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Thunderbirds:

Elite team mission ready



INSIDE:

Still glowing strong
Dr. Neon's hyperkinetic world

Ted Nugent
Be prepared, then go wild

Run the table with the
Striking Viking 

28



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Welcome to another exciting issue of **Tech** Magazine. One of the great stories you'll read in this issue is about the U.S. Air Force's elite Thunderbirds demonstration team. In the article, Senior Master Sgt. Mark Antunes, line chief for the team, is quoted as saying, "No matter how computerized things become, our skill and training still play an important role."

While Sgt. Antunes is talking about F-16 jets, the same can be said about your profession. No matter how computerized motor vehicles become, it's your skills and training that make all the difference. And that's more the case today than ever before.

For years, Snap-on has been instrumental in educating the motoring public about the amount of knowledge and expertise it takes to service today's vehicles. In addition to the education required to enter the profession, automotive technicians must undergo continued training and updating to stay current.

You add a great deal of value to society, and you should be proud of that fact. It's your dedication that truly keeps us all moving. So work with pride every day and take a tip from Thunderbirds maintenance officer Major David Moreland, "look the best, be the best and perform the best."

Again, thanks for your business, and thanks for reading.

Al Biland

Senior VP, Snap-on Incorporated
President, Snap-on Tools LLC



On the cover:

The U.S. Air Force's elite F-16 demonstration team, the Thunderbirds, creates thrills and stirs patriotic chills during performances. At the heart of the team are the technicians – called "maintainers" by the Air Force – who keep the jets mission ready. Read our cover story and find out if you have what it takes to be part of the team.



Nice job! Good to see a magazine that provides good tech articles as well as lifestyle and recreation articles with an open mind. Keep up the good work!

I thought it was a great idea to come out with a magazine for techs. I enjoy reading it.

Keep the complimentary issues coming!

I really liked the articles on new tools. The ads with special offers are a bonus, too.

Overall, a very good magazine for techs to read; good information in well-written articles.

A pretty neat magazine; finally something for the techs.

Snap-on governmental team mission ready

It's no coincidence that this issue's cover story is the U.S. Air Force Thunderbirds.

Snap-on has a governmental sales team that leads the industry because our people consider their work not just jobs, but chosen careers.

We cover all the federal bases and posts every day, providing leading product innovations and concepts to our customers that further guarantee mission capability and success in all the armed services and national security units. For example, our Level 5 tool control system is the finest in the world and unmatched by any competitor.

New Snap-on concept mobility kits for the Marines and Army go where the warfighter is, providing total user reliability. And our enduring global customer service support to the armed services fulfills our commitment.

In the end, our customers know Snap-on is always there with leadership, the best products, and world-class service.

Winner gets more than the boot



Mark Laurie, a Snap-on Dealer from West Palm Beach, Fla., was the first-quarter winner of the Snap-on Dealer Rewards Program from Snap-on Footwear – also known as Coastal Boot. Mark and his wife enjoyed a four-day, three-night stay in Las Vegas in May. Mark won the trip for having the highest sales of Snap-on Footwear in the first quarter.

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Find any museum

Museums have long been extremely popular destinations for tourists, college students, field trips, or vacationers. Museum websites make it convenient to determine hours, exhibits, rates, and so on before packing up the kids in the family truckster.

Now you can browse museumlink.com to find links to nearly every museum website in America.

Links are broken down by state, to show other museums nearby. The site also links to other specialty museums. For example, you can click through to yellowairplane.com, and find every airplane museum in the country.



More uses than colors in a rainbow



Pop Quiz: What causes the rainbow-like sheen when the sun strikes the gills of a freshly caught fish? Why does a similar rainbow appear on the surface of an oil spill when rain hits it?

Answer: Thin film. Thin films can be found everywhere, not just on your trophy bass or the spots on your garage floor. Nanotechnology is the process of applying thin film coating, which has many more practical uses than simply making rainbows.

Thin films have a huge variety of uses in the automotive industry. They can extend the lives of fuel injection components, toughen engine parts, and make bearing surfaces



smoother. Films only a few microns thin give so-called "chameleon" paint a constantly shifting range of pigments. Such paints give custom cars, motorcycles and even helmets a variable, distinctive color. To learn more about the growing field of nanotechnology, visit mavinc.com.

NRA hunter spots 'extinct' bird

The Ivory Billed Woodpecker is one of the most famous species thought to have vanished from the earth in recent years. It vanished in the mid-1940s, apparently the victim of extensive deforestation throughout much of the South.

Then in 1999, kayaker David Kulivan reported seeing one in an Arkansas swamp. Ironically, Kulivan worked for the National Rifle Association and was hunting turkeys at the time, according to Bob Marshall of the New Orleans Times-Picayune. Like many hunters, Kulivan was

interested in conservation and was knowledgeable enough to identify the bird.

In 2004, another kayaker reported several sightings nearby. Ornithologists captured numerous sound and video recordings, which some say confirm the bird's existence. Conservationists and NRA members are keeping their eyes open for more solid evidence. See cornell.edu.



A Duesy of a museum

Hoosier town home to one of world's greatest auto displays

If you're looking for an automobile-related getaway, it's hard to beat Auburn, Ind. The city boasts the Auburn Cord Duesenberg Museum, regarded by many antique automobile aficionados as one of the finest in the U.S., if not the world.

This is the real deal. On display are 120 classic, antique, vintage and special-interest cars. Celebrities, including Jay Leno, are among the museum's card-carrying members.

The vehicles are housed in eight galleries of the restored 1930 art deco national headquarters of the former Auburn Automobile Company, a National Historic Landmark. "Walking into the museum is like walking back into the 1930s," says Gran Roberts, spokesman for the museum.

The Duesenbergs are the big draw. "We have 13 Duesenbergs, which makes this the world's largest collection," Roberts says. "We also have the oldest Auburn (1904) known to exist."

Visitors also can see restored design studios and offices, technology displays and historical artifacts.

"Every day, people look at these exhibits in awe and say, 'This museum is truly amazing,'" Roberts says.

Hours: 9 a.m. – 5 p.m. seven days a week; closed some holidays

Admission: Adults, \$8

Location: Indiana State Road 8 and Interstate I-69. (Twenty miles north of Fort Wayne, 35 miles south of the Indiana Toll Road I-80/90).

Information: (260) 925-1444; acdmuseum.org

Another must-see

The National Automotive and Truck Museum (NATMUS), also in Auburn, focuses on post WWII automobiles, trucks and automotive toys/models. Make this your second stop. (260) 925-9100; natmus.com.

Now what? Other possible stops:

- ◆ World War II Victory Museum
wwivictory.org
- ◆ The Kruse Automotive & Carriage Museum
kccmuseum.org
- ◆ The Hoosier Air Museum
hoosierairmuseum.org
- ◆ Garrett Historical Railroad Museum
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BERLIN AIRLIFT HEROES

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If you remember 20th Century history, you'll recall how after World War II, American and British forces airlifted supplies to the city of Berlin, Germany, because part of the city and the surrounding region were under Soviet control.

Steely nerved U.S. and British pilots flew nearly 300,000 flights over the course of 15 months, delivering food, fuel and other necessities to war-scarred Berlin.

The 330 C-54s (also known as Douglas DC-4s) were used for the airlifts, along with some larger cargo planes. One of these C-54s, known as the "Spirit of Freedom," has been restored and turned into a flying museum based in Ocean County, N.J., flying to 30 or more events a year. Now a group of Snap-on Dealers has joined other volunteers in restoring a second plane for the museum, a C-97 (a Boeing Stratocruiser). This plane will join in showcasing the Berlin Airlift as well as other, lesser-known Cold War aerial accomplishments.

"This is a way of doing something to commemorate the guys who worked just as hard and were just as brave as soldiers (during other wars)," said Bob Horn, a Snap-on Dealer in Island Heights, N.J., who has donated equipment to support the Airlift Museum. "We won the Cold War – this is a tribute to those men."

Thanks to the efforts of Horn and other Dealers, Snap-on donated several tools and a Bore Scope, a fiber-optic tube used for ongoing engine inspections which keep the planes in flying condition.

Because of the high price of fuel, the group is in great need of support to continue its high-flying mission. To learn more about the Berlin Airlift Museum or to find out when one of the planes is coming to a location near you, visit spiritoffreedom.org. 



SURF'S UP for this tech

When he's on stage playing guitar in a band called the Aquasonics, this tech and his buddies wear Hawaiian shirts and play surfer music from the '60s. His nickname is Maui; where do you suppose he lives?

If you guessed Hawaii, you would have been off by only a couple thousand miles. Maui, whose real name is Mark Malera, lives in Colorado, along with the other members of their popular band. The Aquasonics play all over the state, and are recording their first album.

Maui works in the fleet maintenance shop of Commerce City, Colorado, and keeps himself busy in his off hours. Besides being a top-notch musician in the band, Maui is also a master scuba diver. When not in the water or on stage, Maui enjoys rugby, fishing, tactical shooting and rockabilly music. He says that whenever he is on stage, he wears a Snap-on buckleless belt, "so I don't scratch the back of my guitar. It works great!" 



Mark Malera, aka "Maui," is recording an album with his band, the Aquasonics. Malera is second from the right.

Drag racing tech motivates others

As assistant crew chief on the Grant Flowers Drag Racing Team, Mike Smigielski spends 13 weekends a year on the IHRA circuit. "These dragsters put out about 6,000 horsepower, and do the quarter-mile in about 4.5 seconds," he says. "After each race, we get only 75 minutes to rebuild the entire engine and drive train. But we're up to the challenge." That's a lot less time than he normally spends diagnosing and repairing the high-end luxury cars he sees at Sports & Imports in Southport, N.C., where he is shop foreman.

Mike's passion for the smoke, noise and G-forces of top fuel racing began when he was in high school. "I got involved with alcohol funny cars in the early '80s," he says. "But I never drove them competitively, because I'm more in love with the challenge of making them work."

A few years before making the switch to dragsters, Mike and a partner worked with the ASE to set up a motivational program

for students. "We would bring alcohol funny cars to schools as an example of how goal setting and teamwork can make dreams come true," Mike explains. "A lot of these kids had never been close to a professional race car. Seeing one up close really showed them what they could accomplish if they simply applied themselves."

While Mike is no longer involved with that program, it's obvious by his choice of weekend hobby that he still believes strongly in the power of goal setting and teamwork. "Plus I'm one of those lucky guys who just loves what I do, and this way I get to do more of it," he adds. 



Above, Mike Smigielski talks to students as part of a program with ASE. At right, Smigielski helps bring the car to the line on the IHRA circuit.

Simply Striking

Meet Ewa Laurance, one of the hottest women in billiards



Two-time world champion Ewa Laurance, otherwise known as "the Striking Viking," is professional billiards' original glamour girl. In the early '90s, she became one of the first women to bring positive media attention to a once-staid sport.

"Ewa's contribution to billiards can't be overstated," says Shari Stuach, publisher of *Pool & Billiard* magazine and former publicity director of the Women's Professional Billiard Association (WPBA). "Because she was and is such a complete combination of talent, looks and personality, she got

a huge amount of attention at the time, far more than anyone of either gender."

Ewa continues to rank among the game's hottest players (pun intended). The author of two popular books, the *Striking Viking* still actively promotes the game she loves through special appearances and exhibitions. Ewa also plays on the WPBA Tour and the new IPT Tour, competing against the men.

Go to strikingviking.com for Ewa's schedule and list of titles.

Q & A with the Striking Viking

Q: Who first gave you the "Striking Viking" nickname?

A: I always fought having a nickname because they seem like such a "WWF" thing. But a few years ago, Steve Tipton, the WPBA tournament director, tagged me with that and it just sort of stuck.

Q: How often do you get hit on by guys who don't realize you're married?

A: I try to avoid situations where that can happen. Plus you can pretty much control that with your manner and attitude.

Q: What's the worst pick-up line anyone ever used on you?

A: "You play pretty good for a girl." I still hear it sometimes, even when I'm golfing!

Q: Best pick-up line?

A: "Hi." More guys should use that; they can't get in trouble with that one.

Q: You portray a pretty sexy image. Doesn't that make it harder to gain respect?

A: Not really. Pool's a sexy game. Besides, I think nowadays the sexy image is expected. But it's a real double standard; if Andre Agassi batted his eyelashes at the camera, it would be pretty weird. Being sexy works because we're women and our audience tends to be male.

Q: Name one thing that your fans don't know about you.

A: I'm into gardening and we have three horses, and I use their manure for fertilizer. I may be a bit odd, but I just love getting up in the morning to the smell of coffee and horse manure.

Q: Is there one player you're really gunning for?

A: There are two: Karen Corr and Allison Fisher. Allison's currently the number one player, and though I have beaten her on several occasions, I have a harder time beating Karen, who's number two. I'm more of a "feel" player and her slow, methodical pace puts me off my rhythm.

(Continued on page 12)



Q: What's the best tip you could pass on to pool players?

A: Be humble. I think a lot of people believe they're better than they are or that they know it all. When I see amateurs like that, I just know they'll never make it. The only way to improve at anything is to admit you don't know it all.

Q: What do you do when you're having an off game?

A: It's usually because my attention is wandering. The main thing is to really concentrate on the game itself, not everything around you. One ball at a time.

Q: What's the best game you've ever played?

A: In 1985 I played retired Hall of Famer Jean Balukas, beating her 9-2. When I put up my score, I didn't realize the match was over; that's how much I was in the zone. In 1994, I played for the world title against "the Black Widow," Jeanette Lee. I beat her 9-2, barely missing a ball the entire match.

Q: Do past games ever start to blur together?

A: I remember certain shots like it was yesterday, how the table felt, how the room looked, who was in the front row. Other times when I was concentrating less, I barely remember a single shot, or even having played in the event.

Q: What's the best thing people should know about billiards?

A: It's a phenomenal family and social game, and it's a great icebreaker. It beats going on a date and asking, "What's your sign?" It's a very intelligent game. You have to think several moves ahead, just like chess. You can play pool every day for your entire life, and still continue to learn. It's a great game! ☺



Chalk up right

Chalking the cue is a must. It provides friction between tip and ball, reducing miscues. Yet rookies and wannabe sharks alike often get it wrong. "It's amazing how many experienced players mess this up or skip it entirely," says Ewa.

How to chalk up like a pro:

- ◆ Lightly grind some chalk onto the entire tip, including the edge. (Set down the chalk face-up.)
- ◆ Don't rap the cue against the rail. That just knocks off the fresh chalk, defeating the purpose of chalking. It also lets the entire room know you're clueless.
- ◆ Do not blow off the excess chalk; see above.
- ◆ If the chalk doesn't stick, rough up the leather with a cue file or sandpaper.
- ◆ Chalk up before every shot. Always.



How to avoid being hustled

Some advice on spotting hustlers trying to separate you from your hard-earned dough:

- Don't play for money. Sounds simple, but it's true. If you do gamble, never bet more than you can afford to lose.
- Only bet with people you know. Don't bet the "friendly" guy you just met at the bar. Hustlers often appear pleasant, but their personalities change when money is on the line.
- Trust your gut. If you're playing someone who seems a little too eager to bet, use caution. If you suspect you're being hustled, you probably are.
- Don't throw good money after bad, carrying the bet over into the next game. If your wallet gets a little thin, take your lumps and quit.
- Never back a hustler who's cleaning out some poor pigeon. They could be working together to clean you out.
- Quit while you're ahead. If you win a few games and the opponent wants "to make it interesting," walk away from the table – quickly.

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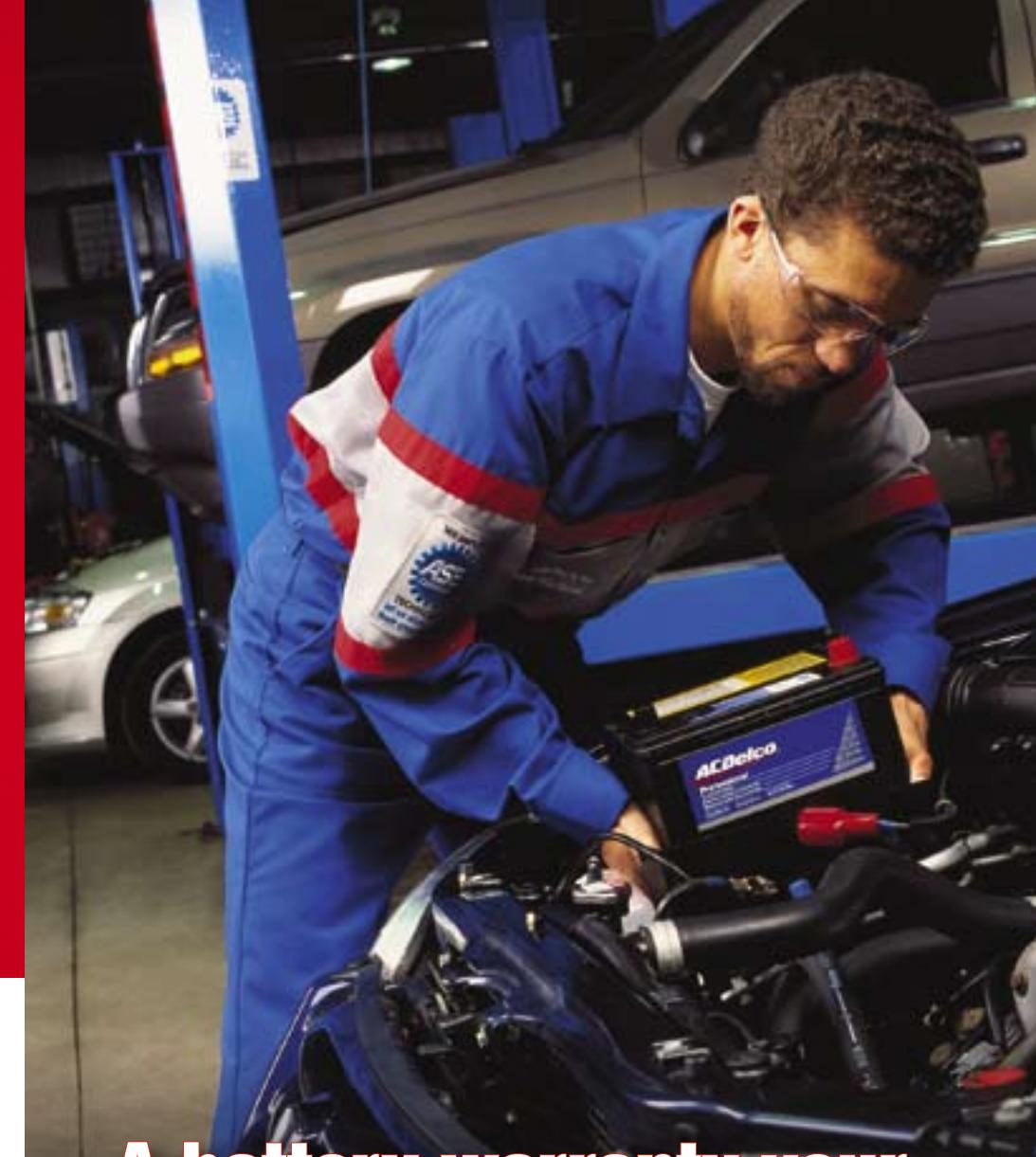
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Until the 2006 winner is selected, the stunning array of prizes will be displayed at select NHRA POWERade Racing Series events and at ACDelco warehouse distributors across the United States. You can also see several 2006 show cars from the ACDelco Racing stable.

For a complete list of prizes and the official contest rules, please visit UCoat It online at ucoait.com or contact ACDelco at 800-ACDelco or acdelco.com.



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If your feet aren't killing you, your work boots may

As a tech, you're probably on your feet all day. You walk and stand on concrete or asphalt from sunup to sundown. You climb stairs and jump in and out of vehicles.

Even if this doesn't exactly describe your working conditions, it's a safe bet your feet take a pretty good pounding. The average person's feet endure several hundred tons of force a day, and you probably walk or stand more than the average person. Makes your feet sore just thinking about it, doesn't it?

Another safe bet is that what you're wearing right now probably doesn't fit properly. Ill-fitting work boots that don't have the proper safety features could even take your life. (See sidebar.)

Here are a few things you need to know about your feet and how to protect them (and you) on the job:

Safety

"When you mention foot safety, most people immediately think to themselves, 'Steel-toed shoes,'" says Jamie Zimmer, product designer for the Red Wing Shoe Co. "That's a good thing, but if they don't think beyond that, they're asking for trouble."

Zimmer says safety features can include steel soles to keep rusty nails from poking through, side plates to protect ankles (especially useful for techs in the mining industry), chemical-resistant soles, hard rubber soles for walking on steel shavings, plastic or carbon-fiber tips for electrical insulation, and more. "If techs take the time to see a work boot specialist and explain their working conditions, they can make a wise investment that will protect them and feel comfortable all day," Zimmer adds.

Proper fit and construction

Many problems can be avoided by simply getting a well-made work boot that fits properly, says Bruce Pontner, with Snap-on's branded line of work

boots. "A good work boot should cup your heel and sole firmly and keep your foot from flattening out," he says.

"Too many people think you get comfort from cushioning, but that can be just as bad as having the wrong fit. Work boots aren't tennis shoes. Proper fit and solid, firm support will get you through the day with more comfort than an overly cushioned shoe," Pontner explains.

No break-in period required

Many people buy boots that feel tight or pinch, believing the leather will stretch to mold to their feet. The reality is that your feet are more likely to change their shape to accommodate the boot. This can result in any number of foot maladies — including corns, bunions, hammertoes and the garden-variety blisters.

If you want to make your life simple and your feet healthier, follow the experts' advice: Visit a specialist trained to help select and fit work boots. You may also need to make a slightly larger investment than buying discount-store quality work boots, but your feet will thank you in the long run.

For more information, talk to your Snap-on Dealer. You can also visit redwingsafety.com and coastalboot.com. ■

A shocking story about boot safety

Last year I was working on a faulty valve inside a furnace used in heat treating. When I reached in to tighten the union, I was hit with 5,000 volts from the ignition system transfer; one of the wires was cracked and I didn't know it.

The power went through my wrench, through my leather gloves into my left hand, and then out my left hip. All this was on my left side, so I was lucky. I had only a few burns, and though my nerves were shaky and weak, I only spent one night in the hospital for observation.

I am fine today, and I credit three things. First, God was beside me. Second, that transfer blew; had that not happened, I would not be writing this letter.

— Roger Ham, Charlotte, NC

The third thing that saved my life was my pair of Snap-on work boots. People at the hospital said the boots saved my life because they were rated for electrical safety. The only damage they suffered was a little charred spot on the toe of my right boot.

I have been in maintenance for over 10 years and never thought about electrical safety and boots. When I purchased the boots from my Snap-on Dealer, I didn't even know there was a safety rating. I didn't know my boots had that rating until I pulled off the tags.

My Snap-on boots saved my life. You can be sure that any work boots I buy from now on must have an electrical safety rating.

SOLE BRO'THER



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Feast or Famine One side too rich, other too lean



>>MODIS™
>>MODIS™

By John Anello
Auto Tech On Wheels
autotechonwheels.com

I was called to a shop on a 2002 Volvo S80 with a 2.8L V6 Turbo that had a CEL lamp on with a complaint of no power on acceleration. The shop had already replaced the MAF sensor and did some preliminary checks but was unable to pinpoint the problem.

This vehicle came from a used car lot with no vehicle history information. Working on cars coming from a car lot leaves the diagnostic playing field wide open. Using a basic troubleshooting chart holds no value in these vehicles, especially if a lot of unqualified guys had their hands on this vehicle already. At this point the shop decided to call me in for technical assistance.

After arriving at the shop, I booted up my MODIS and used the Asian OBDII Generic mode. This mode can provide a lot of information to diagnose a drivability problem when an enhanced mode is not available on a car (such as this Volvo). The code recorded in memory was code P0134 (Figure 1), which indicated a switching problem with the bank 1 O2 sensor. This could be a bad O2 sensor that was not working, an O2 harness problem or a fuel delivery problem not allowing the O2 to properly cross the 500mV rich/lean threshold.

To further investigate, I pulled the freeze frame information (Figure 2) to see if this was a single bank problem. It is very common for an ECM to only flag one bank – even if the problem affects both banks – so it is always a good idea to make sure both banks are in fuel control and that the upper O2 sensors are properly switching when dealing with any type of fuel trim or O2 sensor related problem. The freeze frame data indicated this vehicle was experiencing a dual

bank problem. What was strange was that the ECM was unable to control each bank at opposite fuel trim limits. How could one side of the engine be running too rich, while the other side was running too lean?

I decided to view the fuel trims and rear O2 sensors simultaneously by placing the MODIS in an 8 Graph mode (Figure 3). The front O2 sensors were not available in the OBDII Generic mode because these sensors were lean air fuel ratio sensors. But the rear O2 sensors needed attention to get a basic idea of the lean/rich status of the exhaust content prior to the catalytic converter fully warming up.

Power braking the engine at 2000 RPM in drive ruled out any engine vacuum problems, so I could concentrate on fuel delivery. You can see by the graph that the ECM was pulling the left bank fuel trim to minus 25 percent and creating a lean condition on bank 1. At the same time, the ECM was adding 24 percent fuel trim, creating a rich condition on bank 2. Each bank was at fuel limit, and there



Figure 1

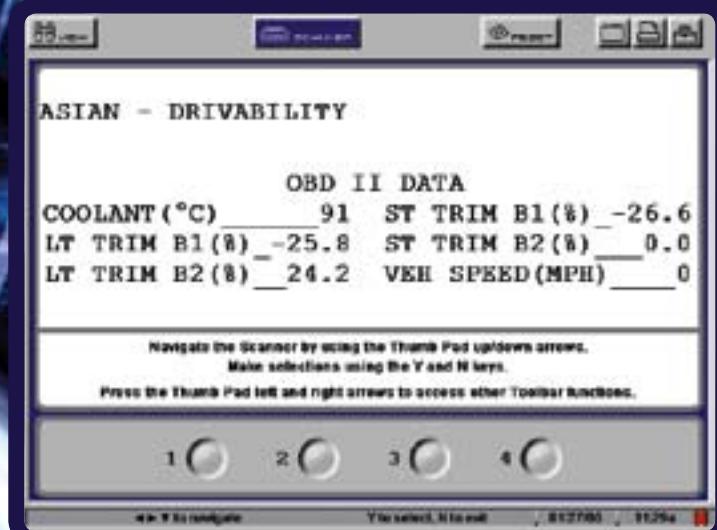


Figure 2

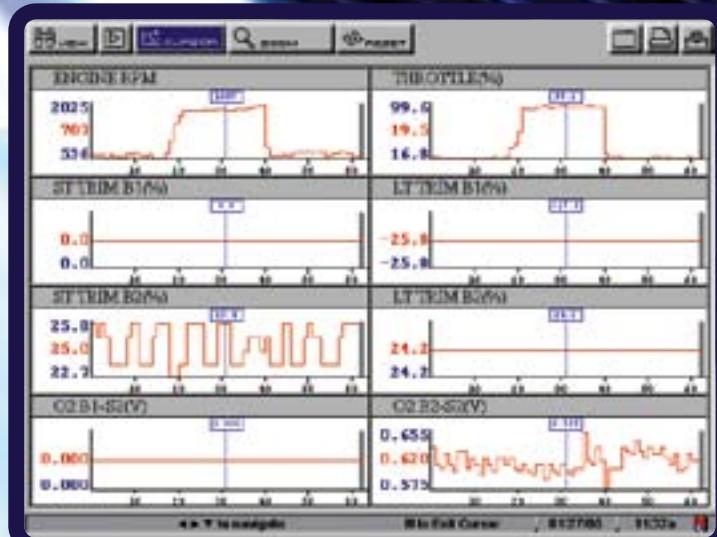


Figure 3

(Continued on page 20)

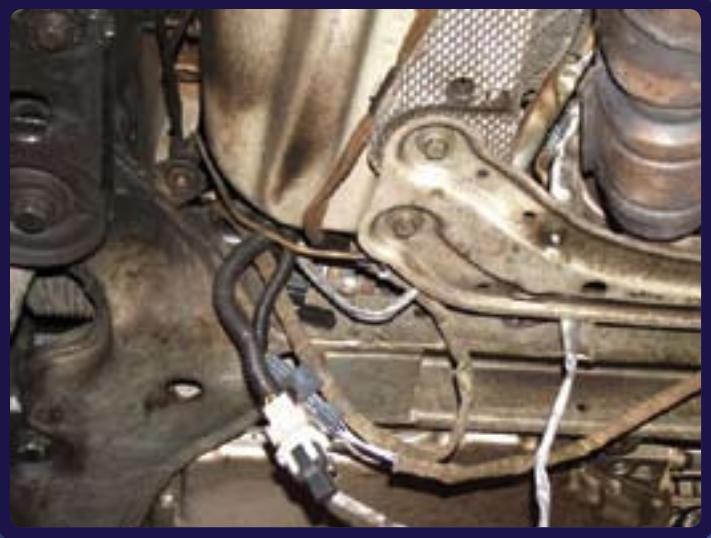


Figure 4

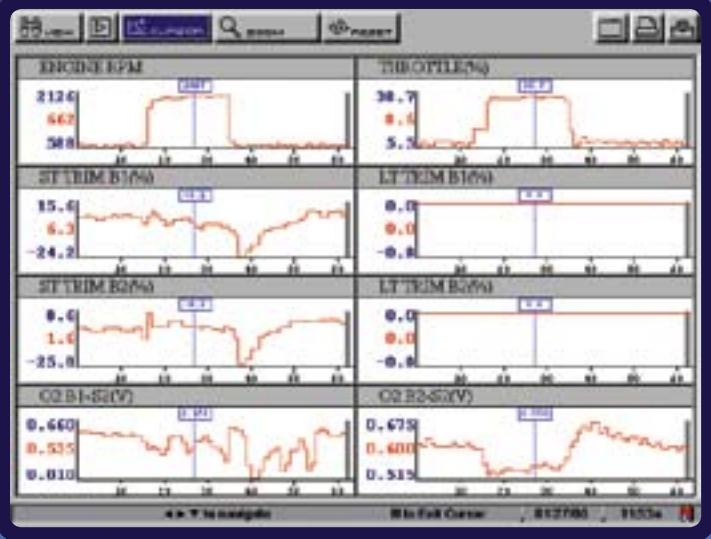


Figure 5

was no more fuel control left to achieve O2 switching on either bank.

When the garage put the car on the lift and did a visual inspection of the O2 sensors (Figure 4), it appeared someone had disturbed the O2 sensor harnesses, because the wiring harnesses did not look properly routed.

This was a used car and you need to think outside the box and apply a lot of logical thinking when diagnosing a problem. Considering the fuel trim problems and looking at the O2 connectors, it seemed possible someone had improperly connected the O2 sensors. The front O2 connectors were identical, as well as the rears, and there was enough harness wiring to switch them to opposite banks. I located the upper O2 sensor connectors and swapped them and started the vehicle. This time the graphing data (Figure 5) showed everything was now working properly.

What a simple fix to a complex problem. The bank 1 sensor was monitoring the bank 2 side of the engine and when the ECM saw the bank 1 sensor go rich it pulled the bank 1 to full lean trim at minus 25 percent. Since the bank 2 sensor was monitoring the bank 1 side, it saw a lean condition. The ECM added full rich trim to bank 2 at plus 25 percent. This created a loss of power due to the bank 1 cylinders being fully leaned out.

Graphing data is a valuable scan-tool asset that many technicians don't always utilize. It provides a visual association between data parameters to allow a technician to see what is really going on. Looking at data readings change in a PID screen view becomes a number crunching task that is overwhelming for the human mind.

It is the power of the MODIS that provides this graphing ability to help technicians get to the root of their problems in a timely manner. I hope this was a learning experience for all.



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Snap-on



The many sides of Dr. Neon

Over his 52 years, Dr. Neon has been or is:

- The host of a television show
- The inventor of Neon spark plug wires
- One of MTV's earliest video DJs
- Partially responsible for starting up the first Renaissance Fairs, now found in nearly every state
- An ordained minister

- A motorcycle fabricator
- A neon glass artist
- A musician
- A public speaker
- A videographer
- A photographer
- A mechanic
- A sculptor
- A woodworker
- A model builder
- A master chef
- A standup comic
- A philosopher

His reputation bears that out. Just ask Kirk Topel, president of Hal's Harley Davidson in New Berlin, Wis. "Doc Neon is recognized as being the best," he says. "But his creative designs and innovations are what really set him apart."

Dr. Neon

Those aren't the only things that set him apart. At the age of 52, Doc practically defines the word "hyperkinetic." Spend time with him and you quickly realize he rarely stops moving, talking and planning. What he accomplishes in one day takes most people four. But unlike us mere mortals, he finishes most everything he starts. "You have to set goals and then just meet them. You have to make a commitment to everything you do."

More important than the volume of his work is the quality. He seems to do everything well, which is why he has earned the respect of friends, customers and peers.

Doc piles a lot on his plate, but it's his energetic style and personality that add the flavor. He is always ready with a smile or his trademark pseudo-scowl and cocked eyebrow. He has no pretensions and plenty of strong opinions. He makes a mean lox and bagel sandwich, and his jambalaya is to die for. He dislikes "hippies" and is incredibly kind to small animals. Doc's the kind of guy you would love to have at a party.

Doc's home reflects his multi-faceted lifestyle. Once an abandoned Baptist church in Asheville, N.C., Doc has transformed it into a labyrinth of surprises. Yet despite extensive renovations, the original red brick exterior still blends with the area – except for cast-iron pagan symbols and a wooden cow head over the door.

Where there once were pews, there is now a hall with a stage, sound system and lighting. At the other end is Doc's loft-style home, decorated with neon designs, artwork and storied knick-knacks. An intricately hand-carved and inlaid wooden armoire sits beneath small winged cows suspended from the ceiling. Doc designed and built the large armoire when he was 17, and won a major award for the design.

"We are the last generation of craftsmen left in this country."

"If I see a hippie on my property, I hold my nose."

"I am a Snap-on tool freak. I mean that! Snap-on is like an Italian racecar, something that Ferrari designed. They're beautiful."

"My goal is to live a great life and own nothing by the time I'm gone."

"This collecting thing isn't a hobby. It's a sickness."

"The most beautiful women in the world come from Puerto Rico."

The basement holds Doc's workshops, offices and collections, which are nearly as famous as he is. In one large room he stores scores of detailed, cast pewter toy soldiers, for his online store. The next room is a little boy's dream,

with hundreds of model cars, planes, trains, trucks, boats, motorcycles, and more. "I think I've got the collecting thing down," he says.

Next stop is the armory, with dozens of hand-made swords, shields, spears, miniature trebuchets, and more toy soldiers. Dominating the entire room is a detailed replica of an English castle built entirely

of sugar cubes, complete with numerous sugary gargoyles. "I made it out of about 38,000 sugar cubes. Pretty sweet, huh?" he says as he adjusts a tiny pewter knight.

The nerve center of his high-security compound is his laboratory. It is here that Doc tackles the heavy-duty projects almost single-handedly. Because of the range of projects he takes on, he has an immense supply of tools. "I think I have every tool Snap-on makes," Doc says. "I used to buy other brands, but I got rid of them all; I just couldn't stand that cheap stuff."

Just like his home, his lab has a lot going on all at once. He is currently fabricating twin motorcycles for the U.S. Air Force. "I'm making them with airplane-type wings, so they can use them as recruiting tools," he explains. He is also fabricating a bike for the Atlanta Museum of Patriotism. "This will be lit up with neon red, white and blue like you won't believe." Other projects include restoring numerous cars and trucks, and customizing even more motorcycles.

Once these projects are finished, you can be sure Doc will start something bigger and better. In fact, his next project is already on deck just waiting its turn. "I'm building a Bonneville-style motorcycle rocket," he says, pointing to what looks like a huge bomb. "That's a fuel drop-tank I pulled off an F-4 fighter plane from the Korean War. That thing will be one wild ride."

Based on Dr. Neon's energy, innovation and commitment, you can be sure of that, too. ☺

The philosophy of Dr. Neon

"You always have to do what's right. I mean, if you run over a guy's dog, the least you can do is tell him about it."

"My house is very well guarded. I have a lot of stuff thieves would love to have, and I don't intend to get tied up, beaten and robbed again. That's no fun."

"I'm a biker through and through. I actually know how an engine works. I didn't do something else, wake up one day and just decide to assemble choppers. I learned how to fabricate bikes from experience."

"If you want something done right you have to do it yourself, even if you don't know how to do it."

"Everyone should make their mark. Leave something beautiful behind, because there's so much ugly in the world."

Go climb a rock

Rock Crawling is not for the meek or unadventurous. It takes a special kind of adventurer to build and strap himself or herself into a one-off 4-x-4 that could easily tumble end-over-end down a boulder-strewn hill.

"The guys and gals who participate in this sport aren't your typical 'bolt-on-chrome' crowd," says Rich Klein, CEO of WEROCK, which sponsors the World Extreme Rock Crawling Championship Series. "These are true motorheads. It's the ultimate test of man and machine over terrain." And gravity.

Rock crawling is not racing. Drivers get help from a "spotter" to find the most efficient line through an obstacle course that would destroy a Hummer. It takes patience, skill, teamwork and superior mechanical aptitude.

Technician Randy Torbett of Torbett Automotive in Salt Creek, Tenn., has been four-wheeling all his life. He says, "One weekend, I watched an event

(Continued on page 26)



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It's the most fun anyone will have watching cars go 2 miles per hour.

and thought, 'Man, I'll bet we can do that!'

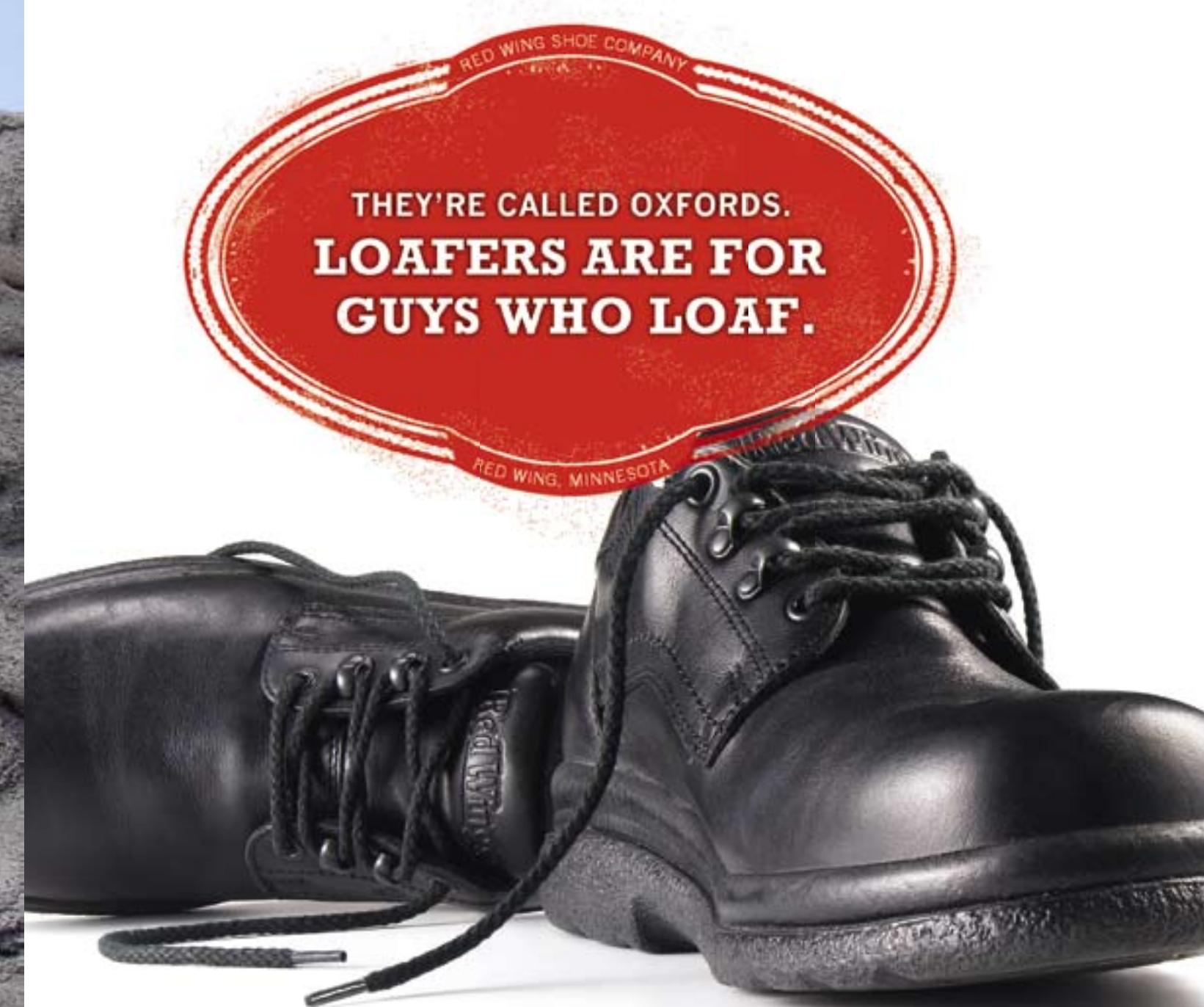
Torbett started building rigs with his spotter, Eric Nixon. "We were just some country boys building our own buggies," Torbett says. "We pulled axles off a New Holland tractor, added special hydraulics and started competing."

A few years later, Torbett and Nixon have won several pro championships, competing as amateurs.

During competition, drivers have 10 minutes to complete a course, earning points based on how well they maneuver. The lowest score wins, just like golf. "Only it's a lot more fun," says Klein.

"It's also the greatest spectator sport around, because you're not insulated from the action," says Klein. "You can safely stand 10 feet from the action, because the rigs move so slowly."

"It's the most fun anyone will have watching cars go 2 miles per hour." 



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Better strap in tight. The Thunderbirds are in town.

The U.S. Air Force's elite F-16 demonstration team creates thrills and stirs patriotic chills for millions during their 70 performances each year. The Thunderbirds are a carefully selected and finely honed team of 120 enlisted personnel plus 12 officers, eight of whom are pilots.

Team members are selected from more than 580,000 USAF personnel, and each man and woman makes it clear that every team member is a Thunderbird. Maintainers, as the techs are called, and support personnel play a role every bit as important as those who climb into the cockpits.

Dressed in crisp, immaculate blue uniforms, the team's aviation specialists comprise 29 specialties, with 14 related to all facets of maintenance to help keep the jets mission ready at all times.

The maintainers must survive intense evaluation to become part of the team. Specialized training and oral boards – combined with a five-year history of squeaky-clean USAF performance reports – are required. On average, only one of 10 applicants is chosen for these coveted assignments, which last three years.

That time, no doubt, goes fast because it's abundantly clear these guys and gals are having fun.

"Building horsepower, that's what I like," says Staff Sgt. Dan Hampton. "Working on these high-horsepower engines is a blast."

Hampton is one of the Thunderbirds' engine specialists. He began learning his mechanical skills early on from his pilot dad, technician uncle, and a 14-week Air Force training program. He now applies those basics with thousands of hours of subsequent training and flight line experience to his responsibilities on the Pratt & Whitney F-100-PW-220 jet engines. They deliver 23,000 lbs. of thrust to the team's \$22 million (each) F-16 Fighting Falcons. The F-16 is the world's most capable single-engine fighter plane. With a thrust-to-weight ratio of 1:1, and a classified top speed above Mach 2, the F-16 has extraordinary power to outperform most any other combat jet – and deliver hair-raising demonstrations.

Trust and communication

Trust runs deep between the maintainers and the pilots. The maintainers handle pre-flight walk-arounds; pilots climb aboard without performing physical checks of their own.

On show days, the crew chief actually runs the aircraft to ensure the F-16s are ready to perform. "No matter how computerized things become, our skill and training still play an important role," explains Senior Master Sgt. Mark Antunes, line chief for the team.

A debriefing occurs immediately after touchdown. This is a time for all pilots to provide information to the line chief.

"A code system is used with Code 1 meaning no problems – all okay," says Technical Sgt. and Crew Chief Trent Perry. "Code 2 means a degraded system, but it's not a flight issue serious enough to ground the aircraft. Code 3 means the jet cannot fly until this problem is fixed."

Feel the Pride.

Hampton performs post-flight engine checks using a Comprehensive Engine Diagnostic System, or CEDS. It monitors all engine parameters from take-off through landing – displaying information such as take-off time, throttle settings, temperatures, and all faults (including everything the pilot sees in flight on the cockpit instrument panel). Hampton also reviews recorded information involving air intake, fan blades, the exhaust system, oil service levels and many other indicators. Any problems are identified and addressed immediately.

Parts orders are fulfilled through the USAF, though some routinely needed supplies accompany the team.

"We carry about 229 line items with us," says Technical Sgt. and crew chief Allen Hewitt. "We do not transport certain consumables that would represent a hazard or are too dangerous. For most items, we rely on the lean logistics program of the USAF."

The biggest challenges are logistics and getting the necessary parts, Antunes says. "We carry many things with us – tires, valves, relays, etc. – but we can't carry everything and must rely on other team members back home at Nellis Air Force Base, Nev., to find the rarely needed parts and get them to us wherever we are. Right now here at Langley, we have an electrician and a senior NCO awaiting a delivery from Nellis."

The two areas that are the toughest to handle maintenance-wise are the jet fuel starter – the heart of igniting the jet engine – and the flight control check. A flight chart is checked between the pilot and the line chief to gather input. Then the team sets to work.

Being a Thunderbird

Describing their favorite part of being an elite Thunderbird, team members mention meeting the spectators, feeling the energy of the crowd and team camaraderie. They're also fiercely proud of the U.S. Air Force.

"As a Thunderbird, I represent the entire USAF," says Technical Sgt. Chris Kobaly, a fuel systems maintainer who stands lean and sharp.

Maintenance Officer Major David Moreland says, "We have a nice life. But the Thunderbirds exist to represent everyone in the USAF – including those guys in harm's way around the world. That's why we take so much pride in everything we do and why it's so important to us to look the best, be the best and perform the best. It's a duty, an honor and a privilege."

"The Thunderbirds are a team by more than name alone. We're a family."

(Continued on page 30)



Staff Sgt. Shaun Branam, avionics technician

GO WILD! GO PREPARED!

Ted's carry list leads to the spiritual condition of independence

BY TED NUGENT

In my last writing adventure, I celebrated true independence and rugged individualism in all its ultimate stand-alone, hands-on, live-it-up glory.

I run into enough hippies in the goofball world of rock

'n' roll who couldn't survive a bad sneeze, much less a night in the way outback wilds of Bronco Wonderland Boondockia Wilderness Hellzonia.

My daily regimen of basic Alpha Male Takin' Care of Business supply stash on my belt and in my pockets has proven time and time again that the Boy Scouts of America motto of "be prepared" is indeed a basic tenet of honest appreciation for life. The choice is clear: Man or wimp? Asset or liability? It is quite simple. The choice is ours.

Nothing elaborate, bulky or intrusive – just simple daily chore

tools for the truly manly, ready to rock amongst us. I cannot celebrate enough just how often I whip out each of these essentials on a daily basis during my ranch and farm chore routine, nonstop hunting, fishing, and trapping adventures, not to mention year round TV show productions, rock 'n' roll band tour rehearsals, various police and military activities, or even a night out on the town with Mrs. N. Here, let me get that for you!

So now we move onto my All American Rolling Thunder of sporting goods, artillery and "hardware store on wheels" that is my personal choice in daily conveyance. I learned early on with the purchase of my very first Ford Bronco 4x4 way back in 1972 that man does not live by off-road vehicle alone. Oh no, booby, not even close.

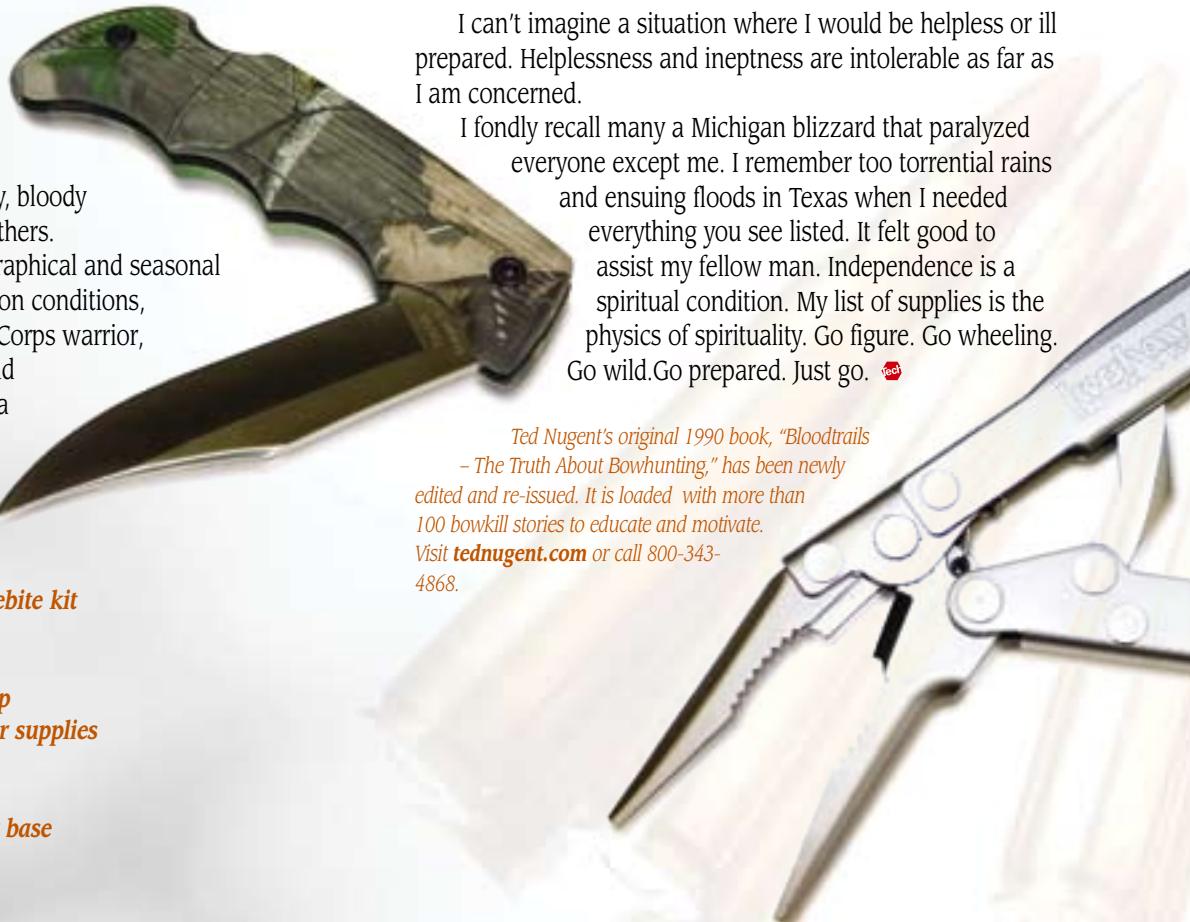
Through blood and guts, cuts and bruises, near death trial and error, I have survived to share with you, in an ongoing effort to keep others from making the same foolish mistakes as Ol' Nuge, a basic list of mandatory equipment to create a fully independent survivalist vehicle.

Fundamental performance and functional upgrades on our personal vehicles are truly one of the great joys of life, are they not? All my trucks get tire and wheel, driveline and HD suspension upgrades, electrical, cooling, horsepower, filtering,

driving lights and stereo upgrades to satisfy my personal tastes and demands. I personally don't know a single person who fails to upgrade their vehicles in some way, shape or form. It is all good and much fun. Greasy, bloody knuckled wrenchdogs are my Blood Brothers.

Now we all know that specific geographical and seasonal adventures demand specific gear based on conditions, terrain and weather. Like a U.S. Marine Corps warrior, it is always smart to improvise, adapt and overcome. Therefore, here is my list for a daily truckload of preparedness with an eye for occasional adjustment and/or addition for specialized wheeling. Just do it like this – Semper Fi!

- complete first-aid kit including snakebite kit
- proper spare tire
- 6 HD road flares
- small HD canvas tarp and plastic tarp
- quality air compressor and tire repair supplies
- bottled water
- HD Warn winch with HD towstrap
- HiLift jack and strong woodblock for base
- HD hydraulic jack
- HD lugwrench
- huge crowbar/prybar
- 3/4 shovel
- hand axe
- full complement of handtools
- spare fuses and bulbs
- HD towchain
- 4-6 bungy cords
- ample supply of strong rope
- baling wire
- electric wire
- duct tape and electrical tape
- ample nuts, bolts, screws, washers, chain links, nails, cotterpins
- HD 12V rechargeable Streamlight police flashlight
- HD 12V floodlight
- long raincoat
- compact tirechains
- firestarter and lighters
- 12-gauge shotgun and ample ammo
- AR15 .308 rifle and ample ammo
- cell phone charger
- binoculars
- Hoo-Hahs anti-bacterial moist toiletries
- Armor-All wipes and Windex wipes
- towel and rag
- can inhibitor lubricant
- 2 Walkers Game Ears shooting muffs
- shooting glasses and gloves
- roll paper towels
- mansize Kleenex
- CornHuskers hand lotion
- magnum dose piss and vinegar



Ted Nugent's original 1990 book, "Bloodtrails - The Truth About Bowhunting," has been newly edited and re-issued. It is loaded with more than 100 bowkill stories to educate and motivate. Visit tednugent.com or call 800-343-4868.

TED'S "ON PERSON" DAILY CARRY GEARLIST CONTAINS THE FOLLOWING:

- clean, large handkerchief (neckerchief, bandana)
- Leatherman, Gerber or Outdoor Edge belt tool
- small pocket folding knife
- medium Outdoor Edge 1/2 serrated folder
- medicated chapstick
- small SureFire pocket flashlight
- small lighter
- handgun and spare ammo (magazines or speedloaders, at least 24 rounds)
- fully charged cell phone
- LEO credentials and ID
- wad o' guitar picks
- small pad, pen and Sharpie
- glowing tsunami of American attitude, pride, honor and spirit



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Old-tool Techs

BROTHERS USE ANTIQUE TOOLS TO REPAIR VINTAGE ENGINES

Just when John Gulbankian thinks he's heard it all, the phone rings and the caller on the other end of the line proves he hasn't.

"We had a customer contact us about rebuilding an engine for a World War II PT boat and ask, 'Can you do it?'" says Gulbankian, 38, who owns J and M Machine Co. in Southborough, Mass., with his brother, Michael, 43.

The brothers' business is built around antique engine repair, but the answer to the PT boat inquiry was, Yes, of course they can do it. The brothers have a theory that every engine is pretty much the same, so whether it powers a Model T or a PT, they'll figure it out.

"An engine is an engine," John says. "They all have their idiosyncrasies, but they all have pistons and valves."

The engines often require antique tools for repairs, particularly when working with bearings. These days bearings are inserted, while antique engines feature Babbitt bearings – which stopped being used in new automobile engines in 1954.

That means antique tools are needed to do bearing work on the old engines. The Gulbankians use Snap-on tools for much of their work. They have proven productive and durable despite their age.



"AN ENGINE IS AN ENGINE," JOHN SAYS. "THEY ALL HAVE THEIR IDIOSYNCRASIES, BUT THEY ALL HAVE PISTONS AND VALVES."

Michael Galbankian checks the clearance on a 1931 Ford Model A.



This PT boat was one of the more challenging jobs the Galbankians took on.



Finding the tools is somewhat similar to finding parts, John says. "We find the tools on eBay, at flea markets, at the car show in Hershey, sometimes through people who are retiring," John says. "Sometimes it's just luck."

Searching for parts and tools has been part of the brothers' lives since they were young.

"We were surrounded by mechanical things growing up," John says. The Gulbankians grew up on a farm, which utilized old tractors that often needed repair. They ran a bus company as a side business.

The tractors and buses gave the brothers plenty of exposure to the basics. Both pursued an education after high school, but they found themselves tinkering with engines, as they had when they were boys.

Eventually, they had enough work lined up to turn their hobby into a business. That was a decade and a half ago, and the brothers never looked back.

The nature of the business often means work starts, and then the engine sits until a part is found. "We have a lot of jobs going on at once," John says. "It would be impossible to focus on only one engine at a time. Our shop is full of stuff. There are engines all over the place." There is a tale behind every engine, and John loves to hear customers tell them.

"They all have their unique story," he says. "Their father owned it, or their grandfather owned it, and now they want it restored."

One customer had a 1926 Model T, which had been owned by his grandfather. The grandfather was poor and had actually

(Continued on page 36)

▼ Antique tools are needed to repair the antique engines. In the box is a valve-stem height measuring tool. Above the box is a valve spring compressor, from the 1930s. The tools are used on Model As.



used the Model T to plow his garden in Louisiana. "The customer needed a spare tire carrier because the grandfather had removed that when he plowed," John says.

Another customer had owned and sold a Model A when he was younger. He had regretted selling the car for the better part of 30 years, and finally decided to buy another. After making the purchase, he determined it was the same car he had owned as a young man.

Some of the engines provide a history lesson. John says there were all sorts of "snake oil" type gimmicks (such as making the pistons tighter) to save oil, increase power and conserve fuel during World War II.

"It really didn't make any difference, but that didn't stop people from trying," John says. It's that history – whether it comes from the customers or the engines themselves – that keeps the job interesting.

"These engines are time capsules," John says. 

On the web: jandm-machine.com



"THEY ALL HAVE THEIR UNIQUE STORY."

THEIR FATHER OWNED IT, OR THEIR GRANDFATHER OWNED IT, AND NOW THEY WANT IT RESTORED."



▼ John Galbankian and a Snap-on torque wrench go to work on a 1914 Model T.



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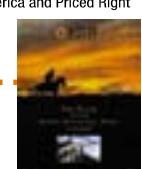
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NO SPEED LIMITS

Many a youngster has strapped on a helmet for the first time and taken the wheel of a family kart in a competitive event. Perhaps you've been there, done that, with your son or daughter.

Building a resume of successes – at the local, regional, national and international levels – is quite another matter. It takes time and money, to be sure. Many climb the ladder,

"Formula 1 racing is like having personal control of your own ridiculously sweet roller coaster. The amount of force that you're able to take is incredible; it's just an awesome ride."

—Scott Speed

Bull) Cosworth V10-powered entry. Scott is setting out to accomplish something that only two Americans have done in the 56-year history of Formula 1 – capture a championship. (The previous winners were Phil Hill in 1961 and Mario Andretti in 1978.)

A family passion

Thinking back to his first taste of competition at age 10, Scott has fond memories of the parking lot at the Santa Clara County Fairgrounds near San Jose. His mom, Julie, dad, Mike, and younger brother, Alex, himself a three-time national champ, were there. Mike raced karts for several years and continues to be recognized on the national level as one of the sport's top tuners.

Scott's meteoric rise through the world of karting and open wheel racing is well documented. Among his many accomplishments, he won the 2001 unlimited shifter championship in the Snap-on Stars of Karting Presented by the IRL and earned a test session in a Rahal Letterman ChampCar. Before heading off to college, brother Alex won the 2004 and 2005 titles.

Not so fast

Documenting just how important good health really is, Scott almost faced a career-ending setback. During early 2003, he was diagnosed with ulcerative colitis, a serious disease of the large intestines that is oftentimes debilitating. Some doctors even proclaimed his career was over.

Scott's track time was greatly diminished and occasionally stopped for the balance of 2003 and part of 2004. Only a month away from an anticipated colon removal, a doctor in Vienna landed on a treatment regimen that started Scott on the road to recovery. Always the fighter, he overcame the anemia, rebuilt his strength and now views the entire experience as a huge character builder.

Those who have observed Scott handling the demands of his flourishing career and personal challenges see no limits. He has grown immensely as both a racer and a person. Although Scott has already arrived where many aspire to be, he faces a bit of unfinished business. All of America will be watching as he pays his dues and sets his sights on being a serious Formula 1 championship contender in the years ahead.



Scott Andrew Speed

Favorite Food: - - - - PB&J sandwiches

Favorite Candy: - - - - - M&Ms

Beverage: - - - - - Red Bull

Hobbies: - - -Golf, rock climbing, cycling

[View Details](#)

Fig. 1. A photograph of the stadium.

On the Web

ScottSpeed.com

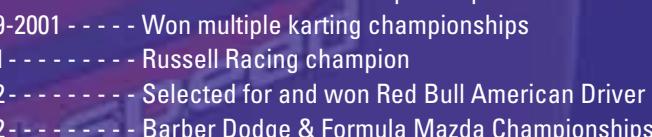
ToroRosso.com

RedBullRacing.com

Formula1.com

StarsofKarting.com

Career Highlights

- 
 - 1993 - First kart race at age 10
 - 1995 - First U.S. national championship
 - 1999-2001 - Won multiple karting championships
 - 2001 - Russell Racing champion
 - 2002 - Selected for and won Red Bull American Driver Search
 - 2002 - Barber Dodge & Formula Mazda Championships
 - 2003 - Select British F3 events
 - 2004 - Formula Renault German & Eurocup Championships
 - 2005 - 3rd in new GP2 Championship
 - 2006 - Friday driver for Red Bull Racing F1 Team (2X)
 - 2006 - Scuderia Toro Rosso F1 starting driver



Here's to finishing the "honey do" list.



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A new twist on an old job

For those in the boat and marine business, encounters with tight quarters, rusted parts, and hot engine compartments are everyday occurrences. Bill Grannis, service manager at Bluewater Boats Inc. in Daytona, Fla., knows this firsthand.

"Any tool that makes the job easier is something to be treasured," Grannis said. And he believes he has found one in the Snap-on S9724RHS Sparkplug Socket.

He describes the new Snap-on "shorty" sparkplug socket as "a lifesaver" on inboard and stern-drive engines using 5/8" hex sparkplugs underneath water cooled exhaust manifolds, especially on Ford motors.

"Limited access to the plugs previously required ingenious methods fitting standard plug sockets over the sparkplug shell," Grannis said. "Now the S9724RHS socket easily fits over the plug, and a wrench can loosen and tighten the sparkplugs."

"Thank you, Snap-on." ☺





Holding the tool just right

The model and the car are important too

The first thing that jumps out is the number of people in the studio. Wait a minute – better scratch that. The first thing is the model, the second is the pink 1957 Ford Thunderbird. THEN it's the number of people. (Some observers, as you'll see later, would notice the car before the woman.)

Sure, a photographer and models are to be expected because there are pictures involved. The car is supposed to be here, too, because the Snap-on calendar, "Classic Chrome," is going to have models and cars (and of course tools).

But who are all these other people?

It turns out they're pretty darn important. There is a stylist, who makes the models look good – or maybe we should say look better, because they already looked pretty good when they walked in the door. There is another photographer – and after that, one more photographer.

There are assistants, who ensure equipment is where it's supposed to be. There is a representative from Snap-on who makes certain the tools are properly displayed. There is the owner of the Thunderbird.

And there are the people who began working on this project back when a 2005 calendar hung on your wall. (But it wasn't the "Classic Chrome" calendar because that's new.)

"It takes a lot of planning," said Daniel Golla, Snap-on

project manager for National Premium Inc., the firm that produces the Snap-on calendars and makes them available to dealers for distribution to customers.

Snap-on first established goals – they include blending cars, models and tools in a classy, tasteful global fashion – with National Premium well over a year ago. National Premium then chose Hare-Strigenz, a Milwaukee-based firm, to handle the layout and photography.

National Premium and Juergen Strigenz, one half of the design team, started searching for cars right after landing the job. Finding them was complicated because various U.S. and international car manufacturers had to be

represented. Years and models had to be mixed, plus each month has a color scheme – for example, February is pink because of Valentine's Day. That meant they had to find not only the right car, but the right car painted the right color.

"At first it was challenging," Strigenz says. He would find the manufacturer, year, model and then "the car would be black when I needed a red one," he says.

About four months later he had it figured out. National Premium and Paula Hare, the other half of Hare-Strigenz, then found models (human models, not car models) that provided varied looks, yet also matched the color schemes and featured products.

Everything came together in early May. Like any project, preparation only goes so far. There is always more work ahead – and the unexpected always surfaces.

The Day

8:30 a.m.

The studio, in a warehouse-type setting in an industrial park, is mostly dark. The exception is the set, lit up like a Broadway stage and featuring a Mary Kay® pink 1957 Thunderbird.

Golla greets a visitor. Much of his work has been done in previous months; he is here mostly to keep an eye on things.

Hare is in charge of pretty much everything going on around the set. Others are assigned to various duties, but it's her job to make it all come together.

So far it has – the crew has been at it for four days, and so far so good. Today, everyone who is supposed to be here is here. That includes the model, Holland, who is prepping for her shoot.

Strigenz, meanwhile, visits with John Safro – the owner of the Thunderbird and a 1969 Toyota Crown, also parked in the studio. Strigenz directs the detail shots, such as a particularly cool taillight, fender or fin.

He most appreciates the owners' enthusiasm. "One of them said doing this was the most fun he's had with his car," Strigenz says. Another was confused when Strigenz discussed a model; some of these car guys have one-track minds.

"The guy thought I was talking about the model of his car," Strigenz says with a laugh. "I said, uh, no, I mean the female model."

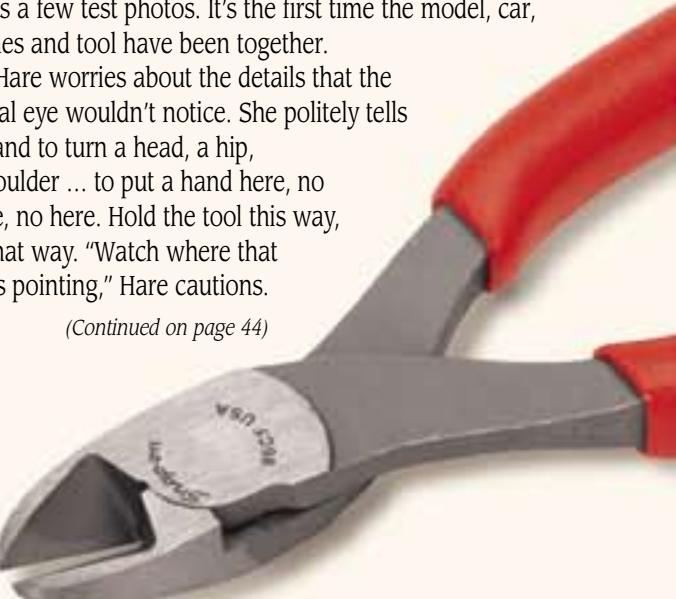
9:08 a.m.

Holland emerges from the dressing room, where a stylist has helped make sure the clothes fit properly. Holland goes to the set and holds a Snap-on diagonal cutter, the February tool.

The photographer, Dan Brice, adjusts the lights and snaps a few test photos. It's the first time the model, car, clothes and tool have been together.

Hare worries about the details that the casual eye wouldn't notice. She politely tells Holland to turn a head, a hip, a shoulder ... to put a hand here, no there, no here. Hold the tool this way, no that way. "Watch where that tool's pointing," Hare cautions.

(Continued on page 44)



The test shots are done, and Holland returns to the dressing room with Neda Spevic, the stylist.

"Holland's going to get makeup and her hair done," Golla says. "She'll look completely different when she comes out." A visitor wonders why – Holland seems just fine the way she is.

10:11 a.m.

Holland emerges from the dressing room and – this is somewhat of a miracle – looks even better. "Told you," Golla says.

The actual shoot goes similar to the test. Brice snaps photos from a camera secured to a stepladder. The images pop up on a computer screen, where Hare gets the first look and provides additional instructions based on what she sees – more "turn this way, that way, the other way."

Less than a half hour later, Holland is back in the dressing room for a change of clothes. (Only it's called "wardrobe," not clothes.)

The shots in the new wardrobe will be used for a supplemental calendar. (The second wardrobe could make the main calendar if it turns out better than the first, which does happen on occasion.)

During the break, Hare talks about the selection of models. She and Golla started out with "comp cards" of about 40, then interviewed about 25.

"We made sure they looked like the card," she says. Sometimes, models don't look exactly as advertised. The interview process also allowed Hare and Golla to get

a read on the disposition of the models – believe it or not, some can be difficult to work with. They held the interviews only three weeks before the shoot; the way a model looks can change in a hurry.

Hare knows how to handle models. Those chosen get a list of common sense rules, including not staying out all night before a shoot and not getting a haircut. (Not everyone has common sense, or knows how to follow rules. A model with a new haircut showed up during the calendar shoot. Neda worked around it, but not all actions have such happy endings.)

Models also get a phone call the day before to remind them they have a job and to make sure they know how to get there. Once they arrive, Hare has tricks to calm them. "I use the mother in me," she says. (She seems like the kind of mother who would give you a great cookie, but not until after your room was cleaned and spotless.)

10:45 a.m.

Holland re-emerges. More shots follow. This round goes quicker because the crew has figured out the best way to have Holland hold the tool.

"The diagonal cutter is tough," Golla says. "It's small, so it's easily hidden. It's easier to figure out how to hold the bigger tools."

Holland heads back to the dressing room for a third wardrobe option.



11:18 a.m.

Holland returns for the last shots. Her work will be done in a few minutes. Then Safro's other vehicle – the 1969 Toyota Crown – will be put on the main set. A photographer has taken detail shots of that car already. He will take details of the Thunderbird as the crew and a different model work with the Toyota for the rest of the day.

The afternoon model shows up a little early and watches the end of Holland's shoot. Hare schedules the less experienced models for the afternoon so they can watch how the veterans (including Holland) handle themselves in the morning.

Safro is there to watch and receive a unique souvenir: A photo of himself with his car and Holland. He has an eclectic collection of 41 cars. "We collect what we like," he says. Admittedly, he likes a lot.

It's clear ownership has its advantages as Safro hustles to the set to get his picture taken with Holland and the

Thunderbird. Hare provides some friendly direction for the glamour shot. Brice jokes with Safro and Holland, putting them at ease as he snaps the picture. Golla and Strigenz smile as they watch an owner receive his "paycheck."

There are worse things than owning a 1957 Ford Thunderbird. And much worse things than a Snap-on calendar shoot with gorgeous cars, glistening tools and glamorous girls.

How to get your calendar

The 2007 "Classic Chrome" calendar will be available through Snap-on dealers in a standard wall format and a 4-inch-by-6.5-inch "mini" version. Two additional 2007 calendars, "Snapshots" and "Motorsports," will continue to be offered.

Paula Hare, Juergen Strigenz, Daniel Golla



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PAMA Olympians set the bar for all aviation techs

One of the premier events in aviation maintenance is the annual PAMA Olympics, held by the Professional Aviation Maintenance Association. This very competitive event gives aviation maintenance techs an opportunity to test their skills against others from around the country.

Simply competing in the grueling event requires hard work and dedication. Those who perform well receive recognition throughout the industry, along with bragging rights among their peers.

According to Tom Yanus, chairman of the PAMA Olympics, this competition provides an accurate assessment of the participants' skills. "Other than being on the hangar floor and actually on the job with these techs, I don't think there is another way to get a true sense of who these professionals are and what they do," says Yanus.

The Olympics is popular among aviation techs because the recognition and the bragging rights are well-earned. There's no room for error in the aviation maintenance industry, and keeping up with the latest developments while maintaining razor-sharp skills requires an exceptional level of dedication. The Olympics measures that level of dedication through challenging competitions judged by the strictest of standards.

Conducted over three days at the annual Aviation Industry Expo (this year's event was held in Las Vegas from March 27-29), six teams of four techs and about 75 individual techs competed in the following categories:

- Electrical troubleshooting
- Aircraft Technical Publishers' Federal

Regulations and data research

- Hardware identification
- Hydraulic line fabrication
- Rigging
- Safety wiring
- Flight Safety International's troubleshooting training program

Snap-on Tools, the largest sponsor of the Olympics, donated about \$50,000 worth



of tools and accessories to the winners, in addition to the trophies. "We are very pleased that Snap-on gives us such positive support," says Yanus.

Yanus, who is an instructor in Aviation Maintenance Science at Embry-Riddle Aeronautical University in Daytona Beach, Fla., says a side benefit of the competition is the attention it brings to aviation maintenance.

"It's the only place to see the best aircraft mechanics put their pride on the line in an awesome display of raw talent," he says. "We rarely give enough credit to the aircraft mechanics. This event reminds everyone that it takes more than a good pilot to maintain safety in aviation."

For more information, visit pama.org or aviationindustryexpo.com.

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TOP PAMA OLYMPIANS

Team standings:

1st Place:	2nd Place:	3rd Place:
Midcoast Aviation	Bombardier Aircraft Services	Southwest Airlines
Team Members:	Team Members:	Team Members:
Brian Bauwens	Mark Dumas	Kyle Acuna
Bill Fields	Michael Zina	Southwest Airlines
Tim Kennon	Robert Huntley	Troubleshooter of the Year
Vinnie Venditto (Coach)	Anthony Masciotra (Coach 1)	Kyle Acuna
	John Carlton (Coach 2)	Data Researcher of the Year
		Robert Huntley, Bombardier
		Dennis Pelletier (Coach 1)
		Tom Zollars (Coach 2)
		Safety Wire Champion
		Bill Fields, Midcoast Aviation

Individual standings:

Technathlete of the Year
Bill Fields, Midcoast Aviation
Troubleshooter of the Year
Kyle Acuna, Southwest Airlines
Data Researcher of the Year
Robert Huntley, Bombardier
Safety Wire Champion
Bill Fields, Midcoast Aviation

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mysteryranch.com



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This is for all those road warriors who forget to unplug their cell phone chargers, and then can't start their cars due to a dead battery. This small gizmo automatically cuts off power to any device draining your battery, ensuring there is enough charge remaining to start the engine. The Brain can even use an optional remote control to disconnect the battery, so would-be thieves are unable to "hotwire" the car.

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batterybrain.com



Golden Boys

Two Snap-on Special Editions of the award-winning Golden Boy .22LR lever action rifle from Henry Repeating Arms are now available. They include a gleaming receiver and awesome 20-inch octagon barrel. One edition (H004GD) features a laser-etched and hand-painted "Get it Done" logo on the American walnut buttstock, and the Snap-on Tools logo embellishes the receiver. MSRP is \$529.95.

The other edition (H004TD) has a "Snap-on - THERE IS A DIFFERENCE" logo laser etched into its American walnut buttstock. MSRP is \$449.95. To purchase these Snap-on Special Edition Golden Boy rifles, contact your nearest Henry Repeating Arms dealer. Direct inquiries to Info@HenryRepeating.com.

henryrepeating.com



Never get lost in the woods again

The Magellan eXplorist 600 GPS boasts a wide range of features not commonly found in one unit. Designed to appeal to savvy outdoor adventurers, the 600 has a personal weather station plus altimeter, barometer, thermometer, and a 3-axis electronic compass. The 600 can also calculate areas, distances, provide vertical profiles of trails, and can store waypoints, routes and logs. It connects to the Internet and uses four different screens for viewing coordinates and other data. Optional add-on software allows users to include street maps, topographical maps, navigation data, and international maps.

\$449.99

magellangps.com



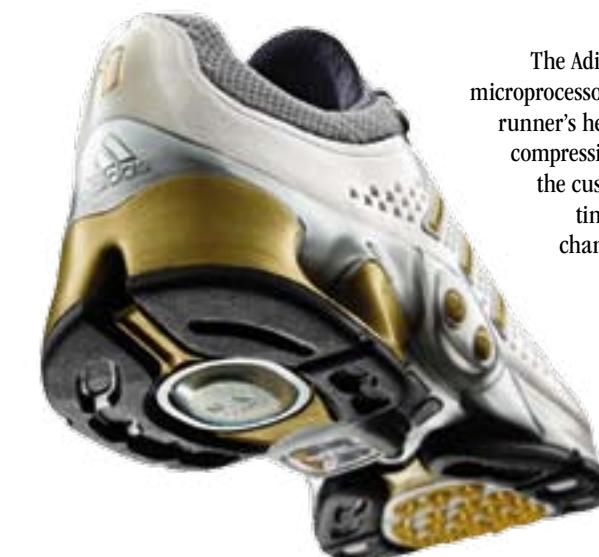
A computer with shoe laces

The Adidas-1 running shoe uses a microprocessor embedded just below the runner's heel to gauge the amount of compression on impact, and adjusts the cushioning to compensate. A tiny built-in motor gradually changes the tension on a cable running the length of the shoe, making it "ride" softer when necessary.

The battery is good for about 100 hours, the normal life of a running shoe.

MSRP \$250

adidas-1.com



Purple power

Royal Purple says its performance advantages come from a blend of synthetic oils and proprietary technology that greatly reduces engine heat and wear. Whatever the reason, independent testing has given Royal Purple a boost. That research – conducted by various magazines and universities – concludes that horsepower increases up to 2 percent when Royal Purple is used versus some other oils, while fuel savings of 4.5 percent can be achieved. Another independent test shows Royal Purple film can be 400 percent stronger than some other leading oils.

royalpurple.com

CARS FOR TWO

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En in your wildest dreams, you probably wouldn't envision two caskets as the starting point for building a street machine. But then again, you're not Mike Fobes of Auburn, Wash. The 20-year tech and now 8-year instructor at Renton Technical College did exactly that.

The two real caskets sit on a hand-built tube frame. It cradles a Boss 302 sporting Hilborn fuel injection. Modified Cleveland heads provide the perfect spacing for 2-inch, pipe-organ exhaust stacks. A Ford C4 automatic churns a 9-inch

rear. Retro-style '60s ET wheels grip the pavement through 12-inch-wide rears and 4-inch-wide fronts. Disk brakes all around stop the fun.

The Munsters-inspired '26 T design utilizes a spider-web theme for the frame gussets, exhaust stack supports, across the front grill and even on the red upholstered seats. A satin black finish is perfect for going out in style. The polished aluminum skull headlights are complete with mouth low beams, eye high beams and leather skullcaps.

Next up for Mike is an RX-7 powered chopper, then a street rodded WWII Army halftrack. His 45 ASE certifications paved the way for the transition to teaching. His tools of choice: Snap-on **super**naturally.

Car photo provided by Henry Ngan of Studio 3, Inc.

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