



Trans-Am Reborn!

At just about any historic road-racing event, the old warriors that really bring people to their feet are the classic Trans-Am cars of the late '60s and early '70s. Their appeal is undeniable: body shapes we recognize (and love), the rolling thunder of Detroit V-8s, and a bittersweet nostalgia for an era peopled with racing heroes and legends like Mark Donohue, Swede Savage, George Follmer, and Jerry Titus.

A lot has changed since the SCCA created the Trans-American Sedan Champi-

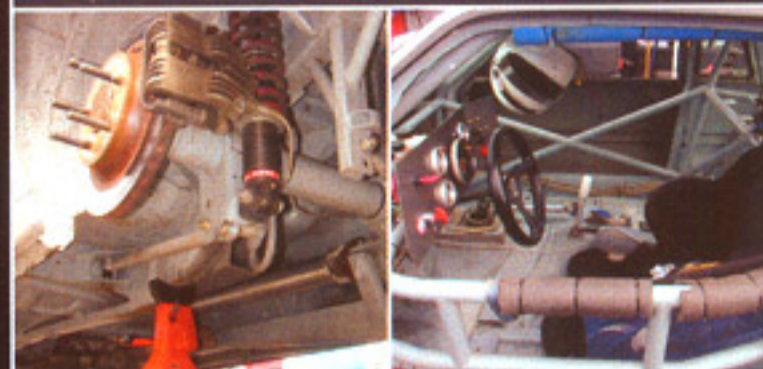
onship in 1966. Most of the cars—Challengers, Barracudas, Javelins, even Camaros—are no longer in production. Many of the competitors have either retired, moved on to other forms of racing, or are clipping apexes on that big track in the sky. And the SCCA's Trans-Am series—though still an active, viable event—looks nothing like it did in the sport's glory days. The stretched and spoiled racers bear little resemblance to the production cars on which they are based.

The old-fashioned pony car wars are still alive, though, if you know where to look. And by old-fashioned we don't mean historic. We mean that old-school Trans-Am-like concept of pitting rear-wheel-drive, V-8-powered, production-based musclecars from rival makers in a series of road-racing duels.

The SCCA still has classes at its Club Racing level that accept domestic V-8-powered cars. But we found another, younger association with a different spin on the idea. The

Guy Cunningham's AI Mustang

Cunningham's '89 coupe, built a year ago, is the second of two Griggs Racing team cars. Headquartered at Infineon Raceway, Griggs sells not only complete GR-40 suspension systems for AI and AIX Mustangs, he also builds engines for them. Bruce Griggs told us he built this car when competitor Maximum Motorsports entered the AI fray. "We had to beat them, so we added Guy and built a team." The strategy seems to be working; Cunningham won the 2002 AI points championship.



Engine: 302 block, Scat crank and rods, "high compression" (all Griggs would admit to), Edelbrock RPM heads, Griggs-grind hydraulic cam, Trick Flow rockers and stud girdle, Edelbrock intake manifold, Ford Motorsport mass air meter, Edelbrock 70mm throttle-body, stock '89 Ford computer, BBK 1 $\frac{1}{2}$ -inch headers; 318 rear-wheel horsepower

Transmission: Tremec TKO II

Rearend: 8.8 with 9-inch billet ends, 3.73 gears, 31-spline axles, DPI Black Gold differential

Front Suspension: Griggs control arms, tubular K-member, and coilovers; Koni double-adjustable shocks

Rear Suspension: Griggs severe-duty TorqueArm, 11-inch control arms, Watts link, Koni coilover kit

Other: Griggs frame kit and lower sub-frame connectors; Wilwood front brakes; Baer rear brakes; Griggs mild-steel 1 $\frac{1}{2}$ x 0.095-inch MIG-welded cage

At NASA events—American Iron, American Iron Extreme, and Camaro-Mustang Challenge (CMS)—cars run in one large group, so spectators can experience the full spectrum of the association's pony car racing.

THE PONY CAR WARS ARE ALIVE AND KICKIN'

BY DREW HARDIN

Photography: Drew Hardin

National Auto Sport Association (NASA) offers several classes for Mustangs and Camaros (and other cars like them, though those two make dominate the races). Plus, NASA also provides something the SCCA doesn't: a training class for novice road racers who want to learn the ropes at the wheel of their own cars. (See the "High Performance Driving Experience" sidebar.)

American Iron

The top tier of NASA's domestic sedan

racing is called the American Iron (AI) series. Its intent, says NASA, is to "encourage each competitor to create an aftermarket-sourced configuration that will make their car perform at an optimum level." After taking a ride in an AI Camaro at northern California's Infineon Raceway (which locals still call by its old name, Sears Point), we can vouch for the "optimum" part.

The racing is fierce, and close, too. It's not unusual for the top five qualifiers in a given race to turn lap times within a half-

second of one another, at average speeds within a few tenths of a mph. In fact, at the last AI event of the 2002 season, Vageli Karas beat Second-Place finisher Guy Cunningham in the first race by $\frac{1}{1000}$ ths of a second. Their average speeds were 58.288 and 57.963 mph, respectively. Like we said: close.

What makes the AI series even more interesting is the fact that these aren't unlimited-style race cars that you can just throw a ton of money at in hopes of building a winner. (The



Here's the Griggs Racing team at Infineon Raceway, formerly known as Sears Point. Griggs' shop is located alongside the track, so Bruce Griggs and Guy Cunningham had home-field advantage during this race, the final AI event for the 2002 season.

Camaro-Mustang Challenge cars like Nick Steel's Camaro aren't allowed as many modifications as AI cars, but the racing is just as close. The top three cars in the first CMC race at Sears Point finished within 0.05 second of one another, with 0.003 second separating Second and Third Place.

basic AI cars aren't, anyway. More on that later.) There are restrictions that the competitors must adhere to. Three in particular set the basic parameters for the class: The vehicle must retain the body envelope as delivered by the factory—the front clip, floorpan and subframe must remain intact, and the firewall cannot be relocated; Toyo RA-1s are the spec tires, with a maximum width of 275 mm and a wheel diameter of 17 inches; and the cars must fall within a 9.5:1 weight-to-power ratio, with rear-wheel horsepower and vehicle weight including the driver as the measurements of concern. NASA brings corner scales

to its events to check the top finishers after each race is over, and competitors are expected to keep current dyno results from authorized checking stations in their log books.

That weight-to-power ratio does interesting things to the cars' designs. For instance, someone could build a real fire-breather of an engine, as the AI rules clearly state that "any performance modification is allowed," but then they'd have to balance that power with extra weight. Some competitors do just that, and use ballast bars to tune their cars for a particular racetrack's configuration. It's all le-

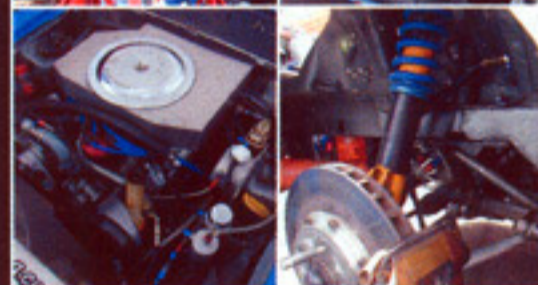
gal, provided the bars meet NASA's specs and don't exceed a total of 100 pounds. Conversely, the rules say competitors may replace hoods and bumper covers with composite pieces, and swap safety glass for Lexan or polycarbonate; but that might make the car too light for its power output.

American Iron Extreme

For those who find those rules too confining, or who are ready to take a step beyond AI, NASA has a class called American Iron Extreme, or AIX. AIX cars do not have

Bruce Griggs' AIX Mustang

Griggs' AIX racer started life as a four-cylinder '89 coupe that he built into an SCCA A-Sedan race car for a customer some 10 years ago. He eventually bought it back and has been using it since to test and develop road-race parts, like his GR-40 suspension systems. Griggs won both of his AIX races on the weekend we were at Infineon Raceway; and Ross Murray, driving the same car, earned NASA's 2002 AIX championship.



Engine: Ford Motorsport iron R block, Sonny Bryant crank, Scat rods, AFR heads, Trick Flow rocker arms, Griggs solid cam ("the grind is proprietary," said Griggs), Edelbrock Victor Jr. intake manifold, Holley 650 carburetor, BBK 1½-inch headers; Griggs said he hasn't had the car on the dyno in this configuration, but with Ford Motorsport heads the engine produced 391 hp. "It's making more now," he told us

Transmission: Modified Tremec TKO II

Rearend: 9-inch with 3.89:1 Motive Gear ring-and-pinion and a Detroit Locker

Front Suspension: Griggs control arms, tubular K-member, and coilovers; Koni double-adjustable shocks

Rear Suspension: Griggs severe-duty Torque Arm, 11-inch control arms, Watts link, Koni coilover kit

Other: Sierra brake calipers on 13.5-inch rotors; Hoosier Winston Cup P275/40ZR17 tires on '95 Cobra R wheels

High-Performance Driving Experience

The class has sort of an awkward name, but the HPDE concept is very cool: Learn the ins and outs of road racing, in your own car, at some of your favorite tracks. Better still, HPDE courses don't cost an arm and a leg like some of the

"name" driving schools, and you still get one-on-one training from highly qualified instructors.

NASA accepts literally any sort of car into HPDE events ("from Hyundai to Ferrari," says NASA's literature), as long as it's in safe operating condition, has seatbelts, and is fitted with a rollbar if it's a convertible. We've been to a couple HPDE events and seen everything from hopped-up Lamborghinis to bone-stock Honda Civics, though most cars are import or domestic enthusiast models.

Drivers are sorted into one of four HPDE groups depending on their level of experience. Group 1 offers one-on-one instruction on the basics of car control at

Alan Blaine's AIX Camaro

Blaine logged some 130,000 miles on this '94 Z28 as a daily driver before he turned it into an open-road racer. At the last Silver State Classic he entered, Blaine averaged 170-plus miles per hour and was clocked at a peak of 192. Fun as the open road racing was, "I wanted to pass people," he said, so he joined the SCCA and NASA. He placed Second to Bruce Griggs in both of his AIX races.

Engine: Stock LT1 short-block rebuilt and balanced by Doug Rippey Motorsports; Ultradyne 233/234 camshaft, Comp Cams chromoly roller rockers, Manley pushrods, stock roller lifters, Crane valvesprings, Feria 2.02/1.55 valves; ported intake manifold; custom-fabricated intake tube; BBK/Edelbrock 58mm throttle-body; ACCEL 30-pound fuel injectors; reflashed engine computer; Hooker long-tube headers with custom-fabricated Y-pipe; 373 rear-wheel horsepower

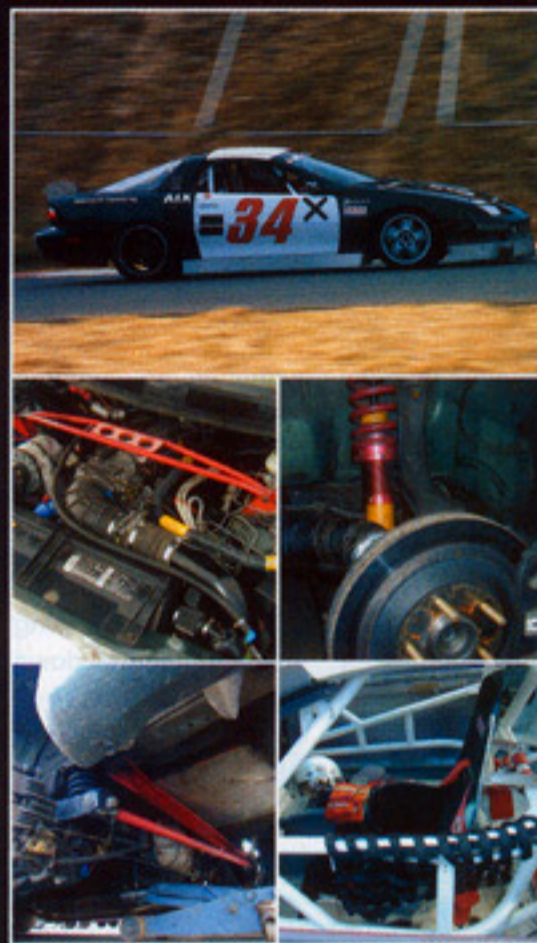
Transmission: Stock T56

Rearend: Stock with 3.73 gears and Torsen differential

Front Suspension: Global West and factory components; custom-fabricated bracket to mount Corvette brakes; stock sway bars; 800-pound springs; Koni shocks; Hotchkis strut tower brace

Rear Suspension: Unbalanced Engineering lower control arms, Panhard bar and torque arm; 150-pound springs; Koni shocks

Other: Custom-fabricated air dam and side skirts; Hoosier P275/40ZR17 tires on 17x9.5-inch Corvette wheels (f); Hoosier P315/35ZR17 tires on 17x11-inch Corvette Grand Sport wheels (r); fiberglass roof panel replaces T-tops



Guy Cunningham (#42) chased Vageli Karas all weekend, as both men were in the hunt for the 2002 AI points championship. Though Karas won both AI races, Cunningham earned enough points to capture the championship.



This tire mark on the side of John Lindsey's AIX Mustang attests to the close racing that goes on during American Iron competition.

to follow the weight-to-power rule (prospective AI cars without dyno sheets are automatically bumped into AIX), nor are there any tire limitations. And while AI cars cannot modify wheel openings beyond rolling or flattening the inside of the fender for tire clearance, AIX cars are "unrestricted in all body panel material and modification," says NASA. They do, however, have to hold to the AI's basic-body-tub rule, so tube-frame chassis are not allowed.

As you'll see from the mini car features sprinkled throughout this story, the parts and pieces that go into the American Iron

cars are readily available aftermarket components, some of which are even used on street cars. Several aftermarket companies—including Carbotech, Griggs Racing, and Maximum Motorsports—support the AI series with contingency programs.

But just because there are off-the-shelf aftermarket parts on these cars doesn't make them poseurs. Not at all. "These cars are incredibly sophisticated," said Ryan Flaherty, NASA's national chairman and an AI competitor himself. "You really have to know what you're doing to get the most out of them. We have some new people in the

class, but the front-runners are some of NASA's best drivers." Which goes a long way in explaining why the AI races are as close as they are.

Camaro-Mustang Challenge

At the other end of the scale, NASA also has a series called the Camaro-Mustang Challenge, or CMC, with rules that are more restrictive than in AI. For instance, only certain engines are allowed (no DOHC Cobra or LS1 motors), and aftermarket engine equipment is limited. The

the limit. By the time the student has graduated into Group 4, he or she is flying solo and lapping the track with other HPDE traffic with no restrictions on speed or passing other than their own abilities, track etiquette, and common sense. HPDE Group 4 members can apply for a competition license to race in NASA's other classes.

Costs to participate in HPDE events vary depending on the venue, but typically they run from \$150 for a one-day event to \$200 or \$300 for a weekend. That buys you several on-track sessions of around 20 minutes each—plenty of time to learn a lot and get your adrenaline fix at the same time.



While a Lincoln Town Car isn't your typical HPDE entrant, this one was lapping Infineon Raceway with the rest of the Acuras, Mazdas, Mustangs, and Corvettes in the class.



Alan Blaine videotapes every one of his races. Not only is it a nice souvenir, he uses the video as a self-teaching aid. When he watches the tape, he times his laps, then goes back over each lap to see if he can figure out why some were slower than others.

AIX cars, like Alan Blaine's Camaro, aren't held to the same power-to-weight ratio as the AI cars are, so they can run more powerful engines and shave weight where possible. Blaine figures he took some 40 pounds off his car by stripping the factory doors down to their plastic skins, which attach via Dzus fasteners.

cars cannot produce more than a set amount of rear-wheel horsepower within a "stock" rpm range, and there's a weight penalty if they do. Toyo RA-1s are the spec tires here, too, but the max size is 255/50-16. "The main concept of this class is to keep the costs down and the racing extremely close," explained Tony Guaglione, CMC's director. As a general rule of thumb, CMC cars are street cars that have been modified to compete in the class. AI and AIX cars, on the other hand, may have once been street cars, but were stripped down to a bare body shell during construction.

How Much?

According to racers in each class, you can build a competitive CMC car for between \$8,000 and \$12,000; a front-running AI car will cost you between \$25,000 and \$30,000; and in AIX, "the sky's the limit," says John Lindsey, an AIX racer and NASA's chief divisional director.

But throwing money at the cars was not

the idea behind AI, says NASA's Flaherty. The AI rules were written to allow flexibility but also to control costs, so the cars would stay within reach of everyday enthusiasts. "For the speeds we run, there isn't a cheaper car you can race," Flaherty claims. Speeds? "Well, at the fastest track we race, the Las Vegas Motor Speedway, we were seeing around 145 mph," he said. "But going 145 down a straight is nothing compared to taking turns at 60 to 70 mph."

Go Racing

Does this sound intriguing to you? It should. Our hot laps in the shotgun seat of Alan Blaine's AIX Camaro reminded us more of laps we've taken in NASCAR cars and trucks than any other production-based racer we've been in. These cars are quick, fast, and sticky, and they'll generate stomach-churning g-forces, especially on the roller coaster that is the Sears Point racetrack. If you've ever wanted to relive the glory days of Trans-Am racing

Ryan Flaherty's AI Mustang

Flaherty bought this '88 Mustang for \$1,500 and finished it just before the first race of the 2002 season. The year wasn't an easy one for him—a blown engine, shunts with other AI racers, and a spectacular off-track excursion (his Mustang caught air like an off-road racer) cost him in several ways. What probably hurt him the worst was lurching his 331ci stroker motor. The "junkie" 302 you see in these photos "is down on power. I'm not in the hunt like I'm used to," he admitted.



Engine: Stock 302 block, stock crank and rods, forged pistons, "aftermarket cam" (it's all he'd admit to), AFR aluminum heads with 9.2:1 compression, Edelbrock Performer manifold, Holley 650 carb, BBK headers; 308 rear-wheel horsepower

Transmission: World-Class T5

Rearend: 8.8 with 9-inch bearings, 3.55 gears, Torsen limited-slip

Front Suspension: Maximum Motorsports tubular K-member (extends wheelbase 3/4 inch) and tubular control arms with Delrin bushings; SN95 spindles; Maximum Motorsports coilover with Bilstein shocks

Rear Suspension: Maximum Motorsports Panhard bar, torque arm, adjustable lower control arms, sway bar; Bilstein shocks

Other: Dual subframe connectors above and below the car's floor; 13-inch Brembo Cobra R front brakes; custom 12-inch rear brakes; 1 1/2x0.120-inch mild-steel MIG-welded cage; HPM rear wing with struts fabricated by Maximum Motorsports.

from behind the wheel, not behind the catch-fence, then NASA's American Iron series is the place to be.

NASA's 2003 AI/AIX West and CMC racing season kicks off the weekend of March 8-9 at the California Speedway in Fontana. To find out more, visit the association's Web site (www.nasaproracing.com), as well as the AI (www.americanironwest.com and www.americanironeast.com) and CMC sites (www.camaromustangchallenge.com). **HR**

Sources

Griggs Racing

Sonoma, CA; 707/939-2244; www.griggsracing.com

Maximum Motorsports

San Luis Obispo, CA; 805/544-8748;
www.maximummotorsports.com

NASA

Richmond, CA; 510/232-NASA; www.nasaproracing.com