AN EMERGING segment of motorsports that cherry-picks elements of land speed and drag racing is attracting racers and spectators in eye-popping numbers.

It’s not quite the salt flats experience; nor is it as rules-regulated as quarter-mile or 1000-foot drags. But for devotees of half-mile and one-mile race events—which have spread and flourished over the last decade-plus—the format is pretty close to ideal.

In fact, anywhere from 300 to 400 street-legal cars may show up at the pit gate to populate what could be called “Baby Bonneville” or “double drag racing,” where ETs mean little and only the top speed counts. Class structures are roughly comparable between organizations, but each has its own take on dividing lines and naming details. From “Not Street Legal” to “Heavyweight” and “Exotic,” every class matrix takes into consideration body style, cubic inch diameter, fuel preference and engine age.

Indeed, a number of performance shops and parts makers report the sands are shifting, and believe some segments of drag racing may have flattened out due to rulebooks lagging behind OEM offerings. Customers contend that showroom new cars and trucks require too much modification just to compete in the quarter mile. But in half-mile racing, for example, all that’s typically mandated for competitors is a seatbelt and helmet.

What’s more, the vehicle they race is often the one they insist on driving to and from events.

The Enablers

“We use airports as our racing venues that are based strictly around the standing half-mile racing distance, most notably in a heads-up, side-by-side racing format,” said Blake Hutchinson of wannaGOFAST (wGF) based in Destin, Florida, which hosts six events in 2016 in Florida, Georgia, Virginia, Indiana and Texas. “We can see upwards of 5000 spectators over the course of a weekend.”

The wGF class structure breakdown includes: AWD, RWD, FWD, Manual, Naturally Aspirated, 4-Door, Heavyweight as well as awards for Fastest Overall Domestic and Fastest Exotic/Import vehicle.

“Our goal is to put a smile on everyone’s face by the end of the day!” Hutchinson enthused. “Racers average five to eight runs per day; several have managed 20 or more, so they really are getting their investment back when they race with us. Our email customer service gets nearly instant replies, and we are investing in better speed display boards and sound equipment.”

Another half-mile, high-horsepower host is Shift S3ctor, whose website touts stats of 18,112 passes completed and “39 blown motors,” and which hosts five events in three states this year. All entrants must provide a “Self Tech Inspection and Declaration Form” completed within 48 hours of the event covering six specific vehicle systems.

Shift S3ctor also allows side-by-side racing, but posts its results using only first names for top speeders in AWD, 2WD, Exotic, NA, 6-Speed, Sedan, Corvette, BMW/AMG, motorcycle. All competitors vie for the event Overall Trap Speed title.

Using another airport, but timing over a mile, is the East Coast Timing Association (ECTA) that was born out of necessity in 1995 to satisfy the speed need of rained-out
Bonneville hopefuls, as well as those who couldn’t justify the hefty 4000-plus mile round trip from the east.

“ECTA has a self-imposed limit of 150 cars per event to give all competitors ample track time,” said Brian Lohnes. “Optimum running conditions can bring 500 runs per day averaging three runs per entrant. Because we use only one side of the wide runways at a time, if an oil down occurs we can quickly switch to the other side without much interruption.”

Today, ECTA participants are still dedicated land speed racing (LSR) competitors, but most are “milers,” with fewer Bonneville racers using the mile for testing purposes. “We are a mile sanctioning body with a class structure very similar to that used by the SCTA at Bonneville,” explained Lohnes. “We have some unique classes and offer a ‘time only’ class for people who just want to come out and have fun with their cars and trucks. We run one vehicle at a time, and single lane staging is operated on a first-come, first-served basis.”

ECTA’s season opener includes the Hot Rod Magazine Top Speed Challenge, a shootout-style race for street-legal cars, while the season closer features a street bike shootout, although cars are not turned away.

The veteran among paved gatherings is the Texas Mile, dreamed up by Jay and Shannon Matus in 2003 from their own passion for motorsports and to address the high-speed street racing problem occurring on Texas highways. Today they host four events—two Texas Mile competitions and two US Mile.

A relatively new segment of motorsports, in which flat-out competition takes place on the half-mile and mile, is drawing hundreds of drivers to repurposed airstrips across the country. Top speed is what matters most at these events, where a range of import and domestic street-legal vehicles routinely top 200 mph. Photo courtesy of Induction Performance.
competitions, which are the Colorado Mile and the Arkansas Mile—all under their newly launched Top Speed Racing Association (TSRA) banner, promising: “3 Days, No Speed Limit, No Tickets, No Kidding.”

“Our events are for everyday people but have a ‘big-time’ race feel,” explained Shannon Matus, who also maintains a full-time career in the telecommunications industry. “The Texas Mile has worldwide participation, and registration sells out within a few hours of activating. At each Top Speed Racing event, our car counts range from 150 to 220 vehicles.”

Focused on their mantra of “delivering the winning experience” to participants, spectators, sponsors, vendors, tuners/shops, online fans, media and the local community, Matus made it clear that their Top Speed Racing events concentrate on modern vehicles, bolt-on parts suppliers and cutting-edge tuners.

Among the reasons for mile and half-mile racing’s rapid growth are rulebooks that call for helmets and basic tech inspection, and not much else. The possibilities for modification, however, are virtually limitless, as one leading shop owner stated, “It is our job to deliver the most power while ensuring as much reliability and safety as possible.” Photo courtesy of Vengeance Racing.

“Our Top Speed Racing events welcome street-legal sports cars, motorcycles, trucks and concept race cars,” she explained. “The events feature everyday people as amateur participants, novices, and professional racers alike who all share the need for speed without the fear of tickets or jail time!

“The concept is simple: drivers line up and go as fast as possible for one mile. The goal? To set the fastest mph record at the event, be the fastest car, truck or motorcycle in your vehicle’s class or just achieve a personal best.

“We know of shops and tuners serving participants who specifically want vehicles modified and enhanced for our Mile events,” said Matus, who revealed that fewer than 15 percent of entries require high-level fabrication work or skilled systems integrations. “Our events are known to be proving grounds for manufacturers, tuners, shops, aftermarket parts. We are geared for PRI and SEMA in motion.”

Classes are for cars as well as motorcycles, and then grouped by
MILE & HALF-MILE COMPETITIONS

vehicle marquee/model/generation, engine displacement and modifications, power adders such as turbo, nitrous, and if its street legal or not. They also recognize the land speed racing classes of Bonneville.

At the recent Texas Mile event, the top dog was a blue twin turbo Ford GT that posted 279.9 mph in the mile and 207 mph in the half. This same team, M2K, set the track record at the inaugural Arkansas Mile in June with 280.1 mph.

TSRA’s structure is well defined, and is the result of Jay Matus having extensive motorsports experience since the 1980s and his 25-plus year career in security and emergency response management. Racers run under clear, concise licensing and technical inspection and rules processes; they are timed with a proprietary laser speed trap system; and they’re covered by a top-notch fire, rescue and safety team.

Ground zero for American straight-line performance enthusiasts is the oldest amateur motor racing organization in the US: the Southern California Timing Association (SCTA) and its subsidiary, Bonneville Nationals, Inc. (BNI).

The organization hosts eight land speed racing events a year, of which six are held on California’s El Mirage Dry Lakebed, located 40 miles due east of Lancaster, where member clubs compete annually for Top Points Champion, Top Points Car, Top Points Motorcycle and Top Points Club on a single, 1 3/10-mile course.

Two events, hosted by SCTA’s subsidiary BNI, are held at Utah’s Bonneville Salt Flats located in Utah: Speed Week and World Finals.

An all-volunteer staff has conducted every race where only the timers, ambulance, fire, and comfort station vendor get paid since 1938.

Classes range from modest to monstrous cubic-inch entries in body styles as common as roadsters to sleeker lakesters up to the fastest vehicles on the planet: streamliners. All are further divided by fuel, induction and a slew of body delineations.

To achieve a record at El Mirage (dirt) or Bonneville (salt), the vehicle and safety equipment must be in SCTA rule compliance. Records are set when the vehicle speed over the course exceeds the current mark, and the vehicle is immediately inspected for certification. Only SCTA/BNI members can set records.

“Mother Nature has taken the last two years of racing on the salt from us, so we are very much looking forward to getting back out there,” explained third-generation racer and SCTA President Bill Lattin. “Last year’s pre-entries were almost 550, and we are hoping for the same this year.”

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The Parts & Players

The emerging mile and half-mile pastime has hit OEMs’ radar. Erich Heuschele at Fiat Chrysler Automobiles US (FCA US) in Auburn Hills, Michigan, not only values customer feedback, but keeps attuned to evolving trends, noting, “SRT Engineering pays close attention to these ‘quasi’ SRT engineering exercises. We listen and watch our customers and how they use our products—that experience is priceless when developing our latest products.”

He pointed out that a measure of success comes from the Challenger SRT Hellcat’s stock intake charge cooling capacity that delivers repeated speed in successive runs. Interestingly, superchargers are among the most common bolt-ons for half-mile and mile racers entering the top speed game.

The OEMs get it. FCA US’s supercharged Hellcat, Chevrolet with its snarling Camaros, and Ford’s stable of Mustangs are some of the most affordable and dominating street performance vehicles straight off the showroom floor.

Those with bigger wallets can show up with a Dodge Viper, Nissan GT-R, BMW M-Series, Cadillac CTS-V, Mercedes AMG, Corvette, Audi R8, Porsche, and of course, higher-ticket European exotics.

According to Nathan Cicio, owner of TopSpeed Motorsports in Alpharetta, Georgia, which specializes in engine, transmission and other enhancements for GT-Rs, among other models, “The GT-R and the Lamborghini are the two top dogs,” citing a Lamborghini’s current half-mile top speed of 239 mph versus the GT-R’s 235 mph.

Although it’s a toss-up mix at every event for vehicles, driver demographics are more predictable. “Our participants range from 18 to 60-plus years of age,” said Hutchinson. “The majority of racers are male, with several females who race at each event, from all over the US, as well as Canada and Mexico.”

SCTA’s participants and spectators come from all over the world to take part in a Bonneville event, slated for its Continued on page 56
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67th annual in 2016. “For hot rodders, Bonneville is the Holy Grail, where sunrise is second to none,” said Lattin of the amateur sport. “There are only two groups—those who come to the salt and those who haven’t made it yet.”

ECTA draws an array of competitors—from bucket listers to teenagers—who, despite the lack of any prize money, return repeatedly. “Our participants literally span all walks of life,” observed Lohnes. “This racing challenges inventive minds in such a fashion that the search for ‘a little more’ is never ending.”

Ron Mowen of Vengeance Racing in Cumming, Georgia, whose experience includes domestic title sponsor of wannaGOFAST half-mile events, believes the sport’s rapid growth is due to rules that only call for helmets and basic tech inspection, yet recognize the difference between a mechanic and a high-performance technician. With a customer base that owns late model GM Performance, specifically 1997 and newer GM platforms with the LS and LT engines, Mowen explained that, “Modifying these cars is not for the ‘average Joe,’ because one mistake can cost someone their life at 150 mph plus. It is our job to deliver the most power while ensuring as much reliability and safety as possible.”

Primarily street legal and daily drivers, the vehicles are a mix of stock, mildly modified and big-budget 1500-horsepower combinations and beyond. Minimum changes to help a car breathe a bit better and a horsepower tune costs about $1000.

One Vengeance client owns a 2007 C6 Z06 Corvette that currently holds the Corvette half-mile record at 204.5 mph, but his metallic butterscotch beauty is getting a few upgrades in order to crank out 210-plus mph.

The result of extensive fabrication skills, exotic parts and skillful integration, the investment hovers above six figures. However, Mowen said the average cost to bump up past 700 horsepower ranges from $15,000 to $20,000.

At TopSpeed, GT-R is the platform of choice for its durable engine that can accommodate a turbocharger and lots of added power. In fact, Cicio said, “You can make a 1500-hp GT-R and literally drive the thing every day comfortably if you wanted to. There is not another platform on the planet you could actually do that with because of a few different things,” including a robust and highly tunable engine, an ECU that allows for numerous alterations, and its stout dual clutch transmission.

While modifications for a Lamborghini that competes on the half-mile can run $150,000–$300,000, Cicio cited costs for
similar modifications on the GT-R ranging from $65,000–$100,000. Such work would include a built engine with built heads, larger turbo, along with upgraded camshafts, transmission, gears, clutches, wheels, tires, and brake components.

Joe Krivickas of Precision Turbo & Engine in Hebron, Indiana, told us domestic muscle cars represent the most popular makes for the mile and half mile because they come from the showroom steeped with power, yet can achieve significant power increases with minimal aftermarket products.

More than a manufacturer of bolt-on parts, the company works with end-users to design complete packages, but leaves the wrench spinning to others. “One of the first, easiest upgrades for the average enthusiast is to install an aftermarket turbocharger kit,” noted Krivickas, stressing that technical knowledge in half-mile racing is a must for proper vehicle setup. “For many late-model muscle cars, this significantly increases horsepower in excess of 1500 without affecting drivability, and with the correct supporting modifications.”

Krivickas shared that Precision is currently on a 250 mph standing mile quest, as the company is working closely with a 2012 Ford Mustang owner who swapped in a 5.2-liter Ford motor that delivers in excess of 1765-rear-wheel hp thanks to Overkill Motorsports’ modified version of a Hellion Power Systems twin turbo kit. The car features a pair of GEN2 PT6466 turbochargers using its Competition Engineered Aerodynamics (CEA) technology.

More than three decades ago, John Lingenfelter built, and solidly drove his way into an enduring slot in the high-performance aftermarket world. Today, Lingenfelter Performance Engineering (LPE) in Decatur, Indiana, specializes in tuning and performance upgrades for GM-based vehicles, with most engineered toward street performance alongside sparing track time.

“Every one is a snowflake,” quipped Brent Malone, noting only 10 percent of customer vehicles get built as all-out Racers average five to eight runs per day, and several have managed 20 or more, so they really are getting their investment back when they race with us.”
race cars, making roll cages, race seats, safety harnesses and parachutes the exception, not the rule. “There is significant engineering and fabrication that goes into these performance enhanced cars. The usual products are LPE factory head, supercharger assemblies, camshafts, exhaust system headers, cold air induction.”

He also noted that speed-rated tires are a must for optimum traction, some form of brake upgrade is smart, and tweaking engine calibration is desirable while preserving street-legal status.

Matt Watts of Induction Performance in Thonotosassa, Florida, said the top speed racing style is still catching on, but cars often retain factory comforts like power steering, air conditioning and stereos, with a common modification thread being turbocharging and some form of dual clutch transmissions.

“Most of the competitors in these events are lightly modified street cars retaining all original body work,” Watts explained. “Minimal attention is paid to aerodynamic modification, and the ability to take advantage of drag/frontal area, lift and downforce properties plays a huge part in maximizing speed.”

Engine work ranges from simple upgrades of rods and pistons to extensively reworked heads, right on through to complete billet builds from the block up.

“Top GT-Rs will have much larger turbos than OEM,” he added. “Transmissions, usually not the cars, are also extensively modified, costing upwards of $30,000 on the fastest cars.”

The latest major project from Induction Performance is a Toyota Supra build seeking to challenge the GT-Rs and Lamborghinis, or at least join the discussion. “The car has a 3.2-liter stroker with billet crank, aluminum rods and high-compression pistons,” said Watts. “An extensively ported head has oversize valves and many aftermarket components including a Precision 8685 CEA turbo, TH400 transmission with ProTorque converter, and a Ford nine-
inch rearend. It also has two nitrous kits that will boost crank horsepower to 1900 and should be capable of 215-plus mph in the half mile.”

Evan Davis of D3 Performance Engineering (D3PE) in Houston, Texas, reported that most of the events his team attends offer a street car category, where cars they’re building, or compete in, include Corvettes, Vipers, GT-Rs and Lamborghinis. “Cars with 2000-wheel horsepower are getting a lot more unsuspecting at a glance,” he said.

Because D3PE manages all facets—engine build and tuning, fabrication, engine management, suspension, chassis and aerodynamics—they can control the overlapping engineering detail requirements. “Just taking a car out that makes a ton of power won’t win anything,” Davis said. “The cars that really excel at these events are ones that are built by shops who can do it all from the ground up, in-house.

“Regardless of brand or builder,” he continued, “the cars have heavily built engines and drivetrains, top-of-the-line suspensions, and very in-depth engine management systems to control the engine, boost, traction control, etc.”

D3PE is building a Gen2 Viper whose goal is to set the overall half-mile record and win King of the Streets at the Texas Invitational—a high-caliber airfield competition held just outside Dallas that’s hosted twice yearly by the Texas Speed Syndicate. The feat will take a 240 mph, two-wheel-drive pass in a realm notoriously dominated by all-wheel-drive platforms.

Hutchinson believes American cars offer outstanding tuning flexibility and often provide the best value-to-dollar ratio for performance. He noted three modification levels, with the first being basic bolt-ons, such as an ECU tune, intake and exhaust upgrades. Tier two includes an upgraded supercharger or turbo system, nitrous or methanol injection, data logger, larger fuel injectors, upgraded camshafts, and high-performance street tires. Tier three consists of a fully forged motor, larger superchargers or turbos, fully built transmissions, upgraded axles, parachutes, roll cage, and fire suppression.

Notwithstanding the adaptation, what’s clear is that mile and half-mile racing continues to feed an appetite for speed that shows no signs of abating. And stakeholders, it would appear, are fully tuned to the market and its prospects. “We truly feel that we are stewards of the sport for the participants,” offered ECTA’s Lohnes, echoing the sentiments of his fellow sanctioning groups and, indeed, the specialty shops and suppliers that make this segment a force to be reckoned with, now and for the foreseeable future.