VOLUME 37, NUMBER 2 FEBRUARY 2022

PERFORMANCE RACING INDUSTRY MAGAZINE

HOW PRI IS ADVANCING INNOVATION, CONTENT AND ADVOCACY IN MOTORSPORTS

# INSIDE

TRADE SHOW COVERAGE | STOCK CAR MARKET | WHEELS & TIRES | CYLINDER HEADS | DYNAMOMETERS HEAD GASKETS | INVENTORY MANAGEMENT | OIL & TRANSMISSION PANS | RPM ACT UPDATE | & MORE

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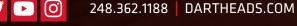
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# STOCK CAR COVERAGE

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# PRI MEMBERSHIP



ON THE COVER Cover Photography: PRI

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# FROM THE PRESIDENT

### **PRI CONTINUES TO GROW!**

Editor Dan Schechner and his team lay out the details in this issue (see Industry News, page 144), but I can't help but share the news that PRI has purchased a massive building on Main Street in Speedway, which is adjacent to Indianapolis, to serve as our new PRI Membership Headquarters. Through great support from Chairman James Lawrence and the entire SEMA Board of Directors, we closed on this facility on December 30. This investment into the racing community comes with a big promise to you: PRI will continue to build, promote, and protect the racing community as no other organization has ever been equipped to do. To do this, you will see this property become the home of a PRI Content Factory. membership recruitment base of operations, membership training and education center, and a regular partner to all things racing in and around the Indianapolis Motor Speedway, including the Indy 500.

Really, the possibilities are endless for you as a key part of the racing community to take advantage of what we are building at PRI. We are even looking at a potential "racer's café" where like-minded individuals can spend time, share ideas, and build the next great project. If you have any additional ideas for our new location, please drop me a note at president@performanceracing.com.

### DC ALERT

As of this writing I had just gotten off a call with our entire Washington, DC-based SEMA/ PRI Government Affairs team. Great people, anchored by Daniel Ingber, Eric Snyder, Christian Robinson, and David Goch. PRI has never been more politically active because the racing industry has never been under this great a threat, and the DC team is gearing up for a big RPM Act push headed into the midterm elections. Remember that when the Congress changes over every two years, all the bills that were previously introduced get scrapped and you have to start over. We're in year two of the 117th Congress, so 2022 will be critical to get the RPM Act passed into law. We currently have



DR. JAMIE MEYER jamiem@performanceracing.com

140 co-sponsors in the House and Senate. A truly bipartisan bill, this thing has legs, but we are going to call on you at critical times to really give it a push. Letters (all 1.5 million of them) go a long way, but a phone call is exponentially more important. Now, during the offseason, think about calling your federal lawmakers to explain to them how much racing means to your community. It's critical that we all stay active to get the RPM Act passed. Much more coming from us soon. For information, head on over to SaveOurRaceCars.com.

### **KERSTING RETIREMENT**

It is fitting that I would write about the Government Affairs office on the heels of the announcement that Chris Kersting, the 20-year CEO of SEMA (PRI's parent company), is retiring this month. Chris has been a huge champion for the motorsports industry throughout his 30-year career with SEMA, and he grew up in the DC office fighting for the automotive aftermarket. Once serving as counsel for NHRA, Chris has played multiple key roles in the promotion and protection of our industry. He also guarterbacked the acquisition of PRI, and, on a personal note, he has coached me through my first year and a half here with grace and incredible intelligence. Chris is retiring in order to spend more time with his family, among other pursuits, and I am sure we will see him at a race or two in the coming years. **PRI** 



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# FROM THE EDITOR

tve things from the PRI Trade Showthat I think will impact the industry in 2022—and likely beyond:

### 1) AFTER 24 MONTHS APART, I THINK

it was extraordinary to see motorsports parts manufacturers and service providers finally come back together to demo and display their latest innovations on the floor of the Indiana Convention Center and Lucas Oil Stadium. Among the countless new go-fast parts turning heads were AWA Forged Composites' prototype line of composite pushrods, rocker arms, lifters, and pistons. The company is working with fellow manufacturer CP-Carrillo on continued testing and eventual distribution. Dart Machinery's new Iron Eagle Gen III Hemi cylinder block, a pair of low-profile LS intake manifolds from Holley Performance Products, Edelbrock's VRS carb line, and much more from manufacturers large and small proved that new product development continues unabated.

### 2) I THINK THOSE WHO STILL DON'T

recognize the influence—and potential—of content creation in motorsports are missing the boat. Savvy marketers have known for years that "content is king," and the presence of user-generated platforms like Facebook, Instagram, YouTube, etc. provide an ideal venue for compelling storytelling. In the racing and performance space, people like Cleetus McFarland (2.8 million YouTube subscribers), Garrett Reed (2.2 million followers on Instagram), and Collete Davis (411,000 followers on Instagram, 301,000 on Facebook) are producing content that reaches hundreds of thousands, if not millions, of motorsports enthusiasts and professionals daily. And all shared their stories at PRI. Think they might be able to help amplify your brand's message? Of note, PRI's own digital content factory, which is guided by Sr. Editor & Social Media Manager Christen D'Alessandro and Justin Cesler of Driveline Studios, now logs comparable numbers and engagement. We invite you to follow the phenomenal work they're putting out year-round on PRI's social channels.

### 3) I THINK THAT AFTER SPEAKING WITH

exhibitors in PRI's all-new EV Performance Zone I'm fully intrigued about the future of electric and hybrid technology in motorsports. While in the Zone we visited with trailblazers like John Metric's Lonestar EV Performance, Torque Trends, Legacy EV, and Hypercraft, which showed off its impressive unlimited EV desert race truck developed in partnership with chassisbuilder Geiser Brothers, as well as visionary suppliers like AEM Performance Electronics, which in recent years has developed high-end motor and inverter controls for EV conversions and now has the capability to swap Tesla drivetrains into almost any vehicle. I genuinely enjoyed chatting with Legacy CEO and founder Rob Ward about opportunities not only to distribute parts, but also to educate the industry on EV tech and even help dispel any lingering myths about the segment.

### 4) I THINK ONE OF THE KEY BENEFITS

of PRI that often flies under the radar is the opportunity for new business that comes with attending and exhibiting at the

IN ADDITION TO EVS, PRI HELPED HIGHLIGHT ENTRY POINTS INTO EMERGING CATEGORIES LIKE BIG-WHEEL RACING...AS WELL AS EXTERNAL MARKETS LIKE THE US MILITARY.



DAN SCHECHNER dans@performanceracing.com

Show. For example, Dave Werremeyer of exhibitor Frankenstein Engine Dynamics told us he learned of a recent rule change in dirt track racing that "we would be totally unaware of...if we weren't here." He went on to note that while his company's focus in motorsports is "basically drag racing and street racing, now we've had diesel guys and tractor pullers who are asking us about building heads for them. Marketwise, sometimes it's easy to become so focused and have blinders on and not see the possibilities. That's where this Show comes into play." In addition to EVs, PRI helped highlight entry points into emerging categories like big-wheel racing, whose National Donk Racing Association recently wrapped up its inaugural season, as well as external markets like the US military, when Thomas Vern of the US Army DEVCOM-Ground Vehicles Systems Center presented a session focusing on the connection between motorsports and DEVCOM vehicle research and development, among others.

# 5) I THINK DECEMBER CAN'T COME

soon enough, as we're already game planning for another spectacular PRI Trade Show! **PRI** 



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# LEAD POSITION

There was something new to discover around every corner, down every aisle, and yes, even behind every wheel well throughout the Indiana Convention Center and Lucas Oil Stadium when the PRI Trade Show marked its triumphant return to the racing capital of the world in early December. Nearly 1,000 exhibiting companies representing all forms of motorsports lined the Show floor with 24 months' worth of new products and innovative technology after a pandemic-prompted hiatus in 2020. Beyond PRI's bustling main exhibit halls, traditional favorites like our race trailer display and Featured Products Showcase in Lucas Oil Stadium joined forces with all-new activations including the EV Performance Zone and Content Creation Center to create a Trade Show experience like no other. For exclusiveand comprehensive-coverage of PRI 2021, see our series of reports beginning on page 32.



# ASK THE EXPERTS head gaskets

Steer clear of power loss or, worse still, engine damage by following manufacturers' best practices for preventing leaks and failures.

### By Drew Hardin

ead gaskets have to work harder than ever in these days of highpowered (and forced-induction) race engines to seal increasing amounts of cylinder pressure and also serve as a barrier to keep coolant and oil within their respective passages. Should a gasket fail, the results could vary from power loss to engine damage if the situation isn't remedied. Even better: Prevent a leak or failure from happening in the first place.



"Once you start pushing an engine's limits, like adding forced induction, you have to go the extra steps when building the engine to prevent leaks in the race environment," said Sergio Duarte of Flatout Gaskets, Mundelein, Illinois.

Micky Hale of Cometic Gasket in Concord, Ohio, agreed that leak prevention begins at engine assembly. "The first thing to do is make sure the surface finish on the block and head is correct. It has to be clean, dry, and flat."

"The roughness of the surface has to match the gasket that's going to be used," Duarte said. Copper gaskets can seal against a surface with an Ra (roughness average) from 40 to 80, "while an MLS (multilayered steel) gasket has to have a roughness that's very, very low."

Hale put the Ra target for MLS gaskets at "50 or better. That's a smooth finish, with no mill marks or

pattern in it. If a pattern that looks like a fingerprint is visible—those are lines from the cut—that's too coarse. That gasket will tend to seep. It doesn't necessarily have to be a mirror finish, but it has to have a smooth finish."

Hale said "any modern machinist should be equipped for that. Over the last 10–15 years, everyone's upped their game there. They know what to do to use MLS gaskets."

Special machining is also needed for an engine using copper gaskets, Duarte said, "to O-ring the heads and install fire rings properly to



manufacturers remind us that leak prevention really begins at the engine assembly stage: 'The first thing to do is make sure the surface finish on the block and head is correct," said a source from Cometic Gasket. "It has to be clean, dry, and flat."

Leading gasket

According to our source from Cometic Gasket, the Ra target for MLS gaskets is "50 or better." He added that "[it] doesn't necessarily have to be a mirror finish, but it has to have a smooth finish." "HAVING A QUALITY FASTENER WILL IMPROVE THE CLAMP LOAD NEEDED TO COMPRESS THE GASKET.

prevent a leak."

Is copper a better choice for a race engine? "It depends on how the engine is prepared," Duarte said. "A lot of people are making 2,000–3,000 horsepower with MLS gaskets, and they're perfectly okay. Most of the MLS gaskets are made with an O-ring around the combustion chambers, so they seal very well even in some race applications. The embossing in the MLS has memory, so when the head is moving up and down with heat cycles, the MLS gasket springs back and keeps the engine sealed."

But, he added, "for an engine that's going to push more and more, in an all-out racing application, copper gaskets with the right fire rings are the way to go."

Whether the choice is MLS or copper, both Duarte and Hale said that proper head fastening is important to prevent gasket leaks.

"Torque specs are critical for the gasket to work," Duarte said. "Always keep the load on the gasket steady."

"Use a good torque wrench, something that's been calibrated recently and is accurate," Hale added. Good fasteners are also "a must. Having a quality fastener will improve the clamp load needed to compress the gasket."





Whether copper is the preferred material over MLS for race applications "depends on how the engine is prepared," said our contact at Flatout Gaskets. But, "for an engine that's going to push more and more, in an all-out racing application," he added, "copper gaskets with the right fire rings are the way to go."

Because of the stainless-steel material Cometic uses in its MLS gaskets, "it takes a bit to compress it," Hale said. "If they are seeping or leaking, typically they're not compressed fully. If somebody calls me and has a leaky gasket, I tell them to try a retorque. If the block and heads have a good finish to start with, that will typically take it away."

As for adding sealant to the gaskets, Hale said "no sealers whatsoever" should be put on the Cometic MLS gaskets. "Our material already has a coating on it, so any additional sealers or coating typically work against it."

Duarte said the silicone coating applied to Flatout's copper gaskets "has been tested by hundreds of people in different forms of racing, from dirt track, Pro Mods, you name it. It's a very good silicone coating." Some builders, he said, also use RTV sealant around the gasket's coolant ports. "It's a matter of choice. Every engine builder has their own preference as to what to use for sealing."

Keeping head gaskets leak-free is "pretty straightforward," said Hale. "It's not rocket science, but it is a science to make everything work together perfectly."

# SOURCES

Cometic Gasket cometic.com

Flatout Gaskets flatoutgroup.com

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# STOP DOING THAT...DO THIS INSTEAD

Create a winning action plan that incorporates inventory management strategies rather than turning those decisions into a game of chance.

### By Bradley Iger

inding an equilibrium between supply and demand is a fundamental goal of just about any business that offers a physical product. Achieving that balance has been a tricky proposition since the advent of organized commerce. For those who support motorsports-a time-sensitive industry with customers who often have very specific needs-it can directly equate to the success or failure of a company. Ongoing global supply chain issues have added another level of complexity to the mix that has frustrated owners and customers alike

"You can't sell out of an empty wagon," said Blake Robertson of BR Motorsports, Visalia, California. "There's no point in advertising something when you can't actually supply it. It's something we see a lot with online stores these days. They have a storefront on their website, but they don't actually inventory anything. They're relying on the manufacturer, or another warehouse, to supply the product. Now more than ever, that's how mistakes happen. Putting the responsibility on somebody else is not good business. These things should be on the shelf."

Robertson is also quick to point out that some strife remains unavoidable due to current circumstances. "Consumables have been an ongoing issuetires in particular. Hoosier had been backordered so much last year that races had to be canceled because they simply couldn't get tires to the track. High-demand components are just hard to get right now. Where in a normal year we might carry 10 or 15 units of an item and it would take us two weeks to replenish our inventory, it's six to 10 weeks on a lot of consumable things now. The demand is a double-edged sword in that way."

Keeping a large amount of inventory on hand can be a costly proposition, especially when it comes to motorsports products. That's why Tom Shay of Profits Plus in



experience and past performance can pay dividends for shop managers, said one of our sources. "My question to a business that's been operating for 10 years would be, 'Do you have 10 years of experience, or have you had 10 first-year experiences?'" he said. "Ten years of experience should provide a feel for the ebb and flow of the market."

"You can't sell out of an empty

wagon," noted our

Motorsports, who

pointed to several

of today's online retailers that "have

a storefront on

their website, but

they don't actually

inventory anything.

They're relying on the manufacturer,

or another

warehouse,

product."

to supply the

source from BR

Leveraging



Dardanelle, Arkansas, said it's crucial for racing businesses to establish a specialized game plan. "That plan should not only define the quantities of inventory that you want to order, it should also be part of a larger overall strategy that determines whether or not you have the money to actually do it."

Trying to be a one-stop shop for every customer that walks in the door isn't really feasible, Shay said. "That's expensive to do, and it generally doesn't make money for the businesses that attempt it. You can't be everything to everybody. Instead, take a step back and really consider who your target customer is and what those particular customers need."

Catering to specific groups of racers tends to prevent a variety of inventory issues from popping up unexpectedly, Robertson noted. "We pay more attention to the sprint car and midget market because that's where our expertise is," he explained. "The main thing is to know your market. Otherwise, you're going to end up ordering stuff that's going to sit on the shelf. That's a waste of money and a waste of your time. But





understanding the market and how it moves during certain times in the race season prevents a lot of that."

That's where leveraging experience and past performance can pay dividends. "My question to a business that's been operating for 10 years would be, 'Do you have 10 years of experience, or have you had 10 firstyear experiences?" Shay said. "Ten years of experience should provide a feel for the ebb and flow of the market. There are ups and downs in terms of what's in demand and when. I would hope these businesses are somehow tracking the items that they sell by SKU. That allows them to go back and determine where those fluctuations tend to occur."

Robertson pointed out that analyzing that data allows a business to predict what the future will bring. "It's important to have some foresight and know what's coming up. I often look at the history of what we've sold, and when, to try to prepare at least 60 to 90 days ahead of time. Use the knowledge available in order to lay out a forecast for the months ahead."

Shay said it's really about specializing in "who" rather than "what." "Inventory control is like a game of Whack-A-Mole. If you pay attention to your sales history, it will tell you which mole is going to pop up next."

# SOURCES

BR Motorsports brmotorsports.com

Profits Plus profitsplus.org



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AILL MITCHELL PADALICTS

# MAKE THE CASE big-tire vs. small-tire racing

While familiarity and potential costs are often key factors for drag racers that need to choose between the two, there are other important elements within both types of racing that can sway a competitor's preference toward one format or the other.

### By Bradley Iger



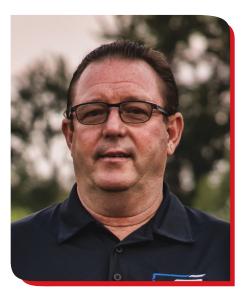
SMALL-TIRE ADVOCATE: Eric Bardekoff, 2021 NMCA Xtreme Street Champion or me, I think it was about what I felt I could do with what I had. I'd built a stock-tub car for Factory Showdown, and that was more or less how it stayed because I could fit a 275 radial under there with no problem. When I built the car there wasn't that much going on in big-tire racing that really had my attention, and the crossover classes are my biggest thing. I'm not going to back-half a car only to be stuck in one or two classes—it's just not feasible for us.

I grew up in NHRA running Stock and Super Stock, but we wanted to get into heads-up racing and Factory Showdown really seemed to fit the bill for us. So that's what we built the car around, and that allowed for a pretty easy transition over to Ultra Street as far as the chassis goes. After that we started paying more attention to radial racing because we felt the car and combination could do pretty well there, too. So along with Ultra Street, we can run in Xtreme Street with the NMCA and Renegade with NMRA. And if I just change the blower, I can run in MPC Real Street, too. I could even dabble in X275 if I wanted to get my face kicked in.

"ALONG WITH ULTRA STREET, WE CAN RUN IN XTREME STREET WITH THE NMCA AND RENEGADE WITH NMRA. AND IF I JUST CHANGE THE BLOWER, I CAN RUN IN MPC REAL STREET, TOO. The thing about our team is that we work with what we've got—this is not a million-dollar racing program. We don't have endless amounts of money to throw at things, so it's more about figuring out how to maximize what we've got. That's not to say I wouldn't ever compete in big-tire racing, but to do so competitively would require building a whole new car. Being able to run in several different classes in the same car was one of my top priorities when I was building the car because I didn't want to get pigeon-holed, and I think the crossover classes help to bolster car counts in general.

From a skill and strategy standpoint, I think small-tire and big-tire racing are both very competitive, and each has their own bag of tricks that you have to figure out. Regardless of which one you're running in, winning comes down to the amount of effort you put in and how effectively you can utilize the data you're gathering. You can have a car with every sensor imaginable and all of the adjustability in the world, but if you don't know how to use the data, it's not going to run competitively in either of them. Whether you're running in small-tire or big-tire races, it takes a lot of work to find success.

With that said, I think that the radial stuff that's going on at Cecil County Dragway is probably the best racing in the country, and I think a lot of people would agree with me on that. At a typical Cecil County street car shootout there's always more than 20 cars in Ultra Street. The competition's fierce, the track prep is consistent, and most of the teams that show up are there to run in the small-tire classes.



BIG-TIRE ADVOCATE: Craig Sullivan, Three-time Top Dragster Champion, NMCA Pro Mod Driver "IF I GO TO NMCA, OR MID-WEST PRO MOD, OR AN ADRL RACE, THERE'S NOT A TON OF CHANGES REQUIRED TO PREP THE CAR FOR A GIVEN EVENT BECAUSE THERE'S JUST A LOT MORE TRACTION AVAILABLE THAN YOU HAVE WITH A SMALL-TIRE CAR.

drive both big- and small-tire cars, but my wallet dictates that I have to own one or the other, so I have a Pro Mod car. Radial Versus the World is just far more expensive, and if you don't have all of the data that the guys who're already successful there have, you basically have to have an unlimited checkbook to go test.

The other thing to consider is that on the small-tire side you've basically got two different categories: The guys that run Donald's (Donald "Duck" Long and Duck X Productions) races and everybody else. You can't take Mark Micke's car or Nick Agostino's car and go run at these smaller small-tire events and expect to go as fast as you'd go at Duck's tracks. Duck pours enough glue on the track so that everyone can set records. Not every promoter can afford to do that, and it's a factor that affects the setup you need to dial in at these events as well as the amount of data you need to have in order to run competitively.

I think big-tire and small-tire racing are pretty similar in terms of the abuse that the components are subjected to, but you see a lot more incomplete runs in small-tire racing because everyone is out there trying to rotate the Earth and go as fast as they possibly can. Things tend to break more often there as a result, and I think the big-tire cars are generally more forgiving. There's more gray area to work in, so you're able to go down the track more times than you would with a small-tire car. That also makes big-tire races better for spectators because they're going to see more cars go down the track than they would at a small-tire race.

And whether you're talking about bracket racing, heads-up, no prep, or roll racing, big-tire cars also seem to work better across a wider range of formats. The Mickey Thompson trailer is selling far more big tires than they are small tires at a given event. That's not to say you're going to bracket race a Pro Mod, but at the same time you don't have to make a ton of changes in order for a big-tire car to run competitively in a bunch of different formats. If I go to NMCA, or Mid-West Pro Mod, or an ADRL race, there's not a ton of changes required to prep the car for a given event because there's just a lot more traction available than you have with a small-tire car. PRI



# NEWLY APPOINTED will baty

Known as "Mr. Clutch," this driveline technology authority is now helping take one of the industry's top brands into off-road racing.

### By Jim Koscs

his past July, Will Baty joined Anaheim, California-based McLeod Racing as off-road and research and development specialist. McLeod, which marked its 50th year in 2021, is making a foray into the growing world of off-road racing.

People who know Baty call him "Mr. Clutch," a name he picked up while working at Centerforce Performance Clutch. He brings more than three decades of clutch and driveline research, development, and engineering to his new role. Just as critically, Baty brings to his new job a passion for racing that began when he witnessed his first Top Fuel race as a young child.

PRI recently spoke with Baty about the challenges of taking a manufacturer into a new racing segment. One question, however, just had to be asked first.

**PRI:** They call you "Mr. Clutch." When and how did you earn that nickname?

**Baty:** Around 2014, our agency rep gave me that name after going on sales calls and listening to me talk with customers. There is now a decal of my face out there titled "Mr. Clutch" that Ashton Robinson designed. Several racers have that decal on their vehicles. It still cracks me up to see it. There might be a certain Funny Car out there that just could have that decal on it soon.

**PRI:** What are you most looking forward to in this new role at McLeod Racing?

**Baty:** It's hard to pick just one thing. When you are asked to be part of the largest aftermarket clutch company in our industry, that's quite an honor. I have this passion to design and engineer, so if I can contribute and help our McLeod Racing team solidify the number-one spot and grow new product into other areas of our industry, that spells fun to me.

**PRI:** Describe this new role and why it's important to the racing industry. **Baty:** My role has a few layers to it. Number one is to utilize all the Wharton Automotive Group brands—McLeod Racing, FTI Performance and now Silver Sport Transmissions—to help our engineering teams refine, design and develop top-quality product for the end user. **PRI:** Why the focus on off-road racing and R&D?

**Baty:** Off-roading is one of my passions. McLeod Racing has a perfect opportunity to make a splash in the off-road segment. I believe the collaboration with our sister brands will help us soon become the "one-stop" off-road driveline company that the end user is looking for. R&D is what I have been doing for the past 34 years in the clutch industry. Together, as a team, we become one innovative driving force in all areas of the driveline.



# WILL BATY

**TITLE:** Off-Road and Research and Development Specialist

ORGANIZATION: McLeod Racing

HOMETOWN: Prescott, Arizona

# FAST FACT:

Will Baty experienced drag racing for the first time as a seven-year-old. "My dad had taken me to my first drag race at Pomona. He told me to stand by the railing when the Top Fuel guys made a pass. l was instantly hooked—and I might have peed a little, too! After that, we never missed another race at Pomona."

# **PRI:** What do you see as the biggest challenges ahead of you?

**Baty:** The biggest challenge is that McLeod Racing really isn't known in the off-road part of the industry—yet. I kind of like it that way, though. We have a semi-blank canvas to work with here. We know the challenges with certain applications, and what is needed for most applications, so this approach could result in high-quality products right out of the box. **PRI:** What are your top strategic goals for the next 12 months?

**Baty:** Not to give up too much information at this point, but the goal is to introduce McLeod Racing to the off-road industry with quality product for the off-road and overland communities.

**PRI:** What is your most gratifying professional accomplishment?

**Baty:** There are several moments, after all these years in this industry, where I have gained some fantastic friends. I've had experiences and gone to places that some people only dream of. I have been on SEMA's MPMC select committee. I have won an NHRA Wally award. Now, I am part of the McLeod Racing team. I sit here a pretty blessed individual.

**PRI:** Who has played an integral role in your professional development?

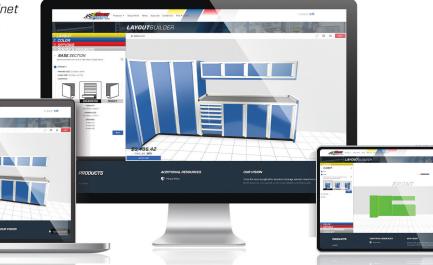
**Baty:** There are several people to thank here, but my mentor in the clutch industry was none other than the man I would call "The Clutch Professor," Bill Hays. Bill's mind and way of design were completely different. We had to always think outside the box and look at the entire driveline. He would quiz us all the time on his own ideas, on why they would or wouldn't work. I have stories and stories working with Bill. The experience and knowledge I gained just can't be taught in a classroom. I miss that quy. **PRI** 



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# INDUSTRY INSIGHTS

A blue-collar upbringing and promising kart racing career eventually gave way to "the business side" for the nowpresident of iconic Daytona International Speedway.

### By Jeff Zurschmeide

rank Kelleher didn't plan to become one of the leading executives in American motorsports. In his youth in Scranton, Pennsylvania, Kelleher grew up working in the family tire dealership, Kelleher Tire. He got involved in kart racing, winning two national titles, but didn't have the financial backing to go pro.

It was an internship at International Speedway Corporation (ISC) that opened his eyes to the business side of racing. After coming up through the corporate structure in advertising and sponsorships, Kelleher is now the president of Daytona International Speedway. At just 41 years old, his best and most productive days are still ahead.

We sat down with Kelleher to find out what's happening at the highest levels of ISC today and where things are headed in the future.

**PRI**: Your personal history reads like the opening of a great movie. What did you gain from that early experience that you're putting to work at Daytona International Speedway these days?

**Kelleher:** As I reflect on childhood and growing up in a family business, I grew up in a very adult environment of understanding business and hard work and how the world actually operates. We were a Cooper Tire and Goodyear dealer and still are. My dad was up with the sun every morning and gone to the garage. Our whole family life revolved around the success or the hardship of the business. There were many years that we lived day to day, week to week.

*"IF WE WANT TO MAINTAIN OUR STATUS AS THE WORLD CENTER OF RACING AND HALLOWED GROUND, WE HAVE TO BE THE INDUSTRY LEADER.* 





Frank Kelleher originally sought to make a living as a pro driver, but a 2002 internship with ISC shifted his focus to the business side. From there, his career took off. "My mentality was to approach this like I did any national karting event: Give it 110%."

Because of that, from a very young age we all understood the value of hard work, the value of a dollar, and that you have to wake up every day and go out and earn it. As a teenager in high school and then in college, I worked six days a week in that garage. I did everything from changing tires, changing oil, working on cars, plowing snow, towing cars, very much in the blue-collar part of the automotive industry. Then when I got to college and was studying business, I had a different point of view. There was what's in the textbook and also my real-life experience.

My introduction to motorsports was on the competition side, watching my uncle race a sportsman. I was on the pit crew for my uncle and for my cousin, who raced sportsman and then a modified and a sprint car. I got behind the wheel at 16 years old, racing karts on a dirt oval and then road course racing. We started running national events with the World Karting Association, and I got to be a two-time national champion. When I was at the race track, I had to be my own PR guy, my setup guy, my marketing guy, the sponsorship guy, and then be the wheelman and go out and get the job done. **PRI:** When you were racing karts and working days at your family's tire dealership and then going to college to learn marketing, did you envision a career like the one you've had, or was this sort of something that happened?

**Kelleher:** It just happened. I did not have a master plan. My goal was to drive open-

*"I WANT TO ENABLE AN ENVIRONMENT WHERE PEOPLE FEEL WELCOME AND PEOPLE FEEL SAFE AND PEOPLE CAN COME TOGETHER, WHETHER IT'S AT DAYTONA OR ANY OF OUR PROPERTIES.* 

wheel race cars. Whether it was IndyCar or Formula 1, that's what I wanted to do. In my mind, if I couldn't make it as a professional driver, then I wanted to race locally, whether that would be SCCA road courses or in the winged sprint car world.

I did my internship here in Daytona with ISC in the summer of 2002. I wrapped up my internship and I jumped back into the World Karting Association, national circuit. I had a scout approach me, and he said, "You're a little bit old, but vou're articulate.

and you clearly know how to drive. I think there could be opportunity for you. Are you financially independent?" I asked, "What does that mean?" He said, "Can you bring a half-million dollars to a race team?" I said, "Buddy, I essentially hitchhiked here." And he said, "Well, let's keep in touch."

That was when the light bulb really went on. I figured that if I really want to be in professional motorsports, I need to be flexible enough to embrace that it might not be behind the wheel. But if I can follow up on my internship and work in the sport in some capacity, man, how cool would that be?

So I just continued to pester and follow up with the folks that I interned with. They offered me a job at ISC in the corporate office or at California Speedway in Fontana, and I chose corporate. My mentality was to approach this like I did any national karting event: Give it 110%. I'm going to be the first one in and the last one to go. I'm going to network with everyone. I'm going to travel as much as I can, ask all the questions, apologize if I made a mistake, and just be the person that I was raised to be.

Fast forward to six months ago [this interview occurred in November 2021]. I was the senior vice president and chief sales officer for all of NASCAR, selling official partnerships and sponsorships at our tracks for all of our media assets. The France family came to me and said, "We want you to go and learn the operational side and everything that comes with being the face of Daytona." I'm honored at this opportunity to lead such a talented group of people and As the new president of Daytona International Speedway, Frank Kelleher draws on a lifetime of motorsports experience, beginning as a champion kart driver growing up in a racing family.

represent the most historic and storied stock car track in the world.

**PRI:** How are you defining success at Daytona International Speedway? What does winning look like in 2022?

Kelleher: How do we earn the fan's business and how do we earn their repeat business? This facility outside my window right now, we did a \$400 million renovation in 2016. And it's beautiful. It's awesome. Just the way that I'm wired though, we have to be planning for the next refresh. If we want to maintain our status as the World Center of Racing and hallowed ground, we have to be the industry leader. We have to be the tip of the sword when it comes to leading and innovating guest experience and competition. **PRI:** How are you going to do that? Kelleher: I think that I authentically can relate with that family in the Midwest or the Northeast or wherever in the country who is going to make sacrifices to get to Daytona and be a fan in the stands. If you're going to travel this far and spend a lot of money,

> you want to get your money's worth out of it.

In 2004, our infield and garage were cutting-edge. As I mentioned, we got a very big injection of capital in 2016 to redo our grandstands and our entry points. I think it's

time that we look at our infield and

our garage experience and figure out what that new cutting-edge experience is for our drivers and our fans that you can't get at any other race track in the world. We do a really good job as well of maximizing our calendar. There's something going on in this facility all the time.

**PRI:** You've been president of Daytona for about six months now, coming in during the pandemic. How's it going?

**Kelleher:** I am so thrilled with the leadership of our company and how they have been behaving and operating the last two-anda-half years, through not only a merger but through the pandemic and the changes and evolutions they've made with respect to inclusion and social justice. And also what's on the horizon of the Next Gen race car and the focus on competition.

Specifically regarding the pandemic, one of the many things I love about working for the France family is that this is a giant family business. When we went back to racing at Daytona and then at Homestead, we were all out laying down the social distancing stickers. I was putting the sanitation wraps on urinals and on the paper dispensers. We were doing it all ourselves. Regardless of your title and your tenure, we've got a job to get done.

*"FROM A COMPETITION AND SPONSORSHIP STANDPOINT, THE SPORT HAS EVOLVED. THAT'S AWESOME BECAUSE IF YOU'RE NOT EVOLVING AND GROWING, YOU'RE DYING.* 



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# *"EVERY YEAR, I WANT TO CONTINUE TO CHALLENGE MYSELF AND MY TEAM AND THIS COMPANY TO RAISE THE BAR TO THE NEXT LEVEL.*

**PRI:** You mentioned the social justice changes that have been happening within NASCAR and ISC. How are you approaching those discussions from your position as president at Daytona?

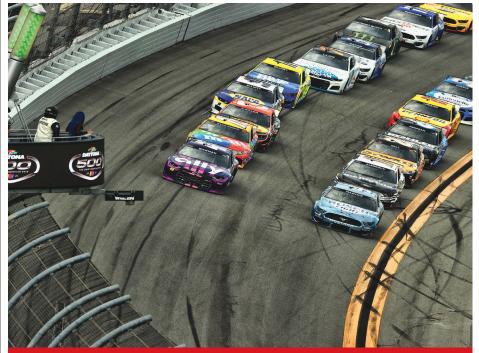
Kelleher: Regardless of the topic or the cause, change is hard, and everyone resists change at first. I want to enable an environment where people feel welcome and people feel safe and people can come together, whether it's at Daytona or any of our properties. I want people to be able to leave politics and stress and anything keeping you up at night out of your mind. You can come here and celebrate and be taken away by a visceral experience, whether that's a concert or a motorsports event or a food and wine festival. Whatever we need to do to enable

everyone to feel welcome and safe, I'm excited to be a part of that.

**PRI:** What surprised you about taking over management at Daytona?

Kelleher: Having worked in the sport for 19 years, I thought I understood race track operations. Now six months into this role, I know I didn't know anything. The ops team at Daytona International Speedway are some of the hardest working people that I know. This speedway is a living, breathing animal that eats capital daily.

We have events from quarter midgets to karting, then to motorcycles, sports cars, stock cars and tire testing. We've got a fourday rock music festival coming up. There's always something going on, and these men and women work around the clock. It



Frank Kelleher is looking carefully at what it means for a track to offer a "cuttingedge experience" these days. He's eyeing updates to build on Daytona's 2004 and 2016 renovations.

PRI



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ENGINE BEARINGS

### INDUSTRY INSIGHTS

is hard, labor intensive work, and they do it with such pride that it's a different level of accountability that I feel as their president. I want to make them proud. I want them to know that I see them, and I appreciate them. We want to deliver for our sponsors and our fans, because they play such a heavy and pivotal role that we're all grateful for. **PRI:** What are your short-term goals for the Speedway?

Kelleher: I don't know what I don't know. So I go into it with a lot of vulnerability and open eyes. I'm getting into my very first Rolex 24 weekend as the track president, and it's the 60th running of the Rolex. I'm getting into my very first Speed Week as the president, as well as my very first Bike Week. So from a short-term standpoint, there's a lot more that I want to learn. However, specific to the Rolex, I really want to maximize the fact that it's the 60th running, and I really want to celebrate the past six decades and honor the men and women of IMSA and the Rolex for what they have created. For Speed Week, my short-term goal is to sell the Daytona 500 out sooner than we have the last few years. I'm aggressive with my aspirations! When we're able to announce the sellout, I really want to pivot the focus to events such as the Xfinity race and the ARCA race on Saturday, which are phenomenal. The Truck race is one of my favorite races here in Daytona. And the Duel on Thursday is a blast. That's going to be the first time that the Next Gen cars are racing the high banks in a point series race. PRI: What are your longer-term goals for Daytona?

Kelleher: I want to take a step back and look at it from a global footprint: What is that next big sport or conference or exhibition? I want Daytona to be in that request for proposal to be a host for the next big thing, and I don't even know what it is that could be on the horizon.

In 2023 for Rolex, we're going to have a brand new class where a car that could race the Rolex 24 can also race Le Mans and vice versa. So I have a vision for a bigger global footprint for all things Rolex.

Also, this community embraces Daytona, and it embraces motorsports. I want to try to take it to a new level. I want to work with our local colleges and help create internships,





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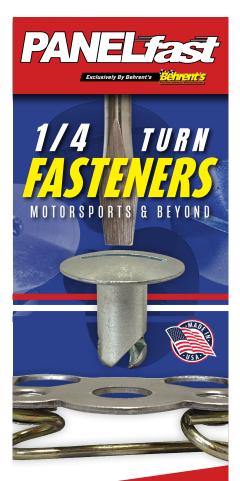


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### INDUSTRY INSIGHTS



Daytona International Speedway is "a giant family business," observed Frank Kelleher. He fits that culture well, gladly taking on whatever task is needed to get the job done, including here, at left, with 2021 Daytona 500 winner Michael McDowell, right, who is honored on the Daytona 500 Champions Walk of Fame.

*"I SEE eSPORTS, iRACING, AND SIMULATORS BEING MORE OF OUR FABRIC MOVING FORWARD IN THE FUTURE FROM ENGINEERING AND DESIGN, TO TRAINING AND FINDING TALENT.* 

help create job opportunities. My son is in first grade, my daughter's in kindergarten. I want to work with Volusia County schools and figure out a way that this community can truly understand what this facility means not only to the backyard but globally.

**PRI:** The Daytona facility must have a lot of jobs that don't necessarily involve racing cars. **Kelleher:** We're hiring! We need people to do HVAC, we need people to mow the lawn and we need people to be accountants and in finance and marketing and sales.

**PRI:** There's a changing marketing and sponsorship landscape in motorsports right now. Where do you see that going, and how are you responding to it?

**Kelleher:** From a competition and sponsorship standpoint, the sport has evolved. That's awesome because if you're not evolving and growing, you're dying. So our sponsorship base should continue to always evolve, and our fan base should continue to evolve.

Look at DoorDash doubling down on Bubba Wallace. This is a tech company out of Northern California with high-tech venture capitalist dollars. We developed a partnership where it is official with NASCAR and activating at tracks. What we are accomplishing in the sponsorship space specifically deserves more credit than it's getting because we're being



very innovative. Historically, you had to talk to the track guy, the lead guy, the team guy and the media guy. But now a NASCAR sales rep can represent all of that in one conversation and bring all these people to the boardroom to help a brand say yes to the sport. That was not the case 10 years ago.

**PRI:** A couple years ago, Mazda had this iRacing competition going on at the Rolex 24 where the winner was going to get a test in an MX-5 Cup car. How does virtual racing play into the future of motorsports and the way that people are going to interact with Daytona International Speedway?

Kelleher: If you look back when the world shut down and the pandemic was at its height, NASCAR pivoted and flipped the switch on our iRacing product, and we stayed relevant in the sporting community. It was not just motorsports but in the sporting community, by having our top talent racing from their homes and apartments in their simulators and iRacing. We had high drama and some comedy along the way, but it kept us fresh, it kept us top of mind. To this day we still have some of the highest-rated video game competitions ever on national television.

For competitors, being behind the wheel on a simulator, you save a lot of expense when you toss a car in the fence. Look at the story of William Byron. That's where he cut his teeth and got noticed, behind the wheel in a simulator. I see eSports, iRacing, and simulators being more of our fabric moving forward in the future from engineering and design, to training and finding talent.

**PRI:** You're comparatively young in your career and you are at the top echelon of motorsports. What mountains are left for you to climb personally?

**Kelleher:** I always try to maintain humble roots and focus on what's in front of me. For the next three to five years, I've got a lot to learn in this role. Every year, I want to continue to challenge myself and my team and this company to raise the bar to the next level. Beyond this role, I haven't narrowed in on what would be next for me. I started my career with the France family, and I would like to end it with the France family. But I'm more focused on the excitement that I have for the short term.



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# PRI SHOW REPORT BACK TO BUSINESS

PRI

The Indiana Convention Center and Lucas Oil Stadium in Indianapolis were once again jammed with new performance parts and technology covering all types and levels of motorsports competition.

By Mike Magda

PERFORMANCE RACING INDUSTRY | FEBRUARY 2022

"I'LL LET YOU GET BACK TO SELLING PARTS. – Journalist who sees long line of racers seeking audience

with highly respected product development engineer

# "SELL 'EM? HECK, IT'S MY JOB TO BREAK 'EM!

-Highly respected product development engineer

Following a COVID-19-driven cancellation of the 2020 Show—which may have tabled many development projects—the Indiana Convention Center and Lucas Oil Stadium in Indianapolis were once again jammed with new performance products covering a wide spectrum of racer needs.

From large, multi-brand corporations to budding upstarts, these companies showcased new products for tens of thousands of attendees looking for ways to go fast, reduce costs and improve shop efficiency.

"The Show is going awesome," reported Reggie Wynn of Precision Turbo & Engine and Turbonetics in Hebron, Indiana, who was on-site during the Show. "I didn't think it would be this well attended. It has definitely surpassed my expectations, by far."

"We learned about PRI while doing SEMA for the first time in 2021," said Amanda Meeks of HC Pacific, which is based in Ontario, California. "I told my boss I'm going to Indy. We've got to exhibit at PRI. This has been an even more amazing show for us. We'll be back next year. We're hooked."

HC Pacific has been manufacturing Cleco temporary fasteners for more than 20 years, mostly for aerospace. "But there's a lot of crossover between aerospace and automotive," said Meeks. "We haven't really sold directly to the automotive market. In the past we've sold to distributors who sell to automotive. But we want to know this market. We want to know who's using them in their shops in the race car industry. We're here to support the industry."

In past PRI Shows, there often was a prevailing theme that generated character and spirit into the aisleway conversations. One year it was all the billet products; another Show was dominated by large turbos and products built to withstand ample boost. For 2021, there were widespread discussions of the strong, if not record, sales and companies recovering from the COVID-19 hangover of slow supply chains and hard-to-find skilled labor. Other lively discussions focused on the growing EV presence, the RPM Act and, of course, racing rules.

"So by coming to this Show we learned a few things," noted Dave Werremeyer of Frankenstein Engine Dynamics, Weatherford, Texas. "Like, we have a new small block Chevy product displayed, and we learned from the Show that there's been a major rule change in dirt track racing. We would be totally unaware of it if we weren't here. We would have probably never known about it.

"Also, our focus in the trade is basically drag racing and street racing. Now, we've had diesel guys and tractor pullers who are asking us about building heads for them," added Werremeyer. "Market-wise, sometimes it's easy to become so focused and have blinders on and not see the possibilities. That's where this Show comes into play."

### **NEW MATERIALS**

The COVID break certainly gave one company a chance to expand and fine-tune its disruptive yet relatively unsold product line. Almost three years ago, the industry first learned of AWA Forged Composites' research into composite connecting rods. Since then, the company has added composite pushrods, rocker arms, lifters and pistons to its prototype lineup, in addition to continued development on the rods.

"We've refined the techniques and technology in our connecting rods," said Bryan Gill of the Rolling Hills Estates, California-based company. "The biggest thing is the revised tooling. With composites, it's all about the tooling and fiber placement. We've been able to do even more computer modeling, more load simulations, more thermal imaging to displace all the loads to the appropriate areas."

Gill said the rod is stronger and lighter than any other material with higher life expectancy, even for Top Fuel or Pro Mod teams. He has been working discretely with sanctioning body officials on the approval process, emphasizing that even though the up-front costs would be very high to a team, the rods have the potential to last an entire season instead of one or two weekends of racing.

"We actually calculated the current cost is \$250 a run, while our product would be about \$150 a run if we cut it off at a year," added Gill.

One of the company's most pressing issues is sales and marketing. Gill freely admitted that he's a scientist, not a business person. So he has entered into talks with CP-Carrillo in Irvine, California, to distribute the product. CP-Carrillo officials confirmed the distribution deal but also say extensive prototype testing is underway to ensure product viability in the racing market.





In addition to promoting products at the PRI Trade Show, exhibitors such as Frankenstein Engine Dynamics also learned of emerging trends and potential new markets, too.

Gill said CP-Carrillo is best suited to determine market possibilities for not only the connecting rods but also the rocker arms, pushrods and other products. Then he would develop the tooling and production schedule to meet sales demands.

AWA's newest innovation is a composite piston. It features a crown constructed from thermal-conductive material that can withstand 2,000 degrees F. It's adhered to a titanium ring land that supports the top two rings. The oil ring groove is actually cut into the lower composite skirt section.

"We separate the rings because it can handle the heat better," explained Gill, who pointed to a prototype composite wrist pin that will lower the reciprocating weight even more. "The rings are cut directly into the composite."

No doubt, high-end racers are eager to hear more about this technology and when product will be available for popular engines.



On the flip side, CP-Carrillo already has new pistons for a number of applications, including the hot, new Toyota Supra with a BMW-sourced straight-6.

"That's really taken off. It's hard to keep those on the shelf," said Tony Calvert. "We have a couple different compression ratios. Those blocks are pretty good from the factory, so a lot of people just want the standard bore setup. We also have an oversized bore available. Keeping up the inventory has been the biggest hurdle this year."

Calvert said the company has brought in new machinery, but hiring skilled labor has been difficult, so adjustments in hiring strategy have to be made.

"In years past, we've always looked for experts in the industry, people with CNC experience who love the racing industry," said Calvert. "Now we're opening it up to people who really want to learn. If they have the right attitude, that's primarily what we're looking for. We can train people, but we can't train attitude and coming to work every day with a smile and willing to help each other out."

CP-Carrillo was on hand with its line of engine components. To help meet strong demand, a company source said hiringpolicy revisions were implemented to attract fresh people to the industry.

### **HEMI NATION**

New products for high-demand applications drew some of the biggest crowds. There was a swarm around Dart Machinery's new Gen III Hemi cylinder block. The industry has been eager for an upgraded block to develop more power parts for the Hemi platform. The block is available with or without VVT, deck height from 9.250- up to 9.285-inch and cylinderbore options up to 4.250-inch diameter. With a 4.000-inch-stroke crank, that's a displacement of around 454 cubic inches.

"We fixed a lot of the oiling issues," reported Nick DiBlasi. "It will be priority main, like all of our race-series blocks. We've added material behind the lifter bores because of the shortcomings there on the factory block."

The block still has the side skirts, but the center three main caps are a splayed fourbolt design—no cross bolts. It will be cast from high-nickel iron with a 220,000-psi tensile strength.

Dart Machinery is part of the Race Winning Brands portfolio, which showed its performance diversity by introducing new diesel connecting rods from BoostLine and powersports pistons from JE Pistons. The connecting rods required purpose-built 12-mm bolts from ARP, which are similar to those used in Top Fuel engines.

"These engines make so much power," said DiBlasi. "They need more clamping force than a traditional 7/16-inch bolt. The rods are made from 4340 chromoly and have our patented three-pocket design."

Test engines rated up to 2,200 horsepower were used to validate the rods in 50-hour dyno runs. On the piston side, JE now has Ultra Series pistons for Hayabusa, Kawasaki, Honda and Polaris powersports applications.

"We're using the horizontal grain flow forgings, which provides about 20% more strength," added DiBlasi. "People were already making 700 horsepower on a [Kawasaki] ZX14 as soon as we came out with these."

Big power these days often starts with boost, and Precision Turbo showed off its new Gen II 8080 T4 with an 80-mm turbine and 80-mm compressor. It's available in multiple housing options and rated at 1,375 horsepower.

"That's very conservative," added Wynn. "I wouldn't be surprised if we could hit 2,000. Most guys need something larger than a 75 mm on the turbine side. We've also done the same combination in a mirrored housing setup."







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AWA Forged Composites used the PRI Show as a chance to display its prototype composite pushrods, rocker arms, lifters, and pistons, which the company developed during the COVID-19 break.

Twin 8080 turbos with mirrored housings can help with packaging issues and are also more aesthetically pleasing. This package will support up to 2,750 horsepower—also conservative.

Wynn said that even though turbos are getting larger every year, improved compressor aerodynamics allow racers to actually select a smaller turbo. "That is, compared to the wheels available 10 years ago," he explained. "The smaller wheels today can make more power than a wheel we were selling 10 or 15 years ago because they're more efficient. A smaller turbo gives the racers better response."



### MORE SPEC ENGINES

Over at the Chevrolet Performance exhibit, the 572 COPO Camaro had Super Stock racers drooling as there is growing interest in factory racing. The good news is that the 2022 COPO Camaro won't be sold out as in previous years, when only 69 units were built and there was a lottery system to purchase one. GM will build as many COPOs as are ordered. In fact, Chevrolet won't offer the 572 as a crate engine in 2022 so that there will be enough for the COPO cars. But in the following year, watch for an announcement.

"When we introduced the 572 COPO, we had a tremendous surge of interest," explained Bill Martens of the Detroit, Michigan, manufacturer, adding that the initial 35 cars built in the new year will have the 572, and then production of the other engine options will resume.

On the circle track side, Chevrolet Performance is a leading supplier of spec and sealed engines to a variety of dirt track organizations. COVID-19 related challenges had disrupted supply chains and engine assembly in 2021.

"Now we're back in production," said Martens. "We resumed production on the CT350s two weeks ago [in late November], and the CT525 is starting up next week. As far as internal content, we've stayed the course and purposely have not changed anything. We want to keep the playing field level.

"There are going to be more opportunities for the 525," promised Martens. "We've got a couple of pending announcements right after the first of the year that some series will be taking the 525 on as their spec engine. That's exciting, but there's nothing I can say until the ink is dry."

# **NEW ENGINE COMPONENTS**

The union of Edelbrock with the COMP Performance Group certainly offers the potential for new racing products over the upcoming years.

Dart Machinery showed off its popular line of blocks and heads. Among them was its groundbreaking new Dart Iron Eagle Gen III Hemi cylinder block, which attracted a steady crowd.



BoostLine introduced new connecting rods for diesel engines, which feature purpose-built 12-mm ARP bolts similar to those of Top Fuel engines.

"It's taken two engineering teams and put them together. It's amazing the ideas that are starting to come up," said Mike Campbell of Edelbrock Group, Olive Branch, Mississippi. "The Edelbrock Group was really focused on cylinder heads and manifolds. COMP was really focused on engine components, camshafts, valvetrain, fuel injection and transmission. The only real overlap that we have is in some fuel injection, but two totally different systems."

Edelbrock's new VRS-4150 carburetor stands out as it's loaded with many features such as billet four-circuit metering blocks, mechanical secondaries and easily accessible adjustments.

"We looked at all the carburetors on the market and found that none had all of the features in them," explained Campbell. "So we put in bigger capacity fuel bowls. We have more air bleeds. We got a built-in TPS on the carburetor, and we have a very unique design that allows a smoother transition of air into the carburetor. Just a lot of really unique features that we made better and put them all into one package for a very affordable price."

The new VRS line, with four models ranging in size from 650 to 950 cfm, expands Edelbrock's presence in the carburetor market. The company's longtime AVS line will not be phased out, as it's designed for street use.

"The VRS takes it to the next level and fills a market we want service in," said Campbell.

Holley Performance Products in Bowling Green, Kentucky, released two new lowprofile LS intake manifolds, one for cathedral port heads and the other for rectangular port.

"We have engineers that are racers who designed these parts," noted Mark Gearhart.

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"So these intakes are available in a singleor dual-injector setup. No welding or drilling or fabricating custom fuel rails. They're also available with a burst panel."

Holley also showed off a CAN I/O module that allows users to add multiple sensor inputs to a budget-minded Terminator X or HP ECU, instead of stepping up to the more expensive Dominator ECU. This means that if a racer wants to add shock sensors or before and after air-temp sensors on a boosted engine, they can use the module to expand the I/O capability of the existing ECU.

### **EVs ARE COMING**

Another market that many of the leading companies are watching closely is electric vehicles.



"We've got some ideas, but I can't say much. We're certainly looking at it," said Edelbrock's Campbell, adding that gas engines are not dying out anytime soon. "We sold more carburetors last year than we did in 2019. Carb sales continue to climb. But, yes, we're certainly looking at EVs."

Holley is already aggressively addressing the EV potential by acquiring AEM Electronics, which has developed high-end motor and inverter controls for EV conversions. The company also sponsored the Holley High Voltage Experience in November, which drew as many, if not more, cars than the first LS festival a number of years ago.

"We want to be here to support whatever people do in the industry," said Gearhart.

Edelbrock's merger with COMP Performance Group is generating new products, like Edelbrock's VRS-4150 carburetor line, which ranges from 650 to 950 cfm.

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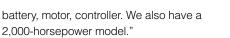
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AUTO-ROD CONTROLS 50 GREEN STREET, WRENTHAM MA 02093 "We want to help support people who want to go faster. We just want to be there to support enthusiasts. We feel like we accept everyone from truck people to gas, EV whatever, with open arms."

AEM already has the electronics to swap Tesla drivetrains into just about any vehicle, and the company has been working with the development of newer EVs to stay on top of the technology. Elsewhere in the company, Holley subsidiaries are making wheels and suspension components for the Tesla.

For the first time at PRI, a special section of the Show was dedicated to EV racing. There were electric dragsters, EV conversions and some of the factory EVs from Ford. Lonestar EV Performance has been a pioneer in EV racing and displayed a motor-inverter-rear axle combination that was quite compact and ready for installation into a dragster chassis.

"It's about two feet long and 1,500 horsepower," said John Metric. "It can blow off 33-inch drag tires with 6,000 foot pounds of torque. I would say we could get someone into 1,500 horsepower for about \$50,000. That would include everything: For the first time ever, PRI devoted a special section of the Trade Show to EV racing, featuring components such as Lonestar EV Performance's 1,500 horsepower motorinverter-rear axle combination.



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Racers have talked to Metric about the possibility of a 4,000-horsepower package. He's heard from owners of drag boats and even monster trucks.

"They want to put them in all kinds of vehicles, like a sand rail," said Metric, noting that exposure to EVs will convince an even larger crowd to consider the potential. "When somebody actually sits in an electric vehicle and drives it, then they get it immediately. It's a big hit when they're crushed into their seat from the acceleration. It's like an out-of-control roller coaster ride. Next, they're looking at a potential conversion or potential new EV car."

LINCHONLINE

EVs weren't the only technology representing the green movement. VP Racing Fuels of San Antonio, Texas, announced that advanced bio-renewable components are available for adaptation with its current race fuel portfolio. That means that renewable components may be used in spec fuels for certain sanctioning bodies. The company said there are 70 proprietary fuel blends in VP's portfolio, and 23 already use some renewable components.



"There are a lot of series that are heading more and more in that direction," explained Bruce Hendel. "We're working on developing some of those fuels."

Hendel said the technology is already available to use more sustainable components but shipping those components from global sources creates more CO2 in the atmosphere.

"We have to be smart, right? Does it make sense to buy them where they're being produced and ship them over here? By the time the fuel gets to the track it may have created more greenhouse gasses than it will save in the race. So I try to focus on the whole chain of greenhouse gases and CO2," he explained.

VP did have a new Trigger fluid control system to help racers transfer fuel from jugs to the racing cells. And it was heavily promoting recent products like the Stay Frosty coolant and water-methanol injection solutions.

### **MACHINERY ROW**

In some ways, Machinery Row is not only where the latest in CNC equipment, abrasive supplies, welders, cleaning systems and other race-related shop gear can be seen. It's also a section of the PRI Show where exceptional fabrication and machine work created by those who use those tools is on display.

John Cowher of Centroid, based in Howard, Pennsylvania, was showing off the company's upgraded A560 XL 5-axis CNC machine that handles both cylinder blocks and cylinder heads. It was whirling away on an Edelbrock big block Chevy casting as Cowher talked about the more rigid frame design.

"It weighs 23,000 pounds, which is a thousand more than the first version," he said. "It's got beefy sheetmetal all around. It's a tank!"

Cowher said the machine is designed to work at a major manufacturer like Brodix or a trending mom-and-pop race shop because of its versatility in switching between heads and blocks. Then he was quick to introduce Centroid customer Jeff Smith of Late Model Throttle in Waukesha, Wisconsin, who had a well-rounded portfolio of billet items.

"It helps tremendously with the rigidity of that machine, so we can run it faster. And obviously, time is money," said Smith, who favors billet parts over casting. "For me it's the fit and finish of a billet part. I can control every aspect of the process. And it's going to be stronger."

One of Smith's billet parts was an airinlet housing for a Mopar application that achieved a 25% gain in airflow over a ported stock casting. It also boasted a unique honeycomb pattern that appears as if it were a mesh laid over all the curves of the piece. Another part on display was a supercharger lid for a Ford GT500 that helped give the car a 35-horsepower increase at the wheels.

"The problem with the factory one is that it's very shallow, and the air doesn't have the room to grow," explained Smith. "By just adding the curve in there, it allows the air to move more efficiently."

Over at the JD Squared exhibit, owner Bob Hughes brought only half of his new product from his Johnson City, Tennessee, headquarters. The XR6 Extreme Rotary tube cutter is adept at plasma cutting intricate details in square or round pipe. In addition to the main section on display, there is also another table that allows work on much longer pieces of pipe. Racers and fabricators are



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drawn to this equipment because an entire roll cage can be designed and cut in short order.

"A fabricator can wedge-cut the frame and never have to do any manual cutting," said Hughes. "It's fully automatic. Our machines will mark the pipe, show how much tube to use and where to bend it. It's all about how fast we can accomplish each job."

JD Squared has a goal of supporting its products for a minimum of 30 years, so the company handles all the software development and even makes its own computers. Ironically, the company has many racers as customers, but those customers often buy the machines to use in their businesses that support their racing activities.

"Out of the 12 machines we talked to customers about yesterday, three were race car builders and the others were drivers and owners with construction or similar operations," said Hughes, adding that during one part of the pandemic he was selling more than 200 entry-level tube benders a month. "Everybody was building stuff at home."

Machinery Row wasn't all high-dollar, computer-controlled manufacturing gear. Centroid showed an extensive array of machinery in action at the PRI Show. Among them was the company's new A560 XL cylinder head porting machine.



There were pneumatic tools, hand tools, power tools, welders and other assorted shop solutions and supplies. Giant Finishing of Addison, Illinois, provides a large assortment of blast systems, vibratory deburring equipment, tumbling bowls, industrial cleaners and other finishing gear. Racers have been turning to these types of products to achieve a clean finish on the metal.

"They want their parts cleaner and smoother," said Mark Oryszczak. "Smoother is faster." Key to these velvety smooth surface finishes is a line of improved media and abrasives for the different types of equipment. "We have our BHD plastic to lower Ra surfaces in a shorter time," said Oryszczak, noting that racers like to smooth out connecting rods, valves and other internal engine components. "Smoother will eliminate the stress risers that can lead to cracks or failure, but let's be honest: Some racing guys just love the bling of a polished surface."

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# PRI SHOW REPORT TOP PRODUCTS HONORED

Industry insiders and trendsetters tabbed select motorsports parts and accessories, from composite engine parts to welding products, for recognition in Performance Racing Industry's first-ever Featured Product Awards program.

### By Mike Magda

lex Taylor knows what's best for her race car and didn't let a little personal apprehension keep her from selecting the innovative StraightGate 50 wastegate from Turbosmart in Ontario, California, as her Judge's Pick in the first-ever Featured Product Awards at the PRI Trade Show.

"Something that we've dealt with back and forth with our own car is the CO2-controlled wastegates," said Taylor, a popular YouTube star with an in-depth series that details the start-to-finish buildup she and her father, Dennis, performed on a rusted-out 1955 Chevy 210. Powered by a 3,000-horsepower 525-cubic-inch twin-turbo BBC, the car has run in the mid-7s at more than 185 mph.

"We're actually running Turbosmart wastegates, but we go back and forth with trying to figure out fluctuating air pressure. With the precision and consistency that the StraightGate50 would allow, I can see it being a game-changer," she added, noting that choosing a product based on her personal needs was somewhat self-serving. "I hated to choose it based on that. There were lots of great new products. But that one stood out to me because I have a newfound understanding of why it's important. That's the reason I chose it."

Taylor was soon comforted after hearing three of the other judges also selected the StraightGate 50 as their top pick. The panel of 12 judges boasted a wide diversity of racing backgrounds, including track operators, sanctioning body officials, social media influencers, and traditional media. As a team, they selected standouts in eight different categories from some 350 entries in the PRI Show's Featured Products Showcase, and then made a Judge's Pick of a product that had the biggest impact on them individually.

NHRA Director of Multimedia Content David Kennedy selected the Pro Series brushless spur-gear fuel pump from Fuelab in Collinsville, Illinois, as his Judge's Pick. PRODUCT AWARDS CONGRATULATIONS

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"The idea of the spur gear, based on the specs, it'll support 2,500 horsepower," explained Kennedy. "It's a flow-through design with a brushless pump. It's going to be durable and flow a ton of fuel. And I have great experience with Fuelab products.

"It's the idea of having a reliable, consistent fuel supply," he added. "The fuel pump is usually at the opposite end from the engine on the vehicle and can often cause many problems. So, if they can make that one choice easy, then every racer benefits."

Garrett Reed has an Instagram page called AmericanMuscleHD that has more than 2.2 million followers. He chose a product that is still in the prototype and testing stage, but one he feels is very unique.

"I'll be honest, it was just the only thing that seemed really different," he said of the composite lifters from AWA Forged Composites, a company based in Rolling Hills Estates, California, that is developing and testing composite engine parts, such as

pushrods, rocker arms, connecting rods, and pistons. Those components are traditionally aluminum or steel.

"All the other products that we saw were a new design, but I've never seen somebody take composite materials and use it as an internal engine part," Reed explained. "I know it's obviously lighter than standard material used on lifters. I want to see how this works. I want to know if it can hold up to the stress of standard materials that have been used for years. So, it's the one thing that just caught my eye."

About two-dozen PRI exhibitors received either a Judge's Pick or a Category Award through the Featured Product Awards program. Following is the complete list of winners. Featured Product Awards judge Garrett Reed of AmericanMuscleHD reviews hundreds of new parts and accessories on display in Lucas Oil Stadium's dedicated product showcase. His top pick: Composite Lifters by AWA Forged Composites.



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### **BEST ACCESSORY PRODUCT**

### FLASH INTEGRATED SCALE BALL MOUNT **Fastway Trailer Products**



The integrated mechanical scale ensures repeatable scale accuracy when measuring tongue weight. With a properly balanced load, you can enjoy improved steering, better braking control, and reduced trailer sway. Features include: 1,000 lb. max tongue weight; 10,000 lb. max trailer weight; 2" receiver; 2" and 2-5/16" chrome hitch balls included. fastwaytrailer.com

### FIA COMPOSITE FULL CONTAINMENT SEATS

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FIA certified to 8855-1999 specs, this seat is suitable for pro racing with increased thigh and hip support along with extended shoulder and rib bolsters. The halo protrusions at the top provide additional head support, which is why this seat is considered full containment. Available in 15" medium and 16" large sizes from any RaceQuip dealer for under \$700. racequip.com



### **VP TRIGGER HOSE**

VP Racing Fuels Inc.

This is a fuel hose system unlike no other. Its patented push-button, self-venting control-flow valve is developed for use with VP Motorsport Containers. It takes seconds to install and makes refilling extremely efficient. Simply tilt your container, press the Trigger button for flow, and release the Trigger button to quickly stop the flow.

### vpracingfuels.com



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### PE Racing

An easy and strong solution to mounting panels, cables, or objects securely to common tubes sizes and roll cages. The line of clamps includes: steering wheel/helmet hooks: tube to



panel mounting brackets; tube clamp mounting brackets; and fuel pump/filter mounting brackets.

peracing.com.au

### FRONT LIGHTWEIGHT TUBULAR SUBFRAME MERCEDES-AMG GT GT S GT C GT R PRO Verkline



Cuts weight by 40% over OEM, resulting in 45/55 front to rear weight distribution. It is similar to the tubular subframes used in Mercedes AMG GT3 and GT4 race cars. It is CAD designed from a 3D scan of the OEM subframe, finite element analysis 3D tested (FEA), and made from T45 tubing.

verklineusa.com

### FULL SUSPENSION SET BUNDLE-TOYOTA **GR YARIS**



Features front and rear lightweight billet uprights, aluminum rear diff carrier, front and rear adjustable upper and lower arms, rear lower arm inserts, and rear sway bar links. It is designed for both road racing and long-travel rally applications. verklineusa.com



### **BEST DRIVETRAIN PRODUCT**

### CARBON FIBER DRIVESHAFT

**PEM Racing** 



Proudly manufactured in the Heartland of the USA, these carbon fiber driveshafts are available in sizes 2.25", 2.75" and 3.25" OD for circle track applications. Features include: 1310 series Neapco Performance Solid Cross U-joints; aluminum extra clearance bondable yokes; and built on modern driveshaft equipment. Trakhook Superflex Tubing is available in 2.25" OD. pemracing.com

### 4L80-E, 4L85-E HEAVY DUTY INPUT SHAFT Sonnax



This high-strength, 300M Sonnax input shaft combines unique design features with advanced manufacturing processes for exceptional performance, durability, and value. A torsional design and spline/cross-hole refinements add strength, as does elimination of the deep undercut at the OD carrier spline where other shafts fail. sonnax.com

### PREMIUM LIGHTWEIGHT QUICK CHANGE GEAR SETS

**Speedway Motors** 



These guick change gear sets are constructed from high-strength alloy steel for higher HP cars with bigger tires. They are lightweight, which decreases the rotating weight. Sets also feature REM polished surfaces for less friction and longer life.

### speedwaymotors.com

### **BEST ENGINE PRODUCT**

### **COMPOSITE LIFTERS**

**AWA Forged Composites** 





AWA's composite lifters are stronger and 30% lighter than competing lifters. Lighter lifters lead to less spring pressure, putting less stress on parts and decreasing deflection. The composite material also reduces harmful harmonic effects. Moreover, AWA has eliminated the use of needle bearings that catastrophically damage an engine during failure.

awacomposites.com

### CLEAR VIEW FILTRATION BILLET DRY SUMP TANKS

**Billet Connection-Clear View Filtration** 



Features Clear View's patented see-through oil filter tank. All are components CNC-machined with no welds inside or out. Has superior venting and baffle system that mounts to the top and removes in one piece for easy maintenance. Tanks come clear or black anodized. clearviewfiltration.com

### ELECTRONIC **STRAIGHTGATE 50 Turbosmart**

The e-StraightGate50 is a world first in electronic boost control technology. Gone are the flow disadvantages of poppet-style wastegates. Its proprietary butterfly valve design makes it the fastest and highest flowing wastegate in the world. This allows the response of a small wastegate, with the flow of a large one, while providing linear control. turbosmart.com



### BEST IN-VEHICLE/ELECTRONIC/ TELEMETRY PRODUCT

### FT550 EFI SYSTEM

FuelTech ECU



The FT550 is an engine fuel control and monitoring system from FuelTech: electronic fuel injection, integrated dashboard, data acquisition and power management.

### fueltech.net

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#### hptuners.com

### VBOX VIDEO HD LITE VBOX Motorsport

A combined video and data logger designed specifically for motorsports. Features a compact and aerodynamic form with GPS data and 8 CAN channels allowing connection to a thirdparty dash or ECU. Review synchronized video and data in the easy-to-use Circuit Tools software supplied. vboxmotorsport.co.uk



### **BEST RACE FLUID**

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From the trusted makers of Engine Ice Hi-Performance Coolant comes this new coolant and antifreeze engineered for the specific demands of snowmobiles and winter SXS, UTV, and ATV use. Features: maximum cooling and freeze protection to -45°F; maintains optimum temperature, reducing possible power loss from excess heat; and biodegradable. Also, no mixing required—ready to use.



engineice.com

### SPEED SAUCE

VP Racing Fuels Inc.

VP Speed Sauce is a proprietary watermethanol injection fluid that helps control detonation and can increase horsepower and torque with proper tuning. Speed Sauce watermethanol mix comes premixed, so it's ready to use straight from the bottle. Another key point is that it's relatively non-corrosive in certain circumstances.



vpracingfuels.com

### XR RACE-ONLY BRAKE FLUID

Wilwood Disc Brakes



Wilwood's new XR Race-Only brake fluid is the same extreme hightemperature fluid used in Formula 1, World Rally Championship, FIA World Endurance, and Moto GP. Laboratory testing indicates XR Race-Only fluid has a dry boiling point of 645°F thanks to a proprietary blend of high-performance polymer electrolytes and borate esters. Sold in four packs.

### wilwood.com

### **BEST SHOP EQUIPMENT**

TIRE SCRAPER

**United Race Parts** 

### BLUEARC 140MSI MIG-STICK INVERTER MACHINE

**Blue Demon Welding Products** 



This 120V x 140A DC MIG-STICK Welding Machine offers gas and gasless MIG welding functionality; includes a Synergic Control Feature; is portable and light weight (only 19 lbs.); fits standard 2 lb. and 11 lb. spools; includes integrated MIG torch, ground clamp, and stinger; and welds steel, stainless steel, copper, and aluminum.

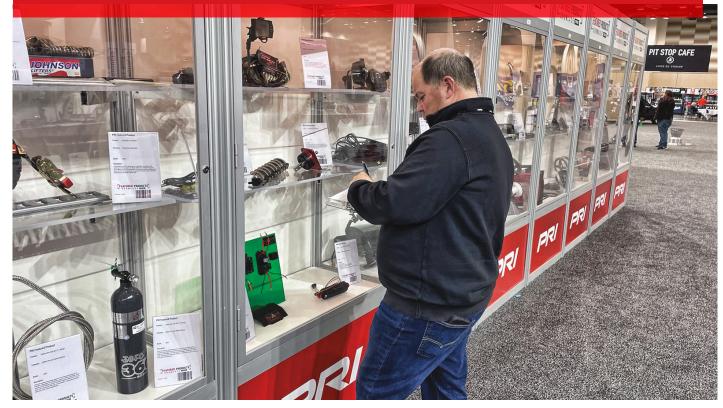
weldingmaterialsales.com

With a molded handle for user comfort, the integrated heat gun has variable temperature and fan speed; 2,000 W output and a 100- to 600-degree temperature range. Avoid damaging your tire compound by using unsuitable tools and/or excessive temperature. This product features an adjustable handle and blade position to suit the user, and is ergonomically designed to increase productivity. **unitedraceparts.com**  SQUARE WAVE TIG 200 TIG WELDER Lincoln Electric



The Square Wave TIG 200 is a portable TIG and stick welding machine that lets hobbyists, makers, and fabricators explore their creativity. This machine is TIG and Stick capable with a user-friendly interface and advanced aluminum controls that make welding fast and easy while also providing room to expand your welding experience. **lincolnelectric.com** 

A 12-judge panel of race track operators, sanctioning body officials, social media influencers, and traditional media selected standouts in eight different categories from some 350 entries in the PRI Show's Featured Products Showcase.





### **BEST SUSPENSION PRODUCT**

### RFX WIRELESS SUSPENSION LOAD STICK

Intercomp

RFX Wireless Weighing Technology eliminates indicator cables. Rate one to four corners using up to four load sticks with one indicator. Allows you to analyze and adjust spring rates for maximum performance, and quickly determine static load at ride height for each wheel; individual load sticks are also available without the indicator.

intercompcompany.com

### C5/C6 MOD SERIES COIL-OVERS

QA1

Convert your Corvette's leaf spring suspension to QA1's MOD Series coil-over shocks to maximize handling performance, suspension tunability, and ride height adjustment for the perfect stance. These four-way adjustable Corvette coil-overs are perfect for pushing your car to the limit at the track then setting the valving for comfortable street use.

### qa1.net

GM 2.0 CONTROL ARMS QA1



QA1 Control Arm 2.0 was designed to be the lightest, strongest, and best-looking control arms available for your ride. Uniquely engineered with key features optimized for either street performance, pro-touring, or drag race vehicles, these American-made control arms will ride better, corner harder, and launch faster than anything you've experienced in the past.

PERFORMANCE RACING INDUSTRY | FEBRUARY 2022

### qa1.net

48



Qa1

C5/C6 CORVETTE MOD SERIES

COIL-OVERS

### JUDGE'S PICKS

### **COMPOSITE LIFTERS**

**AWA Forged Composites** 

\* Awarded by Garrett Reed, AmericanMuscleHD

### **BLUEARC 140MSI MIG-STICK INVERTER MACHINE**

**Blue Demon Welding Products** 

\* Awarded by Joe Skotnicki, Race of Champions

### 123 COUNT WITH CAR PARTS BOOK ►

EAT SLEEP RACE \* Awarded by Wes Buck, Drag Illustrated

### FLAGTRONICS FT200 KIT

Flagtronics by Ballenger Motorsports \* Awarded by JA Ackley, Outside Groove



### 40501 BRUSHLESS SPUR GEAR 6GPM ►

FUELAB

\* Awarded by Chris Blair, World Wide Technology Raceway and David Kennedy, National Hot Rod Association (NHRA)

### CRANKDRIVE F-4X-140

ProCharger Supercharger Systems \* Awarded by Brian Dunlap,

# World Racing Group RACEQUIP PR020

# CARBON FIBER

RaceQuip \* Awarded by Karl Fredrickson, Speedway Illustrated

### ELECTRONIC STRAIGHTGATE 50

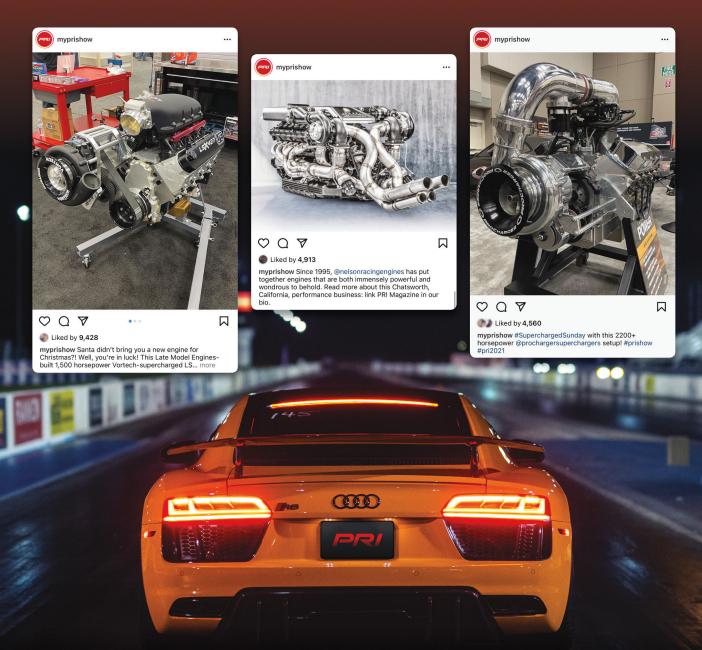
Turbosmart





# CONNECT WITH PRI AND THE RACING COMMUNITY ON SOCIAL MEDIA

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# EDITORS' CHOICE

Thousands of new products were introduced or highlighted during the PRI Trade Show in Indianapolis. Following are our top picks from a bountiful Indiana Convention Center and Lucas Oil Stadium.

From Staff Reports

## 10R80 BILLET FLEXPLATE

## SUNCOAST PERFORMANCE

suncoastdiesel.com

unCoast's 10R80 flexplate is manufactured from 4140 forged billet steel and features a solid one-piece design, redesigned relief ring, an integrated heattreated and oil-quenched ring gear, and is almost twice the thickness of the factory unit-rendering deflection virtually nonexistent. SunCoast has also designed this flexplate with twice the bolt holes, allowing you to take advantage of the additional clamping opportunities that come with its 10R80 Pro-Loc Bolttogether Converter. It is SFIcertified to 29.2.



## **DRAG OPS SERIES MACH-10 STREET & STRIP DRAG WHEELS**

## 3030 AUTOSPORT FORGED WHEELS

### 3030autosport.com

B 030 Autosport focuses on performance wheels for the street and the strip, and they do it all right here in the USA. With over 30 years' experience in wheel making, their focus on superior engineering, quality, and performance is best described as obsessive. Pictured here is the MACH-10, which debuted at the 2021 PRI Show. Available in 15x3.5 through 15x15, as well as 17 inches and 18 inches for Modern Muscle fitments.



## HPCC-1 CV GREASE

### **NEO SYNTHETIC OIL** neosyntheticoil.com

EO Synthetic Oil's NEO HPCC-1 is a truly designed CV joint grease for the application. It provides lower friction and wear protection for the service of the CV joint. HPCC-1 CV Grease was designed to help absorb the vibration, and improve friction and wear resistance in the unit. NEO uses the best additives for this application; anti-wear additives, friction modifiers, antioxidants and corrosion inhibitors are added to improve the quality and performance of the grease.



## GB3

## **GIANT FINISHING**

### giantfinishing.com

This 3-cubic-foot Vibratory Finishing Bowl with internal separation is ideal for deburring and finishing small parts. Eliminate the tedious, hand-finishing labor by just throwing multiple parts in your machine. Utilize the standard discharge ramp and screen separation deck to eliminate searching for small parts in your media. This machine is the perfect fit for all precision race shops.



## **ONLINE CABINET LAYOUT BUILDER**

## CTECH

### ctechmanufacturing.com

esign, visualize, customize, and order high-performance cabinets 100% online with CTech's innovative cabinet builder. Whether you're looking to add overhead storage in the trailer or outfit multiple work bays in the shop, get the exact storage solution you need without leaving your home or office. CTech's highperformance aluminum cabinetry offers an unbeatable fit and finish, packed with exclusive features like MotionLatch drawers and doors, fastener construction, powder-coat finish, and many others. Try CTech's online cabinet builder today and visualize before you buy. No storage experience necessary.



## NASCAR NEXTGEN WHEEL

## **BBS OF AMERICA**

bbs-usa.com

BS was selected by NASCAR as the wheel supplier for the new Next Gen Cup car. This 18x12 forged aluminum wheel is produced using BBS's die-forging technology. The series of special forging dies used in the production process greatly reduces the cost and manufacturing time over a traditional fouror five-axis milling operation. Die-forging provides a better grain structure while also improving durability.



## ALPHA 5/8 WELDING TABLE

### STRONG HAND TOOLS stronghandtools.com

he BuildPro-Alpha five-sided tables are designed with the patent-exclusive, reversible, and replaceable table-top and side plate system. Each table plate is reconfigurable to expand the width or "re-shape" the table to accommodate more complex workpieces. The Alpha modular fixturing table system is available in both 5/8-inch and 28-mm tooling with 2-inch and 200-mm hole spacing, respectively. It increases quality, consistency, and productivity while reducing scrap and setup times in repeating jobs.



## DURAMAX BILLET EXHAUST MANIFOLDS

## WEHRLI CUSTOM FABRICATION

wcfab.com

WCFab's Duramax Billet Exhaust Manifolds replace the restrictive factory cast parts with high-strength, TIG-welded high-flow billet steel components. These manifolds are exhaust port matched and internally divided. Outlet locations allow full compatibility with OEM-style up pipes and are designed to be paired with WCFab's 2-inch Stainless High-Flow Up Pipes (sold separately) for optimized performance. Models available for 2001–2016 and 2017+ Duramax engines, which are fully compatible with vehicle emissions systems. Includes new gaskets, ARP 12PT fasteners, and assembly lube for easy install (up pipe fastener kits sold separately). Finished in Black Ceramic Coat rated for 2,000 degrees F.



## PRO AIR TRI-FLOW

## **PYROTECT** pyrotect.com

Protect's new revolutionary Pro Air Tri-Flow SNELL SA2020 approved helmets come with a full set of covers for drinking tube and communication ports as well as forced air attachments so it can be converted from a standard helmet to a mid-forced or side-forced air in minutes. Available full Carbon or Composite in white, gloss black, or flat black and sizes from XXS–XXXL, MSRP \$1,199.





## SS1R

## **FORGELINE MOTORSPORTS**

forgeline.com

Perived directly from the SS1R-GT wheel, which is engineered specifically for IMSA and WEC GT3 racing, the one-piece forged SS1R wheel is Forgeline's lightest, strongest, and stiffest racing wheel made to date. The centerlocking Forgeline SS1R wheel is an ideal choice for the Porsche 911 and other center-locking sports car applications and is available in a range of widths and custom offsets in diameters from 18 to 21 inches.



## HIGH PERFORMANCE CRANKSHAFTS, CONNECTING RODS & ROTATING ASSEMBLIES



<complex-block>

## **PRI SHOW REPORT** TRENDSPOTTING IN IN DY he PRI Trade Show is known across the racing and performance sector as the key showcase for the industry's latest developments and opportunities. After

A look at what's new, innovative, and fueling growth in the motorsports industry.

By Mike Imlay

a forced hiatus due to COVID-19 in 2020, the 2021 trade event came roaring back to the Indiana Convention Center December 9–11.

Anticipation ran high. The Show drew exhibitors and attendees eager to reconnect, do business, and learn not only what the industry had been up to the past two years, but how those developments might benefit their operations moving forward.

So, what's new in the racing and performance world? Following are several interesting trends we spotted at the Show.

### **VEHICLE ELECTRIFICATION**

At road courses, down drag strips, around dirt tracks, and even across the Bonneville Salt Flats, electric vehicles (EVs) have become a significant motorsports

trend. In part, this trend is being driven by OEM initiatives. Out of the top 20 global automakers-which together in 2020 represented around 90% of new car registrations worldwide—18 have announced plans to rapidly scale up EV production in the coming decade.

Motorsports has always been the proving ground for emerging technologies, and that spirit of engineering was on full display in the PRI Show's EV Performance Zone, a feature area highlighting the growing EV presence in racing. The Zone's exhibitors included Chevrolet Performance. Ford Performance Parts, and several aftermarket brands providing new products and solutions for the electrification market. In addition, purposebuilt feature vehicles demonstrated the latest EV applications being introduced into Trophy Trucks, dragsters, motorcycles, and other racing vehicles.

"Electrification is the future of the

automotive industry, so we're here to showcase the awesome power of our electric vehicles," said Autumn Schwalbe of Ford Performance Parts, Dearborn, Michigan.

Those vehicles included a Ford Cobra Jet 1400, a Mach-E Mustang and a 1978 F-100 concept pickup equipped with Ford's Eluminator electric crate motor, which Schwalbe said has especially caught the attention of the racing industry.

"When we revealed the Eluminator, we sold a lot right away," she said. "Whether for drag racing, short-course racing, or small tracks, a lot of people are getting involved." Opposite the Ford exhibition, Chevrolet displayed a 1972 El Camino conversion built in partnership with Lingenfelter Performance Engineering and featuring the OEM's e-crate system.

"We're trying to give racers—and any individual—the opportunity to move toward an electric drive system," said Mike Celotto of General Motors, Detroit, Michigan. "We know that electric drive is in its early stages. We expect it to grow just like the overall automotive industry is growing, so we want to have a space in that for our customers."

Allen Thomas of the National Electric Drag Racing Association (NEDRA) in Lake Jackson, Texas, has been drag racing EVs for

"MOST PEOPLE DON'T KNOW THAT—ACROSS WHAT WE CALL THE 'FLYOVER STATES'—THERE IS A SLED PULL EVERY NIGHT IN EVERY STATE FROM JUNE TO THE END OF AUGUST. a decade now. While he also enjoys building and racing internal-combustion cars, Thomas said that the vehicle electrification movement reminds him of his early days in racing.

"I see the technological advancements," he said. "I grew up during the heyday of drag racing, when there were different things hitting the drag strip and incredible innovation and people building things. This is the feeling I get from building electric cars now—it's back to the 1960s. It invigorates me because no one has a cookie-cutter approach."

NEDRA is a coalition of electric drag racing vehicle owners, drivers, and fans. The organization promotes EV manufacturers and parts suppliers while organizing and sanctioning electric drag events. Its exhibition at the Show included two drag EVs.

"There's going to be a lot of learning, a lot of challenges in electric drag racing, and it really draws me in. There's exponential growth right now," Thomas added.



Rob Ward of Legacy EV in Tempe, Arizona, said that growth potential is pulling brands of all types into the EV space. A parts distributor for the EV market, Legacy EV was among several performance aftermarket companies educating showgoers about the emerging opportunities in the EV market.

"We're working our tails off to be the face of aftermarket EV performance," said Ward. "We're working with more than 60 manufacturers right now to provide a complete electrification system for pretty much anything. There are a lot of companies investing a lot of energy and money into advancing complete EV systems, so we're excited about where it's headed."

Other EV Zone exhibitors included Holley-AEM, Burromax, FirstCorner, HyperCraft, MRE Racing, ReVolt, and Torque Trends. Key products in the category currently include EV control units, drive systems, gear-reduction boxes, battery packs and related components, but the field is ripe for all sorts of invention.

### **DIESEL MOTORSPORTS**

Although diesel motorsports have been around for decades, the last five to 10 years have seen an explosion of fan interest. Luke Langellier of S&S Diesel Motorsport in Seymour, Indiana, believes that technological advancements are behind the category's surge.

"If you think about the big picture, all the emissions regulations that the OEMs have had to abide by, that's what pushed all this technology. It would never have needed to exist if it weren't for having to meet all those stringent requirements. So that's why we have trucks now that are perfectly quiet, make tons of power, tow like crazy, and can do everything you want them to do," he noted.

S&S Diesel's exhibit space included a massive semi engine, a nod to the semi drag racing that's become a major crowd pleaser.

"People love to race whatever they're passionate about," Langellier said. "We have a pretty strong [semi] following—in Canada, especially, and the northern United States of guys who are really passionate about getting as much performance from a semi as they can."

Ron Knoch of Diesel Motorsports in Kansas City, Missouri, said that his organization's drag races, sled-pulling and show-and-shine events continued unabated during the pandemic, partly because they've become popular staples of county fairs and With EVs now gaining a foothold in mainstream motorsports, the PRI Trade Show's new EV Performance Zone was a popular place to see the latest developments for this growing market.

similar family-friendly events, especially in the American heartland.

"Most people don't know that—across what we call the 'flyover states'—there is a sled pull every night in every state from June to the end of August," Knoch explained. His organization's races, with five competitive classes, are always well attended, he added.

Gregg Jolly of the Outlaw Diesel Super Series in Terre Haute, Indiana, said that diesel truck events offer a unique thrill. "For me, it's watching them go down the track as fast as they do and as heavy as they are," he said. "It takes a lot more horsepower and torque than it does on the car side of things, and it's a lot harder on parts."

In other words, things break a lot, which brings numerous opportunities for the performance aftermarket to produce everything from hardcore engine parts to heavy-duty suspension components. "It's pushing the limits and pushing the aftermarket to make better product," he said.

> Diesel motorsports have picked up market share over the last decade. Accordingly, the PRI Trade Show offered a close-up look at the newest parts and solutions for the segment.





### **DONK RACING**

No show captures motorsports' diversity like PRI, where there's always something new and unexpected to encounter. Take, for example, Donk, or big-wheel racing, a novel form of competition gaining serious traction in mostly urban markets. At a seminar titled "Big Wheel Racing: Why It's a Big Deal," Sage Thomas (a.k.a., the Donkmaster) announced the formation of the National Donk Racing Association, a new sanctioning body bringing safety and organization to the rapidly growing niche.

What's a Donk? Technically it's a customized 1971–1976 Impala or Caprice riding on 20-inch or larger wheels (preferably larger). However, the term has become generic for similarly styled vehicles.

With Donk racing racking up millions of YouTube views and legions of social media followers, Thomas believes the sport is opening new doors for sponsors, safety equipment suppliers, fabricators and partsmakers, and, of course, specialty wheel and tire makers.

"We're showing people this is real,

because a lot of big companies thought it was a fad," said Thomas. "But it's something new for the race tracks, for the fans, and for supporters to be a part of something big. The opportunities are endless for small companies all the way up."

### **GRIDLIFE iRACING**

PRI Show attendees also got a look at GRIDLIFE's iRacer Experience, a new immersive racing concept designed to promote grassroots enthusiasm. The GRIDLIFE booth consisted of six networked competition racing simulators running the latest iRacing build, complete with a live announcer broadcasting to online enthusiasts.

According to Chris Stewart of GRIDLIFE in Chicago, Illinois, the organization's simulator competitions open motorsports to a gaming audience while teaching valuable track skills. Ultimately, this can encourage newcomers to embrace the racing lifestyle through the organization's live track days, time-attack events, drifting events, education programs, and festivals.

"Our intention is motorsports inclusion,"

Stewart said. "We try to get people closer to motorsports, particularly younger individuals. Our core demographic is 18 to 38. We're one of the youngest driving organizations globally."

### YOUTH IN MOTORSPORTS

With the future of the performance industry hinging on attracting nextgeneration talent, PRI has also made youth engagement a top priority.

On Friday, December 10, hundreds of young attendees gathered for the annual PRI Student Breakfast and Career Day, which connected students from across the US with industry leaders. The exclusive meetings exposed students to career opportunities ranging from team and shop roles to product development and administrative positions. The Breakfast also served as an introduction to the Show's world-class trade environment, where they could further take in the industry's size and scope.

Northwood University of Midland, Michigan, was among the many organizations participating in the event.





Many PRI Show attendees learned about Donk racing for the first time, with Sage "Donkmaster" Thomas giving a presentation on this relatively new form of drag competition.

"Students come to Northwood to learn all about the automotive aftermarket." said Michael Kinney. "We're seeing a workforce in manufacturing all the way down to service technicians that is aging out and taking retirement. We need young people to come into the industry, and events like this show them how exciting it can be [with] a great future and great earning potential."

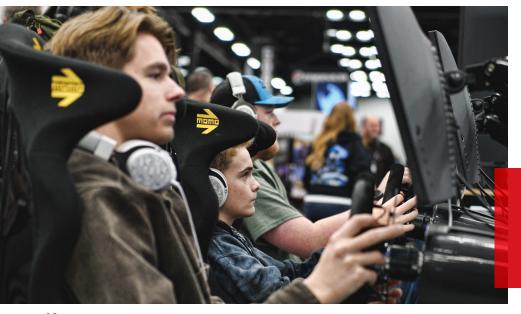
Meanwhile, on the PRI Show floor, exhibitor Preston Lewis was promoting youth involvement through the Off-road Motorsports Youth Foundation (OMYF) in Evansville, Indiana. A survivor of childhood cancer, Lewis launched the non-profit organization at the 2019 PRI Show to give other youth affected by unfortunate life

circumstances a taste of motorsports. OMYF is now building a desert racing team and Class 7100 Unlimited Trophy Truck.

"Our growth has skyrocketed in the past couple of years after our launch at PRI," said Lewis. "Our sponsor list has increased dramatically, and the quality of our sponsors has gone up quite a bit."

Lewis expects the truck and team to be raceready by October 2022. He said OMYF came to the Show to highlight alternatives for young adults who aren't necessarily college-bound.

"What we're trying to do is give them opportunities in a format where they can really find what they love," he said. "If we could leave here with 15 to 20 kids that are really dedicated and want to be involved with us.



that would be a win in our books."

Young PRI attendees also demonstrated their building skills through the Hot Rodders of Tomorrow (HROT) competition, in which high school teams tear down and reassemble engines. The timed rounds took place over three days, with the Burton Center for Arts & Technology E3 Spark Plugs squad from Virginia taking 2021 National Champion honors.

"Due to COVID, we had to shut the operation down for a year and a half, and we thought it would be a great way to reboot it here," said Rodney Bingham of HROT. "Just to see these students get exposed to our performance racing industry.... This shows them a whole new world of jobs and great careers that they could have."

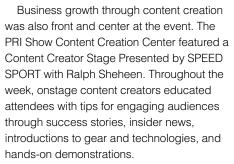
Led by instructor Chris Overfelt, the E3 Spark Plugs team scored an average time of 20 minutes and 51 seconds. Second place went to the Forsyth Central High School team sponsored by SCAT, which clocked in at 22 minutes and 2 seconds. The Moroso team from CD Hylton High School finished third with a perfect engine build in 22 minutes and 23 seconds.

### **GROWING BUSINESS**

The PRI Trade Show was also a prime venue for performance aftermarket manufacturers to discover new ways to sustain and grow their businesses. The possibilities for military contracts were discussed at a seminar titled "Army Ground Systems: Overview & How to Do Them." Presented by Thomas Vern of the US Army DEVCOM-Ground Vehicles Systems Center (GVSC), the workshop highlighted the synergy between motorsports and DEVCOM vehicle research and development.

"Anything on wheels, we handle it," said Vern, who added that the GVSC is especially interested in several areas where the performance industry excels. They include EV technologies, heat dissipation, weight savings, suspension geometry, 3D printing in metals, and parts-making for legacy items no longer mass-produced.

GRIDLIFE's iRacer Experience attracted youthful participants with its six networked racing simulators, and a live announcer broadcasting to the PRI Show crowd.



In addition, Justin Cesler of Driveline Studios presented the "WTF Is Content?!?" workshop, where he shared simple but effective tools for creating pro-level content for both traditional and new-media channels. According to Cesler, the biggest mistake a young brand can make is to sporadically post content or give up altogether due to sluggish response. "Consistency is key," he emphasized. "Don't go out and make content one time, two times, and say it isn't working."

### **PROTECTING MOTORSPORTS**

Since the recent Environmental Protection Agency (EPA) interpretation that the Clean Air Act prohibits motor vehicles designed for street use—including cars, trucks, and motorcycles—from being converted into dedicated race vehicles, the entire performance racing industry has come under threat. In response, the 2021 PRI Show included education on emissions compliance and action to pass the Recognizing the Protection of Motorsports (RPM) Act.

The RPM Act is bipartisan legislation (H.R. 3281 and S. 2736) designed to protect Americans' right to convert street vehicles into dedicated race cars. It also protects the motorsports parts industry's ability to make, sell, and install products that allow racers to compete. The bill clarifies the legality of emissions-related modifications to street vehicles used exclusively in competition and reverses the EPA's recent interpretation holding otherwise.

Industry support for the bill is strong, which was on display at two well-attended PRI events related to the issue.

The first was an "Update: RPM Act & Emissions Compliance" seminar on opening day, where a panel led by SEMA General Counsel David Goch presented steps for remaining compliant with EPA and California Air Resources Board (CARB) requirements. The conference included a status update on the RPM Act and how performance and racing businesses can help push it forward. Goch said critical mass for the legislation is building, and passage is within grasp.

PR

"What I have witnessed in my five years with the industry as general counsel is a true awakening and education," he said after the seminar. "Five years ago, the questions were pretty rudimentary—'What is the Clean Air Act and emissions compliance?' Now people are asking more sophisticated questions to get a better understanding of what they need to do to comply. I think our future is bright because my experience is that most of the folks that I touch through PRI are here to learn to do it right and keep this industry strong."

The following day, PRI held a "Save Our Racecars Rally" in the Quarterback Suite of Lucas Oil Stadium. The exclusive event offered further insights into the RPM Act, and was open only to PRI Pro, PRI Champion, and PRI Founding Members. PRI recently launched its membership program







and Performance Racing PAC (Political Action Committee) to mobilize the industry and fundraise for the RPM Act and other initiatives to protect and grow the industry. Under federal law, PRI may not use its funds to contribute to federal lawmakers and candidates. However, the Performance Racing PAC allows Members to contribute personal funds to help elect lawmakers who support racing's positions and initiatives. Among the speakers was Garrett Mitchell, a.k.a. Cleetus McFarland, a motorsports influencer with more than 2.8 million YouTube subscribers. He said he was happy to lend his persona to the cause.

"A lot of these guys here are entrepreneurs. Many of the people who sit in this room have their own businesses that are solely invested in the motorsports industry, which I can relate to because I have all my eggs in this basket, As online content proliferates throughout the automotive world, PRI Show attendees were eager to learn new ways to harness its power from experts like Hoonigan photographer Larry Chen, at left.

too. So I just wanted to talk from my point of view and reiterate just how important it is for us to all stick together," he explained.

Ultimately, the 2021 PRI Show was a testament to the industry's innovation, grit, and endurance, even through a pandemic.

"The racing industry is resilient and continues to push forward, and PRI very much reflects that spirit," said PRI President Dr. Jamie Meyer. "Racing businesses have demonstrated remarkable passion and perseverance over the last year, and many even reported record sales and month-overmonth revenue growth in 2021."

Judging by what we just saw in Indy, the industry is again revved and ready to race forward in 2022.





## APPLY NOW TO SPEAK AT THE 2022 PRI SHOW DECEMBER 8–10, 2022

AT THE INDIANA CONVENTION CENTER IN INDIANAPOLIS

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For more information, contact Gary Vigil at Garyv@sema.org or (909) 978-6738

\*Proposals must be submitted no later than April 15, 2022



## **POTENTIAL TOPICS OF INTEREST**

SPONSORSHIPS HIRING & EMPLOYEE MANAGEMENT BRANDING CONTENT CREATION YOUTH ENGAGEMENT SMALL BUSINESS OPERATIONS ADVERTISING/PROMOTIONS TRADITIONAL & DIGITAL MARKETING SALES STRATEGIES TECHNICAL CONTENT EV PERFORMANCE

# PRI SHOW REPORT SOLUTION SEEKERS

Whether it was adding new shop equipment or establishing personal connections, attendees at the 2021 PRI Trade Show had varying reasons for taking part, but all left with practical tools and information for the race season ahead.

### **By Laura Pitts**

ttendees from around the world flock to Indianapolis in December for the PRI Trade Show, where they discover the latest motorsports parts and equipment, conduct business, network with fellow industry members, pick up information, discover education and training sessions and keep up with the latest industry developments. The 2021 event was no exception, as thousands of dedicated buyers—including engine builders, speed shop owners, fabricators, tuners, race teams, machinists and more—covered more than 750,000 square feet of exhibit space and Show features in search of solutions for their racing businesses.

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"I start at Row 100 and walk the PRI Show aisle-by-aisle every year, so I don't miss anything," said PRI Champion Member and engine builder Jim Mikel of Performance Technology, Wakarusa, Indiana.

"It takes all three days because there's so much to see. Plus, I'll wind up running into people I know, like this guy here," the longtime attendee continued, pointing to fellow engine builder Patrick Ross of PRR in Avon Lake, Ohio.

As Mikel indicated, rows of booths were filled with new racing technology, performance parts and track equipment designed to help boost business productivity and profitability. These innovations included the shop machinery found in Machinery Row, like the Centroid A560 XL 5-Axis Cylinder Head Porting Machine, purchased by JR Smith of JR's Machine and Performance. The equipment was hooked up on the Show floor for live demonstrations before being shipped to Smith's shop in West Liberty, Iowa.

"This machine is absolutely the most valuable thing here at the PRI Show for us. It's overwhelming to see it in person," Smith said about the shop's first-ever CNC machine purchase. "This will speed up production and accuracy. It can machine a cylinder head in four hours, where now we do it by hand, and it takes two to three days."

Another racing professional keen on finding new equipment at the PRI Show was PRI Pro Member and fabricator Tim Sill of S&S Motorworks in Savannah, Missouri. He and Joe McMillian, also of S&S Motorworks, were found at the HE&M Saw booth eyeing the 782XLH utility saw.





The PRI Show gives attendees opportunities to demo and shop precision machinery firsthand. Here, JR Smith, at right, of JR's Machine & Performance witnesses the capabilities of a Centroid head porting machine. "It's overwhelming to see it in person," said Smith.

"We do bumper-to-bumper fabrication, so we need good tools to modify parts," Sill said. "We weren't in the market for a new saw until we walked by and saw this really quality piece here. We could use it to make brackets for chassis or engine mounts, or even make sheetmetal for modifications to car bodies."

"It would make our job a lot easier," McMillian echoed. "Outside of this booth, I was looking also for organizational accessories from Hepfner Racing Products for my trailer that we use for traveling."

"And we're also working with Scoggin Dickey for engine parts—camshafts, water pumps, flywheels, brackets—for a drag race car we're working on right now. It's a bracket 2013 COPO CRC Camaro," Sill said.

Still, many visited the PRI Trade Show solely to keep up with the latest advances in motorsports, including Dougie Kaempfer of R&D Automotive Restyling in East Troy, Wisconsin, who browsed the Featured Products Showcase in Lucas Oil Stadium to see the standout parts and equipment from this year's exhibitors. He was joined by media member and longtime friend Richie Jaeschke of Wisconsin Hot Rod Radio based in Milwaukee, Wisconsin. "It's always nice to keep up with the technology," Kaempfer said. "I have six PRI Show badges at home, and this will be number seven."

A tuner and fabricator, Kaempfer also kept his eyes open for components for the Nostalgia Junior Fueler he works on as a pit crew member. A Lincoln Electric TIG welder was of particular interest in the Featured Products Showcase. "There's just so much to see in terms of performance parts fabrication," he said.

Outside of the Featured Products Showcase, Kaempfer tabbed the brand-new EV Performance Zone as the most valuable feature of the 2021 PRI Show. "It's interesting to see all the EVs in one room. It was new this year and very well displayed," he said. "There are a lot of manufacturers making new electric-powered cars. Ford has an electric crate motor that can be swapped out—it's a great motor. Even though some old-school guys don't want anything to do with it, you gotta admit it all works pretty well."

### PERSONAL CONNECTIONS

The PRI Show is about much more than products, though, as attendees were also eager to participate in the lineup of premier PRI Education seminars and complimentary networking programs. For example, Mike Arrigo, the North East Regional Owner of Hooked on Driving HPDE school in Brodheadsville, Pennsylvania, attended the PRI Student Program Industry Networking Breakfast to connect with interested students.

"One of my goals is to network. I'm here to help other people; this isn't just for my own business. I want to elevate the whole team of people I work with," Arrigo said. His wife, Mona, was also at the Show attending the 5th annual Women in Motorsports panel.

"Going along with that, another goal was to connect the companies I work with together," Arrigo said. "We have a tire partner, and we have a rim partner, and before the Show, I said maybe it's time to put these two companies together. We could have them make four-piece tire and rim sets, and have our competitors try them out on the track before buying. We have a high number of racers come, about 80 to 200 at our Watkins Glen International and VIRginia International Raceway events, so I thought it'd be cool to give back to both the racers and those two companies at the same time."

Along the education theme, university students were again welcomed back to the PRI Show to see products first-hand that they learn about year-round. That was one of the reasons Eduardo Hernandez and Marcus Jarrett, both second-year automotive technician students of Madison Area Technical College in Madison, Wisconsin, attended the event.

"The school offered us to come," said Hernandez, who works on lubrication technology at a Toyota dealership. "They told us it was a free event over a couple of days with the latest in performance parts, so we were curious and decided to check it out."

"We actually have a performance class coming up, so we thought it'd be good to come here to see the performance parts," said Jarrett, who also works on lube tech but at a Subaru dealership. "A lot of the students will be bringing in their own cars to work on them in that class, so it'll be really cool."

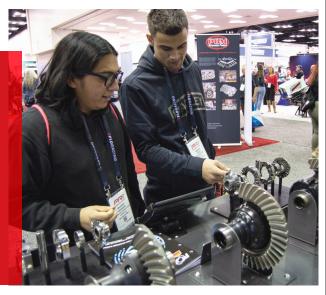
The PRI Show proved to be the perfect backdrop for this goal, as the pair were seen checking out the differential displays at the PowerTrax booth.



Many attendees, such as Dougie Kaempfer, at right, and Richie Jaeschke depend on the PRI Show as a means of learning about the latest advances in motorsports. "It's always nice to keep up with the technology," said Kaempfer.

### PR/

The PRI Trade Show is an opportunity to engage future motorsports professionals, such as Eduardo Hernandez, at right, and Marcus Jarrett. They used their time at the Show to learn more about performance parts like these PowerTrax differentials.



"We already took a differential class at school, so we were looking to figure out how these different designs would perform and what each one does," Jarrett continued.

The most surprising part of the PRI Show for these first-timers, though, was the event's sheer size. "We heard it was big, but we had no idea. We thought we were getting close to seeing everything, but we turned a corner, and there's another whole hall of booths," Hernandez said.

For race teams, the PRI Show again provided a hotbed of opportunity from current and potential sponsors. Driver Gavin Graham of Gavin Graham Racing in Lakeland, Florida, visited his first PRI Show after securing first place in the Proxy Equipment Pro Trucks 50-lap feature as part of the Snowball Derby at Five Flags Speedway in Pensacola, Florida. At 13 years old, he is the youngest winner of a Derby feature in the event's 54-year history.

"The best thing about the PRI Show is talking to more people in person," Graham said. "I don't have to worry about the Internet failing. I can have nice conversations with companies and really get to know the people that work there and start a good relationship with them." He visited with companies including Serck Motorsports, Five Star Race Car Bodies, Eibach, and Allstar Performance and Motor State Distributing.

The significance of the in-person event was repeated by Graham's team marketing manager Luis Murillo. "It's impossible to make [quality] connections over email and with sponsor request forms. Honestly, there's just so much value in having a personal moment with someone. It's one of those things where the message can get lost in an email or a link, but whenever we do really connect with someone, our brand stays in their head."

Along with sponsorship efforts, the PRI Show also helped Graham connect with Chris Dilbeck of Serck Motorsports to discuss cleaning services for his components during the off-season. "Serck is a European company that specializes in cleaning services from the grille screen to the radiator fan. They make sure there are no contaminants, and we're going to try to get our radiators down to them soon," Graham said.

Along with the Snowball Derby feature win, another team accomplishment: Gavin Graham Racing connected with scores of new fans with a booth at the Show.

"We were originally planning on registering as attendees, but we had the opportunity to exhibit, so we did," Murillo said. "We were [one of a few race teams this year to have] a booth and give out swag. We gave out all 1,000 merch bags we brought. We also had 1,092 physical QR code scans, and we jumped from 14,700 to 15,400 followers on Instagram.

"[As a hybrid attendee and exhibitor,] our goal was to connect with people, and we did that this year," Murillo said.

Indeed, the PRI Trade Show proved to be the hub for all things to improve motorsports operations, from new tuning components, race car parts cleaning services, hardcore engine parts, and shop machinery and equipment, to quality networking connections, innovative new ideas and world-class education. Just like the aisles at the PRI Show, the options were seemingly endless. **PRI** 



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**PRI SHOW REPORT** 

Among the many highlights of PRI are major announcements by race sanctions, tracks, and teams as they make preparations and reveal new initiatives for the upcoming season.

### By Linda Mansfield

udging from all the announcements made at December's PRI Trade Show in Indianapolis, racers across all facets of motorsports are anxious to put the pandemic in their rear-view mirrors, get back to prepandemic normality and accelerate their businesses as much as possible in 2022 to make up for lost time and opportunities.

Here's a look at some of the key news generated at the Show, and the ramifications these announcements may have within their motorsports segment for the upcoming race season and beyond.

### CIRCLE TRACK RACING

World Racing Group (WRG): Brian Carter, CEO of WRG in Concord, North Carolina, dropped big news on the last day of the PRI Show when he announced that WRG will expand in 2022 to offer two new series for non-wing sprint cars and midgets. They will be called the Xtreme Outlaw Sprint Car Series and the Xtreme Outlaw Midget Series.

WRG already owns and runs the winged World of Outlaws NOS Energy Drink Sprint Car Series, the World of Outlaws Late Model Series, the Super DIRTcar Series big block modifieds and DIRTcar Racing.

Carter said both new series will have a 10–15 race schedule in 2022, a combined point fund approaching \$100,000, and that all of the races will be streamed live on DIRTvision. Some of the

two new series' races will be run in conjunction with other WRG-sanctioned events.

"Working in conjunction with POWRi and USAC to the extent possible and combining World Racing Group's already established resources will allow us to expand the sport and provide more entertainment for our fans," Carter said.

The series' 2022 schedules and more information will be available as it develops on XtremeOutlawSeries.com.

Automobile Racing Club of America

(ARCA): ARCA team owner Max Siegel used the PRI Trade Show to announce that he'll run two drivers, Nick Sanchez and Rajah Caruth, in all 20 ARCA Menards national races in 2022 as part of NASCAR's Drive for Diversity program with Rev Racing.

"The second thing Max announced is

World Racing Group has announced its new Xtreme Outlaw non-wing sprint and midget series for 2022. Each will race 10–15 events streamed on DIRTvision, and they'll share a combined point fund of nearly \$100,000. that his team has a formal relationship with Chevrolet," said Ron Drager, president of ARCA, Temperance, Michigan. "It's huge for an ARCA team to be working with a major manufacturer like this."

Drager said more diversity should produce more fans. "Different ethnic groups of racers open up interest in different fans, because people like to watch drivers they can identify with and relate to. This will help us appeal to more people, and we hope to gain some added fans," he said.

"We also had five females start an ARCA Menards West race in 2021 for the first time," Drager continued. "That was at the Bullring at Las Vegas.

"Bridget Burgess is expected to be back in the ARCA Menards West series in 2022, and perhaps JoJo Wilkinson too," he added.







The WISSOTA Promoters Association recently added Thunder Hill Speedway in Thunder Bay, Ontario, Canada, to its roster of tracks. At December's PRI Trade Show, WISSOTA introduced its rebranding and new logo.

United States Auto Club (USAC): USAC of Speedway, Indiana, released the 2022 schedules for the AMSOIL National Sprint Series, the NOS Energy Drink National Midget Series, and Silver Crown.

In addition, several USAC driver announcements were made at the PRI Show:

Chase Stockon was named as the new driver of the Pink 69 Racing car for the dirt portion of the 2022 USAC Silver Crown series.

Kody Swanson, the winningest driver in USAC Silver Crown history and its six-time and reigning champion, told a Flo Racing audience he will run the pavement races in that series in 2022 with Doran Racing and the dirt-track races with Dyson Racing.

Jadon Rogers, the 2020 USAC AMSOIL National Sprint Car rookie of the year, will go full-time with the series in 2022, contesting all 51 races for his father, Kyle Rogers, and Tim Engler.

CJ Leary will contest the full USAC Silver Crown schedule in 2022 in the Klatt Enterprises No. 6.

WISSOTA Promoters Association: "We're at PRI to make connections," said Carson Gramm, executive director of the WISSOTA Promoters Association, Saint Cloud, Minnesota. "We have 50 tracks in the United States and Canada, and we're anticipating the possibility of adding three new ones in 2022.

"We just signed Thunder Hill Speedway in Thunder Bay, Ontario," he said, "and two other new ones are possibilities. We're always looking for more tracks."

WISSOTA has eight different classes of race cars, with dirt late models being the premier class and Midwest modifieds being the most popular via car count. Its biggest event is the Speedway Motors Wissota 100, which will be held at I-94 Speedway in Fergus Falls, Minnesota, on September 13–17.

"We recently rebranded, and PRI marks the official debut of our new logo," said Callie Sullivan, the series' office administrator who is also in charge of points keeping and licensing. Lucas Oil Indianapolis Raceway Park: Besides changing its name from Lucas

Oil Raceway in Indianapolis to Lucas Oil Indianapolis Raceway Park, IRP's booth was the place to learn about the new 500 Sprint Car Tour.

"We're working on a schedule," said series co-owner Tom Hartsell Jr. of the Auto Value Bumper to Bumper Super Sprint Series, Cassopolis, Michigan.

"Right now, we're hoping for 11 dates, maybe 12. Of course, the Pay Less Little 500 at Anderson Speedway and Lucas Oil Indianapolis Raceway Park will be on the schedule, and several tracks in Michigan have expressed interest," he said. "We're very encouraged. We're seeing some of the promoters we've been talking to here at the Show and trying to firm things up."

Speedway Illustrated Kenny Schrader

### Real Racer of the Year Award: Karl

Fredrickson, publisher of *Speedway Illustrated* magazine, and veteran racer Kenny Schrader presented the Real Racer of the Year award named in Schrader's honor to Andy Jankowiak, who was this year's unanimous choice by the panel of voters.

John Schneider, best known for his role of Bo Duke on "The Dukes of Hazzard" TV show, was this year's special guest at the awards ceremony. The actor/singer started racing dirt-track modifieds last year.

Jankowiak drives pavement modifieds and three-quarter midgets, where he is a regular winner. He also invested every penny he had to compete in seven events in the ARCA Menards national series in 2021, recording four top-10 finishes.

### **DRAG RACING**

National Hot Rod Association (NHRA): The NHRA of Glendora, California, announced that it has made a major adjustment to its Pro Modified rules in an effort to attract competitors from other series to also compete in NHRA events as their schedules permit.

"Screw superchargers were introduced into Pro Mod, and some safety requirements were amended in an effort to entice competitors from other series to give the NHRA a try," explained Lonnie Grim, who became the NHRA's national tech director last May.

"We also introduced a new category in the NHRA called Factory X," he said. "These cars have a stock dimensional body with an OEM supercharged engine and a five-speed manual transmission. They weigh 2,650 pounds."

The official name is NHRA Factory X presented by Holley, and it bridges the gap between Factory Stock Showdown and Pro Stock. It's for 2019 and newer cars like the Chevrolet COPO Camaro, Dodge Challenger Drag Pak, and Ford Mustang Cobra Jet.

Grim said the Factory X class will be an exhibition-only class at four events in 2022. Actual competition will begin in 2023 at eight to 10 events.

**Ron Capps Motorsports:** Two-time and reigning NHRA Camping World Drag Racing Series Funny Car world champion Ron Capps used a PRI Show press conference to announce the launch of Ron Capps Motorsports. He will be the team owner and also the driver of the NAPA Auto Parts entry in 2022.

"Team ownership has been a lifelong

dream of mine," he said.

In addition to primary sponsor NAPA, Capps' crew will remain intact. Dean Antonelli and John Medlen will continue to tune the car for the new team, which will be based at Don Schumacher Racing's headquarters in Brownsburg, Indiana. **2022 Pro Mod Summit:** Various sanctioning bodies for the Pro Mod class, track promoters, teams and drivers got together in a meeting room at the PRI Show to address common concerns and opportunities, and to try to galvanize the class's participants to work together.

The summit, the follow-up to a similar one held here four years ago, was moderated by Wes Buck of *Drag Illustrated* magazine.

It was noted that common rules generate bigger car counts. If teams don't have to make numerous changes in order to compete, they're more likely to travel.

The need to attract the younger generation was noted, as was the value of business-tobusiness networking.

Social media gives people the means to tell their stories and become well known rather

easily. Conversely, social media is no substitute for business and personal relationships.

The group was reminded that it pays to keep abreast of the requirements of contingency award programs.

It's critical for the different groups that sanction Pro Mod drag racing to get to know each other, and to not think of the different groups as competitors but as comrades. "It's simple, but not easy, to keep talking," Buck said. "Let's start the conversation and create an atmosphere of cooperation."

Professional Drag Racers Association (PDRA) 2022 Season Preview: The PDRA, based in Fredericksburg, Virginia, held a press conference at the Trade Show to preview its 2022 season.

Tyler Crossnoe, series director, recognized the series' young racers who were selected for the "30 Under 30" awards by *Drag Illustrated*. He also thanked the series' marketing partners and announced that Laris Motorsports Insurance will be the organization's insurance provider in a deal that was signed at the PRI Show just hours before the press conference.



PDRA introduced its new Super Street small-tire category, which will debut at four events in 2022. The sanction also highlighted racers selected for *Drag Illustrated* "30 Under 30" awards.





He also announced that a new smalltire category, which will be called the Super Street class, will debut at four events in 2022.

Tech director John Sears also spoke, and Tommy and Judy Franklin, who own both the PDRA and Virginia Motorsports Park, were recognized.

#### Southern Drag Boat Association (SDBA):

"Our big news is we're bringing top fuel boat racing back!" said David Carroll, owner of the SDBA, Edmond, Oklahoma.

"When Lucas Oil pulled out, there wasn't a platform for them to race," he explained. "We kept them in the water with exhibitions only for the last three years, but they'll be racing in at least four of our nine events in 2022, and we're working on securing more.

"Everybody wants to see top fuel boats," he continued. "It means more exposure for us and helps us keep our momentum going as a sanctioning body. We expect four or five top fuel boats at our events to begin with."

National Muscle Car Association (NMCA) and National Mustang Racers Association (NMRA): "Our big news is we're going to introduce a new class, the 8.60 street race category, at four events in 2022," said Rollie Miller, general manager of NMCA and

NMRA, Santa Ana, California. "We anticipate strong participation. "Also new is that the 14th annual NMRA/

NMCA All-Star Nationals, which used to be at Atlanta Dragway, is now going to be at Rockingham Dragway in Rockingham, North Carolina," he said.

**DIESEL Motorsports:** "In 2022 we're going back to Texas and Florida," said Ron Knoch, president of Kansas City, Missouri's DIESEL Motorsports, which offers diesel drag racing events with five different classes around the country.

"We haven't been in Texas in seven years, and we just started racing in Florida last year. In 2022 we'll have one event each in Texas and Florida," he said. NASA focused attention on its newly expanded partnership with Toyota, which provides a free one-year NASA membership for Supra and GR86 buyers.

**Texas Motorplex:** Andy Carter, general manager of the Texas Motorplex in Ennis, Texas, noted that the drag racing facility will be especially busy in October. Its premier event, the NHRA Texas Fall Nationals Stampede of Speed on October 7–16, is 10 days long, when most NHRA events are three days long.

"In addition to all the racing, we'll have bull riding, concerts, a lantern festival, a beer expo, and other special attractions throughout the week," Carter said.

He also pointed out that the Street Outlaws No Prep Kings Finals will be held at the Texas Motorplex on October 28–29.

He said the track has a new sponsor in Ticket Smarter, a ticket reseller, and that in 2022 the track will work on integrating some new technology into its timing systems in conjunction with Portatree and My Race Pass.

### **ROAD RACING**

#### Parella Motorsports Holdings (SVRA,

**Trans-Am):** Schedules were released by Parella Motorsports at the PRI Show for the Southlake, Texas-based Sportscar Vintage Racing Association (SVRA); both the national and West Coast divisions of Trans-Am powered by Pirelli; the F4 United States Championship powered by Honda, and the Formula Regional Americas Championship powered by Honda.

"Our big news for the SVRA is we're back at the Indianapolis Motor Speedway in 2022," said Pamela Shatraw, editor of *SpeedTour Quarterly*, the SVRA's official magazine. "We lost that event to COVID in 2020, and the track schedule didn't permit it to be held in 2021. But in 2022 we'll be at IMS on Father's Day weekend, June 16–19.

"The Shelby American Automobile Club will hold its 60th anniversary convention in conjunction with the SVRA IMS event," she added. "We're expecting a couple hundred Shelby race cars and show cars to be on the grounds that weekend."

National Auto Sport Association (NASA):

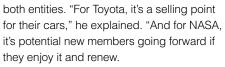
"Our big news here at PRI concerns our relationship with Toyota," said Jay Andrew, regional director of NASA's Great Lakes region. "Everybody who buys a new Toyota Supra or a Toyota GR86 in the United States will get a new NASA membership along with their car," he said. "It used to be just with Supra, but now we've added the GR86, which is a new model.

"It's a big deal to have a relationship with a car manufacturer that big," he added. "The buyers of both cars will get a free track day, too, and we're affiliated with almost every road course in America."

Andrew said the partnership works for

The Team Canada Scholarship returned from its two-year, pandemic-forced hiatus to announce a new "shootout" format to be held at an Ontario road course.





"We think this new promotion will really take off because the new GR86 is about half the price of a Supra, so it will appeal to the younger set, which is good for us because that's our primary market," he said. **GRIDLIFE:** GRIDLIFE is a motorsports event company based in Chicago, Illinois, that produces track days and festivals around the United States geared toward a young audience. The track days are for beginners to advanced drivers. The company's festivals combine live musical acts on Fridays and Saturdays with racing throughout the weekend.

At the PRI Show the company released its 2022 schedule and announced plans for a new festival called "Circuit Legends" that will be held at Lime Rock Park in Lakeville, Connecticut, on August 19–20.

"Circuit Legends" is a new festival concept for the company. It will celebrate automotive culture of the mid-1980s through mid-2000s by featuring vehicles that represent what it calls "the golden age of touring car racing." Legendary drivers will participate on track and at speed.

By staging an event at Lime Rock Park, GRIDLIFE enters a new region, the Northeast. Lime Rock Park is approximately 93 miles from Manhattan.

"Seven of our 10 events are livestreamed," noted Charlie Ensslin, operations manager for GRIDLIFE.

**Team Canada Scholarship:** After losing two years to COVID-19, the Team Canada scholarship will be back in 2022 with a new "shootout" format at a yet-to-be-determined road course in Ontario, said Brian Graham, who founded the scholarship in 2011.

The scholarship was developed to give young Canadian formula car drivers the opportunity to showcase their talents at a world-class event, the Formula Ford Festival and the Walter Hayes Trophy race at Brands Hatch, England, in October. The Team Canada scholarship is very similar to the United States' Team USA scholarship.

Young Canadian drivers from various junior formula car series in both Canada and

the United States may apply. Six drivers will be selected for the Team Canada shootout, which will be a two-day event in August or September. Judges such as Canadian IndyCar driver James Hinchcliffe, who along with 2016 scholarship recipient Parker Thompson were in attendance at the press conference at the PRI Show, will weigh in with their impressions of the young drivers' skills. They'll be judged both on and off the race track at the shootout.

More info will be on teamcanadascholarship.com.

M1 Concourse: Representatives of firstyear PRI exhibitor M1 Concourse in Pontiac, Michigan, were busy promoting their two signature events: the Woodward Dream Show on Friday, August 19, and the American Speed Festival, September 29–October 2.

"It'll be the second year for both events," noted Chris Pokorski, the facility's director of marketing and communications. "The Woodward Dream Show will celebrate 90 years of the 1932 Ford 'Deuce,' and the American Speed Festival will celebrate 60 years of Shelby cars and honor Peter Brock."



## PRI SHOW REPORT PHOTO OPS

A look back at some of the most memorable machines, moments, and men and women of the Performance Racing Industry Trade Show, as captured by our talented team of event photographers.

From Staff Reports

December's PRI Trade Show marked the successful return of the industry's premier live event for motorsports professionals. The Indianapolis, Indianabased Show was one of the most impactful in the 35-year history of PRI, with more events, activities, educational sessions, and special features than ever before.

Tens of thousands of attendees—including media, industry influencers, enthusiasts, and professionals from nearly 1,000 exhibiting

AN IN

companies—gathered in the racing capital of the world for the event, which took place at the Indiana Convention Center and Lucas Oil Stadium in downtown Indianapolis.

Highlights from the December 9–11 Show included legendary driver and team owner Roger Penske and Indianapolis Motor Speedway President Doug Boles headlining the Grand Opening Breakfast; the unveiling of this year's Indianapolis 500 ticket design with four-time race winner Helio Castroneves, a jam-packed Save Our Racecars Rally to support the all-new PRI PAC; a dedicated EV Performance Zone highlighting future trends in motorsports; and much more.

"It was great to experience the excitement and camaraderie of being back in person at the PRI Show, catch up with friends and colleagues, take advantage of opportunities to capture business, and network with other motorsports professionals," said PRI President Dr. Jamie Meyer. "The level of industry innovation and development on display at the Show was truly outstanding and a clear demonstration of the strength and growth of motorsports."

We couldn't agree more, which is why we decided to take a look back at some of the most memorable machines, moments, and men and women of PRI 2021 through the lenses of our own award-winning team of photographers and content creators. Enjoy!

WYSIER SUSSEE



#### From roadsters to pullers, nostalgia drags to modifieds, PRI each year showcases an eye-popping array of competition

VEHICLES

BPLS

FuelTech

Auto .

G TEAM

ERING

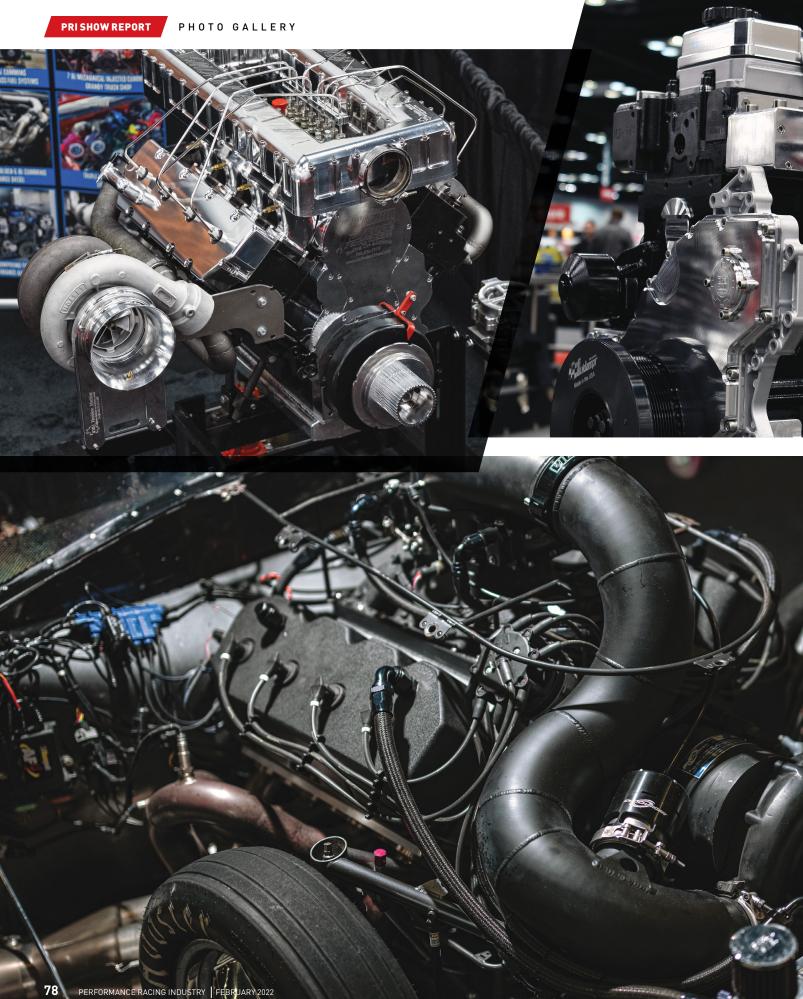
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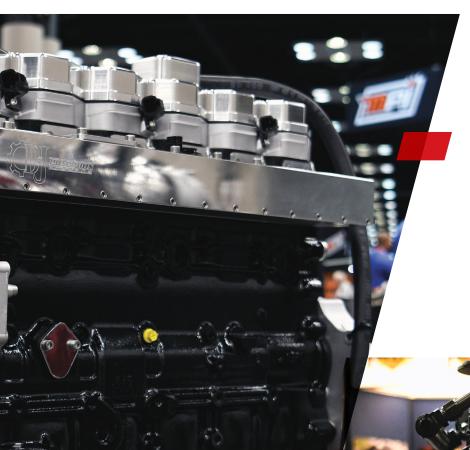
BAURLEY TIRE CENTER

vehicles in all shapes and sizes. Throughout a Show floor teeming with exhibits, attendees are never more than a few steps from a nitro Funny Car, or a vintage Indy car, or even a Fisher Motorsports-built 1973 Jeep with '79 Camaro subframe featuring a 632-cubic-inch BBC powerplant and 88-inch wheelbase that's billed as the world's fastest Postal truck and goes by the name "Junkmail."

JUNKMAIL



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#### HORSEPOWER

So much hp at PRI! There's a reason the annual Trade Show is considered an engine builder's paradise, what with countless big and small block, LS and LT, Coyote and Godzilla, multiple generations of Hemi, and a variety of custom, vintage, and exotic platforms on full display. Beyond making big power, these creations are true works of high-performance art, illustrating what's possible when form meets function in a package that utilizes advanced technology to push boundaries and crush expectations.



#### SHOW FEATURES

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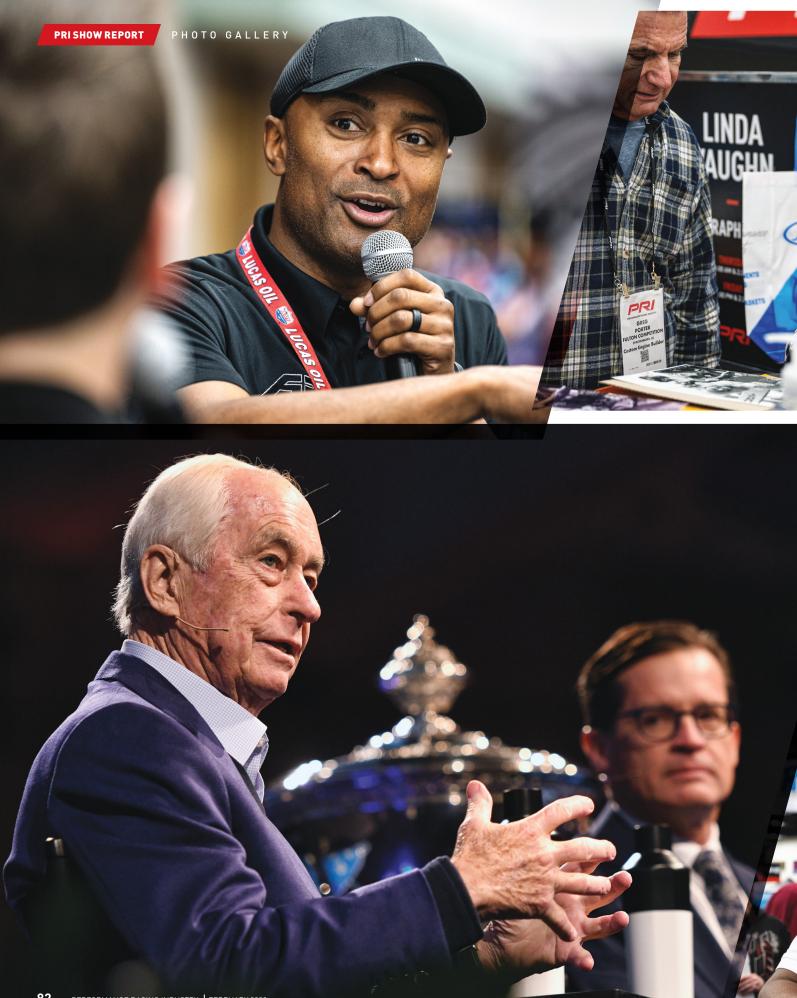
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ROADIL

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Traditional favorites like PRI's world-famous Machinery Row and Featured Products Showcase provided attendees and media with a bevy of performance parts and equipment to take in, while brand-new features included the EV Performance Zone dedicated to electric race and performance vehicles, specialty EV builders, and EV component suppliers; the Content Creation Center, where industry leaders and influencers discussed all things digital content; PRI Headquarters, where visitors learned all about PRI Membership and the PRI Road Tour; and much more.

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#### VIPs

TOYOTA

Where else can you rub elbows with legendary driver and team owner Roger Penske, Indianapolis Motor Speedway President Doug Boles, NHRA Top Fuel driver Alexis DeJoria, three-time Cup Series champion and SRX Series co-owner Tony Stewart, motorsports icon Linda Vaughn, Indiana Governor Eric Holcomb, and...The Donkmaster??? (Real name: Sage Thomas.) As in years past, the PRI Show once again proved it's the perfect gathering place for racing's movers, shakers, trendsetters and groundbreakers.

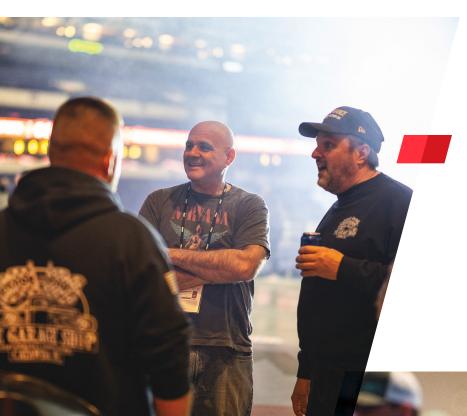


#### PRI EDUCATION

FEBR

Attendees turned out in droves for more than twodozen seminars offered as part of the PRI Trade Show experience. Industry leaders and experts on a host of business and technical education topics delivered the Show's most expansive—and best-received—program to date. "For us, as a fairly new business, it's been incredibly beneficial because we've been able to really identify what we need to do to move forward," said Fast Lane Garage's Rachel Lane. "It's been really eye opening, and it's been a lot of fun."





#### EVENTS

As if there wasn't enough on the Show floor to keep attendees and exhibitors busy over three full days, PRI offered a slew of special events, activities, and networking opportunities for racing professionals of all stripes. The Race Track Business Conference for facility and series operators marked its 10-year anniversary, while young men and women pursuing careers in motorsports got to interact and engage up-close with industry members. And, no PRI Show would be complete without another blockbuster signature kickoff—the Grand Opening Breakfast.

RACE ACK BU

ACT NOW:



# NO BACKING

The RPM Act weaving its way through Congress is essential legislation to save our sport. Here's how industry stakeholders are giving the bill a boost.

#### By Steve Statham

ere's a story that has played out countless times across America: A Camaro (or Mustang, or Supra, or...) that has served dutifully as a go-to-work car starts looking a bit ragged around the edges, and repair bills start mounting up. It's not so valuable as daily transportation anymore, but the owner, in a flash of inspiration, realizes it would make a great race car. He dives in, tears it apart and rebuilds it with all the best race parts. That old Camaro takes on a second life as a dedicated track warrior. Sounds like the most normal thing in the

world, right?

Not if the Environmental Protection Agency (EPA) has its way.

In recent years, the EPA has adopted a radical interpretation of the Clean Air Act that states, "An EPA-certified motor vehicle cannot become a nonroad vehicle even if it is used exclusively for competition because the definition of motor vehicle hinges on the

purpose of its design and not its use."

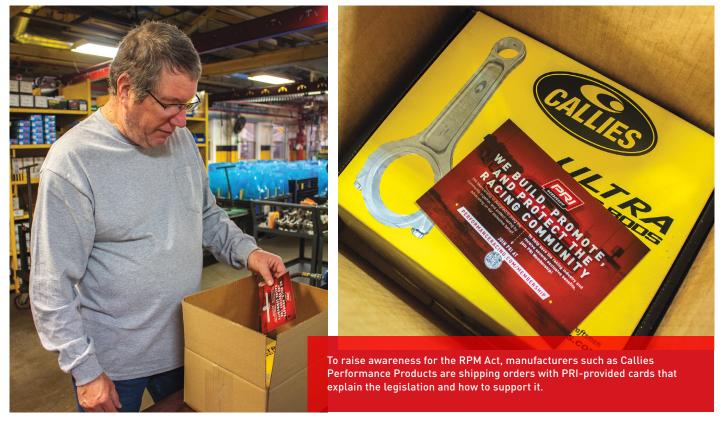
In other words, by bureaucratic decree the American tradition of retiring a street car and converting it strictly into a race car is now under assault, since that process requires removing emissions equipment. Nothing of the sort was ever passed into law by elected officials, but the agency has been aggressive in using this interpretation for enforcement actions against manufacturers and suppliers of high-performance parts. DOOWN For a shocking look at how such

enforcements can impact an independent motorsports business, check out PRI President Dr. Jamie Meyer's interview with Brent Leivestad, owner of PFI Speed in Fort Lupton, Colorado, posted on PRI's YouTube channel (youtube.com/user/pritradeshow). PFI Speed was hit with a demand for records and later threatened with a \$180,000 fine for allegedly selling illegal products—parts all installed on dedicated race cars—with no hearing, trial or even direct talks with EPA agents.

"When we're able to sit down and talk to one of the victims of this government overreach, people in this industry see themselves in Brent," Meyer said. "They relate to the story. They see his shop and they realize that's their shop. They see his business decisions and they realize they



As the US Environmental Protection Agency continues to put unwarranted pressure on motorsports, the racing community is rallying around the RPM Act to protect racers' rights.



make the same decisions every day. They start to realize this is real."

If recent history is any indication, the EPA plans to keep the pressure on. "The EPA has been more aggressive over the last two years," said Eric Snyder, Director, Congressional Affairs, for PRI. "We saw it at the end of the last administration, and the EPA has only continued to ramp up enforcement."

#### **FIGHTING BACK**

The EPA's recent actions foreshadow a general trend from Washington, DC, toward "Green New Deal" type policies. It's safe to say that everybody wants a clean environment, as racer and bureaucrat alike all breathe the same air. But the environmental impact of the motorsports industry is minuscule in the grand scheme of things, while the economic impact of government initiatives like this can be devastating to small businesses and jeopardize countless livelihoods.

Fortunately, there's a way for the motorsports community to push back, and it's continuing to gain momentum. The Recognizing the Protection of Motorsports Act (RPM Act) has been introduced in both the House and the Senate, and support for its passage is growing. The time for racers and industry members to speak up is now to push the RPM Act across the finish line. "We've made the RPM Act a strategic initiative in all our communications and all of our different channels," said Meyer.

The RPM Act has been in front of Congress before, and let's just say its passage has been an endurance race, not a sprint. But it is the rare bill that currently enjoys widespread bipartisan support. At this writing, the House bill (H.R.3281) has 117 cosponsors, and the Senate version (S.2736) has 22 cosponsors. Helping matters is that the RPM Act hasn't been reduced to a polarizing left vs. right, Democrat vs. Republican split. "This issue is not political. We have members of both parties who've been really helpful on this issue," said Snyder.

The RPM Act is also rare in its simplicity. H.R.3281, the House bill, reads, "Amending the Clean Air Act to add: 'No action with respect to any device or element of design referred to in paragraph (3) shall be treated as a prohibited act under that paragraph if the action is for the purpose of modifying a motor vehicle into a vehicle that is not legal for operation on a street or highway and is to be used solely for competition.'"

"Support for the bill is really growing in Congress," Snyder said. "That's important because it's something that congressional leadership and leadership on committees of jurisdiction pay attention to. They notice how

*"WE'VE MADE THE RPM ACT A STRATEGIC INITIATIVE IN ALL OUR COMMUNICATIONS AND ALL OF OUR DIFFERENT CHANNELS.* 





Races are an important venue for rallying support. Street Car Takeover co-owner Justin Keith, pictured here, highlights the RPM Act during every event.

many members are getting on the bill, how many Republicans, how many Democrats, and specifically they look at which members are joining. We've really been able to grow support on the Energy and Commerce Committee in the House, which is important because the committee has jurisdiction over the bill."

#### **STRENGTH IN NUMBERS**

To give the bill the best chance of passage, it's crucial that Congress hear from the motorsports community at large. For that to happen, people need to be informed. The reality is, most racers and shop owners have their heads down working on the next project, and political realities seem distant.

Fortunately, many people in the motorsports industry are taking the lead in raising awareness using a variety of methods. "We've been putting little cards that PRI provided to us in every shipment that explain it, that say 'Support the RPM Act.' We've hung banners in our shop. When we go to races, we hang a 'Support the RPM Act' banner on our tent," said Heath Norton with Callies Performance Products, Fostoria, Ohio.

"A lot of these people just don't see it, they don't know about it," Norton said. "If we can get the word in front of them and the message to them and get it going, we have a chance. But if they don't know about it, we



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received. "No one wants to see race cars go away, so if they're there watching drag racing, obviously they're going to continue to want to watch drag racing," he said. "The enthusiasts that come to our events are a lot of younger people. They're very passionate about keeping the sport alive all driving RC cars around. I feel like it's

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have no chance. We have to take it to where they are, where it's meaningful to them. Have it at the track. Once it's made real to them so they can see how it affects them, then it becomes meaningful."

Justin Keith is founder and CEO of Killer Performance KC in Grain Valley, Missouri, as well as co-owner of the Street Car Takeover series that has a large grassroots following. "At our events we have our own announcer, and he comes to every single race with us. He has been talking about the RPM Act and things people can do to sign up with their senators in their state so they can be aware of the situation," Keith said. "He goes over all that throughout the event several times a weekend. I feel like that has to do something. He'll sit there and talk about it when we have an oil-down or in between classes when it's quiet and everyone can hear it."

Keith reported that the message is well so they can modify their cars and we're not





Online influencers like Alex Taylor are proving highly effective in raising awareness for the RPM Act. "You can tell that people are concerned about it," she told us.



perceived very well."

Alex Taylor is an Arkansas-based racer and car builder who has built a large social media following, including 158,000 followers on Instagram, 211,000 followers on Facebook and more than 91,000 subscribers to her YouTube channel. She has used these platforms to share the message about the RPM Act.

"The approach that I've taken toward it is not a negative, not the scare tactic. It's been, 'You love this industry, and I love this industry.' I've taken the passion approach. 'Here are the resources. Decide for yourself, but you have the chance now to make a difference,''' she said. "For the most part, from what I see from feedback on my side, people have had a positive response to me sharing the message. I can tell that people are concerned about it. I've seen a lot of the response as, 'Why have we not talked about this previously?' or 'Why have I not heard about this?'"

As members of the racing community become more aware of the stakes, it's vital they make their voices heard, from the grassroots all the way up to the corporate boardroom. "It's a constant battle," said Callies' Norton. "You're arguing for time. You're trying to get them to pay attention to



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#### PAC PICK

One way to join the fight is to contribute to the Performance Racing Political



Action Committee (PAC). One hundred percent of the contributions received by the PAC go toward supporting the candidates and lawmakers that support racing.

"If you think about the PRI Show and how we have come together every year for 33 years at a trade show, it's a natural extension of the brand, it's a natural extension of the services our team has offered," said PRI President Dr. Jamie Meyer. "Having a strong PRI membership is certainly how we're going to get the RPM Act passed, but also protect the racing industry well into the future."

For information and quick links on how to contact representatives and senators, along with ready-to-send messages, go to saveourracecars. com. —*Steve Statham* 

you. Honestly, I think one of the best things is for guys like me, who are owners, to use our influence on some of these guys. It's great that the masses are doing it because then it helps echo what we say. But we need the owners and the people who can explain to the congressmen, 'If you want my support, you better support this, because there are a lot of people who work for me in your district. You want them to support you, too.' Just be forceful about it. We've had some luck. We've been reaching out and working with congressmen and their aides and trying to get them to understand the jobs side of it. Because it's easy to say, 'Oh it's just racing, it's just a dumb sport.' But when we talk about the jobs, it really matters. The jobs are the key thing."

Street Car Takeover's Keith reiterated the importance of Congress understanding how



The SaveOurRaceCars.com Championship Night race at Madison International Speedway was held in 2021 to bring attention to the RPM Act. "We're grateful that PRI is fighting for our rights to race," said track owner Gregg McKarns (not pictured).

many jobs are at stake. "If we weren't putting on those races, that affects restaurants, that affects hotels, plane tickets, all this little stuff people don't think the motorsports industry affects, it affects in a big way," he said. "For instance, when we have our event in Charlotte, we sell out every single hotel room in a 10-mile radius around the track. That's a big deal. People have to eat, people have to go to the gas stations, people have to go to Walmart and get stuff for the track."

The Washington clamp-down, if it were to intensify, could have ripple effects that quickly inundate the industry. "It's not just tuning, it's not just some of these smaller segments of the industry, it's everything," Norton said. "If you can't race a race car, you don't need a lot of the hard parts that a lot of us make. That's a lot of jobs. I don't think people understand how many jobs will be lost because of this. The industry is large, it is wide, and it is deep. There are a lot of people that make money off of this sport, more than people think."

#### **GETTING THERE**

More people have spoken out recently than ever before on this issue, and the effort is making a difference. "What sticks out more than anything is companies that have stepped up over the past year," PRI's Snyder explained. "A few companies that have been the target of EPA visits or enforcement have been telling their stories, not just hiding in the shadows. When you have a business owner who is willing to share their experience, that resonates with others in the industry. These are good, hard-working people who are just trying to run their businesses. It's pretty jarring getting a visit from EPA or receiving a letter in the mail saying you're going to be fined for simply operating a race parts

*"IF WE WEREN'T PUTTING ON THOSE RACES, THAT AFFECTS RESTAURANTS, THAT AFFECTS HOTELS, PLANE TICKETS, ALL THIS LITTLE STUFF PEOPLE DON'T THINK THE MOTORSPORTS INDUSTRY AFFECTS, IT AFFECTS IN A BIG WAY.* 



business.

"People in the industry understand that working with Congress isn't an easy thing and that legislative victories don't come quickly," Snyder continued. "Enthusiasts and the men and women who work in the industry have done an incredible job of continuing to write letters to keep this issue in front of lawmakers. That's important. Our strength is in numbers. We have a huge community of more than eight million people who are race enthusiasts or are into modding vehicles, restoring classic cars and going off-road. We're focused on getting those eight million people speaking with one voice to protect racing."

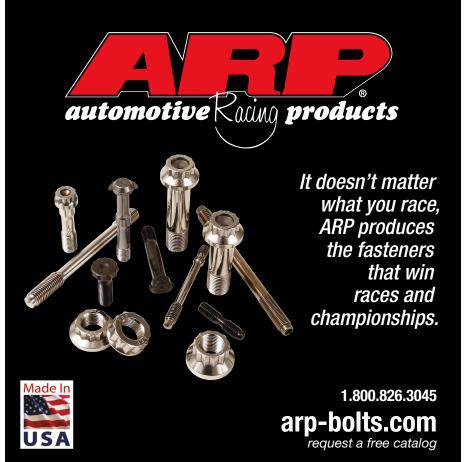
*"I DON'T THINK PEOPLE UNDERSTAND HOW MANY JOBS WILL BE LOST BECAUSE OF THIS.* 

There is more than one path to success for the RPM Act. Passage of a stand-alone bill that is subsequently signed into law would be ideal, but often such legislation is folded into larger bills, such as funding for transportation or infrastructure projects. For either to happen, Congress has to hear from the motorsports community.

"The challenge is that every Congress sees thousands of bills from groups of people who are just as dedicated to their cause as racers are to their lifestyle," Meyer said. "We have seen an increased interest by lawmakers given the number of letters that have been sent to representatives."

"We've had more than a million and a half people write Congress in the last year, and lawmakers have noticed the uptick in pressure," Snyder said. "There's even more excitement for getting this done within the racing community than any session before. Members of Congress understand the importance of the RPM Act, which is reflected in the bill's growing support on Capitol Hill, but we must continue to remind them that the job isn't done until the RPM Act is signed into law."





# REGIONAL CLAIMS

WHAT DISTINGUISHES STOCK CAR COMPETITION FROM ONE AREA TO THE NEXT? WE EXPLORE THE SIMILARITIES AND DIFFERENCES AMONG TRACKS AND SANCTIONS ACROSS THE US.

**By Drew Hardin** 



Racers are nothing if not resilient. While much of the country spent 2020 locked down or shut in, racers found a way to get back on the track, even if it was to mostly empty grandstands. When venues finally reopened in 2021, pent-up demand drove fans through the gates like it was 2019 again. Everyone wanted to put COVID-19 in the rearview and get back to the normal rhythms of a racing season.

"Normal," though, turned out to be elusive in 2021, due to the stubborn virus and the pandemic's collateral damage of continuing economic uncertainty and supply chain disruptions. If an area or a race division had been off the pace pre-pandemic, fallout from 2020 seemed to exacerbate the weakness.

Meeting a challenge, though, is what racers do best. We checked in with stock car sanctioning bodies and tracks around the country to learn what's working, what's not, and what's changing on the eve of the 2022 race season.

#### **OUT WEST**

"We are probably busier than almost any race track in America," said Doug Hobbs of Evergreen Speedway, Monroe, Washington. "We do so many different things—drift, autocross, specialty events, concerts, rodeos, Latino festivals—we are promoting year-round. We do well over 160 events a year with all these different platforms."

Evergreen's stock car program has "10 home track classes, and we've been fortunate to grow through really good car counts," Hobbs said. "Several of our classes, like the intermediate Figure 8 Stingers, Hornets, Legends, Mini Stock, and Street Stock classes, all pretty much averaged more than 20–30 cars last year. Those are really good signs for the support classes for the Super Late Models, Pro Late Models, and our Super Sprint classes."

By working with the State of Washington, Evergreen was able to open for racing "with no fans" in May 2020, Hobbs said. "We opened to fans in limited capacity last March, and by July we were at 100%. We had one of our best years ever because of the demand to see live entertainment. Our car counts were good, and our marketing partners hung with us.

"I've always looked at running a race track like a three-legged stool," he continued. "We need our racers; we need our fans; and we need our marketing partners. If all three are good, we can look forward to a great season."

Stock car racing on the West Coast is different from other parts of the country "because there are just a couple of Super Late Model series out here," said Larry Collins of the SPEARS SRL Southwest Tour Series, Bakersfield, California. "There is a lot of racing out here," he said, but it's a "different dynamic" than in the rest of the country. "The average number of teams that chase our championship seems to be higher than what they get, but the number of cars that show up for each of their events stays pretty strong. Teams have more choices to go from one series to the next. But here, especially in California, we're the only Super Late Model series."

With that in mind, "we have worked hard to set up the rule book to make our Super Late Models the same as the Super Late Models that race in the Midwest and the East Coast," Collins said. "Some of our guys go that direction and race the big events out there, and some of the teams based out there come to race ours. It's been a real positive step in a lot of ways."

Collins said his series "didn't miss a beat" during the pandemic. "We felt that if we did nothing and there was no racing for months,





Regional stock car racing is going strong, even as it grapples with the pandemic's ongoing effects. In fact, IMCA events were "setting records in all aspects of 2021," noted our source at the sanctioning body.

our sport might go away and never rebound. So we made it our mission to keep our events going. With help through sponsorships and cooperation with the race tracks, we were able to keep racing through 2020. Once we got to 2021, things kind of went back to normal."

One sanctioning body that's moving westward is IMCA, which is based in Vinton, lowa. "We sanctioned nine divisions of races in 37 states and Canada in 2021," said Brett Root. "With 9,100-plus licensed members, IMCA racing is strong and as big as ever." The move west—the Wild West Tour visits tracks in Arizona, Nevada, New Mexico, Utah, Wyoming, and Idaho—was facilitated by the fact that "most of those tracks sanctioned IMCA modifieds already. They are adding divisions, like stock cars, to their weekly racing schedules."

Root said the pandemic "slowed IMCA racing down some in 2020, and we experienced a 20% decline in events. However, in 2021 that recovered, and we have been setting records in all aspects of 2021."

He admitted, though, that "some tracks struggle. Divisions struggle. Regions struggle. I'm unaware of any business where everything is either perfect 100% or dismal 100%. Everything ebbs and flows in every aspect of racing."

Economic factors "play a huge role in this," Root added. "In North Dakota, when the oil boom was on, racing experienced solid car counts and successful events. When the money dried up, the opposite

#### *"WE HAD ONE OF OUR BEST YEARS EVER BECAUSE OF THE DEMAND TO SEE LIVE ENTERTAINMENT.*

started to take place."

In a similar vein, "the ARCA Menards Series goes to so many different areas of the country that we get to see it all," said Charles Krall. "There are places that are very healthy, and there are places that are struggling a little bit. Some of that has to do with track promoters who are very aggressive in selling tickets and paying purses. Some of it's going to be because the fan base at some tracks has gotten older. But the economy is still the driver. Economic conditions across the country are different, region to region. It's all about discretionary income."

#### THE MIDWEST

ARCA, headquartered in Temperance, Michigan, has "struggled with car count the last four to five years," said Krall. "But we had a 17% increase in car count throughout our platform in 2021. That includes the ARCA Menards Series, plus ARCA Menards East and ARCA Menards West. The number of drivers who participated is also up a similar number and may be even a little stronger than that. That's key for us. The racers and race teams are our customers, as are our ticket buyers. To see a dramatic increase in both numbers is very, very good." Another Midwest sanctioning body, Champion Racing Association (CRA) in Salem, Indiana, "just finished our 25th year as a sanctioning body for Late Models, plus the other divisions we have," said RJ Scott. "We've seen a lot of transitions in the industry over those 25 years."

CRA is "seeing some stability" these days, said Scott, who was working on his 2022 schedule when we spoke to him in late 2021. "The number of events we're able to book is based on those events that were successful the previous year." That success is judged by whether the promoters "want them back because their crowds, the sponsorship, the car count and the show



were good. Our No. 1 metric is how the promoters view the event. We have to bring a quality show, with decent car counts, so we can make that sale to those race tracks."

CRA had five different traveling series last year, including the ARCA/CRA Super Series for Super Late Models and the JEGS/CRA



All-Star Tour for Pro Late Models. "It looks like the numbers for those two series will be similar for next year, or maybe increase on the Pro Late Model side," Scott said. "I think we'll be seeing more of the Pro Late Models across the country. Jack McNelly [with the CARS Tour] is starting up a new Pro series, and I think that will be good for everyone." (See more about the new CARS Tour series below.)

#### THE NORTHEAST

In the Northeast, stock car racing "is definitely going strong," said Cris Michaud of the American-Canadian Tour (ACT), Waterbury, Vermont. "With ACT and the other people I work with, Tom Mayberry and the PASS Tour, our car counts have been gaining ground. At the two tracks that I own, Thunder Road International Speedbowl [Barre, Vermont] and White Mountain Motorsports Park [North Woodstock, New Hampshire], every division was up. And the fans are coming through. Compared to 2019, everything seems to be up."

A big reason for ACT's strength "is the great commitment we have from the drivers and fans," Michaud said. As an example, he cited the support from the Road Warriors, a division that races at Thunder Road. "We used to run them every other week, but when they knew we had limited fans [in 2020],



The successful 2021 season is giving sanctions leverage for building their 2022 schedules. "Our No. 1 metric is how promoters view the event," explained our source at CRA.

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they stepped up and wanted to run every week. It's a low-buck division we started to introduce people to racing. There's no purse, no championship, basically all they get is a trophy. But this division stood up and wanted to come every week so they could support the race track and make sure we could survive the pandemic."

Bridging the geographic gap between the Northeast and the South is the Super Cup Stock Car Series. Based in North Carolina, it will run nine events in 2022, primarily in Pennsylvania and Virginia. Joe Schmaling set up the races that way to deliver "the best for the most. When I look at where most of my people are from, Virginia and Pennsylvania are the best places for me to put races. I have people who race out of Long Island, South Carolina, and everywhere in between. It's not rocket science, it's logistics. Every driver wants a race in their backyard, but as a traveling series, we can't do that. On the other hand, we can't break our people by sending them too far. This year will be even worse with the cost of gas and hotels. We do the best we can by putting races where they need to be."

Schmaling sees his series as different from most. He started it in 2008, "when the Hooters Pro Cup Series changed hands and moved in a different direction." His aim was to give racers an affordable alternative to compete with cars that had become otherwise obsolete. Since then, the makeup of the series has evolved, as it opened up to cars that formerly raced in and were phased out of ARCA, K&N, and NASCAR.

When Schmaling looks beyond 2022, he is more bullish about opportunities in the Midwest than his home base in the Southeast. The Midwest is the "only place I've seen in any part of the Eastern United States that shows growing interest." Plans to hold events in Indiana, Kentucky, and other areas stalled because of COVID, "but we're continuing to look at it."



ACT reported having a great 2021 season, due largely to the commitment of fans and teams. One ACT division's drivers pushed to have races weekly instead of bi-weekly, to help support the series.

*"WE NEED OUR RACERS; WE NEED OUR FANS; AND WE NEED OUR MARKETING PARTNERS. IF ALL THREE ARE GOOD, WE CAN LOOK FORWARD TO A GREAT SEASON.* 

Schmaling is also working with other sanctioning bodies for the 2022 season to put on a bigger event than he could with just his own cars when reaching outside his normal territory. "We're joining with the FASS big-rig truck series for our last race at Hickory [North Carolina] in October, and we've been invited to go to Ohio in conjunction with the CRA series. I'm up for it. I think it's the way to go."

#### **DOWN SOUTH**

Co-sanctioning has been implemented to varying degrees by almost all of our sources. Jack McNelly said it was a real boost for the Super Late Models running in Mooresville, North Carolina's CARS Tour. "The only success we've had with our Super Late Models is combining the Southern Super Series or the CRA series out in the Midwest with our people to have an event."

McNelly noted that "I'm not talking about marquee shows, your Snowball Derbies, Winchester 400s, or Redbud 300s. Those still draw a somewhat significant number. But for series such as ours, to stand alone and have an event became a real struggle. The last event of ours that was a standalone CARS Super race had seven cars."

As a new way forward, the CARS Tour announced it was replacing its Super Late Model division with a Pro Late Model division for 2022. The Pros will run a 12-event season in conjunction with the 15 races run by CARS' Late Model Stock division.

"The Supers are just very expensive pieces of equipment," McNelly said. "Unless you're having a marquee event, the promoters, ourselves included, can't pay the purse that they should be paid for the investment that they've made."

Pro Late Models run crate engines "that cost about 50% of the engine in a Super," McNelly explained. "A rebuild is probably even more than 50% cheaper than a rebuild on a Super. And since they're choked down or restricted, those motors are not going to wear out as quickly as a Super motor."

McNelly said the reaction to his announcement "has been good. I'm forever grateful for our Super drivers, the fellows who stood by us. Several of them have already told me, all they have to do is take

PR/

that Super motor out of the car, put a Pro crate motor in, and they can run with us because the chassis and body are exactly the same."

He also sees the Pro Late Models as potentially more attractive "to the younger folks moving up from the Bandoleros, Legends, karts, what have you, because it's a much easier car to drive than a Super. It has maybe 425 horsepower, where a Super is way up over 500, so the Pro doesn't have to be finessed like a Super. It will be a natural steppingstone into a full-size stock car."

#### **COMMON CHALLENGES**

McNelly wasn't alone in putting more emphasis on the Pro Late Models to help cut racer expenses and potentially grow car counts. Hobbs at Evergreen Speedway spotted that trend "about three years ago, and we started transitioning into weekly Pro Lates and only specialty races for the Super Lates. Pro Lates is a growing class. We're seeing more cars coming into that class and more being built than were staying in the Super Late Model class or were going to be built for future years."

By no means was this the only situation that crossed regions.

"2021 started out like a house on fire, then in April, we found out we didn't have any tires," McNelly said, describing a shortage faced across the country. "For me, that actually became a larger problem than COVID. At least with COVID we were able to find some states that were a little more relaxed and be able to race. But if you only get X number of tires, it's very difficult to have a race."

Many tracks had to ration tires or implement new plans to stretch inventory through the season. CRA "was more fortunate than most," said Scott. "We didn't have to limit tire purchases until the end of the year. In some respects, it might even work for the better. It showed some racers that they may not need as many tires to put on a show as they thought."

Tires weren't the only problem, Scott added. "There were shortages of a lot of parts that go into these race cars. We had problems getting ignition boxes for a long time because the processing chips were sitting on boats coming from overseas. Engines have been delayed because the parts they need are in a shipping container somewhere. The supply chain is all messed up carrying over from COVID effects."

"We'll be fighting lingering effects of the pandemic for the foreseeable short-term future," said ARCA's Krall. "As much as I'd like to think we're past it, anybody who watches the news knows we're not. There are companies out there that will be conservative getting back to full pre-pandemic operations. Whether that is hospitality or full-blown sponsorship, it will take a while to get back to where we were prior to 2020."

Root said he's "far more concerned about the impact of runaway inflation on IMCA racers than I am the pandemic at this point. IMCA racers are very budget-minded. We see it across all divisions and at every track in every state and region. Large price increases will not help IMCA racing, IMCA racers or IMCA event promoters in any capacity."

"The price of gas, the price of this and the price of that just seem to be going through the roof," added ACT's Michaud. "What is it going to bring? Will people have to watch



Even though COVID stalled initial plans for events in Kentucky and Indiana, among other areas, organizers of the traveling Super Cup Stock Car Series are bullish about opportunities in the Midwest this year.





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#### STOCK CAR MARKET



Co-sanctioning continues to gain traction in regional stock car racing. "For series such as ours, to stand alone and have an event became a real struggle," explained our source at CARS Tour.

their pennies more? That's what I'm worried about over the next couple of years."

Two specific topics were more long-term concerns. One had to do with keeping the racing ranks filled given the disinterest many young people have in cars in general.

"When I was 15, I bought my first car, worked on it and put it together piece by piece until I could get a driver's license," Schmaling recalled. "Kids aren't car people today. A whole generation doesn't care about cars. They have other things to do."

Those that do get involved often see short-track racing only as a steppingstone to NASCAR's top tiers, Schmaling added. "Thirty years ago, if they tried to move up to that level and didn't make it, they'd come back and race at their local race track because they were racers. Kids today, if they don't make it, they don't come back."

Race tracks, too, are disappearing, Scott said. "There's a decreasing number of facilities pretty much anywhere you go. There are pockets of strength, properties that are well managed, have been around for years and will continue to be around for years. But there are race tracks that have gone by the wayside because of the encroachment of community. Columbus Motor Speedway, Illiana Motor Speedway, a number of different race tracks were just consumed by the city, because the city got so big, and a track wasn't what they wanted near their population. Between that and ineffective management, we're going to lose race tracks. There aren't many pavement tracks being built anymore, and few dirt ones as well. It's a tough business. Track owners have to be really passionate about it."

Ultimately, though, the successful stock car venues will "be here for a long time," Scott said. "There are really good people behind the scenes. They get the past, and they get the future. The ones who can tie it together do a great job and put on a great show. They'll be around for years."

#### SOURCES

American-Canadian Tour (ACT) acttour.com

ARCA Menards Series arcaracing.com

CARS Tour carsracingtour.com

Champion Racing Association (CRA) cra-racing.com Evergreen Speedway evergreenspeedway.com

IMCA imca.com

SPEARS Southwest Tour Series srlsouthwesttour.com

Super Cup Stock Car Series supercupstockcarseries.com

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# EXPLORING THE OPEN SPACE

By Bradley Iger

THE SHIFT TOWARD SPEC AND CRATE ENGINE PACKAGES ACROSS STOCK CAR RACING HAS REDUCED THE NUMBER OF POWERTRAIN COMBINATIONS AVAILABLE TO RACERS IN MANY SERIES AND CLASSES, BUT PROSPECTS STILL EXIST FOR ENGINE BUILDERS WILLING TO DO THEIR HOMEWORK.

s stock car sanctioning bodies look for ways to reduce costs to racers and drum up sponsorship support from heavy hitters like Edelbrock and General Motors, spec and crate engine requirements have become increasingly prevalent. This shift has reduced the importance of the powerplant as a strategic element of teams' racing programs within certain series and classes, and it has yielded some consternation among engine builders as a result.

"I think that money is the number one factor," said Clint Anderson of CNC-Motorsports, Brookings, South Dakota. "And by that, I mean some kind of financial backing to the organization in the form of a large sponsorship agreement. The incentive is much greater for the sanctioning bodies than it is for the racers. If the organizers were so concerned about curbing costs, we'd see the regulations focused elsewhere. Even if they're marginally curbing the cost of the engine, it still doesn't stop racers from spending \$30,000 or \$40,000 on a chassis."

That shift has convinced outfits like Dakota Engine Builders in Jamestown, North Dakota, to adjust its focus over recent years. "The crate engine trend has definitely taken a toll," Jim Beyer explained. "It has taken business away from shops like ours, and we have put more energy into other disciplines as a result—drag racing, truck pulling, mud runners and so on. That said, we still have a pretty strong amount of business from circle track racing with the sanctioning bodies that aren't building their rule sets around crate engines. We've been staying busy."

IMCA President Brett Root said that demand for engine builders still exists with the Vinton, Iowa-based organization and others. "There is plenty of opportunity for engine builders within IMCA to build non-crate engines, and we also select engine shops to repair broken crate engines through IMCA's sealing process."

As we discovered, negotiating these changes comes down to identifying which classes to target and what support is needed.

#### THE CRATE GAME

The growth of crate engine requirements in stock car racing has narrowed the field for would-be engine builders within the discipline, but Anderson said that there are still a few avenues to explore even within these limited confines. "Shops can't really compete from a pricing perspective with a stock-style engine that's built in mass quantities," he observed. "They can become a certified crate engine rebuilder, though, and anybody can become a reseller for those. There's also the option of becoming an approved crate engine builder, but there's usually a fairly lengthy certification process associated with that. We never really looked into that very much because it would require taking a significant amount of money away from our other markets to support it."

Jack McNelly of the CARS Tour in Mooresville, North Carolina, sees a clearly defined pathway for engine builders within crate motor stock car classes, though he also admits it's a tight market in which to gain a foothold. "There's a list of engine builders all over the country that are SEAL [Sealed Engine Alliance Leaders] approved. Builders are brought into the mix through an application process that is brought in front of the SEAL board and considered."

Beyer also said some series provide racers with a wider range of options within classes where crate engines are often utilized. "The WISSOTA series, for instance, allows crate motors, but the majority of people racing with that series still run custom-built engines. WISSOTA also came up with its own plan to put together a 'concept engine' specification, where we control the rpm's along with the lift of the cam in some classes. It basically created these rules to help us engine builders stay in business and provide these engines, and it's good for the racers because it allows them to race with the engine of their preference. And the racing is good. Some nights in the Late Model races the 525-cubic-inch engine does well, and on other nights the open motors do well. It's not one-sided. On any given night, either of those motors could win the event."

Meanwhile, Root noted that engine decisions often come down to cost for many racers. "I sympathize with the anti-crate crowd to a certain extent, but the reason the crate has become so widespread is because of the perspective of some of those engine builders," he said. "Racers, particularly IMCA racers, tend to migrate to what they can afford. In the end, the racer drives much of the market demand. If the crate is winning those racer decisions, that said it all to us."

#### SPEC, NOT STOCK

Although crate motors don't provide stock car racers and engine builders with many options in terms of strategy, the same is not true of most spec engine rule sets. "In Late Model stocks, for instance, we use a 'spec' motor that isn't sealed," McNelly said. "In a rule set like that, the racers are told what parts must be in the motor, but there's more leniency as far as the rest of the combination goes. The requirements mostly pertain to the main ingredients—camshaft, crank, rocker arms and that sort of thing. But because it's not a sealed type of situation, competitors and builders have a bit more room to apply some strategy."

These classes also do not require engine builders to be part

Photo courtesy of CARS Tour



Spec- and crate-engine stock car rules restrict engine builders, forcing many to consider alternative markets. "We have put more energy into other disciplines," noted our source at Dakota Engine Builders.

of an approved supplier list. "Any engine builder can get involved with the spec classes," Beyer said. "With something like IMCA SportMod, we can build engines, and we do a fair amount of them. We have to abide by certain restrictions for things like compression and the type of cylinder heads that can be used, but there's some flexibility there. And a lot can be

done with classes like A Mod and Late Model. There are restrictions as far as

"IT'S TOUGH TO SAY HOW THINGS WILL SHAKE OUT, BUT I BELIEVE THERE'S A LOT OF INCENTIVE TO LOOSEN UP SOME RULES BECAUSE OF THE SUPPLY CHAIN PROBLEMS WE'RE DEALING WITH RIGHT NOW.

cubic-inch limits, there's a spec head we have to use, and we can only do so much porting in the head, but there aren't a lot of other limitations. That allows us to develop the engine combinations we want to build."

Root added that IMCA's stock car division also has several other non-crate engine options available that land somewhere between spec and an anything-goes open rule set.

"The 350-cfm and 500-cfm carburetor engines fall into that category," Root explained. "We use the 350-cfm carb to control the performance of that engine, and rule structure is fairly liberal with that one: No compression limit, no cubic-inch limit, no 'spec' parts per se, but we still utilize some rules in regard to things like steel heads, blocks, flat-tappet cams and such. The 500-cfm carb engine is more controlled, with a cubic-inch limit, compression limit and a spec head that is required. Those requirements come in addition to the rules that apply to the 350-cfm engine regarding the use of steel blocks, steel heads and flat tappet cams. But it also includes the most important rule for many engine builders: No crate motors allowed."

Reliability is often more important than outright horsepower anyway, Anderson pointed out. "There's still a lot of room for improvement. Some classes require a stock rocker arm, and that's not really a cost-effective solution for the racers when they're tearing through a couple sets of them every season. Putting a full roller rocker arm on there would have saved them some money in the long run. The same goes for exhaust manifolds. A header is going to save that racer some money in the long term because manifolds tend to create more heat and fail in a shorter amount of time."

#### THE ROAD AHEAD

As with most motorsports disciplines today, the costs to campaign a stock car are on the rise despite efforts to stem the tide. "Let's be honest here: What are you buying



While spec and crate engines are increasingly the norm in stock car racing, some sanctions, such as IMCA, also offer options that allow considerable leeway for engine builders.

#### PR/



Like any other business challenge, navigating adverse engine rules is largely a matter of attitude. "Sometimes things change in fairly dramatic ways, and you just have to adjust," said a source at Dakota Engine Builders.

today for the same price or less than you paid six months ago?" McNelly asked. "Over the next few seasons, we'll see measures taken to try to contain the costs, but this kind of racing is very expensive. These racers are spending an inordinate amount of money right now, and we're reaching the point where our grandstands cannot support what these racers should be getting paid. The two numbers seem to be getting further apart."

At the same time, Anderson identified some of the same issues as being potential catalysts for more open engine rule sets. "It's tough to say how things will shake out, but I believe there's a lot of incentive to loosen up some rules because of the supply chain problems we're dealing with right now. Tire shortages have been one of the biggest issues that we've seen, and car counts may suffer if we don't find a way to loosen things up so racers can still compete while keeping things balanced. That includes the engine rules. We may see sanctioning bodies ease up on the engine restrictions a little bit more, but that could also potentially add another level of complexity to tech inspection in the interest of keeping things fair. It's a tough problem to solve."

Beyer agreed that signs point toward costs heading upward despite everyone's best efforts, but he also identifies some strategies to lower engine costs that may become more commonplace in the race "MOST SANCTIONING BODIES ALREADY HAVE BEGUN TO INCORPORATE RPM LIMITS IN CERTAIN CLASSES, BUT I COULD IMAGINE A SCENARIO WHERE THEY DROP THE LIMITS FURTHER TO GET THE ENGINES TO LAST A BIT LONGER.

seasons to come.

"One thing I do think we'll see more of is rpm limits on the engines," he said. "Lower rpm usually results in more longevity out of the engine, and that's one way to address the increasing costs to run these cars. Most sanctioning bodies already have begun to incorporate rpm limits in certain classes, but I could imagine a scenario where they drop the limits further to get the engines to last a bit longer.

"It's hard to say though," Beyer admitted. "Racing is a unique business. Sometimes things change in fairly dramatic ways, and you just have to adjust to it. But the folks who really want to do it always seem to find a way."

#### SOURCES

CARS Tour carsracingtour.com

CNC-Motorsports cnc-motorsports.com

Dakota Engine Builders dakotaenginebuilders.com

IMCA imca.com



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# SENNESS PROFILE PERFORMANCE

ATTENTION TO DETAIL AND OUT-OF-THE-BOX THINKING HAVE RESULTED IN MORE THAN 100 VICTORIES FOR CUSTOMERS OF THIS MICHIGAN-BASED SHOP SINCE THE COMPANY OPENED IN 2008. STEADFAST SUPPORT AND ITS ABILITY TO ADAPT HAS KEPT THE BUILDER AT THE FOREFRONT OF OUTLAW AND SUPER LATE MODEL CIRCLE TRACK RACING.

#### By Bradley Iger

When Terry Senneker decided to turn his self-described side hustle into a full-time business back in 2008, he'd already amassed a wealth of experience competing in—and wrenching on—Outlaw cars. In many ways the shop was a natural progression for Senneker. He'd worked for several different chassis manufacturers over the years, and eventually he began developing his own solutions for shortcomings that he identified in the suspension systems of his cars.

"I did a lot of dumpster diving for other peoples' parts, basically fixing their throwaways," he recalled. "For a while I was just dabbling in it on the side when I could find the time. I had a couple of customers who wanted me to build cars, so I would work on those at night. At a certain point I felt like I had a big enough workload that I could just focus on doing this, so I decided to give it a try."

Turning Senneker Performance into a full-fledged shop was a fairly hassle-free transition, Senneker said, because most of the typical obstacles that face new small business owners had already been addressed. "I was fortunate enough to be able to run the shop from my home. We had a pole barn in the backyard, and I already had all of the welding and fabricating equipment I needed to get started. I didn't have to take out any bank loans or anything like that, so that made it a lot easier to get the ball rolling." In its earliest incarnation, Senneker Performance was a partnership, but differing priorities convinced Senneker and his business partner to part ways amicably. "We started with a couple of IMCA modified builds and a few Outlaw cars, as well as some work on sportsman cars, anything we could do to make some money," he said. "But we soon realized that we had different goals: I wanted to grow a business, and he wanted to continue doing this as more of side hustle. We parted ways on friendly terms, and that's when I really started focusing on what I needed to do to make this a viable operation."

Senneker set to work developing the fixtures and jigs he needed, and shortly thereafter, several Outlaw customers jumped on board. "JR Roahrig and his son Tyler were some of the first customers we had that really started winning," he explained. "My success at the track in my own car helped the business to a tangible degree, but when customers began taking podiums, that took it to another level. It really solidified this shop as a business and helped us gain some momentum."

Senneker Performance soon became a dominant force within the Midwest Outlaw ranks. "It reached a level where it was basically a case of strength in numbers," Senneker said. "We had premier teams in our cars, and by 2012 or so, it got to the point where about half of the field was running our cars on any given night."

These days the company operates out of a 5,000-square-foot facility in Wayland, Michigan, which puts it about a halfhour's drive from both Berlin Raceway and Kalamazoo Speedway. The shop has nine stalls and six car hoists for its half-dozen technicians to utilize, along with a wide variety of fabrication equipment that includes MIG and TIG welders, vertical and horizontal



In a relatively short amount of time, Terry Senneker has taken Senneker Performance from side hustle to regional success. "It got to the point where about half of the field was running our cars."



Besides building complete chassis, Terry Senneker and his team also repair and service cars. The shop can even adapt the unique Senneker front and rear suspension to other brands of chassis.

band saws, a manual lathe and a manual mill. Since tuning and setup is such an intrinsic part of chassis building, Senneker Performance also has a pull-down rig to simulate suspension behavior at speed, along with a shock dyno and the requisite data acquisition equipment. While the company outsources its machine work, all of the engineering is done in-house.

"Most of the folks we've hired over the years have been through word of mouth," Senneker said. "We haven't had a high turnover rate, and we're fortunate in that way because it's a very specialized market. We can't just put out an ad for a general welder or fabricator. Being a chassis builder makes us kind of a jack-of-all-trades, yet the skills are specific to this kind of work. We're hanging the bodies on the cars, we're wiring them up and we manufacture most of the suspension components that we use."

Recent years have seen the shop shift its focus beyond Outlaw cars, a move that Senneker said came from necessity. "Early on it made a lot of sense because that's the kind of racing I was doing at the time, and it was very popular. There were 30 or more cars at any given event we went to. But at a certain point that market started to get saturated with our cars, and the Outlaw car counts started to level off. It got to a point where we had so many Outlaw cars out there, there wasn't really a market for brand new ones. It kind of turned into a used-car market after that." As a result, Senneker Performance began to shift its attention toward Super Late Model racing.

Along with its chassis builds, the company services and repairs the cars, and it can adapt its components to existing chassis. For instance, if a customer has another builder's car and they don't want to invest in a brand new car, the shop can adapt its front and rear suspension systems on the car.

"MY SUCCESS AT THE TRACK IN MY OWN CAR HELPED THE BUSINESS TO A TANGIBLE DEGREE, BUT WHEN CUSTOMERS BEGAN TAKING PODIUMS, THAT TOOK IT TO ANOTHER LEVEL. "We'll take on just about anything, whether it's repairs, re-working an existing chassis, hanging a body on someone else's chassis, or just doing setup work," said Senneker. "Our flexibility has been really important to our success."

It's a sentiment shared by Mike Garvey, a longtime Senneker Performance customer who has been campaigning cars in various short-track disciplines for nearly four decades. "We're always trying to keep an eye on what's going on around us. At a certain point, I started to notice that the Senneker cars were running really well. What really impressed me was that Terry was thinking completely outside the box. Most of these cars are very similar to one another, but Senneker designed a totally different suspension, and I really liked that. With a Senneker car, we kind of have to forget about the other cars when it comes to what we're doing. These are completely their own thing. We saw a lot of success once we started racing with them, and we also became really good friends with those guys along the way."

These days Garvey spends more time coaching and consulting young racers, and he told us that he points them toward Senneker's shop whenever applicable. "We've been really happy with Terry's work and the support that the shop provides," he explained. "They build the best cars out there, and they provide consistent,



Terry Senneker started his business out of his home, but now has a 5,000-square-foot shop with nine stalls and six car hoists—ample workspace for the company's six technicians.



Terry Senneker, pictured second from right, believes his experience behind the wheel is vital to the company's success. "You need to understand what's going on from the driver's perspective," he said.

repeatable performance. But importantly, Terry's team is also easy to work with. If you have something you want to try, they're receptive to new ideas."

Senneker pointed out that being willing to adapt to change is crucial if the goal is to stay competitive. "Some manufacturers take a 'Gen 1' and 'Gen 2' type of approach to chassis building, but our philosophy has been more about tweaking them as we go. Instead of just establishing these specific generational templates, we want to be able to react to rule changes and adapt to the times. It's more of a progression." Rather than investing all of its engineering effort into developing and producing a new chassis every few years, for Senneker Performance it's about making incremental changes to its existing designs on a regular basis in order to improve the breed.

Taking a hands-on approach to development right from the start helped the company establish a larger engineering philosophy for the products it produces. "For me this has very much been about doing it myself-being in the seat and being able to feel how the changes we are making are affecting the car," Senneker said. "Rather than approaching it from the perspective of a typical business owner, I want to be able to provide first-hand information. That's especially important with a racing business. If you're trying to get feedback from a customer and interpret what they want out of the race car, you need to actually be there working on the cars. You need to understand what's going on from the driver's perspective."





# -SPIN DOCTORS

The world of racing wheels often seems as large and diverse as racing itself. So PRI asked several manufacturers to explain how they develop a great product.

**By Jim Koscs** 

While the basic purpose of the wheel has not changed in more than 5,500 years, more recent advances in engineering, materials, and manufacturing have yielded the lightest, strongest, and stiffest wheels in motorsports history. These benefits carry over to the performance street market, where oftentimes the cars are more powerful and faster (and certainly heavier) than their competition counterparts. For a snapshot of the current performance wheel market, PRI talked to six manufactures of all sizes. We found a landscape that seems ripe for small niche operations to carve out profitable slices of the market, even as the big players continue to innovate and prosper.

#### 3030 AUTOSPORT

Keith Kern and Philip Watson launched 3030 Autosport in Terre Haute, Indiana, in 2020, seeing a need for high-quality forged drag racing and street wheels with direct factory sales. The company name comes from the pair's 30-plus years of wheel industry experience.

Kern explained that each of the company's four street and track wheel series is made with a specific manufacturing process to meet the needs of its particular market. Production and material sourcing are all in the US.

"Everything we do is forged 6061-T6," Kern explained. "All of our stuff is ringrolled—it comes from a log of billet. That retains the grain structure you get with a forging. After ring rolling comes precision spinning over a mandrel, which always produces the same shape. And we get to move the material, for example, making it thick only where we need to."

The company's Drag Ops two-piece 15-inch rear wheels are SFI 15.1 certified, and the monoblock FrontRunners are 15.2 certified. Kern said Autosport 3030 also subjects its FrontRunners to a rotary fatigue test that can account for the abuse that these wheels endure on the drag strip.

"Wheels don't always come down straight on a launch," he said. "And there's a lot of correcting on the strip."

Drag Ops wheels are certified for street and strip, and available in non-, single- and double-beadlock. "They're street rated but light enough for drag racing," said Kern. Beadlocks are also forged parts, which Kern said do not deform when in use like a machined-plate beadlock might. Heli-coil inserts are used for securing bolts.

The modern muscle car market presented different opportunities for street-and-strip applications.

"A lot of these drivers just want to take off the OE 20s and put on drag wheels for some track fun," said Kern. He explained that the company's 17x4.5 and 18x5 monoblock FrontRunners and Drag Ops Modern Muscle 17x10-inch wheels are designed so customers don't have to change the big OE brakes.

Kern described the company's Series



Advanced materials and improved manufacturing methods are yielding lighter and stronger wheels from both established big-name brands and relative newcomers such as 3030 Autosport.

G wheels as an outgrowth of Drag Ops for street/strip drivers who want the OE wheel sizes, up to 20 inches. The Mod3 is a threepiece modular wheel line for street and track, including road racing and autocross. Kern said these wheels, which use a spun outer rim, forged centers and ARP assembly bolts, are tested to an equivalent of pulling 1.2G in a 4,600-pound car for 250 miles.

#### **BBS OF AMERICA**

BBS Wheels, which became famous for its iconic cross-spoke aftermarket and OE wheels in the 1970s, has won more than 250 series championships in Le Mans, IndyCar, Formula 1, IMSA, World Rally Championship and more. For 2022, the company will supply new wheels for F1 and the NASCAR Next Gen (Gen-7) car. Each of these wheels is made with different materials and processes, reflecting the specific needs of its mission.

After decades using 13-inch wheels, F1 has switched to 18-inch wheels with lowerprofile tires. The new F1 wheel is forged magnesium. "We brought forged magnesium wheels to F1 in 1991," said Craig Donnelly of BBS of America, Braselton, Georgia, explaining that the material's light weight and ultimate stiffness were critical in the new, larger wheels.

NASCAR's radically new Next Gen race car will use 18x12-inch forged aluminum wheels replacing 15x9.5-inch steel wheels used before. They are made with the company's die-forged manufacturing process. The NASCAR Next Gen chassis is the first in the sanctioning body's history to use independent rear suspension and center-lock wheels. It will also have more braking power than in the past.

"NASCAR needed a wheel that was lighter and stiffer, yet durable and would withstand the abuse and forces these big, heavy cars generate," Donnelly said. "It's a much larger contact patch for the tire, and more mechanical grip. BBS worked closely with Dallara in the area of clamping loads."

Even while going to an 18x12-inch centerlock configuration, NASCAR wanted the new wheel to be lighter than the previous 15x9.5 five-lug steel wheel. Donnelly said the new BBS wheel came in a pound and a quarter under that. As for durability, BBS is offering a five-year service life on the wheel.

The company's net-shaped die-forging process, which is used for OE and high-end aftermarket products, was key to achieving

"NASCAR NEEDED A WHEEL THAT WAS LIGHTER AND STIFFER, YET DURABLE AND WOULD WITHSTAND THE ABUSE AND FORCES THESE BIG, HEAVY CARS GENERATE.



NASCAR and Formula 1 are introducing radical changes in wheels for 2022. BBS and other manufacturers are responding with new designs tailored to the unique needs of each series.

NASCAR's objectives, including its cost target and production volume for all teams. The multi-stage process uses up to 18 million pounds of pressure, according to BBS.

"Most of the shape is created in the forging process, with minimal processing, machining, and heat-treatment," said Donnelly. "Die forging forces the material to take the shape of a spoke, so the grain structure in the material is more in alignment with where the stress is. It's just slightly better than with a solid-milled fully forged 6000series aluminum wheel."

Critically for cost, the die-forged wheel requires less than 30 minutes of machining time versus several hours per wheel with traditional forging and four- or five-axis machining, according to Donnelly. "We would not have considered any other technology or process for this."

Donnelly described the project as a

"DIE FORGING FORCES THE MATERIAL TO TAKE THE SHAPE OF A SPOKE, SO THE GRAIN STRUCTURE IN THE MATERIAL IS MORE IN ALIGNMENT WITH WHERE THE STRESS IS.

unique international team effort, with BBS engineering expertise in Germany and strength in die-forge manufacturing in Japan. Finally, he added that testing for the new NASCAR wheel went "above and beyond the SFI spec."

#### **BELAK INDUSTRIES**

Marking its 10th year, BelaK Industries in Miami, Florida, emerged from founder Damian Borroto's experience in drag racing, which began in his teen years. As a racer, he knew the frustration of waiting for wheels to arrive before a race. With 10 employees in three buildings in South Florida, the company specializes in building customizable forged three-piece drag wheels and forged front runners with quick turnaround, Borroto said.

"When we got into the business, we saw a weakness in the market for an ability to meet exact customer needs," he said. "We're a smaller company, which allows us to be nimble and flexible. All of our wheels are made to order." Customers can specify the backspacing and bolt pattern they need and can also choose custom powder coating for a unique look.

All of the company's wheels are SFI certified and for track use only. Critically, Borroto said the company's nimbleness has allowed it to identify and move into niches before larger manufacturers do.

"We want to provide wheel packages for customers with brand new cars," he said.

As examples, he cited the market for drag racing and roll racing the V10-powered Lamborghini Huracán and its corporate and mechanical cousin, the Audi R8. BelaK Industries has an exclusive contract supplying T1 Race Development of Royse City, Texas, with drag wheel packages for these cars.

"We are the only manufacturer that offers an 18-inch wheel with single beadlock that will work on a Huracán or R8," Borroto said.

In another example of catering to a specific car, Borroto said his company was the first to make a drag wheel package for the new Toyota GR Supra. A brake change is not required to install the drag wheels on this car.

"We listen to the racers and do everything we can to meet their needs," he said. "We get a car into the shop and tailor the fit. If there's a clearance issue, we can machine the wheel to fit."

In addition, Borroto understands his customers' desire for style and customization. "We want them to look at



their car in a new light and love the way it performs with our wheels," he said.

#### FORGELINE

The supercar and modern muscle car markets have created a strong demand for even more choices in track-only wheels as well as street wheels with true dual-purpose capability. Forgeline Motorsports of Dayton, Ohio, caters to both with a line of forged monoblock wheels.

Race wheels are available from Forgeline for the Ford Mustang and Chevrolet Camaro GT4. At the extremes of "street" cars, Forgeline supplies wheels for the Hennessey Venom F5, which has a claimed top speed of 310 mph, and the SSC Tuatara, which set a record of 282.9 mph in January 2021.

"Most of our high-end wheels are tailored for a specific car or chassis—built for specific car weight and downforce," explained Dave Schardt of Forgeline. He highlighted the new SS1R GT wheel developed for IMSA and WEC GT3 racing as the lightest, stiffest, and strongest wheel the company has ever made. A streetcertified SS1R version is engineered for road and track. Both are forged monoblock wheels. The key differences lie in machining, according to Schardt, who said, "The milling process for the true race wheel takes about



Modern racing-wheel design is a delicate balancing act between strength and weight. "Teams would accept more weight for increased stiffness," according to our source at Forgeline.



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*"USING FEA, ONCE WE HAVE THE WHEEL STIFFNESS WE NEED, WE'RE ABLE TO TAKE OUT MATERIAL WHERE IT'S NOT NEEDED.* 

five hours, and the SS1R takes about two."

While touting the light weight of both wheels, Schardt addressed a critical trend in road-racing wheel development that may surprise some, especially in the street camp that does track day driving: It's not always about ultimate light weight.

"Teams would accept more weight for increased stiffness," he said. "That trend started about seven to eight years ago. With aero producing so much downforce, the stiffer wheels can yield faster lap times. There's less flexing, better reaction. Suspensions are so good, and tires are getting stickier all the time. Drivers can actually tell stiffness in the wheel."

Material choice and the manufacturing method are key to getting that stiffness with very low weight. Schardt explained that all Forgeline race wheels are 6061-T6 forged, using a proprietary mixture that he said is 20–25% stiffer and stronger than regular 6061-T6. "We pay a higher premium for that," he said. "It is all sourced in the US."

Schardt added that achieving maximum stiffness with low weight also depends on cutting-edge finite element analysis (FEA). "We have so much data from 20 years, including our wheels and others, along with wheels that broke," he said. "Using FEA, once we have the wheel stiffness we need, we're able to take out material where it's not needed. For example, we're not the first to do I-beams in spokes, but it's a great way to increase strength with less weight."

#### **REAL RACING WHEELS**

Frustrated with the way somebody else makes something? Do it yourself. Troy Boubin said Independence, Iowa-based Real Racing Wheels began in 1992 when his grandfather, a tire distributor for American

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Racer, became dissatisfied with delivery times from a large wheel manufacturer.

"His goal was to provide racers with a quality race wheel and a minimal delivery time," Boubin told PRI. The business organically grew into a niche to provide wheels exactly to racers' individual specs.

"We can make pretty much any off-road type of wheel, including for dirt track, tractor and truck pulls," explained Boubin. "We have the tooling to make large and small orders. We do not mass-produce. We have no minimum quantity."

The "Real" in the company name stands for "Racer Engineered Aluminum." While most of the wheels are indeed aluminum, the company also makes 15x8-inch steel wheels for modifieds. Street wheels are not offered.

Product development is driven by what customers ask for, according to Boubin. He said racers come to Real Racing Wheels seeking specific backspacing and bolt patterns they cannot get elsewhere. Other needs are driven by changes in brakes, suspension, and tires required by racing series. "For example, when a new tire comes out in pulling, everybody calls needing a wheel for it," he said. "We also keep our ears to the ground on trends in the market."

Most the company's wheels are spun by hand, except for some of the larger-diameter wheels that are CNC-spun. Boubin cited advantages to hand spinning, including quick changeover for making different wheels.

"It really is a disappearing art," he explained. "It is very labor intensive, but our guys can see if there's a defect in material, or if something is not right in the heat-treating. Quite a few have been with us for more than 15 or 20 years."

Likewise, the polishing is laborious. "It's a tough, dirty job but is so critical," said Boubin.

Expertise in short runs of specialty wheels has attracted customers to Real Racing Wheels from around the world. Boubin said the company has made wheels for sanddrag racers in Dubai and the United Arab Emirates, ice racers in Iceland, and for military all-terrain vehicles in Alaska.

He revealed that the most unusual



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Some wheel manufacturers serve a wide range of race series, while others specialize. Vahlco Wheels focuses primarily on oval track, but has recently launched a drag-racing line.

request came from NASA, which needed development wheels for the Mars Rover early in the program. "None of our wheels went to Mars, though," he said. "They were used for the mock-ups."

#### **VAHLCO WHEELS**

A relatively new name in the racing wheel market, Vahlco Wheels of New Egypt, New Jersey, emerged from race team owner's Fred Vahlsing's purchase of Valken Wheel company in 2014. The company has focused on oval track racing—dirt sprint, dirt late model, Northeast modified, and asphalt sprint—and recently expanded into drag racing.

Dave VanHorn, who runs operations at Vahlco, is a third-generation dirt racer who currently drives a Northeast dirt modified, including at the local 7/16-mile dirt track, New Egypt Speedway.

VanHorn said that, while always seeking light weight and high strength for its wheels, the company makes durability a top priority, no easy feat for such brutal race conditions.

"Most dirt oval racers are racing 100 times a year, and the wheel has to hold up for that," he said. "The Saturday night guy needs a wheel to last three to four years with no issues."

Vahlco's wheels use CNC-spun 6061-T6 rims and forged centers. "They are within 20 thousandths true," said VanHorn. Emphasizing the company's attention to heat-treatment, he added, "The temper part is the secret to all wheels for getting the correct stiffness."

VanHorn said the company is always seeking to give racers the best product possible, with good value and durability. For example, the sprint car wheel centers were recently upgraded to 2024 alloy, known for its high strength-to-weight ratio. For its 10-inch midget racer wheels, Vahlco now uses a magnesium center. "We have a lot of teams in Australia and New Zealand using those, and they have been very successful," said VanHorn.

Vahlco engineers wheels in the US and sources forged centers from California. The CNC-spun rims are produced by a manufacturing partner in South Korea that VanHorn said has 30 years of experience. "We work closely with them on the



"MOST DIRT OVAL RACERS ARE RACING 100 TIMES A YEAR, AND THE WHEEL HAS TO HOLD UP FOR THAT.

processes," he said.

Beadlock rings are made in Vahlco's New Jersey home base, where wheels are assembled, packaged and warehoused. VanHorn said the company is doing more in-house manufacturing than before, which helps to get orders out more quickly.

For drag racing, VanHorn said Vahlco saw a need for a certified wheel in amateur divisions, and now the company is also seeking SFI 15.1 certification for faster classes.

He explained that the key for the drag wheels is getting the weld-on beadlocks correct, depending on the weight and horsepower of the class. In oval racing, he said the company has become renowned for its fully machined billet beadlock system, using its own bead grip technology.

#### SOURCES

3030 Autosport 3030autosport.com

BBS of America bbs-usa.com

BelaK Industries belakindustries.com

Forgeline forgeline.com

Real Racing Wheels realwheel.net

Vahlco Racing Wheels vahlco.com

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Shortages plagued the 2021 race season, but these manufacturers have plans to keep tires rolling down tracks this year.

**By Jim Koscs** 

s PRI reported in August 2021, race tire manufacturers spent 2020 dealing with COVID-19 related shutdowns, and then trying to meet spiking demand in 2021 while dealing with disruptions in the labor and global supply markets. We spoke again with these tire manufacturers in December to re-assess the current situation and gauge their outlook on the tire supply for 2022.

#### **AMERICAN RACER**

Scott Junod of American Racer in Indiana, Pennsylvania, gave a blunt assessment of the year behind and the year ahead. He cited the same challenges with material supply and labor as other tire companies while outlining steps the company put in place to keep racers supplied.

"We've left no stone unturned in getting people and material to build tires," Junod said, adding that he expects continued limited supply in all raw material markets through 2022. "I might get enough nylon to run for a couple of weeks but run out of something else and have to shut down a tire line."

The main strategies that American Racer put into place in 2021 included focusing on supplying existing customers and high-volume products, Junod said. "Last year, we didn't bring any new customers onboard. We made that decision in January 2021. We focused on our existing book of business to help them get through the season,

and we did a good job of doing that. The phone was ringing, but we didn't feel it was right to sign up new customers and not be able to supply the tires."

He said that demand from existing customers drove business 10–20% higher than 2019. "You can't compare to 2020," he added. "Everybody needed more tires coming out of 2020."

American Racer also streamlined its product line, preferencing longer-run models over shorter-run specialty tires. "We didn't shut down too many things," Junod said. "We met our obligations to events and racers."

He expressed some improvement on the labor front, reporting more hires and lower turnover in recent months. At the same time, however, Junod said that availability of workers does not always align with raw material supply. "It seems the more labor we have to make tires, the less likely it is to have all the materials we need to build them."

Junod expects to continue the company's plan through 2022. "We're going to do our best to supply existing customers and won't be signing on new ones. I'm optimistic for the customers that we have, but it's going to be another challenging year, maybe longer. If we can get tires to an event where somebody needs them, we're going to do anything possible to make that happen."



Tire manufacturers are struggling against pandemictriggered shortfalls of materials and manpower. Hoosier Racing Tire has implemented more than 70 measures aimed at easing workforce shortages.

*"IF WE CAN GET TIRES TO AN EVENT WHERE SOMEBODY NEEDS THEM, WE'RE GOING TO DO ANYTHING POSSIBLE TO MAKE THAT HAPPEN.* 

#### HOOSIER RACING TIRE

Paul Menting of Hoosier Racing Tire in Lakeville, Indiana, echoed the issues about material supply and labor but also said the company's steps to address the latter are helping to increase tire production.

"We are seeing shortages of nylon, carbon black and other materials mainly due to labor shortages and logistic constraints our vendors are experiencing," he explained. "This situation would appear to be continuing in 2022."

Focusing on the labor issue, Menting offered somewhat better news. He first explained that pressures put on the Hoosier workforce, including mandatory six-day work weeks with voluntary Sundays for over nine months in 2021, caused many to resign and will not be repeated.

"We instead need to fill the gap with more workers working fewer hours," he said. "We put into place no fewer than 70 different action items to address hiring more people and keeping the people we have and do hire. One of the largest was a 20% wage increase in 2021, with more increases planned for 2022."

Menting disclosed that those measures have already helped attract and retain new employees, but he said such progress takes time to have an overall positive effect on business. "It takes three to six months to bring a new hire up to speed and productive in the tire plant, depending on the job skill."

Menting confirmed that the new labor measures have resulted in increased production output, and that Hoosier will make more tires this year than in 2021. He cautioned, however, that the company is starting 2022 with less inventory than it did entering 2021, and that the supply pressures will be the same in 2022, if not worse.

"We are asking all customers to conserve and limit tire consumption where possible in order to help the entire market achieve our goals of running every race scheduled," he said. "We are very proud of the effort all our employees, distributors, and customers put into the problem of supply in 2021, and



Despite recent challenges, some manufacturers are optimistic for this year's race season. "We are hopeful that 2022 will be an improvement over 2021," said our source at Toyo Tire USA. through that group effort we were able to manage the situation. We will need the same focus in 2022 and, hopefully, toward the end of the season we will see light at the end of the tunnel."

#### **TOYO TIRE USA**

Toyo Tires is a leading brand in motorsports spec-tire classes, and Cameron Parsons told PRI that the Cypress, Californiabased company plans to continue supplying racers for the upcoming season.

"The current climate in the tire business unfortunately forces us and just about all other tire manufacturers to re-prioritize efforts," Parsons stated. "We are working within strict material and shipping limitations, so our highest priorities are to fulfill our existing agreements and contracts as best we can."

He explained that while production and shipping are limited, Toyo is allocating resources to serve the spec-tire classes specifically. "We will produce our other motorsports products and sizes outside of these spec-class products as we are able," he said.

Parsons offered a ray of optimism for the new race season. "We are hopeful that 2022 will be an improvement over 2021," he added. "The impact of material shortages and supply chain limits caught many by surprise in 2020, and we are still seeing the effects. We have been adapting to this situation and aim to be better prepared for 2022. We expect our supply to improve as we now have a better idea of prioritized products for the current automotive and motorsports climates."

#### SOURCES

American Racer americanraceronline.com

Hoosier Racing Tire hoosiertire.com

Toyo Tire USA toyotires.com

# SENSIBLE HADS

WANT TO GO FAST WITHOUT FLATTENING THE WALLET? THESE CYLINDER HEADS ARE DESIGNED FOR POWER WITH PRICE POINT IN MIND.

By Mike Magda

There's no shortage of attentiongrabbing slogans that bait and lure budget-minded racers to a great deal on performance parts: "Bang for the buck!" "Cost effective!!" "Price/performance ratio!!!" "Horsepower per dollar!!!!"

Arguably, that grandiose jargon is less prevalent in the cylinder head market. That's because cylinder heads are a major investment, and winning engine builders aren't often swayed by cute jingles. A cylinder head is unique in that it's the single component the rest of the engine is often built around. Breathing is key to horsepower gains, and the cylinder head can't be the choke point.

Yet, costs shouldn't be ignored, even in Tier-1 racing classes. The obvious problem is that "budget" is a relative term in racing. A budget head for a claimer motor is certainly not the same budget head for Comp Eliminator or a Trophy Truck.

"Absolutely, it depends on what the budget really is," said Gavin Simcoe of Frankenstein Engine Dynamics in Weatherford, Texas.

Chris Grace of 1 Way Technologies in Washington, Indiana, has a general strategy when discussing cylinder heads with a team for the first time. The first question is always about the engine brand, simply because 1 Way may not have an applicable product, but it will often recommend the competition to be as helpful as possible.

"They'll remember that," noted Grace. "Then we're going to look at the cost and turnaround time. The lead time on cylinder heads right now is 12–16 weeks. Then we'll look at the rules and at the product that we have to see if we can provide them with the competitive advantage, legally."

That discussion then involves all the engine parameters and durability requirements. Cylinder head changes often require adjustments in other areas of the engine. A different combustion chamber may need different pistons. More power may require offset steel rocker arms along with a different induction system. Raised-port heads may require a different intake manifold and exhaust headers.

Fortunately, cylinder head suppliers usually have different lines of products for

*"OUR AS-CAST PRODUCT LINE HAS JUST BLOWN US AWAY BOTH IN PERFORMANCE AND INTEGRITY OF THE CASTING.* 

the most popular engine families so that the engine builder can meet the power requirements while staying within a budget. We sampled a cross-section of the industry to learn about their budget options and strategies for working with cost-conscious customers.

#### **1 WAY TECHNOLOGIES**

Sanctioning bodies are always shaping rules to help hold down racer costs and may work with manufacturers to establish a spec head, thereby reducing the costs of extensive porting. 1 Way offers a legal cylinder head for the ASCS 360 sprint car series, and the company wants to keep it legal even when customers ask for something extra on the QT.

"Every cylinder head porter will interpret those rules to what they want to read. We as a company are very strict and stringent on our rules reading," said Grace, noting that having a close dialogue with the tech officials can clear up misunderstandings and make adjustments as needed. "These rules now have allowed us to go in there and improve our product. We were able to work with them, and it's fair across the board."

1 Way recently developed a small block Chevy hybrid casting that is versatile enough to be machined for either a R0X head on a 4.500-inch bore spacing or a SB2.2 on a 4.400-inch bore space, thereby lowering the manufacturing costs handed down to the customer. Most of its work, though, comes in developing a variety of CNC-ported race packages using Brodix, All-Pro, Edelbrock, Pro-Filer and OEM castings.



1 Way Technologies works with a number of casting suppliers to provide cylinder head packages for all types of racing, including a legal ASCS head for sprint car racing.

"When we work with those companies, we have them make cylinder heads to our specifications, and then we CNC them to meet the customer needs," said Grace.

So, in effect, each order is custom, and costs will be reflected in the total package of valves, springs, rocker arms and other equipment in addition to being competitive in a variety of racing disciplines.

"We run the gamut," added Grace. "From hill climb, time attack, drag, circle track, asphalt and dirt, truck pull, water sports. Anything with an internal combustion engine and an aluminum cylinder head, we're working on it."

#### AIR FLOW RESEARCH (AFR)

CNC machining takes time, which costs money, so if a cylinder head is designed to run with only minimal machining in critical sealing areas after casting, then the cost of the head will be lower. The Enforcer line from AFR in Valencia, California, is driven by this "as-cast" strategy.

"They're very comparable to some of our entry-level CNC heads but just don't have



The AFR BBC Enforcer head is a big hit with Rat-motor fans. This as-cast head features 325cc intake runners and is suggested for engines over 500 cubic inches.

that next level of performance," explained Chris Sperling. "For guys who want that extra five to 10 horsepower, we recommend our CNC heads. However, our as-cast product line has just blown us away both in performance and integrity of the casting."

The company's most popular Enforcer head is the 185cc small block Ford, which has a street price under \$600 each, fully assembled. There are also 165cc, 205cc and 220cc versions

"We do a quick little bowl blend on both the intake and the exhaust to make sure that we have smooth transitions from the valve job. That's one of the more critical areas for flow," added Sperling, noting that racers are going to get what they pay for. "It's all in the quality of the components. Using poor quality components may save a little bit. But in the long run, it's going to cost more with rebuilds or not having the needed tolerances."

For an engine like the GM LS family, there are plenty of options. The Gen III Hemi, however, is just now starting to gain popularity, so performance options from the aftermarket are limited.

"We're targeting the Hemi for Q2 release in 2022," said Sperling. "We have two versions, a CNC-ported job and an as-cast Enforcer. The Enforcer will be a great stock replacement."

Dyno testing isn't complete, but Sperling expects the CNC version to flow about 60 cfm better than the as-cast model.

"The potential market for that is across the board because of the product levels that we're offering," said Sperling. "This product can go on anything from a naturally aspirated street/strip car all the way up to somebody who's got a twin-turbo application with 30-plus pounds of boost."

#### **ALL-OUT PERFORMANCE**

Based in Lindsay, Oklahoma, All-Out Performance is working on a total engine package for racers, and then the shop will release a cylinder head package that leverages that development experience.

At the 2021 PRI Trade Show, the company introduced an EFI LS engine designed for dirt track racing where the rules allow. "A lot of tracks are opening up their engine rules," said Bryce Koone. "We showed it off in a sprint car chassis, but it could very well be adapted into Late Models or modifieds. Right now, it's a plenum-style intake manifold, but we're testing individual runner intakes."

All-Out Performance is currently using factory GM cylinder head castings to hold down costs. "Again, I can't say

much about our dedicated cylinder head package," added Koone. "We also want to offer an economy motor package that can bolt onto an existing LS engine for dirt track applications. And we're testing both cathedral and oval port versions."

The motor shown at PRI offered about 800 horsepower. "But I left a bunch on the dyno, so we're hoping to be closer to a thousand," said Koone, noting that durability is a key goal for the project. "Especially in the economy motor where I want to run them for a season without having to touch it. We've got to catch a break in the racing world. Everything is so expensive."

#### BRODIX

Brodix of Mena, Arkansas, has one of the largest cylinder head catalogs covering different price points and power levels. The company also offers a wide variety of options and upgrades, so a budget head can get pricey with a little extra port work, better valves and upgraded springs.

For example, the IK series is Brodix's budget-priced cylinder head. It comes with either 180cc or 200cc intake ports and either 64cc or 70cc combustion chambers. The same casting can be CNC machined to open up the intake ports to 210cc. This head also receives slightly larger valves and stiffer valve springs.

For the big block Chevy, Brodix has an as-cast version of its popular CNC-ported head called the BB3 Xtra.

"It would be competitive in Super Comp, Super Gas or other index racing," said Mark Fretz. "We offer it as a copy of our ported head but in an as-cast version. They usually flow within a few CFM of the ported head." Brodix is another company that works

The Brodix IK 200 is a 23-degree small block Chevy cylinder head with an easy price point, yet the intake runners are CNC ported to 200cc and it flows 261 cfm at .600-inch lift.





closely with sanctioning bodies to provide spec heads, which are meant to hold down racing costs by keeping teams from experimenting and testing port and valveangle designs. One example is its ASCS sprint car head.

"We will give advice about cylinder head technology," explained Fretz, "but we don't try to influence rules in any way. Once a rule is in place, then yes, we will develop a head that will utilize all the advantages allowed in the rule. Also, we offer a full line of cylinder heads, and racing organizations may adopt our head as their spec cylinder head. But we do not go out and promote or try to bring in spec-head business."

#### **DART MACHINERY**

Dart, which is based in Warren, Michigan, recently gave its budget-minded SHP (short for Special High Performance) series of heads a makeover in celebration of the company's 40th anniversary. The SHP line *"IT REALLY JUST COMES DOWN TO, HOW MUCH POWER CAN THEY GIVE FOR THE LEAST AMOUNT OF MONEY?* 

> Dart's budgetminded series is the SHP line. As expected, the small block Chevy and small block Ford, seen here, are the most popular offerings.







the choice of top teams and builders across all venues of motorsport



Here's the Edelbrock E-street cylinder head for GM LS cathedralport engines. It's available bare or fully assembled with COMP Cams valvetrain components.

includes heads for the small block Chevy and Ford engine families.

The Ford Windsor-based head features the popular 20-degree valve-angle configuration and touts a revised port design for improved power at an economical cost. The Chevy head is the standard 23-degree configuration, again revising the ports for improved performance.

Both heads can be ordered in bare form or fully assembled, which includes Manley stainless-steel valves and a choice of 7- or 10-degree retainers. There's also a choice of 1.250-, 1.437- or 1.550-inch-diameter valve springs. Other features include Viton seals, hardened spring cups, guide plates and ARP rocker studs.

The heads are manufactured using a proprietary process with permanent molds and dense aluminum alloy.

#### EDELBROCK

Edelbrock, which recently relocated to Olive Branch, Mississippi, has an easy-tounderstand pecking order of its cylinder head lineups. The E-Street group is the least expensive with Ford and Chevy small block, Chevy big block and Chrysler big block kits. Depending on the kit, there are choices of valve size and springs for either a hydraulic roller or flat-tappet camshaft.

The latest offering in E-Street is for the

#### TWO-WHEEL PERFORMANCE

Harley-Davidson cylinder heads need love, too, and T-Man Performance in Kernersville, North Carolina, offers different power and price points for all the popular V-twin configurations. For twin-cam, two-valve engines there is a good-better-best choice between the Street Performer, Pro Touring and Thumper series, respectively. The top two heads are designed to work with larger displacements.

"We take existing Harley castings and modify them," said TR Reiser. "We have a five-axis CNC machine in-house. The Pro Touring is the most popular."

T-Man even offers a high-output version of the Pro Touring that's good for 140-plus horsepower on a 124-cubic-inch engine with pump gas.

"On the Thumper, we weld the ports, raise them a little and change the valve angle," said Reiser, adding that larger valves are also installed. The Thumper program is available only on air-cooled heads because the machine work could invade water jackets on liquid-cooled engines.

For the four-valve Milwaukee 8 engines, T-Man offers the base Street Fighter, and the Pro Street Touring is the top of the line.

"The Pro Street Touring is the more aggressive head with oversize valves, and it's fully CNC ported," said Reiser. "This head is used on 150-plus horsepower engines." —*Mike Magda* 



T-Man Performance deals in Harley-Davidson engines and offers a wide range of cylinder head packages for the different generations, including this budget-minded Street Fighter package. "WE DON'T RECOMMEND PUSHING THESE THINGS MUCH OVER 1,200 HORSEPOWER, BUT WE'VE GOT GUYS CHASING 2,000 AND HIGHER AND IT STILL HASN'T CRACKED.

LS cathedral-port engines. They come with either dual or beehive springs, 2.000/1.550 stainless-steel valves and chromoly retainers.

From there, Edelbrock has the Performer, Performer RPM, E-series, E-CNC, Victor Jr and Victor cylinder heads that target different price points and performance levels. As mentioned earlier, the term "budget" is relative to the racing series.

Edelbrock's new Victor raised-runner, CNC-ported LS7 head may be the budget choice for engine builders seeking very big horsepower. The need for a bigger intake valve drove that head's development.

"Traditional LS7 has been 12-degree with 2.200-inch intake valve max," explained Mike Sanders. "We were able to move the guides a little bit to put in a 2.250-inch valve. Now we have more cross-sectional area under the bowl, which moves more air to make more power. It's no different than raising the port on a big block. There is a better line of sight to the valve. But it should be noted that this head will still work with a stock intake manifold."

As with many other cylinder head suppliers, Edelbrock is looking at the Gen III Hemi for high-performance potential but won't disclose any specific details.

"There's a lot of hype about that market," added Sanders. "There aren't really a lot of high-performance cylinder heads available. Edelbrock has a Performer RPM version, but it's a market that's starting to develop and will be moving quite quickly."

#### FRANKENSTEIN ENGINE DYNAMICS

The budget-minded Monster cylinder



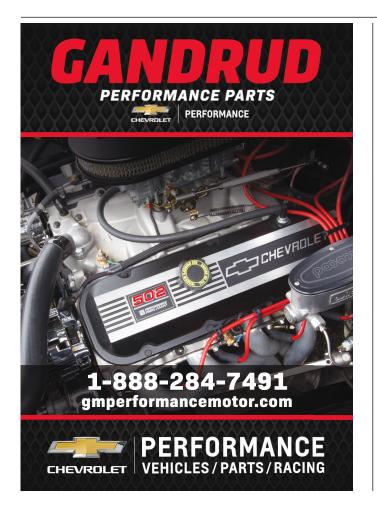


Frankenstein Engine Dynamics' budget cylinder head is called the Monster series, and it's quite potent. Shown is the M23 for small block Chevy.

head line at Frankenstein Engine Dynamics is not a basic street upgrade or designed for some forms of restricted racing. These are mid-level cylinder heads for a major leap in power levels over stock, so the base prices start at nearly \$1,800 and go up past \$2,500 for an assembled set of two.

"It really comes down to, how much power can they give for the least amount of money?" said Simcoe. "If we can give them a quality product that lasts, that gives them better than stock at a good price, I think that's really what we're aiming for."

The starting point for the Monster line was the M311 head for LS3-based engines. It features an 11-degree valve angle and 2.165/1.600 valve sizes. It flows almost 400 cfm at .800-inch lift. The head is fully CNC machined, then hand blended and deburred. Options are available. "We can upgrade to titanium intake valves. We actually have another head that's the same exact head as this, but we upgraded to a CHE bronze guide and Inconel exhaust valve," said Simcoe. "We call those the Boost Monsters. What's nice about this: It's an entry-level aftermarket cylinder head with a .750 deck, six-bolt head. We don't recommend pushing these things much over 1,200 horsepower, but we've got guys







A specialist at World Products conducts a thorough quality control check on the company's small block head before it's shipped out to a customer.

chasing 2,000 and higher and it still hasn't cracked. They are strong. Racers get all these benefits; plus, the factory intake manifold will fit."

#### WORLD PRODUCTS

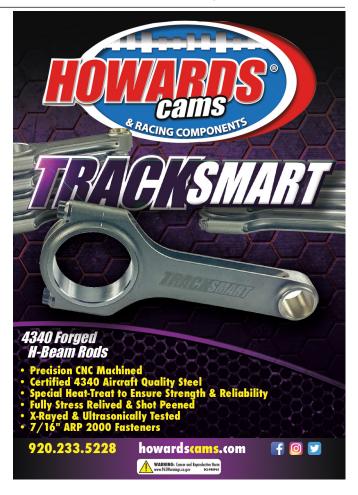
There's still a market for iron heads, driven mostly by restoration shops and racing classes that don't allow aluminum. While iron heads are heavier, they do offer a much lower price point than aluminum without sacrificing performance, according to Jack McInnis of World Products in Louisville, Kentucky. "There's no difference in power potential between an aluminum and iron head, all things being equal," said McInnis. "An American-made cast-iron head will offer very good performance for years, for quite a bit less money than an aluminum head. But because an iron head doesn't dissipate heat as fast, an aluminum head can actually tolerate a bit more compression.

"A lot of the iron-head market is complying with the rules in different types of racing," he continued. "It can be small block stuff in circle track. For big blocks, it gets into truck pulling. Also, marine applications are growing, especially offshore where salt water wreaks havoc on aluminum."

Recently, World Products started offering CNC-ported versions of its iron cylinder heads, giving racers and performance enthusiasts an option for more power at a budget price. High Velocity Heads handles the machine work.

"We have a few ported-iron versions for





"WE'RE SEEING THAT THIS PRODUCT CAN GO ON ANYTHING FROM A NATURALLY ASPIRATED STREET/STRIP CAR ALL THE WAY UP TO SOMEBODY WHO'S GOT A TWIN-TURBO APPLICATION WITH 30-PLUS POUNDS OF BOOST.

small and big block," said McInnis. A ported Motown 230 small block head can flow up to 318 cfm at .700-inch lift, while a Merlin 365 that's been CNC machined will flow nearly 430 cfm at .900-inch lift.

"And again," McInnis added, "aside from the rules or the corrosion, racers are still saving a good deal of money over ported aluminum heads." PRI

#### SOURCES

1 Way Technologies 1way-tech.com

Air Flow Research (AFR) airflowresearch.com

All-Out Performance facebook.com/aop83/ Brodix brodix.com

**Dart Machinery** dartheads.com

Edelbrock edelbrock.com Frankenstein Engine Dynamics frankensteined.net

**T-Man Performance** tmanperformance.com

**World Products** pbm-erson.com

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# **Gear Up Your Dyno**





Photo courtesy of Dynojet Research

# DYNOS FOR DOLLARS

BEYOND MEASURING HORSEPOWER, DYNAMOMETERS CAN HELP RACE SHOPS GENERATE BIG PROFITS. OUR EXPERTS EXPLAIN HOW.

By David Bellm

he dyno doesn't lie. It's a common axiom in all types of competition. Whether that often-repeated saying is absolutely true or not, it speaks to the power that these machines have over racers' psyches. The motorsports community worships at the altar of horsepower, and in that pursuit the dynamometer is the ultimate arbiter of truth.

With such a lofty stature, it's not surprising that there's a lot of money to be made with a dyno. Racers and car enthusiasts crave numbers, especially when it comes to power output. That desire naturally converts to a strong, steady market for those with the necessary equipment.

#### **MONEY MAKERS**

To learn more about the profit potential of dynamometers, we reached out to leading experts in the field. They shared with us six powerful ways dynos can increase a shop's bottom line, along with the all-important financial considerations it takes to get in on the action.

#### **1. NEW CUSTOMERS**

Dyno testing is almost a spectator sport these days, with much of the noise, intensity, and anticipation of actual motorsports. Add to that the powerful element of bragging rights, and a dyno becomes a true magnet for car enthusiasts. That makes it a powerful means of bringing new customers to a shop.

To create a buzz around a dyno and get attention, many shops hold frequent dyno days, in which groups of people gather and have their cars tested. "Dyno days generate a large local fan base," said Johnny Johnson of Dynojet Research, North Las Vegas, Nevada. "Interest grows on social "THE VAST MAJORITY OF THE REVENUE COMING INTO A SHOP THAT HAS A DYNAMOMETER COMES IN BECAUSE THEY'RE FIXING THE GENERAL TUNE ON A VEHICLE.

media when people have a cool car on a dyno and see how much power it laid down. You're letting everybody around know that your shop is there and open for business. That gets people in the front door."

#### 2. TUNING WORK

One of the biggest opportunities for making money with a dyno is in tuning customers' cars, according to our sources. With today's competition engines usually sporting fuel injection, forced induction and other complex systems, race-winning power is often a matter of tuning as much as hardware. This makes tuning a staple revenue source for dyno owners, which can generate considerable income month after month, year after year.

"The vast majority of the revenue coming into a shop that has a dynamometer comes in because they're fixing the general tune on a vehicle," explained Michael Caldwell of Mustang Dynamometer, Twinsburg, Ohio. "And people don't tune on chassis dynos for a couple hundred bucks. It's \$1,000 and up to get a car on the dyno and get it tuned."

#### **3. UPSELLING OPPORTUNITIES**

Dyno runs are an ideal setting for selling customers more potent equipment to satisfy their need for greater power. This can be done by suggesting individual pieces, but the most effective way has proven to be by putting together pre-tested packages that offer proven power increases.

"Being able to put together packages and have the numbers to back them up is really huge," said Johnson. "Just do the R&D on the dyno to make sure that the claim is true."

Successful shops aren't upselling just

the performance aspects of the cars they get on their dynos. All of a car's systems can mean potential work. "Dyno owners can make a lot of money with around-thevehicle inspections," added Johnson. "Are there any frayed or broken belts? How are the tires? Is everything tightened up? It's no different than a service advisor would do at your local car dealership when you bring it in for an oil change."

#### **4. RENTING DYNO TIME**

With dynos becoming more common and race engines getting costlier than ever, dyno testing is becoming the norm. Customers expect it. Even so, many shops still haven't made the leap into purchasing a dyno. That's another terrific opportunity for those that have.

"Renting dyno time is very lucrative," said Caldwell. "It can be thousands of dollars to get some cars where they need to be."

Many tuners roam throughout the country. These itinerant experts can be prime candidates for renting dyno time, according to our sources. "Some of the best tuners don't have a dedicated shop," observed Johnson. "They travel from shop to shop and schedule four or five cars to do in a couple of days. And then they're off to the next shop. So renting dyno time to them can pay very, very well."

#### **5. COST SAVINGS**

Besides bringing in revenue for a shop, having a dyno can also boost the bottom line by cutting costs. For one thing, just having the ability to test vehicles inside the shop eliminates significant expenses. "With a dyno, there's no need to take vehicles on drivability tests on the streets," said Allison Blackstein of Dynocom Industries in Fort Worth, Texas. "So it's a big insurance saving."

Shops that don't have a dyno in-house are probably renting time from one that does. That may not seem important if it's a couple blocks away and easy to schedule. But for many shops, it's not that easy. Often the nearest dyno is an hour or more away, and it gets booked well in advance. "It's a waste of time driving hours just to get some dyno runs in," noted Caldwell. "That time can't be billed to the customer. No one's going to pay for that."

Along with these savings, having a dyno allows a shop to pinpoint problems faster and more accurately. The precise data provided by a dyno can eliminate guesswork and speed up diagnostic tasks. "These days, a lot of mechanics just throw parts at things versus actually diagnosing the problem," said Johnson. "They're basically chasing a ghost. So having a dyno saves a ton of time and money."



Dynamometers can be a big revenue source for shops of all sizes. Setups like this Dynocom portable unit are well suited for tight spaces and temporary locations.



#### 6. INCREASED CREDIBILITY

Perhaps most important of all, a dyno can make a shop far more credible to potential customers. They know the shop will be able to back up performance claims, verify its work and tune for optimum results.

That assurance can set a shop far above its competitors, said Scott Lampkin of Dynapack, Clovis, California. "When there's a dynamometer at a facility, it's automatically going to be considered a more professional outfit in the eyes of the consumer who's shopping for someone to work on his car."

#### **PROFIT KILLERS**

As noted, a dynamometer can be a powerful money-making tool. But like any tool, there's a right way to use it and a wrong way. In contrast to the above, following are some of the biggest business mistakes dyno owners make, according to our sources.

#### 1. NOT CHOOSING THE RIGHT DYNO

Dynamometers come in many different types, with a vast range of prices. Businesses that end up with the wrong type of dyno for their needs could be limiting the kind of work they can pursue or have to turn away potential customers.

"Start by taking a hard look into the future of the business," explained Johnson. "What

*"DYNO DAYS GENERATE A LARGE LOCAL FAN BASE.* 

kind of cars do you hope to work on? Then base the buying decisions around that. For example, if Subaru tuning is in the plan for the future, then look at an all-wheel-drive dyno. Or at least think about a system that can be upgraded later."

### 2. NOT CONSIDERING THE FACILITY

The type of dyno a shop invests in is often largely dictated by the kind of building it's going in. This can lead to high-priced mistakes for shop owners who don't look at their facilities before choosing a dyno. "Is the building rented or owned?" asked Johnson. "If rented, the landlord probably isn't going to be happy with a giant pit dug in it to put the dyno in the ground."

"Power is another consideration," added Blackstein. "Some shops don't have high enough voltage, or they only have single phase instead of three phase." Dynamometers can unlock many profit opportunities, oftentimes with a relatively short ROI. "Dynos are really cheap compared to what they bring in," explained our source at Mustang Dynamometer.

#### 3. NOT CONSIDERING ADDITIONAL COSTS

Different types of dynos have different installation needs. These costs can be substantial and need to be factored into the overall budget for getting a dyno. "An aboveground dyno requires either a four-post lift or ramps," said Blackstein. "If it's going in-ground, it needs a pit. That can range from \$3,000 to \$7,000 depending on where the shop is located."

#### **4. NOT FINANCING**

Many shop owners are scared off by the relatively high prices of dynos. For that reason, they miss out on a potent flow of revenue that can last decades. "A lot of people think a dyno is going to cost them tons of money that they'll never be able to repay," said Johnson. "But there are financing options. And if a shop runs a couple of cars a month, it really pays for itself."

### 5. NOT KNOWING HOW TO USE THE EQUIPMENT

A big part of the revenue from a dyno comes from tuning and component installation. So it's crucial for shops to know what they're doing when it comes to running the dyno and working on the cars they specialize in. "A dynamometer is useless without a person who knows what they're doing," observed Caldwell. "It ends up being just a very expensive paperweight."

#### 6. NOT SPECIALIZING

Most of the benefits a dyno offers a shop are built on the foundation of credibility. Building that crucial reputation starts with



understanding what kind of cars the shop will specialize in. "It can't be the jack of all trades," said Lampkin. "It's very rare for a dyno shop to be successful tuning everybody's product."

#### 7. NOT NETWORKING

Being successful with a dyno is largely a matter of being visible to the local community of racers and car enthusiasts. For this, it's absolutely crucial to network within the area's car culture. "The best way to get business is word of mouth," Lampkin said. "Be involved in your segment."

#### 8. NOT KNOWING THE BUSINESS

Although dynos can be a powerful revenue source for shops, they're still just one component in the overall mix. Without the essential foundation of a strong business. a dyno won't add much. "Years ago, a guy bought a dyno from us, and I showed up to train him," recounted Lampkin. "There wasn't even a toolbox in his shop. I asked him, 'Are you a mechanic?' He said, 'No, I worked at my dad's pizza parlor. I want to be a tuner, and he financed this for me.' His dad dropped \$120,000 on this dyno. I ended up selling it for him six months later."

#### 9. NOT BEING CREATIVE

To profit from a dyno, be creative and look for opportunities wherever they present themselves, note our sources. "It's kind of like selling hamburgers," explained Johnson. "McDonald's has the Big Mac, the Quarter Pounder, the cheeseburger, and others. They're all hamburgers. It's just a different bun, different sauce. Like that, figure out how the shop can generate money off of this same piece of equipment in the same spot."

#### **10. NOT GETTING A DYNO**

Perhaps the biggest mistake of all is passing completely on the opportunities that a dyno offers. Sure, getting one requires thought, planning and plenty of number crunching. But the rewards can be well worth the effort.

"Without your own dyno, you have to wait in line at somebody else's shop," noted Caldwell. "You've lost control over



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DYNAMOMETERS



Frequent dyno days can dramatically increase a shop's visibility. "You're letting everybody around know that your shop is there and open for business," said our source at Dynojet Research.

"WHEN THERE'S A DYNAMOMETER AT A FACILITY, IT'S AUTOMATICALLY GOING TO BE CONSIDERED A MORE PROFESSIONAL OUTFIT IN THE EYES OF THE CONSUMER WHO'S SHOPPING FOR SOMEONE TO WORK ON HIS CAR.

your process, and you're just subsidizing somebody else's dynamometer investment."

To that Johnson added, "One of the biggest things I hear from people is, 'If I would have known it was that easy to get a dyno, I would have done it years ago."

#### MAKING THE LEAP

According to our sources, the profit potential with a dyno can be immediate and powerful. "Dynos are really cheap compared to what they bring in," said Caldwell. "A shop might have \$45,000 to \$55,000 into it, but each vehicle that runs across it will bring in \$1,000 to \$3,000, depending on how much time is spent on the vehicle."

Nonetheless, that initial investment certainly isn't pocket change. Even low-price





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dyno setups cost more than \$10,000. That's a significant purchase for well-to-do shops, and a huge expenditure for ones that aren't so well endowed.

This is where financing plays a crucial role. The ability to buy or lease a dyno over time is vital to making the numbers work. "With interest rates where they are, it's kind of foolish to pay cash for a dyno," explained Caldwell. "Just lease-to-own and spread the payments out over 60 months. There's very little down required. They might ask for first and last payment, which might be a couple grand up front. But then the cash out of pocket is pretty much removed from the table. It's bringing in more than that per month. So from a cash-flow standpoint, it can be completely invisible to the shop."

Even so, many shop owners wonder how quickly a dyno can generate positive cash flow and pay for itself. According to our sources, that can vary widely, depending on the shop and what it does with its dyno. For example, some shops use their dyno mostly for their own internal development work. For

> When purchasing a dyno, shops need to consider their future needs. These Dynapack modular units can start as a two-wheel-drive setup and expand to all-wheel-drive later.



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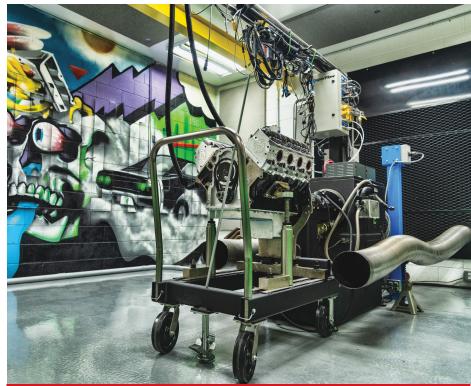
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#### DYNAMOMETERS



Racing engines nowadays are increasingly dependent on tuning to achieve maximum power output, making dynos a vital profit-making tool for engine builders.

them, the return on investment can be four or five years compared to renting time on someone else's dyno.

On the other hand, a dyno can pay for itself almost immediately for shops selling dyno services, if they have a good location, a solid market and a strong grasp of the kind of vehicles their customers bring in. "I've seen some shops that do enough work where it literally pays for itself in a matter of months," observed Johnson.

With the many business advantages dynos offer, it's not surprising that more and more shops are getting them. It's not just the "in" thing to do. Dyno work is more than ever a big percentage of the revenue that successful shops bring in.

"A dyno is a money-printing machine," said Caldwell. "The longer you put off getting one, the more money you're losing."

### SOURCES

**Dynapack** dynapack.com

Dynocom Industries dynocom.net Dynojet Research dynojet.com

Mustang Dynamometer mustangdyne.com



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# MEMBER CHECK-IN

#### **JOHN JOHNSON**

PRI Membership encompasses a wide range of companies including the Spartan Group, which focuses on management services to middle-market business owners in the performance segment.

#### By Jim Donnelly

There is a wave of foreseeable changes coming in the aftermarket and racingcomponent industries, unfolding as longstanding entrepreneurs retire and the growth of electrification presents both challenges and opportunities for business owners and investors. Navigating these financial and organizational pathways is the specialty of John O. Johnson, co-founder of the Spartan Group in Pasadena, California, which provides advisory and management services to business owners in what the investment world calls the middle market.

What's that? In business parlance, the middle market is made up of companies, generally privately owned or closely held, with revenues running from \$5 million to \$1 billion annually. They account for about a third of the US private-sector GDP and employ about a quarter of the nation's workforce. They're also very well represented in the automotive aftermarket and performance sectors, which account for a substantial chunk of the Spartan Group's

clients. Essentially, middle-market businesses are too big to be called family owned and too small to qualify as multinationals.

Before co-founding the Spartan Group with his partners, Johnson managed an IPO for Edelbrock and went on to form financial management relationships with K&N Filters, Dart Machinery, Aeromotive and Jesel, among others. By the early 2000s, Johnson was focusing on performance industries as clients for his investment-banking services. He worked in mergers and acquisitions on both the buy and sell sides, helped business owners secure investment capital, and counseled them on taking their firms public. He co-founded the Spartan Group in 2003, and more recently was named

> SEMA's Person of the Year in 2017 for contemporizing the association's organizational and financial discipline.

"A more apt description than middle market is family owned or entrepreneurially owned companies," Johnson explained. "We're an investment bank focused on them. Most of my clients are not private equityowned companies. We sell some of them to private equity, and we buy some companies from private equity, but my clients are longterm relationships. Sometimes it's called a boutique bank because of the client quality. Private equity companies tend to be more institutionally owned, backed by limited partners that are often pension funds, insurance companies or governmental entities. That's typically not our client base.

"We get to know companies for multiple years, often decades, and work with them before there's a real transaction," he continued. "We're talking with them about the industry, about technology, about the RPM Act, about emissions standards, about electric vehicle conversions, even mundane things like sales and use tax compliance and personal-data compliance, any kind of advice that involves business in the performance aftermarket. Effectively, we're problem solvers, but we also bring transactional and financial advice."

The Spartan Group's client base ranges from OE aftermarket suppliers and fullsystem manufacturers to powersports and Class 8 truck builders. Johnson estimated, however, that performance is 75% of his business, with five to 15 major transactions per year.

The industry's potential challenges in the near-term fall into two broad categories starting with demographics, as the baby boomer generation of business owners ages out. "The generational shift is from the boomers to what's now the largest consumer segment in our society, which is millennials," Johnson said. "Buyer appetite is toward millennials, so the boomers are transitioning either to the next generation of family ownership, or in more cases than not, to new owners. That's an overarching issue."

Johnson foresees the industry's current crunch of supply and labor shortages easing within six to 12 months. A parallel issue, from an immediacy standpoint, is his view that e-commerce and direct-to-buyer engagement are industry priorities. "There's a huge movement toward buying direct



from the manufacturer," he said. "That can increase its margin, and the manufacturer can talk directly to the consumer. On the EV side, Tesla does it. It's like Walmart versus Amazon."

The other key consideration for Spartan is the intertwining of technological and regulatory realties, he added. "The most important ones are adherence to the Clean Air Act of 1986, the most pivotal issue in the industry today, which is why the RPM Act that SEMA and PRI support is so important. Consumers have to have the right to choose to convert an OE vehicle and use it on the race track. We advise a lot of our companies on strategies for dealing with that.

"The related challenge is how the industry adapts to electric-vehicle conversion," Johnson said. "We have a view at this firm that EV conversion is going to be healthy over time. There is a base of more than 290 million installed ICE vehicles in North America. Roughly 4% of vehicles sold this year are going to be full EV-not hybrid. And even though the infrastructure bill will have a lot of stimulus to transition to them, our studies show that 19% of new-car sales in 2030 are going to be EV. That means 81% are still going to be ICE. And that's on top of the 280 or 290 million that are still in the marketplace. With the stimulus, maybe that goes to 25% instead of 19. The point is, ICE engines are going be around for a while, and the EVs are going to have a healthy market share, growing at over 21% over the next decade, even without the big juice or stimulus. So we're going to have to coexist, and that coexistence is really the industry's other major challenge."

Major EV suppliers will likely experience their own consolidations before exploring future mergers with the aftermarket, Johnson predicted. What likely won't change is that buyer enthusiasm, namely the car person or racer, will continue to power the aftermarket during the EV pivot. "We've seen dramatic growth in the pandemic as people have stayed home and wrenched on their vehicles, invested stimulus money in their projects. They're enthusiasts. It's a way of life. It's a lifestyle, not a hobby, and that's still the driver in the market. We're a car culture. Really, the discussion still begins and ends there. That's what makes this such a fun industry." PRI

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# PRI EDUCATION

#### **OIL PAN AND COVER UPGRADES**

Relying on products designed for street and highway use will prove detrimental once a race vehicle hits the track or off-road course. Consider these guidelines when choosing an oil or transmission pan.

#### By Michael Eckerson

acers should be aware that there are upgrade options to the longlived trend for manufacturers to use stamped steel for differential covers, oil pans and transmission pans, along with molded plastic for oil and trans pans. These materials can do a "good enough" job holding fluid in, but they are sub-par when it comes to heat dissipation and, frankly, providing any other benefits.

#### SETTING THE RECORD **STRAIGHT ON TIN**

The term "tin" is frequently used when describing stamped-steel materials. Tin is rarely used by itself but rather is alloyed for a particular purpose. For instance, a grocery aisle tin can is a tin-coated steel container. Likewise, oil pans are not made of tin but may be alloyed with both tin and steel. Sheetmetal is simply metal formed into thin, flat pieces. Many different metals can be combined to create sheetmetal, such as aluminum, brass, copper, steel, nickel and titanium.

#### PLASTIC PANS: A DISCARDED REALITY

The reality of using plastic for oil and trans pans is that they are discarded as part of the service cycle, only to require the customer to repurchase the same (underperforming) pan. It's also worth noting that plastic pans can warp, melt and fracture upon impact. Molded plastic also acts as an insulator, holding in damaging heat.

#### QUALITY AND PERFORMANCE COST MORE

The process of casting aluminum alloy is not cheap, so a replacement part will cost more. However, cast aluminum alloy is much better at heat dissipation than stamped steel or plastic. Aluminum alloy conducts heat at least three times better than mild steel. So, all things being equal, a transmission with an aluminum pan will cool the fluid three times faster than one with a stock steel pan (depending on the environment).

Adding to the cooling benefits of cast aluminum are fins, or raised surfaces, on the outside that act to increase surface area and capitalize on the under-vehicle airflow. Additionally, pans and covers with internal heat sinks help radiate temperatures outward and help reduce the oil sloshing effect. This ensures the oil stays available at the oil pickup and generally eliminates the possibility of oil starvation in hard cornering and heavy acceleration. Finally, some aluminum pans and covers are engineered with cast gussets on the outer surfaces, adding strength and providing rigidity for the housings.

#### FLUID VOLUME MATTERS

Many aftermarket pans and covers offer increased fluid volume over stock. Higher fluid volumes suspend more damaging metal particles, thus offering greater wear protection and extended service intervals. This fluid increase also contributes to lower temperatures since higher fluid volumes take longer to heat up. A nominal increase or decrease of 10 degrees is significant when considering heat's detrimental effect on fluid, seals and valve-body components.

Another way to increase fluid volume is through the use of inline trans fluid and inline oil coolers. These components also take advantage of free-flowing air to cool fluid. In addition, factory tubeand-fin components can be upgraded to the superior bar-and-plate style of aftermarket coolers for even better cooling performance.

#### DURABILITY

Cast aluminum alloy is more robust than plastic or stamped-steel pans. If either of these factory parts has contact with a hard surface on the road or is pierced, such as on an off-road trail, it can be potentially dangerous, especially in remote locations. The cast options can last a lifetime,



pan. Gussets, meantime, provide strength and rigidity to the housing.





Inline transmission fluid and inline oil coolers take advantage of freeflowing air to cool fluid. The factory tube-and-fin components can be upgraded to the superior barand-plate style of aftermarket coolers, seen here, for improved cooling performance.

and some manufacturers back up their products with a limited lifetime warranty to the first owner.

#### BENEFITS OF DRAINAGE AND MAGNETS

Improved drainage is another benefit of upgrading to cast products. Many stock pans and covers now come without a drain plug, which can create fluid showers when servicing. If a stock pan comes with a drain plug, the plug is often located above the bottom of the pan, leaving behind a small pool of heavy, dirty fluid when the pan is emptied. The fresh fluid becomes immediately contaminated with gritty sludge in these cases.

Many of the stock pans also don't have an integrated magnet, so the abrasive metal grit circulates, potentially causing havoc. The hope is that all particles will get lodged in the filter, but even the best filters don't catch everything. The better cast pans come with magnet-equipped drain plugs to hold ferrous metals. The best plugs have integrated rare-earth neodymium magnets, which are almost magnetic overkill, but fluid can never be too clean.

#### **RACING APPLICATIONS**

Pans and covers for competition are highly specialized equipment. Options often include billet aluminum, and, in some cases, hand-built pans. Some racers opt for two-piece oil pans that allow for lower crankcase access and inspection without complete removal and replacement.

Machined billet offers superior structure compared to cast or fabricated options that can crack or fail at the welds due "PANS AND COVERS FOR COMPETITION ARE HIGHLY SPECIALIZED EQUIPMENT.

to vibration. However, the cost of billet products is significantly higher since the manufacturing process removes up to 95% of the raw material.

Some specialized pans have a sump chamber to keep the oil from pooling away from the pickup. A windage tray is used to cap the sump and helps keep the oil trapped. Baffles are also added to the floor of the sump to minimize sloshing.

The dry sump is widely considered the ultimate oiling system for internal combustion engines. Demonstrating this is the fact that all Formula 1, Indy cars, Le Mans, sports racing cars, and Super Stock cars use dry sumps. Traditional wet-sump oil systems are less capable of minimizing the fluid movement that occurs when high G-forces cause the oil to move away from the oil pickup, which creates a pressure drop. This is particularly harmful when the engine is spinning at 6,000-plus rpm.

The dry-sump system eliminates these problems by providing constant oil pressure. Other benefits are the ability to use a shallower pan, horsepower increase by eliminating the parasitic drag due to oil sloshing into the rotating assembly, and overall cooler oil.

#### FINAL CONSIDERATION

Depending on how hard a vehicle is driven or raced, one constant remains: Seals, rings and sensitive valve-body components do not perform well at even moderately high temperatures, especially for extended periods of time. In these conditions, the reality of greater wear and reduced service life is inevitable. Adding easily bolted-on aftermarket products increases cooling, rigidity and fluid volume, and makes servicing these high heat-generating components easier. The decision to upgrade is something every consumer should consider.

Michael Eckerson is the Design Department Manager for Pacific Performance Engineering (PPE) in Montclair, California, where he oversees full-scope brand unity, coordinates product placement, marketing, and assists with product development. Eckerson is also the Editor In Chief of Drive! Magazine, which is distributed in the western United States.



Many stock pans don't have a complete fluid drain, leaving the dirtiest oil to contaminate the new oil each time the oil is changed.

# ADVOCACY CORNER

Tracking legal, legislative, and regulatory developments impacting the racing and performance industry.

#### **Edited By Laura Pitts**

RI's Washington, DC-based advocacy team and Race Track Ambassador Tom Deery work continuously to protect tracks, sanctioning bodies, and motorsports businesses around the nation. This month, we are tracking several initiatives, including many that came out of the 2021 PRI Trade Show: track operators and promoters uniting to benefit the industry; the Save Our Racecars Rally that raised funds to support motorsports; and Indiana Governor Eric Holcomb's visit to the event. Plus, an update on our campaign to increase awareness of the vital RPM Act.

### TRACK OPERATORS, SANCTIONS UNITE

Drag racing track operators and event organizers across the nation have teamed up to find solutions to current issues, including how to keep gates open and grandstands full, plus how facilities can receive legal assistance for issues such as noise ordinances and curfews.

An all-encompassing roundtable, led by Kurt Johnson of Total Venue Concepts, drew about 70 professionals representing some 30 drag racing facilities and five sanctioning bodies.

"The session was a huge success. The beauty is the ease of collaborating between so many tracks with different sanctions, sizes, and geographical areas. Yet, all of these tracks have so many of the same problems," Johnson said. "Many in attendance did not realize that PRI can help the tracks with legal issues. This was addressed, and contact information was shared with attendees, so that alone was a big success." [Editor's note: the PRI track promoter helpline can be reached



An all-new dedicated workspace at PRI 2021 helped unite owners, promoters, officials, and staff of race tracks and sanctioning bodies.

at 202-794-8279 and racinghelp@ performanceracing.com.]

The drag racing meeting mirrored similar roundtables for dirt and asphalt oval tracks led by Joe Skotnicki of Racing Promotion Monthly. In these separate gatherings, topics ranged from on-track competition to marketing events, including the "hot topic" of live streaming races. Around 50 track and sanction professionals attended the dirt oval meeting, while approximately 30 participated in the asphalt installment.

"Several regions were represented, including Florida, Alabama, Alaska, and more. Some big names were also present, including Gregg McKarns, Larry Kemp, Larry Boos, Bob Sargent, Scott Gobrecht, and more," Skotnicki said. "Anytime you can bring promoters and sanctions together, it is amazing what you will learn. It was a success, and also a building point for further discussions."

The conversations took place in the newfor-2021 Track Operators, Promoters, and Sanctions (TOPS) Workroom and Lounge as part of PRI 2021. The space, dedicated to owners, promoters, officials, and staff of motorsports facilities and sanctioning bodies, provided a one-of-a-kind opportunity to connect with professionals with shared interests and needs.

"One of the strongest elements of the PRI Show is the participation of the tracks and sanctioning bodies. Outside of the lineup of world-class PRI Education seminars, we've never given them the opportunity to meet, greet, and discuss in a formal setting. That's what we accomplished in 2021 with the brand-new TOPS Workroom and Lounge," Deery said. "It allowed that segment to have their own space with like-minded people; but more importantly, it helped show they are not in this alone—PRI is here to help, along with countless other tracks.

"For those who weren't able to make it, we missed you at the Show," he added. "But PRI's track promoter helpline and resources are available each day to help with those everyday problems. It can be as simple as talking a problem through, getting in touch with valuable contacts, or even resources to solve an issue."

Skotnicki invites track operators and sanctions to continue the dialogue in Florida during Racing Promotion Monthly's 49th RPM@Daytona Workshops set for February 13–15, at the Plaza Resort in Daytona Beach.

#### INDIANA GOVERNOR TOURS PRI SHOW

In a show of support for motorsports, Gov. Eric Holcomb walked the floor of the 2021 PRI Trade Show, where he saw firsthand what constitutes the world's premier gathering of motorsports professionals.

Nearly 100 exhibitors have headquarters or facilities in the Hoosier State, including Hoosier Racing Tire, Impact Racing, Lucas Oil Products, National Hot Rod Association (NHRA), and PWR Advanced Cooling Technology North America, all businesses Gov. Holcomb was able to connect with during his tour.

While there, the governor doubled down on his support for racing by stopping by the new

PRI Headquarters booth and signing up for a Champion PRI Membership.

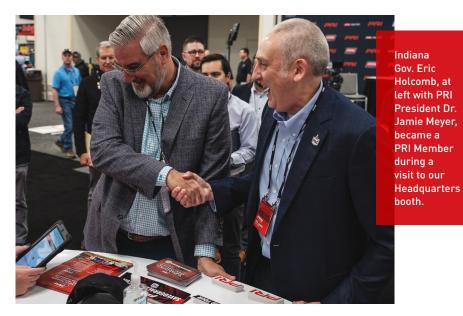
"Visits like Gov. Holcomb's to PRI serve to raise awareness for the industry with key lawmakers," said Daniel Ingber, PRI's Vice President of Government and Legal Affairs. "The more friends we have in our corner, the more we can get done. PRI encourages its members to get engaged and host their local lawmakers to tour their businesses. PRI Government Affairs staff are available to help make all the arrangements."

Companies interested in hosting lawmakers at their motorsports business may contact Eric Snyder at erics@sema.org.

#### RALLY RAISES OVER \$24K FOR PAC

More than \$24,000 was raised for the Performance Racing Political Action Committee (PAC) during the first-of-its-kind Save Our Racecars Rally at the 2021 PRI Trade Show. More than 300 PRI members attended the event in the Quarterback Suite of Lucas Oil Stadium.

"The goal was to raise awareness for and to stimulate engagement with PRI's government affairs efforts, such as the passing of the RPM Act to ensure street cars can be legally converted into dedicated race cars. To that end, the event was a complete success," said Daniel Ingber, PRI's Vice President of Government and Legal Affairs. "One-hundred percent of the funds raised will go toward





Hundreds of supporters turned up for the Save Our Racecars Rally to raise awareness and funds for the PRI PAC.

supporting the candidates and lawmakers that support racing."

The Performance Racing PAC was established as a direct way to influence lawmakers and protect the racing community's interests. "Now more than ever, motorsports faces challenges that must be addressed in a united effort to protect the rights of racers, racing businesses, and the entire community," Ingber said.

For more information, visit performanceracing.com/rpm-act.

#### CAMPAIGN CONTINUES SUPPORT FOR RPM ACT

PRI's advocacy team continues its social media campaign encouraging the racing community to write their federal officials in the U.S. House of Representatives and Senate to ask them to support the RPM Act.

"Many wonder if their voice can make a difference, and the answer is a resounding yes," said Eric Snyder, PRI's Director of Congressional Affairs. "The people who make up the racing industry—including the race teams, manufacturers, retailers, fabricators, fans, and more—are on the frontlines in the fight to pass the RPM Act."

The latest campaign achieved nearly 800,000 impressions on social media at press time, which has helped to increase the outreach from the racing community and grow lawmakers' support for the RPM Act. PRI appreciates the efforts of everyone who has helped so far and is enthusiastic about the campaign's impact as it continues to evolve. **PRI** 

# INDUSTRY NEWS

#### PRI REINFORCES COMMITMENT TO INDUSTRY WITH PURCHASE OF NEW MEMBERSHIP HQ

PRI has strengthened its commitment to the motorsports industry and cemented its presence in the racing capital of the world by purchasing a 42,500-square-foot building in Speedway, Indiana, just outside of Indianapolis. Located within walking distance of the Indianapolis Motor Speedway, the building will serve as PRI Membership Headquarters and offer a broad range of programs and services to assist the motorsports community.

"Indianapolis is the epicenter of motorsports in America and the world, and we are excited to work alongside our Indianapolis neighbors and racing industry icons, and stand at the forefront of the racing community," said PRI President Dr. Jamie Meyer. "PRI Membership is a groundbreaking program that unites the industry and creates a collective voice for the motorsports community to address any challenges and needs." The new Membership Headquarters, at 1255 North Main Street in Speedway, further solidifies PRI's connection to Indianapolis, site of the annual PRI Trade Show. The building, which will be a key tool in helping expand PRI Membership, will include office space for dedicated staff; incorporate a Content Factory where garage space will be transformed into a content-generation machine; offer live and virtual educational opportunities; host motorsports gatherings and membership meetings; and more.

The facility also will support organizational initiatives including the PRI Road Tour, which launched in 2020 and brought our

team of award-winning content creators across the US for visits with motorsports companies and race tracks, sharing their stories and increasing awareness to billions of enthusiasts.

"PRI is at the forefront of building, promoting, and protecting the racing community," Meyer added. "The new PRI Headquarters in Indianapolis will allow us to expand on the PRI Membership promise to unite the industry and remain a strong voice for the racing community."

PRI Headquarters is scheduled to open in May 2022, ahead of this year's running of the Indianapolis 500.



PRI's new Membership Headquarters, scheduled to open in May, is located within walking distance of the Indianapolis Motor Speedway.

#### CHRIS KERSTING TO RETIRE FROM SEMA, PRI

Following more than 30 years of service to the Specialty Equipment Market Association (SEMA), President and CEO Chris Kersting has announced his impending retirement.

"Our mission at

Chris Kersting

SEMA is to help our member companies succeed and prosper," said Kersting. "Pursuing that mission has provided three decades of exciting and fulfilling work engaging with the outstanding people in our industry to find new and better ways to help them thrive. Together with our talented SEMA team, we've built a truly innovative portfolio of services and benefits—and certainly one of the greatest trade shows in the world. You couldn't ask for a better career."

Kersting joined SEMA in 1996 to lead the organization's Washington, DC, office as Vice President of Legislative and Technical Affairs. Kersting took the helm as SEMA's CEO in 2002. Milestones include launching the SEMA Data Co-op, the SEMA Garage and Emissions Lab, SEMA Ignited, the PRI acquisition, the SEMA Garage in Detroit, and developing the globally recognized SEMA Show.

Beginning February 1, Kersting will transition into an advisory role, which will continue through July. SEMA executives Bill Miller (Senior Vice President of Operations) and Mike Spagnola (Vice President of OEM & Product Development Programs) will serve as interim co-CEOs.

#### SCAT ENTERPRISES, AIR FLOW RESEARCH JOIN FORCES

SCAT Enterprises has been acquired by Taglich Private Equity, which owns Air Flow Research Heads, the manufacturer of cylinder heads and intake manifolds in Valencia, California.

The transaction includes the Procar by SCAT seating division.

Under terms of the agreement, SCAT's management team will remain in place, along with SCAT's production facility and employees based out of the company's Redondo Beach, California, headquarters. SCAT founder Tom Lieb will stay involved in the business, while SCAT's current COO, Craig Schenasi, will become CFO of the combined companies as well as an owner in the business.



#### IRACING ACQUIRES MONSTER GAMES, ORONTES GAMES

Chelmsford, Massachusetts-based iRacing.com Motorsport Simulations, the provider of the iRacing simulation gaming platform, has announced the acquisition of Orontes Games and the acquisition of Monster Games.

Orontes Games lead developers Christian Folkers and Thorsten Folkers will join the iRacing development team along with the president and owner of Monster Games, Rich Garcia.

#### JRI SHOCKS ACQUIRED BY ARNOTT

Arnott—the provider of air suspension products for passenger vehicles in Merritt Island, Florida—has announced the acquisition of JRi Shocks based in Mooresville, North Carolina.

JRi Shocks Founder Jeff Ryan will continue to manage engineering activities for the company, while VP of Operations Det Cullum and JRi President and CEO Ray Evernham will remain involved in advisory roles.

#### MOHAMMED BEN SULAYEM ELECTED FIA PRESIDENT

Mohammed Ben Sulayem has been elected president of the Fédération Internationale de l'Automobile (FIA) based in Paris, France. He succeeds Jean Todt, who has served the maximum three terms since his election in 2009.

Elected to a four-year term, Sulayem has appointed Carmelo Sanz de Barros as president of the Senate, Robert Reid as deputy president for Sport, and Tim Shearman as deputy president for Mobility.

#### SPEEDWAY MOTORSPORTS ANNOUNCES PROMOTIONS

Two industry veterans recently received promotions at Speedway Motorsports, as Mike Burch has been named the company's chief operating officer, while Jerry Caldwell was promoted to president of Bristol Motor Speedway. The promotions were announced

### CONNECT WITH PRI AND THE RACING COMMUNITY ON SOCIAL MEDIA

prishow.com/social f y D in 0 J





#### PR/

by Speedway Motorsports President and CEO Marcus Smith.

Burch, who joined Concord, North Carolina-based Speedway Motorsports in 2003, most recently served as chief strategy officer, and previously held positions of senior vice president of national sales and marketing and manager of business development.

Caldwell, who began working full-time at Bristol Motor Speedway in its sales and marketing department in 1997, has been the executive VP and general manager of Bristol Motor Speedway and Dragway since 2010.

#### NASCAR ANNOUNCES COMPETITION PERSONNEL PROMOTIONS

NASCAR has announced that Brad Moran has been promoted to NASCAR Cup Series Managing Director, and Seth Kramlich will transition to the role of NASCAR Camping World Truck Series Managing Director.

Most recently, Moran held the position of NASCAR Camping World Truck Series Managing Director. Kramlich moves to his new role after three years as NASCAR Xfinity Series Assistant Director. Moran, Kramlich, and NASCAR Xfinity Series Managing Director Wayne Auton will remain at the NASCAR Research & Development Center in Concord, North Carolina, and report to Scott Miller, Senior Vice President of Competition.

### TOTAL SEAL ADDS NEW QUALITY DIRECTOR

Total Seal Piston Rings in Phoenix, Arizona, has announced Victor Wise as its new director of quality. Wise will focus on day-to-day operations, working with management and manufacturing to ensure the highest quality

Victor Wise

product ships to the customer on time, with the tightest tolerances possible, the company said.

With over 15 years in management, Wise's experience includes aerospace, automotive, semiconductor, and commercial.

#### MAHLE MOTORSPORT EXPANDS SALES, ENGINEERING DEPARTMENTS

MAHLE Motorsport has announced the addition of three new employees to the company's staff headquarters in Fletcher, North Carolina. The three positions fulfill roles in sales technical support and engineering design. Sales administrator Adam Beddingfield has been hired along with engineers Brian Fair and George Wright. All three employees report to MAHLE Motorsport Product Manager Eric Grilliot.

#### PERTRONIX PERFORMANCE BRANDS NAMES NEW INVESTMENT PARTNER

San Dimas, California-based PerTronix Performance Brands—the provider of ignition, exhaust and fuel system products has announced a new investment partner, Charger Investment Partners private equity firm based in El Segundo, California.

"Charger's operational knowledge and investment background brings value to our organization and will support the growth of our brands and the ability to leverage future opportunities," PerTronix CEO Robyn Hetland said.

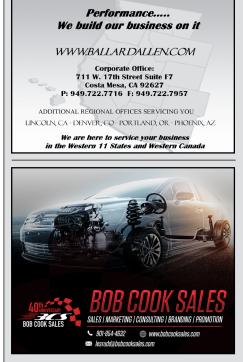
#### GEOFF BUXTON JOINS WILWOOD ENGINEERING

After more than two decades of work with IndyCar, World of Outlaws, and USAC race teams, Geoff Buxton has joined Wilwood Engineering's team of field sales and support representatives.

In his new role, Buxton joins a team that spends weekends at race tracks across the US offering trackside brake system support.

Originally from Australia, Buxton moved stateside when he became a member of Randy Hannagan's World of Outlaws crew. He has spent time with the Andretti and A.J. Foyt racing teams, too, as well as in Indy Lights, Global Rallycross, and other motorsports disciplines.

For all the latest motorsports industry news, visit primag.com/industrynews.



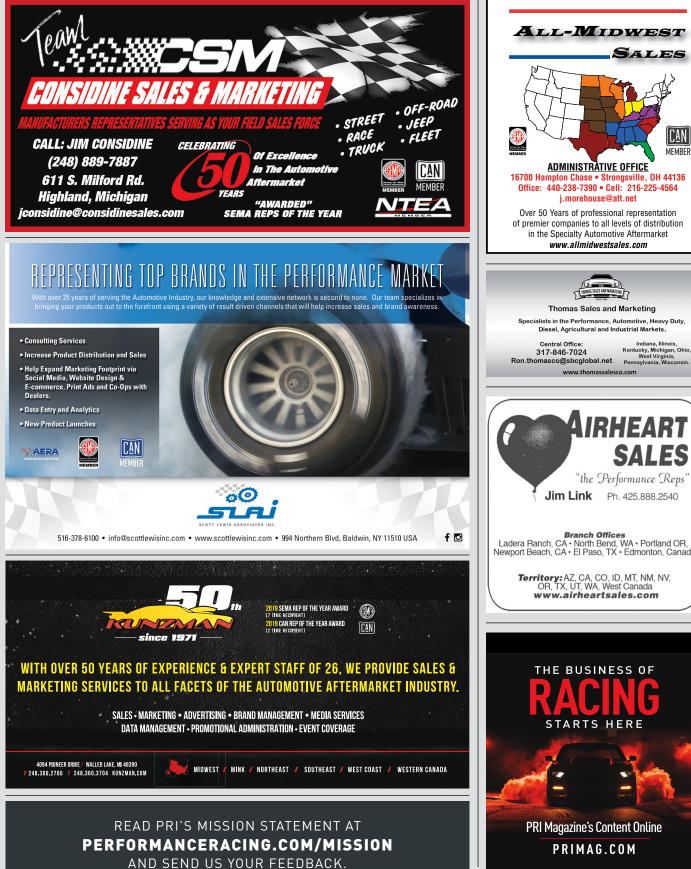
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## PERFORMANCE INDUSTRY REPS



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# SOCIAL STATUS

A closer look at racing and performance industry members' winning strategies on Instagram, Facebook, Twitter, and more.

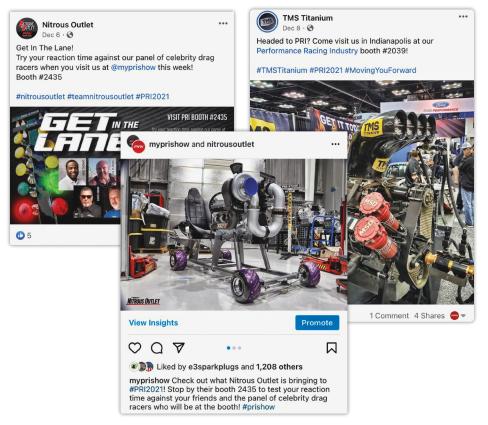
he 2021 PRI Trade Show was a huge success in many ways, including the ever-important social media marketing aspect of the event. For motorsports companies exhibiting in the world's biggest trade show for racing professionals, it's imperative that they promote their presence there, not only to potentially bring in more foot traffic, but also to highlight their relevance in the performance and racing realm. Additionally, social media can be leveraged to show off new products or make important announcements.

We asked a handful of 2021 PRI Show exhibiting companies how they utilized social media throughout the event. The common consensus was to let people know they were exhibiting at PRI, and to feature what was happening in their booth. "We used our social presence to make sure people knew we were at the Show," noted Chris LaCouture of E3 Spark Plugs, Ponte Vedra, Florida. "Months in advance we posted that we were attending PRI and shared our booth number along with encouraging people to stop by, visit, and check out our latest products. In addition, any time our partner drivers stopped by, we posted about them and tagged them, resulting in them sharing that same content and extending our reach."

Todd Harrison at TMS Titanium, Poway, California, added, "We used social media by posting our booth number daily and also sharing content of what was happening each day at our booth, from drivers' autographs to testimonials about TMS. We made sure to tag the participants to give them the chance to reshare or for followers to make sure they knew where their favorite drivers were."

K&N, located in Riverside, California, used social media to not only display its presence at the PRI Show but also to ensure that its audience knew it was actively participating and engaging with people at the Show and online. "We strive to post interesting and engaging content that will receive a positive response from users, getting people to interact and spread the word that we are there," explained JR Badian.

Nitrous Outlet in Waco, Texas, "used social media to bring the event to everyone who wasn't able to attend," noted Rudy Rodriguez. Also, "scheduling posts and sharing the event through Instagram Stories helped everyone at the Show know where our booth was and on what dates our *Continued on page 150* 







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celebrity racers would be stopping by."

Creative content is key when it comes to marketing. Standing out will get you noticed. E3 got imaginative by telling the whole PRI Show story. "We started posting about the Show multiple times per day starting with the first day of travel to the Show-from suitcase pictures with our badges and video clips of the plane landing in Indy to booth setup videos and daily updates on our booth traffic," noted LaCouture. "In addition, we ran a product giveaway on Instagram in collaboration with PRI to help not only drive traffic to the booth but also engagement on our social pages."

Nitrous Outlet built custom carts specifically for the PRI Show to allow attendees to test their reaction time against each other on the drag race practice tree. "We got creative by posting a few weeks before the event showing off small teasers of what we were working on for PRI,"

*"WE STRIVE TO POST* INTERESTING AND ENGAGING CONTENT THAT WILL RECEIVE A POSITIVE RESPONSE FROM USFRS



 $\bigcirc \bigcirc \bigcirc \land$ 674 likes

nitrousoutlet Have you gotten a chance to check out our New HEMI plates? Stop by our Booth at PRI! Booth #2435

#nitrousoutlet #teamnitrousoutlet #hemi #srt #hellcat #trx #boost #boostniuice #pri #prishow #pri2021

Rodriguez explained. "This created positive engagement and helped us inform everyone who hadn't heard of PRI. We also had a few of our celebrities come by the booth to compete with the public by testing out their reaction time on the tree."

In addition to creativity, here are a few other tips from our sources to keep in mind when promoting the next PRI Trade Show. "Stay consistent," said Badian. "It's important to consistently engage with users who are viewing online by posting to highlight your presence and by responding to users, giving them the best experience whether they are able to attend the Show or not."

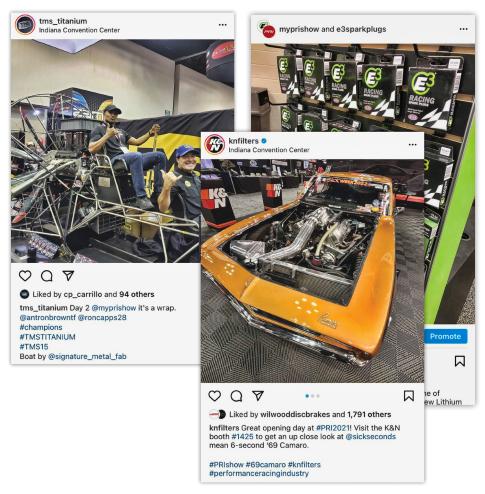
LaCouture agreed that consistency is important. "Start early and keep at it. Let people know you're going to be attending and tell them about anything new you're revealing/launching at the Show. Collaborate with any teams or partners you have in the industry who will also be at the Show to

increase your reach. The more people see content coming from your partners versus directly from you, the more organic the posts look and feel over what feels like a paid ad."

Rodriguez added that exhibitors should definitely utilize the Story option on Instagram and Facebook with greater frequency during the event.

"Don't be afraid to tag the event itself, content creators who are with you at your booth, and use the event hashtags...to connect everyone else using those hashtags and help it grow," he explained. "When doing that, it gives them the option to reshare your story on their social media."

"Make sure to tag the correct people." Harrison noted. "Use hashtags, have fun and exciting things in the booth to get some good content as well as more foot traffic, and have a game plan of what to post so you come prepared every day to let followers know your booth is the booth to see!"





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