



PORSCHE

Motorsport News

December 18, 2017

No. 91 /17

Dear Journalist:

Early each week, Porsche Cars North America will provide a weekend summary or pre-race event notes package, covering the IMSA WeatherTech SportsCar Championship, Pirelli World Challenge (PWC), the FIA World Endurance Championship (WEC) or other areas of interest from the world of Porsche Motorsport. Please utilize this resource as needed, and do not hesitate to contact us for additional information.

- Porsche Cars North America Motorsports Public Relations Team

Porsche Motorsports Weekly Event Notes: Monday, December 18, 2017

Porsche Profile.

Event Story Lines.

911 RSR. Technical Review of the Porsche 911 RSR.

The Roar Before the Rolex 24 open test for IMSA cars at Daytona International Speedway, January 5 – 7, marks the one-year anniversary of the official competition debut of the current Porsche 911 RSR. Over the course of the year, much information and success flowed on the new-for-2017 racecar. While not the first mid-engine Porsche, or even the first 911 to have the powerplant shifted ahead of the rear-axle, the German marque's entry into the highest level of GT competition – the GTLM class of the IMSA WeatherTech SportsCar Championship and the LMGTE-Pro category of the FIA World Endurance Championship (WEC) – shocked the motoring world when it was introduced at the Los Angeles Auto Show in November, 2016.

With two IMSA Tequila Patrón North American Endurance Cup titles, a race victory and two pole positions in the WeatherTech Series, the concept was proven in the United States and Canada against a field of full-factory programs from Corvette, Ford, BMW



PORSCHE

Motorsport News

December 18, 2017

No. 91 /17

and Ferrari. Entering the 2018 season [details of Porsche's plans are outlined in the Porsche Motorsport Weekly Notes dated December 11] few modifications have been made to the technical specifications or livery for the Porsche GT Team-run "works" cars allowing a deeper look at the creation of the innovative racing iteration of the iconic 911.

Engine Testing.

Thanks to the outstanding baseline engine development for the 911 GT3 R – which was introduced to the IMSA GTD and Pirelli World Challenge GT classes in 2016 – the 4.0-liter, flat-six, direct fuel-injection, normally aspirated RSR motor ran for the first time on the test bench after only seven months of design and development. Full-scale endurance runs began less than a year after concept creation. The test program for the engine of the 911 RSR included two 70-hour long runs under different weather conditions. In total, the engine of the 911 RSR withstood over 300 hours of endurance testing. In addition to the sophisticated engine test benches, testing on a racetrack was still critical to the performance and reliability of the powerplant. The 510 hp engine – performance is dependent upon restrictor size mandated by the series – ran 21,000 test miles (35,000 kilometers) on racetracks around the world.

In addition to the multiple tests held across the globe, the entire car also underwent a 50-hour test prior to its competitive debut. This test was held at Sebring International Raceway in Florida under the watchful eye of race and development engineers. Utilizing nearly all the Porsche GT drivers, the experience gained by all involved proved vital in both the WeatherTech Championship as well as the WEC throughout the 2017 race season.



PORSCHE

Wind Tunnel Testing.

Early on in the development of the aerodynamics for the new 911 RSR, computer simulations were carried out using CFD (Computational Fluid Dynamics) software. These trials offered the chance to evaluate certain concepts and components without having to build a physical wind tunnel model. Afterwards, the concepts under consideration were tested in the model wind tunnel, in real airflow. After the model wind-tunnel trials, 80 percent of the car was completed.

The next step for the last 20 percent was testing in the large wind tunnel at the Weissach technical center in Germany. These tests allow a more accurate assessment as this tunnel incorporates a running belt to mimic airflow of a car in forward motion. The tunnel can replicate entire corners to see how the car will behave on actual racetracks. These results are then fed back into the computer simulation, giving even more exacting detail to the simulations. As a result, engineers can then very accurately predict lap times the car would normally clock on the racetrack.

Serviceability.

The 2017 911 RSR's serviceability was significantly improved over previous models through a concentrated effort by its designers. Changes to the suspension setup can be performed much more quickly and easily than on prior generations of Porsche's top GT racer. This allows the maximum use of test and practice sessions.

As a result of cleverly devised quick-release fasteners, if an incident on-track results in damage, entire elements of the carbon-fiber body can be exchanged completely in a very short time. A door, for example, can be replaced within 15 seconds and a front bumper with underbody can be swapped out in less than one minute.



PORSCHE

Driver Assist.

The new 911 RSR is the first Porsche GT racecar to be fitted with state-of-the-art assistance systems. Thanks to a radar-supported warning system, the so-called “Collision Avoidance System”, drivers, who are constantly being overtaken by more powerful and faster prototypes, enjoy a better view to the rear. On a monitor in the cockpit, arrows indicate if vehicles are following directly behind. Depending on the color of the arrows, the driver knows whether the trailing car is coming closer or falling back. Not only does this system work in fair weather, but also in rain, fog and at night.

A new safety cage and a new, rigidly mounted racing seat further enhance driver safety.

Working Drivers. Factory Drivers and Teams Involved in 911 RSR Development.

The Porsche GT “works” drivers were included in the 911 RSR project from its formative stages. In the beginning of development process, the main priorities were to optimize the correct driver seating position, the visibility to the front as well as the ergonomics of the car. As in a street car, seating position is essential to performance, safety and decreased fatigue over long “stints”.

Another key factor to the drivers is the layout of the many lights and switches on the steering wheel and in the cockpit. Every button and switch must be readily accessible for ease of use. The basics were placed in the design phases with the drivers’ input. However, fine-tuning could only be accomplished once the car was testing in real life



PORSCHE

conditions. From the first test, the drivers were involved in identifying weaknesses and further developing the car in conjunction with the engineers.

After the 2017 debut season, in which the 911 RSR was exclusively fielded by the works team in the FIA WEC and the IMSA Championship, Porsche Motorsport offers the vehicle to selected customer squads in 2018. The time and attention to detail spent in the creation of the Porsche 911 RSR will prove even more valuable to the customer programs, which often include gentleman drivers.

Marco Ujhasi, Director GT Factory Motorsports, Porsche Motorsport.

On driver comfort. “The drivers have to feel comfortable in the car. Only a driver who still feels fresh at the end of a grueling stint will be able to give the top performance that is needed to be successful in such a tough competitive environment.”

On the 50-hour Sebring test. “As far as I know, no other manufacturer has dared to do this. The test on this extremely bumpy racetrack in Florida, known for the immense challenges it throws at man and machine, ran without any major issues. Precisely because of the enormous stresses, it was the right direction. This was confirmed at the first two races of the season; the long-distance classics of Daytona and Sebring, where our new car impressed immediately with a strong performance.”

“On the test beds, we simulate maximum stress situations, such as a particularly fast qualifying lap on circuits with maximum full-throttle passages such as Daytona and Le Mans. Special racing situations, like caution phases or a sudden exit from the pit lane, cannot be simulated on a test bench. These insights as well as impacts on the entire vehicle can only be gained on the racetrack.”



PORSCHE

Social Media.

Porsche Cars North America.	@Porsche
Porsche GT Team (North America)	@PorscheNARacing
Porsche Motorsport – GT Cars.	@PorscheRaces
Porsche Racing – 919 Hybrid.	@Porsche_Team

Model Hashtags.

Porsche 911 RSR.	#911RSR
Porsche 911 GT3 R.	#911GT3R
Porsche 911 GT3 Cup	#911Cup
Porsche 919 Hybrid.	#919hybrid

Event Hashtag.

Series Hashtags and Handles.

GT3 Cup Challenge USA.	#GT3USA
GT3 Cup Challenge Canada.	#GT3CAN
PCA Club Racing Porsche Cayman GT4	@CaymanGT4CSEast
Clubsport Trophy East	#GT4CSE
Pirelli GT3 Cup Trophy USA	@PirelliCupUSA
Intercontinental GT Challenge	@IntercontGTC



PORSCHE

Future Porsche Events.

IMSA WeatherTech SportsCar Championship.

Event: Roar Before the Rolex 24 At Daytona, Daytona International Speedway

Dateline: Daytona Beach, Florida

Date: Friday - Sunday, January 5 – 7, 2018

Track Length: 3.56-miles, 12-turn

Race Duration: Official Test Session

Class: GTLM (Porsche 911 RSR)
GTD (Porsche 911 GT3 R)

Round: GTLM. NA
GTD. NA

Next Round: 56th Running of the Rolex 24 At Daytona, Daytona International Speedway, January 27 – 28, 2018

IMSA WeatherTech SportsCar Championship.

Event: 56th Running of the Rolex 24 At Daytona, Daytona International Speedway

Dateline: Daytona Beach, Florida

Date: Saturday - Sunday, January 27 – 28, 2018

Track Length: 3.56-miles, 12-turn

Race Duration: 24-Hours



PORSCHE

Motorsport News

December 18, 2017

No. 91 /17

Class: GTLM (Porsche 911 RSR)
GTD (Porsche 911 GT3 R)

Round: GTLM. 1 of 11
GTD. 1 of 11

Next Round: 66th Annual Mobil 1 Twelve Hours of Sebring,
Sebring, Florida, Sebring International Raceway,
March 17, 2018

Porsche Motorsport Video News Releases

<https://vimeo.com/159661478>

Photography:

<http://press.porsche.com/media/gallery2/v/photos/motorsports/>

Porsche Cars North America Media Site.

<http://press.porsche.com/>

Porsche Cars North America Motorsports Site:

<http://www.porsche.com/usa/eventsandracing/motorsport>

Porsche North America Motorsport Portal:

porscheusa.com/racing

Porsche Motorsports Media Information.

Current news, images and notes relating to Porsche can be found on our press kit.

Please contact Dave Engelman or Tom Moore for the latest Porsche Motorsports media kit.



PORSCHE

Motorsport News

December 18, 2017

No. 91 /17

Contacts.

Dave Engelman

Porsche Cars North America

Spokesperson, Motorsports and Brand Heritage

Office. 770-290-3617

Mobile. 404-386-4665

dave.engelman@porsche.us

Tom Moore

Motorsports Public Relations

Mobile. 615-509-5000

tom@darkhorseautosport.com

###