

The official newsletter
of: Revs Institute
Volunteers

Revs Institute
2500 S. Horseshoe Drive
Naples, Florida, 34104
(239) 687-7387

Editor:
Eric Jensen
eric60@gmail.com

Assistant Editor:
Morris Cooper

*Inside this
Issue:*

Events Calendar	2
Tappet Trivia	3
Members Meeting	4
Goodwood Revival	6
Rennsport Prep	8
A True Tale of Logos	9
First Race Winning 911	11
Lou Gregg's Autohaus	17
Race Control Flags	19
Tappet Tech	23
Adopt-A-Car	26

*Thank You to
this month's
contributors:*

- Bill Vincent
- Ralph Stoesser
- Max Trullenque
- Whitney Herod
- Joe Ryan
- Chip Halverson
- Whitney Herod

TAPPET CLATTER



Volume 29.2

Oct 2023



Chairman's Notes

By Chip Halverson

My letter this month is about developing volunteer leadership.

Our organization has had the benefit of some extraordinary leadership that has come before us. They have worked tirelessly to advance our mission of providing the best possible guest experience.

Today we have over 150 volunteers serving in the galleries, library, gift shop, parts, and research. Through the Board and committees, we have done a number of things not ordinarily led by volunteers such as developing our own training programs, producing a world class monthly publication, implementing a multifaceted approach to recruiting, and setting and maintaining our own performance standards.

To continue to perform at this level we need a steady flow of volunteers taking on committee and leadership roles. High performing organizations tend to have a mix of leadership with the experience of the long tenured members complimented by the energy and new ideas of the newer members.

I would like to urge you to get involved. All of the committees are looking for new members. Their meetings are open to all members and will be posted in VicNet. Take in a meeting or two to find what you are most interested in.

(Continued on page 2)

Chairman's Notes... continued

(Continued from page 1)

There are elections each spring for the Board of Directors open to those who have been members for at least two years. Ideally candidates for the board would have some committee experience. The Board meetings are also open to all members. If you have interest please attend some meetings.

If you have questions please talk to Whitney or anyone on the Board.

Thanks, from all of us,

Chip Halverson

Events Calendar

Event	Date	Info or contact
Suncoast Region PCA	Oct. 6 @ 10:30 am	Sign up on VicNet
First Assembly of Fort Myers	Oct. 6 @ 1:30 pm	Sign up on VicNet
Broward County Sheriff's Office	Oct. 7 @ 12:30 pm	Sign up on VicNet
Box Box Car Auto Club	Oct. 7 @ 11:00 am	Sign up on VicNet
Membership Committee Meeting	Oct. 10 @ 1:15 pm	Sign up on VicNet
Valencia Bonita Activity Club	Oct. 13 @ 10:30 am	Sign up on VicNet
Volunteers Board Meeting	Oct. 13 @ 10:00 am	Sign up on VicNet
Women of the 239	Oct. 20 @ 1:30 pm	Sign up on VicNet
Members Meeting	Oct. 20 @ 10:00 am	Sign up on VicNet
SuperCar Saturday	Oct. 21 @ 12:30 pm	Sign up on VicNet
Heritage Bay Golf Country Club	Oct. 27 @ 10:30 am	Sign up on VicNet
Cars and Coffee	Nov. 4 @ 8:00 am	Sign up on VicNet
Hello Florida	Nov. 8 @ 1:30 pm	Sign up on VicNet
Horseless Carriage Club	Nov. 11 @ 10:30 am	Sign up on VicNet
MG Car Club	Nov. 16 @ 1:30 pm	Sign up on VicNet

For a full list of daily tour groups and events, go to the 'Calendar of Events' on VicNet.

TAPPET TRIVIA

By Joe Ryan

This section is devoted to questions about the Miles Collier Collections cars or cars of the same period. Some of the questions might be a bit (very) obscure or (impossibly) tricky. Test your knowledge and *have fun!*

Since we are covering the Goodwood Revival and the participation of the Miles Collier Collections Ferrari 250 LM, the trivia questions this month come from just that topic.

1. **Question:** Did the Miles Collier Collections 1965 Ferrari 250 LM win the 24 hours of Le Mans?
2. **Question:** Who was the team owner of the 1965 24 Hours of Le Mans winning Ferrari 250 LM?
3. **Question:** Who were the winning drivers of the 1965 24 Hours of Le Mans?
4. **Question:** What Manufacturer and Model car was favored to win the 1965 24 Hours of Le Mans?
5. **Question:** A Ferrari 250 LM won the 1965 24 Hours of Le Mans. What cars finished 2nd and 3rd ?
6. **Question:** What company designed the body of the 1965 Ferrari 250 LM?

The answers appear later in this issue



Cars and Coffee

November 4th, 2023

8:30 to 11 am

September Members Meeting

By Eric Jensen

As is usual at this time of year, the Revs Institute Volunteers end-of-summer Members Meeting includes a luncheon. This year was no exception to that tradition. What was exceptional is the number of guests to the museum over the summer months. That and the Hawaiian shirts!



Whitney Herod, our Volunteer Coordinator opened the meeting with strong numbers of guests over the summer. Even considering the museum was closed for August and September, some 8000 guests visited. Over 7000 Volunteer hours were contributed as well.

The Volunteers Board Vice Chairman (me, ed.), Eric Jensen, said a few words after Whitney, filling in for Chairman Chip Halverson. We were graced with a busy summer that saw many interesting guests with which to share stories. This is a wonderful change from past years. I saw nods in the audience when I shared that this year was a far cry from years ago when there were summer shifts where guests outnumbered the Station Guides! The cars had a busy summer as well participating in many shows and races from California to Great Britain. Scott George was back from his travels (maybe with a bit of jet lag...) to share some of those activities with us.

But first, a video! Created by the growing multimedia department and presented by now full-time Revs Institute employee, Lauren Goodman. The video showcased Briggs Cunningham and his quest to win the 24 hours of Le Mans with an American automobile. Comments and recollections from Mr. Collier painted a rich picture. While Mr. Cunningham never took the top step of the podium at the great race, he certainly paved the way for Ford to do so a few years later.



When Scott George takes the podium after a busy summer, all know we are in for a treat! Trips to the 100th anniversary of Le Mans with the Le Monstre to two wins and two second places for the Porsche 917 PA, and the annual visit to Pebble Beach.

(Continued on page 5)

Photos Courtesy of Revs Institute

September Members Meeting...continued

(Continued from page 4)

Pebble Beach invited the 1937 Delahaye and 1929 Mercedes-Benz SSK with the Delahaye placing third and the SSK placing second in their respective show classes. While the cars are in Monterey, how about a 3 day tour for the SSK along with its supercharged siblings? A testament to the quality of the preservation specialists in the shop given that the 94 year old classic performed flawlessly.

Across the great Atlantic, the Ferrari 250 LM took to the track at Goodwood Revival. An article and pictures about the event are later in this issue. Scott did show some in-car video of racer Rob Hall during the unfortunate spin and minor damage to the Ferrari. The shop has it nearly repaired as it is going out to play again in Sonoma California in November at the Velocity Invitational.

Rennsport VII comes to Laguna Seca in October. This is a Porsche celebration attended by the Porsche 550-01, 356 GT, 904 GTS, 908/3, 906 Carrera, 917 PA and the Porsche tractor with its pedal car piggies in tow. John Oates (of Hall and Oates) will again race the tractor.

Coming up this fall, there will a Ford GT-40 Mark III on loan joining its Mark I and Mark IIB brothers in the gallery. The Alfa Romeo on GTA on the rotisserie will be re-assembled on the mezzanine for the viewing pleasure of the guests. Learning what goes into the reassembly of a preserved automobile should be very enlightening.



The Goodwood Revival 2023

By Eric Jensen

The Goodwood Revival is an annual event held in Great Britain at the Goodwood racing circuit adjacent to the estate of Lord Richmond since 1998. Best described directly from the Goodwood website.

In the autumn of 1998 motor racing returned to Goodwood for the first time since the closure of the famous Motor Circuit in 1966. Known as the Goodwood Revival, the event has since become one of the biggest historic motorsport events in the world and the only one to be staged entirely in period dress.



The 250 LM getting ready for battle

From 1948 to 1966 the Goodwood circuit was the spiritual home of British motor racing, staging classic races such as the Tourist Trophy for sports cars and the Glover Trophy for Grand Prix cars. All the top drivers of the day came to Goodwood on Easter Monday, from Juan Manuel Fangio and Stirling Moss in the 1950s to Jim Clark and Graham Hill through the 1960s. The circuit was established by Freddie March (later 9th Duke of Richmond), himself a Brooklands winner, and was revived by his grandson Charles, Earl of March, in 1998. The Revival event is a magical step back in time to the romance and glamour of motor racing as it used to be in Goodwood's heyday.

The Goodwood Revival has become the largest historical event in the world playing host to hundreds of cars and thousands of guests. Of course the Revs Institute would participate as these cars are not precious paperweights, they are racecars.



The starting grid of the Lavant Cup Race

Racecars were made to race. And race they do! The eight races held over 3 days of the event feature various classes of vintage racecars driven by current and retired drivers from various racing series and talented amateurs.

Photos Courtesy of Revs Institute unless linked

(Continued on page 7)

The Goodwood Revival...continued

(Continued from page 6)

The atmosphere is enhanced by period costumes from the 40s, 50, and 60s worn by crew, racers and spectators. Tweeds and trilbies for the men with furs and frocks for the ladies. Held each September, the event includes vintage cinema, vintage aircraft displays, car auctions, and a pedal car race for the children. There are also competitions for best dressed, tutorials on vintage fashion and craft workshops.

This year saw the Ferrari 250 LM racing in the Lavant Cup featuring 16 Ferraris featuring the infamous 250 "Breadvan" and eight 250 SWBs! The Miles Collier Collections 250 LM started from the pole driven by Rob Hall. Rob made a great start possibly helped by the fact he was in the only mid-engined car in the field. And then things went just a little wrong when Rob spun off track and buffed the left rear fender lightly on the tire wall. Rob recovered and chased down the leader, Emmanuelle Pirro in a 250 SWB, to retake the lead.



Further excitement was provided by former F1 driver, Karun Chandok, bringing the broken 250 GTO he was driving to a safe stop with a fireball erupting at the rear from a broken oil line. Both car and driver were safe and the race continued with Rob Hall bringing the victory to Revs Institute, Pirro finishing second and the Breadvan third.

Links to this race, exciting moments and the entire second day at Goodwood Revival are linked below. All three days are available on Goodwood's YouTube channel.



The Lavant Race Complete



Exciting Features



Entire Saturday Events

Preparations for Rennsport 2023



A report on Rennsport 7, 2023, the celebration of all that is Porsche, at the Laguna Seca Raceway will appear in next month's *Tappet Clatter*.



Photos Courtesy of Revs Institute

A True Tale

By Ralph Stoesser



The Porsche and Ferrari emblems indeed have one thing in common....

A reprint from April 2017



Once upon a time there was a Duke of Swabia who founded a large stud farm suitable for the raising of his warhorses. That was in the 10th Century and he named the area Stuttgart. Now please stay with me on this but leap ahead about 800 years. The spelling of his farm area changed but Stuttgart endured and became the capital city of the now south German State of Wurttemberg. It also became the home of Daimler Motoren GMBH and other companies who were in the business of replacing horses with horse power. The city of Stuttgart crest had a black rearing horse on a yellow shield with a background of the coat of arms of Wurttemberg with its red and black stripes in diagonal opposition to the stag antler areas also on a yellow background.



*Francesco Baracca and his hand painted "horse" logo
Photos Courtesy of Revs Institute*

Conflicts arose. During WW 1, aka, the war to end all wars, two protagonists in their respective fledgling air forces dueled in the skies over the Dolomite mountains. The unknown German pilot in his Albatross (fitting name), fighter plane was shot down. As was often done, the Italian ace, the pilot, Francesco Baracca, allegedly salvaged the hand-painted "horse" logo from the fabric of the downed plane.

In the 1920s a young mechanic and racer named Enzo Ferrari was competing in races with an Alfa Romeo. Any young racer was eager to gain an edge and in racing it seems luck helps.

When the mother of the Italian ace told him to place the horse emblem (her son's souvenir but by now he was a fallen ace) on his car for good luck Enzo accepted. The image must have helped because he won the race.

(Continued on page 10)

A True Talecontinued

(Continued from page 9)

There is more to the story. In the book *Enzo Ferrari, A Life*, by Richard Williams (2001), it was written that Count Enrico Baracca, the father of the ace who was in the squadron of Enzo's brother Dino, introduced Enzo to the ace's mother Countess Paolina, etc. Some historians suggest a little embellishment here. Remember also that first race Enzo won was in 1923. Some historians suggest he did not use the logo until 1932 as he had no team until then and therefore no use for the crest. In any event, he won at Spa with it and he went on to become the Alfa team race manager.

When racing was suspended during WW II, he began a company that built machine tools. In the postwar era, he turned to the idea of creating a car bearing his own name and in 1948 the black horse crest appeared on his cars. By the way, the term "scuderia" also came into use and it means stud farm.

Late in 1952, on his second trip to the U.S. a new car company founder, Ferry Porsche, was in NYC visiting his importer Max Hoffmann. He was on his way to visit Studebaker to compete for their new small car project engineering. In addition, at that time he was about to launch the America roadster, (the Speedster predecessor). Max advised Ferry Porsche that his cars needed to wear an automotive crest. The extended lettering of P O R S C H E, spelled out across the hood would no longer suffice for an upscale auto. Max told Ferry the image of the crest was vital. Ferry approached the city fathers of Stuttgart for permission to incorporate the city crest and they agreed.

The crest he designed has never changed. It incorporates elements of the flag, black and red stripes, as well as the stag antlers of the state of Wurttemberg. The name Porsche is lettered over the top of the crest. The shape of the tail of the horse has changed over time but not as used by Porsche.

All of this is told by Ferry Porsche in his autobiography *Cars Are My Life*, co-authored with Gunther Molter. Whether the tail feathers are arranged up or down, the black prancing horse on two different brands of cars has its origin in the same city of Stuttgart and both car company principles wrote or were quoted years ago on the subject and were in agreement. Simpler times indeed.



Photos Courtesy of Revs Institute

(Continued on page 11)

A True Talecontinued

(Continued from page 10)

Other interesting minutia remains. Subtle changes in logos are often made with an idea of “updating”. There is a quite recent example of this. Where have the ducks (merlettes) gone on the newest Cadillac crest? Or the subtle changes made in the FORD script over a century of time.

There is a difference that is quite apparent too between the 1948 TIPO 166 Ferrari and the 1962 Ferrari Superamerica crests. If you observe closely you will notice the early version (*leftmost logo*) has the hoof firmly planted on the “road”, (the top of the extended F of Ferrari), whereas the later car (*rightmost logo*) has a prancing horse with its hoof in the air. According to some historians, this was not a deliberate Ferrari change but due to switches in sourcing and suppliers because of a very limited order placement.



Indeed Revs Institute volunteer, Glen Hanke, confirmed to me that his early Ferrari (same era as the TIPO 166), has the horse prancing above the F (road). Is it possible there was a deliberate very early change in the prancing horse? There is another more likely possibility with our car. The accident damage in the Watkins Glen crash of 1950 and subsequent repairs resulted years ago in the incorporation of a “non-original” crest which may have been the only piece available. Is that the likely reason for this anomaly? If so, it has the making of another story as the crest has been on the car for about 65 years.

In terms of the Porsche crest, the manufacturing of the cloisonné enamel crests have been provided to Porsche through the years by the same jewelry manufacturer, (Fritz) REU of Heubach, Germany. They were also used on the hubcaps of the Type 356A and 356B cars fitted with either the “Super” or the Fuhrmann 4 cam motors. They distinguish the upscale cars from the “baby moon” hubcaps found on the lesser engine Porsche models. The early plain hubcaps fitted to the normal models were nothing more than VW hubcaps without the VW initials stamped into them. Today Porsche charges extra for the full colored hubcaps.

In summary, we answered one question...the amicable dual brand use of the Stuttgart horse is fact. I have now raised another question. Do we need to someday be able to answer the question of the firmly-footed versus the prancing horse as they exist on our Ferrari crests or does it really matter? The fun just keeps on coming.

Photos Courtesy of Revs Institute

The First Race Winning Porsche 911

By Tom Stoll

"This car was a generous donation from Christian Zugel. I am very pleased that Christian felt the Revs Institute would be the ideal home for this really significant and interesting 911. I like that it is such an original 911, almost more than the fact that it is a race car. It's like a great two in one. We've got an important race car and a really early Solex-carbureted 911 in the same car. How cool is that?" - Miles Collier

The 1964 Porsche 911 was first unveiled at the International Motor Show (IAA) in Frankfurt, Germany on September 12, 1963. This 1964 Porsche 911, serial number 300-128, was one of the first two 911 model Porsches imported into the USA and is one of the first 200 cars made. This particular automobile served as a dealer demonstrator, competed in road race events, went through several private owners and won best-in-class at the Amelia Island Concours in 2013 before it was generously donated to the Revs Institute.



*Peter Harholdt Photo
Courtesy of Revs Institute*

Most notably, this was the first production Porsche 911 to win a road race, even though it had been driven 30,000 miles as a dealer demonstrator. When Jack Ryan, the first owner, looked for ways to improve the 911 so it could race in the highly competitive GT class there were no factory performance parts available. He would have to do with removing the rear seat and adding a roll bar and driving lights. The car had to compete on factory stamped-steel wheels with a stock engine and stock soft suspension. Even the factory radio was in place (the radio antenna can be seen in photos taken during its races).

This museum car still has the original 1991 cc engine with the original Solex carburetors, original transmission and original interior. Since the carburetors were difficult to hold tune many 911s were later changed to Webers. In later years, all factory Porsche 911s used Weber carburetors.

When the Porsche 356 was becoming long in production, the company began to realize that a larger sports car was needed as customer tastes had changed, particularly in the USA. In 1951, Erwin Komenda, the head of Porsche Bodywork Design, designed a full four-seater version of the 356. Komenda extended the wheelbase of the sports car by 12 inches and exchanged the compact 356 doors with massive ones, which allowed passengers to climb into the coupe's rear seat. The experiment was called type 530 and lacked the prior model's minimalist charm.

(Continued on page 13)

The First Race Winning 911...continued

(Continued from page 12)

Ultimately, the car was deemed too heavy for the four-cylinder engine and was not considered for production. During the latter half of the 1950s, Ferry Porsche commissioned further designs that allowed for sufficient rear seating comfort and a larger trunk. However, the question of whether the new Porsche should be a full four-seater or a smaller 2+2 design remained open. Ferry Porsche remained uncertain about this issue for some time.



Porsche type 530 Prototype

Designs by outside firms and designers for a replacement car were also commissioned, reviewed and ultimately rejected. In house, two versions of a replacement car were designed by Ferry Porsche's son, Ferdinand (Butzi) Alexander even though he was only 24 years old. Design director Erwin Komenda had started a larger four-seater prototype, the 754 T7 (below). In response for a sleeker design from Ferry Porsche, Butzi designed a two-plus-two (design 901 T8).



Porsche type 754 T7 Prototype

The iconic rear Porsche quarter windows and the raised front fenders over a sloping hood were first featured in these designs. Featuring the 8 lower sporting fastback roof with the occasional rear seats, the 901 was Butzi's second major design after the 904 Porsche sports racing car.

Ultimately, Ferry Porsche selected Butzi's shorter 87 inch wheelbase fastback design with a aerodynamic drag coefficient of 0.38. A full size prototype of the 901-1 was presented to the Porsche board in April 1962. On the evening of November 9, 1962, the first prototype rolled out of the Zuffenhausen factory gates for a test drive.

The 1964 Porsche 911 was the first entirely new Porsche production series auto in 16 years. The 911 was designed to replace the Porsche 356 which had started production in 1948. The 911 continued with the signature Porsche design features of an air-cooled rear-engine, unitary body construction, independent suspension and aerodynamic bodywork. The 1964 Porsche 911 list price was \$6500. Included in the list price was leatherette upholstery, cabin heater, wood-rimmed steering wheel, radio, 150 MPH speedometer, 8000 RPM tachometer, oil temperature and level, fuel level gauge and a clock all from VDO in the now familiar 5 gauge layout.

(Continued on page 14)

The First Race Winning 911...continued

(Continued from page 13)

The Porsche 911 was first unveiled at the International Motor Show (IAA) as the 901 in Frankfurt, Germany on September 12, 1963. During the show many orders were taken for the new Porsche. On September 14, 1964, the Porsche 901 went into series production. The first vehicles were kept by the factory or used as exhibition vehicles. One of the cars was sent to the Paris Motor Show, which opened in the same month.

However, the Paris exhibition revealed an unexpected problem. Peugeot objected to the 901 designation as they viewed it as an infringement of its French copyright and trademark protection to use the middle zero in the naming of their cars. The Porsche sales team suggested that the 901 name should be changed by simply replacing the "0" with a "1". This pragmatic solution avoided extensive changes to the already prepared sales and advertising copy, operating instructions and other documents for a car already in production.

On October 22, 1964, Ferry Porsche gave the order for the name change. Consequently, the first 82 cars produced received the 901 designation and the remaining 150 produced in 1964 were labeled as 911 for a total of 232 cars.



*Peter Harholdt Photo
Courtesy of Revs Institute*

One may ask, why the future Porsche 904 and 906 designations were allowed? Baron Huschke von Hanstein, the Porsche racing and public relations director, wrote the FIA, the world auto racing governing body, noting that Porsche racing models were not available to regular customers and therefore did not infringe on Peugeot's right. He proposed that Porsche be allowed to retain the middle zero in these situations. The FIA agreed.

It took six years to develop the new 901 (AKA the 911) until it was ready to be displayed at the 1963 IAA. The first generation of the original Porsche 911 was built between 1964 and 1973. A total of 111,995 of this generation were produced. They are today nicknamed the "long hood" models, before the new massive bumpers required the use of a shorter hood in later generations.

The 911's opposed, flat, six-cylinder engine was a completely new design. A cooling fan with light alloy ductwork provided engine cooling. The engine also featured a light alloy crankcase with eight crankshaft bearings. A single overhead-camshaft per bank replaced the pushrod and rocker arm layout of the 356. Domed pistons and inclined valves in a hemispherical combustion chamber allowed for a 9:1 compression ratio. The Biral cylinders were machined from aluminum castings and the finned/ribbed cylinder barrels had cast iron liners.

(Continued on page 15)

The First Race Winning 911...continued

(Continued from page 14)

The engine had a bore and stroke of 80 x 66 mm (3.15 in. by 2.60 in.) for a displacement of 1991 cubic centimeters. The Solex type 40 BI carburetors used were 40 mm in size. There were two groups of three single-body overflow-type



*Peter Harholdt Photo
Courtesy of Revs Institute*

carburetors per cylinder bank. The carburetors were fed by a Bendix fuel pump. The Bendix fuel pump was augmented by one twin mechanical fuel pump with fuel flowing in a continuous circuit from the carburetor back to the fuel tank. This arrangement ensured that the fuel remained cool, prevented vapor lock and helped eliminate fuel starvation in high-speed cornering. A dry-sump lubrication system ensured an adequate supply of oil even at high longitudinal and lateral accelerations. The 911 had a new Porsche-designed and built five-speed transmission to replace to the four-speed unit used in the 356. The new transmission was a fully-synchronized with a

single dry plate clutch.

The 911 engine's 148 SAE HP and 140 ft. lb. of torque is more than the 356C's 107 SAE HP/91 ft. lb. of torque. The 87 inch wheelbase was larger than the 356C's 82.7 inches. Acceleration to 60 MPH was 9.0 seconds (in a 1965 *Road and Track* article) versus the 356C's acceleration of 11.2 seconds. Its air-cooled, six-cylinder 'boxer' engine gave the 911 an impressive top speed of 131 mph.

Perhaps the greatest change from the 356, other than the engine, was the new suspension. The independent front suspension on the Porsche 911 was McPherson style with lower A-arms, longitudinal torsion bars and guide struts at the front. This replaced the dual trailing arm links on the 356. The rear suspension had independent, longitudinal, triangulated control arms, known as a semi-trailing arms, and a transverse torsion bar. There were hydraulic telescopic strut type dampers front and rear. The new rear suspension replaced the swing axle used on the 356. The steering was a ZF rack and pinion design as opposed to the worm and roller design of the 356 with a hydraulic damper.

Fifteen-inch wheels sized 4.5 J X 15 were shod with Dunlop 165-HR-15 radial tubeless tires. Brakes were the newly-introduced hydraulic 4-wheel disc brakes manufactured by ATE under license from Lockheed. The rear disc brakes had mechanical hand parking brakes on integral drums.

(Continued on page 16)

The First Race Winning 911...continued

(Continued from page 15)

Porsche retained the tried-and-tested heater system from the previous 356 (and Volkswagen). The cabin heater used an engine exhaust heat exchanger to produce warm air that was blown by the engine cooling fan through the door sills and defroster outlets at the base of the windshield. An optional supplemental gasoline-fueled heater warmed and recirculated cabin air using an electric blower near the rear seats.

The body consisted of unitized, welded, pressed-steel sections. The designated body fabricator, Reutter Karosserie-Werke of Stuttgart, who had previously made the 356 body, could not make the investment for the new model. To do so, Porsche acquired the Stuttgart car body production company Reutter in 1963 to produce the 911. The prototype 901 was fabricated at Reutter.

A new company was founded under the name Recaro – derived from two words “RE” utter and “CARO”sserien – to produce the passenger seats. The first customer was Porsche. Optional extras included leather upholstery, electric sliding sunroof and seat belts. The Collection car has a Blaupunkt AM/FM/SW radio.

Porsche 300-128 was the first Porsche 911 to win a championship road race anywhere in the world. Produced on December 9, 1964, Porsche 300-128 was delivered in December 1964 to Brundage Motors (now Brumos Porsche) of Jacksonville, Florida where it served as a dealer demonstrator. Race car driver Jack Ryan purchased the well-worn 30,000 mile demonstrator from Brundage in 1965 and entered the car in the 1966 24 Hours of Daytona.

Remarkably, this was not a factory Porsche effort, but the result of a private owner entering it in a race without Porsche’s prior knowledge. When Huschke von Hanstein, the Director of Porsche Motorsport, found out about the unauthorized effort, he asked the 911 drivers Ryan, Coleman and Bencker to stop as Porsche had already entered their new 906 race car (several Porsche 904 GTs were also entered by the factory).

It seems that Porsche wanted to avoid any embarrassment if the privately run 911 broke down during this signature event. Undeterred, Ryan replied “It is my car now and I’m racing it.” The Ryan 911 team continued in the race and moved from 39th place at the 3 PM start to leading the 2-liter class by 8 AM the next morning. When the Ryan 911 continued firmly in the lead, von Hanstein became interested and offered assistance from the Porsche factory mechanics. Help was not needed, however, and the Ryan 911 finished 16th overall and first in class after 548 laps at Daytona on February 6, 1966. A very significant accomplishment indeed!

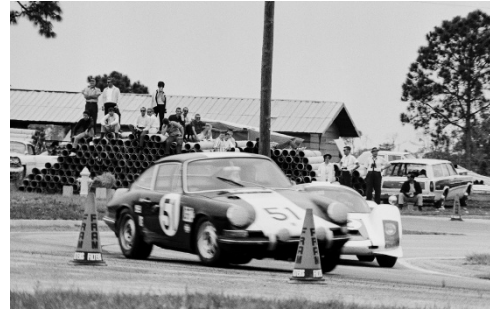
(Continued on page 17)

The First Race Winning 911...continued

(Continued from page 16)

Porsche 300-128 was also the first 911 to race at the 12-Hours of Sebring (also in 1966). Years later it was found the car had run Sebring with a burned engine piston. Despite that disadvantage the car still finished second in class and 20th overall. Imagine how it would have finished with a healthy engine!

One might consider another Porsche 911 entered in the 1965 Monte Carlo Rally and placed 5th in points. While earlier than 300-128 at Daytona, this was a timed rally, not a road race. The Rally, held from January 16 - 23, 1965, started in various European cities and ended at Monte Carlo. That Porsche 911, driven by Herbert Linge and Peter Falk, started in Frankfurt and made stops in over 24 cities on the way to the Monte Carlo, where the entrants finished the event by competing in stages. Porsche also entered a 911 and finished first in the Paul Whiteman Challenge Cup race in the Daytona Prototype class in 1965. However that was a prototype car and the Whiteman Cup was not a championship race.



*1966 Sebring Race
Courtesy of Revs Institute
Karl Ludvigson Collection*

After Jack Ryan competed the car in the 24-Hours of Daytona in 1966, it was sold in the winter of 1966-67 to Lou Gregg from Ohio (*see the companion article also in this issue - ed.*). Gregg owned a business called Autohaus. The 300-128 car was then sold to Steve Boesel of Ohio in 1968 who owned it for 4 decades and finally to Christian Zugel in 2011.

Zugel had Porsche restorer Kevin Jeanette (father of Gunnar Jeanette, a successful racer and frequent driver of various Miles Collier Collections cars) do a complete restoration which was finished in 2011. Kevin Jeanette remarked they were lucky that most of the original parts, such as the original engine with the blown piston and the factory seats had travelled with the car through the years. Restoration included rebuilding the original engine and finishing the paint and livery to that used at the 24-Hours of Daytona.

The livery showed several sponsors: RBM was the Atlanta-area team that entered the 911 at Daytona and Autohaus of Pompano was the car dealer who sponsored the car. The other sponsor stickers were restored to those that were on the car when it raced at Daytona. Other than new tires, a front fender, radio, headliner and paint the car is "as-raced" at Daytona in 1966. The restored 911 was acknowledged as one of the most original 1964 911s in existence at the Laguna Seca Rennsport Reunion IV in October 2011. After winning the best in class at Amelia Island Concours in 2013, the car was generously donated by Mr. Zugel to Revs Institute, where it resides today.

Lou Gregg's Autohaus

By Eric Jensen

The 1964 Porsche 911, serial number 300-128, was identified as being sold to Ohioan Lou Gregg after winning the 2.0 liter class in the 1966 24-Hours of Daytona.



This connection is close to this Dayton, Ohio-born author because Lou Gregg's auto dealership was also a Datsun (nee Nissan) dealer located in Fairborn, Ohio. It was situated between the city of Dayton and Wright-Patterson Air Force Base (WPAFB). This author owned two Datsun 510s at that time (a '71 and a '72) that needed repair parts...often!

This was a time where, in GM-centric Dayton, foreign car parts sellers were segregated from shops selling American car parts and not all parts were being produced in the aftermarket. There were no alternatives for some parts except the dealers. Lou Gregg's Autohaus was one of only two Datsun dealers in the entire Dayton-metro area. My continued business was encouraged by the placement of Lou's Datsun 510 racecar in clear view from the parts department every time I visited.

Originally from north Florida, Lou Gregg enlisted in the Air Force right after high school in the early 1960s. After a deployment to Germany, Lou was posted to WPAFB. He worked nights in the hospital X-ray unit so he could work days at his small Volkswagen and Porsche garage located in the nearby college town of Yellow Springs.

Lou raced an F-Production OSCA at that time, driving it two hours to and from Mid-Ohio in Lexington, Ohio to race.



Autohaus dealership in Fairborn, Ohio on Kaufmann Avenue

After leaving the Air Force in 1965, Lou moved his shop to Fairborn. The location was closer to WPAFB as there were many military owners of foreign cars.

(Continued on page 19)

Lou Gregg's Autohaus...continued

(Continued from page 18)

The shop had plenty of business from WPAFB from military owners as well as large numbers of civilian engineers with similar eclectic automotive tastes.

The dealership sold various brands over the years including Porsche, Peugeot, Datsun and BMW cars. Clearly familiar with Porsches, Lou raced a silver 1957 Porsche Speedster in 1965 to 1966.

Lou bought 300-128 in the winter of 1966-67 from Daytona class winner, Jack Ryan, and raced it throughout 1967 in C-Production class. He finishing 3rd in the Sports Car Club of America (SCCA) National Championship Central Division. Apparently Lou also raced it at the local dragstrip. This was likely the nearby Kil-Kare Raceway in Beavercreek, Ohio although no firm confirmation could be found. The drag strip announcer was said to have called it "that funny-looking outhouse car."



One of Lou's favorite races was the Bellefontaine Hillclimb run by the SCCA from 1953 to 1974 on public roads in Bellefontaine, Ohio. The event was revived in 2015.

Clearly Lou favored 911s as the picture of the red 911 (*above right*) shown here is his from the 1967 or '68 event. The 911 looks to be of similar vintage to the Miles Collier Collections car (*above left*). The red car may have taken some inspiration from Porsche 300-128 as the roll hoop matches the placement as does the megaphone exhaust. Porsche 300-128 was sold to Steve Boesel in 1968.

Lou Gregg sold his shop sometime after this author's visits in the early 1980s. Lou then went into the mortgage business and reportedly passed sometime in 2018.

*Peter Harholdt Photos
Courtesy of Revs Institute unless other wise linked*

Waving in the Breeze, Race Control Flags

By Bill Vincent

As you look over all the competition cars at the Revs Institute, in the heat of this summer's motorsports season, you can imagine how busy the drivers (and sometimes co-drivers) were hurtling their cars around a race course. Drivers steering, changing gears, braking, and accelerating. Co-driver/riding mechanics guiding the driver, pumping lubricants, monitoring the condition of their car, etc., etc., etc.

But on top of all that was going on *IN* the car - they also had to be alert to what was going on *OUTSIDE* the car too! All with the need for pit crews and race officials to get information to them.

So the use of flags in motorsports has been around pretty much from the beginning. Which really shouldn't be a surprise, as it was often THE form of communication before radio took over. It was also more reliable than the radio and didn't come with a language barrier among other challenges of the time!

The military made extensive use of flags for communication, particularly the Navy, with an alphabet and code system (right).



Although the actual starting point for flags in motorsport can be hard to pinpoint. It is known that flags were used in the early 1900s during French city to city races, where a yellow flag could mean a compulsory pit stop and a blue flag would mean "slow down."

We know that in the 1906 Vanderbilt Cup, a more formal use of flags was established, although quite a bit different from what we know today:

Red - The course was clear. (Today that would be a green flag.)

White - A competitor should stop for inspection. (Which would be the black flag today.)

Yellow - The competitor should stop. (A red flag is used today).

Blue - Caution on course. (Yellow is used today).

Green - The final lap. (In the U.S., white is used for that today).

The one flag that is the same as today is the checkered flag - which signifies the end of the race!



(Continued on page 21)

Race Control Flags...continued

(Continued from page 20)



Red - Stop

Amber / Yellow - Caution

Green - Go / all clear

Along with those flags, these were added:

A red and yellow vertical striped flag (right) - which warned of fluids on the track, or course.



The black flag with a large orange ball in the middle, sometimes referred to as the "meatball" flag (right) - calls a driver to the pits for a mechanical infraction (loose and/or dangerous component on the car).

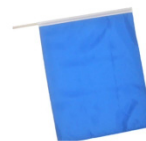


Two other flags used are slightly different, depending on which side of the Atlantic you were competing on and in what series you're competing.

The white flag - Here in the U.S. usually signals the last lap of the race in some racing series. But in Europe and US based sports car clubs, signals a slow moving vehicle on track. This could also be accompanied by a board with a large "SC" on it (right), indicating "Safety Car" on course.



The blue flag with a diagonal yellow stripe (U.S., solid blue in Europe) - also warns a driver that a faster car is overtaking them and also advises them to be "cautious" (right). In 1995 Formula 1 implemented a rule where a driver could receive a penalty if they didn't move over to let the faster car by.



If a driver incurs a penalty, they are shown a black flag, unlike the "meatball" flag, this indicates you've done something against the rules and your presence is required in the pits!



There is also "flag code" that usually means the following:

A stationary, or static flag, is an "advisory." A waved, or waving flag, is an "order" (comply or be penalized). This is most important with yellow flags.

Bill Vincent Photos and Graphics unless other wise credited

(Continued on page 22)

Race Control Flags...continued

(Continued from page 21)

With the yellow flags:

A stationary, or static flag, indicates a danger that is off the track and not immediate, with no passing allowed.

Waved, or waving flag, warns of danger being close. Still no passing allowed.

Double waving flags warn to slow down and prepare to stop! *And you guessed it, no passing allowed!*

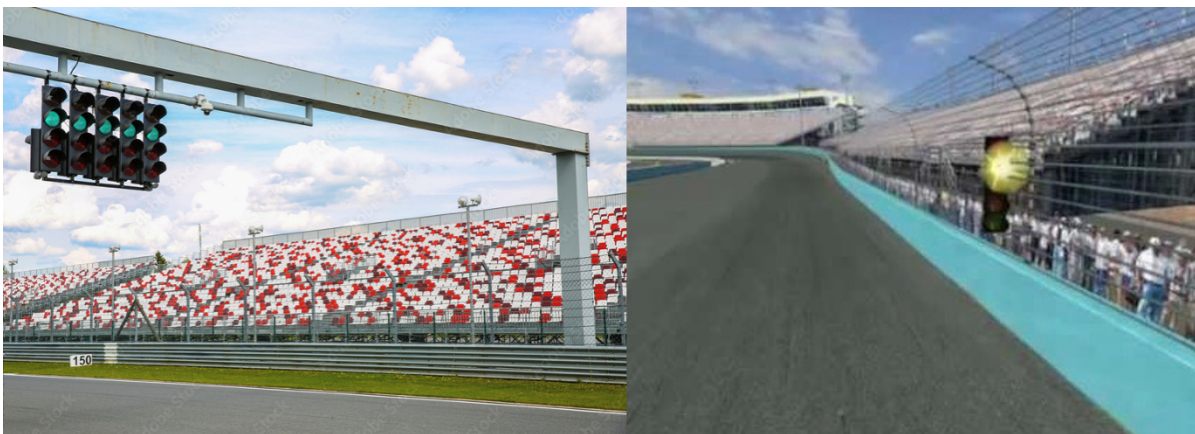
The red flag means the race is stopped and cars should return to the pits. The first red flagged Formula-1 race (not including the Indy 500) was the 1971 Canadian Grand Prix, for fog and rain. The declared victor of that race was Jackie Stewart. 1971 also saw the British Grand Prix as the first race stopped with a red flag and then re-started after a crash involving eight cars.

One thing of interest is the dimensions of the flags.

The red and checkered flags are *usually* about 31 inches by 40 inches.

While the other flags are *usually* only 24 inches by 31 inches.

The World Endurance Championship in also uses a "Code 60" flag (right), which requires drivers to slow down to 60 kmh, or about 37 mph.



Today most modern tracks also use colored lights, in conjunction with the flags. But flags are still used - as their batteries never fail and their bulbs don't burn out!

So, just like in days past, the drivers are still watching for flags to keep them informed!

TAPPET TECH

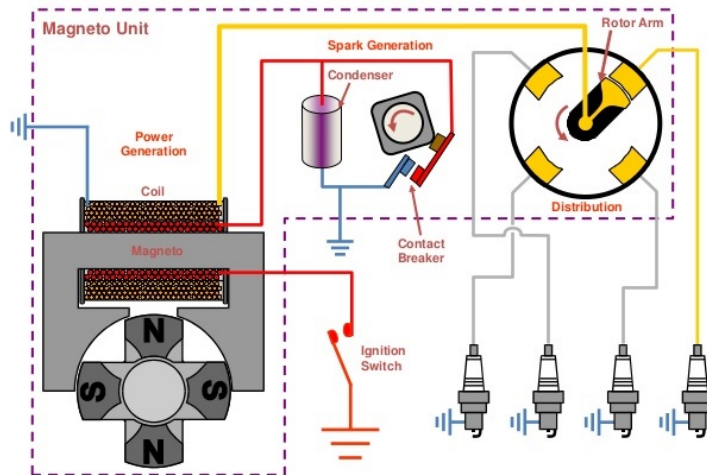
Magneto Sparks or Battery-Coil Sparks

By Eric Jensen

When the internal combustion engine was first developed, one big question needed an answer; "How do I ignite the mixture? The short answer was; A spark. How to achieved this was another question entirely. Engines such as used in the 2008 Mors used a generator to make electricity and mechanically open and closed points inside the engine. The contact points touch and a spark is formed igniting the fuel and air mix.

Technology moved on and created the magneto. So what is a magneto and what makes it different to the coil-and-spark type ignition?

In the late 1890s, English engineer and German engineer Robert Bosch developed a practical magneto ignition used on Daimler engines for the Zeppelin airship. Driven by the engine, a magneto contains a small electrical generator, that is switched on and off by a contact breaker (or breaker points) connected to a rotor driven by and timed to the engine to deliver spark to each cylinder exactly when it is needed. Note the diagram in Figure 1. All the parts are contained in a single component.



*Figure 1
Magneto Ignition System*



*Figure 2
Magneto Ignition*

A magneto does not require a battery to operate. When the engine is hand-cranked, a weak electrical current is developed to create a spark across the spark plug's gap. Once started, the magneto develops more electrical current sufficient to provide a robust spark. The engine will run without any additional components until the driver flips a switch to open the circuit and stop the engine. This is the type of ignition system still used on hand-cranked small engines and some racing cars. The magneto is a compact self-contained unit attached to the engine. See Figure 2.

(Continued on page 24)

TAPPET TECH

Magneto Sparks or Battery-Coil Sparks ...continued

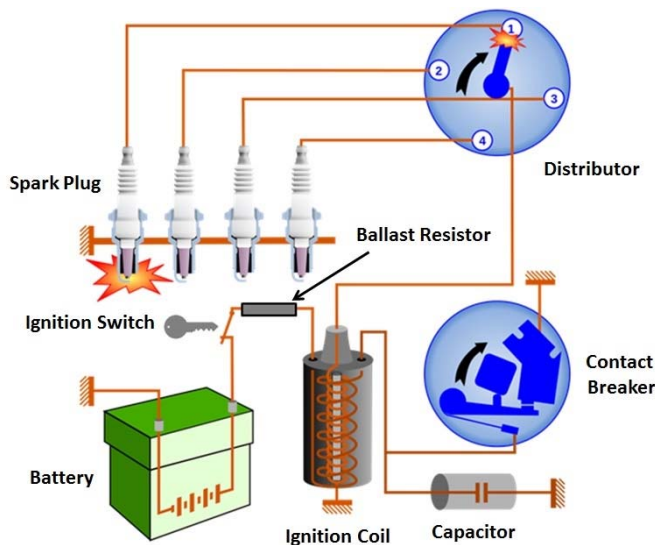
(Continued from page 23)

About a decade after Bosch's magneto, Charles F. Kettering developed a battery-generator-starting-ignition system that used a battery to both turn an electric motor to start the engine and energize a coil to provide spark. The spark was distributed much the same as with a magneto to each cylinder. Note Figure 3.

The battery provided energy for a strong initial spark compared to the magneto which had a weak starting spark. That was a downside to using a magneto ignition. The battery-coil made a stronger spark at very low RPM so it was an improvement in starting the engine. Kettering's system also included a generator to recharge the battery after the start and to provide electricity for lights. Both were desirable features in 1912 as they are today.

Kettering's system was more complicated but it performed more functions. This required more components than a simpler magneto system but the electric starter and generator provided benefits worth the cost and complication to the automobile owner.

Kettering's battery ignition system did not immediately displace magnetos. The Ford Model T used a hybrid coil-magneto system until the end of its production at one point adding a battery to air spark when starting. Some cars were built with both systems. While the magneto was weaker at low engine speeds, the battery-coil system was weaker at high engine RPMs. Using both provided a wider range of performance. The battery-coil system for easier starting with strong low RPM spark and the magneto for high RPM performance and reliability.



*Figure 3
Battery-Coil Ignition System*

TAPPET RIVIA

By Joe Ryan

And Now The Answers.....

1. **Q:** Did the Miles Collier Collections 1965 250 LM win the 24 hours of Le Mans ? **Answer:** No. The race winning car was chassis number 5893 and now resides in the Indianapolis Raceway Museum.
2. **Q:** Who was the team owner of the 1965 24 Hours of Le Mans winning Ferrari 250 LM? **Answer:** Luigi Chinetti, owner of the North American Racing Team (N.A.R.T.).
3. **Q:** Who were the winning drivers of the 1965 24 Hours of Le Mans? **Answer:** Jochen Rindt and Masten Gregory.
4. **Q:** What Manufacturer and Model car was favored to win the 1965 24 Hours of Le Mans? **Answer:** Ford Motor Co. with their Ford GT 40.
5. **Q:** A Ferrari 250 LM won the 1965 24 Hours of Le Mans. What cars finished 2nd and 3rd? **Answer:** Ferrari 250 LMs finished 1st and 2nd with a Ferrari 275 GTB finishing 3rd all with 3.3 liter V12 engines. 4th place went to a little 2.0 liter flat 6 Porsche 904/6!
6. **Q:** What company designed the body of the 1965 Ferrari 250 LM? **Answer:** The body was revealed in 1963, and the design company was Pininfarina!

Contributions to the column are always welcome.



*Peter Harholdt Photo
Courtesy of Revs Institute*

Adopt-A-Car Program

Available Adopt-A-Car Automobiles and Engines

Alfa Romeo Guilietta	Simplex	C-6R Offenhauser engine
Alfa Romeo AutoDelta	Stutz Black Hawk	Cadillac OHV V-8 engine
Ardent Alligator	Vauxhall 30-98 Type OE	Chrysler Hemi (C-3) engine
Bugatti Type 55 Super	Waymo Firefly	Duesy Sprint Car engine
Cisitalia SC	Abarth 1000-TC-R engine	Ford GT-40 Transaxle engine
Cunningham C-3	Alfa Romeo GTZ engine	Ford Turbocharged Indy
Fiat Abarth TCR		Gurney Eagle GP engine
Jorgensen Eagle		Jaguar XK120 Series engine
Maserati Tipo 60		Meyer-Drake Turbo Prototype
Mercer Raceabout		Porsche Type 901/20 engine
Miller board track racer		Porsche Type 901/22 engine
OSCA Sports Racer		Porsche Type 908 engine
Porsche Elva		Porsche Type 916 engine
Porsche RS-61L Spyder		Columbia Three-Track
Scarab Sports-Racer		Humber 58" Ordinary Bicycle
		Velocipede Bicycle

To adopt a car or engine, contact: Brian Lanoway, Adopt-A-Car Chair
at blanoway@shaw.ca

The *Tappet Clatter* is the official newsletter of Revs Institute Volunteers of Naples, Florida. Its intended purpose is to inform, entertain and promote camaraderie for our members.

The editor is Eric Jensen, eric60@gmail.com. Although email is preferred, correspondence can be mailed to: The *Tappet Clatter*, 2500 South Horseshoe Drive, Naples, FL 34104.

The *Tappet Clatter* welcomes contributions from all sources. Contributions are subject to editorial review and enhancement. The editor may use third party input to confirm content. Authors can have the right to review and approve the final version of their article before publication. All ideas and opinions are those of the writers. Neither the *Tappet Clatter* editor nor the Board of Revs Institute Volunteers assumes liability for the information contained herein.

The *Tappet Clatter* respects the copyright of all sources. However, the *Tappet Clatter* may choose to use copyright material if that use meets all four factors of the [Fair Use exception](#) identified in [United States copyright law](#). Unless otherwise noted, photo sources can be identified by clicking on the photo.

The *Tappet Clatter* is not to be reprinted or electronically distributed beyond the membership of The Revs Institute Volunteers without prior written permission. Rights of reproduction, in printed or electronic media, are retained for any text or photographs submitted. The *Tappet Clatter* reserves the right to refuse publication, edit, or modify any material and hold such material for an indeterminate period.