

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:*

BOD Elections	2
Membership Report	3
Events Calendar	4
Tappet Trivia	5
Volunteer Banquet	7
The Jazz Age	10
Walt Hansgen	13
Elva and the 917	17
Tappet Tech	20
Adopt-A-Car	23

*Thank You to
this month's
contributors:*

- Pete Chehayl
- Bill Vincent
- Brian Lanoway
- Whitney Herod
- Joe Ryan
- Chip Halverson
- Tom Dussault
- Mark Ghorayeb
- Anna McDowell

TAPPET CLATTER



Volume 29.6

February 2024



Chairman's Notes

By Chip Halverson

I am writing this month's letter a few days after our annual members banquet. Thanks to the efforts of Whitney it was the best banquet that I can remember. Also a special thanks to Anna and fellow volunteer Diane Johnson for their efforts setting up the tables and flowers.

Great food, great program, and most importantly a chance for all of us to get together with our spouses and enjoy each other's company. With the large crowds we have been experiencing in the galleries there is not much time for us to visit with each other.

Special kudos to our award winners. It's hard to pick the winners when so many of you are doing so much great work. This year's winners are however truly deserving of the recognition. Congratulations from all of us.

Shifting gears, the other day I was standing in the lobby waiting for the guests on my tour. It was lunch hour on a very busy day. While standing there I was able to observe our volunteers in action. Guest services volunteers were greeting guests and tending to the gift shop visitors. Several volunteers at station one were giving orientations to the guests. And a tour passed through with a docent and tour assistant. It was fun to watch all of these highly engaged, skilled volunteers go about their tasks.

(Continued on page 2)

Chairman's Notes... continued

(Continued from page 1)

All of this was taking place in the lobby while there were ten or more station guides in all the galleries interpreting the collection for the visitors. Truly a major undertaking every day we are open.

Keep an eye on the calendar in VicNet. There are a lot of events coming up, and more yet to be scheduled.

Keep up the Great Work

Chip Halverson

Volunteer Board of Directors Elections

2024 Volunteer Board of Director Election Update

Each year leading up to our Annual Meeting, we elect three new members to our nine-member Revs Institute Volunteer Board. Board members serve three-year terms.

This year, we received three applications by the January 26th deadline for our three openings, so these members will be elected by acclamation and formally become members of our board at our upcoming Annual Meeting.

Thank you to everyone who applied for our board openings.

If you have any questions, please direct them to Nominating Committee Chairs Tom Dussault at trd@bu.edu or Mark Komanecky at mkomanecy@gmail.com.

March Members Meeting

Mark your calendars for the Members Meeting on March 11, 2024. Our guest speaker will be Jonathon Diuguld, the Managing Director of Porsche Penske Motorsport. Porsche Penske just recently won the 2024 IMSA Rolex 24 at Daytona with their Porsche 963 GTP hybrid racecar.

Not since 1969 has a Penske entry brought home the overall win at the Rolex. Penske last won in 1969 in a Lola driven by Mark Donohue and Chuck Parsons.



Membership Report

By Tom Dussault

The Membership Committee is pleased to introduce three new members to the Revs Volunteer team.

Steve Wouch is originally from Philadelphia and now is a full-time resident of Bonita Beach. A graduate of Penn State, he is a CPA and founded his own accounting firm. At the age of five, he could point out the make and model of every car that passed by. Steve has owned a 1973 Triumph Stag, a 1985 Ferrari Mondial, a Jaguar E-Type and a Ferrari 348 Spyder. After losing three cars in last year's flooding, he now drives a 2005 Ford GT. Steve is looking forward to meeting our volunteers and sharing his knowledge with our guests. Steve's mentor is Chip Halverson.



Jim Linton is originally from St. Catherines, Ontario and now spends six months of the year in Naples. Jim spent 30 years on the faculty of the University of Windsor as a professor of communications. He specialized in film and video production and produced many documentary videos. He has the honor of having been nominated for an Academy Award in one of the feature documentary categories. Jim started working as a "grease monkey" at a VW dealership at age 14. He has owned a 1963 Porsche 356B, which underwent a frame off restoration. He also has owned a Morris Minor, Toyota Corona, Triumph Mayflower, BMW Isetta, Isuzu Bellett and a Morris Mini that he says he usually pushed to start. Jim's mentor is Morris Cooper.

Paul Subject is a native of St. Marys, Ontario. He owned an international engineering company for many years before retiring to Naples where he spends about half of his year. Paul is an accomplished racer of open-wheel cars. His record includes three time CASC Formula Libra Champion, VARA Club Champion, Formula Classic & F90 Champion and Skip Barber 2.0 Litre Formula Car Grand Master Champion. Paul is an MSF HDPE Certified Instructor and produces his own YouTube channel focusing on racing. Paul says that as a semi professional race car driver, trained coach, and mechanic, he looks forward to spending his retirement years around our beautiful, classic vehicles from all eras. Thanks to Larry Gleeson for mentoring Paul.



Adopt-A-Car

Often overlooked is the list of Adopt-A-Car candidates on the last page of every issue of the *Tappet Clatter*. AAC reports are a great way to learn about a particular car in great detail, expand the knowledge base and share the history of the collection with your fellow Volunteers.

Some surprising information has been uncovered in the AAC research. One of the more recent is that the 1923 Mercedes Targa Florio is not a 1923, but a 1921 originally built as a factory racing car with a different body.

Flip to the last page to see if your favorite car is on the list of adoptees.

Finished reports will get you put on the list for a ride in your adopted car when it goes out for exercise. Reports will be edited into an article to be published in the *Tappet Clatter*.

If you want to reserve a car or ask questions about the procedures or content, contact the AAC chair, Brian Lanoway at blanoway@shaw.ca for assistance.

Events Calendar

Event	Date	Info or contact
Shelby America-Wingate Event	Feb. 2 @ 10:00 pm	Sign up on VicNet
BorgWarner Dinner	Feb. 6 @ 6:00 pm	Sign up on VicNet
Volunteer BOD meeting	Feb. 9 @ 10:00 am	Sign up on VicNet
Madeira on Marco Island Tour	Feb. 9 @ 10:30 am	Sign up on VicNet
First Presbyterian Tour	Feb. 9 @ 1:30 pm	Sign up on VicNet
Chubb Classic PGA Dinner	Feb. 14 @ 7:00 pm	Sign up on VicNet
Corvette Club Valencia/Bonita	Feb. 16 @ 10:30 am	Sign up on VicNet
Duff and Phelps Tour	Feb. 23 @ 10:30 am	Sign up on VicNet
United Church of Christ	Mar. 1 @ 1:00 pm	Sign up on VicNet
Women's Cultural Alliance	Mar. 8 @ 10:30 am	Sign up on VicNet
Madiera on Marco Tour	Mar. 9 @ 10:30 am	Sign up on VicNet
First Presbyterian Tour	Mar. 9 @ 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!*

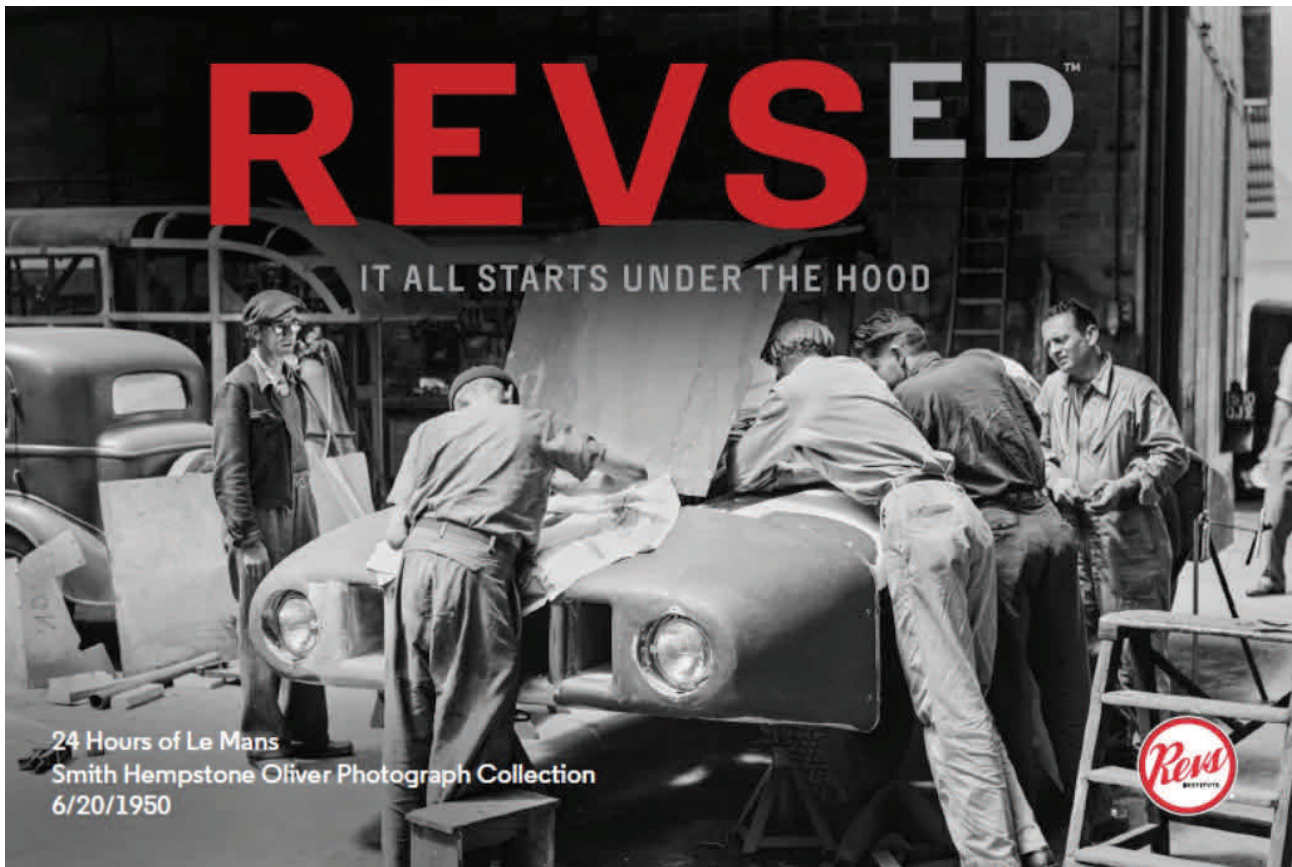
This month's theme is Ford's GT40 cars. In keeping with that, this February Trivia centers around the GT40 Mark III on loan to the Revs Institute from the Peterson Museum. I tried to offer questions that may give our volunteers additional information for our guests.

1. **Question:** Was the 1967 GT40 Mark III bigger than the race version?
2. **Question:** How many 1967 GT40 Mark IIIs were built and sold to the public?
3. **Question:** Where were the 1967 GT 40 Mark IIIs built?
4. **Question:** Why was the shifter positioned in the middle between the seats rather than on the right hand sill?
5. **Question:** What engine was in the Mark III and how was it different to the race versions?
6. **Question:** Did the the1967 GT40 Mark III have door window cranks or electric window switches?

The answers appear later in this issue



Courtesy of Petersen Automotive Museum



24 Hours of Le Mans
Smith Hempstone Oliver Photograph Collection
6/20/1950

REVSED™

IT ALL STARTS UNDER THE HOOD

WHO: -Adult and Teen classes

HOW: -Small class size
-Hands On with Live Equipment & Tools
-Revs Institute Instructors

WHY: -Gain knowledge and confidence
-Meet like minded car lovers
-Have fun!

WHERE: -Revs Institute in Naples, FL



LEARN MORE

revsinstitute.org/visit/register-for-classes/

Engines 101 Learn how engines work, how to use hand tools, and ultimately what makes an engine GO.

Engines 102 Perform diagnostic testing on all the major engine systems, including the starting, charging, ignition and fuel systems; then make the repair.

Brakes 101 Remove, inspect, and reinstall components, then flush and bleed the fluid in the hydraulic system.

Steering & Suspension 101 Remove, inspect, and reinstall all components. Learn how to evaluate tire wear and the importance of wheel alignment.

Electrical 101 Learn how all electrical components receive the proper voltage through specific wires at the push of a button.

Metal Fabrication 101 Learn how to design, cut, bend, and fasten sheet metal to construct a finished product.

January 2024 Volunteer Banquet

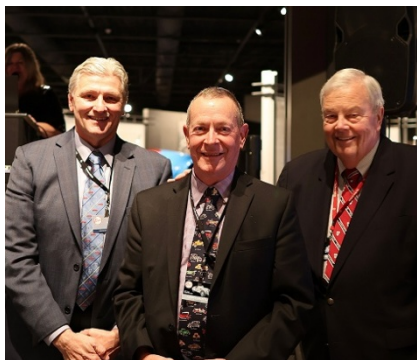
By Eric Jensen

The Volunteer Awards Banquet is our annual celebration of the year's achievements. A gathering of people we spend time with discussing all things automotive.

It is an event to recognize outstanding contributions to the mission of Revs Institute as well as a social gathering of Volunteers, their guests and staff. Once the last guest leaves for the day, the staff springs into action moving cars to the shop to make room in Bentley row for the party. Tables are erected, set and decorated in record time. Hats off to our Volunteer Coordinator, Whitney, for the event planning and Diane Johnson and Anna for the table set up and decorations.

This has truly been a banner years for the Revs Institute. Our 150 Volunteers and the staff were very busy attending to the increased number of visitors. Comparing the 4,623 visitors from November 1st to January 20th 2022 to the 7,245 visitors in that same period in 2023 shows just how busy (a 57% increase). Our total visitor count has increased from 20,616 in 2021 to 24,381 in 2023. Our Volunteer hours increased from 14,432 to 19,974 over that same 3 year period. The glowing comments in *Trip Advisor* reviews reflect the quality of our efforts.

This year we started off recognizing the staff member most helpful to the Volunteers. It is an honor granted by the Volunteers to recognize the contributions to our organization. This year that person was Nadia Taliceo. Nadia is shown to the right receiving her award. Left to right; Chip Halverson, Nadia's grandson Elijah, Nadia and Scott George. Thank You, Nadia!



The Station Guides are a very important element of the museum. They provide security to the collection, educate and, yes, entertain the guests as they view the galleries. They are integral to the stellar reviews we receive on *Trip Advisor*. This years Outstanding Station Guide goes to Gary Oertli (*left*). Gary not only provides great service to our guests but shares that knowledge mentoring new Volunteers so they can excel as well. Congratulations, Gary.

(Continued on page 8)

Photos Courtesy of Brian Lanoway

Volunteer Banquet...continued

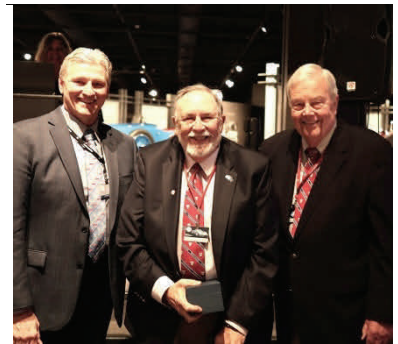
(Continued from page 7)

Another key to our guest experience is provided by those Volunteers that have studied to become Docents. The Docents lead groups of guests on tours through each gallery illustrating the rich history. The 2024 award for Docent of the year goes to Fernando Licopoli. Fernando (*right*) not only gives an engaging and informative tour, but has also worked to create new, specialized tours for those guests wishing a more focused learning experience. Well done Fernando!



Outstanding Research Author award is given to the Volunteer that has shown rigor and attention to detail in researching material for their *Tappet Clatter* or Adopt-A-Car articles. This year's award goes to one of the most prolific contributors to the *Tappet Clatter*, Bill Vincent (*left*). When one issue publishes, the editor sees an email from Bill the same day with a new, well written article and pictures for the next month's issue. Congratulations, Bill, well deserved!

The Emeritus award is a special recognition granted to Volunteers that have served with special distinction for many years but can no longer contribute the required minimum hours. This waiver is requested by the Volunteer but Emeritus is only granted to those Volunteers with significant lifetime hours and achievements. Our *Tappet Trivia* contributor, Joe Ryan (*right*), was granted the title of Emeritus. Joe has been a member of the Volunteer Board of Directors, Sunshine chair, Membership chair, Station Guide, Docent, and contributed over 4000 hours. As if that isn't enough, Joe recruited this author to the Volunteer ranks in 2016. Congratulations, Joe!



The final award of the night is named in honor of one of the founding members of the Revs Institute Volunteers. The Joe Leikhim Award for Outstanding Service is given to those Volunteers that have made significant contributions to Revs Institute. John Wharton is this year's recipient for his leadership of the Training Committee and contributions to the Display Committee.

(Continued on page 9)

Photos Courtesy of Brian Lanoway and Anna McDowell

Volunteer Banquet...continued

(Continued from page 8)

John is known for engaging Docent tours, engaging instructional classes and his legendary “big binder” used to contain his collection notes. This shows his commitment to excellence. Bravo, John!

Please enjoy the additional candid photographs below of our Volunteers and guests. We feel we have the best volunteer organization in the world serving the best automotive history museum.



*Photos Courtesy of Brian Lanoway , Mark Ghorayeb
and Eric Jensen*

The Jazz Age

By Morris Cooper

After the war ended in 1918, the French car industry achieved greatness. The fall of 1919 saw the return of the Salon in the Grand Palais. That show's elegance and size is evident in the poster found in the Revs Institute lobby. Consider the marques that were on display – Renault, Mors, Panhard, Peugeot and many others. Even the makers of airplanes during the war displayed their automobile creations, such as Voisin.



By far, the star of the show was Marc Birkigt's latest, the six-cylinder H6 Hispano-Suiza. Without a doubt, it was the most technically advanced car in the world. Its mostly aluminum engine was derived from Birkigt's water-cooled V8 which had been used in thousands of French and British single seat fighters during the war, including the famous SPAD biplane. That engine had been introduced in 1914 and



Photo Courtesy of Revs Institute

went on to become the most used airplane motor by the Allies, built in 21 factories, including in the U.S.

The Hispano-Suiza post war cars were adorned by the elegant, sculptured emblem of the famous French fighter squadron, the Escadrille des Cigognes. The English word "stork" doesn't do justice to the beautiful, winged bird above the radiator. That radiator itself was the most imposing ever seen.

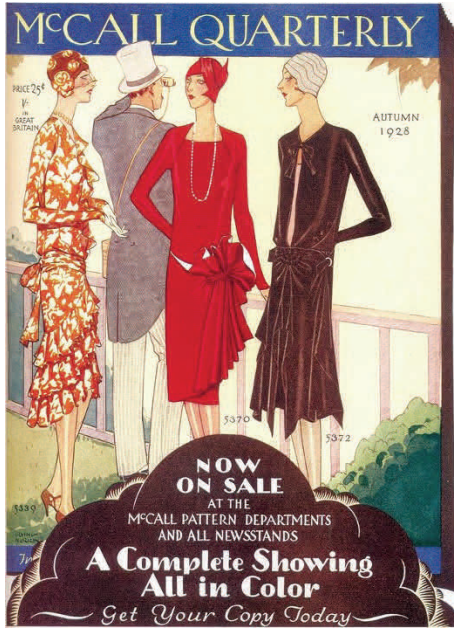
The principal competition to the H-S engine was the side-valve Rolls-Royce. Birkigt's motor was tall, requiring a high hood (bonnet is more correct). The high bonnet resulted in high sides and a clean horizontal line for the great Paris coachbuilders to work with.

The straight lines in bodywork were the expression of the fashion of the "Tubular Twenties". Cars and motoring became fashionable and smart, part of what the Parisians began to refer to as "Le high life."

(Continued on page 11)

The Jazz Age...continued

(Continued from page 10)



The great coachbuilders of the era brought out annual “collections”, just like the great fashion houses, making sure that the styles changed each year. In the years leading up to the 1925 “Exposition des Arts Decoratif”, cars had become an unequalled artistic and creative expression, works of art themselves.

The look of women in advertisements and the posters grew taller and thinner, leading writers to say that in proportion to the rest of their bodies, the women depicted were twice the height of any living woman. The “slim, boyish figure” became the ideal, bringing with it the objective of “a boy’s freedom of movement and behavior.” Hemlines rose from the ankle to the knee, and automobile advertising was never the same. To be “in fashion” meant owning a

Ballot, Hispano or Delage, on the way to horse-racing or the casino.

An interesting development from aircraft manufacture was the start of the use of flexible lightweight “skeletons” covered in a stretched, lightweight and waterproof fabric. No more sheet metal and paint shops.

Like the fashion’s hemlines, the car’s “waistlines” also were raised in designs. Soon the windshields (windscreens) became narrow and low. Part of the style of big touring cars was a type of half-deck and second windscreen in the middle of the car, protecting the rear seat passengers. In the U.S., this was called a twin-cowl phaeton, seen in a number of the Collections’ cars.

Proportions on cars began to change as cars became wider to accommodate front brakes and a wider track. Seats were lower. The newer wider tires lowered the visual profile of the cars.



Photos Courtesy of Revs Institute
Peter Harhold Photos

(Continued on page 12)

The Jazz Age...continued

(Continued from page 11)

Car interiors were luxurious. The new man-made cellulose fibers were coming on-stream, such as Rayon, with its brightly colored designs. Similarly, this brought in a golden age of the glass mascot by Rene Lalique, the ultimate automobile jewelry of the Art Deco period.

But by the end of the decade, the smart, swift world of 1920's motoring came to the abrupt crash of the stock market and the subsequent hard times for automakers, coachbuilders and their clients. It is worth taking the time while walking through the early car Vitesse gallery to appreciate the Jazz Age, now one hundred years past.



Walt Hansgen, The Forgotten Driver

By Peter Chehayl

After Lauren Goodman's presentation about the Ford GT 40s, I remarked to her and a volunteer well informed on American racing that I had a connection to the GT 40s. When I mentioned Walt Hansgen's name the volunteer thought for a moment and he said, "the forgotten driver." Hansgen grew up in my hometown of Westfield New Jersey and I remembered that he owned the Jaguar dealership in town. But when I was in high school, that was about all I knew about him.

At Revs Institute we hear a lot about Briggs Cunningham and his drive to win the 24 Hours of Le Mans with American cars and American drivers. I volunteered for several years entering metadata for the Revs Digital Library. The more I learned about Cunningham, the more interested I became. I went to the Cunningham Team Drivers web site. There I learned that Briggs had driven his cars in 186 races. Hansgen drove in 180 races for Briggs. John Fitch was next with 64 and Phil Walters with 48. While Fitch and Walters are familiar names, who was this forgotten driver?

Walt was born on October 28, 1919. His father immigrated from Germany in the 1890s. He was trained in the carriage building trade and set up shop in Westfield, New Jersey. Walt worked in his father's shop and the name was eventually changed to F. K. Hansgen & Son. After graduating from high school, Hansgen joined the army. The army soon took note of his automotive skills, and he was put in charge of the motor pool.

Walt continued to work in his father's auto repair shop after the war. While he wanted to go to college, the work at the shop was too demanding and he had a growing family.

The occasional MG TC or Jaguar that came to the shop for repair piqued his interest in these exotic cars. A good friend showed Walt his MG and explained that the Sports Car Club of America held races and rallies. Walt was hooked. In 1950, his friend bought a Silverstone Healey which he and Walt brought to Watkins Glen for the Grand Prix. It was Walt's first look at road racing. The next spring, Walt bought a Jaguar XK-120 and taught himself how to drive it.

1951 was a breakout year for Hansgen. He drove his XK-120 to the Bridgehampton racetrack on Long Island in May. Ten or twelve XK-120s were entered into the race.



Walt Hansgen, right, with Alfred Momo, left

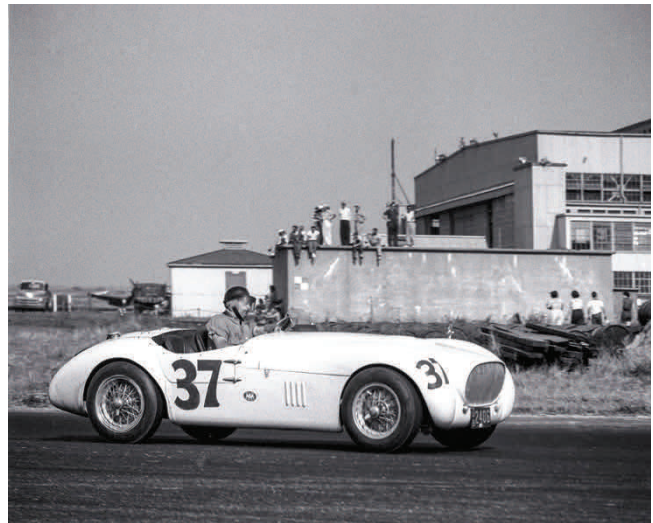
(Continued on page 14)

Walt Hansgen...continued

(Continued from page 13)

Walt was running fourth in C Production class with most of the other XK-120s in his rearview mirror when he spun out on the last turn of the last lap and failed to finish (DNF). In September he was at the Watkins Glen Grand Prix. Briggs Cunningham had brought three C2Rs to race and they finished 1-2-4. Phil Walters drove the winning car. He and Hansgen had met the year before. Both men had a deep understanding of the machinery they were driving and developed a mutual respect. Cunningham drove the fourth-place finisher with Hansgen running right behind him taking 2nd place in Class 3 with his XK-120. The connection to the Cunningham race team would be a pivotal event in the future.

At Watkins Glenn his aggressive driving earned him a black flag and a license suspension. This was a time when the SCCA still thought motor racing should be more of a gentleman's sport. He used this time to construct his own car. F. K. Hansgen & Son body shop built a new body for the XK-120 (*right*). Walt created a lightweight tube-frame chassis and modified the engine. However, in 1953 when Hansgen's suspension was completed and he was able to track the Special, it was not competitive. But with Walt's driving skills and determination he was able to gain third in C Modified at the SCCA Nationals.



Hansgen bought Maston Gregory's C Type Jaguar at the 1954 12 Hours of Sebring. It DNF at that race. Over the course of the racing season, he raced his C-Type and George Tilp's Aston Martin DB2 - Offenhauser with limited success.

Hansgen drove other people's cars in 1955, including an OSCA MT4 and Ferrari Monza for George Tilp, a Porsche 550 for Don McNought, and an Austin Healey 100S for George Bortin. He received the Outstanding Performance Award from SCCA National that year.

During the 1955 24 Hours of Le Mans, there was a terrible accident that killed over 80 spectators and injured over 120 more. Phil Walters was driving the Jaguar D-Type for Briggs Cunningham that is now in the Revs Collection. Walters was right behind the accident and saw the whole thing happen. Being the professional that he was, Phil completed his stint, got out of the car in the pits, and never went racing again.

(Continued on page 15)

Walt Hansgen...continued

(Continued from page 14)

Who was to fill this important seat?

Hansgen signed on to drive a D-Type Jaguar for Hansen-McPhee Auto Engineering in Bedford, Massachusetts for 1956. It was a small firm, but the two principals were excellent engineers. At the Vandegrift Memorial race at Cumberland, Maryland in April, Hansgen took on the entire four D-Type team of Briggs Cunningham and beat



*Tom Burnside Collection
Courtesy of Revs Institute*

them pulling away. Briggs had previously talked to Walt about driving for his team. Still needing to find a replacement for Phil Walters, Briggs saw in Walt the same driver/engineer qualities of Phil. Briggs offered the seat to Walt, who agreed only on the condition that he could honor his commitment for the 1956 season to the small Bedford, Massachusetts team. He would drive for Cunningham at the races the smaller team did not enter. It was agreed.

For the rest of the 1956 season, Walt drove a D-Type Jaguar for either Cunningham or Auto Engineering. Either way the results were the same. Hansgen won the 1956 SCCA Championship in C Modified. He repeated in 1957 racing Cunningham's D-Type 17 times, including a fifth place overall at the 12 Hours of Sebring (*above left*).

In 1958, Walt raced twenty-five times for Briggs. The D-Type Jaguar was switched out for a Lister Jaguar (*right*) starting with the 12 Hours of Sebring in March. Walt and co-driver Scott Brown did not finish (DNF). The rest of the season was more favorable to Hansgen and Cunningham's Lister Jaguar. He finished second in the Watkins Glen Grand Prix and was again SCCA National Champion in C Modified.



*Karl Ludvigsen Collection
Courtesy of Revs Institute*

1959 saw Hansgen race nineteen times for Briggs. At the 12 Hours of Sebring, Walt and co-driver Richard Thompson finished twelfth overall in the Lister Jaguar. In addition to the Lister Jaguar, Walt twice raced Cunningham's Stanguellini and drove Briggs's Jaguar Mk2 to win the Sebring Compact Car Race that December.

(Continued on page 16)

Walt Hansgen...continued

(Continued from page 15)

Walt won the Watkins Glen Grand Prix with the Lister Jaguar. For the fourth year in a row, Hansgen won the SCCA National Champion in C Modified.

As noted above, Walt Hansgen in total drove in 180 races for Briggs Cunningham; Briggs drove 186 times for his team; John Fitch 64; and Phil Walters 48 times. Cunningham, Hansgen, and Alfred Momo formed a formidable team to keep Cunningham at the forefront of racing. Walt's mastery of the course at Bridgehampton was so complete that the first turn out of pit lane, a difficult downhill turn, was named the Hansgen Turn.



*Top to Bottom, Sherwood Johnson, Walt Hansgen and Briggs Cunningham
Courtesy of Revs Institute*

Cunningham closed his team after the 1963 season. Hansgen spent the 1964 race season driving mostly for Holman-Moody and John Mecum. He co-drove a John Mecum Lola MK6 GT Chevrolet with Augie Pabst to DNF in the 12 Hours of Sebring and placed fifth in the United States Gran Prix at Watkins Glen in a Lotus 33 Climax for Team Lotus. He competed in twenty-four races that year.

In 1965, Hansgen competed in nineteen races, predominantly in a Lola T-70 Ford for John Mecum. He finished eleventh at the 12 Hours of Sebring co-driving with Mark Donohue. Mark and Walt were both from northern New Jersey and formed a bond when Mark was accepted into the Road Racing Driver's Club training program that Walt developed. Mark had a BS degree in mechanical engineering from Brown University and their engineering/racing aptitudes were part of the equation.

1966 saw Hansgen co-driving a Ford GT40 MK II with Donohue for Holman-Moody to a third-place finish at the 24 Hours Daytona and a second place finish at the 12 Hours of Sebring. On April 3, 1966, Walt was testing the GT40 that he and Mark were to drive at the 24 Hours race. As usual, Walt was making the best the car could do after the previous night's rain at Le Mans. He was traveling at 150 mph while approaching a curve. He started to lose control of the car but knew that there was an escape road at the entry to the curve. A construction crew had deposited two large piles of sand on the escape road without notifying race control. It was a horrible crash and Hansgen died at hospital four days later.

So now you know the forgotten driver. The question remains; why, with all his major accomplishments, he remains forgotten?

Elva Race Cars and the Porsche 917 Engine

By Bill Vincent

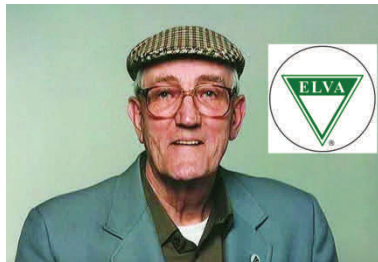
The lightest car in the Miles Collier Collections carries more weight than you might think!

Much like in music of the late 50's and early 60's - Elva was part of a "British Invasion" of the sports car and motorsport kind! Some were more well known like MG, Triumph and Jaguar on the road - and on the motorsport side Lola, Chevron, Merlyn and Elden, among others. Some had a foot in both camps, building road cars and purpose built race cars, like Lotus - and Elva.



Bill Vincent Photo

That featherweight Elva also represents some other ties in the collection along with a personal one too! But more on that later...



So Elva was founded in 1955 by Frank Nichols (*left*). The name comes from the French phrase "elle va", or "she goes." The first car was based on a car built by Mike Chapman, using a Standard Ten front suspension, Ford Anglia rear axle, and a modified Ford 10 engine with an overhead valve conversion. Production Elvas started with the front engine Mk I to MKIIIs (*below right*). To the rear/ mid engine Mk IV's to Mk VII's - of which The Miles Collier Collections Elva Porsche represents. Aside from the Porsche powered chassis, most were powered by engines from Coventry-Climax, Ford, and BMW.

But that Elva / Porsche pairing wasn't limited to the four cylinder Fuhrmann engine though, as Porsche also raced an Elva Mark VII (*below left*) chassis with the 8-cylinder Type 771 competition engine in the 1964 European Hill Climb Championship. That car only weighed about 1146 pounds and was much lighter than the Porsche Bergspyder RS 61 (type 718) or the 904 Bergspyder.



Porsche won the opening round of the 1964 championship with it, at Rossfeld in southern Germany, with Edgar Barth (*father of later Porsche Engineer and racer Jurgen Barth*) behind the wheel. Then won again with it at the final round at Sierre Crans Montana, in Switzerland, with Herbert Muller driving.

(Continued on page 18)

Elva and the Porsche 917 Engine...continued

(Continued from page 17)

Barth ended up winning that championship - but only after reverting back to the previous year's Porsche RS 61.

The Elva proved to have poorer driving characteristics, with its frame probably too heavily stressed by the weight and power of the 8-cylinder engine. On the "road car" side Elva produced the Courier (*right*), which was introduced in 1958. It initially used a 1500 cc MGA engine, in a ladder style chassis and an Elva designed independent front suspension. The layout had the engine set well back in the chassis to improve the weight distribution. That made for good handling but crowded in on the cockpit and made the car a bit tight.



It had a lightweight open 2-seater fiberglass body and it was produced as a complete car for the US and European market and available in kit form for the UK market. Something Lotus also did up through its Europa model. The rights to the Courier were then sold to Lambretta-Trojan, in England, in 1962.

The Elva Formula Junior and Mark IV sports cars continued to be built by Frank Nichols. There were various mechanical changes as it evolved, but the styling stayed pretty much the same. Then in 1965 Ken Sheppard Customized Sports Cars, of Shenley, Hertfordshire, acquired the Elva Courier from Trojan.



There was also a GT160 that was shown at the 1964 London Motor Show. That didn't really get past a three unit run of prototypes, built by Carrozzeria Fissore of Turin. One was entered in the 1965 24hrs of Le Mans - but retired early in the race. (Pic: #6) The Elva nameplate went on to produce sports and single seat race cars, along with road cars until 1968.

Now - about those ties to and in the Miles Collier Collections...

The cylinder head on that first car, that featured the overhead inlet valves conversion? It was designed in part by one Harry Weslake. Yup, the same Weslake whose name is cast into the cam covers (*next page*) on the beautiful 1967 Gurney Eagle Formula 1 car!

Peter Harholdt Photo Courtesy of Revs Institute

(Continued on page 19)

Elva and the Porsche 917 Engine...continued

(Continued from page 18)

Of course there's also the link pictured on the wall, behind the Elva Porsche on display! That is of the Volunteers' own Bill Wuesthoff with Augie Pabst (*below*) after winning the 1963 Road America 500 in an Elva Porsche!



But there's also one more hidden link - a much more subtle one on display across the Porsche gallery from the Elva. That would be the Porsche 917 Turbo engine on display!

Well, there was a young driver / engineer that would go on to be very involved in the development of the 917 CanAm engine that cut his racing teeth driving Elvas; an Elva Courier - and an Elva Formula Junior!



That driver / engineer was a young Mark Donohue (*right*). Donohue acquired an Elva after selling his '57 Corvette and, after getting his SCCA Regional License in it, began collecting trophies in the SCCA F-Production and later E-Production classes out the east coast. Then in 1962, Donohue moved into the Formula Junior class with an Elva with mixed success.



But years - and many race victories later - Donohue applied his engineering talents, along with Porsche's resources, to create the 917-10s and 917-30s (*below left*) that



Team Penske campaigned in the CanAm series. That 917 turbo engine on display in the Porsche gallery represents all the time he spent at Porsche in Germany, working with them sorting through the tuning of the fuel injection

and turbocharger boost for those engines that ultimately uprooted McLaren's CanAm dominance!

And all that ties back to a little British Car company that built, for the time, an affordable entry into the world of sports car racing.

It's always interesting to see whose names along with the ties that pop-up between manufacturers, race teams, and the like - through the automotive evolution the collection at Revs Institute represents!

Photo courtesy of Bill Vincent unless linked

TAPPET TECH

Water Cooled Engines

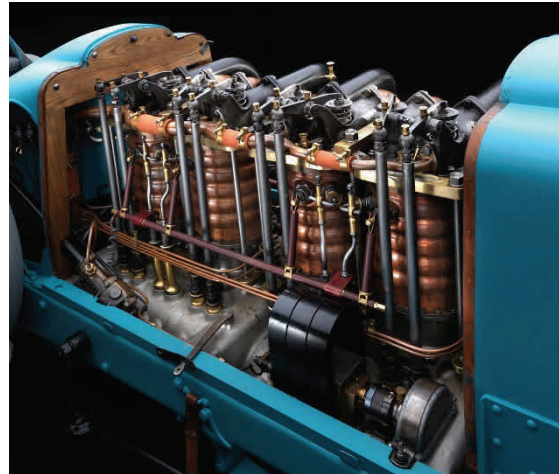
By Eric Jensen

We all know engines make heat as a consequence of making horsepower. That heat must be taken away so the engine does not grind to a halt when the internal temperatures become high enough to damage things. How did early cars solve that problem?

There are two schools of thought about engine cooling. You could directly air-cool the engine; Dr. Porsche's favorite method. Or you could put water in compartments around the heat producing areas of the engine and then direct it to something that can transfer the heat to the air, like a radiator.

Air-cooled sounds simpler, doesn't it? In theory, yes, it is simpler. You leave open spaces around the combustion chambers and cylinders and hope driving the car moves enough air to keep things cool. In the earliest days of 10 horsepower automobiles, that works fine. When higher horsepower engines come along, fans are added and ductwork to direct the air.

Many early autos chose to cool with water instead. On some early autos, water surrounded the cylinders inside copper jackets, as shown here in the 1908 Mors (*right*). A radiator with finned tubes was used to dissipate the heat from the water to the air as it thundered down the road. Some pioneering carmakers used engine driven pumps to circulate the water.



Most Ford Model Ts (and others) used a simpler method. The engine was cast from iron with the water passages cast into the block. A water pump was not fitted. So how did the water circulate?

Since hot water is lighter than cold water, it floats to the top and sinks when cooled down. The radiator top is the highest point so it receives the hot water which then cools and drops down to the bottom of the radiator pushing the cool water into the engine. This is called thermo-siphon cooling. A fan was included to keep the water cool when sitting in traffic or driving slowly.

(Continued on page 21)

*Courtesy of Revs Institute
Perter Harholdt Photos*

TAPPET TECH

Water Cooled Engines ...continued

(Continued from page 20)

The early cooling systems were not sealed which meant that the water would boil at 212 degrees Fahrenheit. Careful monitoring of the temperature was required to prevent boiling over like a tea kettle left too long on the stovetop. Water needed to be added periodically due to evaporation. Since the radiator cap was within constant view, the driver knew when to take it easy with the throttle to prevent overheating.

The temperature was controlled by the driver. Hood vents (*right—chromed on the sides of the engine cover*) could be opened to cool more effectively or closed so the car comes up to running temperature quickly in the winter.

Much like hand controls for spark advance or fuel mixture, hand starter cranks and manual transmissions, the driver was very much the “brains” of the cooling system. Brains that would be walking if they didn’t pay enough attention!



Because overheating was a common occurrence in early cars, the Boyce MotoMeter Company created a radiator cap with a built in thermometer (*left*) to show the driver the engine’s temperature. Right in the driver’s sight line, the cap could tell you when the water temperature was getting a bit too high.

For winter use extra precautions were needed. Since water freezes at 32 degrees Fahrenheit, auto owners added methyl alcohol to the water to lower the freezing point. It evaporated more easily than just water, but that was a problem for the summer months!

As materials technology improved, cooling systems were improved with glycol-based liquids that have higher boiling and lower freezing points. Stronger radiators, radiator caps and hoses that can be pressurized raised the boiling point even higher. Water pumps and thermostats regulate the temperatures so the driver does not have to constantly monitor it. No longer does the driver stop to open the vents.

Today’s cooling systems are virtually maintenance free. We have come a long way!

TAPPET RIVIA

By Joe Ryan

And Now The Answers....

1. **Q:** Was the 1967 GT40 Mark III bigger than the race version?
Answer: Yes, it is 8 inches longer than the race version to make room for a small luggage/storage area.
2. **Q:** How many 1967 GT40 Mark IIIs were built and sold to the public?
Answer: Ford built seven and none were sold to the public due to the high cost of \$18,000 in 1967. This would be \$167,210 in 2023 dollars!
3. **Q:** Where were the 1967 GT 40 Mark IIIs built?
Answer: The cars were built in Great Britain, not in the United States.
4. **Q:** Why was the shifter positioned in the middle between the seats rather than on the right hand sill? **Answer:** To provide room for an ashtray and when a left or right-hand drive was ordered, fewer changes in the mechanicals were needed.
5. **Q:** What engine was in the Mark III and how was it different to the race versions? **Answer:** The engine for the GT40 Race version was a 4.7 liter V8 making 390 Horsepower. The GT40 Mark III engine was de-tuned to 306 Horsepower. The car still had a respectable 0 - 60 time of less than 6 seconds.
6. **Q:** Did the the1967 GT40 Mark III have door window cranks or electric window switches? **Answer:** There were no window crank or electric window switches. The window could only be swung a bit open at the rear for ventilation much to the chagrin of the driver and passenger!

Contributions to the column are always welcome.



Courtesy of Petersen Automotive Museum

Adopt-A-Car Program

Available Adopt-A-Car Automobiles and Engines

Alfa Romeo Guilietta SV	Lancia Aurelia B20	Vauxhall 30-98 Type OE
Ardent Alligator	Lotus Elite	Waymo Firefly
Austin Cooper S	Maserati Tipo 60	Abarth 1000-TC-R engine
Bugatti Type 55 Super	Mercedes Benz W-154	Alfa Romeo GTZ engine
Cadillac Series 61	Mercer Raceabout	C-6R Offenhauser engine
Cisitalia SC	Miller board track racer	Cadillac OHV V-8 engine
Cooper Climax T-43	OSCA Sports Racer	Chrysler Hemi (C-3) engine
Cooper T-51	Packard Speedster	Duesy Sprint Car engine
Cunningham C-1	Porsche Elva	Ford GT-40 Transaxle engine
Cunningham C-3	Porsche RS-60 Spyder	Ford Turbocharged Indy
Cunningham V3	Porsche RS-61L Spyder	Gurney Eagle GP engine
Delage Grand Prix	Rolls Royce Silver Ghost	Jaguar XK120 Series engine
Delahaye 135 CS	Scarab Sports-Racer	Meyer-Drake Turbo Prototype
Duesenberg Model J	Simplex	Columbia Three-Track
Fiat Abarth TCR	Stutz Black Hawk	Humber 58" Ordinary Bicycle
Jorgensen Eagle	Trabant	Velocipede Bicycle

To adopt a car or engine, contact: Brian Lanoway, Adopt-A-Car Chair

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 Volunteers' edition of the *Tappet Clatter* is not to be reprinted or electronically distributed beyond the membership of The Revs Institute Volunteers without prior written permission. There is a public edition of the *Tappet Clatter* available on the Revs Institute website. 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.

Adopt-A-Car Program

Available Adopt-A-Car Automobiles and Engines

Alfa Romeo Guilietta SV	Lancia Aurelia B20	Vauxhall 30-98 Type OE
Ardent Alligator	Lotus Elite	Waymo Firefly
Austin Cooper S	Maserati Tipo 60	Abarth 1000-TC-R engine
Bugatti Type 55 Super	Mercedes Benz W-154	Alfa Romeo GTZ engine
Cadillac Series 61	Mercer Raceabout	C-6R Offenhauser engine
Cisitalia SC	Miller board track racer	Cadillac OHV V-8 engine
Cooper Climax T-43	OSCA Sports Racer	Chrysler Hemi (C-3) engine
Cooper T-51	Packard Speedster	Duesy Sprint Car engine
Cunningham C-1	Porsche Elva	Ford GT-40 Transaxle engine
Cunningham C-3	Porsche RS-60 Spyder	Ford Turbocharged Indy
Cunningham V3	Porsche RS-61L Spyder	Gurney Eagle GP engine
Delage Grand Prix	Rolls Royce Silver Ghost	Jaguar XK120 Series engine
Delahaye 135 CS	Scarab Sports-Racer	Meyer-Drake Turbo Prototype
Duesenberg Model J	Simplex	Columbia Three-Track
Fiat Abarth TCR	Stutz Black Hawk	Humber 58" Ordinary Bicycle
Jorgensen Eagle	Trabant	Velocipede Bicycle

To adopt a car or engine, contact: Brian Lanoway, Adopt-A-Car Chair

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 Volunteers' edition of the *Tappet Clatter* is not to be reprinted or electronically distributed beyond the membership of The Revs Institute Volunteers without prior written permission. There is a public edition of the *Tappet Clatter* available on the Revs Institute website. 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.