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

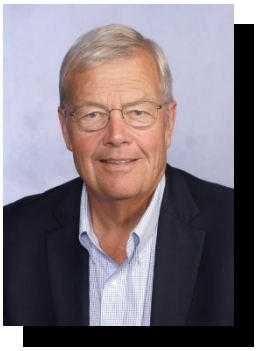
***Inside* this Issue:**

Thank You to this month's contributors:

- Lauren Goodman
- Max Trullenque
- Brian Lanoway
- Bill Vincent
- Frank Brown
- Whitney Herod
- Joe Ryan
- Chip Halverson
- John Wharton

TAPPET CLATTER

Volume 28.7 March 2023



Chairman's Notes

By Chip Halverson

When I retired I thought about going back to school to take some classes. Maybe it was driven by guilt over all the classes I slept through in college. Seriously, I thought it would be fun to take some classes in subjects that interested me.

About that time, I became involved with Revs institute. There I have experienced an environment of constant learning in a subject matter of great interest to me, and had fun doing it.

This month's letter is about that constant learning experience at Revs. Over the last few months two excellent new training programs have been presented by the training committee.

First is the Myth Busters class. While we feel our group already has very high standards of accuracy, there is always room for improvement. John Wharton did an excellent job addressing some of most frequently observed areas of concern. The good news is that list was not long considering how large a subject we are covering. On the other hand this is not a one-and-done class. The committee intends for this to be an ongoing process.

Ralph Stoesser, our resident Porsche impresario, presented the Porsche family and gallery information to eager Volunteers. Even experienced Docents and Station Guides can be intimidated when marque clubs come to visit. Given the number of Porsche clubs that visit the Revs Institute, all carried away the information needed to impress even the most knowledgeable Porschephile.

(Continued on page 2)

Chairman's Notes... continued

(*Continued from page 1)*

Next, we had an Open Wheel Class covering galleries 9 & 10. John Fritz did extensive research on the cars and presented information covering both facts and interesting stories. Everyone there that I talked to said they learned a great deal. I have already heard some of the information being used by volunteers. One interesting observation John made before the class was how many of the attendees were long time volunteers, both station guides and docents. This is a great example of the commitment to continuous learning.

Coming soon Morris Cooper will present "Footprints Masters Class". Given the very high-quality content Morris has produced over the years this promises to a very interesting perspective on the collection.

I highly encourage all of you to attend these classes. They are some of the best I have experienced at Revs. If your schedule doesn't fit they will be available on YouTube shortly.

Many thanks to the presenters!

Chip Halvorsen

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!*

Continuing with the theme of questions about a specific car rather than a random set of questions. This month's questions reference the Ford Motor Company.

1. **Question:** How many investors did Henry Ford have for the 1903 startup Ford Motor Company?
2. **Question:** Who was the largest investor in the Ford Motor Company?
3. **Question:** Who did Henry Ford work for while working on his first car and engine called the Quadricycle?
4. **Question:** Was Henry Ford involved in Politics?
5. **Question:** Who was the first President of the Ford Motor company?

The answers appear later in this issue

COORDINATOR'S CORNER

By Whitney Herod

This past two years, we've given focused attention to recruiting efforts. By offering more ways to serve, we've been able to appeal to a broader talent pool, allowing us to diversify and grow our membership base substantially. We are proud of the growth we've cultivated and look forward to continuing to welcome volunteers from a wide range of backgrounds, interests and talents.

Equally important to the attention we extend to recruiting and retaining new volunteers, is the care and appreciation we must show our long serving members, especially as it becomes necessary for them to reduce their service contribution. For this reason, we are introducing a new *Tenured Volunteer* Designation of Honor. This article will explain this new status and clarify how it differs from the Emeritus Award, which now has better defined criteria.

Thank you to the Membership Committee and Volunteer Board for their work on this important initiative. Once you've read the details, I welcome you to reach out to me if you have questions. One of the most important elements of the Tenured Volunteer and Emeritus Honor is that once awarded, the designated volunteers are encouraged to continue to contribute in ways they are willing and able, ensuring Revs Institute continues to benefit from their wealth of knowledge, expertise and longstanding commitment to the Revs Institute Mission.

Tenured Volunteer Designation Honor:

Guidelines for Nomination/Selection:

"Tenured Volunteer" is a special designation that is reserved for members who have made a significant contribution to Revs Institute but are no longer able to perform the traditional duties or are unable to meet the minimum sixty (60) hour service requirement but still wish to contribute in a meaningful way. Criteria for consideration include:

- Served a minimum of 1500 Hours
- Longevity: 8 Years of Service (minimum)

(Continued on page 4)

COORDINATOR'S CORNER ... *continued*

(Continued from page 3)

Nomination/Selection Process:

The process is initiated when a Member requests "reduced hours" to be exempt from the sixty (60) hour yearly service requirement but wishes to continue to serve in some fashion.

Volunteer Coordinator identifies member as a candidate for the Tenured Volunteer designation and honor. The Member meets with Volunteer Coordinator to discuss appropriate volunteer activities based on member's ability and interests. These may include, but are not limited to, traditional activities such as Station Guide and Docent as well as contributions to Adopt-a-Car, *Tappet Clatter*, and Library, etc.

Tenured Volunteer Benefits:

- Member Meetings and all social activities
- VicNet access
- All Member email communications
- Four (4) Guest Passes per year
- Revs Store Discount

Annual Banquet invitation is not included as a benefit (unless 60 hours of service was contributed during the prior year).

Emeritus' Designation Honor:

The "Emeritus Award" is a rare and special honor that is reserved for members who have made a lasting impact at Revs Institute. In recognition of this, Emeritus members are no longer required to meet the minimum annual service hours requirement, while their contributions are still welcome in meaningful ways, such as mentoring, committee participation, research and other select volunteer duties. To be considered for the Emeritus designation, a member must meet the following criteria:

- Served a minim 2000 Hours
- Longevity: 8 Years of Service (minimum)

Offered a significant contribution to Revs Institute by serving in one or more of the following: (next page)

(Continued on page 5)

COORDINATOR'S CORNER ... *continued*

(*Continued from page 4)*

- BOD Member.
- Working Committee Leader or Committee Member.
- Training Development / Delivery
- Ambassador Program/Community Outreach / Recruitment.
- Mentoring
- Adopt-a-Car / *Tappet Clatter* Contributor

Nomination/Selection Process:

The process is initiated when a Member requests "reduced hours" to be exempt from sixty (60) hour yearly service requirement but wishes to continue to serve in some fashion. Membership Committee during the November committee meeting shall identify members who meet criteria. There may be no candidates, or one or more candidates in a given year.

Volunteer Coordinator considers and, if approved, forwards nominee/nominees to Board of Directors. Membership Committee & Volunteer Coordinator present nominees to Board of Directors at November or December meeting. Board of Directors approve or deny.

Emeritus Member meets with Volunteer Coordinator to discuss appropriate activities based on member's ability and interests. These volunteer activities may include, but are not limited to, traditional activities including Station Guide and Docent as well as contributions to Adopt-a-Car, *Tappet Clatter*, Library, etc.

'Emeritus' Benefits:

- Annual Banquet invitation
- Member Meetings and all social activities
- VicNet access
- All Member email communications
- Four (4) Guest Passes per year
- Revs Store Discount

We feel that this is a way to both honor our long serving Volunteers and continue to benefit from the relationship. It also allows all of us to remain connected with our friends.

Events Calendar

Event	Date	Info or contact
Mythbusters Training Class	Mar 6 @ 10:00 am	Sign up on VicNet
Platinum Yacht Club	Mar 8 @ 1:30 pm	Sign up on VicNet
Gimmick Rally	Mar 10 @ 10:15 am	Sign up on VicNet
Footprints Master Class	Mar 15 @ 10:00 am	Sign up on VicNet
Board of Directors Zoom Meeting	Mar 17 @ 10:00 am	Sign up on VicNet
Women's Cultural Alliance	Mar 17 @ 1:30 pm	Sign up on VicNet
Footprints Master Class	Mar 22 @ 10:00 am	Sign up on VicNet
Suncoast British Car Club	Mar 23 @ 11:00 am	Sign up on VicNet
Valancia-Bonita Corvette Club	Mar 24 @ 10:30 am	Sign up on VicNet
Florida Suncoast BMW	Mar 31 @ 10:30 am	Sign up on VicNet
Pelican Marsh Tour	Mar 31 @ 1:30 pm	Sign up on VicNet
Member's Meeting	April 5 @ 11:00 am	Sign up on VicNet
Cars and Coffee	April 15 @ 8:30 am	Sign up on VicNet
For a full list of daily tour groups and events, go to the 'Calendar of Events' on VicNet.		

April 5th Members Meeting - Diane Parker

Our featured speaker, Diane Parker is extremely passionate about the brain science associated with the power of storytelling to convey brand and event messaging. An irresistible story elevates a brand and captures hearts by first attracting the brain!

Diane is a sedulous leader and business strategist that recently retired as the Vice President of the Hagerty Drivers Foundation. She remains on the Board of Directors of the Foundation as Treasurer. She also serves on the Steering, Marketing, and Scholarship, Grants and Education Committees for America's Automotive Trust. In the past, Diane served on the Advisory Committee for the Petersen Business Incubator Program for Women in the Automotive Industry.

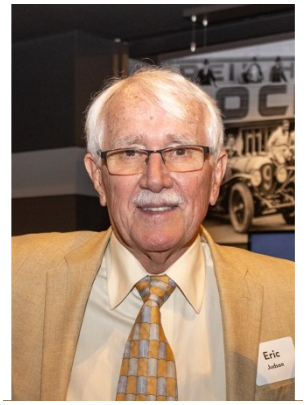
Diane has judged at various Concours events including Motorcar Cavalcade, Amelia Island, Boca Raton, Detroit, Greenwich, Hilton Head, the Elegance at Hershey, The Greenbrier, and The Quail, A Motorsports Gathering.

Volunteer Board of Directors Candidates

It is time to elect three new members to our nine-member Revs Institute Volunteer Board. We elect three new board members each year, with board members serving three-year terms.

At the time of this publication, we have four candidates and three openings on the board. The fourth candidate is below with the previous 3 on the next page. An election will be held by electronic voting. Additional volunteers wishing to be considered must contact **Hank Berglund**, Nominating Committee Chair.

The final voting results will occur at the April Volunteer Monthly Meeting.



Eric Judson

I remember my first experience with sports cars. When I was 16 years old I had the opportunity to ride in a Porsche 356 Speedster. A friend of my father's took me for a short, but very fast ride. I was "hooked". College and marriage interfered with my ownership of a sports car until I was able to buy a Fiat 124 Spyder. I loved that car, and took my wife on a month long cross country trip. I have subsequently owned a Mercedes 450 SL, a Mazda RX7, 2 Nissan 300 ZXs, a 1966 Cobra Replica, and now own a C5 and C7 Corvette.

I retired and came to Naples in 2000. I heard about this great auto collection at the Collier Auto Museum, but was told it had closed in 1994 and was almost impossible to get into. Fast forward to January 2014. A good friend had the opportunity to bring a friend to tour the museum. I jumped at the chance and we spent the whole day touring the museum. At the end of the day we were standing on the mezzanine, and I asked our guide how he had been so fortunate to volunteer there. He said it was simple, all one had to do was knock on the door and offer to volunteer. My wife was quite surprised when I arrived home and told her I had signed up to become a volunteer at Revs Institute! I began volunteering, and was there when the museum opened to the public again that April.

I have enjoyed every day I been at Revs Institute. I enjoy my fellow volunteers and the guests I meet. I have recently become a docent, a mentor, and the author of an adopt a car report.

I would like to become a member of the board of directors so that I may continue to contribute to the museum and my friends. I would consider it an honor and a privilege.

Volunteer Board of Directors Candidates

These are the candidates whose full information was published last month in the February *Tappet Clatter.*

John Wharton

At Revs I've been able to apply some of my work experience, where I started as a planetarium director (literally lecturing to people behind their backs and keeping them in the dark) before moving into administrative roles such as head of visitor experience, special projects, and facility operations at the Saint Louis Science Center, a 300,000 sq.-ft. science museum that drew nearly a million visitors annually. During that time, I also became involved in fostering professional standards in the field, volunteering as a peer reviewer in the American Alliance of Museums' Accreditation and Assessment Program.

James C. Wood II

I just started my 11th year at Revs Institute and was a docent and volunteer at the Studebaker National Museum for 10 years when going back and forth to the north. I was a certified appraiser of Antique, Classic and Collector cars for 35 years doing individual and collections for Hagerty, Grundy and State Farm Insurance Companies in Indiana, Illinois, Michigan and Ohio. I went to Carlisle and Hershey Car Meets for over 30 years SEMA Show in Vegas. I am a 32nd Degree Scottish Rite Mason, former Rotarian and a Paul Harris Fellow, past President and 25 year board member of the Indiana Auto Dealers Association, served on several boards.

Mark Komanecky

I successfully completed a complete inventory and digitization of our Adopt-A-Car library, which uncovered a number of older AAC reports and has allowed us to have online access to all of our AAC documents. In 2020, I was chosen by the Revs Institute staff to join the team working on a Revs Strategic Plan, which was completed in 2021 and outlined several key initiatives to be pursued by Revs Institute over the next few years.

In 2023, I will also be working with fellow Revs Institute volunteers in our Outreach Program, which includes recruiting & promotional events at a variety of community venues.

Cars on 5th

The Revs Institute Support Crew
Shaunessy Photo

The annual Cars on 5th charity show, benefitting St. Mathews House, organized by the Ferrari Club of Naples featured two Revs Institute cars; the Porsche 906 and the Ferrari 166. On hand to protect the cars were (left to right) Whit Turner, Mike Lawther, Tom Saracco, Rick Soloway and Paul Swinwood. The crew was well supported by the Shaunessy transport folks. This is the 19th year for this event. It is claimed as the largest one day event in Naples with over 700 cars on display. Last year it raised $1.2 million.

The usual large crowds!
Brian Lanoway Photo

Pedro Vela driving the Ferrari 166
Maximillian Trullenque Photo

Porsche 906 on Display
Brian Lanoway Photo

Ferrari 166 on display
Maximillian Trullenque Photo

Brian Redman's Targa 66

By Lauren Goodman

Since 1991, Brian Redman's Targa Sixty-Six has been an opportunity for high performance cars, both vintage and modern, to "stretch their legs" at the racetrack – without having to race. For owners and curators of priceless vintage racers, this makes "Targa 66" hugely attractive. The 2023 iteration, held this past February, saw the event move to its new home at Homestead-Miami Speedway. With dozens of cars entered and each guaranteed hours of track time, the variety on display was a spectator's dream.

Eric Jensen Photo

Revs Institute is always sure to send a few cars for exercise at speed, and this year was no exception. The all-Porsche lineup included the Jennings 356

Eric Jensen Photo

in its restored livery, the RSK, the 908 "Flunder" *(left),* the 906, and the Behra formula special *(above).* Gunnar Jeannette, in a cream-colored driver's suit emblazoned with the Revs

Institute logo (right), put the Porsches through their paces. The Revs Institute garage staff also had informative displays and museum brochures for the curious, a surefire way to encourage new visitors. Scott George and the incredible team of mechanics run a tight program that exudes professionalism, all while remaining approachable to attendees who want to learn more.

Lauren Goodman Photo

(Continued on page 11)

Targa 66....continued

(Continued from page 10)

Maxamillion Trullenque Photos

Of course, Revs Institute is only one of a number of "members" who participate every year. The atmosphere in the paddock is welcoming and collegial. Vintage racers included formula (notably a 1997 Williams FW-19 with the screaming Renault V10) *(below left),* enduro, and sports cars. But, just as a great dinner party includes guests of diverse interests, Targa 66 plays host to a mix of modern performance along with the pedigree racers. One member arrived with his driving coach to improve his time in his McLaren 765LT and Porsche 911 GT3 RS. A Ferrari Challenge Cup car *(below right)* was testing setups for the upcoming season. And, it wouldn't be a track weekend without at least one Miata putting in some laps.

Eric Jensen Photos

A name like Brian Redman's draws other greats back to the track, of course. Le Mans campaigners David Hobbs and John Fitzpatrick were in attendance, and Divina Galica (former British F1 driver) had come to coach a couple of her students. James Redman has stepped into the logistics role, allowing Brian to simply enjoy his time in the paddock as an elder statesman of racing, chatting it up with old and new members alike.

(Continued on page 12)

Targa 66....continued

Besides the author, a few other Revs Institute Volunteers were in attendance to simply enjoy the sights and sounds. In years past, a motor coach was organized for the Volunteers to take a day trip over to Targa 66.

Come 2024, let's restart the tradition!

Lauren Goodman Photo

Eric Jensen Photo

Eric Jensen Photos

Eric Jensen Photo

Lauren Goodman Photo

MythBusters Part II

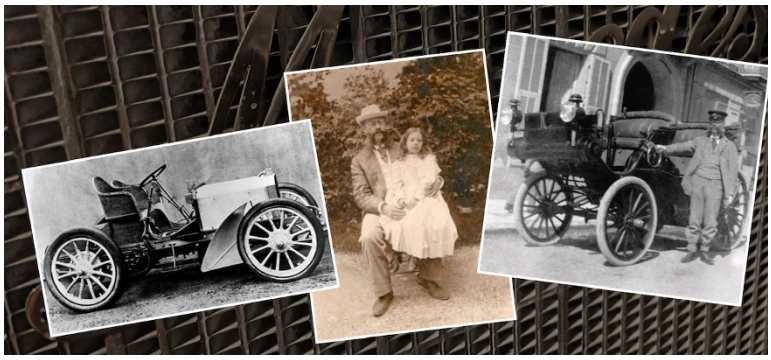
By John Wharton

MythBusters is one of the newest classes for Revs Institute Volunteers, an effort to identify and eradicate outdated, misunderstood or just plain wrong information about the cars of the Miles Collier Collections. This month we continue installments from the class with Part Two - What's In A Name?

The "Mercedes" Moniker

Let's dispel the myths that have been overheard right now. The cars made by Gotleb Daimler's company at the turn of the 20th century were not named after Daimler's daughter. Nor did Emil Jellinek suggest to Daimler that they rename their cars after HIS daughter in order to avoid bad associations of the German company amid the economic and political tensions leading up to World War I (which is way out of this timeline anyway!)

There are lots of twists out there on how Jellinek came to inspire the use of the name of his beloved daughter. In a nutshell, the Austrian insurance mogul bought and ran Damlier cars in the early racing days of the late 1890s (see right in photo), choosing to name those cars after his daughter (center). In 1900 he commissioned, from Daimler, the design of what became the prototype for the modern automobile, the 35 PS (see left photo), having great success with the three-dozen cars he then ordered, and also named Mercedes.



Mercedes-fans.de.com , Mercedes-Benz.com, Motorblog.com

Based on his bulk buy, design influence and subsequent success, Jellinek became a Daimler board member and distributor in Europe in 1902, the company saw a good marketing opportunity, and it adopted the Mercedes brand name going forward. Interestingly, just in the last year Daimler AG changed its formal corporate name to Mercedes-Benz Group AG. Emil Jellinek's influence continues.

The "Swift" in Briggs Swift Cunningham

Occasionally overheard in the Vitesse gallery is a reference to Briggs Swift Cunningham, Jr. having come from a family of money, courtesy of the company that gave us Swift Premium meats. Briggs' heritage and wealth had nothing to do with Swift & Company — but, there *were* links to meatpacking, if you'll pardon the pun.

(Continued on page 14)

MythBusters...continued

(Continued from page 13)

Junior Sailing Assoc. of Long Island
Swift Premium Meats Co.

Briggs' grandfather Elmore William Cunningham started in Cincinnati with shipping on the Ohio River, and then partnered with his son - Briggs' father - in a meat packing company that eventually became Evans, Lippencott & Cunningham. But that was just an early step along the way in what became the vast Cunningham family fortune. Among many pursuits and investments, Briggs' father founded Citizen's National Bank and was chief investor of what came to be Proctor and Gamble.

Incidentally, Briggs' first and middle names came from the middle and maiden names of his grandmother, Lucy Briggs Swift!

Lance Reventlow; Mom's Dime, but Who was Mom?

The Scarab in the GT40 section makes for one of the best examples of the "Playboy Racer". For the whole story, check out Morris Cooper's *Tappet Clatter* article about Lance Reventlow from October of 2017. The thumbnail sketch is this: Gain a $25 million dollar trust fund, take a page or two from the Briggs Cunningham playbook, and build and race cars to go up against the best of the day. But, as overheard sometimes in the telling of the tale of Lance, it's easy to get tripped up on the name of the source of his trust fund fortune - his mother.

BARBARA Hutton was an American debutante, socialite and heiress to one-third of the Woolworth estate. She had seven husbands, including #3, Cary Grant, who came just after Lance's father, a Danish count. But it was her fourth husband, Russian prince and road racer Igor Troubetzkoy, who introduced European auto racing to Barbara's only child. After Lance was killed in a private plane crash at age 36, Barbara lived another seven years, dying virtually penniless in 1979 at age 66 after a life of lavish spending and being victimized by those who managed her estate.

Keystone/Getty Image

(Continued on page 15)

MythBusters...continued

(Continued from page 14)

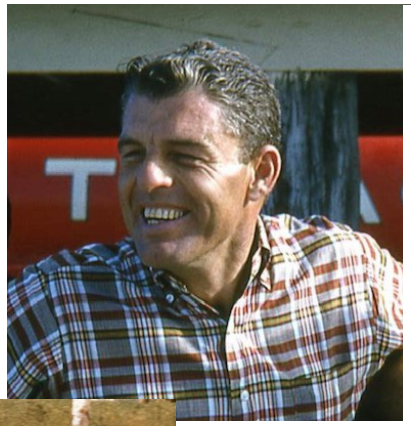
BETTY Hutton was NOT Lance's mother, but has been confused with her because of her name and her own fame. She was an American stage, film and television star, with major mid-century movie hits like Annie Get Your Gun. Betty only had *four* husbands, weathered middle-age drug addiction, bankruptcy and aging out of roles, and lived to age 86.

Here's an easy way to keep these two names straight. Rich divorcees, like Barbara, opt for long, classier-sounding names. Actresses, like Betty, always use shorter, snappier names.

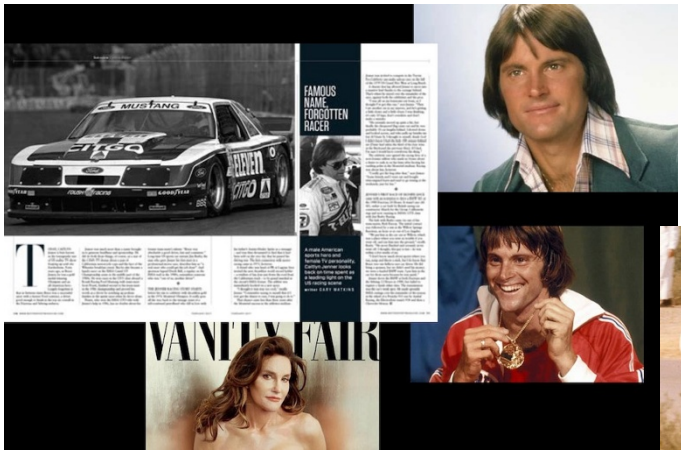
The OTHER Racing Bruce

Slip of the tongues can happen. But here's an important place NOT to slip up. Not only does the 1958 356 Carrera GT Speedster occupy a prominent place in SCCA history and in the Porsche gallery, but the car's former owner and racer, Bruce Jennings *(below right),* was a close friend and mentor of this museum's founder.

The car was most definitely NOT once owned and raced by Bruce *Jenner (below left).* However, the occasional confusion might be understandable. After his Olympics exploits - and before his reality TV exposure and other transitions - Bruce *Jenner* was a bona fide racer. He had 57 starts, including the Daytona 24 Hours and Sebring 12 Hours, and competed in IMSA for several seasons with a few wins and podiums. He also fielded a racing team for a while. Still, he was no Bruce *Jennings*.



Motorsport Magazine, Getty Images, Imago, Vanity Fair



Barcboys.com ^

< Revs Institute

1934 LaSalle Series 350, Part III

By Frank Brown

What makes the 1934 LaSalle Unique:

1934 LaSalle
Photo Courtesy of Revs Institute
Peter Harholdt Photo

Unlike previous years, this LaSalle was powered with a straight 8 engine with 240 cid that delivered 95 bhp at 3700 RPM and a compression ratio of 6.5 to 1. All cars produced for the domestic market were supplied with 16" all steel disc wheels with a one-year-only for 1934, wheel-disc cover available in chrome or various matching or harmonizing paint colors.

LaSalle adopted hydraulic brakes, a full two years ahead of Cadillac with this model. New, too, was the "knee action" independent coil spring suspension. This "knee action" utilized wishbone lengths that permitted the wheel to move up and down in an almost vertical plane which helped absorb the side thrusts and brake torque reaction. To prevent bottoming, coil springs were used with rubber bumpers installed on the inside of the coil. A rubber bumper placed on the frame prevented over-expansion.

At the rear, a torsional stabilizer bar was used to help prevent side sway as resistance to the softer coil springs up front. "One of the through-the-year transitional improvements was the adoption of Hotchkiss drive, replacing the torque tube construction used by Cadillac…" Mid-year changes were made to the transmissions, primarily in the gate and size of the gearbox.

A LaSalle Engine, not an Oldsmobile's:

> Early on, it was rumored that LaSalle consisted of numerous Oldsmobile parts because both makes had a 119-inch wheelbase, chassis components resembled each other, and both had a straight-8 engine. Interchange manuals of the era also suggested the interchangeability of numerous parts; however, as it turned out, very few were identical. It should be noted now that just a visual comparison of body design and construction makes it obvious even to the most casual observer that there was no interchangeability with other GM makes for the 1934 year. The 1934 was a unique, stand-out-by-itself design. The striking design of the slender radiator grill and long tapered hood prevented the installation of any of the V-type engines… (*LaSalle, Cadillac's Companion Car*, Van Gelderen & Larson, 2000).

(Continued on page 17)

1934 LaSalle Part III...continued

(Continued from page 16)

1934 LaSalle Engine
Jack Sprague Photo
Photo Courtesy of Revs Institute

A new engine was required, but management sought to keep the price down. Greater cost efficiencies would have to be found elsewhere. Looking within, the engine that came closest to fitting was an Oldsmobile straight-8, but it was not quite up to spec. The LaSalle engine was subcontracted to a foundry that was already supplying GM.

The appearance of the Oldsmobile and the LaSalle engines was very similar, but they had different carburetors, air cleaners, fuel pumps and cylinder heads. Their bore and stroke and other dimensions are similar, but LaSalle used a different bell housing, different bearing widths and aluminum pistons.

A higher compression ratio of 6.5 to 1 was obtained in the LaSalle engine through a different head configuration. "Anyone who has tried to restore a LaSalle engine will attest to its uniqueness and frustrating lack of interchangeability" (*LaSalle, Cadillac's Companion Car* , Van Gelderen & Larson, 2000).

> *Oldsmobile 8 chassis? This was answered by, 'That is not true. LaSalle was designed and developed by Cadillac engineers and measures up to the Cadillac standards in every respect. The LaSalle engine, transmission, rear axle … all are built in the Cadillac factory to Cadillac standards.'… Was it different from Oldsmobile? Definitely … Objective analysis of the facts verifies this claim and lays to rest the long time [sic] erroneous perception of LaSalle using an Oldsmobile engine.*

Leveraging Fleetwood Excess Capacity:

Sales of higher priced Fleetwood Cadillacs, especially the multi-cylinder models, had dropped dramatically because of the economic depression. Fleetwood employees were not too busy, and GM had been reluctant to lay them off. Because of their outstanding craftsmanship, it was decided to use the almost idle Fleetwood production line and to utilize its employees to build the 1934 LaSalle. Use of the highly skilled Fleetwood teams provided another boasting opportunity for LaSalle: they could be badged "Fleetwoods" which provided marketing bragging rights. This continued through 1935.

LaSalle offered only four body styles: a two-door coupe with a rumble seat, a two-door convertible with a rumble seat, a four-door sedan, and a four door Club sedan with a blind rear quarter. These LaSalles exuded Fleetwood.

(Continued on page 18)

1934 LaSalle Part III...continued

(Continued from page 17)

Some of the exterior chrome was stamped with the LaSalle body and style numbers to match the model because all of the doors featured different dimensions.

Consequences of Radical Design Changes:

The 1934 LaSalle sent shockwaves to the design departments of every GM division, to every other domestic carmaker, and to international companies as well. The design tables had been turned: instead of America looking to Europe for design inspiration, now Europe and the rest of the world, were looking with envy to America and its beautiful new LaSalle.

Photo Courtesy of Revs Institute
Peter Harholdt Photo

Every automaker had the 1934 LaSalle in their sights, to use as a design departure point, and to ensure their transition would also be in vogue; this continued until 1936 when the designs of the Cord and Lincoln Zephyr excited the automobile world like never before.

LaSalle's overall smooth flowing effect, pontoon fenders, low catwalks and narrow grill were most influential. It was agile, youthful and streamlined. It's Art deco ornamentation was tastefully applied from the beautiful protruding pressed glass taillights to its five round ventilators on either side of the hood and its three chevrons on the leading edge of each front fender. Not to be overlooked, were the five brake fin speed hashes on either side of the striking tall and narrow grill and the hood ornament with three stabilizers.

The front-end was finished off with biplane bumpers that gave a see-through effect to the front grill. All elements were nicely integrated. The appearance created was one of streamlining and speed. Even though the car had been shortened, it looked longer. To maintain its streamlined look, the factory discouraged two-tone paint schemes. The design of the four door sedans called for the spare tire to be concealed in the luggage compartment. A special compartment was made below the rumble seat compartment on the two door models. For more conservative customers, fender mounted spare tires were reluctantly made available. To discourage their purchase, they were only offered as an optional extra.

(Continued on page 19)

1934 LaSalle Part III...continued

(Continued from page 18)

The modern look of the 1934's was fraught with manufacturing complications, however. Presses for the complex sheet metal configurations of components like the pontoon fenders were not yet available so that required a great deal of additional hand-fitting, extra welding and finishing. None of the body panels were interchangeable with Cadillac's. Given the short time between design-approval and production, and all of the previously identified manufacturing challenges, it was a logical decision to use the idled Fleetwood craftsmen.

It is ironic that such a modern looking car body was fitted over old-fashioned hardwood framing. 1934 would be the last year of that technique of coachbuilding.

Sales for the 1927-28 combined years show a strong start for LaSalle, accounting for 35% of Cadillac's total unit sales.

The tables turned in 1929 when the percentage shares for each are reversed to almost the same percentages, 66% for LaSalle and 33% for Cadillac. One explanation could be that the features of the LaSalle were so good that it made it difficult to justify paying more for a Cadillac.

From 1930 until 1933, overall sales for both brands take downward trends. The volume shares continue the pattern that had been set in 1929 when LaSalle started leading Cadillac, but it is curiously reversed in 1932 when Cadillac again leads with a 63% share of overall sales units. By 1933, LaSalle regains its share, but not totally, achieving 52% of total Cadillac and LaSalle sales.

Sales in 1934 were just shy of 11,500 units. The share for LaSalle was 63%, with just over 7,200 units. These numbers reflected the state of the economy at that time. Even though the LaSalle had really been "jazzed-up", people were not buying cars.

From 1935 until the last year of LaSalle production in 1941, LaSalle continued to deliver the bulk of the unit sales for the Cadillac Division. Perhaps this cannibalization of Cadillac sales volume was part of the rationale behind the decision to kill LaSalle in the 1934 model year. Other factors could have been the high production costs for a period (1927–1940) during which total sales never exceeded 50,000 units for both brands combined. The other divisions rid themselves of their respective companion cars a few years before Cadillac finally did in 1941.

LaSalle after 1940:

The brand LaSalle was not eliminated from the GM pallet in 1941. GM put it away.

(Continued on page 20)

1934 LaSalle Part III...continued

(Continued from page 19)

> *The most extravagant traveling show put together by GM was the "Motorama," with excitement created by actors and music, skits and revolving stages, dramatic lighting… Anything to draw the public to the show.*
>
> *For 1955, the Motorama staging was more spectacular than ever before. Every division had at least one, if not two, dream cars. Cadillac was no exception.*
>
> *Even corporate GM had two show cars at Motorama … One, a two-passenger Sports Coupe and the other, a six-passenger sedan. Both dream cars added a Harley Earl touch to the show … they were named LaSalle II.*
>
> *LaSalle came very close to being resurrected by Bill Mitchell. This would be the second attempt since production ceased in 1940. The first attempt surfaced as the LaSalle II used on two 1955 Motorama show cars testing public reaction to a small Corvette-like roadster and a handsome four-door Hardtop Sedan.*
>
> *It looks like a Seville, but it began as a LaSalle. It became a Seville, but it was a LaSalle until the very last minute.*
>
> *Market pressures had Cadillac looking for a smaller but higher-priced, personalized luxury sedan. Other makes were doing it successfully… It was all well and good to create such an automobile, but what name should it carry? LaSalle had been absent from the Cadillac Motor Car lineup since the fall of 1940; but, even in 1974, it was still highly regarded for its styling, quality and market success… Designers had always liked LaSalle… (LaSalle, Cadillac's Companion Car* Van Gelderen & Larson, 2000*).*

The idea of having a companion car did not die with the LaSalle. Subsequent lower-priced Cadillacs were offered but they never became stand-alone brands unto themselves like the LaSalle once was. A couple of them that may have been forgotten are the Cimarron and the Catera.

Having companion cars did not go away with the LaSalle. In the late 1980's, Japanese manufacturers launched companion brands, but unlike GM, they went up-market; their companions cost more than the core brands. Examples include Acura by Honda, Lexus by Toyota and Infiniti by Nissan. Possibly inspired by the Japanese, now Hyundai offers its Equus.

Maybe when a radical new technology is invented, Cadillac will use the opportunity to once again re-launch the venerable old LaSalle brand. Unfortunately, the clock is ticking and unless it happens soon, those who remember the once prestigious LaSalle marque will all be gone.

The Art of Stopping in a Straight Line

By Bill Vincent

Although I'd be the first to admit - I've never been that "head over heels" for cars with running boards…

I do still admire the craftsmanship, effort, and countless hours that went into the creation of those automobiles. I also have always been intrigued by the solutions the designers and engineers of those cars came up with, to solve problems along the way! Using - and often pushing - the technology that was available to them in their day.

We are fortunate in that a stroll through Revs Institute gives us the opportunity to see the evolution of one I thought was kind of interesting: Stopping under control - and in a straight line. And the artistic and creative ways that was accomplished.

1950 Cadillac LeMonstre Brake
Eric Jensen Photo

It's always big news the amount of horsepower a car produces and how fast and quick they are. But have you ever thought of what it was like the first time it was realized that the contraption they were riding in needed to stop, too? Bet *THAT* broadened some eyes and puckered some muscles!

In the beginning things were pretty straight forward, with some sort of clamping devise providing drag to the rear wheels. This evolved and, for the most part, kept up with the ever increasing performance of things. Until a tipping point was reached and it became apparent that all four wheels needed to be contributing to stopping the vehicle.

(editor: It was first thought that brakes on the front wheels would cause the car to tip over forward with vigorous braking… not true!)

This is where I find the problem solving interesting.

You'd think it would be pretty straight forward, just continuing with the cables, rods, and clamping devices that evolved at the rear. With the cable and suspension technology of the time, it wasn't too hard to work out how to control the rear brakes, without having them being applied unintentionally every time the wheels rode over a bump.

Remembering that a cable is a fixed length - and every time the rear axle went up or down, that "length" changed - effectively "pulling" on the cable and then applying the brakes.

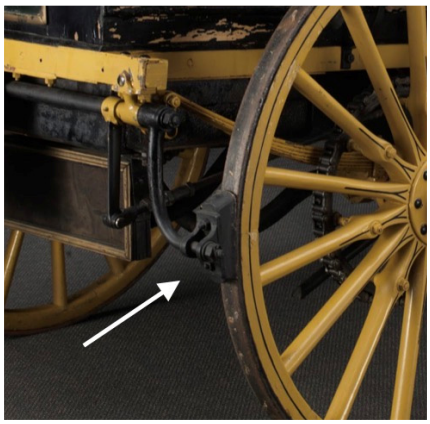
(Continued on page 22)

The Art of Stopping... continued

(Continued from page 21)

The front wheels added additional problems that needed to be solved! Obviously the front wheels had to be able to handle bumps, etc. - but they also needed to be able to turn. The car's "leaning" when corning also had to be addressed. Often ALL of this could be happening at once!

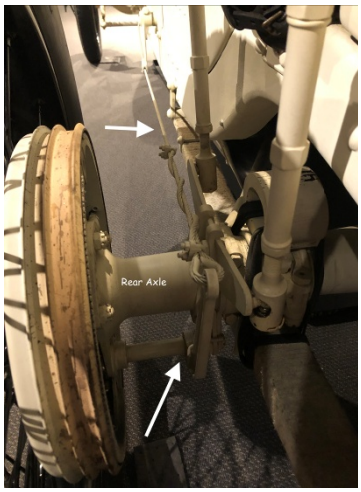
So the way the cables were routed had to mirror the arc that the suspension traveled in, along with a mechanism developed to allow the front wheels to turn. All with the intent to not change that "length" of the braking cables and apply, or drag the brakes unintentionally.



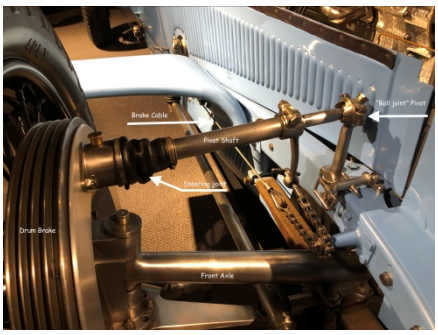
Peter Harholdt Photo
Courtesy of Revs Institute

Here's where that stroll through the Revs Institute's galleries is fascinating.

Starting with the most basic of "clamping" on the rear of the 1896 Panhard et Levassor Wagonette *(right).*



By the 1914 Mercedes Type 18/100 Grand Prix car we had gotten to drum brakes - but still only on the rear axle *(left).*



With the 1927 Delage 1.5 Liter Grand Prix car, braking the front wheels had come into play *(right).* Here the brake cable becomes a chain and the chain wraps around a sprocket to pull a lever arm to rotate a shaft that in turn spread the brake shoes within the brake drum.

(editor: The reverse pulley prevents axle windup under braking from adding more brake force without the driver's input... Very clever of Delage)

That shaft has a point of pivot on each end, so it can move in harmony with the front axle - and allow the front wheels to turn. This is similar to the: 1928 Hispano Suiza H6C *(next page)* and the 1930 Bugatti Type 35B Grand Prix Car *(next page).*

Bill Vincent Photos unless otherwise credited

(Continued on page 23)

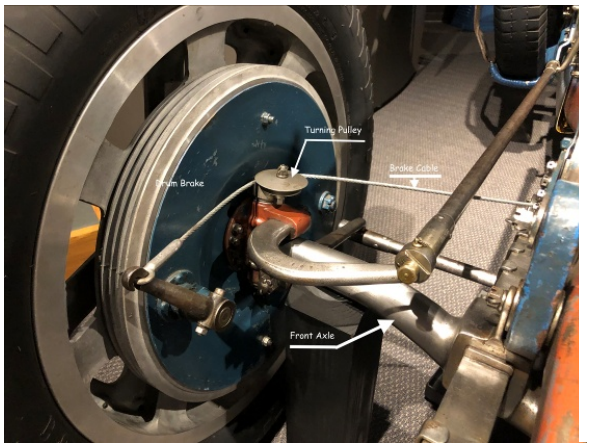
The Art of Stopping... continued

(Continued from page 22)

The Bugatti being elegantly simple in the brake cable running all the way, around a pulley (to allow the front wheel to turn), to a lever arm to spread the brake shoes within the brake drum.

Of course there are many other artistic and ornate examples to admire, some others with bell cranks, some with chains and gears. Each an example of someone's approach and solution to that problem and challenge!

Hispano-Suiza Chassis
Front Brake System



1930 Bugatti Type 35
Front Brake System

The 1921 Duesenberg Model A is oft credited for being the first car with hydraulic brakes and that was the beginning of the end for these detailed mechanical systems.

Although maybe not as visually interesting as the old mechanical systems, it was in a way simpler and more robust. With no worries of cables stretching, etc. - it is what has been the system of choice to this day.

DUESENBERG

STRAIGHT EIGHTS

Holds Sixty-Six Official A. A. A. World's Records

Jimmy Murphy, "San Francisco Boy," with his Duesenberg Straight Eight on July 25th this year WON the French Grand Prix, setting for all time Duesenberg claims the WORLD'S CHAMPION AUTOMOBILE

"Built to outclass, outrun, and outlast any car on the road"

Exclusive Features of the Duesenberg

Duesenberg "Straight-Eight" World's famous motors.
100 Horse Power at 3,000 R. P. M.
Weight of complete automobile only 3,000 pounds.
Duesenberg Special Improved Four Wheel Oil Brake.
3 to 90 miles per hour on high gear.
20 miles per gallon of gasoline.

A. W. RAWLING COMPANY
NORTHERN CALIFORNIA DISTRIBUTORS
Telephone Lakeside 581
2838-2840 Broadway
OAKLAND, CALIFORNIA

Another problem and challenge solved and evolved.

Now on to the next - *because there's always a "next"*!

Duesenberg hydraulic drum brake, Peter Harholdt Photo

TAPPET TECH

Hispano-Suiza Power Brakes

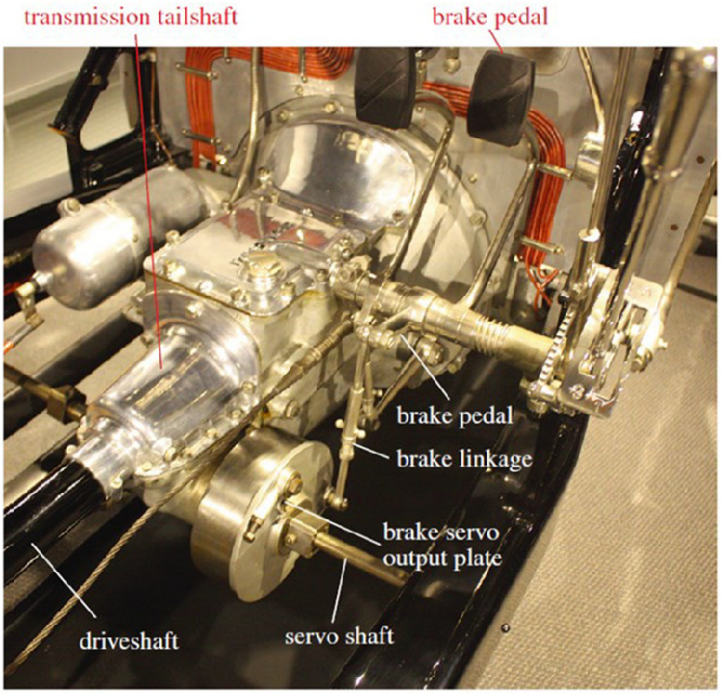
By Michael Karr

The article that follows is a partial reprint written by Michael Karr, a retired Bell Laboratory researcher published in the May 2016 *Tappet Clatter*.

The Revs Institute is fortunate enough to have four Hispano-Suizas in its collection: a 1912 LWB, a 1912 T-15 SWB, a 1928 H6C Chassis and a 1928 H6C with a body by French coachbuilder Kellner. The H6C was arguably the finest automobile of its time. Its advanced features included a mechanical servo that increased braking force to four wheels. The Hispano-Suiza was the first automobile to have power-assisted brakes.

Hispano-Suiza used drum brakes on four wheels and although not the first automobile to do so, it was the first to have all four brakes controlled by a single pedal. Some cars used hydraulic brakes but when the H6 was introduced in 1919 hydraulic brakes had not been perfected, and often leaked due to poor seals. This was improved by Chrysler in 1924 with the introduction of rubber seals.

Hispano-Suiza brakes were assisted by a servo mechanism that used the car's engine output to assist the braking effort. The design was so successful that Rolls Royce licensed the patent and used the mechanical servo boost until 1948.



Photograph and notations courtesy of Robert L. Norton.

From the photograph at the left, you can see that the servo mechanism is driven from the transmission tailshaft which leads many reviewers of the Hispano-Suiza to conclude that the braking force is proportional to speed when in fact the additional braking force of the servo mechanism is independent of speed.

The brake servo is mounted slightly below and to the rear of the transmission and is transverse to the drive train. A worm gear on the transmission shaft drives a worm wheel on a shaft that connects to the servo drum.

(Continued on page 25)

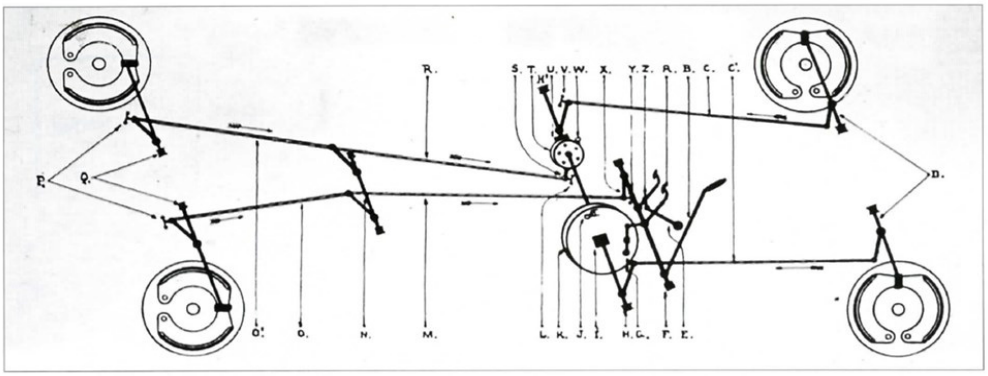
TAPPET TECH

Hispano-Suiza Power Brakes

...continued

(Continued from page 24)

This worm wheel drives the servo drum at a slower speed than the driveshaft and the speed of the servo drum depends on the number of teeth on the worm wheel. From a side photograph of the gear in a book from the Revs Library, it appears to have approximately 30 teeth, so the servo drum is running about 1/30 of the transmission tailshaft speed. The H6C brake pedal is connected directly to the linkages that operate the front and rear brakes. It is also connected to the brake servo on the side of the transmission.



While it looks complicated, the mechanical connections between the brake pedal, the brake servo and the hand brake with the front and rear brakes, are clearly shown in this Hispano-Suiza diagram.

The brake pedal is connected to the servo plate via linkage, and this plate is connected to the transverse shaft that connects to forks where the front and rear brake rods connect. Mounted within the servo plate are two brake shoes that are applied by the brake pedal linkage. The servo brake shoes multiply the force applied by the driver's foot on the brake pedal, pulling the brake cables much harder than the driver's leg could provide.

With the system just described, if the car was moving in reverse, the servo drum would also move in the opposite direction. When the brake is applied, the servo force would now be opposite to the applied force on the brake pedal, not allowing the car to stop. To prevent this, a ratchet is incorporated in the transverse shaft so that the servo drum does not turn when the car is going in reverse. Additionally the handbrake lever to the left of the driver can be used to apply the rear brakes for parking or as an emergency brake.

The system was patented by Hispano-Suiza and licensed to Rolls-Royce whose cars used it for many decades. Clearly a superior innovation.

TAPPET TRIVIA

By Joe Ryan

And Now The Answers…..

1. **Q:** How many investors did Henry Ford have for the 1903 startup Ford Motor Company? **Answer:** Henry Ford and 11 other investors totaled $28,000.00 to start the Ford Motor Company.
2. **Q:** Who was the largest investor in the Ford Motor Company? **Answer:** Henry Ford and Alexander Malcomson each owned 25.5% of the Ford Motor Company. The Dodge Brothers together owned 10%.
3. **Q:** Who did Henry Ford work for while working on his first car and engine called the Quadricycle? **Answer:** Henry Ford worked as an engineer for the Edison Illuminating Company in Detroit, Michigan.
4. **Q:** Was Henry Ford involved in Politics? **Answer:** Yes, in 1918 Henry Ford lost his bid for the U. S. Senate.
5. **Q:** Who was the first President of the Ford Motor company? **Answer:** John S Gray was the first President of the Ford Motor Company and a close friend of Alexander Malcomson.

More on Henry Ford and the Ford Motor Company in the April edition of The Tappet Clatter. All comments and contributions are appreciated!

Contributions to the column are always welcome.

The 1909 Ford Model T Touring

Peter Harholdt Photo
Courtesy of Revs Institute

Adopt-A-Car Program

Available Adopt-A-Car Automobiles and Engines

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