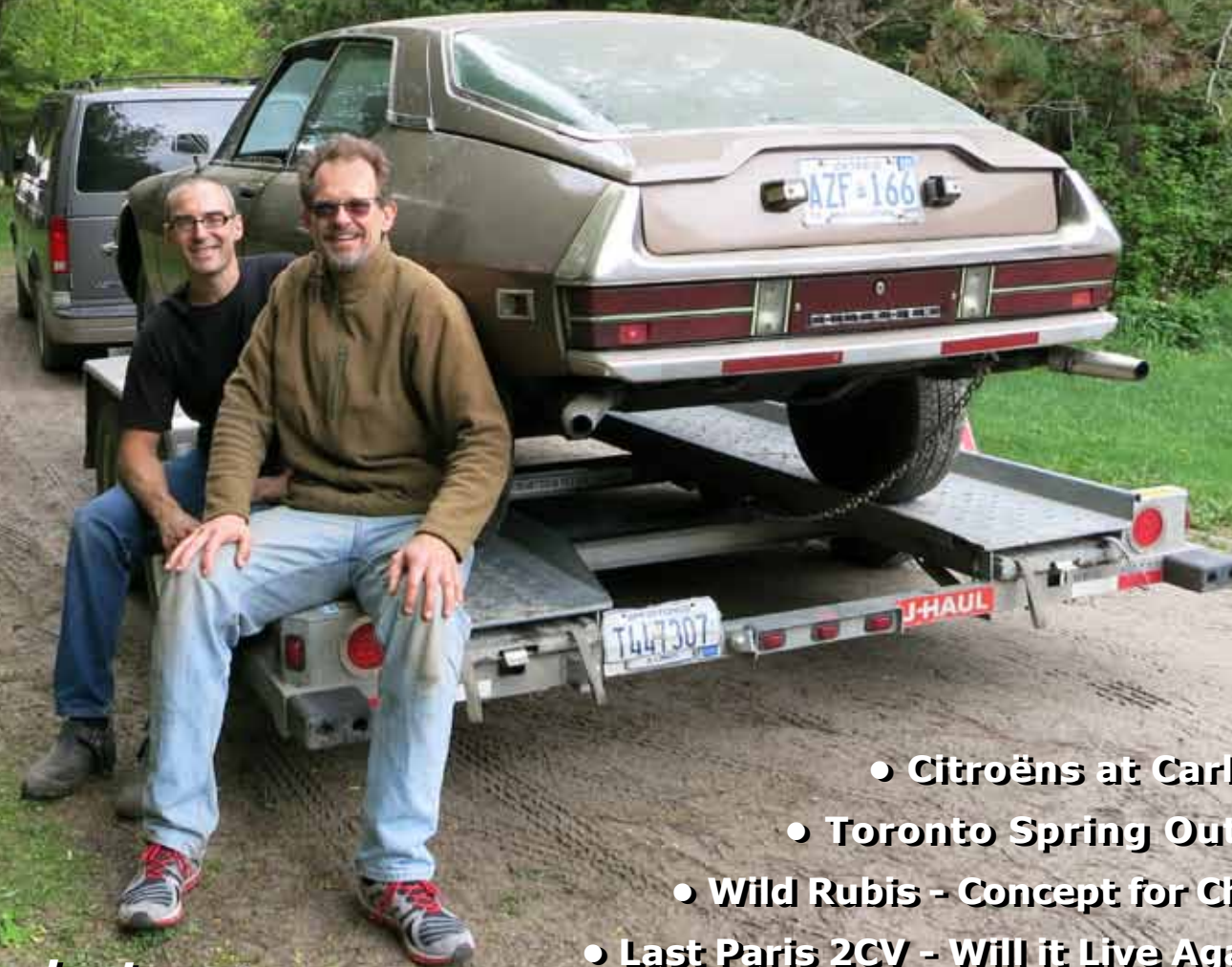


CITROËNVIE!

a quarterly publication (with a North American perspective) for Citroën enthusiasts

2013 No. 3

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***Feature Article:
How American
Budd Made Citroën
a Forerunner in
the European Car Industry***

- Citroëns at Carlisle
- Toronto Spring Outing
- Wild Rubis - Concept for China
- Last Paris 2CV - Will it Live Again?
- 30 years+ for Citroën Autoclub Canada

USA Citroën - Eastern Events:

Aug. 30 - Sept. 2 '13 - Circle Tour of Lake Superior. Enjoy a Labor Day Holiday Weekend in unique style with north-shore Canadian scenery, the picturesque towns of Michigan's upper peninsula Copper Country, and a chance to astonish the 'locals' in three states and one province with a Citroën Caravan! Contact Michael Barone: barone.m@comcast.net

USA Citroën - Western Events:

Jul 14, '13 - San Francisco Citroën Club Bastille Day celebration at Lon Price's Citroën Repair shop Santa Cruz 95060. This is a pot luck so bring your favorite dish! Tel: 831 476 8395 Meet up starts at 11:00 am.

Aug 25, '13 - "Cit Chat & BBQ" at 2CVsRus in Seattle. Contact Axel Kaliske and Ursula Walter. email: deuxchevaux@earthlink.net or call 206.439.0202

Sept 20-22, '13 - Western Rendezvous USA at Cambria Pines Lodge, Cambria CA 93428. Registration info TBA.

Oct 13, '13 - San Francisco Citroën Club Oktoberfest Party at Peter Koine's new Citroën repair Shop at 71 Glenn Way # 5, San Carlos CA. Starts at 11:00am. Bring your lederhosen and a German dish of your choice.

International Citroën Events:

Jul 31 - Aug. 4 '13 - 20th International Meeting of 2CV Friends - Alcaniz, Spain. Website: <http://2cvspain2013.com>

Aug 8 - 10, '14 - EuroCitro at Le Mans. Celebrate once more (for the 5th time) the most popular grand French Citroën meeting on the traditional race track. www.eurocitro.org

Sept. 13-14 '14 - Traction Avant 80th Birthday Event. Organized by Club Traction Universelle at La Ferté Vidame, France. The Club will strive to accommodate about 1000 Tractionistes in the Park of the Château de La Ferté Vidame (28340), 205 miles/330 km from Calais. There will also be an exhibition on André Citroën, and maybe the opportunity to drive your Traction on the official Citroën test circuit, as in 1934!

More info at: <http://amicale-citroen-internationale.org/wp-content/uploads/2013/04/ferte-vidame-internat-traction-80.pdf>

2016 - ICCCR - The Netherlands (date and location TBD) www.iccr2016.nl

Citroën Autoclub Canada - Eastern Events:

Regular monthly meetings are held on the second Wednesday of every month. From October - April our location is indoors at the Granite Brewery in Toronto. May - September meetings are held outdoors at the Grenadier Restaurant in High Park, Toronto.

July 10 '13 - 7 pm - Monthly Club meeting (outdoor location) at the Grenadier Restaurant parking lot within High Park, Toronto.

July 13 '13 - 10 am. CAC Summer Outing. Wine tasting adventure mixed with a thrilling drive on the spectacular backroads of the Niagara Escarpment near St. Catharines.

Aug 14 '13 - 7 pm - Monthly Club meeting (outdoor location) at the Grenadier Restaurant parking lot within High Park, Toronto.

Aug. 16-18, '13 - Ottawa Citroën Club - Annual Meeting. Perth, ON <http://www.ottawacitroenclub.ca/>

Aug 24 '13 - 9 am - August Summer Party - Great Northern Adventure. A drive to Port Severn and then on to the Marine Railway (an engineering marvel that transports boats over the roadway and down the escarpment) just south of Bala.

Sept 8 '12 - Méchoui Citroën at Beloeil Airport, Montreal. We will drive from Toronto to Montreal on Sat. Sept. 7. RSVP to: louise.richard@sympatico.ca

Sept 11 '13 - 7 pm - Monthly Club meeting (outdoor location) at the Grenadier Restaurant parking lot within High Park, Toronto.

Sept 28 '13 - CAC Fall Outing. We're calling it Golden Leaves, Golden Suds. We will take in the lovely scenery just northwest of Toronto and a sampling of the fine beers available in Wellington County. It will be a day trip that will take us through Guelph.

Oct 9 '13 - 7 pm - Monthly Club meeting (indoors) at the Granite Brewery, on the southeast corner of Mt. Pleasant & Eglinton Ave. Toronto.

Nov 13 '13 - 7 pm - Monthly Club meeting (indoors) at the Granite Brewery, on the southeast corner of Mt. Pleasant & Eglinton Ave. Toronto.

Citroën Autoclub Canada - Western Events:

Sunday, July 14 '13 - Bastille Tour de Tsawwassen. South Delta, BC Starting at Deas Island Park at the mouth of the Fraser River. Delicious fish and chips in Ladner for lunch. Then a lovely drive to Westham Island and visit the George Reifel Bird Sanctuary. We wrap up the day with a drive to Boundary Bay Airport. Contact: johnnymac4bc@telus.net

*Cover: George Dyke and Jeff Teerlinck begin resuscitating a Citroën SM that was dormant for 7 years near Stouffville, ON.
- Photo by Sven deBruyn*

Message from the Editors



George Dyke

Summer is here and while most of your time may be devoted to enjoy driving your Citroën, I urge you to take a few moments to ensure you can get full access to CITROËNVIE. Our new website is online. It's a project we have devoted hundreds of hours in creating, and investment we felt well worth the effort to offer the publication in electronic form in 2014. Yes, this is our second to last issue of CITROËNVIE in its present form. We've had great success and accolades with CITROËNVIE but with digital publishing via

the web, we can offer so much more to our readers, and on a far more timely basis.

Getting the most out of "the new" CITROËNVIE requires only the slightest lifestyle change on your part. Rather than sitting there waiting for us to notify you once every three months that a new issue is online, you need to get in the habit of you checking CITROËNVIE frequently. Do it once a week, or even daily. You can easily do so from your smartphone, tablet or virtually any computer you have. Bookmark us and get a super rich experience where you can view new CITROËNVIE content anytime you want or get a notification that there is something new for you to review.

So what do you need to do to ensure you keep up to date with CITROËNVIE? Not much really... You just need to make a one time effort to make sure you are properly registered with us. And here's how you do it:

Simply go to CITROËNVIE.com and register! We have a signup page that verifies your name and subscription email address. We do this even for free subscribers so they can easily manage their profiles, updating status changes such as email addresses, etc. Full "paying" members can assign personal passwords to get into a much richer level of our site that has hundreds of technical documents, historical Citroën marketing info, cool videos, photos and access to an extensive archive of hi-resolution issues of CITROËNVIE, Citroënthusiast and Citroën Autoclub Canada newsletters. Add to that an up-to-date online membership Roster and a Services Guide that gives you a comprehensive listing of Citroën parts and repair resources, and there is no question that paid membership is a phenomenal deal!

What does membership cost? For North American members we make the choice simple: For \$15 a year you can get unrestricted access to our



John McCulloch

CITROËNVIE website. You get access to the Roster, Technical Articles, our Service Resources Guide, and high resolution archive issues of CITROËNVIE. For \$30 a year we will continue our policy of sending you our award winning printed calendar. That alone is a \$15 value but we'll include the mailing cost. And if you are in Canada your \$30 payment also gets you access to our collection of specialized Citroën tools that you can borrow.

We use a little 3rd party file sharing app called "SugarSync" to let readers access our archives. It's easy to install on Mac or PC and you can do so for free! To access the free version is a little obscure on their website but go to <https://www.sugarsync.com/personal/> Scroll down below the pricing plans and you will see: Want to try SugarSync out first? "You can sign up for a free 5 GB account and see what SugarSync is all about." Just click on Create a free account. Do that and you are all set with a free account (with no time limit of expiry). What's even cooler is that you can actually sync our CITROËNVIE folder to your computer. SugarSync works in the background so CITROËNVIE data is always backed up and available to you — regardless of your location or the computer you are using. How sweet is that?!

A free 5 GB SugarSync account will be all you need as a CITROËNVIE member. Once you create a SugarSync account not only can you access our CITROËNVIE documents, you can use your 5 GB of SugarSync storage to put other documents from your computer "in-the-cloud". (Our CITROËNVIE documents we are sharing with you don't take up any of your SugarSync online storage. This leaves you with 5GB that you can use as you wish!) You can use it to securely back-up you own files online in case you loose data on your computer. Or use your online storage to share documents with others. If you feel you ever need more storage space SugarSync offers very affordable increased storage plans. Point is that for CITROËNVIE full membership access all you need a free 5 GB account.

Now let me give you brief tour of the new CITROËNVIE site itself. Our home page has two menu bars. Just to the right of the CITROËNVIE logo are the menu options that the public see; Home, Events, Gallery, Download, Marketplace, Links and Blog. Each one (except for Blog) has drop down choices that take you to other related pages. For example, under Gallery, folks have a rich variety of choices. They can see a selection of our favorite Citroën images (a truly stunning gallery on its own), an extensive gallery of past events (in Canada, the US and around the world), pictures of our members' Citroëns, profiles of members over the years, a listing of Citroëns by model with specific pictures and description of each model, another gallery featuring memorable moments our members have experienced, and a gallery showing the progress of Citroën restorations. There is enough info in the Gallery alone to keep you browsing for hours on end!

Members get to enjoy a whole other level to our site. At the upper right of the Home page there is a log-in. Sign in and another menu bar will appear along the top of the site. There you can manage and update your account (changing your password, updating your address info, etc..), get access to our online Roster, our Citroën Services Directory, view

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Citroën Autoclub Canada - Toronto Spring Outing

by George Dyke

The weather couldn't have been better for our 2013 CAC spring outing on May 4. Not a cloud in the sky for the entire day! We gathered at the McDonald's in Toronto's Beaches neighbourhood (Near Coxwell & Eastern Ave.) at 10 am.

We had a welcome surprise with a few new Club members showing up; notably Shawn Sramek with a lovely green and white 2CV that he restored in Czechoslovakia and imported six years ago. Very impressive car and cute as a button with its Charleston paint theme.

2CVs were the dominant model. Jeff



Jeff Teerlinck inspects his 1967 2CV

Teerlinck gave his "barn find" 1967 2CV its first outing since acquiring it last October. Fresh tires and new battery were all it took and Jeff was all smiles! Nazar and Isabella Mishchuk made their road debut in their 1939 Traction Avant 7A they have been restoring for 2 years! Larry Lewis' Traction 11B sported a new spotlight mounted on the windshield post. Larry



Shawn Sramek's 2CV



Larry A. Lewis' Traction Avant 11B



Shawn Sramek's and George Dyke's 2CVs.



Nazar Mishchuk's Traction 7A, Simon Walker's 2CV and George Klein's SM.



In all we had 10 cars for the outing: 6 2CVs, 2 Traction, 1 SM and 1 Maserati. George Klein drove the SM and Simon and Martha McBride arrived in their Maserati only because of a mishap the previous day. The hood of their DS peeled back at 80km/hr and cracked the windshield. No worries however because we had a windshield and a hood in the Club's parts' stock and Simon should have the DS back on the road in a week or two.

We travelled along Queen Street in the Beach and then turned north on Glen Manor Drive up past some of the lovely homes in the hilly section



Nazar Mishchuk starts his 1939 Traction Avant 7A.

of the Beach. We shortly made our way to Kingston Rd. and headed east. From there we turned south onto Warden Ave and onto the Lakeshore Trail which meanders along the Scarborough Bluffs. Eventually we made our way over to Old Kingston Rd. and out to Pickering where we turned north to enjoy the winding road through the Rouge River Valley. From there we took country roads northeast to Whitevale before heading west and making our way back toward historic downtown Unionville where we enjoyed an early afternoon lunch at the Old Country Inn Restaurant.

CAC driving events are always fun, and it is very heartening to see a line of Citroëns driving along, making a distinguished contrast to the mundane automobiles that typically crowd the roads in the Toronto region.

It was a great way to kick-off the driving season and we all went away looking forward to driving our Citroëns at every possible opportunity now that the nice weather has finally arrived.



Isabella Mishchuk poses with 1939 Traction Avant 7A.



George Dyke co-ordinates a brief photo stop.



Marijke Dyke poses with her custom design 2CV sunroof.



Stopping for lunch at The Old Country Inn in Unionville.



Nazar and Isabella Mishchuk's 1939 Traction Avant 7A.



How American Budd Made Citroën a Forerunner in the European Car Industry

by Per Åhlström

In 1922 André Citroën had a visitor who would eventually change the course of the Citroën business. The visitor's name was Hugh Adams. He was sent out by Edward Gowan Budd Manufacturing Company of Philadelphia to convince European auto makers to convert their factories to the production of the all-steel bodies that Budd had developed.

Prior to meeting André Citroën, Mr. Adam's sales tours in Europe had been unsuccessful. Europe was rising out of the ashes of the Great War. The European market was split into small national markets. The car manufacturers were numerous and small in size with few ambitions to follow Ford's example and produce great numbers of cars. They were all struggling, and they saw no way of justifying the investments required to produce all-steel bodies, and they turned down Mr. Adam's offerings.

When Hugh Adams met with André Citroën he got a completely different reaction. Citroën had Henry Ford as his idol. His ambition was to become the European Henry Ford and to build cars that were affordable and dependable, cars that would put Europe on wheels the same way that the Model T Ford had put America on wheels. André Citroën thus immediately saw the potential of the technology offered by Budd Mfg. Co. The all steel body technology was developed to facilitate the mass production of cars that André Citroën was trying to achieve.



above:
André Citroën.

left:
Citroën Paris
factory B model
production line
showing bodies
on separate chas-
sis. circa 1920.



UNITED STATES PATENT OFFICE

JOSEPH LEDWINKA, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO EDWARD G. BUDD MANUFACTURING CO., OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA

PRESSED METAL VEHICLE BODY

Application filed January 3, 1927. Serial No. 158,487.

This invention has for its principal object which is to say, by building the chassis upon the production of a pressed metal vehicle the under side of the body rather than by body which, as a body, is adapted to serve as building the body superstructure on top of its own chassis. the standard chassis. This too lowers the cen-

Joseph Ledwinka's patent application for a uni-body car was filed in January 1927. A year later he found it necessary for Budd to acquire the German patent for unit body construction belonging to Otto Henniger, that he had refused a couple of years earlier. With the two basic unit body patents in its portfolio, Budd Mfg was uniquely positioned to lead the development of modern autobody technology.

Biggest From the Start

Citroën was a very successful manufacturer by French standards. With a production rate of 100 cars per day, Citroën was the biggest car maker in France from the very beginning of Citroën car production in 1919. When

Henry Adams arrived in 1922 Citroën was the undisputed leader in the French car industry with production figures and an economy of scale that his main competitors Renault and Peugeot could only dream about. But when compared to Ford, his production line was rudimentary, and the production only a small fraction of Ford's. This was also reflected in the price of the cars. In 1921 the model T Fords assembled in France sold for 8.500 francs, while the price of the smaller and less sturdy Citroën was 11.500 francs.

André Citroën was in dire need of new technology that could help him speed up production and get the prices down. The offer from Budd was exactly what he was looking for.

With all-steel bodies he would be able to bake the painted bodies in ovens, drying the paint over night. This was an enormous advantage, as the multi-part bodies had to be stored for ten days(!), waiting for the paint to dry. This took up expensive space, tied up large amounts of capital and was a serious obstacle to an increased rate of production. The number of hours needed to build a car could be reduced many times over and the production rate could be increased dramatically as well if the multi-part bodies were replaced with all-steel one piece bodies.

Signing to a Revolution

The all-steel-body was such a revolution, and such a big investment, that André Citroën decided to go to Philadelphia himself in 1923, to negotiate the

final details face to face with Edward G. Budd and to celebrate the important contract with his partner in this fateful joint venture. A transatlantic trip was, at this time, a major undertaking that required Citroën to be absent from his factory for at least three weeks. The fact that he chose to make this journey to sign the contract is proof of the importance he placed on this transformational technology.

In spite of their differences – Budd was known for being a very serious man who never participated in frivolous activities, while Citroën was known for his gambling habits – the two men established a close rapport, and their meeting was the start of a very close collaboration between Edward G. Budd Manufacturing Company and the Société Anonyme André Citroën, a collaboration that would last until death and bankruptcy separated the two in December 1934. It was this collaboration that would be essential in the development of the revolutionary technologies that made it possible to build the Citroën Traction Avant – a car that introduced the configuration of cars that was to become more or less standard 40-50 years later.

The contract signed in 1923 gave André Citroën exclusive rights for two years to build and sell all-steel-bodied cars in Europe. Citroën and Budd applied all their available resources to the project, aiming to introduce an all-new, all-steel Citroën at the Paris Automobile Salon in October 1924. Hugh Adams stayed in Paris for two years to oversee the installation of the presses and welding machinery, to make sure that the production lines would be ready to meet the expected increased demand for Citroën cars, and to get the assembly lines running smoothly. The undertaking was enormous. Machinery like this had never before been seen in France. The presses were huge, exerting a pressure of 1400 tons. And they were numerous.

French Steel Not Good Enough

The Budd press technology required the use of very high quality steel, cold rolled sheet metal, which could not be produced in France. Thus the cost for the body steel went up sharply, but this was more than offset by the eliminating the cost of wood and the expensive carpentry work that went into the conventional multi-part bodies, and the radical improvements in the painting process that were made possible.

The faith in the new technology and the new model was high. The production capacity was increased from 100 to 250 cars a day, a production rate that also was necessary to pay for the investments and the licensing costs incurred by the shift to all steel bodies.

The new car, the Citroën B10, was a great success, and in 1925 Citroën sold 61487 cars, compared to 32678 in 1923.

Budd was, at this time, a very major player in the American automobile industry, constantly looking for and developing new technologies that could provide opportunities to expand its business as a supplier to car manufacturers.

Pusher of Technology

Budd was not just pushing the American car manufacturers to adopt their all steel bodies. He also promoted all kinds of advanced automotive technologies, even if he was not involved in the production of the new features. He knew that when car makers introduced new features, they would also want to renew their body designs and require new press tools.

In 1917 Budd started to manufacture pressed steel truck wheels in cooperation with Michelin. The wheel business was placed in a separate company, and its technology and pricing was a major force in pushing the traditional wooden wheels out of the market.

In 1920 Budd bought four European chassis equipped with four-wheel-brakes, mounted all-steel bodies on them and ran demonstrations on a lake near Detroit in an attempt to convince the major American car manufacturers to introduce four-wheel-brakes – an effort that met with little success. It would take the American car industry until the middle of the decade to introduce four-wheel-brakes. And Budd decided not to go into the brake business, fearing that Bendix, the giant in brakes, would be induced to go into the wheel business to compete with the Budd-Michelin products.

Budd was a major force in the development and introduction of modern technology into the American automobile industry. Building prototype cars that incorporated the most recent improvements in automotive technology was one of the ways Budd used to market his business.


In André Citroën, Budd found a European partner who was more than willing to try anything new from America, a partner who saw the American automobile industry as a model and a key source for new ideas – not only for the improvement of cars and production methods, but also in marketing and aftermarket activities.

André Citroën's already keen interest in the technological developments in the U.S.A. inspired him to see that engineers were staying on top. Budd also gave him access to the thinking and the developments within the major American automobile companies. Budd was a key subcontractor to all of them, making tools and body parts for just about every auto manufacturer in the U.S.

Citroën could piggy-back on Budd's network and information. Budd had extra good connections with Chrysler, as Dodge, now a company under the Chrysler umbrella, was Budd's first major customer, and the company that pioneered the Budd all-steel technology in mass production.

The All-American French Company

Budd was not the only American company Citroën cooperated with. His engineers visited not only Philadelphia. They also studied the developments in Detroit, the heart of the American automobile industry. After early failed attempts to interest Ford and GM to invest in his

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...Budd made Citroën a forerunner - continued from page 7

automobile venture, André Citroën cultivated his connections with Chrysler. It is therefore no surprise that the next model launched by Citroën, the B14, and the subsequent rear-wheel-drive Citroëns were very similar to contemporary Chryslers.

The Citroën plant was equipped almost exclusively with American machinery, and the production set-up was overseen by American experts. A report written by experts from Crédit Lyonnais sent out to evaluate the Citroën operation in 1926, states: "The tooling consists of 10,000 machines that are almost exclusively American."

There is further proof of André Citroën's and SA André Citroën's dependence on American subcontractors, licenses and patents, the most evident being that in 1928 Citroën set up an American subsidiary in Detroit, in close cooperation with Chrysler to handle American licenses and subcontractors. The company was registered in Montréal, Canada, for legal reasons. It is very interesting to note that it was also set up as a design and development department that would compete with the Bureau d'Études in Rue de Théâtre in Paris. It was supposed to work in parallel with the Parisian engineers on the same design assignments.

Citroën obviously hoped that the competition between his two design departments, one relying on European technology and the other on American, would be another step towards making Citroëns the most modern cars on the market.

Atlantic Commuters

One of the most important aspects of the Budd-Citroën cooperation was the intense exchange of technicians. A stream of delegations from Budd visited Paris and Citroën, and the French technicians were just as frequent travelers to Philadelphia. There was a constant stream of Citroën engineers and management people coming and going through the Budd plants and offices, according to George Trautvetter, chief draughtsman for Budd at the time, who was interviewed in 1972 about his memories of the cooperation between Budd and Citroën.

"It is absolutely essential that our [Citroën's] engineers visit the USA. This country is a forerunner. Only there they finely hone their technology as part of their culture...and they have a creative spirit...that painters and sculptors used to find in ancient Rome...Engineers must go to America, where big industry was born. ... They come back to me as inspirers and they bring me widened horizons. This is one of the major reasons that our company is successful," André Citroën told his board of directors and his financiers.

One could almost say that André Citroën regarded Budd Mfg as an integral part of his own company. The body production in Paris was in reality managed by Budd engineers, and when Citroën did not have the time or capacity

to produce parts in his own factories, he had the parts produced by Budd in Philadelphia. This happened every time Citroën introduced new models. To get cars ready in time for their launch, and to have demonstration cars ready to be distributed to the dealers in time, he let Budd in Philadelphia produce the parts for the first batch of the new cars, and in a couple of instances even let Budd build the pre-series cars in the U.S.

It should also be noted that in 1929 Citroën hired a Budd employee, George Kendall, to run the body production in Paris. Thus the Budd machinery at Citroën in France was run by a Budd engineer, all through the period when the Traction Avant was being developed, giving the Citroën designers free access to the best and most current sheet metal shaping technologies of the time.

In the 1920s Citroën was the undisputed technological leader in the French automobile industry not only because of a unique creativity demonstrated by the Bureau d'Études, but also because of André Citroën's willingness to implement the most recent technical developments in the American automobile industry. In Budd Mfg. Co he had found the right partner, a partner who not only looked for new technologies, but put most of his profits into the development of new and better technologies for automobile production.

Budd was as keen on selling its technologies in Europe, and on expanding its European business, as Citroën was keen on exploiting American inventions and ideas. In 1925 Budd started a joint venture in England, Pressed Steel, in cooperation with Morris, and the following year another subsidiary, Ambi-Budd, was set up in Germany. Budd owned 51% in these companies and the local partners 49%.

The English subsidiary was early on turned over to British majority ownership and management, and took on a role as a pure subcontractor that produced parts designed by its customers.

A Development Powerhouse

The German Ambi-Budd had a much closer relationship to the Budd main factory in Philadelphia and took on the same role in Germany as Budd had in North America towards the car industry. Ambi-Budd became an active partner to the industry, assisting its customers in the development of new car models and the technologies required to produce them. Budd's chief engineer Joseph Ledwinka played an important role in the management of Ambi-Budd, and the company was a major force behind the efforts of the German automobile industry to modernize its cars and production methods. When an important new German car was launched, you could almost be sure that Ambi-Budd and Joseph Ledwinka had been consulted in the design process. When Ferdinand Porsche was finalizing the design of the Volkswagen, Joseph Ledwinka was consulted for the sheet metal work. According to "the Buddgette", the employee newsletter of Budd, Ledwinka could not attend the company's 25 year jubilee in 1937 because he was in Germany "to work on the new German national car."



Joseph Ledwinka was Budd's chief engineer and long time partner. He was the inventor behind several of the patents that forced every major car maker in the world to buy technology licenses from Budd.

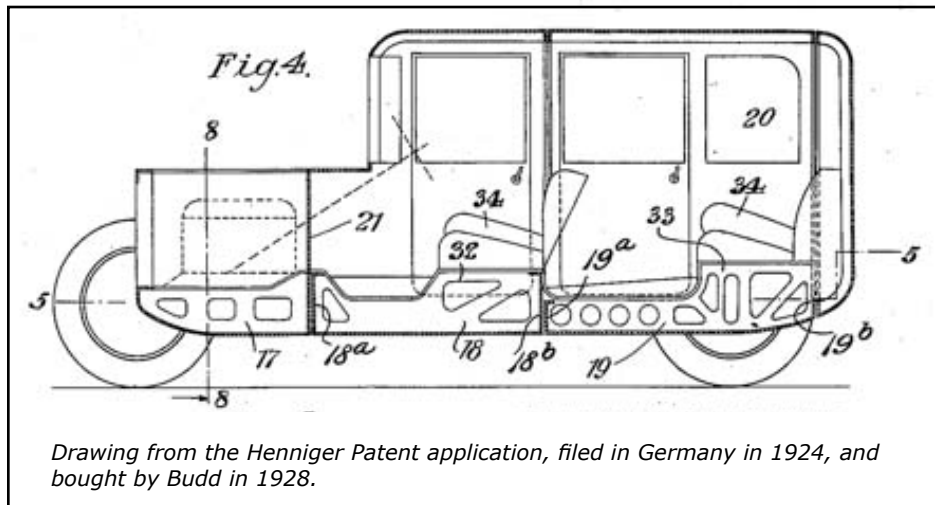
The 1920s saw many important developments in the design and production of automobiles. This is the decade when the automobile industry broke away from its carriage-building roots.

In 1923 Lancia introduced the Lancia Lambda, with what many consider to be the first unit body. While it is true that this was the first car built without a frame, it was an open car, and thus lacked the component that many think is key to a unit body – a stress-carrying roof. The structure of the Lancia Lambda was more like the design of a boat, and cannot really be seen as the first step towards the modern unit body car.

The Unit Body Premiers

The first steps on the path that led up to the modern unit body technology were taken by a German

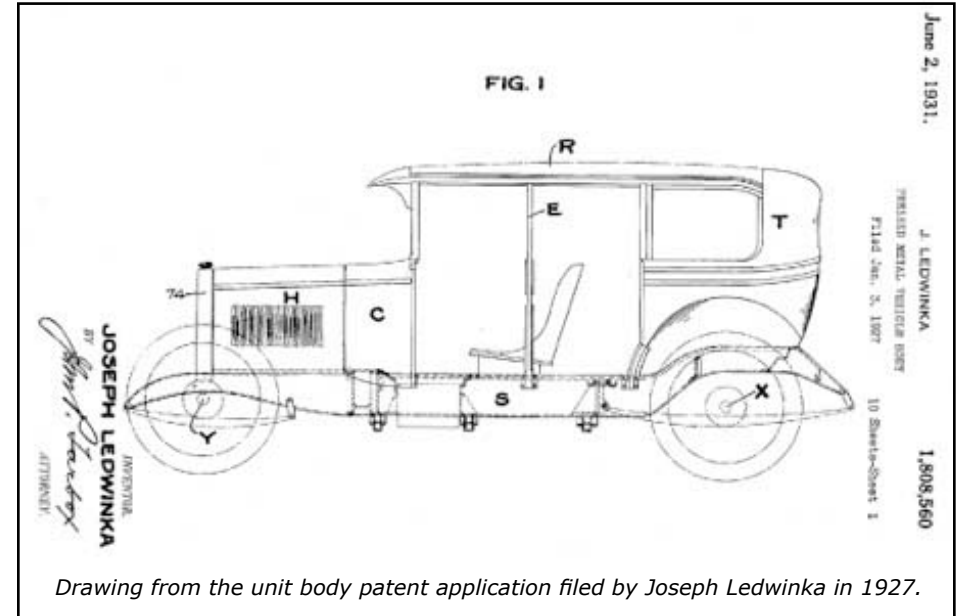
engineer, Otto Henniger. In 1924 he filed a patent for a saloon car, where sturdy sheet metal box sections in the floor provided torsional stiffness, and where all body panels carried stress and contributed to the overall strength of the car. This design was stiffer and lighter than anything the world had yet seen. Henniger didn't have the resources to build a car based on his



Drawing from the Henniger Patent application, filed in Germany in 1924, and bought by Budd in 1928.

patent, and in 1925 he offered the patent to Budd. After consulting with Joseph Ledwinka, Budd turned down Henniger's offer, probably because Ledwinka was already working on his own design for a unit body. A design for which he filed a patent application in 1927.

The Ledwinka design was obviously not satisfactory, and in 1928 Budd acquired the Henniger patent for \$75,000.



Drawing from the unit body patent application filed by Joseph Ledwinka in 1927.

The constant exchange of engineers between Citroën and Budd made it very likely that André Citroën was also well informed about these developments.

The 1920s was also when the industry started to experiment with front wheel drive, and produce well functioning front wheel drive cars.

Front Wheel Drive Proves Viable

The French Tracta was launched in 1926. The cars were designed by Jean-Albert Grégoire and used a front-wheel-drive system featuring Grégoire's patented Tracta constant-velocity joint. The production of the Tracta was stopped in 1934, but it was no doubt a very important factor behind Citroën's decision to develop a front wheel drive car. Citroën actually contracted the design of the universal joints for the front wheel drive to Grégoire. The original Tracta joints did not meet Citroën's demands for a design that was well suited to mass production, and this came to be a major obstacle for the successful introduction of the Traction Avant. Grégoire's attempts to modify the joints to better suit mass production were unsuccessful, and the faulty universal joints were one of the many

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problems plaguing the early Traction Avant production cars.

This is one of several examples of why the existence of a successful low volume car does not necessarily mean that its technology is suited for affordable, high volume production cars.

In the U.S., front wheel drive was pioneered by the 1929 Cord L-29, which was introduced a couple of months before the equally radical Ruxton. Both of them were fairly expensive cars that were produced in very limited numbers.

The Ruxton actually was developed by Budd. It was one of the prototype cars that Budd developed and built as part of his effort to get automobile manufacturers interested in producing cars featuring the latest developments in automobile technology.



The front-wheel-drive Ruxton was developed by a team of Budd engineers and shown to the public in 1929.

The development of the car to be produced as the Ruxton started in 1926, when Budd set up a development team, led by Joseph Ledwinka and development engineer Earl James Wilson (aka Colonel) Ragsdale and William (Bill) J. Muller, a former race car driver who served at Budd as engineer, test driver, trouble shooter, talent scout and even as Edward G. Budd's part-time personal driver.

There is no doubt that André Citroën was well informed about Budd's work on the Ruxton car. In an interview with Michael Lamm, editor of *Special Interest Autos*, in 1971, Bill Muller says that when he visited the Citroën factories in 1928, André Citroën had shown a keen interest in unit body construction and front wheel drive.

Many manufacturers of economy cars shared Citroën's interests, and in Germany Adler designed a car that in many ways was similar to the future Trac-

tion Avant. The front wheel drive Adler Trumpf was launched in 1932, with Budd's German subsidiary Ambi-Budd responsible for the design and production of the bodies. This is further proof of Budd's expertise and dominance in the field of advanced automobile body design.

The Adler Trumpf is in many ways similar to the Traction Avant introduced two years later, but there are also important differences. The Adler is not a unit body design. The structure is more similar to the platform design used for the Citroën DS 20 years later. The sheet metal platform is stiffened with box sections and incorporates the cowl. Pictures from the Adler assembly line show interesting similarities in the way that the forces on the front end are transferred to the cowl section. Equally evident are the differences, with the Adler front end composed of a large number of pieces welded together, a design that makes high volume production virtually impossible.

Not Good Enough

In 1932 Adler offered Citroën the right to build the Adler Trumpf under license in France. Despite Citroën's urgent need for a new, smaller, lighter and cheaper cars, he refused the offer for two reasons: One Citroën did not want to become dependent on a German company, and two, the design of the Adler Trumpf was virtually impossible to adapt to mass production - a pre-requisite for Citroën's survival. The chassis was designed to accept both sedan and convertible bodies, as well as coachbuilt bodies, on the same platform.

The design of the Traction Avant is much more advanced than the Adler design and made with mass production as one of the most important design parameters. The number of components are reduced to a minimum, the front end forces are better distributed over the cowl area and, not least, it is an aesthetically very pleasing design, one of the best examples of elegant body engineering ever created.

It is safe to say that the basic design elements of the Traction Avant were well known to André Citroën at least three years before he is said to have been inspired by a front wheel drive design that was shown to him by Budd. In the following year, the star of André Citroën was in its zenith. The company for the first time built over 100,000 cars, double the production of his closest French competitor, and 40% of the total French car production.

Then the depression hit, and the dramatic chain of events that led to the creation of the Traction Avant began.

The Traction Avant Was an Unavoidable Gamble

When the stock market crashed in the US in 1929, igniting a global economic crisis, France was not strongly affected in the beginning. But Citroën was. The measures taken by the French government in its attempts to stave off an economic recession were a direct blow to Citroën's business model, which depended on licenses and imported parts and materials from America.

Citroën had to make radical changes to save his business. What until now had been a competitive advantage – his reliance on American technology and subcontractors – had turned into a serious competitive disadvantage.

Citroën immediately sent his second-in-command, Georges-Marie Haardt, to the U.S. to renegotiate contracts and to find all possibilities of lowering the costs for materials and parts. Haardt's tour to Citroën's American suppliers, of which Budd was the most important, no doubt was very important to the future developments at Citroën.

The French government's objective in raising import duties was to favour domestic products over imported materials. But this was not a viable alternative for Citroën. The French steel industry still could not produce the cold-rolled steel required to produce car bodies with the American equipment in the Citroën factories. Nor could the French industry produce sheet metal wide enough for Citroën's needs. The only possible alternative seemed to be to find every way possible to reduce the weight of the vehicles, and thus the use of imported steel and imported parts.

Weight Reduction a Top Priority

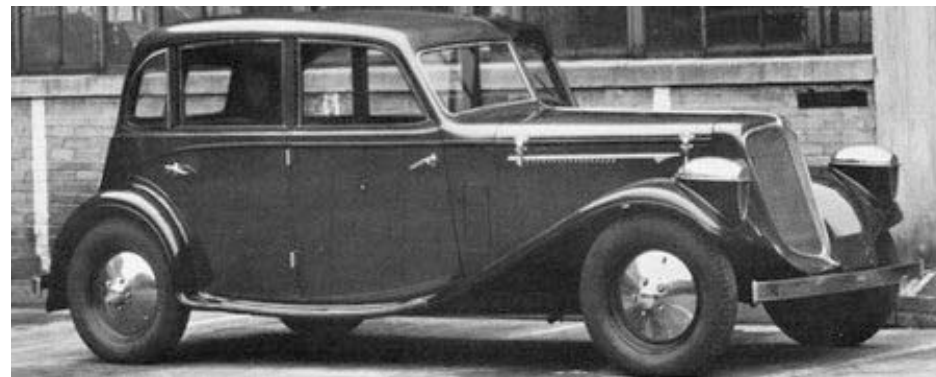
André Citroën told Haardt to concentrate on finding ways to reduce the weight and the use of material in the Citroën model lineup.

Budd had several new weight-saving developments to show Haardt in 1930.

One, for which a patent application was filed in 1929, was the "Monopiece" technology that made it possible to press the whole side of the car in one piece, eliminating a number of small pressings, simplifying production, reducing the number of presses necessary, and not least – made for a considerable reduction of the weight of the body.

As the steel industry at this time could not produce sheet metal wide enough for these monopiece pressings, Budd had devised a way to weld two sheets together, using flash welding to create a weld slightly thicker than the gauge of the sheets, removing the flash and then hammering the weld down to the gauge of the sheets and cleaning the surface of the welded sheet to avoid imperfections in the final pressings.

At the time Haardt visited Budd, the Ruxton was finished and seen as a very successful design. The weight savings of front wheel drive was obvious, with the elimination of the drive axle to the rear. The car was also very low slung, thus demonstrating further possibilities of saving weight on the body work. Furthermore, in 1930 Joseph Ledwinka was working on another front wheel drive prototype, a car with a unit body, making full use of the unit body patents of Henniger and Ledwinka, and of the new "monopiece"- technology. The whole purpose of building the prototype was to find car manufacturers who were interested in implementing the Budd-developed technologies the car was built on. Certainly Budd had no reason to withhold the work on this car from Citroën.



Patented Oct. 16, 1934

1,977,131

UNITED STATES PATENT OFFICE

1,977,131

METHOD OF MAKING ELASTIC METAL STAMPINGS

George L. Kelley, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a corporation of Pennsylvania

No Drawing. Application March 26, 1931, Serial No. 525,619

2 Claims. (Cl. 28-148)

1,977,131

2.

The method of fabricating all steel automobile bodies to render them relatively immune from fatigue failure which consists in cold working the sheet steel stock to a material degree in addition to that degree necessary merely for the prevention of stretcher strains, drawing the parts from the stock so treated and assembling the resulting stampings to form the completed body,

performing cleaning and paint drying operations upon the same, and utilizing the temperatures incident to those operations to bring out during cleaning and paint drying the elastic properties as rendered available by the excessive amount of cold work done.

GEORGE L. KELLEY.

left: The undramatic headline of this Budd patent, filed in March 1931, is hiding a technological revolution that transformed the use of sheet metal and transformed the structure of the global automobile industry. The technology described made it possible to press sheet metal to shapes that previously were unthinkable, and the patent that made all makers of mass produced cars dependent on licenses from Budd. The low volume producers who could not afford a license could not keep up with the design trends introduced by the Budd licensees. The voluptuous shapes and intricate grilles pressed with the new Budd technology could not be replicated by the tradesmen building bodies for coachbuilding firms and low volume car industries.

above: This is a unit body, front wheel drive car developed by Joseph Ledwinka, which could be the car that provided Citroën with the concept for the Traction Avant. This car was finished in 1931 and most likely shown to André Citroën when he visited Budd. It is conceivable that Ledwinka discussed this design with Georges-Marie Haardt when Haardt came to the U.S. in 1930 to find ways to minimize the weight and the use of expensive materials in existing and future Citroën models, and that Haardt brought back the unit-body, front-wheel-drive concept to André Citroën as a possible solution to the problems Citroën had run into when the French government raised its import duties.

All Pieces in Place

It is also likely that Haardt in 1930 learned about the new deep-draw technology that Ledwinka and his team had developed. The patent for the new

continued on page 12...



...Budd made Citroën a forerunner - continued from page 11

technology was filed in March 1931, and created completely new possibilities for designers of sheet metal products. This patent, with the bleak title "Method of Making Elastic Metal Stampings," was not only to change the shape of cars but the structure of the car industry itself. The deep-draw sheet metal stamping technology had dramatic consequences for a wide range of industries.

The patent describes how the sheet metal is cold rolled beyond what is necessary to avoid stretcher strain, then cold rolled without changing the gauge of the metal to eliminate imperfections where cracks can start, pressed into body parts, which are welded together to form the body, after which the body is cleaned off and painted, and finally the whole painted body is heated in an oven, combining the heat treating of the metal and the drying of the paint. Which is exactly how car bodies still are being built.

And the beautiful shape of the Traction could not have been pressed into metal without the invention of the deep-draw stamping technology.

How Flash Welding Works

This process involves joining two sheets (in this case) together without the use of any filler or other metal. The sheets are then charged with electricity. The arc or flash, which results from the nearness of the two sheets of metal, gives this process its name. When the edges of the two sheets are hot enough they are joined together without an alloy being formed. Heat produced in the flash welding process is by the flashing action resistance at the interface surface, rather than contact resistance as in the butt weld process.

Both oxy-acetylene and MIG welding produce a bump along the seam where a second metal is used as a sort of "glue".

In flash welding, once the area has become molten and reached the proper temperature, the second stage of the operation begins - the upset or forging action. The two ends of the workpieces are then brought together with a very high force sufficient enough to force most of the molten metal, along with most of the impurities, out of the joint.

Smooth, clean material surfaces are not as critical with this process as they are for butt welding, because the flashing action burns away irregularities at the weld surfaces. This allows joining of a wide variety of materials, such as wide, thin sheets of material; tubing; forgings; and ferrous and nonferrous materials to successfully be welded.

When Haardt came back to Paris the Bureau d'Études was ordered to reduce the weight of the present production models by at least 100 kg within the next 12-18 months. They were to make maximum use of Budd's "Mono-piece" technology and then go on to find new ways to reduce weight even further on future Citroën models.

This order must also have been given to the design studio in Detroit, and can be a possible explanation for a mysterious picture from 1934 of a car that according to the text on the archive envelope is a Citroën, but which bears

no resemblance to any known Citroën production car.

As both the Budd and Citroën archives have big gaps - the Budd archives were largely destroyed when the company was acquired by Thyssen in 1976, and the Citroën archives suffered bombings during WWII - it has as yet been impossible to document the precise chain of events and when decisions regarding the development of the Traction Avant were made, but it seems reasonable that the decision to develop the radically new model was taken when Georges-Marie Haardt came back from the U.S. in 1930.

At this time he had knowledge of all the design elements that were to be incorporated in the Traction Avant, and the company was forced to come up with a way to radically reduce its consumption of materials. The logical solution, under these circumstances, was to develop a unit-body car with front wheel drive, precisely the kind of car Joseph Ledwinka was building in the Budd development department in Philadelphia at this time.

No Time for Social Visits

It is reasonable to believe that negotiations regarding the new vehicle and the machinery needed for its production were going on in the year that passed between the Georges-Marie Haardt's return from the Philadelphia in 1930 and André Citroën's visit to Philadelphia a year later. It is probably no coincidence that a big delegation with Budd's leading engineers visited the Citroën factory in 1930. It seems likely that they were there to inform their French partners in detail about the new technologies developed by Budd, providing Citroën with the knowledge needed to implement the new technologies in the design of a new car, and describing what equipment was necessary to build a unit body front wheel drive car.

It is to be noted that André Citroën only made two visits to his important partner in Philadelphia, Edward Gowan Budd. Following both visits, changes in production at Citroën were made. In 1923/24, Citroën decided to implement Budd's all-steel body technology. On his arrival back in Paris he feverishly undertook to develop the new car and to re-tool his production line.



above right: In 1931 André Citroën went to the US on what has been described as a social visit. It is much more likely that the purpose of his visit was to sign the contract for the licenses, machinery and assistance needed from Budd to design the Traction Avant and to prepare the Citroën production lines for the radically new model that came into production only 2 1/2 years later.

On his second visit, the so-called social visit, Citroën arrived home and began an initiative to radically reduce the weight of a proposed new vehicle. To achieve this goal, he rebuilt the Quai de Javel factory and bought and installed new machinery to facilitate mass production. This was certainly the greatest gamble during the worst financial collapse the world had known. And really – with a company in a financial crisis, fighting for its life, André Citroën could not have had time to waste on social visits.

An Unavoidable Gamble

To rebuild the whole factory, and at the same time develop and build a radically different car was by many considered to be taking an excessive risk. But to rebuild and retool the factory without knowing, at least in principle, what the design parameters of the new car would be, would have been downright foolish. And André Citroën was no fool.

He was taking a very well calculated risk, and a very necessary risk. He knew that it was not financially viable to continue building the models he had in production. He knew that a new conventional model would not provide the reduction in weight and materials necessary for the cars to be profitable. He knew that the domestic industry did not have the ability to produce the quality materials he needed.

It was very clear to André Citroën that venturing to build the new car, with all the investments necessary for its development and production, was taking an enormous risk. But at least it gave his company a possibility to survive. To not take this risk would lead inevitably to bankruptcy. His choice was not between taking a big risk and a smaller risk. His choice was between total disaster and a possibility of survival.

I am convinced that André Citroën knew the overall dimensions of the new car, what presses would be needed, what material handling equipment would be needed, what the production flow would look like, etc., when he, at the end of 1931, started the transformation of his company. But of course he did not know the details of the design.

A Historic Contract

I am also convinced that his visit to Budd was no social visit. It was an important and historic event, where Budd and Citroën in this personal meeting hammered out the final details of the contract for the Budd technologies and the Budd machinery that made the Traction Avant possible.

Due to the damage done to the Citroën archives during WWII and, the Thyssen takeover of Budd, and destroying the company's [Budd's] archives in 1976, this important document will probably never be found. Thus my conclusions are, at least as yet, impossible to fully prove. But it is hard to find acceptable alternative explanations for the actions of André Citroën at this time.

The decision to build the Traction Avant put enormous pressure on the engineers in Citroën's Bureau d'Études. In my mind there is no doubt that the development departments in Paris and Detroit got the same directives from the company president: "Design a car that makes the most of the light-weight build technologies developed by Budd!" Probably adding limits to dimensions and costs, but obviously not prescribing that the new car must be front wheel drive, as the discussion about the pros and cons of front wheel drive were still going on when André Lefebvre, "the father of the Traction Avant", entered the Bureau d'Études in Paris in March 1933.

At the Hagley Museum in Wilmington, Delaware, where the remains of the Budd archives are kept, there is an envelope labeled "Citroën,*" that contains pictures of a very strange prototype car. The pictures are dated March 29, 1934, the very date the Traction Avant was introduced to Citroën dealers. The car bears no resemblance to any known Citroën production model. It is obviously built to meet strict weight limitations and to sell at a low price. It has a small engine and rear wheel drive. It looks as if it was built with the conventional thinking for light weight economy cars in the 1930s, except for two distinct features: It is close to the shape of the Chrysler Airflow, which was released at this time, and it obviously has a unit body.


The only reasonable explanation I can find for this car, aside from a mislabeled envelope, is that this was the car designed by the Citroën designers in Detroit, documented by Budd in 1934 for the purpose of the archives (there are also a number of pictures of clay models dated with the same date). The likeness to the Airflow is an indication that the Citroën design studio in Detroit was responsible for this car, as it did have close ties to the Chrysler organization.

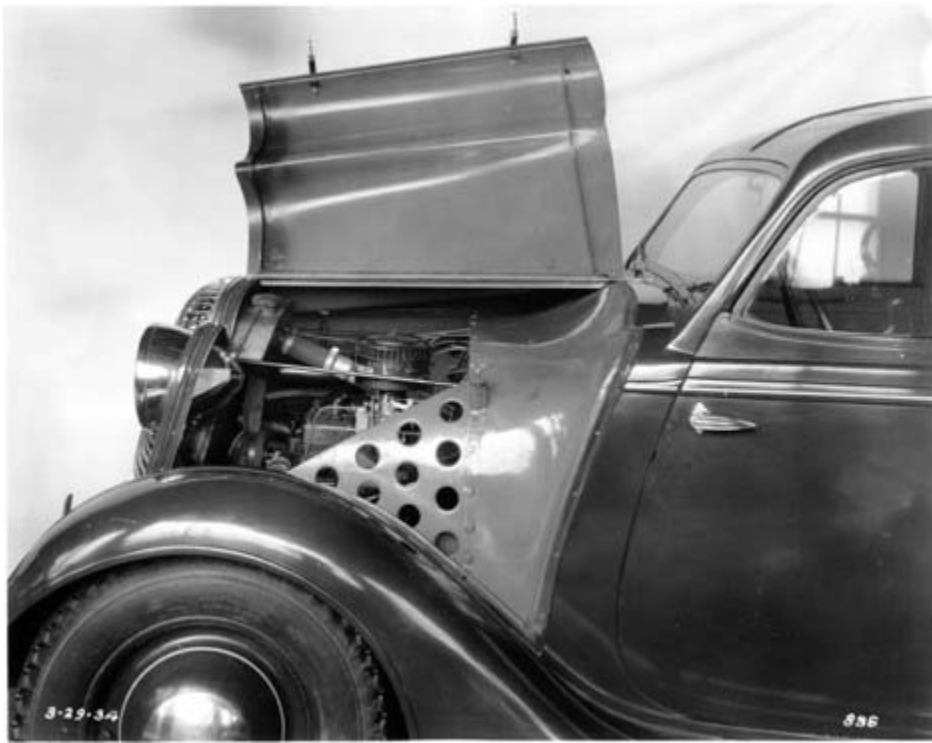
If this was an alternative to the model developed in the French design bureau, Citroën lovers and the automobile industry as a whole should be very happy that Citroën chose to go for the car developed under the auspices of André Lefebvre: the Traction Avant.

The article in *Special Interest Autos*, Jan-Mar 1972, focuses on the visual resemblances between the Citroën Traction Avant and the contemporary Ford models. It should not come as a surprise, as Citroën used the same American subcontractors as Ford. It is conceivable that the hood handles on the Ford and the Citroën come from the same suppliers, and that the Citroën and Budd engineers who talked to and visited each other regularly also brought information about what kind of tooling other automobile companies were interested in or ordering, much the same way that new ideas are spread today in various industries.

Everybody Needed a Budd License

Budd Mfg Co was, from the mid-1920s and up to the outbreak of WWII, a key provider of licenses, patents and parts to every major car manufacturer in the world. A 1930's car could not be produced without a license for

continued on page 14... 



This mysterious car is labelled "Citroën" and dated March 29 1934. It could be a car proposed by the Citroën design studio in Detroit as the answer to Citroën's order to his designers to develop a car that was radically lighter than his conventional models. This is a unit body car with rear wheel drive and a very simple interior, obviously designed to sell at a rock bottom price.

machinery from Budd. The world's automobile industry had become dependent on Budd technology, which is proven by the company's long list of licensee's: All the big American car companies, Citroën, Renault, Peugeot, Fiat, Volvo, Toyota ... It is a complete list of all the companies in the 1930's who had ambitions to build automobiles en masse.

Thus Budd had good knowledge of what the future releases from the major automobile manufacturers would look like, and channels to discreetly convey this information to the designers at Citroën. And the shapes that lead many people to believe that the Traction was somehow copied from the 1934 Ford may in a way be right, as the 1934 Ford is an upscaled version of the English Fords that were first shown in 1932. Flaminio Bertoni only had to look in the motor magazines of the day to be up to date on the auto design fashion of the day, and to be inspired to make his personal - and very successful - interpretation of the automobile design trends of the mid 1930's.

Even if Budd did supply the concept, the necessary technologies and machinery, there is no doubt that the design of the Traction Avant is the work of the engineers in the Citroën Bureau d'Études under the leadership of André Lefebvre. He probably came with some kind of design of a small front wheel drive car ready on paper or in his head, but it is not likely that he had full knowledge of the possibilities and limitations that the latest developments by Budd provided for the new car. There must have been close cooperation between the designers in Paris and the body engineers at Budd in Philadelphia throughout the design process, or it would have been very difficult to finalize the design as quickly as is described in the book "André Lefebvre" by Gijsbert-Paul Berk. But not impossible.

In the 1972 article in Special Interest Autos, Russel Leidy, production manager for Budd in Philadelphia at the time (and married to Joseph Ledwinka's daughter), was asked who was responsible for the design of the Traction Avant. His answer was very clear: "The French did the styling and the interior."

As the foremost expert on tooling for a new car model, he was also asked how long it would take to develop and fabricate the tooling needed to produce the Traction Avant.

Mr. Leidy estimated that it would take 5-6 months from the first engineering drawings till the production of acceptable stampings. Tools alone could be developed in 3-4 months, but it would take another couple of months to work out all the kinks in the kind of large stampings required for the Traction Avant.

Record Time to Production

This adds credibility to the description of how the final details of the design and the tooling were worked out late in the fall of 1933, in cooperation between the Citroën body engineers Raul Cuinet and his assistant Pierre Franchiset, and the Budd organization. Cuinet and Franchiset went to Philadelphia in the beginning of November 1933 with the drawings they had made based on Bertoni's designs, to finalize the body engineering and get the production of the tooling started.

First all drawings had to be transferred from measurements in millimeters to measurements in inches to make them readable for the American engineers. The Budd technicians made a great number of modifications to the Citroën drawings, reducing the number of body parts and working out ways to reduce the amount of scrap, e.g. by using the cutouts for doors and windows to produce smaller parts. It was an enormous undertaking, that was finished in a very short time.

The so called "Kellering" models, three-dimensional wood mock-ups that served as masters for the fabrication of the steel tooling, were ready to be inspected only three weeks after the arrival of Cuinet and Franchiset in Philadelphia. The work schedule had been very intense. Cuinet and Franchiset worked 12 hour days. Every night they sent a telegram to Paris, describing the modifications deemed necessary. The six hour time difference allowed

the engineers in Paris to evaluate the suggestions and come up with alternative solutions that they sent to Cuinet and Franchiset so they could start working with the responses from France as soon as they went to work in Philadelphia.

Cuinet went back to France after three weeks, while Franchiset stayed to oversee the fabrication of the press tools.

According to Franchiset the first set of parts for a complete Traction Avant was finished in February 1934. Parts for 100 Tractions were pressed in Philadelphia and sent to France to build 100 pre-series cars during the spring of 1934. These 100 prototypes were used for final test runs and as demonstrator cars for the Citroën dealers. Budd delivered the tooling that was sent to Paris on time, and was installed in the new factory at Quai de Javel before Citroën had finished the testing of the prototype cars, after the big launch, after the distribution of demonstrators to the dealerships, and after sales had begun. It is not surprising that the product Citroën delivered to his customers was far from perfected. The imminent financial crises of his company forced André Citroën to a premature launch of his new car.

The final word on how the Traction Avant was conceived and developed has yet to be written, but it is very likely that the development process started much earlier than hitherto has been believed, and that the end product is a result of both teamwork and individual talent at both Edward G. Budd Mfg. Co in Philadelphia and at the Citroën Bureau d'Etudes in Paris, with Edward G. Budd and Joseph Ledwinka at Budd, and André Lefebvre at Citroën as the

individual geniuses who made the Traction Avant possible, and who created a car that decades later became the norm for modern car design.

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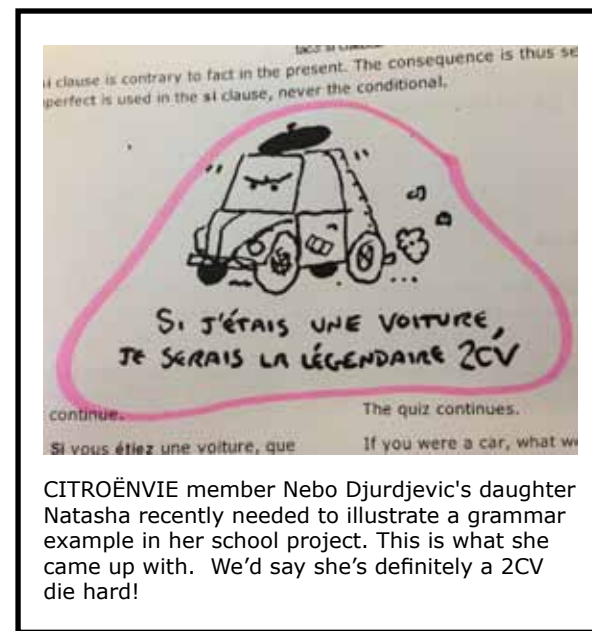
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Citroen Pre-WWII Car Production by Year	
1919	3,325
1920	12,244
1921	10,933
1922	21,025
1923	32,678
1924	55,387
1925	61,487
1926	50,584
1927	76,077
1928	72,356
1929	102,891
1930	77,788
1931	71,932
1932	48,027
1933	71,742
1934	56,123 sold at loss
1935	30,950 sold at loss
1936	41,537 sold at loss
1937	61,136
1938	68,109
1939	71,249



CITROËNVIE member Nebo Djurdjevic's daughter Natasha recently needed to illustrate a grammar example in her school project. This is what she came up with. We'd say she's definitely a 2CV die hard!

Reader Feedback:

In response to the story in our Spring issue about new Citroën's being spotted in North America, Ben Boyle writes:

"I may be able to shed a little light on these insanely new Citroëns you have pictures of in the states. My mom's Nexteer plant has several new Citroëns as part of their test and evaluation fleet. I would not be at all surprised that other companies have them too. There was, until recently, a C3 Pluriel being driven on manufacturer plates here in Michigan by Inalfa Roof Systems. Also, Richard Lucki works for PSA Peugeot Citroën in Michigan and the most recent car I knew he was driving around in was a C6."

Ed Footnote: I met Richard Lucki this past summer when I was at Concours of America in Plymouth, MI. Nice guy! He said he was going to have to ship his C6 back to France because its importation papers were expiring. He's staying but what a shame the car has to go!

- George Dyke

Dave Brenny sent us this link to 2 YouTube videos of the 2012 New Glarus Hillclimb. Dave is running his vintage Porsche 356 while his wife Julie is pushing their SM to the max. Zoom, zoom!!

<http://youtu.be/us1kkTKZsQY>

http://youtu.be/VyKr_hADgv4



Keep current with our **CITROËNVIE Online Blog**
<http://blog.citroenvie.com/>

We heard from Gordon Aikman recently thanking us for helping him find a lovely 2CV Truckette. He bought it in Vancouver from Lionel Handler and after bringing her home to the Comox Valley in Vancouver Island (near Courtenay) she is now causing a stir in the community.



Gord says he must get a card made for the window that gives her details as everyone asks about her. Amazing show stopper!!

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Sac to Quad in a D

by Richard Bonfond

After moving from Sacramento to Chapala last October, we returned in March to take care of some unfinished business, visit friends and family and pick up our DS which we had left behind. Having run out of time on our initial move, we left the DS with Lon Price in Santa Cruz to conclude the work I didn't have time to finish.

Once picking the car up, we managed to visit a few friends during our short visit in Sacramento before pointing the car in a southerly direction towards

San Diego, where we spent ten days with our daughter Chantal and her husband Don. From San Diego it was off to Phoenix where we caught a flight to Austin to spend a few days with our other daughter Natasha and her boyfriend JP. We then



returned to Phoenix, picked up the car at the airport and met up with Barry Singer for a lunch buffet at a very good Indian restaurant. We finished the day with a visit to Trader Joes before heading to Nogales, where we spent the night prior to crossing the border in the morning.

left: In San Diego.



On the way to LA.



In Mazatlan.

Me in AZ.

From Nogales we crossed the border, took care of formalities and continued on a three day drive with an overnight stop in Ciudad Obregon and Mazatlan, before arriving back home in Chapala. I think this blue DS-21 got more attention traveling through the country of Mexico than it gets driving around in the United States - lots of smiles, thumbs up and iPhone picture taking!



Me with Barry Singer in Phoenix.



A total of 3245 miles/5226 kilometers of trouble free driving from start to finish.

She now needs a bath and an oil and filter change before her next adventure!

Last day on the road.



Reader Feedback:

George,

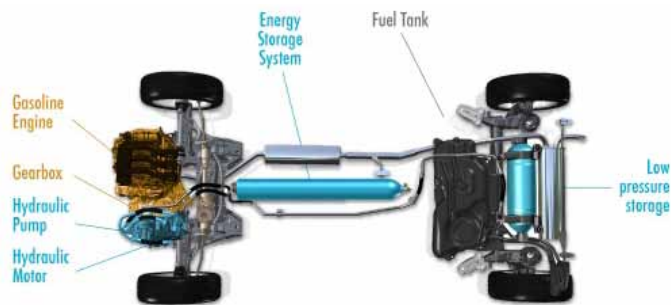
Thanks for another socko issue. Going to all digital is probably inevitable, and ok.

About that "Air Peugeot"; Most of the stuff I've seen on this grand achievement is either intentionally misleading, or poor interpretations.

First, note that many of the press items mention nitrogen as the working gas, but you can see that, for a 300 bar (around 4500 psi) compression, the storage tank for nitrogen at low pressure (say a couple bars) would have to be, say 150 times the volume of the high pressure tank, or a lot bigger than the car. The conclusion is that it runs on atmospheric air, which of course is wet, and has implications for its expansion and cooling through a motor.

Second, we see statements such as available for use 80% in city driving, which may be true, but, except in the Times article, no mention of the total range on a full charge of "a few hundred yards". Efficiency, by most legit. studies, of a similar system is less than battery-electric. The only putative advantage of a short-term storage hybrid system is that the compressed gas can be stored hot, and used right away, hot, saving all the losses of an intercooled system, which are about half the energy. It thereby limits the ultimate energy density in the tank, but at least it might not be throwing away all the compression heat energy. But the temperature rise is huge, and the

mechanical parts have to either operate extremely hot or waste it with cooling apparatus. A little fly-wheel or a battery could also do the same job, without all that plumbing and stuff.



There are so many ongoing frauds in the compressed air car world - Wikipedia names some - that a reader has to be careful in order to understand the details.

I remember a spoof article in an early 70's copy of the Bulletin of the League of American Wheelmen (I once was very attached to bicycle touring), show-



ing nice mechanical drawings of a piston compressor running inside of, and pressurizing, the frame tubes of a bicycle. All run off the pedal crankshaft.

Valves enabled tire-burning acceleration. Same concept, except much more elegant, and likely equally manufacturable.



- Richard J. Stein, Ph.D.
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Stein Laboratories LLC
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cooke@snet.net

'58 Truckette owner.

Illustration courtesy of Mike Flanagan
Flantoons
<http://www.flantoons.co.uk/>

CITROËNVIE payments can be by credit card whether or not you have a PayPal account

We use PayPal as our method for online payment transactions. However some people have expressed concern that they do not want to use PayPal. They would prefer to pay by credit card. That's not a problem. We can send you an invoice that you can pay with your credit card rather than having the transaction go through PayPal.

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- Your CITROËNVIE Production Team

Attention DS and SM owners: George Klein in Toronto now has the means to rebuild front bearings. He has the separating tool for the front hubs and for 90 euro for a set for 2 bearings, plus 6 euro for the middle seal... 100 euro in parts total, he can now rebuild the front bearings. Once cleaned and repacked in fresh grease, bearings will last 40 years again. For more info contact: georgeklein@rogers.com.



Line Up for a Deal on ebay Dept:



Great, - a \$500 parts car selling on ebay for \$6,950. And they think some schmuck is actually going to buy it? Granted it's a rare Jubilee version with the Burgundy dashboard, but come on.... \$7K???

I guess the one positive thing is that this kind of nonsense helps drive up the price of the D models that we already own. I'd say mine is worth about \$90K if this guy get's what he's asking. :)

- George Dyke



**BASTILLE DAY ON 60TH ST
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BETWEEN 5TH AND LEX. AVES**

Bastille Day Celebration in NYC is On Again!

On Sunday July 14, 2013 the annual Bastille Day Celebration will roll through the streets of New York City. If you are in the NYC area consider being a part of the event.

Contact Howie Seligmann <hseligmann@usa.net> or visit <http://www.bastilledayny.com/>



Message from the Editors - continued from page 3

our Citroën Tools List, and launch yourself into our vast Document Archives. How vast? Just starting we have over 350 technical publications, 100 really cool Citroën videos, access to past newsletters as well as over a decade's worth of CITROËNVIE and Citroënthusiast articles that can be browsed individually. And we have Ken Betsch's renowned D book compilation online. All updated and another 250+ documents in itself. If that's not enough you'll find that we will be continually adding to our archive, by scanning our physical record library, feature new technical articles and add Citroën feature stories. How's that for membership value?

As you can see our website is very extensive I hope you will make the point of checking in frequently to stay informed and up-to-date about Citroën and CITROËNVIE!

Meanwhile enjoy the summer driving season. We'll be busy behind the scenes with a special edition of CITROËNVIE planned for the fall. In it we'll feature a look back at "Whimsy", the 2CV Artcar and a show a retrospective of what we have accomplished over the years in CITROËNVIE.

- George Dyke & John McCulloch



What's New At Mother Corp.

Wild Rubis - Shanghai SUV



Citroën is leaving no doubt over whether the newest member of its DS family will make production, calling this "Wild Rubis" concept the "forerunner of the future DS SUV." Its Shanghai Motor Show launch, which came a few days after a brief viewing at Château Cheval Blanc in France, emphasizes the importance of the Chinese market for the brand. The Wild Rubis aims to take on its rivals the Audi Q5 and BMW X3 primarily in the Chinese market. Citroën claims though that it is being considered for its European and other foreign markets.

Measuring 4.7 metres in length, 1.95 metres in width and 1.59 metres in height, the Wild Rubis concept is longer, wider and lower than the Q5 and sits on enormous 21-inch wheels.

Picking up where the stunning Numero 9 concept (revealed at the Beijing Motor Show in April 2012) left off, the Wild Rubis features a host of striking design cues, including roof rails that flow into the C-pillars, a bold crease along the shoulder line and chrome insert in the side sill. The ruby red paintwork also changes with the intensity of the light.

At the front, a chunky chrome grille surrounds an oversized DS badge and joins up with the full-LED headlights. A similar effect is applied at the rear, where the slim taillights and twin tailpipes are both wrapped in chrome. Also notable is the DS badge front and rear but a lack of chevrons appearing anywhere. Could this signal a de-emphasis of Citroën within Peugeot toward DS being an upscale brand in its own right?



There are no pictures of the interior yet, nor have there been many details about the powertrain; Citroën confirming only that the Wild Rubis is a full-hybrid featuring plug-in technology. However it is most likely that it will use the 1.6 liter THP 225 hp coupled to the 70 hp electric motor from the Citroën Number 9 concept car.

Rather than using PSA's new EMP2 platform, which will underpin every compact and mid-size Peugeot and Citroën in the coming years, the DS SUV will use an older chassis from the C5 and be built in China. It will be followed by a large DS saloon (previewed by the Numero 9 concept) and another smaller saloon, as Citroën bids to capitalize on the booming car trade in China.

Peugeot to Take On Pikes Peak

A Peugeot 208 Turbo 16 will take on the 91st Pikes Peak Hillclimb on June 30. Project 208 T16 Pikes Peak has a "magical power to weight ratio" according to Jean-Christophe Landig, Director of Peugeot Sport, whose team is excited for this unique project.

One of the main constraints of this "race to the clouds" is its 2865m altitude. To compensate for the loss of power due to lack of oxygenation (about 1% for every hundred meters climbed) the car has a double turbo V6 engine that produces 875 hp!

Running gear, brakes and some aerodynamic elements such as the central air intake and rear wing are borrowed from the 24 Hours of Le Mans 208.



"We believe that this is what can make the difference compared to our competitors," says Landing. "On the course of Pikes Peak, the velocities range from 50 to 240 km/h"

Now it only remains to Sebastien Loeb to utilize his mastery in driving the 208 Turbo 16, and Peugeot Sport will once again hold his name in the history of the event, twenty-five years after Ari Vatanen's first victory on the 405 T16.

Not wanting to be the Bearer of Bad News, Rather Just Reporting it Dept:

While automobile sales in Europe rose for the first time in 18 months this past April (up 1.8% to 1.08 million) PSA Peugeot Citroën saw both of its main brands lose sales, with Peugeot sales falling 7.5% and Citroën down 13%.

France has entered its second recession in four years after the economy shrank by 0.2% in the first quarter of the year. Its economy shrank by the same amount in the last quarter of 2012. President Francois Hollande has said he expects zero growth in 2013. Meanwhile French unemployment figures are at a record high.

It remains to be seen what measures will be taken by the company to secure market position in light of continuing losses.





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Editorial: All That Mother Corp. Has to Do...

While in Holland my wife and I were entertained by riding in a 2CV which was converted to full electric power. We took off driving the normal speed required by law; however, the driver all of a sudden pushed the pedal and the car instantly became a race car. My thoughts were "holy smoke, this ride is becoming dangerous!" Just at the moment that I was ready to shout, "Slow down," the driver braked the car through manipulating the electric engine with the assistance of the regular brakes. We were awestruck; I mean, here is a lightweight car with the speed of a Ferrari!

In my mind the iconic 2CV instantly became the car of the future, especially if Citroën would not change the car too much, but produce a car up to the safety requirements of today. I can see that this automobile could be a big seller again. Imagine the original design of the car offered with some of the newest gadgets, like GPS and by the way, automatic transmission through the use of the new power system.

For decades this car was a great success. It doesn't take a lot of fantasy to visualize it conquering the car market again. As George mentioned in a previous CITROËNVIE article, the prices of the 2CV's are going up as the rich are playing with them currently. The 2CV could appeal to a large segment of the entire world population if the design was changed to meet the present needs of people. It would be the greenest and cheapest car to run.

Citroën could be the big player by using the original design of the 2CV, and by transforming it into the newest car of the future. Charging stations are on the planning board in most major capitals and Citroën with its green power revolution would certainly speed up the process.

All that Mother Corp has to do is run with it, because time is of the essence.

- Ary Sala, Fanny Bay, B.C. Canada

Comments found on the internet:

In 1930's the engineers, Andre Lefebvre & others created a very lightweight car. This was an excellent achievement because we can run the 2EV with only 10 batteries. Andre Lefebvre & others excellent design & the addition of an electric motor, I believe we have made a "Dream Car," a perfect "People's Vehicle". We often compare the smoothest & quietest engines to an electric motor when we find such an engine... We have got a real motor!

Until the end of the 2CV's production in 1991, the car lacked an electric clock. I would like to install an electric clock in the 2EV & really see if the following statement is possible with the converted "great people's vehicle." At 60 miles an hour the loudest noise in this new Rolls-Royce comes from the electric clock"(R/R Motor)



Citroëns at Carlisle 2013

by Gabrielle Isenbrand / Photos by Dave Burnham

We would typically reach for our rain slickers when packing for the mid-May Import and Kit Nationals in Carlisle, Pennsylvania. But this year's forecast was for clear, dry weather, so we dared to err on the side of optimism and trusted the predictions.

That optimism was repaid with two days of warmth and sunshine. Only at the very end of the afternoon on Saturday did a few sprinkles remind us that this is, after all, Spring in the Northeast.

Again this year Citroëns at Carlisle, ably organized by Brad Nauss, was an enjoyable and well-attended gathering. Citroën owners from as far away as Michigan made the trek to be part of the festivities.

Display cars started streaming in to the Carlisle Fairgrounds on Friday afternoon. Our Citroën weekend officially commenced with an al fresco dinner on the pavilion at the Mayapple Golf Club on Friday night, where George Lois provided his typical excellent food and hospitality.

On Saturday close to 30 Citroëns lined up on the show field. They included not only the usual 2CVs, Traction Avants, DS, CX, and SM models, but also GS, Visa, and roadster 2CV derivatives such as Burton, Lomax,



and KG - all seldom seen on these shores. Peugeot was also represented by a 403 and a 405. At mid-afternoon Brad led a "meet and greet" group that went down the whole line, interviewing owners and discussing their experiences with their cars.

During the course of the day a steady stream of People's Choice ballots made their way to the Citroëns at Carlisle tent, where a rotating cast of characters seated themselves to relax with some shade and



conversation.

Saturday evening's dinner and awards ceremony at the Middlesex Diner was literally packed with convivial Citroënistes enjoying the delicious buffet. The ceremonies were capped

continued on page 24 ...



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by a well-deserved recognition of Brad for all his hard work on the event.

The next morning dawned overcast, but it did not dampen the mood at the breakfast in Boiling Springs at the Caffè 101. A plentiful flow of properly brewed coffee prepared everyone for the driving tour that Brad had planned, complete with turn-by-turn route sheets. Even in the fog the Pennsylvania countryside was beautiful. The drive ended at the historic U.S. Army War College at Carlisle Barracks, where the group toured the exhibits and grounds.



If you haven't attended Citroëns at Carlisle yet, check www.bradnaussauto.com for the dates and mark it on your calendar for next year. It will be worth the drive!

Citroëns at Carlisle - Peoples Choice Awards, 2013

Best early D series..... **George Lois...** (not pictured)
Mechanicsburg, PA
1967 DS21

Best Traction Avant 11CV
Rich Pazar
Watkins Glen, NY
1953 Normale



Best late D series
Robert Monteleone
Jackson Heights, NY
1968 DS19



Best A Series
Truckette
Judith Reiter
Silver Springs, MD
1972 Truckette





Hard Luck Award
Carl Erb
Monroeville, PA
Traction 15/6

Best French car that is not a Citroën
Jim Schlick.....
Bloomington, IN
1966 Peugeot 403B



Best Series Two CX
Lou Bevier
Canonsburg, PA
1987 CX25GTI



Best SM
Peter Bandy
Taylor, MI
1972 SM



Best Deux Chevaux sedan
Donand & Suzanne Kopczynski
Harborton, VA
1960 2CV



Best Dyane
Martin Gambony
Basking Ridge, NJ
1969 Dyane



Best Citroën: Special Category
Erik Dewidt
Mt. Airy, MD
Burton



Longest Distance Driven in a Citroën to Attend
Dale Martin
Midland, MI
1972 D Super



Best Series One CX
Brian Peters
Washington, DC
1981 CX



Best of Show...TIE:
George Lois (not pictured)
Mechanicsburg, PA
1967 DS21

- and -

Brian Peters
Washington, DC
1981 CX



Special Feature:



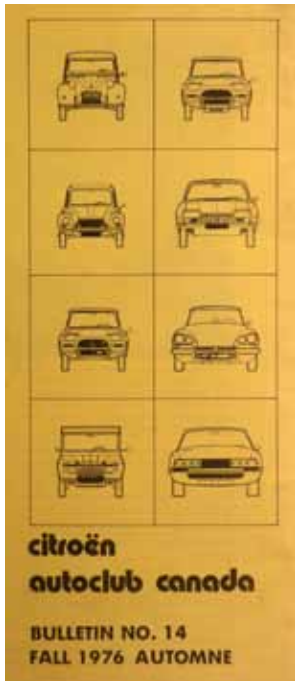
A Celebration of Citroën Autoclub Canada's 30th Anniversary!



by George Dyke (Current CAC President)

Citroën Autoclub Canada as we know it today was officially started in the fall of 1983, though our roots go back even further..

A Club was formed in British Columbia in 1973 under the name Citroën Autoclub Canada. Shortly thereafter a group called Citroën Autoclub Canada was also formed in Montreal, presumably after some dialogue with the west coast folks and a desire to have a common Canadian Club with regional entities. Robert Buchanan in Montreal took over editorship of their newsletter. (Pictured left, below is a newsletter cover we have in our archives. It says Fall 1976 and it is issue #14, indicating there must have been at least 3 years of newsletters from the group prior to that). The Montreal Citroën Autoclub Canada appeared to run out of steam in the spring of 1978. (We have their last newsletter in our archive, issue #18, and the notice letter from Robert Buchanan).



Dear Members:

It is with regret that I must announce that this is the last major issue of the newsletter that will be published under my editorship.

I must admit to having been very pleasantly surprised at the number of memberships our "re-launched" club generated, and I want to thank all of you, especially the regular contributors, for all your support, kind comments and efforts.

However, with interest in Citroën cars declining, it is growing more and more difficult to gather and translate enough topical material to make the newsletter of real service to the members. The scope of the first 2 issues of the magazine, as well as the work-load involved, far surpassed my initial expectations, but since then interest and written submissions from the membership have fallen off, making a regular publication schedule impossible.

Perhaps if and when the CX arrives, things will be different, but at present I would feel it unfair to ask any members to renew and further contribute financially.

While waiting for the CX, we will from time to time publish mini-bulletins with classifieds and news of special services and events. Your comments will always be welcome.

To all of you who worked so hard — thanks again, and may your Citroën run forever.

Robert Buchanan, Ed.

In the mid 1980s Chris and Monika Adshead brought the Club in British Columbia back to life and kept it alive till 1992. In 1993 the Club became part of the NWCO (Northwest Citroën Owners Club) and is still alive in a sense as events are basically organized by John MacGregor in Vancouver still under the CAC name.

In 1972, there were some Citroën owners in Toronto that formed an informal local group. I'm talking about Jack Andrews, John Mazmanian, Norman Mackenzie, Glen Fryer, Victor Wagner, John Nesikaitas and Freddie Fix to name a few. I know this from an interview with Glen Fryer where he stated; "The Club emerged from a group of teachers in around 1972, some eleven years before the founding of CAC." As Citroën had fully abandoned the Canadian market by 1974, these guys informally exchanged tips about keeping their Cits on the road and probably the locations of Citroëns that were sitting in driveways or abandoned somewhere because their owners had some sort of issue that they felt did not warrant spending any more money on them.

In 1983, the Toronto group issued a letter that was a call to form a Citroën Car Club. In that letter (shown below) it states "We are contacting you, determined to form a local (Toronto area) Citroën club or, better still, relocate Citroën Autoclub Canada in Toronto. They managed to do the latter. On October 25, 1983 the

CITROËN CAR CLUB CANADA

c/o Glen Fryer,
West Park Secondary School,
1515 Bloor Street West,
Toronto.

Dear Citroënists,

Season's Greetings!

Our next meeting will be in the Staff Room, West Park Secondary School, January 10, 7 p.m. (corner of Bloor and Dundas). Parking is available at the school in an underground garage and in an adjacent mall lot. Minutes from the school is the Dundas Street West station on the T.T.C. Bloor line.

1) Your pro tem officers are:

Glen Fryer, Chairman c/o West Park Secondary School

Andrew Kolodziej, Treasurer c/o Bache Securities, 180 King Street East, Toronto MSC 1E3

Fred Feix, Designer and Patternmaker

Greg Winterhelt, Archivist, Toronto

John Mazmanian, Technical Director

Norman Mackenzie, Corresponding Secretary, c/o Glen Fryer, West Park Secondary School

2) On October 25, 1983 we established our club with 25 members attending. The mood was positive and eager. We are in business.

3) Your pro tem executive is actively investigating the following:

a) The drawing up of a simple constitution on the model of other Citroën clubs

b) The legal implications for a club such as ours with regard to tax and other factors even although we are a non-profit organization.

The matter of incorporation is being investigated. We do not wish for encumbrances on the club. On the other hand we should be careful of our organization right from the beginning. We'll report when we receive clear information from our friendly lawyer.

4) Shall we call ourselves the Citroën Club of Canada? the Citroën Club of Canada, Toronto? or what? Supply suggestions and in due course we'll call for a vote on the title.

5) We are investigating the costs of producing a newsletter with advertisements and perhaps even photographs. Cost will determine the level of our ambitions.

6) We plan to solicit advertising from businesses who would pay a modest

Citroën Autoclub Canada was established with 25 members attending. Glen Fryer was elected president, and Andy and Greg Lamb became involved in the club doing its newsletters in the early years. That club, operating as Citroën Autoclub Canada, has endured to this day. I'm the current president and have been since 2001. Victor Alksnis was president before me taking over from Glen Fryer in the early 1990's.

*Past & present
CAC presidents:*

*Left: Victor
Alksnis*

*Center: George
Dyke*

Right: Glen Fryer



How has CITROËNVIE evolved? Back in 2003 the Citroën Club of North America were having problems publishing their newsletter called Citroën-enthusiast. John McCulloch and I had taken over publishing duties of the Citroën Autoclub Canada newsletter in 2001 and had ramped up the publication to the point where it was getting accolades from everyone who read it. We were also members of the CCNA and had watched their publication, the Citroën-enthusiast deteriorate over the past couple of years. I suggested to the CCNA executives at the time; Judith Reiter, president, Denis Foley, treasurer and his wife Lynne Gervase, the long time editor of the newsletter, that we combine the two newsletters and offer a common newsletter to both organizations under the Citroën-enthusiast name. The clubs would remain distinct but Citroën-enthusiast would have content relevant to both clubs. They agreed and for the next 6 six years John and I edited and published Citroën-enthusiast.

In November 2008 I was informed by Denis Foley that the CCNA no longer wanted to do a co-publication effort. From what I have been able to ascertain, there was a feeling among some of the CCNA executives that a co-publication was a loss of identity for the CCNA and they wanted to take back control of the publication. History has not been kind to the CCNA from

Citroën Autoclub Canada logo evolution:



circa 1976



circa 1986



circa 1995



circa 2002

that point. They did publish Citroën-enthusiast for a couple of years, but it was hardly the newsletter it was when it was published by us. Ultimately they stopped publishing it all together and the CCNA ceased operating in November 2010.

As we still wanted to keep our Citroën Autoclub Canada publishing efforts alive, once we were informed that CCNA wanted to go it alone with Citroën-enthusiast, we created our own magazine called CITROËNVIE. Though it was now an exclusive Citroën Autoclub Canada publication, we received a lot of feedback from CCNA members disgruntled that we were no longer involved in publishing their newsletter and they wanted to get our publication. So we launched CitroënVIE in the spring of 2009 and tailored it to not only focus on the events that Citroën Autoclub Canada organized, but to deliver news, technical articles and historical information about Citroën from a North American perspective. Since that time, Citroën Autoclub Canada (in Toronto) has promoted and branded the name CITROËNVIE for our website, events that we hold, and the promotional booth that we have each year at Rendezvous in Saratoga Springs NY.

In 2013 we shifted to a solely web-based publishing effort designing a new look to our CITROËNVIE website that encompassed Citroën Autoclub Canada as well as CITROËNVIE. This was done to integrate and enhance our commitment to provide extensive and timely online resources and deliver them on demand to people using home and laptop computers and the burgeoning number of people that are accessing information on smartphones and e-tablets.

Though CITROËNVIE is our moniker these days we do still keep the Citroën Autoclub Canada name. More information about how to join us can be found here.

<http://citroenvie.com/home/about-us/join-citroen-autoclub-canada/>

CITROËNVIE!

Current CITROËNVIE logo, revised in 2011 to include flag icon in the "O" depicting both the USA and Canada.



Surf'n Cits

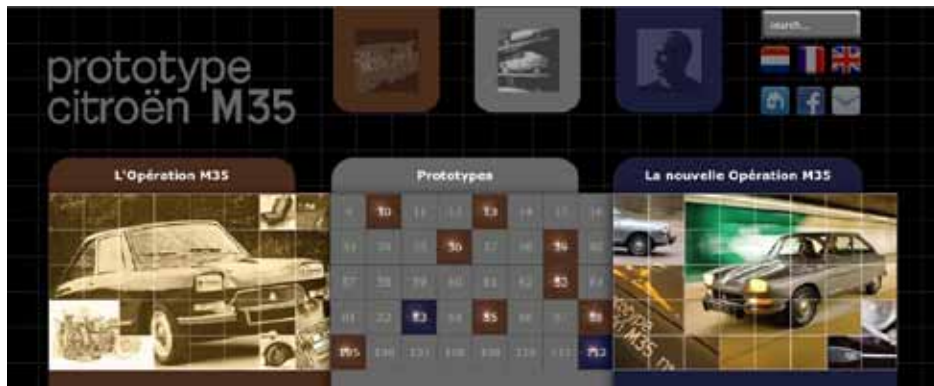
by George Dyke

If you are online and up for a little web-surfing, here is our continuing profile guide to the best of classic (and current) Citroën websites. Note that we are only printing our latest website profiles here. You can find a complete listing of previously featured URLs (with active links) at <http://citroenvie.com/citroenlinks/>

Citroën web-surfing couldn't be easier! Want to find original paint colours? The history of a particular Citroën model? Wondering how to fix a Citroën or looking to take preventative maintenance? Look to our online links as a comprehensive resource for everything Citroën-esque.

Feature URL's:

Citroën M35 enthusiasts have set up a special website (in Dutch, English and French) to honour this niche model two-door coupe, built from 1969-1971 by Heuliez in Cerizay. The M35 was based on the Citroën Ami 8 and served as testbed for the company to investigate the reliability of rotary engine technology. The M35 was equipped with hydropneumatic suspension – thus being the only A-type car with that technology. Carefully selected buyers had to operate the car about 30,000 km per year. The "Bureau d'Etudes", the research and development department of Citroën, were directly involved to fix and supervise the vehicles. The car was sold at a price of 14,000 FF – about the price of an ID19, or about twice as expensive as a 2CV. From the originally planned 500 vehicles, only 267 were built. After a two-year test phase owners were to decide whether to return the car to Citroën – combined with an offer of a new car purchase on favorable terms – or to keep the M35 under a contract that excluded access to repair and spare parts. Consequently most vehicles were returned to Citroën and were scrapped.



www.citroenm35.com

19 allée des Marronniers - une saison de Rallye WRC avec Citroën. This 75 minute Citroën Rally film is a wonderfully produced behind the scenes insight into Citroën's rallying commitment. Naturally it focuses in the racing success of their world championship team of Sébastien Loeb and Daniel Elena and Citroën's support for Sébastien as he makes the transition from rally to track racing.



http://www.dailymotion.com/video/xw48wo_19-alle-e-des-marronniers-une-saison-de-rallye-wrc-avec-citroen-sebastien-loeb-et-mikko-hirvonen_auto?start=1#.UQ2em-h5IGp

Take 6 mins and watch these crazy Belgians and their 2CV's. Some are modified by "Qatar" and fitted with a 4X4 wheel drive transmission from Voisin.



<http://www.youtube.com/watch?v=41NzZhyFhi4>

Otto Graf sent us this link to a cute music video he came across on YouTube. It's all 2CV! The song is called Miljoen and it is sung by Myra Maud. It was filmed in Guateng, South Africa with some scenes inserted from Paris. There's an interesting history to the piece that you can find here <http://www.afrifrans.co.za/> Click on videos to see her interview.



<http://www.youtube.com/watch?v=j1pfwY2zWe0>

The March 2013 issue of Hemmings Sports & Exotic Cars magazine featured a good comparison of the Citroën SM and Maserati Merak, two cars that share the same drivetrain (and some other bits) albeit in a very different layout.

Thanks to Jim Marr of Moncton. NB for bringing it to our attention.

Gammer Chameleons

Citroën's SM and Maserati's Merak share genes, an engine, a transaxle and a troubled past. Forty years on, we decide whether they're different enough to justify their existence.



http://www.hemmings.com/hsx/stories/2012/02/01/hmn_feature1.html

Tommy Bryce, a Scottish gentleman who completed the Monte Carlo rally in 1954, sets off from Glasgow to go to the race in his 1928 Citroën.



<http://www.bbc.co.uk/news/uk-scotland-glasgow-west-21203766>

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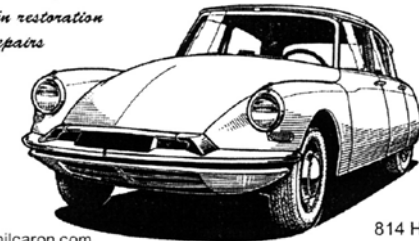
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 - PHOTOS: \$10.00 per issue.
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- Payment is due prior to ad placement.
- SEND text and/or artwork to the CITROËNVIE Editors. e-mail is preferred. Please note that we reserve the right to edit any submissions.

Citroëns for Sale:

[Year / model / description / location / date ad



1972 SM AUTO in good condition. Almost no rust. Paint fair to good. Back seat has to be redone but front in good condition. Runs well. Selling for health reasons. Call for more pictures and questions. Contact: Philippe Devingt Tel: 519-332-5329 or email: phdevingt@hotmail.com ON 11/12



1928 Citroen AC4 Completely original. In excellent condition. No rust. Always garage kept. Engine runs great. New tires. Gas tank was refinished in 2012. Very rare in America. New and used parts are still easy to find in France. \$16,000 CDN. NEGOTIABLE. Contact Marc: 514-769-2269 or marcdesrosiers@sympatico.ca QC 01/13



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ON 9/11

1969 DS21 Station Wagon Not running. Good for parts or rebuild . Fresh water flooded. \$2500. US. Contact Manny Barreiros. Ph: 908 232 7098 NJ 4/12

Wanted:

An Autovox 3 band radio for a Citroën DS. I believe the part # is CR 2301. Need a parts radio or if possible the schematic for this radio. If you can help please contact Arnold at: 905.669.2299 or akorne@gmail.com. 6/12

I am a vintage motorcar collector/restorer, and very much like the vintage, circa 1900-1903 Panhard Motorcar. I am interested in purchasing copies of engine/chassis prints or detailed photographs of these lovely, historical motorcars. Hoping to hear from you! Contact Don Scheppelman. email: donscho430@aol.com 2/13

Parts For Sale:

George Klein - SM Determination

George Klein is a member of the Citroën Autoclub Canada with an unequivocal commitment to SM's. He still owns a white 5-speed that he bought in 1974. George does a great deal of his own maintenance and has learned a lot about the SM over the years. And George has connections. For example:

He uses a local Toronto shop to build up and refinish cams to original spec. And he has had new cam followers made.

He has access to 3L and 2.7L SM starter motors. They are rebuilt in Toronto and come with a one year warranty. George always keeps one in stock, - just in case.

And he has taken the initiative to make cam cover and rear engine cover gaskets. He has them available. If you'd like to get any of the above items you can contact him at: georgeklein@rogers.com. ON 3/12



Check out the pimpy SM dash on this Maserati Merak! Everything is covered in red. Even the fascia around the dials. Looks like a rolling bordello!

And then they dumped the SM steering wheel in favor of Nardi wood. No doubt wrapping the SM steering wheel in red would have been just a touch too gaudy! :)

Be Part of Our CITROËNVIE Community
www.citroenvie.com

The editors, George Dyke and John McCulloch, are always delighted to have contributions to CITROËNVIE! We are looking for articles on events, cars, people or any other item that you think might be of interest to Citroën fanatics. Include a picture or two. We can take it from there...



Become a member. It's simple:

Basic membership (worldwide) - \$20 per year.

Membership includes access to our online Membership Roster, Technical Articles, hundreds of Service/Repair Documents, our online Citroën Service Resources Guide, and all our high resolution archive issues of CITROËNVIE and CITROËNTHUSIAST publications.

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Full membership includes all the features of basic membership plus we mail you our renowned full colour CITROËNVIE printed calendar. (The calendar alone is a \$15 value, yet we include it and the mailing cost in the full membership fee.) Canadian residents also have access to borrow specialized Citroën tools (within Canada).

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Note: Canadian residents purchasing a CITROËNVIE membership are automatically enrolled in Citroën AutoClub Canada as a member.

Pay by credit card, Paypal, or send us a cheque.

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Please send cheque payment to:

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The Last 2CV to be Revived?

Last year we reported on the unfortunate destruction of the last 2CV from the Citroën factory in Levallois-Perret. The Grey Cormorant colour, chassis number KA 302493, had just 5km on the odometer. Its owner was Roger Brioult, the former editor of the Automotive Technical Review (ATR), he had ordered it in 1974 to be sure to get the last 2CV produced. It was stolen on March 19, 2012. He died a week after the theft. Two months later, the 2CV was found, burned in the condition you see here.



The remains were sold on March 17, 2013 in Fontainebleau by the Osenat auction house which organized the sale.

Estimated to go for between 1000 and 2000 €, it was sold for € 10,800. Had it not been vandalized its value was estimated to be more than € 110,000.

It was not disclosed who the buyer is, and whether it was purchased with the intention to restore it or keep it in its present state.



The Association "2CVPORTUGAL2017" was officially created on March 22, 2013 with the goal to develop the candidacy of Portugal to organize the 22nd World Meeting of 2CV Friends in 2017 and submit nominations to the voting that will be held on July 31st, 2013 at the 21st World Meeting of 2CV Friends in Alcañiz, Spain.

Their proposal will be based on competency and a proven track record. 30 years ago Portugal hosted the 7th World Meeting in Ericeira. The plan is to once again hold the meeting near the sandy beaches in late July 2017.

<https://www.facebook.com/2cvPortugal2017>

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