AMILCAR 6 CYLINDRES

THE FASTEST CAR IN THE WORLD

TOME 1

To Michel Marteling, President of the Pégase Amilcar Club, who passed away a few weeks before the publication of this book.

Foreword

Gilles Fournier, the indispensable historian of cyclecars and voiturettes, author of two reference works on BNC and Amilcar, passed away on June 29, 2023.

For months, he had been working on an ambitious project concerning the 6-cylinder Amilcar. While he had time to publish two booklets on two chassis (the C6s of José Scaron and Gaston Reveiller), death claimed him before the definitive work on the 6-cylinder car was completed, far from it.

For over thirty years, Gilles had amassed an impressive collection of documentation on the subject, and at the time of his death, the first volume of this book was already well underway.

A historian far less well-known than Gilles, I had been working with him for several years. Our work was divided as follows: Gilles was responsible for writing notes based on his documentation and research, as well as selecting the illustrations; For me, it was about writing the texts based on these notes and the genealogy section, in which I have considerable expertise, my own knowledge complementing that of my colleague. The two booklets already mentioned were the result of a collaborative effort.

Gilles' sudden death brought the writing of the book on the 6-cylinder engines to a halt, even though several chapters of Volume 1 were finalized and even laid out, and others were in the proofreading phase. Fortunately, Gilles' family, deeply committed to preserving the memory of their departed brother, decided that the project should be completed. They contacted me, and I readily agreed to finish the work he had begun.

So, I set to work, having access to all the archives, and I sincerely hope I haven't distorted his original vision.

Many enthusiasts were eagerly awaiting this book. I'm not sure it would have been published sooner if Gilles, for whom there was always room for improvement and expansion, had remained the driving force.

My name doesn't appear on the book's cover. Gilles and I often discussed this, and the reason is simple: I felt that his decades-long research far outweighed any contribution I could make, and that I would have taken credit for something I didn't deserve. I never wavered: «This book will be yours and yours alone!»

This posthumous work brings to a close a life of passion. Let us never forget the man he was, the historian, the magician so skillful with his hands, the architect who designed his unique home… Farewell, Gilles.

Pascal Legrand

Preface

Among Gilles' notes was a text he had prepared as a foreword shortly before his death. As with all his writings, I reworked the original, as it was somewhat «rough around the edges»!

Pascal Legrand

Long overlooked despite an impressive racing record, the 6-cylinder Amilcar has finally found its rightful place in car collections worldwide after a long period of neglect, except in the United Kingdom where it was never forgotten for the simple reason that, improved and modified over the years, it practically never stopped racing, moving directly from traditional races to historic events! In Belgium, Pierre Dellière, the founder of the Orgon Museum in 1967 (closed in 2023), was the first, in the early 1970s, to restore a 6-cylinder Amilcar to working order. These cars, whose last racing appearances dated back some twenty years, were then completely forgotten. Collectors at the time had eyes only for Bugattis… Dellière, with its captivatingly loud C6, sparked the interest of a few enthusiasts, but it would be several more years before the 6-cylinder Amilcar entered the pantheon of classic cars.

Yet, behind the scenes, Clément-Auguste Martin and his son Claude maintained an undiminished passion for the few 6-cylinder cars they had preserved, some dating back to the early 1930s! Special tribute must be paid to the Parisian garage owner who had acquired the factory's racing cars and a large stock of spare parts. He saved all these cars from certain destruction, allowed them to continue competing in races and hill climbs for a few more seasons, and then preserved a number of them.

Before detailing the history of the 6-cylinder Amilcar, it was essential, at the beginning of the book, to revisit the history of the brand and its involvement in racing, to understand the reasons that led the management to commission these cars, the reasons for the sudden withdrawal from racing after three triumphant years in which all competition was crushed, and the reasons that led them to offer a customer racing version to their clientele. Despite their long and illustrious racing career, the 6-cylinder Amilcar has never been the subject of in-depth study, apart from a few overly simplistic articles in the specialist press, despite the talent of their authors. With the brand's archives lost, reconstructing the history of these 6-cylinder cars and compiling it in a book was only possible after painstaking research to gather the necessary documentation and images, and to collect testimonies from the last remaining figures of that era, all of whom have since passed away. This research required a great deal of time, patience, and travel, demanding considerable energy and perseverance. This project, a true chapter of my life, was fascinating, all-consuming, and sometimes irritating, but I cherish the memory of it. I hope the reader will find as much pleasure in discovering it as I did in completing it!

Of course, I mustn't forget the role of my friend Pascal Legrand, who had the daunting task of rewriting and correcting all the texts based on my notes. He always knew how to gently persuade the stubborn person I can sometimes be, arguing calmly and without ever raising his voice. A skilled historian with an exceptional memory, and also a dedicated genealogist, he provided invaluable and discreet support. I extend my sincere thanks to him.

Gilles Fournier,

Melay, mars 2023.

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The origins

In 1908, Jules Salomon, in partnership with Jacques Bizet, son of composer Georges Bizet, founded the Le Zèbre automobile company. This brand enjoyed a period of prosperity until the outbreak of the First World War (1914-1918), during which, like most French industrial establishments, its infrastructure was repurposed to contribute to the war effort. Jules Salomon was mobilized and then assigned to his own factory under the direction of the Army Technical Service. Le Zèbre then produced automobiles reserved for the Ministry of War; these were used, for the most part, as liaison vehicles.

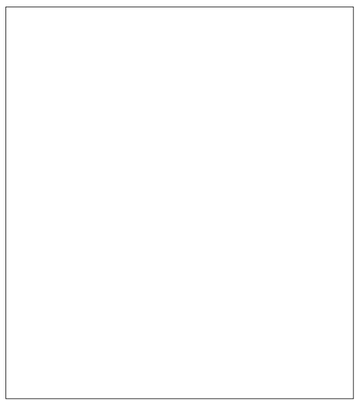
The Zebra single-cylinder type A 1911. It was this model that allowed the company, created in 1908, to achieve success.

During this period, disagreements arose between the two partners, and Salomon preferred to leave the company. An intermediary put him in touch with André Citroën, who was already considering the repurposing of his enormous wartime industrial facility. Head of the Mors automotive division before the war, Citroën had been impressed by the small Le Zèbre car. He summoned Salomon in February 1917 and offered him the opportunity to design a popular and economical car to compete with the luxury car project designed by engineers Arnault and Dufresne. The latter was not selected; it would become the Voisin C1. Indeed, André Citroën, a visionary, understood that the mass production he envisioned required manufacturing a car accessible to the widest possible audience. Salomon was therefore hired at the Quai de Javel factory in July 1917 and became the father of the first model of the double-chevron brand, the Type A 10 HP, offered to customers as early as May 1919.

Under his authority, a young engineer, Edmond Moyet, who had worked on the 10 HP, was tasked with developing a second model that would become the Citroën 5 HP, presented in 1921. Outside of his working hours, Moyet conceived and drew up plans for a cyclecar. Salomon's departure in 1917 destabilized the Le Zèbre company. In the early 1920s, it faced a period of major turmoil. Cars were selling poorly, but paradoxically, the factory was unable to fulfill the few orders it received on time. Furthermore, price increases were applied to existing orders even though they had been signed at agreed prices, and lawsuits were filed against Le Zèbre, which it regularly lost. A certain André Morel, sales manager for the southern half of the country, then intervened. Given the situation, and rightly doubting the company's long-term viability, Morel, who had heard of Edmond Moyet's personal project, put him in touch with Emile Akar and Joseph Lamy, who sat on the Board of Directors of the company Le Zèbre. Emile Akar held significant capital in Le Zèbre, and Joseph Lamy was its sales director. The two men saw in the young engineer's project an opportunity to launch their own automobile business. Events moved quickly: Moyet left Citroën, Morel left Le Zèbre, and both joined, in January 1921, under the leadership of Lamy and Akar, an entity that did not yet have legal status.

While working at Le Zèbre, André Morel participated in the Limonest-Mont Verdun races, near Lyon, in 1920. He is seen here in April 1921 at the wheel of a Type D voiturette of the brand. By this time, Morel had already been hired by Lamy and Akar, but Amilcar production had not yet begun, which explains his participation in the Le Zèbre race. Beside him is Florine, his partner. Comparing the registration numbers of this Zèbre with those of the Amilcar shown in an advertisement (8198-E1 and 8199-E1 respectively) reveals the link between the two brands: both cars were registered at the same time.

Several Le Zèbre cars are immortalized in front of the company headquarters on Rue Villaret-de-Joyeuse in Paris. Production began in 1909 in workshops located first in Puteaux, then in Suresnes on Rue Carnot. After the First World War, other workshops were rented on Rue du Chemin-Vert in Paris. These were later taken over by Amilcar when the new brand was launched.



This page from the directory of the *National Chamber of Automobile Manufacturers* (1924 edition) reveals the list of members of the Board of Directors of the Le Zèbre company. Emile Akar and Joseph Lamy are still listed, even though they had already launched Amilcar. The two founding partners are no longer included: Jules Salomon has left for Citroën, and Jacques Bizet is now the head of Unic taximeters.
The Le Zèbre company continued until 1931.

Advertisement published in the magazine Omnia on February 14, 1914. The firm created by Jules Salomon was then at its peak.

Messrs. Cotte and Julitta, operating under the name Eldorado-Garage in Grenoble, represented several French automobile brands, including Le Zèbre. This letter, dated May 28, 1920, was addressed to a customer who had placed a firm order for two cars of the brand. It perfectly illustrates the crisis facing the Le Zèbre company, which, unable to deliver within the agreed timeframe, offered its customer the option of canceling the order or, if the customer maintained it, paying an additional amount on top of the previously agreed price, while postponing delivery to a non-contractual date!

In his mechanical engineering workshops on Rue du Chemin-Vert in Paris, Maurice Borie, who was also a partner with Emile Akar in other ventures, worked for Le Zèbre. The Amilcar prototype was built in these same workshops. Its radiator was ordered from the Chausson factories in Borie's name, as the Amilcar brand did not yet exist.

The prototype d'Edmond Moyet

Construction of the prototype cyclecar designed by Moyet began immediately. After four months, the first test of the «Akar voiturette» was carried out, as evidenced by a typed document dated April 25, 1921. It took place on the Paris-Le Merlerault-Paris route, covered in two stages, for a total distance of 350 kilometers. The choice of Le Merlerault, a town in the Orne department, was not accidental: it is located 10 kilometers from Courtomer, Joseph Lamy's birthplace. He maintained personal interests there, in addition to the positions of administrator and sales director he still held for some time at Le Zèbre.

The test report, unfortunately unsigned and unillustrated, is informative. It was certainly written by a tester from Le Zèbre, since it explicitly refers to the company's 6 and 8 HP models. He points out, for example, that the two magneto mounting bolts are just as difficult to access as on the 6 HP and that it would be advisable to secure the magneto with a flange, as on many other engines.

His very detailed analysis implies that this prototype, which would become the first Amilcar, was a promising start, even if some (and significant) flaws needed correcting. Indeed, the entire front suspension lacked rigidity and needed reinforcement, the brakes tended to chatter, fuel consumption was excessive, and oil leaks had appeared. The lack of accessibility complicated valve clearance adjustment. Worse still, during disassembly, the parts holding the side valves (key, retainer, and spring) could very easily be lost inside the crankcase. As for the bodywork, «it would have to have a completely different design because, as it is, it certainly wouldn't appeal to customers.»

On May 11, three weeks after this trial, a letter signed by Emile Akar was sent to the Chief Engineer of the Mines Department. It was written on a single sheet of paper (see document opposite) since there was no company letterhead as the company had not yet been established.

The report from the engineer in charge of homologation was critical and required a second inspection. The requested modifications were made, and two months later, on July 21, 1921, following its second presentation, the car finally received its official acceptance certificate, registered under the name «Cyclecar E. Akar, type CC» (CC = Cyclecar Chassis).

A few days later, the final descriptive document for the cyclecar, updated according to the handwritten notes of the Mines Engineer, was returned to him by Emile Akar. The letter is dated August 3, 1921:

"We have the honor of sending you herewith a descriptive notice of the cyclecar that you were kind enough to examine twice. This notice, which supersedes the one previously sent, presents the description of the final model, which I would be grateful if you would accept. This cyclecar, which I will name the AMILCAR voiturette, will be mass-produced in my workshops on Rue du Chemin-Vert by the Société Nouvelle Pour l'Automobile, currently being formed.

I am at your disposal to fulfill any requests you may have.

Letter signed by Emile Akar, dated May 11, 1921, addressed to the Mining Engineer, requesting an appointment for the presentation of his cyclecar with a view to its homologation.

Please accept, Sir, the expression of my distinguished sentiments." The Amilcar brand is mentioned for the first time. This name does not refer to the Carthaginian General Hamilcar Barca (290-228 BC), the father of Hannibal; rather, it is a contraction of the surnames of the two founders, Lamy and Akar, in a sort of anagram with a British sound.

This simple handwritten sheet, dated July 29, 1921, is the official record of acceptance by the Mining Engineer of the cyclecar, which was not yet called Amilcar. It demonstrates the engineer's latitude in interpreting official documents. His annotations concern the braking system, which he deemed non-compliant with current legislation, but which he nevertheless accepted because its principle seemed superior to certain others that did meet the requirements.

«The rear axle of this cyclecar has no differential. The wheels are driven and secured to the axle by a cone and key. Each wheel has a brake drum. Braking is applied simultaneously to each wheel. It can be controlled either by a pedal or by a hand lever, both of which operate an intermediate lever from which the control is single (small sketch). There is only one brake in each drum.» This device does not comply with the requirements of Article 23 of the decree of May 27, 1921, which requires two braking segments with independent control and transmission. However, we must acknowledge that it is more mechanically sound than the system installed on several types of vehicles approved by our department, which consists of two brake systems with separate transmissions, one acting on the right wheel and the other on the left wheel. These brakes, when applied separately, cause the shaft to work under abnormal torsion.

On July 19, 1921, Joseph Lamy registered the Amilcar trademark with the INPI (National Institute of Industrial Property) «to designate a small automobile, its spare parts and accessories,» but, as Emile Akar points out in a letter dated the 21st, the company that would use this name did not yet have legal existence.

It was only on September 20 that Lamy and Akar appeared together before Maître Barillot, a notary in Paris, to ratify the articles of incorporation of the limited company called Société Nouvelle Pour l'Automobile (SNPA).

The company's headquarters and workshops were located at 34, rue du Chemin-Vert, in the Bastille district of Paris. The premises belonged to Maurice Borie, who was already a partner with Emile Akar in several industrial and commercial ventures. Until then, the vehicles had been leased to the Le Zèbre company, which used them for assembling sub-assemblies, with car assembly taking place in the workshops located on Rue Carnot in Suresnes.

To raise the necessary capital to create the company, Joseph Lamy and Emile Akar approached their family and friends. As a result, prominent figures from the worlds of business, culture, and politics—circles regularly frequented by Emile Akar—appeared on the list of shareholders.

In addition, the two partners also approached the regional Le Zèbre automobile dealers they already knew, who, besides providing capital, brought their sales and repair networks. Akar and Lamy had a thorough understanding of the automotive market and were aware that launching a new brand without a network was doomed to failure. The recruited dealers built the essential network. This network, further expanded, would become the backbone of the brand's exemplary success.

SNPA's initial capital is 3 million. The share price will continue to rise as long as the company's financial situation remains sound. Then…

The two founders of Amilcar opted for a rapid and immediate development of their distribution network. This would be one of the keys to their success.

Amilcar trademark was filed with the INPI on July 19, 1921.

Emile Akar (Paris 1876-Marseille 1940) was already a highly enterprising businessman well before the creation of Amilcar. Alone or in partnership, he founded several dozen industrial companies, including at least two during the war, specializing in the manufacture of shells and war materiel. In June 1919, he and Maurice Borie established the Ateliers de Construction du Centre (Central Construction Workshops) in Clermont-Ferrand, «to meet the need for reconstruction and renovation of the national railway network.» This company worked until 1979 on the repair and renovation of SNCF passenger cars and freight equipment. Upon his departure from Amilcar, he made it his duty to sell a large part of his assets to repay his creditors before embarking on new ventures.

Facsimile of the handwritten notarial deed drawn up by Me Barillot in Paris, establishing the statutes of the Société Nouvelle Pour l'Automobile which would build cars under the trade name Amilcar. Emile Akar and Joseph Lamy ratified these statutes on September 20, 1921, when everything was already in place and production had practically begun.

Joseph Lamy (1881 Courtomer - 1947 Paris) also described himself as an «industrialist,» which is more surprising since, before holding an administrative and commercial position at Le Zèbre, he had been Director of Taxis in Monaco after beginning his career in 1901 as a French teacher in Saint Petersburg, Russia. After leaving Amilcar, he managed the company that imported American Hudson and Essex cars, before turning his attention to pollution-reducing exhaust systems and synthetic gasoline.

Several prominent figures gathered around Emile Akar to establish the capital of Amilcar

The SNPA's capital of 3 million francs was divided into 30,000 shares of 100 francs each. Logically, Emile Akar and Joseph Lamy, the two founding partners, became the two main shareholders of the SNPA. Together, they held nearly half of the required capital. For the remainder, Emile Akar approached relatives and friends, many of whom, like him, were Jewish. His extensive network of contacts allowed him to raise the necessary funds without difficulty.

Among the 61 subscribers, several names stand out:

- The most substantial contribution came from Michel Cahen and his son Albert. This is easily explained by the fact that Michel was Emile Akar's father-in-law. The country's main coffee importer and trader, he heads a roasting plant and a packaging plant in Paris, as well as a network of 500 outlets nationwide under the brand name Au Planteur de Caïffa.

- Michel Calmann-Levy is the son of the founder of the renowned publishing house Kalmus Levy, also known as Calmann-Levy.

- Louis Dangel is a former lawyer. After the First World War, he became the director of the fashion houses of Madeleine Vionnet and then Jeanne Lanvin.

- Madeleine Vionnet, the celebrated couturier, was able to launch her own fashion house in 1919 with the financial assistance of Emile Akar. In return, she subscribed to some shares in SNPA.

- Alphonse Isaac Lazard is the co-manager of the famous investment bank of the same name.

- Henri Lillaz, director of several companies including the Bazar de l'Hôtel de Ville, participated, along with Emile Akar, in the creation of Madeleine Vionnet's company in 1919. Elected to parliament in 1928, he served as Under-Secretary of State for Technical Education in André Tardieu's government in 1930. His first wife, May Becker, an artist, was a friend of Madeleine Vionnet.

- Paul Wertheimer was the son of Ernest, who took control of Bourjois perfumes in 1898. Paul and his brother Pierre succeeded him at the head of the company and gave it a global reach. They were also shareholders in Chanel perfumes (Pierre was married to Coco Chanel).

Among the companies that subscribed were:

- Chausson, a company that manufactured automobile radiators before venturing into body stamping in the early 1930s.

- The Société Anonyme d'Estampage de la Vence, which manufactured parts for the automotive and railway industries, was founded in 1911. It became the Société des Forges et Ateliers de la Vence et de la Fournaise, whose Saint-Denis factory was purchased in 1924 by Amilcar for its headquarters.

Among the Le Zèbre agents who subscribed were:

- Dumond Frères, agents for Talbot, Le Zèbre, and other brands in Lyon. They would represent the agents on Amilcar's Board of Directors.

For six years, none of the shareholders regretted their investment. In 1927, those who hadn't taken the precaution of withdrawing in time lost everything.

In 1890, Michel Cahen and his wife founded the company Au Planteur de Caïffa. Initially a simple coffee roaster selling a wide range of coffees, Michel Cahen transformed his shop into a grocery store before establishing a chain of branch stores in Paris and throughout the provinces. His daughter later married Emile Akar.

Madeleine Vionnet (1876-1975) is one of the greatest French couturiers of the 20th century. Emile Akar had financially supported her when she founded her fashion house. In an elegant gesture, she symbolically subscribed to 250 shares of the SNPA (Société Nationale des Professionnels de l'Automobile) in 1921. This advertisement appeared in the November 1920 issue of La Revue Automobile, whose readership was generally quite unconcerned with fashion. Nevertheless, it reveals the couturier's connections to the automotive world.

Ernest Wertheimer (1852-1927) acquired a stake in Bourjois in 1898 before becoming, along with his sons, the principal shareholder of Chanel. In 1921, his eldest son, Paul, subscribed to 250 Amilcar shares.

1921 : The presentation at the Motor Show and the start of production

With the prototype having been approved by the Mines Department, production of the first series-production Amilcar, the CC model, could begin. It met all the official definition of a cyclecar (less than 1100 cc, less than 350 kg, maximum 2 seats) and therefore benefited from a favorable tax regime (flat annual tax of 100 francs).

As early as September 3, 1921, while the company's articles of incorporation had not yet been officially filed and the Amilcar brand was completely unknown, the Lyon-based agency Le Zèbre, owned by the Dumond brothers, placed an advertisement in La Vie Lyonnaise, touting the new model. The advertised price was 9,200 francs, compared to 8,250 francs for a Peugeot Quadrilette and 8,500 francs for a Citroën 5 HP (on which the factory's profit margin was very low). On October 5, the opening day of the Paris Motor Show, three examples of the CC cyclecar were displayed on the new brand's stand. The catalog was not yet available, but a leaflet, printed for the occasion, was widely distributed.

The company was taking shape: André Morel resumed his role as a traveling salesman, a position he had held at Le Zèbre. He represented the brand to dealers throughout the southern half of France, while Maurice Boutmy was responsible for the northern half. Edmond Moyet was appointed chief engineer, overseeing the design office and production. Emile Akar took charge of the company's administration, and Joseph Lamy handled sales. The first customers received their cars in November. A few weeks later, before the end of the year, the Amilcar CC was already being exported to England, confirming the partners' ambition to widely distribute their vehicle.

This advertising leaflet was printed on September 29, 1921, just one week before the opening of the Salon where it would be distributed. The first real catalogue would not be published until after the Salon.

This advertisement, commissioned by the Dumond agency in Lyon, one of the largest subscribers among the former Le Zèbre agents, appeared in La Vie Lyonnaise on September 3, 1921. It predates the first official advertisements. The cyclecar shown is still rudimentary: the two seats are side-by-side, the fenders are provisional, and the Amilcar monogram is not yet present. The production model, featuring two staggered seats, would be more refined.

At the 1921 Paris Motor Show, three Amilcar CC cyclecars were displayed with bodied bodies, including this charming little coupé which was not selected for production. From the beginning of 1922, the CC model was offered in several versions (CV, CS, C4). A testament to its excellent design, the C4 remained in the catalog until 1929.

As early as March 1922, two new models were approved by the Mines Department. The Amilcar range expanded to include the CC (cyclecar chassis), CV (voiturette chassis), and CS (sport chassis) models, all equipped with the 4-cylinder engine designed by Moyet.

Thirty-one cyclecar manufacturers were present at the October 1922 Motor Show. Several distinguished themselves by the quality of their vehicles, notably Amilcar, Salmson, Derby, and Rally, while the majority of other manufacturers offered handcrafted models with minimalist designs and rough finishes.

At the end of 1922, Amilcar could report a very positive outcome from its first full year of production. More than one hundred dealers, spread throughout the country, had sold 1,695 cars. On the sporting front, where the brand needs to be present to stimulate its sales, Morel participates in numerous events and wins the 1922 French Speed Championship title for Amilcar.

The first advertisement appeared in the press (Cyclecars et Voiturettes, October 15, 1921) from the new firm Amilcar. However, it came after that of its Lyon-based agents, Dumond frères, who had taken the lead a month earlier in the magazine La Vie Lyonnaise.

The Amilcar CC is displayed here without a body. The similarity in design to the Citroën 5 HP engine is due to the fact that Edmond Moyet worked on the small Citroën project before designing his own cyclecar.

On the left, the first Amilcar catalog was printed after the Motor Show. The Amilcar logo had not yet been finalized; beneath the monogram, still imperfect but close to the one that would be adopted—consisting of seven letters connected by a horizontal bar—a second logo, formed by an A with the other letters awkwardly arranged beneath it, was fortunately not chosen. The rapid expansion of the range would justify the publication of two more catalogs during 1922 to present the new models.

This document shows one of the very first CC-type cyclecars produced, fitted with its final bodywork. Its design is simple and harmonious; the pleasing aesthetics of the bodywork would become a constant feature of Amilcar's production. Advertisements specify that it is delivered «fully equipped,» which distinguishes it from many other cyclecars. Indeed, a windshield, headlights, shock absorbers (!), and a spare wheel are all standard equipment. The general architecture of the CC-type would be used on almost all of the brand's subsequent models.

1923-1926: Amilcar acquired an enviable reputation

At the beginning of 1923, the workshops on Rue du Chemin-Vert already employed 443 workers. Throughout the year, success was confirmed, and the sales network expanded further, boasting 150 agents in France. In addition, sales offices were established in the colonies, in Algeria, Madagascar, Morocco, and Indochina, and importers distributed the brand in Austria, Belgium (with agencies in Antwerp, Brussels, and Liège), Egypt, Spain (with agencies in Barcelona and Madrid), Greece, the Netherlands, Italy, Portugal, and even as far away as Japan.

At the end of the year, the CGS model, a high-performance and well-designed 7CV sports car with its distinctive «gutter» fenders, effectively contributed to strengthening Amilcar's already established reputation. Conversely, the Type E, a 10 HP passenger car, was a commercial failure, as customers preferred Citroën, Renault, or Peugeot for this type of vehicle, which did not fit the image Amilcar had already established.

2,529 cars were delivered that year. These production figures necessitated larger and more suitable premises, which were found in the suburbs of Paris. The gradual relocation from Paris to the La Fournaise factory in Saint-Denis, on the Route de la Révolte (renamed Boulevard Anatole-France shortly thereafter), began during 1924. In these new facilities, production increased further, reaching 3,647 vehicles, with the workforce growing to 800 workers and employees by the end of the year.

In October of this year 1924, the construction of a racing car equipped with a 6-cylinder engine was officially announced..

The CGS (Grand Sport Chassis) model, introduced in late 1923, weighed over 350 kg. It was therefore no longer a cyclecar but a voiturette. This model, particularly successful both mechanically and aesthetically, as well as the lowered CGSS which succeeded it in 1926, definitively established Amilcar's reputation.

The La Fournaise factories in Saint-Denis

In 1924, SNPA, Amilcar's parent company, having outgrown its premises on Rue du Chemin-Vert, purchased the vast buildings of the Société des Forges et Ateliers de La Fournaise in Saint-Denis. This company, founded before the First World War, specialized in forging, stamping, and deep drawing parts for the automotive, railway, and aviation industries. One of its main activities was subcontract chassis stamping for numerous automotive firms.

The immense La Fournaise site covered 27,000 m², including 16,000 m² of covered buildings. The move from Paris to Saint-Denis took place between mid-1924 and mid-1925, without any interruption to production. Amilcar is now moving to the industrial stage and its workforce will quickly reach a thousand employees.

This photo only shows the administrative buildings along the Route de la Révolte, renamed Boulevard Anatole-France at the end of 1924. Other buildings face the adjacent streets.

Three Amilcar 7CV Type L sedans are being transported on a trailer pulled by a Latil tractor in the courtyard of the La Fournaise steelworks.
The scene takes place around 1927-28. Several daily trips were made between the Saint-Denis factory and the coachbuilding workshops (formerly Margyl) purchased in Courbevoie, located about ten kilometers away, as well as between the factory and the train station where part of the production was shipped by rail to regional agents.

The occasion for taking this photograph, showing a group of workers gathered on the sidewalk in front of the Amilcar factory (see the inscription on the brick wall) in Saint-Denis, is unknown. Their demeanor does not suggest a picket line, even though, like many industrial companies, and especially automotive companies, Amilcar had experienced several labor disputes, some of them violent. For example, L'Humanité, the Communist Party newspaper, reported in its October 13, 1925 edition, under the headline:
"Gendarmes fire on Rue de la Révolte"
"In front of the Amilcar factory, on Rue de la Révolte, a column of several hundred strikers—men, women, and children—marched at 1:30 p.m., singing The Internationale and inviting non-strikers to join them." Suddenly, the gendarmes deployed and tried to clear the factory entrance. The crowd surged back, and the gendarmes charged. The workers defended themselves as best they could. Bricks and stones flew. All at once, a shot rang out, then ten, twenty, thirty, forty more crackled. It was a continuous barrage of gunfire for three minutes. It was the gendarmes who fired! Three wounded, three workers, remained on the scene, whom the municipal ambulance came to relieve a few moments later.

In the large storage hall, the cars, some without hoods, await the final touches before delivery on their bare rims. At the head of the line, from left to right, a C4 type convertible, a CGS3 with an «Eldridge» grille, a CGS3 with «propeller» wings, a G type torpedo, a G type saloon.

The euphoria continued into 1925 with 3,764 vehicles produced. By the end of the year, 1,100 people were working at Amilcar. At the end of the racing season, the 6-cylinder model successfully participated in its first competitions.

At the beginning of the following year, Amilcar acquired a major subcontractor, the Margyl coachbuilding company, which employed 300 workers. The goal was to control all production functions internally, following the vertical integration model favored at the time by major manufacturers such as Ford, Renault, and Citroën.

Amilcar's production capacity was then estimated at 400 cars per month. However, while the order book remained full, the first cash flow problems appeared. Management errors and heavy investments in machine tools at La Fournaise (the steelworks) weighed heavily on the company's financial health. Nevertheless, with 3,970 vehicles manufactured, Amilcar reached its peak, both in terms of revenue and production volume.

La carrosserie Margyl

The company was founded in February 1925 by Marcel Sée and Gilbert Nataf. Located at 41-47 Quai de Seine in Courbevoie, it was acquired by Amilcar in early 1926. Emile Akar was one of its principal shareholders. The Board of Directors included Marcel Sée, Otto Fried, and Gilbert Nataf (1888-1966), the latter two being industrialists in Paris. It appears that the coachbuilding company, which subcontracted for Amilcar, was created solely to make a very profitable deal by reselling it to its client at a premium some time later.

Otto Fried (1864-1940) was Gilbert Nataf's father-in-law. Nataf managed several companies specializing in hosiery (Gilbert Nataf et Cie, shirtmaking; Au Gagne-Petit; Soldes en Tous Genres, etc.). In 1930, he became Amilcar's Sales Director. Jean Fried (1890-1983), son of Otto, married in 1924 to Marcel Sée's sister, Babette Valérie (1898-1986).

Two fairly famous opera singers had adopted this pseudonym: Jane Margyl, born Jeanne Clémence Floriet in 1874 and who died following an appendectomy in 1907, and Odette Margyl, born Alice Gabrielle Decorne in 1881, who died in 1929.

1927: Une tempête dans un ciel pourtant dégagé

Cash flow problems worsened rapidly and became so severe that they led to the bankruptcy of Société Nouvelle Pour l'Automobile (SNPA), Amilcar's parent company, on February 19, 1927. Judicial liquidation was declared shortly thereafter, and a composition agreement was signed with the creditors. SNPA's assets were taken over by a new company, Société Anonyme Française d'Automobile (SAFA), created around Marcel Sée, until then the managing director of SNPA, while Emile Akar and Joseph Lamy were ousted.

Turnover plummeted, halved. The workforce was reduced to 636 employees, and drastic cost-cutting measures were implemented, to such an extent that the launch of the CGSS sports models and, to a lesser extent, the C6, remained very low-key, without advertising or the publication of specific catalogs. The racing program, however, was not affected.

Marcel Sée: Paris, January 6, 1893 – May 18, 1977.

This 10 HP touring car, type E, not bearing the Amilcar name, failed to attract customers, who preferred the more common 10 HP models from major manufacturers (Citroën, Peugeot, etc.), which were cheaper. Its poor sales were one of the factors that led to the company's liquidation in 1927. With this model, Amilcar successfully implemented its patent for front-wheel braking, a principle that would be adopted on all the brand's cars.

The Société Anonyme Française d'Automobiles took over from the Société Nouvelle Pour l'Automobile after the latter's judicial liquidation in 1927. Emile Akar and Joseph Lamy, who had created the company 6 years earlier, were forced to leave in favor of Marcel Sée, who took control.

The CGSS, one of the company's finest models, succeeded the CGS at the October 1926 Motor Show. Beset by cash flow problems, the brand had to forgo its promotion. In fact, it was never even submitted to the Mines Department for type approval. This is why it was initially designated CGS.
It would feature a different body style for each model year until 1929, the year production ended.

Gilles Fournier's CGS at the Saint-Yan airfield (Saône-et-Loire) during an outing in the early 80s.

1928-1933 : Un équilibre difficile à maintenir

The new management decided to refocus production on higher-end models, notably an eight-cylinder car in which Marcel Sée placed all his trust and hopes.

At the end of 1928, an agreement was signed with the executives of the American automobile company Durant. It stipulated the distribution of each brand's models in their respective countries, but its primary purpose was to temporarily inflate the stock price and generate substantial profits for those who had been given inside information. The situation improved somewhat, with the workforce rising to 1,129 employees at the beginning of the following year to mass-produce the eight-cylinder car. Unfortunately, the difficulties in developing this car and, above all, the Wall Street stock market crash, the effects of which were felt throughout Europe from the early 1930s onward, dashed all hopes. While the 1929 turnover was only slightly affected, it steadily declined from 1930 to 1932. Layoffs, totaling nearly 400, became inevitable. In 1932, the factory produced the four-cylinder M3 and eight-cylinder models at reduced capacity. The introduction of an entry-level model, the 5 CV, in October 1932, failed to achieve the expected success. The situation became so critical that Amilcar struggled to stay afloat until 1934.

The M3, a 7 CV, 1200 cc car, presented at the 1931 Motor Show, represents the ultimate evolution of the cyclecar line designed by Moyet in 1921. Widely distributed from 1931 to 1934, it allowed Amilcar to weather the economic crisis, albeit with some difficulty. The M4 9 CV model, intended to complement it, was produced in very limited numbers.

A stroke of genius or a bluff aimed at the financial sphere? In any case, the Wall Street stock market crash of 1929 put an end to this ambitious cross-collaboration project, presented in lengthy press articles, notably that of the newspaper L'Auto, on October 7, 1928. It should be noted that before Amilcar, W.C. Durant had already attempted a rapprochement with other French manufacturers, in particular Mathis.

The 5 CV Amilcar, a small car presented at the October 1932 Motor Show, failed to achieve its goal of reaching a different, price-conscious, and less demanding clientele. It was the last true Amilcar and also the last car of the brand designed by Edmond Moyet.

Even with superb bodywork like this faux convertible, the 8-cylinder Amilcar, initially powered by a 1500cc engine, then a 2-litre engine and finally a 2.3-litre engine, failed to find its place between popular and high-end cars, particularly due to its unreliable engine which only allowed modest performance.

William Crapo Durant (1861-1947)

In 1908, he founded General Motors, which gradually brought together more than 25 manufacturers. Ousted from his position as President in 1910, he financed Louis Chevrolet, who founded his own brand, and then returned to the presidency of GM in 1916 when Chevrolet joined the group. Removed again in 1920, he created Durant Corporation, which included, among others, Durant, Flint, Star, and Locomobile. This entity collapsed with the 1929 stock market crash.

En marge d'Amilcar, la culasse culbutée DR

Edmond-Louis Delmer, who joined Amilcar in 1921 as production manager, left the company in 1924 to move to Bignan, where he participated in the design of the brand's 2-liter engines.

On January 15, 1925, together with Henri Renoult, who worked in Amilcar's technical department, he filed a patent application for a pump for pressurizing the rear crankshaft bearing of the Amilcar engine.

On May 21, 1926, the two colleagues filed a new patent application for a «cylinder head for converting a particular side-valve engine into a higher-powered, overhead-valve engine.» This patent was issued in 1927.

To exploit their various patents, Edmond-Louis Delmer and Henri Renoult partnered equally with Charles Duval, Amilcar's official coachbuilder, and on August 13, 1925, created a general partnership named Ateliers Mécaniques DR. The company, located at 123 rue du Vieux-Pont-de-Sèvres in Boulogne-sur-Seine, aimed to «exploit DR's creations and patents relating to modifications and improvements to automobiles in general and to Amilcar cars in particular, as well as to carry out the mechanical work described above.»

Edmond-Louis Delmer was born in Fargniers (Aisne) in 1890, he died in Marseille in 1981. Henri Renoult was born in Honfleur in 1882, he died in Grimaud (Var) in 1952. Charles Henri Duval was born in Paris in 1882.

La culasse DR

It is installed in place of the original cylinder head on Amilcar four-cylinder side-valve engines. It features innovative overhead valves operated by rocker arms. These are actuated by pushrods and tappets that occupy the positions of the original side valves. The valves of the new cylinder head are returned by double springs, and the intake and exhaust ports are generously sized.

The manufacturers claim «a power increase of approximately 35%, a considerable increase in RPM and therefore speed, lightning-fast acceleration, and less frequent gear changes.»

In this regard, Pierre Chan writes:

«Mr. Delmer, with the collaboration of Renault and Duval, launched the Super Cylinder Head D.R. with rocker arms for the Amilcar four-cylinder engines. It met with considerable success.» I even bought one and fitted it to my Type L. Acceleration was greatly improved, as was hill climbing. But the gain was mainly in torque, not power. On the other hand, the inside of my car was filled with rather annoying smoke: the oil that lubricated the rocker arms was dripping onto the exhaust manifold due to a lack of sealing.

The Amilcar engine, equipped with the DR cylinder head, gains in aesthetics.

The DR cylinder head cutaway clearly highlights the overhead valve and rocker arm configuration. The rocker arms are actuated by long pushrods that extend the original tappets, which are lifted by the camshaft. The valves are returned by double springs, and all the cylinder head ports have a larger cross-section than the original. The cylinder head cover is made of cast aluminum.

Advertisement published in La Revue Automobile on August 1, 1927. The estimated 35% power increase seems quite optimistic. However, the improved flexibility is very real.

The price charged for the purchase and assembly of this cylinder head is unknown to us, but it is undoubtedly prohibitive, as is always the case with special productions in very limited series.

1934: La fin des usines de Saint-Denis.

In May 1934, Amilcar presented two new models which, due to a lack of resources, were simply modernized versions of the 5 and 7 CV models, fitted with so-called aerodynamic bodies that all manufacturers had adopted with varying degrees of success. Customers were not fooled, and the two cars failed to revive the company. Layoffs accelerated, and the cessation of production became inevitable. In late August or early September, all but a very small team of employees were dismissed on the grounds of «job elimination due to production shutdown.» The Saint-Denis factory closed its doors.

Like many manufacturers, Amilcar succumbed to the trend for so-called aerodynamic bodywork. This modernization of lines meant the end of the boxy bodies offered until then, but this hastily applied facelift of older models was doomed to failure. At the end of the summer of 1934, the Saint-Denis factory closed its doors. Thanks to this trend, the small 5CV roadster, whose modest performance had hardly changed, now boasted a sportier look.

Between August and September 1934, all employees of the Amilcar factory in Saint-Denis received this work certificate, which signified their dismissal on the grounds of job elimination or cessation of production.

Leaflet published in mid-1934 presenting the 7 CV M3 and the 5 CV in their aerodynamic version.

1934-1939: Des Amilcar qui n'en ont plus que le nom

Despite this closure, the brand did not disappear. Marcel Sée, surrounded by the few employees he had retained, managed to convince new investors. SOFIA, Société Financière pour l'Automobile (Financial Company for the Automobile), established at 23 and 25 rue de Bellevue in Boulogne-sur-Seine and later at 71 Avenue des Ternes in Paris, became the new parent company of Amilcar, succeeding SAFA.

At the October 1934 Motor Show, SOFIA presented a new model, the Amilcar Pégase. This was, in reality, a Delahaye 134 purchased as a bare chassis and bodied by independent coachbuilders according to in-house designs. The Boulogne workshops were only involved in a few finishing touches.

In January 1937, Messrs. Ainsworth and Jacobsen, respectively the owner and sales director of Hotchkiss, acquired shares in SOFIA and then quickly took full control of the company.

At the 1937 Paris Motor Show, Amilcar presented the Compound, type B 38, a 7 CV front-wheel-drive car with an original cast aluminum chassis. It was designed by engineer Jean-Albert Grégoire with capital from Hotchkiss and Aluminium Français. It was sold under the Amilcar brand because, being highly innovative, it did not fit into the Hotchkiss range, whose reputation was based on classicism and reliable manufacturing, justifying the company's slogan, «The Right Balance.»

Amilcar's parent companies experienced many ups and downs: the first, SNPA (Société Nouvelle Pour l'Automobile), founded in 1921 by Lamy and Akar, was liquidated in 1927. SAFA (Société Anonyme Française d'Automobile), headed by Marcel Sée, took over until 1934, when production ceased in Saint-Denis. SOFIA (Société Financière pour l'Automobile), headquartered in Boulogne-Billancourt, succeeded it from 1934 to 1939. This company did not manufacture cars but subcontracted the conversion of the Delahaye 134 into the «Amilcar Pégase,» whose specific bodies were manufactured by renowned coachbuilders.

Presented at the 1934 Motor Show, the Amilcar-Pégase was simply a disguised Delahaye 134. It was the subject of several publications, notably a superb illustrated catalogue by Geo Ham whose drawings skillfully enhanced the lines of the models.

1939: Amilcar disparait, l'histoire prend le relais

During the Second World War, production shifted towards manufacturing a van derived from the Compound. Only a very small number were built, used by the postal service for deliveries and by the French Red Cross as ambulances.

At the end of the war, Hotchkiss's management decided not to revive Amilcar. The brand entered a long period of dormancy; it would only emerge from this obscurity many years later, thanks to collectors and automotive historians.

Concours d'Élégance organized by the newspaper L'Auto, Bois de Boulogne, June 9, 1939. These three Amilcar Compound roadsters, presented by Mrs. Pierre Maillat, Mrs. Guy Verdier, and Baroness Louis de la Paumelière, "three young women in white, wearing white straw hats with ribbons matching the colors of their cars, who formed a charming ensemble," received the prize for best overall presentation.
Guy Verdier was a renowned silk stocking manufacturer. Mrs. Pierre Maillat was Pierrette, the daughter of Charles Faroux, Maillat being one of the directors of the Compagnie Française d'Afrique Occidentale (French West Africa Company).

1921: Les débuts en course

Edmond Moyet, taking into account the report of the first road test in April (see p. 14), made some modifications to his prototype.

On June 5, 1921, while the Amilcar company was not yet established and the car was not yet approved by the Mines Department, the cyclecar participated in the Paris-Rouen rally and its final hill climb. It was entered under the name Amilcar, a brand then completely unknown. Driven by Maurice Boutmy, it finished the rally in nineteenth position. In the 700-meter hill climb, held on Rue d'Ernemont in the heart of Rouen, Boutmy recorded the third fastest time in the cyclecar category, behind Casse in a Morgan and Mauve in an Elfe.

On September 4, Boutmy participated, driving an Amilcar, in the Dinard Rally and its Concours d'Élégance. On October 23, André Morel, sales manager for Southern France for the newly formed Amilcar company, traveled to the Lyon region at the wheel of one of the first production cyclecars. While the purpose of the trip was to visit the dealers who had taken over the brand's representation, he also took the opportunity to participate in the Lyon Flying Kilometer, a competition recently organized by the Lyon Motorcycle Club. He won the cyclecar category, covering the distance at a remarkable average speed of 90.45 km/h, ahead of Lapayre on his Hinstin at 75 km/h. This enormous difference in performance can probably be explained by the extensive engine modifications made to the «standard» Amilcar before it left the factory. The press reported on this victory, highlighting for the company's management the potential benefits of such a publicity platform. Under the leadership of the young technical director, Marcel Sée, a graduate of the École Polytechnique, the fledgling brand was immediately oriented towards competition. From then on, it was under the company's banner that Morel and other drivers participated in numerous motor races that flourished throughout France in the early 1920s.

Marcel Boutmy, born in Amiens on May 8, 1877, was Amilcar's sales manager for the northern region. He competed in several races driving the company's cars (notably the 24 Hours of Le Mans in 1923 and 1924). After leaving Amilcar, he was appointed Sales Director of Tracta. From 1924 onward, his official residence was in Parigné-l'Évêque (Sarthe), where he had purchased the Château de Montbraye. He died in Parigné on May 6, 1934.

1922: l'Atelier des Courses et les premières 4 cylindres de course

Amilcar's commitment to racing was confirmed by the establishment of a Racing Workshop within the factory, initially tasked with optimizing production cars. This work focused on maximizing weight reduction and meticulously selecting engine components from the production line to extract the maximum performance. Soon after, the Racing Workshop was authorized to build specific racing cars reserved exclusively for the factory's use.

The 1922 season began on February 19th with the UMF (Union Motocycliste de France) Endurance Competition, a regularity rally held in Marly-le-Roi, near Paris. Two cars were entered by the factory for Munch and Marius Mestivier, and another by a customer, Mr. Minchin. A set average speed had to be maintained to cover the 245 kilometers, or 35 laps of a 7 km circuit laid out in the forest, made difficult by the weather. Eight competitors, including Munch, received no penalties; they were all tied for first place. The other two Amilcars were penalized for «engine failure.» The Salmson team, with its three cars, distinguished itself by finishing in the group without penalties.

On April 23, Morel won his class in the 500-meter standing-start race, organized as part of the Grand Prix du Parc in Dijon (Côte-d'Or). He repeated this success on May 7 at the Limonest hill climb, near Lyon. The car he used had a body kit conforming to the catalog but lacking

its fenders, lights, and windshield. However, the engine's displacement was increased from 900 to 1100 cc, while Amilcar's commercial range did not yet include models with such a large engine. These modifications explain why the car was entered in the «racing» category and not in «touring.» This victory was featured in a full-page advertisement in the June 1st issue of Moto-Revue.

During the 1922 season, Amilcar participated in a total of 17 races, the main ones being the Bol d'Or, the Boulogne-sur-Mer Meeting (where Boutmy suffered a spectacular crash, and his mechanic Crespel sustained a serious head injury), and the Cyclecar Grand Prix at Le Mans. The inaugural Bol d'Or race, held over 24 hours at Livry-Gargan on May 28th and 29th, was won by Morel. Driving solo, as required by the regulations, he covered 1450 kilometers at an average speed of 60 km/h. Over the years, the Bol d'Or has become the iconic endurance race reserved for cyclecars and small-displacement cars. Many amateurs compete, sometimes successfully, against the manufacturers' official cars.

From its very first year, Amilcar grasped the importance of communication and established itself as a brand to be reckoned with. For its simple class victory at the Limonest hill climb, the company secured a full page in Moto-Revue, as well as extensive editorial content in L'Auto and another in L'Echo des Sports.

Mestivier (No. 77) and Minchin (No. 78) at the weigh-in on February 18, 1922, the day before the UMF Endurance Competition. This regularity test «aimed to demonstrate the mechanical qualities of the various competing machines, while also highlighting the flexibility of the engines when faced with the terrain and the difficulties of the course,» La Revue Motocycliste, February 25, 1922.
«The weather brought its own little complication: waterlogged, muddy roads, greasy cobblestones, and potholes put the machines to the test. Some competitors experienced impressive skids.»

Morel poses at the wheel of his car on the banks of the Saône in Lyon, a simple CC type stripped of its accessories but equipped with a specific engine.

Le Premier Bol d'Or Motocycliste et Cyclecariste.
27-29 mai 1922, circuit de Livry-Gargan, Vaujours, Clichy-sous-Bois.

This endurance race, challenging both the vehicles and the drivers, was conceived in 1922 by Eugène Mauve, President of the A.M.M. (Association Amicale des Anciens Motocyclistes Militaires – Friendly Association of Former Military Motorcyclists), himself a driver and manufacturer who founded two short-lived cyclecar brands: Elfe (1919-1922) and then Mauve (1922-1923). It adopted the name of a cycling race created in 1894, the prize for which was a gilded bronze bowl.

Its principle was simple: a 24-hour race, one driver per car, with the winner determined by the greatest distance covered. Here are some excerpts from the regulations, which evolved over the years:

"Vehicles must have two seats, two effective brakes, mudguards, a muffler, and a powerful lighting system necessary for high-speed night driving. A clutch and gearshift are mandatory." The number of passengers transported is limited to two.

Under no circumstances is the cyclecar passenger permitted to replace the driver.

During the event, drivers and passengers may stop to rest, eat, etc., if they deem it necessary. Repairs, and generally any other operation or refueling, may only be carried out by the driver of the vehicle and, if necessary, their passenger. The circuit is located 12 km northeast of Paris and is 5.2 km long. The event is divided into two races. The first is reserved for motorcycles, with 17 competitors starting at 6:00 a.m. on Saturday. The second, starting at 8:00 a.m. on Sunday, brings together cyclecars and sidecars, with 35 entrants representing 16 different brands. Four Amilcars are among the participants: Morel, Mestivier, and Fardeau in official cars, and Scaron in a private car. We will see him again at the wheel of a 6-cylinder car from 1928 onwards.

The narrow road is unpaved and riddled with potholes, making overtaking hazardous, especially since the competitors, benefiting from sunny weather, are constantly hampered by the dust kicked up by those in front of them.

1450 km in 24 hours, averaging 60.5 km/h including stops, on such a challenging course, represented a remarkable performance in 1922 for a cyclecar with a top speed of 100 km/h. The inevitable pit stops for refueling were undoubtedly carried out efficiently.
The passenger's position, constantly jostled in a very cramped space, was no more enviable than that of the driver, who held the wheel alone throughout the entire race.

Looking tired after 24 hours of racing, André Morel poses for the traditional winner's photo.

The race was decided in the final hours. Mestivier, who had been leading since the start, had a sidecar collision in the 18th hour and relinquished the lead to his teammate Morel, who had been lying in wait until then.

As the Moto-Revue journalist reported on June 1, 1922:

«Morel, who covered the most kilometers in twenty-four hours with his Amilcar, across all categories, became the Bol d'Or record holder.»

However, he was mistaken when he stated: «His record is unlikely to be broken anytime soon.» Indeed, it would be broken in the very next edition by Devaux on a Salmson, covering 1,777 km.

Robert Benoist, the future champion, then a cyclecar driver for Salmson, recalled this first Bol d'Or in an interview with the newspaper L'Auto on May 2, 1934:

"Mauve organized it for the first time on the Livry-Gargan circuit. The circuit, about 10 kilometers long, was riddled with potholes the likes of which are unimaginable today. The first Bol d'Or reminds me of the suffering everyone endured for 24 hours on such a circuit, where the jolts were all the more violent because our fragile vehicles weighed only 350 kg and we were tossed about like nuts in the bottom of our seats. The eye strain was particularly cruel, and thanks to my friend Stoffel, a former cycling manager, rosewater revived me. The particularly cold night left our limbs numb." Every 500 kilometers, we felt the need to adjust our valves. It goes without saying that all the accessories, with very few exceptions, were held on the cars only with electrical tape and wire.

But in the end, finishing second in this race, behind my friend Morel, the Amilcar champion, I had to console myself with 40 hours in bed, which seemed to me the finest reward.

The Bol d'Or, year after year, established itself as the race inextricably linked to the cyclecar epic in France during the 1920s and 1930s. The Bol d'Or for automobiles continued until the mid-1950s, and the motorcycle "Bol," after a hiatus from 1960 to 1969, still exists today.

At the Grand Prix for Light Cars, Voiturettes, and Cyclecars held in Boulogne-sur-Mer on July 29th and at the Cyclecar Grand Prix on the Sarthe circuit near Le Mans on September 17th, the factory entered three cars specially designed for racing, featuring long, streamlined, bullet-shaped bodies. Their engines were particularly finely tuned: camshafts, valves, and many other parts had been reworked. In Boulogne, aluminum alloy connecting rods rotating directly on the crankshaft, without a metal bearing, were tested, but they caused Morel to retire on the first lap and Mestivier on the second. Boutmy, for his part, spun his car on the third lap. The Salmsons achieved a 1-2-3 finish (Devaux ahead of Casse and Benoist).

At Le Mans, despite the return to conventional tubular steel connecting rods, the Amilcar team finished behind the Salmsons. However, at the end of this 1922 season, based on the number of victories won, Morel, for Amilcar, was crowned French Speed Champion.

Morel debuts his new car in the courtyard of the Chemin-Vert factory.

Mestivier's car (No. 3), photographed during a stop in the rain at the Grand Prix des Cyclecars on the Sarthe circuit on September 17, 1922. A marshal is ensuring compliance with the regulations which limit the frequency or type of certain interventions.

Jérôme Marcadanti, a mechanic from Mestivier and a driver himself, during testing of one of the three new racing cars that would participate in the 1922 Boulogne Meeting. The streamlined, hammered aluminum body is narrow and rises very high to encircle the two-seater cockpit, from which only the occupants' heads protrude. The car is well-designed but, in keeping with the standards of the early 1920s, it sits high on its stance. Conversely, a few years later, the brand's 6-cylinder models would feature a much lower ground clearance and a lower center of gravity.

The day before the race, the jovial Boutmy, accompanied by his young mechanic Crespel, presented their car to the photographers. They had no idea of the misadventure that awaited them.

Boulogne-sur-Mer Meeting, July 27, 1922.
The three racing cars were brought together for the first time on this occasion. They were practically identical; only the registration numbers and the position of the monogram on the radiator distinguished them. Car number 40 was driven by the Morel/Chanut crew (retired on the first lap), car number 41 by Mestivier/Marcadanti (retired on the second lap), and car number 42 by Boutmy/Crespel (accident on the fourth lap).

Début 1923 : Intensification du programme de courses

Hill climbs, circuit races, road touring events (Paris-Nice, Tour de France Automobile), and regularity rallies followed one another at the beginning of the 1923 season. While their number was only slightly higher than in 1922, around twenty, Amilcar planned to enter several crews in the most important ones. André Morel and Marius Mestivier were the official drivers, assisted as needed by other recruits chosen from among the mechanics at the Racing Workshop. The cars from the previous season, improved, were back in action. In February, Morel won Paris-Nice, a 1200 km race covered in four stages.

André Morel and his mechanic Chanut, during a stage of the 1923 Paris-Nice race. The hood of the Amilcar sports the tricolor cockade «French Speed Champion 1922,» won the previous season. In the background, a Benjamin cyclecar. The principle of maintaining an average speed over each of the four stages—Paris-Dijon, Dijon-Lyon, Lyon-Marseille, and Marseille-Nice—prevented competitors from being separated. However, Morel's best times on the La Turbie climb and in the flying kilometer on the Promenade des Anglais in Nice secured him the overall victory in this event, which took place entirely in the rain.

Mestivier competed in the Cœur Volant hill climb near Marly-le-Roi (Seine-et-Oise) on March 11, 1923. The car, repainted in a dark color, was one of three used in Boulogne in 1922. Marius Mestivier, entered in the Professional two-seater 1100cc category, set the fastest time among the cyclecars. He finished ahead of Dhôme's Morgan-Darmont single-seater 1100cc, which had been unbeatable until then. It's worth noting the multitude of categories offered, giving everyone a chance to win a trophy! The Cœur Volant hill climb was only held in 1922 and 1923. It temporarily replaced the Argenteuil hill climb, whose road surface was in very poor condition. In 1924, Argenteuil returned to the calendar.

In March, at the UMF Endurance Competition held at the Malmaison circuit, Mestivier salvaged the brand's honor after Morel's retirement. The Bol d'Or, on May 20th and 21st, was not kind to Amilcar, with only one of its three crews finishing the race. Fratissier finished 4th behind three Salmsons. For the first edition of the 24 Hours of Le Mans Grand Prix d'Endurance, on May 26th and 27th, 1923, Amilcar entered only one car (no. 35), driven by Boutmy and Marcadanti. They finished 18th out of 30 classified cars, having covered 1536 km.

24 Hours of Le Mans, May 26 and 27, 1923

While a Grand Prix was regularly held on the Circuit de la Sarthe near Le Mans even before the First World War, it wasn't until 1923 that the 24 Hours of Le Mans (more precisely, the 24 Hours of Le Mans Endurance Grand Prix) was established, organized by the Automobile Club de l'Ouest. The regulations stipulated that the entered car had to conform to a model from the commercial catalog. As the Amilcar CGS was not yet in the catalog, a three-seater C4 type voiturette was chosen. With its 1004 cc engine, it was the smallest engine size entered, competing in the 1100 class which included four other competitors. After covering 1519 km, it finished behind two Salmsons (1691 and 1605 km) but ahead of the SARA. The second car of the latter brand retired.

Maurice Boutmy during a pit stop. The regulations require him to work on the car alone; any outside assistance is prohibited.

Jérôme Marcadanti at the wheel of the Amilcar during the 1923 24 Hours of Le Mans. A stone guard protects the radiator.

Fin 1923-1924: Les Tandems

In July 1923, the Racing Workshop now had two specially designed cars called «tandems» because of their very narrow bodywork, in which the driver and mechanic were seated one behind the other. They were built on a completely new curved chassis, foreshadowing that of the production CGS model which would be presented at the end of 1923. For the first time, they featured brakes on the front axle. While the engines appeared similar to those of the production cars, they were, in reality, entirely designed for racing. Pierre Chan's recollections are very precise and show how little the engine had in common with the production model:

«The block was cast using the standard foundry pattern, but, thanks to tricks such as modifying the sand cores, we had managed to enlarge the internal diameter of the manifolds and also that of the crankshaft front bearing housing.» The valve guides, instead of being drilled in a straight line, were drilled in a staggered pattern, which allowed for an increased diameter of the valve seats. The height of the conical valve seats was reduced to further increase the diameter, and the inside of the ports was oven-enameled to reduce gas friction.

The conventional forged steel crankshaft from the production model was replaced by a balanced crankshaft with arms cut from a special steel plate. Its rectangular arms had two symmetrical sections about the crankshaft axis, thus achieving dynamic balancing. This crankshaft was no longer mounted on plain bearings but on roller bearings. At the rear, it rested on a large deep-groove ball bearing, designed to withstand the axial thrust of the clutch disengagement, and at the front, on a smaller double-row spherical ball bearing, capable of withstanding the angular deformations due to crankshaft flexing.

At the front and rear of the crankshaft, thin, circular steel cups were fitted to collect the oil draining from the bearings. Through a hole, this oil entered the crankshaft journals to lubricate connecting rods 1 and 4. Connecting rods 2 and 3 were lubricated, as in pressurized engines, by means of annealed copper tubes, bent and fixed to the sides of the arms, through which the oil circulated by inertia. The bearings were lubricated, as in standard four-cylinder engines, by the oil that the flywheel sent into a special reservoir located in the left engine mounting bracket.

The nickel-steel connecting rods were tubular, and therefore hollow. The pistons were made of thick-walled aluminum. The cylinder head, with its polished ports, had been machined to increase compression. The camshaft had been calculated to achieve very «crossover» valve timing. The valves were made of silicon-molybdenum steel, their return springs calibrated differently. The intake valves, I recall, had a diameter of 30.5 mm instead of 28 mm on the early CGS models.

The lightweight flywheel was made of steel, no longer cast iron, to avoid the risk of bursting, and the clutch had been reinforced.

This allowed the later models to produce 42 horsepower at around 4500 rpm, enabling a top speed of 147 km/h. Finished hastily for the

French Cyclecar Grand Prix, Montargis, July 22, 1923: first outing for the tandems. This rear view shows the narrowness of the bodywork, which is very enveloping around the passenger compartment.
The backrest, which also serves as a headrest, acts as an expansion tank to collect water from the radiator.

French Cyclecar Grand Prix held in Montargis on July 22nd, the two pairs were unprepared and disappointed. Morel and Mestivier retired after only three laps. Amilcar cleverly and maliciously explained the withdrawal of its cars by highlighting «excessive braking, resulting in the engine oil being projected forward onto the crankcase, causing lubricant to rise into the first cylinder and fouling the spark plug.» Salmson achieved another 1-2-3 finish (in order: Devaux, Benoist, Bueno).

Following this resounding defeat, and in order to still secure some victories, Amilcar had no choice but to resort to subterfuge, notably entering its cars in a category different from that of the Point-du-Jour brand.

These practices are used by all manufacturers who exploit the regulations legally. In the same race, it is not uncommon to distinguish between «professional» and «amateur» categories, themselves subdivided into «touring» and «racing» categories, the latter being entered in two-seater or single-seater categories, all divided into 1100cc and 750cc classes! Sometimes a competitor finds themselves the only one entered in their category: they simply need to finish the race to be declared the winner.

In the premier 1100cc racing class, Salmson's supremacy, with its cars now equipped with twin-cam engines, was undeniable. At the beginning of 1924, Amilcar had to face the facts and choose between abandoning racing or remaining in the sport by investing the necessary resources—that is, by building a car capable of winning. This led to the creation of the supercharged 1100cc 6-cylinder car. During the development phase and while awaiting its competitive debut, the brand continued to race with its 4-cylinder models.

The Mestivier tandem number 75 is seen here in the courtyard of the Chemin-Vert factory after the French Grand Prix held in Montargis.
Behind the car, a piece of fabric is being waved by two people to facilitate the framing of the photo.

André Morel and a companion are taking a break in the countryside on their way to a sporting event. The tandem bicycle is being transported on a trailer equipped with hoops for covering it in case of rain.
The towing vehicle is an Amilcar 10 HP Type E torpedo. Needless to say, the combined speed is very slow and long journeys require a great deal of patience...

Mont Ventoux Hill Climb, August 10, 1923. In addition to the rear section, the engine hood was removed due to overheating during practice.
The fuel tank, bearing the number 25, is clearly visible. Morel set a new class record.

Allauch Hill Climb (Marseille Motorcycle Club), January 27, 1924. Another class victory for André Morel.

«Morel's performance on the Amilcar deserves special mention. The Lyon champion caused a huge sensation on his splendid racer, climbing the famous hill at over 100 km/h and breaking the 1100cc cyclecar category record. This magnificent demonstration once again establishes the Amilcar's climbing abilities, as well as its extraordinary roadholding,» (local press).

Mont-Agel Hill Climb, March 16, 1924: New class record for Morel.
When regulations allow, driver and mechanic prefer to race without the rear bodywork. Besides the weight saving, they can take corners faster thanks to the weight transfer from their bodies, much like sidecar racers.

With the bodywork removed, the narrowness of the chassis is evident (50 cm at its widest point). The driver's position is very uncomfortable, with poor visibility. He and his mechanic sit very low, one behind the other, on two small perforated aluminum seats.

Limonest hill climb, May 25, 1924: the start will be given to Morel and his mechanic entered in the 1100 two-seater cyclecar category. The Amilcar will set a new category record.

Standing-start kilometer in Nice, March 14, 1925.

«From a sporting point of view, the event was of great interest. It allowed Morel and his Amilcar to break the standing-start kilometer record for 1100cc cars. In his marvelous little machine, the affable champion managed to exceed 100 km/h... Just as he was about to leave this machine, which he had so often driven to victory—to take on the 6-cylinder that Amilcar would soon be releasing—it was quite a feat he had it accomplish, and we understand Morel's joy when the results were announced.»
Les Sports de Provence, March 16, 1925.
The journalist was particularly well-informed. He was one of the very first—if not the first—to mention the 6-cylinder car, six months before its first appearance in a race.

1924-1925 : Le Faux tandem et la fin des quatre cylindres de course

After a period of fine-tuning, the tandem cars proved entirely satisfactory. They were replaced at the end of the 1924 season by a modified tandem. This differed from the previous model in its bodywork, which allowed the driver and mechanic to be positioned not strictly one behind the other, but in an intermediate, side-by-side, but slightly offset position. Entrusted sometimes to André Morel, sometimes to Marius Mestivier, this reliable, superbly prepared, and versatile tandem left little chance for the competition… with the exception of the formidable Salmsons, whose engines proved far more powerful. It was clear that the Amilcar's side-valve engine had reached its limits in racing.

Alpilles hill climb, Saint-Rémy-de-Provence, April 27, 1924: Morel wins his category.

Mont Ventoux Hill Climb, September 7, 1924. Morel in the Saint-Estève bend. The bodywork of the mock tandem is no wider, but the steering wheel is offset to the right, whereas it is centrally located on tandems. A cutout on the right side gives the driver more freedom of movement, allowing him to extend his right shoulder and arm to the outside and freeing up some space for the mechanic seated behind him, slightly offset to the left.

The «faux tandem» is easily recognizable by its hood, pierced with horizontal oblong openings, unlike the vertical louvers of the standard tandems. Its bodywork is no wider, and the steering wheel is no longer centered but offset to the right. A cutout in the bodywork allows the driver to free their right shoulder and arm outside the cockpit, thus freeing up some space for the mechanic seated behind them, slightly to the left.

The engine of the «faux tandem» is virtually the same as that of the standard tandems. It is based on a CGS engine block. While the external appearance is similar, all its constituent parts are unique. The visible differences compared to the CGS engine relate to the 35 mm Solex carburetor (instead of 26 mm) and, most notably, the four exhaust pipes that converge into a single tube. Equipped with this side-mounted engine, the «faux tandem» exceeded 147 km/h during the Record Day at Arpajon in 1924.

Alpilles hill climb, April 26, 1925. New category record for Morel.

Mont-Agel hill climb, March 22, 1925: the engine of the mock tandem is held at full throttle just before releasing the clutch. Morel waits for the green light from the marshal.

The engine of the false tandem represents the ultimate evolution of the lateral 4-cylinder. Compared to the Salmson engines, it shows its limitations, which leaves Amilcar's management with little choice: if the company wants to win against its competitor, a completely new car must be designed.

Un drame aux 24 Heures du Mans (20 et 21 juin 1925)

The strict regulations for this race stipulated that the entered model had to be listed in the catalog and equipped with all the features of the commercially available car: windshield, soft top, fenders, lights, and a spare tire. Furthermore, it had to have a «comfortable body,» which excluded the participation of a tandem or a «faux tandem» (a type of tandem).

The only car entered was built on the chassis of a standard CGS, whose body had been modified and whose engine, as with the racing versions, retained only the external appearance of the standard one:

«The engine was the one with which Marius Mestivier had broken the flying kilometer and flying mile records at Arpajon in 1924 (147 km/h for the kilometer and 136 km/h for the mile). With this engine, the speed, with the soft top and windshield folded down, was close to 130 km/h» (testimony of Pierre Chan).

The Morel (driving) - Mestivier (standing) crew and their Amilcar in the streets of Le Mans after scrutineering, the day before the 1925 24 Hours of Le Mans. Amilcar officially participated in the first three editions of the race (in 1923 with Boutmy-Marcadanti (18th), in 1924 with the same pair (14th) and Morel-Mestivier (DNF), in 1925 with Morel-Mestivier (DNF). The company entered two more cars in 1926, but they both withdrew. After 1925, no more official Amilcars were seen at Le Mans.

The car, entrusted to André Morel and Marius Mestivier, started the race with number 51. The race turned tragic when, around 8 p.m., after four hours on the track, Marius Mestivier lost control of the car, veered off the track, and was killed. This death plunged the entire team into despair. The loss was devastating; Mestivier, an Amilcar driver since the company's inception, was particularly well-liked within the Racing Workshop he managed. He passed away just a few months before the presentation of the new six-cylinder car on which, of course, he was working. Amilcar would no longer officially participate in the 24 Hours of Le Mans. We will see that in 1926, the company applied for two entries, but both six-cylinder cars were forced to withdraw. Later, cars from the Saint-Denis-based marque would participate in the famous endurance race, but under the guise of private entries.

1925 24 Hours of Le Mans: pit stop for the Amilcar #51 driven by Morel and Mestivier. The car still has its top up (regulations required it at the start of the race). At that time, the pit area was still located on the Mulsanne Straight. The Amilcar was assembled from a CGS chassis, a tandem engine, and a body inspired by that of the CC type.

L'accident de Marius Mestivier pendant les 24 Heures du Mans 1925

The circumstances of Mestivier's accident will never be definitively established. Accounts vary depending on the news outlet reporting them: Under the headline «The Death of Mestivier,» L'Echo des Sports (opposite) of June 21st wrote: «...but soon a terrible noise spread, quickly confirmed by the departure of an ambulance. A serious accident had befallen Marius Mestivier, the excellent Amilcar driver. As he passed the grandstands and attacked the long straight beyond them, heading towards Mulsanne, the car spun out tremendously, overturning on its unfortunate driver, who was killed instantly. Marius Mestivier was one of our best drivers, long attached to Amilcar, for whom he had achieved numerous victories. Both daring and cautious, he was also an exceptional development driver.» He was barely 30 years old, having been born in Sanzy (Loir-et-Cher) in 1895, and lived in Le Raincy, on Allée de la Limite. Desolation reigns in all the pits and among the drivers, who all appreciated their unfortunate and loyal comrade.

Marius Mestivier (1895, Sancy - 1925, Le Mans).

For its part, Voitures Légères, in its July 1, 1925 edition, reports:

«The automotive world has been deeply affected by the death of poor Mestivier, who was killed on the Le Mans circuit. It is known that the cause was simply a tire blowout (L'Auto of June 21 also supports this theory, editor's note).

And one can only wonder that such a serious accident resulted from such a minor incident.» This terrible consequence can be explained as follows: the section of the circuit where the accident occurred was practically the only place where drivers could rest and attend to the details of their engine's operation. It is more than likely that at the moment the explosion happened, Mestivier was busy adjusting his lubrication system. He was therefore taken by surprise, and the subsequent reflexive jerk of the steering wheel could not, alas, be corrected.

L'Echo des Sports, June 21, 1925.

Pierre Chan's recollections complement these articles: «As the engine's oil consumption was relatively high, we had planned for an auxiliary tank next to the driver (the frequency of lubrication stops in the pits was regulated). He had a hand pump on the floor which he had to use to transfer lubricant into the engine.» It is believed that the accident was caused by the fact that, while pumping oil, he leaned over for a moment and lost sight of the road. This happened on the long straight of the Mulsanne Straight, when he was traveling at approximately 130 km/h. He must have veered off course and come too close to the edge of the road. Roads at that time were bordered by small earthen embankments, occasionally interrupted by a small drainage ditch. It is thought that Mestivier, deviating from his trajectory, struck one of these ditches. His car was launched into the air at full speed. He died of a fractured skull. After Marius Mestivier's death, his brother Maurice became the chief mechanic for the Racing Department. Later, he held a position as an assistant in the Commercial Department and, after the war, founded the Autobleu company.

After Amilcar withdrew from racing in 1929 and until the 1950s, he drove a former factory Amilcar privately.

Marius Mestivier at the wheel of his tandem in the factory courtyard on the return from the Château-Thierry hill climb, April 13, 1924.

Fin 1925 : La course continue

The death of Marius Mestivier did not bring an end to Amilcar's racing program. The Racing Department had to be reorganized. His brother Maurice was promoted to chief mechanic, while Morel was given the title of head of the Department.

Until the end of the season, André Morel remained the sole driver officially representing the company, but his program was reduced to three outings: the Val-Suzon hill climb, the 24 Hours of Spa Grand Prix in July, and the Mont Ventoux hill climb in August. In the meantime, he finalized the development of the 6-cylinder car, whose first outing, initially scheduled for the Arpajon Record Day on October 11, had to be postponed. The Type CO 6-cylinder finally appeared on October 18 at the Gaillon hill climb, where it achieved an exceptional performance, and observers immediately recognized the potential of this new racing car.

24 Hours Grand Prix of the Royal Automobile Club of Belgium, Spa-Francorchamps, July 19 and 20, 1925. Four Amilcars were at the start, but none were officially entered by the factory. Although one was prepared by the Racing Department, the one equipped with the supercharger was fitted by Lebovitch, the company's agent in Brussels. On this occasion, Amilcar experimented with supercharging on a 4-cylinder car from the Racing Department. The engine was fitted with a Cozette supercharger, which was still being developed. The setup had not been sufficiently tested, and car number 51, driven by Morel-Lebovitch, experienced numerous spark plug problems, requiring constant pit stops.
Despite its many stops, it finished 10th. A second car (no. 47), factory-prepared with a conventional engine, was entered by the Rouleau brothers, importers for Belgium. It retired. The other two cars were entered by private Belgian enthusiasts.
On car no. 51, the exhaust pipe passes through a box whose function is unknown.

1926 : Une année prometteuse

The 4-cylinder racing cars are definitively retired and the 1926 season looks very promising for the Amilcar Racing Service, which will have two, then three 6-cylinder cars.

Seconde partie

Des origines du projet aux premières courses des 6 cylindres

1924-1926

L'Atelier des Courses devient le Service des Courses

In early 1922, the preparation of cars for racing was carried out informally. A «Racing Workshop» gradually took shape as the brand's involvement in competition became increasingly regular.

The construction of specific cars, such as the tandems in 1923-24, and even more so the highly ambitious 6-cylinder project, explains the Workshop's evolution into a fully-fledged official Racing Department.

Its staff was recruited from among the factory's best workers, particularly the development engineers and chassis testers who performed road tests before delivery. For a factory employee, being assigned to the Racing Department was a source of great pride: they were now part of the elite of their profession. Working during the week assembling and preparing the cars, some of these colleagues were sent out on weekends to racetracks or hill climbs to assist the drivers. During the era of the Racing Workshop, some of them participated in races as onboard mechanics (also called driver-mechanics), the only person authorized to assist the driver in case of repairs to the car during the race.

From the beginning of the 1925 season, due to too many accidents, the regulations changed and prohibited mechanics from riding in the car during races. They were now confined to the pits. This new regulation, enacted to save lives, was not unanimously accepted by the drivers, who were deprived of immediate and effective assistance during the race in case of mechanical problems, and even less so by the mechanics themselves, robbed of their pride in sharing the glory—or misfortune—of a driving ace. Furthermore, this decision shattered the dreams and hopes of those who aspired, through this path, to one day become drivers.

Lee Guinness's accident in his Sunbeam at the San Sebastian Grand Prix on September 27, 1924, in which his mechanic Tom Barrett was killed, led to the new regulations. It should be noted that circuits were now much shorter and the presence of a mechanic on board was essential on a racetrack.acé développant souvent plus de 100 km avant la guerre de 1914-1918, ne se justifie plus.

This article, published in L'Auto on October 14, 1924, explains the reasons why the presence of a mechanic on board the car became obsolete. It predates by a few months the official decision of the AIACR (International Association of Recognized Automobile Clubs), created in 1904 at the initiative of the ACF (the oldest automobile club in the world). This association became the FIA (Fédération Internationale de l'Automobile) in June 1946. The AIACR, through its International Sporting Commission (CSI, which became FISA in 1978), initially aimed to defend the interests of organizers and competitors and to improve safety. The new regulation prohibiting the presence of a mechanic on board was adopted by the AIACR in October 1925. Published in January 1926, it specified that the bodywork must still have two seats and a minimum width of 80 centimeters.

This change in regulations came after the design of the first Amilcar 6-cylinder type CO cars, conceived in 1924; they were therefore built with a two-seater body. The subsequent cars, type CO Déporté (1927) and, even more so, MCO (1928), would be designed as single-seaters.

From 1927 onwards, the Racing Department, in addition to its assembly and maintenance of factory cars, handled the assembly, testing, and fine-tuning of customer 6-cylinder cars, which were manufactured individually, outside the production car assembly workshops.

In late 1928/early 1929, the closure of this department for budgetary reasons forced the factory to reassign most of its staff to less prestigious tasks. Some of these mechanics prefer to leave Amilcar and set up their own businesses as garage owners or engine specialists/tuners, with a great business card that refers to their past in the factory's Racing Department.

Victor Persot and Auguste Lavèze highlighted their previous roles at the Racing Service (team leader for the former, racing mechanic for the latter) to attract customers to their Parisian garage.
Auguste Lavèze was born in Paris in 1896 and died there in 1955. Persot's identity remains unknown.

Les essayeurs

From 1924-1925, the factory, now housed in the vast buildings of «La Fournaise» in Saint-Denis, acquired engine testing and break-in benches, which it had lacked at its location on Rue du Chemin-Vert. However, essential road testing was not abandoned, as reported by a journalist from the magazine Je Sais Tout after a visit to the Amilcar factories in September 1926:

«...and the car, still without a body, already looks very good. It already has 'the Amilcar look,' there's no mistaking it! And it seems 'ready to drive,' ready to receive its exeat (exit permit). Excuse me!» For this, it lacks one essential thing: the stamp of approval, the director's pass, which isn't granted blindly. The company intends to deliver to the buyer only a «fully finished» car, tested, checked, and fine-tuned. The final tests will take place on the road. It will be the «baptism of the cobblestones.»

We would all like to climb onto the «soapbox,» next to the driver in overalls, and go for a spin in the suburbs. Alas! The chassis doesn't have two seats; we must be content with watching it start up, turn sharply at the factory gate, and speed off towards the Seine bridge… But here comes another one just now. The driver jumps out and goes to write his report. The slightest defect will be denounced by him as a flaw. Was the engine too thirsty, or too sluggish? Were the brakes a bit too soft? The specialists were there, ready to remedy the problem and uphold the company's good reputation with their practical experience.

For his part, Pierre Chan, recently hired, didn't yet own a car at that time and was eagerly awaiting the chance to buy his first Amilcar. He recounts:

«In the mornings, you could usually see a strange caravan leaving the factory with a loud roar of open exhausts and controlled skids. About ten chassis, each topped with a sort of wooden box secured by bolted brackets and fitted with a thin cushion serving as a seat, would speed out. Leading the way was the chief test driver. The destination was a town about fifty kilometers from the factory where the team had found a suitable restaurant for lunch.» Then came the return journey, each tester having meticulously noted all their observations in a notebook after making the necessary adjustments.

Back when they were based on Rue du Chemin-Vert, the testers would leave Paris via the Bastille and the Porte d'Italie, heading towards Fontainebleau. A partir de 1925, les essais se déroulaient sur la route de Saint-Denis à Chantilly au nord de la capitale».

In another interview, he returns to the subject:

"Sometimes, when I could take a weekday off from the office, I would take advantage of the test drivers leaving for the road to ask for a ride. Of course, I had to make do with the uncomfortable, wind-blown cabin and the harsh suspension due to the car's light weight, but this discomfort was compensated for by the sheer pleasure I got from the lightning-fast acceleration of these incredibly maneuverable little machines. The day came when I was finally able to buy a car and thus become independent."

The considerable cost of these tests, requiring skilled personnel, and the improved quality of the cars thanks to more uniform machining tolerances and more efficient assembly—following almost exactly the methods used by the major manufacturers—explain why these systematic tests were abandoned, probably during 1926.

However, as we will see later, they resumed for the C6 type, with each model being tested before delivery. These tests drew the ire of the Municipal Council of Ezanville, located about ten kilometers north of Saint-Denis, as evidenced by an article published in L'Intransigeant on July 22, 1929. The testing team consisted of about ten people. Each chassis, without exception, was tested over approximately one hundred kilometers. Taking into account the preparations, the travel time (between 1 hour 30 minutes and 2 hours), any necessary adjustments, and the cleaning upon return, each tester can only test one or two chassis per day.

On that beautiful summer day of July 8, 1924, ten test drivers from the Amilcar factory posed under the flowering wisteria vines of the Café-Restaurant des Tilleuls, located in the Sénart forest, southeast of Paris. They were all wearing their classic work clothes: overalls, caps, glasses of the same type as those worn by the PLM railway's engine drivers, and, for the ultimate touch of elegance, scarves around their necks. In one of the men's pockets, a small notebook could be seen, allowing him to record his observations. The test driver had to demonstrate a keen sense of mechanics and have a trained ear to detect the slightest imperfections. The job, pleasant in good weather, turned into a real ordeal on stormy or bitterly cold days, due to a lack of protective gear. Yet, this position was highly sought after, especially by young mechanics who saw it as an opportunity for rapid advancement. The test drivers are considered «aristocrats» by the factory workers.
They enjoy considerable autonomy both inside and outside the workshops. The invaluable experience gained through testing explains why the «mechanic-racers» who will accompany the drivers in races are selected from among these highly skilled personnel.

Despite his boyish appearance, Georges Rebourg, a «test driver and development engineer» in the Testing Department, is 24 years old. Over his mechanic's overalls, he wears a thick canvas gabardine.
The chassis being tested is that of a CC cyclecar. A basic bodywork, fitted for the tests, is installed on the bare chassis. It consists of a wooden frame housing a rudimentary bucket seat, a toolbox containing a few tools, the spare wheel, rear mudguards reduced to their simplest form, and front fender supports that were not deemed necessary to install on the rain-free day of the test. The entire assembly is quickly fitted as a single unit over the steering column and secured to the chassis frame with a few clamps. The hood and dashboard are also temporary and reused for each test.
The four wheels are part of the Testing Service's equipment, which explains the advanced tire wear and the different spoke pattern of the front left wheel compared to the other three. Carrying a spare tire is not a superfluous precaution in an era when roads are still largely used by horse-drawn carts. Horseshoe nails and sharp flints in the road surfaces are harsh on tires of uncertain quality and cause frequent punctures.
The four-digit number (4484) painted on the chassis rail will be the one recorded on the registration document. The second number, 565, is the engine number. The license plate at the front of the car bears a factory registration (W1).

Georges Rebourg (Régny 1899-Vaucresson 1980) remained with Amilcar from October 1923 to March 1925. Previously, he worked for a year at Panhard. He left Amilcar for the Caffort company, located at 125 bis rue du Chemin Vert, which manufactured engines for industry, aviation and automobiles.

The article appeared in L'Intransigeant on July 22, 1929

1926: about twenty workers pose in a very formal manner around the apprentice who is blowing into an oil funnel with an extended neck, acting as a bugle. The two figures on the left are sitting on the front of a 6-cylinder car.

Le personnel du service des courses

The atmosphere is friendly and relaxed within the Racing Department. The workers there enjoy greater freedom than those involved in the production of standard cars. Their time isn't constrained, but their availability is essential when it comes to finalizing the assembly of a car or even traveling at the weekend to assist the drivers at a race.

The Racing Department is also mentioned in the previously cited press article:

«The small caravan of Je Sais Tout is now preparing to take leave of its obliging host... But he is still willing to open for them the doors of another sanctuary, on which are written, in black and white, letters a foot high: 'The public does not enter here.' An exception is made in our favor. Let's take this opportunity to

The team of mechanics from the Racing Service dispatched to the Italian Grand Prix at Monza in September 1926 poses almost in its entirety around one of the three race cars entered. In the foreground are the three mechanics, each responsible for one car. In the background are five other mechanics and, in a suit, Arthur Duray. The two other drivers, André Morel and Charles Martin, are not in the photo.

contemplate, as in a museum, the glorious trophies from all the races in which Amilcar triumphed.» Telegrams announcing the brand's numerous recent victories are displayed on the walls.

The appearance of this last workshop differs significantly from that of the previous ones. Dismantled chassis lie side by side; here and there, disjointed car bodies; a racer in running order; in one corner, stacked engines; in another, hoods still covered in the dust and mud of the harsh circuits. Only four or five workers labor unhurriedly, meticulously, restoring the machines, worn by the effort but not yet broken. The «push-started» cars that come here to rest are the benefactors of their more modest counterparts, the tourists.

A moment of relaxation in the workshop.

A mechanic has settled into a 4-cylinder car. He is surrounded by some of his colleagues from the Racing Department, including a significant number of young apprentices.

1927-1928: about ten employees surround Maurice Mestivier (in dark overalls), chief mechanic of the Racing Service. Two MCOs, one placed high up and the other serving as a seat for the mechanics, are being assembled.

This mechanic seems particularly proud, seated aboard a remote CO in the workshop. In the background, a CO type can be seen. Both the CO and remote CO types are 6-cylinder «factory» models.

Un projet ambitieux

The idea of designing an entirely new car to replace the four-cylinder racing cars obviously originated within the factory, but it's impossible to pinpoint who was behind it or to precisely date the decision. This highly ambitious program, starting almost from scratch, required a very substantial budget. It clearly had the full support of management, who may even have been its instigator.

The idea likely took root at the beginning of 1924, or perhaps in the last months of 1923. Naturally, Edmond Moyet, the chief engineer, assumed technical responsibility. The specifications were simply to design and build a completely new car, exclusively dedicated to racing.

The objectives, contingent on expected victories, were to consolidate the brand's already established reputation after only three years in existence and to boost sales against Salmson. Amilcar therefore opted for an 1100 cc car, a displacement modeled on that of its production models but opting for a cutting-edge mechanic incorporating the most advanced technologies of the time, a solution in total rupture with the tradition of the company, which until then had specialized in the production of well-built and high-performance engines, but of great architectural simplicity.

L'annonce officielle

Amilcar's management took advantage of the banquet held for agents during the Paris Motor Show on October 9, 1924, to unveil the new racing program and the start of development on these new racing cars. In reality, the project had already been underway for several weeks, as evidenced by the signatures validating an engine plan dated September 1924. The daily newspaper L'Homme Libre, in its October 10 edition, perfectly described the situation:

"The Amilcar company, which has more than 300 agents in France and abroad, most of whom were currently in Paris, had gathered them for a friendly luncheon at Ledoyen, chaired by Mr. Akar, assisted by Messrs. Marcel Sée and Lamy. Marcel Sée, the managing director, delivered an important speech, the main passage of which is as follows:

"We have thus far raced, and I must say, generally with success, with our production cars." I believe that today it is time to prepare cars capable of delivering the fantastic performance demanded of them in racing. That is why our Council, under the chairmanship of our very kind Mr. Akar, whom we all support with our unwavering dedication, has decided to allocate a significant and special budget to provide our great «aces,» such as Morel and Mestivier, with instruments worthy of their abilities. The implementation of this program is underway.

Following the banquet, all the guests visited the Amilcar factories, where a model organization prevails and where the production capacity is truly remarkable.

The banquet held at Ledoyen during the Paris Motor Show took place on October 9th, but a second dinner was organized on the 12th. «These banquets strengthen the bonds between the brands, their agents, and the press, but what a stomach you need!» Mr. Mauvais concluded the series of speeches on behalf of the agents.

Le Gaulois, October 13, 1926. Jean Mauvais is an agent based in Madrid.

In their respective issues of November 24, 1924, and January 1, 1925, L'Auto et Moto-Revue revisited the subject, providing some further details:

"As we have already announced, the Amilcar company is determined to take a very active part in the major races of 1925. To this end, it has just begun construction of six special-type cars. These cars feature 1100 cc, 6-cylinder monobloc engines with a bore and stroke of 55 x 77 mm, and twelve valves operated by two camshafts. Each will be equipped with a supercharger.

As for the drivers, the team will consist of Morel and Mestivier, the two well-known aces, but nothing has yet been decided regarding the other driver(s)."

Une entreprise florissante

Sales volume, turnover, and the number of workers have been steadily increasing since the company's inception in 1921. In 1924, this period of euphoria and financial strength continued. The commercial success of the 6 and 7 CV models offered to customers (CC cyclecar, CS, C4, and CGS voiturettes, and Type G cars) allowed Amilcar to generate substantial profits, enabling it to finance such an undertaking. Simultaneously, increased production necessitated the development of infrastructure and machine tools. As we have seen, during the year, the company began its gradual relocation from Paris to Saint-Denis.

La societe vue en interne

While the company projected an image of dynamism and continuous expansion during its early years, some members of management and staff remained vigilant and called for greater attention. The following excerpts from the internal report attest to this, and while the company was indeed very profitable, they listed numerous irregularities in several departments. These three typewritten pages, on plain paper, without letterhead, are unfortunately unsigned and undated. However, through cross-referencing, they can be dated to early 1925, specifically March 5, 1925. They are written in a rather informal style and likely originated from a relatively senior department head addressing his superiors directly. At that time, the firm, founded four years earlier, was still thriving, with orders pouring in. But while turnover doubled between 1923 and 1924, it remained virtually unchanged between 1924 and 1925, and profits stagnated, a sign of lax management or, at the very least, of a carelessness on the part of the leadership, who were simply taking advantage of favorable circumstances… The 6-cylinder model was then in development and would not make its first test drives until the summer of 1925.

Original text of this memo addressed to Mr. Sée:

"A company that stops progressing regresses: this is certainly the case with ours.

Since the 1923 Motor Show, we have enjoyed a prodigious momentum that surprised and amazed the world for two years. Our chassis had no competitors, and our Sport bodies were unparalleled in terms of design (Petit Sport, Sport Bois, Sport Aluminium, CGS)." Then, for two years running, the 10 CV was a real wolf in sheep's clothing, to call a spade a spade. The CGS deeply disappointed the public and poisoned the atmosphere among dealers. Our bodywork, by its very presentation, turned off buyers. The presentation of our chassis, too. Good mechanical engineering is essential, it's the foundation, but it's not everything. Presenting it well and dressing it well are equally crucial. Yet, until recently, «delivery» was far too often considered a negligible quantity. You wouldn't dream of ordering whites in October and a fur coat in April (Whites or Marcel, undershirts knitted by the Roanne hosiery company Marcel Eisenberg, editor's note); would you?

Well, here, we open our «Summer Exhibition» in November and our «Winter Exhibition» in the spring. Indeed, the CGS, which were supposed to appear flamboyant in the first fine days of 1924, began to show themselves - very dull - during the off-season, then in abundance and very «ugly» in the middle of winter.La conduite intérieure et les cabriolets avec différentiel qui devaient être livrés aisément en novembre le seront en mars. Ajoutez à cela les ruptures d'essieux (un millier environ), de biellettes de direction (deux cent environ, avec mort d'hommes), le dodelinement des roues contre lequel deux années durant nous sommes restés impuissants.

DanIn the details, we have erred and continue to err greatly due to a lack of organization in the various departments that are in direct contact with customers. I won't speak for the others, as I don't know them.

1. Deliveries:

The delivery was poorly executed (the presentation of the chassis and bodywork was absolutely appalling). There were gross errors of all kinds, missing parts on the cars, in the tools, etc. Cars marked as ready are never actually ready: agents and customers wait for hours on end, impatient and furious in the waiting room, ready to criticize.

2. Spare Parts:

The mail is overflowing with complaints about missing parts and outrageous delays that immobilize customers' cars. This is terribly damaging to the brand's reputation. There's no parts catalog for the 10 CV model, nor a parts catalog, for a year now, since these models have been on the road.

3. Repairs:

Faulty, unreliable 10 HP and CGS engines, damaged from the moment they're installed, sit there for months on end. Their absence from the customer's car highlights the flaw in our vehicles of these models.

At the café in the evening, the customer who has to walk for months is ridiculed by his friends. The dealers, in such cases, when they can do the necessary work at home, carry out the repairs at night so that «no one will know.»

4. Sales Department:

Many dealers don't have a price list because it's impossible to send them from the showroom due to a lack of packaging (Mr. Patisson's version)? Sending 50 price lists to each of our 150 dealers takes a month. They're short of them in the meantime. It was the same situation under Mr. Barrois. No photos to send to dealers who want to advertise at their own expense. No rankings. No more advertising copy to give to agents, I mean, no more newspaper clippings where we ran them. We come across as shabby, cheapskates, small-minded people.

I swear I'm not exaggerating. Getting even the smallest thing is a feat; inertia is what holds you back.

I fear that this 1925 season is ill-suited to bucking the tide that's dragging us down. We're entering the spring with simply the same models we had in 1922-1923. Nothing new to offer these models to pull them along. Tourists sell mainly because they have noble, purebred parents, in our Grand Sports cars, in our racing cars.

It's a kind of pedigree for them. The man who buys a car because he needs it, just as a farmer needs clogs to walk, will buy a Citroën, a Renault. The Amilcar buyer is someone who also needs a car, but who is interested in automobiles in general, who understands a car, who appreciates it on hills, in acceleration, at speed, who doesn't think, «What does it matter if it takes five minutes longer to get from one place to another?» The Amilcar customer is a latent or declared sportsman. He is proud to be an Amilcar enthusiast (editor's note: the word existed at the time!) if the brand is in the spotlight, but the opposite would quickly happen if the brand's prestige were to fade. And, I repeat, it is fading; the prestige is fading, the laurels are withering, and indifference is taking hold.

And understand this: we have no way of changing our customer base. «You don't hitch a thoroughbred to a cart.»

The "big wolf", the 10HP, implicated in the report.

Un projet immédiatement mis en œuvre

The design of the new racing car began in 1924. The initial plans focused on the engine. From January 1925, while the drawings of the various engine components continued, work began on the front axle and gearbox. Next, in chronological order, came the studies of the front and then rear suspensions, and later, the design of the chassis frame. In parallel with the engine drawings, in February 1925, the design office signed off on plans for a Roots-type supercharger.

Les hommes du bureau d'études

In Saint-Denis, the design office, comprising ten draftsmen under the supervision of a department head, quickly became the nerve center of the new factory. Mechanics, assemblers, and fitters came there to exchange information, receive orders, or listen to the latest gossip. These two excerpts from Pierre Chan's notes to the author provide some insight into the workings of the design office:

«Moyet gave his general directives based on his ideas but didn't draw anything. He came to the design office every day to discuss our ongoing work with Dubois, Chinon, and myself.»

«The official drivers often visited us to give us their perspective on various problems. As for Mestivier, we saw him daily because the Racing Workshop was located practically below the design office.»Edmond Moyet

Born in Toulon on March 30, 1893, Edmond Moyet died in Paris on April 9, 1954.

He began his career at Le Zèbre under the technical direction of engineer Jules Salomon, who founded the brand with Jacques Bizet.

During the First World War (1914-1918), he was assigned to Citroën, on the Quai de Javel, as a «draftsman/engineer.» There he met Salomon again, who, following a disagreement, had left Le Zèbre in 1917.

Both were tasked with planning for the conversion of shell factories into automobile plants. Under Salomon's direction, Edmond Moyet collaborated on the designs of the 10 HP, Type A, the first Citroën and the first French car to be mass-produced, starting in 1919.

Shortly afterward, he was entrusted with the study and design of its smaller derivative, the future 5 HP. At the same time, he designed a small car, putting his own ideas into practice.

Moyet was hired in 1921 by Lamy and Akar. He brought with him the drawings of his cyclecar, which would become the Amilcar Type CC when it went into production. Edmond Moyet, who had not attended the École des Arts et Métiers (School of Arts and Crafts), was nevertheless given the title of Chief Engineer by his new employers. This title was well-deserved: he possessed the skills and

Edmond Moyet began his career at Le Zèbre before a brief stint at Citroën. He revealed his true talent at Amilcar, where he was responsible for the design of all their models. He left the company in 1934 and returned to Citroën.

Miramas, March 1926: Edmond Moyet, recognizable by his leather gabardine, his felt hat and, above all, by his traditional chronometer slung over his shoulder.

talent required for the position.

He designed all the brand's cars, from the CC type (1921) to the 5 CV known as the «Moyet license» (1932-1934), except for the Pégase (1934) and Compound (1937) models, which were launched after his departure. Indeed, he left Amilcar in August 1934 when the financially drained company decided to lay off most of its staff and relocate to Boulogne-sur-Seine, to the modest premises of the former Mira spring factory, where it survived until 1939. When the Saint-Denis factories closed, Moyet rejoined the Citroën design office. He was soon joined there by his colleague Marcel Chinon, who had remained in Boulogne for a while longer. At Citroën, both men participated in the design of the 2CV – Edmond Moyet was the architect of the water-cooled engine for the pre-1939 prototype – and also led the development of an engine (which was ultimately abandoned) for the future DS, a revolutionary car that Moyet would not live to see in its final version, presented at the 1955 Paris Motor Show.

All the models designed by Moyet at Amilcar proved to be technical successes, with the exception of the 8-cylinder model, whose engine suffered from a chronic lubrication problem. His masterpiece remains the magnificent 1100cc twin-cam 6-cylinder engine.

Marcel Chinon

Marcel Chinon, born in Tours in 1900, was self-taught. After a brief apprenticeship, he worked for a year as a fitter in an elevator manufacturing company. He joined Citroën in 1916, and, under the supervision of Jules Salomon, from 1917 onward, he performed menial tasks (numbering plans, small drawings) before being taken under the wing of Edmond Moyet, who convinced him to attend courses at the Conservatoire des Arts et Métiers (National Conservatory of Arts and Crafts). In 1922, he left Citroën to join Moyet at Amilcar. Pierre Chan recounts:

"Except when absolutely necessary, Chinon specialized solely in the design of engines and gearboxes. I myself worked on chassis, axles, rear axles, brakes, steering, and all the fuel system components. I also designed the bodies for racing cars."

Indeed, Chinon designed and signed the majority of the plans for the main engine components (crankshaft, pistons, connecting rods, etc.),

the supercharger, and the gearbox. He was assisted with the sub-components by draftsmen Roussellet and Muller.

Antibes 1928: André Morel, Edmond Moyet and Marcel Chinon.

At the end of August 1926, after Dubois' departure, Marcel Chinon was appointed head of the design office. From that date onward, he was less active at the drawing board but countersigned the plans drawn by his subordinates. Dismissed during the reorganization of Amilcar in 1934,

he rejoined Citroën in 1935, where he was reunited with Edmond Moyet.

Marcel Chinon died in Paris in 1984.

This overview of positions of responsibility highlights a revolving door of several technicians between Citroën and Amilcar. Moreover, in addition to Edmond Moyet and Marcel Chinon, Paul Taboureau, assistant to the manufacturing director at Citroën since 1915, joined Amilcar in 1924 to take over the same position.**Paul Taboureau** est né en 1894 à Paris. Après son passage chez Amilcar, il entre chez Simca, toujours comme chef de fabrication. Il est décédé à Antony en 1981.

Pierre Chan

Born on June 12, 1898, in Grasse (Alpes-Maritimes), Pierre Chan passed the entrance exam for the École Nationale des Arts et Métiers in Angers in 1916. Upon the declaration of war, he immediately enlisted as a volunteer until the end of hostilities. At his request,

he was transferred to the air force and trained as a fighter pilot with SPAD 94 squadron. Shot down in aerial combat on June 9, 1918, he was taken prisoner.

Returning to civilian life, he first worked as a technical secretary for the Demaria-Lapierre factories, manufacturers of photographic and cinematographic equipment in Lagny-sur-Marne.

He was hired by Amilcar on October 1, 1921, and worked there until July 29, 1927. He was a key figure during the company's prosperous period. Having started as a simple draftsman in the design office, he was promoted in 1926 to assistant head of that department. In 1927, he left to start his own business repairing automobile radiators, in which the Akar brothers held a stake.

He returned to Amilcar on October 19, 1932, but was forced to leave permanently on November 14, 1933, when the company began laying off staff.

After this second stint at Amilcar, from 1934 to 1939, he held various technical positions, first at Renault, then at Peugeot and Simca. In 1939, he was mobilized to the Amiot seaplane shipyard in Cherbourg as head of the tooling department. After the war, he joined the design office of the Jeumont-Schneider Electromechanical Engineering Company in Le Mans before founding and managing his own design office (general mechanics and tooling) from 1957 to 1967. In the meantime, he founded the Union of Civil Pilots of France. Pierre Chan died in Le Mans on July 25, 1990. Having worked at the heart of the company for many years, he had become the living memory of Amilcar. A few articles published in *L'Album du Fanatique de l'Automobile* (The Automobile Fanatic's Album) and his own accounts, collected by the author in the 1970s, were essential in reconstructing the history of the brand for which he had a true passion and of which he successively owned several models.

Pierre Chan, hired by Amilcar in 1921, left the company in 1927 but returned in 1932, though only for a year. Much later, he became one of the key figures in passing on the history of Amilcar, a brand for which he had an unwavering passion.

Maurice Dubois

Maurice Dubois, from a very modest background, was born on May 22, 1894, in Argenteuil. His father was a pastry chef, and, likely due to his parents' long working days, he was primarily raised by his grandparents. He managed to begin engineering training but appears not to have completed his studies, as the outbreak of World War I (1914-1918) caught him by surprise at the age of 20. Described as a «draftsman/fitter,» he was mobilized into the Navy in Brest as a second-class seaman specializing in mechanics. His battalion of marine-soldiers was virtually wiped out in 1915.

After being hospitalized for 44 days due to pneumonia, he was first transferred to a flotilla of armed trawlers tasked with patrolling the English Channel coast, then assigned to a «photoelectric» station (coastal searchlights and optical signals) in Boulogne. He was subsequently moved to Cherbourg before serving with torpedo boats in Dunkirk. In July 1918, he was stationed on the Greek island of Corfu. After attending a military flight school,

he earned his seaplane pilot's license (No. 93) on October 21, 1918 (it should be noted that he had likely discovered seaplanes during his childhood in Argenteuil, a town that had a quay and a 4-kilometer straight runway on the Seine dedicated to seaplane testing).

At his request, he was transferred to the fledgling naval aviation service. Promoted from the rank of seaman to the immediately superior rank of quartermaster, he then carried out a series of fighter patrols against enemy submarines. Discharged at the end of 1918, his lungs severely weakened, he began a career as a design draftsman at the Georges Lévy Company, an aeronautical subcontractor, located on Rue Michel Carré in Argenteuil. He worked there from December 20, 1918, to September 20, 1919. From September 22, 1919, to March 31, 1920, he held the same position at the Louis Janoir Company, a manufacturer of motorcycles and seaplanes. He then joined Société Lorraine, a manufacturer of automobiles and railway equipment (April 14, 1920 – January 19, 1921), before taking up a similar position at Louis Schreck, Quai de Seine in Argenteuil, whose factory manufactured seaplanes under the FBA (Franco British Aviation) brand. He remained there for only six months (February 1921 – August 1921) before immediately joining Amilcar, that is, before the company was officially established. At his new employer, he was responsible, among other tasks, for finalizing and submitting the patent for a front brake assembly (FR 571402 filed on October 2, 1923). This device would be applied to all future production.

Dubois was head of the design office until 1926, when he left the company to become a traveling salesman. The 1931 census shows that he was still living in Argenteuil, where he declared himself an «engineer-salesman.» In 1949, he founded his own company importing and distributing machine tools and equipment.

Argenteuil was the birthplace of the seaplane in France. Several workshops building this type of aircraft had been established there since 1912. Maurice Dubois worked in several of them including the Louis Schreck establishments, before joining Amilcar permanently.

He maintained some connections in the automotive world, particularly with the engineer Jean-Albert Grégoire (a proponent of front-wheel drive with his Tracta and later the creator of numerous prototypes).

Maurice Dubois regularly used his personal Amilcar until 1955. He died in Eaubonne on July 13, 1969, at the age of 75. He had married Hélène Wehrlé in 1920, with whom he had two children (in 1923 and 1933). His grandson, born in 1955, wrote about him in 2022:

"My grandfather never spoke to us about the war, at most about his seaplane flights and their mechanical problems. These small biplanes, made of wood and canvas held taut by piano wires, still managed to fly at altitudes of over 1,800 meters." When we spotted a submarine, we'd drop a bomb or two by hand, without much success, even though these submersibles took a long time to dive. They only retaliated with rifle fire. Although he wasn't much for playing with his grandchildren, I had managed, through sheer persistence, to lure him into my room for a toy soldier battle with my father's tinsel.

Finally, he came in, bent down, and swept aside all the soldiers I had lined up in trenches. I frantically told him I wasn't ready yet, but he retorted, «We weren't ready in 1914 either,» and left me standing there!

Maurice Dubois was head of the Amilcar design office from 1921. He left the company in 1926, just as the 6-cylinder engine, on which he had worked extensively, was beginning to build its exceptional track record. He was replaced by Marcel Chinon, who remained in this position until the factories closed in 1934.

Maurice Dubois photographed well after his departure from Amilcar

It is worth noting that Maurice Dubois, who joined Amilcar at the very beginning of the company, left in August 1926, just as the 6-cylinder cars, on which he had undoubtedly worked extensively, were achieving excellent racing results. Had he realized that, in the long run, the company was no longer viable due to its imprecise management (it filed for bankruptcy in early 1927), or did he seize the opportunity to become independent by becoming a traveling salesman?

The letter below is addressed to Miss Thérèse Solomas. Dated November 25, 1927, it confirms her hiring as a secretary. A month later, she would become the third wife of Joseph Lamy, who had already left the company.

Job advertisement published in L'Auto on January 21 and 23, 1925. The 6-cylinder program entails assigning the best draftsmen from the design office to the plans for the future car. Other draftsmen must be recruited for their usual work.

Mademoiselle,

Following your discussions with our Managing Director, Mr. Sée, we confirm your employment in the Sales Department and that you will report directly to the Managing Directors.

Your remuneration will be as follows:

- 1. Fixed salary: three thousand five hundred francs (3,500 francs) per month,
- 2. Bonus per car sold and delivered: seven francs (7 francs), paid at the end of the month.

In the event of termination, the notice period will be three months, with the severance pay consisting solely of the salary specified above.

Please acknowledge receipt of this letter and accept our sincere regards.

Signed Marcel Sée and Louis Baer.

Effervescence au Bureau d'Etudes

From the moment the 6-cylinder car project was announced, the design office staff entered a period of euphoria and intense work.

Testimony of Pierre Chan:

«...I had just gotten married... From that moment on, I devoted myself entirely to the work of the Amilcar design office, especially since it had just been decided that we would fully commit to competition, not with improved production cars but with a true racing car designed specifically for it.

The Montlhéry autodrome had just been inaugurated in October 1924 and would allow manufacturers to conduct their tests in better conditions than on open roads. It was also designed to host competitions without resorting to makeshift circuits, as had been done until then.

Amilcar decided to use these new facilities for the development of our new racing car.» The CO prototype project began in late 1924 while Amilcar was still located on Rue du Chemin-Vert in Paris. Our initial plan called for the construction of ten 1.1-liter, six-cylinder cars with supercharged engines, capable of outperforming all our competitors.

The work was divided between Chinon and me, based on Moyet's preliminary designs. The other draftsmen in the office were responsible for refining the details and creating the tracings. Chinon and I were so enthusiastic that we sometimes lost track of time at our drawing boards. What could be more exhilarating for a technician than to give free rein to their imagination without being constrained by the ever-present price tag, so restrictive when it comes to designing a production car?

Upon the departure of Maurice Dubois (August 31, 1926, editor's note), the chief engineer of the design office who had just set up his own tooling business, Chinon took over and I became his deputy.

Quelques autres souvenirs de Pierre Chan

extraits de la correspondance entretenue avec Gilles Fournier dans les années 1970.

From the late 1970s onward, the author, passionate about Amilcar, was already searching for any documentation and images related to the brand. Having learned that Pierre Chan had retired to Le Mans, he managed to get in touch and met him at his home. The former draftsman then sold him some of his archives. Two generations had met to discuss their shared passion. Thanks to the interest of his young interlocutor, fresh out of his studies, the old man was delighted to relive a part of his youth. Since the two men lived quite far apart, further meetings proved difficult. And, as Pierre Chan was already quite elderly, time was unfortunately of the essence. It was therefore agreed to continue the conversation through letters. Thus began a question-and-answer correspondence that turned out to be relatively costly for the future author, who was unaware of his own worth, as the old Amilcar enthusiast lived frugally on a small pension and charged for his replies by the line! The amount varied depending on whether these notes were handwritten or typed.

The following anecdotes, like all the accounts reproduced in this book, are taken from them. It should be noted that Pierre Chan possessed a virtually infallible memory, as almost all his recollections, including those concerning technical data, have been confirmed by the discovery of new archives.

It is worth remembering that when he was hired by Amilcar in 1921, Pierre Chan was 23 years old. Passionate about automobiles, he already had his driver's license but did not yet have sufficient means to buy a car… "One day, I was finally able to buy an Amilcar. It was one of the very first racing cyclecars, whose appearance at the Grand Prix of the Lyon Motorcycle Club had sparked the brand's sporting ambitions." (Chan is referring to André Morel's first race on October 23, 1921, editor's note).

This strange, skiff-like machine (a small, flat, and tapered boat) was so narrow that the passenger, despite the seat being set back, had difficulty finding a comfortable position. Since no regulations prohibited it at the time, a free-flowing exhaust was fitted, which was very popular with young people. To open the exhaust, a lever was located on the floor and, in a touch of refinement, directly in front of the passenger seat, under their legs... As a result, when the passenger was female, the need to operate this lever became strangely frequent for the driver... The ride was very pleasant because the lightness of the vehicle allowed for strong acceleration, and hills were climbed at high speed, effortlessly overtaking all the other cars that were unable to keep up. … One day, as I was speeding down a tarmac road under a bridge nicknamed the "Black Bridge," I spun out violently, probably on an oil slick, and continued backward at full speed, even though I had released the accelerator and disengaged the clutch. I traveled what seemed like a long distance, probably about fifty meters, and came to a stop, the engine stalled. Fortunately, traffic was very light and the risk of a collision very low.

…One morning, as I was driving from Neuilly to Rue du Chemin-Vert via Rue Saint-Antoine, one of my front wheels, which had very narrow tires, got caught in one of the tram tracks. It was raining and the cobblestones were slippery. I couldn't get free until the tram coming from the opposite direction had stopped. The impact was extremely violent, and my poor cyclecar was crushed right up to the tram's running board. Furthermore, the tram platform was damaged. The worst part was that the insurance policy I was negotiating hadn't yet been taken out, which promised serious financial trouble. (Car insurance wasn't yet mandatory; it wouldn't become so until 1958, editor's note). The tram company was demanding damages, and my beautiful cyclecar was beyond repair. Fortunately for me, Amilcar's management, thanks to its connections, was able to have the tram project shelved. As for the cyclecar, I sold the wreckage to my head of design, who, having a workshop in the suburbs, offered to rebuild it.

I then bought (in 1923) the new «sport» type C4 car, which had just been launched and gave me a great deal of pleasure.

Slightly slower than the cyclecar but much more comfortable, it served us well for a long time. We shared many adventures together, which I still remember with emotion, more than half a century later.

Among other escapades, I had decided to go to Lyon to attend the ACF Grand Prix (in August 1924) and I had taken Marcel Chinon, the chief draftsman in the design office, with me, whom I had invited. Luckily, he had no idea what awaited him!

First of all, it must be said that after the war, the roads were in a deplorable state. Only a few rare sections were paved and passable, but they sometimes turned abruptly and without prior warning into dirt and gravel.

These roads, poorly maintained or not maintained at all, were riddled with potholes of varying depths. In broad daylight, it was possible to slow down before encountering them, but at night, the surprise was complete, and the risk of breaking a spring or even going off the road was high, especially since the headlights didn't provide exceptional illumination.

In short, the achievable average speeds weren't very high, even when driving fast, and were at best between 60 and 70 km/h. That's how we arrived in Chalon-sur-Saône at nightfall, very tired after driving for a long time in thick fog. We looked for a hotel to get some rest. We had asked for an early wake-up call so as not to miss the start of the Grand Prix, and we hardly slept at all. We set off again while it was still almost dark, and we weren't fully awake. Exceptionally, the road was good and straight, and I took advantage of it to go fast. I accelerated, and the engine noise rose, becoming suddenly so loud that in a flash of reason I realized I had shifted into second gear.

The moment I shifted back up, a terrible clanging noise was heard,

accompanied by a strong smell of frying oil. I had just caused a «connecting rod salad.» Lubrication in this type of engine was done by splash lubrication, and it was necessary to ease off the accelerator from time to time to allow the oil to return to its proper level in the troughs where the connecting rod heads drew it.

The rest of this story has unfortunately been lost, but one can imagine that the two protagonists were unable to attend the ACF Grand Prix…

Regarding another car he owned:

"I had just bought (1927) a new bare Amilcar chassis, a Type L (8 CV, editor's note), and I had the same special bodywork made that Morel had commissioned for himself from our coachbuilder, Duval in Billancourt. It was a two-seater faux-cabriolet with a trunk.

This body, extremely well-crafted and luxuriously upholstered in cloth and rosewood marquetry veneered with lemonwood, was unfortunately very heavy for its engine, as the total weight reached 980 kg.

Furthermore, the gearbox only had three speeds." The engine was a long-stroke, four-cylinder unit with a displacement of 1187 cc, while the displacement of its successors was increased to 1244 cc with a four-speed gearbox (M-types).

Nevertheless, my colleagues in the design office and I made a bet to drive from Paris to Marseille in a single day. It was the dead of winter, the nights were long, and the wind was howling, bringing down tree branches onto the road. I covered the 793 kilometers in 13 hours, averaging 61 kilometers per hour.

So I won my bet, and also suffered a terrible backache because the suspension was so stiff. I only stopped twice to refuel. The oil supply was provided by a small pressurized tank under the hood, the flow of which I could control without stopping, thanks to a large-diameter tap.

I ate sandwiches and bananas and drank tea from a thermos.

As with the previous memory, the ending of this hike is missing.

Organigramme des usines Amilcar

The internal upheavals stemming from the liquidation of SNPA in 1927 went unnoticed by customers, especially since the press remained silent. As production continued uninterrupted, orders were fulfilled, and the model range expanded. However, for a keen observer, the temporary price reductions, solely aimed at boosting sales and quickly replenishing the company's desperately needed cash reserves, could have instead revealed the emergence of serious difficulties.

The following list summarizes the hierarchical organization of the Amilcar factories in Saint-Denis between 1924 and 1934. A significant change occurred in early 1929 with the elimination of the Racing Department.

Before the relocation to Boulogne following the closure of the Saint-Denis factories in the summer of 1934, the Amilcar company was organized as follows:

Managing Director (equivalent to General Manager): Emile Akar (1921-1927)

Service Commercial :

Directeur commercial : *Joseph Lamy (1921-1927)*

Secrétaire commerciale : *Thérèse Solomas*

Responsables des ventes : *Maurice Boutmy (Nord de la France), André Morel (Sud de la France)*

Directeur Technique : *Marcel Sée, Henri Renoult (à partir de 1927)*

Ingénieur en Chef : *Edmond Moyet (1921-1934)*

Bureau d'études :

Chef du Bureau d'études : *Maurice Dubois (1921-1926), Marcel Chinon (1926-1934)*

Assistant puis Adjoint du Bureau d'études : *Pierre Chan*

A dozen draftsmen (under the supervision of Chinon and Chan) work in the design office. Each specializes in a particular area, but there is also overlap in their skills. Rousselet, who specializes in drawing small engine parts, also works on the plans for the cylinder head and the C6 chassis. Muller designs the gearbox gears, camshafts, valves, pistons, and connecting rods. Charbonnel designs the rear axle.

Chef de Fabrication : *Edmond Delmer (1921-1924), Paul Taboureau (1924-1934)*

Production :

530 employés en 1924, 1020 en1925, 1200 en 1926, 600 en 1927-1928, 730 en 1933-1934.

Responsable du montage des moteurs : *M. Poillerat*

Responsable du montage des châssis : *M. Delafosse*

Chef Outillage : *M. Bernard (5 dessinateurs)*

Service des Réparations

Service des Essais :

Chef de la Mise au point et des Essais : *Lucien Van Parys*

Une dizaine d'essayeurs (dont *Fardeau, Fratissier, Chanut, Marcadanti, Crespel, Rebourg) et* autant de mécaniciens.

Atelier, puis Service des Courses :

Chef du Service : *André Morel*

Mécanicien en chef de l'Atelier des Courses : *Marius Mestivier* (1921-1923)

Mécanicien en chef du Service des Courses : *le même de 1923 à 1925, remplacé par son frère Maurice (1925-1929)*

Une dizaine de mécaniciens

Pilotes officiels :

André Morel (1921-1929), premier pilote - Marius Mestivier (1921-1925) - Charles Martin (1926-1928) - Arthur Duray (1926-1927) - Jules Moriceau (1928-1929).

Les premiers essais à Montlhéry, été/automne 1925

The engine study, which began in September 1924 and continued smoothly until July 1925, was carried out at a rapid pace. Simultaneously, the design office developed the other mechanical sub-assemblies and the chassis. The final plans for the chassis were approved on March 26, 1925, and assembly of the car followed soon after.

Pierre Chan explains:

"In order to study the behavior of the new car, it was decided to begin testing before the supercharger design was completed. As soon as the prototype was finished, we went to Montlhéry to conduct tests on the new speed track. Lacking a supercharger, we had fitted a vertical carburetor from which six intake manifolds extended. Specialists are well aware of the drawbacks of such an arrangement for a six-cylinder engine. The single carburetor and its long manifolds, which generate condensation, result in difficult starting and erratic acceleration." But time was of the essence, and we had little choice. On the other hand, the engine ran perfectly once it was running. The car immediately revealed its many qualities, which allowed us to foresee a bright future. Indeed, a machine that requires too many modifications before being satisfactory is comparable to a suit that needs alterations and never fits properly!

Morel completed several laps of the track at an average speed of 175 km/h, which confirmed our predictions. The only problems encountered came from the spark plugs and valve springs, issues that were quickly resolved.

(It is unlikely that such an average speed was achieved with a 6-cylinder engine without a supercharger. It should also be noted that the springs would cause further problems, particularly at Miramas in June 1926, editor's note).

In the last third of 1925, the Roots supercharger was completed and its development carried out on the 6-cylinder engine. It proved entirely satisfactory from the outset.

«The supercharger, finally machined and installed, allowed the car to reach 190 km/h.»

(These tests with the supercharger, but still with the intake manifold in the chandelier configuration, were carried out in September/October 1925, editor's note).

Lucien Van Parys, after serving as head of development and testing and then head of the repair shop, left Amilcar in late 1926/early 1927 to establish his own garage in Boulogne-Billancourt. At a time when Amilcar was dominating racing, relying on his expertise was a mark of reliability and prestige. Lucien Van Parys (spelled as such on his birth certificate) was born in Le Havre in 1892 and died in Paris in 1961.

The tests at the racetrack continued, and the few journalists present remained incredulous at the new Amilcar, so vast was the gap in performance compared to other 1100cc cars. Thus, on September 12, 1925, L'Auto reported:
"At the racetrack yesterday, Morel was 'gasping' incredibly hard. If we weren't afraid of being indiscreet, we would say a figure—exceeding 150—which would give an idea of the speed reached by the new little racing car from the brand so dear to the Lyon-born driver…"

The engineers in the design office, the modelers, foundry workers, machinists, assemblers, and developers had achieved a remarkable feat. Indeed, less than a year had passed between the initial sketches and these first tests. Amilcar thus achieved a fantastic leap forward from a technical point of view by moving from a very classic lateral 4-cylinder to a particularly sophisticated 6-cylinder, a true mechanical masterpiece.

This racetrack was frequently used by Amilcar racing cars, both official and unofficial, for private testing and the numerous races in which they participated. Built on the Saint-Eutrope plateau, 30 km south of Paris, at the initiative of Alexandre Lamblin (1884-1933), an industrialist who made his fortune manufacturing radiators for aircraft, it occupies a 240-hectare site. Its construction involved colossal amounts of deforestation (40,000 trees) and earthworks. The 2,548.24-meter-long track consists of two short straights, four steeply banked corners with a 250-meter radius, extended by 280-meter-long connecting curves that allow for very smooth and fast entry and exit from the corners. The track is 18 meters wide, widening to 21 meters in the curves, which, with an average gradient of 51°, allow speeds of around 220 km/h. The steep gradient of the curves gradually eases before connecting to the two short straights. The infrastructure of these curves consists of a forest of 3,300 pillars and 7,000 sleepers cast in reinforced concrete, a highly innovative design for the time. The on-site prefabrication of sub-assemblies and the division of the construction site into 12 sections were equally groundbreaking. The project employed up to 2,000 workers.

The track's design and construction are the work of engineer Raymond Jamin (1891-1980). The study and design took him only one month. Another remarkable feat: the workers took only six months to build it! The autodrome was officially opened on the weekend of October 11th and 12th, 1924. The MCF Grand Prix, a race between large cars, and a race between cyclists paced by stayers were on the program. At that time, only the oval track was operational. Eldridge had already achieved a lap speed of 210.230 km/h in early October, a record immediately broken by Parry Thomas.

The French Grand Prix for voiturettes was won by Goutte, ahead of Casse and De Marmier, all driving Salmsons. The 250cc and 350cc motorcycle Grand Prix saw victory for the British driver Le Vack (JAP), while the 500cc Grand Prix was won by Richard and his Peugeot.

The Champions' Match was won by Eldridge and his Fiat, ahead of Thomas (Leyland) and Duray (driving a D'Aoust with a Hispano engine). As soon as the meeting, attended by 50,000 spectators, ended, a Bignan took to the track to attempt to break the 24-hour record dating back to 1907. Ridden by Marie, Charles Martin, and Gros, it fulfilled its objective by covering 2,930.193 km.

On October 1st, on the same Montlhéry track, Léon Vanderstuyft set a new world record for the hour in cycling behind a stayer (107.710 km). The road circuit, over 12 km long and very challenging, was built soon after, and the 1925 ACF Grand Prix was held there. Several circuits could be used based on this layout. Despite its popularity with competitors, particularly those aiming to set all sorts of records, the circuit was not profitable, and the operating company

was declared bankrupt in 1926, at a time when Lamblin's businesses were also experiencing serious financial difficulties. The industrialist, completely ruined, died in 1933 at the age of only 48.

The photo was taken during the trials organized for the official inauguration of the autodrome on October 11 and 12, 1924. By studying the document carefully, one can see Parry Thomas's white Leyland and Eldridge's Fiat.

An example of a race start with almost empty stands.

After many ups and downs, only the 3.3 km circuit is still in use today. The road circuit was abandoned, the track having been heavily damaged by vehicles from the nearby military camp. The last race held on this course dates back to 1971, for the 1000 km of Paris.

The Opening Grand Prix on May 17, 1925, saw Duller (Talbot No. 3 in 3rd position) take the victory ahead of Conelli and Segrave (No. 1). The two Talbots were about to overtake Morgan's Thomas Special (No. 22).

Numerous races are held at the autodrome, which struggles to attract spectators due to difficult access (no direct railway line, and a narrow, steep access road from the N20). Races run with nearly empty stands are common. However, the races held on June 7, 1925 (photo opposite) drew a large crowd. In the Prix Icare, De Marmier (Salmson) won ahead of his teammate Casse. Car number 7 is another Salmson driven by Goutte, and number 11 is the EHP driven by Maurice Benoist. The direction of rotation (here counter-clockwise) would later be reversed.

In 1933, the Petite Rosalie, driven by César Marchand's team, covered 300,000 km at an average speed of 93 km/h. This performance would not be surpassed until 1963 by Ford. At the Miramas autodrome, the 12M then covered 354,273 km at an average speed of 106 km/h.

From 1925 onwards, the circuit was frequently used by Amilcar's Racing Department to fine-tune the development of their 6-cylinder engines. Furthermore, privately owned C6s made several record attempts (see, in particular, the chapter on Widengren's car, volume 2). However, the most famous record remains that set by the Citroën Rosalie in 1933 (300,000 km at an average speed of 93 km/h).

Une première sortie plusieurs fois reportée

The car's first outing, initially scheduled for the Brooklands 200 Miles on September 20, 1925, was postponed to October 11 for the Record Day organized by the Motocycle Club of France in Arpajon. The newspaper L'Auto, in its October 6 edition, commented on Amilcar's entry «with a new 1100cc, 6-cylinder supercharged engine.» This information was confirmed on the 11th, the day of the event, and the journalist went on to specify:

«Today in Arpajon, world records will be fiercely challenged. It's worth noting that this fine day will serve as the debut, in public competition, of the new 1100cc supercharged 6-cylinder Amilcar, from which we expect the best results.»

He then lists the entries and their assigned race numbers: Amilcar is entered with its 6-cylinder car under number 37, in the 1100cc racing category, where it is to compete against Casse's factory Salmson number 36. A second Amilcar, a 4-cylinder, is entered in the 1100cc sport category under number 39. It will be up against Doré's Sénéchal number 40. But, in reality, neither Amilcar appears at the start. No information emerged in the following days to explain the reasons for this withdrawal, even though on the morning of the event, Morel was fine-tuning his settings at the Montlhéry autodrome, very close to Arpajon, as reported by Moto-Revue in its November 1, 1925 edition:

«If Morel did not start the day of the Record attempt at Arpajon, it was not because he 'lost his nerve,' nor due to a lack of speed, because those who saw him lapped the autodrome on the morning of the 11th know that he was still going remarkably fast.»

L'épreuve inaugurale : 18 octobre 1925, course de côte de Gaillon

Finally, the first official appearance of the 6-cylinder Amilcar took place eight days later, on October 18th, at the Gaillon hill climb in the Eure department.

Created in 1899, this event is one of the oldest hill climbs organized in France (the Nice-La Turbie and Chanteloup-les-Vignes races date from 1897 and 1898 respectively). 1925 marked its 21st edition, and for the third consecutive year, the start was a standing start rather than a rolling start. The straight, one-kilometer course took place on the Sainte-Barbe climb, on National Route 182 (later renamed N13bis and then N15), between Vernon and Rouen. Its average gradient was 9%.

Cautiously, the factory pre-registered two cars for Morel: a four-cylinder (no. 98) and a six-cylinder (no. 115), but this precaution proved unnecessary as the six-cylinder was now fully developed, meaning Morel wouldn't need to use the four-cylinder. Favorable weather and the road surface, resurfaced for the occasion, contributed to a flurry of records. The fastest time was set by René Thomas in the Delage DH, a 12-cylinder, 11-liter engine. With an average speed of 121 km/h, he improved upon his own record set the previous year. He finished ahead of the Talbot 1500 driven by Jean Chassagne (107 km/h). Morel, with his new 1100, achieved the third-fastest performance of the day at 104 km/h.

For their first participation, Morel and his Amilcar pulled off a masterstroke. They caused a sensation by achieving a time of 34 seconds, shattering the category record held since 1924 by Mestivier, also driving a factory Amilcar, but with a 4-cylinder engine, by 9 seconds.

With such a result, the 6-cylinder Amilcar heralded a revolution in the 1100 class. This class would be definitively impacted by this little racing car, whose qualities and performance changed the game. Rival manufacturers, seemingly stunned, remained virtually silent, often technically or financially incapable of designing such a sophisticated car. They were relegated to the role of mere spectators. The press unanimously reported the brilliant performance, but without highlighting the Amilcar's technical specifications. The newspaper

L'Auto, the day after the race, published the most comprehensive article on the event:

"One of the biggest factors contributing to the success of the Gaillon race was the extraordinary performance of the new 6-cylinder Amilcar, which executed a sensational gallop up the famous Sainte-Barbe ramp. The first official outing of this racer with its clean lines was eagerly awaited. It was a revelation. Despite its small engine, the Amilcar appeared to everyone to be one of the fastest of the day; the impression of speed was tremendous."

The result speaks for itself. Morel, who was driving the vehicle, exceeded an average speed of 104 km/h over the 1000 meters of the formidable hill. The record was broken, and so thoroughly broken that the average speed jumped by 21 kilometers per hour compared to the previous record. This was the largest difference observed among the generally outstanding results of the day. One conclusion is inescapable: Amilcar's new creation represents a mechanical achievement that abruptly marks a major leap forward. Those in the know were not mistaken, and they, so difficult to impress, had only one topic of conversation yesterday: Amilcar's performance.

Morel in action on the Sainte-Barbe ramp in Gaillon. At the top of the hill, he was clocked at over 150 km/h.

The comments in other newspapers were just as laudatory but also rather vague regarding the car's mechanics. One could read:

«Amilcar shatters records.» «Up the Gaillon climb, from a standing start, at an average speed of over 104 km/h, Amilcar simply broke the event records for all vehicles up to 8 liters of engine displacement and its own record by more than 8 seconds!» Le Journal, October 19, 1925.

«Morel and the new 1100cc six-cylinder Amilcar caused a sensation: the acceleration was breathtaking; Amilcar has developed an ultramodern racer.» L'Homme Libre, October 20, 1925.

«...in racing cars, it was a revelation and the extraordinary performance of the new 6-cylinder Amilcar.» Despite its small 1100cc engine, the Amilcar's speed appeared to be one of the fastest of the day, and it was true: its driver, Morel, exceeded 104 kilometers per hour on average, beating the previous record by 21 kilometers per hour on average" (Le Temps, October 20, 1925).

"At Gaillon, Morel, on one of the new 1100cc cars, achieved a stunning performance." Starting from the bottom of the hill, it reached speeds of over 150 km/h at the top of the grueling 1-kilometer climb." L'Auto, November 11, 1925.

We had to wait until the article in Dimanche-Auto, on November 15, for a brief description of the car:

"The new Amilcar racing car is equipped with a 6-cylinder engine, 55 mm bore and 77 mm stroke (1097 cc displacement), with twin overhead camshafts, the cams actuating the valve stems via oscillating fingers. Very lightweight tulip valves with triple return springs. Rear-mounted timing by spur gears. Cylinder block. Light alloy pistons, roller bearing connecting rods, crankshaft with plates machined from a single piece of metal, pressure lubrication by two pumps." At the front of the engine, a Roots or Cozette compressor sends fuel gas to the cylinders at approximately 1 kg of pressure; high power speed: 6000 rpm.

But, as is often the case, it was the English press that was the most vocal. It emphasized the «Grand Prix» technology of the new Amilcar. The Light Car and Cyclecar of October 30, 1925, focused on this in an article entitled:

«Interesting Details on the New Supercharged 6-Cylinder Amilcar.»

«The new Amilcar racing 6-cylinder, which, as mentioned in a previous article, made a successful debut at the Gaillon hill climb, was taken to Montlhéry last Friday (October 23) and underwent fine-tuning tests. Driven by Morel, the well-known Amilcar representative, the car completed several laps at speeds approaching 112 miles per hour (over 180 km/h).»

The car was built solely for racing and record attempts, and the brand has no plans to put this model on the market at this time.

The engine is a monobloc design, following the classic layout of those found in large racing cars. It has the appearance of a Grand Prix engine viewed through the end of a telescope. All the usual features are present: two overhead camshafts under an aluminum cover, and a Roots-type supercharger mounted at the end of the crankshaft. The supercharger itself is mounted on ball bearings, as are the camshaft bearings, which are driven by a cascade of gears at the rear of the block. The valve angle, one for intake and one for exhaust, is 90°. (The journalist is mistaken; the angle is 100°.)

The engine has a bore of 55 mm and a stroke of 77 mm. The normal operating speed is around 6000 rpm, giving a power output of 83 bhp on the test bench (brake horsepower).

«The center of gravity is very low, and the car's excellent handling was particularly noted at the Gaillon hill climb.»

For its part, The Autocar wrote on November 27, 1925:

«The remarkable and promising performance of the miniature Amilcar racing car suggests that it will be a formidable competitor in next year's events.... It is interesting to note that the Amilcar firm of Paris has created what can be considered the first 1100 cc racing car, distinguishing itself from sports models modified for racing.» Thus, the car's first appearance was at the Gaillon hill climb, where, with Morel at the wheel, it beat all the competitors except for Thomas's large 12-cylinder Delage and Chassagne's 1500cc Talbot. For comparison, the Amilcar's time was 34.75 seconds (104.465 km/h), Chassagne's Talbot 1500's was 33.25 seconds (107.784 km/h), and Thomas's Delage's was 29.75 seconds (121.621 km/h).

After Gaillon, testing continued at Montlhéry, as evidenced by the article by Charles Faroux in L'Auto on November 11, 1925:

"The Amilcar company, which is preparing for a major sporting season in 1926, recently came to our attention, first at Gaillon, then at Montlhéry where a car of the same type covered 93 kilometers in 30 minutes."

Advertisement published in Le Petit Journal on October 21, 1925.

This article appeared in L'Auto on October 19, 1925. It was a disguised advertisement in the form of an article that appeared on the front page of the newspaper the day after the race. This practice, also widely used by other manufacturers, would be repeated after each victory of the 6-cylinder Amilcar. These few glowing lines brought in a lot of money for their author and the newspaper.

The Amilcar CO is back in the workshop after the Gaillon race. Work on the bodywork and engine will continue for many months.

Seconde (et dernière course) de l'année 1925, course de côte de Gometz-le-Châtel

The Gometz-le-Châtel hill climb (a town in the former Seine-et-Oise department, now in Essonne), held on November 22nd, closed the 1925 season. Organized by the French Motorcycle and Cyclecar Association, the event took place in the Chevreuse Valley, 25 km southwest of Paris.

The race started with a rolling start at the bottom of a 7% gradient hill, on a perfectly straight one-kilometer stretch of road. The finish line was also marked by a rolling start. This was the 6th edition of this event, where speeds were high and the machines could maintain that gradient without the driver needing to change gears. It brought together 94 competitors, ranging from mopeds to 5-liter cars.

This poor-quality document shows the Amilcar CO used at Gometz-le-Châtel. The four wheels have been fitted with hubcaps (inner and outer) for improved aerodynamics.

The new regulations allowed for multiple attempts.

Still somewhat hesitant about its new machine, the Amilcar Racing Department entered two cars for Morel once again: the 6-cylinder CO, registered in the racing category (no. 112), and a 4-cylinder in the sport category (no. 89).

Before the arrival of a generous sun, this autumn morning was misty and cold. The still-damp road was dotted with patches of black ice. The first start, scheduled for 8:30 a.m., was therefore delayed by two hours:

«After a test run by Péan on a 500cc Peugeot motorcycle, which left him less than enthusiastic due to several slides, an army of sweepers was needed. After spreading sand to dry the road, they had to deploy in a 'skirmish' formation to clean it up.»

Despite this setback, the day was filled with remarkable achievements. The best time of the day went to Chassagne, in his Talbot 1500cc, with a time of 26 seconds, representing a speed of 150 kilometers per hour.

«In the sports category, Morel, driving his 4-cylinder car, despite several attempts, was hampered by carburetion problems and had

to relinquish first place to Valette's Salmson.» (Salmson secured one of its last victories against Amilcar here.)

In contrast, in the racing category, Morel, the great Amilcar «ace,» with his 6-cylinder engine, immediately behind Jean Chassagne, also performed brilliantly. With his fantastic little 1100cc engine, he shattered last year's record and secured the second-best time of the day across all categories with a splendid average speed of 142.857 km/h, thus confirming his victory at Gaillon. (L'Auto, November 23, 1925)

Thus, for its second race of 1925, the Amilcar 6-cylinder type CO confirmed the remarkable performance achieved during its first outing at Gaillon a month earlier. It demonstrated that it was a well-designed car with a promising future. The Autocar magazine, in its November 27th edition, emphasizes:

«Wonderfully executed, extremely well-designed, and capable of unprecedented performance, as the initial tests in France have revealed, the new Amilcar racing car will be a formidable competitor in next season's races.»

The Racing Department has two months to perfect the car in preparation for the 1926 season, whose busy schedule begins at the end of January on the French Riviera.

This short article, published in L'Auto on November 23, 1925, at Amilcar's expense, resembles a regular article but is, in reality, a genuine advertisement. It also serves, incidentally, to list the suppliers who provide the Racing Service with various bonuses.

Les recrutements de Charles Martin puis d'Arthur Duray

Since June 1925, following the accidental death of Marius Mestivier, André Morel remained the sole driver, both in testing and racing. In preparation for the 1926 season, the Racing Department was reorganizing. Plans were in place to field up to three cars in certain events. This time, Amilcar was not relying on its internal talent pool and was recruiting highly experienced drivers.

Charles Martin signed his contract at the end of 1925. He came from Bignan and was 36 years old.

«The Amilcar Racing Department has just made a valuable addition: we can now officially announce the arrival of the affable Martin to the team, which is led by the capable André Morel. And throughout 1926, with its packed sporting calendar, we will see both of these exceptional drivers competing in race after race with their Amilcars.» Need we recall Martin's career? For several years he participated in the most important races, driving for Bignan, not to mention his numerous successes in the 2-liter category in various hill climbs. His impressive overall victory in the 1923 San Sebastián Grand Prix for Touring Cars should be highlighted, as should his victory, teaming up with Matthys, in the 2-liter category of the Belgian RAC 24 Hours Grand Prix; and also his position as world record holder for the 24-hour race from October 13, 1924, to May 19, 1925. (L'Auto, November 5, 1925)

The third driver only appeared mid-season. He was the Belgian Arthur Duray, a 42-year-old veteran who had experienced the era of motorsport. His debut dates back to 1903 at the wheel of a Gobron Brillié, during the Paris-Madrid race. Remaining young at heart and armed with solid experience, he would prove, through his results, to be an excellent recruit for the firm.

The official pilot team. From left to right, André Morel, first pilot, Charles Martin and Arthur Duray.

Negotiations were apparently conducted with other drivers, but without success. Thus, Le Figaro of January 2, 1926, under the headline «For Whom Will They Race?», wrote:

«Some reports presented Robert Benoist's commitment to a manufacturer famous for its 1500cc engines as a done deal. This is not the case; Benoist has just signed his contract with Delage, where he will also be in charge of the sales department. He will, moreover, be the only racing driver, with Thomas as head of the racing department. Wagner and Divo will, however, drive Delages from time to time. Furthermore, it is likely that Divo will also race for Amilcar, which is preparing 6-cylinder engines whose off-season testing has been outstanding.»

(Albert Divo ultimately signed with Delage, editor's note).

Début 1926 : Les premières épreuves de la saison et la réception par le Service des Mines

The year 1926 began at a breakneck pace for the Racing Department. The calendar was packed: some thirty events were scheduled throughout the season, some with a single car, others with two, and sometimes three. Morel made a victorious start on January 24th, winning his class at the Camp hill climb near Marseille, then, near Menton, at the Moyenne Corniche hill climb on February 20th and at La Turbie on February 25th, and finally, on the same day, at the standing-start kilometer race on the Promenade des Anglais in Nice.

Meanwhile, work was underway in Saint-Denis to complete the assembly of two more 6-cylinder cars. In anticipation of the delayed homologation of the model by the Mines Department, Maurice Dubois sent a terse letter to the Chief Engineer of that department on February 26:

"We would be grateful if you would summon us for the inspection of our new 7-horsepower chassis, the descriptive notice of which is enclosed."

The appointment was set for March 1, then postponed to March 2. On that day, the Mines Engineer accepted the car under the designation "Amilcar Type CO Voiturette," specifying "special type for sporting events 1926."

This homologation request may seem surprising for a car exclusively dedicated to racing, but it was essential to comply with the regulations of certain road sporting events that required registered cars and to complete customs formalities in the event of participation in an event abroad.

The test took place on March 2, 1926, on vehicle no. 1 with engine no. 1. The CO type was classified as a voiturette (light car) and not a cyclecar. Indeed, although its engine displacement was less than 1100 cc, it weighed over 350 kg.

The technical specifications selected by the mining engineer were as follows:

- Brake power = 100 hp with turbocharger, 60 hp without turbocharger.
- Maximum engine speed: 6300 rpm.
- Speed achieved on the Linas road circuit: 195 km/h at approximately 5600 rpm.
- 6-cylinder engine, 55 mm bore x 77 mm stroke, 1094 cc.

This handwritten document, written and signed by the mining engineer on March 2, 1926, is the official record of the type approval for the CO model. Amilcar referred to it as the «special type for sporting events 1926.» The handwritten sheet is filled with numerous calculations based on the legal mathematical formulas then in force. The tax horsepower declared by Amilcar is 7 CV, but the engineer's calculation, based on his own standards, yields 6 CV, later revised to 12 CV due to the supercharger.

Letter from Maurice Dubois to the Mines Department dated February 26, 1926, countersigned by Marcel Sée.
The Mines engineer's notes are unfortunately difficult to read: they specify the date of the summons (March 1st, only 3 days after the request was written) as well as some characteristics of the car: Brake power 60 hp without turbo*, 100 hp with turbo. Maximum engine speed 6300 rpm. 195 km/h at Montlhéry (road circuit) with a 15 x 55 gear ratio.
On the acceptance form, the engineer changed the manufacturer's declared administrative horsepower from 7 hp to 12 hp, recalculated according to the official formula.
*turbo or turbocharger: these terms were often incorrectly used in the 1920s to refer to a simple supercharger.

Saison 1926 : l'Amilcar six cylindres s'impose

During a triumphant 1926 season, the Amilcar team participated in a total of 27 events (hill climbs, Grand Prix, record attempts, and others), some in Switzerland, Italy, and England, and most often secured first place. During 1926, the design office was already imagining and developing evolutions of the CO type. These different models are discussed in the following chapter.

The reports of all these races are gathered in a dedicated chapter.

Notes complémentaires de Pierre Chan au sujet des dirigeants d'Amilcar

Emile Akar :

"Emile Akar was a shrewd businessman. He had three brothers: Paul, a company director; Jean, a veterinarian turned businessman; and André, a banker. They were the sons of the man who, in partnership with my grandfather, had founded the family clothing business.

Emile Akar had married Clémence Cahen, daughter of a very wealthy, self-made industrialist who, having started out selling packets of coffee on the street with a small dog-drawn cart, had ended his career at the head of a large roasting plant complemented by a chain of stores throughout France. It was the company "Au Planteur de Caïffa." His fortune came from the idea he had of putting a silver coin as a gift in some of his first packets of coffee. It was the beginning of sales with premiums."

Emile Akar was very fond of luxury and high society, and owned a hunting lodge in Sologne, which he sold during the Amilcar bankruptcy proceedings to pay off the creditors. At the beginning of the affair, he lived in a small townhouse on Rue Berlioz in the Grande Armée district. Some time later, he bought and completely renovated a very fine townhouse on Rue Jean Goujon, near the Grand Palais. He had several servants and a chauffeur, and he loved luxury cars. I knew him to own, successively, a Voisin, a Chrysler, and a Hispano-Suiza. Of course, he also owned Amilcars. His old chauffeur, Joseph, was legendary, having always been in his service. He had become a close friend and was always eager to give his boss advice. Emile Akar, who addressed me informally (as I did), often told me he was exasperated, but ultimately, he put up with everything because he was very kind. Emile Akar died in Marseille during the 1940 exodus, as did his young son Robert. (Emile Akar died on November 16, 1940, and Robert in 1942 in the same city, at the age of 31.)

Clémence Akar remarried, this time to a foreign diplomat. We remained in contact until 1953. She lived in Casablanca, Morocco, and then returned to France. (She died in Cannes on January 19, 1979.)

Joseph Lamy :

Unlike Emile Akar, Monsieur Lamy was a slow and thoughtful man. Of medium height, with grey hair, he moved somewhat heavily, like a countryman, a true Norman. He was perfectly assisted by his secretary, known as «Mademoiselle Thérèse» (Thérèse Solomas 1898-1955), whom he later married.

Marcel Sée :

An engineer and friend of Emile Akar, he burst onto the scene at Amilcar shortly before the move to Saint-Denis, a move he had instigated.

Ambitious and somewhat megalomaniacal, he pushed Emile Akar into an adventure that ended badly, involving considerable investments at a time when the global crisis was beginning. It was he who arranged the purchase of the large «La Fournaise» factory in Saint-Denis, with an ambitious production program and very expensive technical equipment.

He also established a coachbuilding factory with his cousin Gilbert Nataf in Courbevoie, a factory he later sold to Amilcar, undoubtedly making a good deal.

He emerged unscathed from Amilcar's successive bankruptcy proceedings, while Emile Akar, out of scruples, sold many of his assets to pay off his creditors. I myself lost 200,000 gold francs.

Genèse des moteurs d'usine

Les 6 cylindres AMILCAR d'usine

Les courses des voitures d'usine
1925-1929

Biographie des pilotes d'usine AMILCAR

Identification des CO Déportés

Des choix à la pointe de la technique

The decision to build an entirely new racing car, as we have seen, dates back to 1924.

The project's launch was officially announced in October, by which time the initial studies had likely already begun.

The first work focused on the engine; the design of the rest of the car (chassis frame, running gear, etc.) would not begin until early 1925.

The manufacturer's objective was clear: the car had to be a success, and within a very short timeframe, with the imperative of having a distinctive Amilcar design to enhance the brand's reputation, showcase its expertise, and, above all, boost sales of production models and further extend the brand's lead over Salmson, its main competitor in the microcar market. The budget was not a problem for the company, whose financial health was very sound at that time. It was therefore decided to draw inspiration from the best Grand Prix engines (limited to 2 liters until the end of the 1925 season), while remaining confined to the voiturette category (1100 cc).

Amilcar thus opted for a sophisticated inline 6-cylinder engine with twin overhead camshafts, supercharged by a positive displacement compressor, with a crankshaft, connecting rods, and camshafts mounted on bearings. Two valves per cylinder opened into hemispherical combustion chambers. Lubrication was by dry sump.

The design office, led by Edmond Moyet, had, until then, never truly worked in the field of cutting-edge technology. The improvement of 4-cylinder engines intended for racing had certainly initiated a genuine culture of competitive mechanics within the company, but this had only involved maximizing the potential of side-valve engines. The dual-camshaft distribution system and turbocharging, for example, are areas that the engineering department has not yet explored.

Taking on this challenge is difficult and is further constrained by deadlines. Since outsourcing the project to an external firm is out of the question in order to preserve the established customer image, the engine design (and the rest of the car) must be carried out in-house. Amilcar therefore decides to rely on the expertise of a technician who has a thorough understanding of these technologies.

La source d'inspiration : le moteur Sunbeam 2 litres de Grand Prix

Pierre Chan explique :

"To avoid wasting precious time and to save on costly experiments, it was decided to poach a design draftsman from the Talbot-Sunbeam firm named Mognet*. This company, located in Suresnes (a western suburb of Paris, 15 km from Saint-Denis), designed the successful British Sunbeam racing cars, whose technology closely resembled what we wanted to achieve. The defecting draftsman brought with him invaluable documentation. This recruitment was orchestrated by André Morel, who had connections throughout the automotive world, particularly at Talbot, Delage, and Voisin.

The Sunbeam engine was a 2-liter inline six-cylinder equipped with a Roots-type supercharger. We created a scaled-down version of it while retaining its general principles." Mognet had initially designed a cylinder head with a removable one, but Moyet preferred a non-removable hemispherical cylinder head integrated with the cylinder block. This resulted in longer and more expensive maintenance, but it prevented head gasket failures and reduced the risk of pre-ignition due to carbon buildup at the gasket.

* This testimony was collected 50 years later: the surname «Mognet» may therefore be unreliable (see below).

A bit of history:

To discover the origins of twin-cam technology in racing engines, we must go back to 1912 and the work of Ernest Henry at Peugeot, then to 1914 when Fiat hired a young engineer named Giulio Cesare Cappa. After the war, for the new Grand Prix car of the 1921 season, Cappa designed the 402 engine, a 3-liter, 8-cylinder, twin-cam engine developing approximately 110 hp at 4,400 rpm. Cappa had very personal designs and rarely drew inspiration from what was being done elsewhere. Therefore, as the table below shows, this 402 engine differs completely from the line of famous twin-cam racing engines developed by Peugeot and then Ballot, initiated by Ernest Henry.

	Peugeot - Ecole française	Fiat - Ecole italienne
Paternité	**Ernest Henry**	**Giulio Cesare Cappa**
Naissance	1912	1921
Chambres de combustion	En toit	Hémisphériques
Nombre de soupapes par cylindre	4	2
Nombre de ressorts par soupape	2	3
Angle interne des soupapes	Entre 60 et 90°	Environ 100°
Trajet des flux	Rectiligne	En col de cygne
Paliers de bielle	Lisses	Rouleaux
Paliers de vilebrequin	Billes	Rouleaux
Bloc-cylindres	Fonderie	Cylindres forgés, chemise(s) soudée(s)

Although the Fiat 802, equipped with the 402 engine, lacked the development necessary to win the 1921 Gran Premio d'Italia, it still allowed Pietro Bordino to set the fastest lap in the race.

In 1922, new Grand Prix regulations reduced the maximum engine displacement from 3 to 2 liters. Cappa then developed the 404 from the 402 engine, a 2-liter, twin-cam, 6-cylinder engine producing 92 hp at 5000 rpm. The Fiat 804/404 won both Grand Prix races in 1922, the ACF in Strasbourg and then the Italian Grand Prix in Monza, thus marking the end of French racing technology's dominance in favor of Italian engineering.

Moreover, a few years earlier, during the First World War, the French army made a decision that had unforeseen consequences for the history of… motor racing! Indeed, Renault was unable to supply sufficient quantities of its 12-cylinder Type 12F engine, intended to power the brand-new and highly regarded Breguet XIV, a single-engine reconnaissance and bombing biplane. It was therefore decided to fill the gap with the 6-cylinder Fiat A12bis engine. The Breguet XIV was then built under license in several factories, including the Darracq automobile factory in Suresnes. In 1917, Fiat sent one of its technicians, Edmondo Moglia, to Darracq to oversee the adaptation of its engine to the Breguet. After the war, Moglia decided not to return to Fiat and to remain with Darracq.

Edmondo Moglia was born in Turin on June 22, 1892. He settled permanently in the Paris region after the First World War. He married a French woman in 1921, applied for and obtained French citizenship in 1933. He died on March 23, 1965 in Paris.

In 1920, Darracq merged with the British manufacturers Sunbeam (Wolverhampton) and Talbot (London) to form the Sunbeam-Talbot-Darracq (STD) group. Under the leadership of Frenchman Louis Coatalen, STD's charismatic and ambitious chief engineer, it was decided that all the group's racing cars, regardless of their brand, would henceforth be designed at Darracq*, while all engines would be manufactured at Sunbeam in England. While the Sunbeams and, especially, the 1500 Talbots achieved impressive results during the 1921 and 1922 seasons, in Grand Prix racing, the Fiats proved unbeatable. STD then decided to change its strategy.

Following mergers and restructurings, Moglia found himself a member of the group's «racing» design office, which didn't prevent him from maintaining strong friendships at Fiat… Thus, as early as August 1922, he convinced Coatalen to hire his friend Vincenzo Bertarione, the technician who had overseen the execution of all the Fiat designs for Cappa. In this way, much to the Italian manufacturer's dismay, Moglia became the Trojan horse for Fiat technology within the Sunbeam-Talbot-Darracq group! The result was immediate: for the 1923 season, Bertarione designed a Sunbeam equipped with a 6-cylinder engine heavily inspired by the Fiat 404 (except for the bore/stroke dimensions and the valve train (a cascade of gears instead of three Y-shaped shafts)). The new car (nicknamed the Green Fiat) won the ACF Grand Prix at Tours, a race that saw the retirement of the three high-performing Fiats, equipped, for the first time, with a supercharger. The following season, again copying Fiat, Bertarione fitted «his» 6-cylinder Sunbeam with a Roots-type supercharger. Power jumped from 108 to 138 hp, allowing Sunbeam to win the 1924 San Sebastián Gran Premio.

*In France, Darracq became Talbot-Darracq in 1920 and then Talbot in 1922.

Le moteur Amilcar :

After this lengthy background, we arrive at the period when Amilcar decided to build a 1100cc twin-cam, six-cylinder engine and when, according to Pierre Chan, «this technician named Mognet» was recruited. The earliest known plans for the Amilcar twin-cam engine date from September 1924, so this technician's arrival at the factory must have been no later than the summer of 1924. Let's now compare the 2-liter Sunbeam six-cylinder engine and the 1100cc Amilcar six-cylinder engine:

	Sunbeam Grand Prix	Amilcar CO
Chambres de combustion	Hémisphériques	Hémisphériques
Rapport alésage/course	67/94 = 0,712	55/77 = 0,714
Nombre de soupapes par cylindre	2	2
Nombre de ressorts par soupape	3	3
Angle interne des soupapes	100° (Ad. : 48°, Ech. : 52°)	100° (Ad. : 50°, Ech. : 50°)
Trajet des flux	En col de cygne	En col de cygne
Commande de distribution	Pignons	Pignons
Paliers de bielle	Rouleaux	Rouleaux
Paliers de vilebrequin	Rouleaux	Rouleaux
Bloc-cylindres	Cylindres forgés, chemise (s) soudée (s)	Fonderie
Suralimentation	Compresseur volumétrique Roots à deux rotors superposés, en bout de vilebrequin, aspirant à travers le carburateur	Compresseur volumétrique Roots à deux rotors superposés, en bout de vilebrequin, aspirant à travers le carburateur

As we can see above, the table confirms Pierre Chan's recollections, who, referring to the 6-cylinder Sunbeam, recounts:
«We made a reduced extrapolation of it while retaining the general principles.»

The Amilcar 6-cylinder engine is, in fact, an 82/100ths scale reduction of the Sunbeam 6-cylinder engine. The essential difference lies in the engine block's construction: the lightweight but complex and expensive architecture with forged cylinders joined in two blocks of three by a welded water-lubricated liner (inherited from Fiat, which had itself adopted it from Mercedes aircraft engines) gave way to a heavier but more rigid cast block. The other, minor, difference lies in the valve angle: 100° in both cases, but asymmetrically on the Sunbeam engine (the intake valve is inclined at 48° to the vertical and the exhaust valve at 52°), while the valves are arranged symmetrically on the Amilcar engine (50° and 50°).

Genealogy of the Amilcar CO engine:

1921	1922	1923	1924	1925
Fiat 402 8 cyl. en ligne, 2ACT 2973 cm³ (65 x 112)	**Fiat 404** 6 cyl. en ligne, 2ACT 1991 cm³ (65 x 100)	**Sunbeam Grand Prix** 6 cyl. en ligne, 2ACT 1988 cm³ (67 x 94)	**Sunbeam Grand Prix** 6 cyl. en ligne, 2ACT 1988 cm³ (67 x 94) Compresseur Roots	**Amilcar CO** 6 cyl. en ligne, 2ACT 1098 cm³ (55 x 77) Compresseur Roots

Due to a change in regulations limiting engine displacement to 2 liters, the 1922 Fiat 804-404 was equipped with an inline 6-cylinder engine, an extrapolation of the 402 engine with two cylinders removed and the stroke reduced to 100 mm. Bordino is immortalized here shortly before the 1922 ACF Grand Prix, where he finished 4th, with Nazzaro winning the race in an identical car.

The 1921 Fiat 801-402 was equipped with a 3-litre, twin-cam, inline 8-cylinder engine.

The 1924 Sunbeam 6-cylinder engine.

Les compresseurs :

The Roots superchargers fitted to the Sunbeam and Talbot-Darracq aircraft designed in Suresnes feature two superimposed rotors, each 128 mm in diameter. The table below shows that they differ only in chamber length.

Amilcar's initial design also uses a positive displacement supercharger of the same type, with rotors also measuring 128 mm in diameter, which suggests a clear connection to the STD technology.

	Talbot GPL 1924-1925	Sunbeam GP 1924-1925	Sunbeam de record 1925	Sunbeam de record 1926	Talbot GPLB 1926-1927	Amilcar CO 1925-1926
Configuration	4 cylindres	6 cylindres	12 cylindres	12 cylindres	8 cylindres	6 cylindres
Cylindrée	1,5 litre	2 litres	4 litres	4 litres	1,5 litre	1,1 litre
Longueur du compresseur	130 mm	195 mm	230 mm	2 x 140 mm (2 compresseurs)	140 mm	90 mm

The Amilcar compressor differs from the Sunbeam/Talbot compressors in a few construction details:

- the covers on the Sunbeam/Talbot are closed by ten screws compared to eight on the Amilcar,
- on the Sunbeam/Talbot, the drive of the upper lobe by the lower lobe is on the opposite side to the drive by the engine, whereas it is on the same side on the Amilcar.

Longitudinal section of the Fiat 404 engine.

Comparison of Fiat and Sunbeam 2-litre engines and evolution of power outputs between 1921 and 1923.

Cross-section of the same Fiat engine.

Les interrogations sur l'identité du technicien transfuge de STD

To conclude this study of the Italian-British influences on the Amilcar CO engine, let's focus on the technician who defected from STD. We've seen that in Pierre Chan's recollections, he is named Mognet, but this could actually be Moglia, as the two names sound quite similar.

It is established that Moglia ended his collaboration with Talbot no later than 1924 and became a consultant for several manufacturers. If it is true that Moglia was directly approached by Amilcar, he would not have been formally hired but would have remained a collaborator «making his experience available.» The direct involvement of Moglia (alias «Mognet» according to Pierre Chan's recollections) in the design of the Amilcar CO engine therefore remains entirely plausible.

Other work by Moglia could support close and ongoing ties with Amilcar: for the 1926 season, Moglia designed a rather unusual Roots-type supercharger for Bugatti, as its two rotors each had three lobes. And, in a striking coincidence, in November/December of the same year, a Roots supercharger with two rotors and three lobes was also designed by Amilcar.

Excerpt from an article in the magazine Omnia, July 1927.

On the left, the signature that appears on the undated plan of the cam boxes of the first Amilcar engine (55 x 77), on the right, a certified signature of Edmondo Moglia dating from the early 1930s. Half a decade apart, the signatures seem quite different but, without expertise in graphology, the authors leave it to the reader to form their own opinion.

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Several other, less obvious, similarities link the Amilcar and Sunbeam engines. These were recently highlighted by Pierre Lamoureux, a specialist in the restoration and reconstruction of 6-cylinder Amilcar engines. He confirms the similarity of the Sunbeam and Amilcar designs regarding:

- Valve actuation by a rocker arm articulated on a removable support with three fixing screws,
- the valve/opening cup/keys/triple/return spring assembly,
- the oil pump and dry sump lubrication system, oil inlets and outlets, relief valve located identically on the sides of the lower crankcase,

The steeply sloping lower crankcase,

the two tachometer connections (one per camshaft),

the water pump located on the left side of the engine, driven by one of the timing gears and distributing water to the lower cylinders at two points with a very similar crankcase attachment,

the left-hand breather located at the rear of the crankcase,

the 46 mm bore Solex slide carburetor,

the gravity lubrication of the compressor gears from a branch on the camshaft return line,

the oil return from the compressor to the crankcase via a line bolted to a plate with three mounting points,

the compressor-to-crankshaft coupling system,

the design of the Amilcar prototype engine's chandelier-shaped intake manifold, in the same style as that of the Sunbeam engine.

But while the design of the Amilcar CO engine was clearly largely inspired by the Sunbeam engine, Edmond Moyet nevertheless applied some of his own designs. Under his direction, the design office notably created a one-piece cylinder block/camshaft/crankcase/timing cover assembly, forming a single engine block—a technique identical to that of the company's own four-cylinder engines and already applied to his 1921 prototype.

This option resulted in significantly greater structural rigidity by eliminating the mating surfaces and differential expansion of separate components inherent in traditional engines (cylinder block bolted to the lower crankcase) and specifically in the Sunbeam cylinder block.

Furthermore, it allows for much easier small-batch production than the one-off welded assembly used successively by Mercedes, Fiat, and Sunbeam.

The Amilcar engine block, cast in a single piece, is the result of the remarkable expertise of the company's mold makers and foundry workers. The thinness of the internal walls (fabrics), the narrowness of the water passages, and the large number of cores to be positioned and held in place represent a new challenge with each casting.

Similarly, the subsequent milling, turning, and grinding operations are also akin to the work of a goldsmith for the machinists. They cannot afford any mistakes, lest the entire complex part be rendered unusable.

When one considers the extremely tight machining tolerances required for boring or fitting a shaft line on a racing engine, one can only admire the skill of these craftsmen.

Finally, the engine designed by Amilcar's engineering department has several other distinctive features compared to the Sunbeam:

a magneto driven by the water pump on the left side of the engine (driven by a bevel gear and positioned perpendicularly at the rear left on the Sunbeam engine),

camshafts rotating on 4 bearings on the Amilcar engine (7 bearings on the Sunbeam engine),

pressure lubrication of the camshafts (by spray on the Sunbeam),

a different distribution of the same value (100°) of the included angle of the valves (50°/50° versus 48°/52).

To complete and conclude this analysis of the relationship between the Amilcar and Sunbeam engines, let us quote the insightful commentary of journalist Maurice Philippe, who, in an article in the magazine Automobilia dated April 15, 1926, reporting on the Grand Prix de Provence at Miramas, wrote:

«...in fact, the victory of the Talbots was never in doubt. It is known that the 1500 Talbots, designed by the Italian engineer Bertarione, have a supercharged engine with a Roots-type compressor. This engine produces approximately 117 horsepower at 5,200 rpm, which is nearly 80 hp per liter of displacement and 15 hp per liter per 1,000 rpm.»

It's amusing to note that another engine, supercharged in the same way, the Amilcar 1100 cc, with its hundred horsepower at 6000 rpm, gives the same figure of 15 hp per liter per 1000 rpm. Far from being fooled, Maurice Philippe cleverly implies that the two engines are comparable, without, however, explicitly stating any common origins.

Pierre Lamoureux, formerly in partnership with Nicolas Salaün, is the undisputed specialist in the restoration and reconstruction of Amilcar 6-cylinder engines. The current body of technical knowledge about these cars stems largely from his research and experience.

Introduction

The 6-cylinder engines equipping the factory's Racing Department cars are all designated CO. The prototype engine led to two evolutions that differ in a number of modifications aimed at improving performance. However, each retains the characteristics of the original engine (1100 cc inline 6-cylinder, cast iron block, twin overhead camshafts, supercharger).

Caractéristiques communes de l'ensemble moteur-boîte

The cast iron engine block comprises, cast in a single piece, the crankshaft housing (carrying the main bearings), the cylinders, and the cylinder head. In this assembly, the cylinder head is not detachable, resulting in cylinders that are considered blind. This is also referred to as a «blind block» or «blind engine.»

The combustion chambers are hemispherical with spark plug wells inclined towards the front of the cylinder to maximize space for the two large valve heads. The crankshaft is machined from a single piece of steel. It rests on seven main bearings and rotates on roller bearings. Because it is not removable, the raceways must be machined directly onto each main bearing, requiring extremely precise machining and fitting, and necessitating the manual insertion of the rollers, one by one, into the raceway groove. The connecting rods are made of forged steel. Their small ends rotate on a bushing around the piston pin. Their big ends, with removable caps, also rotate on roller bearings. The same care is required for their machining and the insertion of the rollers.

The pistons conventionally have three piston rings.

The valve train is controlled by two overhead camshafts at an included angle of 100°. They are driven by a cascade of straight-cut gears located at the rear of the engine. They actuate the valves via light rocker arms (called «valve fingers» on period drawings) hinged on a removable support.

Each camshaft is supported by four bearings: three on rollers, the rear bearing on balls. The right camshaft operates the intake valves, the left one the exhaust valves. The valves are returned by three concentric springs.

The lower engine crankcase is made of cast aluminum. Its underside has a large opening into which the oil pump is housed. The bronze body of the pump is fitted after the crankcase has expanded by heating it with an external heat source (blowtorch or oven). A perfect seal between the two parts is achieved by the aluminum part contracting as it cools.

To promote lubricant flow and prevent the oil pump from losing its prime, the bottom of the crankcase is sloped from front to back. The pump is a two-stage design: the first stage draws oil from the crankcase to keep it constantly drained and transfers it to a reservoir (or oil pan)/radiator located outside the engine. The second stage draws the lubricant from this oil pan and distributes it under pressure to all the engine's moving parts. This type of lubrication is called «dry sump» because there is no residual oil in the crankcase, which would otherwise impede the crankshaft's rotation.

The crankcase sides are perforated with four breather holes (three on the right, one on the left) to vent oil vapors that would otherwise cause overpressure in the crankcase.

Ignition is handled by a magneto (a Bosch FH6 with a flap on the prototype, then a SEV Racing or Scintilla with a rotating magnet), with four pull-outs per revolution, driven at three-quarters of the crankshaft's speed. This choice was dictated by the engine's very high rotational speed, as well as by space constraints and the engine/magneto mounting points.

Supercharging is provided by a Roots-type supercharger with two horizontal or vertical rotors (2 or 3 lobes), depending on the engine design. Driven continuously by the crankshaft, it rotates at a constant speed.

The horizontal Solex carburetor, made of bronze, with a 40 or 46 mm bore, is mounted at the supercharger inlet. On the opposite side, to the right of the engine, the long intake manifold delivers the fuel-air mixture to each cylinder. A relief valve on the manifold protects the supercharger and valves in case of pre-ignition and/or backfire in the intake. The supercharger boost pressure is approximately 900 grams. Lubrication of the supercharger rotor drive gears is provided by a bypass line connected to the camshaft oil return.

Fuel is supplied under pressure from the tank by a small mechanical air pump driven by the timing belt. A hand pump mounted under the dashboard pressurizes the fuel system for starting the engine. The air circuits for the mechanical pump and the hand pump communicate via a manifold/regulator, which also includes a calibrated relief valve.

Depending on the model, the fuel tank is located either directly on the firewall or in the rear section. Cooling is provided by a water-cooled system, activated by a small aluminum centrifugal pump driven in tandem with the magneto on the left side of the engine by a shaft engaging one of the timing gears. The radiator features a conventional design with vertical tubes and horizontal fins, and its welded grille serves as the water box. Exhaust gases are expelled through a sheet metal manifold with six outlets that gradually converge into a single outlet at the rear of the hood. This is extended rearward by a simple, unbaffled pipe running along the left side of the body. The exhaust manifold sits atop the left side of the engine block, housing the small mechanical air pump and the water pump/magneto assembly. The 4-speed gearbox plus reverse is attached via the clutch housing to the upper (cast with the engine block) and lower (detachable aluminum) crankcase halves by 12 bolts. The single-disc clutch operates dry.

This gearbox is identical on all 6-cylinder models, whether factory cars or customer C6s.

Power is transmitted to the bevel gear, which lacks a differential, via a simple flexible coupling driving the driveshaft enclosed in a reaction tube.

The Amilcar 6-cylinder engine intake side (1925) and exhaust side.

The intake pipe was quickly replaced with a longer piece.

Rear cross-section of the engine

Cross-section of the cylinder block

Diagram of the connecting rod assembly on rollers

Drawing of a valve and a control finger. On the plan, some instructions are noted: «these valves will be treated with petroleum, sandblasted, and machined 0.1 coarse to be treated with acid before grinding».

Développement et évolutions des moteurs d'usine CO

Much of the data presented in this chapter comes from the research, observations, and work of Pierre Lamoureux and Nicolas Salaün, already mentioned. Additional information was also gathered through the analysis of plans according to their execution dates. Furthermore, the notes of Maurice Dubois, the accounts of Pierre Chan, and several contemporary press articles have supplemented this study.

Introduction :

Three generations of 6-cylinder engines with blind blocks succeeded one another or coexisted between 1925 and 1929. The second generation was a significant evolution of the first. The third, which appeared in 1928, was simply a variant of the second. Unlike the chassis on which they were mounted (types CO, CO Offset, etc.), these different engine types all retained the same CO designation.

Le moteur initial 55 x 77 :

Studies of the 1100 cc 6-cylinder engine began in 1924 and were finalized during 1925. A bore of 55 mm and a stroke of 77 mm were chosen, probably to maintain the 0.71 compression ratio of the Sunbeam engine (67 x 94), which served as a reference for Amilcar engineers.

The date of the first bench tests of the new engine remains unknown; only the first prototype car tests can be dated to the end of summer 1925. The first test session took place at the Montlhéry autodrome. Although the engine was designed from the outset to be supercharged, in order to save time when the development of the supercharger was delayed, these tests were conducted with an engine without one. It is fed by a single 40mm vertical Solex carburetor coupled to a 6-branch, chandelier-style intake manifold. It features pistons specifically designed «for a supercharged engine,» the design of which dates back to January 16, 1925, and whose intended use will be explained in the chapter dedicated to factory cars.

This engine is fitted to the CO prototype (later called the long CO to differentiate it from the second, known as the short CO, with a wheelbase reduced by 70mm). The tests were conducted with the utmost discretion and were therefore not reported in the press. Only Pierre Chan's notes provide us with any information:

> «The top speed reached was 175 km/h with a power output of 75 horsepower at 6,500 rpm. At a constant speed, operation was satisfactory, but acceleration was sluggish and starting was difficult due to the single carburetor and its long intake manifolds, which generated condensation.»
>
> «The supercharger, finally completed, was installed and tested. Immediately, the power exceeded 90 horsepower and the speed reached 190 km/h.»
>
> (These tests with the supercharger, but still with the chandelier-style intake manifold, were carried out only in September/October 1925. - Ed.)
>
> «Some time later, a much larger supercharger, providing an intake pressure of 1.2 kg, was installed on the engine
>
> (This could be the 3-lobe supercharger whose plans date from November 1925 - Ed.).» The engine was upgraded to 95 horsepower, but the spark plugs couldn't withstand it, so they reverted to the original supercharger with a pressure of 900 grams and a compression ratio of 5.1. With new camshafts, the power exceeded 95 horsepower at 6500 rpm.

In addition to the long-wheelbase CO, this 55 x 77 engine was also fitted to the short-wheelbase CO, for a total of 3 or 4 cars.

The number of engines built remains unknown, but it is certainly very small: in addition to those that powered the cars, there are also a few spares.

By chance, a few pages torn from a small notebook meticulously kept by Maurice Dubois were recently rediscovered by his family. A series of sketches and calculation formulas are recorded there to determine very precisely the exact volume of the combustion chamber of the factory 6-cylinder engine, type CO (55 x 77).

While seemingly difficult to understand at first glance, this page is actually quite simple to decipher. From top to bottom, with its six dimensioned sketches, Maurice Dubois takes into account the total theoretical volume of the hemispherical combustion chamber (43.55 cc), represented by a hemisphere. From this, he subtracts the volume of the cross-sectional head to a thickness of 1 mm, corresponding to the thickness of this head extending above the seat (0.85 cc), and the volume of its convex section (2.42 cc), minus the volume of the conical recess cut into this convex section (0.72 cm^3). The last drawing represents the residual volume between the top dead center of the piston and the top of the cylinder (9.57 cm^3) which is added to the volume of the chamber itself.

This photograph, likely taken in 1925, shows a 55 x 77 engine being tested on a test bench. It appeared in the September 1926 issue of the magazine «Je sais tout» (I Know Everything). This engine is equipped with the vertical supercharger mounted after the prototype supercharger with rectangular ports. The carburetor is a 46 mm Solex slide carburetor (the prototype had a 40 mm butterfly carburetor). The short engine mounts and exhaust manifold are identical to those of the prototype.

Le moteur 56x74 :

While the first prototype had only made two appearances in hill climbs with promising results, the decision was immediately made, before the end of 1925, to design a new engine.

The earliest available plans are signed by Chinon. They are dated January 18, 1926, and concern the crankshaft. The cross-section of this new engine was drawn on March 18.

More than a new engine, it was, in fact, an evolution of the first, the most significant difference being the modification of the bore and stroke dimensions, while maintaining the same displacement. The stroke, reduced from 77 mm to 74 mm, resulted in a decrease in the linear speed of the pistons and therefore allowed for a higher maximum engine speed, an essential condition for obtaining greater power. The bore, meanwhile, increased by 1 mm to 56 mm.

As a consequence of this evolution, the modified 6-cylinder Amilcar is no longer a strict reduction of the Sunbeam engine!

Drawing of the pistons equipping the 56 x 74 engine.

Factory drawing of the crankshaft (56 x 74 engine).

Another major modification concerns the engine block/cylinder head casting, where the intake and exhaust ports have been redesigned.
Other distinctive features, besides its specific crankshaft assembly, also appear on this engine:

- Modification of the rear crankshaft bearing to facilitate, it seems, its removal,
- redesigned camshaft profile,

- enlarged valve head diameter (made possible by the increased bore which also necessitates a new combustion chamber design with an adapted radius),
- new, now horizontal, supercharger,
- simplified oil pump,
- less steep slope of the lower crankcase.

In Pierre Chan's notes concerning the design of this new engine and the adaptation of the horizontal supercharger, we find:

«For this new supercharger, we built a modified engine with a redesigned cylinder head and a new type of crankshaft. The bore was reduced from 55 to 56 mm and the stroke from 77 to 74 mm. The valves were larger...» This new engine produced 107.5 horsepower at 6,750 rpm. During the construction of this engine, the company decided to attempt pure speed records over short distances, from 1 kilometer to 10 miles.»

On this point, Pierre Chan seems to make a mistake: the engine was not modified because of the horizontal supercharger, but rather, and more accurately, a new type of supercharger was adapted to this short-stroke engine. And, indeed, on May 9, 1926, the Amilcar CO broke the 1100cc speed record for the flying kilometer at Arpajon at 197.422 km/h, it was then equipped with the 55 x 77 engine, as indicated in the engine displacement verification report signed by the ACF officials. The 56 x 74 engine was therefore not yet operational at the time of this attempt.

The 56 x 74 engine served as the basis for the one, designed shortly thereafter, that would equip the «customer» C6 models: the same bore and stroke dimensions were retained, but the choice of a detachable cylinder head necessitated a new design for the engine block and the cylinder head itself.

Excerpt from a notebook by Maurice Dubois

The short-stroke engine was fitted to the so-called «Deported» COs, which first appeared in May 1927. However, it is highly likely that it was previously fitted to one or more COs built earlier.

As with the first-generation engine, the number of units manufactured is unknown: at a minimum, one for each Deported CO (three cars), plus a few spare engines.

Le moteur 58 x 83 :

Since their introduction to racing, the 6-cylinder Amilcars have had virtually no competition in the 1100cc class, to such an extent that the public has become accustomed to the brand's repeated victories. Having nothing left to prove in this class, the temptation is great to compete with the 1500cc cars, especially since, in 1927, international regulations reduced the engine capacity of Grand Prix cars from 2 liters to 1.5 liters. Designing a completely new engine is out of the question; the company filed for bankruptcy in early 1927 and is financially drained. The least expensive solution is to modify the 1100cc engine by adjusting its bore and stroke to closely approximate the 1500cc specifications.

But starting from the same cylinder block/cylinder head, the increase in dimensions is limited: the bore by the small amount of material available between the cylinders, the stroke by the height of the block. With the maximum possible dimensions, 57 x 83, the resulting displacement is 1270 cc, far from the upper limit of 1500 cc but sufficient to compete in that category.

At the factory, this modified engine was designated the «1500 engine,» and the cars it powered were called «1500 cars.»

The original blueprints for this engine have not survived. Only by examining the still-existing, dismantled engine block can its specific characteristics be identified compared to the 1100 engines.

Two cars were successively equipped with this engine: one of the three CO Déporté 1100s, which was re-engined as a «1500» in March 1928, and the MCO «1500,» launched in July 1928, which set international 1500cc records in September/October.

It is practically certain that this engine was built only once and that it was transferred from one car to the other. As proof, from the moment the MCO 1500 appeared, the CO Déporté 1500 was no longer seen in races, its engine having undoubtedly been removed to equip the MCO.

This engine, used in hill climbs, long-distance circuit races, and speed

record attempts, proved remarkably versatile.

Excerpt from a letter Jean Nougier sent to Clément-Auguste Martin in 1980:

«The CO camshaft you took back, which is for a 1-2-3-6-5-4 firing order, please exchange it for one of the same model that I still have, which is a much more practical 1-5-3-6-2-4.»

The most common firing order for an inline 6-cylinder engine is 1-5-3-6-2-4. The order indicated by Nougier simply reverses cylinders 2 and 5, whose pistons move up and down simultaneously, but adopting this order necessarily requires the installation of a new pair of intake and exhaust camshafts.

No information has leaked regarding these camshafts; only this letter mentions them. It is therefore unknown whether factory engines were used with this setup or if it was simply a trial run with no further development.

Did Amilcar's engineers experiment to find the right balance between power and flexibility?

It's worth noting that Ferrari, with the 456GT (presented in 1992), modified the firing order on the M version released in 1998. According to the factory, this modification increased the V12's flexibility.

The «1500» engine (58 x 83, 1270 cc) of the car driven by Moriceau at Indianapolis in 1929.

La course au rendement et à la puissance

Introduction

The energy efficiency of an internal combustion engine rarely exceeds 25%. In fact, nearly a quarter of the heat produced is lost through the exhaust, another quarter is absorbed by the cooling required to maintain the engine at the proper temperature, and yet another quarter is lost to various frictions and the accessories essential to its operation. When designing their racing engines, manufacturers' primary objective is to achieve maximum power while maintaining a degree of flexibility, all without compromising reliability. The power output depends on several key factors (engine displacement, engine speed, compression ratio, cylinder filling coefficient, fuel properties) and numerous secondary factors (valve timing, diameter of gas passages and valve heads, combustion chamber shape, intake and exhaust port cross-section and design, etc.). Among the key factors, some are technical specifications defined by the manufacturer and are difficult to modify. Conversely, it is relatively easy to adjust others. Cylinder filling, in particular, can be improved by turbocharging, which, if not included in the initial engine design, can be added later. Similarly, it is possible to choose a specific fuel, as its calorific value depends on its chemical composition.

La suralimentation, principes généraux

In a conventional engine, the cylinders are filled with the air-fuel mixture by the vacuum created during the piston's downward stroke (intake stroke). As engine speed increases, the time spent on intake decreases: at 1200 rpm, it lasts 1/10 of a second, while at 6000 rpm, it is only 1/50 of a second. At high engine speeds, engines are often under-fueled because the vacuum alone is no longer sufficient to ensure complete cylinder filling. This can be remedied by using a pressurized intake system with a compressor, a process commonly known as supercharging.

Although already implemented by Renault on an aircraft engine in 1908, supercharging was first used in racing by Fiat in 1923 on its cars entered in the ACF Grand Prix at Tours. They made a thunderous start to the race, clearly outclassing their competitors before retiring, all due to engine failure. Following this demonstration, supercharging quickly became widespread, to such an extent that at the 1924 ACF Grand Prix in Lyon, 11 out of 21 cars at the start were equipped with a supercharger. For comparison, the supercharged Sunbeam engine of 1924 developed nearly 140 hp, a 30% increase over the naturally aspirated engine of the same brand that had won in Tours the previous year (108 hp).

Two main types of superchargers were used:

The centrifugal compressor, whose operating principle is similar to that of a fan blowing large volumes of air generated by a turbine driven at a very high rotational speed (30,000 rpm), and the positive displacement compressor, which draws in the gas mixture and compresses it before sending it to the cylinders. There are two variants:

- eccentric vane compressors (Cozette, Zoller, Baudot-Hardoll, etc.);
- rotary lobe compressors (Roots, MZ, etc.).

The supercharger can be mounted directly on the end of the crankshaft or driven by a chain, gears, or even a belt. Its operation can be continuous or intermittent. In the latter case, its activation can be automatic (from a predetermined engine speed) or controlled (possibly via a clutch). The supercharger, positioned between the carburetor and the intake manifold, draws in and compresses the fuel-air mixture before sending it to the cylinders. The ideal carburetor position is located at the very inlet of the supercharger. In this configuration, the air/fuel mixture is drawn directly through it, which promotes better mixing, improves vaporization in the cylinders, and allows for more efficient combustion. The boost pressure typically used is in the range of 500 to 900 grams, rarely more. Thanks to improved efficiency, supercharging increases engine power, a key objective for racing. It also results in a significant increase in low-end torque, leading to greater engine flexibility. However, it has two drawbacks to consider: the significant energy required to drive the compressor and a substantial increase in fuel consumption.

Le compresseur à palettes :

The best-known example is the one designed by the French engineer René Cozette. Its distinctive feature is a perforated sleeve (false rotor) concentric with the stator, which rotates inside it at the same speed as the rotor itself. As the vanes spread apart due to centrifugal force, their tips strike the false rotor without causing wear, unlike in conventional vane compressors.

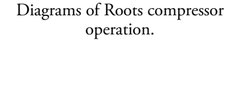
La suralimentation chez Amilcar

Before the official appearance of its supercharged 6-cylinder engines, Amilcar only experimented with supercharging on one occasion, during the 24 Hours of Belgium in July 1925. A 4-cylinder car of the brand was then entered by Semion Lebovitch, Amilcar agent in Brussels.

Cross-section of a Cozette vane compressor and, on the right, the carburetor-compressor assembly.

In fact, the car had been prepared at the factory but entered unofficially to avoid negative publicity in case of engine failure. Moreover, Lebovitch's co-driver was none other than André Morel. Amilcar was testing the Cozette supercharger on this car, which was not yet commercially available.

Later, on May 17, 1926, another test of a Cozette supercharger mounted on a 4-cylinder CGSS-type engine was carried out at Montlhéry. The 6-cylinder CO engine was designed from the outset to be supercharged by a Roots-type supercharger. However, it is likely that the engineers at Amilcar did not yet possess the specific expertise required for this task. Indeed, the design of such a device requires highly complex calculations to determine the shape of the combustion chambers and lobes, and to ensure proper operating clearances. Nevertheless, numerous plans relating to compressors, drawn up in 1924 and signed by Marcel Chinon, suggest that the company had a compressor of this type at its disposal for study and precise analysis, thus saving valuable time.



Diagrams of Roots compressor operation.

The Roots-type supercharger:
Its operation is similar to that of a gear pump. It has two lobed (or bladed) rotors driven by gears rotating in opposite directions. The two rotors mesh with very little backlash, requiring careful lubrication from the engine's lubrication system or provided by oil (usually castor oil) added to the fuel.

In the first photographs taken in 1925 showing the CO engine of the prototype car, a very distinctive Roots-type compressor can be seen. This component, with a design notably different from the one manufactured a few months later, was recently rediscovered and has been the subject of meticulous examination. This is a vertical compressor with two two-lobe rotors, 90 mm long and with an 80 mm center-to-center distance. These characteristics are repeated on subsequent models, but with notable differences:

a casing with large fins, but fewer in number, and the absence of a perpendicular reinforcing rib;

rectangular gas inlet and outlet;

mounting to the engine with M8 screws and studs, which is unusual for this engine, as all other fasteners are M5 or M7; a tapered mounting of the rotor gears on their shaft (which is no longer the case in later models);

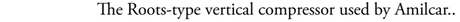
domed (not flat) fins on the cover; and a different design for the bearing caps (holes instead of notches for tightening).

These observations lead us to believe that this compressor was neither designed nor manufactured by Amilcar. Indeed, its rectangular gas inlet and outlet are designed to be connected to a manifold and carburetor with rectangular inlets, which are poorly compatible with the circular carburetors and intake manifolds still used by Amilcar. This configuration necessitates the use of an adapter flange (rectangular inlet/circular outlet). The second version of the Amilcar supercharger, designed by the engineering department, features circular inlet and outlet directly matching the carburetor and intake manifold dimensions. Therefore, one might wonder why the company didn't apply the same principle to the first version. However, the assembly of the first compressor is identical to that used on the Sunbeam engine… One question therefore remains: did the compressor used for the initial tests of the Amilcar CO come from Sunbeam and, if so, was it used, drawing heavily on it, for the design of the "homemade" compressors?

Compresseur vertical, compresseur horizontal

A twin-rotor supercharger is called vertical when, in a cross-section, its rotors are arranged one above the other, unlike a horizontal supercharger where the two rotors are arranged side by side. The transition from a vertical to a horizontal supercharger on the 6-cylinder Amilcar engine is explained by Pierre Chan:

«...However, under certain circumstances, flooding due to excess fuel occurred. This was because the vertical supercharger created a low point below the lower rotor, and under certain conditions, the fuel condensed there into a liquid mass that the supercharger forced back into the cylinders. Therefore, another type of supercharger was studied in which the rotors were no longer stacked but side by side, with the carburetor at the bottom rather than to the side. This supercharger was called a horizontal supercharger.»



The Roots-type vertical compressor used by Amilcar..

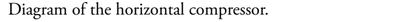


Diagram of the horizontal compressor.

Les carburants spéciaux

After achieving optimal cylinder filling through supercharging, two other parameters can be adjusted to obtain greater power:

Crankshaft speed. The higher the speed, the better the efficiency. This is achieved by reducing the mass of the moving parts (pistons, connecting rods, crankshaft, flywheel, and timing gears) and shortening the stroke. Conversely, a higher speed hinders cylinder filling, hence the advantage of a supercharger.

Compression ratio. To reduce heat loss, the combustion chamber volume must be minimized, which leads to an increased compression ratio. However, beyond certain limits, this ratio induces various engine malfunctions, including pre-ignition, which is the spontaneous combustion of the fuel-air mixture.

Pre-ignition is also caused by very high temperatures in poorly cooled areas such as the exhaust valve head (the intake valve is cooled by fresh air) or the spark plug tip. Because of this erratic ignition, the engine knocks and overheats, power drops, and the cylinders and pistons deteriorate. Installing a supercharger with commercial gasoline therefore requires a significant reduction in the compression ratio. To maintain a high ratio, it is essential to use a fuel capable of withstanding it without causing pre-ignition. This is the goal of so-called «special» fuels.

A high compression ratio also requires a very powerful ignition system. Indeed, the voltage required at the spark plug electrodes to ignite the spark increases as the air-fuel mixture is compressed further.

The factory-built 6-cylinder Amilcars, with their high-revving engines and high compression ratios, could not use commercially available gasoline (the anti-knock properties of tetraethyl lead, discovered in the United States in 1921, had not yet been implemented in Europe).

For these high-performance racing engines, several ready-to-use special fuels were available from retailers. However, in practice, it was the blending of different fuels in precisely defined proportions that produced the ideal fuel for a given engine.

Les différents combustibles utilisés en course dans les années 1920/1930

Le Benzol*

At that time, it came from the distillation of coal. It was considered a homogeneous product because it was composed primarily of benzene (with traces of xylene and toluene), whereas common gasoline was a mixture of various hydrocarbons.

Benzol's calorific value is 10,000 calories per kilogram. This is lower than that of gasoline, which reaches 11,000 calories per kilogram, but because benzene has a higher density, its calorific value is higher for the same volume (8,500 calories per liter versus 7,500).

For complete combustion, benzene requires more oxygen (i.e., more air) than gasoline, which necessitates adjustments to the carburetor settings. Its chemical composition ensures a smoother and more consistent combustion than other fuels. It is anti-knock and imparts this characteristic to the fuels in which it is blended. Therefore, gasoline blended with benzene allows for a higher compression ratio than that used with commercial gasoline.

In conclusion, benzene-based fuels significantly increase the efficiency of internal combustion engines.

*It is worth noting that benzene production was far too limited to replace gasoline. Today, its sale is prohibited because it is considered a highly carcinogenic substance.

L'Alcool

It has a lower calorific value than gasoline or benzene, but it offers specific advantages:

high latent heat, meaning its vaporization generates a relatively low temperature that helps lower the temperature of the mixture before combustion;

a high flash point, which allows for maintaining a high compression ratio without the risk of pre-ignition.

Because it contains oxygen in its chemical molecule, alcohol requires less air for complete combustion. The same volume of alcohol and air therefore releases more heat than a mixture of gasoline and air. It is better suited than benzene for engines with compression ratios up to 10:1 and provides better thermal efficiency.

However, ethyl alcohol (ethanol) or methyl alcohol (methanol) has drawbacks in its use:

it prevents cold starts; preheating or starting with gasoline is essential. It contains a significant amount of water (10% for 90% alcohol). Alcohol therefore causes the oxidation of metals, and this oxidation occurs even more readily at higher temperatures. The use of pure (dehydrated) alcohol would be a suitable solution, but the process for obtaining it is complex. Furthermore, it tends to reabsorb water quickly.

Its consumption by racing engines is extremely high and incomparable to that of gasoline engines, hence the need to adopt new carburetor settings and ensure sufficient fuel flow through large-diameter fuel tubes and a significant increase in jet diameter.

Its immiscibility with gasoline is due to the presence of water. To aid mixing, the use of an additive is necessary (castor oil, acetone, benzol, or ether), but the homogeneity of the mixture remains unstable. Furthermore, the solubility of these liquids in each other varies depending on the temperature.

The proportions generally used are as follows: 45% alcohol, 50% gasoline, 5% castor oil.

To address the specific disadvantages of each of these fuels while preserving their advantages, different mixtures were studied for racing in the 1920s and 30s.

Le Discol

Alcohol-based, nicknamed «the fuel of records,» it was the standard fuel mixture for racing between the two World Wars.

It was developed in the United Kingdom in the early 1920s by Harry Ricardo, an engineer renowned for his work on gas turbulence and the shape of combustion chambers (Ricardo cylinder heads). Manufactured in England by the Hammersmith Distillery Co Ltd, it was distributed in France from 1926 by the Parisian concessionary company Lionel Dektereff et Cie. It was a mixture composed of 60% ethyl alcohol, 20% acetone, 10% benzol, and 10% water. Benzol improves cold starts, acetone reduces pre-ignition, and water is added to increase the heat of vaporization (the heat required to change from a liquid to a gaseous state), which also reduces cylinder wall heating.

It allows for a slight increase in engine power (approximately 5%) and reduces heat loss by a third, resulting in less overheating.

Advertisement published in «L'Auto» October 16, 1927.

L'Elcosine

This special fuel, developed in Italy by Messrs. Annaratone and Oddono, was manufactured and sold under license in France by the company SACLA (SA des Carburants, Lubrifiants et Accessoires) in Paris. It was used by Delage, Bugatti, Amilcar, and numerous private racing drivers.

Like the previous fuel, it was alcohol-based, but its exact formula remained unknown. It was thought to contain approximately 60% alcohol, benzol, and ether in undetermined proportions. Elcosine, which contained no gasoline, was often referred to as the «French national fuel» because, «made without petroleum products, it could be produced in France without resorting to foreign imports.» Its calorific value was estimated at 9,295 calories per liter.

Its major drawback was its prohibitive cost (8.25 francs per liter compared to 2.28 francs for regular gasoline in 1929). Furthermore, its very high fuel consumption necessitates more frequent refueling during races or the use of large-capacity fuel tanks.

The press of the 1920s described this pinkish-hued fuel as «a kind of dynamite replacing gasoline.»

Another article appeared in the same newspaper in its September 8, 1927 edition. In the 1920s and 1930s, there was frequent talk of developing a «French national fuel.» This term referred to a fuel whose components would all be sourced in France, without relying on foreign imports. This excluded petroleum-based products but included coal-based products.
Elcosine is an alcohol-based fuel that contains no gasoline, but its production and selling prices were very high. Consumption, too, reached record levels.

Le carburant BP 3

Manufactured by British Petroleum, BP 3 is a benzol mixture containing other components whose list and proportions have not been disclosed. It was widely used in France between the two world wars, competing with Elcosine.

The company used various fuels (Elcosine, BP 3, etc.) as well as specific blends developed for the cars in its Racing Department. Pierre Chan recounts:

“Regarding chemical research, an engineer was attached to the Amilcar factory, and he had been able to formulate a special blend that allowed us to achieve the best performance with the supercharged CO engines. However, following a disagreement with the technical director, Mr. Marcel Sée, he resigned abruptly, leaving without revealing his formula, which he had kept secret, leaving us in a state of considerable embarrassment for some time.” The French oil company BP then supplied us with a new fuel which gave us satisfaction and whose composition was as follows: Benzol 55%, Alcohol 26%, Gasoline 17%, Ether 2%, Castor Oil: 1%

The castor oil was intended to lubricate the compressor rotors and ensure their relative sealing because these rotors turned in their casing with a play of 0.1 mm in all directions” (i.e. a total of 101 parts of the mixture! Pierre Chan also seems to confuse BP 3 with another special fuel used by Amilcar because, on the page of his notebook dealing with this subject, Maurice Dubois, for this same formula, mentions Amilcar Veedol, a BP-type mixture” (editor’s note).

Veedol is an American oil company specializing in lubricants.

Note that on the «Notes on driving the Amilcar 6-cylinder racing car» sheet intended for its customers, Amilcar recommends, for the use at high speeds of its type C6, the use of Elcosine or BP3.

Elcosine was developed in Italy, the company SACLA obtained the license to manufacture and distribute it for France (short article published in L’Auto on April 30, 1928).

New excerpt from Maurice Dubois’ notebook which details the composition of different fuels.

Dektereff & Co. specialized in selling motorcycle accessories. They manufactured and distributed Discol in France, a fuel also used in motorcycle racing.

Dektereff also distributed the iconic Cromwell helmets manufactured by Helmets Limited, a company based in St Albans, Great Britain, initially specializing in the manufacture of colonial helmets and later helmets for the army (see the insert in Moto-Revue, Salon issue, October 1927).

The Paris Gas Company (which succeeded the Paris Gas Company founded in 1855) is responsible for the operation of the town gas network throughout the Paris region (for domestic and industrial uses, public lighting via gas lamps, etc.). This gas, known as coal gas, comes from the transformation of coal into coke. Benzene is a byproduct of this process.

In 1938, Georges Grignard, who had acquired a CO (Combined Fuel) unit from the factory, listed the fuels and the settings inherent to each of them. With a carburetor equipped with a 33 nozzle and a 320 (3.2 mm diameter) main jet, the fuel consumption was 30 liters per 100 km.

The Amilcar CO exhibited at the 1926 Motor Show

From its very first races, the 6-cylinder Amilcar built a rich and varied record, quickly establishing itself as the queen of its class.

According to the limited information available, particularly contemporary press articles and the recollections of Pierre Chan, Amilcar's initial project in 1924-1925 was limited to the construction of six cars exclusively for its Racing Department. These cars, designated CO (for COurse, meaning Race), were assembled one after the other, with each new car benefiting from the technical improvements made to the previous one.

Due to a lack of reliable records, it is impossible to know the exact number of COs actually built, across all models.

The excellent results achieved in 1926 with the first COs encouraged Amilcar's management to continue the company's involvement in racing and thus to improve the existing cars. The construction of even more powerful new cars, derived from the initial model, was also planned. For the 1927 season, three entirely new cars, the CO «Déportés» (Deported) cars, were indeed built, followed in 1928 by two MCO (Monoplace CO) cars.

To these cars must be added the CO Monoplace Expérimental (Experimental Single-Seater) and the two CO cars modified for participation in the 24 Hours of Le Mans.

The total number of factory cars manufactured would therefore amount to 6 + 3 + 2 + 1 + 2, or 11 cars, of which 3 (the experimental single-seater and the two CO cars prepared for endurance racing) were never used in competition.

The judicial inventory carried out at the factory on December 31, 1926, for the purpose of declaring the company bankrupt, lists 10 racing cars. However, it does not allow us to definitively decide because this list does not specify whether it refers to 4 or 6 cylinder models.

Les différents modèles construits par le Service des Courses de 1925 à 1929

Built by the Racing Department between 1925 and 1928, the Amilcar factory 6-cylinder engines underwent various evolutions:

CO (longs et courts) (1925-1926) :

They are characterized by their two-seater bodywork, which accommodated only the driver, as the accompanying mechanic was banned by the new regulations.

The total number of examples built is a matter of debate: alongside the two or three long-wheelbase prototype COs used from 1925 to 1927, two or three short-wheelbase COs are thought to have been assembled. These were officially entered in races from 1926 to 1927.

These COs were particularly versatile cars, suitable for hill climbs, circuit racing, and record attempts.

Les deux prototypes CO (longs) :

The oldest surviving CO-type plans date from September 1924. They concern the engine, the primary focus of study, as the engineers were already well-versed in chassis and running gear design. These engine drawings are referenced CO with an index number. Plan CO 1, for example, depicts a connecting rod and is dated September 10th.

In 1924, the designers' work focused solely on the 6-cylinder engine. On November 25th, they produced a complete overall plan, but the design was far from finalized, as evidenced by the revised connecting rod drawing in plan CO 1, which was shortened by 1.5 mm (148.5 mm instead of 150 mm) and signed on December 11th.

Other engine drawings continued to be developed over the next two years, well after the initial tests and races.

Le plan initial du châssis est daté, lui, du 26 mars 1925.

The prototype of the 6-cylinder Amilcar underwent its first tests at Montlhéry. We do not know the exact date because the internal report from the Racing Department has not survived. Furthermore, specialist journalists were obviously not invited. However, through cross-referencing, we can place the tests at the end of summer 1925. The first photos published in the press date from September/October.

This prototype is referenced under the type «CO». However, we will take the liberty of calling it the «Long CO,» a designation not used by Amilcar but which distinguishes this first model from the subsequent ones referenced as «Short COs» on the factory plans. The slightly reduced wheelbase justifies this new designation (2.23 m for the «Long» CO versus 2.16 m for the «Short» CO).

During these preliminary tests, this initial car underwent a whole range of technical developments and modifications, primarily to the 6-cylinder engine but also to other components.

This CO prototype, tested and driven by André Morel, was followed at the beginning of 1926 by a second one entrusted to Charles Martin. Very similar aesthetically, and therefore difficult to distinguish from certain angles, it incorporates all the initial modifications made to the first car and incorporates new ones, such as relocating the oil tank inside the cockpit to the driver's left (it is located between the front chassis arms on the other car). This second car made its first laps at the Montlhéry autodrome in February or March 1926.

In parallel, tests concerning, among other things, the braking system, carburetion, and the position of the fuel tank continued. The first prototype made its racing debut with Morel at the Gaillon hill climb in October 1925, even though its development was far from complete. The second car received its racing debut, driven by Charles Martin, at the Argenteuil hill climb on March 7, 1926. Due to weather conditions, the two long-wheelbase CO cars entered in this event did not start. The true debut of the second prototype is therefore postponed to the Grand Prix of Provence held at the Miramas autodrome on March 28.

Moteur et boîte de vitesses :

Both cars are equipped with the CO 55 x 77 type 6-cylinder engine. On the first prototype, it was tested in various versions: initially without a supercharger, with a Solex carburetor and a chandelier-style intake manifold, as the supercharger was not yet available; then with a vertical supercharger of unknown manufacturer; and finally, with the factory-developed vertical supercharger.

The gearbox offers four forward gears and one reverse. It adopts the general design of the Amilcar range. A resounding success from the outset, it underwent no major modifications and was used on all models, both factory and customer-built.

The final drive ratio could vary from one race to another. Similarly, the tire size, and therefore the wheel circumference, differed depending on the race conditions.

The first generation cars are equipped with wire spoke wheels with rims for 700 x 80 or 710 x 90 beaded tires (metric dimensions), the following ones with rims for 4 or 4.40 x 19 tires (inch dimensions).

Châssis :

Its architecture largely follows the design of the brand's four-cylinder racing cars, which were characterized by their light weight and compact dimensions. The frame is stiffened by three crossmembers and is open at the rear. The axle is fixed to the ends of the side rails, which do not extend to support the rear end, the latter being cantilevered. The engine, mounted on four supports, contributes to the frame's (admittedly relative) rigidity. The two side rails share the same cross-section as those of the four-cylinder CGS model.

A second chassis was designed (plan signed by Pierre Chan on March 10, 1926), but it appears that this frame was never manufactured.

The brake lever, positioned centrally on the chassis (as on the CGS), incorporates a balancing device for the front brakes in its center.

The suspension uses conventional leaf springs: semi-elliptical at the front, articulated on a double arm at their rear attachment point; quarter-elliptical at the rear, with one attachment point on a bracket riveted to the outer face of the frame rail and the other on an axle fixed to the axle.

The wheels have Rudge hubs and center mounting and are spoked. The 710 x 90 tires are mounted on beadlock rims. These wheels are sometimes flanged.

Two chassis designs were drawn for the long-wheelbase CO. The first drawing is dated March 26, 1925, the second March 10, 1926. They differ practically only in the curvature of the frame rails, and therefore the angle of the rear springs. In the second drawing, the fuel tank is now located in the rearmost point of the body and no longer under the cowl. Otherwise, all dimensions are identical.

It is highly unlikely that this second version of the long CO was built because, at the end of March, the plans for the short CO chassis, very similar but with a wheelbase reduced by 7 cm, were completed.

Carrosserie :

It consists of several panels of very thin aluminum sheet metal (1.2 mm), shaped and then assembled by nailing edge to edge onto a wooden frame. It offers two side-by-side seats and its design is asymmetrical: the right side is cut away while the left partially covers the passenger seat.

The bodywork is completed by a fairing that extends along its lower section. This fairing rests on the outer faces of the frame rails.

The space reserved for a potential passenger is sometimes covered by a fairing (awning) to slightly improve the car's aerodynamics.

Modifications successives et repères chronologiques :

The first Amilcar CO made its racing debut at Gaillon in October 1925, the second at Miramas at the end of March 1926.

A third car appeared on June 7th at the same Miramas autodrome, driven by Duray, for the Grand Prix des Cyclecars et Voiturettes, organized as part of the ACF Grand Prix.

By the end of September, at least two more cars had been assembled. They were present at Montlhéry, awaiting the drivers' hypothetical return from Brooklands (see the chapter on the 1926 season).

Over the seasons, the long and short CO cars gradually evolved, sometimes at the drivers' request, but more often due to technical constraints.

Second drawing of the long CO with the fuel tank located in the rear tip and no longer under load.

Late October 1925: the CO prototype returned to the Racing Workshop after the Gaillon hill climb. It still bore the number 115 assigned to it for that event.
The front underbody was removed, revealing the chassis rail with its very thin cross-section (height: 85 mm). In the background, a 4-cylinder CGS engine was placed directly on the ground.

These documents show the CO prototype at the Gometz-le-Châtel hill climb (no. 112) held on November 22, 1925. Wheel covers were fitted to the wire wheels, and the windscreen was slightly raised.
A significant modification was made between Gaillon and Gometz-le-Châtel: the oil tube passages in the grille were lowered. This modification was likely made possible by replacing the stubby intake manifold with a long, straight one.
This grille was completely rebuilt. The beautiful enameled emblem is no longer present.

The first CO prototype is immortalized here in Miramas in 1926. It is equipped with the engine featuring a chandelier-style intake manifold.
The oil lines for the oil pan are located quite high in the grille. The grille itself bears an enameled emblem. On the body sides and the lower part of the rear section, the junction of the aluminum sheets, nailed edge to edge or with a slight overlap onto the wooden structure, is easily visible. The rocker panels conceal the profile of the side members and are cut out for the brake lever and rocker arm. The latter has a double connecting rod at its ends, simultaneously actuating the front and rear brake cables that run along the chassis. The handbrake lever pivot is located well behind the central rocker arm. Via the lower linkage, it acts on the double connecting rod of the central rocker arm. The windscreen is symbolic; a grab handle for a potential passenger is screwed onto the tip, behind the driver's right shoulder. The car is fitted with very thin, beaded tires, 700 x 80.

November/December 1925: Maurice Mestivier poses at the wheel of prototype no. 1 in the courtyard of the Fournaise factory in Saint-Denis. The car is seen here in the same configuration as at Gometz-le-Châtel.
The passenger grab handle has been removed, but the two mounting holes are visible. The 700 x 80 beaded tires have been replaced with 710 x 90 tires of a slightly larger section. In the background, stacks of new E and G type chassis frames await assembly.

This photo, taken the same day in Saint-Denis, highlights the deep aluminum grille (CGS type) that surrounds the recessed radiator, and the oil pan positioned between the two chassis rails, in front of the radiator. The two oil supply and return lines pass through the grille at its base. The rear leaf spring mounting brackets, the front brake cables outside the chassis, and the two small bulges at the front of the right-hand hood are also visible: the lower one conceals the head of the engine's front support post; the other, the flange connecting the supercharger outlet pipe to the intake manifold. The left-hand hood, however, has no bulges.

January/February 1926, coinciding with the first races of the season held on the French Riviera.
The car underwent further development: the central lever now controlled the front brakes via two cables running inside the frame rails and exiting at the front through horizontal cutouts.
At the front, the hood was modified again with the addition of a bulge to accommodate the cooling chamber, and the original grille with the emblem was reinstalled. A radiator guard was fitted.
Late March 1926, Miramas: the grille of the first prototype was cut to improve cooling.

The Racing Service took advantage of the trip to the southeast in early 1926 to conduct tests at the Miramas autodrome. Prototype No. 1 was in the same configuration as before, but a large brand logo had been affixed to the side.

Prototype No. 2, driven by Charles Martin, underwent its first tests on the Montlhéry track during the first quarter of 1926.
During assembly, the car was fitted with the same braking system as the first car, and subsequently received identical modifications, with the cables concealed within the frame rails. The handbrake lever is positioned further forward and controls the rear brakes. The foot brake lever has, at each end, a connecting rod that operates the rear brake cables, which run externally to the chassis. The bodywork, very similar to that of its predecessor, nevertheless features some distinctive characteristics. The oil tank has been relocated to the cockpit, next to the driver, and the passenger seat is concealed by a removable sheet metal fairing.
The hood support strap is much closer to the firewall, and a large opening is visible on the right side of the hood, likely corresponding to the fuel tank filler neck. The left half of the hood has several louvers.

Caractéristiques des CO longs et courts

Plans :

Deux cadres de châssis ont été dessinés, l'un avec le réservoir en charge devant l'auvent, l'autre avec le réservoir placé dans la pointe arrière. Il semblerait que le second n'ait pas été fabriqué, remplacé par le CO court.

Date de dessin de ces deux cadres : **26 mars 1925 et 10 mars 1926**

Date de dessin du cadre du CO court : **31 mars 1926**

Dessinateur : **Pierre Chan**

Moteur :

Position :	**Dans l'axe central sur le châssis**
Alésage x course :	**55 x 77**
Cylindrée :	**1097 cc**
Type de compresseur :	**Roots vertical**

Chassis :

Section des longerons du châssis :	**85 mm**
Maître couple du châssis :	**770 mm**
Voie AV/AR :	**1060 / 1090**
Ressorts avant :	**semi-elliptiques articulés sur une jumelle à son attache arrière**
Empattement :	**2 235 mm (CO long)**
	2 165 mm (CO court)
Dimensions des roues :	**roues fils avec jante à talons pour pneus de 700 x 90**
Pente ressorts AV :	**9 % et 10 %**
Pente ressorts AR :	**6 % et 4,36 %**
Entraxe mains AV :	**485 mm**
Entraxe boulons fixation ressorts AR :	**808 et 816 mm**

Calandre :

L'élément initial du type utilisé sur les CGS, est étroit et profond.

Largeur : **400 / 195 mm**

Hauteur : **545 mm**

Les CO courts :

They were assembled during 1926 and entered in races alternately or simultaneously with the two long-wheelbase CO models. They were used by the Racing Department until 1928. They differed primarily from the two prototypes by their wheelbase, which was reduced by 7 cm, and their wider grille.

The chassis plans are dated March 31, 1926.

The overall dimensions and length of the car were identical to those of the long-wheelbase CO. However, the reduced wheelbase necessitated shortening the transmission tube and lengthening the rear overhang. The hood length was increased by 55 mm, but to compensate for this increase, the cowl was also shorter.

As with the long-wheelbase CO prototype No. 2, the oil tank was located next to the driver.

The first racing appearance of a short CO car took place at the Grand Prix for cyclecars and voiturettes in Miramas on June 27, 1926. It was driven by Duray.

It appears that at the Brooklands 200 Miles on September 25, 1926, two other short CO cars were entered for Morel and Mestivier, bringing the total number of short CO cars manufactured to three.

If this is confirmed, at the end of the 1926 season and for the 1927 season, the Racing Department had five cars at its disposal (the two long CO cars and three short CO cars). The long CO cars were primarily used in hill climbs, while the short CO cars were used in longer endurance races.

Thanks to the weighing carried out in Miramas, the weights of the two versions are known: 590 kg for the short CO, 573 for the long CO piloted by Morel and 603 for the long CO of Martin, these data being understood without water, oil or fuel.

Le CO Monoplace expérimental de 1926 :

On November 4, 1925, a new version of the CO type was designed. It was intended for pure speed trials over short distances (1 km to 10 miles). The car was bodied as a strict single-seater. The chassis width did not exceed 55 cm at its widest point, and the slightly curved side members followed the shape of the body. The streamlined bodywork minimized the frontal area and tightly enclosed the driver's seat, the opening of which was reduced to its simplest form.

It was equipped with the CO 55 x 77 engine, which developed 107.5 hp at 6,750 rpm.

On April 9, 1926, the plans for another version were completed. It differs notably in its reduced wheelbase, from 2.235 m to 2.160 m, thus following the evolution from long to short wheelbase, and in the size of its wheels (710 x 90 instead of 700 x 90).

A car was built immediately afterward. It was probably manufactured based on the plans of project no. 2 but fitted with the bodywork of no. 1. The first tests took place at Montlhéry in late April/early May 1926.

The results were very disappointing. Access to the vehicle proved impractical, and visibility was reduced due to the very enveloping bodywork. But, above all, according to Pierre Chan, the car «proved difficult to drive, not to say dangerous: the driver's position, seated directly above the driveshaft, necessitated the use of stiff springs to limit their travel and prevent the driver's bottoming out on the seat. As a result, at high speeds the car bounced, swerved, and jumped into the air over the slightest unevenness in the road surface.» Morel thus experienced some close calls and, as soon as the first test session was over, he wanted nothing more to do with this prototype, which was subsequently dismantled.

The first outing for this experimental single-seater had been scheduled for the Arpajon Record Day on May 9th. Following these disastrous initial tests, the experimental single-seater was abandoned in favor of a specially prepared one.

As early as May 15th, a leak from a journalist mentioned «the single-seater that wasn't ready and that we'll certainly see in September at the next Record Day.» The car, as we've seen, would never be used in a race. Moreover, Amilcar wouldn't participate in this second Record Day.

Despite the project's abandonment, the idea of a single-seater continued to take root, but it would have to wait until 1928 for it to materialize with the MCO. However, we'll see that the latter has virtually no connection to this experimental car.

These mechanical layout plans for the CO Experimental Single-Seater – its official designation – are dated April 9, 1926, just one month before the Record Day for which it was intended to be entered.

Other, significantly different plans attest to further research on this concept. The engine is the same as the CO (55 x 77), with a vertical Roots supercharger at the front. The overall design is based on the 4-cylinder racing tandems of 1923/25, with the engine centered on the chassis axis, a particularly enveloping body with a very high beltline, and a narrow cockpit with the driver's seat straddling the

driveshaft.

The wheelbase of 2.160 m is identical to that of the short-wheelbase CO models. Engine, steering wheel, and driver's seat are centered on the longitudinal axis of the chassis; however, the steering column, curiously mounted without a universal joint, is connected to the gearbox at a rather sharp angle, which explains why the steering wheel axis is not perpendicular to the chassis axis.

To save weight and reduce air resistance, the car was not fitted with front brakes.

This drawing, published in Moto-Revue on June 15, 1926, further accentuates the height of the car and gives the impression of a very short wheelbase. It also shows the narrowness of the cockpit.

The CO experimental single-seater tests took place at Montlhéry in the spring of 1926. These two poor-quality photos are the only ones we have. They highlight the narrowness of the car, whose bodywork is barely wider than its streamlined grille.
After managing to get into the cockpit, the driver is positioned, straddling the driveshaft, with the gearbox between his legs and one foot on either side.
The unusually tall bodywork on a short wheelbase gives the car a particularly ungainly appearance.
This bodywork is made of unpainted aluminum panels, hand-formed and nailed edge to edge onto a wooden frame.

André Morel, cramped in the cockpit of the experimental CO Monoplace car, looked miserable. The driving position proved extremely uncomfortable in such a small cockpit with its off-center steering wheel. The very enveloping bodywork, enhanced by a small deflector, did little to improve visibility. Morel quickly decided to end the experiment.

Curiously, although not intended for commercial sale, the Amilcar Type CO appears in the 1926 price list printed in November 1925.

Even though the car had already raced at Gaillon, it was still only a prototype. Its final development was not yet complete, and the bodywork required finishing work. Under no circumstances could it be offered to a customer in its current state.

The car is briefly described as a «Special Six-Cylinder Type.» It is promised to reach 190 km/h, and its «roller crankshaft» is specified.

The advertised price (175,000 francs) is exorbitant. It is eight times the price listed in the same catalog for a CGS model with a sports body (21,000 francs).

For comparison, a Bugatti Type 35, 8-cylinder, roller-type crankshaft, costs 100,000 francs.

In short, if the company hadn't wanted to sell the CO, it couldn't have done a better job!

In this excerpt from the Amilcar catalog dated November 10, 1925, the price quoted is particularly prohibitive, as if the company didn't want to sell a single one! The 6-cylinder model is described in its factory version, type CO, but the supercharger is not mentioned. This is a blatant subterfuge to allow the car to be entered in the 1926 24 Hours of Le Mans, as the specific regulations for this race required the model to be listed in the catalog before the end of 1925 and stipulated that engines could not be supercharged. In subsequent publications, the type CO remains in the catalog, but its selling price is no longer listed. The customer-competition version, C6, potentially usable on a daily basis (!), would not be offered until 1927.

While this practice may seem outlandish, it actually stems from a perfectly calculated strategy by the company's management, who, before the CO's unveiling, established a particularly busy racing program for the upcoming season. Now, the regulations of certain events, such as the 24 Hours of Le Mans, require that the entered model «be previously registered by the manufacturers.»

The brand wants to prove that its new, highly sophisticated racing car is capable of competing in a 10 km hill climb, a 300 km Grand Prix, or an endurance race. Therefore, in December 1925, as soon as entries opened, Amilcar officially entered two cars in the 4th Grand Prix d'Endurance, held on June 12 and 13, 1926, at the Circuit de la Sarthe.

The regulations for this event were draconian, and to comply with them, two official registration documents (COs) were specially constructed. These regulations stipulated, in particular, that the entered cars had to conform to the production model offered in the current commercial catalog, which had to be printed before December 31, 1925. Thirty copies of this catalog, along with a printer's certificate stating the number of catalogs printed and the date of printing, had to be sent to the ACO before April 30, 1926. Furthermore, these catalogs had to be accompanied by a sworn statement from the company's director.

This point in the regulations explains the haste in mentioning the new 6-cylinder engine in the 1926 price lists.

Another point in the 24 Hours of Le Mans regulations prohibits supercharging, which is why it is specified that the car can be sold with or without a supercharger, which is obviously false. The desire to participate in the endurance race, however, is very real. The cars are built according to the imposed specifications, and on April 20, 1926, L'Auto reports that:

"Morel, head of the racing department at Amilcar, went to Le Mans to reserve the team's camp.

This camp will be set up in Arnage."

Then, in the days leading up to the race, L'Auto announces the team's driver lineups. Morel and Duray will drive the Amilcar No. 44, while Martin and Moriceau will share No. 45. L'Auto reports:

"As for the longest distance covered, we should witness a fierce battle between Peugeot, Bentley, and Lorraine-Dietrich; but you'll see that the small Amilcars, despite their small engine displacement, won't give them a chance."

This comment seems rather presumptuous, as the circuit is fast, with a very long straight. It's hard to imagine an 1100cc car without a supercharger, topping out at 140 km/h, competing with a Bentley approaching 180 km/h.

Three days before the race, on June 9th, the same newspaper, in a short article entitled «A Regrettable Withdrawal,» published the following text:

«A phone call received yesterday from Amilcar informed us that, due to a delay in the construction of the bodies for the two cars they had entered, they had decided not to participate. This withdrawal will be sorely regretted, as we expected to see some impressive performances from these two little 1100cc cars, which were to be driven by two teams of top drivers: Morel/Duray, and Martin/Moriceau.»

Five other competitors also withdrew (two Sunbeams, two GMs, and one Overland), and ultimately, 41 crews started the race on June 12th for the 24-hour event. The race was won by the Lorraine-Dietrich 3.4L driven by Bloch and Rossignol. It covered 2,552 km.

In the 1100cc class, the highest-placed car was the factory Salmson driven by Casse and Rousseau, which, with 1,914 km, finished in 10th position.

GM Automobiles (Gendron & Michelot) The brand was active from 1924 to 1928. Marcel Michelot died in an accident during testing at the Le Mans circuit on June 12, 1927.

The only official reason given for the withdrawal of the two Amilcars was the one reported by L'Auto. The subject was never mentioned again, and no further information was released.

The pretext of delays in the bodywork seems hardly credible. The project had been underway for over six months, and significant resources had been invested, as both cars were under construction and nearly finished. How could the factory, just days before the start, withdraw with such a flimsy reason? Indeed, any potential delay in shaping the bodies (which were quite simple, by the way) could easily have been made up by allocating additional bodywork specialists to complete the cars.

The real reason for Amilcar's withdrawal is therefore quite different. It is possible that the company's management feared their cars would be disqualified for not conforming to the regulations requiring a commercially available model. A decision along those lines by the ACO stewards during scrutineering, or worse, a protest from a competitor, could have damaged the company's reputation.

Even though the cars entered at Le Mans by manufacturers like Lorraine-Dietrich or Peugeot are specially prepared, they still conform to those described in their respective catalogs. However, at Amilcar, the catalog describing the bodywork and accessories doesn't even exist… The reputation of the 24 Hours of Le Mans was forged thanks to its regulations, which uncompromising stewards apply without hesitation. Thus, during the 1926 edition, despite public protests, they did not hesitate, around 5:00 a.m., to disqualify the Peugeot 174S cars of Boillot-Rigal (then second in the standings) and Wagner-Dauvergne (4th). The former was disqualified due to a broken windshield pillar (Article 8 of the famous regulations), and the latter after having to push-start the car from the pits because of a dead battery (Article 9 of the regulations required the engine to be restarted using the starter motor).

It is also possible that the development of the 6-cylinder engine, now without its supercharger, proved difficult, or that the performance achieved was simply inadequate.

Pierre Chan explains:

"In 1926, I was tasked with designing a special body to be mounted on a 6-cylinder racing chassis for the purpose of competing in the 24 Hours of Le Mans." The car I designed consisted of a CO-type chassis onto which was mounted a body conforming to the race regulations, meaning it had two side-by-side seats of a specified width. It also had a windshield that the regulations allowed to be retracted after a certain point in the race, as well as a soft top that could be folded down at the same time. I had envisioned a very low windshield that could slide into lateral grooves and extend slightly above the driver's knees.

Similarly, I had designed a system for attaching the soft top to the windshield with quick-release latches to save time (the soft top had to be closed by the driver at the start, after running across the track, before entering the race). Fenders and running boards were also mandatory. I had planned for two spare wheels mounted at the rear. Haunted by the fear of secondary component failure, I took extensive precautions; for example, the headlight and fender mounts were made of nickel steel with very rigid reinforcement. The same was true for the spare wheel mounts.

The engine was intended to be supercharged. Ultimately, this supercharged 6-cylinder engine could not be developed in time, so

we had to settle for the special four-cylinder engine, which was the modified production engine used in the tandem cars. But the CO chassis/bodywork we built proved too heavy for this engine.

It therefore seems that the inadequate development of the supercharged engine was indeed the real reason for the two cars' withdrawal.

The few surviving photographs show one car apparently finished and the other in the process of being assembled. Neither car was ever entered in a race, and their fate remains unknown. We can simply assume that the 6-cylinder engines were discontinued and the cars were sold with a 4-cylinder engine.

Extraits du règlement des 24 Heures du Mans 1926

To be eligible to participate in the competition, competitors must meet the following conditions:

- The registered cars must, in all their specifications, strictly conform to the description in a standard commercial catalog printed before December 31, 1925.

Competitors must send the Automobile Club de l'Ouest, by April 30, 1926 at the latest, thirty copies of this catalog along with a printer's certificate stating the number of catalogs printed and the date of printing.

This document must be certified as true and accurate by the heads of the competing company (Managing Director or Head of Company).

- For cars with an engine displacement of 1100 cc or less, the body must accommodate two comfortable seats. All other cars must have a body with at least four comfortable seats.

The cars entered must have a standard passenger car body and include: a windshield, fenders, running boards, lanterns, headlights, a convertible top, a horn, automatic ignition, a rearview mirror, and a working muffler.

- Cars with supercharged engines are not permitted to participate in the event.

- Automatic ignition is mandatory and the only type permitted for the start, which is given with the engine off.

For cars with an external crank for starting, as shown in the catalog, this mechanism must be sealed to prevent the engine from being started manually.

The cars destined for the 1926 24 Hours of Le Mans are being assembled at the Racing Department. On both chassis, the headlight and fender support bar is in place. The car visible on the left has already received its two fuel tanks: a large-capacity one mounted on the cowl and a second one at the rear of the chassis.

In the background, the CGS is one of the three that raced in the Bol d'Or in May 1925, modified with gutter-shaped fenders fitted for the 24 Hours of Belgium.

The car, built on a CO-type 6-cylinder chassis, appears to be finished. Although the photo is undated, it's reasonable to assume it was taken before the 1926 24 Hours of Le Mans, the race for which it was specifically built but which it would not compete in.

The dynamo mounted on the end of the crankshaft in place of the supercharger (which was prohibited for this race) was essential for charging a battery and thus powering the mandatory electric starter. Maurice Dubois, head of the design office at the time, poses next to the car.

The wings, running boards, headlights, windshield, soft top, and spare tire all conform to the specific regulations of the 24 Hours of Le Mans. The bodywork, which by regulation must have a minimum width of one meter, extends beyond the narrower chassis.

In the background, a 6-cylinder CO car can be seen with its hood removed. Further to the right, a CO chassis frame is positioned vertically against the glass wall, and even further to the right, a CO chassis board/apron is visible.

CO Déportés (1927-1928)

The decision was made in 1924 to build an entirely new 6-cylinder racing car, before sporting authorities banned the presence of a mechanic on board. The cars were therefore designed as two-seaters. The new regulations came into effect in 1925.

In late 1926/early 1927, new cars were designed by the Amilcar design office to replace the CO models. From the outset, they were designed as single-seaters on new chassis. On these chassis, the engine/gearbox/transmission/rear axle assembly was offset 9 cm to the left of the car's centerline to provide more space for the driver, who was seated on the right. This arrangement allowed the driver's seat to be lowered, thus lowering the center of gravity.

These cars were equipped with the second version of the CO engine, a short-stroke 6-cylinder with a bore and stroke of 56 x 74 mm, supercharged by a new horizontal-type compressor. On the factory plans, these single-seater models are designated CO type with offset engine, simplified to Offset CO. Their overall appearance adheres to the Amilcar style, making them immediately identifiable as Amilcar productions.

Apart from the front (1.060 m) and rear (1.090 m) track widths and part of the front suspension, they share little in common with the CO models that preceded them. However, some features of the experimental single-seater CO were retained. The wheelbase was slightly lengthened compared to the short-wheelbase CO (2.195 m versus 2.160 m), and the maximum chassis width was reduced to 67.8 cm (from 77 cm). The side rail cross-section increased from 85 mm to 135 mm. The chassis frame extends below the axle to support a large-capacity fuel tank (107 liters). The front springs slide on rails, replacing the shackles. This design allows for a slightly lower ride height and improved front-end handling.

The maximum height has been reduced by 5 cm (84 cm total height compared to 89 cm), and the radiator height by 4 cm.

The bodywork is an assembly of hand-formed aluminum sheets, now riveted or stapled to a steel or aluminum angle frame, rather than nailed to a wooden structure. Its design is asymmetrical, with a deep cutout on the right side at the cockpit, designed to improve access. Behind the wheel, the driver has significantly more freedom of movement than in the experimental single-seater.

The left side, in contrast, has a shallow cutout. The lower section, below the exhaust pipe, features vertical louvers to channel fresh air to the oil tank and the cockpit. The left side of the cockpit is enclosed by a rigid cowling that covers the 30-liter oil tank/reservoir, which is mounted on the cockpit floor to the left of the transmission tube. This cowling is removable to facilitate mechanical or maintenance work and is perforated to allow the oil tank's filler neck to pass through.

These sketches allow us to visualize the architecture of the remote COs.
In the front view, the crank handle is offset to the left. The plan view shows the engine/transmission/axle assembly offset 9 cm to the left of the centerline. The large-capacity fuel tank is supported by a chassis extension that passes under the rear axle.
They also highlight the asymmetrical body design. Note the shallow slope of the hood, the ventilation louvers under the exhaust pipe, and the oil filler neck.

On the left half of the hood, a fairly substantial bulge was cut to cover the magneto, which, due to the narrower chassis, protrudes from the body. The hood, viewed from the side, has a gentler slope.

From the front, the CO Déporté is easily recognizable: the starting crank is offset to the left of the radiator, and the bodywork is narrower and lower than on the CO types.

Three CO Déporté models were assembled by the factory. It appears they were not approved by the Mines Department, which did not prevent them from being registered.

They are practically identical, and distinguishing them at first glance is a difficult task. As with all racing cars of the same type, however, a few details allow for identification, particularly the cutout in the passenger compartment, the number of louvers on the left side, or those cut into the hood. See p. 222 “Identification of Deported COs”.

A fourth CO Deported appeared in the mid-1930s. To learn about the genesis of this car assembled around a factory chassis and single-headed engine, refer to Volume 2 of this work.

A streamlined, angled radiator grille is present on one of the three cars; the other two feature a conventional exposed radiator.

It is quite possible that one of the CO Déportés was initially powered by the 55 x 77 engine.

In races, the CO Déportés are driven by factory drivers and, more exceptionally, for promotional purposes, by local drivers recruited on an ad hoc basis during trips abroad.

The cars are not assigned to a specific driver, but André Morel, the lead driver, undoubtedly favors the most competitive one.

Like the COs, the CO Déportés are very versatile, fast, and reliable cars. Over the course of the races, minor modifications are made to them: the addition of a stone guard in front of the radiator, the radiator fairing, the addition of a windscreen, modifications to the bodywork to comply with Brooklands regulations, and, to race on the same track, the addition of an exhaust silencer.

The CO Déporté made its racing debut in May 1927, driven by Morel, at the Kilomètre Lancé, one of the events of the Bordeaux Motor Week. From July onwards, all three cars were used regularly in races.

After the Rome Grand Prix on June 10, 1928, the CO Déportés were retired and replaced by two new factory cars, also single-seaters, but even narrower: the MCO 1100 and 1500 cc.

It should be noted that one of the CO Deportees was re-engined in March 1928 with the 58 x 83 1270 cc engine also known as the «1500». On this occasion, larger diameter brake drums were fitted.

Morel at Montlhéry, driving one of the three CO Deportees at Montlhéry on August 15, 1927. Beside him, his faithful mechanic, Maurice Mestivier. A row of rivets securing the aluminum sheet to the frame is clearly visible. Hanging from Morel’s elbow is a piece of leather strap that the driver buckles around his waist before the start, a rudimentary rudimentary seatbelt.

This photograph, taken during the Bordeaux Motor Week on May 22, 1927, clearly distinguishes the two CO models: the Offset CO (on the left), making its racing debut, and the CO. The Offset CO sits lower, the crank handle is offset, and the hood features a bulge covering the magneto. Morel and Mestivier are positioned between the two cars. Mrs. Morel can be seen on the left in the background. Seated on the CO is Maxwell, an Amilcar agent in Bordeaux (Gascogne Automobile).

Sammy Maxwell (1902-1965), of Irish origin, was in partnership with Philippe De Saint-Affrique. Their garage was located at 152 rue Fondaudège. De Marcellus joined them in 1931.

Although the plans for this new car were drawn up as early as March 1927, practically at the same time as those for the CO Déporté, its construction was delayed, undoubtedly due to the financial difficulties the company was experiencing. The MCO (Monoplace Course) 1100 and 1500 cc models finally appeared in the summer of 1928. Both cars were designed primarily for acceleration trials (standing or flying kilometer) and short-distance speed records. To this end, engine power was optimized, and weight reduction and minimal size were essential, even at the expense of traction, overall balance, and driver comfort. The two cars, which would also be entered in longer races, therefore differed significantly from other factory 6-cylinder models.

Their chassis, whose maximum width has been reduced, is lightened by the use of thinner sheets (2.7 mm compared to 3.5 on the other versions) and the section of the longitudinal members is reduced to 80 mm (compared to 85 on the long CO and 135 on the short and Offset CO).

This design choice necessitates reinforcements in the form of gussets in high-stress areas such as the rear suspension mounts and engine mounts.

The 65 mm reduction in wheelbase means the 6-cylinder engine and radiator are moved further forward. The maximum width is limited to 50 cm, within which the engineers must find a way to best accommodate the driver's seat, oil tank, and transmission!

Some crossmembers are no longer riveted but bolted to allow for quicker disassembly and easier frame modifications.

One of the cars is powered by the 1100 cc engine, the other by the 1270 cc. The engine-gearbox-transmission assembly is offset 11 cm to the left (9 cm on the Offset CO models) to position the driver's seat as low as possible. This lowers the center of gravity and improves aerodynamics. This greater offset explains the relocation of the left rear engine mount to the outside of the chassis; it rests on a bracket fixed to the outer face of the frame rail.

The gearbox is identical to that of the other CO models, but the secondary shaft is hollow and the gears are lightened by drilling and machining grooves. Furthermore, the reverse gear engagement system is modified to reduce friction.

The axle is reinforced, the wheel shafts have a larger cross-section, and their shafts have four splines instead of three. The lubrication of the pinion bearings is improved, and the final drive ratio is adjusted (31 km/h at 1000 rpm).

The front suspension features specific spindles, lightened by hollowing out their axles, and machined to lower the chassis relative to the axle.

The front track is widened by 20 mm (span from 1.06 m to 1.08 m).

The front spring slide boxes are positioned very low, their attachment reinforced by a lug bolted to the underside of the frame rail. The front and rear springs are stiffened by an additional leaf spring.

The steering box is identical to that of other Amilcar racing models. As on the experimental CO Monoplace, the column is connected to the box at a fairly steep angle, which explains why, here too, the steering wheel axis is not quite perpendicular to the chassis' transverse axis.

The braking system, while very similar to that of other Amilcars, does have a few subtle differences. The rear brake levers are shortened to limit braking power at the rear of the car due to its low weight. The external rudder levers are lightened and lack the left/right balance system; the adjustment knob on the control rod, accessible from the pedal, is highly perforated.

During certain record or acceleration attempts, the front brakes are removed, the wheels fitted with hubcaps, and the radiator shroud area increased.

The body panels, made of aluminum sheets, are welded together to form a single piece without a true frame. This body shell is simply stiffened by a few aluminum hoops to which it is either welded or stapled. Very enveloping on the left side, it is cut out on the opposite side to allow access to the cockpit and permit minimal movement for the pilot.

The left half of the cowling features two bulges: an oval one on its lower part to conceal the prominent engine mount, and another, larger one at the front, protecting the magneto, which, due to the engine's position, protrudes from the chassis.

The reduced frontal area results in a hood without any louvers (on the 1100), a 15 mm reduction in the maximum height at the bulkhead, the fitting of a radiator shroud with a reduced height (475 mm compared to 510 mm on the Offset models), the addition of a deflector at the bottom of the windscreen, and a streamlined headrest extending to the tip of the rear section. The radiator's frame and sheet metal components are lightened as much as possible by drilling numerous holes. As on the Offset models, the crank handle is offset.

Viewed from the front, the upper part of the radiator barely extends beyond the line of the front wheels. The quest for improved aerodynamics even led to the removal of the upper part of the hood support straps.

The minimum weight required necessitated the removal of the firewall in the bulkhead supporting the hood. Oil and gasoline fumes thus penetrate directly into the cockpit, and the driver's legs are in direct contact with the heat emitted by the engine and gearbox. One can easily imagine the ordeal endured by drivers during races longer than the sprints for which the car was designed.

To save a few more dozen grams, the bolt heads are hollowed out and milled to remove any unnecessary material.

The dashboard, supported by the firewall, is...

It consists of a single tachometer and two gauges for fuel and air pressure. It also houses the fuel tank air pressure adjustment knob and the oil pressure control valves located directly on the fuel lines. The driver also has an ignition timing control.

The cockpit is so cramped that it doesn't allow a driver taller than 1.75 m to fit inside.

The car weighs 600 kg, but this weight is poorly distributed, heavier at the front and also on the left side due to the engine and the offset transmission.

La MCO 1100

While the two cars are very similar in appearance, they differ in a few details, with the MCO 1100 focusing more on weight reduction and improved aerodynamics.

The latter's engine uses the same dimensions as the CO 56 x 74 type 6-cylinder engine, but it is machined and assembled from an original 55 x 77 block, easily identifiable by certain casting characteristics and its steeply sloping oil pan housing a first-generation pump.

The reasons for this choice remain unclear, but it is possible that the high cost of the very complex casting of these single-ended blocks led, as a cost-saving measure, to the use of an available block.

The camshafts are specific, allowing for greater valve lift. A 90 mm horizontal supercharger provides the engine.

The maximum operating speed of this engine has been increased to 7000 rpm. A second 6-cylinder engine with a bore and stroke of 56 x 74 mm was assembled from such a block. Likely intended as a spare engine, it may also have been a prototype developed before the introduction of the final, second-generation engine. This second engine still exists, stored at a collector's home, gutted, disassembled, and incomplete.

La MCO 1500

It is equipped with the so-called «1500» CO engine (1270 cc, 58 x 83 bore and stroke) and the four large-diameter brake drums that appeared and were tested during the season on one of the offset CO models.

Compared to its 1100 cc sibling, the hood has louvers on its sides and top.

It was the only car used during the truncated 1929 season due to Amilcar's abrupt decision to withdraw from official racing.

Its last two races under a factory entry took place in March at the Geneva Kilometer, and in May, sporting the yellow and black livery of Thompson Products, at the Indianapolis 500.

During its brief official career, the car participated in only eight races. But, just like the MCO 1100, the MCO 1500 will begin a second career outside of Amilcar's Racing Service when it is sold by the factory.

After being sold by the factory, the MCO 1100 was raced extensively by private drivers, while the 1500 saw less use. Both cars are now in private collections.

The 1925 season was limited to two events contested by André Morel and prototype number 1: the Gaillon and Gometz-le-Châtel hill climbs. These two events were detailed in the chapter «From the Origins of the Project to the First Races,» so we will not revisit them here.

After these two victorious outings, the Racing Department had little time to prepare for the 1926 racing season, which began at the end of January.

The company decided to fully commit to competition. The objectives, all of a publicity nature, were numerous: to prevail against rival brands participating in the same races, to showcase complete mastery of the most advanced technology, to reinforce the image of a dynamic manufacturer, and, of course, to fill the order books. Approximately thirty races were on the calendar. They represent a diverse range of hill climbs, circuit races, endurance events, and speed records.

This program concerns France but also other countries where Amilcar hopes to increase sales through strong results. While, until now, the Racing Department had only ventured abroad once with its 4-cylinder cars (at the 1925 Belgian 24 Hours), in 1926, with the 6-cylinder cars, five trips abroad were planned: to Switzerland for the Klausen Rally, to Italy for the Voiturette Grand Prix at Monza, to England for the Brooklands 200 Miles, to Belgium for the Spa 24 Hours, and finally, to Spain for the San Sebastian Grand Prix.

This very busy schedule was not fully met, as the company withdrew from several events. Nevertheless, by the end of the season, the 6-cylinder cars had participated in 26 different races, sometimes with three cars entered simultaneously. To ensure the assembly, preparation, support, and maintenance of all the cars, the Service has strengthened its team of mechanics.

The driver team includes André Morel, Charles Martin, and, occasionally, Arthur Duray.

La saison 1926

Course de côte du Camp, 24 janvier

The first speed race of the year, the 11th Camp Hill Climb (now Le Camp du Castellet), was organized by the Marseille Motorcycle Club and Automobile Club.

It took place on a 4 km stretch of National Route 8 between Aubagne and Toulon, in the commune of Cuges-les-Pins.

The Racing Department made the trip with the six-cylinder CO, whose last outing had been the previous November.

Unfortunately, the weather conditions were dreadful; the road was waterlogged and, being unpaved, had been eroded by the overnight rains. Robert Benoist (Delage), the overwhelming favorite, and Morel decided to honor their commitment, but without taking any risks.

They were merely making up the numbers and used ignition problems as an excuse for their poor performance. This left the field open to the less powerful cars. Former cycling champion Aristide Bettini, driving a Bugatti 35, took the opportunity to set the best time of the day ahead of Raymond Savon (Bugatti 37).

L'Auto, in its report published on January 25th, explains the poor performances of Benoist and Morel.

Although Benoist was not classified, Morel still won the 1100cc racing category, but he completed the course in 3 minutes and 25 seconds, 35 seconds slower than the winner! This «performance» was only reported by Le Matin.

January 24, 1926. In cold, gray, and foggy weather, Maurice Mestivier leaned over Morel's car at the start of the Camp hill climb. It was no longer raining, but the incessant storms of the night had made the unpaved road very slippery. The driver opted for a very cautious ascent. The car was still in its original configuration (unvented hood, oil lines running through the grille).

Courses de côte de la Mi-Corniche, 20 février

Following the Camp hill climb, several events are organized in February on the French Riviera, generally benefiting from fairly favorable weather conditions.

The first two races are included in the program of the Monaco motor racing meet, organized by the Monaco Automobile Club. This event begins on the 16th and ends on the 28th, and includes numerous races, the two main ones being the Mi-Corniche and Mont-Agel hill climbs.

The first takes place on February 20th on one of the three routes (lower, middle, and upper Corniche) that overlook or run alongside the sea and connect Nice to Menton.

The race only uses a short, one-kilometer section with a 6% gradient on the Middle Corniche, between Villa Primavera and the Pissarelles tunnel. The start is from a standing start.

André Morel achieved a remarkable performance, setting the fastest time across all categories at 37.1 seconds. He finished more than a second ahead of Williams (Bugatti 35). Furthermore, the Amilcar driver improved the absolute hill climb record by 3 seconds.

«Morel was driving an Amilcar with only an 1100cc engine. With it, he set the fastest time of the day in all categories, even beating racing cars with larger engines.

He climbed the hill at an average speed of 96.7 km/h, starting from a standing start.

This performance greatly impressed the many spectators who attended the race.

Amilcar, with its marvelous machines, accustoms us to fantastic speeds and will be a competitor to be reckoned with in the coming season.»

Le Figaro, February 22, 1926.

Mi-Corniche Hill Climb, February 20, 1926. Without a helmet or racing suit, brake lever in hand, Morel prepares to make a test run.

The weigh-in for the meeting takes place in Monaco. Morel, in a sweater, and Mestivier, in a jumpsuit and tie, stand behind the car, waiting for it to be checked and stamped. On the 6-cylinder (this is prototype number 1), the hood is not yet vented. The car, which will only be homologated on March 2nd by the Mines Department, bears a registration number (7887-I 7) taken from one of the two factory tandem cars.

Course de côte du Mont-Agel, 21 février

The day after the Mi-Corniche hill climb, the Mont-Agel hill climb takes place over a 10.6 km course between Beausoleil and Mont-Agel.

The latter, which rises to 1148 m, overlooks the Principality of Monaco.

The start is given in the Place de la Mairie in Beausoleil, and the finish line is located at the Mont-Agel golf course. The course is very winding, with numerous tight turns and an average gradient of 7.5%. The event is open to motorcycles, sidecars, and cars.

The first start is given at 8:15 a.m., while dense fog lingers and considerably hinders the competitors.

After his magnificent performance the previous day, much is expected of Morel and his Amilcar, but after climbing two-thirds of the course, he misses one of the Bellevue hairpin bends and goes off the road. Damaged front axle; it cannot continue.

First place in the 1100cc racing category goes to Henny De Joncy, who debuts the new BNC model, equipped for the first time with a supercharger. This BNC victory over Amilcar will remain unique throughout the period when the two brands compete against each other.

Robert Benoist sets the fastest time of the day at the wheel of the 12-cylinder Delage, with a lap of 11 minutes 54 seconds. Williams (Bugatti) finishes second..

Morel in full action on one of the hairpin bends of the Mont-Agel hill. He will go off the road a little further on.

The victory of Henny de Joncy's new BNC, thanks to Morel's off-road excursion, was merely an illusion. Facing the SCAP 4-cylinder overhead valve engine equipped with a Cozette vane supercharger, the Amilcar's 6-cylinder twin-cam engine with a Roots supercharger was a formidable opponent.

*The March 5, 1926 edition of *The Autocar* published this document with the following caption:*

"Amid the smoke and noise of battle. Morel, at the wheel of his supercharged six-cylinder car, starting from Mont-Agel, forced spectators to cover their ears as he revved his engine before setting off. He got off to a very good start, but unfortunately failed to negotiate one of the many corners, slightly damaging his car."

Course de côte de la Turbie et Km départ arrêté de Nice, 25 février

The Nice meeting begins while the Monaco meeting is still underway. It takes place after the finish of the Paris-Nice road race and includes, in the morning, the Turbie hill climb and in the afternoon the Nice standing-start kilometer.

The Turbie hill climb is the oldest in the world (the second oldest being Chanteloup-les-Vignes near Paris), with the first edition dating back to 1897. It now measures 6.3 km (over 16 km in the early years) and is held on a section of the Grande Corniche.

Morel, hampered by mechanical problems during the climb, can do no better than De Joncy, who is driving the supercharged BNC that won at Mont-Agel. The two men were tied for first place in the 1100cc racing category.

In the absence of Robert Benoist and his Delage, who withdrew after a collision with Jean de l'Espée's Bugatti just before the start, Louis Chiron, driving a Bugatti, won the event, setting a new record.

In the afternoon, in the standing-start kilometer race held in Nice on the straight of Avenue de la Californie, Morel recorded the best time of the day, across all categories, at 29.45 seconds. His average speed was 122 km/h. The 2-liter Bugattis driven by "Williams" (32.35 seconds) and Friderich, the latter entered in the Sport category with a Type 35 (35.25 seconds), were unable to improve on that time. De Joncy (BNC) finished second in the 1100cc racing category, but a full 13 seconds behind the Amilcar driver.

Turbie hill climb: some mechanical problems encountered on the ascent prevented Morel from overtaking the BNC team of de Joncy. They finished in a tie.

The following day, in the newspaper L'Auto, an advertisement disguised as a press article carefully avoided mentioning the mechanical problems of the 6-cylinder car and its joint-place finish with the BNC at La Turbie:

"In Nice, victory for Amilcar. Thursday's major events – the La Turbie hill climb and the standing-start kilometer – were triumphant for the Amilcar team. Morel's performance in these two races, with his little 1100cc machine, made an absolutely fantastic impression." Indeed, not only did the Amilcar break its category record at La Turbie, clocking in at 5.5 seconds and achieving the second-best time of the race, holding its own against larger-displacement vehicles and displaying a splendid display of power and precision, but it also secured a magnificent first place overall in the standing-start kilometer, averaging 122 km/h and beating the record set on the same course by a larger car.

For its part, Delage, although unable to participate, emphasized in a similar article that the La Turbie record set by Divo in 1924 remained unchallenged and still belongs to them!

Turbie hill climb: Morel during practice.

Maurice Mestivier is busy working on the Amilcar engine before the standing start kilometer race held on the straight stretch of the Californie in Nice.

Kilometer of Nice: Morel, driving the CO, will set the fastest time.
The #40 Bugatti is Williams' car, which will have to settle for the second fastest time.

Advertisement insert published in L'homme libre on March 2, 1926.

Course de côte de l'Esterel et 500 m de Nice, 28 février

The Cannes Meeting followed those of Monaco and Nice and concluded the early-year racing series on the French Riviera. It consisted of two main events: in the morning, the Estérel hill climb, 8.3 km long, and in the afternoon, a 500-meter sprint, with a standing start and finish. Morel, although listed among the entrants, is not mentioned in any of the race reports. It can therefore be assumed that he withdrew, the reason for which remains unknown.

In the Estérel hill climb, in the 1100cc racing category, De Joncy took advantage of the opportunity to secure another victory with his supercharged BNC. Friderich won the event ahead of Lepori and Williams, all driving Bugattis.

The 500-meter race took place on the Promenade de la Croisette. As with a few other events, the finish line was marked as a standing start. Competitors traveling at full speed must therefore brake as late as possible to stop on the finish line while losing minimal time. The exercise may seem absurd, but one must consider the context of the time. Stability under braking was highly unpredictable, and the driver had to demonstrate considerable skill to keep their car straight. The accidents involving Eric Lora at Fontainebleau in 1934 (8 deaths among the spectators in addition to the driver himself) and Joseph Cattaneo at Château-Thierry in 1935 (8 deaths, 31 injuries) during braking at the finish line spelled the end for these events. Jean d'Aulan had also collided with spectators in 1927 at the finish of the Château-Thierry race, but fortunately, the crash resulted only in injuries.

In Nice, Friderich and Rigal (in a large 18hp Peugeot touring car), tied for first place, achieved the best performance.

Course de côte d'Argenteuil, 7 mars

A week later, the Amilcar team was in Argenteuil, about fifteen kilometers north of Paris, for the hill climb that traditionally opens the season in the Paris region.

The 1800-meter course follows the road to the Fort. Organized by the Motocycle-Club de France, it always draws a large crowd. A regular participant in this event since 1924, Amilcar entered two 6-cylinder motorcycles for the first time: Morel (no. 151) in the 1100cc racing category, and Charles Martin (no. 121) in the 1100cc sport category. The reason for this choice was simple: rather than winning the top two spots in the racing category, they figured they might as well secure two victories on the same day. The bad weather, which made the road very slippery, didn't deter the many spectators who turned out, but it did explain the withdrawal of about forty entrants. Only 63 of the 104 competitors lined up at the starting line, and 58 were classified. The race was marked by a few off-road excursions, fortunately without serious consequences. Morel had a disastrous start, his wheels spinning for a long time on the unpaved and waterlogged road. He didn't persist and retired. Martin, for his part, didn't even show up to start. Michel Doré (Sénéchal 1500 cc) won the race ahead of Montier (Ford-Montier).

Argenteuil Hill Climb: While the weather conditions didn't deter spectators, they greatly frustrated the competitors. At the foot of trees where a number of daring spectators were perched, a car (probably Gréau's Stabilia) skidded and went off the road.

Grand Prix de Provence à Miramas, 28 mars

The first circuit race of the season takes place at the Miramas Autodrome, where the second Provence Grand Prix is being held.

This autodrome was inaugurated in 1924. Built on a 400-hectare estate located on the Crau plain, between Istres and Salon-de-Provence, about fifty kilometers from Marseille, it is an oval track with a 5-kilometer circumference, consisting of two straights of approximately 1000 meters each, connected by two semicircles with a 500-meter radius. The track is 16 meters wide.

Its corners have very little bank (5 cm per meter), and the concrete surface is quite abrasive.

Grandstands 300 meters long, constructed of reinforced concrete, covered and protected from the mistral wind, can accommodate more than 7,000 spectators. They line one of the straights and face the pit lane and the four-story timing control building.

A hairpin bend, often called a «virelet» by the press, already used the previous year, is laid out inside the north corner; it is intended to make the races a little more selective. The ACF Grand Prix will be held at this autodrome in 1926, followed by a third Provence Grand Prix in 1927. Then, apart from a few record attempts, only the Marseille Grand Prix will be run there (in 1932, 1933, 1936, and 1937). Racing then ceases at the autodrome. Several reasons explain this decline: the often very strong winds, the precarious grip, very slow water drainage in case of rain, but above all, the lack of profitability is the main reason. It was used after the war by Simca and then Ford to set very long-distance records. Today, it belongs to BMW.

The Racing Department is bringing two cars. This participation is essential as it will allow them to assess the car's capabilities on the track in a long-distance event. Furthermore, it foreshadows the ACF Grand Prix, which will take place on the same circuit in June.

After numerous tests at Montlhéry, the final adjustments to the six-cylinder CO engine continue for a few days at the race venue itself. The Racing Department has dispatched a workshop van and a large team of mechanics. This proved to be a wise move because:

«During the pre-race adjustments for the Provence Grand Prix, a surprise awaited the racing team: the car took off like a shot and then stopped after a few hundred meters. The accelerator was emptying the fuel line.» Morel borrowed a bicycle inner tube from the racetrack attendant, cut off the valve, fitted it to the gas tank cap, and pumped to restore pressure.

«On race day, a large pump bought from a hardware store in Marseille was hastily adapted, and Morel manually restored the missing pressure. He took first place at 123.6 km/h.» (Anecdote recounted by Roger Labric in the second quarter 1956 edition of the magazine Moteurs Courses following an interview with André Morel).

Morel is seen here during a test session: a hose connecting the tank installed in the rear section and the pressurized tank located on the bulkhead has been fitted, a temporary solution before the use of a pressure pump.
Martin's car will be equipped identically.

This fuel supply failure was due to the large-capacity tank mounted in the rear section, supplementing the one located under the canopy, which proved sufficient for hill climbs. A booster pump transfers fuel to the smaller tank, but the compressor, if used for extended periods at high RPM, siphons fuel from the line, causing the system to lose its prime. This problem did not occur when the fuel supply came directly from the main tank.

To permanently resolve the issue, the fuel system will now be kept under constant pressure. In addition to the installation of the second tank, another modification was made to both prototypes: the grille was widened to improve cooling.

The Miramas circuit is 5 km long, to which must be added the 50 meters of the U-shaped hairpin inside the circuit. This «turn» (additional track on the map) forces drivers to brake, downshift, and demonstrate virtuosity to negotiate this chicane.

André Morel is conducting tests on the Miramas track before the race. In front of the car is his mechanic, Maurice Mestivier. In the background, from left to right: engineer Moyet with his stopwatch, Martin's mechanic, Charles Martin in a white overalls and balaclava, an unidentified figure, and a third mechanic. The race number and the black stripe on the hood have not yet been painted. In the distance, the perimeter wall surrounding the racetrack can be seen.

The Provence Grand Prix practice sessions were marred by tragedy following an accident at the entrance to the «virelet» (a sharp bend). Gaétan Ducreux, braking hard to avoid hitting his brother Alfred's car, lost control and crashed into the embankment. Both the driver and his mechanic were ejected. Tragically, the car ran over Félix Castellan, the 24-year-old mechanic, who was killed instantly.

The Ducreux brothers run the family business, «L'amer Picon,» a famous aperitif brand. Gaétan was driving a Turcat Méry, and Alfred a Panhard. Both were forced to withdraw from the race.

On the concrete track at Miramas, Henny de Joncy poses between the two tanks of Thelusson (No. 10) and Brosselin (No. 11). The marque is debuting its new model, the Type 52, with a lowered chassis, a Scap engine with a Cozette supercharger, and a tank-like body. While they looked promising during testing, they wouldn't live up to expectations in the race.

The Grand Prix begins with five qualifying heats, each run over 50 km. These heats group cars of the same engine displacement (over 3 liters, 3 liters, 2 liters, 1500 cc, 1100 cc). A final, contested over 250 km, pits the top five finishers from each category against each other.

As at Argenteuil, Amilcar enters two cars for Morel and Martin. The car, which has only participated in hill climbs so far, will have to demonstrate its endurance and cover the 300 km of the event. Aside perhaps from the Montlhéry trials, it has not yet proven its reliability.

The qualifying heats take place on Sunday morning under threatening skies, which did not deter several thousand spectators from attending.

Two of the Salmsons (Nos. 1 and 2 of Marckiewicz and Bac), the Amilcar's main competitors, before the 1100cc qualifying heats, in front of the timing post. This document shows that these tall Salmsons were immediately at a significant disadvantage in terms of road holding compared to the considerably lower Amilcars. A generation separates the two models; the Salmson conforms to that of the early 1920s, the Amilcar to that of the second half of the same decade.

The 1100cc category attracts the largest number of competitors and promises to be the most interesting. The confrontation between Amilcar and Salmson is particularly anticipated. Facing the two Amilcars, the Salmson Saint-Sébastien cars are entered by their owners, without official factory support. The three BNCs are equipped with the same supercharged Scap engine already used by Henny De Joncy in hill climbs in southeastern France. The manufacturer lacks the resources to maintain a racing department, so their three drivers, privileged customers, have entered them privately. The cars of Thelusson and Brosselin feature a streamlined, aircraft-wing-shaped body, known as a «tank,» but they lack development. Finished hastily, they arrived from the Levallois factory by road the day before the race.

The other competitors (in the Octo and the Nemo) cannot hope to compete with the aforementioned cars. The same was true for the four-cylinder Amilcars of Michel and Cozette.

Morel, who took the lead, was never challenged and finished victorious. At the finish, he was 1 minute and 34 seconds ahead of his teammate. The three Salmsons followed, Bac 1 minute and 56 seconds behind, while Jourdan and Dufour were more than 2 minutes back. Pourtal (Octo) was the last qualifier.

After a good start, Brosselin's BNC dropped back and then retired. Only Thelusson was classified in 9th and last position.

The winning Amilcar maintained an average speed of 128 km/h. Charles Martin, for his part, opted for a more conservative race, content to keep the Salmsons at bay. If the competition hadn't yet grasped the supremacy of the 6-cylinder engine in this category, that's now been confirmed.

The other qualifying heats saw Rost (Georges Irat) take the win ahead of Montier (Ford-Montier) in the 3-liter class, and Lehoux triumph over Chiron, Eysermann, and Williams in the 2-liter class. The 1500cc class was dominated by the Talbots of Bourlier, Seagrave, and Moriceau, while the race scheduled for the over-3-liter class was cancelled, with only one competitor remaining after numerous withdrawals. Massias from Marseille (Alfa Romeo) qualified automatically.

At 2:30 p.m., the sixteen competitors qualified for the final lined up at the starting line. They had to complete 50 laps of the track, a total of 250 km. The sun had finally decided to shine, and the crowd was even larger than in the morning.

The starting grid was set in ascending order of engine displacement and according to the qualifying results. The two Amilcars were therefore on the front row with the Salmsons. The second row was occupied by the Talbots of Segrave, Bourlier, and Moriceau.

Morel got off to an excellent start, but Bourlier quickly overtook him and completed the first lap in the lead. At the end of the second lap, Bourlier had relinquished his position to Segrave, who was ahead of Lehoux, Morel, and Chiron.

The Amilcar driver steadily lost positions and, by lap 10, was in 9th place behind Martin, who had overtaken him. The rear tires of his car were worn down, scraped by the concrete of the track, and he stopped to change them on lap 12.

On this document, we see, fixed directly to the bodywork, a hand throttle lever, the air pump which keeps the fuel tank pressurized and the brake lever.

Martin retired on lap 30 due to fuel supply problems. Morel was then in 8th place. At the front, the two Talbots of Segrave and Bourlier were under direct threat from the Bugatti of Williams, which was running at full throttle. Later, Bourlier retired with a broken throttle linkage, and Williams suffered a puncture, losing precious time changing the wheel. Segrave was no longer in contention and won ahead of Moriceau, Williams (initially declared second), Chiron, and Foresti.

Morel finished 8th, three laps down, in this race disrupted by numerous timing errors. He won the 1100cc class ahead of Jourdan (Salmson), the only other 1100cc car to finish (11th, eight laps down). However, it appears that beyond 6th place (occupied by Rost, who was the last to complete 50 laps), the competitors were not classified. The reason was simple: the marshals stopped the cars because the public had invaded the track.

On such a fast circuit, despite all its qualities and the virtuosity its driver displayed in the corner, the Amilcar logically couldn't keep up with the pace set by the larger-displacement cars. The Talbot 1500s had dominated their class since 1921, and even the Bugatti Type 35s couldn't match the speed they imposed.

The performance achieved at the very beginning of the race by the 6-cylinder car was nonetheless remarkable. Charles Faroux, in his report, stated:

«We would like to see this chassis, executed in a superior manner, on a circuit with numerous laps, like the Targa Florio or San Sebastian. It would certainly hold its own against many larger-displacement cars.»

The March 29th edition of Les Sports de Provence recaps the qualifying rounds and the race:

"Amilcar dominated, taking first and second place respectively, along with Morel and Martin, in the new 6-cylinder machine. Morel, in particular, made a very strong impression: remarkable braking, lightning-fast acceleration, and, moreover, perfect stability. The impression he made was so powerful that, during the qualifying rounds, he had captivated the large crowd gathered at the racetrack, and during the time between the heats and the final, many wanted to bet on his luck. Alas! After a remarkable start in which he left everyone in his wake, serious tire problems robbed him of any chance of finishing first overall. Nevertheless, he finished first in the 1100cc class." In the same 1100cc category, Salmson, in the qualifying heat, ran a remarkably consistent race, finishing third with Bac, fourth with Jourdan, and fifth with Dufour, thus qualifying three cars.

BNC had made a serious effort in preparation for its participation in the Grand Prix de Provence. We lament the bad luck that seemed to relentlessly plague its team.

The Revue Motocycliste et Automobile of April 15, 1926, emphasizes that:

«The Amilcars, driven by Morel and Martin, proved clearly superior to the Salmsons, and the other competitors were never in contention.»

It is true that at the end of this first long-distance event, even though Martin had to retire on the 30th lap, the Amilcar CO proved just as competitive over 250 km as it had been in much shorter hill climbs.

Morel's brilliant performance allowed Amilcar to establish itself as the manufacturer to beat in the category. The company's management could already be satisfied with the investments made.

Maurice Philippe, in the April 15, 1926 issue of Automobilia magazine, offered the most insightful commentary:

«In fact, the Talbot victory was never in doubt. We know that the Talbot 1500s have a supercharged engine with a Roots-type compressor.» This engine produces approximately 117 horsepower at 5200 rpm, which is nearly 80 hp per liter of displacement and 15 hp per liter per 1000 rpm.

It's interesting to note that another engine, similarly supercharged, the Amilcar 1100 cc, with its 100 hp at 6000 rpm, achieves the same figure of 15 hp per liter per 1000 rpm.

The Talbot 1500s made their victorious debut in the hands of René Thomas in 1921 at the Coupe Internationale des Voiturettes held at Le Mans. They achieved a 1-2-3 finish with Lee Guinness in second place and Segrave in third.

These cars, designed under the direction of Owen Clegg, were equipped with twin-cam, four-valve-per-cylinder engines, directly inspired by the three-liter, eight-cylinder engine of that year's Sunbeam Grand Prix cars.

The journalist, already mentioned in a previous chapter, once again draws parallels between Amilcar engines and STD productions…

L'Auto, March 31, 1926, excerpt from another glowing article published for advertising purposes:

"The debut of the new little 1100cc Amilcars on the formidable testbed that is the racetrack was eagerly awaited, especially when it is complicated by a U-junction like the one planned at Miramas.

This debut only confirmed the tremendous impression made by this little vehicle each time it triumphed in hill climbs or flat kilometer races…".

"Amilcar triumphs… or the art of exploiting a rather disappointing result: while it's true that Morel took first place in the 1100cc category, both in the qualifying race and the final, Martin only finished second in the qualifying heat. After his retirement on lap 30, it was Jourdan in his Salmson who finished second in the final." L'Auto, April 4, 1926.

A few minutes before the start, the drivers get into their cars. Journalists and mechanics haven't yet left the track. Morel's Amilcar is number 5, Dufour's Salmson number 4. On the far left, Jourdan's Salmson number 3 is in the back row. In the second row, Bourlier is driving the Talbot number 20, and Foresti is driving the Bugatti number 25. Behind Bourlier, Segrave's Talbot number 19 can still be seen, and in the distance, Lehoux's Bugatti number 27.

The race has just started, with Salmson cars #2, #3 and #4, driven respectively by Bac, Jourdan and Dufour, and Amilcar #5 of Morel, in the front row. Martin's car is out of frame.

The start of the final is now imminent, and the drivers are in their cars. Mestivier, the last mechanic still on the track, is fastening the hood of Morel's car. To the right is Dufour's Salmson No. 4. In the background are the three Talbot 1500s of Segrave (No. 19), Bourlier (No. 20), and Moriceau (No. 21). The vertical black stripe painted on the hood is a distinctive feature of the cars racing at Miramas.

On lap 12, Morel was forced to stop to change his two rear tires, which had been prematurely worn due to the roughness of the concrete track. The team's setup seemed quite rudimentary: a rock to chock the front left wheel, a simple screw jack under the axle. It's worth noting that the rear tires were significantly wider than the front ones. Before setting off again, Morel helped a mechanic top up his fuel tank with a 5-liter jug, under the watchful eyes of two race marshals wearing ACF armbands. Without this incident, Morel could have hoped for a better result.

Morel and Martin's Amilcars at full speed. At the end of the straight, the speed is approaching 170 km/h.
The constant pressurization of the fuel tank, which caused so many problems during testing, is ensured by a pump located outside the cockpit.

Morel negotiates the hairpin bend. Behind him, Moriceau's Talbot No. 21, Trouvé's Delfosse and, further on, a Bugatti.

Morel won both the qualifying heats and the final in the 1100cc class. Martin finished second in qualifying but retired during the final. The two cars are nearly identical, differing only in a few minor details.

Journée des Records, Arpajon, 9 mai

After its first circuit race, the 6-cylinder car tried its hand at a new discipline in Arpajon, during Record Day.

The event was organized on a section of the N20 highway, which connects Paris to Orléans and then Toulouse before reaching the Spanish border. It's hard to imagine today the closure of a major national road for a motor race, but at the time, the relatively light traffic still made it possible.

Since the dawn of the automobile, drivers have always tried to set speed records. The duels between the Count of Chasseloup-Laubat and Jenatzy remain legendary. In 1899, Camille Jenatzy became the first to exceed 100 km/h in Achères, a small town west of Paris, at the wheel of «La Jamais Contente» (The Never Satisfied), an electric car.

Absolute speed records were subsequently set at events such as the Nice Week, the Ostend meeting, and at Dourdan, on the road to Chartres.

Until 1914, records remained the exclusive domain of racing cars. In the early 1920s, they were broken by specially built vehicles like the Sunbeam 350 hp, which later became Malcolm Campbell's first Blue Bird.

At the time of the 1926 Record Day in Arpajon, the record belonged to the British driver Parry Thomas, who, with his Babs powered by a Liberty aircraft engine, had reached 273.6 km/h.

This Record Day has been organized since 1921 by the French Motorcycle Club, initially in the Allée des Acacias in the Bois de Boulogne (from 1921 to 1923) before being moved to Arpajon. The long straight stretch of the N20 highway allowed Eldridge and his monstrous Fiat Mephistopheles to break the absolute speed record during Record Day 1924, but this performance was not officially recognized because the car lacked a reverse gear. The record then went to René Thomas and his Delage. Six days later, with a speed of 234.78 km/h, Eldridge reclaimed his title at the wheel of the modified Fiat. While it was still possible to break the absolute record at Arpajon in 1926, beaches like Pendine Sands in Wales and then Daytona in the United States were more suitable. Eldridge's record was the last one set on public roads.

Record-breaking days were held in Arpajon until the early 1930s before being moved to the Montlhéry autodrome and then disappearing rather quickly, as public enthusiasm for this type of event had largely waned.

In Arpajon, as with all speed records, the recorded speed per kilometer or mile was the average of the times achieved in each direction. An electric timer was triggered as the cars passed over a pneumatic tire placed transversely on the road.

Eldridge in the Fiat Mephistopheles at Arpajon in July 1924. This car was built by Eldridge himself, starting with an antique 1908 Fiat Grand Prix, whose chassis he lengthened to accommodate a Fiat A12 aircraft engine, a nearly 22-liter, 6-cylinder inline engine producing approximately 320 hp.
The chain drive was retained.

Morel achieved a remarkable performance by reaching 197 km/h during one of his attempts at the flying kilometer.

Amilcar competed in Class G, reserved for cars with engines from 750 to 1100 cc. André Morel attempted the outright speed record for the category, that is, from a rolling start, while Martin participated in the standing-start events, with the drivers sharing the same car. The anticipated duel with Salmson in Class G was short-lived. Goutte, in the car specially prepared for the occasion, rolled over during practice, thus giving Amilcar the lead. Morel achieved a truly remarkable performance. Driving the CO, he set new records for the kilometer and mile, reaching speeds of 197 and 195 km/h respectively. Casse, in a single-seater 1100cc Salmson cyclecar, had achieved 182 and 177 km/h the previous year, but this record had been officially recognized in a different category; the official record until then had been held by a GN at 127.73 km/h. The CO, which nearly broke the symbolic 200 km/h barrier (199.004 km/h) during one of the attempts, even surpassed the Talbot 1500 driven by Bourlier in 1925, which had won its class with an average speed of 193 km/h. Morel also achieved the best performance of the day, ahead of O.E.C. Temple (at 171.225 km/h), who was riding a 1000cc motorcycle of his own design.

Martin, meanwhile, enabled Amilcar to secure a third international record, this time for the standing-start kilometer at an average speed of 126 km/h. His performance was just as remarkable as Morel's, as he beat the previous official record held by Hall's Frazer Nash, set at Brooklands, by more than 10 seconds. A second Record Day was organized in Arpajon on September 5th, but the Amilcars, entered in Monza, did not participate. Benoist and the Delage achieved the best performance with 236.143 km/h. In the 1100cc class, Dhôme and his Morgan reached… 138 km/h!

Martin at the start of the standing-start kilometer. The timer starts automatically as the wheels pass over the pneumatic tire placed transversely on the road. The banner stretched between the two rows of trees is marked «Finish» because the time for the return attempt will be recorded at this point. The car is a slightly modified CO model to improve aerodynamics. The passenger seat is covered by a fairing, the hood is smooth, without vents, and the front shelf between the chassis arms is faired.

A certain amount of confusion, likely deliberately fostered by both the organizers and the participating brands, exists between World Records and International Records.

The only World Records are those for absolute speed for a motorized land vehicle (held in 1926 by Parry Thomas) and distance covered in a given time, the most prestigious being the 24-hour record held from 1924 to 1926 by Bignan. Engine displacement, number of engines, and wheels are irrelevant.

International speed records are awarded by vehicle class, itself defined by engine displacement (Class G, for example, for 1100 cc vehicles). They are subdivided into distance records (1.5 and 10 kilometers; 1.5 and 10 miles), with flying or standing starts, and records for distance covered within a set time (1 hour, 3 hours, 6 hours, 12 hours, and 24 hours).

For speed records over a given distance, the time counted is the average of the two times achieved, one for the outbound leg and the other for the return leg, in order to eliminate the effects of wind favoring speed in one direction or the other. For simplicity, we will refer to them as «World Records,» although the correct term is «International Records.»

World records, which sound more prestigious, are often used, but in reality, they are international records. Amilcar, playing on this ambiguity, does not hesitate to call its 6-cylinder car the «fastest microcar in the world».

The press widely reported on the magnificent performance of the Amilcar at Arpajon. The speeds achieved by Morel represent a break with previous performances: for example, the official records for the flying kilometer and mile, in the 1100cc class, each jumped forward by 70 km/h! As for Martin's time for the standing-start kilometer, it is comparable to the old flying kilometer record...

This advertisement, illustrated by Geo Ham, was widely circulated in the automotive press in the months following the Arpajon records.

This large-format telegram (44 x 32 cm) was sent to all brand agents following the performances achieved in Arpajon.

Course de côte de Limonest, 16 mai

While Charles Martin was competing in the Toul-Nancy race, which was being held on the same day, André Morel chose the Limonest hill climb. Having lived in Lyon, the driver was keen to attend this important event.

Organized jointly by the Automobile Club of the Rhône and the Lyon Motorcycle Club, the Côte des Chères in Limonest is 3.7 km long with an average gradient of 5.2%. This hill climb, which has been held since 1905, should not be confused with the Kilomètre Lancé (Speed Kilometer) race held on National Route 6 between Les Chères and Anse in 1907, 1908, and 1909, which was revived after the war for a single edition in 1922 (won by Thomas in a Delage at 191.5 km/h).

The current Limonest-Mont Verdun hill climb takes place on a 2.6 km stretch of the D92 road.

The 1926 edition of the hill climb was disrupted by rain that had been falling incessantly for four days.

The event was nevertheless held, but numerous withdrawals were recorded, as competitors were deterred by the driving rain and the icy wind, which was strong enough to expose the grandstand.

Among the drivers who braved the weather, many were forced to retire or make a voluntary stop, as Morel did. Anxious to honor his contract and, perhaps, collect his starting bonus, he attempted a run... but ultimately gave up after the first few turns, due to the risks involved on a road that had become extremely slippery and practically impassable. The best time of the day, for cars, was set by Jules Moriceau in a Talbot touring car entered in the 3L category, the second by Fernand Libold at the wheel of a Bugatti sport 1500 cc.

Fernand Libold (1897-1981) was a controversial figure. He was convicted several times for various offenses (indecent assault, desertion of family, theft and identity theft, and dealing in stolen securities). He bought a cinema in 1921, sold it in 1922, and then ran a car dealership. In 1920, when he married for the first time, he declared himself an industrialist. He manufactured the «Tubeco,» a device that transferred gasoline while filtering it. His modest career consisted of two hill climb races: Limonest in 1926 and Planfloy the following year.

Article published in Paris-Soir, May 18, 1926.

Toul-Nancy, 16 mai

Its name immediately evokes the great city-to-city races of the early 20th century. These races had been banned due to the numerous accidents that marred the 1903 Paris-Madrid race; only one exception was tolerated in 1913, precisely on this same route from Toul to Nancy (cities located in the western part of Meurthe-et-Moselle, which was not annexed by the German Empire). That race was won by Carl Jörns driving an Opel.

In 1924, the Toul-Nancy race was the first of its kind to be organized after the war, and it would remain the only one.

To obtain the necessary permits, the Lorraine Automobile Club (A.C. Lorrain) committed to erecting barriers to keep the public away, resurfacing the 15.5 km of the RN 4 highway separating the two towns, installing numerous telephone lines, and so on. Security was provided by an infantry battalion and 200 gendarmes. While the course begins with a short, steep climb of approximately 200 meters at a 6% gradient, it is characterized by a long straight, interrupted only by two sharp curves. The only village it passes through is Gondreville. The start is located just outside Dommartin-lès-Toul, with the finish line at Quatre Vents, just before Nancy.

In 1924, the best performance was achieved by Divo in a Delage, averaging 164.601 km/h, ahead of Marie in a Bignan. The following year, Robert Benoist, also driving a Delage, set a new record of 168.173 km/h. For the 1926 edition, Amilcar's Racing Department entrusted Charles Martin with the task of securing the company's second victory of the weekend, the first being guaranteed to be achieved by Morel in Limonest. But, as with the first driver, this objective was thwarted by appalling weather conditions. In Lorraine, the stormy weather, with strong crosswinds, was typical of a winter's day, and the rain was incessant.

La Revue Automobile, June 10, 1926.

Wisely, Charles Martin decided not to start, as did Robert Benoist, the overwhelming favorite. Chandon de Briailles, in his Bugatti, took advantage of the situation to set the fastest time, ahead of Montier (Ford Montier) and Williams (Bugatti).

The Toul-Nancy race was held until 1930. That year, Marcel Lehoux and his Bugatti set the definitive record at 184.168 km/h. It was replaced by the Circuit de Lorraine, whose first edition took place in 1932.

Course de côte des Dunes, 23 mai

The Poitiers meeting, whose first edition dates back to 1923, was organized by the Automobile Club de l'Ouest and comprised two events: the Dunes hill climb and a gymkhana.

The Dunes hill climb followed a section of Boulevard Coligny in Poitiers. The course was only 500 meters long and included two turns. The start was from a standing start, and each competitor made two attempts.

Morel achieved a remarkable performance, setting the fastest time of the day and breaking the absolute record with a time of 22.45 seconds. The previous record, set in 1923 by René Thomas in the Delage DF, a 6-cylinder car with an engine displacement of over 5 liters, had a time of 27 seconds.

Morel's record would not be broken until 1933 by «Trébuh» (Hubert Cohas) and his Bugatti.

The gymkhana, whose ranking is established based on the results of several more or less folkloric events (reverse driving competition, rings, balloons), is won by Pichon in a Bugatti.

Article published in Le Gaulois, May 25, 1926.

The Dunes hill climb race takes place in Poitiers on a course only 500m long with only two turns.

Morel listens attentively to the instructions of the race commissioner at the start of the Dunes hill climb in Poitiers, on May 23, 1926. He is about to achieve a magnificent performance by reaching an average speed of 79 km/h. The event takes place on Boulevard Coligny, which at the time was located on the outskirts of Poitiers.

Course de côte de Fontainebleau, 30 mai

This is the second edition of this event, the first having been organized at the end of September 1925. Paul Brosselin (Bugatti) then achieved the best time ahead of Marcel Violet and his 750cc cyclecar.

> Paul Brosselin (1900-1978), during the trials of the 1925 Targa Florio, was hit by a volley of pellets in the neck and shoulder, fired by a self-hating local!

Organized by the ACIF (Automobile Club of Île-de-France), the race follows the Route de la Reine Amélie, also known as the Montée du Calvaire, which winds for 1,330 meters and features about ten bends and hairpin turns among the rocks and oak trees of the forest. The start is given not far from the Fontainebleau-Avon train station; the steep, unpaved climb has a gradient that varies from 4 to 8%. The finish line is not marked as a stop sign, as it will be in subsequent years.

The Racing Department brought two cars for Charles Martin, bearing numbers 78 and 79, and entered in the 1100cc racing category.

This curious duplication has no satisfactory explanation, especially since only two other competitors are registered in the same category (Houllier in a Salmson and Devilliers in an Amilcar), and they pose no threat to Martin. As expected, the official Amilcar driver won the 1100cc racing category, setting the two fastest times of 1 minute 28 seconds and 1 minute 30.15 seconds. However, the day's big winner was Robert Sénéchal. Entering three cars built by his own workshop, he set the day's record with one of his 1100cc Touring cars, achieved the second fastest overall time with the other 1100cc, and won the 750cc Sport category.

Even though Martin has the excuse of having lost a lot of time at the start – "to which it must be said that his powerful start was negated by the slippery state of the ground" – it is indeed a poor performance. In the overall standings, his time of 1 minute 28 seconds places him in 3rd position, tied with "Valcourt" (Jean Bielovucic) in a Bugatti 2-liter sport car and René Sachot in a Salmson 1500 Touring.

Course de côte de Poix, 6 juin

Poix is located in Picardy, 30 km southwest of Amiens, at the intersection of National Route 29, leading to Le Havre, and National Route 1, connecting Paris to Dunkirk via Beauvais and Abbeville. The race takes place on a 2 km stretch of the latter, with the start at a standstill just outside the town in the direction of Beauvais. While the first part of the climb has a gradient of approximately 7%, the second part continues almost on a flat section. It is being organized for the 7th time by the ACPA (Automobile Club of Picardy and Aisne).

It has been on the calendar since 1921, but it appears that an edition, of which no record has survived, was organized before the war. Over the years, it has gained a certain renown. The record, set in 1925, is held by René Thomas in the 12-cylinder Delage at 53.35 seconds.

The day before the race, during practice, there was a tragic accident that marred the Poix hill climb trials. This morning, Ortmans, the champion driver for Panhard & Levassor, was practicing on the hill when, for reasons still unknown, he crashed into a tree. His mechanic, Guillaume, was thrown from the car, and when he was pulled from the wreckage, he was already dead. Ortmans, merely dazed by the impact, was immediately transported to Poix, where the doctor determined that he had only minor bruises. L'Auto, June 6, 1926.

At the time of the accident, Morel, Mestivier, and Mercier, the latter a garage owner in Amiens, were positioned at the top of the hill to ensure the road remained clear. Alerted by the noise, they rushed to the side of the mechanic whose head had struck the tree and who was bleeding profusely from the nose and ears. They quickly realized that all hope was lost.

The unfortunate mechanic was Guillaume Dejosez. Born in Chevremont, Belgium, on March 23, 1895, his friendship with Ortmans had been forged during the war.

Charles Ortmans, utterly devastated by Dejosez's death, owned a brewery and was the Belgian vice-consul. He held numerous records, always in a Panhard. In Poix, he drove his usual 16CV Touring car. Born on October 6, 1886, in Liège, he died on August 14, 1959, in Brussels. One of his granddaughters, Diane de Voghel, married the racing driver Teddy Pilette.

The route of the Poix-de-Picardie hill climb, a small town located 27 km from Amiens and 115 km from Paris. In 1926, the ACPA (Picardy and Aisne Racing Club) organized the 7th edition of this race, which had gained considerable renown. The start was given at the edge of town, on the RN 1 towards Beauvais. The 2 km course featured a 7% gradient climb over 1 km and a flat second section.

Compared to Martin's car, Morel's car has a few differences, the most noticeable being the absence of the front oil cooler.
To the left of the car, in a gray overall and tie, leaning slightly forward, is Maurice Mestivier, Morel's regular mechanic. The engine is running, as evidenced in the background by the competitor in a white overall protecting his ear.

On June 7, L'Auto continued:

"Misfortune has decidedly plagued the Poix hill climb this year. After the terrible accident in Ortmans that claimed the life of his mechanic, another accident occurred during the practice sessions.

Michel Doré, driving a microcar of a different make than the one he was to drive in the race (a Sima-Violet), had climbed the Poix ramp with Mr. Accoulon, the owner of that car. Shortly after the finish, the microcar overturned, throwing the driver and passenger to the ground.

The two injured men were immediately helped to their feet and transported to Poix… Mr. Accoulon succumbed to his injuries yesterday evening.

Michel Doré, the popular champion, was also very seriously injured, suffering a fractured skull with hemorrhaging."

Accoulon (correct spelling) was entered in the race. The accident was caused by a transmission failure.

Once again, Morel and Mestivier, this time with Robert Sénéchal, were the first on the scene. While young Acoulon's condition was critical, Doré's was hardly more encouraging. Initially taken to Poix, Morel and Sénéchal transported them to Amiens that evening.

André Acoulon had a fractured pelvis and, more importantly, a perforated intestine and bladder. He died during the night. Contrary to what was reported in the press, he was 26 years old, not 19.

Born in Amiens on August 15, 1899, he was an electrical engineer. His military recruitment record clearly states that he died on June 6, 1926, in Amiens. His father, Gomer Acoulon, was a foundry owner and had been mayor of Friville-Escarbotin.

On the starting line, Charles Martin receives final instructions from the race marshal under the watchful eye of his teammate Morel, wearing a white balaclava and overalls. The car, bearing the registration number 4639 U7, is held in place on the ramp by a wedge positioned under the rear wheel.

Michel Doré was born on January 24, 1892, in Abbeville, and died on February 4, 1945. He was a garage owner at 14 Place Clémenceau in Abbeville. He recovered from his serious injuries and resumed his career the following season. The Amilcar Racing Department entered two cars, one for Charles Martin in the 1100cc racing category, and the other for André Morel, entered in the 1500cc racing category, with the clear aim of achieving two victories on the same day.

«To double their chances of success, the two 1100cc six-cylinder cars of Morel and Martin are entered in different categories, one in 1100cc, the other in 1500cc.» L'Auto, June 10, 1926. Barring unforeseen circumstances, neither driver could be threatened by the competition in their respective categories. Martin faced off against Desmoulins' Derby, while Morel took on Lasnier's Bugatti.

Both performed admirably: Martin clocked a time of 58.35 seconds; Morel, undoubtedly keen to prove he was the company's top driver, shaved a full two seconds off the time.

The fastest time of the day was set by the Delage driven by Robert Benoist, who established a new record of 52.15 seconds. The two Amilcars achieved the second and third best times, ahead of Montier's Ford-Montier and Etancelin's Bugatti, the latter then at the very beginning of his illustrious career.

The Amilcar's performance naturally attracted the attention of the press:

«But what about the performances of Morel and Martin, driving Amilcars with engines of only 1500 and 1100 cc, who beat previous times by more than 25 seconds and achieved average speeds of 128 and 122 km/h, taking second and third place overall?» Revue Automobile, June 25, 1926.

The previous category records belonged to Mestivier (Amilcar 4-cylinder) in the 1100 cc class and to Collomb (La Licorne) in the 1500 cc class, set in 1925 and 1924 respectively.

24 Heures du Mans, 12 et 13 juin

As we saw in the previous chapter, Amilcar had requested two cars for this endurance race but withdrew a few days before the start. We will therefore not revisit the cars' origins or the reasons for this withdrawal. As a reminder, the race was won by the Lorraine-Dietrich B3/6 of Bloch and Rossignol, the French marque achieving a 1-2-3 finish. The 1100cc class was won by the Salmson of Casse-Rousseau, which finished two laps ahead of the SARA of Marandet-Lécureul.

The Salmson finished 9th overall.

Duray, who was supposed to drive one of the 6-cylinder cars with Moriceau, ultimately found an entry in the Ariès 3-liter No. 11. He shared driving duties with Charles Flohot.

The two men retired after 31 laps due to a small fire. The factory will no longer enter cars at Le Mans; the brand's subsequent participation will be due to private initiatives.

24 Hours of Le Mans 1926: Casse-Rousseau's Salmson wins the 1100 cc category, which Amilcar was targeting with its COs specially prepared for this event.

Grand Prix des Voiturettes et Cyclecars, Miramas, 27 juin

Until now, a major race reserved for touring cars was held as a curtain-raiser to the ACF Grand Prix. Major manufacturers like Voisin, Peugeot, Ariès, Cottin-Desgouttes, and many others, aware of the stakes, entered specially prepared cars.

In 1922, in Strasbourg, the winner was Rougier in a Voisin; in 1923, in Tours, victory went to André Boillot's Peugeot. The following year, at Lyon-Givors, Peugeot repeated its success, this time with Christian Dauvergne at the wheel. In 1925, at Montlhéry, Boillot added another victory to the Sochaux-based marque's tally.

However, for 1926, when the Grand Prix was held for the first time in Miramas, a race reserved for 1100cc voiturettes and 500cc and 750cc four-wheeled cyclecars was chosen to complete the program.

The reasons for the exclusion of the Touring car race are unknown, the most plausible explanation being that the cars, even if they retained the appearance of production models, were increasingly diverging from the actual models offered to customers. This Voiturette Grand Prix thus saw the official Amilcars competing against the Salmsons, which they had defeated in the Provence Grand Prix held at the same autodrome on March 28th.

This new confrontation between the two marques was eagerly awaited by all observers, especially since this race became the highlight of the day after the Grand Prix attracted only three cars!

The Racing Service is stacking the odds in its favor by entering, for the first time, three CO types. They are entrusted to Morel, Martin and Duray.

12 autres voitures sont inscrites :

En catégorie 1100 cm³ :

- Casse (n° 2) et Devictor (n° 10) sur Salmson à compresseur Cozette, (562 et 550 kg)
- Rousseau (n° 16) sur Salmson sans compresseur, (470 kg)
- De Joncy (n° 14) et Gubernatis (n° 8) sur BNC à moteur Scap avec compresseur Cozette, (599 et 608 kg)
- Giraud (n° 6) sur Dufour et Giraud à moteur Scap avec compresseur Cozette, (488 kg)
- Gendrot (n° 20) sur Salmson sans compresseur, (491 kg)

Les Amilcar de Morel (n° 4), Martin (n° 12) et Duray (n° 18) pèsent respectivement 572, 603 et 590 kg.

Gustave Gubernatis's BNC.

En 750 cm³ :

- Zubiaga (n° 22) sur Austin, (439 kg)
- Berthe (n° 26) sur Octo, (280 kg)
- Maurice Benoist (n° 24) sur Sima-Violet, moteur deux-temps. (286 kg)

En 500 cm³ :

- Enders-Jack (n° 30) et Stanton (n° 28) sur Sima-Violet à moteur deux-temps. (278 et 286 kg)

Maurice Benoist (1892-1951) was the brother of Robert, the Delage pilot. During the war, initially a member of the Resistance, he appears to have joined the enemy. Stripped of his civil rights, he was sentenced to eight years of hard labor in 1946.

The distances to be covered are respectively 250 km (50 laps) for the 1100 cc voiturettes; 200 km (40 laps) for the 750 cc; and 160 km (32 laps) for the 500 cc.

The race starts at 1:30 p.m., after the finish of the ACF Grand Prix. Voiturettes and cyclecars race together.

Morel takes off like a shot and completes the first lap in the lead.

Casse, in his Salmson, follows closely behind. The pace set by the leading Amilcar driver is blistering; his average lap time exceeds that achieved by Goux's Bugatti in the previous race!

But has he pushed the car too hard? Nevertheless, on the fourth lap, Morel stopped at the pits and retired. A second blow of misfortune struck when Martin joined the pits shortly after and also withdrew. Thus, after only 20 km of racing, the Salmson/Amilcar duel was disrupted by the disappearance of both Amilcars. Casse took the lead, followed by Duray, who kept the gap to less than 10 seconds. By the 20th lap, the Salmson and the Amilcar had already lapped all the other competitors, but Duray stopped for a few minutes at the pits. As he was about to rejoin the race, a fire, quickly extinguished, broke out in the car. Duray lost more time; he rejoined the race to enthusiastic applause, but he had lost two laps to the leader. At the halfway point, Casse was one and three-quarters laps ahead of Gubernatis, Gendrot was third, and Rousseau fourth.

On lap 30, Duray stopped again, restarted, but another fire forced him to abandon the race.

Shortly after, Gendrot snatched second place from Gubernatis, who had stopped at a refueling stop. Casse continued his solo lead to the finish, completing the 254.86 km course without a single stop in 2 hours and 25 minutes at an average speed of 105 km/h. He finished ahead of, in order, Gendrot (Salmson), Gubernatis (BNC), Rousseau (Salmson), De Joncy (BNC), Dufour (Dufour-Giraud), and Devictor (Salmson). Only three retirements marred this event, and all three involved Amilcars… A real blow for the Saint-Denis-based manufacturer.

In the 750cc class, Zubiaga, driving an Austin, covered the 203 km in 2 hours and 31 minutes, averaging 80.6 km/h. He finished well ahead of Berthe (Octo).

In the 500cc class, Enders-Jack took the victory on a Sima Violet, covering 163 km in 2 hours and 17 minutes (average speed 71.4 km/h), ahead of Stanton, also driving a Sima Violet.

Duray, like his teammates, will be forced to abandon the race following a small fire.

A dark day for Amilcar, who saw all three of their cars retire and hand the victory to Salmson.

The reasons for the Amilcar retirement and press commentary:

«...The unluckiest team of the day was Amilcar, which, due to problems with the valve springs, was unable to classify its cars. Mr. Sée, the company's managing director, had, moreover, expressed his concerns about this before the race, and at the speeds of 6500 rpm of the Amilcar racing engine, the valve spring problems were undeniably a major technical difficulty.» Englebert-Magazine, July/August 1926.

«In the Voiturette 1100 Grand Prix, Salmson, in just a few laps, eliminated all his dangerous rivals. From the very first lap, Morel, in his 6-cylinder Amilcar, took the lead, but not for long.» The first four laps hadn't been completed when its valve springs, too fragile to withstand a speed of 6,500 rpm, broke. Then, the same accident befell Martin's Amilcar.

The Amilcar-Salmson battle was over. The venerable Billancourt firm triumphed with its four-cylinder engine, the work of its affable engineer, Mr. Petit. (Paris-Soir, June 29, 1926)

It should be noted that Duray's retirement occurred following a small fire.

The successive retirements of the Amilcars allowed Salmson and BNC to take the top spots. During this phase of the race, De Joncy (BNC #14) was ahead of his teammate Gubernatis (#8) and a Salmson.

The organizers of the ACF Grand Prix, run under the new regulations in effect since the start of the season limiting engine displacement to 1500 cc, received 12 entries:

- Three Talbot 8-cylinder twin-cam supercharged cars for Segrave, Moriceau, and Divo
- Three Delage 8-cylinder twin-cam supercharged cars for Benoist and Bourlier, with the third driver yet to be named
- Three Bugatti Type 39A 8-cylinder single-cam supercharged cars for Costantini, P. de Viscaya, and Goux
- Three Sima-Violet 4-cylinder opposed two-stroke cars for Violet and two drivers yet to be named.

On race day, only the Bugattis were ready and participated.

The three cars, two of which had never been driven, traveled to Miramas at a reduced speed to break in their engines. Naturally, with such a small field, the race's appeal was considerably diminished. To prevent the public from witnessing a dull parade, and also to ensure that an 1100cc microcar didn't achieve a better performance, a special prize was offered to the car with the best average speed over the 250 km. Jules Goux, without ever pushing himself too hard, won the race ahead of Costantini (who was stopped by the race officials on lap 85). De Vizcaya retired after 45 laps with engine trouble. While the winner encountered no problems, supercharger issues hampered the other two. Costantini had a lengthy pit stop that cost him 12 laps, and De Vizcaya eventually had to retire.

Casse, the winner, on Salmson.

The 1926 ACF Grand Prix remains unique in the annals. Indeed, only three Bugattis took the start and only one, Goux's, finished.

Grand Prix des 24 Heures du Royal AC de Belgique à Spa, 3 et 4 juillet

Following the ACO concept but with less stringent regulations, the 24 Hours of Spa has been held since 1924. French marques won the first two editions, with Bignan in 1924 and Chenard & Walcker the following year.

The two Amilcars prepared for the 24 Hours of Le Mans were also intended to participate in the prestigious Belgian endurance race. We have already explained the reasons that led to their withdrawal from the Le Mans race and then to the project's eventual cancellation. Therefore, the two 6-cylinder cars were not present at Spa. The 1926 edition was won by the Peugeot 174S of Boillot-Rigal, ahead of the Excelsior of Diels-Carles. The 1100cc class was won by the Chenard & Walcker of Lagache and Léonard, which finished ahead of the other Chenard of Pisart-De Zuniga and the Salmson of Casse-Devictor. It would take until 1934 with the Bugatti 44 of Desvignes-Mahé and then… 1999 (with Peugeot and a 306) to witness another French victory at the 24 Hours of Spa.

André Boillot and Louis Rigal won the 1926 Spa 24 Hours in a Peugeot 174S.

Meeting de Dieppe, 11 juillet

The new edition of this important event, already held the previous year, included, in addition to a rally and a concours d'élégance, a one-kilometer flying start race on flat terrain and two races of one and two kilometers, with standing starts, on the Pourville hill. In 1925, the best times in the speed trials had been set by Fouché and his Bugatti. Charles Martin was the only driver entered to represent Amilcar. Also present was Mr. Sée, the company's managing director.

In the morning, the flying start kilometer race was held on the road from Dieppe to Eu. The time recorded was the average of the times achieved in both directions. Martin achieved the best time overall, beating Etancelin (Bugatti) by more than a second. For comparison, Valentin Tersen (Amilcar 4-cylinder), second in the 1100cc racing category, recorded an average time of 31 seconds, nearly 10 seconds slower than the 6-cylinder.

«The most impressive performance was that of Martin, who, with the 1100cc Amilcar, achieved an average speed of nearly 172 km/h in one direction and 150 km/h in the other, despite a strong headwind and fuel supply problems.» L'Auto, July 12, 1926.

The two hill climb events scheduled on the main road D75, towards Pourville beach, took place in the afternoon. In the 2km event, Martin achieved the best overall time, ahead of Etancelin and De L'Espée. He relegated the second 1100cc car, Havrincourt's Salmson, to nearly 12 seconds behind and shattered the record set in 1925 by Buquet and his Amilcar.

The overall classification, determined by adding the three fastest times of the day, went to Charles Martin.

The Paris-Dieppe rally was won by Mrs. Jennky's Chenard, and the gymkhana by Coruble in a Bugatti.

Janine Jennky (whose real name was Marie Camille Françoise Roussey) was born on August 8, 1894, in the 14th arrondissement of Paris, and died on July 11, 1979, in the 17th arrondissement. She was the partner of Albert Divo for a few years, but never married. Her modest acting career, under the name Mademoiselle Roussey, began around 1920 in musical comedies. At the time, she enjoyed horseback riding and dreamed of becoming a jockey.

She obtained her driver's license in 1923. The Chenard rally car was her first car. She truly began racing when she bought a Bugatti Type 35 in 1927. Her greatest victory remains her outright win at the Grand Prix de Bourgogne in 1928. Her career ended at the end of that 1928 season. The origin of her stage name is unknown.

The origin of her pseudonym is unknown. It should be noted that Ms. Coville participated in the gymkhana with a Panhard. Ms. Coville (1899-1983) is none other than Ms. Odette Siko, who finished 4th in the 1932 24 Hours of Le Mans with Marguerite Mareuse in a Bugatti.

The standing start and finish kilometer was ultimately changed to a rolling finish due to the wet and slippery road surface.

This first sprint was won by Etancelin's Bugatti. Martin set the second fastest time, ahead of another Bugatti, this one driven by De L'Espée.

«Martin, who had the misfortune of climbing the hill when the fog was thick, spun his wheels at the start and lost a few seconds. He nevertheless set the fastest time in the 1100cc class but was beaten by a second by Etancelin's 2-liter Bugatti. On the same hill, over two kilometers, he achieved the fastest time overall.» L'Auto, July 12, 1926.

Grand Prix d'Espagne, 25 juillet :

Le Grand Prix d'Espagne est l'une des épreuves du meeting de Saint-The Sébastien Grand Prix was held from July 18th to 25th at the Lasarte circuit, which also hosted the European Grand Prix on July 18th and the Gipuzkoa Touring Grand Prix on July 22nd.

Amilcar's Racing Department had pre-entered three cars, numbered 7, 18, and 25. The drivers had not yet been announced, but it can be assumed that they would have been driven by Morel, Martin, and Duray had they not withdrawn.

The Grand Prix was run in an open formula. Facing competition from the Delage 2LCV V12, the Sunbeam 4-liter V12, and the Bugatti Type 35, Amilcar undoubtedly made a wise decision. Morel, free of any prior commitments, was recruited by Delage and participated in the race with the 2LCV #16. He was forced to retire on lap 6 due to a supercharger failure, while in the lead. The race was won by Bugatti, who achieved a one-two finish with Costantini and Goux. The Delage, shared by Wagner and Benoist, finished third.

Morel also participated in the European Grand Prix in the Delage 1500cc 8-cylinder #22. Briefly in the lead, he, like his teammates Benoist, Bourlier, and Wagner, succumbed to the unbearable heat generated by the Delage's exhaust. When he stopped on lap 11, he fainted and was taken to the hospital. Louis Wagner took over the driving duties. Benoist, also feeling unwell, was replaced by Robert Sénéchal. All the Delage drivers were forced to stop for the same reason.

Ultimately, Bugatti won the Grand Prix with Goux in first place and Costantini in second; the Delage shared by Morel, Wagner, and Benoist finished third but was not classified. Following a protest by Delage, which had seen two of its cars disqualified because Sénéchal, a non-registered driver, had driven them, the classification was revised. Goux remained the undisputed winner, but the Delage of Bourlier and Sénéchal was classified second, while Costantini dropped to third place.

The Gipuzkoa Touring Grand Prix saw the triumph of the small Chenard & Walcker 1100cc with a Cozette supercharger, driven by Léonard and De Zunica. Another Chenard 1100cc, but without a supercharger, driven by Lagache and Pisart, finished second. Minoia and Morand's OM 2-litre car finished 3rd, the big Mercedes cars with over 5 litres were beaten.

Course de côte de Laffrey, 18 juillet :

While André Morel was racing for Delage in San Sebastián, Charles Martin was entered in two hill climbs: one at Laffrey, near Grenoble, on July 18th, and the other at Planfoy, near Saint-Étienne, the following Sunday.

The first, organized by the Automobile Club and the Moto-Club Dauphinois, was established in 1901 and is therefore one of the oldest events on the calendar.

Its 6.4 km course is located about fifteen kilometers southeast of Grenoble, on the RN 85, also known as the Route Napoléon, which connects the French Riviera to Grenoble via Gap.

The start is at the Romanche bridge in Vizille, and the finish line is at the first house in the village of Laffrey. The road, with its 52 bends, is steep, averaging 12% in its lower section and featuring short stretches at 16% and 18%, for a total elevation change of 605 meters. On race day, the weather was splendid and the crowds turned out in droves. Martin set the fastest time for cars at 4 minutes 25.25 seconds, ahead of Paul Baboin's 2-liter Bugatti by 30 seconds, and Billet's BNC, second in the 1100cc racing category, by 38 seconds.

However, the fastest time of the day was set by a motorcycle, the Motosacoche 1000cc ridden by François Franconi.

The Laffrey climb is 6.4 km long. Very selective, it has 52 bends and an average gradient of 10%.

The Romanche bridge has become infamous. Located at the bottom of the Laffrey descent, it has been the scene of tragic accidents, each time involving a tour bus with faulty brakes: 18 deaths in 1946, 43 in 1973, 29 in 1975, and 26 in 2007, not to mention the numerous truck accidents. The descent has been closed to public transport vehicles and trucks since the 1980s.

The hill climb record, set at 4 minutes 2 seconds by Robert Benoist in his Delage in 1924, remained unbroken. Martin, however, improved his category record by more than a minute. This record had been held by Didier (Salmson) since 1924. It should be noted that Morel had set the 1100cc record the same year, but with an Amilcar cyclecar, in 4 minutes 53 seconds.

Three accidents, none of them serious, occurred. A motorcyclist fell without injury, well protected by his helmet; Rodansky, on a BNC, overturned at the Laffrey bridge; and Lobre (Amilcar) suffered a tire blowout and also overturned. Neither driver was injured.

Advertisement published in La Vie Lyonnaise on July 27, 1926, by Dumond Brothers.
Brothers Francisque and René Dumond, initially agents for Le Zèbre, were the Lyon agents for Amilcar. They had subscribed to a number of shares when Amilcar was founded, and Francisque long served as the spokesperson for all the agents on the company's Board of Directors.
Francisque (François Aimé Hughes) was born in Liergues on September 6, 1874, and died in Lyon on February 24, 1944.
René Hughes was born in Ecully on August 25, 1881, and died in Lyon on March 9, 1933.
Their garage was still in operation in the 1960s, representing Peugeot.
In 1900, in partnership with Claude Marius Ailloud, Francisque built five Ailloud-Dumond cars (5CV, two-cylinder) and then a four-cylinder model in 1902, which remained unique. Dumond then devoted himself to the automobile trade with his brother..

Course de côte de Planfoy, 25 juillet

Organized by the Automobile Club of Forez, the race follows a 7-kilometer stretch of National Route 82, linking Saint-Étienne to Bourg-Argental via the Col de la République.

The start is in the outskirts of the city, in the Digonnière district. The average gradient is 6%, with a total elevation gain of 420 meters. Charles Martin is the sole official representative of Amilcar, as Morel is still in Spain. He fulfills his mission perfectly, achieving the best time of the day across all categories, at 4 minutes 43 seconds, although he does not break the record set in 1925 by Albert Divo's Delage at 4 minutes 23 seconds. He finishes ahead of the Bugattis of Baboin and Libold.

Saint-Étienne, July 25. Ten records were broken on the Planfoy hill climb, which attracted an even larger crowd than in previous years along its famous ramp. Martin, driving an Amilcar, set the fastest time of the day across all categories, and Thézenas (Ravat) achieved the fastest time for motorcycles. (L'Auto, July 26, 1926)

Paul Baboin was a major silk industrialist (Soieries Aimé Baboin et Cie). Born in Lyon on May 19, 1902, he died in Paris on March 20, 1954.

The program cover was designed by Martin Dupin, a famous poster artist from the 1920s and 30s.

This poor-quality document from the Revue de l'Automobile-Club du Forez shows Charles Martin's car. It is the CO he drove at Miramas, but its front-mounted oil tank has been relocated. The registration number, which begins with 4640, has been changed. The reason for this is unknown.

Course de côte du Klausen, 8 août

The 5th edition of the Klausen International Hill Climb, organized by the Automobile Club of Switzerland in conjunction with the Swiss Motorcycle Union (UMS), is now known as the «Swiss Hill Climb Grand Prix.» The organizers have received 191 entries.

This race, one of the most challenging hill climbs in Europe, takes place in one of the most beautiful locations in the Swiss Alps, in the canton of Graubünden. The extremely rugged 21.6 km course features over 130 tight corners, many of them hairpin bends, and a straight section that allows for high speeds. The race starts in the village of Linthal (canton of Glarus) at an altitude of 664 meters and finishes at the summit of the Klausen Pass, at 1937 meters, representing a total elevation gain of 1273 meters with an average gradient of 6.21% and sections exceeding 8%. The road is unpaved.

The record for the climb is held by Count Giulio Masetti in a 2-liter Sunbeam Grand Prix, with a time of 17 minutes, 28.8 seconds in 1925.

Despite being held during the summer months, the weather is dreadful. The first day, dedicated to motorcycles and touring cars, takes place in torrential rain. The second day, reserved for sports and racing cars, is also disrupted by very poor weather conditions. Indeed, for the first two-thirds of the course, rain flooded the road, making the turns extremely dangerous, and for the final third, snow blanketed the road. Faced with this inclement weather, many competitors, including several favorites, withdrew from the race.

Despite the dreadful weather, 20,000 spectators lined the route.

Under these conditions, Masetti's record remained unchallenged, with the fastest time of the day for cars achieved by Swiss driver Joseph Kessler in an Alfa Romeo P2, clocking in at 18 minutes 42.8 seconds.

André Morel achieved the third-fastest time of 19 minutes 15.2 seconds, behind Count Kinsky in a 3-liter Steyr. The Amilcar driver obviously dominated the 1100cc racing category, setting a new record and beating his closest rival, Clerissi on a Salmson, by nearly 3 minutes. The best performance of the day was achieved by Claude Ceresole on a 1000cc Harley Davidson motorcycle in 18 minutes,

5.5 seconds.

Eliska Junek, in her book «My Life is Bugatti,» recounts the grueling conditions in which the race took place and describes the drivers' feats in achieving acceptable times. Junek was 25 years old at the time and was racing in the 1.5 to 2-liter Touring category:

«During the Grand Prix in San Sebastian, Spain, in 1926, I was invited by the Swiss delegation to the formidable Klausenpass hill climb.» I was hesitant and unsure about giving a positive answer regarding participation in this hill climb, renowned for being the most grueling and longest.

... The Zurich Automobile Club welcomed us on site. A glance at an aerial view of the course was enough to induce vertigo: like a narrow cable, the road wound its way along rocky ridges and was bordered by extremely dangerous precipices. Over a length of 21.5 kilometers, the elevation gain between the start and finish was 1,273 meters, with the finish line at 1,937 meters.

The course crossed three different climatic zones: the lower section was run under tropical rain, amidst fog, and the upper section involved several meters of freshly fallen snow.

In the village of Linthal, in the rain, Morel prepares to tackle the 21.6 kilometers of the Klausen climb.

That year, there were 191 competitors: 115 cars, 66 motorcycles, and 10 sidecars. The nations represented were Switzerland, France, Italy, Belgium, England, Germany, the Netherlands, Austria, and Hungary, with myself representing the Czech Republic.

The motorcycles, sidecars, and touring cars started on Saturday, August 7th. It was raining, but the race was going well. The following day, a storm broke.

In the mountains, it was hell. The sports cars started around noon. The lower part of the course was bearable, but above 1,000 meters, the icy rain lashed my face as I drove at 140 km/h.

Moreover, the wet snow practically blinded the drivers. On the soft carpet covering the road, the tires spun and the car frequently skidded. For the first time in my life, I was driving with maximum risk. To reach the finish line, I summoned my last reserves of strength. When my time was announced, I trembled with happiness and satisfaction, even though the result was not as good as during practice.

The race cars had remained stationary at the start, as the professionals, somewhat favored, were delaying their departure due to the bad weather. The Swiss, who knew the course in all weather conditions, had.

They were eager to start at all costs. By vote, it was decided to continue the race. Some excellent drivers withdrew, others stopped during the climb. My time, in my 2-liter Bugatti, was 20 minutes and 39 seconds, which is the best time among the female competitors and close to the best times for the men.

She was ranked 3rd in her category behind Karrer and Weber, only 4 seconds behind the latter.

Morel at the exit of a hairpin bend during the climb. The atmospheric conditions are atrocious, the fog, in particular, thickens as the climb progresses.

The snow that fell on the third of the course didn't deter the spectators. The unpaved road was a veritable ice rink. The finish line reached an altitude of 1937 meters, and it was bitterly cold there, despite it being summer.

Course de côte de la Broche à Rôtir, 15 août

This event, part of the Assumption Meeting organized by the ACO, took place in Sainte-Adresse, a town located in the hills above Le Havre, over a one-kilometer standing start. «La Broche à Rôtir» (The Roasting Spit) is a crossroads in Sainte-Adresse where the intersection of streets resembles the shape of a spit*. The course followed what is now the D 940. The meeting also included a Concours d'Elegance and a gymkhana, which had no sporting significance.

On the hill, punctuated by a few bends, Charles Martin faced only serious competition from Etancelin and his Bugatti. The Amilcar set the fastest time of the day at 43.25 seconds, ahead of the Bugatti driven by the Norman driver (44.15 seconds) and Rost's Georges Irat 2-Litre Touring (49.15 seconds).

The Concours d'Elegance ranking was determined by the car's selling price.

The 20,000 to 25,000 franc car category went to Joseph Lamy, managing director of Amilcar, who won the Grand Prix d'Honneur with a convertible of the brand. The 25,000 to 30,000 franc car category was awarded to José Scaron, the Amilcar agent in Le Havre, with another Amilcar convertible.

The 30,000 to 40,000 franc car category was also awarded to Scaron for an Amilcar torpedo.

*Research conducted by regional historian Alphonse Martin (1854-1930).

The other categories eluded the Saint-Denis cars, but the 75,000 to 90,000 franc car category again went to Lamy, who entered his personal car, a Voisin saloon (usually driven by his chauffeur).

Joseph Lamy also won the overall gymkhana classification.

Stelvio Hill Climb, August 28

The Amilcar racing department traveled to Italy for the Voiturette Grand Prix, held on September 5, 1926, in Monza, near Milan, as part of the Italian Grand Prix.

Three cars were entered for Morel, Martin, and Duray. The team arrived a few days before the race to prepare it in the best possible conditions.

Morel took advantage of this trip to Italy to participate in the first edition of the Stelvio Hill Climb, eight days before the Monza race.

Two editions had already been scheduled in 1902 and 1903. It would appear that they were not contested.

The Stelvio Pass is located in northeastern Italy, in the Trentino-Alto Adige region. It connects Bormio to Prato allo Stelvio, heading towards Austria, and was the highest pass in the Alps (2,758 m) until the opening of the road to the Col de l'Iseran in 1937 (2,760 m).

The 27.5-kilometer race route begins in Spondigna and climbs to the pass. It follows the road from Austria to Italy, which features 46 hairpin bends over an elevation gain of 2,270 meters. Morel's participation proves that the first Amilcar driver was a tireless traveler. Consider this: a round trip to Klausen, Switzerland on August 8th (1300 km), the drive from the Paris region to the Stelvio Pass (over 1400 km), then another 400 km to Monza and 900 km back home.

Le Temps, 2 septembre 1926.

The French driver was the favorite to win the hill climb.

According to the race regulations, he was required to carry ballast. Unfortunately, the sandbag secured to the fuel tank shifted under the violent jolts of the unpaved road and caused a fuel line to rupture. He was forced to retire.

The fastest time (31 minutes 40 seconds) was achieved by Supremo Montarini in a Bugatti Type 37 entered in the racing category.

La Baule Meeting, August 23-29

Charles Martin was scheduled to participate in the Flying Kilometer on the 27th and the Grand Prix de la Baule, a 100 km race organized on the beach on the 28th. He did not participate in either event. This withdrawal can be explained by the scheduling conflict with the Voiturette Grand Prix, which took place at Monza the following Sunday and for which Amilcar was making a significant effort.

The fastest time in the Kilometer was achieved by Robert Benoist in the Delage DH 10.7L, averaging 202 km/h.

The Grand Prix was won by Louis Wagner in a Delage 2LCV. He finished ahead of Charles Montier (Montier-Ford) and Roland Coty (Coty Spéciale, the former Béquet Spéciale built on a Delage 2LCV chassis and powered by a Hispano V8 aircraft engine).

Grand Prix des Voiturettes à Monza, 5 septembre

The Automobile Club of Italy meeting takes place at the Monza racetrack from September 5th to 12th.

The first event of the meeting is the Italian Grand Prix, held on September 5th. The race is organized according to the 1926 International Grand Prix regulations (maximum engine capacity of 1500 cc with supercharging permitted, minimum weight 700 kg), but it is also open to 1100 cc cars, which will compete in the Voiturette Grand Prix, a separate race run concurrently with the Grand Prix. The Voiturettes will cover 400 km, compared to 600 km for the Grand Prix cars.

On September 5th, in Arpajon, the second day of the Records competition took place, where the 6-cylinder car had shone so brightly. However, the Racing Department prioritized the Monza event, as it was essential to promote the brand in Italy, especially since the SILVA company (Societa Industriale Lombardo Veneta Automobili) had just taken over its production under license, previously handled by Eugenio Salvani's Compagnia Generale Automobili SA, which had signed a contract in 1925. A victory at Monza would be effective publicity for this company.

The factory therefore entered three cars in the Voiturette Grand Prix for the usual drivers, Morel, Martin, and Duray, accompanied by a large team of mechanics. The entire team had been there for almost a week. L'Auto reported:

«Milan, September 1st. There was a very lively practice session today on the Monza Autodrome track.» Costantini in a Bugatti, Maserati, Meregali and Materassi in Maseratis, Duray in an Amilcar, and De Joncy in a BNC were seen on the track in succession. The latter missed a turn at 120 km/h; the car hit the barrier, a tire burst, and the passengers were thrown from the vehicle, fortunately without injury. The car came to rest on the bridge where the tracks intersected, sustaining very little damage.

The race reserved for voiturettes, which promised to be exciting on paper, ultimately attracted only a very limited number of entries. On the Italian side, only Marino, a very obscure marque, took up the challenge with two cars equipped with Cime engines. They were driven by Augusto Trevisani and Alberto Marino, one of the car's builders.

On the French side, the duel was limited to a confrontation between Amilcar and BNC, which had entered three cars for De Joncy, Gubernatis, and Ducreux. The latter, likely due to Henny de Joncy's accident during practice, did not start the race.

It was clear that the Amilcar CO cars were the ones to beat, as the BNC cars, equipped with SCAP engines and Cozette superchargers, were no match for them, as evidenced by their poor performance at Miramas in March.

After only three laps (the Monza circuit is 10 km long), two of the seven competitors in the 1100cc class had already retired: Gubernatis (BNC) and, most notably, Martin, whose supercharger seized.

Morel was then in the lead and remained unchallenged until the finish. Duray, however, stopped on lap 10 due to engine trouble, temporarily losing his second place to De Joncy's BNC.

Both Marino cars retired with broken engines. Duray managed to regain second place, and the Voiturette Grand Prix standings remained unchanged.

Morel completed the 40 laps in 3 hours and a few seconds, Duray finished 8 minutes and 44 seconds behind, and De Joncy more than fifteen minutes behind. The winner's average speed was 133 km/h, with the fastest lap reaching 138 km/h. Comoedia commented in its September 6th edition:

«The Voiturette race turned into a demonstration by the Amilcars.»

As Le Miroir des Sports of the 8th summarized the race:

«The two Amilcars of Morel and Duray are cruising past the BNC in Joncy.»

With the Voiturette Grand Prix over, the cars entered in the Italian Grand Prix still had 20 laps to go. At that point, only two cars were still in the race: the Bugattis of Meo Costantini, the leader since the start, who was leading ahead of «Sabipa» (Louis Charavel). The two Maseratis of Ernesto Maserati and Emilio Materassi had suffered engine failures, Serboli's Chiribiri had caught fire, and Goux (Bugatti) had retired (oil pump).

On lap 58, two laps from the finish, Costantini pitted. He rejoined the race but conceded the victory to Sabipa. The Monza Meeting also included a 24-hour race for touring cars (September 11 and 12) and the Milan Grand Prix, run in open format on the 12th. The endurance race was won by André Boillot, driving a Peugeot 174S alone. He finished ahead of his teammate Rigal and Dosio's OM. The two BNCs of Gubernatis and De Joncy participated in the Milan Grand Prix, while the official Amilcars were not entered. Segrave, at the wheel of the Sunbeam V12 4-liter, made a thunderous start to

the race but retired after 12 laps with a gearbox failure. The field was now clear for the Bugattis, Costantini and wins the race ahead of Goux and the 35 privateers of Farinotti and Chiron. De Joncy and his BNC, 8th in the general classification, wins the 1100 category.

Morel, in a suit, with his hands in his pockets, stands behind the car in the company of two mechanics and an unidentified person.

Morel is still in a car that is significantly different from No. 23, particularly in terms of the sheet metal covering the passenger seat and the hood.

The car bearing the number 23 was entered for Martin; number 28, in the background, for Duray. Compared to the car in which Morel is posing, the windscreen is very different.

Morel at the wheel of his car. For an unknown reason, the windscreen has been removed.

On one of the cars entered, surrounded here by part of the team of mechanics, it would appear that a metal jerrycan is replacing the oil reservoir.

The CO led by Duray

Advertisement published in L'Auto Italiana on September 15, 1926, on the occasion of Morel's victory at Monza. SILVA (Societa Industriale Lombardo Veneta Automobili (S.I.L.V.A.), headquartered in Verona, is now responsible for marketing Amilcars in Italy. It takes over from CGA (Compagnia Generale Automobili), which had been founded the previous year by Eugenio Silvani.

Course de côte des Moulineaux, 12 septembre

The Moulineaux hill climb, organized by the Automobile Club de l'Ouest and the Motocycle Club de la Seine Inférieure, takes place near Rouen, on National Route 138 (Rouen-Alençon).

Moulineaux is a village located just past Grand-Couronne, at the foot of the hill chosen for the event. This hill is 1,800 meters long with an average gradient of 7%, offering long straights and easy curves that can be taken at full speed without risk.

The ideal weather and excellent road surface contribute to some impressive performances. The start is from a standing start. Martin, with a time of 59 seconds, sets the fastest time of the day, across all vehicle categories, averaging over 109 kilometers per hour. He finishes more than 10 seconds ahead of Lemesle's Bugatti Type 37.

200 Miles de Brooklands, 25 septembre

Brooklands was the first circuit designed specifically for cars and motorcycles. Located about 50 kilometers southwest of London, its construction dates back to 1907. It became established due to the Motor Car Act, a law in effect since 1903 imposing a maximum speed of 20 mph on public roads.

The concrete track with its banked corners is 2 miles and 1,360 yards per lap, or 4.462 kilometers.

The 200-Mile Race, or «JCC 200,» has been organized by the Junior Car Club of England since 1921. It is run over 73 laps, with the 200 miles representing 321.828 km.

This event is highly publicized and attracts manufacturers due to the significant financial benefits it generates in the event of a successful race.

For the 1926 edition, two chicanes forming fairly fast S-bends, delimited by sandbanks, were laid out.

38 competitors were divided into three categories: 1500cc, 1100cc, and 750cc, identifiable by the color assigned to the cars. Other distinctive features of Brooklands: exhaust noise had to be limited by a silencer, the race number painted on the hood was repeated on a disc placed on the tail of each car, and the make of each car had to be followed by «Special».

The 1500cc category (green cars) comprised 19 cars: 6 Bugattis, 4 Talbots (including 3 factory entries), 3 Alvises, the Eldridge with an Anzani engine, the Marendaz, the Lea Francis, and the 2 Thomas Specials.

The 750cc class (red cars) attracted only four competitors, all driving Austins.

The 1100cc class (blue cars) had 17 entries, but only 15 cars took the start: six Salmsons, six Amilcars, one Fiat, one Austin, and one Gwynne.

The official Salmson team, fresh from its four previous victories at Brooklands, consisted of Goutte, Casse, and De Marmier. Their cars were «Saint Sebastian» models (four-cylinder twin-cam, crankshaft on three main bearings, supercharger).

Three other Salmsons were entered by private British drivers (Newman, Dunfee, and Wood).

After Switzerland (Klausen) and Italy (Stelvio and Monza), this was the third trip abroad this year for the Amilcar Racing Department, which crossed the Channel with three CO-type cars. The official cars were entrusted to Morel (No. 36), Martin (No. 37), and Duray (No. 38). Although brought by the factory, the Amilcar Specials (!) were entered by Boon and Porter, then the brand's distributors in Great Britain.

Two four-cylinder Amilcars were entered by Amilcar's London agent, Vernon Balls, for himself and Paul Dutoit. Another four-cylinder was driven by R. Bond.

Once again, even though the race was not held on French soil, the main focus in the 1100cc class was the confrontation between Salmson, a regular at Brooklands where it had been racing successfully since 1921, and Amilcar, for whom it was a first at this circuit. The duel between the two French marques was widely publicized and extensively discussed in the British press in the days leading up to the race. At the end of the first lap, Casse and his factory Salmson led the class ahead of Balls, Thomas (Thomas Special), and Martin. Casse was even briefly in fourth place overall.

De Marmier (Salmson) retired on lap 18 with a clutch failure.

At the quarter mark, Casse was still in the lead, 6 seconds ahead of Morel and Goutte.

On lap 22, Duray made a brief pit stop.

At the halfway point, Casse's Salmson was ahead of the two Amilcar COs of Martin and Morel, who had lost some time after spinning out in one of the chicanes and having to pit due to a slipping clutch.

A dramatic turn of events occurred on lap 48: Casse retired with a broken engine. Morel, having made a strong comeback, then took the lead in the class ahead of Duray and Martin. The remaining factory Salmson, driven by De Marmier who had relieved Goutte, was far behind.

Around lap 60, Morel experienced further clutch problems. He sprayed the clutch disc with gasoline to stop the slippage and lost valuable time. He rejoined the race behind his two teammates, for whom the end of the race was a formality, with Martin finishing ahead of Duray.

The 6-cylinder Amilcars thus dominated the top three positions in their class. George Newman (Salmson) finished 4th, and Bond (4-cylinder Amilcar) 5th.

In the overall standings, the 6-cylinder cars were in 4th, 5th, and 7th positions.

The race was marked by numerous incidents, particularly due to the chicanes. Moriceau, driving a factory Talbot, was one of the victims. The sand piles were hit or grazed very closely by several struggling competitors, and the scattered grains of sand made the track particularly slippery. Moriceau skidded and got stuck, losing more than half an hour trying to get his car out.

The Talbot 1500s proved untouchable. Segrave won the race with an average speed of over 120 km/h, ahead of Divo. Moriceau, due to going off the track, was classified.

14th. Harold Purdy (in a Bugatti Type 37) finished 3rd.

The 750cc class saw victory for Eric Gordon England in his Austin Seven.

The pit straight is interrupted by two chicanes.

Charles Martin is driving the same car as at Monza, but the passenger-side fairing has been removed. In accordance with the regulations of the English autodrome, an exhaust silencer, the «Brooklands exhaust», has been fitted.

The Light Car and Cyclecar, October 1, 1926. Boon and Porter were then the distributors of Amilcar for the United Kingdom. They succeeded (temporarily) Vernon Balls, who had previously handled the import and whose contract was suspended following a dispute with the Saint-Denis firm.

The team's mechanics, all in suits and ties, pose on board or next to the three cars entered, which have a very similar appearance.

Duray (No. 38), here at the exit of the second chicane, will finish second in the category (5th in the general classification).

André Morel (No. 36) is following Casse's Salmson (No. 28). Eric Longden, never in contention at the wheel of his Fiat, cautiously passes on the outside. Casse, then in the lead, will retire on lap 48, Longden will break his gearbox on lap 31.

Morel stopped in the pits with a slipping clutch due to an oil leak from the engine. His mechanic (regulations only allow one per car) poured kerosene onto the mechanism in an attempt to fix the problem.
The car sports a grille emblem, and its bodywork has been artificially widened under the driver's right arm to comply with race regulations stipulating a minimum body width.

Martin in a bad position, probably during the trials

Grand Prix de France du MCF à Montlhéry, 26 septembre

The Brooklands 200 Miles race was held on Saturday (traditionally, in Great Britain, motor races are not held on Sundays), and Morel and Martin had planned to return immediately to France to participate in the race at Montlhéry. However, buoyed by the Amilcar victory in England, and likely due to prize-giving ceremonies and other receptions, they cancelled this express return trip.

To honor this commitment, it seems clear that at least two additional cars were built, in addition to the three entered at the British racetrack.

In its edition of the 26th, the journalist from L'Auto had not yet been informed of the official Amilcar's withdrawal. He stated:

"Finally, the 1100cc race will be a remarkable event: it will see the famous Amilcar duo, Morel and Martin, at the starting line (having flown back from Brooklands where they raced yesterday)." Morel and Martin had been assigned numbers 74 and 75. Without the Amilcars, the race reserved for 1100cc cars was won by Guy d'Havrincourt's Salmson.

Count Guy Cardevac d'Havrincourt was born on May 28, 1902, and died on May 1, 1998.

Course de côte de Gaillon, 3 octobre

Despite its hill climb course with no corners, this event, now in its 22nd edition, remains a key fixture of the season. Amilcar's Racing Department felt compelled to participate and brought two 6-cylinder COs for Morel and Martin.

The fastest time of the day was set by Divo's 4-liter Sunbeam, which broke the hill climb record with a time of 28.35 seconds. Morel, meanwhile, caused a sensation with his 1100cc, clocking a time of 31.45 seconds, just 0.25 seconds slower than Robert Benoist's 2-liter Delage 2LCV, and ahead of the new 1500cc Talbot Grand Prix car, Albert Divo's second car. This magnificent performance can be explained by the CO's reduced weight, but also by ideal gearing, which Benoist and Divo certainly didn't have in their much more powerful cars (160 hp for the Talbot, over 200 for the Delage). Morel also set a new record for the category, which he had held since 1925, with a time of 34.35 seconds. He relegated his runner-up (Jean Graf in a car of his own design) to more than 20 seconds behind.

Martin also fulfilled his objective. Entered in the 1100 Sport category, he won easily ahead of Vanhoff's GAR, setting a new record (33.15 seconds).

The 3-second gain achieved by Morel shows that the car had evolved considerably since its first appearance here in October 1925. This proves that a factory racing car is never static and benefits from constant improvements, unlike a customer car which often remains exactly as it was when purchased. The car driven by Martin, bearing the number 101 it sported at Gaillon, will be exhibited at the Paris Motor Show, which opened eight days after the race.

Morel and his mechanic during the first practice runs for the Gaillon hill climb. The race number has not yet been painted on the black background.

Crank start on the starting line

Morel on the climb. He achieved a remarkable performance by averaging 113 km/h over the 1000 m of the hill, from a standing start (3rd best time of the day).

A lot of smoke billowed from Martin's car as it started up (photo on the previous page), reaching an average speed of 109 km/h. The competition regulations allowed Amilcar to enter Morel's car in the racing category and Martin's, despite being identical, in the sport category, thus increasing their chances of victory. Martin won the Sport category across all engine sizes, finishing nearly 8 seconds ahead of his runner-up, Jean Graf, in a car of his own design.

Grand Prix du Salon à Montlhéry. Critérium des Voiturettes, 17 octobre

To mark the closing of the Paris Motor Show, a motor racing event was organized at the Linas-Montlhéry circuit by the Société de l'Autodrome, under the patronage and regulations of the Automobile Club de France.

The program included motorcycle races, a «racing car» competition, the Grand Prix of the Motor Show for 1500cc cars, and, for 1100cc cars, the Voiturette Critérium, contested in three heats.

Despite the dreadful weather, the public turned out in droves for the event, with an estimated 25,000 spectators stoically braving the cold, wind, and torrential rain that fell throughout the day. This inclement weather forced the organizers to modify part of the program, which nevertheless remained quite interesting. Thus, the distance of the Grand Prix du Salon was reduced from 400 to 200 kilometers, and the motorcycle races and the «racing car» competition were replaced by simple exhibitions, as the organizers feared the wet track would become too dangerous.

The racing car competition was to feature two cars equipped with aircraft engines, the Coty and the Sadi Spéciale, as well as Eldridge's Miller and a Delage 2LCV (which replaced the Talbot announced for Divo, actually the Sunbeam 4-liter).

The first round of the Voiturette Championship, which brought together 14 cars, took place on the 12.5 km road circuit, which the competitors had to complete four times. The race started at 9:30 a.m.

After the withdrawal of Casse and Goutte's Salmsons, the three factory Amilcars faced no serious opposition, but their triumphant run was hampered by incidents that eliminated two of them. Morel, in the lead, stopped on the penultimate lap due to a fuel supply problem. Martin then took the lead and won this first heat by 1 minute and 16 seconds over his teammate Duray. Unfortunately, after crossing the finish line, a rear wheel of Martin's car collapsed, and the Amilcar overturned. The driver, ejected and fortunately wearing a helmet, was taken to the hospital with a broken collarbone and two broken ribs.

The second heat was scheduled for 10:45 a.m. It consisted of six laps of the 5 km road circuit. Only eight cars lined up at the start.

Morel did not participate, implying that the reason given for his withdrawal was something other than a simple fuel supply issue, which could easily have been resolved in the 45-minute interval between the two races.

Amilcar's chances now rested on the shoulders of veteran driver Duray, who did not disappoint. He won this second heat, relegating Perrot's Salmson to second place by 1 minute 13 seconds and Stuart Sandford's Sandford by 1 minute 17 seconds. Around 4:00 p.m., the final heat was run over eight laps of the speed ring, a distance of 20 km. The 6-cylinder car, significantly faster than its competitors, was unbeatable, barring unforeseen circumstances.

Duray achieved an average speed of 164.328 km/h; his closest rival, Perrot, finished more than a lap behind, and Sandford was even further back.

In the overall standings, calculated by adding the times of the three heats, Arthur Duray finished first, more than 4 minutes ahead of Perrot and his Salmson. Sandford was ranked 3rd.

The Grand Prix du Salon was run over 16 laps of the 12.5 km road circuit. As with the Italian Grand Prix, the Delages were absent. Their last race had been on August 7th at Brooklands, where the British Grand Prix was held. At the factory, they underwent significant modifications, requiring the design of a new cylinder head to accommodate the exhausts, a source of serious inconvenience for the drivers, on the left side of the car.

Three Talbot 1500 8-cylinder Grand Prix cars were entered for Segrave, Divo, and Moriceau, the rest of the field consisting of a Guyot Spéciale, Fouchet's Bugatti, and a few other competitors unlikely to pose a threat to the Talbots.

Divo won without breaking a sweat, ahead of Segrave and Moriceau. Guyot, in fourth place, finished four laps down… The Talbots' dominance was absolute. The winner's average speed was 100.817 km/h, significantly lower than that achieved by Martin in the first Voiturette race (104.114 km/h).

Course de côte des 17 Tournants, 24 octobre

Organized for the second time by the Motocycle Club of France in collaboration with Le Journal, the event takes place near Saint-Rémy-lès-Chevreuse, about forty kilometers southwest of Paris. It follows a 1300-meter stretch of steep, winding hill followed by a 500-meter straightaway on a level section.

The winding road surface is dirt and gravel; however, the final straightaway is paved. The event is highly selective due to the numerous challenges encountered over a relatively short course. It highlights the inherent qualities of the motorcycle but, above all, the skill and virtuosity of its driver.

Grand Prix du Salon, October 17, 1926. After the retirements of Morel and Martin, Amilcar's chances of victory rested on the shoulders of Duray, who did not fail.

Morel, in the rain, on the road circuit. He will withdraw before the end of the first heat and will not restart.

Charles Martin finished the first heat as the winner, but he crashed after a rear wheel collapsed. He was pulled up with a fractured collarbone and two broken ribs, preventing him from participating in the following heats.

Duray poses after his victorious race in the rain. In the background, Stuart Sandford's three-wheeled Sandford passes by.

Many competitors registered, as the event was one of the last of the season. The entry list included around fifty motorcycles and sixty cars. Morel was the sole representative of Amilcar, as Charles Martin had not yet recovered from his crash at Montlhéry. He had two cars: a four-cylinder, entered in the Sport 1100 category (no. 84), and a six-cylinder CO running in the Course 1100 category (no. 102).

The choice of the former is curious, especially since the six-cylinder had already been entered in the sport category in other events, but perhaps the organizers were more particular and required a car that was actually available in the catalog. While Morel was alone in his 6-cylinder category, in the other he faced stiff competition from D'Havrincourt (Salmson) and Giraud-Cabantous (Caban).

For the overall standings, he could hope to compete with Divo (Talbot 1500) and Williams (Bugatti).

Even though the road was in better condition than in 1925, Divo's record in his Delage remained unbroken. The reason? The corners, made slippery by the night's rain, offered only precarious grip.

Divo set the fastest time of the day (1 min 32.56 sec, the time calculated to the hundredth of a second, which was extremely rare at the time), ahead of Williams (1 min 34.51 sec) and Morel (1 min 35.20 sec). Morel set a new record in the 1100cc racing category; the previous record belonged to Mestivier in a 4-cylinder Amilcar.

In the 1100cc sport category, the first Amilcar driver was beaten by 0.80 seconds by D'Havrincourt, finishing second in a tie with Vanhoff in a GAR. It should be noted that Jean-Albert Grégoire, champion of front-wheel drive and designer of several models such as the Amilcar Compound and the Hotchkiss Grégoire, participated in the event with his Bugatti Brescia. He won the 1500cc sports car category.

"The format and location chosen by the Motocycle Club de France are quite judicious. The layout and structure of the corners force the machines to exert considerable effort and require powerful braking. They test the chassis strength, work at varying engine speeds from start to finish, demand abrupt steering inputs, and put unusually high stress on the wheels and steering. The machines therefore play a major role in this race, but the skill of the drivers is also crucial. The corners follow one another without interruption, so that the driver barely has time to recover after exiting one corner before entering the next." So, it's a race of zigzags, tires scraping the ground with sideways slides, sudden straightening up, and sweeping across the road from left to right. Driving a racing car in such conditions is a kind of acrobatics that very few drivers, even renowned ones, are capable of. Therefore, one shouldn't expect to witness a perfect race from start to finish. Regardless of the skill and reflexes of a Divo, a Morel, or a Williams, there are cornering maneuvers that are open to criticism. For example, Albert Divo had great difficulty recovering in the final turn. His abrupt braking maneuver threw him close to the outside curb, and it took him 200 meters to right himself. At the same obstacle, Montevola (Bugatti) broke the rear wheel of his 3-liter car, fortunately without causing any injuries. This hairpin bend was all the more challenging as it preceded the final straight, at the beginning of which accelerations were the most difficult and could significantly alter the final time.

All these factors contributed to the race's immense popularity. A large crowd lined the steep, natural bleachers that bordered one side of the road.

Miroir des Sports, October 26, 1926.

Montevola was the pseudonym of Jean de Vizcaya (Antonio Augustin Jean de Vizcaya), born in 1902, who died in a plane crash near Mende on December 18, 1931.

The series of turns on the unpaved road, often taken in a skid, delights the spectators gathered on the embankments.

This advertisement, published in Le Petit Parisien on October 7, 1926, highlights the two most important victories of the season, Monza and Brooklands, as well as the performance at Arpajon.
The total of 100 victories represents all of the brand's successes since its inception.

"The cold weather and damp corners hampered the high-powered cars; the tires' grip on the road was repeatedly insufficient. Unexpectedly, after the previous day's rain, the weather was fine; but the temperature remained cold; despite this, a large crowd turned out." L'Auto, October 25, 1926.

Bilan de la saison 1926

Overall, the season was very positive, with 23 victories, including two major ones (the Voiturette Grand Prix at Monza and the Brooklands 200 Miles). In its class, the 6-cylinder car proved practically invincible, especially since its reliability was generally excellent. It even managed to challenge much more powerful cars in hill climbs. The official Salmsons, while well-driven and fast, were unreliable and couldn't truly trouble the Amilcar. As for the other competitors, they were merely bystanders with no chance of success.

The most remarkable performance of the season remains the record set at Arpajon on May 9th. The 1927 season thus looked very promising, as Salmson had no plans to manufacture an engine as advanced as that of the CO type..

At the Paris Motor Show in October 1926, Emile Akar announced his plan to increase the brand's participation in motorsport for the 1927 season. However, financial difficulties were already well-established, ultimately leading to the company's liquidation in early 1927. Industrial activity continued, but with a new management team.

While the 1927 racing program was less extensive than the previous season, the financial commitment remained substantial. Three cars were often entered simultaneously, and new models, the CO Déportés, appeared during the season.

1927 also saw the launch of the 6-cylinder customer version, the C6. Establishing a competition program while the company was experiencing serious difficulties is easily explained. The main investment, which had already been financed, concerned the research and design of an entirely new car. The cars are perfectly tuned, face no competition in their category, and will therefore provide constant publicity for the brand while requiring only a significantly reduced budget to run the season.

Furthermore, the design and manufacture of the new cars, evolutions of the original CO type, do not require a substantial investment.

The season begins at the end of January in Marseille.

Course de côte du Boulevard Michelet, Marseille, 30 janvier

This new sporting event, organized by the Marseille Motorcycle Club and Automobile Club, replaced the Allauch hill climb. The latter, whose first edition dates back to 1922, had been very successful, but in 1925, prefectural authorization was not granted under pressure from local residents. René Thomas therefore remains the record holder for the event with his 6-cylinder Delage, averaging over 141 km/h in 1924. For 1925, the organizers established the Pailladou hill climb, located on the N96 Aix-Aubagne road, 30 km north of Marseille. Thomas, this time driving the 12-cylinder Delage, set the fastest time.

This photo was taken during the morning practice sessions for the Boulevard Michelet hill climb, authorized from 7 a.m. to 9 a.m., a few days before the race. The sun had not yet risen on this early morning at the end of January.

Morel on the starting line, under the starter's orders.

André Morel and Mestivier are surrounded by people. Two spectators, cigarettes in their mouths, lean forward to be in the photo. Having your picture in the newspaper was practically a holy grail back then!

In 1926, the organizers chose Boulevard Michelet in Marseille as the course for their race. Authorization was granted by the mayor and senator of the Phocaean city, Siméon Flaissières. However, the race did not take place. The following year, all obstacles were finally removed, and the event could finally be organized.

It was held in the heart of the city on a one-kilometer stretch of Boulevard Michelet located between the Prado roundabout and the Mazargues Obelisk. The road was straight, 16 meters wide, and had a slight 3% incline. The competitors started from a standing start. The race was open to all categories of motorcycles, cyclecars, sports cars, and racing cars. Trials are permitted on Thursday, January 27, Friday, January 28, and Saturday, January 29, between 7:00 and 9:00 a.m. (the residents are, this time, particularly understanding!).

The race takes place on Sunday morning, between 9:00 a.m. and 12:00 p.m.

130 competitors are registered. While the motorcycle category includes several nationally renowned riders such as Boetsch, Richard, and Rolland, the car categories feature only one headliner: Morel. The official Amilcar representative wins the event, achieving the best overall time (30.35 seconds, or 117.64 km/h), ahead of Richard and his Peugeot 750cc motorcycle.

Morel, without any real competition, easily set the best time of the day.

The second fastest time in the car category is achieved by Henri Giraud (Bugatti 2L), and the third by Louis Rigal (Peugeot Sport 5L).

"Marseille, January 30th. The Marseille Moto-Club race was held this morning, starting at 9:00 AM, on Boulevard Michelet, under sunny skies and before approximately 30,000 spectators. The race was a resounding success; it couldn't have been otherwise, as it took place not far from the city center, on an ideal straight road. The day's big winner was none other than André Morel, the Amilcar rider, whose prowess has been witnessed many times. He achieved the best time of the day with an average speed of over 117 km/h, in a race where, it should be noted, the start was from a standstill and the finish was a rolling start. The second-best time of the day, and also the best time for motorcycles, went to Jean Richard, on a 750cc Peugeot, with an average speed significantly lower than Morel's…" Revue Automobile, February 25, 1927.

«Unable to organize its annual race in Allauch, the Marseille Motorcycle Club turned to the beautiful Avenue Michelet, which extends the first section of the Prado. Residents of this boulevard were quite surprised to learn that it had a ramp, as this was hardly suspected. On the gently rising incline, nearly one hundred competitors raced on the last Sunday of January before a considerable crowd.»
Omnia, mars 1927.

Kilomètre lancé de Genève, 6 mars

The event was organized during the 4th Geneva Motor Show on the Eaumorte straight (not Eaux-Mortes, the name of the nearby hamlet), located on the outskirts of the major Swiss city.

Charles Martin was the sole official representative of Amilcar. A few test runs allowed him to just barely determine the appropriate axle ratio. The atrocious weather explained the withdrawal of Robert Benoist and the fastest car in the field, the large Delage, holder of the event record. In torrential rain, Martin achieved the best time across all categories, averaging 166.60 km/h.

He was far from reaching the 200 km/h envisioned and approached by Morel at Arpajon in 1926. To his credit, the road, quite narrow, was made very dangerous by the rain. The Amilcar finished nearly a second ahead of Delmar's large 18CV 6-cylinder Steyr.

The day after the race, benefiting from much better conditions, Robert Benoist attempted an official test. His average speed reached 208.099 km/h, thus breaking the national record held since 1924 by Thomas in the same car at 203.5 km/h.

Martin poses in his CO type car before the race. The number 29 assigned to him will be affixed to the black disc.

This time, the photo was taken after the race, as evidenced by the marks left by torrential rain. In fact, a deflector has been placed behind the right front wheel to offer some protection to the driver from the spray. Martin is at the wheel, and his mechanic is on the far right. The other people in the photo are likely members of the Geneva branch of the Automobile Club of Switzerland, the race organizers.

Course de côte de la Mi-Corniche, 9 mars

As in the previous year, André Morel participated in the Monaco and Nice Meeting events. He began with the Mi-Corniche hill climb. Edmond Bourlier set the fastest time in a Delage 2LCV with a time of 55 seconds. Morel finished second (56 seconds). These two drivers were the only ones to break the one-minute barrier; the third-place finisher, André Boillot in a Peugeot 174S, was timed at 1 minute 2.35 seconds.

André Morel and Maurice Mestivier at the Mi-Corniche hill climb. The Amilcar driver logically lost to the Delage.

Two of the most formidable racing cars of the 1920s, the Amilcar CO 6-cylinder and the Delage 2LCV V12 2-liter in its final version, are parked in the port of Monaco. Both cars participate in the various races of Monaco Racing Week, driven by their respective drivers, André Morel and Edmond Bourlier.

Course de côte du Mont-Agel, 10 mars

The following day, the same field, with a few exceptions, moved to Mont-Agel, but Bourlier and Morel did not fare as well. The former suffered various mechanical problems, while the latter was forced to retire after a fuel line burst. Chiron and Rost were also unable to compete and handed the victory to Albert Proal (Bugatti). Bourlier only managed the fourth fastest time, behind Lorthiois and Lepori, both driving Bugattis. The 1100cc racing category was won by Signoret (Salmson).

Albert Proal was a car dealer in Nice. Born on September 18, 1897 in Barcelonnette (04), he died in Gap on September 18, 1965.

Richard Lorthiois was a textile manufacturer from northern France. He managed the family business with his brother Léon. Born in Tourcoing on October 29, 1897, he died in Joinville-le-Pont on January 15, 1977.

Kilomètre de Nice, 12 mars

A very strong wind disrupted the organization of this event, held on Saturday afternoon. Curiously, despite its name, it was run over 1100 meters, from a standing start. Unsurprisingly, Bourlier set the best time (32 seconds, or 123.150 km/h). He finished ahead of Morel, who clocked 33.25 seconds..

Course de côte de la Turbie, 13 mars :

Although there was heavy rain during the morning, it stopped for the race and only resumed in the late afternoon. Driving conditions therefore remained quite good.

Bourlier and his Delage won the race ahead of De Moraes (Bugatti) and Morel in his Amilcar, who improved the 1100cc racing category record by 10 seconds.

Turbie Hill Climb: Morel achieves the 3rd best time behind Bourlier and De Moraes.

The Amilcar driver takes the tightest line. He will easily win the 1100cc race category.

Course de côte d'Argenteuil, 20 mars

While the 1926 edition was hampered by the weather, which led to Charles Martin's withdrawal and André Morel's almost immediate retirement, Amilcar took a resounding revenge in 1927 thanks to Martin.

This time, the weather was superb, and 30,000 spectators attended the race. The fastest time was achieved by the Peugeot motorcycle entered in the 1000cc category and ridden by Richard (1 min 16 2/5 sec), while the second fastest was set by the Amilcar rider in 1 min 16 4/5 sec.

Martin finished ahead of Michel Doré on a 1500cc La Licorne and Dugat on an 1100cc Derby racing motorcycle.

«The weather was perfect, and this unforgettable event took place on a magnificent spring day.» We had never before seen such a crowd; all records were broken.

We had planned a system of barriers and safety barriers, as well as a complete and well-organized security detail at every turn and in all sensitive areas, so that despite the 30,000 spectators who flocked to the coast, there were no accidents or incidents.

According to the entire press, in addition to this impeccable organization, a Gaumont loudspeaker information service operated throughout the race with remarkable speed and accuracy. The public thus knew exactly what to expect minute by minute, competitor by competitor.

The second major winner of the day was Martin in his Amilcar, whose record time was only two-fifths of a second behind Richard's. This performance surprises us, both in terms of the driver and the manufacturer. It should be noted, however, that Martin broke the category record by 11.45 seconds, a record previously held by his teammate, the late Mestivier. (4-cylinder, editor's note. Official Bulletin of the MCF, April 15, 1927.)

"As every year at this time, the MCF held its classic Argenteuil hill climb race last Sunday on the Fort road in Argenteuil.

From eight o'clock in the morning, early-bird spectators, laden with provisions for the day, were already securing prime spots along the roadside.

At noon, even more spectators arrived and, with some difficulty, climbed the "Bas de Rosière" path, as it was already hot. What a wonderful sight, what a crowd! All along the course, spectators frolicked in the warm caress of the spring sun. Some, to follow a competitor's climb for longer, climbed into trees, onto cars parked in parking lots, and even onto the electrical pylons." Match-L'Intran, March 22, 1927.

Grand Prix de Provence à Miramas, 27 mars

To mark its reopening for the 1927 season, the Miramas Autodrome hosted the Grand Prix de Provence for the third year.

The splendid weather that had persisted for several days, the program put together by the organizers, and the quality of the entries (29 cars representing 8 different brands) drew thousands of spectators.

Five categories were planned: up to 1100 cc, 1100 to 1500 cc, 1500 to 2000 cc, 2000 to 3000 cc, and finally, over 3 liters. Qualifying heats (10 laps, or 50.5 km) were scheduled for each category. The final race brought together all classes over 303 kilometers (60 laps). As in the previous year, competitors had to navigate the U-shaped hairpin bend, designed to highlight the cars' braking, handling, roadholding, and acceleration qualities, but primarily intended to add excitement to the race and ensure a minimum level of entertainment.

In the 1100cc class, the three factory Amilcar COs, driven by Morel, Martin, and Duray, were entered against six BNCs, three Salmsons, the Giraud Spéciale, and a privately entered 4-cylinder Amilcar. Ultimately, the three Salmsons and two BNCs withdrew, leaving the Amilcars without any real competition.

Before the race, the Amilcars were considered the favorites:

"We recently had the opportunity to examine the Amilcar cars entered in the race during a visit to the factory, which is still in full operation. The company is doing excellent work. In particular, Morel's car, with its meticulously designed lines and supercharged multi-cylinder engine, is sure to be a marvel. As we will see at Miramas, its potential speed exceeds even the most optimistic predictions, and I don't believe we should look elsewhere for the winner of the 1100cc class. Certainly, the BNCs and the Salmsons are serious contenders; all three manufacturers are remarkable specialists in high-performance cars; however, Amilcar remains our favorite."

L'Auto, March 25, 1927.

Provence Grand Prix. In the days leading up to the race, the weather conditions were decidedly spring-like and very different from those experienced by drivers and spectators on race day.
The mechanics from the Racing Service are photographed in Morel's car (No. 1) and around Martin's car (No. 2). Martin, injured in the foot during practice, will have to withdraw from the race.

Before the start of the 1100cc qualifying race and the grid formation, a marshal and a mechanic push Morel's Amilcar No. 1, which is probably having trouble starting. Duray's sister car (No. 3), Ducreux's BNC No. 4, and further back, Gubernatis's BNC with the heart-shaped grille are visible. The three other cars—Massias's and Chatain's BNCs and Jourdan's Giraud-Spéciale—are hidden.

Duray and Morel at the wheel of their respective cars

The rest of the field included the three factory Talbot 1500 8-cylinder cars (Divo, Williams, Moriceau), Robert Benoist's Delage 1500, and the Bugattis of Chiron, Lehoux, «Couc's» (Gérard de Courcelles), and «Foc» «Feu au c…» (Pierre Matussière).

On race day, the fine weather, which had been abundant until then, gave way at 8:00 a.m. to a cold, fine rain interspersed with torrential downpours that made the track extremely slippery. In places, large puddles stagnated, making driving extremely hazardous. At 9:30 a.m., the scheduled start time, with the covered grandstands full, officials decided to postpone the qualifying heats until noon and, due to time constraints, shorten them by five laps. They would therefore be run over only 24 km.

While the rain continued to fall, the first heat for the 2- and 3-liter cars started at noon. Chiron won with an average speed of 114 km/h, ahead of Lehoux and Couc's. All three drivers qualified for the final.

During the 1100cc qualifying heat, Morel, exiting the chicane or «virelet», took a solo lead. The track was completely flooded in places.

At 12:30 p.m., the 1500 cc cars—three Talbots, the Delage, and the Bugattis—took to the track just as the rain temporarily stopped. Louis Delâge and Owen Clegg, the heads of Delage and Talbot, who had briefly considered withdrawing, ultimately decided to start but not to compete against each other, simply maintaining a speed sufficient to qualify. Benoist and Divo played it safe, driving well below their potential, but Moriceau and Williams set a faster pace and secured the top two spots in the heat for Talbot. Louis Delâge felt cheated and voiced his anger. Without delay, the third heat, for the 1100cc class, began. Only two of the three 6-cylinder Amilcars lined up; Martin, injured in the foot by a gearbox problem, had withdrawn. The four BNC cars (Massias, Gubernatis, Alfred Ducreux, Chatain) and Jourdan's Giraud-Spéciale tried to stay within striking distance. As soon as the flag dropped, Morel took the lead, followed by Duray. He maintained his advantage, steadily increasing his lead. After five laps, he won in 12 minutes 36 seconds, averaging 117 km/h and setting the fastest time of all the heats. Duray finished second, about twenty seconds behind; Jourdan, third, within the same minute. The three BNCs of Massias, Gubernatis, and Ducreux followed. Chatain (BNC) retired on the first lap.

Sixteen cars qualified for the final: 6 Bugattis, 3 Talbots, 3 BNCs, 2 Amilcars, the Delage, a BUC (De Maleplane's), and the Giraud-Spéciale. Louis Delâge was furious and told the press that he was «not very happy with the dirty trick the Talbots played on him after the agreement that had been reached.» He has just informed Mr. Bertarione, an engineer at Talbot, that Benoist will race in the final and that he will push as hard as he can… Mr. Delâge doesn't want to leave the public with the impression of this elimination round being won by Moriceau and Williams." Just as the sun finally appears, the bad luck continues.

"While the competitors in the final lined up for the start, Benoist did two practice laps before lining up himself. He pushed it a little to test its handling in the corners and forgot about it. He kept the accelerator on and came out of the corner at 150 km/h, right in the middle of the pack of competitors preparing for the sprint.

Slammed on the brakes! The car fishtailed and spun. Sideways, the Delage hit three cars and sustained enough damage to be out of the race. Benoist suffered a minor injury to his fibula." Talbot then decided to withdraw from the final, not wanting to capitalize on Benoist's misfortune. The three cars were therefore withdrawn. The race started at 2:30 p.m. for the 12 remaining cars.

«From the start, Morel took the lead, closely followed by Chiron who replaced him in the lead on the next lap. The race continued steadily, with Chiron constantly increasing his lead.» Le Petit Marseillais, March 28, 1927.

But the withdrawal of Benoist and the Talbot brothers, canceling the highly anticipated match on which the success of the meeting depended, greatly displeased the public. The spectators, who had waited stoically since morning, felt cheated. They first loudly expressed their irritation before leaving the stands and invading the track.

"Chiron, whom we had considered a very dangerous outsider, was in the lead, but Morel was following a few seconds behind, his deficit due only to a skid in the corner at the start, having entered it a little too fast."

Les Sports de Provence, March 1927.

"The huge crowd in the stands, agitated at not being informed of these unfortunate incidents (due to a sound system failure, ed.), invaded the track. The security detail was overwhelmed in the blink of an eye. For a moment, the worst accidents were feared; the race had to be stopped. There were a few minutes of confusion and disorder. Chiron, who was leading in his Bugatti, tried to restart, but the crowd refused to listen, and everyone wondered at every moment, fearing the worst, what might happen on the next lap. Chiron had to cross through an enormous crowd and continued nonetheless." The other competitors try the same thing.

The track hasn't yet been invaded by spectators and, for the moment, the race is proceeding normally. Morel (No. 1) is ahead of Duray (No. 3). Two Bugattis follow: Gubernatis' BNC and another Bugatti. Chiron, in the lead, has already passed.

However, the Amilcars, on Mr. Sée's orders, stop. Each of the other competitors, most of whom are amateurs, tries to continue. To restore order, the organizers need an authority figure, which is currently lacking. If Bugatti were officially present, he would undoubtedly do as Sée did. But Chiron, the owner of his car, is fighting for his chance as he sees fit.

Furthermore, while the crowd lets some competitors pass, spectators unscrew radiator caps from two BNC Amilcars, and Mr. Bollack is also forced to stop his men.

L'Auto, March 28, 1927.

L'Auto, March 28, 1927.

«Terrible weather and regrettable incidents caused by the public reduced the interest in this event, which served as the reopening of the Miramas autodrome, to almost nothing.»

From the morning, it was deemed impossible to give the starting signal, and it wasn't until noon, still in the rain, that the qualifying races began, which were scheduled to occupy the entire morning. However, due to the rain, the distance of these qualifying races was reduced to 24.7 km (5 laps of the track) and the minimum speed to 80 km/h. Numerous withdrawals were recorded, including that of Talbot after the qualifying races, and of Delage after a collision that injured Robert Benoist. These withdrawals displeased the public, who at one point invaded the track, bringing all the events to a halt. Such an outcome is truly regrettable, as the results of the qualifying races promised some exciting battles, judging by the tenacious qualifying sessions in the rain, where Morel's 1100 Amilcar was the fastest.

Motorcycling and Motoring, April 20, 1927.

Courses d'encadrement du Tourist Trophy à Montlhéry, 3 et 10 avril

The French Tourist Trophy is a unique event organized by the MCF (Motorcycle Club of France) on the 12.5 km Montlhéry road circuit. Competitors must maintain a set average speed for their category over eight consecutive days, with 10 hours of driving per day.

The regulations are similar to those of regular road rallies. Naturally, repairs must be carried out using the tools and spare parts found on board the vehicles. Open to both motorcycles and cars, the event is often run in the rain, and while it offers considerable technical interest, it holds only limited sporting appeal for the few spectators. Although it borrows its name from a British race, it has no connection whatsoever. Furthermore, the reasons behind the organizers' choice of this English term for their event remain unknown. Moreover, a journalist from Le Figaro expressed his outrage in the April 11th edition, writing:

«As if the Tourism Trophy wouldn't do better and say just as much!».

The crowd, unhappy with the withdrawal of the two main marques (Delage and Talbot) from the final, left the stands and invaded the track. A few drivers tried to make their way through to continue. In the foreground, Gubernatis, at the wheel of his BNC, hits a huge puddle, a testament to the state of the track during the race. In the background, Duray's Amilcar has been abandoned by its driver on the advice of Mr. Sée, the head of Amilcar, who was undoubtedly worried about the crowd's reaction.

The race was definitively stopped. At the moment the track was invaded, the standings were as follows: Chiron in his Bugatti in the lead, ahead of Morel by 14 seconds, Foc in his Bugatti by 22 seconds, Couc's in his Bugatti, Duray, De Prandières (Bugatti), etc. It was ultimately decided that no final standings would be established and that the event was canceled.

«Thus ends, miserably, due to organizational failure and, above all, a lack of authority, a day of sport that promised to be magnificent.»

The RAC Tourist Trophy, first held on the Isle of Man in 1905, was a classic race. It was contested six times (the last time in 1922 saw Jean Chassagne take the victory on a Sunbeam), and, as of the date of the French Tourist Trophy, the British event remains one of the major racing series on the motorcycle calendar. The motorcycle Tourist Trophy has always been particularly dangerous (nearly 270 riders have been killed since its inception). The 1927 500cc edition, held in June, was marred by the fatal accident of 22-year-old Archie Birkin, one of the brothers of the famous rider Tim Birkin, one of the Bentley Boys.

Sir Thomas Birkin, Tim's grandfather, was Jane's great-grandfather.

The RAC Tourist Trophy, a motor race, was organized again from 1928, first on the Ards circuit in Northern Ireland, then on various British circuits.

After eight days of monotonous laps in which the official Amilcars did not participate, the results of the French Tourist Trophy were as follows: the 500cc category was won by Michel Doré in a Sima-Violet, the 750cc cyclecars by Siran in a D'Yrsan, the 750cc cars by Rigal in a Peugeot, the 1100cc cyclecars by Dhôme in a Morgan, and the 1100cc cars by Devaud in a 4-cylinder Amilcar CS. Devaud covered a total of 5,137.65 km, the highest mileage achieved across all categories.

Alongside this long endurance event, support races were organized by the organizers on April 3rd and 10th. The factory Amilcars were entered in these races.

On April 3rd, the first race consisted of three very short heats (12.5 km) run on the track, with the final standings determined by the total points awarded after each heat (one point for first, two for second, etc.).

Morel won the first heat with an average speed of over 171 km/h. Martin finished second, with the same time as his teammate. The Amilcar drivers finished ahead of Casse, Perrot, and Goutte, all driving Salmsons.

At the end of the second heat, on the final corner, Goutte impeded Morel, who was unable to overtake. After the finish, the crowd booed the Salmson driver, who had won the heat ahead of Morel, Casse, and Martin.

April 3, 1927, Montlhéry: a great day for Amilcar. Morel wins both support races of the Tourist Trophy.

In the third heat, Morel won ahead of Goutte, who once again distinguished himself by forcing Martin, who was trying to pass him, to scrape the barriers. Martin finished far behind.

In the final standings, Morel was the winner with 4 points. Goutte finished second (8 points), Perrot third (12 points). Martin was fifth with 17 points.

After this race, a Formula Libre event was organized, consisting of 10 laps of the small road circuit, totaling 50 km (the race was originally scheduled for 20 laps).

Morel and Martin faced five other competitors: Montier (Ford Montier 3L), Perrot (Salmson), Hawkes (Eldridge Special), Jean Graf (Jean Graf), and Lepicard (Derby).

Morel and Martin achieved a one-two finish. Perrot finished third, one lap down, and Lepicard fourth.

On April 10, just after the French Tourist Trophy had concluded, the same events were held.

In the Formula Libre event, the British driver George Eyston (Bugatti) left no chance for André Morel, who finished second, one lap down. Montier (Ford Montier) finished in 3rd position. Martin, meanwhile, retired.

Morel wins another one of the races organized on April 10th.

In the three-heat race on the track, Morel and Martin tied for first place with 5 points each.

Morel won the first heat at an average speed of over 174 km/h, ahead of his teammate and Perrot (Salmson). The second heat ended with the same drivers in the same order. At the end of the third heat (interrupted by the spectacular collision between Guéret and Collet in the first corner, resulting in a restart), Martin took the win ahead of Perrot and Morel, who, evidently, didn't push himself and settled for 3rd place, allowing the two Amilcars to finish tied.

Firmin Didot finished 9th overall.

This is Paul (1907-1989), a direct descendant of Firmin Didot, the famous printer. Auguste Cochin, born in 1907 (who raced under the pseudonym Eric Lora and who died at the Fontainebleau hill climb in 1934), a descendant of the founder of the Cochin hospital, was also related to the Firmin-Didot family through one of his aunts.

At the end of the meeting, several exhibitions were offered to the public. Divo, in his 4-liter Sunbeam, couldn't push it to its limits due to the rain that was falling at that moment. A duel between cars and motorcycles took place on the track, pitting Morel's Amilcar against Richard's 1000cc Peugeot. The first heat was won by the car, by a very narrow margin. However, at the end of the second heat, Richard's motorcycle pulled away from the Amilcar by several lengths, and he was declared the winner of the exhibition.

A second edition of the Tourist Trophy was organized in 1928. Only two cars finished, Devaud (Amilcar) ahead of Doré (Violet). In 1929, the MCF (Motorcycle Club of France) decided not to organize this event and relaunched its Tour de France.

Journées de sport à Montlhéry, Grand Prix des 1100 cm³, 17 avril

The race, reserved for 1100cc racing cars, was run over 20 laps of the road circuit, a distance of 250 km, before a very sparse crowd. The Racing Department entered three cars for its usual team.

At the start of the race, Morel pulled away, with Martin following a few hundred meters behind. On the 5th lap, the leader suffered a puncture but did not lose the lead. Three laps later, Martin was forced to retire, and Duray took over in second place, with D'Havrincourt (Salmson) in 3rd. On the 10th lap, Morel also retired; his radiator had been punctured by a stone. Duray took the lead and held it until the finish. D'Havrincourt finished one lap down, and Perrot, in another Salmson, completed the podium.

On the same day, Albert Divo, driving a 4-litre Sunbeam, set a new track record, achieving an average speed of 232.834 km/h over one lap. This record was broken in 1933 and then in 1934 by Miss Gwenda Stewart and her Derby-Miller (234.861 km/h and then 237.450 km/h) before being definitively raised to 238.897 km/h on May 7, 1939, by Raymond Sommer at the wheel of his Alfa Romeo 308.

Course de côte des Plâtrières, 1er mai

Organized on May 1st by the Marseille Automobile Association, under the sporting supervision of the Aix-en-Provence Auto-Moto Club, this hill climb takes place just outside the city of Aix-en-Provence, on the road to Avignon, at a place called «Les Plâtrières.» The first edition dates back to 1902 (at that time, it was run on a 500-meter stretch) and, after a long hiatus, it was revived in 1924. The record has belonged since 1926 to Jules Rolland from Aix-en-Provence on a Terrot motorcycle, with a time of 1 minute 43.25 seconds.

The course is 3 km long, and the start is from a standing start. Its long straight and single, easy turn allow for high speeds. The road has been completely resurfaced by the Roads and Bridges Department. The event features numerous classifications for motorcycles and cars based on engine displacement, subdivided into amateur and professional categories. The good weather contributed to the event's success, and several records were broken..

Camp Hill Climb: Morel under the starter's orders

André Morel, struggling with his clutch, slightly anticipated his start, hesitated… and continued. He achieved an excellent time (1 minute 32.25 seconds) but received a 3-second penalty. This corrected time still placed him second among the cars behind Louis Chiron and third overall, as Richard and his Peugeot motorcycle had achieved 1 minute 32 seconds.

Morel obviously won the 1100cc racing category, with second-place finisher Gubernatis in a BNC finishing nearly 20 seconds behind. Chiron, in a 2-liter Bugatti, who had arrived from Nice the previous day by road, set a new overall record for the event (1 minute 29 seconds, an average speed of 121 km/h).

"Chiron delivered a truly remarkable performance on this occasion, and the impression he made was considerable. Everything was against him. Starting last, he encountered his first obstacle: the onlookers, the crowd who, believing the race was over, had already spilled onto the road.

He had to make his way through these spectators who were scattering hastily at the sound of his Bugatti's engine, speeding along at full throttle. And yet, he managed to achieve a time of 1 minute 29 seconds, with an average speed of 121 km/h, 17 km/h faster than the existing record."

Course de côte de Camp et Kilomètre lancé à Gémenos (Marseille), 8 mai

The Camp hill climb takes place on the morning of May 8th. In the afternoon, 9 kilometers away, a second event, a 1-kilometer flying start, is held in Gémenos. Organized by the Aubagne Auto-Moto Club, it follows a section of the main road from Gémenos to Rocquevaire, near Pont-de-l'Etoile.

The Camp hill climb is a classic, now in its 12th edition. It takes place on a 4-kilometer course, in splendid weather and before a large crowd.

Numerous records are broken or improved. Among the most impressive performances, Chiron's time in his supercharged 2.3-liter Bugatti stands out, as he beat the overall race record by 3 seconds. The previous record, held by Robert Benoist, was 2 minutes 35 seconds, set in 1924 with a 6-cylinder Delage. The Monegasque driver finished 4 seconds ahead of Bourlier, the favorite, who was driving a Delage 2LCV. Morel achieved the third fastest time overall and triumphed in the 1100cc class, «putting in a very impressive performance and breaking his own record.»

Camp Hill Climb: Morel exiting a bend on the unpaved road. He covers the 4 km in 2 min 37 sec at an average speed of 91.7 km/h, a time 5 seconds slower than Chiron in a supercharged 2.3 litre Bugatti.

The Gémenos race, a rolling start, was run over a 1 km straight course with a slight 3% incline. Morel achieved an average speed of 174 km/h (20.3 seconds), compared to 185 km/h (19.2 seconds) for Chiron in his 2.3-liter Bugatti and 191 km/h (18.4 seconds) for Bourlier in the Delage 2LCV, who set the fastest time. A large crowd gathered behind the barrier erected for the occasion.

As a side note, every year a prediction contest was held for the competitors. In 1927, the winner was… Bourlier, who correctly predicted Chiron's exact time!

The same riders met again in the early afternoon in Gémenos for the one-kilometer flying start race, a straight course with a slight 3% incline.

Bourlier took his revenge, achieving an average speed of 191 km/h. He posted the best performance of the day, ahead of Chiron, who won his category with an average speed of over 185 km/h, and Morel, who again won the 1100cc category with an average speed of nearly 175 km/h.

Course de côte d'Harfleur, 11 mai

While André Morel was in the South of France, Charles Martin was tasked with representing Amilcar at the Harfleur hill climb, organized by the Automobile Club de l'Ouest, as part of the Le Havre Meeting.

Two events were scheduled: the mile (spelled mille in the press) with a standing start, and the kilometer with a flying start after a 609-meter run-up. The ranking was determined by adding the two times.

The field was rather small because, on the same day, two other important events were being held: the 14 km of Saint-Quentin (where Benoist set the fastest time with a Delage 1500 8-cylinder) and the Calvaire hill climb at Fontainebleau, won by D'Havrincourt in a Salmson.

In Harfleur, Martin achieved the best combined time in the car categories (1 min 3 2/5 sec + 35 sec, i.e. 1 min 38 2/5 sec) ahead of Seujacq (BNC, 1 min 43 1/5 sec) and Pollack at the wheel of his big Panhard (1 min 44 1/5 sec).

Seujacq (or Senjacq) was the pseudonym of Max Jacques Paul Laporte, a Parisian garage owner, born in Canteleu on February 9, 1897. He married in Los Angeles in 1931 and died in the United States in December 1981.

Two local Amilcar enthusiasts, future owners of the customer version of the 6-cylinder model, were competing with 4-cylinder motorcycles. José Scaron, the local dealer, set the fastest time in the 1100cc sport category, and Robert Jeuffrain, an industrialist from Louviers, finished third in the 1100cc racing class.

The best performance of the day was achieved by Pierre Flahaut from Rouen on an Indian motorcycle (59.35 seconds).

This Pierre Flahaut has no connection whatsoever with Pierre Flahault, the post-war pilot who distinguished himself flying Delahaye and then Monopole aircraft. Pierre Théodore Flahaut was born in Rouen on January 29, 1899, and died in Casablanca on March 19, 1965. Pierre Flahault (1921-2016) was a native of La Varenne in the Paris region.

Course de côte de Monrepos à Bordeaux, 20 mai

The Bordeaux Automobile Week is organized by the ACSO (Automobile Club of the Southwest) and the Bordeaux Motorcycle Club. It includes various motoring events, the most important of which are the Monrepos hill climb and the flying kilometer. Amilcar sends Morel with two cars: a classic CO and the brand-new CO Déporté model, making its official debut.

The Monrepos hill climb, first held in 1901 and back on the calendar since 1924, takes place over 1,300 meters of 5% gradient on National Route 136, from Bordeaux to Branne. It features numerous bends, including four particularly tricky ones. The record for the climb dates back to 1926, set by Lescot (Bugatti) in 53.45 seconds. The race started from a standing start at the city gates, on Avenue de Benauge, at kilometer marker number 6.

«Benefiting from superb weather, the first event of the Bordeaux Meeting was a great success. A huge crowd lined the entire course, and everything went off without a hitch. Some very impressive performances were achieved. Among the most remarkable was Chiron, who set the fastest time of the day across all categories and established a new course record by climbing the 1300-meter ramp from a standing start in 48.35 seconds, an average speed of over 98 km/h.

In the 1100cc class, Morel, driving an Amilcar, clocked a very respectable time of 50 seconds, finishing first in all 1100cc categories and also breaking the previous course record.» L'Auto, May 21, 1927.

Le Kilomètre lancé, Semaine Automobile Bordelaise, 22 mai

It is organized in the Croix d'Hins area between kilometer markers 25 and 26, shortly before Marcheprime on the Bordeaux-Arcachon road, "which allows for the highest speeds."

In case of rain, the event is scheduled to be moved to the Saint-Médard-au-Temple road.

Morel participates in the event with both cars and achieves the two best times in the 1100cc racing category (18.06 seconds with the remote CO, equivalent to 193.5 km/h, and 18.9 seconds with the standard CO). Faure, driving a BNC, finishes 3rd in 22.4 seconds.

«The success of the second event, the flying kilometer, which concluded the Bordeaux week, exceeded the organizers' expectations. The Automobile Club of the Southwest and the Bordeaux Motorcycle Club were among the organizers. Although the event took place 25 km from Bordeaux, on the magnificent Bordeaux-Arcachon road, a veritable racetrack, a considerable crowd lined both the racing kilometer and the flying kilometer sections. The weather was ideal for record speeds: overcast, without blinding sun, calm, and windless. As a result, competitors in the various categories achieved impressive speeds.

Times were recorded in both directions, with the average time calculated.» Splendid performances were achieved by Chiron (Bugatti), the day's overall winner, who reached an average speed of 208.09 km/h, and by Morel (Amilcar), whose 1100 reached 193.518 km/h. Also noteworthy was Faure's time in the BNC (22.4 seconds).

Revue Automobile, June 10, 1927.

This poor quality document, taken from the 1928 program of the same event, shows the Amilcar fitted with an aerodynamic grille.

"In the flying kilometer test, Morel covered the kilometer in 18.6 seconds, achieving a splendid average speed of 193 km/h, beating

many more powerful cars. This is further proof of the striking superiority of the 6-cylinder Amilcar, which will certainly not surprise connoisseurs but is worth highlighting." La Petite Gironde, May 23, 1927.Kilomètre lancé de Tarbes, 26 mai

It seems that Charles Martin did not participate in this event, especially since he was present at the start of the Poix hill climb held near Amiens (900 km away) on the 29th. The press reports of the event remain very brief. The best performance was achieved by Pollack and his Panhard at 157.894 km/h, with Paul Péan (Peugeot) setting the fastest time among the motorcycles. Martin is never mentioned, but apart from Boillot (Peugeot), Laval, and Castera (both driving Salmsons), no other participants appear in the press.

Jacques Désiré Pollak (correctly spelled this way) was a pearl trader and very active with his Panhard during the 1926 and 1927 seasons. He died in a road accident in Châtillon-sur-Indre on September 11, 1927. He was born in Marseille on November 18, 1877.

Chiron was reportedly present, but the crowd's unruly behavior prevented him from starting.

The race was held on a section of the Tarbes-Pau national highway and took place in the rain.

On the 29th, Chiron won the Mont-de-Marsan flying kilometer, which suggests that he had indeed remained in the Southwest after his victory in Monrepos.

Course de côte de Poix, 29 mai

The 8th edition of this event, so dramatic the previous season, took place this time without any major incident.

The Delage 2LCV made its final official appearance on this occasion, driven by Robert Benoist. He set the fastest time of the day at 57.1 seconds, averaging 125.86 km/h. Charles Martin posted the second fastest time, 1 second behind (58.25 seconds). He finished well ahead of Michel Doré (La Licorne 1500 cc), who clocked a time of 1 minute 3.35 seconds.

The Delage 2LCVs, now at the end of their development, would continue to race with private drivers, notably in Italy and Argentina, but these complex machines would no longer reach their full potential without the expertise of the factory mechanics.

Course de côte de Limonest, 12 juin

The meeting began in the rain, but fortunately, the sun came out in the afternoon. It started a few minutes late, as a heated discussion had broken out on the starting line between organizers and drivers, the latter requesting the possibility of a second start in case they missed the first. The competitors ultimately got their way. This event held no secrets for André Morel: he had participated since 1920 (that year and the following year in a Le Zèbre and, since then, in an Amilcar), but the 1927 edition did not go as planned for the first Amilcar driver. Indeed, as he approached the grandstand corner, which he was about to take without cutting the corner, the Amilcar began a tremendous skid that ended in a spectacular spin. Even though the crowd expressed its enthusiasm for the driver's skill, he immediately understood that he had lost all chance of a good result. "There were a few seconds of intense emotion when Morel spun completely out at the big bend; like a true racing driver, he displayed exceptional control and was greatly admired for the way he tamed his small, overly spirited machine." La Vie Lyonnaise, June 18, 1927.

He was allowed to make another run, as a demonstration, but his time was not officially recorded. Without any serious competition after this incident, Louis Chiron, driving a Bugatti Type 35 for the Nerka Racing Team, set the fastest time of the day at 1 minute 49.35 seconds. He improved by two-fifths the record set by Benoist in 1925.

Photos above and on the previous page: in the «big bend» of the Limonest hill climb, Morel makes a mistake and thus loses all chance. He will be allowed to make a second run, but as a demonstration, out of competition.

This document shows Morel during his second untimed climb.

The 1100cc racing category was won by Lobre (BNC) in 2 minutes 38.45 seconds, a performance that Morel would have easily beaten, as it was reported that his time during the demonstration run approached Chiron's.

«Morel, who, in his second attempt, gave a remarkable demonstration with his 1100cc Amilcar.» La Vie Lyonnaise.

«A racing incident deprived Morel, the likeable Amilcar driver, of what should have been a superb victory.» En Auto.

Grand Prix de San Sebastian, 25 juillet

The race takes place on the 17.315 km Lasarte circuit, entirely paved. Forty laps, or 692.6 km, must be covered.

«To accommodate the crowds who come to watch the races over the three days of the meeting, a small town has been built, with spacious grandstands, outbuildings, restaurants, bars, a telegraph and telephone pavilion, pit boxes, timing stations, and a very ingeniously designed scoreboard, highly legible and adaptable to all possible rule combinations. Each competitor is marked by a red electric light that illuminates as soon as the car passes through the village of Lasarte, one kilometer before the grandstands; all of this is painted white and yellow, gleaming in the sun, and decorated in the Spanish yellow and red colors, flanked by the flags of the competing nations.»

Seventeen competitors are entered. In the over-1100cc category, victory seemed destined for a Bugatti. Indeed, a lone and, above all, very slow Hudson started alongside an armada of supercharged 2-liter cars from the Molsheim firm, the favorites being led by Materassi, Chiron, Conelli, and Dubonnet.

In the 1100cc class, the three CO Déportés of Morel, Martin, and Oscar Leblanc faced off against two Salmsons (Jourdan and Martinatti), three BNCs (Gaupillat, Zubiaga, and Fourny), a Hisparco (Uribesalgo), and a Buc (De Maleplane).

Oscar Leblanc, the third Amilcar driver, despite his French-sounding name, was Spanish.

He was a professional cyclist from 1913 to 1917, raced a Salmson in 1926, and, in the 1930s, competed in hill climbs on a Hillman. He died in March 1967 in Madrid.

The circuit was closed after the Bugatti Royale, brought there by the Alsatian manufacturer, had passed. Ettore Bugatti's plan was to present his enormous car to King Alfonso XIII of Spain, who, incidentally, had reportedly placed an order for it after a test drive. However, this purchase order was apparently cancelled, and the King ultimately bought a Duesenberg.

Juan Mauvais, a Frenchman whose real first name was Jean, settled in Madrid and became the brand's importer. In his advertisements, he highlighted the 1925 sale of a CGS to Infanta D. Jaime, the second son of King Alfonso XIII, himself a great car enthusiast. Jean Léon Mauvais was born in Vilosnes (Meuse) on January 3, 1879. He was an accomplished aviator (license no. 144). He emigrated to Spain but returned to France for the First World War, then went back to his adopted country as soon as the conflict ended. Jaime (Jacques Henri de Bourbon) was born in 1908 and died in St. Gallen, Switzerland, on March 20, 1975. He was deaf.

On the left, Oscar Leblanc, a cyclist in the 1910s. On the right, Oscar Leblanc in San Sebastian. The shape of the nose and chin confirm it's the same man.

Oscar Leblanc and Jean Mauvais knew each other well. They both participated in the 12 Hours of Guadarrama race in an Amilcar in 1923.

Navacerrada Hill Climb 1935 in a Hillman

"Lasarte Grandstands, July 2nd. The weather is splendid. Consequently, the grandstands and the entire circuit are packed. The royal family remains in the grandstands for half an hour. His Majesty King Alfonso XIII first speaks with Mr. Ettore Bugatti, from whom he has commissioned a 15-liter car; then with Mr. Sée, the director of the Amilcar company." L'Auto, July 26, 1927.

The Duesenberg SJ was acquired by the King of Spain, despite Ettore Bugatti's considerable efforts to sell him one of his Royales.
Bugatti extensively presented his Royale to Alfonso XIII, but the king, although interested, did not order the car (contrary to what L'Auto claims) and instead opted to purchase a Duesenberg SJ.
Alfonso XIII, born in 1886, was forced into exile in 1931 after the overthrow of the monarchy. He traveled to Cartagena with his Duesenberg and from there sailed to Marseille. He died in Rome in 1941.

Materassi takes the lead, followed by Chiron. Chiron stops at the end of the first lap to change his spark plugs; the stop drags on, and he loses any chance of a good result. The three Amilcars are leading their respective categories.

After 5 laps, Materassi is still in the lead. In the 1100cc class, Morel is leading ahead of Martin, while Leblanc has dropped to 7th place.

On lap 10, Martin is leading the 1100cc class ahead of Morel, while Leblanc has moved up to 5th place. In the next category up, Materassi is still in the lead.

Morel is gradually dropping back, having been overtaken by Jourdan and Martinetti. After 20 laps, Jourdan, driving his Salmson, is in the lead ahead of Martin, Morel, and Martinetti.

While Materassi seemed untouchable in the overall standings, the battle for the lower category remained wide open, especially after Morel retired due to a broken left rear wheel bearing. Charles Martin was now the sole Amilcar representative, as Leblanc had withdrawn on lap 18 following a fuel problem. Some sources attributed this to a miscalculation by the driver, while others suggested a leak in the fuel tank.

Martin, who overtook Jourdan on lap 25, now had a comfortable lead of approximately 12 minutes. He reached the finish line unchallenged, taking 6th place overall. Materassi won the overall classification, followed by Dubonnet, Conelli, and Chiron, who made a strong comeback despite an eye injury sustained when his glasses were broken by a stone. Jourdan finished second in the 1100cc class, well behind Martin. De Maleplane (Buc) finished 3rd, Fourny 4th and last. The victory earned Charles Martin 5,000 pesetas.

The San Sebastian meeting included two other races: the 12 Hours International Criterium, won by Rost and Lehoux in their 2-liter Georges Irat, and the Spanish Grand Prix, won by Benoist in a Delage.

Meeting at Montlhéry, 1100cc speed race opening the 24 Hours of Paris, August 14th

The renown of the Bol d'Or (reserved for cars with an engine capacity not exceeding 1100cc) and the 24 Hours of Le Mans, which has become a major event on the calendar over the years, prompted the management of the autodrome and the UMF (Union des Motocyclistes de France) to organize a meeting with, as its flagship event, a 24-hour endurance race on the 12.5km road circuit. As a prelude, other races were organized: the French motorcycle

The San Sebastian Meeting comprises three events: the San Sebastian Grand Prix, the 12 Hours reserved for sports cars and the Spanish Grand Prix.

« Another smashing victory for Amilcar (Encore une victoire écrasante d'Amilcar) ». La victoire de Charles Martin en Espagne est exploitée jusqu'en Angleterre et vante les mérites de « la voiture de 1100 la plus vite du monde ».

Marcel Sée, the boss of Amilcar, bareheaded, hat in hand, shows off the beautiful supercharged 1100 engine to an enlightened enthusiast, King Alfonso XIII of Spain (cane and hat).

Charles Martin achieved one of the greatest successes of his career by winning in San Sebastian.

The three CO Deportees No. 25 (Oscar Leblanc), No. 20 (Martin) and No. 7 (Morel) in front of the stands.

The cars are being positioned on the starting grid. The Bugatti No. 31 visible on the right is Edward Bret's, who will finish 5th, No. 18 is Conelli's (3rd), No. 35 (open hood) is Chiron's.

Martin (number 20) speeds past a few spectators. The weather is superb and the circuit is fast. Martin will complete the 692 kilometers at an average speed of 108 km/h.

The three Amilcar drivers are standing behind Martin's car (from left to right, Leblanc, Morel, and Martin). Three factory mechanics wearing caps have posed for the photo. On the left, with his hand on the hood, is Maurice Mestivier, chief mechanic for the Racing Department.

championships, motorcycle speed races (1000cc and 500cc), a race for cars up to 1100cc, and finally, a handicap race reserved for female drivers.

Unfortunately, the public (around 2,000 spectators) largely ignored the event, with the chosen dates being «when there's hardly anyone in Paris» and the gloomy weather being the main reasons.

By all accounts, the preliminary trials were far more interesting than the endurance race, which featured a small and rather disparate field. The race, reserved for 1100cc cars, was run in three 25km heats on the small road circuit. Fourteen cars lined up at the start, including the two Amilcars of Morel and Martin.

While the Salmsons initially looked promising, the two factory 6-cylinder cars quickly took the lead, with Morel finishing about 100 meters ahead of his teammate. Pierre Goutte tried in vain to keep up, but the Amilcars were untouchable. During the fourth lap, Martin overtook Morel, who had to settle for second place until the finish. Four Salmsons followed, in the order of Goutte, Casse, D'Havrincourt, and Perrot. Martin set the fastest lap at 2 minutes 24 seconds.

Twelve cars started the second heat. Martin took the lead and was never caught. Behind him, Casse managed to overtake Morel. The final standings were: Martin, Casse, Morel, Goutte, D'Havrincourt, Perrot.

In the third heat, the Amilcars dominated, with Morel finishing ahead of Martin and the Salmsons.

In the overall standings, Charles Martin was the winner, followed by André Morel. Next came the four Salmsons of Casse, D'Havrincourt, Goutte, and Perrot. Two other motor races preceded the start of the 24 Hours race: the UMF French 1100cc cyclecar championship, held on the main circuit and won by Dhôme in a Morgan, and the race reserved for women drivers (50 km on the smaller road circuit) which saw the undisputed victory of Mrs. Elisabeth Junek (Bugatti 35), who started with a handicap of 11 minutes and 10 seconds. The Czech driver won ahead of Mrs. Versigny (Talbot), Mrs. Derancourt (Salmson), Miss Salomon (Bugatti), and Miss Bois Gallais (Amilcar).

Tous les chemins mènent à Amilcar…

In the women's race at the Montlhéry meeting on August 14, 1927, Colette Salomon finished 4th in a Bugatti Type 35. She had started with a 10-minute handicap.

Daughter of Jules Salomon, a lawyer (not to be confused with the founder of the Le Zèbre company), this rather famous prima ballerina was born in Bois-Colombes on July 21, 1906, and died in Le Rouret (Alpes-Maritimes) on November 16, 1986. She never married.

Her paternal great-grandmother, Sophie Akar, was a sister of David Akar, the father of Emile, founder of Amilcar with Joseph Lamy. Colette was therefore a distant cousin of Emile Akar.

Andrée Bois Gallais, for her part, was married to Albert Oblin, a bicycle manufacturer and, from 1921, partnered with Paul Münch, one of the very first Amilcar agents for the Paris region (Société Münch et Oblin).

Andrée, an opera singer whose career seems to have ended in the mid-1930s, was born in Paris on June 26, 1900, and died in Bois-Colombes on April 29, 1990. She divorced Oblin in 1938.

The Münch et Oblin company was liquidated in 1929, but Albert Oblin remained a car dealer. He was then based in Ville-d'Avray. Born in 1879, he died in 1954.

Paul Münch was a Swiss citizen. He was born, like his partner, in 1879.

As for Charlotte Versigny, even though she has no connection to the Saint-Denis firm, she deserves attention. Indeed, the Versigny driving school was a true Parisian institution.

Charlotte Didierjean was born in Verdun on September 13, 1897, and died in the 12th arrondissement of Paris on February 25, 1982. She married Henri Versigny (1877-1932), the founder of the famous driving school, and took it over after her husband's death.

The endurance race attracted only 17 starters, with the start scheduled for 6:00 PM. It was dominated from start to finish by the Bentley of Clement and Duller, which covered 2012 km at an average speed of 84 km/h. The British car naturally won the over-3-liter category.

The other winners (as each category had its own separate classification) were: in the 2-liter category, the Fasto of Gros-Barthélémy; in the 1500cc category, the SCAP of Guibert-Clément; and in the 1100cc category, the BNC 527 of Pousse-Doré (who finished second overall).

This 24-hour race would not be held again before the war. The title «Grand Prix des 24 Heures de Paris» was, however, reused for the 1955 Bol d'Or, the last edition of the Bol d'Or automobile race, won by the Porsche 550 of Veuillet-Olivier.

Arpajon Record Day, September 4th

The French Motorcycle Club organized another Record Day in Arpajon, but a thick fog rolled in at daybreak. This was followed by a persistent light rain, forcing the organizers to cancel the event.

Charles Martin, enjoying great success, wins again after his victory in San Sebastian.

The slanted grille fitted to Morel's car gives it a completely different appearance, but in fact, the two cars are virtually identical. The other noticeable difference is the wind deflector, which has been replaced by a small windshield.

André Morel and his inseparable mechanic, Maurice Mestivier.

On the wet track, Morel and Martin, surrounded by some of the Racing Service staff, pose in front of the Montlhéry control tower in their two CO Déportés cars after their victory (Martin, car number 14; Morel, car number 12). Between the two cars, Maurice Mestivier can be seen, and in the background, the engineer Edmond Moyet, in a leather raincoat and wide-brimmed hat. Behind Martin's car, the mustachioed figure wearing a cap could be Marcel Chinon.

"We hoped in vain for a truce in the weather and a favorable break in the clouds. Several times the road was opened and then closed again. Our hopes were not fulfilled, and at 2 p.m., with heavy hearts, rather than risk accidents that could have been fatal, we had to resign ourselves to postponing the event to a later date."

Official Bulletin of the MCF, September 15, 1927.

The Prefect of Seine-et-Oise authorized the postponement of the event to Tuesday, September 6th, two days later. Amilcar, which had entered two cars (numbers 45 and 47) for Morel (in the flying kilometer and mile) and Martin (in the standing-start kilometer and mile), preferred to withdraw in order to focus on preparing for the Boulogne Meeting, which was of far greater importance to the company. The Salmson factory, which would also be present in Boulogne two days later, did not give up. Its driver, Goutte, achieved 196.721 km/h over the flying kilometer, leaving Amilcar with its 1926 record of 197.422 km/h. However, he beat the international flying mile record for the 1100cc category, held by Amilcar for a year, by 5/100ths of a second (196.294 km/h versus 195.962).

The exceptional closure of the national highway on a weekday prevented the organization of attempts at the standing-start kilometer and mile. In an advertisement, Amilcar took the opportunity to proclaim that «Amilcar retains its kilometer record,» but carefully avoided acknowledging that its mile record had been broken!

«On May 9, 1926, Morel, driving an Amilcar, broke the international flying kilometer record for 1100cc cars, achieving the following extraordinary performance: 18.235 seconds, average speed 197.422 km/h. A splendid record, and so solid that it still stands sixteen months later.» Attacked again yesterday, it holds firm. And this observation is a serious testament to the marvelous engineering created by Amilcar.

Amilcar would have liked to race yesterday at Arpajon to further improve the impressive record. But the Amilcar team is racing this week in Boulogne and is already there. A pity, because we would have witnessed another unforgettable sporting event."

L'Auto, September 7, 1927.

The best performances of the day were achieved by Divo (Talbot 1500 Grand Prix). He covered the flying kilometer in 17.265 seconds (208.514 km/h) and the mile in 27.905 seconds (207.620 km/h).

Meeting de Boulogne, GP de l'UMF des Cyclecars. Coupe des Voiturettes, 10 septembre

The Boulogne Meeting is one of the most important events of the season. Its renown predates the First World War with the organization of the Voiturette Cup in 1909, 1910, 1911, and 1913, but the Meeting itself had existed since 1907, twinned with the Ostend Meeting, which included the Franchomme Cup and the Caraman Chimay Cup. Several events, such as the famous Baincthun hill climb, were held near Boulogne. From 1921, when the organization was revived, the Boulogne Meeting established itself and attracted its first British competitors. It includes the Georges Boillot Cup (won by André Dubonnet on a Hispano Suiza), the Boulogne Grand Prix (won by Joseph Collomb on Corre La Licorne), the Voiturette Grand Prix which Lefebvre won on a La Perle, the cyclecar Grand Prix which saw the victory of Honel on a GN.

Paul Honel, using the pseudonym Pepino, died on May 21, 1922, while serving as André Lombard's mechanic on a Salmson during the Armangué Trophy in Spain. His death led to a lawsuit filed by his family against the manufacturer for failure to purchase insurance. Salmson was heavily fined. Honel was born in Saint-Mustapha, Algeria, on September 3, 1887.

Over the seasons, the field became increasingly international. British, Italian, and Belgian drivers registered for this series of events, which had become essential.

In 1927, the Meeting included, in addition to a Concours d'Elegance, the Touquet-Paris-Plage Rally, with participants departing from several European cities. Edouard Malaret, driving a Hotchkiss, was declared the winner, ahead of Pierre Cibié (1908-2006, son of Léon and future CEO of the Cibié company) in a Panhard.

The Meeting continued in Le Touquet with the 3km flying start, the 1km standing start (the best times were achieved each time by Goutte's Salmson), and the first gymkhana event, won by Mrs. Jennky.

The first race organized in Boulogne took place on the Wimille hill climb (Wimille being a town north of Boulogne, whose name has no connection to the famous driver). It was followed by the other gymkhana events, then the speed races on the circuit: the Boulogne Grand Prix for light cars, open to cars with a maximum engine capacity of 1500 cc; the Boulogne Grand Prix for 1100 cc voiturettes; the UMF Grand Prix for cyclecars and voiturettes (these three races were held simultaneously); and finally, the Georges Boillot Cup, reserved for sports cars. Goutte again achieved the best performance in the 1000-meter Wimille hill climb. He finished ahead of Doré (La Licorne 1500 cc) and Lorthiois (Bugatti 2-liter).

The Amilcar Racing Department could not afford to miss the first two speed events and meticulously prepared its participation. One month before the race, we could read in the columns of L'Auto:

"Boulogne-sur-Mer, August 8. Morel, the well-known driver and head of racing services for Amilcar, has come here to study the circuit and arrange accommodation for the team that will drive and maintain the three 1100cc cars entered in the Boulogne-sur-Mer Grand Prix. Amilcar's headquarters will be located at the Rottiers garage in Desvres, and the drivers will stay at the Hôtel du Cygne in Desvres."

To better prepare for this meeting, the company withdrew from the Arpajon Record Day a few days earlier.

The duel between the two «rival» marques (Amilcar and Salmson) was highly anticipated. Salmson had meticulously prepared its San Sebastian models (very fast but sometimes unreliable). Chief engineer Emile Petit had made the trip, and his drivers (Goutte and Casse) were highly experienced. Goutte, in the absence of the Amilcars, had won the preliminary trials at Le Touquet, notably beating Lorthiois's 2-liter Bugatti and the large Panhards of Pollak and Ortmans, as well as the Wimille hill climb.

The circuit was 37.3 km long, forming a triangle starting in Boulogne, passing through Colembert and Desvres before returning to Boulogne. Competitors had to complete the circuit 12 times (but an initial ranking was established after 7 laps for those participating in the UMF Grand Prix). The event, combining the two Boulogne Grand Prix races and the UMF Grand Prix, took place in torrential rain and strong winds.

Unsurprisingly, the 1500cc race was won by one of the Bugattis entered, that of Malcolm Campbell. The driver, better known for his absolute speed records with his Blue Birds, triumphed over the sister cars of «Sabipa» and Eyston.

In the 1100cc class, the field consisted mainly of the three Amilcar CO Déportés driven by their usual drivers (Morel, no. 35; Martin, no. 36; and Duray, no. 37) and the four Salmsons of Goutte, Casse, Devictor (not De Victor as is often written), and Newman. The BNC of Gaupillat and the GAR of Cooper complete it.

André Emile Félix Devictor is not the most famous of the Salmson drivers. However, he did participate twice in the 24 Hours of Le Mans (in 1926 and 1927) driving cars of the marque. After his marriage in 1928, he stopped racing and settled in Pocé-sur-Cisse (Indre-et-Loire) where he opened a garage. Born in Boulogne-Billancourt on January 1, 1898, he died there on February 28, 1955.

While Morel and Martin were entered in both the Boulogne Grand Prix and the UMF Grand Prix, Duray only participated in the former.

As the Salmsons of Casse and Devictor took the lead, Morel's chances were dashed on the very first lap due to magneto problems. At the end of this first lap, Devictor was in first place ahead of Casse (by 1 second), Duray, and Martin, wheel to wheel but 1 minute 45 seconds behind. Morel had made a lengthy stop on the circuit, and Goutte had lost considerable time, also hampered by his magneto.

At the end of the third lap, Casse was leading the pack, Devictor having dropped out following a minor off-track excursion. The two Amilcars of Martin and Duray followed, 5 minutes 12 seconds and 6 minutes 20 seconds behind respectively, gaps that now seemed impossible to close. Newman's Salmson retired due to a small fire, while Morel, although far behind, continued. A dramatic turn of events occurred at the end of lap 5 when Casse made a lengthy pit stop, allowing the two Amilcars to take the lead. On lap 6, at the halfway point, Martin was ahead of Duray, who was himself a few lengths ahead of Casse, who had restarted. Martin was still in the lead at the end of lap 7, thus winning the UMF Voiturette Grand Prix ahead of Marcel Violet (Deguingand, 1st in the 750cc category). At the end of this first race, other winners were declared: De Rovin in the 500cc voiturette class, Ego on D'Yrsan in the 1100cc cyclecar class (1st in the UMF Cyclecar Grand Prix), and D'Yrsan (D'Yrsan) in the 750cc cyclecar class.

The Boulogne Grand Prix continued. On lap 8, Duray overtook his teammate (who continued on to qualify for the Boulogne Voiturette Grand Prix), with Casse following 3 minutes behind. On lap 9, the order at the front was reversed. Duray was more than a minute behind Martin, with Casse 3 minutes behind.

Boulogne-sur-Mer meeting, September 10, 1927. Martin negotiates the Fourche Saint-Martin corner, very close to Boulogne. The 37-kilometer triangular circuit then follows the RN 42 and passes through La Capelle-les-Boulogne. Before Le Wast, a very tight corner leads the riders towards Alincthun and then Desvres, where the third and final tight right-hand corner takes the riders back towards Boulogne via Wirwignes, Croix-Botte, and then Fourche Saint-Martin.

Duray negotiates the Fourche Saint-Martin corner. As on Martin's car, a spare wheel, essential on this circuit, has been provided.

Charles Martin, driving CO Déporté No. 36, was speeding along the Boulogne road circuit. The road was damp, but the rain that had been falling since morning seemed to have stopped. On this 37-km circuit, the car was equipped with a spare tire. A stone guard had also been fitted in front of the radiator. While in the lead, Martin went off the road and, with his steering thrown off, was forced to retire. Duray then took the lead and was never challenged again until the finish.

This photo is from The Motor magazine, September 13, 1927. Duray leaves his pit after a short refueling stop. In this area, the cobbled road, in the rain, is known to be extremely slippery and dangerous.

Charles Martin seemed to have the race won, but he was forced to retire on lap 11 after losing control following a slight off-track excursion. Duray took over the lead and finished as the clear winner ahead of Casse.

The following day, the Georges Boillot Cup, with its rather complex format (qualifying rounds followed by a handicap race), was won by Robert Laly in a 3-liter Ariès. Duray participated in an 1100cc Ariès and finished 4th behind Newman (Salmson) and Brisson (Lorraine-Dietrich). To give an idea of the complexity of the regulations, Lewis (Bugatti), who finished second, was disqualified for exceeding the average of his three best laps in the qualifying round by 10%.

200 Miles de Brooklands, 15 octobre

While in 1926 the three cars had been entered directly by the Racing Service, a sign of the times, for the 1927 edition they were entered by the British importer, who covered all the expenses related to traveling to the London Autodrome. As in the previous year, three cars were entered for Morel (no. 23), Martin (no. 24), and Balls himself (no. 22).

Balls began his career in 1926 and drove only Amilcars, always at the Brooklands circuit, which he knew perfectly. He notably entered a car in the 6-hour race held on May 7th, which ended in retirement.

The racing cars he entered underwent modifications to comply with the specific regulations of the autodrome: the bodywork received side extensions to meet the minimum required width and, most importantly, exhaust silencers were fitted, as residents near the circuit had successfully lobbied for a more tolerable noise level. For this 7th edition of the JCC 200 Miles, the circuit used the speed ring, cut off, as in the previous year, by chicanes marked by sandbags, and the outer circuit. It thus measured 2.767 miles, with 71 laps, or 322 km, to be covered.

The event was the only major race reserved for voiturettes in Great Britain, and therefore held considerable importance for the two rival manufacturers, Amilcar and Salmson. But while it garnered the full attention of journalists on this side of the Channel, in France it was overshadowed by reports from the Paris Motor Show held at the Grand Palais.

The 1100cc cars (eight in total, the Salmsons of Casse, Goutte, De Marmier, and Newman, all vying for dominance against the Amilcars) raced alongside the thirteen 1500cc cars and could well pose a threat.

Despite the presence of the eight-cylinder Alvis cars, considered the favorites, Malcolm Campbell and George Eyston, both driving Bugatti Type 39As, took the lead. Until lap 30, the battle raged between the two drivers, but Eyston, suffering engine trouble, was forced to retire, leaving the field open to his rival.

At this stage of the race, in the 1100cc class, the Amilcars were leading, with Morel ahead of Balls (slowed by a slight contact in one of the chicanes) and Martin. Casse, briefly third in the class, had been overtaken by Martin.

The end of the race unfolded without incident for Campbell, who finished as the overall winner. Morel, who followed the Bugatti 2 minutes and 47 seconds behind, won the 1100cc class ahead of Balls and Martin.

In the overall standings, the three CO Déportés finished 2nd, 3rd, and 4th respectively, ahead of the two 1500cc cars of Harold Purdy (Thomas Special) and Bill Urquart-Dykes (Alvis). The two Salmsons of Casse and Goutte were the last two classified cars. All the other competitors had retired, including the other two Salmsons.

This triumph for the Saint-Denis firm is a blessing for Balls, who, having invested a great deal of money, is being handsomely rewarded..

The Amilcar team with the three CO Deportees (Martin, No. 24, Morel No. 23 de Morel and Vernon Balls No. 22) is immortalized before the race.

This drawing is meant to depict Vernon Balls' Amilcar in distress. The incident had no consequences, as Balls finished second in the 1100 class behind Morel.

This document, on the right, perfectly illustrates the regulation lateral extension of the bodywork, which also serves as an armrest. The brake lever is thus partially concealed. Mestivier, another mechanic on the team, and two Dunlop fitters pose next to the car.

To comply with the specific Brooklands regulations, the cars underwent several modifications:

- the bodywork was artificially widened with side panels to meet the minimum required width,
- a «Brooklands-type» silencer cuts off the exhaust line,
- the numbered discs mounted on their points are typical of the racetrack.

Morel's car retained the streamlined radiator fairing, while the other two had their radiators protected by angled stone guards.

André Morel dedicated this photo to «his brave Maurice, the ace mechanic.» The friendship and close bond between the two men would endure long after Amilcar's retirement from racing.

Morel has just overtaken the small Ratier No. 27 (4 cylinders, 750 cc, 60 x 66 bore and stroke, crankshaft on bearings and connecting rods on rollers, Cozette supercharger for factory cars) driven by Francis Samuelson. It will not finish. The Ratier is an original design from the French propeller manufacturer, which was looking to diversify. Boris Ivanowski is its official driver in France, achieving enviable results. Fewer than twenty cars were built. In 1923, Ratier also built a propeller-driven car powered by a Janvier engine and, from 1924, manufactured the 3,000 Citronettes (designed by Paulin Ratier) ordered by André Citroën.

Eyston (Bugatti) leads Vernon Balls in the Amilcar. After a close duel with Campbell, Eyston retires with engine trouble.

In 1936, nine years after the race, André Morel realized he had never received the trophy for his victory at Brooklands in 1927. He expressed his surprise to L.F. Dyer, then secretary of the Junior Car Club. Dyer replied that the Amilcar team had been entered by Vernon Balls, and therefore the trophies had been awarded to him.

Within this specific regulation of the JRDD 200, there is a note written in English: «We request that Captain Hornsted be present in the pits on Saturday to be Mr. Moyet's interpreter.»

Lydson G. Hornsted (1884-1957) was a British racing driver who set the land speed record in 1914 at Brooklands with a 200 hp Blitzen Benz (averaging 199.7 km/h in both directions). He competed in the 1912 ACF Grand Prix in a Calthorpe and the 1913 ACF Grand Prix in an Excelsior. He continued to race at Brooklands in the 1920s with a small Mathis.

Leonard F. "Bunny" Dyer (1901–1996) played a key role at Brooklands: he calculated the handicap formulas so popular in Britain. He was also responsible for designing the chicanes. In the early 1920s, he worked for the Citroën importer and became Racing Director of the London Autodrome in 1930. After the war, he helped the Earl of March launch the Goodwood circuit.

Advertisement published in The Light Car and Cyclecar on October 21, 1927. "As expected, the Amilcar Specials finished 1st, 2nd and 3rd in the 1100 class at the end of the 200 Miles. This advertisement is due to the initiative of Vernon Balls, who has just taken over the exclusive Amilcar agency for the United Kingdom and has assumed responsibility for entering the factory cars."

Bilan de la saison 1927

Even though the Salmsons were sometimes very competitive, the CO Déportés (Workers' Amilcars) displayed an outrageous superiority. Fast, reliable, and well-driven, they ultimately encountered little opposition.

Only the Boulogne race was truly unpredictable against the Salmsons, and the triumph at Brooklands capped off a remarkable season during which the official Amilcars racked up 8 overall victories (including a one-two finish) and an impressive 14 class wins (including a one-two-three finish and a one-two finish). The 1928 season thus looked very promising, especially since the competition didn't seem inclined to invest in at least attempting to match their performance.

The financial difficulties followed by Marcel Sée's takeover could have abruptly halted all sporting participation after the triumph in England at the end of 1927, especially since Amilcar had nothing left to prove in the 1100cc category. However, this was not the case, even though the budget allocated to the Racing Department was reduced.

During this new season, while travel abroad was indeed limited to a single event, new single-seater cars were put into development. But here again, the investment was relatively modest, nothing like the sums initially invested in the CO project.

Aware of the potential of the 6-cylinder engine, a version bored out to 1270cc was built to enter a car in the 1500cc category.

A new driver was announced to replace Duray. César Marchand, whom Morel knows very well from having participated with him in the records set with the Voisin brothers, is expected to drive the 3rd car:

L'Intransigeant, December 29, 1927.

As in 1927, the new season starts very early in Marseille.

Course de côte du Boulevard Michelet, Marseille, 29 janvier

To participate in the second edition of this event, the Racing Department entered not one of the factory cars, but a customer C6 to promote sales of this model, which had been presented at the Motor Show in October 1927.

A promising event:

...in 1920, Morel, the brilliant leader of Amilcar, and Lipmann both assembled identical machines: the new six-cylinder Amilcars, which any customer could purchase, since they had been listed in the Saint-Denis brand's catalog since the Motor Show and were being delivered regularly to customers. Guaranteed to reach 160 km/h, their engine was turbocharged. They would certainly live up to their hard-won title: «the fastest cars in the world in this engine size.» Local newspaper, January 1928.

Even though its designers are aware that its distribution will remain limited in any case, the C6 really needs this boost given its very high selling price and its intended use either in racing (for which it was primarily designed) or on the road (with all the inherent drawbacks of a customer-racing model). The car used by Morel will be put up for sale after the event at Durbec, the local dealer.

Le Petit Marseillais, 28 janvier 1928.

Lionel Lipmann also entered the C6 he had just acquired. Parking and entrance fees were charged, but all proceeds were donated to the Caisse de l'œuvre des enfants à la montagne (Children's Mountain Fund), an association founded in 1893 to help underprivileged children in the Saint-Étienne mining basin by opening holiday camps in the mountains.

André Morel won the 1100cc racing category with an average speed of 102 km/h, compared to the 117 km/h achieved the previous year in a CO (Coup de Coeur). This difference highlights the vast gap between a factory car and the car offered to amateurs, and explains the latter's temptation to improve their engines' power. We will see that in England, some tuners will manage to give C6s performance equivalent to that of COs and their derivatives. Morel finished 2 seconds ahead of Lipmann's other C6.

The fastest time of the day was set by British-born Cannes resident Edward Bret (Bugatti) in 30.1 seconds. Chiron was second, two-fifths of a second behind, while Morel achieved the third fastest overall time for cars in 35.1 seconds (it should be noted that Rolland and Eddoura both went faster than him on their motorcycles). The Amilcar finished well ahead of the first 1500, Louis Mistral's Bugatti #37.

Louis Mistral was a landowner residing in Saint-Martin-de-Crau. Born in Arles on April 1, 1905, he died there on April 25, 1976.

Boulevard Michelet hill climb, January 29, 1928: two C6s were entered, one by the factory for Morel, the second by Lipmann. The photo shows the latter.

«The excellent Amilcar driver, Morel, took first place in the 1100cc racing category, but it should be noted that he was driving a production car, which was for sale at the catalog price after the race. Morel's performance therefore takes on a very special significance from this perspective. (Le Petit Marseillais, January 30, 1928)

Course de côte de Massillan, 26 février

The Massillan hill climb is located near Nîmes, on the road to Uzès. It was organized for the fourth time by the Auto-Moto Club du Gard on a winding 2 km course with an average gradient of 6%. The event was not held in 1927.

Despite the organizers' efforts, the field consisted of only a few amateur drivers familiar with hill climbs in southeastern France, such as Lamy, Decollas, Leurquin (future owner of a C6), and Mistral. Morel entered the race; the car he used is not definitively identified, but he is believed to have driven another C6. In this case, the goal was the same as in Marseille: to help promote the customer racing car and perhaps present it to Gaston Réveiller, a garage owner from Nîmes who would buy one, but only in 1931. The first Amilcar driver had already participated in the first two editions of the Massillan hill climb, in 1924 and 1925. In 1924, driving a factory tandem car with a 4-cylinder, 1100cc engine, he had set the second-fastest time of all the cars (1 minute 51 seconds), behind Divo in the large Delage DF with a 6-cylinder, 5.1-liter engine (1 minute 40 seconds). The following year, driving a non-tandem car, he set the fastest time of all the cars, regardless of engine size, equaling Divo's time.

Louis Lamy (Bugatti) won the race with a time of 1 minute 28.45 seconds, breaking the record held by Rolland on a Terrot motorcycle (1 minute 31 seconds in 1926). Morel finished second (1 minute 34.45 seconds) and, of course, won the 1100cc racing category. It was a successful day for the Saint-Denis-based marque, as they also won the 1500cc sport category (with Descollas on a closed-cockpit motorcycle) and the 1100cc sport category (with Pignan).

Nice Meeting. 900m Race and La Turbie Hill Climb, March 17 and 18

The Paris-Nice Automobile Criterium, after its long road leg, continues with two events also open to drivers who did not participate in the main event:

- a 900m standing start speed race on the Promenade des Anglais on Saturday, March 17.
- the La Turbie hill climb, over a distance of 6.8 km, the following day.

In the former, Chiron, driving a Bugatti, took first place overall, covering the 900m in 26.35 seconds, at an average speed of 125 km/h. The second fastest time was achieved by Morel in his Amilcar, in 27.25 seconds. He finished 3 seconds ahead of Goutte (Salmson). Liorthois (Bugatti) finishes 4th.

The photographer was unable to keep up with Morel's Amilcar at full speed along the Promenade des Anglais. The image is therefore blurry, but it at least has the merit of showing us the car during the 900m sprint.

At La Turbie, Chiron triumphs again:

> "This morning, in superb weather, the old and classic Turbie hill climb took place, and, as always, it drew a considerable crowd.
>
> The day's big winner was the unbeatable Bugatti champion, Louis Chiron, who climbed the hill at an average speed of 86.63 km/h, breaking the record for the 2-liter racing class and, remarkably, coming within a second of Divo's famous overall record from 1924. And yet, he was hampered by the spectators in some places.
>
> Then, we were able to admire Morel's climb in his 1100 Amilcar, which managed to beat his own class record by 27 seconds, setting the second-fastest time of the day."
>
> L'Auto, March 19, 1928.

The Critérium Paris-Nice, highly controversial in its application of regulations, saw a multitude of category winners, many of them tied, particularly in the 3-litre class where all 10 classified finishers completed without any penalty!

The La Turbie hill climb is a huge success every year, drawing crowds of spectators along the 7km ascent. Morel, driving his CO Déporté (no. 62), achieved the second fastest time behind Chiron in his 2-litre Bugatti, but ahead of all the other Bugattis entered.

Kilomètre lancé à Genève, 18 mars

While Morel was competing in the Nice Meeting, Charles Martin was in Geneva to participate in the traditional Flying Kilometer organized by the Geneva section of the Automobile Club of Switzerland during the Geneva Motor Show.

The race took place on the Eaumorte road, just outside the city. Each competitor completed the course in both directions, with the average of their two times determining the final ranking. Charles Martin was driving an MCO single-seater, making its official debut. The car was equipped with the classic 1100 cc engine (56 x 74). This inaugural outing resulted in a victory in the international event. Martin achieved a time of 20.03 seconds (179.730 km/h), beating Heusser (Bugatti) by a mere hundredth of a second. His time, however, was faster than Heusser's time in the national event (18.95 seconds).

Charles Martin is at the wheel of the new MCO. Theo Sarbach, the brand's importer for Switzerland, a man of imposing stature, stands near the car. Significantly larger diameter rear wheels have been fitted. Their increased size allows for a higher top speed. A CO Offset and this MCO look very similar from this angle. However, the reduced height of the frame rails on the MCO compared to those of the CO Offset makes them easily distinguishable.
Due to the engine's leftward offset, bulges have been added to the bodywork to house the magneto and the rear engine support bracket.

We could have expected a much better performance from the new car (remember Morel's 197 km/h at Arpajon) but the conditions were probably not the same (launch distance, limited width of the road in Geneva).

Course de côte de la Mi-Corniche, 22 mars

Morel remained on the French Riviera after the Critérium de Nice. He was entered in both hill climbs of the Monaco Meeting, the first being the Mi-Corniche event, which awards the Monte Carlo Cup and is run over a mile (1609 m). Chiron, the Monegasque driver in his Bugatti, left no chance for his rivals and set the fastest time of 53.25 seconds, averaging 108 km/h. Morel, in the CO Déporté, achieved the third fastest time (56 seconds) behind Liorthois (Bugatti).

Course de côte du Mont Agel, 25 mars

The second hill climb of the meeting, 10.6 km long, was much more challenging than the first. The prize was the H.S.H. Prince of Monaco Cup.

This time, on a road made slippery by the rain, Chiron was beaten by Liorthois. The latter set the best time of 11 minutes 54.3 seconds. He finished well ahead of the Monegasque driver, who likely made a mistake and managed only 12 minutes 27.1 seconds. Morel also had a disappointing performance, being forced to retire (for reasons still unknown), thus handing the victory in the 1100cc class to Henny de Joncy (BNC).

Morel was forced to retire during the Mont Agel hill climb. Before a practice run, Mestivier guided the driver back to the starting line.

On April 1st, Morel did not participate in the third event, the final race for the Côte d'Azur Prize. It was a time trial, held over three laps of the 3.4 km Riviera circuit in Cannes. Chiron set the fastest time ahead of Liorthois and won the Prize, the overall standings of which were determined by combining the times from the two hill climbs at Mi-Corniche and Mont Agel with this circuit race. On the same day, Chiron also won the final of the Riviera Grand Prix, a 10-lap race, on the same circuit. He finished ahead of Bret and Dreyfus. The day before the Mont Agel race, the final of the International Concours d'Élégance automobile had been held, a competition of paramount importance to coachbuilders, as the region was teeming with wealthy individuals eager to purchase their designs. All the major automotive coaches (Grummer, Gallé, Boulogne, Letourneur et Marchand, etc.) presented at least one of their creations mounted on prestigious chassis (Delage, Voisin, Minerva, Isotta Fraschini, Rolls Royce, etc.).

This ultra-glamorous gathering brought together the elite, including the King of Sweden and numerous countesses. Concours d'Elegance events were experiencing their golden age during this period. The women presenting the cars were sumptuously dressed, and their celebrity (actress, dancer, countess) shaped the image of the manufacturer. Having fallen out of favor in the 1950s with the decline of the great coachbuilders, they have returned to fashion and are now attracting the attention of classic car enthusiasts.

Course de côte d'Argenteuil, 25 mars

The six-cylinder Amilcars are entered in this event for the third consecutive year. It is important for the Saint-Denis-based company, as the Paris region represents a very large potential customer base, always receptive to good racing results.

Morel appears on the initial entry lists but has remained on the French Riviera. He is participating in the Mont Agel hill climb on the same day. Charles Martin is therefore competing alone, but with two CO Déportés (combined engines): the first (no. 95) with an 1100cc engine, the second (no. 100) with the engine bored out to 1270cc and a 1500cc engine. This is the first official outing for this engine.

71 competitors are registered, only 20 of whom are driving cars. Martin was the clear favorite, with his most dangerous rivals being Janine Jennky (Bugatti) and, above all, Michel Doré (La Licorne with a 1500cc Causan 6-cylinder engine).

As is often the case at this time of year, the weather was rather unpredictable, but despite the rain, spectators turned out in large numbers.

The Amilcar driver fulfilled his mission perfectly, winning both the 1100cc and 1500cc races, while also breaking the absolute record for the event. In the 1500cc class, he clocked a time of 1 minute 15.45 seconds, relegating Doré to more than 6 seconds behind.

In the 1100cc class, his time was 1 minute 22 seconds, the same as Doré's, and he finished 4 seconds ahead of Van Hof's GAR. Of note was the remarkable performance of Marcel Dhôme on a Darmont-Morgan 1100 cyclecar, 4th overall time.

Marcel, Marc, Elie Dhôme, born on January 24, 1893, in Neuilly, several times French cyclecar champion, was a brilliant airplane pilot during the First World War and a prominent member of the French Resistance during the Second. Promoted to the rank of reserve colonel, he received the Legion of Honour. He died on May 6, 1960, in Paris.

Amilcar entered two cars at Argenteuil. Martin won both the 1100 and 1500 categories.

Charles Martin, thanks to his victory in the Argenteuil hill climb, was honored with the cover of the Official Bulletin of the MCF on April 15, 1928.

Martin is pictured aboard one of the three CO Déportés, which was fitted with the modified 1500 engine (an 1100 bored out to 1270 cc). Large-diameter brake drums were fitted to the front. This car will remain in this configuration until the La Baraque hill climb on July 27th. It will then be permanently replaced by the MCO 1500. The photo was taken before the event; the drivers' overalls are still pristine.

Grand Prix d'Antibes, Circuit de la Garoupe, 9 avril

Three CO Déportés cars were entered by the Racing Service for Morel (no. 4, fitted with large front drum brakes), Charles Martin (no. 5), and Jules Moriceau (no. 7, a defector from Talbot, replacing the veteran Duray, who was now focusing on touring car racing with Ariès). Car no. 7 sported a streamlined grille. Morel drove the car seen at Argenteuil with the 1270cc engine; this same car would be entered with the same engine in the 17 Turns hill climb on April 29th.

The Rumor, April 11, 1928

This article seems to prove that Morel did indeed start with the 1270cc engine. However, L'Auto, in its April 8th edition, predicted a victory for Morel in the 1100cc class! No list of competitors by category is available, but it would be very surprising if Amilcar had entered a car equipped with a 1270cc engine in the 1100cc class, risking dismantling after the race or a leak that would be catastrophic for the brand's image. It is highly probable, given his thunderous start to the race, that Morel was entered in the 1500cc class. A first edition, called the "Circuit de la Garoupe," was organized in April 1927 by the Antibes Automobile Club and Motorcycle Club, but it did not achieve the expected success. The chosen circuit, very winding and only partially paved, measured 3.6 km.

The field consisted mainly of local drivers. Bret (Bugatti 37) won the 1500cc racing category, Signoret (Salmson) the 1100cc, and «Fashion» (Bugatti) the 2-liter.

Fashion: pseudonym of Jean Paul Clérissi (born September 12, 1897), a textile merchant from Nice. He died prematurely on December 12, 1935 in Sancellemoz (Haute-Savoie), where there is a large sanatorium.

Undeterred, the organizers modified their event, now titled the «Antibes-Juan les Pins Grand Prix.» The circuit, still as winding as ever, now measured 4.07 km. Thanks to substantial starting and finishing bonuses (114,000 francs for the latter), the field was significantly larger this time.

The main event consisted of 75 laps, or 305 km, with 28 competitors entered in the two categories (up to 1100 cc and above). 50,000 spectators, well-informed by the press which provided extensive coverage, lined the entire circuit.

On race day, the weather turned sunny, replacing the rain that had disrupted the motorcycle races the previous day. After numerous withdrawals, some at the last minute, only 17 competitors took the start: six Bugattis (Bret, Chiron, Williams, Trützschler, Cereseto and Dreyfus), the three factory Amilcars, four Salmsons without superchargers entered by semi-official drivers (Martinatti, Jourdan, d'Havrincourt, Signoret), two BNCs (Carasso and De Joncy) and the special Tony of "Benoît" (Benoît Falchetto).

Morel (No. 4) at the wheel of his CO Déporté before the start. In its previous race at Argenteuil, and the following one at the 17 Turns, this car competed in the 1500cc class with its engine bored out to 1270cc. At Antibes, there is little doubt, given Morel's sensational start to the race, that this engine was retained and that the Amilcar was entered not in the 1100cc class but in the 1500cc class.

Part of the Amilcar team is gathered behind Martin's car, number 5. The three drivers are in white racing suits, with, from left to right, Moriceau, glasses around his neck, Martin in a tie, and Morel. Engineer Moyet, in a fedora, separates Morel from Mr. Sée, the brand's director, wearing an official armband, who has come for the occasion. On the left, a mechanic is working on Moriceau's car, number 7.

Before the start, acrobat André Mercier, in his finely tuned Peugeot 5CV, performs his act, which consists of launching himself and jumping over another car using a ramp. Mercier gained a certain notoriety thanks to these jumps (sometimes over a horse) and thanks to another act performed with a car equipped with roll bars that rotated on its axis.

«The start was impressive with a splendid launch from Morel who, unfortunately, couldn't find a clear path. Chiron was first at the 500-meter mark, followed by Bret and Morel close behind.» L'Auto, April 10, 1928.

«With a deafening roar, the cars roared to life. What a start! Chiron practically flew off and led the way, followed by Morel and Bret. Despite the large number of competitors, everything went smoothly. The last car disappeared around the bend in the road. The roar of the engines, gradually fading, could be heard. A brief moment of silence, and then the purr resumed nearby. The competitors passed, approaching the straight behind the grandstands. A sharp turn. Chiron, its steering unresponsive, spun spectacularly, but the road remained clear: all the competitors had passed. Chiron set off again with the entire line to overtake. It stopped for a few seconds in its pit to check its steering and then sped off again.

Bret led the way ahead of Morel and Williams; the latter soon moved into second position.» Behind them, we find Dreyfus, Trützschler, Cereseto, Martin, Moriceau, de Joncy, Benoist, Martinatti, d'Havrincourt, etc."

*L'Eclaireur de Nice et de Sud-Es*t.

The race has just started. On the front row, the two Bugatti T35 Cs of Edward Bret (No. 1) and Louis Chiron (No. 2) are closely followed by Morel (No. 4), who is overtaking Williams' Bugatti 35C (No. 6). Just behind Morel's Amilcar, we can see those of Martin (No. 5) and Moriceau (No. 7).

The race was initially dominated by Bret, but a valve failure on lap 25 allowed Williams to take the lead. Chiron, delayed from the start by a pit stop to tighten a wheel nut and then by a spin, was in 15th place, but he gradually climbed back up the order and, from lap 34 onwards, engaged in a battle with Williams. The latter gradually lost ground, and by lap 40, his deficit had grown to nearly a minute and continued to increase with each passing lap. Louis Chiron won the race ahead of Williams and René Dreyfus, the driver from Nice, who was the revelation of the event.

In the lower category, Morel (provided he was properly entered in the 1100cc class) made a sensational start and found himself in 3rd place behind Chiron (who pitted immediately) and Bret. The Amilcar driver, formerly with Williams, was still in 3rd place, but on lap 9, while overtaking a competitor on the outside of a corner, he lightly clipped a rock. The tire burst, and ultimately, the wheel broke, forcing him to retire. Martin had already retired on lap 10. Moriceau, 6th overall, held the lead in his class ahead of De Joncy and Benoît.

The new Amilcar recruit never relinquished the lead and finished well ahead of Henri Signoret and François Martinatti, both driving Salmsons. Moriceau finished 4th overall. Chiron, the overall winner, pocketed 50,000 francs, in addition to the 20,000 francs for first place in his class. Williams, 8,000 francs; Dreyfus, 4,000 francs. In less than 1,100 francs, Moriceau was awarded 20,000 francs; Signoret, 8,000; and Martinatti, 4,000. In addition to these cash prizes, numerous bonuses were offered during the race by equipment manufacturers and the Automobile Club of Nice and the French Riviera. These bonuses represented significant sums, comparable, for example, to the price of an Amilcar CGSS, catalogued at 25,000 francs in 1928..

"The circuit itself possesses all the qualities. It is spectacular, very challenging, made up of difficult, unique corners, steep inclines, and straights allowing for very high speeds. It is an excellent testing ground for braking, sudden acceleration, and pushing to the maximum revs.

The Antibes-Juan-les-Pins Grand Prix was run on the Garoupe circuit, with superb organization, where every detail had been meticulously planned."

L'Eclaireur de Nice et de Sud-Est.

"…Another fine victory was that of Moriceau in his Amilcar, a victory which highlighted the starts, braking… and speed of these new Amilcars, unbeatable as well." Le Temps, April 11, 1928.

Despite the undeniable success of this edition, the event was only held a third and final time in 1929 with an even stronger field. Lepori (Bugatti) won the race ahead of Rigal (Alfa Romeo), Dauvergne (Bugatti) and Scaron (Amilcar C6, winner in the 1100cc class).

Charles Martin will drop out almost at the same time as his leader, in the 10th round.

Morel made a thunderous start to the race, even holding 3rd place for a while, but he broke a wheel on lap 9 and was forced to retire.
The CO Déporté was equipped with large-diameter brake drums.

Moriceau, here in the curve of the seafront, flies towards victory in 1100 cc after the retirements of his teammates.

On the uphill section before passing the grandstands, Morel quickly lapped Martinatti's Salmson #16. Ahead of Martinatti, Chiron followed another Salmson and Benoît's special Tony Kart.

Martin passes in front of the advertising sign boasting of the lighthouse erected on the plateau (built around 1830 but dynamited by the Germans in 1944, rebuilt in 1948) and the Bois de la Garoupe, a magnificent green setting.

Baron Hans von Trützschler (Bugatti 35), in the curve of the seafront, is ahead of Martin (No. 5), Moriceau (No. 7) and Cereseto (Bugatti 35, No. 9).

This lithograph, measuring 53 x 34 cm, was made from a watercolor with gouache highlights by Géo Ham. (Barataud Courteau et Cie, publishers in Paris). Bugatti No. 2 was driven by Louis Chiron, No. 9 by Alfredo Cereseto, and No. 11 by René Dreyfus. Car No. 4 is Morel's Amilcar.

Moriceau can savor his victory, achieved in his very first race for Amilcar. A former Sunbeam-Talbot driver and highly skilled mechanic, his experience proved invaluable.

Course de côte des 17 Tournants, 29 avril

The third edition of this hill climb, 1.3 km long and very winding for the first 800 meters, takes place near Saint-Rémy-lès-Chevreuse, about forty kilometers southwest of Paris. It was not held in 1927, and for 1928, it was scheduled much earlier in the season. Despite this change of date, the event took place in continuous rain.

Morel had shone there in 1926, setting the record for the 1100cc category. He returned with the CO Déporté equipped with the 1270cc engine (no. 71), while Martin was entrusted with one of the two other CO Déporté 1100s (no. 66). Forty-two competitors (cars and motorcycles) were entered. Some would complete several runs, as the regulations allowed. Despite the appalling weather, a large crowd was present and witnessed a great duel between Williams (Bugatti) and Morel.

The April 30, 1928 edition of L'Auto provided a detailed account of their battle:

"The two heroes of the day were Williams (Bugatti 2-liter) and Morel (Amilcar 1100). The former twice, the latter once, achieved times better than the previous record, which had been set with larger engines and in dry conditions. These two excellent drivers surpassed themselves and thrilled the public with their skill and determination to win.

The best performance of the day was ultimately Williams' second run up the hill in his two-liter Bugatti. Despite a tire that was severely deflated from the very first corners and almost flat at the finish, Williams (who had initially clocked 1 minute 29 seconds) climbed the hill in 1 minute 28 seconds, averaging 73 km/h—a splendid feat that underlines the driver's skill and the car's power." Williams can rightly be proud of the record-holding title for the 17 Corners.

Morel, the intrepid driver of the 1500 Amilcar—a 1500 that only has a 1270cc engine, it should be noted—gave Williams a run for his money. It was a splendid battle. With his time of 1 minute 29 seconds, he also beat the previous record, a truly remarkable feat. Morel and his Amilcar are in excellent form. Martin, in his 1100 Amilcar, has the honor of setting the third fastest time after those we have just mentioned. He, too, proved perfect in the art of cornering.

Note that Williams came with two cars: the 35 2-litre with which he set the fastest time and a type 44 which earned him a class victory in 3-litre Sport.

On an unpaved, waterlogged, and very winding road, the drivers had to demonstrate considerable skill to make the most of the engines' power and, above all, keep the cars on the road. Martin (No. 66) and Morel were driving two CO Déportés. The first Amilcar driver's car was equipped with a 1270cc engine and larger diameter front brake drums; the other had a streamlined grille. Both cars bore the Amilcar logo on their sides—effective and… free advertising! Despite the incessant rain, spectators lined the route. On both cars, a horizontal mudguard mounted behind the right front wheel was visible, designed to limit spray towards the cockpit.

This Amilcar editorial advertisement is cleverly inserted into the race report given by L'Auto on May 30, 1928.

Circuit de Torvilliers, Troyes, 6 mai

The official Amilcars are not entered in this race, but a challenge, rewarded by the André Morel Cup (named after the Troyes native), donated by the company's first driver, is up for grabs. It is intended for the competitor living within a 100km radius of the region who demonstrates the most consistent performance, regardless of their car. The formula, devised by Morel himself, takes into account the time gaps between each lap completed. The field is rather small. Notable drivers include Montier father and son in their Ford-Montier, Chandon de Briailles in a Salmson, and Fernand Gabriel in an Ariès. Also of note is the entry of Jacques Schiever in an Amilcar.

Jacques Schiever (1901-1980) was the grandson of the founders of the wholesale food company established in Avallon in 1871 and still in operation today. Schiever, in partnership with the Auchan group, remains one of the major players in the mass retail sector.

On the day of the event, the organizers were forced to quickly stop the race due to a torrential downpour so intense that it made driving impossible. No results were ultimately published, and the winner of the André Morel Challenge remains unknown.

Course de côte de Monrepos, 18 mai

Every year, the Automobile Club of the Southwest, based in Bordeaux, organizes the Bordeaux Automobile Week, which includes two major events: the Monrepos hill climb and the Croix d'Hins flying kilometer race. These two events attract large crowds, as pure speed races are not common in the Southwest. Despite the gloomy weather and intermittent rain, several thousand spectators still make the trip to the hills. It's worth noting that, since the Mont Agel hill climb on March 25th, all the hill climbs involving official Amilcar cars have taken place in the rain! 1928 was indeed a year of contrasts: on May 9th, it was -3°C in Thionville and snowing in the Alsace plain, but the temperatures in July and August were scorching (reaching 40°C in Angoulême). In August, hailstones weighing 400 grams fell in the Lot region. At the end of October, the Isère River overflowed its banks, flooding the Grenoble area. In November, a veritable hurricane struck the north of the country. Finally, the winter of 1928-1929 was one of the harshest the country had ever experienced (-30°C in the Limagne region near Clermont-Ferrand, -15°C in Marseille, and 20 cm of snow from Brittany to the Lyon area).

Morel was entered with two cars in the 1100cc racing category, numbers 28 and 29. These were probably one of the CO Déportés (Deported Workers' Company) and the MCO 1100 (although it is possible that it was the MCO 1500, which would have made its racing debut here). The Amilcar driver did not appear in the results. It is very likely that he withdrew from the race due to the weather conditions. The best time was set by Roberts in a 3-liter Bugatti Sport (probably a 44), while Faure (BNC) won the 1100cc racing category..

Roger Roberts was born in Bordeaux on August 9, 1888; he was a company director.

Kilomètre Lancé de la Croix d'Hins, 20 mai

The attempts took place on a section of the Bordeaux-Arcachon road between kilometers 25 and 26, at a place called La Croix d'Hins. The road is paved, perfectly flat, and offers a straight stretch of several kilometers, allowing for a long run-up before the timed section, as well as a long deceleration track.

However, as in Monrepos, the weather was too bad, and the rain prevented any records from being broken:

"Due to successive downpours, the day organized by the Automobile Club du Sud-Ouest on the new Arcachon road, so conducive to record attempts, could not take place, much to everyone's disappointment. Between two of these downpours, a sunny spell had dried the running kilometer; but the running kilometers, with their overgrown edges, were unfortunately not dry enough, and the competitors were unwilling to risk driving on this road, which becomes a veritable ice rink when wet." Moreover, heavy clouds burst again, and all hope of holding the event was lost. Several thousand people had come, but they had to return home disappointed by this cruel inclement weather." L'Auto, May 21, 1928.

Wisely, the A.C.S.O. Sporting Commission decided to postpone the event until the following morning, Monday. But the same weather persisted all day, and the same newspaper announced the next day:

"The ACSO Flying Kilometer event was hardly more favored by the weather this morning than it had been yesterday. Rain showers made the asphalt road impassable for the cars whose drivers were preparing to reach impressive speeds." During a lull in the weather when the road dried out sufficiently, three cars competing in the Garage Owners' Cup (Daniel Renaud in a Bugatti, André Merle in a Ballot, and Aimé Vassiaux in a Morris-Léon Bollée, ranked in that order) and nine motorcycles were able to complete the event.

Shortly afterward, the event was definitively cancelled.

Kilometer flying from Bordeaux on the road to Arcachon, May 20th: the grille profile was reportedly modified on site, and unofficially, Morel is said to have exceeded 200 km/h during Saturday's trials. The event was canceled the following day due to bad weather and a «wind strong enough to blow the horns off a bull» (according to Morel). Postponed to Monday, the weather conditions were no better, so it was definitively canceled, as the prefectural authorizations to close this fairly busy road could not be renewed.

For the occasion, the classic hood with its louvers was replaced by a completely smooth one. On the tip, the number 28, which had been assigned to Morel, can be seen (the other car bore the number 29).
Among the figures in the background of the car's rear panel, André Morel can be recognized in a suit, sweater, and cap alongside his wife. The fourth person from the right is James Maxwell, the brand's agent in Bordeaux. On the far left is André Naudon (1900-1994), a renowned motorcycle racer, mechanic, and tuner based in Talence, near Bordeaux.

Grand Prix Royal de Rome, 10 juin

After the Geneva Flying Kilometer in March, the Amilcar team made a second trip abroad, this time to Italy, to participate in this important event on the calendar. Substantial starting and finishing bonuses justified this long journey, which Marcel Sée, the company's owner, also attended. The three CO Déportés (competitive off-road vehicles) were entrusted to Morel, Martin, and Moriceau. Presumably, all three cars were equipped with 1100cc engines. The Royal Grand Prix of Rome, established in 1925, was being held for the fourth time, but for the 1928 edition, a new course had been chosen. The race consisted of 30 laps of the Tre Fontane (Three Fountains) road circuit, located on the outskirts of the Italian capital and measuring 13 km. It was jointly organized by the Automobile Club di Roma and the Commissione Sportiva del RACI (Reale Automobile Club d'Italia). The circuit is triangular in shape and situated in hilly terrain. It incorporates a section of motorway and does not pass through any built-up areas. It is fast but still features three tight corners.

The event includes cars of four different engine sizes: 2.5 liters, 2 liters, 1.5 liters, and 1.1 liters, the latter category having its own separate classification.

Thirty entries were registered, but only 23 cars took the start: eight Bugattis, six Maseratis, two Talbots (1500 8-cylinder models from the Materassi team), two Delages (2LCVs purchased by Valpreda and Aymini, the first driven by Achille Varzi), one Diatto, and four Amilcars, the only cars representing the 1100 cc class after Michele Baccoli's Tracta withdrew. The fourth Amilcar was a C6, entered by the Italian privateer Alfonso Zampieri, who undoubtedly benefited from the support of the Racing Service.

After 3 hours and 5 minutes of racing in intense heat, Louis Chiron, driving a Bugatti 35C, won the race with an average speed of 126 km/h, finishing 4 minutes ahead of Gastone Brilli-Peri in an identical car. Materassi (Talbot 1500 8-cylinder) and Minoïa (Bugatti 39A 1500) took third and fourth places, respectively.

In the 1100cc class, the race should have been a formality for the three factory Amilcars, but it turned out quite differently with Moriceau retiring on the second lap after a collision with another competitor, and Martin suffering a mechanical failure on the 23rd lap. Morel managed to reach the finish line, but his engine was running on only five cylinders after a valve failure. He remained under constant threat from Zampieri's C6, which was right behind him at the finish.

Morel finished 10th overall and 1st in his class.

In the end, the results were very mixed. While the 1100cc class was indeed won by Amilcar, it was a family affair, with no real competition. Two cars retired, and the third finished victorious, but with a dying engine, directly threatened by a privateer C6 which, like Morel's car, had spark plug problems. The mechanics on the sidelines must have been sweating bullets in front of their boss… Back in France, the Racing Department would not enter any more cars in races abroad until the end of the season.

The Rome Grand Prix was also Charles Martin's last race appearance and Moriceau's last race of the season in a factory Amilcar. Morel thus remained the sole driver for the team.

On the Trois Fontaines road circuit near Rome, Morel, the sole survivor of the official Amilcar team, won the 1100cc category. He finished 10th overall. However, the results remained very mixed for the Saint-Denis-based company: two retirements and the third car finishing with a 5-cylinder engine.

Course de côte de la Baraque, Clermont-Ferrand, 22 juillet

The first edition of this event, organized by the Auvergne Racing Club, took place in 1923. In 1927, Eddoura, riding his Koehler Escoffier motorcycle, set the best time across all categories. Louis Rosier, the Clermont-Ferrand driver destined for a great post-war career (whose name is still spelled Rozier in the reports from that era), began his career there. He was then riding a Harley Davidson motorcycle. He quickly switched to cars with a SCAP.

The hill climb follows the route of the N89 highway as it leaves Clermont-Ferrand heading towards Limoges. While it previously covered 10 km up to the Col des Goules, it has been shortened to 6.5 km due to roadworks and includes eight bends. The course is very challenging with an average gradient of 7.4%. The race started at the corner of Avenue du Puy-de-Dôme (now Avenue Raymond Bergougnan) and Boulevard Lavoisier, where one of the Bergougnan villas stood, owned by Clermont's other major tire manufacturer.

With particularly generous prizes (2,000 francs for the fastest time of the day, 500 for first place in each category), the event attracted a field of around forty motorcycle and car competitors. The Amilcar Racing Service made the trip to Clermont-Ferrand for the first time. Morel debuted a new MCO equipped with a 1270cc engine (the first MCO being the one Martin used in Geneva, fitted with a classic 1100cc engine). This new MCO likely borrowed the 1270cc engine that had been fitted to one of the CO Déporté cars. Indeed, this CO Déporté will no longer be seen from this date.

On this MCO 1500, the radiator is not faired and the streamlined headrest is not yet installed.

Morel's tests are reported by a journalist from Le Moniteur, a republican daily newspaper in the Centre region, Clermont edition, in a particularly enthusiastic tone:

«We were able to see, moreover, last night at the Mannessier garage, the affable champion and his astonishing single-seater racing car with which he reached the fantastic speed of 210 km/h.»

Morel will continue his tests and this morning, at daybreak, around 4 a.m., his 1200 cc machine will tackle the 6 kilometers of La Baraque.

«Day is beginning to break.» And suddenly, in the somewhat dull dawn of this day, which will be less hot and less sunny than the previous ones, a sound rises like a howl. Low, narrow, with a vague, spider-like appearance, its four wheels protruding from the chassis, the blue vehicle passes Rue Blatin and speeds down Avenue de Bordeaux.

We follow behind. By the time we reach the Quatre-Routes intersection, Morel has long since left for his first test run. We will soon cross paths with him, descending gently to begin a new run. A glance at the landscape reveals a thick mist shrouding the plain, hooding the mountains; Clermont stands out, a dark blue silhouette against this grayness. We hear the howl again, drowning out the sound of our engine, and the vehicle dances past, briefly disappearing. The roars echo for a moment off the mountainside; A bit of blue flashes by, higher up, on the road, glimpsed through a gap in a hedge. "Let's position ourselves in the middle of the finish line straight: from there, we can see the bend at the edge of the village of La Baraque. The roar, the racing car suddenly bursts out of the bend and it's right on top of us." Morel turns, the finish line crossed—with what mastery!—

"I'll do it again. I crossed the line at 170, 180…"

And he does it again, even faster.

And that's it for today. Morel will do it again today. A stop in La Baraque. Morel, very friendly, a bit cheeky, reminisces about some great events: hill climbs, kilometers, world records…

90% of the shares of Le Moniteur du Puy-de-Dôme were acquired by Pierre Laval in 1927. Obviously, the newspaper supported Laval's policies when he was President of the Council and those of Vichy from 1940 onwards. Its last issue was published on August 26, 1944.

On race day, as a curtain-raiser, spectators watched the cycling time trial won by Demonpied from Riom in 18 minutes. Then, Morel set the fastest time across all categories by a considerable margin (4 minutes 12.25 seconds). His runner-up, Dugat on a Derby 1100, finished in 4 minutes 41.25 seconds, nearly 30 seconds behind the winner! In the motorcycle race, Oilter on a 500 Motosacoche took the victory with a time of 4 minutes 24.15 seconds.

Morel on the Baraque hill climb, a very challenging course. The Amilcar driver will achieve the best time across all categories.

Today, Ford in Clermont-Ferrand is represented by the Dugat garage, a name as iconic as Bony (Renault) or Groine (Mercedes trucks). But Gabriel Dugat, the Derby driver and development mechanic, is simply a namesake. Born in Marseille in 1893, he lived in Puteaux. He died in 1962. At that time, the Ford dealer in Clermont was René Dauplat..

Morel poses behind the wheel of the MCO 1500 in front of the Mamessier garage in Clermont-Ferrand, an Amilcar regional agent. The brand's triangular sign hangs on the wall behind the car. Driving on public roads, the car is properly registered.

Back of a postcard sent by Morel to Mestivier.

«My dear Maurice,
I've just returned from spending eight days fishing with Marchand. I found your card when I arrived. Don't snooze! As soon as you get back, you'll change the bridge on the 1500 so we can go to Gaillon on the 29th.
Greetings to my friend at Roll's.
See you soon.
Best regards,
A. Morel.»

This is César Marchand (1897-1966), the driver and preparer of the record-breaking Voisin cars (and, later, for other manufacturers, notably Citroën) with whom Morel teamed up in successful attempts at world records..

Rol was a photographic press agency founded in 1904 that covered all motor racing events. Its direct competitor was the Meurisse agency. Its founder, Marcel Rol, died at the age of 24 in September 1905 when the Mors, driven by Joseph Collomb, in which he was a passenger, went off the road on the return journey to Carpentras after the Mont Ventoux hill climb. The agency nevertheless continued until 1937, when it merged with Meurisse and Mondial Photo Presse. Joseph Collomb, seen at the 1907 ACF Grand Prix in a Corre, ruined by his passion for aviation, took his own life in 1908. He was 40 years old.

In neat handwriting, the pilot's son, André Morel junior, added in pen at the bottom of the card: «Hello Mr. Maurice».

Epreuve de Troyes sur 900 mètres, 15 août

It is organized by the Aube Motorcycle Union and the Ardennes-Champagne-Argonne Motorcycle Club. The chosen section is located on the national highway linking Troyes to Sens, near Torvilliers, 10 kilometers from Troyes.

While the organizers had initially planned a one-kilometer flying kilometer race, they had to settle for the only section with an acceptable surface: flat and sufficiently wide, measuring just 900 meters.

The field of cars and motorcycles is quite large. André Morel is entered with his MCO 1500, both to please the local public (he's a local and is sure to receive a warm welcome) and, above all, to prepare for the Arpajon Record Day under real-world conditions. He hopes to shatter several existing records there. He's also counting on a friendly atmosphere to have a very pleasant time in his hometown. The trials took place in the morning under threatening skies. Morel, with a launch of only 700 meters, achieved a respectable 192 km/h.

A local boy, André Morel agrees to participate in the event, taking the opportunity to perfect the development of the MCO 1500 in preparation for Record Day.

Unfortunately, rain began to fall in the early afternoon, just as the race was about to start. As the regulations stipulated, regardless of the weather, the event had to proceed. The showers, moreover, did not deter the numerous spectators.

La Tribune de l'Aube, 16 août 1928.

Under these conditions, the record set in 1925 by Célérier's Bugatti at 157 km/h seemed relatively safe, but this was without taking into account the audacity of the first Amilcar driver who, taking advantage of a break in the rain and determined not to disappoint the organizers, astonished everyone by covering the 900-meter course in 15.35 seconds at the astonishing average speed of 207.730 km/h. The second fastest time was achieved by Perrotin on a 500cc Terrot motorcycle in 20.35 seconds. Corteyn's run in an Amilcar, the second fastest car, took… 32.45 seconds, more than double the MCO's time!

Morel, who was scheduled to compete in the Laffrey hill climb on August 19th in the 1500cc category, does not appear in the results. We have received no information regarding a withdrawal or possible retirement. It's worth noting that the proximity of the Arpajon Record Day, so important for Amilcar, may explain why Morel decided against participating, as he risked damaging the car.

"Foc," a local driver, won the race at the wheel of his Bugatti, but fell far short of the record set by Robert Benoist in 1924. He finished ahead of Dugat (Derby)..

Journée des Records, épreuves à Arpajon et Montlhéry, 26 août et 1er septembre

During the 1926 edition, Morel set new records in the 1100cc category for the flying kilometer and mile, averaging 197 and 195 km/h respectively. Charles Martin, for his part, broke the standing-start kilometer record with an average speed of 126 km/h.

It should be noted that these performances, touted as world records, were in fact international category records (see the explanation in the chapter dedicated to the 1926 season, page 168). The records set by Amilcar, which skipped this event the following season, could not be approached during the rain-affected 1927 edition.

However, in preparation for Record Day 1928, the Saint-Denis-based company made a significant effort to leave a lasting impression by setting new records. Two cars were specially prepared for this purpose. This day is divided into two events. The first, on August 26, traditionally held on a section of the N20 highway near Arpajon, is reserved for short-distance attempts: kilometers and miles. The second, a week later, dedicated to longer distances (from 5 kilometers to 10 miles), will take place at the Montlhéry Autodrome.

Two MCOs (1100cc and 1500cc) are entered in Arpajon. Both are entrusted to André Morel, the sole official driver after Martin's dismissal, justified by the ongoing dismantling of the Racing Department, as cost savings have become a matter of survival for the company. For the coming months, they will be entering less expensive races.

From the outset, both cars were designed with minimal weight in mind; every part was designed and machined with this goal in mind. However, for these record attempts, they underwent specific modifications. To improve aerodynamics, the 1100 was fitted with a smooth hood, devoid of air vents, and a fairing covered the lower part of the grille. Furthermore, the 19-inch rear wheels of both cars were replaced with 21-inch wheels with flanges. To save even more weight, the front brakes were removed (only on the 1100).

While Jenatzy, with his Jamais Contente which broke the 100 km/h barrier for the first time in 1899, had understood the advantage of a streamlined body, manufacturers neglected aerodynamics for years. Serpollet, with his 1902 record-breaking car, had indeed designed a boat-shaped body that allowed for better air penetration, and Mors, with his racing cars in 1903, had also explored this avenue, which ultimately failed to catch on, with very few exceptions. In the 1920s, racing cars, apart from the Chenard and Bugatti tanks or the Voisin cars of the 1923 ACF Grand Prix, were all designed according to the same basic formula, conceding little or nothing to improved aerodynamics. Only record-breaking cars, especially after 1928, received the full attention of specialized engineers..

Numerous records were expected to be broken at Arpajon, but it was the Amilcar-Salmson duel that garnered the most attention. However, while the Saint-Denis-based company could rely on relatively proven cars, the same could not be said for its rival, which entrusted its new 1100, an 8-cylinder, twin-cam, twin-supercharged model, to Georges Casse.

On the national highway, Record Day unfolded under overcast and uncertain skies, with no wind. The rain that began to fall at the end of the day brought the event to a premature end. While timing still relied on a wire stretched across the road to trigger the clock as a competitor passed, trials using a beam of light were attempted before the competition. This new method quickly became the standard. The day lived up to all expectations, with 24 international records and 32 national records broken. Another remarkable achievement was a motorcycle exceeding 200 km/h over a kilometer for the first time. The feat was achieved by Englishman O.M. Baldwin in a 1000cc Zenith/JAP.

In the 1100cc category, the Amilcar/Salmson battle quickly turned in favor of the former. Casse managed to approach 200 km/h (197.856 km/h), but his car lacked proper setup and he was unable to challenge the two MCOs. He achieved the third fastest time of the day, ahead of Ghica Cantuzène's Cozette (191.846 km/h). Janine Jennky, in her Bugatti, was also clocked at nearly 200 km/h, finishing 5th with an average speed of 190.930 km/h. Morel, at the wheel of the two perfectly prepared single-seaters, set several records: with the 1500, he notably achieved 133.729 km/h over the standing-start kilometer and, above all, he cemented Amilcar's legendary status in the flying kilometer and mile, exceeding 206 km/h with the 1100 cc and 210 km/h with the 1500. These official figures, which represent the average of the out-and-back times, do not reveal even higher speeds because, on one of the runs, Morel reached 214 km/h over both the flying kilometer and mile.

«Record-breaking day may not have been blessed with ideal weather, but no matter!

It was first and foremost an unleashed Morel, a Morel of astonishing audacity, who single-handedly improved more than seven records. And what records they were!» "Happy?" we ask Morel. "Think so," replies the affable Amilcar champion, "especially since Divo's record (Talbot 1500) was 'hard' to beat and my car only has a 1270 cc engine." Match, August 28, 1928.

This document allows us to judge the fineness and small size of the MCO 1500.

The following week, on September 1st, the second Record Day took place on the Montlhéry circuit, which is naturally suited to record attempts over much longer distances.

Only the MCO 1100 (making its final official appearance) was entered; it also seems that the engine displacement was limited to 1100 cc, as no larger cars appeared in the rankings. Casse, dissatisfied with the new Salmson, decided it was best not to compete against the Amilcar.

Morel, along with his mechanics, had fine-tuned his car during numerous test sessions on the Montlhéry track in the weeks leading up to the event. This meticulous preparation paid off, as the day ended with four new international records (5 and 10 flying kilometers, 5 and 10 flying miles, at over 204 km/h), and, for good measure, Morel completed a lap of the track at 205.5 km/h.

"Once again, the highest speeds were achieved by Morel in the extraordinary little 1100cc six-cylinder car, which broke four new world records over the four distances on the program. It is worth noting that the speed reached by this car is virtually the same over 5 or 10 km: approximately 205 km/h, equivalent to the speed it achieved over the kilometer at Arpajon. Such consistency at these speeds constitutes a truly exceptional performance. This six-cylinder Amilcar is a work of mechanical art."

The Journal, September 3, 1928.

At Arpajon, Amilcar broke 9 records: 4 international records and 5 national records.

On the Montlhéry track, Morel added 4 international records and 4 national records to the brand's list of achievements.

Surprisingly, while the performances achieved in 1926 had been thoroughly exploited, this flurry of records was hardly highlighted. One might have thought that the company's management would have taken advantage of it to bolster its reputation and boost sales, yet no advertisement mentioning it appeared in the press. Should we conclude that Amilcar was betting entirely on its new 8-cylinder engine, which broke with both the company's sporting tradition and the 1100cc displacement? The CGSS, moreover, was in its final months of production.

It is clear, however, that an advertising campaign around these excellent results could have boosted C6 sales, but Marcel Sée was primarily concerned with the Amilcar-Durant partnership, which was being finalized and should open up the gigantic American market to him, but also, and above all, allow Amilcar's share price to soar..

Settled in the cockpit of the MCO 1500, Morel hadn't yet put on his helmet. Beside him sat Maurice Mestivier in his usual attire (overalls but with a tie). Mestivier had meticulously prepared the car, and Morel's performance owed much to him. In fact, the driver associated him with his successes, referring to «our car» and «our victories.»

Morel, on the MCO 1500 during his attempt at the flying mile. Clocked at over 214 km/h in one direction and over 207 in the other, his average time will be 210.8 km/h, he thus beats the previous international record of the F class (1500 cm^3) on his first attempt.

André Morel is in the center, accompanied by two mechanics from the Racing Department (in overalls). The three other figures are unidentified.
In the foreground on the left, the MCO 1100 is missing its front brake drums. In the background, the MCO 1500.

The MCO 1100 on the Arpajon straight, August 26th. At the wheel, Morel broke the International Records (Class G = 1100 cc) for the flying and standing kilometer, as well as the flying mile.

The two MCO cars, the 1100 and 1500, are very difficult to distinguish. The streamlined headrest and the rear wheel covers are the same. The aerodynamic grille screen can be fitted to both cars. The only significant difference: the 1100 has no front brakes.

"An Hour with Morel," an interview published in L'Intransigeant on August 30, 1928 (that is, between the two record-breaking days), between Georges Fraichard and André Morel:

The Porte Maillot district is to the racing driver what Boulevard Saint-Michel is to the student. So, when aperitif time arrives and the day is over, all these gentlemen gather on the terrace of this large café on Avenue de la Grande-Armée (the Brasserie Excelsior, at number 81 on this avenue, near Porte Maillot, was the usual meeting place for the big names in the motor racing world and many amateur drivers), and the petty grudges from the last race are forgotten, leaving only true, good friends.

Cheerfulness is the order of the day, and witty remarks fly thick and fast. Tips are being leaked, and gossip is flying.

One table is particularly noisy and well-attended. But it's André Morel, the big «star» of the day, who—as is customary, isn't it?—is celebrating last Sunday's impressive victory in style.

«Congratulations, Morel, you were splendid!» The Amilcar champion blushes slightly. He's modest, after all. But he quickly overcomes this awkwardness, and his only response is to invite us... for an aperitif. The interview will be delicate. He has to satisfy the demands of his many friends, as well as those of our questions.

«This isn't the first time you've broken the 200 mph barrier...»

«I've already achieved that speed in three different cars.» But, curiously enough, the feeling was never the same: the first time was with a Voisin, when Marchand and I broke the 24-hour record at Montlhéry... I was constantly driving at 205 km/h, but the weight of that car—1600 kg—the wide tires, the comfort, were such that I didn't realize how fast I was going... The engine was running at 2000 rpm, but silently, so I felt like I was gliding rather than driving.

Later, I achieved the same speed, but with a Delage, a car that weighed only 850 kg. The feeling was almost identical to that of the Voisin... Perhaps a little less comfortable, but still, «it's good.»

With the Amilcar, everything was supposed to change; I was going to do some real sport, some real sport... This car only weighs 500 kilos, so you can imagine that at 200 km/h, it barely weighs anything.

The Montlhéry track (used during preliminary testing, ed.) is very undulating, so I constantly feel like I'm bouncing, jumping, like the car is about to slip out of control... like a snake on the track! So much so that I can't keep my head straight because I'm so afraid of falling flat on the steering wheel...

- So, you'd already reached 200 km/h in an Amilcar?

«On the track, yes. I've covered more than 200 kilometers at that speed recently.» Arriving in Arpajon on Sunday, I knew perfectly well what speed I could achieve... You know that the track reduces your speed by 2.5% compared to the road... It might seem paradoxical, but it's true. While I reach 202 km/h at the racetrack, I have to reach 207 km/h on the road. This is for several reasons. The corners of the racetrack, the mandatory climb at the top of these corners, cost me a few minutes, whereas on a nice straight road like the one in Arpajon, I just have to press the accelerator and... fly.

- Do you feel the same sense of speed on the road as on the racetrack?

«At that speed, the Amilcar's handling is unimaginable.» Besides, the road is smoother than the track, and I don't feel those awful jolts that make me sway at the racetrack.

Here's how I do it. When I cross the starting line, I'm already in fourth gear, my engine is running at full throttle. A quick glance at the tachometer tells me what I'm doing. So, I'm only thinking about keeping as low a profile as possible. I tuck my elbows in, lower my head, and, looking between the spokes of the steering wheel, I try to maintain my line by using the radiator cap as a guide, making sure it doesn't leave the center of the road. The road narrows even more, trees and spectators duck... Instinctively, I push hard on the throttle. Yes, I'm always afraid I haven't given it my all.

- Don't you ever think about the possibility of an accident?

"Never. If that were the case, I wouldn't be going. Besides, I have complete confidence in my car. Engineer Moyet is an expert in this field, and if a particular part isn't thicker, it's because he's determined it shouldn't be… He's not afraid, after making a modification to the car, to take the wheel himself. He's the one who had the idea of completely offsetting the engine, which allows me to be seated

«The space between the driveshaft and the chassis allows for more headroom for the driver and reduces rolling resistance!»

«But what about balance?»

"The balance is maintained partly by the engine and partly by the driver."

Eight o'clock. André Morel is expected by his wife and two babies. Being a model husband and father, he won't stay any longer.

"See you Sunday," he tells us. "I'm hopeful."

We are too, for that matter.

Georges Fraichard.

Georges Fraichard, a renowned motoring journalist (Dijon 1903-Paris 1964), is the author of the book "La Ronde Impitoyable, les 24 Heures du Mans" (Amiot-Dumont, 1953). His nephew, Georges-Michel Fraichard (1931-2022), was also a respected motoring expert in the press, notably at Auto Journal.

"Hello! Hello! Morel, on his Amilcar 1100cc, has just taken off. And there's a movement in the crowd, a movement back. We know that the Amilcar champion, already a world record holder, will exceed 200 km/h today.

Face is tense. We hear the unmistakable sound of the little blue racing car. He's approaching; the sound becomes more distinct. A flash. A thunderous roar. Morel has just passed."

(As reported in the press the day after the race.)

Le Miroir des Sports, September 4, 1928.

The press praises Amilcar. But, probably due to its financial difficulties, the Saint-Denis firm does not take advantage of this to launch a vast advertising campaign as it had done following the record sales of 1926. It therefore considers the dithyrambic articles published in all the daily newspapers to be sufficient.

The record report. It should be noted that, although the engine bore was recorded at the same dimension three times, the stroke, which is more difficult to measure, varies from 76.90 to 76.94 mm.

The timesheet highlights the consistency of the driver who completes his laps between 44.64 seconds and 45.63 seconds.

Bilan de la saison 1928

While Amilcar still racked up numerous class victories, it must be acknowledged that the competition was virtually nonexistent.

Throughout the season, the cars' reliability was repeatedly called into question. The program, more limited than in previous seasons, reflected the internal difficulties within the company.

The season ended with an impressive series of records that Amilcar did not seem willing (or able) to commercially exploit. However, nothing foreshadowed the bombshell that would drop at the beginning of 1929.

La saison 1929

The 1929 program was established by the factory as soon as the racing calendar was published. However, while the racing season had already begun and Morel had just won the Boulevard Michelet race in Marseille on January 27th, a bombshell dropped on the small world of motor racing: Marcel Sée unexpectedly announced the suspension of Amilcar's racing program. The news was published on March 9, 1929, in the newspaper L'Auto:

"Some clarification is necessary regarding our decision to completely abandon racing. We know too well what we owe to motorsport and we are too aware of the importance of racing to have even considered making such a decision.

The truth is that we are in the midst of launching our new 8-cylinder model, and our agents in France and abroad are clamoring for the delivery of the cars they have ordered." We therefore needed to focus all our efforts to satisfy our agents and customers. Among the measures considered to achieve this was slowing down the racing department, which absorbed the best of our engineers and a whole elite of workers.

L'Auto, 9 mars 1929.

Next year, our sporting efforts will resume at full capacity, and we will then focus them on events reserved for touring cars and, in particular, on 24-hour endurance races."

In reality, this suspension will result in a definitive end to the brand's sporting activity. However, two race entries are maintained: the Kilomètre Lancé (standing start) in Geneva on March 17 and the Indianapolis 500 at the end of May, agreed upon when the contract with Durant was signed.

Two other reasons, which Amilcar is careful not to mention, could also justify this decision. The first concerns the company's now recurring financial difficulties; The second reason is the current lack of interest in 1100cc races, due to a shortage of rivals capable of challenging the 6-cylinder. Furthermore, the marque has nothing left to prove after the extraordinary results achieved over the past three seasons.

The 6-cylinder, with its engine bored out to 1270cc, allows it to compete in the 1500cc class. While it can achieve some respectable results in national races, it has no chance in international competitions dominated by the Bugatti 35C 2L. It's important to remember that the 1500cc class is not yet the dominant class it will become from the mid-1930s onward, and that Grand Prix cars have not been limited to 1500cc since 1928, provided they do not exceed 750 kg.

Amilcar could design a car to compete in higher categories and thus promote sales of the new production 8-cylinder model, but the necessary investments were incompatible with the company's financial health.

A few days before the official announcement, a letter was sent to André Morel informing him of this decision and, consequently, his dismissal the day after the Geneva race. His annual contract with Amilcar had, however, been renewed on September 30, 1928.

Curiously, Morel, who had been the regional sales manager in the brand's early days, was not reappointed to a sales position. He left the company permanently, which suggests that he was deeply affected by this decision and preferred to try his luck with another manufacturer where he could potentially continue his career.

Naturally, the termination of his contract would lead to difficult negotiations.

The main reason for Amilcar's withdrawal from competition was, as we have seen, budgetary. Racing results brought exceptional renown to the brand and boosted sales, but now the company no longer had the resources to finance a Racing Department. The global economic crisis had not yet reached the country, but Amilcar was just recovering from serious financial difficulties that had led to its liquidation in early 1927. The firm's finances were once again strained following the heavy expenses incurred in the development and production of its top-of-the-range eight-cylinder model.

This model was presented as a chassis at the October 1928 Motor Show, but its commercial launch had to wait until the end of 1929. Amilcar emphasized 15 months of testing, implying flawless development, when in fact this long delay concealed major design flaws that the engineers were trying to correct. Furthermore, the engine displacement was clearly insufficient for a car intended to be high-end (1.8 liters, 10 hp). The commercially available model therefore saw its engine displacement increased with the C8 type (2 liters, 11 hp), which was itself immediately replaced by the CS8 type (2.3 liters, 13 hp). Unfortunately, the unreliable mechanics drove customers away. The economic crisis that hit Europe around 1930 definitively sealed the fate of this unsuccessful model..

L'accord commercial franco-américain Amilcar-Durant

The initial objective was to mass-produce the 8-cylinder model for markets already served by the brand, thanks to a well-established network of agents, but also to export to the United States and its enormous potential market. With this in mind, Amilcar forged a commercial agreement with the American manufacturer Durant, an agreement that was not as advantageous as it seemed for the Saint-Denis-based manufacturer.

At that time, William Crapo Durant was at the head of several brands (Durant, Flint, Star, Locomobile, Rugby, and Mason Trucks), but the group's cars struggled to compete with Ford and General Motors' offerings. The financial situation was far from rosy, and the October 1929 crisis would ultimately devastate the company.

The agreement, signed in October 1928, stipulated that each company would benefit from the other's network of agents for the distribution of their respective models. Furthermore, to avoid paying import taxes on automobiles, it was envisaged that each manufacturer would produce certain parts for the other's vehicles.

W. C. Durant traveled to Paris for the October 1928 Motor Show to ratify the main points of this agreement. Marcel See, then head of Amilcar, traveled to the United States in mid-March 1929 to finalize the contract. He returned to France on April 24th accompanied by Durant. The two men, interviewed extensively by the press, expressed confidence in the practical implementation of the agreement, and in this context, the decision to enter an Amilcar in the Indianapolis Grand Prix was confirmed. Thus, Marcel See declared to the newspaper L'Auto on April 25, 1929:

"I return delighted, delighted on all counts." Received admirably by W.C. Durant, I studied with him the organization of the marvelous Durant Motor Co. factories in Lansing, which represent the latest in its kind. I was able to work as I wished, in agreement with Messrs. Philip and Beynes, Mr. Durant's direct collaborators, and I am certain that our agreement will be further extended, our coordination amplified. From all sides, I have received requests for the Amilcar 8-cylinder engines. I have also concluded various agreements concerning my production. Thus, by virtue of an agreement with the most powerful piston and valve manufacturer, Thompson Products of Cleveland, our brand will participate in the major American speed events: there will be an Amilcar at the starting line of the Indianapolis Grand Prix on May 21st.

However, while Amilcar did participate in the 500 Miles race in May, and while several Durant cars and Rugby-branded commercial vehicles were imported and presented to the Mines Department by Amilcar in July and August for homologation, the delayed launch of the eight-cylinder model and the Wall Street crash in October ultimately doomed the Franco-American agreement, which was never fully implemented. It should be noted that some French media outlets were not fooled and reported Marcel See's maneuvers to artificially inflate Amilcar's stock price using this supposedly very advantageous agreement, thus engaging in insider trading, a perfectly legal and common practice at the time.

L'accord Amilcar-Durant

A momentous event: the signing of an industrial collaboration agreement between W.C. Durant and SAFA "Amilcar".

Article by Charles Faroux published on October 7, 1928, in the newspaper L'Auto:

To grasp the significance of this event, one need only recall that W.C. Durant, founder of the General Motor Corporation, is one of the most considerable financial and industrial powers in America. W.C. Durant controls countless businesses and, in particular, heads the renowned Durant Motor Co., whose factories currently produce several hundred cars a day.

Several months ago, W.C. Durant was introduced to Mr. Marcel Sée, Managing Director of Automobiles Amilcar, by Mr. Raymond Michel, Managing Director of Veedol Oil, their mutual friend and W.C. Durant's official representative in France.

After extensive discussions between Mr. W.C. Durant and Mr. Marcel Sée, a collaborative agreement was reached. First and foremost, it was specified that Amilcar would remain independent:

Control of Amilcar remains in the hands of the current management, and Mr. W.C. Durant has no involvement whatsoever in Amilcar's financial operations. Under the terms of the agreement, Amilcar will handle the exclusive sales in France of Durant and Locomobile cars, as well as Rugby trucks, brands controlled by Mr. W.C. Durant. Amilcar will utilize its dedicated network of agents for this purpose.

Amilcar will also manufacture the body and chassis components of these various American cars in France, with the aim of reducing production costs. It will thus involve French labor to the greatest extent possible in the construction of the American cars sold in France.

For its part, W.C. Durant will manufacture in the United States any parts, components, or assemblies that may be used by Amilcar.

The Durant Motor Co., with its impressive network of 2,600 agents, would handle the exclusive sale of Amilcar cars in the United States.

In short, while granting Amilcar complete autonomy, the company would be given access to W.C. Durant's formidable resources and production capabilities.

Thus, for the first time, a genuine and sincere industrial and commercial collaboration was established between the French and American automotive industries.

It was no secret that W.C. Durant had been seeking an agreement in France for months. Given Durant's strong personality, his willingness to reach an agreement with Amilcar was a highly valuable endorsement for the company.

The 1929 season, therefore, consisted of only three races.

Course de côte du Boulevard Michelet, 27 janvier

It was organized for the third consecutive year, even though «the Marseille Motorcycle Club was considering abandoning the event for 1929, given the poor condition of the road surface. However, after various efforts, they obtained a complete resurfacing of the boulevard from the road department.»

It was held in the heart of Marseille over a one-kilometer standing start. Morel, who had participated in the first two editions, was entered with the MCO 1500. The only serious competition came from several 1.5-liter and 2-liter Bugattis.

The best time was achieved by Lamy's 2-liter Bugatti, which broke the event record, but the biggest sensation of the day was Morel's Amilcar, which finished just one-fifth of a second behind and, in its class, beat the Bugatti 1500s of Deydier and Dreyfus by more than four seconds.

Morel at the wheel of the MCO 1500 during the trials for the Boulevard Michelet hill climb on January 27, 1929. The car is equipped with large diameter front brake drums.

Kilomètre départ arrêté à Genève, 17 mars

The Eaumorte Kilometer race takes place on March 17th near Geneva, during the Geneva Motor Show.

The Swiss press itself differs on the spelling of the place and we find alternately: Eaux-Mortes, Eau-Morte or Eaumorte.

Despite the announcement of its withdrawal from competition, Amilcar's commitment was still honored. However, the MCO 1500 was not officially entered by the factory but by the agent Théo Sarbach, the objective being to continue supporting the brand's sales in Switzerland. Morel was the driver. This year, the start was a standing start. The organizers, aware that the road was noticeably narrow, feared accidents given the speeds reached in previous years. The performance recorded for each competitor was the average speed over the outbound and return journeys.

The event took place on Sunday morning, starting at 9:30 a.m., in cold and foggy weather. Free practice sessions had been held the two days prior. It was divided into two races: the «national» race and the «open» race. One might think that the national race is reserved for Swiss drivers, but this is not the case since Morel is participating. Having found no information on the matter, we therefore do not know the criteria allowing participation in one or the other of the two events, or even both.

Half a dozen entrants withdrew at the last minute, leaving only 22 cars at the starting line. The field consisted mainly of four Bugattis (1500cc and 2-liter), two 7-liter Mercedes, the factory 1100cc Donnet driven by Lepicard, a 4-liter Chrysler, and the two Amilcars of Sarbach (C6) and Morel (MCO 1500).

Hampered by a clutch problem, Morel missed his first attempt, managing only 109.9 km/h, beaten by the 2-liter Bugatti of Swiss driver Strittmater (112.8 km/h). He took his revenge in the second race, setting the fastest time of the day at 30.6 seconds, reaching 117.6 km/h, ahead of Strittmater (113.2 km/h). Sarbach, riding his C6, achieved speeds of 109.4 km/h and 108.4 km/h (33.2 seconds) and won the 1100cc category.

The French-language edition of the Swiss magazine Revue Automobile summarizes the event:

"The National Race: ... Sarbach was given the first real thrill of speed that day: 33 seconds on the outward leg, a time he improved even further on the return.

Finally, here comes Morel and his supercharged and overbored Amilcar, making it a 1500cc. "What's all this sand about?" he asks, displeased. Those who went before him have indeed brought some to the center of the track. We quickly sweep it up while he pulls his machine back. The operation completed, he takes off and disappears as if by magic. As if by magic, he reappears, and the impression made is so strong that we are astonished to learn that he is not first. An admirable time of 29 1/5 seconds on the outward leg was, in fact, rendered meaningless by a delay at the start of the return leg, which we could not have possibly noticed." He thus allowed Strittmatter (Bugatti 2-liter) to win the national race after a hard-fought battle: 31.9 seconds and an average speed of nearly 113 km/h.

The Open Race: it can be summed up in Morel's triumph. While Sarbach, in his 1100cc class, couldn't quite match his times from

Morel at the starting line of the standing-start kilometer race in Eaumorte, March 18, 1929, near Geneva. He would go on to record the best time of the day and win the City of Geneva Prize.

The comments in L'Echo des Sports, in its post-race edition, are telling:

"Despite the icy wind, 7,000 to 8,000 people attended yesterday afternoon's prestigious annual race on Boulevard Michelet, organized by the Marseille Moto-Club.

The dazzling performances of the main competitors left a very positive impression on the spectators.

In the overall standings, Lamy, an excellent driver from Apt and already the Ventoux record holder, came out on top with his 2-liter Bugatti, beating Morel, the likeable Amilcar driver, by just one-fifth of a second, despite the difference in engine size. Morel's Amilcar, in fact, only has a 1.5-liter engine. But it must be said frankly that Lamy jumped the start and was penalized by the timekeeper by two-fifths of a second." However, it is quite clear that this penalty, in the opinion of experts, is insufficient to level the playing field, as Lamy, somewhat nervous, got off to a flying start and the advantage he gained must have been close to four-fifths of a second. Moreover, the impression at the finish was clearly in favor of Morel's Amilcar, and we can say that Morel received all the public's support.

Morel and his Amilcar's race will remain memorable, like all their previous great victories. Not only did they take first place in the 1500cc category, but they also shattered the record by a considerable margin, a record that Morel already held on an Amilcar. Morel covered the standing-start kilometer at the fantastic average speed of 126.76 km/h; he must have finished at nearly 200 km/h. This is simply fantastic for a machine of such a small engine. And so Amilcar continues his series of impressive victories.

an hour earlier, and Strittmatter, in his 2-liter class, only managed to improve by a fifth of a second in one direction, Amilcar's ace, although he didn't recapture his fabulous time from the final leg, avoided the bad luck he had suffered earlier on the return leg, and posted a total average time of 30.35 seconds, or an average speed of 117 km/h. Let's reiterate: watching him go by, he seemed to be traveling with the same formidable momentum as in the last two years at the start. And yet what a difference in the score. The victory is nonetheless clear and decisive... In reality, we saw much higher speeds yesterday, approaching 150 or 160 km/h as the racing cars came towards us from the end of the kilometer marker..

Garage Métropole, which represents Chrysler and Amilcar (it is the brand's agent for French-speaking Switzerland), belongs to Théo Sarbach. Morel poses at the wheel of his Amilcar, which still bears the number it wore during the Boulevard Michelet hill climb on the rear.

In front of the Garage Métropole, Théo Sarbach (no. 34) poses alongside Morel (no. 36). His car is a special C6 with an offset engine, probably a prototype he acquired from the factory. The reasons for this modification are unknown; perhaps the factory wanted to develop the «customer» C6? It's also worth noting that it could have been a special order from Sarbach, dictated by his large build. From the front, the difference in frontal area between the two cars is striking.

André Morel, focused before the start. He's now wearing a proper helmet, not a leather headband. His gloved right hand is pulling the handbrake. For this kind of performance, the start is crucial: engine kept at high revs, clutch and brakes ready to be released.

No doubt there's a lot of emotion for Morel, who knows he's participating in his last race for Amilcar.
Mestivier, too, is aware that an era is ending. Sarbach, on the left, wearing a cap, doesn't have the same worries. On the right, you can see the rear end of the Swiss agent's C6.
The car entered with number 56 for the race actually has number 58 on its rear end and number 36 when it's photographed in front of Sarbach's garage…

UAnother Swiss newspaper writes:

“We asked the intrepid Amilcar racer, Mr. André Morel, for his impressions of his impressive victory. But Mr. Morel is modest: he isn’t satisfied with his time. He holds all the records for this type of race up to the 8,000 cc category, and that’s with the same machine he presented on Sunday, which has a displacement of only 1,270 cc.”

“I had some trouble with my clutch,” Mr. Morel told us, “it slipped during the national event; that’s why I couldn’t break the record in my first race. But in the international race, I was determined to take first place and didn’t try to break my own world record, as I couldn’t do so because of my clutch.” “Admittedly, I’m far from my Arpajon time, 210 km each way, but I’ll be back, I hope, and I’ll do better.”

In reality, this race was Morel’s last for Amilcar. He was forced to leave the company he had helped create and where he had spent eight years, working tirelessly. By winning this final race and setting the fastest time of the day, he couldn’t have ended his career in a better way. Starting in May, he participated in the Tour de France Automobile driving an American Essex, a brand distributed in France by… Joseph Lamy.

500 Miles d’Indianapolis, 30 mai

L’Echo des Sports, in its April 25, 1929 edition, headlines:

Morel speeds past the stands. The road is noticeably narrow due to the tramway tracks. In 1930, Sarbach was involved in an accident when his car wheels ventured onto it.

“Jules Moriceau to Race in America” and specifies: “One of the first consequences of the return to France of Mr. Marcel Sée, managing director of Automobiles Amilcar, is the departure for America of Jules Moriceau. Moriceau leaves Paris today. He will take the transatlantic train at 11:40 a.m. and will board the ocean liner Aquitania this evening. Also on board will be the six-cylinder Amilcar with a 1270 cc engine, which our brilliant champion André Morel so often drove to victory. Moriceau will participate in several races in the United States and will compete in the Indianapolis Grand Prix at the end of next month.” “Make sure you understand,” Moriceau told me, “that Amilcar isn’t sending me across the Atlantic hoping to win the Indianapolis Grand Prix. I’ll only be making a demonstration in that race. That’s the purpose of my trip.”

Moriceau’s choice of the American race, already an official factory driver in 1928, was likely due to his experience at Indianapolis where, in 1919, he had accompanied Louis Wagner as a racing mechanic on a 5-liter Ballot. Furthermore, Moriceau spoke fluent English.

But the real reason was that Morel was probably on very bad terms with Amilcar after the termination of his contract. We’ve seen that the former lead driver has moved on and accepted Lamy’s offer to participate in the Tour de France Automobile starting at the end of April..

The Indianapolis 500, whose first edition dates back to 1911, was traditionally held on May 30 or 31 until 1972 (it now takes place between the 24th and 30th) at the Indianapolis Motor Speedway, a 2.5-mile (4.023 km) oval-shaped speedway built in 1909. The race consists of 200 laps, totaling 804.670 km or 500 miles. The track is slightly banked in all four corners. Until 1937, the surface, entirely paved with red bricks laid on edge, caused vibrations and jolts that severely tested the cars and their occupants. The race was extremely deadly, with 15 drivers losing their lives between 1931 and 1935.

The regulations for the 1929 Indianapolis Grand Prix remained unchanged from those of the three previous years: the race was open to cars weighing a minimum of 635 kg, equipped with an engine displacement not exceeding 1500 cc. The use of a supercharger was permitted. Two drivers could take turns at the wheel.

The prize money was incomparable to that distributed in Europe: $50,000—a veritable fortune—was awarded to the winner, and substantial other prizes were also available. The Grand Prix enjoyed considerable success every year. Today, the racetrack boasts grandstands designed to accommodate over 250,000 people. A total of 400,000 spectators can attend the race.

Generally, the cars entered are specifically designed for this type of oval track racing. Their centrifugal (rather than positive displacement) supercharger spins six to eight times faster than the engine, which can rev to 8,000 rpm. They are extremely lightweight, to the point that the brakes (hardly used by the drivers), clutches, and gearboxes are simplified to the extreme. They carry very little fuel, and consequently, pit stops are very frequent—on average every 100 kilometers—both to refuel and to change the tires, which are heavily stressed on the bricks. All these unique features, the setting, the regulations, the atmosphere, and the American culture make the Indianapolis 500 a race like no other. Its atmosphere is remarkably well described by Louis Chiron upon his return from the United States in an article published on June 15, 1929, by the Official Bulletin of the French Motorcycle Club (he participated in the event on a Delage 1500):

“From Indianapolis, our member, Louis Chiron, brought back a treasure trove of memories and a strong desire to return next year… He tells us about the race: “The conditions are deplorable due to the heat. The red brick of which the track is made behaves like the gigantic wall of an oven. The superheated air is stifling, and a blazing sun finishes everything off. Even at high speed, it’s a scorching blast of air that penetrates the lungs. Truly, the race is grueling.

And then, there’s the unexpected element for me; The oil that coats this track after half an hour. Specially designed cars are needed to maintain grip on this ice rink where wheel-to-wheel contact is the norm. Some American cars even have their fuel tanks extending beneath the chassis.

The conditions are such that for the leaders, driver changes are almost mandatory. This explains the drivers’ endurance; they give their all in a short period and are relieved at the wheel by fresh drivers.

Personally, I didn’t want to rely on this. Besides, my teammate Moriceau, who was scheduled to take over, was forced to retire at the start of the race.

As for the atmosphere on the circuit, Chiron believes there’s nothing comparable:

«It’s something fantastic, simply magnificent. Before the race, 1,700 musicians march around the track in impressive formation.» In the air, planes perform aerobatics and then land in the center of the racetrack where 40,000 cars are already parked—some have been there two days before the race! Ticket sales: $1,000,000.

Then comes the start. But a start like only the Americans know how to give, and despite my training at Indianapolis, despite my extensive track experience, my heart felt strangely tight.

Packed behind the pace car, a «pointless lap,» in order, at an average speed of 150 km/h, and then suddenly it’s «all out,» with engines ripping through the air, the cars going into a full-on battle, passing at 200 km/h wheel to wheel. Conquer or die, that was the thought that crossed our minds. On the bends, they skidded, but no matter, they had to get through at all costs. The riders rolled over. They were helped up. If they weren’t killed, they went to the infirmary, and it was quick. And if, after a terrifying tumble, they were unharmed, they rushed to the «Spare Drivers» aid stations.

they propose.

The sportsmanship of the American drivers is incredible. And, while the almighty dollar reigns supreme, the fairy of «regularity» has full powers: mutual support also reigns supreme. And all of

this, I assure you, works very well together.»

To participate in the race, drivers must qualify through elimination rounds that determine their race number and starting position on the grid. On May 26, 1929, L'Echo des Sports ran the headline:

«News from Moriceau who will race in the Indianapolis Grand Prix» and added: «We had made Jules Moriceau promise to send us details about what was happening across the Atlantic.» True to his word, Moriceau sent our colleague, Maurice Henry, the letter we are about to read, which is full of very interesting information about the Indianapolis Grand Prix on May 30th:

"Indianapolis, May 9th. After a short stay in Cleveland, Ohio, home of Thompson Products Inc., the piston and valve manufacturer for which I will be racing here, I arrived in Indianapolis last Tuesday, the 7th of this month, and immediately made contact with the track, where Grand Prix training has been in full swing for a month. Needless to say, the French cars will have a significant handicap to overcome: speed.

The 1500cc Millers reach 250 km/h, and since there are two long, 1-kilometer straights, you can see that they can really push it." The engine revs to 8,000 rpm, their blower spins at 40,000 rpm, five times the engine speed. A radiator is mounted on the side to cool the exhaust gases before they enter the cylinder.

One of these Millers covered 280 kilometers on the flying mile. Many have front-wheel drive, which gives them excellent grip in the corners, which are only slightly banked. The track surface is very hard (brick), so the cars take a real beating. The fastest cars are the Millers and the Duesenbergs.

There are 48 entries, but only 33 competitors will start. The qualifying heats consist of four laps. The qualifying time must be under 1 minute 40 seconds. So far, I've only done about fifteen laps, my average time is 1 minute 28 seconds, so you can see I'm definitely «good.» I'm going to make a few modifications, and then I'll certainly be able to improve my time by a few seconds.

For his part, Louis Chiron has modified his car; he's lapping in 1 minute 22 seconds. The fastest of all is Léon Duray, in his Miller: he's doing laps in 1 minute 12 seconds. The others are lapping between 1 minute 16 seconds and 1 minute 20 seconds. So you can see that we're not exactly favored in terms of speed, but the main thing is to qualify for the qualifying rounds; that's already proof that the car is progressing.

Léon Duray should not be confused with Arthur Duray, the former Amilcar factory driver. Léon Duray (born George Stewart in 1894) legally changed his surname in homage to the Belgian-born driver. Léon Duray, who finished second in the 1914 Indianapolis 500 driving a Peugeot L76, died in 1956.

The leading American drivers—Léon Duray, MacDonald, Keech, Milton, de Palma, de Paolo, Moore, Gulotta, etc.—have been training for some time.

The Indianapolis Grand Prix hasn't changed: it's still a race full of surprises, and since its inception, no more than ten drivers have ever finished.

Of the 48 cars entered, 35 qualified, and 33 (the unchanging number of starters at Indy) took the start. Approximately one-third of these cars have front-wheel drive, which lowers their center of gravity by eliminating the driveshaft and results in a significant weight reduction.

Jules Moriceau qualified easily, posting the 15th fastest time, which allowed him to start on the fifth row. Besides the Amilcar and the Delage (the Talbot 1500 entered by Comotti failed to qualify), the starting grid featured eleven Miller Specials, three Packard Cable Specials, three Cooper Specials based on Miller designs, four Duesenberg Specials, and one Simplex Special. The brands under which the other cars were entered (Marchese, Chromolite, Boyle Valve, Burlach, Detroit, RDB Special, Richard Bros Special) concealed rebadged Millers.

All the cars, except the Amilcar, had inline 8-cylinder engines:

«The Frenchman's car has six cylinders and a piston displacement of only 77 cubic inches, the smallest car ever to enter an American race,» noted an American journalist.

Louis Chiron drives a Delage 1500 that belongs to him. It is one of the former 1927 World Champion cars, bought back from the factory and slightly modified, or more precisely, «adapted» for the American track. However, its top speed remains significantly lower than that of the American racing cars.

The Amilcar driven by Moriceau is the MCO 1500 with which Morel set several world records in September 1928. For the occasion, the car has been repainted yellow and black, the colors of Thompson Products (which undoubtedly sponsored the entry). The company logo appears on both sides of the bodywork. The Amilcar monogram has been removed from the radiator, and the name of the French company appears only very discreetly, painted on each side of the bodywork, which raises questions about the true intention of promoting the brand in the United States.

The numerous tests, conducted during the three weeks preceding the race, took place in unseasonably hot conditions. Moriceau requested improved ventilation for the cockpit, a problem partially solved by adding vents to the canopy. No information was released regarding the car's mechanical preparation. The American press simply reported a power output of 118 horsepower at 6700 rpm.

Among the spare parts accompanying the car was a spare engine, likely an 1100cc, but it is possible that Thompson Products was contracted to manufacture specific replacement parts for the 1270cc engine in case of a major problem. An unverified report in the American press indicated that the Amilcar would start with pistons and valves manufactured by the supplier.

From the outset, the competition was fierce between Duray, Moore, Litz, Woodbury, Hepburn, and Keech. Deacon Litz led the race until lap 57 before his Miller's engine broke down. Louis Meyer took over the lead, but on lap 157, after a pit stop, he struggled to restart his engine. Ray Keech seized the opportunity to take the lead and held it until the finish. Meyer finished second, and Jimmy Gleason third in a Duesenberg. The race was marred by the fatal accident of Bill Spence, who went off the track on lap 14 in his Duesenberg. For the French drivers, Louis Chiron finished a respectable 7th after 5 hours and 41 minutes of racing. He achieved a good result driving a European Grand Prix car, which was at a significant disadvantage compared to the cars specifically designed for American racing..

Conversely, when Léon Duray entered his Miller 91 in Europe during the 1929 season and later in 1932, he achieved no good results. After the 1934 Tripoli and AVUS Grands Prix, De Paolo realized that his Miller was completely uncompetitive against the Alfa Romeos, Bugattis, and Maseratis. He then made an agreement with Nelly Braillard to drive a Maserati 8CM. During his very first laps behind the wheel of this notoriously difficult car, during practice for the Peña Rhin Grand Prix, he suffered a serious accident that ended his career.

As for Moriceau, he retired on lap 31. Local journalists reported that the Amilcar hit the inner wall of the track, resulting in the car's removal from the race. The telegram from the French correspondent, common to the entire French press, was reproduced with varying degrees of accuracy:

«Moriceau, attempting to overtake another car, swerved and his car overturned. The driver was unharmed.» Le Temps, June 1, 1929.

«Moriceau also overturned; but fortunately, the driver escaped with a few bruises, while his car was completely destroyed.» Paris-Soir, June 1, 1929, the journalist added a bit more detail, specifying that the car was completely destroyed!

“Moriceau was involved in an accident. His car overturned and the driver was thrown several meters; the car was totaled, but Moriceau escaped very fortunately. He suffered only a slight concussion.” Journal des débats politiques et Littéraire, June 1, 1929.

“As for Jules Moriceau (Amilcar), who was driving the smallest car in the field, he crashed into the barrier while passing another competitor, but escaped with a few bruises.” Le Populaire, June 4, 1929.

“Moriceau hit the wall at the northwest turn on lap 31, but was unharmed.” Automobilia, June 15, 1929.

These articles are contradicted in the June 15, 1929 edition of the Official Bulletin of the Motorcycle Club of France, which is much better informed and writes:

“Moriceau has returned from Indianapolis. He must have embarked in New York last Tuesday and is sailing, as these lines are being published, towards Paris. We should add that our friend Jules was not involved in any accident. He was simply stopped by a breakdown, pulled over to the inside of the track, and according to custom, his car was tossed around without further ado by a team of burly men for the sole purpose of clearing the track.”

In the same issue, Louis Chiron, describing the race, confirms this version:

“…Some racers fall over. They are helped up.” If they aren’t killed, they’re whisked away to the infirmary, and it’s quick. And if the car is still on the track, even if it’s worth 200,000 francs, it doesn’t matter; one gesture, and it disappears behind the barrier. That’s the fate that befell Moriceau’s car and many others.»

Finally, the last word goes to the man himself, in an interview given to Maurice Henry and published on June 21, 1929, by L’Echo des Sports under the title «Back from America, Jules Moriceau talks about Indianapolis»:

«Jules Moriceau, who returned to France last Tuesday, accompanied by his mechanic Roberjot, aboard the Mauretania, gave us some details about the race and also about his ‘accident.’» “First of all,” Moriceau told us, “I never rolled over, as the French newspapers were so fond of saying. On the thirty-first lap of the race, which had two hundred laps, I had a slight problem with my steering that forced me to stop. At thirty kilometers an hour, I came to a stop on the track, alongside the wall, and immediately, as is customary at Indianapolis when a driver retires, my car was flipped over the wall. As you can see, I didn’t have a scratch on me. That’s the origin of my so-called accident, and if my car was flipped over, it was only afterward, simply to clear the track.”

“What did you think of the race?” I asked Moriceau. Endlessly enthusiastic about his trip across the Atlantic, «Julot» replied: «In France, you can’t imagine what the Indianapolis Grand Prix is like. The winner, as you know, was the unfortunate Ray Keech, whose tragic death I learned of upon my return to Paris. He won by a narrow margin over Louis Meyer (Keech died 17 days after his victory, in another race in Pennsylvania). Meyer was in the lead most of the time when, with twenty laps to go, his oil line broke. He couldn’t restart until after a twenty-minute stop; he then overtook the entire field and managed to take second place. But make it clear,» added Moriceau, «that contrary to what has been said, Ray Keech and Louis Meyer remained at the wheel for the entire 800 kilometers of the race; at no point did a replacement driver take their place.» The performance of these two men was admirable, as was that of Léon Duray, who has held the Indianapolis Motor Speedway lap record since 1928, averaging 200 kilometers per hour.

«Are you satisfied with your stay in America?»... Moriceau didn’t let me finish my sentence and continued:

«My Amilcar performed wonderfully; unfortunately, a stupid incident prevented me from achieving consistent speed. Add to that the fact that my car’s engine displacement was only 1270 cc, the smallest of all the cars entered. The Amilcar was admired by the Americans, and the newspapers there devoted long, laudatory articles to it. Roberjot and I are very happy with the welcome we received, especially from the late Ray Keech and my friends Louis Meyer and Léon Duray.» “And Chiron?”

“Ah! Chiron was ‘amazing.’ Despite driving a car significantly slower than the American Miller or Duesenberg vehicles, he ran a remarkably consistent race, without a single problem.

It was admirable; he too drove the entire 800 kilometers, never once considering being replaced.” This, faithfully recorded, is the conversation I had with Moriceau, which definitively clarifies the “accident” of the Amilcar driver.

Jules Moriceau and his mechanic Louis Roberjot boarded the return ship ten days after the race. Indianapolis was the last official outing for the Amilcar Racing Department, which had already ceased to exist officially. Shortly afterward, all the cars were sold. They then enjoyed a second life in the hands of private drivers.

Louis Roberjot, born in Saint-André-le-Désert (71) on June 8, 1897, was killed in a car accident near Montargis on April 23, 1930.

From the initial testing stages, the car was modified: the contoured headrest was removed. Later, crude ventilation openings were added to the canopy and windscreen.

Jules Moriceau poses at the wheel of the Amilcar, renamed Thompson Products Special. The car has lost its original uniform blue paintwork in favor of bright yellow and black. The Amilcar name now appears only in tiny letters at the bottom of the body.

The Thompson Products Factory was a manufacturer specializing in valves and other components for automobile and aircraft engines. A subsidiary of the Durant Motor Company, it was based in Cleveland, Ohio, at the time. Thompson Products merged with Ramo-Wooldridge in 1953 to form TRW, a major group and leading supplier of valves and airbags to the global automotive industry. It has since been dismantled.

On American racetracks, most racing cars (primarily Millers and Duesenbergs) were entered under the sponsor’s brand, which the sponsor used as an opportunity to promote the car. Examples include the Boyle Valve Special, the Packard Cable Special (which would later compete against European cars with Duray), the Chromolite Special, and others.

This photo of the damaged Amilcar has given rise to various interpretations. Contrary to what has often been claimed, the car was not involved in an accident but was manually lifted by marshals over the wall surrounding the inside of the track to clear the circuit after Moriceau had parked on the inside due to a steering problem.

This document was published in several American newspapers with the following caption: «A miniature car is entered in the Indianapolis 500. A glimpse of the contrast is illustrated in this photograph showing the Amilcar, the smallest car ever entered in the Indianapolis race, alongside a standard American production car.»

With the bodywork removed, we can see the small intermediate tank mounted on the bulkhead, fed from the main tank located in the rear of the body and kept under pressure. It acts as a buffer and ensures a continuous, high-flow fuel supply to the carburetor. The engine runs on a methanol-based mixture and consumes astronomical amounts of fuel (over 100 liters per 100 kilometers). The right-hand camshaft cover has been removed. On the same side, three modified breather vents prevent fuel starvation when cornering.

On the left side of the engine, the magneto has been removed. The horizontal Roots supercharger is significantly larger than the one fitted to the «customer» C6 models. The manufacturer's plate, attached to an access panel for the rocker arms on the intake camshaft side, is unfortunately illegible.

The Amilcar was transported on a Thompson Products truck. From left to right: Moriceau, Chiron, Ralph De Palma, and Louis Chevrolet

The MCO remained in the United States at Thompson Products. It was entrusted to Russell Snowberger on August 31, 1929, for a race organized in Syracuse, New York, but he failed to qualify.

It was then entered with number 35 for Cliff Bergère in a race at North Randall, Cleveland, on September 22. After a strong performance, he retired on lap 46 with a stalled engine while in third place. The car was then shipped back to France.

At the factory, the MCO 1500 rejoined the other 6-cylinder cars, which had not been produced since April 1928 for the Deported COs and since October 1928 for the MCO 1100.

André Morel

André, Paul, Victor Morel was born on August 3, 1884, in Troyes, in the Aube department, nine years before his sister Rosalie, Flavie.

His parents, Victor, Paul Morel, born in 1855, and Estelle, Flavie, née Martin, born in 1861, lived in Buchères, a village less than ten kilometers south of Troyes. They ran a modest wine business and lived frugally.

The young boy was only 12 years old when his father died at the age of 40. Having earned his primary school certificate, he followed an unusual path, starting out working for a farmer, then considering the priesthood before becoming an apprentice butcher. Finally, his job at the Maillot garage in Lusigny-sur-Barse (Aube) revealed his true calling. At 16, brimming with ambition, he cycled to Paris where he worked successively as a porter at Les Halles market and then as a bicycle mechanic before landing an apprenticeship at Corre in Levallois.

André Morel, here next to the Berliet bus, established regular routes, first in the Loire and then in the Aube.

He discovered racing while working as a mechanic during a Tour de France automobile race. For him, it was a revelation; this passion would never leave him. With a meager nest egg in his pocket, still on his bicycle, he left Paris for Lyon, the second capital of the French automotive industry, to hone his skills with one of the major local manufacturers. But he went from one disappointment to another. La Buire, Mieusset, Rochet-Schneider, and Berliet all refused to hire him, and he finally found a job with a mechanic and used car dealer. In 1904, Maurice Perrin, a trusted associate of Marius Berliet, noticed his abilities, poached him, and brought him into the Berliet factories in Lyon-Monplaisir. He was tasked with testing the 40 hp chassis and then the bus chassis, and was quickly considered the factory's best test driver. He didn't yet have a driver's license (!), but he rectified this by obtaining it on June 18, 1906. Noticed by Marius Berliet himself, the latter asked him to be his chauffeur for his honeymoon in Switzerland in 1907 (Marius Berliet married Louise Saunière on January 17).

One of the Berliet buses is parked in front of André Morel's garage in Bar-sur-Aube.

André Morel then drove a Berliet coach on the Feurs-Panissières (Loire) line. It seems he left the Lyon-based manufacturer to set up his own business.

He declared that he lived in Feurs when he married Marie-Anne Dormoy on February 14, 1910, in Bar-sur-Aube.

Around 1911, he returned to his native region and settled in Bar-sur-Aube, his wife's hometown, where he established a car repair and dealership representing the Berliet and Le Zèbre brands. He then created and operated two bus lines providing passenger transport and postal service between Bar-sur-Aube and Bar-sur-Seine, and between Bar-sur-Aube and Soulaines-Dhuys.

In August 1914, his buses were requisitioned, and he himself was mobilized. A private, he was assigned to the Infantry, but deemed unfit for combat due to minor health problems, he was granted a deferment and assigned to Berliet to manufacture artillery shells..

But he wasn't satisfied with this «shirking» position (in his own words), so a few months later, in March 1915, he applied to join the air force.

He was transferred to the Dijon airbase on June 21, 1915, to receive theoretical training. On September 23, he was assigned to the Ambérieu-en-Bugey (Ain) Aviation School, where he made his first flight on the 27th, and then soloed on December 17. He obtained his military pilot's license on January 24, 1916.

On February 8, 1916, he was put in charge of training student pilots and promoted on October 1, 1916, to General Instructor, which authorized him to train aviators on all types of aircraft. Upon his demobilization, André Morel, who finished the war with the rank of warrant officer, had logged an impressive 1,638 flight hours. He had trained 1,910 students for their first flight.

He did not reopen his garage and abandoned public transportation. He settled in Lyon because, on April 1, 1919, he had been hired as a Sales Inspector for 40 departments in southern France by the Société des Automobiles Le Zèbre, for which he had been an agent in Bar-sur-Aube before the war.

Faced with the post-war economic difficulties, the company struggled to restart production, and Morel often had to manage conflicts with customers. Under these circumstances, doubting the brand's long-term viability, André Morel put Joseph Lamy and Emile Akar, then shareholders and directors of the Le Zèbre company, in touch with Edmond Moyet, whose personal project for a cyclecar was well advanced. The Amilcar company was thus launched, with Morel holding the same position he had held at Le Zèbre, meaning he was responsible for sales for a vast territory covering almost the entire southern part of the country. While André Morel was the catalyst for the creation of Amilcar, he was also the driving force behind the brand's involvement in racing. In 1922, he established the Racing Workshop and was subsequently appointed first driver and head of the Racing Department.

However, his contracts never mention his involvement in these two entities; they stipulate that he was attached to the Sales Department, which successively referred to him as «Traveler» (1922), «Traveler Inspector» (1925), and then «General Inspector of the Province» (1928).

On each of the contracts signed annually by the two parties, the amount of monthly salaries is specified, but it is added that «the position of runner will not earn (you) any additional remuneration», and that «the racing team is part of the staff paid a fixed salary by the company and should not be considered as dependent on race bonuses from the point of view of its remuneration».

He remained Amilcar's lead driver from 1921 until his dismissal in 1929, which he considered a true betrayal. Unceremoniously dismissed by Marcel Sée, Morel, who apparently wasn't even offered a sales position, harbored a deep resentment towards his former employer, for whom he had taken so many risks, dedicated so much time, and sacrificed his family. In fact, in 1926, he divorced Marie-Anne, with whom he had two daughters, Rolande and Paulette.

Even though he was Amilcar's lead driver, a clause allowed him to race for other car manufacturers under certain conditions:

«It is agreed that you will have the right—as long as Amilcar is not racing at that time—to race in the French Grand Prix for a car manufacturer that is not in competition with us.» (December 29, 1924)).

Letter addressed to André Morel, to be forwarded to him. The traveler is tasked by his employer with visiting
dissatisfied customers…

This work certificate specifies that Morel worked for Le Zèbre from April 1919 to the end of 1920. It is signed by Henri Puech, who was then one of the firm's directors and whom Morel would later meet again after being dismissed by Amilcar. Puech was then distributing American Essex and Hudson wines in partnership with Joseph Lamy.

This contract, dated August 21, 1925, concerns the 1926 season. It stipulates that Morel is primarily employed by the sales department and, independently, is the lead driver for the Racing Department, without additional compensation from his employer. Only travel expenses are covered.
It is clearly specified that the sums paid by the organizers to the drivers go to Amilcar, which retains a large portion before distributing the remainder to the drivers. Only bonuses granted by the equipment suppliers go to the driver, who, however, must share them according to a pre-established scale with the engineer Moyet and the mechanics of the Racing Department. While the amount of these bonuses is relatively modest, their number and frequency represent a substantial sum by the end of the season.

Ou encore :

« faculté vous est laissée de courir une ou deux courses par an pour la Maison Voisin, à l'exclusion de toute autre Maison, sauf autorisation spéciale et écrite de notre part. » (septembre 1928).

Morel, dont les talents de pilote sont reconnus, est donc quelquefois sollicité par Louis Delâge et Gabriel Voisin qui lui proposent un volant dans diverses épreuves prestigieuses.

Morel at the wheel of the Voisin Laboratoire which he drove in the ACF Grand Prix held in Tours in 1923.

En juillet 1923, à l'occasion du Grand Prix de l'ACF disputé à Tours, Gabriel Voisin fait appel à lui pour la première fois pour piloter l'une des quatre voitures « Laboratoire 1923 ». Sur la n° 17, Morel fait équipe avec Chanut, son fidèle mécanicien de chez Amilcar.

La voiture, du type C6 (!), est équipée d'un moteur 6 cylindres, 2 litres, à chemises coulissantes. La carrosserie, au dessin très particulier en aile d'avion, intègre les roues arrière au fuselage, la voie avant étant largement supérieure à la voie arrière.

Morel est disqualifié à l'issue du 8ème tour en raison d'un ravitaillement illicite sur le circuit.

At the 1924 ACF Tourism Grand Prix, Voisin entrusted one of his cars to Morel.

Les trois autres voitures étaient conduites par André Lefèbvre (intime de Gabriel Voisin et futur ingénieur en chef de Citroën, seul à terminer, 5ème et dernier), Arthur Duray et Henri Rougier. Malgré la faible puissance développée par leur moteur, les Voisin Laboratoire ont été chronométrées à 165 km/h en ligne droite, preuve que la recherche aérodynamique n'a pas été vaine. Morel est de nouveau sollicité par Voisin en 1924 pour disputer le Grand Prix de l'ACF tourisme à Lyon sur une voiture « Laboratoire 1924 ». La voiture, type C9 L, 4 cylindres, 32 chevaux est de conception originale. Sa structure est monocoque (comme la Lancia Lambda contemporaine), sur laquelle sont ajustés, aux cotes prescrites par le règlement, ailes et marchepieds. Il termine 4ème de la catégorie voitures légères remportée par Lacharnay sur une Cottin-Desgouttes.

Gabriel Voisin l'intègre aussi dans ses programmes de records de 1927 et 1929. Morel fait alors équipe avec César Marchand et Serge Kiriloff. En 1927, avec une 6 cylindres 8 litres sans soupapes, 23 records du monde de vitesse (toutes catégories) sont battus. Lors d'une autre tentative, la même année, le prestigieux record du monde des 24 heures est porté à 182,6 km/h de moyenne. En 1929, 9 autres records du monde sont établis, cette fois avec une Voisin 12 cylindres sans soupapes de 11 litres. La firme d'Issy-les-Moulineaux engrange aussi le record des 48 heures (à 146,6 km/h) et celui des 240 heures (10 jours à 133,1 km/h de moyenne).

Morel est aussi retenu par Delage. Le 27 septembre 1924, au second Grand Prix de San Sébastian, il est au volant d'une des quatre Delage de Grand Prix, type 2 LCV, V12, 2 litres. Il termine 3ème devant son compagnon d'écurie, Albert Divo, alors que René Thomas et Robert Benoist ont abandonné.

Le 19 septembre 1925, quatre Delage 2 LCV, désormais équipées de compresseurs, sont engagées dans ce même Grand Prix qui voit un triplé de la marque. Morel relaie Divo sur la voiture victorieuse. Ils devancent Robert Benoist et René Thomas.

Morel as seen by Géo Ham

Morel won the 1100cc racing category at the end of the 1925 Bol d'Or, but the overall victory went to Michel Doré on a Sénéchal entered in the 1100cc sport class.

During the 1925 San Sebastian Grand Prix, the young Paul Torchy was killed at the wheel of the Delage 2LCV bearing the number 13. Regarding the number 13, L'Intransigeant published an article in its April 28, 1926 edition:

This text recounts the feelings of seven drivers interviewed about the allocation of the number 13 in races following the five fatal accidents while the car bore this number (Honel in a Salmson at the Armangué Trophy in Spain in 1922, Julien Matthys in a Bignan at the Georges Boillot Cup in 1925, Torchy the same year, and Count Giulio Masetti on April 27, 1926, at the Targa Florio in Sicily).

Morel's Confessions:

«I don't want number 13 on my cowling, and I won't claim it to show off; but if it's assigned to me, I'll take it, and it won't influence me in the slightest.

Perhaps it's just force of habit... because when, during the war, I was a flight instructor at Ambérieu, I trained several hundred students on an aircraft bearing that number, without a single accident.

I must say, however, that one day I had to give it up at the insistence of some students—many of them—who didn't want to compromise themselves...

It's also true that my ACF license bears the number 13... So!... I'd be wrong to complain.»

Morel at the wheel of a Delage 2LCV

In 1926, again in San Sebastian, for the European Grand Prix (July 18), the three Delages entered were of the 15 S8 type (8-cylinder, 1500 cc, twin-cam, supercharged engine). Robert Benoist and André Morel, sharing car number 22, brought it home in 3rd position behind two Bugattis.

The Delage drivers endured a real ordeal in cockpits transformed into ovens due to the heat generated both by the engine and, especially, by the exhaust pipe running along the bodywork. All the drivers stopped and were relieved. After the finish, following a protest by Louis Delâge, the Bourlier-Sénéchal car was reinstated in second place, while the Benoist-Morel car dropped to 4th. One of André Morel's daughters told the author that, his feet burning, her father stopped in the pits, jumped hastily into the tub of ice water holding the champagne bottles intended for the winner, and then fainted. Albert Lory, the car's engineer-designer, redesigned the cylinder head to reverse the exhaust outlet.

The following week, on July 25, 1926, during the Spanish Grand Prix, also held at the Lasarte circuit, Morel, driving the No. 16 LCV, retired from the race.

He drove the Delage 1500 twice more in 1927. On July 3, he finished 3rd in the ACF Grand Prix at Montlhéry and retired on July 31 during the Spanish Grand Prix at San Sebastian. While relations with Marcel Sée remained very strained, Morel's relationship with Joseph Lamy, since the latter's forced departure in 1927,

Morel in a Delage 1500 8 cylinder during the ACF Grand Prix on July 3, 1927. He finished 3rd behind his stablemates Benoist and Bourlier.

remained excellent. The former Amilcar administrator was now working at the Société Française de Vente des Automobiles Hudson-Essex, headed by Henri Puech, another former acquaintance from Le Zèbre. It should be noted that Hudson and Essex cars were, at that time, assembled in Great Britain and Belgium.

Henri Puech was born in Sauveterre-de-Rouergue in 1885, he died in Neuilly in 1972.

Morel was hired by this company in April 1929 as a sales representative. He competed in the Tour de France Automobile in 1929 driving an Essex and in 1930 in a Hudson-Essex. In 1931, he won the sports car category at the Mont Ventoux hill climb.

He drove these touring cars without much enthusiasm, so he left Hudson-Essex without regret to briefly join Minerva, having been offered a truly lucrative position. Morel was then approached and hired by Talbot in September 1932 as a sales inspector. The brand's cars had no sporting aspirations, and our driver continued to be bored. In the 1933 Tour de France Automobile, he accompanied and supervised the Talbot team, and then took the wheel himself on numerous occasions. In 1934, Anthony Lago bought the French branch of the STD group, which included Talbot, and intended to give it a completely different direction. Passionate about racing, Lago launched models with a distinctly sportier character, as well as new racing cars.

Morel won his category at the 1929 Tour de France automobile race in an Essex.

Morel wins the 3 to 5 litre category in the 1933 Tour de France automobile race in a Talbot.

Appointed chief test driver, Morel simultaneously embarked on a second career as an official driver. In 1938, he won the 12 Hours of Paris with Le Bègue and finished 3rd in the 24 Hours of Le Mans with Prenant.

On October 2, 1939, at the age of 55, he left Talbot for the duration of the war. He rejoined the company on November 27, 1946, now as Head of Road Car Testing, a role he held until his retirement on March 4, 1951.

After the war, Morel participated in four more editions of the 24 Hours of Le Mans, each time with André Chambas in Chambas's Talbot. In 1949, the Chambas-Morel team made headlines by retiring on their final lap. The same Talbot T26GS finished 13th in 1950, 17th in 1951, rebodied as a sports car, and in 1952, fitted with a supercharger, it retired after going off the track.

Morel and Dreyfus in a Talbot T150C. André Morel, driving this car, achieved some further successes, notably the 12 Hours of Paris in 1938 with René le Bègue. In the background, the sign advertising the subscription for the French car refers to SEFAC, the company of engineer Emile Petit.

Son palmarès chez Talbot :

28 juin 1936 : GP de l'ACF à Montlhéry, 10ème avec Luigi Chinetti.

5 juillet 1936 : GP de la Marne à Reims, 3ème.

9 août 1936 : GP du Comminges, 9ème.

6 juin 1937 : GP de Marseille, 5ème.

11 septembre 1938 : 12 Heures de Paris, 1er avec René Le Bègue.

18-19 juin 1938 : 24 Heures du Mans, 3ème avec Jean Prenant.

17 et 18 juin 1939 : 24 Heures du Mans. Abandon à la 11ème heure avec Jim Bradley.

Morel was 68 years old at the time. He would remain for a long time the oldest driver to have participated in the 24 Hours of Le Mans.

André Morel had two daughters, Rolande and Paulette, with Marie-Anne, his first wife. He divorced in 1926. Marie-Anne Dormoy, born in 1887, died in 1981. Rolande was born in Bar-sur-Aube in 1912 and passed away in 2002. Paulette was born in 1913 and died in Chaumont in 2000. However, long before his divorce, André had a relationship with Fleurine Guyot (1892-1989), with whom he also had two children, André and Florette, born before his final separation from Marie-Anne. Florette was born on September 8, 1926, and died in 2014. André and Fleurine married later in life, in January 1959.

Morel died on October 5, 1961, at the age of 77 in Vaulx-en-Velin (a suburb of Lyon), where he had retired. He is buried in the Oullins cemetery.

Charles Martin

Until now, very little is known about the life and career of Charles Martin as a pilot. Thanks to some genealogical research and the kindness of a few of his descendants, we have been able to gather valuable information.

He was born on August 30, 1889, in Gensac-la-Pallue, Charente. His military recruitment record indicates that around 1909, he was

Morel was dismissed by Talbot in March 1951 following the liquidation of the Suresnes-based company. It should be noted that the official name was still Talbot-Darracq. It only became Talbot-Lago when Anthony Lago succeeded in raising the funds to relaunch the brand.

André Morel, on the left, is driving a Zebra Type D. He is participating in the Limonest hill climb on April 24, 1921. Fleurine is in the car, so she met Morel well before his divorce.

living in Bilbao, in the Spanish Basque Country. He was living in Cognac in 1912 and then, the following year, at 32 Boulevard de Villiers in Levallois-Perret, in the Paris suburbs.

During the war, he was assigned to the 21st Artillery Regiment and then, on November 20, 1915, was detached to the Lorraine-Dietrich factory in Argenteuil, which manufactured heavy war materiel (trucks, armored vehicles, etc.). He married in 1916 and had two children. Returning to civilian life on August 10, 1919, he settled at 3 rue Rennequin in the 17th arrondissement.

Before joining Amilcar, he was employed by Bignan from 1922. There, he served as «head of development,» test driver, and racing driver.

From 1922 to the end of 1925, while working for Bignan, he participated, alone or as part of a team with other factory drivers (De Marne, Gros, Matthys), in various competitions: endurance races (Circuit des Routes Pavées, 24 Hours of Le Mans), the Grand Prix de Touring, as well as hill climbs, the Tour de France Automobile (driving an 1100cc cyclecar), and the Paris-Nice Rally.

Charles Martin, driver of a landaulet before the Great War.

Martin, in a dark jumpsuit, is sitting on the wheel of the Nieuport equipped with a Lorraine-Dietrich engine, the company that employed him during the war.

His record includes two notable victories: the overall win in a 2-liter Bignan at the 1923 San Sebastian Grand Prix for Tourism, and the 2-liter class victory at the 1925 RAC 24 Hours of Belgium (with Henri-Julien Matthys).

On October 14, 1924, he and his teammates Victor Gros and René Marie set a new 24-hour world record. The 2-liter Bignan he drove covered 2,930 km in two laps of the clock at the Linas-Montlhéry autodrome.

He joined the Amilcar team as a second driver at the end of the 1925 season. Although already 36 years old, he was hired to replace Marius Mestivier, who had died in a race, and to participate in the construction and, above all, the development of the CO model. He raced for the Saint-Denis-based marque until June 1928, when he was dismissed because Amilcar's financial difficulties forced the manufacturer to reduce its racing program. He participated in some 31 sporting events for Amilcar: record attempts, hill climbs, and circuit races. The factory called upon him when two cars were entered in the same race or when two races were organized on the same day at different locations. In the latter case, Morel would make the longer journey himself. Morel was the lead driver and, as such, except in cases of force majeure, his teammate had to step aside. Nevertheless, Martin brought excellent results to his employer. His greatest success was probably his victory at the Brooklands 200 Miles in 1927, but other victories revealed undeniable talent. Reserved and somewhat unassuming, but likeable, he enjoyed an excellent relationship with his teammates. His last appearance in an official Amilcar was on June 10, 1928, at the Grand Prix

Le Petit Parisien, October 14, 1924.

Paris-Nice 1923 on a Bignan.

Royal de Rome, where he was forced to retire.

Charles Martin was involved in only one accident during his contract with Amilcar. It occurred on October 17, 1926, at the Grand Prix du Salon in Montlhéry, held in torrential rain.

The press reported on it:

«...The crowd was large and stoic in the pouring rain. The bad weather forced the organizers to modify part of the program. The distance of the Grand Prix du Salon was thus reduced from 400 km to 200 km, and the motorcycle races could not take place. This was not an act of excessive caution, as an accident is always possible on a wet and often slippery surface.» Martin, the excellent Amilcar driver, was involved in an accident just after winning the first heat of the 1100cc car class. The accident was not too serious, however, as Martin escaped with a broken collarbone and a broken rib. (Le Petit Parisien, October 18, 1926).

Always impeccably dressed, elegant and reserved, Charles Martin, for once, smiles. His tie and houndstooth horizontal striped sweater match his cap.

After being dismissed by Amilcar, he took over a garage in Paris, called Garage des Minimes, at 12 rue des Minimes, in the 3rd arrondissement. He put his tuning skills and experience at the service of his customers. He lived on the premises, but after the Liberation, he did not resume his garage business and instead took the position of workshop manager at Trillaud-Divo, Ford dealerships located on Avenue de Choisy. He worked in particular on the Delahaye 135 #47193 owned by Henri Trillaud, which the latter entered in the Grand Prix de Nice on April 22, 1946. A few days after this race, on May 10, Charles Martin died suddenly at home at the age of 57.

Arthur Duray

He was born in Ixelles, Belgium, on February 9, 1882, just two years before André Morel. Yet, in the 1920s, unlike his teammate at Amilcar, he was considered a veteran, a label justified by his career beginning in… 1898.

Like many drivers of that heroic era, he started with cycling races in 1893 and then naturally transitioned to automobiles. After a few races in Belgium, he moved to France where he joined Gobron-Brillié. The company's second driver, the first being Louis Rigolly, he participated in the 1902 Paris-Vienna race where he was involved in one of the few accidents of his career. While he escaped with only a few bruises, his mechanic, Bosc, suffered a serious head injury.

After a brief stint with Darracq in 1904, for whom he notably finished second in the Mont Ventoux hill climb, he began a long collaboration with Lorraine-Dietrich.

He caused a sensation by qualifying his Lorraine-Dietrich for the 1905 Gordon Bennett Cup qualifying rounds alongside the Brasier cars of Théry and Caillois. In the Cup itself, he finished 6th. He achieved one of his finest victories the following year at the Circuit des Ardennes.

In 1907, at the ACF Grand Prix, he engaged in an epic duel with Nazzaro in a Fiat. He managed to build a sufficient lead to win, but was forced to retire after a gearbox bearing failed on his Lorraine-Dietrich. That same year, he won the Moscow-Saint Petersburg race in a Lorraine-Dietrich 60HP (700 km in 9 hours 22 minutes) and finished 4th in the Targa Florio.

He was undoubtedly one of the best drivers of his era.

The confusion with his namesake C.A. Martin, an early Amilcar agent and purchaser of the Racing Service's cars in 1929-1930, is nothing new. Both were Amilcar drivers, but at different times, and both were garage owners; the misunderstanding is easily explained, especially since journalists, in their reports, almost never mention their respective first names.

Martin participated in the 1933 Tour de France automobile race driving the Amilcar M3 #61, in the 1100 to 1500 cc category. He finished without penalties, tied for 1st place with 18 other competitors!

Palmarès de Charles Martin sur Bignan :

1922 :

Avril, Tour de France sur cyclecar Bignan (5ème).
Juillet, Grand Prix de l'ACF, Strasbourg, épreuve de tourisme (2 litres).
Septembre, Circuit des Routes Pavées (2 litres).

1923 :

Mai, Le Mans, équipage Martin-de Marne sur Bignan 2 litres, n° 24. 112 tours, classé 4ème (2026 km)
Juillet, Grand Prix de Tourisme de San-Sebastian : vainqueur du classement général sur Bignan 2 litres
Aoùt, Meeting de Boulogne-sur-Mer (2 litres)
Septembre, Circuit des Routes Pavées (2 litres)

1924 :

Janvier, Course de côte d'Allauch (tourisme, 2 litres)
Février, Course de côte de la Turbie (2 litres)
Mars, Paris-Nice (2 litres)
Mars, Meeting de Monaco (2 l)
Avril, Meeting de Saint-Lo (cyclecar)
Mai, Course de côte de l'Alouette (2 litres)
Mai, Toul-Nancy (2 litres)
Juin, Le Mans, équipage Martin-de Marne sur Bignan 3 litres, n° 10. abandon 5ème tour
Aout, Meeting de Boulogne-sur-Mer (cyclecar) + Coupe Georges Boillot (2 litres)
Septembre, Circuit des Routes Pavées (2 litres)

1925 :

Mars, Grand Prix de Provence, Miramas
Avril, Course de côte de Château-Thierry (2 litres)
Mai, Course de côte des Alpilles (2 litres)
Mai, Course de côte de l'Alouette (2 litres)
Mai, Course de côte de Poix (2 litres)
Juin, Le Mans, équipage Martin-Matthys sur Bignan 2 litres, n° 32. abandon 65ème tour (1122 km)
Juin, Course de côte de Limonest, vainqueur (2 litres).
Juillet, Grand Prix des 24 heures du RAC de Belgique (Martin-Matthys, vainqueurs en 2 litres)

Palmarès de Charles Martin sur Amilcar :

1926 :

Mai, Records de vitesse d'Arpajon. Kilomètre départ arrêté à 126,072 km/h (record international).

1927 :

Juillet, Victoire de catégorie au Grand Prix de San Sebastian
Octobre, 200 Miles de Brooklands, 1er.

1928 :

Mars, Kilomètre Lancé de Genève : sur MCO 1100 (179 km/h)
Mars, Course de côte d'Argenteuil, record général de l'épreuve avec le CO Déporté 1270/1500 cm³.

The place and date this photograph was taken are unknown. From left to right: Charles Martin, Robert Benoist, Albert Divo in a dark jumpsuit, a man named Bouvet wearing a Panama hat, the motorcyclist Thurotte in leather pants, and Philippe Etancelin in a suit. The woman standing next to Benoist is Bouvet's wife. Pierre Thurotte (1900-1984) raced extensively on Harley-Davidson motorcycles. An active member of the PPF (French Popular Party), he was sentenced in 1948 to 20 years of hard labor and the confiscation of all his property for collaborating with the enemy during the war.

L'Auto-vélo, 19 octobre 1929

Duray was also passionate about aviation, holding Belgian pilot's license number 3. Close to Geo Chavez, he was devastated when the young pilot was killed in a plane crash on September 23, 1910, right before his eyes.

Although he participated in several air shows in 1910, this accident put an end to his ambitions as a pilot.

After his time with Lorraine-Dietrich, he was approached by various manufacturers. He participated in several Touring Car races for Métallurgique and Turcat-Méry. He finished 21st in the 1912 Monte Carlo Rally in a Daimler. On the track, he was entered by Delage to compete in the 1913 Sarthe Cup. He finished in 5th place in a very worn car that had been used for all the trials.

Duray at the Circuit des Ardennes 1905 on a Lorraine-Dietrich.

In November 1913, at Ostend, driving the monstrous Fiat S76 (28.3-liter, 290 hp, 4-cylinder engine), he covered the flying kilometer at 230 km/h during several trials, but the record was not ratified because the maximum interval of fifteen minutes between the out-and-back attempts was not respected, due to weather conditions. His mechanic on this occasion was Prince Soukhanoff, the car's owner. The record therefore remained the property of Victor Hémery, set in 1909 with a Blitzen Benz at 202.68 km/h.

In 1914, he finished 8th in the ACF Grand Prix in a Delage.

That same year, 1914, although announced as a Delage driver, he participated in the Indianapolis 500 in a 3-liter Peugeot belonging to Jacques Menier. He brought it home in second place. He won the Cabourg Meeting in July with the same car. Albert Guyot (one of the few drivers to have enjoyed such a long career, along with Louis Wagner and René Thomas) recounts these two anecdotes about Duray:

"During a Vanderbilt Cup race, on a tight turn, the spare tire, poorly secured, came off. The mechanic, with remarkable dexterity, caught it but nearly got thrown from the car. Duray let go of the steering wheel with one hand, grabbed the mechanic by his trousers, and

Sarthe Cup 1913: Duray drives a Delage which he leads to 5th place.

took the turn without lifting his foot off the accelerator!

On another occasion, a drive chain broke while he was traveling at 140 kilometers per hour." It lacerated his arm; the pain was unbearable. He could no longer operate the brake lever. He signaled to the mechanic… The latter, a true acrobat, crawled and stopped the car. After the First World War, he finished second in the 1922 ACF Touring Grand Prix in Strasbourg, driving a Voisin, behind Rougier (also driving a Voisin).

In 1924, he participated in the Bolides race at the Montlhéry autodrome with the D'Aoust, powered by a Hispano aircraft engine.

He raced more sporadically, notably in an Excelsior, before his career was revived when Amilcar hired him to complete their team of drivers. After this episode, he reappeared in the Ariès touring cars in major endurance races (the 24 Hours of Le Mans and Spa), a marque for which he had been racing regularly since 1924.

After Morel's dismissal from Amilcar, the two men often saw each other and sometimes drove the same cars (Hudson-Essex, Minerva). At the 1929 Critérium des Vieilles Gloires, reserved for drivers aged

Duray on Delage before the 1914 ACF Grand Prix, which he finished in 8th position.

at least 40 who had participated in a race before 1909, he broke the gearbox of his car and entered the race in a delivery van from the newspaper L'Intransigeant!

In 1933, he drove the Citroën 15CV Spido with Albert Guyot, Louis Haubourdin, Louis Wagner, Yves Boillot, and Lucien Bonne.

During his first record attempt, he was involved in an accident. In December 1933, he participated in a record attempt in the 1100cc category in the «Duray Spéciale» (an Amilcar C6) with the De Gavardie brothers. Six international records, including the 24-hour record, were broken. The records belonged to MG and were set on October 7th by the team led by George Eyston. His career ended on this high note after 35 years. Around the same time, Duray, «a former legionnaire and motorist,» obtained French citizenship. He died on February 10, 1954, at his home on Rue Ravignan in the 18th arrondissement of Paris. He was married twice: first to Antoinette Decommer, second to his sister-in-law, Lydie Decommer.

The car will be rebuilt and will return to the track a few weeks later.

Jules Moriceau

This son of bargees was born in Nantes on January 2, 1887. He completed his military service in a nursing unit in Algiers, then settled in the Paris region to work as a mechanic. He lived in Suresnes, where he met Raymonde Marchand, a music teacher, whom he married in 1912. Shortly after, he spent a few months in Russia. During the First World War (1914-1918), he served as a stretcher-bearer and then as an ambulance driver on the front lines. In September 1915, he was wounded near Château-Thierry and subsequently assigned to the Darracq company in Suresnes.

Right after the war, he worked as a mechanic for Ballot, for whom he accompanied Guyot and Wagner to Indianapolis in 1919. He then became a test mechanic for the Talbot-Darracq racing department and assisted Segrave and Divo in races.

From 1923, he became an official Talbot driver and remained so until 1927. Notably, he finished second in the Voiturette Cup held at Le Mans in 1923, behind his teammate, Albert Divo.

In 1925, he entered the 24 Hours of Le Mans with Bourlier, but this sole participation ended in retirement. He won his class in the Soviet Rally, a country he knew well from having lived there before the war.

When the Talbot racing program was discontinued, he joined Amilcar.

In 1928, he was living in Levallois, on Rue Vallier, with his brother-in-law Gaston Blanc (1886-1945), a Citroën salesman, who was married to Raymonde's sister.

After his brief stint with Amilcar, he managed a large garage in Vaucresson. He reappeared, however, in a Talbot during the 1932 Tour de France automobile race.

Jules Moriceau died in Garches on June 20, 1977. His wife survived him by only two years. The couple had one son, Georges (1917-1990).

Jules Moriceau on a Talbot 1500 at Montlhéry before the 1927 ACF Grand Prix. The Talbot No. 4 will be driven by Divo, Moriceau will finish 4th with Williams on No. 10.

We know that the factory cars were not assigned chassis numbers, so we will refer to the CO Déportés as numbers 1, 2, and 3. The CO Déporté made its first racing appearance during the Bordeaux Week, which began on May 20, 1927, with the Monrepos hill climb. Unfortunately, the only photograph we have doesn't provide enough detail to identify it in subsequent races. However, when all three CO Déportés were entered together in the San Sebastian Grand Prix on July 25, the details that distinguish the cars became apparent.

Le CO Déporté n°1

It is immediately distinguished from the other two by its hood, which has only 11 vents above the exhaust. It will retain this feature throughout its racing career. These vents are larger than those on the other two. At Lasarte, it is entrusted to Oscar Leblanc and bears the number 25. Thanks to this unique feature, the No. 1 Remote CO can be regularly tracked.

At Montlhéry on August 14, 1927, it bore the number 12 and was driven by Morel:

Still in Morel's hands, it is entered in the JCC 200 at Brooklands with number 23:

In 1928, Morel piloted it at La Turbie and then, at the Antibes Grand Prix, it was in the hands of Jules Moriceau:

The car reappears in North Africa where it is entrusted to Louis Dupont:

At the 1932 Dieppe Grand Prix, it appears that Scaron was driving it. Even though the photo we have is of very poor quality, it still allows us to discern the shape of the vents:

From 1933 onwards, it was in the hands of Maurice Mestivier, and its history is then perfectly well known:

Le CO Déporté n°2

Unlike car number 1, its hood has 13 vents above the exhaust. The hood support strap is very close to the last opening.

At Lasarte, it bears the number 20 and is entrusted to Charles Martin.

Its oil tank cap is secured by rivets. The two lower rivets are on the same horizontal plane.

In addition, four rivets are visible on the cover:

Charles Martin drove this car at the Boulogne Meeting on September 10th…

...and at Brooklands on October 15th:

In 1928, we find her again, still with Charles Martin, at the Grand Prix d'Antibes:

This CO Déporté disappears after this race. However, we will see that its bodywork will be reused much later on CO Déporté No. 3..

Le CO Déporté n°3

As with car number 2, 13 vents were cut into the hood above the exhaust; however, the hood support strap is located much further from the last opening, a feature that remained consistent throughout the car's production run. Furthermore, the rivets securing the oil tank filler neck are positioned differently. Charles Martin, the driver, at Montlhéry on August 14, 1927:

He is entrusted to Duray for the Boulogne Meeting on September 10th.

At Lasarte, it can only be the car driven by Morel, since the other two have been identified. In the accompanying document, Charles Martin is photographed at the wheel of this car, but we have seen that he will participate in the race with the CO Déporté n°2..

The hood retaining strap is offset from the last upper hood vent. The riveting of the oil tank filler neck differs from that of the Remote CO No. 2. This filler neck is also longer.

On the left, on the Deported CO No. 3, on the right on No. 2.

At Brooklands on October 15th, he was entrusted to Vernon Balls:

For the 1928 Antibes Grand Prix, Morel was the driver. It was equipped with large drum brakes which had been fitted since the Argenteuil hill climb on March 25th, Charles Martin was driving the car then.

Morel at the 1928 Antibes Grand Prix. All these characteristics will be found on C.A. Martin's car equipped with a 4-cylinder engine in 1931 and then on De Burnay's in 1936.

Tableau récapitulatif des participations du Service des Courses en 1926

Date	Epreuve	Pilote	Classement
24-janv	Course de côte du Camp	Morel	1er catégorie
20-févr	Course de côte de la Mi-Corniche	Morel	1er
21-févr	Course de côte du Mont Agel	Morel	AB (sortie de route)
25-févr	Course de côte de la Turbie	Morel	1er catégorie ex-aequo avec de Joncy
25-févr	Km départ arrêté de Nice	Morel	Meilleur temps toutes cat. confondues
07-mars	Course de côte d'Argenteuil	Morel	Abandon
		Martin	Forfait
28-mars	Grand Prix de Provence, Miramas	Morel	1er catégorie, 8ème au général
		Martin	Abandon (alimentation)
09-mai	Journée des records, Arpajon	Morel	Meilleur temps lors du Km lancé
		Martin	Record du Km départ arrêté
16-mai	Course de côte de Limonest	Morel	Abandon
16-mai	Toul-Nancy	Martin	Forfait
23-mai	Course de côte des Dunes, Poitiers	Morel	Meilleur temps toutes cat. confondues
30-mai	Course de côte de Fontainebleau	Martin	1er catégorie, 3ème au général
06-juin	Course de côte de Poix	Morel	1er en 1500cc
		Martin	1er en 1100cc
27-juin	Grand Prix des voiturettes, Miramas	Morel	Abandon
		Martin	Abandon
		Duray	Abandon
11-juil	Meeting de Dieppe, 3 épreuves	Martin	1er
18-juil	Course de côte de Laffrey	Martin	Meilleur temps des voitures
25-juil	Course de côte de Planfoy	Martin	Meilleur temps toutes cat. confondues
08-août	Course de côte du Klausen	Morel	1er catégorie, 3ème au général
15-août	Course de côte de la Broche à rôtir	Martin	Meilleur temps toutes cat. confondues
28-août	Course de côte du Stelvio	Morel	Abandon
05-sept	Grand Prix des voiturettes, Monza	Morel	1er
		Martin	Abandon (compresseur grippé)
		Duray	2ème
12-sept	Course de côte des Moulineaux	Martin	Meilleur temps toutes cat. confondues
25-sept	200 Miles de Brooklands	Morel	3ème catégorie, 7ème au général
		Martin	1er catégorie, 4ème au général
		Duray	2ème catégorie, 5ème au général
03-oct	Course de côte de Gaillon	Morel	1er catégorie 1100 course
		Martin	1er catégorie 1100 sport
17-oct	Grand Prix du Salon, Montlhéry	Morel	Abandon (alimentation)
		Martin	Abandon (sortie de route)
		Duray	1er
24-oct	Course de côte des 17 Tournants	Morel	1er catégorie, 3ème au général

Tableau récapitulatif des participations du Service des Courses en 1927

Date	Epreuve	Pilote	Classement
30-janv	Course de côte du Bd Michelet	Morel	Meilleur temps toutes cat. confondues
06-mars	Km lancé Eaumorte (Genève)	Martin	Meilleur temps toutes cat. confondues
09-mars	Course de côte de la Mi-Corniche	Morel	1er catégorie 1100, 2ème au général
10-mars	Course de côte du Mont Agel	Morel	Abandon (canalisation d'essence)
12-mars	Km départ arrêté de Nice	Morel	1er catégorie 1100, 2ème meilleur temps
13-mars	Course de côte de la Turbie	Morel	1er catégorie 1100, 3ème au général
20-mars	Course de côte d'Argenteuil	Martin	Meilleur temps des voitures
27-mars	Grand Prix de Provence (Miramas)	Morel	1er éliminatoire 1100, finale annulée
		Martin	Forfait
		Duray	2ème éliminatoire 1100, finale annulée
03-avr	Montlhéry, épreuve n°1 en 3 manches	Morel	1er
		Martin	5ème
	Montlhéry, épreuve n°2 formule libre	Morel	1er
		Martin	2ème
10-avr	Montlhéry, épreuve n°1 en 3 manches	Morel	1er
		Martin	2ème
	Montlhéry, épreuve n°2 formule libre	Morel	2ème
		Martin	Abandon
17-avr	Grand Prix des 1100cc, Montlhéry	Morel	Abandon (radiateur crevé)
		Martin	Abandon
		Duray	1er
1er mai	Course de côte des Plâtrières	Morel	1er catégorie 1100, 2ème au général
08-mai	Course de côte du Camp	Morel	1er catégorie 1100, 3ème au général
08-mai	Km lancé de Gémenos	Morel	1er catégorie 1100, 3ème meilleur temps
11-mai	Course de côte d'Harfleur	Martin	Meilleur temps des voitures
20-mai	Course de côte de Montrepos	Morel	1er catégorie 1100 course
22-mai	Km lancé Semaine de Bordeaux	Morel	1er catégorie 1100 course
29-mai	Course de côte de Poix	Martin	1er catégorie 1100, 2ème au général
12-juin	Course de côte de Limonest	Morel	Non classé (tête à queue)

25-juil	Grand Prix de San Sebastian	Morel	Abandon (roulement de roue)
		Martin	1er catégorie, 6ème au général
		Leblanc	Abandon (panne de carburant)
14-août	Montlhéry, course en 3 manches	Morel	2ème
		Martin	1er
10-sept	Grand Prix de Boulogne	Morel	Abandon (magnéto)
		Duray	1er
		Martin	Abandon (sortie de route)
	Grand Prix de l'UMF, Boulogne	Martin	1er
15-oct	JCC 200 Brooklands	Morel	1er catégorie 1100, 2ème au général
		Martin	3ème, 4ème au général
		Balls	2ème, 3ème au général

Tableau récapitulatif des participations du Service des Courses en 1928

Date	**Epreuve**	**Pilote**	**Classement**
29-janv	Course de côte du Bd Michelet	Morel	Meilleur temps catégorie 1100 avec une C6
26-fev	Course de côte de Massillan	Morel	Meilleur temps catégorie 1100 avec une C6
17-mars	Course de côte de la Turbie	Morel	1er catégorie 1100, 2ème au général
18-mars	900 m départ arrêté de Nice	Morel	1er catégorie 1100, 2ème au général
18-mars	Km lancé Eaumorte (Genève)	Martin	1er dans l'épreuve internationale
22-mars	Course de côte de la Mi-Corniche	Morel	1er catégorie 1100, 3ème au général
25-mars	Course de côte du Mont Agel	Morel	Abandon
25-mars	Course de côte d'Argenteuil	Martin	1er en cat.1100 et 1500cc
09-avr	Grand Prix d'Antibes, la Garoupe	Morel	Abandon
		Martin	Abandon
		Moriceau	1er catégorie 1100, 4ème au général
29-avr	Course de côte des 17 Tournants	Morel	1er catégorie 1500, 2ème au général
		Martin	1er catégorie 1100, 3ème au général
18-mai	Course de côte de Montrepos	Morel	Forfait
20-mai	Km lancé de la Croix d'Hins	Morel	Course annulée
10-juin	Grand Prix Royal de Rome	Morel	1er catégorie 1100, 10ème au général
		Martin	Abandon
		Moriceau	Abandon
22-juil	Course de côte de la Baraque	Morel	Meilleur temps toutes cat. confondues
15-août	Epreuve de 900m à Troyes	Morel	Meilleur temps toutes cat. confondues
26-août	Journée des records Arpajon	Morel	Plusieurs records internationaux
1er sept	Records à Montlhéry	Morel	Plusieurs records internationaux

Les records internationaux réalisés par les Amilcar MCO 1100 et 1500

Arpajon, 26 août 1928 **Pilote : André Morel**

Catégorie 1100cc			
Km lancé	17 sec 80	206,895 km/h	Ancien record : 197,432 (Amilcar en 1926)
Mile lancé	28 sec 12	206,032 km/h	Ancien record : 196,394 (Amilcar en 1926)
Catégorie 1500cc			
Km lancé	17 sec 40	210,770 km/h	Ancien record : 208,816 (Talbot en 1926)
Mile lancé	27 sec 56	210,818 km/h	
Km départ arrêté		26 sec 92	133,729 km/h

Montlhéry, 1er septembre 1928 **Pilote : André Morel**

Catégorie 1100cc		
5 Km lancés	205,409 km/h	
5 Miles lancés	204,079 km/h	
10 km lancés	204,568 km/h	
10 Miles lancés		204,216

Ces records ne sont pas des records du monde comme vantés par Amilcar mais des records internationaux.

Quatrième partie

La 6 cylindres « client », Type C6

La 6 cylindres «client», Type C6

The new 6-cylinder model appeared in the Amilcar catalogue at the end of 1925. In the previous chapter, we explained why it was offered at a particularly prohibitive price. Let us briefly recall that two CO type cars were specially prepared for the 1926 24 Hours of Le Mans and that, to comply with the race regulations, the car entered had to be listed among the marque's production models.

From the very beginning of the 1926 season, the idea emerged of selling this new car to amateur drivers who could potentially enhance the brand's record, much like Bugatti did with its Type 37 and Type 35. The Racing Department couldn't be present at every race, and customers could thus fill the gap.

However, marketing the «factory» CO version was hardly feasible for two main reasons: the Racing Department shouldn't be directly competing with customers who had equally high-performance cars, and, above all, the CO engine was a highly sophisticated piece of engineering requiring complex and expensive maintenance. The design office was therefore tasked with developing a derivative of the CO, still equipped with the supercharged, twin-cam, 6-cylinder engine, but offering easier maintenance for such a machine. According to Gilles Fournier's notes, the first plans for this model, named C6 (for Course 6 cylinders), were drawn up as early as mid-March 1926 and focused on the engine, the main component to be modified to simplify the car. The drawings for the supercharger, clutch, and chassis were not finalized until November. Throughout 1926, studies continued, extending into early 1927 for some components.

The car described in the catalog conforms to the CO type, exclusively reserved for the Racing Service. The C6 type actually intended for sale will be significantly different. Note that the advertised tax horsepower is 7CV. This will be increased to 12CV, as the authorities take the supercharger into account. The CO type, despite a few teething problems quickly corrected, proves to be the ultimate weapon in the 1100cc category. In 1926, it reigns supreme over all its completely outmatched competitors.

However, a report from the tests that took place at Montlhéry on May 17, 1926, concerns a car equipped with a detachable cylinder head engine. If this is indeed a prototype of the C6 (the recorded engine speeds correspond), its engine was therefore already operational by that date:

First start: After a warm-up lap, the engine reaches 4200 RPM. This RPM varies from 3900 to 4200 depending on whether the wind is headwind or tailwind. Towards the end of the second lap, the engine speed drops to 3500 RPM, then falls to 3000 RPM during the third lap. The engine stops. The engine is overheating, and the water is vaporizing. There's a lack of fuel. The carburetor is adjusted by Cozette.

Second start: One warm-up lap, second lap - RPM from 3200 to 4300. Third lap - the engine is slowed down, the AC spark plugs ignite. Delage lends Champion spark plugs.

Third start: The RPM remains consistently between 3900 and 4300, reaching approximately 4600 at times. Tailwind.

The 50 kilometers were covered in 24 minutes and 55 seconds (approximately 120 km/h). The engine stopped. The spark plugs were removed to check the carburetion, which was perfect. The engine restarted. The RPM range was maintained between 3900 and 4300. At kilometer 99, the head gasket blew. The gasket was replaced, and the final kilometer was completed.

Fuel consumption: 13.8 liters of gasoline.

Oil consumption: 2 liters.

A four-lap test was then conducted with Gilardoni #100 spark plugs. No pre-ignition, good carburetion. RPM range: 4000 to 4300.

For the first few months, the development of a 6-cylinder «customer-competition» model remained secret, but on August 1st, a journalist from Moto-Revue leaked the information. In the «My Little Finger Told Me» section, it is stated that:

«At the Motor Show, Amilcar will present its six-cylinder racing car, sold with a guaranteed top speed of 150 km/h [...] fifty cars of this model are being produced [...] they will allow amateur racers to successfully defend the brand's reputation in regional competitions...»

The Moto-Revue reporter deserves little credit because, on the same date, Amilcar published a catalog for this car, called the «6-cylinder racing car.» The description remains very brief, but two important details are nevertheless mentioned: the engine's bore and stroke (56 x 74 mm) and the oil tank's mounting between the front axles of the chassis, characteristics of the customer version.

The price is not disclosed.

Amilcar dans la tourmente

When the development of the new 6-cylinder engine began in late 1924, Amilcar's finances were very healthy. The company could afford to invest large sums in this project without jeopardizing its stability. However, in 1926, even though the order book was still full (350 cars were produced monthly), the firm faced significant financial problems due to a lack of rigorous management. The solution involved a capital increase, and shareholders were therefore convened for an Extraordinary General Meeting on October 7, 1926. Joseph Lamy sought to reassure them by announcing, among other things:

«This car is the one that set the world record at Arpajon!»
The C6's performance will be far from matching the factory CO2 emissions. Only cars extensively modified by the British will achieve that.

«Amilcar's racing supremacy is assured for at least two years thanks to the overwhelming superiority of the 1100cc 6-cylinder engine, which will be put into production next year.» This model will be sold at extremely lucrative prices and will constitute a considerable new source of revenue, along with a surge in free publicity."

This initial warning resulted in stricter spending controls. However, the racing program, which had already been allocated significant capital to complete the development of the 6-cylinder engine, was not affected.

The most striking example of these drastic cost-cutting measures concerns the launch of the new model at the 1926 Motor Show, the CGSS type (accompanied by the C6 prototype), which was not supported by any promotional campaign.

In this letter addressed to his bank, Lamy attempts to justify the company's difficulties, which he considers to be temporary.

The presentation of two of Amilcar's most iconic models thus went almost unnoticed…

To attest to this, from the October Motor Show until the end of 1926, apart from the usual few glowing articles financed by the company, no advertisements appeared except for a lengthy piece about the 7CV published at the end of December.

On the other hand, several articles emphasized the company's excellent health, with its turnover constantly increasing: 45 million in 1924, 51 million in 1925, and 80 million projected for 1926… On October 12, during the traditional banquet offered to the agents, Akar, Chairman of the Board, and Sée, Managing Director, specifically mentioned the steady increase in turnover and the number of cars produced, carefully avoiding any mention of the difficult period the company was experiencing. After the meal, all the guests were invited to visit the Margyl coachbuilding workshops in Courbevoie.

However, the difficulties only worsened and became critical. On February 5, 1927, the company was unable to meet a cash flow deadline, the bank withdrew its support, and bankruptcy was inevitable. The Board of Directors approved this on February 19 and granted full powers to one of its managing directors, Marcel Sée, to carry out the procedure. A court-appointed administrator was assigned by the Commercial Court. He was tasked with investigating the reasons that had led to this situation and, in collaboration with the company's management, with stabilizing the finances or, if this proved impossible, initiating liquidation proceedings. In the first case, a moratorium with the creditors had to be obtained (establishing a payment schedule for the debts). In the second scenario, the liquidation of the company's assets, typically conducted through an auction, will be used in whole or in part to repay the debts.

The court-appointed administrator's report first highlights the financial abyss caused by the commercial failure of the 10HP Type E, which was the antithesis of Amilcar's customer expectations. Amilcar's clientele was more drawn to the prestige of the 6HP and 7HP models, forged by numerous racing successes, than to a run-of-the-mill touring car. It seemed obvious, however, that a customer looking for a 10HP sedan would likely opt for Citroën, Renault, or Peugeot models, which were less expensive and very reliably mass-produced. Only 500 Type Es were ever made. Furthermore, the report criticizes wasteful and, above all, risky financial management, particularly the large stock of raw materials that was disproportionate to the immediate needs of production. In addition, the investments required to renovate the Saint-Denis factory in 1924-1925 (layout of buildings, purchase of machine tools) and the acquisition of the Margyl bodywork company weighed down an already failing cash flow.

In April, Amilcar's management requested cash flow facilities from its bank, explaining that the strike at the Margyl body shop (which the Saint-Denis-based company had acquired) was partly responsible for the company's temporary difficulties. This labor dispute was covered by the daily newspaper L'Humanité in its March 5, 6, and 12 editions.

L'Amilcar CGSS au Salon 1926

The administrator's conclusions, however, did not call into question the integrity of the directors and concluded that the company's recovery was possible, a decision granted by the Commercial Court on March 5, 1927. An agreement allowing for the staggering of debts, approved by the Court on June 23, was therefore signed with the creditors.

In early 1927, Lamy published a confidential memo «on the Amilcar affair.» The text is similar to that of the memo dated October 7 of the previous year:

Since its inception, the business has been in constant growth, as can be seen in the attached table (editor's note: the table showing the evolution of turnover and car deliveries).

Despite the very high prices it has always charged, it has never had cars in stock, even during the off-season. Even now, in times of crisis and in a particularly difficult situation, its production is regularly sold. Amilcar's sales power has always been significantly greater than its production. Moreover, to understand the Amilcar case, one must grasp that it differs from typical automobile deals.

Amilcar has no competition and cannot be challenged for long because it has specialized in a well-defined type of car: fast, elegantly designed, and sporty, yet easy to build and therefore inexpensive. This is its stronghold, and it can easily maintain it. Thanks to this unique position, Amilcar can sell its cars at very high prices in every country in the world. The brand enjoys a splendid reputation everywhere. Its racing supremacy is assured for at least two years thanks to the overwhelming superiority of its 1100cc 6-cylinder engine, which will be put into production next year. This model will constitute a new source of considerable revenue as well as a surge in free publicity.

The E-Type and its derivative J-Type (here in Torpedo form) are partly responsible for the company's financial difficulties.

On July 11, 1927, under the leadership of Marcel Sée, then Sales Director of SNPA, a new company, SAFA (Société Anonyme Française d'Automobiles), was created by a group of investors to take over from SNPA. Joseph Lamy and Emile Akar were forced to leave the company they had founded six years earlier. Marcel Sée took the helm of the new company, which continued manufacturing cars under the Amilcar brand..

L'actionnariat de la SAFA

The principal investors were Albert Neubauer, who also served as Chairman of the Board, and the bank Robert Weyl, Sauerbach & Co. Louis Baer, an engineer, was appointed Vice-Chairman and Managing Director (as was Marcel Sée). The other directors were Pierre Franck, Eddy Edmond-Blanc, Daniel Martin, and Lucien Sauerbach.

Albert Neubauer was born in Rio de Janeiro in 1869 and died in Paris in 1940. His first garage, «Le Palais de l'Automobile,» was established on Boulevard Péreire in 1901. Later, he partnered with Maurice Farman and specialized in exporting cars to the United States. A second garage was opened, representing Peugeot, as well as Panhard, Delaunay-Belleville, Renault, and even Rolls-Royce. He adopted Jacques (1897-1977), his wife's son from her first marriage, who would later take over the business. The Neubauer Group, long dedicated entirely to Peugeot, diversified starting in 1999. Today, it represents 17 brands.

Robert Weyl, a banker, was born in Saint-Mandé on June 23, 1880, and died on January 4, 1933, in Paris. He was in partnership with Roger Sauerbach (born in 1891 in Paris, who perished at Auschwitz in 1942). Sauerbach's brother, Lucien, a mining engineer, was born in 1893 and died in 1955, and served as a director of the new company.

Louis Baer, an engineer, was born in Aix-en-Provence in 1886. In 1935, he became Chairman of the Board of Directors of the company L'Outillage RBV.

Eddy Edmond-Blanc was born in Neuilly in 1904 and died there in 1952. He married Princess Paule Murat (1901-1937) in 1928, a direct descendant of Joachim Murat, Marshal of Napoleon and King of Naples. It is worth noting that Eddy's brother, François, was the second husband of «Coco» (Martine Paolucci), who married Jacques-Henri Lartigue in 1934. Princess Paule Murat was first married to the Prince of Cystria.

Pierre Franck was born on May 31, 1891, in Paris. He was the Director of the Neubauer Automobile Palace. He died in Buenos Aires on May 16, 1981.

Among other investors were Daniel Lucien Martin (Benerville 1901-Cannes 1979), Herbert Meyer (London 1881), Robert François (engineer, Paris 1896-1958), André Briès, née Brisenmeister (company administrator and later director of Rosengart, Paris 1881 - La Chapelle-sous-Gerberoy 1979), and André Francfort (Le Puy-en-Velay 1897).

Daniel Lucien Martin married Annette Schumann (1904-1994) in 1923. The couple divorced in 1930. Annette Schumann later remarried Jean Fraissinet, a shipowner from Marseille, who was the father of Régis from his first marriage. Régis Fraissinet (1931-2023), a racing driver, competed in the 1964 24 Hours of Le Mans in an AC Cobra and in 1965 in an Iso Grifo, each time with Jean de Mortemart. He also raced Ferraris, Abarths, Porsches, and one of the Cooper-Maserati F1 cars in 1968.

Le Prince de Cystria, premier mari de la Princesse Murat a été un personnage atypique.

At the 1923 ACF Grand Prix, he drove one of the Bugatti tanks. He went off the track and retired. His real surname was Bertrand de Faucigny-Lucinge. He was born on December 3, 1898, in Paris, where he died on February 22, 1943, at the Saint Antoine Hospital. De Cystria also participated in the Bugatti adventure at the 1923 Indianapolis 500. He is seen again at Montlhéry in 1924 driving an Austin, after which he does not appear in any further races. He began his racing career in 1922 driving a 2L Ballot (in hill climbs and the Boillot Cup).

He married for the first time to Paule Murat (1901-1937), great-great-granddaughter of Joachim Murat, Marshal of the Empire, and Caroline Bonaparte, Napoleon's sister. The couple divorced in 1926 (in fact, the marriage was declared null and void by the Church). They had one daughter, Diane (1922-1973). Bertrand de Faucigny-Lucinge, a recipient of the French and Italian Croix de Guerre, was convicted in 1931 for drug use. In 1930, he had also been convicted of issuing bad checks and fraud. He bought cars with the checks and resold them. He was sentenced to six months in prison, which he served in 1936.

In 1931, he turned himself in at a Parisian police station, clearly suffering from withdrawal, and was taken to the hospital. He had been using morphine for years (likely since receiving a serious head injury during the war on July 12, 1918) and had already undergone several detoxification treatments. His second wife, Maria Lloveras, whom he married in December 1927 and who was born in Buenos Aires in 1898, left him, frightened by his erratic behavior. As early as 1923, riddled with debt (from gambling and drugs), he had sold the family castle of Coat an Noz in Belle Isle en Terre.

He was arrested again in September 1941 and disappeared in February 1943.

A testimony from Seagrave.

Article dated 1930: he had even swindled his friend De Vizcaya.

Présentation de la C6 au Salon d'octobre 1926

Two 6-cylinder models are on display at the Amilcar stand at the Paris Motor Show, which opens on October 7: the CO, still bearing the number 101 assigned to it for competing in the Gaillon hill climb with Charles Martin, and, presented without bodywork, the prototype of the C6 type. On this chassis, the single-ended engine has been replaced by an engine with a detachable cylinder head, and the crankshaft is no longer mounted on rollers but on regulated bearings.

The ladders still in place prove that the October 1926 Motor Show was not yet open to the public. On the brand's stand, the CO type and the new CGSS are prominently displayed. The C6 chassis is not visible. Three G type sedans and a C4 faux cabriolet, recognizable by the crossbar supporting the headlights, complete the stand.

The C6 project was not yet complete, and while the model appeared in the catalog published for the Motor Show, it was not yet on the market. The description was rather brief, and the selling price was not specified.

It appeared for the first time in the 1927 model price list under the name «Type C6 car,» but its price was still not stated.

During the Motor Show, numerous articles were published in the press. These were dictated by Amilcar itself and, therefore, all repeated the same information. They announced the upcoming launch of the C6 and skillfully maintained the confusion between the performance of the factory versions and that of the new model.

October 14, 1926. L'Auto:

A New Record for Amilcar

Amilcar, the brand that created «the fastest 1100 cc in the world,» was a specialist in records, whether sporting, industrial, or commercial.

Advertisement published in L'Auto on October 7, 1926

Amilcar has just established a superb reputation by presenting its latest creation at the Motor Show: the 1100cc 6-cylinder chassis, identical to the one that recently triumphed in the Italian and British Grand Prix. This chassis, a marvel of mechanical perfection, will go into series production and will soon be delivered to customers. It will undoubtedly be the prototype of the supersport car and will soon enjoy tremendous success among enthusiasts of fast cars, thanks to its impeccable construction and truly attractive price. Go see this chassis and you will certainly join us in saying: Bravo, Amilcar!

October 17, 1926. La Revue Motocycliste et Automobile:

"We have saved for last the new model presented by Amilcar: the six-cylinder, an ultramodern racing car, unbeatable by any car in its class, anywhere in the world." Stemming from the research that enabled Amilcar to claim the international records in the 1100cc category, this 6-cylinder engine features twin overhead camshafts. This car will be available with or without a turbocharger. Its handling is as perfect as that of the four-cylinder Grand Sport, and as for its speed... a top speed of 200 kilometers per hour was officially recorded at the Arpajon speed trials.

This mechanical marvel is a must-see; it's one of the highlights of the show, and there's no doubt that all sports car enthusiasts will want to test drive it, which will be easy since Amilcar has reserved a chassis for this purpose.

«The car reserved for these tests» doesn't exist, and furthermore, the launch of the very limited production run is significantly delayed. A letter from the Amilcar company addressed to a client on October 29, 1926, a few days afters la fermeture du Salon, en atteste:

> «Sir,
>
> We have received your letter of the 26th of this month, and in response, we are enclosing a copy of our illustrated catalog, as well as a current price list detailing the prices of our various models, with the exception of the 6-cylinder. Indeed, we will not be able to deliver this new model for several months. We lack sufficient cost information to determine the selling price, and furthermore, exchange rate fluctuations could lead to price disruptions and risks for us. However, our Grand Sport model is sold at a fixed price of 26,900 francs... Delivery of this Grand Sport model is currently 15 days from the date of order receipt. All our models, except the 6-cylinder, have side valves... The valves of the 6-cylinder are operated by overhead camshafts. Water cooling is provided by a radiator and pump, and oil cooling by a circulating radiator.» The suspension consists of semi-elliptical springs at the front and half-cantilever springs at the rear. The chassis is enclosed. The top speed will be approximately 160 km/h. It is a «racing» type. The price will be approximately 75,000 francs. However, if you are looking for a car that can be used at any time and not a special racing car, the Grand Sport is the one to buy.

Shortly after the Paris Motor Show, the same C6 chassis was exhibited at the London Motor Show. The British press reported on it: "At the Olympia Motor Show, most enthusiasts in the world of mechanics had their eyes glued to the supercharged 6-cylinder Amilcar chassis, and many questions were being asked about its price and production capacity" (Autocar, November 12, 1926). The first tests of the C6 type took place in December 1926 at the Montlhéry autodrome. Moto-Revue reported on it in its January 1, 1927 issue:

"...the 6-cylinder Amilcar, customer type, has just completed its tests at Montlhéry and reached a speed of 165 km/h [...] next season, for wealthy and daring enthusiasts willing to push the throttle to its limits, it will be an opportunity for some great battles."

The development process continued during the first weeks of 1927. Finally, customers who had already placed orders had to wait until the end of March, five months after the Salon, for the first cars to be delivered.

La C6 et le Service des Mines

We saw in a previous chapter that the CO type was approved by the Mines Department (see page 87). A fortiori, a car like the C6, intended for commercial sale, obviously had to pass the Engineer's inspection.

At the end of the first quarter of 1927, the car could finally be presented to the relevant department. The company's management eagerly awaited the delivery of the first models, which would provide a significant and essential cash injection necessary for the survival of the company, which, it should be remembered, had just filed for bankruptcy.

Amilcar's initial request for approval of the new C6 was made by telephone. The urgency was cited, explaining this faster method of communication than traditional mail; an appointment was requested as soon as possible.

Unfortunately, the Mines Department was overwhelmed and seemed reluctant to favor the manufacturer from Saint-Denis. Finally, the engineer proposed a compromise: The C6 type would not undergo a separate approval process, but it would benefit from the approval granted a year earlier (March 2, 1926) to the CO type, which had a fairly similar design.

This verbal agreement allowed for the immediate homologation of the new model, but the Mines Department was slow to send the official approval report. Amilcar's management grew impatient and sent a follow-up letter.

The letter was annotated by the recipient: «Call them and ask them to send a printed copy, which my colleague will return certified as a true copy.»

The person tasked with making the initial phone call was not acting promptly, as a new letter was sent on April 5th.

Three days later, on April 8th, the engineer's reply confirmed that Amilcar needed to provide a copy, which he would initial.

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Three days later, on April 8th, the engineer's reply confirmed that Amilcar needed to provide a copy, which he would initial.

"My department is currently overloaded with urgent typing work…" Yet this letter was typed by one of his employees!

Despite the urgency declared by Marcel Sée, the copy was only returned on April 26:

"To the Chief Engineer (very urgent):

We have the honor of requesting that you find enclosed a copy of the descriptive notice for our Type C6 cars.

We would be most grateful if you would have this notice checked against the original in your possession and affix the usual statement certifying that the type in question complies with the provisions of the Highway Code.

We are enclosing a stamped, self-addressed envelope for your reply.

With our thanks, please accept, Mr. Chief Engineer, the assurances of our highest consideration." In summary, the C6 type was not approved by the Mines Department but retained the earlier approval of the CO type. As a result, the manufacturer's plate riveted to the C6 chassis is engraved with CO, while the engine numbers clearly bear the designation C6! The C6 registration certificates therefore also refer to a CO type.

On the left, the manufacturer's plate of the C6 #11051, riveted to the chassis, is engraved type CO while the engine plate of the same car (on the right) is listed as C6. Of course, the registration certificate includes the same information.

Even though the CO and C6 types are quite similar in design (chassis with few differences, 6-cylinder engine of similar appearance), it is still surprising that the Mining Engineer approved homologation without examining the new car in detail. He therefore considered it a simple evolution of the CO type (racing car) into a modified model for commercial use, which, ultimately, is quite close to the truth.

The descriptive document for this same chassis 11051, issued by the factory, logically reiterates the characteristics of the first CO type, notably the 55 x 77 mm bore and stroke, and specifies that «the cylinder is cast as a single piece with the cylinder head.» However, the C6 models are equipped with a 56 x 74 mm engine with a detachable cylinder head. Further on, it is stated that the fuel tank «is located under the firewall,» whereas on the C6 it is mounted at the rear of the chassis.

Nowadays, it's hard to imagine the delivery of a car, or any household appliance for that matter, that doesn't perfectly match the manufacturer's description. But back then, customers were less litigious. They knew, when they signed the order form, that they would receive a car derived from the factory's racing cars, capable of performing well in regional competitions, and that's all that mattered to them. They didn't care whether it was registered as a CO or a C6!

In the very few official Amilcar publications concerning its customer model «CO/C6,» it is always referred to as a C6.

For simplicity, we will use this designation.

Les premières livraisons et le Salon 1927

With type approval from the Mines Department granted, the first deliveries could begin. These took place in April/May 1927, well before the final version of the C6 (this time with its bodywork) was officially unveiled to the public at the Paris Motor Show in October.

Two examples were then displayed on the Amilcar stand: the first, a chassis/engine only, to showcase its beautiful 6-cylinder engine; the second, fitted with a two-seater body equipped with a half windshield and a spare wheel, was ready to hit the road. They were presented alongside the company's other models: the CGSS, which had appeared the previous year; the ever-popular C4; and the L, which replaced the G.

The C6s were not assembled in the factory's mass production workshops but individually at the Racing Department. This choice is explained by the car's unique characteristics, the meticulous care required for its assembly, and, above all, by production rates unrelated to any mass production. Indeed, production can be estimated at two cars per month in the best years.

The descriptive notice for C6 #11051 lists the characteristics of type CO: 55 x 77 engine, blind block, pressurized tank on the cowl. However, the C6 is equipped with a 56 x 74 engine, a detachable cylinder head, and a rear-mounted tank!

La production de la C6, 1927-1931

The C6 model is listed in the catalogs for 1927, 1928, 1929, and 1930. The model was no longer on display at the Amilcar stand during the October 1930 Motor Show, and the last cars were delivered during 1931.

The C6 was therefore offered to customers for four years without any major modifications. Its price in 1927 remains unknown, but in 1928 it was listed at 60,000 francs (a CGSS was then priced at 24,000 francs). In 1929, the price increased to 80,000 francs and remained unchanged the following year.

Given the very limited production of the model, no specific catalog was published. The car simply appeared in the brand's general catalog, and its description remained extremely brief.

The car was intended for a specific clientele; On the one hand, there were amateur drivers who bought with full knowledge of the car's specifications, and on the other hand, there were motorists passionate about fine engineering, sufficiently wealthy, and eager to stand out. The latter would undoubtedly have been more interested than the former in a catalog describing the car in detail, and there is little doubt that an order was only placed after the customer in question had approached a dealer.

Documents extracted from Moto-Revue of November 1, 1926. The vertical compressor and the SEV magneto are perfectly visible.

The C6 prototype is photographed at the factory before its transfer to the Motor Show. The oil tank is not mounted between the front frame rails, and the exhaust pipe is cut at an angle. The cowl is more rounded than on the production models.

The car was exhibited at the Paris Motor Show, probably in 1928. It is equipped with a SEV magneto and… a splendid radiator mascot in the likeness of Pegasus, the winged horse (the Amilcar Pegasus would not be presented until 1934).

In this magnificent photo, the driver's position suggests that the C6 (one of the first, registered in the Seine department) is moving, but this is not the case!

Dealers weren't necessarily seeking such sales, even if their commission was substantial. Maintaining such a sophisticated 6-cylinder engine in the hands of an average driver was likely to cause more problems than it solved.

While the C6 didn't have a dedicated catalog, it also didn't benefit from a promotional campaign, neither at its launch in 1927 nor in subsequent years. Logically, the company knew that the customer base for this model was necessarily limited and that it was pointless to invest large sums in advertising spaces entirely devoted to the C6.

On the other hand, Marcel Sée wanted to steer the brand's production towards luxury cars and devoted all his energy and advertising budgets to the 8-cylinder touring car. The C6 occupied only a niche and, according to the head of Amilcar, it didn't need to be promoted any further. The Amilcar boss's obsession with the 8-cylinder, which was a commercial failure due to its unreliability and, above all, its failure to meet the criteria of a true luxury car, led to the abrupt end of its racing involvement at the beginning of 1929. From then on, the C6, despite its extraordinary qualities, remained definitively marginal within the range.

Production figures

The factory's manufacturing or delivery records for the C6 have not survived. However, the number of cars produced can still be estimated as best as possible using the archives of the French Manufacturers' Association (see the table on page 329). These documents, based on engine numbers, reveal 13 cars built in 1927 (engines 90001 to 90013), 26 in 1928 (90014 to 90039), and 8 in 1929 (90040 to 90047), for a theoretical total of 47 cars (provided that no 6-cylinder engines were assembled as spares and that their numbers are included in these records). To this must be added those that would have been manufactured in 1930 and 1931. It is certain that several cars remained in storage at the factory before being sold. Thus, C6 #11051, equipped with engine 90044, was only registered new on February 5, 1931, even though engine 90044 had been assembled in 1929.

The press mentioned this small production run, but it was relying on information provided by the factory itself. For example, Moto-Revue, in its August 1, 1926 edition, stated: «...fifty cars of this model were put into series production...»

Pierre Chan also offered his account: «As always, customers wanted a car that resembled a racing car as closely as possible. We had planned a series of 60 cars. I don't know how many were actually produced. The price was 60,000 francs, very high for the time.»

However, it should be noted that, for example, #11063 was assigned to MCO 1100 in 1931 when it was sold.

It is likely that the actual number of C6s produced will remain forever unknown. The estimate of 47 to 68 cars is unfortunately too imprecise.

The C6 at the Amsterdam Motor Show in 1928, still with the Pegasus mascot.

A C6 fitted with complete road equipment was offered by the British importer Vernon Balls to its customers.

The price of the C6 rose to 80,000 francs in 1929, an increase of 33% compared to the previous year! A CGSS was then billed at 29,500 francs.

Marcel Pouliguen left Amilcar in May 1928. His work certificate was written on letterhead from the Société Nouvelle pour l'Automobile, overprinted with the company's new name following its liquidation at the beginning of the previous year. The document specifies Pouliguen's special assignment to the assembly and fine-tuning of 6-cylinder cars. The fitter-mechanic returned briefly to Amilcar (from August 27 to November 22, 1929).

The C6 in the catalogue published in March 1928 is priced at 60,000 francs.

#11054 still exists today. This car, along with #11051 manufactured in 1929, also dates from that model year. It was, in principle, equipped with engine 90041 and would therefore be one of the last cars assembled in 1929.

Finally, on July 8, 1930, the vehicle registration records for the Alpes-Maritimes department recorded car number 11069.

If the order of the numbers has been respected, the series having certainly begun with #11001, it follows that 69 C6s would have been manufactured. To this figure, we must add the 10 to 12 cars built by the factory (CO, CO deported, and MCO) which were not numbered.

The production of the Ami The six-cylinder Amilcar was, in any case, very limited in production. With only about 70 cars produced in four years, it pales in comparison to the company's annual output (3,000 to 4,000 cars).

Georges Dumond, a very active agent in Lyon, had a demonstration car on loan from the factory, but he didn't manage to sell a single one in his region, where, nevertheless, attractive cars usually found buyers quite easily.

Compared to Bugatti, Amilcar was a failure. The Molsheim-based manufacturer managed to sell its Type 37 and Type 35 models in large numbers at very high prices. These cars, highly versatile in racing and capable of winning major competitions, were also perfectly usable on the road. The Amilcar C6, also very comfortable on the road, only allowed it to be classified in the 1100cc category, which had fallen into disuse by the early 1930s. It would seem that this engine size is the real explanation for its modest sales. Perhaps it needed a true 1500cc engine to boost sales? Or perhaps production had to begin as early as 1925? The limitations of the MCO's 1270cc engine wouldn't have been enough; a new engine would have had to be developed, which was out of the question given the company's financial difficulties.

Présentation de la C6 à l'étranger

The company has a presence in numerous countries and is relying on this international network to sell its C6s. As soon as the model went into production in April 1927, one example was already sold in Switzerland. Another went to Italy in June.

After the Paris Motor Show closed, the car was immediately exhibited at the Olympia Show in London, then moved to the Brussels Motor Show in November. In 1928, it was presented at all the major European motor shows (Geneva, Berlin, Amsterdam, etc.).

Caractéristiques techniques de la C6

Derived from the second version of the CO-type 6-cylinder engine, with its modified bore and shortened stroke (56 x 74 mm), which powered the factory cars, the C6 engine thus shares a similar architecture and external appearance.

The main modifications aimed to reduce manufacturing costs for the factory and maintenance costs for the customer.

It's worth noting that, on the CO, the casting of the single-ended block, the machining of the valve seats, and the extremely complex crankshaft assembly significantly increased the engine's production cost. With a simplified casting process achieved through the use of a detachable cylinder head, machining and all work on the top end of the engine are facilitated.

The C6's crankshaft, like that of the CO, rotates on seven main bearings, but on the C6, only those at the two ends are mounted on roller bearings, whereas the CO's crankshaft is entirely mounted on roller bearings. The central bearings and connecting rods of the C6 engine rotate on bronze bushings.Le moteur :

6 cylindres en ligne. Alésage 56 mm, course 74 mm.

Cylindrée 1097 cm^3.

Taux de compression : 5,5 :1

Régime d'utilisation : 3500 à 5000 tours/minute.

Régime maximum conseillé par le constructeur : 5600 tours/ minute (le moteur atteint sans difficulté 7000 tr/mn mais avec un carburant spécial).

Puissance indiquée par le constructeur : 62 ch à 5600 tours/minute.

Puissance fiscale 12 CV.

The brand's Lyon-based agent, Dumond, received a C6 on loan from the factory with the aim of selling a few in the region. It was all in vain; none of them found favor with local customers, whether amateur drivers or wealthy car enthusiasts.

The cast iron cylinder head is attached to the block by 14 studs. The camshafts are inclined at 38° from the vertical (50° on the CO engine).

The combustion chambers are hemispherical, and the spark plug wells are slightly offset from the cylinder's centerline.

The two valves per cylinder are returned by three concentric springs. Intake valve diameter: 32 mm, exhaust valve diameter: 30 mm. The angle between them is 76° (compared to 100° on the CO type).

Valveiling is achieved by two overhead camshafts, each mounted on four main bearings.

The C6 chassis at the Brussels Motor Show

At the end of 1928, in neighboring Switzerland, the C6 was priced at 14,500 francs.

Three smooth bearings and one ball bearing bearing (timing side).

They are driven by a cascade of five spur gears located at the rear of the engine. The crankshaft gear has 24 teeth and drives a 58-tooth ring gear. The upper part of the cascade consists of a 48-tooth gear meshing with two other 48-tooth gears mounted on the camshafts. The ring gear also drives a 32-tooth gear mounted on the drive shaft for the water pump and magneto.

The cams, with different profiles for intake and exhaust, adapted to the supercharger, actuate the valve stems via rocker arms.

The cylinder block is made of cast iron and incorporates the upper half of the crankcase. The lower crankcase is cast aluminum.

The crankshaft has circular flanges and is machined from a solid block of steel.

The pistons are made of a light alloy and feature two sealing rings and an oil scraper. The piston pin is secured to the connecting rod small end with a screw and nut, and the piston is free to rotate on its axis, as on the brand's side-valve engines.

The cylinder head gasket thickness is adjusted to allow for setting the backlash between the timing gear teeth.

Lubrication is a dry sump system under high pressure. A two-stage bronze oil pump is embedded in the lower crankcase and driven by one of the timing gears. The seal between the pump body and the crankcase, as well as the seal between the pump's oil passages and those of the crankcase, is achieved by clamping the bronze of the pump to the aluminum of the crankcase. The oil pump can be installed after the crankcase has been heated to expand using an external heat source (oven or blowtorch). The first stage of the pump drains the oil collected in the lower sump and sends it to the external oil reservoir/cooler. The second stage draws oil from the reservoir and distributes it to the lubrication system for the engine's moving parts.

A valve controlled from the dashboard allows the oil flow rate to be adjusted. The monograde oil used at the time had a very high viscosity when cold, requiring the valve to be fully opened at startup and then gradually closed as the lubricant warmed up.

Hot operating pressure: approximately 1 kg/1000 rpm.

Oil reservoir/cooler capacity, located between the front frame rails: 12 liters.

The lower sump housing the oil pump has three vertical breather ports, one of which also collects vapors from the oil reservoir. The engine is supercharged by a horizontal Roots-type supercharger with two two-lobe rotors, continuously driven at engine speed by the crankshaft via a damper system to dampen shocks. This supercharger differs from those of the CO series. The lobe length has been reduced from 90 to 75 mm, resulting in a 20% smaller air volume. It should be noted that the first C6, the one exhibited at the Motor Show in late 1926, was equipped with a vertical supercharger.

Distribution cascade diagram

Les cames attaquent les queues de soupapes par l'intermédiaire de linguets.

The supercharger's drive gears are lubricated by a simple oil spray from a bypass tube on the oil line that returns the lubricant from the cylinder head to the crankcase after lubricating the entire engine.

The supercharger draws the fuel-air mixture through the carburetor and distributes it to the cylinders via a long intake manifold located on the right side of the engine block. A relief valve is located at the inlet of this manifold.

Horizontal Solex carburetor, bronze, with a slide or butterfly valve, 40 mm bore. Idle jet: 50 to 55. Main jet: 180 to 200.

The fuel supply system is pressurized by a mechanical piston pump driven by the engine. The tank is pressurized by a hand pump for starting the engine. The usual operating pressure is 0.1 kg/cm².

Ignition is provided by an S.E.V. Racing magneto on the early models, then by a Scintilla MN6 ¾ with a rotating magnet, driven at 3/4 of the crankshaft speed (Firing order: 1-5-3-6-2-4, magneto rotation: counterclockwise).

The water pump and magneto are mounted on the left side of the engine block. They are coupled and driven by two Simms-type toothed joints.

The exhaust manifold has six outlets that merge into a single pipe, which is extended by a 60 mm diameter exhaust pipe with direct exhaust flow, without a muffler.

Water cooling is provided by a pump.

The engine is rigidly mounted to the chassis at four points.

La magnéto

A four-cylinder, four-stroke engine requires two crankshaft revolutions to complete one cycle. To ignite the four spark plugs during this cycle, a conventional magneto must complete two revolutions. Its tension-cutting cam has two bosses arranged at 180° intervals, which allows it to produce two sparks per armature revolution. The magneto therefore rotates at the same speed as the crankshaft.

With a six-cylinder engine, the data remains the same: two crankshaft revolutions are required to complete one cycle. However, this time, to supply the spark to the six spark plugs, the magneto must complete three revolutions, meaning it rotates one and a half times faster than the crankshaft.

With an engine like the Amilcar's 6-cylinder, running at high speeds and with an ideal operating range between 3500 and over 5000 rpm, the magneto's very high rotational speeds result in a very frequent breakage, potentially causing voltage fluctuations and premature ignition. Furthermore, centrifugal force generates stress on the moving parts, primarily the armature, which can be damaged.

To address this, alternatives are available with two types of magneto:

- the rotating magnet type, in which the winding is fixed and therefore not subject to deformation caused by centrifugal force;
- the four-spark type, producing four sparks per revolution, which allows for a significant reduction in its rotational speed.

The Scintilla MN6 «3/4» or AM6 «3/4» type magnetos fitted to the Amilcar C6 engine combine these two advantages.

They are equipped with a tension-break cam featuring four bosses arranged at 90° intervals, which control the opening of the contacts four times per revolution, resulting in four sparks per revolution. They consist of a 4-pole rotating magnet and four pole pieces integrated into their body.

Consequently, for the six sparks in one engine cycle, this magneto

only needs to complete one and a half revolutions. It therefore rotates at half the speed of a conventional magneto, or at three-quarters of the crankshaft speed, hence its «3/4» designation.

The Amilcar engine's magneto rotates counter-clockwise and, the only negative point of this 3/4 configuration, is that starting the engine with the crank is more difficult due to the lower rotation speed of the magneto.

It should also be noted that the magneto is driven in tandem with the water pump on the left side of the engine by a shaft parallel to the crankcase. This shaft is itself driven by a gear meshing with the timing chain. The diameter of this gear determines the magneto's rotational speed, as well as the distance between the crankcase and the drive shaft. If a conventional magneto had been used—that is, one that rotated twice as fast as the four-stroke-per-revolution magneto—this gear would have had half the number of teeth and, therefore, a smaller diameter. In that case, the crankcase-to-magneto distance would have been insufficient to offset the magneto outside the engine casing.

L'embrayage, la boîte de vitesses et la transmission.

The clutch mechanism remains very conventional, with a single plate and disc operating dry. The gearbox offers four forward gears plus reverse. Fourth gear is direct drive.

The reverse gear locking lever is located on the right side of the gearbox.

Power is transmitted via flexible couplings and then half-shafts mounted under a two-part tube. A bearing in the center of this tube ensures the half-shaft is centered.

Le pont

It is a banjo-type differential with end caps/flange holders pressed onto the axle housings and then riveted to them. The bevel gear set has straight-cut teeth. Some cars were delivered without a differential.

The original gearing, with a ratio of 12 x 54, gives a speed of 29 km/h at 1000 rpm in direct drive. According to the manual, this gearing «allows the engine to be used at its maximum speed of 5600 rpm, either on a relatively flat track with long straights, or on a racetrack, or for flying kilometers, in which case the flying distance must be at least 1 kilometer.»

Other, shorter gear ratios are also offered by the manufacturer:

- 11 x 55 (26.5 km/h per 1000 rpm) ideal for hill climbs of 5 to 10%,
- 10 x 55 (24 km/h per 1000 rpm) for steeper climbs.

L'essieu avant et la direction.

The front axle is made of forged steel, with a U-shaped cross-section that opens at the rear. To lower the car, this axle is angled at its ends.

The steering box is a worm and sector type, with a bronze body. The maximum steering angle of 38° is achieved by rotating the steering wheel 270°.

La suspension

It is provided:

- at the front, by semi-elliptical springs positioned obliquely to the chassis axis and located outside the chassis. The rear end of the main leaf spring slides in the slot of a bronze oscillating barrel. Under load, the spring deflection is negligible.
- at the rear, by diverging quarter-elliptical springs articulated without swages on the axle's trumpet-shaped ends.

It is completed by four Hartford friction shock absorbers (No. 101 at the front and No. 103 at the rear) with greased wooden friction washers.

Les freins

A 4 mm diameter steel wire cable system on all four wheels acts on 260 mm diameter cast iron drums with 30 mm wide brake shoes.

The pedal controls all four drums via a balancing lever.

The hand lever operates only the rear brakes.

At the front, the braking system uses the principle patented by Amilcar in 1922, which was applied to all its models, with the brake shoe control rod passing through the center of the pivots. Thanks to this design, braking performance is unaffected by the wheel's steering angle.

The tables on the left give the different dimensions of the Scintilla AP6-AM6 and AG6 magnetos.

On the right of the drawing (therefore on the left of the engine): the water pump, the exhaust side camshaft. On the left: one of the oil breathers, the intake manifold, the intake camshaft actuating the valve via a rocker arm.

Even though the cylinder head is detachable on the C6 engine (unlike the CO engine's, which comes cast with the block), it remains a complex part to manufacture. The very thin internal fabrics and the numerous cores that don't stay in place during casting explain the significant number of parts that are rejected.

With the radiator removed, the 12-liter oil reservoir, mounted between the frame rails, is visible. It normally has six longitudinal tubes that supply fresh air to cool the lubricant.
The horizontal Roots supercharger, with two rotors and two lobes, is continuously driven by the crankshaft. It draws the fuel-air mixture from the carburetor (visible to the right of the supercharger) and blows it into the long intake manifold.
The camshaft covers are made of aluminum. The timing chain is located at the rear of the engine block.
On the right, the magneto is housed under the 6-into-1 exhaust manifold, which is extended by a simple 60 mm diameter pipe.
Stands mounted at the front on each side of the frame support a transverse tube to which the engine is attached.
Six spare spark plugs are screwed into the firewall.

This view highlights the three lower crankcase breathers, the supercharger, and the long intake pipe with its relief valve located at its inlet.

The chassis exhibited at the 1926 Motor Show has a much more rounded canopy than later models. The engine is equipped with a vertical supercharger and the gearbox lacks a reverse gear lock.

The drawings of patent no. 571402 filed by Amilcar for «Improvements to brakes for rotating components, such as the steering wheels of an automobile»

Le cadre de châssis

It largely replicates the design of the CO type in its latest iteration.

It consists of two thick, curved steel frame members (135 mm high) made of 3.5 mm thick steel sheet and cross members (three riveted and a fourth bolted at the front). This last cross member supports the radiator. It is removable to allow access to the chassis after slightly spreading the frame members apart (a necessary step in case of an accident, for example).

At the rear, a riveted cross member completes the frame in front of the axle. The entire rear end of the bodywork is suspended in a cantilevered fashion.

The fuel tank is supported by a riveted metal bracket that extends from the chassis.

La carrosserie

This design of the body is formed with a mallet from sheets of steel and stapled to a metal angle iron structure, itself bolted to the chassis at six points.

The entire assembly—hood/side panels/rear end—is a single piece.

This drawing of the front axle is dated December 22, 1926, while the car had already been presented at the Salon.

The two hood halves are hinged around a central pivot. They are perforated by inverted louvers (scoops stamped inwards towards the hood). They are held in place by a leather strap that splits into a Y on each side; the tension of the assembly is maintained by four spring-loaded buckles.

The exhaust pipe runs laterally along the left side, following the curve of the body's side cutout. The front axle is dated December 22, 1926, even though the car had already been presented at the Motor Show.

The frame supporting the bodywork.
This is a brand new assembly, built to the same specifications.

Divers

The car is delivered without electrical equipment. It therefore lacks a battery, a dynamo, and a lighting system. Without a starter motor, the engine is started by hand (or, possibly, by push-starting).

The bodywork has no fenders or convertible top. Only a spare tire and a small windshield with one or two hinged panels are included as standard equipment.

This minimal equipment suggests that the car is primarily intended for racing and not for road use.

Le tableau de bord rassemble :

- A fuel pressure gauge (graduated from 0 to 500 g).
- An oil pressure gauge (graduated from 0 to 16 kg).
- An ignition timing adjustment lever.
- A manually operated fuel pump for pressurizing the fuel system.
- An oil flow adjustment knob.
- Two tachometers (one per camshaft).
- An engine kill switch activated by grounding the magneto.

The C6's characteristics remained unchanged throughout its production run. Only one option was offered: a large-capacity fuel tank (90 to 100 liters), supported and bolted to a rear chassis extension, itself riveted to the ends of the side rails and passing under the axle housings. The rear end of cars equipped with this tank differed slightly from C6s fitted with the original tank.

The large-capacity tank was essential for drivers using racing fuel such as Discol, as fuel consumption then reached 80 to 100 liters per 100 km.

For endurance races where competitors used commercial gasoline, this tank provided a significant range.

Furthermore, two C6s were delivered with the engine and transmission offset to the left of the chassis's centerline, as on the Offset CO models. Both cars were built around a C6 chassis that was wider than those of the Offset CO models. It's unclear why the factory built these two cars with their unique architecture.

One was sold to the British importer Vernon Balls, the other to the Geneva-based agent, Theo Sarbach. They weren't given any specific designation at the factory; we'll call them «C6 with offset engine» or, more simply, «C6 Offset.»

Dimensions

Front track = 1.060 m (ground).

Rear track = 1.090 m. The front and rear tracks are slightly different due to the camber angle of the front axle.

Wheelbase = 2.195 m.

Ground clearance = 20 cm.

Wire spoke wheels, hollow-base rims and Rudge hubs, with three rows of steel wire spokes, fitted with Dunlop 27 x 4.40 tires (equivalent to 4.40 x 19).

Weight of the car (without fuel but with 15 liters of oil) = 680 kg. This weight, relatively high for a small-displacement racing car, is explained, among other things, by the sheet steel body on a steel angle iron frame. We should also remember that the engine and cylinder head are cast iron. The weight distribution, as with many cars where the engine and gearbox are conventionally mounted at the front, is not ideal.

The fuel tank has a capacity of 60 liters. Fuel consumption is between 15 and 20 liters per 100 kilometers.

Each C6, before being delivered to its future owner, is tested at the Linas-Montlhéry autodrome to fine-tune its performance. This document, of rather poor quality, shows a C6 before delivery. It is fitted with a rudimentary body used solely for testing.

According to the manufacturer, the car reaches 160 km/h. It is only delivered to the customer after a test at Montlhéry, with a timing sheet attesting to the speed achieved.

En conclusion

Despite the technical solutions chosen, the C6 engine proves remarkably reliable, provided the maximum RPM is respected. However, drivers are often tempted to exceed the recommended 5600 RPM, so eager is the 6-cylinder engine to perform. The risk of failure, particularly in the valve train, is then very real.

In races, the main failures have involved the head gasket, the valve train (valve train and springs), and the magneto. Very serious failures (such as a connecting rod breaking through the crankcase) are extremely rare.

Identification des C6

Like all cars intended for sale, Amilcar C6s are identified by their serial (or chassis) number. An engraved brass plate bearing the car type (CO) and this chassis number is screwed onto the dashboard or the left side of the passenger compartment. This same chassis number is, of course, recorded on the car's registration document. The series begins at 11001. The engine also has a riveted plate on one of the camshaft covers, indicating its type (C6) and its serial number, which begins at 90001. The chassis and engine numbers are not matched. For example, chassis #11029 is not equipped with engine number 90029.

Many car parts (axle housing, gearbox, steering box, hood hinge, front engine mount, brake flanges, etc.) are also stamped with a number (in the 90000 series, as with the engine). However, assemblers were not required to match parts; thus, on car #11051, the engine bears the number 90044 and the steering box the number 90043.

Some C6s remained unsold for many months, which explains why their registration numbers were assigned well after their production date. Thus, chassis number 11051 with engine number 90044 was

This photo showing a C6 on a bridge illustrates an advertisement for Tecalemit.

Notes from Maurice Dubois dated February 1928. Each C6 is delivered with a certificate specifying that it reached at least 160 km/h during the first tests.

The C6 user manual is primarily intended for customers wishing to enter their car in racing.

only sold on February 5, 1931, while chassis number 11045, also with engine number 90034, was registered in July 1928, and chassis number 11058, with engine number 90031, was sold new in February 1929. It should be noted that the manufacturers' association published a record of C6 engine production figures for three years.

If these figures are accurate, 13 + 26 + 8, or 47 engines, were assembled from 1927 to the end of 1929, which seems entirely plausible.

The highest known engine number is that of C6 #11069, sold in July 1930 with chassis number 90043, meaning it was manufactured in late 1929. This would seem to prove that very few C6s (perhaps none) were manufactured in 1930. The MCO 1100 was arbitrarily numbered with chassis number 11063, and its engine received the plate 90047, corresponding to the last engine assembled in 1929.

However, engine 90014 is fitted to a car sold no later than September 1927, so it's unclear how it could be the first one manufactured in 1928… unless the original engine of this C6 was replaced.

La C6 vue par la presse

Numerous articles mention the C6, but aside from a few general lines, they offer little real information. No detailed articles or reviews have been published.

But beyond these flattering articles, the car is astonishing. The journalist from AutoSports magazine, in his report on the 1928 Motor Show, writes, «And let's not forget the astounding 1100 cc six-cylinder engine, which, although quite recent, already boasts an impressive history of victories and performance. It's worth remembering that the engine in this chassis, while allowing for normal use of the vehicle, is nothing less than a state-of-the-art racing engine with its double overhead camshafts, oil cooler, vented crankcase, etc.»

While it's true that the 6-cylinder has «an impressive history of victories,» this refers primarily to the performance of the factory CO models, not the C6!

The magazine Cars and Motor-Cycle, dated September 29, 1928, published a more technical article: «The design and execution of this marvelous little car are considered by many to be one of the finest examples of modern craftsmanship. Its harmony clearly makes it an ultra-efficient and superbly executed specimen.

The Roots-type supercharger is mounted at the front of the crankcase, driven by the crankshaft nose via an ingenious flexible coupling system comprising 16 steel washers. The supercharger draws the air-fuel mixture through the Solex carburetor and delivers it to the cylinders via a beautifully designed intake manifold.» Typically, short flexible hoses are used to connect the supercharger to the intake manifold to compensate for misalignment. It should be noted that the Amilcar assembly is executed with such precision that no such connections are necessary. All the parts fit and adjust perfectly.

Les deux compte-tours

All 6-cylinder Amilcars were delivered with two tachometers on the dashboard, each driven by one of the camshafts. The presence of these two instruments is surprising, intriguing, and ultimately raises questions. However, no official explanation exists for this setup. For such

a sophisticated engine, with its rapid acceleration, the tachometer is essential for the engine's survival, as it is highly sensitive to over-revving. The hypothesis of keeping one tachometer as a backup in case the other failed remains the most plausible. The instrument itself is subjected to unusual stresses. The needle moves back and forth constantly, thus weakening the delicate clockwork mechanism. The mechanical drive from the camshafts (gears and cable) can also cause a tachometer failure. Engine damage due to over-revving often results in irreparable harm. The investment required to install a second tachometer is completely disproportionate to the cost of an engine.

Apart from Amilcar for its 6-cylinder engines, only a few rare racing cars (notably Delage and Sunbeam) were equipped with one. The explanations offered by C6 owners are rather amusing, such as this one: «They're there to make sure that both camshafts are rotating at the same speed!» If one of the camshafts rotates at a different speed than the other, the two tachometers will soon stop working because the engine will seize!

Others will point out that the second tachometer is for the passenger, who can then associate the roaring engine with the erratic needle of the instrument...

Le bruit de l'Amilcar 6 cylindres

By design, 3, 6, and 12-cylinder engines produce the most melodious sounds. The sound of racing engines is a major element of a car's aura.

While three-cylinder engines were primarily used in motorcycles (the sound of Agostini's MV 3 is still remembered by many), 6 and 12-cylinder automotive engines are not to be outdone. The sound of the Delage V12 in the 2LCV is literally captivating.

Jean-Luc Lagardère, at Matra, insisted that the V12's sound be as distinctive as possible, and the engineers succeeded beyond all expectations.

The BMW 6-cylinder engine is also characterized by a captivating sound. The inline 8-cylinder racing engines—Bugatti, Delage, Alfa Romeo, Maserati—produce a sound that is not as iconic as that of these engines. The Amilcar's six-cylinder engine has also become legendary. The deep, resonant tones contained at low revs in the open exhaust pipe give way, under acceleration, to exhilarating, soaring high notes.

In England, when it occasionally ran without a muffler on the Brooklands racetrack, it was reputed to be, despite its small engine size, one of the loudest cars. A local journalist compared its acceleration at full speed to «the sound of fabric being torn.»

Inside the car, the sound is quite different but remains just as captivating. The raucous roar of the open exhaust is compounded by the whine of the straight-cut gears in the gearbox and the clatter of the timing chain if it has even a little play. And the engine's incredible responsiveness, revving endlessly, only adds to the enchantment of the drive...

The dashboard with its two rev counters.

Remarks by engineer Jean Albert Grégoire

In his book «50 Years of the Automobile» (Flammarion, 1974), engineer J.A. Grégoire, co-inventor of the constant velocity joint with Pierre Fenaille and founder of the Tracta automobile company, wrote: «Amilcar! A brand that made me dream, like all the boys my age. My first car. In 1922, I invested all my savings in buying a sports car: a cyclecar with a mahogany skiff body, of which I was quite proud ... Another reason led me to place Amilcar among the elite of brands, alongside Bugatti: the admirable racing machine that engineer Edmond Moyet designed in 1924, powered by an 1100 cc six-cylinder engine with twin overhead camshafts.» A success as remarkable as the one Albert Lory would achieve two years later with his unbeatable 1500cc Delage. What a marvelous exhaust note, unrestricted of course, but channeled through a steel pipe with organ-pipe resonances. A rumble less deep than that of the Bugattis, which rattled the windows, but so much more seductive than the asthmatic clatter of the Salmsons.

L'Amilcar 6 cylindres et la concurrence

The Saint-Denis-based firm's customer-racing car has no equivalent among other manufacturers. None offer a car as sophisticated and, above all, as high-performing.

However, the C6 can be considered, first and foremost, a racing car and not a vehicle intended for everyday road use. If we are to compare the various 1100cc sports cars on the market, the C6 must therefore be excluded, giving way, for Amilcar, to the CGS and CGSS, which face fierce competition, notably from Salmson. In any case, the production models of both brands benefit from the racing results of the 6-cylinder engine for the Saint-Denis brand, and the 4-cylinder twin-cam engine for the other. The Salmson racing cars, the Grand Sport Spécial (GSS), Grand Sport Course (GSC), and Grand Sport-Grand Prix (GS-GP), all equipped with the San Sebastian engine, managed to give the 6-cylinder Amilcars a run for their money and even, on occasion, beat them. A total of around sixty of these cars were built.

In 1927, in an attempt to break the dominance of the 6-cylinder Amilcars in racing, Salmson began work on an 8-cylinder 1100cc engine. The engine was an assembly of two 4-cylinder blocks, 50 x 70 mm bore and stroke, with two overhead camshafts, mounted on the same crankcase. A gear train between the two blocks drove the valve train, and the valve actuation was desmodromic. The engine was supercharged by two Cozette No. 7 compressors, and power was said to reach 140 hp at 7500 rpm.

Due to a lack of resources, the engineer Emile Petit, its designer, was unable to complete its development and refinement. Two prototypes were built, and they were seen in races, mainly in the early 1930s, driven by private pilots.

Emile Petit

Born in Saint-Mandé in 1883, he held various engineering positions before the First World War (at Clément, Charron, and Ballot) and was then appointed Director of the Niclausse factory, an automobile manufacturer in the 1910s and a producer of boilers for the navy. In 1919, he became Technical Director of the Rhône et Seine company, which was liquidated that year. He then launched a design office and designed his first engine. Thanks to André Lombard, this engine was adopted by Salmson, which used it to equip its first cyclecars. Petit became the indispensable chief engineer of the Boulogne-based firm, which owes him the twin-cam engine and the 1100cc 8-cylinder engine. In 1929, he joined Ariès and then, two years later, re-established a design office. In 1934, he designed the SEFAC, a racing car project in which Raymond Sommer was notably involved.

The engine, once again, consisted of two 4-cylinder units, but unlike the Salmson 8-cylinder, the two units were placed side by side, with their crankshafts connected to each other. The car, being very heavy, was never developed.

After the war, he studied the rural car equipped with a Panhard engine that Georges Irat was supposed to manufacture. Later, he studied a twin-cam cylinder head for the 4CV (Boudot cylinder head, Petit patent) and a supercharger built under license by Constantin.

It should be noted that the car in the countryside was commissioned by the Dommartin Engine Company. Dommartin later acquired the Sefac, which was renamed after its new owner.

In 1948, the Dommartin underwent testing at Reims in preparation for the ACF Grand Prix, with Pierre Meyrat at the wheel. Constantin also completed one or two laps. The car did not start the race.

Emile Petit died in Levallois-Perret in 1974.

Amilcar versus Salmson, the duel very often turned in favour of the former.

Jean Le Paige de Dommartin was born in Lunéville on July 30, 1911, and died in Nice on November 20, 2004. He was the owner of the company Othermo, which manufactured electric cookers.

Another competing brand was that launched by André Lombard (1886-1952), who initiated the construction of cyclecars by Salmson in 1920, a company he later managed commercially. He left the company in 1923 with a five-year non-compete clause.

The Salmson 8-cylinder engine uses an architecture favored by the engineer Emile Petit. It results from the assembly of two 4-cylinder engines placed end to end (unlike that of the SEFAC, also designed by Petit, whose two 4-cylinder engines are placed side by side).

Girod won the 1500cc category at the Château-Thierry hill climb in 1934, as the photo is captioned on the back. However, on the entry list, his car was assigned number 74, number 70 being that of the Girod-Salmson driven by Devaux, entered in the 1100cc class.

Despite this restriction, André Lombard created his own company at the end of 1926 with the help of industrialist Simon Brault and immediately presented his AL 1 model, followed by the AL 2 and finally, in 1928, the AL 3 Grand Air. The engine was a superb 1100 cc (61.5 x 92) four-cylinder with twin overhead camshafts, a blind block, and a Cozette supercharger, designed by engineer Edmond Vareille. The advertised price was 53,000 francs, compared to the 60,000 francs asked for an Amilcar C6. The venture ended abruptly due to a lack of capital. Lombard ceased production in 1929, and the project was taken over by BNC. In total, approximately ten cars were produced.

Pierre Henri Edmond Vareille was born in Vœuil-et-Giget (Charente) on June 2, 1894, and died on April 10, 1980, in Perpignan. He was listed in the 1921 census at 4 rue Chaptal, Levallois, the same address he gave when he established the Vagova company.

He built the Godet-Vareille cyclecar in 1924, which he entered in the Sénart Forest Speed Day. The cyclecar was also sold under the Vagova brand. Brault, the future sponsor of Lombard, was already involved in this venture with Eugène Godet (1874-1948).

Amilcar and Salmson's main competitors in the 1100cc sports and racing category used 4-cylinder engines offered by SCAP, Chapuis-Dornier, Ruby, and CIME.

Faced with the 6-cylinder engines of the CO and C6 and the particularly sharp 4-cylinder engines of the Salmsons, the BNC, Rally, and others had virtually no chance of success, even when engine manufacturers equipped their machines with the Cozette supercharger.

From 1928-29, Ruby offered an 1100cc engine specifically designed for supercharging, the Type K, equipped with a Baudot-Hardoll supercharger. This overhead-valve engine, with a single block bore and bore and stroke of 62 x 90 mm, proved rather underperforming despite a claimed power output of 50 hp at 4000 rpm. In 1928, a BNC 527 equipped with the SCAP T11 overhead-valve supercharged engine, developing approximately 40 hp, sold for 32,000 francs; the Rally ABC Grand Sport, equipped with the same 4-cylinder engine, sold for 39,500 francs.

SCAP also built an X11 version of its 4-cylinder engine, offering 58 hp at 4,500 rpm. Only a few dozen units were produced, notably in the Rally ABC Grand Prix, which was offered at 42,900 francs in October 1928.

Chapuis-Dornier offered its 59 x 100 mm CS4M type overhead-valve 4-cylinder engine, which was produced in very limited numbers.

Le moteur Vagova

In 1925, Vagova, along with Amilcar, was developing a tiny 750cc supercharged 6-cylinder engine with a bore and stroke of 49.7 x 64 mm, desmodromic valves, and a crankshaft mounted on bearings. This engine, designed by Edmond Vareille and Eugène Godet, powered a racing car and later a saloon car, which was exhibited at the 1926 Paris Motor Show but never went into production.

This engine was then taken up by Aviation Michel, who enlarged it to 1100cc. Designated the AM 16, it was offered in two versions for aviation and automobiles. D'Yrsan offered a car equipped with this engine in its catalog, but none were actually built.

In its 1100cc version, the Vagova-Aviation Michel engine could have seriously competed with the Amilcar C6, provided, of course, that its manufacturer had the resources to finalize its development. A true marvel of engineering, it was rated at 40 hp at 6000 rpm in its 750 cc version, with a weight of 62 kg.

Even though it gives the impression of a very compact monobloc, the engine is composed of six separate cylinders, assembled on the

This engine, designed by Edmond Vareille, is a marvel: double overhead camshaft, blind block with hemispherical combustion chambers, crankshaft on ball bearings and central roller bearing, connecting rods on rollers, distribution controlled by a vertical shaft, dry sump lubrication, fuel supply by Cozette compressor.

Extrait du catalogue Lombard

A Lombard AL3 registered in Great Britain

crankcase in pairs, surrounded by an aluminum cooling liner that can be removed to allow the replacement of a pair of cylinders. Three cylinder heads cover the cylinders.

The crankshaft, which can be disassembled into nine parts assembled with tapered fittings, rests on five roller bearings. The tubular connecting rods also rotate on bearings.

The camshafts are driven by a vertical shaft located at the front of the engine. It is driven by the crankshaft via helical gears. This same shaft carries, wedged in its middle, an angle pinion which drives, on one side, the Delco ignition distributor and, on the other side, the Cozette compressor.

L'Amilcar face aux Bugatti

The C6 was designed primarily to establish a significant track record through the participation of private drivers in regional races, just as Bugatti did with its 37 and 35.

This is the only possible point of comparison between these various cars, which competed in different categories. However, unlike Bugatti, which dominated the customer racing car market, Amilcar struggled to gain traction in a category that was gradually falling out of favor in favor of the 1500cc class.

In any case, at Amilcar, making the C6 project profitable was certainly not an option. Moreover, selling only about fifteen hand-built cars per year, even with a substantial profit margin, made such a mission impossible.

Let us recall that in 1925, the manufacturer from Molsheim built an 1100cc 8-cylinder, type 36, derived from its type 35. This car, poorly designed from the start, was not successful and the two or three models produced were reconfigured into 1500 or 2 litres.

En guise de conclusion : l'Amilcar C6, une réussite à tous points de vue ?

Upon its release in 1925, the factory-built six-cylinder Amilcar, type CO, demonstrated the expertise of a company that was only four years old.

In 1927, the launch of the C6, the customer version whose engine remains a masterpiece of engineering, allowed amateur drivers to own a true racing car, capable of achieving good overall results and, above all, class victories. The exceptional qualities of this small machine, attested to by its numerous successes on circuits, hill climbs, and record attempts, are uncommon, yet the six-cylinder Amilcar remains somewhat overlooked in the list of exceptional French racing cars. At the very top of this list, without question, is the Bugatti Type 35, boasting countless victories in highly competitive international races as well as, more frequently, in smaller events. The Delage 1500 8-cylinder and the Peugeot L76 with its twin-cam engine and four valves per cylinder also feature prominently. Outside of a small circle of motorsport enthusiasts from the 1920s and of the marque itself, the Amilcar 6-cylinder remains unjustly overlooked and has yet to occupy its rightful place in automotive history. The same is true for the Delage 2LCV.

The Vagova engine was increased to 1100 cc when manufactured by Aviation-Michel.

D'Yrsan offered a car equipped with the Aviation-Michel engine in its 1928-1929 catalogue but none were built.

This document, taken from the December 1925 issue of Englebert Magazine, shows the Vagova saloon. It is the only known depiction of this car, which likely never reached the production stage.

La voiture robur

In 1927, Delmer, Renoult, and Duval, partners in the D.R. Mechanical Workshops, which produced the overhead valve cylinder head for the Amilcar 4-cylinder engines, embarked on a much more ambitious project. They designed, manufactured, and obtained approval from the Mines Department for a superb sports car equipped with an 1100 cc (52 x 64) inline 8-cylinder engine, featuring a side camshaft and overhead valves operated by pushrods and rocker arms. The crankshaft was supported by nine main bearings. While the cylinder head was made of cast iron, the block was aluminum, with each cylinder linerd in a steel sleeve. Lubrication was by dry sump.

The Robur's 1100cc 8-cylinder engine

Two other distinctive features of the car concerned its chassis: the two U-shaped side members had a very high cross-section and were significantly stiffened by bolted, rather than riveted, crossmembers.

The bodywork was superbly designed by Charles Duval, who fitted the chassis in his workshops. Unfortunately, the very high production cost of this sophisticated car prevented any commercialization.

Henri Alexis, a garage owner based in Montlhéry, entered and drove the Robur, renamed AR8, in the 1933 (no. 34) and 1934 (no. 51) Bol d'Or races. In this second participation, he finished second in the 1100cc racing category. Fortunately preserved from destruction, this unique car is now part of a private collection.

Well designed, the car appears low and long despite a very classic wheelbase of 2.40 meters.

Henri Alexis est né à Lyon le 3 octobre 1891.

Unlike the factory six-cylinder, the customer version was presented when the company was going through a difficult period. The takeover of Amilcar by Marcel Sée coincided with a shift in strategy towards more luxurious cars, which explains the lack of promotion for the new model and its stalled development.

The undisputed dominance of the 6-cylinder engines, both the CO and derivative types as well as the C6, also led to the gradual abandonment of the 1100cc class, which had become a near-monopoly for Amilcar. While the technical and sporting success of the Amilcar C6 is undeniable, its commercial success may not be the same. Although the initial target was around fifty cars, this goal was met. However, even sold at a prohibitive price, the venture could not be profitable.

Serge Pozzoli, in an article in L'Album du Fanatique de l'Automobile, written, as usual, in the historian's distinctive style, raved about the C6:

"One of the most marvelous small-displacement racing cars is undoubtedly the Amilcar 1100 cc. This mechanical gem was mounted in a very small chassis with a track width of 1.10 m and a wheelbase of 2.20 m. A true racing car, on a scale comparable to the most prestigious Grand Prix machines." This makes it one of the most desirable sports-racing cars imaginable.

Let's give the final word to the Anglo-Saxons by quoting an excerpt from the May 1948 issue of MotorSport:

«One of the most desirable sports-racing cars it is possible to imagine.»

And the June 1957 issue of Australian Motor Sports magazine, which concludes its article on the C6:

«Definitely one of the most successful racing cars of all time.»

But the general public couldn't care less about the aura surrounding the 6-cylinder Amilcar. Their heart will invariably lean towards a Bugatti, even if it was made near Buenos Aires! A connoisseur, however, will turn to the Amilcar, which is much rarer.

Two C6s were presented at the 1927 Motor Show:
the first, a chassis (already exhibited the previous year), allowed visitors to admire the magnificent 6-cylinder engine and all its components;
the second, with a bodied body, was positioned further back on the stand.
It should be noted that this second C6 was equipped with an oil tank mounted at the front.

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Warning: The photographs illustrating the two volumes of this work come from the collection assembled by Gilles Fournier over the years. In addition, most of them were kindly provided by the family of Clément-Auguste Martin and by the families of Jacques Blot, Jean Lamoureux, Charles Martin, and Gérard Léveillé.

Flavien Marçais and Dominique Pascal were also contacted by Gilles and helped him select many essential photos.
Several historians, such as Alessandro Silva and Morten Larsen, readily opened their archives. Many others contributed to this photographic collection, but unfortunately, it is impossible to compile a list.

However, some copyrights remain unknown. If the owners of the documents in question recognize a photo that belongs to them and that they are legally entitled to use, they must contact the publisher immediately.

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