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THE SPORTS PROTOTYPES VOLUME 1 1963-1969

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Contents

Author's Introduction

I never really wanted to be a detective! However, during the research for my previous book about the development of the first turbo Formula 1 car, I found that, like the turbo story, there was very little available about the Alpine sports prototypes for English-speaking readers. Not only this, but I discovered that the full chassis/race history had never really been completely brought together in any language. There have been some fine books created by Dominique Pascal, Christian Descombes, Jean-Luc Fournier, François Hurel, the Association des Anciens d'Alpine and Jean-Jacques Mancel (particularly about the men and women of Alpine) and I have to thank all of the aforementioned because their work was my inspiration and my starting point which has led to this two-volume study of *Alpine and Renault – The Sports Prototypes*. Volume 1 covers 1963 to 1969, volume 2 covers the period 1973 to 1978 and some of the interesting activities that followed.

Alpine, Gordini, Renault – these names will be recognised by every enthusiast who remembers the dramatic sports prototype cars of the 1960s and 1970s. These names encompass a period of time that involved not just great changes but huge steps forward in racing car development.

It's now over 32 years since a factory Renault Alpine sports prototype ran in the Le Mans 24 Hours and won; and it's over 47 years since Alpine first entered sports prototype racing, so newer generations of motorsport enthusiasts may not even know that these cars existed. Here, I hope you will find, as near as I can make it, the full story, with images, dozens of personal recollections and technical facts to bring to life the first period of the Alpine and Renault racing sports prototype programme in the 1960s. I crave the indulgence of those who lived through that period or studied the subject in depth, as this story is aimed not only at all those passionate 'Alpinists,' 'Gordinists' or 'Renaultphiles,' but also at many who have yet to discover the dedication of all those at Alpine, Gordini and Renault who strove to achieve the highest spot on the podium. Through these pages, I invite present and future generations to step through a door into the past and immerse themselves in a story which started with a design team that created at Alpine in Dieppe some of the most beautiful cars of the era.

Volume 1 commences at a time of recovery. The memories of the disaster that was World War II are receding, cars are getting faster, developments more progressive, everything on the technical engineering side was inexorably moving forward. We will look at the progress year-by-year, noting that safety aspects and the running of the teams, let alone some of the ideas and technology at the time, were very much work in progress – dare I say almost amateurish by today's standards. It was a perilous time in motorsport. Racing always has an element of risk, but back then it was really dangerous – the drivers were gladiators, possessed of a special mentality, and seemingly blind to the consequences of accidents. Speed was their life, and sometimes, sadly, their death.

From research studies and dozens of interviews with the participants, you will see what it really took to design, construct and drive the Alpine Renault sports prototypes, a reality which sometimes is not as attractive as the myths. Thankfully there are many from that era who are still with us, and it is to them that I turn to say thank you for giving the reader the opportunity to get a glimpse of their lives. Until that time, only land-speed record cars or the prewar giants of Mercedes or Auto Union got above 150mph. By the end of this volume we'll see that Porsche had developed a car that was lapping the Sarthe circuit at an average of nearly 149mph (239kph) and was running at up to 250mph

(402kph) on the straight at Le Mans: the mighty 917. That was the challenge facing the little team from Dieppe in the north of France ...

In the 1950s the Italian Mille Miglia road race was part of the World Sports Car Championship, and we see the first competitions entered by Jean Rédélé, the father of Alpine. Into the early 1960s, we enter a period where the weight of racing sports and GT cars has been dramatically reduced, body shapes become very streamlined and even small 1000cc engines are capable of pushing a car whose chassis is constructed of the thinnest possible tubing to very high speeds. By 1965 tyres were still narrow, treaded cross-plys designed for all weathers, until the Michelin company entered racing with two revolutionary developments: first the invention of the radial tyre, and then the creation of 'slick' racing tyres. Against this background we see how the drivers had to learn, test and finally race at the highest level and often under extreme duress. With few aerodynamic aids, the cars would often lift off the ground at the front, like aircraft, creating at worst a disaster and at best a near heart attack for the driver. Of course, the Le Mans 24 Hours features heavily and plays a major part in every year of this first volume, 1963 to 1969. We see the highs and the lows, some beautiful designs, some crazy ideas, impossible dreams, and some remarkable achievements of the team led by that visionary with a dream; Jean Rédélé. His dream was to win outright at the Le Mans 24 Hours, but he would not see outright victory for a car with the name Alpine on it in this first period, though there were high hopes with the V8 cars. So, too, we see the advancement and involvement of the automotive giant Renault as it becomes an influencing factor for both Alpine and the engine developer Gordini, and then the frustrations and the serious decisions that were finally taken in 1969.

A lot of people helped me in writing this book, and many former drivers invited me into their homes to listen to their stories. Several I had the pleasure of meeting for a second time after my first book – all warm, friendly people who came from an era when motorsport was definitely a sport, and one of rivalry yet camaraderie (before it became the clinical, politically charged marketing medium that it is now). I have heard the stories of the many occasions when a driver would get his instructions, take a final drag on his cigarette, drop it, stub it out, climb into his car and go into battle with the track and the elements on tyres you wouldn't even put on your wheelbarrow today! It was a time when he was unaware that the fumes from that cigarette might kill him, even if the car didn't!

The 1960s was the period of the journeyman racing driver, living in an intoxicating mix of personalities and teams, where the only contractual agreement was a phone call followed by a handshake. Jean Rédélé's company, Alpine, entered this world, joining the likes of Ferrari, Ford, Porsche, Lola, and Alfa Romeo. Although Alpine took many class wins at Le Mans, and indeed outright race victories at the Nürburgring, by 1969 it needed an engine with more than 500bhp to compete at Le Mans. This is the story of how a small, passionately dedicated team battled through highs and lows to win the hearts of a nation.

Roy Smith

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Chassis designers: Richard Bouleau (ex-Alpine) and Len Terry from Colin Chapman's Lotus company.

Drivers: Mauro Bianchi, Roger de Lageneste, Jean Vinatier, Philippe Vidal, Jean-Pierre Jabouille, José Rosinski, Jacques Cheinisse, Alain Serpaggi, Jean-Pierre Jaussaud, Gérard Larrousse, Michel Leclère, Jean-Pierre Rémusat, Jean-Pierre Hanrioud.

Engine men: Giuseppe Albarea, Alain Marguet, François Castaing, all ex-Gordini, and Bernard Dudot, ex-Alpine.

Motoring journalists and historians: Gilles Blanchet, Christian Descombes, Ed McDonough, Mike Jiggle, Dominique Pascal, Jean-Jacques Mancel, Jean-Marc Cotteret, Alain Bienvenu, Michel Morelli, Maurice Louche, François Jolly, Jean-François Kreuse, Jean-Luc Fournier, Jean-Claude Rehlinger, Terry O'Neil.

IMAGES

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Renault Communications, LAT, J-M Cotteret (Mille Miles), Alexis Callier/M Egli, Pete Lyons, Ron Kielbiski, Manfred Foerster, Michel Morelli, Roger de Lageneste, Mauro Bianchi, AAA (Dieppe), Alain Marguet, Gilles Blanchet, Alain Bienvenu, Christian Descombes, Hector Mackenzie-Wintle (many of Mr Mackenzie-Wintle's photos were given to him by Jean Rédélé himself), Dr Philip Newsome, P3 Motorsports, Bill Stowe, Maurice Louche, José Rosinski, Alain Jourdain, Renault Histoire et Collection, Giuseppe Albarea, Roberto Piccinini, Jean-Baptiste Bassibey, Ed McDonough, Jacques Ubags, Dr Greg Mills, Martin Roessler, Mille Miles Magazine, Rétro Passion, Jean-Luc Fournier, François Castaing, E M Mullender, Gérard Larrousse, Robert Young.

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Technical items and quoted statements are from personal interviews, with additional bibliographic historical information from the Alpine factory chassis records of Gilbert Harivel, also bibliographic research used to cross-check details from: *Alpines at Le Mans* by François Hurel, *Alpine Label Bleu* and *Alpine* by Christian Descombes, *Alpine* by Dominique Pascal, *Time and Two Seats* by János Wimpffen; works by AAA (Dieppe), *Berlinette* magazine and *Mille Miles* magazine. Other historical bibliographical sources are: *Motorsport, Autosport, Alpine au Mans, Endurance 50 Years, Targa Florio 20th Century Epic, Reims, Vitesse Champagne and Passion, Alpine: des Hommes, des Voitures, Les 1000 Kilomètres de Paris, Bahamas Speed Weeks, Colour and Noise, ADAC 1000km Rennen, Les Monoplaces Alpine, Le Mans, Pierre Dupasquier,1000km Francorchamps.*

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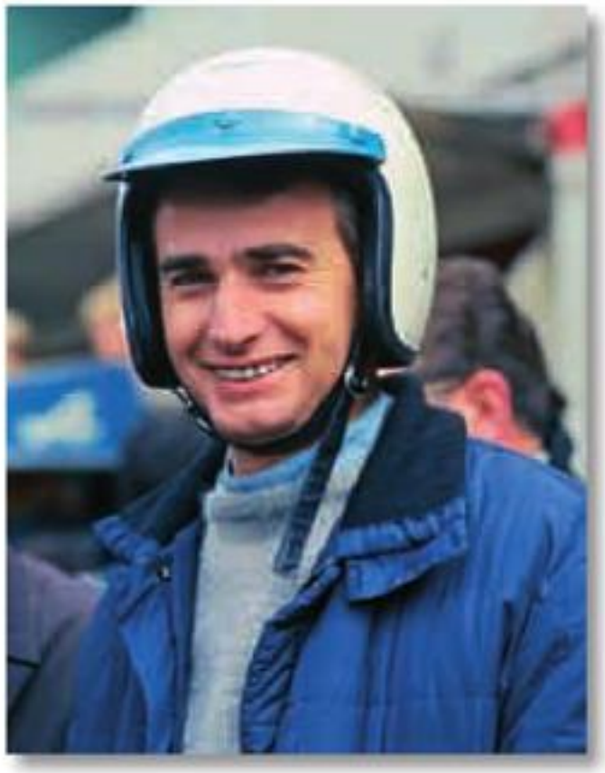
A huge thank you is due to János Wimpffen whose amazing work *Time and Two Seats* has, with his permission, yielded a lot of race record details concerning the World Sports Car Championship, with additional permission to use images from this work and his other books, *Winged Sports Cars* and *Spiders and Silhouettes*, in conjunction with the permission of LAT Photographic.

Once again I thank my dear Helen for her continued unstinting work on translations, initial editing, and for correcting my terrible spelling and grammar, which you will not see thanks to her contribution. Without her these two volumes, which have taken over three years of full-time work to research and bring to fruition, would not have been possible.

Finally, I thank Veloce and Rod Grainger, my publisher, for having the confidence, patience and faith in my humble efforts to record for posterity this history of the Alpine sports prototypes.

Even in a work where one has conducted so many interviews and made every attempt to obtain permission, verify comments, statements, data and information, there may still be omissions, miscredits and/or some differences of opinion. I hope the errors are few; everything contained within this work is published in good faith and in the spirit of bringing the history to the reader above all other considerations. I apologise now for any technical, photographic or acknowledgement errors or omissions.



Jacques in the 1960s: first a driver, then team manager. (©R)

JACQUES CHEINISSE

Alpine Renault is one of the very rare marques – if not the only one – to have been involved in all disciplines of our sport and to have achieved enviable results in each of them: rallying, hillclimbing, endurance racing and single-seater racing in Formula 2, Formula 3 and even Formula 1.

Several books have related the achievements of Alpine on the road which brought the brand to victory in the World Rally Championship, and this is the field where it is best known. Roy Smith has already given us a superb history, written with faithfulness, accuracy and talent, of Alpine and Renault's adventures in Formula 1 – *The Development of the Revolutionary Turbo F1 car.*

Now he's back with the story of the Alpine and Renault sports prototypes from the Le Mans 24 Hours in 1963, to victory in the same event in 1978, again with his 'no stone unturned' approach to research.

I have two reasons to be very pleased that Roy has taken the initiative to write this book:

Firstly, because the team's battle in sports prototypes was difficult, unrelenting, courageous, and, in the end, brilliant – but who knows about it? Who remembers today that in the 1960s Alpine was a pioneer in the application of aerodynamic research to the car? Or that in partnership with Michelin it was the first team to fit its cars with radial tyres and later with slicks?

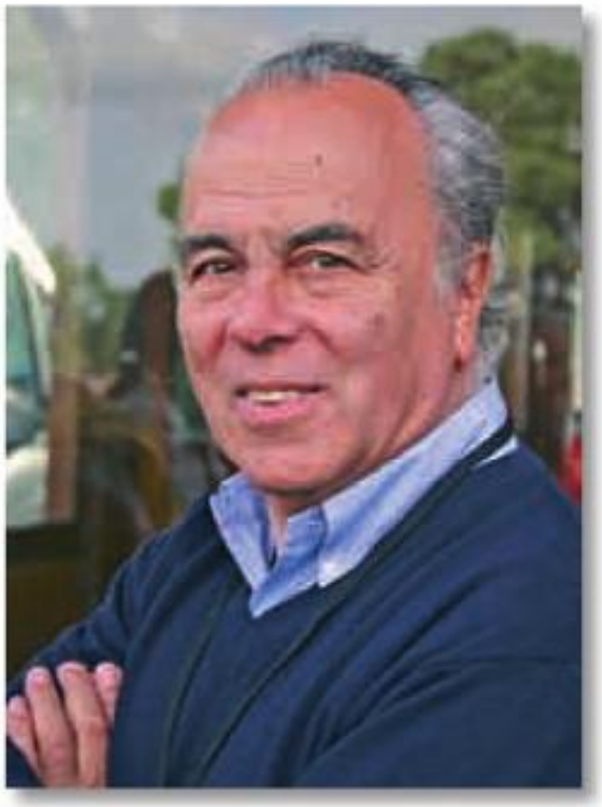
Secondly, because it is one of Her Majesty's subjects who is paying tribute here to Alpine and Renault. In all sectors of motorsport, our British friends have always been our toughest adversaries and it was under the pressure of this rivalry that we found the resources to motivate our own teams – Norman at heart if not by birth – to work wonders ... and to win!

Bravo, Roy, and thank you!

Jacques Cheinisse
Team Manager Alpine Renault 1968-1975
Former Product Planning Director Renault
Paris, France

JEAN VINATIER

I remember with great emotion the period from 1963 to 1969, covered here in great detail by Roy Smith, because for me it was the finest, most enthralling, most fascinating time of my years as a young driver, and especially as an Alpine driver. My sporting history with Alpine began with my two entries in the most fabulous of road races, the Mille Miglia in Italy, with an Alpine A106 entered in GT and the following year with the same A106, then reclassified by the technical officials as a sport proto. Even then, those Alpines were already striking fear into the Italian GT cars. Then there was my excellent relationship with Jean Rédélé, formed over long days (and nights) on the road, in the same events, and later, after I had been racing with the competition, as an official driver on the Alpine Renault team, with the 'real' Alpine prototypes, single seaters, and the famous Berlinettes.



The driver. (Photo *MMiles*)

I wasn't part of the very early days of the Alpine adventure in 1963 – I don't regret it as it was a sombre year (happily the only one) for the young Alpine team at the Le Mans 24 Hours. In 1964, together with other French drivers, I was to run in the 24 Hours in an Abarth. But during the first day of preliminary tests in April, Carlo Abarth decided for his own reasons to withdraw the entries of his Simca Abarth 2000 cars. As I wandered along the pit lane, a disappointed man, I came across Jean Rédélé, who offered me the chance to run in the Nürburgring 1000km with Henri Grandsire and, if we got on well, to race in prototypes for the rest of the season. Thus began a long collaboration with Alpine as I continued as official driver of the Régie Renault rally team, with whom I was to win the Tour de Corse in a Renault 8 Gordini 'prototype.' The years 1964 to 1969, covered precisely and accurately by Roy's book, were filled with races in Alpines and Renaults in all possible categories of motorsport available at the time. The proto races, especially the Le Mans 24 Hours which was the main target for Alpine (also, and in particular, for Renault), the development of the cars and the preparation of the event meant that each year this race was everyone's true motivation and aim. Every season was a refining crucible for all the teams: Alpine, Renault, oil companies, suppliers and tyre manufacturers all working in a common spirit of competition. In the early part of each season, we entered various races with the intention, obviously, of winning, but above all to prepare for the main race which for us was the Le Mans 24 Hours.

The long, hard hours of work in the offices and workshops in the avenue Pasteur in Dieppe, under conditions and schedules which were not always easy, put the engineers, technicians and mechanics to the toughest of tests for many weeks, with the first aim of arriving on time at scrutineering at Le Mans – that was a victory in itself! Then began the most intense, the hardest, the longest week of the year, with official practice by day and night, followed by the adjustments and setup work that had to be completed overnight to satisfy the wishes and requirements of the engineers and drivers. Everyone put 100 per cent into it at the race, each maintaining his good humour in spite of the pressure which rose as the hours, days and nights went by, bringing everyone a varied mix of problems to be solved. So it was always a crescendo and fortissimo: hope, disappointment, joy, sadness, sometimes anguish and regrettably sometimes pain. Then when at last we were freed by the drop of the chequered flag everyone would meet up on the Sunday evening at the Auberge St-Nicolas in Mayet for a last meal and the team would explode with the release of the tension. We used to let our hair down in the restaurant where 'pirated' Chinese crackers were set

off on and below the tables or, with a muffled sound, in Madame Mica's big flower vases! Things would start to fly around the room – bits of bread, fruit, anything that could be used as a projectile, transforming the room into a battlefield where the waitresses didn't dare set foot. Only Mr Mica, the owner of the hotel, dared remain in the dining room, trying to restrain this band of crazy kids who were ready for anything to have a good time and prolong this evening of camaraderie. The owner's wife, who had a dread of fireworks, had long since withdrawn to the sanctuary of her private rooms!

At last, very late into the night (the second night up for everyone), the battle fizzled out. Among the debris, with the party over, Etienne Desjardins had the job of negotiating with Mr Mica over the (complete!) reinstatement of the premises – long conversations, a hard and difficult task, and a bill to be paid.

The masterful hands of Jean Rédélé, who was present at all the happy and sad moments, created a spirit of solidarity and bonded the Alpine team together by the seriousness of his commitment, endless work and professional awareness until the goal of overall victory was won. So, too, he also generated and shared in the letting off of steam by everyone after all their efforts. In the years without victory, the 'party' was much calmer and less joyous, but it was always there as it built towards the future. Here you will find in this captivating work the teams, the competitions, the development of the Alpine prototypes, the M63, the very sleek M64, then the most successful M65/A210, followed by the very beautiful 3-litre Alpines, whose life was sadly cut short.

After this period comes the second part of the Alpine story, Volume 2, 1973 to 1979 – one in which I will not be present, but once more Roy's work will, I am sure, be every bit as fascinating. This is for everyone: the men of Alpine and Renault and the enthusiasts of today. The story of a period when motorsport was exciting, bewitching, maybe more convivial than today, but also much more dangerous.

Jean Vinatier
Former Alpine and Renault driver
FIA Technical Delegate
Paris, France

RICHARD BOULEAU

How could I not feel privileged to have had the chance to take part in this history of motorsport at a time when the first pages were being turned by such extraordinary people? Among them, in particular, what a privilege to have met Colin Chapman, John Cooper, Jack Brabham and his faithful Ron Tauranac, not forgetting Mike Hewland. With him, I see myself once more negotiating the supply of gearbox parts in a sort of prefab, a few metres square, which held a mini design office and a tiny workshop, both highly confidential. Leaving the drawing board for a while, we would climb into his Jaguar E-type to drive to the home of his mother, who acted as my interpreter to help out my poor schoolboy English. In her garden, Mrs Hewland would welcome us with a cup of tea while we put the finishing touches to our technical and commercial negotiations.

The designer. (Photo RB)

At the time when my friend Mike was designing his clever pinions and dogs to go in the magnesium gearbox casing taken from the VW Beetle, I had just left Jean Rédélé's Normandy apartment where we had set up two drawing boards before we had the few square metres devoted to the first design office in the Renault agency. Colin Chapman had already received us in a design office worthy of the name. He was one of the designers who, at the request of Jean Rédélé through Gérard Crombac, had established the plan of a chassis intended for the building of a car to take part in the Le Mans 24 Hours. Colin's designer Len Terry's design, done before I arrived at Alpine, didn't take into account the very specialised requirements for the Le Mans event. Bernard Boyer, originally brought in by Jean Rédélé to design this car, decided to take me with him to work in Dieppe to redesign the chassis.

After the first sketches were pencilled out in November 1962, we needed to have the first prototype ready to take part in preliminary testing at Le Mans in April 1963. In order to fit out this car, we therefore had to fall back on mechanical elements which could not all be borrowed from production cars. Thus it was that Lotus supplied some parts for the drive train and the wheels. It was not until the end of 1964 that I was able to do without these parts during the design of the M65, later baptised A210. It would be pretentious to claim to share the emotions of the pioneers, but I feel that I lived through a marvellous period of history very far removed from our present days of crisis and excess. Excess in the resources available and also in budgets. Excess in the salaries paid to professional sportsmen. Excess in performance and in the systematic search for achievement of which the media are so fond.

If I were not afraid of making this foreword too long, I would embroider it a bit more by remembering the little local bistros where Amédée Gordini invited me to lunch when the new Beaujolais was at its best. Or again, the Martini tent at the Le Mans 24 Hours where Steve McQueen would move the chairs around to create the right ambience.

I can only express my appreciation to my friend Roy who, for the greater pleasure of lovers of motorsport, will immortalise here a chapter of its history.

Richard Bouleau
Former Chassis Designer, Société Automobiles Alpine
Cogolin, France

ANDRÉ DÉSAUBRY

Although I was only a modest actor in the history of Alpine, I was fortunate to work alongside an exceptional man, Jean Rédélé. I am delighted today to see our history being retraced with the story of the Alpine sports prototypes, and it makes me very proud, just as Jean Rédélé, the man who gave us so much, might himself have been, to write these few lines on behalf of the Association des Anciens d'Alpine, with the confidence that my friend Roy Smith, a very competent writer, has given us an exceptional book.

What a wonderful history was bequeathed to us by Jean Rédélé, a man who had to face so many merciless battles! He would find in this work the acknowledgement that he so richly deserves. At Le Mans nothing was easy, but nevertheless he had the satisfaction of seeing victories in the indexes but never overall. He would have to wait until 1978, in the post-Rédélé period, for his loyal team of men to be part of the victory for which he longed. It was he who set us on the road – a long and difficult one, which began in 1963 with the M63 and ended in 1978.

It was a road full of pitfalls, but nonetheless captivating, which saw the building of a team totally devoted to one man – those were the days! And then again, times changed and a new order arrived and we were to share the joy of a great victory. Through Alpine, French motorsport was to be reborn. We were so proud to have been part of that.

André Désaubry
Former Chief Mechanic Alpine Renault
President, Association des Anciens d'Alpine
Dieppe, France

The mechanic: André Désaubry, centre. (Photo AAA)

1 1000 MILES ... AND MORE

The first motorised vehicles were, like many other things of their time, new ideas in an age that had already seen an explosion of innovative technical developments. Especially in France, the automobile was challenging the horse as a new form of transport. It wasn't long before men – although certainly some women were involved, too – became interested in how fast the new motorised medium might go, and from there, in a competitive nation, it was but a small step for one Frenchman to say to another, "I bet you 100 francs that my machine is faster than yours!"

Louis Renault with his first car in 1899. (©R)

More men got involved – and yes, the women, too, for sure! – and so we had the first automobile races. In the beginning it was just a 'last one home buys the drinks' type of thing, but soon it became more serious; large bets were placed, and organised racing began to take place.

The brothers Renault were among some of the early racers. Louis Renault loved engineering, creating new ideas and techniques for applying his talents as a mechanic. As a young man he spent a lot of his spare time with Léon Serpollet, who was building steam cars in his workshop in the Montmartre area of Paris. Eventually Louis Renault set up his own workshop in a shed in the garden of his parents' home. This was where he designed and built his first small four-wheeled car, seen here, left. The adventure had begun. Others were already on the case, and 16 July 1899 saw the first of what was to be one of the longest running series of events in the calendar: the Tour de France Automobile, Paris to Paris, over a distance of 2175km – a huge challenge – which ran up to 24 July. Panhard Levassors took the first three places.

The Renault brothers fully understood that participation in car races could provide valuable promotion for their product. They started with the Paris-Trouville race in 1899 and, as the months and years passed, they went on to take victory in most of the town-to-town challenges of the period, such as Paris-Bordeaux, Paris-Ostend and Paris-Berlin, topping it off with Paris-Vienna – all endurance events that would make Marcel (the main racing driver among the brothers) a highly respected competitor by 1902. (Interestingly, he is reputed to have used a primitive type of turbocharger in one of his races; Renault even patented one in 1912 – but more of this later.) Of course, the cars got bigger and the publicity surrounding these victories led to many requests from friends and customers for cars, with Paris-Toulouse alone bringing in many orders.

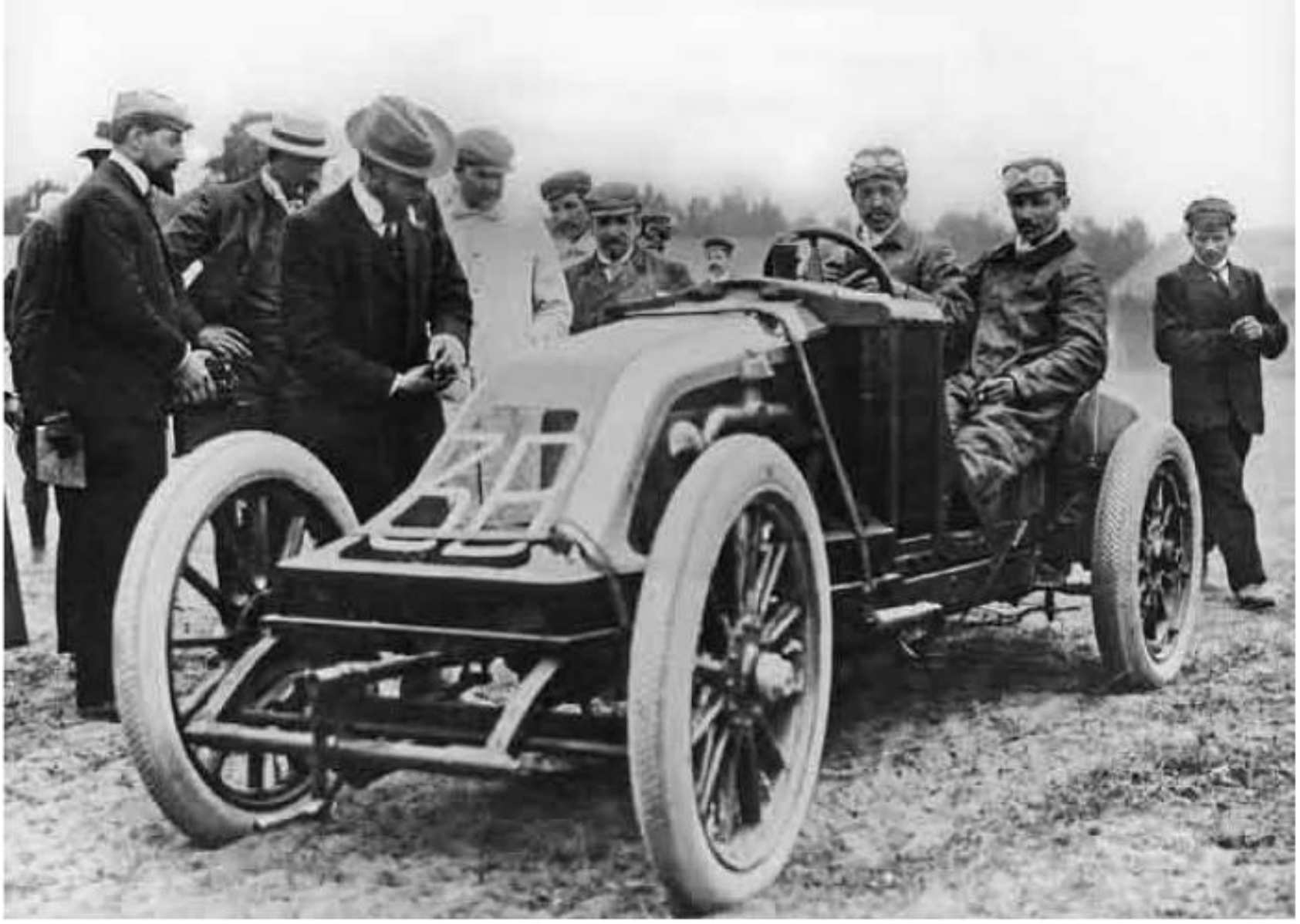
Sadly, in the 1903 Paris-Madrid race, twelve people met their deaths, among whom was Marcel Renault.

Louis gave up competing and concentrated on selling his cars to other drivers, both in France and further afield, continuing to create technical innovations that contributed to the expansion of the firm.

Louis Renault: Paris-Madrid, 1903 ... (©R)

... and Marcel Renault: fatal last race, Paris-Madrid 1903. (©R)

Early Renault poster. (©R)



1906: Ferenc Szisz, behind the wheel. (©R)

Racing was for any type or size of car, and mostly from place-to-place until someone decided, for all sorts of reasons, to split up the various forms of racing into classes, and to race on circuits. After some years, and the disaster that was World War I, a new era of optimism dawned, and then, in 1923, the first edition of what was to become one of the greatest challenges in the world to man and car was organised: the Le Mans 24 Hours.

Le Mans was created for sports cars, a relatively unassuming name indicating that there were cars – and then there were sports cars, implying competition. If you wanted your car to go fast and beat your friends, or indeed race against them on a track, you needed the lowest possible weight to allow your projectile to be propelled at the fastest possible speed with the power available. So, the owners of the so-called sports cars would strip out their cars, improve engine performance, etc., and – hey presto! That principle has not changed since the first race took place. But some drivers and owners began to dominate, just as they do today; of course, others with slower cars, or less money to develop them, objected to that dominance, and so in the interests of fairness various clubs and committees established classes so that competition could be for an outright win and for a class win. The Le Mans 24 Hours took this concept to new levels.

The Automobile Club de France was formed in 1895, and, on 26 June 1906, held the first French Grand Prix on a circuit created at Le Mans in the department of La Sarthe. That first Grand Prix was won by a Renault car driven by Ferenc Szisz, who covered the 12 laps of the circuit in 12h 14min.

Although the race was called a Grand Prix, the cars were, in fact, two-seater racing vehicles (for a driver and a mechanic), and, apart from the town-to-town races held in earlier years,

in which the Renault marque had proved very successful, this race at Le Mans came to be seen as the probable start of long-distance circuit racing. Another not insignificant fact is that some 20 years previously, early in the morning of 9 October 1875, a 4-ton steam-powered vehicle had left Le Mans heading for Paris; it arrived successfully 18 hours later. Its driver, Amédée Bollée, had created a machine that had suspension on each of its four wheels, efficient brakes and a claimed speed of 40kph.

So, the town of Le Mans, a community that dated back to before Roman times, could be said to have been right at the forefront of the new technology of motorised passenger-carrying vehicles, and also in at the beginning of circuit racing.

Over the years that followed, up to and after World War I, motor racing, especially with sports cars, as were seen on the roads every day and would be recognised by everyone, had quite early on attracted many manufacturers, as the records of events and their participants show.

The coming of the official Le Mans race in 1923 led to a huge surge of interest in the car that won. The maker would enjoy an almost legendary acclaim as his cars could be rated winners of what was recognised as one of the greatest of endurance races, and sales would go up. Nearly every serious sports car manufacturer has at some time in its history set its sights on Le Mans. Even today a win at Le Mans will have an effect on the sales of a manufacturer's road car range.

In 1904, the Fédération Internationale de l'Automobile (FIA) was created to be the governing body of official motorsport. In 1946, the FIA, with its headquarters in Paris, standardised the rules and regulations governing Grand Prix Racing, Formula 1 as it is known today, and in 1950 went on to organise a Drivers' World Championship. Sports racing car enthusiasts had to wait until 1953 before the FIA recognised the part that sports cars, their manufacturers and owners played in the world of motorsport, establishing then what became loosely known as the World Sports Car Championship, based, like F1, on a points system.

From 1953 to 1961 there was what was known as a Championship series – a number of designated events where points could be scored. At first it was for manufacturers rather than drivers – a World Championship for Makes. In the beginning it was a bit of a casual affair until the serious disaster that occurred at the 1955 Le Mans, after which much stricter regulations were applied. To put it simply, cars had to be road-going, with proper bodies and lights, passenger seat, spare wheel, space for luggage, etc. But even with these rules, by 1960 some of the cars had become little more than Grand Prix cars with bodies, and, from 1962, the FIA decided to restrict the World Championship for Makes to GT (Grand Touring) cars only. However, after huge protests that it had 'dumbed down' the challenge, cries which came from manufacturers and public alike, the FIA instigated a class called the Challenge Mondiale, which would eventually run until 1974. This Challenge Mondiale introduced a class known as 'prototype' for all those few-off, super-fast specials that provided the speed the public adored. This class grew and, between 1962 and 1981, there were various engine capacity and car type classes for each of the sections: GT from 1962 to 1965, prototype championship and competition

Early poster. (Photo JS)

sports cars 1965 to 1967, International Championship of Makes 1968 to 1971, World Championship of Makes 1972 to 1975, Silhouettes 1976 to 1981, and a drivers' challenge that started in 1978. (Are you keeping up?)

In the late 1940s Europe was still recovering from the second catastrophic period of its evolution in the 20th century, World War II, during which most of the production of vehicle manufacturers had been diverted to the war effort on both the Axis and Allied sides. Racing had all but ceased. The war ended in May 1945 (in Europe, at least) and the first post-war car race was run on a course round the Bois de Boulogne in Paris on 9 September. Two years later, in 1947, an event was restarted that had captured the imagination of so many before the war: the Mille Miglia, held on the roads of northern Italy. It is called the Mille Miglia because it was run over a distance of

"The world was a different place in the late 1940s, and it was in a climate of post-war austerity that Renault brought out the 4CV."

1000 miles; originally on open roads, but after many incidents the roads were closed and the event had the route to itself (well, nearly!) with the result that it got faster and became, along with the short-lived Carrera Panamericana, probably one of the toughest road races in the world. Of course, this was over a set distance on public roads, and the game was to cover that distance as quickly as possible.

The first post-war Le Mans 24 Hours race was held in 1949 on an entirely closed circuit, a large slice of which ran by the village of Mulsanne. The 24 Hours circuit still uses some public roads, which are closed for the event, and in the early 1950s it was still run on a circuit whose layout had changed but little since 1923. For France, arguably the spiritual home of motorsports, this race became the ultimate challenge.

4CV Luxe/49 model at Trocadero Paris, September 1948. (©R)

For some reason, however, Renault didn't get involved in trying to win this great race, or even playing a major racing role, until after World War II. The world was a different place in the late 1940s, and it was in a climate of post-war austerity that Renault brought out the 4CV. The first time this diminutive but solid and reliable little car was seen at Le Mans was in 1949, then again in 1950, and, as popularity grew, several examples were racing in 1951.

Renault was expanding the number of agencies it had, and

it was in this context that we first hear the name Rédélé. Jean Rédélé's father, Emile, set up a Renault dealership and garage in Dieppe in the early 1920s, and it was there that the young Jean was introduced to the world of cars and racing.

Emile Rédélé had been something of an adventurer; a fascination for engines rather than school work led to several confrontations with his father, one of which resulted in him leaving home rather quickly. He went to Paris and to Billancourt to become one of Louis Renault's employees; in fact, working on the 1906 Ferenc Szisz race car. Emile left Renault when, as the legend goes, it was discovered that the new central wheel fixings on one of the cars he'd fitted were not attached properly, and three of the four wheels came off, causing the car to dive into a pond.

Emile survived World War I and ended up in Dieppe, where he started a taxi service, eventually extending this to a coach business. Then he moved to the rue Thiers, where he started the Renault agency garage, married Madeleine Prieur, and son Jean arrived on 17 May 1922. Born into cars, Jean Rédélé developed an interest in racing after he rebuilt the shattered remains of his father's garage following World War II. Creating Grands Garages de Normandie, he worked on refurbishing ex-army vehicles to raise the finances to rebuild the garage. Rallying became his hobby and he found he was quite good at it, becoming attached to the official Renault team, which led to entries in the Mille Miglia and Le Mans 24 Hours.

1063cc 4CV ready for Le Mans. (©R)

4CV of Pons/Lecat ready for Le Mans. (©R)

Lined up for the 1951 24 Hours outside the Boulogne-Billancourt plant. (©R)

1951 Sandt/Moser car abandoned during the final hour. (©R)

Ah, that's better! Jean Rédélé takes a break, Le Mans 1952. (©R)

Renault first entered cars in the 1950 edition of the 24 Hours – the 18th running of the by-now historic race. There was an entry of 60 cars that year, the largest field ever to start the race. On 24 June the race began at its traditional time of 4pm on a circuit of 8.38 miles (13.492km), unchanged since 1932. The big cars looking for outright victory were the likes of Bentley, Talbot, Jaguar, Delage and Ferrari, but among the smaller cars after a class win we find car No. 48, driven by Jacques Lecat/Louis Pons; it finished 25th, with its sister car of Sandt/Coatalen just one place ahead.

For the 1951 Le Mans the big guns turning up again included Aston Martin, Ferrari, Talbot, Jaguar, and a name that would become synonymous with Le Mans in later years: Porsche. This time Renault entered a factory team of five 4CVs – fully race-prepared R1063cc cars (see previous page). Three finished, with the highest placed car being No. 50 in 23rd place, driven by François Landon and André Briat.

By the end of 1952 Jean Rédélé had already proved a formidable competitor on the Monte Carlo Rally, and also that year he took part in the Mille Miglia with a 4CV Renault in which he won his class. The Mille Miglia was really something special, and could be driven with or without a co-driver. Roger de Lageneste, whom we will hear from often in this first sports prototype era, drove the Mille Miglia twice.

Roger de Lageneste: "The Mille Miglia, I did it twice in my Peugeot, once on dry roads and once on wet roads. In the wet I did 14h 34min on my own and the year after on a dry road 13h 34min; average speed was 110kph. With my Peugeot I could not go more than a max speed of 148kph! I did it non-stop apart from time checks and refuelling. I began my racing like that. In those days I drove the car to the race from my home [near Moulins in France], did the race, and drove back home alone – no co-driver!"

Jean Rédélé decided to enter the 1952 Le Mans 24 Hours, along with 56 other starters representing 22 manufacturers. Mercedes took first and second places, but down the field, some

Sandt/Moser refuelling, Le Mans 1952. (©R)

Rédélé/Lapchin on their way to 17th overall. (©R)

1400km behind in 17th place overall, was Jean Rédélé in car 67, co-driven by Guy Lapchin, having covered some 2388km (1483.834 miles) at an average speed of 99.5kph (61.82mph).

The die was cast, but the dream that came true 26 years later would hardly have been imaginable at that time.

In 1953 Rédélé and Pons entered and finished the first Mille Miglia to count for the Manufacturers' Championship – round two of the World Sports Car Championship – held on 25-26 April. They finished in 151st position out of 283 cars that finished the event and eighth in the Sports 750cc class.

13-14 June saw the 1953 edition of 'La Ronde Infernale' (Le Mans 24 Hours) but Rédélé and Pons failed to finish. This time, though, they were driving the delightful Sports Barquette VP Renault, running out of fuel after four hours with only 35 laps completed. (We'll see more of this type of problem later!)

Also entered in that year's Le Mans was car 56 powered by Renault and bodied and driven by Vernet and Pairard; a coupé version, it was still running but not classified at the finish. Rédélé

4CV coach by Vernet/Pairard. (©R)

also ran again in the little VP sports car in the Spa 24 Hours that year, but engine failure meant that he didn't finish.

In 1954 it was back to Italy for the Mille Miglia on 1-2 May; this time Rédélé and Pons took a touring 4CV to victory in the 750cc class on what was round three of the World Sports Car Championship for that year.

1955 saw Rédélé and Pons take the VP Renault sports car to the Sebring 12 Hours on 13 March, but they were caught up in an accident on lap three and failed to finish. Relegated to reserve in the same car at the Le Mans 24 Hours that year, Rédélé did not get to race.

By now, though, he had other things on his mind: he was about to introduce the first cars bearing the Alpine name. A few years earlier he had made the acquaintance of Giovanni Michelotti, whom he asked to design a sports coupé based on the 4CV chassis, which he called the Renault-Special. It had an aluminium alloy body manufactured by Allemano, and weighed just 550kg (1210lb). This car found its way to the USA in 1954, to the New York show and an abortive cooperation scheme for production as a car called the 'Marquis.' Late in 1954 Chappe and Gessalin, coachbuilders, created a 'coach'

"Following a class win in the 1955 Mille Miglia in a second Michelotti/Allemano-bodied car, driven by Galtier and Michy, it was decided that the name Mille Miles should be used as a designation for the high-performance variants of the cars."

Line-up for practice, Le Mans, June 1953. (©R)

body at the behest of Rédélé's father-in-law, Charles Escoffier. Family discussions took place and several of these bodies formed the shape of the new Alpine 106 and Rédélé's first 'production' cars. Alpine was the name chosen for the marque, as a celebration of two consecutive class wins in 1953 and 1954 by Rédélé and Pons in the 4CV in the Coupe des Alpes rally. Three of the new A106 glass-fibre-bodied cars – one blue, one white and one red – were shown to Pierre Dreyfus, new managing director of Renault, at Renault's Boulogne-Billancourt HQ in July 1955. Although he was not successful in enlisting Renault company support, Rédélé pressed on with developments and showed off the glass-fibre-bodied cars on the Chappe and Gessalin stand at the Paris Salon in September 1955. Production would begin a while after at Escoffier's premises in Paris, and later Dieppe. Following a class win in the 1955 Mille Miglia

in a second Michelotti/Allemano-bodied car, driven by Galtier and Michy, it was decided that the name Mille Miles should be used as a designation for the high-performance variants of the cars. A Certificat de Dépôt d'Acte was issued by the Tribunal de Commerce de la Seine on 6 July 1955 recognising the official foundation of Société des Automobiles Alpine on 22 June that year.

A Michelotti-designed A106 cabriolet incorporating for the first time the centre tube chassis in place of a Renault floorpan was completed in Turin on 3 May 1957, and, in 1959, preparations began for the A108 Berlinette which was conceived (as Jean Rédélé told motoring historian Christian Descombes in a 1990s interview) after he had received a drawing of a car from a young lad, the 17-year-old Philippe Charles. Rédélé was taken by the designs and asked Philippe to join him in creating a car based on his early tube chassis 106; it became the A108 and later, as development progressed, the iconic A110 Berlinette, a name that was popular at the time and used by Ferrari and others. Rédélé's mind never rested in those days and he was always thinking of something bigger. He loved competition, he loved the big races and he loved Le Mans. Jean Vinatier, a driver who was to become famous with Alpines in rallying and circuit racing, had also taken part in the Mille Miglia, including the last one to be held, in 1957, driving an A106 Alpine. The race would not be held again after an horrendous accident when the Marquis Alfonse de Portago and his co-driver Edmund Nelson were killed along with nine spectators, among them five children. De Portago had a tyre blow-out on his Ferrari, causing the car to fly off at 150mph (250kph) into the crowd lining the route.

Galthier and Michy, first in the 750cc Touring category. (©R)

Jean Vinatier: "It was my second drive in the Mille Miglia with the Alpine A106. I was the first car to go past the scene after the Ferrari had crashed. Even now if I close my eyes I can still see the scene of the crash; there were many people in the road, wheels on the road and dirt from the accident everywhere. It was a very straight road and very fast and with my Alpine I was going at 116kph (72mph) and behind me there was a Ferrari catching me, travelling at 200kph+ (124mph). Normally the Italian spectators shouted 'Via! Via!' but this time, it was only 'Piano! Piano!' (Slowly! Slowly!). I did not understand and because there were people on the road it was not possible to see more than 300 or 500m ahead, and when I arrived I saw the catastrophe. I slowed and passed by – I don't know why, but I did; it was sure there was nothing that I could have done. When I arrived in Brescia I asked the officials but they didn't know exactly what had

happened. It was 30 or 40km before the finish. Even now in my memory it is difficult to think about that Mille Miglia.

"Because the Italian organisers didn't want us to compete with the Abarths, I raced in the sports category that year with my car. I averaged more than 111kph (68mph) in that Mille Miglia. I finished in 112th place and fifth in the 750cc sports class in a time of 14h 36min 44sec."

Sports car racing was entering a new era, and Jean Rédélé started to look at the long-distance races in greater detail. He was beginning to think about entering the World Sports Car Championship for real, but to do this he needed a plan and a better car for the job: he needed a long-distance racer and a good engine. He had the A108 and was about to launch the A110 when the legendary French journalist Gérard Crombac, a good friend of Colin Chapman of Lotus and whom Rédélé also knew well, suggested that he might be able to help with some contacts.

"Normally the Italian spectators shouted 'Via! Via!' but this time, it was only 'Piano! Piano!' (Slowly! Slowly!)."
– Jean Vinatier

Alpine A106 Mille Miles. (©R)

Jean Rédélé could see that Renault was supplying engines to DB to race in its prototype cars. He approached Renault, which agreed that it could also support the Alpine company with engines from Amédée Gordini if Alpine could show the Renault management a sports car capable of running at Le Mans. It was the green light to enter the world of sports prototype racing. Rédélé decided to open the door and the talking began. Colin Chapman spoke with Len Terry, legendary chassis designer, who made contact with Rédélé and presented a creative chassis design not dissimilar to the Lotus 23. Would this be the car to take Alpine sports prototype racing? The legendary adventure had begun.

2 A CAR IS BORN

Jean Rédélé received the details of a racing sports car chassis that had been drawn for him by Len Terry. José Rosinski (racing driver and later famous journalist) says: "The design, pretty much like the Lotus 23, was good, but by the time Jean Rédélé got the drawings they could see that Terry had not followed the latest regulations for the cars that were to run at Le Mans – the problem was that the brand-new design arrived at the same time as the new CSI rules." Reading the document, Crombac and Rédélé were a bit concerned: the new changes made the Len Terry design obsolete.

Bernard Boyer, racing driver and designer, was already doing some work for Alpine, and before receipt of these designs had spoken to Rédélé about a friend of his. Rédélé wanted to expand Alpine sales and agreed to see this friend. This led to his decision to recruit a young Richard Bouleau. Bouleau (eventually to design all the Alpine racing chassis from 1963 to 1969): "I was working for SAVIEM (the Renault truck division) in Paris after finishing my studies in Saumur. Through some friends, and in particular Bernard Boyer, I was introduced to a little group of young guys who used to meet at the Bar de l'Action, near to the Etoile in Paris. There was José Rosinski, Jo Schlesser, Amédée Gordini, Jean Lucas and Gérard Crombac.

"Bernard Boyer introduced me to Jean (Rédélé). Rédélé didn't really want a new designer but he was interested in my experience in Mexico where I had been for SAVIEM and what he had in mind for me was a job as assistant in the department that dealt with Alpine licensees abroad. This was in November 1962. Shortly after I started with Alpine I was asked to take a look at some drawings that Jean Rédélé had apparently got from Len Terry for the princely sum of £300. It was Bernard again who was instrumental in this: I had helped him with one of his chassis the year before and although I had not previously been involved in racing, once I had been to a few races with Bernard I had started to formulate some ideas. Bernard had convinced Mr Rédélé that I could create a car for Alpine."

Bernard Boyer had been racing a Monomil, a small front-wheel-drive single seater with Panhard mechanical parts, and wanted to move up to the much more interesting single-seater Formula Junior series. He decided to build his own car, calling it the Sirmac, and Richard had helped him design the chassis, while friends from the Garenne Bezons company created the bodywork. It proved to be a promising chassis and so Bernard saw good reason to recommend Richard as the man to create the car for Jean Rédélé.

Richard again: "There was no design office then – we just went out and bought two drawing boards and began to design a car in Jean Rédélé's apartment. In fact, I never did get round to working for the licensees abroad!"

The two young men suggested a new project more suitable for the new rules. Jean Rédélé wondered about the abilities of Bouleau and Boyer and sought reassurance from Colin Chapman; after speaking to him about the revised design and taking into account the new rules, Rédélé decided that the general principle of the Lotus chassis could be maintained but accepted the new design team's views.

Richard Bouleau: "If I remember rightly, at first the central tube was to serve as fuel tank. After torsion testing this idea was abandoned but the basic structure of the M63 was born."

The author spoke to Len Terry in August 2008; here is what he said: "Jean Rédélé – of course I remember, but it's a long time ago. I had done some work with Colin (Chapman), but you know I had no formal training in design; it just seemed to be something I could do. Colin liked my work and asked me to see if I could design something for Rédélé. I had not long before designed the Lotus 23 chassis so it seemed logical to do something along those lines. I was not given any specific instructions as to detailed regulations, so I was not surprised when I heard that they had changed quite a few things from the drawings. They still used some Lotus parts, though."

At the time, Jean Rédélé spent most of the week in his Paris sales office talking to customers and marketing his product. He went back to Dieppe at weekends, and arrived on Saturday morning to inspect the work that had been done during the week under the management of Etienne Desjardins.

Richard: "I remember that we decided to start almost from scratch because the Len Terry design had taken no account of the rules, which included specific door sizes and openings, ground clearance, space for a suitcase, etc., and several other crazy

Marcel Hubert in white overalls. (Photo AAA)

Smooth teardrop-style aerodynamics. (Photo RS)

things dreamt up by the rule makers to keep the Le Mans cars to two seaters and in the spirit of sports cars. We did try to build a first chassis using Len's ideas but stopped once we realised that it did not meet the regulations."

In fact, Bouleau and Boyer came up with a new design perfectly suited to the regulations: it was a pure sports prototype for the up-to-1100cc class specifically designed for the 1963 Le Mans 24 Hours and designated the M63. It would be ready for testing which, as tradition dictated, took place in springtime at the Le Mans circuit.

The central beam chassis, an idea dear to Jean Rédélé, had been retained, with a tubular framework at each end to take the suspension and mechanical parts. Rédélé told Christian Descombes in an interview, "To test the strength of the tubular beam we used to weld it up and put each end on some blocks of wood or concrete, or anything we had to hand, and several of us would jump on it in the middle, to see if it was strong enough!"

Several parts originating from the new Renault R8 were used in modified form with other items acquired from Lotus – rear wheel hubs, wheels, etc. They also kept the design of the windscreen from the early Berlinette Alpines and the front bonnet cover dimensions. The front suspension was by double wishbones with Allinquant shock absorbers. The gearbox was a VW unit with Hewland modifications utilising five speeds.

During December 1962 Marcel Hubert, a man who went on to influence almost every Alpine and Renault race car, came on the scene, his first work for Jean Rédélé being just after Richard had started. Hubert had studied at the Romani School and joined Alpine first on a freelance basis, then as a company employee. His aerodynamic work played a major part in the amazing performances achieved at Le Mans over the coming years.

"At a time when computers were not even thought of for designing, his brain worked like one, able to turn two-dimensional concepts into three by literally cutting some wood or foam to shape to demonstrate what he had in mind." – François Castaing

A master of the situation, Hubert knew how to work in a team, taking into account the comments of drivers and the requirements of the engine people and chassis designers. François Castaing, who created the V6 Renault Gordini championship-winning engine ten years later, said: "Marcel Hubert was Alpine's secret weapon; he was simply a genius. At a time when computers were not even thought of for designing, his brain worked like one, able to turn two-dimensional concepts into three by literally cutting some wood or foam to shape to demonstrate what he had in mind."

This new sports prototype was Marcel Hubert's first Alpine car, and its design was formed over a mock-up. These pictures show his original wooden mock-up for that first sports prototype M63.

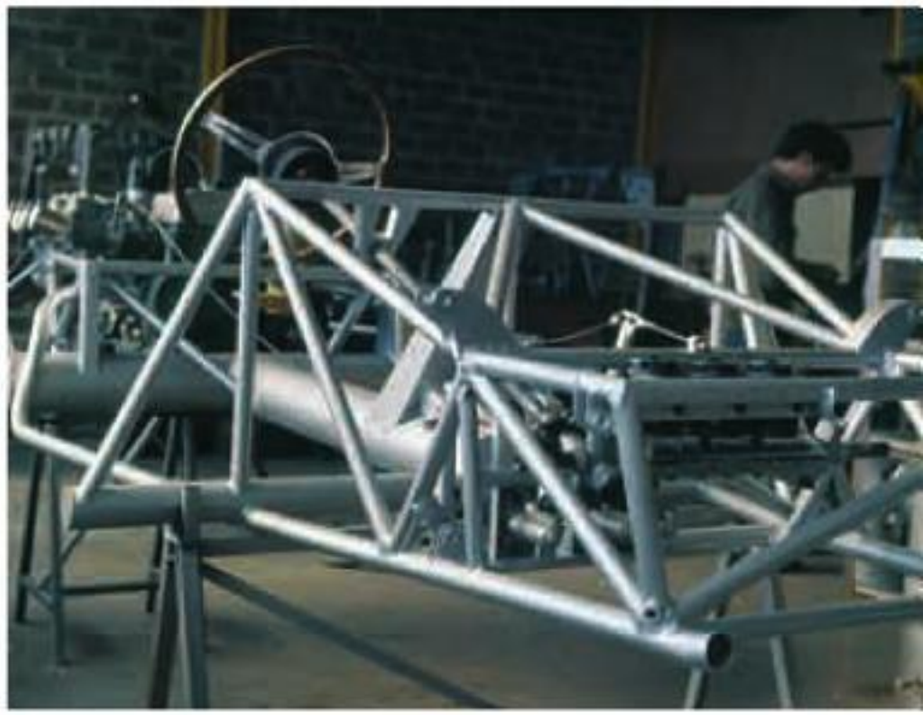
The overall shape took a similar form to that of the new Berlinette Alpine. (Photo RS)

Windscreen, bonnet and several other features are from the early Berlinette. (Photo RS)

Marcel Hubert's expertise had previously been employed on the successful Panhard-powered CD, producing a beautifully crafted and shaped body that would give very low drag coefficients and a projected top speed of 220kph (136.7mph) on the long Le Mans straight; their target, the indexes (class and category challenge) of performance or energy.

The central-tube chassis seen here formed the base onto which steel tubes with multiple triangulations (along the lines of Lotus thinking) were attached; indeed, as already mentioned, several Lotus components were used in the construction, the most evident to the outsider being the magnesium wheels. The fuel tank held 32 litres, and the car had a wheelbase of 2300mm, and a track of 1280mm at the front and 1270mm at the rear (90.5 inches x 50.4 inches x 50 inches).

The car was powered by a Gordini four-cylinder engine consisting of a wet-sump, cast-iron block utilising a five-bearing crankshaft and a new alloy head double overhead cam design, with two valves per cylinder, and was fuelled by two twin-choke DCOE Weber carburettors. The engine was developed by Amédée Gordini for the Renault R8 and was initially a 996cc unit developing 95bhp. The engine was linked to the gearbox by a Ferodo single-plate dry clutch.



Central-tube M63 chassis. (Photo CD)

Workshop scene. (Photo CD)

Giuseppe Albarea was a young engineer who had joined Gordini and continued into the Renault Sport era right through to the F1 period of recent times. Now retired for several years, he recalls throughout both volumes of our story what he remembers of those times. Giuseppe Albarea: "I began at Gordini in January 1963, working in the design office as a draughtsman. I was young but I had completed my training and joined two older men – Igor Bourimoff and Marc Bande. Gordini was making small engines derived from Renault production units for René Bonnet. The Gordini factory was at 69 boulevard Victor, near the Porte de Versailles, opposite the Parc des Expositions. There is a Mercure Hotel there now, but at the time there was a café on the site, and the factory wrapped around the café in an L-shape. Gordini's factory was quite old even then, dating from before World War II. In those days and in the days just after the war they didn't have much money, so they were used to making things simple – whether things always worked or not was another question! I remember Mr Gordini tried to spend as little money as possible.

"The design office was a glass building within the workshop and there were five drawing boards. In the workshop there were also the assembly areas, with test benches in the middle; it was an open area, so when the engines were running it was very noisy in the factory and the neighbours living above and in the nearby building used to complain a lot. In the other part of the L-shape were the machining workshop and the parts store. Soon after I got there I heard about the new arrangement: we were going to supply some engines to the Alpine company."

The first car was finished in the Dieppe works on 5 April 1963, one day before the scheduled Le Mans trials. They had had little time to check the car and resolve any major problems when Bernard Boyer took to the track, the car being fitted with a

Checks during testing. (Photo HMW/R)

Rosinski about to leave the pits. (Photo HMW/R)

In the paddock – note the Lotus wheels. (Photo HMW/R)

four-speed gearbox, and did a few laps around the Sarthe circuit to shake down the car before handing over to José Rosinski, the officially entered driver, running with No. 47.

Initially Rosinski was taking over five minutes a lap, but after a five-speed gearbox was fitted he recorded a lap of 4min 40sec during the last of three sessions that allowed the 15 cars that had turned up to conduct assessments ahead of the race. It was here that Rosinski first found that, although the car cornered well, on the long Hunaudières straight (known to the English as the Mulsanne straight) it was difficult to keep in a straight line. He feared that the slightest movement of the steering when running at high speed would send the car out of control.

A few modifications were made and, despite its difficult handling at high speed, a couple of weeks later the car was out again, this time at Montlhéry with Bernard Boyer at the wheel.

Montlhéry proved to be a success, and it was felt that the car should be tested in a race to give experience to the drivers and the team prior to Le Mans. The car, designated chassis 1701, was entered for its first major appearance at the Nürburgring 1000km on 19 May 1963.

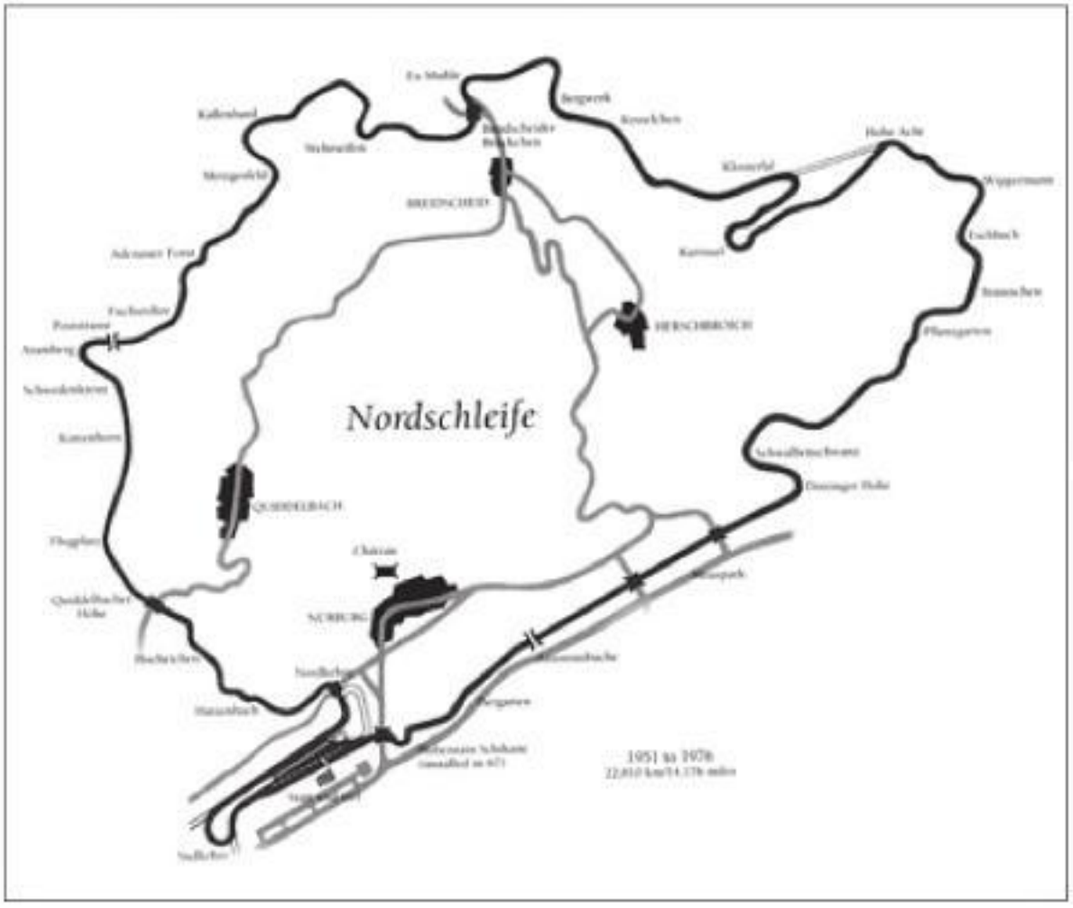
Bernard Boyer. (Photo CD)

3 Time to go racing

The Nürburgring, in the Eiffel mountains near the Belgian border in Germany, is one of the most challenging circuits in the world. It can be glorious – sunny, hot and dusty – but more frequently the weather is cold and damp, with mist swirling around the trees, promoting a sense of mystery and perhaps fear. So it was on 19 May 1963 as the gladiators of the World Sports Car Championship set off around the Nordschleife – 22.810km (14.173 miles) of twisting, rising, falling, uneven surface that had seen the giants of Mercedes and Auto Union go head-to-head with the Alfa Romeo of Nuvolari in the 1930s. Many had come, but few had really conquered this mighty circuit.

Alpine was about to try its new creation on the most demanding track in the world. It was not the only new boy on the block, though; this was a period of rapid development among the smaller-engined car manufacturers, and a lot of new sports prototypes were on the entry list. Stirling Moss, the legendary uncrowned king of motor racing, had entered a neat little Frank Costin-bodied Lotus Elan special for Innes Ireland and John Whitmore. The Enzo Ferrari-supported ASA, the so-called 'Ferrarina' company, brought two cars. A new Abarth Simca prototype showed up along with the forerunner to the GT40, the Lola V8 GT. Several French Bonnets, a G6 Ginetta with a two-stroke DKW engine, and a BMW-powered sleek and streamlined car from local entrant Willy Martini added to the mix. Many failed during practice and, of course, it was the powerful 250 GTO Ferraris that dominated the pre-race formalities. However, entered in the GT prototype class, and qualifying 28th position on the grid was the No. 92 Alpine Renault M63 of José Rosinski from France and American driver Lloyd 'Lucky' Casner.

Casner had co-driven with Stirling Moss in a Maserati a few years before, and through a link to Gérard Crombac, who as we know was a friend of Jean Rédélé, was brought in as co-driver to utilise his knowledge of the circuit. Keeping company with the new sports prototype car was another factory Alpine entry, that of Frenchmen René Richard and Henri Grandsire in an A108 Berlinette. A future star Alpine driver started from 11th place but failed to finish – Mauro Bianchi, 1000cc GT class World Champion for Abarth. The little A108 Berlinette also failed to finish.



The Nürburgring Nordschleife.

The start. (Photo CD)

Rosinski ahead of Helmut Felder in the SWB 250 GT Ferrari. (Photo JR)

José Rosinski: "Lucky Casner was used to big cars with lots of power, and he was quite concerned at having to drive flat out in a little car with a small engine, but he did it OK. As for me, I drove quite carefully – never at 100 per cent – and so I cannot say that the car was really good or bad, but by driving in this way we achieved a good result."

A good result it certainly was: after 7h 31min of racing in the mist from the traditional Le Mans-style start with the drivers running across the track, the outright winners at the end of the scheduled 44 laps were Englishman John Surtees and Belgian Willy Mairesse, but on 40 laps and qualifying as a finisher in 11th place overall and first in the 1300cc prototype GT class was the Alpine Renault M63. A class victory in its first event!

At the start the sun was shining, then it had rained, hailed, then the mist came and went and finally it was back to sunshine, all of which produced a challenging situation for the drivers. However, it was an overjoyed little team from Alpine that returned home with that victory in its new car, chassis 1701, almost 'straight out of the box.'

Standard 4-cylinder R8 Gordini engine. (©R)

With this result and proof that the specification of the first Alpine sports prototype worked, the team decided to build more cars specifically to race at Le Mans. The design would be basically the same for each of the following chassis, numbered 1702 and 1703. The engines installed would be the new double overhead cam unit loaned and looked after by the men from Gordini. The transmission was, of course, rear-wheel drive, through a multi-plate clutch and 5-speed Hewland internals in a Volkswagen-type casing.

Giuseppe Albarea: "Amédée Gordini had wanted to expand his services and had already been working with Renault for some time, beginning with the Dauphine during the 1950s, when along came the idea for a new car by Renault called the Renault R8. In 1962 they were working on that engine – a 4-cylinder Renault single overhead cam unit – on which we had modified the cylinder head and cam, fitted twin Webers and a few other things. It was Gordini who had wanted to develop the engine and he presented it to Renault during 1962. Renault had said yes, we'll take it and make a few cars with it. Certainly they didn't have any idea that they would sell as many as they eventually did – it was, of course, to become the famous R8 Gordini. I remember Renault set the prices and they sold a lot of cars. It was thanks to those cars that a large number of future great racing drivers were to make their names. The single cam was nearing the end of its first design phase at Gordini and the twin cam was the first one I was involved with. I remember there were lots of little deals going on, and at the time it was Amédée Gordini who did all the contracts himself; he often did things which we didn't know about until afterwards! We were around 20-22 people at the boulevard Victor premises then – not many.

Twin overhead cam engine installed in the M63 chassis. (Photo CD)

"Those first engines for Alpine were the new twin camshaft ones. When it first appeared it was 996cc, to enable it to fit within the under 1-litre class rules. They had actually started re-designing the cylinder head in 1961, before I was there. But initially they were not very powerful and they had started to create a new unit called the type 55 – similar to the 51 but with improvements made by Igor Bourimoff and Marc Bande. Mainly Igor worked on the 55 and Marc, who was a gearbox specialist, converted the 4-speed unit to take five speeds in the same casing."

The M63 body was a Marcel Hubert-designed two-seater coupé, constructed of resin and glass fibre. It had a claimed CD efficiency of 0.15.

As the cars were prepared for Le Mans, they were built with a front track of 1.280m (50.3 inches), and at the rear 1.270m (47.2 inches) with a wheelbase of 2.3m (90.55 inches). The body width was 1.630m (64.17 inches), height 1.230m (48.42 inches) and ground clearance 150mm (5.9 inches). Weight varied between 601-620kg depending on the transmission chosen and various minor construction details. Fuel tank capacity was 32 litres. Maximum speed was reckoned to be around 232kph.

As already mentioned, at Le Mans there were not only the overall and engine-size class victories to go for, but also two classes called indexes: performance and efficiency. For those unfamiliar with the terms 'index of performance' and 'index of efficiency,' it's worth explaining here what they mean, and how they work, and also the regulations related to classification as a finisher in what is still the greatest test of man and car on a circuit over 24 hours. This format was in force in 1963 and for many years to come. At first it was calculated manually and mechanically; later it became electronic, and today it is digital.

To be classified, a car taking part in the Le Mans 24 Hours had to cover a minimum distance (D_1), depending on its capacity.

A first classification (outright total distance) was calculated at the distance (D) actually covered during the 24 hours. As this favoured the large-capacity cars, a second classification, called the performance index, compared the actual distance run (D) with the minimum required distance (D_1).

A car that had run the minimum distance D_1 had to continue until the end of the 24th hour. Moreover, from the moment it met the distance requirement, it also had to maintain the minimal hourly speed defined by its routine lap speed until the end of the race:

$$\frac{D_1}{24}$$

For 24 hours, the competitors were, therefore, checked both for the distance run and their hourly speed. This required constant timing, so there was a special calculation team which drew up hour-by-hour the distance classification and the performance index classification.

Here is an explanation of the system taken from a Le Mans race programme of the 1960s: "The timing mechanism is located at the edge of the track, a short distance before the refuelling pit entry, in the direction of the race. A white line is marked on the track, the zero point of the 13.461km circuit, next to which there is a timing building which has on its first floor a wide glass window to enable the staff to see the cars arriving and passing. The registering chronograph is placed exactly on the white line. Each time a car crosses the white line, the chronometrist moves a lever and engages the mechanism which inscribes on a paper roll the hour, the minute, the second and the tenth of a second. When a car approaches, a look-out calls out its number which is immediately noted next to the time printed on the paper. The average speed for the lap is calculated and is announced over the loudspeakers if it is out of the ordinary. Every complete hour, a classification is drawn up by the number of laps completed since the start, with an indication for each car of the exact time of its last pass before the complete hour. This classification is transmitted by teleprinter to the calculation service, situated close to the race director.

"The calculation of the distance run and, consequently, of the average speed and the performance index are rather complex. It must take into account the placing of the car at the start. Thus, a car which at the start was located 200m from the zero line benefits up to the end of these 200 metres. Each hour then, these 200m must be deducted to place the car on the same level as a car which started on the zero line: this correction at the start is set out in the rules. On the other hand, the timing gives the number of laps completed before the end of each hour, and at the moment when the complete hour chimes, each car has run a certain distance over and above the number of whole laps. As this distance cannot be measured exactly, it is estimated according to a rule of three, in the ratio between the time evolved since the last passage at the complete hour and the time used so far for the car on its present lap. At the 24th hour, the calculation is tighter, the base time being the duration of the last lap during which the 24-hour period is up, which is why the rules require that this last lap is finished in its entirety."

The second index was the thermal efficiency index. The formula for the calculations had been updated in 1962 to what follows. Of course, it would be impossible for a 1000cc car to compete on equal terms with a 3000cc for outright victory, but competitors could win in their engine class or chassis category and/or in one or more of the indexes.

For the efficiency index, to avoid confusion, we will stick to a relatively brief explanation, again taken from the official document.

It was based on the car's average speed over the 24 hours, its weight and its fuel consumption, the latter being expressed in litres per 100 kilometres during those 24 hours. To be classified, of course, we know that the car had to have completed its minimum required distance D_1. The thermal efficiency index is expressed by the formula:

$$Ir = \frac{Em}{Er}$$

where Ir is the thermal efficiency index figure and Er is the fuel consumption over the 24 hours measured in litres per 100 kilometres.

Em is calculated from the following formula:

$$Em = 1.5 + \frac{(P+1)\,V^3}{4 \times 10^5}$$

where V is the average speed in kph during the 24 hours and P is the weight of the car in metric tonnes (with full fuel and oil tanks and one spare wheel).

This formula is then applied to every car in every class by a separate specialist team calculating the result, just as they do for performance.

There! I hope that clarifies things!

All the classes and the regulations for them were set out by the ACO (Automobile Club de l'Ouest) and, in the '60s, apart from those two indices, they generally followed the rules of the major championships. After 1975, though, when the ACO pulled out of the championship, the Le Mans 24 Hours was run to the rules of the ACO alone.

Serious stuff; so, let's take a peek at the lighter side of life with Alpine as the summer of 1963 approached. Richard Bouleau tells this story: "Before the Le Mans race, most of the introductions of a new team were done in Paris. But we did not or rather could not spend any money to launch our team, so somehow somebody – probably Jean or Jabby Crombac – had lured a French TV channel to do an interview and introduction of Alpine up in Dieppe. We had got everybody together; enthusiasm was high getting ready for the Le Mans 24 Hours in a few weeks' time. There was a media story going around about the perceived duel which would bring us face-to-face with the cars of René Bonnet. If I remember rightly, every Saturday Claude Joubert and Paul Renty did a brief overview on motorsports on the sports programme. So the journalists came up and we showed them round. We all got on pretty well and the two guys, instead of going back to Paris, decided to stay in Dieppe overnight and invited us to have dinner with them, whilst we gave them a quick tour of Dieppe – that didn't take long! Anyway Bernard and I had not been there very long, and at the end of the little tour we started to look for a picturesque bar where we could have a drink before going to dinner.

"Someone in our party said, 'Hey, Richard, you haven't been to Mélodie's yet, have you?' I cautiously replied that I hadn't and our two journalist friends looked puzzled but intrigued. So there we were, sitting in front of a row of whiskies in a bar by the port. The air in the bar was full of the aroma of the clothing and boots of the fishermen at a neighbouring table. Remember this was the early sixties; there weren't many people out and about in the evenings in Dieppe at that time, so the patronne was not in a position to choose her customers. The room had a long bar and a jukebox. Having emptied our glasses, we stood up to leave, but one of the fishermen looked at us in amazement: 'You're not leaving, are you? What about the show?'

"We had no time to ask questions as we saw the patronne leave her bar, throw the enormous bolt that locked what looked like a very heavy door and give us a conspiratorial look as she put a coin in the jukebox. As the music started, our attention was attracted towards the end of the room, where a little stage was suddenly lit up by spotlights. On the stage appeared a lady whose age would indicate that she was nearing the end of her career as she clattered through an astonishing tap-dancing number. The impressive size of her black bow and, despite her age, the shortness of her skirt were enough to fill us with good humour.

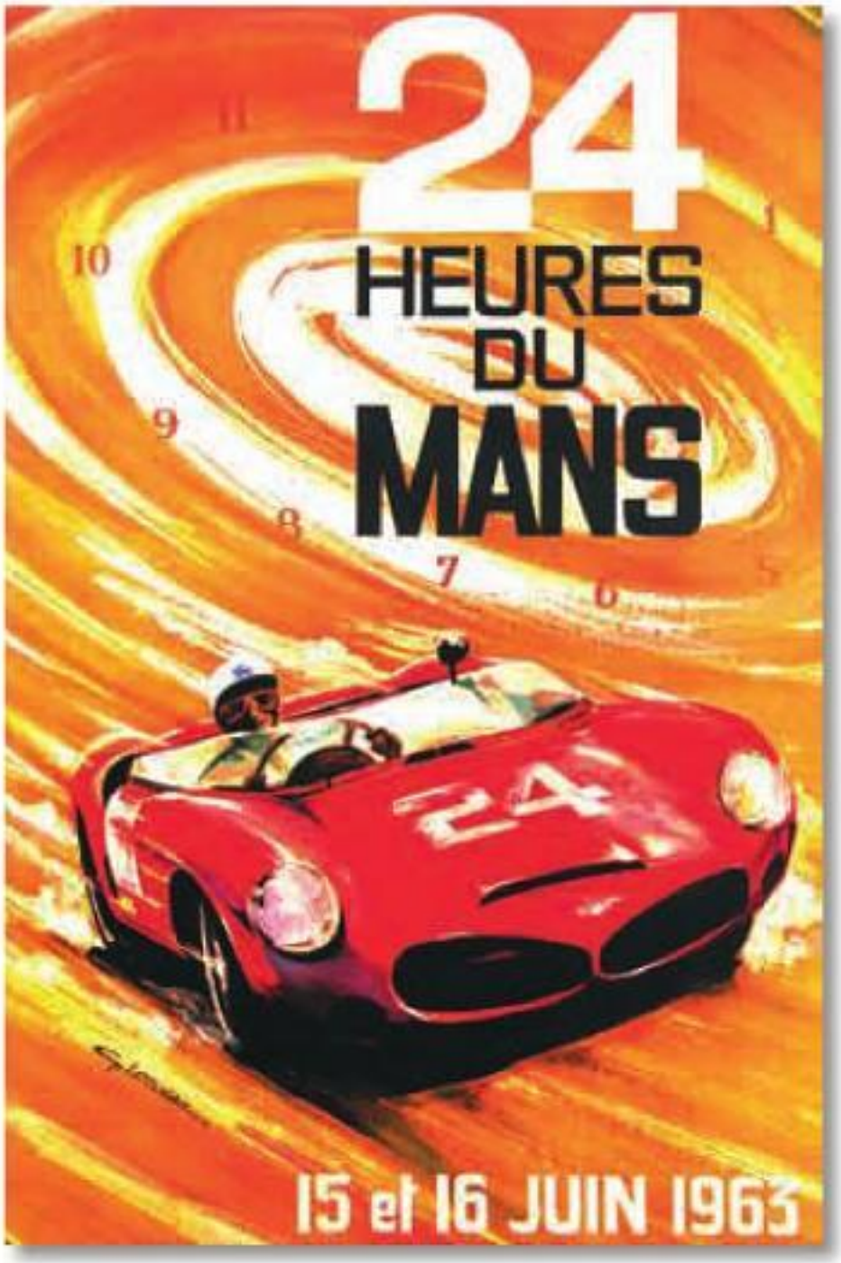
"... enthusiasm was high getting ready for the Le Mans 24 Hours in a few weeks' time. There was a media story going around about the perceived duel which would bring us face-to-face with the cars of René Bonnet." – Richard Bouleau

"When she got rid of the big bow, naively we still hadn't cottoned on to what she was up to. It was only when the miniskirt fell to the ground that we realised that, without the intervention of the fisherman, we would have missed the striptease of the century! In anticipation we now wondered what the final three minutes of the 45 single on the jukebox would bring. Well, this lady took her leave of her public just maintaining her modesty under a pair of panties which were as small as the black bow had been big.

"We had honestly not planned to lure our friends into this 'den of lust.' Later, when we were sitting in a restaurant, the meal was interspersed with frequent peals of crazy laughter. The men up from the city confessed that they had never enjoyed a Paris show as much as this one. You know, I wonder if I should wander down to the yacht harbour when I'm in Dieppe some time; maybe there is still the ghost of this lovely 'Mélodie's' somewhere behind the door of one of the restaurants which now attract the tourists."

So, after the dubious delights of Dieppe in 1963, we arrive in the town of Le Mans and the first attempt by Automobiles

Alpine at the Le Mans 24 Hours. Since the beginning of the year there had been a few adjustments to the new regulations for the various sports car championships and the Challenge Mondiale, and, following a CSI ruling, there was now no longer an upper limit on engine capacity in the prototype class. There was,



Le Mans, 1963. (Photo JS)

however, a new rule on weight and a new minimum height of 34 inches (85cm). The teams no longer had to refill oil tanks, water reservoirs and fuel on the same pit-stop. A new calculation for the index of performance was created for supercharged engines: there was now a correction factor of 1.4. Seatbelts were now recommended.

After the April tests and whilst chassis 1701 was being prepared for racing at the Nürburgring, two more chassis were put into production to the same specification as the first car. José Rosinski was asked to select the drivers for this first Le Mans, and he chose Bernard Boyer, Guy Verrier and René Richard – each well known to him as excellent combatants. To this mix he added his friend Piero Frescobaldi, an Italian 'gentleman driver' from a high-ranking Italian family with whom he had driven several times previously and who had already shown his metal. Christian 'Bino' Heinz was to drive alongside José Rosinski, a pairing aimed at utilising the perceived kudos of running at the Le Mans 24 Hours to aid the sales of Alpine cars in South America, where Alpine had a contract with Willys Overland in Brazil to produce Alpines under licence. 28-year-old Heinz, a German by birth, was a good racing driver, competent and charismatic; the sales manager for Willys in Brazil, he had driven at Le Mans in 1959.

1701, car No. 49, would be driven by René Richard and Piero Frescobaldi and weighed in at 601kg.

1702, car No. 48, would be driven by José Rosinski and Christian 'Bino' Heinz and weighed 608kg.

1703, car No. 50, would be driven by Bernard Boyer and Guy Verrier and weighed 620kg, the extra weight being due to a different gearbox.

It was sure that although Rédélé and the Alpine team had always dreamt of winning at Le Mans, in these early days it was only to win one of the categories, as they could not hope to compete with the powerful machines of Ferrari and later the Fords for outright victory.

Unknown to the team, tragedy was waiting. 'Bino' Heinz had agreed to drive just this once more – "for the last time," he said – purely to help co-operation in South America and, of course, to have some fun. He arrived in France with his wife and young child to spend some time on holiday as well as to race at Le Mans. He would never return to his home: he was killed in a fireball as his car crashed off the track.

The race started well, with car 49 in 29th place on the grid, car 48 in 33rd, and car 50 in 40th. The Alpines' only real competition was archrival René Bonnet, as the ASA and Abarth cars that had run at the Nürburgring were not entered. Car 48 of

The M63 of René Richard/Piero Frescobaldi. (Photo CD)

The M63 of José Rosinski/Christian Heinz. (Photo CD)

The M63 of Bernard Boyer/Guy Verrier. (Photo CD)

Preparation in the pits. (Photo CD)

The double overhead cam Gordini engine. (Photo GB)

On track. (Photo CD)

Rosinski/Heinz that carried the legend 'Equipe Interlagos Alpine' was in the lead on the performance index after two hours, with Rosinski at the wheel. The car was running well and was very fast on the long straight. Heinz took over at a pit-stop, and at the end of the fourth hour all was going to plan. Then it happened: Bruce McLaren had an engine blow-up in his Aston Martin, and deposited oil on the track at the Hunaudières kink. It cannot be verified, but it is said that the officials were slow to react, as Jean-Pierre Manzon in his Bonnet and Roy Salvadori in the Jaguar arrived on the scene, both hitting the oil and suffering severe accidents that threw the drivers from their cars and deposited debris everywhere.

Christian 'Bino' Heinz had no chance. The Alpine was known to be unstable when travelling in a straight line if the steering wheel was turned suddenly at high speed, but 'Bino' had nowhere to go. At top speed and with no warning from the flag marshals, he tried to avoid the debris but lost control and the car left the road, hit a telegraph pole and exploded; he was trapped inside.

Racing slowed but, as was the case in those days, did not stop while the debris was cleared (pace-cars were unheard of); everyone took note but, as ever, the battle continued, albeit for many in subdued mood. Car 49 had clutch problems and, after a second clutch change, retired during the eighth hour after 63 laps.

Car 50 ran faultlessly for nearly 20 hours until just before lunchtime on the Sunday, when it came into the pits with a nasty rattle in the engine. The problem was diagnosed as a con rod

bearing; the mechanics set about fixing it and, after a long stop, it returned to the race, only to fail in the 23rd hour.

For the team, and not least the Heinz family, it was a personal tragedy and a stark realisation of the dangers of motor racing. Apart from the destroyed chassis (1702), the cars would be out racing again another day.

30 June was to offer the stunned but recovering Alpine team some hope. It had all started so well at the Nürburgring, and three weeks before, at the start of the Le Mans 24 Hours, things looked promising. Then the sudden shock of losing a driver in what was only their second race had brought the team up with a jolt. Nevertheless, they decided to press on and had chosen to enter the Reims 12 Hours on 30 June for the international prototype, Grand Touring and sports car race scheduled to run for 25 laps. Two cars were entered by Alpine: chassis 1701 for José Rosinski (car 60), and 1703 for Henri Grandsire (car 62).

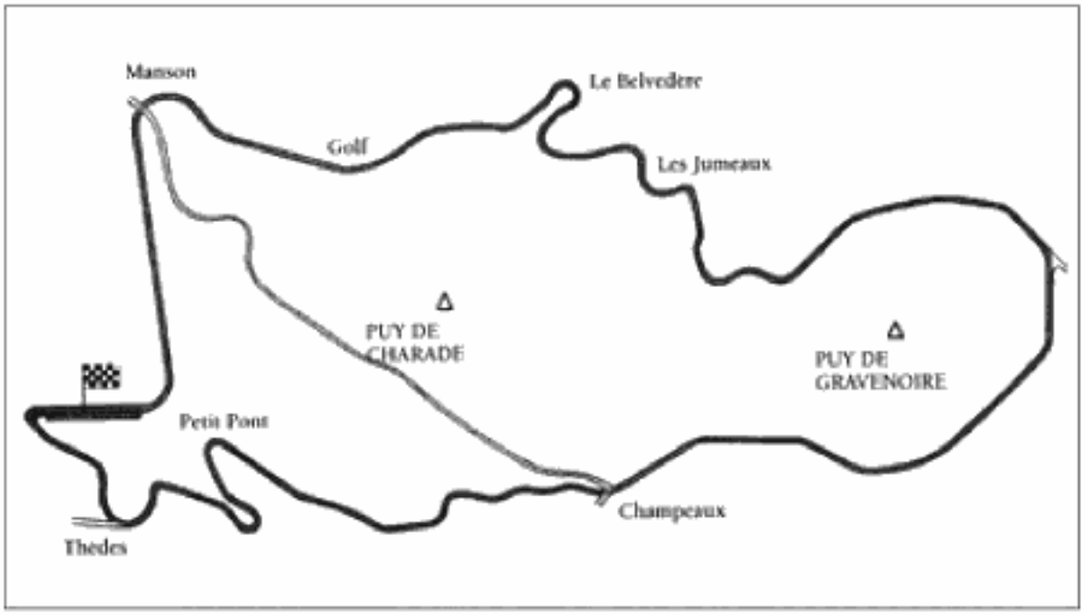
As at Le Mans, Alpine could not target overall victory as this was a race where the Ferraris, Aston Martins, Maseratis and Lotus would dominate. Interesting to note that the aforementioned Lotus 23 was a 2-litre car, yet it was capable of getting amongst the big-capacity 3-litre-plus machines. Michael Parkes was quickest, on 2min 20.2sec in the factory 250 Prototype Ferrari. Henri Grandsire was to start from 19th place on the grid and José Rosinski from 20th. The race went well for Alpine, Rosinski finishing in ninth place, three laps down on the winner Carlo-Mario Abate in a 3-litre Ferrari Testarossa, who completed the 25 laps in 1h 2min 59sec. Rosinski also took the prize for first prototype in the 1-litre category, with Grandsire finishing 11th overall, four laps down. Rosinski had finished a lap up on the competition from Bonnet. No incidents, and a good result; Alpine's morale was rising again.

The next race would be the Trophée d'Auvergne on the picturesque circuit of Charade near Clermont-Ferrand and the ninth round of the 1963 International Championship for Makes. As an experiment, Alpine built an M63 without a roof, creating what in French is known as a barquette. The race, over three hours of the 5km circuit, started in the dry, but, as the day wore on, the weather changed to light rain.

"No incidents, and a good result; Alpine's morale was rising again."

José Rosinski: "It was an interesting experiment, the open-top car. We knew on winding circuits our cars were quite good but when a fast straight of any length was involved they still moved around and you had to be careful. The barquette needed no extra strengthening: interestingly enough it was inherently strong, even with no roof."

Such a car suited the twisty Charade circuit. Given chassis number 1704, it was the only time it raced in this barquette format, as, when it returned to Dieppe, it was fitted with a roof for the



Charade circuit (Clermont-Ferrand).

The barquette M63. (Photo ML)

A smiling José with Richard Bouleau (in white cap) looking on. (Photo ML)

1964 Sebring and Targa Florio races. At Charade, though, the two cars were entered as private entries under the drivers' names, as opposed to Alpine's as a company, though, of course, they were fully supported works cars, the second car being chassis 1703, a conventional coupé M63 for Henri Grandsire; he finished in 15th place and third in Sports Proto GT up to 1000cc, with José in 13th, and second in Sports Proto GT up to 1000cc.

First place in the Sports Proto GT was the Italian driver Mauro Bianchi, who had driven his socks off to beat the Alpines, including going off the track on the last lap. Jean Rédélé noticed Mr Bianchi, the younger of two brothers and World Champion in the GT 1-litre class in 1962. For the moment, though, for Alpine it was a successful showing; for the records, the race was won by Lorenzo Bandini in the Ferrari 250 Testarossa.

Mauro Bianchi: "The car I drove in the Trophée d'Auvergne was a 1000 Abarth; a very good engine, but the chassis was terrible – so bad that Abarth had decided to break up the car. At the time, I found it scandalous to break up a car like that and I asked if I could do some tests myself on the car. Carlo Abarth

José Rosinski in action. (Photo ML)

said, 'Do what you like. In any case we're going to cut it in pieces.' I had an idea; I had bought a book by Colin Chapman which included some suspension diagrams showing what was good and what was bad. I looked at the suspension of the Abarth and saw that it was like the example of the bad suspension! So I went to see our technical director Colucci and told him, 'It's wrong! Can we change the suspension?' Mario Colucci was very intelligent; he understood the point and said he'd take my book home and study it. He made the modifications exactly the way Chapman had said. I found that the car was wonderful. It was decided to enter it in the Auvergne 3 Hours race. There was the Ferrari 3L, a Maserati with my brother Lucien driving, Porsche 2-litre, etc., mostly big cars – we were the smallest car to enter along with the new Alpine barquette. The Alpine was very light and had an excellent engine and, with its good suspension, it was like an F3 car at the time. I had a good race; my car was very fast and after three hours' racing, I finished sixth, so it was good with only 1000cc – there were about 50 cars at the start. I was only a young driver but with a great will to win. Near the end of the race I saw a Porsche in front of me and I thought that if only I could pass it ...

"... I passed the Porsche but took too much of a risk and went off the road and broke the car, ripping off the engine cover which was left dragging behind the car ..." – Mauro Bianchi

Over-enthusiastic ... (Photo MB)

"It wasn't quite so heroic because I was a lap behind, but I didn't register it in my mind at the time and on the last lap I passed the Porsche but took too much of a risk and went off the road and broke the car, ripping off the engine cover which was left dragging behind the car, so I finished the final lap very gently but won the 1-litre category in front of the Alpine. Abarth insulted me after the race, saying I was an imbecile. I was in sixth place and wanted to do too much and I broke the car, but Jean Rédélé, who had been watching, thought my racing was spirited, and some months later I got a phone call."

After the August holiday period Alpine decided to take a breather, take stock of the sports car racing activities to date and plan for the future. Richard Bouleau was already thinking about the next car – the M64 – an all-space-frame chassis as opposed to the frame and central-tube chassis of the M63. Alpine was also thinking about going into F3 and F2 single-seater racing, and the design team was flat out on those projects, too.

We'll continue with the prototype story in a moment, but first there is a significant item that is worth mentioning. Although it was not an event that included Alpine sports prototypes, the Tour de France Automobile of 1963 counted for the International Championship for Makes. It was an event Alpine wanted to be part of, and so entered several cars, one of which was driven by the new sales and marketing manager who had joined earlier in 1963, a man who was to become synonymous with Alpine: Jacques Cheinisse.

Cheinisse had owned an A106 whilst working in his family's cheese business. As it had quite a few problems, Jacques had had quite a bit of contact with Alpine, and Jean Rédélé in particular, in those early days. During one of those communications he offered to help Rédélé develop the sales of his product, and, just before the Geneva motor show in February 1963, Jean Rédélé asked Jacques if he would like to go and work there as an Alpine salesman. The show was due to start two weeks later and, for some unknown reason, his existing agent in Switzerland was not available. Jacques said yes; and he impressed Rédélé enough to be offered the marketing post with Alpine at Dieppe.

On joining Alpine, Jacques was not slow in ordering one of the new early A110s. Jacques Cheinisse: "In fact, I was never asked to pay for it!" It was fitted with the new twin-cam Gordini engine and, with it, Jacques entered the Tour de France Automobile on 14-22 September, round 14 of the International Championship for Makes. After a week of racing he finished with just 13 cars ahead of him, all of bigger capacity and including Jean Guichet and Lucien Bianchi in 250 GTO Ferraris, Bernard Consten in a 3.8 Jaguar, Paddy Hopkirk in a powerful Cooper S, and Rosemary Smith in a Sunbeam Alpine.

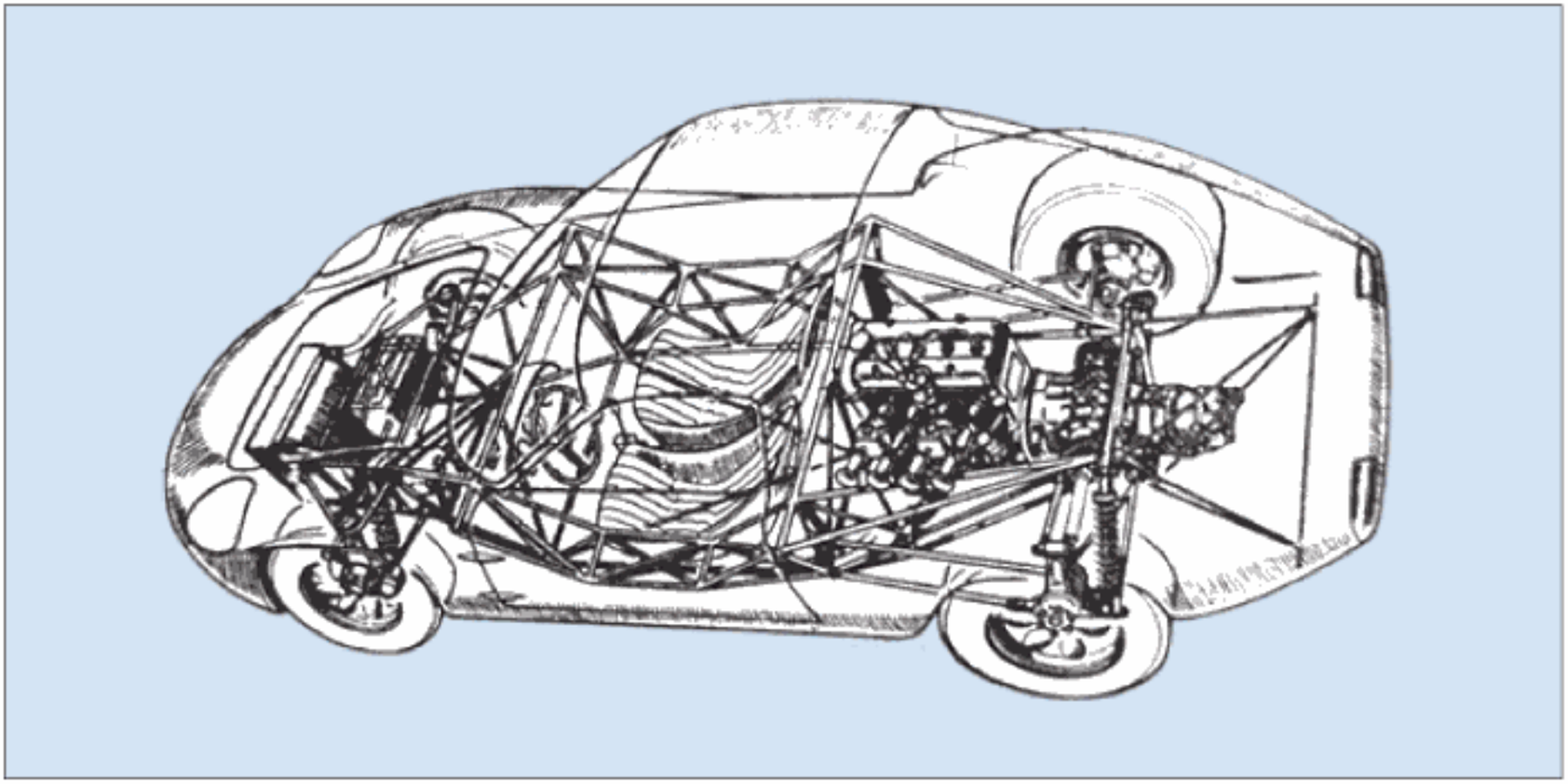
Two minutes behind Jacques was the Alpine factory driver, Jacques Féret, and eight other Alpine Berlinettes. He beat them all to take victory in the up-to-1300 GT class. The result gave everyone at Alpine food for thought about this new employee.

Back to the prototype story, and we find Richard Bouleau and the design team working hard on ideas for the new

Cheinisse, front row left, at the Rouen-Les-Essarts circuit for a 1-hour race, a stage of the Tour de France 1963. (Photo ML)

chassis. The M64 was not just an upgrade of the M63; it was an all-new-design space frame using the experience from the 1963 season and the principles of the Lotus 23 design, an example of which, incidentally, José Rosinski had run for the latter part of the 1962 racing year after the Le Mans 24 Hours.

José Rosinski: "Colin Chapman entered a Lotus 23 for Le Mans in 1962. However, under pressure from a rival team who knew the Lotus could beat them, the scrutineers took a close look at the Lotus and pronounced it not eligible for the race because the wheels on the rear had five studs and nuts but those on the front axles only three studs and nuts. Colin Chapman was furious, as was Gérard Crombac, who had played a major part in getting the Lotus on the entry list. Both Chapman and Crombac wanted to teach the rival French team that had



Chassis cutaway of M64. (AAA)

protested a lesson, so he spoke to me about using a Lotus to finish the championship. We asked Chapman if he could lend us the car. He agreed, but not with the engine as it was; it was to have a new, special one from Cosworth. No problem; we did the deal and then contacted Keith Duckworth (creator of Cosworth) direct; he agreed to lend us an engine and Chapman lent us his top mechanic, Bob Dance. I succeeded in winning the championship and beating Bonnet, who had protested the Lotus at Le Mans. In fact, I think if Alpine had followed the Lotus 23 more closely from the beginning in 1963, the handling might have been better at high speed." As a final word it is recorded that in 1963 Chapman would not let any of his drivers drive for other teams at Le Mans, so incensed had he been at the scrutineers' decision the year before. The factory Lotuses never returned to Le Mans.

Richard Bouleau's all-new car gradually took shape, taking into account changes in the regulations, and was to weigh in at almost the limit for the category of 600kg all up. Constructed of welded molybdenum chrome steel tubes with 1mm wall thickness, it was designed to be lower than the M63, narrower, and 20mm shorter, but kept the same wheelbase and track.

From an aerodynamics point of view, the frontal area had been reduced and the general shape improved as Marcel Hubert brought his magic into play. A new steering rack from the Renault Dauphine replaced the earlier R4 unit, but the suspension, which had performed well, stayed the same. Engine-wise, a new larger-capacity 1149cc, which Amédée Gordini claimed would give 105bhp, was used, and Gordini also supplied an updated 996 unit stretched to 1001 to comply with the new engine regulations at Le Mans for 1964 which banned under-1000cc units. Having scored six points in the 1963 up-to-3L prototype class of the World Championships, Alpine decided to do a full season in 1964 and so work continued unabated throughout the autumn, taking the team into the new year experimenting with new ideas.

4 A LONG WAY FROM HOME ... AND A NEW CAR

The new car, the M64, would utilise chassis numbers 1709, 1710 and 1711. It was of all-welded tubular space frame construction. Its suspension was little changed, having kept the front independent and with the same wishbones, helicoidal springs and hydraulic shock absorbers by Allinquant. The independent rear continued with trailing arms and horizontal top tie rods, helicoidal springs and again hydraulic shock absorbers by Allinquant. Brakes were still Girling discs, but the steering rack was now from the Renault Dauphine. Tyres at the front were 5 x 135 and at the rear 5.5 x 130, still Dunlop Racing. The engines, though, had been updated and uprated, and all the Alpine race cars had double overhead cam engines by Gordini, but now they were 1149cc giving a claimed 115bhp at 7000rpm. Transmission stayed with the 5-speed Hewland unit. The track at the front was 1.28m (50.39 inches) and the rear 1.27m (50 inches); wheelbase was 2.3m (90.55 inches). The body, though, was different and the width was now 1.51m (59.44 inches), height 1.05m (41.3 inches), ground clearance 150mm (5.9 inches) and the M64 weighed in at around 640kg (1411lb); fuel tank capacity was 32L. The new car had a projected top speed of 240kph (150mph).

Richard Bouleau: "The difference between the M63 and the M64 was that when we started the year before, I designed the chassis by integrating ideas from several existing cars which we had bought and studied, like the single seaters from Lotus and Brabham. Then towards the end of 1964, after several changes on the M64, I was able to say right, now I'm ready for 1965. We had seen the results of those early cars and I said we must make a clean sweep of all the assemblies and start with something original and clear. So I redesigned all the elements for the next car during 1964 to create the M65 for next year, keeping the M64 as a sort of interim. All the parts were French, which pleased Jean Rédélé, and they were new – everything would be redesigned during the year."

Along with the new M64 car, which on reflection can be seen as an upgrade of the M63, indeed a sort of interim car to the next generation, Jean Rédélé had decided that they needed a top-line driver. He wanted someone who would be 100 per cent committed to testing and racing. Not that his existing drivers were not suitable: they were eminently qualified, but were frequently committed elsewhere. Rédélé wanted a permanent 'pilot.' He had seen one at Charade the previous year and had heard that he was out of a drive for 1964.

Enter Mauro Bianchi. Born on 31 July 1937 in Milan, Mauro was to have a long and influential career with Alpine. Right from the start, when he joined early in 1964, he was already a race winner in single seaters and in sports prototypes, but he was also to become a fine test driver and development technician of many Alpine cars through to the mid-1970s.

Mauro Bianchi. (Photo MB)

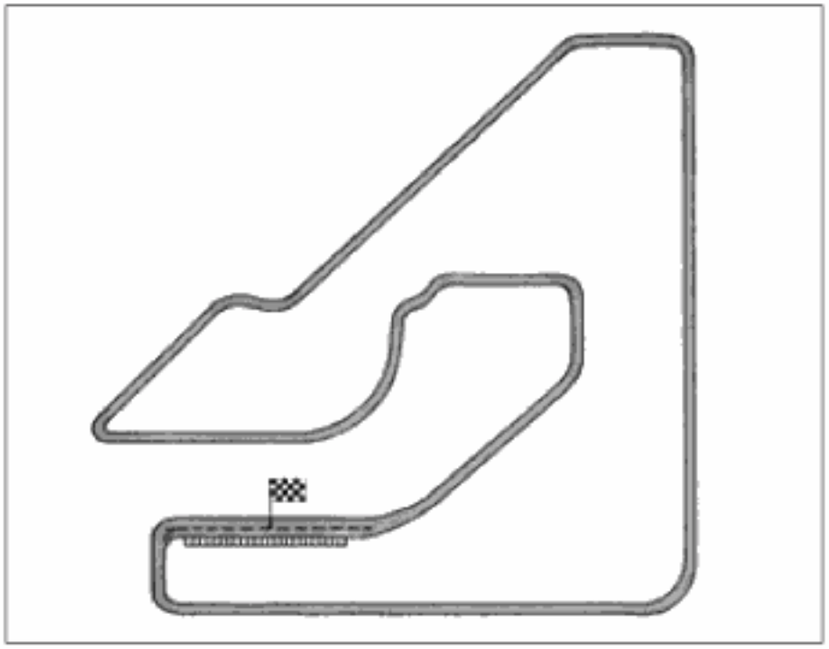
Mauro had to live in the shadow of his famous brother, Lucien, but during the 1962-63 seasons he had notched up World Championships in the 1000 GT sports car class. An impetuous young man, in 1963 he approached Ferrari hoping for a drive, but his hopes were dashed. By then, Abarth had recruited his replacement. Mauro Bianchi: "I had a friend, Franco Lini, an Italian journalist; he was very close to Ferrari. Like all the young drivers, my ambition was to be a Ferrari driver one day. I spoke to Franco Lini and he said, 'You're crazy; Ferrari can't take you on while you're at Abarth. Mr Ferrari won't have anything to do with you.' So I said, 'If I were no longer with Abarth, would Ferrari be interested?' He intimated that if I were free Ferrari might be interested. I wanted to drive single seaters and Abarth didn't want to do single seaters, so I resigned. I phoned Lini and told

Bianchi in a works Abarth, thought to be at Rosfeld. (Photo MB)

him I had resigned and was free, and could he write an article in the paper to say that I was available. The next day there was the article: 'Mauro Bianchi is no longer with Abarth; he's available.' And at 10h in the morning I had a phone call from the private secretary of Enzo Ferrari saying that the Commendatore wanted to see me. I went the following day to Maranello and there I had an interview with Ferrari, but it wasn't easy. Ferrari said he would be interested but he had already taken on Jonathan Williams. So

"He intimated that if I were free Ferrari might be interested. I wanted to drive single seaters and Abarth didn't want to do single seaters, so I resigned."
– Mauro Bianchi

I wasn't at Abarth and I wasn't at Ferrari; I had no work. At the end of the year I still didn't have any work, but news had got around and I received a phone call from the director of Shell's competition department (which was partly sponsoring Alpine



Sebring airfield circuit.

at the time), suggesting a meeting with Jean Rédélé. I was well aware of Alpine, and there I was, unemployed, with a wife and family to feed, so I went to Paris."

Jean Rédélé had found the man he wanted. Mauro: "I went home and said to my wife, 'We're going to France, to Dieppe, to live beside the sea in a beautiful villa – it's going to be wonderful!'"

Jean Rédélé was also interested in selling his A110s in the USA and, whilst nothing concrete was signed with any agency, he thought it might be useful, as Alpine was going to tackle the Prototype Trophy class in the World Championship, to take a trip to the USA. The Prototype Trophy, a year-long competition within the 'Série Mondiale' World Sports Car Championship, involved four events in 1964 – Sebring, the Targa Florio, Nürburgring and Le Mans – all except Le Mans being a long way from home; he would make a start with Sebring. He also had the possibility of selling a couple of cars to a man by the name of John Norwood, an industrialist from New York, of whom more later.

The cars were prepared and taken to the seaport of Le Havre on 24 February, leaving French shores for Sebring on the 26th. The Sebring circuit was created out of an airfield in 1950, and the 12 Hours had gradually become recognised as an important event, providing a good test of how well drivers were prepared for the year's challenges.

Bob Tullius. (Photo GB)

Twin-cam chassis 1704. (Photo GB)

Car 68: Bianchi/Rosinski, chassis 1704. (Photo PL)

Alpine decided that the 1964 edition of the Sebring 12 Hours would see its cars out in force, the target being that Prototype Trophy. Three cars were sent to the USA; following earlier negotiations, two of them would be bought by John Norwood. These two – chassis 1701 and 1703 – were entered under the name of Autosport International.

The entry list provided an indication as to who was going to do what, but not the whole story that was to unfold. Chassis 1701 (car 70) was listed to be driven by Paul Richards with Jocko Maggiacomo, and 1703 (car 69) with Ray Cuomo and Bob Tullius aboard (yes, the same Bob Tullius of later Group 44 Jaguar fame). However, in the race Paul Richards drove both cars in turn, with Charlie Rainville, who was also entered but not initially named as an Alpine driver.

The third car was number 68, driven by Mauro Bianchi/José Rosinski. It was chassis 1704, the Trophée d'Auvergne barquette from 1963, but now with a hard top and in standard M63 trim.

The number 68 car was to return to Dieppe, but chassis 1701 and 1703 stayed with John Norwood. Both cars went on to other races in the USA, as we will learn.

The engines installed in these two cars were the standard R8 Gordini units, as the twin-cam engine was the property of Amédée Gordini on loan to Alpine and reserved for other races in Europe. The standard engines had been bought and installed by Alpine.

The weather for this 1964 edition of the Sebring 12 Hours was warm and dry, a sunny day that saw the three Alpines qualify in 39th place for car 68, 49th place for car 69 and 51st place for car 70.

José Rosinski: "You know I like a car set up with just a little understeer, but Mauro liked lots of oversteer. For me it was almost impossible to drive. Great guy, but I made a mental note at that race to be careful if I was co-driving with Mauro again!"

Of the three cars entered, only car 69 finished, in 29th place on 153 laps, with Charlie Rainville eventually joining and finishing the race, with Paul Richards putting him in fifth place in the prototype up-to-3L category.

The winners were Mike Parkes/Umberto Maglioli in the Ferrari 275 sports prototype, who covered 214 laps in the 12 hours. The Bianchi/Rosinski car went out on lap 140 and Cuomo/Tullius, who were entered together and swopped drivers around in car 70, went out on lap 66 with gearbox failure. Also entered but not finishing was the A110 Berlinette of William Haenelt and John Norwood, which suffered engine failure on lap two.

Confusing? Sounds it, but there was a story behind these driver swops. From the records and interviews we learn that Maggiacomo started but was switched for Rainville after a

No. 70: Paul Richards/Jocko Maggiacomo. (Photo BS)

Ray Cuomo/Bob Tullius. (Photo BS)

serious incident that began on track but ended in a neighbouring pit, involving the Alfa Romeo of the late Consalvo Sanesi. Sanesi spoke about it a few years ago when he said in an interview with motor racing historian Ed McDonough, "The most dangerous incident I ever had was the fire in the pits in Sebring in 1964. I was stuck in the TZ and then someone came rushing in to help pull me out. It was a guy I thought was Italian – Jocko Maggiacomo – but actually he was an American. I remember that very well, but mainly I was glad to escape, though I had some bad burns. There were other people there to help but I don't remember much about it, except that that man Maggiacomo saved my life."

"The fire was terrible; this big guy on our team rushed out of our pit to wrench Sanesi from his burning car. There were no fireproof suits then; those guys were real heroes." – José Rosinski

José Rosinski says, "The fire was terrible; this big guy on our team rushed out of our pit to wrench Sanesi from his burning car. There were no fireproof suits then; those guys were real heroes."

What happened was that the Alfa, which had a differential problem, was slowing and approaching the pits when it was clipped by one of the very fast Cobra team cars. The Alfa exploded and was cannoned into the pit wall, demolishing 25 feet of it; it came to rest right at its own pit, with Sanesi semiconscious inside. Chauncey (Jocko) Maggiacomo, normally a stock car driver, rushed from the Alpine pit to the Alfa. The heat was so intense it started to melt Sanesi's helmet; he was quite badly burnt around the head and arms and Maggiacomo also suffered similar burns but not as serious. The Cobra driver was not injured, though the car was a write-off. Again we see the darker side of the spectacular sport of long-distance prototype sports car racing, where faster, more powerful cars can often happen upon a slower-moving car at great speed, with sometimes catastrophic results. Luckily, this time the people involved all survived to tell the story.

Due to the burns sustained during the rescue, Maggiacomo was unable to continue driving, so the driver pairings were switched around, putting Rainville in with Richards for the latter part of the race.

After the Sebring race, chassis 1704 of Rosinski and Bianchi went back to France, while, as already mentioned, 1701 and 1703 stayed in the USA.

Jacques Grelley, in an article for *Mille Miles* magazine (in 1991), had a few words to say about these cars: "I met him (John Norwood) quite by accident; it was he who printed the programme for the 1984 Dallas F1 Grand Prix. He introduced himself as 'Ecurie Tricolore.'" Grelley was eventually to acquire the 1703 car in 1984. Between 1964 and 1966, this car took part in some 15 races in the USA and, for the 1965 season, 1701 was used as a source of parts to keep 1703 in action for Paul Richards, its regular driver; he had class wins in nine of the 15 races it entered.

Paul Richards was quite a well-known driver in the US. He raced Formula 3 Coopers and drove for Briggs Cunningham in Maseratis and Jaguars at Sebring and Le Mans in 1963 with Roy Salvadori. John Norwood began with Team Roosevelt. Franklin Roosevelt Jr (son of the wartime president) was the Fiat importer in the USA and ran a team of Abarths. Norwood was team manager, Paul a driver. When Roosevelt pulled out, Norwood bought the assets of the team, using an Alfa at Daytona in 1962 and again in 1963.

The reader might wonder why such unique cars were left in the USA. The reason is that in those days racing cars were not regarded as valuable collectors' items; they were designed and built to do a job, and once that job was over the builder would want to sell them on to obtain money for his next project. Alpine was no different. René Bonnet told Grelley, "When our car became obsolete, the manufacturer would rebuild the engines during the winter and then send them to Sebring. There, after a race of 12 hours with, for example, a good, sturdy Panhard engine (which they might have found to have finished well, especially if it rained), it would be sold to Americans for cash, often for at least three times the price they would have sold it for in Europe." Of course, Rédélé had arranged the deal with Norwood because Alpine already had the new M64 and wanted to sell off the M63s; thus it was that John Norwood came by the cars. When Grelley got chassis 1703, it was exactly as it was when it was last raced in the Governor's Trophy at Nassau in 1966. "Even the small windshield at the front to protect against mosquitoes and flies was still on the car," says Grelley in *Mille Miles* magazine. 1703 eventually went back to France; 1701 went to Japan.

In Europe, when the traditional official test session for the 1964 Le Mans 24 Hours was held on 18 and 19 April, Alpine sent along three cars. It was an interesting weekend, as we'll see later when we get to the Le Mans effort itself.

The next race, though, would be another event a long way from home: the 48th Targa Florio on 26 April, attracting 75

entries; among them were two Bonnets to go head to head with the two Alpine prototype entries.

Alpine entered car 190 for Lucien and Mauro Bianchi – the M63B (an M64 new chassis with the longer M63 1963 Le Mans bodywork). Listed as chassis 1708, it was finished at the Dieppe factory in April, and was fitted with an 1149cc engine, again a twin-cam Gordini unit. With them was José Rosinski/Jean Rolland in an A110 factory-entered 1100cc Berlinette.

Fastest lap in practice was by Jo Bonnier in the Porsche 718 Spider, who put in a time of 41min 14sec. He had a considerable power advantage so it was astounding that the Bianchis' little 1150cc Alpine went round in 45min 50sec. 67 cars started, and it was José Rosinski in the A110 who was showing considerable pace in the early laps, leading the up-to-1300cc GT class with the push-rod version of the Gordini engine. On the third lap he put in a time of 45min 6sec, but the punishing pace and the state of the road surface led to a broken wheel and an abandonment as he failed to show on lap four. The rate of attrition was such that only 27 cars finished and were classified, among them, after stops for a suspension problem (broken rear radius arm bolt) and a broken fan belt, Mauro and Lucien Bianchi, who brought the little M63B home after nine laps in 15th overall and second in prototypes up to 1300cc.

Just over a month later, on 31 May, came that year's Nürburgring 1000km. This race saw the début of one of the greatest sports cars of the era – the Ford GT40; although on this first occasion it was not as formidable as it was later in its career, it did demonstrate just how fast it was. Sadly, this event again drew attention to the hazards of racing in the 1960s, especially at the Nürburgring, when the practice session claimed the lives of Brian Hetreed and Rudolph Moser in separate accidents.

Five René Bonnet cars were there to battle it out with the two Alpine entries: Grandsire/Vinatier in chassis 1708 M63B used in the Targa Florio by the Bianchi brothers, running No. 110, and Mauro Bianchi/José Rosinski (taking a chance on sharing a Bianchi car again) in car 120, the first of Richard Bouleau's all space frame cars with the new M64 bodywork, the M64 listed as chassis 1709.

This car, running the 996 double overhead cam engine, proved to be quite quick until its demise on lap 21 due to engine failure. Unfortunately, Grandsire and Vinatier fared even worse, going out on lap five with gearbox failure. It was two famous names of sports prototype racing in the Ferrari, Ludovico Scarfiotti and Nino Vaccarella, who were to win over the 44 laps of round three of the Prototype International Trophy.

Mauro and José. (Photo MB)

The stricken Bianchi car is passed by the 275 Ferrari of Graham Hill. (Photo MB)

Mauro leaves the wet pit lane. (Photo ML)

Legendary French driver Jean Vinatier, from whom we heard in chapter 1, said: "Nürburgring 1964 was a return to Alpine for me. I had raced a few times in competition with Jean Rédélé in the Reims 12 Hours and the Tour de France Automobile, when he was still racing – 1957 or 1958. He was entered with an A106. We often did many kilometres together, one behind the other, which was very enjoyable for me. DB offered me a long-term drive in the early 1960s, so I went to them and then afterwards to Abarth and with René Bonnet with Renault engines, and then I came back for this race to Alpine and Renault. In those days there were no contracts, nothing in writing. With Alpine or Abarth they just asked if I would drive for a month for them, we shook hands and that was it. We didn't get paid to drive. It was just a great passion and I, like others, drove for no money."

The next race on the calendar was closer to home – at last, the race Alpine was always to target above all others: the Le Mans 24 Hours, with this 1964 event due to begin on 21 June.

Back in April the official test session on 18th-19th saw three Alpines on test, with Mauro Bianchi running the new M64 carrying No. 45, driven by Morrogh/de Lageneste in the race. José Rosinski drove No. 54, the chassis he had used at the Nürburgring, and this was to be the Vidal/Grandsire car for the June event.

Some 34 cars from a wide range of makes had entered the testing session, which was almost as competitive as the race. Ferrari was carrying out extensive tyre tests in the wet conditions, and the rumble of several Shelby-prepared V8 Cobras added to the sound of the early GT40s, while a new concept made a brief appearance: the gas turbine. Rover had brought the first jet-engined car to Le Mans; for a first-timer it didn't do too badly, going round in 4min 50.2sec, but that paled in comparison with the top-of-the-list 3min 48.3sec of the Ferrari driven by Ludovico

Scarfiotti. There were a couple of rule adjustments which involved the weight of cars, a new minimum engine capacity of 1000cc, and a reduction of the minimum time for the final lap to 15 minutes, down from the previous last-lap regulation time limit of 20 minutes.

The Rover played a part in a dramatic incident for Alpine. The weather had become decidedly wet and a serious accident befell Jacques Cheinisse, who went off the road at Maison Blanche in the standard 105bhp hemispheric-headed R8 Gordini-engined 1100cc A110 Berlinette running in the 'Grand Tourisme' category. Interviewed along with José Rosinski in April 2008, Jacques said, "It was my first drive at Le Mans and I found I was pretty quick with my twin-cam-engined Berlinette, and it was very wet. I think I was using a Kleber tyre, but I was quicker than the protos."

José Rosinski: "At the time, we racing drivers saw Jacques as a rally driver, so we suggested he tried the racing tyres, but he didn't go any quicker on them." Jacques again: "I asked José if he would set a reference time as they were joking about me and the Kleber tyres."

Jean-Pierre Jaussaud also tried the car and said in a separate interview that with the Dunlop racing tyres not only was it "no good" but it was clearly "dangerous." Jean-Pierre Jaussaud: "Jean Rédélé had seen my driving capabilities and had suggested that I might drive for Alpine at Le Mans in the June, so I went along to the test weekend. They asked me to try Jacques' Berlinette; I told him not to drive it and I said to Mr Rédélé it was very kind of him to offer me a drive but I had decided not to take up the offer. I thought those cars were horrible – on the racing Dunlops, they were impossible to drive."

(Photo JS)

Jacques Cheinisse takes up the story again: "Next day, however, Jean (Rédélé) insisted that I try again with the Dunlops. But in the wet conditions they exaggerated the handling of the car and it oversteered quite wildly. I arrived at Maison Blanche, glanced in the rear-view mirror and saw the Rover Turbine of Graham Hill behind and in that fraction of a second I lost control, hit the fence, shot across the road just in front of the Rover and was thrown out. I don't remember anything after that."

Jacques suffered significant damage to his vertebræ. The rescue marshals saw him, prone, still, with no sign of life. They thought he was dead and rather carelessly loaded him in their Citroën truck and stupidly broke his foot closing the tailgate! The track doctor realised that he was not dead at all and had him rapidly transferred to hospital, where he was in a coma for eight days. It was some time before he left hospital and when he did he had to wear a neck brace. In this condition he entered a race at Nogaro in a Berlinette; there was, it seems, nothing in the rule book to stop him! This incident showed the true determination of the man.

Before we leave the test weekend, here are the times:

Position:	*Car no:*	*Type:*	*Drivers:*	*Time:*
21st	45	M64	Mauro Bianchi	4min 45.5sec
28th	51	A110 Berlinette	Jacques Cheinisse	5min 1.4sec
30th	54	M63	José Rosinski	5min 10.1sec

Jean-Pierre Jaussaud decided to walk away from Alpine on that occasion, but would be back 13 years later.

Le Mans, 21-22 June 1964. The Alpine team found that due to the withdrawal of Abarth there was space on the entry list for an extra car, and the team was able to enter a total of four prototypes, three of them sporting the new aerodynamic modification of covers on the front wheel rims. The team set a lap-time target for qualifying of 4min 20sec; none of them got close!

Prototype Alpine qualifying looked like this:

Car no:	*Chassis:*	*Engine:*	*Place on grid:*	*Drivers:*	*Time:*
46	1711	1149cc	36th	Henry Morrogh/ Roger de Lageneste	4min 34.3sec
47	1710	1001cc	42nd	Jean Vinatier/ Mauro Bianchi	4min 44.0sec
54	1709	1001cc	40th	Philippe Vidal/ Henri Grandsire	4min 40.3sec
(This car had the 5-speed Hewland gearbox and a Ford differential)					
59	1708	1001cc	43rd	Roger Masson/ Teodoro Zeccoli	4min 48.3sec

Masson and Zeccoli. (Photo CD)

55 cars started the race on a cold but dry day – a mixture of the technologies of recent years and one or two startling new ones, the foremost being those early GT40s.

Chassis 1708, the M63B of Masson and Zeccoli, ran well for the whole 24 hours, finishing 20th overall, fifth in the performance index and second in the thermal efficiency index. Having lost 30 minutes due to an ignition problem right after the start, the climb-back from near last to 20th was some achievement.

The first M64 chassis 1709, entrusted to Vidal and Grandsire and fitted with the 1001cc engine (car 54), unfortunately went out with transmission failure on lap 133, after having been in the pits for an hour for attention to the gear dogs.

No. 47, allocated to Bianchi/Vinatier, the second new M64 chassis 1710, was also powered by the twin-cam 1001cc engine.

This car weighed in at just 604kg (1331.6lb). Mauro Bianchi: "I remember it was quick but a bit scary. We could get 240kph flat out, but at that speed and in fact anything over 200 it lacked stability and wandered across the road, just as José (Rosinski) had reported on the Hunaudières the year before. It was a relief to reach the end of the straight and get the brakes on; then it became much more stable. Aerodynamically it was a very slippery body, but it just lacked downforce. Another thing: at any speed above 200kph if it was raining we got soaking wet as the water forced its way in!"

They finished with 230 laps completed but were not classified after gearbox problems, again relating to the fourth and fifth speed dogs, which necessitated over an hour in the pits. Jean Rédélé was concerned after two gearbox failures and got his mechanics to remove the gearboxes from two of the display single seaters that were on the Alpine stand in the "village."

It was Henry Morrogh and Roger de Lageneste who were to bring celebration to Alpine and many of the 350,000 spectators with the first class win for the team in the 24 Hours, in only its second year.

Roger de Lageneste: "Before I agreed to drive at Le Mans for Alpine, I was asked by Peugeot and Charles Deutsch to do Le Mans in the CD car with big vertical wings he had designed. Before the war he and Mr Riffard were specialists in making wings for racing aeroplanes. My friend Alain Bertaut, a great racing man (I did the Liège-Rome-Liège with him), asked me to test it. When I saw that car in the Paris garage I said, 'No, it's too big. The front is very good but there is nothing to keep the car on the road.' Well, they asked me to go with the car one night to do

Smooth Vinatier and Bianchi let down by gearbox. (©R)

Tactical discussions: Rédélé explains all. (Photo HMW/R)

Practice day – Morrogh looks on. (Photo RdL)

a secret test on a new, unopened motorway to the north of Paris. So we started the test and I drove up to around 210kph. 'At that speed,' I told them, 'it feels as if it's going to take off.' They said, 'OK, but try it once more and tell us what you think.' I thought about it. I knew there was a little bump half-way down the section I was driving on, so I took the car up to maximum speed and went over that little bump; I knew the road was straight so there was no risk. The car took off; I turned the steering with the car in the air! Nothing happened and I landed straight. I slowed down and came back and said, 'I'm sorry, but I will never drive

Morrogh/de Lageneste at the finish – an 1150cc class act. (Photo RdL)

that at Le Mans.' I went to Jacques Cheinisse and took up his offer to drive for Alpine!"

Starting from 36th on the grid, they finished 17th overall and first in the 1150cc class, first in thermal efficiency and eighth in the performance index in the third new M64 chassis, powered this time by an 1149cc engine designed especially to target the thermal efficiency index. They avoided a scary incident during the night when Jack Sears'/Peter Bolton's AC Cobra spun and somersaulted off the track on lap 77. (The same Cobra had also been involved in an unfortunate accident on lap 68 when it inadvertently had a coming together with Baghetti's Ferrari. The Ferrari left the track, claiming the lives of some spectators who had entered a forbidden area.)

Morrogh and de Lageneste almost completed 4000km using 13.6 litres of fuel per 100km (around 21mpg). The rejoicing over this class victory was nearly overshadowed, though, as seven times the mechanics had to attend to various gearboxes during the event. Also, the car's wayward nature at high speed on the straight, although improved by new anti-roll bars, was still evident, and considerable finesse was required to keep the cars on the straight and narrow. Rédélé was happy: car No. 46 had beaten the record for the up-to-1600cc category, let alone its own class, with an average speed for the 24 hours of 163.374kph (101mph) and the drivers had consistently managed to record 4min 40sec laps. It was just the gearboxes that had caused the problem; unfortunately the Hewlands, which were known to be

Roger de Lageneste, Jean Rédélé, Henry Morrogh. (Photo RdL)

good and which Rédélé himself had decided should be used, did not live up to their reputation this time.

However, on this occasion Roger de Lageneste did not need to use any of the spare coins that he always carried in case he broke down and needed a drink, nor the pipe and tobacco, nor his penknife, lightweight rain jacket and pullover! Roger de Lageneste: "Yes, it was great. We won our class – first time for

Graham Hill, Jo Bonnier, Jean Guichet, Nino Vaccarella, Roger de Lageneste, Henry Morrogh. (Photo RdL)

Alpine, and the first time for me to win at Le Mans. At first I was afraid because Henry Morrogh didn't have experience of very long drives, but Alpine gave me a good car, so I said, 'Thank you very much; I'm very happy!'"

Alpine was very busy at this time, preparing for Formula 2, Formula 3, rallying and the prototypes. Production of the road cars was in full swing, and it was 'all hands to the pump.' It wasn't always easy. Richard Bouleau: "The same team that assembled Berlinettes during the week used to work with the competition cars at the weekend, returning to the production line when they got back from the circuits." Richard laughs. "It has to be said that they didn't bring out many Berlinettes, as the total staff of about 45 were always tired!"

Tired or not, the team had decided to enter the Reims 12 Hours, which this year was to be round eight of the International Championship for Makes. Less than a month after Le Mans, it allowed teams little time to lick any wounds and recover. Four prototypes were entered for the race, which had not been run since 1958. Like Sebring, this event had a Le Mans-style start, with the drivers running across the track, but here it was at midnight instead of 4pm.

37 cars started the event, and it was a race which attracted many great names of the time: Maurice Trintignant, Masten Gregory, Dan Gurney, Richie Ginther, Innes Ireland, Bruce McLaren, Pedro Rodriguez, Graham Hill, John Surtees, Jo Bonnier, Lucien Bianchi.

The start. (Photo LAT)

Alpine entered chassis 1711, an M64, for Roger de Lageneste and Henry Morrogh, fresh from their class win at Le Mans, along with José Rosinski and Henri Grandsire in M64 chassis 1709, and Mauro Bianchi and Jean Vinatier in the M64 chassis 1710. Philippe Vidal and Jacques Maglia were in the 1708 M63B.

It was warm and dry throughout the race and the pace set by the leading Ferrari 250s was astounding. After 12 hours, at

De Lageneste/Morrogh. (Photo CD)

the finish the winning Ferrari of Graham Hill and Jo Bonnier had covered 296 laps of the 8.3km (5.1 mile) circuit. This was some 55 laps more than the class-winning Alpine No. 51 of de Lageneste and Morrogh, who for the second time had something to celebrate with a near faultless run from 31st on the grid in their 1149cc car, covering 2000.42km (1243 miles) at an average speed of 166.678kph (103.6mph).

On 18th overall, they were followed home by car No. 50 of Rosinski and Grandsire in 19th place and No. 49 of Mauro Bianchi and Jean Vinatier in 20th. Thus it was that Alpine took first, second and third in the Prototype GT 1300cc class.

The No. 52 1001cc M63B of Philippe Vidal/Jacques Maglia had engine failure halfway through the race.

After his class win, Henry Morrogh is reputed to have told this story: "I was looking for something to eat and drink, but there was only champagne and I risked getting drunk. Juan Manuel Fangio was there – invited by Renault, for whom he was an importer for Argentina. I asked if he knew where I could get something to eat. He took me to the Shell tanker and the truck drivers shared their meal with us. While we were eating, lying on the grass, the loudspeaker asked Fangio to do a lap of honour in my victorious Alpine; I refused to drive because I was nearly

Reims – open country. (Photo LAT)

drunk. Thus it was that, if only for a lap of honour, the great Fangio drove our Alpine."

After the Reims race Alpine entered a car in a number of hillclimbs. Roger de Lageneste took M64 chassis 1711 to four events: Urcy on 6 July, where he finished second, Montlhéry on 20 July, Sestrières on 23 July and Mont Doré on 16 August.

Roger de Lageneste: "I used the same car in all the hillclimbs. It was silly, really, because it wasn't a car for hillclimbing – it's a racing car. It's a car designed to go fast at Le Mans, Reims, etc. The first gear alone was very long – you could reach 60kph – and for hillclimbs you need fast, quick bursts of

Oh dear! Engine failure: Vidal/Maglia. (Photo RS)

Sestrières. (Photo RdL)

Further up the hill. (©R)

acceleration, especially at Sestrières, so really it was not very good.

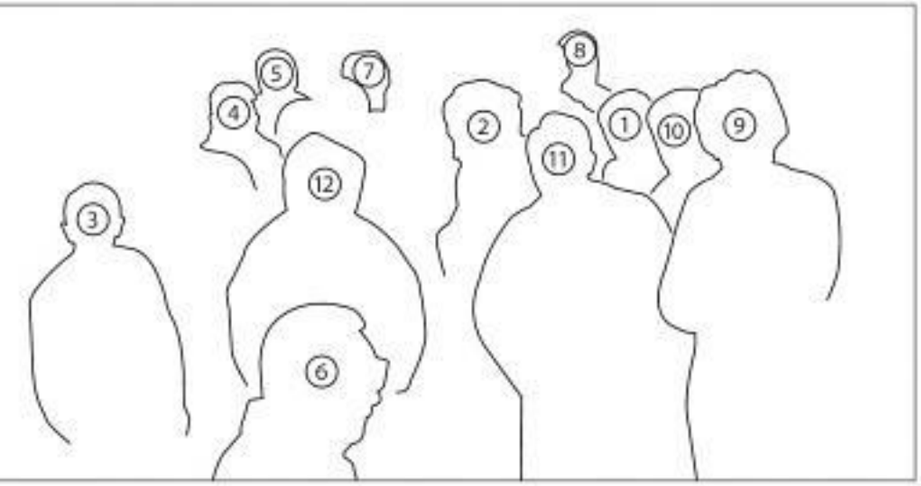
"It also had a fuel tank of 40 litres, not a tiny one like the specialist guys. And another thing: after your run you have to wait two hours to go again, which is not good for a proper long-distance race car. I had to get points in the French championship and the championship included hillclimbs, so I had to do some. There were only minor changes to the car for the hillclimbs: we put some shorter ratios in the gearbox, but nothing else. It attracted a lot of attention but I was always behind the specially-built Abarths. Carlo Abarth built fabulous cars for hillclimbing."

De Lageneste awaits the start at the Mont Doré hillclimb. (Photo RdL)

En route at Mont Doré. (Photo RdL)

Concentration on the single-seat formula cars and the upcoming Tour de France on 11-20 September took up most of the factory's time, and as the entries in the Tour de France did not involve the prototypes the mechanics were switched to the other disciplines.

11 October saw the Paris 1000km at Montlhéry, just south of Paris, close to the towns of Linas and Montlhéry. The banked track, built in the 1920s, was originally used for records and competitions of all kinds (car against plane, etc.).



Briefing – spot the driver! We can see for sure: 1) Franco Patria, 2) Ludovico Scarfiotti, 3) Silvio Moser, 4) Roger de Lageneste, 5) David Piper, 6) Pedro Rodriguez, 7) Jean-Pierre Hanrioud, 8) Teodoro Zeccoli, 9) Annie Soisbault, 10) Mauro Bianchi, 11) Lucien Bianchi, 12) Jackie Stewart. (Photo RdL)

Sadly this race proved a tragic one, with the deaths of German Peter Lindner and the Italian Abarth driver Franco Patria. As Lindner's car got out of shape coming off the banking and careered across the track into an unprotected pit lane, the Abarth driver had no chance; nor did three officials standing close by. The accident left five dead.

Under the cloud of depression, Alpine had a mixed sort of day over the 116 laps (129 for the overall winner) of the 7.7km (4.8 mile) circuit. Four sports prototypes were entered on a day that was noted for its low temperatures. The 1100cc-engined M63B of Jacques Cheinisse and Teodoro Zeccoli, chassis 1708, failed on lap 86.

Pits line-up. (Photo GB)

Three wise men! Cheinisse, de Lageneste, Rosinski. (Photo RdL)

Chassis 1709 was prepared for Rosinski (who had returned to the fold again) and Grandsire. Numbered 54, it faired much better, finishing 16th overall and taking second in the small prototype class after a late spin had allowed the Abarth Simca of Demetz and Fischaber through at the last minute.

Just behind them in 20th was car 56 of Henry Morrogh and Roger de Lageneste, the M64 chassis 1711 finishing third behind the Abarth after stopping at the pits to fix an oil pressure problem that led to the engine blowing up right at the end. The fourth car of Bianchi/Vinatier, chassis 1710, was an 1150cc-engined car; it suffered engine failure on lap 25.

After the race Alpine stayed on at Montlhéry, having brought chassis 1704, which had been prepared for an extensive mechanical test at the Montlhéry circuit from 19-24 October. This was followed by aerodynamic tests from 29 October to 4 November under the direction of Marcel Hubert.

Over the Atlantic, the end-of-the-year races known as the Bahamas Speed Weeks were taking place.

This was a series of events aimed at increasing the profile of the Bahamas and attracting tourism. In fact, they were pretty much a time for fun and games for those who were in a position

Morrogh rides the banking. (Photo RdL)

Waiting in the rain. (Photo RdL)

Bahamas Speed Weeks programme. (Photo RS)

to take time out to race cars for 10 days in the extremely comfortable climate of Nassau. Many of the top drivers of the time mixed it with the lesser lights. First run in 1954, it didn't see an Alpine until 1964, when the M63 that had been bought by John Norwood and run at Sebring (chassis 1703), was entered for Paul Richards. William Haenelt drove these races with a Berlinette. As we've already seen, the M63 cars stayed in the USA for many years. The Bahamas event was of no interest to the Alpine factory team, but is worth mentioning here as the Norwood cars were in action and we have the records. The 1964 Speed Weeks – well, 10 days really – featured several well-known drivers: Phil Hill with a GT40, Ken Miles with a 7L Cobra, Roger Penske with a Chevrolet, Pedro Rodriguez with a 250 GTO. To mention these drivers will give a flavour of the event. These top-liners were there to race against what we might call the 'gentleman drivers' and surprises were not unusual.

Paul Richards, driving No. 83, chassis 1703, in the five-lap GT race on 29 November finished in a credible sixth place and first in his class. In the same race William Haenelt finished 13th in the Berlinette. Both cars were still powered by the hemispherical-head single-cam 998 pushrod engine by Gordini. In the 23-lap Nassau TT, also on 29 November, in the Berlinette car 84, Haenelt finished 20th overall and won the small class with Paul Richards, No. 83 in the M63, 38th overall but not running at the finish due to engine problems.

4 December saw the running of the 25-lap Governor's Trophy which included Messrs Rodriguez and Penske in a Ferrari 330 and a Chaparral 2 respectively. Richards, in Alpine No. 83 this time, finished 16th overall and first in class, with Haenelt 21st overall. The last event

they entered was the Nassau Trophy on 6 December, a 56-lap 252-mile race; Richards came in 16th overall but our Mr Haenelt went out on lap 17. Quite clearly the cars provided an interesting mix and the names of the races, such as the 5-lap Island Residents' Race, a 5-lap Ladies' Race, and a Porsche Classic Race, again over five laps, give a view of a different world from the one we know today. From the photographs in Terry O'Neil's book *Bahamas Speed Weeks*, from which this information comes, we can see wall-to-wall sunshine, and a quick look at the cover shows the fabulous machinery that attended this event. There is no mention of chassis 1701, so the author is assuming that this was already being set aside for spares.

Back in France in Dieppe, Jean Rédélé and his team were thinking ahead. They had had a promising second year and had put together some good results. The rally side of the business was progressing well. So too was the sales side under Jacques Cheinisse's influence. Renault, whose engines were used in abundance, was satisfied and had used the successes to promote its product and its involvement and close cooperation with Gordini. Many brochures and advertisements featured the cars. Although rallying and the single seaters brought considerable home interest, the class win at Le Mans would reverberate around the world. Sports prototype racing saw glamorous cars racing in exotic places and the public could not fail to take notice. Most of all, in France the name of Alpine was becoming very well-known; the patriotic French people had a new cause to champion.

The R8 Gordini was now fully on sale to the public, and with the rising profile of Alpine the Gordini engines were becoming legendary. Gordini started to look further ahead towards a 1300cc engine.

Gordini engineer Giuseppe Albarea: "During 1964 we created what we named the Momoteur and we designed everything on it, the casing, cylinders, etc. Marc Bande had started to design it in late 1963.The first engine had appeared with a capacity of 997cc. Then the 58A (a 1296cc) was created to fit the up-to-1300cc class at Le Mans. At the same time the 58B was created at 1005cc, just over 1L, because of the energy index at Le Mans for which we had to be as near as possible to the smallest capacity and with the lowest possible consumption.

"Although rallying and the single seaters brought considerable home interest, the class win at Le Mans would reverberate around the world."

"We were designing the engine so that it could be built up using different cylinder heads with a block that was able to support the different capacities; it had bracing struts to give it rigidity. The stroke of the engine could be changed to give three capacities (996, 1005 and 1296); all these were engines with the strut design. When we created the 1470cc engine in 1965 we had to increase the height of the strut."

For 1965 Alpine thought it could be dominant and would move forward with a super new car. That was the thinking at least in some circles, but it was with caution that the well-informed viewed the new cars. Events would prove how right they were.

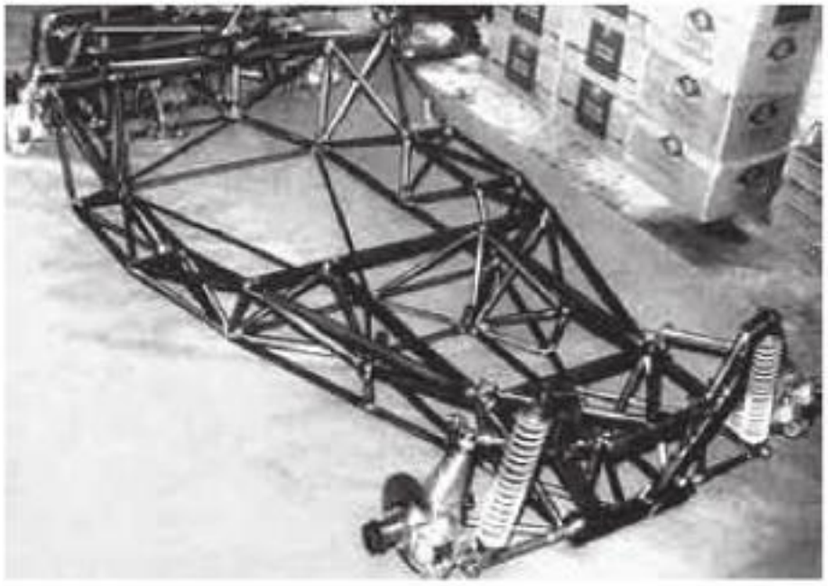
Paul Richards' M63, with Haenelt's A110 alongside. (Photo ACE)

5 Difficult times

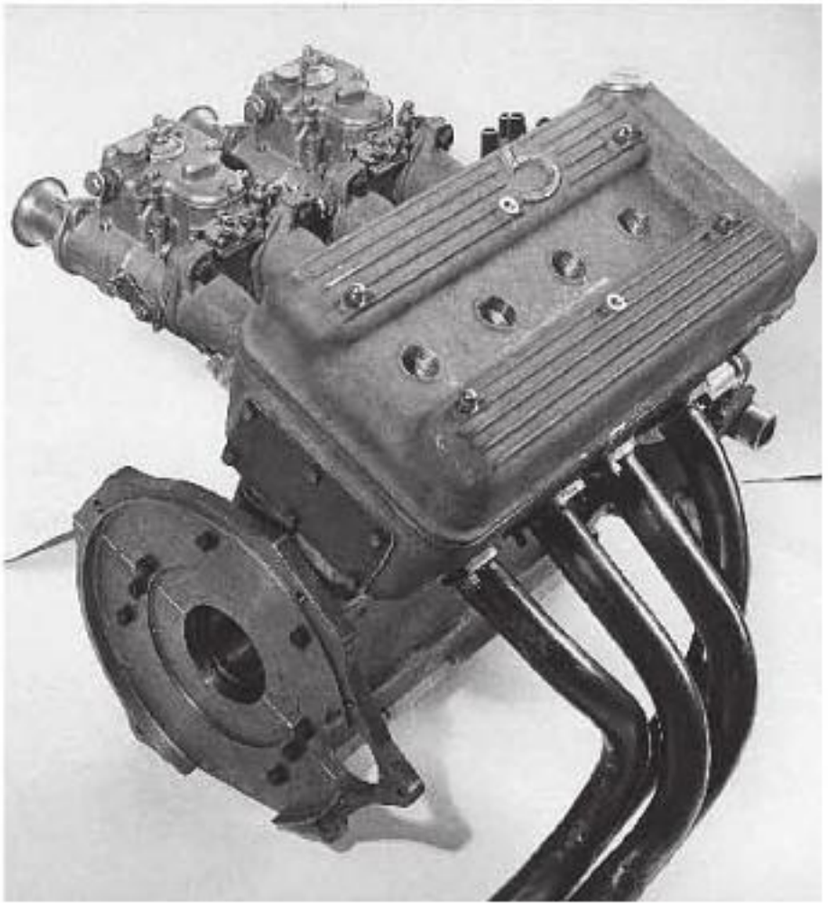
1965 saw the birth of another car. Designed during 1964, it was initially called the M65. The first three chassis of the new type, which was an all-welded tubular space frame, were numbered 1718, 1719, and 1720. Using the existing technology from the M64, Richard Bouleau kept the same design for the front suspension – independent with wishbones, helicoidal springs and hydraulic shock absorbers, still by Allinquant. The steering rack was still the one from the Renault Dauphine. At the rear it was originally the same story: independent with wishbones and helicoidal springs. Same disc brakes. Tyres were still Dunlops.

It was the engines that changed dramatically: now they were 1296cc double overhead cam.

The power of the Gordini 5-bearing engine was now quoted as 130bhp; transmission was still the 5-speed Hewland. The chassis catered for a front track of 1.280m, rear track of 1.270m and a wheelbase of 2.3m. The new body shape created by Marcel Hubert had a width of 1.510m, its height was 1.050m, and ground clearance still 150mm. The changes brought the car's weight up to around 649kg.



The new M65 chassis. (Photo AAA)



Two overhead camshafts: the Gordini type 58. (©R)

Those Gordini engines were, of course, the heart of the car and as the year progressed Amédée Gordini, watched by Renault on whose engines his creations were based, settled on two main sizes of cylinder block. As stated by Giuseppe Albarea in the previous chapter, these had different heights so that he could readily modify the capacity from 1000cc to 1300cc by changing internal components while keeping a commonality of basic parts, thereby ensuring a relatively low-cost programme. The type 55 was now superseded by the type 58, which had been

Engine men: Amédée Gordini, Marc Bande and Giuseppe Albarea at the blvd Victor, Paris, 1965. (Photo GA)

started in late 1963, and over the years five specifications were developed:

Year:	*Type:*	*Engine:*	*Bore:*	*Stroke:*
1963	58	996cc	75.7mm	55.4mm
1964	58A	1296cc	75.7mm	72.0mm
	58B	1005cc	76.0mm	55.4mm
1965	58C	1470cc	79.0mm	75.0mm
1968	58I	1470cc	79.0mm	75.0mm

(Kugelfischer injection)

It may be interesting to note that in 1964, before the tests in April for the Le Mans 24 Hours, the team at Alpine had given thought to increasing the capacity of the R8 Gordini single-cam engine to 1300cc. Marc Mignotet was in close contact with the Alpine engineers who were using his technology for some of the rally cars. A Mignotet engine was fitted to a Berlinette and tested by Mauro Bianchi, then newly arrived from Abarth. For sports prototype racing, however, our main interest here, it was the Gordini unit that prevailed; the 1005cc unit was now capable of developing 105bhp at 8000rpm. The new 1296 units could develop 125-135bhp at 7500rpm. The engines were dry-sumped, and ran with a compression ratio of 10.5:1.

The M64s were still being used for certain events and retained their original engines – mostly 1149cc, 71.3mm bore and 72mm stroke, giving 110bhp. But Alpine was now looking to the future and its new car.

Mauro Bianchi: "Through 1964 we had problems setting the cars up – you know, camber angles, toe-in, etc. Some of our measuring equipment was pretty antiquated. Strangely, I found that when I set up a car without using this device and it went well, the engineers would use the equipment to copy my settings. But the problem was that the measuring device didn't copy my setup correctly, so the other drivers would often get in a car and say I was crazy: many times they thought I set up a car to suit myself. But truly, it wasn't the case at all, though if my car was good and the others were bad it looked as if it was my fault. After a lot of arguments it was found that the old measuring equipment was the real cause of the problem. We had heard about a new system made by the Müller company in Germany. We went to see them and came back with the new optical measuring devices which could measure the toe-in and angles precisely, and from that moment when I did the adjustments to set up a car it was copied accurately and there were no further problems."

Mauro continues: "From the moment I arrived at Alpine in 1964 I did a lot of tyre testing, much of it in collaboration with the technicians from Michelin. In the middle of the 1960s, the tyres used by the various racing teams were mainly supplied by Dunlop and Goodyear (we used Dunlops). Michelin was at that time completely absent from competition, and then one day we saw arriving in Dieppe a short, slim man, clearly a Frenchman; his name? – Pierre Dupasquier. This man, who later became a world celebrity, was completely unknown at that time. He explained that Michelin had decided to develop its tyres for competition and that they wanted to work with Alpine. When you know the reputation and working power of Michelin as it is today you may well smile, but at the time the Auvergne manufacturer was virtually unknown in competition circles, as was Pierre, who has become a lifelong friend.

"I am a bit ashamed to admit that we received this offer, which was absolutely fabulous for Alpine, with a certain scepticism and even a little reticence, saying things like, 'We're very happy with our Dunlop tyres – are you sure you can do better?' Continuing our 'interrogation,' we asked the dimensions of the proposed tyres. 'We have already built 14-inch wheels for you.' This reply shut us up! Given the man's determination, it was impossible for us to refuse.

"He told us about the Ladoux test circuit, a very impressive installation with an enormous test centre. We soon realised how little we knew and began to understand that we weren't

The Michelin test track at Ladoux. (Photo U)

dealing with amateurs. This centre had several specific circuits at its disposal. Circuit No. 1, where our tests were to be carried out, encircled the whole site and had several very big, very fast bends.

"We decided to establish a base time with our usual Dunlop tyres. I can confess now that it was with perverse pleasure that I noticed that our M64 prototype fitted with the 1150cc engine and on 13-inch wheels allowed me to keep my foot hard down in all the corners, averaging 235kph a lap. I was laughing inside my helmet, thinking that Michelin would have trouble doing any better. We fitted the magnificent new Michelin 14-inch rims and I went out to test them. I only did one lap, as the car seemed to me completely undrivable: it zigzagged all over the road, completely lacking stability, and it scared me so much that I had to keep below 200kph! I stopped immediately and made a full report. To my amazement, the Michelin engineers didn't seem at all surprised and with a composure which knocked us backwards told us, 'The chassis of your car is probably not adjusted correctly.' That really began to annoy me. I had myself supervised all the settings of the car, which were absolutely in accordance with our standards, and I could only reply, 'With Dunlop tyres I do an average of 235kph – doesn't that prove that the settings of our car are correct?'

"I only did one lap, as the car seemed to me completely undrivable: it zigzagged all over the road, completely lacking stability, and it scared me so much that I had to keep below 200kph!"

"They then told us that these new tyres were, in fact, revolutionary, that they had 'radial' carcasses, that they were very specialised and required equally specialised geometric settings. Not at all convinced, I and my Alpine colleagues gave in and agreed to hand over our prototype to the Michelin technicians.

"They worked for several hours to reset the chassis. It seemed completely incomprehensible to us – quite useless. At last, the engineers triumphantly gave us back the car, saying, 'Now the car is set up properly.' I still thought that all this was rubbish, but I went out in the proto with its new settings and, to my complete surprise, it had become truly excellent – perfectly stable – and I had no difficulty in doing a lap at top speed. When I stopped, I sheepishly had to act the good loser and said, 'Bravo, you've done it; your tyres are as good as the Dunlops,' to which they replied, 'No, no,' showing me the test result sheet which indicated an average of 238kph! With a wicked smile, the Michelin engineers just said, 'Better rolling coefficient of the radial carcass.' That day, my team colleagues and I realised the opportunity that had been offered Alpine to be able to work with a partner of this quality."

It was a challenging season but would end with some hope on the horizon. An interesting if not altogether successful technical change was made to chassis 1711, the M64, when in the latter part of January it was fitted with the Allinquant oleo-pneumatic suspension system.

So what is the oleo-pneumatic suspension? Richard Bouleau explains: "We undertook with Allinquant to run one of our cars with self-pumping suspension. They called it oleo-pneumatic – suspension without springs and without assistance from the engine or the battery.

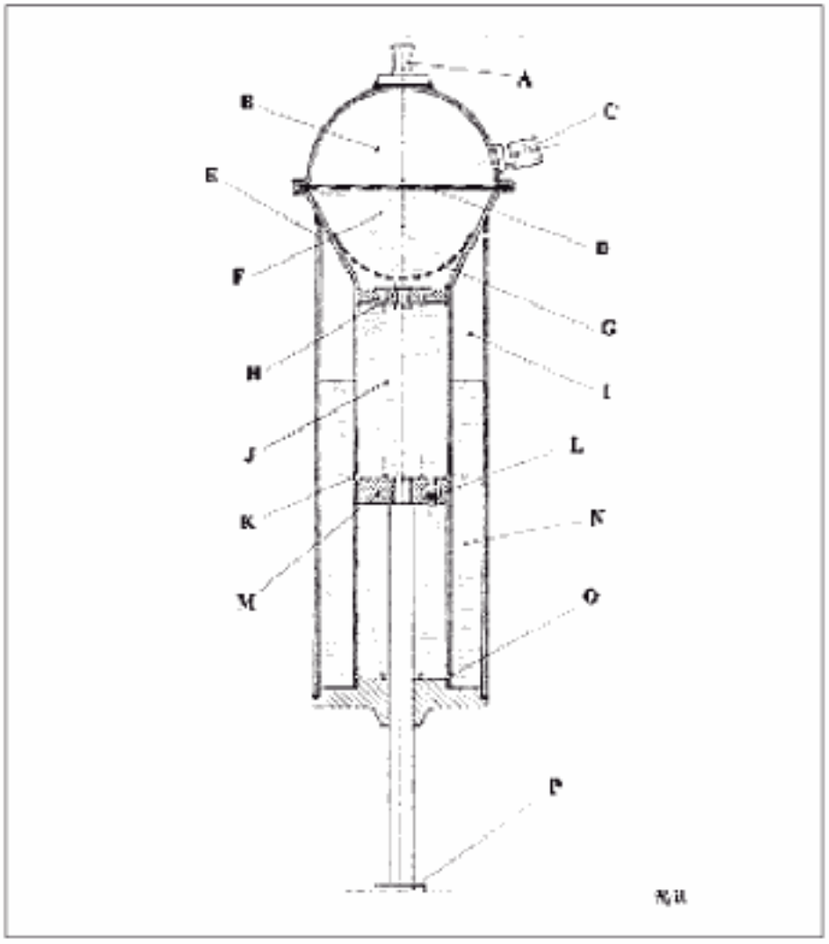
"This experiment was intended to be used for the Le Mans 24 Hours. The suspension was installed in 1965 on an M64

under the guidance of its inventor, an engineer from the Allinquant company called Mr Labadens, if my memory serves me correctly. The overriding principle of this suspension was to ensure a constant trim, correcting the trim solely by the use of the energy generated by the action of the wheels and the movement of the suspension in relation to the car. Although it wasn't exactly crowned with success, this attempt was not negative either.

"By definition, for the suspension to work it has to 'pump.' And for that to happen, the car has to be running. And at the start it would have to be on its bump stops, so it was difficult to imagine that the car could move with no suspension. Allinquant used the hypothesis of an opposite reaction system, which you might call 'self-retro-pumping.' To get the car running, therefore, it was necessary to pump the suspension before moving off. This is where Mr Labadens' contribution came in. It took no less than half a dozen people to shake the car. Once the car had a satisfactory trim, it could start moving! So the suspension worked, although we couldn't claim that it gave any advantage over our classic suspension. We must credit this experiment with the happy memory of the hilarious moments we spent shaking this poor car. Also in the Coupe de Cognac 1965, before crossing the finishing line, Mauro Bianchi, with a collapsed rear suspension, treated the public and the attendant photographers to the curious sight of a wheel almost 20cm off the ground.

"How did it work? As no trace can be found of this experiment and we were not even informed how it actually worked, I propose to do a bit of 'fictional technology' because I have kept no pictures or drawings. We can see the presence of a pneumatic accumulator 'B,' a hydraulic jack 'J,' a shock-absorbing wall 'H,' an oil tank 'N,' transfer holes 'K' and 'O,' a jack piston valve 'L,' a grill 'G' to limit the movement of the accumulator membrane and finally a valve permitting the intake of air or other gas into the suspension element.

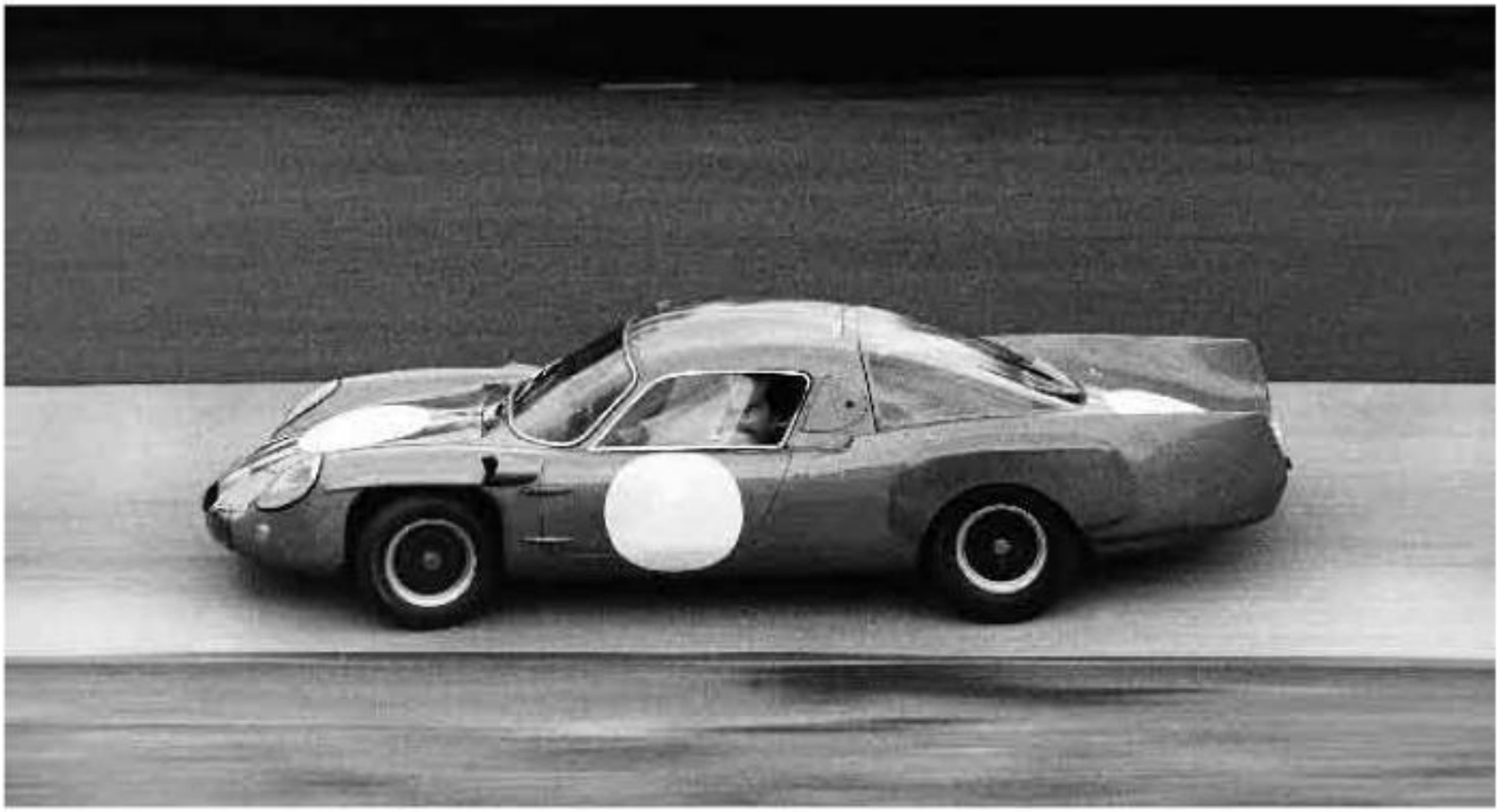
"Before starting the vehicle: the accumulator is inflated under pressure to permit the positioning of the membrane against the grill 'G.' The element is in a compressed position, i.e. the piston is close to the shock-absorbing wall. The car is therefore in a lowered position (say, on the bump stops). This is where it is necessary to 'pump' the suspension. When the piston falls, the valve will open, allowing oil to penetrate into 'J.' The car is allowed to drop back down and the piston will rise, pushing oil into 'F' through the shock-absorbing wall 'H' and the grill 'G.' The car is not completely at its lowest point but you must continue to 'pump' to continue to inflate the accumulator until the piston is stabilised at the level of the outlet holes 'K.'



Richard Bouleau's hypothesis of the Allinquant oleo-pneumatic suspension. (Photo RB)

Each time the piston drops, the valve opens and allows oil to pass freely, while the shock-absorbing wall efficiently stops the return of the oil from 'F' towards 'J.' At the end of this pumping sequence, the piston settles at a position which allows the suspension to do its job.

"Operation during a race: with the car now at the correct height, the pumping (accelerated by the fast movement of the wheels up and down) will allow the piston to stabilise at the level of the outlet holes. Once the suspension relaxes, when the piston rises again, the oil which has escaped through the outlet holes towards 'N2' will rejoin the jack via the holes at the bottom of the skirt of the jack 'O.' The valve will always close when the piston rises and permit the return of the oil towards the accumulator when the piston is higher than the outlet holes.



The M65, which later became the A210. (Photo MB)

"Following a stop, if the load of the vehicle has changed, the same cycle will be reproduced and the car will recover its standard trim; this is the raison d'être of the system. One can imagine that a sufficiently supple bump stop would allow the pumping of the suspension as soon as the wheels start to turn. But on a good road surface (which is usually the case) it is more doubtful that the car would quickly acquire a suitable trim. This concept and my drawing are as close to the spirit of the idea as we can get, as no original drawings exist."

Now we will go to the racing year. Not of interest to the Alpine factory in Dieppe but certainly on the programme of American team owner John Norwood was the Daytona 2000km, the first major race of 1965 – 327 laps of a 3.81 mile (6.132km) circuit, where he entered the M63 chassis 1703 for Paul Richards and Ed Wilson. They put the car in 27th place on the grid with a time of 2min 33sec in the Proto GT class, and got to the finish of the event but were not classified in the final results. A few weeks later, on 27 March, the Sebring 12 Hours saw two racing Berlinettes take part, but neither was classified at the finish and they are outside the scope of our study, not being sports prototypes.

In France the design team had been busy on the new car, the M65, chassis 1718 (incidentally the 'M' was derived from Le Mans). It was 1965, so M65 it was. It was tested and sent to the Le Mans testing day on 10 April. We'll look at the details of this test when we come to the section on the Le Mans 24 Hours itself.

Marcel Hubert had discovered in tests at Montlhéry the merits of stabilisation by adding vertical tail fins to the rear wings to provide a funnel for the air flow between the wings over the rear bodywork. During these tests the car was powered by the new 1300cc engine (1296cc).

After the April Le Mans trials, Alpine decided to test the M65 car in a race and entered the mighty Targa Florio held on the 72km Piccolo Madonie circuit in Sicily, due to run on 9 May that year. The new car (chassis 1718) registered 717W75 and carrying No. 164 was fitted with the older 1149cc twin-cam engine for this long and arduous event, which Alpine thought would give it the best chance of completing the distance as it raced in anger for the first time, driven by Mauro Bianchi and Henri Grandsire. The new car was fastest in its class in practice and emerged as favourite to win the class.

The 1300-class cars were due to go off first at 8am. It would be a hot and dry day, the smaller-engined cars building the excitement of the local 'folla' awaiting the roar as the big-engined cars stormed away. It was an Alpine that started proceedings: the Berlinette No. 2 driven by Joseph Thomas. Then came a sequence of Abarths, Porsches and Lancias before the departure of the Bianchi/Grandsire car.

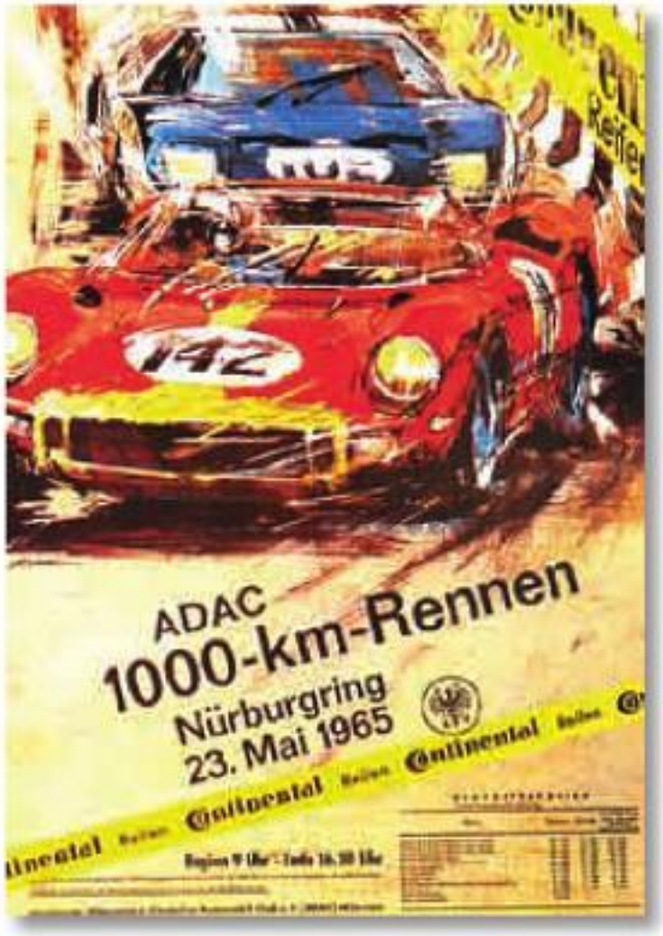
As happened every year, there was that period of relative peace except for the sound of a train whistle some distance away, mixed with the sound of excited voices and ice cream sellers promoting their wares. Everyone waited, straining to hear the whine from the first small 4-cylinder engine – the first car on the road to complete its first lap. It was a flying Abarth Simca, No. 26, which passed all those in front of it. But would it last? It did, actually, finishing in tenth overall. For Alpine it was Mauro Bianchi who came round in the M65 just behind Hans Herrmann in the Abarth 1600. The Alpine was leading the prototype class and was in tenth place overall at the end of the first lap.

Bianchi pressed on at remarkable speed, but in those early laps, each of which took around 44 minutes, there were three serious accidents. After a quick stop for fuel and a driver change going into lap five, one of those accidents involved Henri Grandsire. As he approached a curve above the village of Cerda he found he had brake problems and misjudged the corner; the car left the road, somersaulted, destroyed itself and caught fire. Grandsire was trapped but was helped out of the crumpled wreckage by spectators who were nearby. He suffered arm and facial burns which required the assistance of the local rescue helicopter to rush him to hospital. Grandsire told the press at the time: "Unfortunately I hit the side, which contained the fuel tank, on a bank; it burst and the car immediately caught fire. There was nothing to separate the engine and the cockpit. When I saw the flames I lost my concentration and I didn't take the next corner. I was very lucky because it was one of the few corners in the Targa Florio where there is a field instead of the usual steep

Bianchi/Grandsire. (Photo HMW/R)

slopes. I ended up in the field and managed to get out of the car. I was slightly burned on the face and the wrists (everything that wasn't covered) and the car was completely destroyed. This proto was intended for the 24 Hours, and once he knew that my condition was not serious Jean Rédélé was not best pleased. It was a shame because it had been going well – I remember that during that lap I had passed several Ferrari 250LMs. I stayed in hospital in Paris while my skin recovered and was discharged just in time to go to Monaco at the end of May to race in F3."

It was a day of mixed feelings for Alpine, because the A110 Berlinette of Jean Vinatier/Roger de Lageneste fared much better and managed to complete the same number of laps (ten) as the winning Ferrari 275 of Vaccarella/Bandini and finished 13th overall and third in class. The Berlinette that led away at the start of the race also completed the distance, but the third Alpine, the Berlinette of Jacques Cheinisse/Jean-Pierre Hanrioud, also went out in an accident on the first lap. It was a long journey home to lick their wounds.



Nürburgring 1965. (Photo JS)

Two weeks after Sicily came the Nürburgring 1000km. Two M64s were entered: chassis 1709, No. 42, this time with a 1-litre engine going for the small-capacity prototype category, driven by Roger de Lageneste/Peter Ruby, along with chassis 1710, No. 40, a 1296cc car for Mauro Bianchi/Jean Vinatier. The cars looked fine in practice but unfortunately the good form was deceptive.

In the race, the Bianchi/Vinatier car which started on 37th place on the grid of 61 with a time of 10min 8.3sec went out on lap 11 when the cooling system failed. Five laps later, the No. 42 car of de Lageneste/Ruby, which had started from grid position 43 with 10min 19.9sec, stopped with a broken wheel. Back to Dieppe to start again!

As spring turned into summer we come to the Le Mans 24 Hours, 19-20 June 1965. The weather was hot. The eventual winner, the 3.3-litre Ferrari of Jochen Rindt/Masten Gregory,

A flying de Lageneste/Ruby M64. (Photo LAT)

Chassis 1708: Henri Grandsire. (Photo AJ)

covered 348 laps of the then 8.364-mile (14.61km) circuit during the 24 hours.

The build-up started, as was tradition, with a test weekend at the circuit back in April, and we return now to that date. The new M65 chassis 1718 had its first outing at that time, but in addition to this car Alpine sent five other prototypes to the 10-11 April tests. Of the 41 entrants for the tests only 31 were scheduled to start "La Ronde Infernale." Of those 41, the fastest Alpine was the No. 55 M63 of Henri Grandsire on 4min 16.9sec, but this car was not entered for the race!

Here is how the tests worked out for Alpine:

Car no:	*Type:*	*Chassis:*	*Drivers:*	*Time:*
55	M63	1708	Henri Grandsire	4min 16.9sec
50	M65	1718	Mauro Bianchi	4min 19.8sec (car 46 in race)
46	M64	1709	Roger Masson	4min 30sec (car 50 in race)
51	M64	1711	Jacques Cheinisse	4mins 33.1sec
47	M64	1710	Jean Vinatier	5min 16.7sec

Finally came Vinatier again, but in an A110 this time.

The tests proved quite a revelation, with the old M63 being quickest and confounding the critics. M64 1711 was trying the new oleo-pneumatic suspension described earlier. Jacques Cheinisse: "All the time it was working, and hydraulic seals were new for the oleo part, it was very good, and the cars cornered as if they were on rails, but the problem came as a race wore on and things got hot and the system leaked! Then the handling became very strange." In this first test the suspension still needed some sorting, as the car was routinely bottoming out. Over the two days, 5000km of testing were conducted by the Alpine drivers: Henri Grandsire, Mauro Bianchi, Roger de Lageneste, Jacques Cheinisse, Roger Masson, Jean Vinatier, Jean-Pierre Hanrioud, Bernard Consten, René Richard, Robert Bouharde and the former motorcycling champion Pierre Monneret.

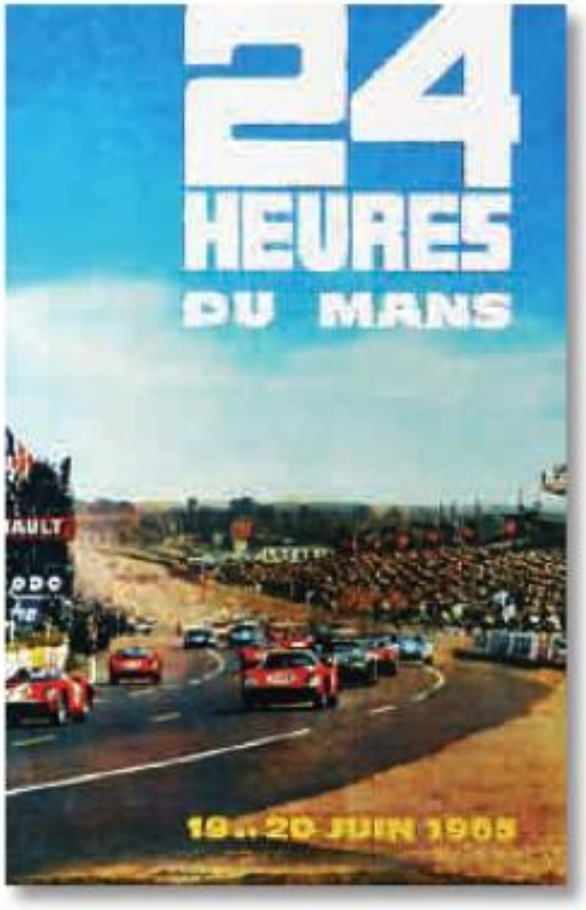
Sadly, the weekend saw the death of Lloyd Casner in a Maserati. It will be remembered that 'Lucky' Casner had driven the first M63 Alpine at the Nürburgring in 1963; unfortunately, the likeable American's luck had run out. Safety at Le Mans was always an issue, and, although it sounds unthinkable today, it was, as we have seen already, an era when death was pretty much regarded as part of the risk.

In the weeks before the 1965 Le Mans 24 Hours in June, one of the principal competitors to Alpine, the Bonnet company, was bought out by Matra, and the cars that were expected did not show up, except for one that was unfinished and failed scrutineering. So, Alpine ended up being the only French marque at the great 24-hour race, and, with the promising showing from April fresh in journalists' minds, considerable excitement was whipped up in support of Alpine. Renault, too, was looking hard and thinking of the possible marketing opportunities offered by having its 'lozenge' diamond logo on the cars. Renault decided to expose its full involvement at this time, with its trademark clearly in evidence.

Only one M65, chassis 1719, started; the other (1718) had been destroyed in the Sicilian race.

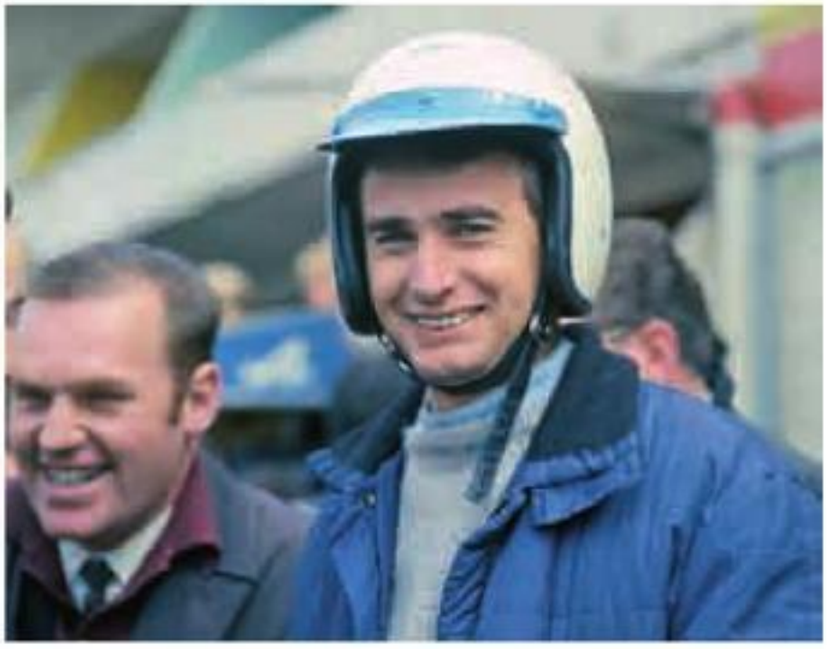
Test weekend line-up. (Photo AJ)

Guy Verrier/René Richard/Bernard Consten. (©R)



And now for the big one: Le Mans 1965. (Photo JS)

Resting in the paddock. (Photo RdL)



A cheerful, helmeted Jacques Cheinisse with Richard Bouleau. (©R)

June – the Sarthe circuit – Le Mans. The Alpine line-up was as follows:

The M63B (chassis 1708, car 61) with its 1001cc engine, to be driven by Robert Bouharde/Pierre Monneret. Chassis 1709 (car 50), shared by US driver Peter Revson/Philippe Vidal; it was powered by an 1149cc unit. Chassis 1710 (car 47), with the new 1296 engine, to be driven by Jean Vinatier/Roger de Lageneste.

Chassis 1711 (car 51), 1149cc, had Guy Verrier/Roger Masson aboard. The sole M65 was to be driven by Bianchi and the still recovering Grandsire. It, too, had the new 1296 unit, and was numbered 46. The final car was a GT4 Alpine road car chassis, race No. 55, fitted with an M64 long-tail body and

The 'Sauterelle,' No. 55. (©R)

No. 47: Vinatier/de Lageneste. (©R)

powered by an 1100cc push-rod engine. This car was known as the 'Sauterelle' (grasshopper, so-called because it ran on 4.5-inch wheels and, on the corners, it hopped across the road). It was driven by Jacques Cheinisse/Jean-Pierre Hanrioud running in the GT category and had the GT4 box-type chassis built by Chappe and Gessalin. Some may remember that Chappe had been involved with Jean Rédélé many years before with the first road cars. Jacques Cheinisse: "It was running on standard steel wheels and Michelin road tyres! Can you imagine that at Le Mans?" Jean-Pierre Hanrioud: "It was a difficult car, with the aerodynamics, with little wheels, and I had a problem with it. I successfully drove many different types of car but I never really knew how to do a modification or to set a car up, so I would adapt myself to it rather than adjust the car. I didn't understand anything about technical stuff – I used to get in a car, drive a few km, test it, decide how to drive it and that was it. There were already problems with the roadholding of this one, which was not like the Berlinettes or Porsches. This car needed setting up and I remember one day I saw Gérard Larrousse, who was in the garage where they were preparing the Porsches. Gérard had asked the mechanics to modify the pedals. It was a completely different approach. He would adapt the pedals or the seat, changing the padding to make it more comfortable – all kinds of things. Looking back, I think he was right. It was that approach that was needed for the 'Sauterelle.'"

Is the engine still there? (Photo HMW/R)

350,000 people are reported to have crammed into the confines of the circuit that year, principally to witness the anticipated battle between Ford and Ferrari, but a good many of them to see the pride of France – Alpine – attack the index awards.

The crowd was unaware of the efforts that the engineers and mechanics at Alpine had had to make to get to Le Mans. In fact, within the management team – all young men – they had let their enthusiasm come before strategy, and the company had overstretched itself with not only works entries in the F2 and F3 Championships, but service to clients, as well as the huge entry at Le Mans.

The engineers on the shop floor were at full stretch production-wise, and were becoming physically fatigued due to lack of sleep and the workload imposed. Preparation of the cars was suffering and the race would not be a happy one.

Here are the qualifying times from race week practice that determined the start position for the Alpines:

Position:	*Car no:*	*Drivers:*	*Time:*
33rd	46	Mauro Bianchi/Henri Grandsire	4min 20.0sec
35th	47	Jean Vinatier/Roger de Lageneste	4min 21.1sec
41st	50	Philippe Vidal/Peter Revson	4min 34.9sec
42nd	51	Guy Verrier/Roger Masson	4min 35.1sec
45th	61	Robert Bouharde/Pierre Monneret	4min 44.7sec
51st	55	Jacques Cheinisse/ Jean-Pierre Hanrioud	4min 57.8sec

The fastest Alpine in practice, car 46 of Bianchi/Grandsire, was running well in the early laps of the race in 26th place, but just after the 2-hour mark, with 32 laps completed, it became the first of the team's casualties when the input shaft to the gearbox failed.

"The engineers on the shop floor were at full stretch production-wise, and were becoming physically fatigued due to lack of sleep and the workload imposed."

The next incident involved the No. 50 car of Philippe Vidal/ Peter Revson, the young American future Can-Am, Formula 1 and Indy car driver who was having his first adventure in sports car racing. They were leading the two Le Mans indexes of performance and efficiency and were then 20th overall, until ten hours into the race when they suffered valve failure on lap 116. With two cars now out, frustration in the camp was palpable. Confidence was wavering.

Car 51 was the one with the Allinquant oleo-pneumatic suspension. It failed after 15 hours.

Some say it was a gearbox link while others say it was the

Can we win? Rédélé is interviewed. l-r: Cheinisse, Gordini, Gauchet, Rédélé, Hubert. (Photo RdL)

En route: Bianchi/Grandsire. (©R)

Philippe Vidal/Peter Revson. (©R)

The oleo-pneumatic car lasted 15 hours. (Photo GB)

Collapse! (Photo CD)

clutch, but it looks more like the suspension! Either way, it was now three down. The disappointment continued when car No. 61 of Robert Bouharde/Pierre Monneret also failed, their troubles coming around the 16-hour mark on lap 187 when the ignition failed. Despondency must have increased a few minutes later when, on lap 195, the lightest car – No. 47 with the 1300 engine driven by Roger de Lageneste/Jean Vinatier – failed to come by. Again, it was the ignition system that had let them down.

A difficult time for Alpine in front of the home crowd got worse when the Hanrioud/Cheinisse GT4 'Sauterelle,' the car with the M64 body on the GT4 chassis, failed shortly afterwards when its clutch let go. The heaviest of the cars, it had lasted the longest but sadly only to lap 197. After all the hopes and promise shown, it was a disaster, and the Régie Renault was not very pleased.

The fact of the matter was that although the cars were in many cases as quick as the bigger-engined machinery, they proved to be fragile in one way or another.

Robert Bouharde/Pierre Monneret. (©R)

"Le Mans had been a disappointment. Alpine needed to get its act together, and Renault was watching closely over its shoulder."

Six cars entered and started: all six went out. Reliability was what was needed. Coincidentally the same affliction had attacked the Fords as they all self-destructed, leaving victory to the aforementioned Ferrari. It was a tough race for everybody that year, and only 14 cars were classified at the end.

Le Mans had been a disappointment. Alpine needed to get its act together, and Renault was watching closely over its shoulder.

Next up would be the Reims 12 Hours where, thankfully, Alpine would find redemption. The Alpine team had made determined efforts to correct the failings evident at Le Mans, concentrating on preparation and reliability, and it paid off. Five cars started and five cars finished, the best one covering 262 laps after 12 hours of dry driving on the 5.158 mile (8.301km) circuit.

Nearly, but not quite – out after 187 laps. Vinatier follows. (Photo AAA)

Ignition failure left it out on the circuit with eight hours to go. (Photo RdL)

GT4 'Sauterelle.' (Photo CD)

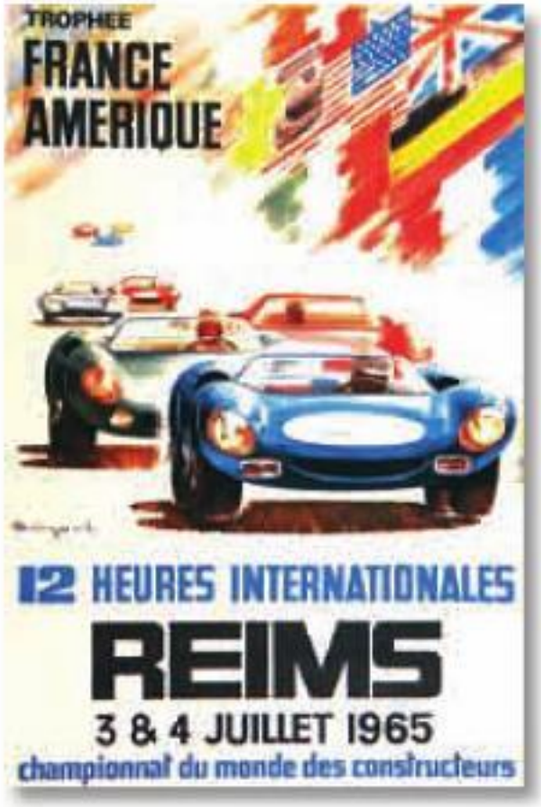
Success at Reims. (Photo MB)

This year's Reims 12 Hours, run on 3-4 July, was round ten of the Championship for Makes and saw four Alpines in the 1000cc to 1300cc prototype class. Lucien Bianchi (Mauro's older brother) paired with Henri Grandsire in the sole M65 (chassis 1719, race No. 15) qualifying in 13th place with 2min 36.5sec. Next up was the 15th place qualifier, car 17, the M64 (chassis 1709) of Philippe Vidal and Mauro Bianchi on 2min 42.1sec, followed by car 16, the M64 (chassis 1710) of Jean Vinatier/Roger de Lageneste with 2min 42.7sec, and on 21st grid slot were Guy Verrier/Jacques Cheinisse in car 18 M64 (chassis 1711) with a time of 2min 50.4sec. A fifth car, No. 60 – the GT 'Sauterelle' – was entered for Robert Bouharde/Pierre Monneret.

As ever, tradition dictated that this event started at night, and as the time ticked round to 11.59pm on a cool, dry evening, the crowd went silent, the flag dropped and the patter of tiny (and not so tiny) feet was heard as the drivers re-enacted the traditional Le Mans-style start, each running from his numbered circle across the track to his car, then the briefest of seconds' silence again before engines roared into life and the 1965 Reims 12 Hours got under way. Of course the phalanx of Ferraris took an immediate unchallenged lead; after 25 laps it was the Hill/Bonnier Ferrari that headed a second Ferrari of Surtees/Parkes at a blistering 209.9kph average. At 30 minutes past midnight the Vidal/Bianchi car had to come in to have its water pump attended to, whilst the other Alpines were running like metronomes. By 2.45am the Vidal/Bianchi car was running well again, albeit in last place. At the half-way stage after six hours the order of the Alpines was: Lucien Bianchi/Grandsire ninth, de Lageneste/Vinatier 11th, Cheinisse/Verrier 13th, Bouharde/Monneret 16th and Vidal/Mauro Bianchi 17th.

At the 8-hour mark the little blue cars were still powering round almost in formation, and come the chequered flag Alpine's honour had been restored.

Rodriguez/Guichet in the Ferrari took victory on 284 laps at an average speed of 197.121kph to cover 2365.45km. But it was the little cars from Dieppe that the crowds were cheering: in seventh place, Lucien Bianchi/Henri Grandsire had covered 2068.8km and 248 laps to win their class.



Publicity for Reims. (Photo JS)

Charging back: Vidal/Mauro Bianchi. (©R)

Lucien Bianchi/Grandsire. (©R)

The 'Grasshopper' – Robert Bouharde/Pierre Monneret. (Photo CD)

In eighth were de Lageneste/Vinatier on 243 laps. Mauro Bianchi/Vidal had climbed off the bottom slot to finish 12th on 222 laps, with Cheinisse/Verrier 13th on 219 laps, and the 'Sauterelle' of Bouharde/Monneret 14th overall and first in the GT class on 216 laps.

For Alpine it was redemption and a sign of what could be if it got the preparation right. Not everything was perfect, but the result was excellent.

An amusing note from this race was that the Shelby Daytona Cobra of Jack Sears and John Whitmore had had a connecting rod let go. Many would have retired the car, but apparently, there was a case of champagne riding on the finish, and team manager Alan Mann had the mechanics take out the rod and piston and disconnect the spark plug and sent the car back out to race! The 7-cylinder Cobra ran for five hours like this and finished ninth; true grit!

After the fun of Reims came a lesser race at the earlier-mentioned Cognac circuit. This was an old military aerodrome circuit of 4.9km where motorcycle and car races were held throughout the 1960s, usually during the months of July and August. Mr Martell (yes, from the famous cognac family), keen sportsman and passionately involved with cars,

Mauro waves a wheel to the crowd. (Photo MB)

became the patron and organiser. The Trophée de Cognac was part of a challenge called Coupe des Provinces Françaises. It was created at the beginning of the sixties and was sponsored by Ford France and the French magazine *Sport Auto*. On 25 July 1965 Alpine was in attendance and took the M64 chassis 1711 (1149cc) fitted with the Allinquant oleo-pneumatic suspension. As we have already heard, when it was working well it was very good, but on this occasion it only allowed Mauro Bianchi in the 1-litre-engined car to drive each lap in spectacular style.

Good fun was had, but no result; Mauro was down the field. The race, over 25 laps, was won by Guy Ligier in the Ford GT, who also set the fastest lap in 1min 35.8sec on the 3.62km course.

After the Cognac race it was on to more aerodynamics testing on 25-26 August, this time with the M65 chassis 1719 at Montlhéry, with Philippe Vidal driving, before the team went on to bigger things on 5 September.

Alpine entered three cars for the Nürburgring 500km. It was round eight of the Manufacturers' Championship and a completely different ballgame to the previous race at Cognac. As ever in the Eifel Mountains, the weather could not be relied upon to show a sunny countenance and it rained throughout practice; although it didn't rain in the race itself it was chilly and threatening and the teams had to prepare for every eventuality. One never knows here when conditions might change and, with the 22.810km (14.173 miles) of the Nordschleife, it could well be pouring down on one part of the circuit whilst in another part it was sunny and dry.

Chassis 1709 M64 with its 1149cc engine was to be driven by Grandsire, Vidal and de Lageneste. In the event, however, the stewards (for reasons that we have not been able to establish) refused to allow the car to start, so only two cars competed in the race.

The M65 chassis 1719 with a 1295cc engine was allocated to the Bianchi brothers, sharing an opportunity to race together. Chassis 1710, the old M64, was driven by the partnership that was originally entered in 1709.

Over the years, the Nürburgring had become the traditional haunt of the Abarths, which, since the early sixties, had made prolific appearances at the top of the results sheets. In 1965 the 500km was not for the bigger-engined cars, but was restricted to the up-to-1300cc contenders, and the course and race were ideal for the design of the small cars with their better manœuvrability.

Across the classes, Abarth had entered 12 cars against Alpine's two, with the leading 1300cc open-top prototype Abarth challenge coming from the legendary drivers Hans Herrmann and Gerhard Mitter (Mitter had been borrowed from Porsche to do this one race). The very quick Le Mans-bodied Austin Healey Sprites were also on the entry list, along with Fiats, DKWs and Marcos. Practice was wet and gave little indication of who would be victorious, except that everyone assumed it would be an Abarth.

L Bianchi/M Bianchi. (©R)

At 11am the traditional patter of feet again signalled the Le Mans-style start as the drivers ran across the road to jump into their cars. The roar of engines began, as Herrmann in car ten immediately led Mitter (car one) in an Abarth one-two on what would be 22 long laps of the tortuous Nordschleife. There would be time for a sandwich and a drink before the cars returned to the home-straight, as the waiting spectators saw some nine and a half minutes tick by. The buzzing Abarths were expected to be in front, but there was a gasp from the crowd when they saw Mauro Bianchi's M65 Alpine come by in the lead, followed by the two Abarths and the second Alpine. Highly experienced in the ways of the little M65, Mauro had built up a lead of 45sec at the half-way point of the race when he handed over to his brother Lucien, who was more experienced, but not in Alpines. Unfortunately, Lucien had suffered an injury in an event a week or so previously and, as this race progressed, he became more and more fatigued. Mitter, in the Abarth, saw his chance as Lucien appeared not to be as quick as Mauro that day and started to push hard, closing the gap to 19sec with just four laps to go.

There was huge drama in the Alpine pit. As Lucien finished the lap, he came in, very tired, to hand over to Mauro, but realised that the pit crew was screaming at him to go straight out again – Mitter was coming into view and the driver change would take too long. He roared out again just in front of the charging Abarth, and on the 21st lap of the 22 he drove the fastest lap of the day, 9min 38.9sec, pulling away again from Mitter. Could he hang on? His body was aching so much that it was only adrenalin that pumped him back to life and he crossed the line after the final lap some 24.8sec ahead of a disbelieving Mitter in the Abarth. It was a great victory for Alpine and showed that the team had once again got its act back together after the Le Mans debacle.

André Désaubry, a mechanic at the time, takes up the story: "On the start line, tension was high. Mauro and Lucien had got seventh best time in the pouring rain. As the cars lined up we were hoping that every turn of our spanners and screwdrivers had been correct; for sure, it was playing on our minds. Our confidence in our work was high, but some doubts remained; maybe there was something beyond our control that would give us a problem. Then the seconds to the start were counting down and the marshals asked us to return to the pits.

"At the start, Mauro was really going all out and by the end of the first lap we could not believe his position. It was a mixture of joy and fear lest anything should go wrong. We were on the alert, ready to jump into action at any moment. On the second lap, Mauro was well out in front. Our pit was a happy place. We glanced at the Abarth pit and could see how amazed our rivals were.

"Lap after lap, the gap lengthened between the M65 and its pursuers. A win looked possible. Mauro was going round in 9min 52sec. Amédée Gordini was feverishly scribbling on a cigarette packet the times passed to him by Michèle Dubosc, our timekeeper. Jean Rédélé remained unmoved. The hope of a first great victory was in our grasp, but ... we knew there were always many 'buts' in motor racing.

"On the 13th lap, when Mauro came in to change drivers and refuel, he had a 45sec lead over Mitter's Abarth. It was the mechanics' turn to shine. Not a second to lose in this situation. As the car set off again with Lucien at the wheel, our Alpine team turned proudly towards the Abarth pit. The pit time for the Alpine was 51sec, against 1min 10sec for the Abarth."

André continues: "At that moment, we thought that Mauro had done what was needed and that Lucien, more experienced on paper, would keep and even improve his lead. But he didn't know the car as well as his brother and, as he had a back problem, he wasn't too comfortable. There were quite a few laps to go and his lead decreased with each one.

"Questions were going backwards and forwards among the Alpine staff. Jean Rédélé, Jacques Cheinisse, Richard Bouleau, Amédée Gordini – all gave their verdict. The gap was closing and at the final pit-stop there was no question of putting Mauro back in the car; it would take too long. We shouted to Lucien to stay in the car; he only just got out of the pits in front of the Abarth. We were over the moon and mightily relieved when Lucien crossed the finishing line as winner."

The two brothers' grateful glance towards the rest of the team made this Sunday 5 September 1965 a unique experience. Alpine had just won its first major World Championship race outright at the notorious Nürburgring. A special race and a special circuit – they had conquered both and at an international level. For Mauro and Lucien Bianchi, it was a chance to share some family fortune. The other Alpine, No. 8, finished in 31st place.

On 26 September two cars were entered for the non-Championship Grand Prix of Albi, a supporting race to the F2 and F3 Grand Prix races held on the Albi circuit near the little town of Le Séquestre in south-west France. The 40-lap race was won by Guy Ligier in a Ford France-entered GT40. Second place was taken by Vincent Palmaro in a Lotus 23, and third was Mauro Bianchi in an M65, chassis 1719, running race No. 64. Henri Grandsire was one lap down in fourth, driving M64, chassis 1710 and carrying race No. 63. Jean-Pierre Hanrioud's records show he finished 11th here in the 'Sauterelle,' car 74.

For Alpine the next race would normally have been the Paris 1000km, but in 1965 this race was cancelled. However, historian Jean-François Krause's records show that they did run one prototype car (thought to be the 1709 car that was refused entry at the Nürburgring, as it was still fresh) for Henri Grandsire in the Coupe de Paris on 3 October, a non-Championship event run on the Montlhéry circuit, along with two Berlinettes. Grandsire finished second to Jackie Oliver in a Lotus Elan, with Bernard Consten in an Alfa Romeo GTZ third. Also, as we see from the immaculate records kept by Jean-Pierre Hanrioud, he drove the 'Sauterelle' again, finishing ninth overall.

l-r: Mauro Bianchi, Gerhard Mitter, Lucien Bianchi. (©R)

It was the end of the racing season for Alpine, and it would now have plenty of time to prepare for 1966, hoping that the one victory at the Nürburgring would lead to further success, especially at Le Mans after an otherwise difficult time in 1965.

Over in the USA, the Bridgehampton 500 round of the World Championship of Makes was split into two races – one race for the smaller classes and the other for the big boys. The small-capacity race was held on 18 September, Paul Richards driving the William Baldwin-entered chassis 1703 M63. The weather was warm and dry, and the 19 cars that started the 110 laps of the 2.86 mile circuit were driven for a little over 3h 38min, at the end of which the winner was a Porsche 904, driven by American Herb Wetanson. Paul Richards came in fifth overall and won the prototype GT class. Interestingly, amongst the entry list of local drivers on the day were some famous names: Paddy Hopkirk, Rauno Aaltonen and Timo Mäkinen in MGs.

We cannot leave 1965 without mentioning a remarkable lady who played an important role with Alpine in its early years, and who would go on to influence several great teams. Michèle Dubosc was an experienced timekeeper who joined Alpine in 1961, but now decided to leave and go to Matra. A well-liked and competent rally navigator, Michèle Dubosc began her career navigating for various rally drivers. Passionate about her sport, in 1957 she even handed in her notice from work when she was refused time off to do the Tour de Corse. She later became José Rosinki's co-driver and, when he eventually moved to work with Alpine, Dubosc was invited to join him. Jointly with Gérard Crombac, the two were also involved in the launch of the magazine *Sport Auto*. As we have seen, in 1963 Alpine entered the world of sports prototype racing, and Michèle Dubosc became responsible for timing and logistics, including all the racing contracts, drivers and team facilities.

After a while Dubosc started travelling to the races, and at the Le Mans 24 Hours she did the timing, communicating with the signalling team in charge of the pit boards at Mulsanne by telephone. For practice and qualifying she timed all the Alpines and the other competitors, though during the races she would look after just one or two Alpines, meticulously counting the laps to be sure nobody ran out of fuel. Sadly, Michèle Dubosc passed away in 2005 but it is recorded that she had a very pleasant way with everyone. She did get cross sometimes, though, one occasion being with Bernard Boyer at Le Mans over the way one of the cars was refuelled. She made a suggestion, but he took umbrage at being told a better way to do things by a woman and told her so. But it was not a permanent spat: when Boyer decided to move to Matra and found that they were looking for a good chronometrist he asked her to join him.

Dubosc said later that her time at Alpine remained one of her best memories: "Especially after the races and prize-giving, we partied all night in an atmosphere that I haven't found anywhere else." She also became well-known in Formula 1. On one occasion when the organisers of the Long Beach Grand Prix in the USA completely lost their timekeeping records and didn't know how to lay out the grid, Bernie Ecclestone, Grand Prix supremo, went to see Michèle, confident that she had the times of all the drivers entered on her chart. Indeed she did; Ecclestone declared it official and the grid was determined solely by Michèle Dubosc's timekeeping records!

Michèle Dubosc, 1965. (Photo RS)

1965 had been a difficult year for Alpine; would 1966 see a reversal of fortunes?

6 Comeback - The 1966 season

Jean Rédélé's aim had always been success in the Le Mans 24 Hours. The other races that were entered, although important, carried nothing like the kudos of winning a category at Le Mans and the ensuing publicity that could enhance the sales of road cars.

As mentioned in the previous chapter, Bernard Boyer, who had been in at the beginning, decided to leave to go to Matra during 1965, so chassis design was now 100 per cent Richard Bouleau's responsibility, and the department had again been busy over the winter creating the new A210 which would see the light of day during 1966. Although it looked pretty much the same as the M65, it was in several small mechanical details that things had changed. While the chassis itself remained as before, the shock absorbers and the suspension had undergone an upgrade.

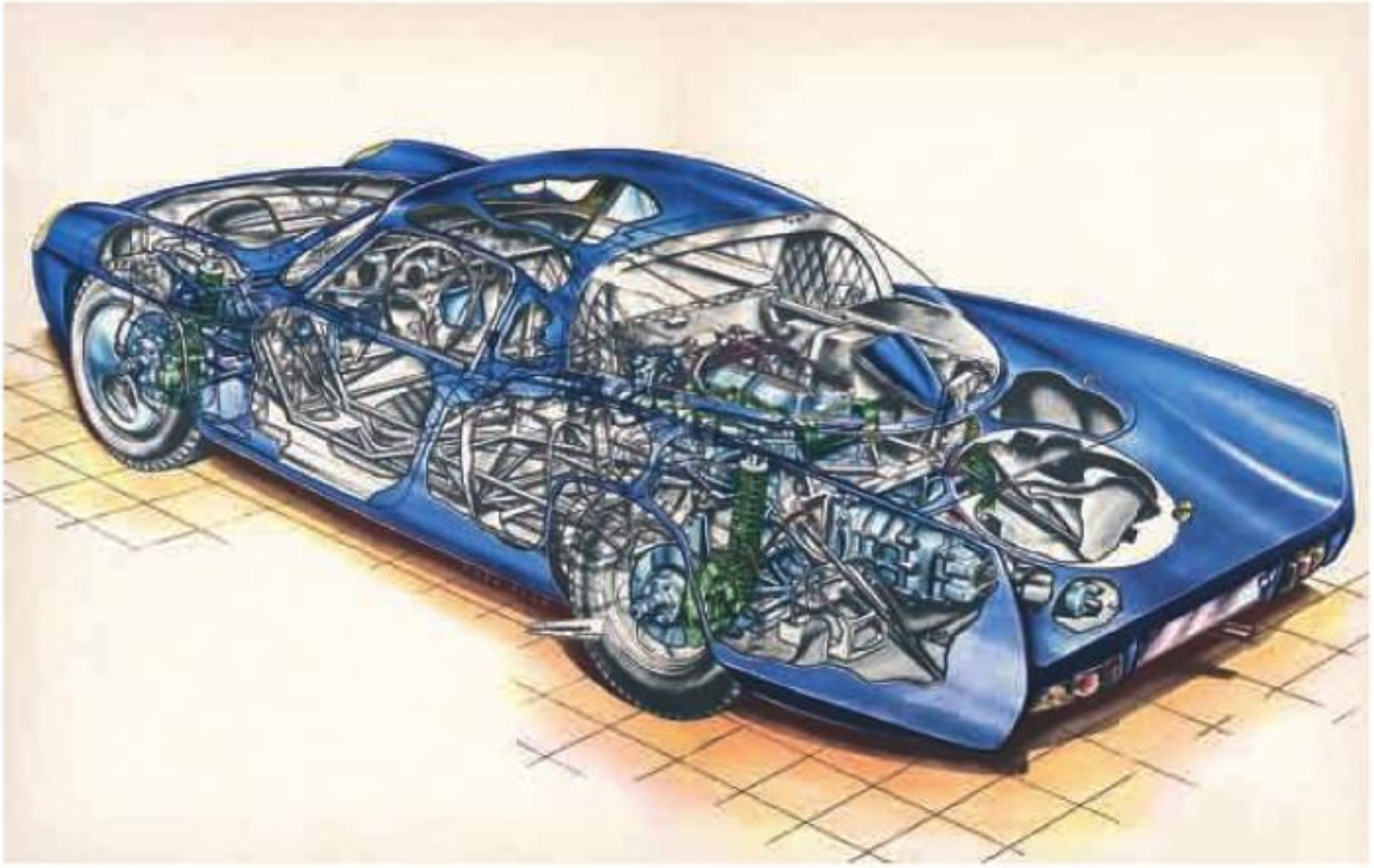
Aerodynamic know-how is developing. (Photo CD)

Marcel Hubert, who had been responsible from the beginning for the aerodynamics, and, by default, the cooling of the oil and water (and also of the drivers!), found new ways to move the air around the cars. The brakes, for instance, now had a cooling duct on the front wings. The long tails had curved ends to aid airflow. (This had been used with the M64 the year before.)

Montlhéry had been the scene of a lot of winter testing, and Hubert had found that, by increasing the air pressure inside the engine compartment, he could assist the engine to 'breath better' and produce more power: a gain in speed of 3kph was achieved. Not much, one might think, but his calculations indicated that this could be translated to 5kph on the Hunaudières straight (Mulsanne) at Le Mans, which, over 24 hours, could be significant.

The regulations saw a change, too: the official GT category was now for cars built in numbers of 500 instead of 100, and the previous Sports Prototype category was now a trophy for constructors. A new category was introduced, to be known as Group 6 Sports Cars, of which at least 50 examples had to be built and homologated; these were in two classes, for cars up to 2 litres and over 2 litres, and primarily featuring the races at Sebring, Nürburgring and Le Mans. For Alpine, the new GT class rules brought into play the Berlinette models. There were no minimum production requirements for pure prototype cars.

Things were certainly moving on. Jean Vinatier: "Back in 1963 I drove the M63 briefly at the April testing because all the drivers did a bit. For the time, I remember it was better than similar small cars built by the other constructors. It was very fast, with good top speed – a bit light if I remember rightly. But in my opinion, by the time I drove again in 1965 with Roger (de Lageneste), both the M64 and, of course, the later M65 had developed a great deal and the cars now behaved very agreeably – still a bit light, of course, because they didn't have a lot of downforce and were intended to go very fast on the straight. We must not forget that in those days the straight



Cutaway drawing of the new A210. (Photo MB)

was 7km long (4.35 miles), and to gain a few seconds on the straight was very important to Alpine with its small engines in comparison with other teams whose cars had bigger engine capacities, so for the overall lap time good straight-line speed was essential. Today the requirement for ultimate aerodynamic efficiency would be questioned because there are many chicanes and corners and high downforce requirements are much more important. So, compared with the earlier cars that I had driven, by 1966 Alpine had made huge progress."

The new A210s were given chassis numbers 1721 to 1726. The chassis was still the all-welded tubular space frame structure, pretty much the same as the M65. Again it was in the engine department that things took a big leap, these sport prototype Alpines now being designed to take a new 1470cc double overhead cam dry-sumped unit with five bearings, hemispherical cylinder head, 79mm bore and 75mm stroke. Power was quoted as 156bhp. The transmission changed, too: though still 5-speed, it was the Porsche type 901 that delivered the drive through a multi-plate clutch. Weight had increased from 692 to 720kg. A bigger fuel tank carried 79 litres and 15-inch wheels of varying widths were used to keep the car on the road at its projected maximum of 270kph.

Giuseppe Albarea, ex-Gordini: "The 1470cc engine was called the 58C. It was the first engine made by Gordini which operated at a speed of more than 10,000rpm, because before that the maximum was 6000, then 7000, then 8000rpm, but with the 58C we went above 10,000 and it had a power rating of 100bhp/litre. With this type of engine and with the test benches in the middle of the workshop, there was really a lot of noise. We didn't have sound insulation, so we had to build some walls to enclose the test area which reduced the noise a bit, but not completely. We also altered the test benches for the type 58C 1470, to try out a new idea for the following year which we were already working on: fuel injection.

"Alain Marguet had joined us the year before from the technical school in Reims and later in the year Amédée Gordini was in touch with a university where he was interested in getting a car designed; this would lead to contact with another new young man, François Castaing, then just a student. By now Amédée Gordini had for some time been known by journalists as 'Le Sorcier' (The Magician). So, when they spoke of 'Le Sorcier' you knew instantly who they were talking about. But in the workshop, amongst ourselves, because Gordini was getting on a bit, we called him 'Pépère' (Grandad); it was not an insult – it was as if he were our grandfather, which, engineering-wise, he was. Also during 1966 we first started the idea of constructing the V8." But more of that later.

Alain Marguet: "I was very passionate about racing when I was young. At that time, for the Reims 12 Hours the teams went to garages in the city because they didn't have big permanent pits at the circuit. So I didn't go to the college on those days; I went to the garages to see what was going on. One day they were running the Grand Prix of France. I was a student with no money and my friends and I had a Renault 8 and two of them squeezed into the front under the bonnet. I paid one ticket for myself and got in with three. That was what people did!

"When I got my diploma, the 'brevet technique automobile,' I decided I definitely wanted to work in the racing world. However, I was not an engine man in the beginning and in 1965 I wrote letters to Lotus and to Alfa Romeo. Then somebody told me that Gordini was expanding and so I sent a letter to him, too, and he replied, 'Come over and we'll see,' so I went to Paris, an innocent boy from the provinces! Amédée Gordini said to me, 'OK, you can begin next week.' I was so happy. In the beginning I was put to work on the dyno, with an old but very good carburettor man – Mr Febvre. I remember they had two dynos and the noise was incredible; all the neighbours complained."

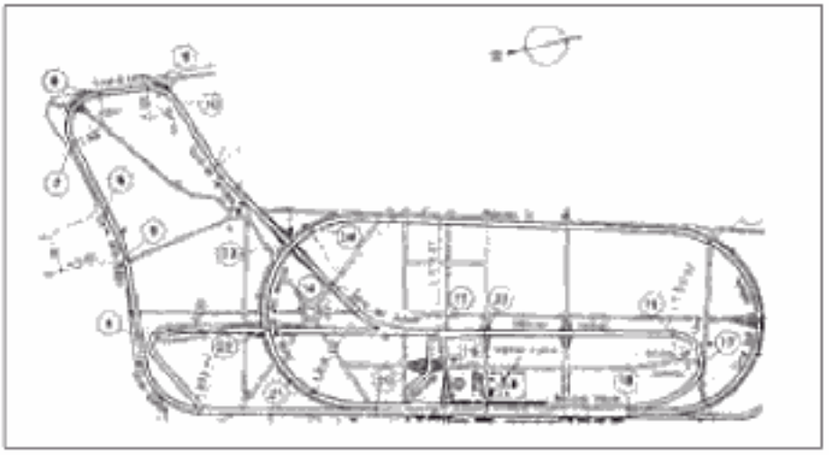
Racing regulation changes that now allowed the A110 Berlinette models to run in the Sports category opened up a wider use of these cars for racing, especially for this year's 50th Targa Florio which was held on 8 May. Our subject here is primarily prototypes, so we'll not go into great detail on the Berlinettes, but we will take a brief look at that race for this year.

"I was very passionate about racing when I was young. At that time, for the Reims 12 Hours the teams went to garages in the city because they didn't have big permanent pits at the circuit. So I didn't go to the college on those days ..." – Alain Marguet

The regular season opener at Sebring in the USA featured two of the racing Berlinettes from the year before that Jean Rédélé had sold to entrants Fred Baker and Kenneth Sellers. They both finished, Fred Baker's entry in 21st place and Kenneth Sellers' in 24th place. Alpine did not enter any factory-supported prototype cars for the event that year.

The first outing for the Alpine factory prototype cars was the Le Mans test weekend on 2-3 April. As in previous chapters, when we reach this year's Le Mans race we'll see the test results of the five cars entered, none of which was destined to take part in the race this time.

Just three weeks after the Le Mans test weekend came the first proper race of the year for 'Usine' Alpine, at the Monza 1000km. Entered were Mauro Bianchi/Henri Grandsire in M65 chassis 1719, carrying race No. 53; they qualified 18th with a



Monza autodrome, 1966.

lap of 3min 27.3sec. The second car was chassis 1720, No. 52, updated to A210 spec for Jean Vinatier/Roger de Lageneste, qualifying in 31st place on 3min 36.5sec.

Race day, 25 April, was a Monday and a national holiday in Italy. The weather was dreadful – continuous rain – and the 100 laps of the 6.276 mile (10.1km) circuit ahead of them would take 6h 5min. The full combined circuit would be used – the banking and the road course – which now had the two chicanes that had been built in 1965 on the entry to the curves on the banked section designed to reduce the speed on the banking.

The Autodromo di Monza circuit was built in 1922 by the Automobile Club of Milan and over the pre- and post-war years had been modified several times. The first Monza 1000km was run in 1965 and was won by Mike Parkes and Jean Guichet in a Ferrari 275 P2.

1966 saw Alpine's first visit to Monza. On pole for the race was Mike Parkes again, but this time with John Surtees in the Ferrari 330 P3 with a time of 2min 58.1sec, which was quite a lot faster than the 1300 class that included the Alpines. The speed difference was always a problem at Le Mans, but Monza could also be a tricky place to drive at high speed, especially in the wet. And it was to rain all day.

1966: M65 becomes A210. (Photo GB)

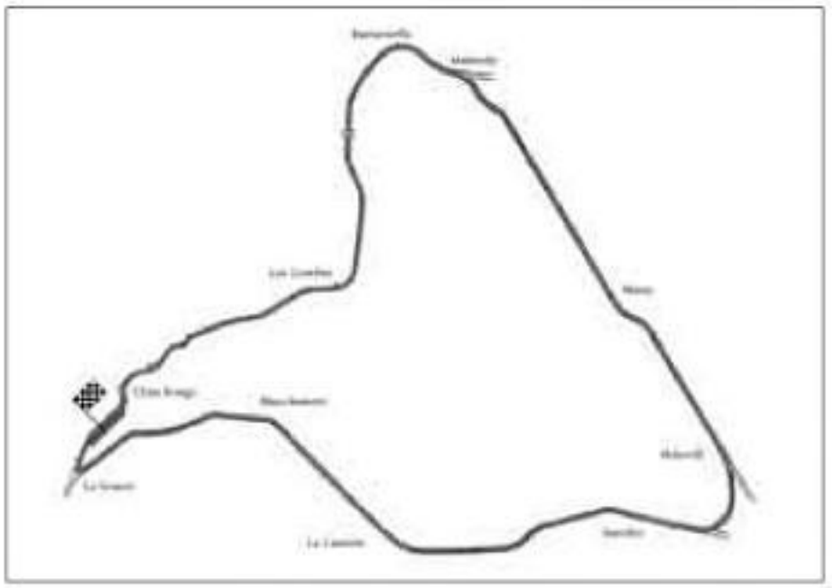
The Monza organisers had adopted a type of rolling start where a dummy grid was set up some 200 yards or so behind the start line; the cars rolled forward gently and then the flag dropped and they were away. The Bianchi car was held up due to a faulty starter cable on the dummy grid, though once he got going he caught and passed the Abarths after some 12 laps. The Abarth teams began to worry – shades of the previous year's Nürburgring! Alas, for Alpine it was not to be; a connecting rod broke, leading to engine failure on lap 18 after a pit-stop when the car was running in 26th place overall.

However, the other car of Vinatier/de Lageneste kept plugging on and looked like winning the class until, after completing 81 laps, it somehow tangled with one of the Ferraris close to the finish, and finally crossed the line 18th overall and fourth in Proto 1300 behind a gaggle of Abarths. The weather being what it was, everyone was glad to pack up and head for home.

8 May was the date of the Targa Florio. As already stated, there were no prototype Alpines this time, but Alpine had not neglected this dramatic race, and had entered no less than three factory cars. Renault had also paid to enter two cars, and a semi-works entry was put in by Joseph Thomas. All were Berlinettes and are only mentioned here in our prototype story because of the results and race interest. It was the fourth round of that year's Manufacturers' and Sports Championship with the sports category now open to the Berlinettes. We won't go into great detail; suffice to say it was wet that day, too – heavy showers interspersed by sunshine. The fastest cars completed ten laps, and two of those were the 1300 factory racing lightweight Berlinettes. In fifth place overall and first in Sports 1300 were Roger de Lageneste/José Rosinski; in sixth place and second in Sports 1300 were Pierre Orsini/Jean Vinatier. Third in class was the Renault entry of rally drivers Jean-Pierre Hanrioud/ Jean-François Piot, and fourth in the same class was the Joseph Thomas/André Guilhaudin entry. The only failure was the second Renault entry of Bengt Jansson/Pauli Toivonen, which went out on lap three with gearbox problems.

The Targa Florio of 1966 had been a resounding success. Now, could the prototype cars step back up to victory?

Before Le Mans, however, there would be another severe test: the Spa 1000km, a first-time entry for everyone as it was the



Spa Francorchamps.

De Lageneste/Patte, class winners. (Photo RdL)

New chassis 1724 with oleo-pneumatic suspension. (Photo MB)

Bianchi rides the curb. (©R)

first 1000km race on the circuit. Sports car racing was not new to Spa, though, and many races of less than 1000km had been held regularly at the circuit before that.

Alpine entered two prototypes. Chassis 1720, the M65 re-designated A210 with a 1296cc engine, had Roger de Lageneste as principal driver, sharing this time with Jacques Patte, a well-known local driver. They carried No. 22.

Chassis 1724, also a new A210, had been fitted with the oleo-pneumatic suspension, which was still being tried, and was entrusted to Mauro Bianchi/Jean Vinatier.

Just as an aside, the observant reader might have noticed when looking at entries or results from the period a 'B' for Belgium against the name of Mauro Bianchi, who was of course Italian. Mauro always raced as a Belgian-registered driver because in his younger days the Italian Federation would not give him an Italian racing licence; he was too young. In Belgium, however, he was allowed a licence, and so, as a way of saying thank you, he decided that he would always enter under a Belgian licence registration, hence the 'B.'

Jacques Cheinisse was now regarded unofficially as the team manager for Alpine, a role in which he would be officially confirmed in 1968, and in which he would excel as the years rolled by.

20-21 May was practice and qualifying, as we now call it. Although not so many kilometres away from the Eifel Mountains of the Nürburgring, the Spa circuit in the Ardennes stayed dry for this race, and the M65/210 chassis 1720 of de Lageneste/Patte appeared in 20th place on the grid with 4min 25.6sec, and the oleo-pneumatic suspension car of Mauro Bianchi/Jean Vinatier chassis 1724 was 21st on the grid on 4min 27.9sec.

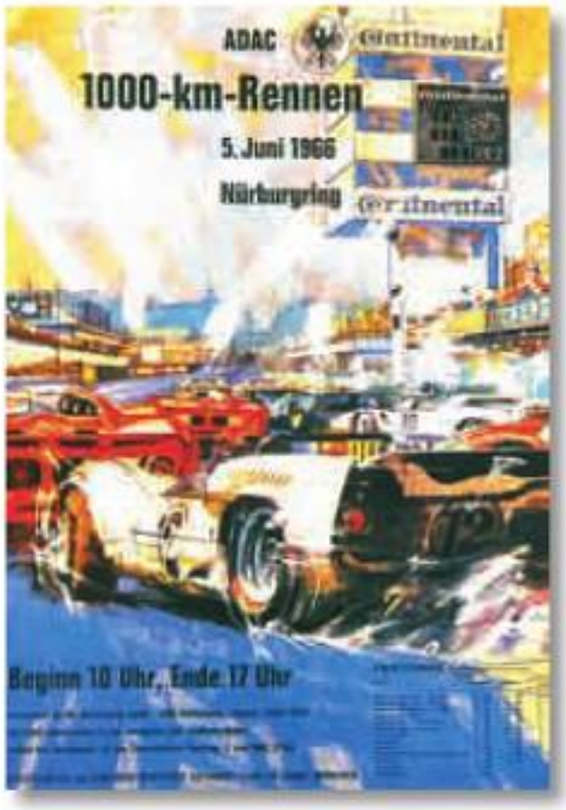
Race day arrived – 22 May. At the 1pm start the Ferrari of Parkes/Scarfiotti roared away, chased by the now inevitable Ford GT40 in the latest phase of a battle between two great marques that would go on for some years. Back in the 1300 category, de Lageneste/Patte took the lead and held it to the end, to finish ninth overall and first in 1300 Proto. Mauro Bianchi/Jean Vinatier lost the oleo bit of their suspension half-way through the race, but managed to keep going. Mauro Bianchi: "I have bad memories of that race, and recall it very well. The car was very difficult to drive, and half-way through the suspension failed, not by dropping down, but it got stuck on the high position! We had to take a lot of risks to keep going in what was a frankly dangerous game. Despite that, we managed to finish and slot in just one place behind Roger in tenth overall."

That weekend Bianchi was doing the double, also racing at Monaco in Formula 3, performing a shuffle of practice, plane, qualifying, plane, race, plane. It sounds crazy today but it was quite common then for drivers to do this; some used to do the

Monaco GP on the Sunday and fly to the USA the next day to compete in the Indianapolis 500!

Jean Vinatier: "This oleo car was ... well, there were some disadvantages, it's true; first the heavier weight of the car, heavier than a car with standard spring shock absorbers. But when we were in the car, I think we adapted to driving it. It's like Mauro says: you just get on with it. A new model or modification like the oleo-pneumatic suspension arrives; you adapt and get used to its characteristics and then you notice the faults, but the longer you drive the more you overcome the faults, because a driver must adapt himself to the car and unconsciously gets used to it. That's what Mauro did, because his vocation, his motivation, was to go as fast as possible with the car they gave him. I personally don't have too many bad memories of this suspension, but I don't have excellent memories of it either. I think we did what we could with what we were given."

There would be one more chance to check the cars' performance before Le Mans, and that would be the old Alpine stamping ground of the Nürburgring for the 1000km which was



Nürburgring 1000km, 1966. (Photo JS)

Chaparral 2D. (Photo AB)

to be run on 5 June. A huge crowd turned up, with an estimated 110,000 vehicles in the car parks and over 350,000 spectators around the circuit.

Alpine had entered the Belgian Jacques Patte again with Roger de Lageneste in the M65/210, chassis 1720, with a 1296 engine, race No. 87. The second car, this time 1719 numbered 88, type M65/A210, would be driven by Henri Grandsire/Jean Vinatier. The race is remembered as the one where Jim Hall, the American builder of the Chaparral, entered his first race in Europe with the Chaparral 2D. No one thought much of it, although it was a spectacular-looking projectile, until it was put on second place on the grid by Jo Bonnier/Phil Hill. When it went on to take victory by 13sec over the expected winner Ferrari, everyone's opinion changed. The Chaparral had proved that Jim Hall was an innovator who knew what he was doing.

It was an indifferent race for Alpine. The 44 laps of the race started at 10am that Sunday morning in the dry. A number of cars were late away as the starter hesitated while lowering his flag: some drivers started running while others weren't sure. But as the race went on the Eifel rain began to fall. De Lageneste/Patte finished 19th overall from 61st on the grid, completing 38 laps, fourth in the 1300 Sports class to the inevitable Abarths.

There is a little story involving Roger de Lageneste related to this race. Roger de Lageneste: "Even in a racing car I still thought like the farmer I and my family were. I always had with me a special Swiss penknife with a pair of pliers built in, because it frequently happened during rallying that I needed a tool – nearly

always in places where there were no tools at all. I had my famous little bag in the car with a lot of things in it. Le Mans: it's long. Nürburgring: it's long. If I stopped somewhere I liked to get back, preferably not on foot; sometimes there was snow at the 'Ring, even in summer. The knife appeared in the newspaper the next day after I stopped during the 1000km with the Alpine. The car spluttered and came to a halt out at the back of the circuit in the woods, and I remembered that this had happened before when Vinatier was driving – Le Mans, I think it was. The mechanics had showed me what happened after the race: it was the rotor arm on the distributor which was disconnected; the retaining spring had broken. So I jumped out, checked the distributor and there was the same fault, so I nipped into the trees, cut a piece of wood, trimmed it down nice and thin and pushed it in where the spring clip had been and put the rotor arm back on the distributor shaft. It worked: the car started and I got back to the pits where it was fixed properly. A journalist had taken photographs of me with my knife fixing the car; next day it was in the newspapers!"

The Grandsire/Vinatier car did not fare so well; after qualifying 47th on the grid fan-belt failure on lap four led to more problems and out they went.

June 1966 and the 34th edition of the Le Mans 24 Hours.

As ever, the build-up began with the test weekend in April. All the talk was of Ford versus Ferrari. The test was to prove a bit of a let-down, however, as Ferrari pulled out and did not attend – was it a tactical move or was Ferrari nervous of showing its cards too early? For Alpine the test was to be just that; they had made an application to the organisers to run seven cars, none of which was entered for the race, so this was definitely a testing session in the true sense of the word. In the event five cars showed up on 2-3 April (Ford entered eight and seven arrived, including the new J-car).

Alpine chassis 1709 had been modified to take the inclined 1296 engine and was run for 41 laps. This time the drivers were:

Jean-François Piot in an M64 1296cc, No. 47.
Roby Weber in an M64 1296cc, No. 70.
Jean Vinatier in an M65 1296cc, No. 46.
Mauro Bianchi in an M65 1005cc, No. 56.

Piot. (Photo CD)

Roby Weber. (Photo CD)

Bianchi in car 56. (Photo CD)

Piot driving No. 70. (©R)

Of course, the named driver was not always in the same car, as Henri Grandsire, Jean-Pierre Hanrioud, Roger de Lageneste, Guy Verrier, Robert Bouharde, Jean Vinatier, Jacques Cheinisse, Pauli Toivonen, Bengt Jansson, Claude Dubois, Alain le Guellec, Vincent Palmaro and Rico Steinmann were all on hand to do the testing. Interestingly, another driver was originally due to test as well – a young man by the name of Fittipaldi who was successfully racing Alpines in Brazil. This was, of course, through the Willys connection where the company made the Berlinette Alpines under licence.

Car 45 with Mauro driving came up fastest, with a 4min 00.9sec lap. He also brought a big surprise to proceedings, setting a speed on the straight of 265kph (164mph), giving an average lap speed of 201.161kph (125mph). The journalists were amazed; what they did not know at that moment was that Alpine was trying to see just how fast it was possible to go, and so that car wasn't using the heavier Porsche gearbox but the Hewland-cased item, and it had a very small 15-litre fuel tank fitted. It worked: the little Alpine was as fast in a straight line as the Porsche Carrera 6s!

This super-quick car was followed by Weber on 4min 11.6sec, then Mauro in the 1005cc M65, again confirming his ability and that of Alpine by putting in a time of 4min 12.7sec. Just behind him came Jean-François Piot on 4min 13.8 sec. On 4min 20.6sec was Jean Vinatier; this car had the Porsche gearbox. Although it may seem strange to test with a car you are not going to race, it was quite common practice and other manufacturers were doing the same.

Sadly, just like the year before there was a tragedy at this test. Walt Hansgen, a veteran American Indianapolis driver and four times SCCA Road Racing Champion, was driving a Ford GT40 in the early hours of Sunday morning in the rain when the car left the track near the Dunlop bridge, hitting a bank and a retaining wall. He died in hospital a few days later. Le Mans had claimed another victim.

For Alpine it had been useful; the company had made the headlines and all the cars came back undamaged. Bianchi had gone 15 seconds faster than the Alpines' previous performances.

So, we jump from testing to the race on 18-19 June. It was warm and dry at the start, but would turn to rain on the Sunday. The familiar 8.3-mile (13.46km) circuit with the Hunaudières (Mulsanne) straight in its original form was certainly a daunting place. This year 103 cars were entered; only 57 would qualify.

'La Ronde Infernale.' (Photo JS)

Practice and the start position qualifying were held on 15-16 June. All the M65 cars were now reclassified as A210s and, to the casual observer, there was no apparent difference.

Chassis 1710, the old faithful M64, No. 56, saw service at Le Mans in 1964, then the Reims 12 Hours, the Paris 1000km, the 1965 Nürburgring 1000km, Le Mans, Reims 12 Hours again, Nürburgring 500km, and now was entered and qualified for the 1966 Le Mans. Powered by the 1005cc engine, it was the slowest car in the team, and was lined up as first reserve in case any of the other Alpines failed at the last minute. (An interesting point here is that although it was the slowest Alpine it was still quicker than

six other cars accepted in the start line-up.) It was the ACO organisers who decided that, for Alpine, seven cars were too many and they did not allow it to start, relegating Jean-François Piot and Alain le Guellec to the rank of spectators.

The following were all either M65s re-established as A210s, or all-new 210s:

Chassis 1719 was the ex-Nürburgring winning car of 1965. It was given race No. 47. Powered by the 1296cc engine, it was entered by Alpine but the financial support came from Renault, who fielded two of its talented rally drivers in it: Pauli Toivonen and Bengt Jansson. They qualified 39th with 4min 20.2sec – a good result, ahead of the Bianchi car.

Chassis 1720, car 55, had the 1005cc engine, weighed 695kg, and managed to qualify 48th with 4min 37sec. The car was driven by Jean-Pierre Hanrioud, better known as a superb rally driver, and a new recruit seen for the first time: André de Cortanze, who later joined the Alpine design department and led the team that designed the first Formula 1 turbocharged car in 1976. Jean-Pierre Hanrioud: "André had driven in the Geneva rally for Alpine, but here at Le Mans he was particularly good because de Cortanze Sr, his father, was the boss of the circuit at that time and there was a driving school where André had, of course, gained specialised knowledge of the circuit. I was to have driven with Cheinisse but Jean Rédélé changed the drivers around and I found myself with de Cortanze in a car I was not familiar with."

Chassis 1721, No. 44 for the race, was powered by the 1296cc unit and was driven by Jacques Cheinisse and Roger de Lageneste, who qualified 45th in the start line-up with a time of 4min 27.2sec.

They were entered under the name of Ecurie Savin-Calberson, but, of course, it was a full works entry. There was good reason for this: at this time sponsorship on cars was forbidden and, although Calberson had often been involved with Alpine and for this year loaned it space in its premises near to Le Mans, it could not yet carry its logo on the cars.

Jacques Cheinisse. (Photo GB)

Preparation time at Calberson's warehouse. (©R)

Chassis 1722, No. 46 for the race, was again powered by the Gordini 1296cc engine and was driven by Mauro Bianchi/Jean Vinatier. Entered by the Société des Automobiles Alpine, they started in 41st place with 4min 21.9sec.

Chassis 1723, car 62, also had the 1296cc engine, and weighed just 683kg. Entered by Alpine, it was driven by Henri Grandsire/Leo Cella. They qualified 44th with a time of 4min 25.4sec.

Chassis 1724, car 45, the oleo-pneumatic suspension car, was some 35kg heavier than most of the others, and nearly 50kg more than chassis 1721. This was the car Bianchi had wrestled with at Spa.

Powered by the 1296cc unit, it was driven by Guy Verrier/Robert Bouharde, and qualified 43rd with a time of 4min 25.2sec. Again, an all-Alpine factory entry.

Scrutineering. (Photo MB)

Before the Calberson premises were made available, the cars had undergone final preparation at a garage in the village of Mayet, 30km from the circuit, where the team met regularly and stayed together at the then-famous Auberge St-Nicolas, a well-appointed inn that boasted a swimming pool and games room – ideal for the drivers to relax. Roger de Lageneste: "We always went to Mayet a few days before the race together with all the Alpine family – the mechanics and everybody involved – staying at this good hotel in the village; it was always a time of frivolity – lots of fun. At the Auberge St-Nicolas, Vinatier's pockets would be full of fire crackers and during the night when you were asleep and the window was open, because it was hot in June, you would hear all these terrific bangs! It was a big joke for us, but one or two of the wives were very scared, one especially – I think maybe in her own childhood during the war she had suffered during the bombing in London. Today it would be considered antisocial behaviour,

Car 62 in practice. (©R)

The Bouharde/Verrier car in the Le Mans paddock. (Photo GB)

but we were young and a little crazy and there were very few health and safety regulations! I enjoyed being with the Alpine team."

Jean Vinatier: "Yes, Roger is right: we had a lot of fun, but once at the track we took things seriously. For this race we were well aware of the importance of aerodynamic efficiency. The A210 and its new bodywork would play a big part at Le Mans; its stability on the straight had been an ongoing improvement curve. Engine-wise things had developed – the gearbox, the mechanical equipment, the clutch – though we did have a bit of concern over the clutch in these Alpines. The Porsche box was really a gearbox for Grand Touring; it was heavier, and a little

Gordini (far left), Toto Roche (holding hat), and Jean Rédélé (arms folded). (©R)

slower, and the gear control was not very efficient. It was a pity; I think that in the high-speed races where we really needed light weight for top speed we were handicapped a bit by this gearbox. However, I enjoyed driving with Mauro, a good friend of mine – Mauro is Mauro. There are a lot of people who said that he was difficult – he did this, he did that – but I always had a very good relationship with him and perhaps that was why we often raced together; we had a similar technical approach. He insisted on the correct setups and knew his craft well, and we understood each other perfectly. We won the Spa 24 Hours in an R8 Gordini together, the Targa Florio – lots of races – and I have very good memories of him. We never had any problems between us; a good team."

As was usual at Le Mans during the 1960s, teams would pass messages by pit boards to their drivers in a special signalling area at the beginning of the long Hunaudières straight. There, a group of people from each team would receive messages from the pits and the chronometrists by telephone link. The signallers in the signalling area would then put up the pit board as their driver approached. They identified the cars by colours and lights on the roof of the car as well as by number. During the night this was essential. From the 1966 race team records we can see an example of how the cars were identified:

Car 44: One white band, one red light on roof.
Car 45: One red band with yellow edges, two yellow lights and one red on roof.
Car 46: Two yellow bands, two yellow lights on roof.
Car 47: One yellow band, one yellow light on roof.
Car 55: One red band with white edges, three red lights on roof.
Car 62: Two white bands, two red lights on roof.

The driver, of course, looked for his number on his pit board, but as his concentration was high all the time he would often not know exactly where he was in the race until he was told during a pit-stop. It was also difficult for the signallers to pick individual cars out in a gaggle at night.

And so to the race weekend; show time! The line-up for the 1966 race was stunning. Ford, running mostly 7L cars in the over-2L Prototype category, was determined to beat Ferrari. Ford had 13 cars with the Ford logo on the front ready to do battle against 14 red cars (the largest capacity being 4.4L) sporting the prancing horse.

Our story is about Alpines, of course, and that titanic battle between Ford and Ferrari has been written about on many occasions, but it's worth mentioning that this was probably the only time such a massive battle between two major manufacturers would take place. Ford wanted to win Le Mans and had made an approach to invest in Ferrari some years before, but the great Enzo Ferrari had told them to – ahem! – go away! ... Ford was incensed at this rebuff and set about trying to beat the 'Commendatore' at his own game. It led to the financing

Nearly ready ... (Photo CD)

(Above and below) In the pits before the start. (©R)

of the early Lola prototype from Eric Broadley, the Lola Mk6, which was funded and powered by Ford. The relationship with Lola worked for a while, and then Ford got more and more involved, as did Carroll Shelby's company, and went and built its own car, the brutal Ford GT40, along with a new design called the 'J-car.' The race became a huge struggle, with mechanical casualties on both sides, but in the end the Ford Mk2 of Bruce McLaren and Chris Amon won at an astonishing average speed of 130.92mph (210.69kph) over the 24 hours. Fords were also second and third; then came the Porsches, and you had to look back to eighth place for the first of the only two finishing Ferraris. Ford had made its point.

But let's get back to Alpines. Saturday, 4pm. The race begins and all six Alpines get away OK, the mighty cars at the front clashing like Titans, though three of the Fords dived into the pits at the end of the first lap. One of the Bizzarinis crashed into the barrier right at the start, which affected the early laps, but the race soon settled down. As the clock ticked relentlessly on, the early hours saw no less a battle going on further down the field, where the Alpines were fighting with the ASAs and the Le Mans Healey and their arch-rivals the CD (Charles Deutsch) Peugeots, whose aerodynamics were being looked after by a man who would later be involved in a major way with Alpine and Renault: Michel Têtu.

Jean Vinatier awaits the off. (©R)

Go! The start, 1966. (©R)

Vinatier leads Grandsire. (©R)

Car 44, pit-stop over. (©R)

Into the evening, and at the head of the race the rate of attrition rose as the big cars started to have problems, playing into Alpine's hands as the little blue cars were running like metronomes. It looked set to be a resurrection for Alpine after the disastrous 1965 race.

After 24 hours the results as the cars crossed the line were dominated first by two of the 7L Fords, then four 2L Porsches and a lone 3.3L 275GTB Ferrari. No surprise there, then, but in ninth place overall from the 55 cars that started was chassis 1723, car 62, with Henri Grandsire/Leo Cella.

On 311 laps, they were first in the 1300 Prototype class, separated only by the second Ferrari to finish from chassis 1721, car 44, driven by Jacques Cheinisse/Roger de Lageneste,11th overall and second in 1300 Prototype, and first in the index of efficiency.

En route to ninth overall: Grandsire/Cella. (©R)

12th overall. (Photo AAA)

A trio of cars pace each other. (©R)

Cheinisse/de Lageneste. Sunday morning. (©R)

Together again: the finish. (©R)

Next up, in 12th overall, was the Guy Verrier/Robert Bouharde car 45, third in Prototype 1300 with the oleo-pneumatic car. To cap off the weekend, car 46 of Bianchi/Vinatier was 13th overall and fourth in Prototype 1300.

Success at last, and four of the six cars finished in formation, taking 1, 2, 3, 4 in the 1300 Protoype class and the efficiency index. The team was jubilant; the promise of the test days in April had been delivered.

Car 47 was not so lucky, however, as it went out with gearbox failure after 18 hours and 217 laps. Car 55 of de Cortanze/Hanrioud also went out, with water pump failure, on the 118th lap.

For Alpine, though, Le Mans was a moment to remember. A great party followed and Renault seized the opportunity to promote its success in the newspapers worldwide.

As was usual, most of the interest in sports prototype racing was centred on Le Mans and the build-up to it – the testing, the pre-Le Mans races, etc. Henri Grandsire, speaking in *Mille Miles* magazine in 1993 about life at the 24 Hours, said, "We managed to sleep between relays in one of the caravans behind the car park. When you see the installations the drivers have now at Le Mans, you'd think you were dreaming – we camped out! And when you woke up at three or four in the morning in the rain or the fog, you sometimes asked yourself what you were doing there. But I have some great memories, because the atmosphere was wonderful. After the race everybody went back to the hotel and I have to say that the ambience was fairly warm! Everyone was there – drivers, mechanics, managers, some journalists – and it would end with everyone chucking things around – yoghurt, cream buns, anything they could find! Crazy."

After Le Mans, when the hype and media interest had subsided, the teams generally settled down to the rest of the racing season to complete the championship series.

At this point it is worth looking again at the tyre situation and how it was developing. Alpine, traditionally a user of Dunlop, had started to use the products of Dunlop's French adversary Michelin. Let's hear a few words from Pierre Dupasquier, who was to become the Michelin competition department guru. Pierre: "On the occasion of a visit to the Paris Salon in October 1965, I had met engineer Richard Bouleau, who took me to one side. 'We're worried,' he said. 'We've just done some tests at Montlhéry and our brakes don't hold up. We need to use a larger disc diameter, but the space inside the wheels isn't big enough.'

"I said, 'Of course, you don't want to touch the bodywork ...' His reply was, 'No, of course not. Marcel Hubert won't hear of it. He claims that our only chance of winning in the energy index is our small frontal surface area and our excellent aerodynamic coefficient.'

"So I asked him, 'Can you bring the drawing of the maximum size of your present wheel/tyre assembly to Clermont? I can't guarantee anything at this stage, but with our radial construction we can probably design a tyre on a 15-inch rim

which would have the same external characteristics as the 14-inch ones.'

"Michel de Reynal, to whom I posed the question a few days later, was optimistic. He thought he could design a suitable 15-inch diameter item. No sooner said than done: the front and rear tyres could both be 15-inch. Moreover, during the early part of 1966 de Reynal had been thinking of smooth tyres (later these would be known as 'slicks'), starting from the principle that the more rubber you could get in contact with the ground the better. Alpine prepared a prototype for us. I got the Michelin department in charge of wheel development (the 'VR' department) to put together some steel wheels and a few weeks later we were studying the optimal behaviour of our radial tyre on a competition car driven to the limits of its possibilities.

"Alpine had invited a young driver from Clermont-Ferrand across to our Ladoux test centre, a motorcycle racer who, awaiting his moment, was working as a mechanic at Alpine in Dieppe. His name was Patrick Depailler.

"Mauro Bianchi, responsible for testing, was going round on track one and gradually improving his times until they became stable. This very fast track allowed speeds of more than 300kph, and its banked corners meant that you didn't need to drop below 240-260kph, depending on the car. He stopped and spoke to Patrick, who must only have driven about 50km in a racing car at the time. 'Do you want to do a few laps?' asked Mauro. Patrick's eyes were as big as saucers. He must have been waiting for this moment. 'Yes, of course,' he replied. 'Tell me, Mauro, what's it like?'

"He stopped and spoke to Patrick ... 'Do you want to do a few laps?' asked Mauro. Patrick's eyes were as big as saucers. He must have been waiting for this moment." – Pierre Dupasquier

"Mauro responded, 'It'll take a few laps, but you'll find it's "full bore" all the way round. The section below the bridge is a bit tight but if your line is good you can go from the left-hand rails at the entry to the right-hand at the exit and you'll be fine.' Patrick put on his helmet, slid into the cockpit and set off. First lap: no time reading, but listening to the sound Mauro was sure he hadn't lifted his foot under the bridge. The three lap times he did before they stopped him were identical and only a fraction slower than Mauro's. What a find this young man was!

"It was at these tests that we developed further our understanding of the role of the suspension. Michelin had a workshop directed by André Mayeux who had invented a ball-bearing plate which stopped the suspension compressing during gear changes. In order to judge the behaviour in our tyres, we would analyse every car in this way before each test.

"We noted the importance of a characteristic angle of the wheels in relation to the ground: the camber, the geometric position at the precise moment of turning, and the effect of bump steer which could affect any one of the wheels when it was under vertical stress. For instance, you're on the straight, your front right wheel goes over a bump and causes a small deflection of the wheel, pulling your car away from the chosen line. Not pleasant at 300kph. We had to eliminate this, or make use of it to improve the behaviour of the car in the transitory phases. We called these controlled deviations 'induced deflections.'" From these words we can see Michelin was moving forward rapidly.

Alpine's next race would be the Trophée d'Auvergne, which was not included in that year's International Manufacturers' Championship and so did not count for the 1300 S1 class. Nevertheless, the team sent chassis 1723, the A210 that had finished ninth at Le Mans. Piloted by Henri Grandsire, it carried race No. 66. 23 cars appeared at the Clermont-Ferrand circuit, and the weather was fine and dry under a blue sky when Jean-Pierre Beltoise got the race under way at the head of the field. On the twisting circuit Grandsire was in his element, and by lap six he had moved into third place behind the Matra BRM of Beltoise and the Ferrari of David Piper. The GT40 of Jean-Michel Giorgi, after being left behind at the start, was carving its way up the field as Beltoise visited the pits, and at lap 12 the order was David Piper (365P3 4.4L Ferrari), Richard Atwood (3.3L 250LM Ferrari) and the tiny 1300cc Alpine A210 of Grandsire, and that's the way it remained all the way to the chequered flag. Behind Grandsire were more Ferraris, GT40s, Lotus 23s – all much more powerful machinery. An interesting result.

4 September saw the Alpine sports prototypes reappear at the Nürburgring 500km, scene of their victory the previous year. As before, it was an event only for cars up to 1300cc (prototypes, sports, GT and touring cars), run over 22 laps. Alpine sent four cars. Race numbered one to four, they were chassis 1719, last used at Le Mans but failing to finish, appointed to Roger de Lageneste, car one. Chassis 1720, the second car not to finish at Le Mans, now numbered four and driven by Jean Vinatier. Chassis 1722, race number two for this race, was again to be driven by Mauro Bianchi as it was at Le Mans. The final chassis, being driven for the second time since Le Mans, was the 1723

1: de Lageneste; 3: Grandsire. (Photo P3)

car, race number three, of Henri Grandsire. Chassis 1724 which had the Allinquant oleo-pneumatic suspension was tested but not used in the race. No Berlinettes started this time, only prototypes, indicating that Alpine's interest was perhaps not to win the Sports 1 title of the Manufacturers' World Championship with the Berlinettes, which they were leading after the Targa Florio, but rather to try to win outright again at the prestigious Nürburgring circuit because of the recognition it would bring. Abarth, though, thought differently, and had a large entry with a mix of eight cars in the Prototype and Sports 1 classes to try to overtake Alpine in the overall standings.

In practice and qualifying Alpine dominated, with Mauro Bianchi on pole on 9min 25.1sec (145.31kph). Grandsire was second on the grid and the first Abarth was 15sec slower.

As the race start time approached, mist started to descend on the circuit – well, it was the Eifel and the Nürburgring! – but it was clear at the start area as they all got away.

Grandsire grabbed an early lead from Bianchi, driving on senses alone in the mist out at the back of the circuit, with the Abarth prototypes of Ortner followed by Schütz struggling to stay in touch.

On the second lap Bianchi set the fastest lap of the race as

Bianchi. (Photo P3)

the following cars were bunched up and challenging each other. In the mist, braking points were hard to see and Grandsire went off the road on lap three, whilst trying to avoid a collision with the two Abarths.

Three more laps and still Bianchi was in the lead. As the fog lifted, Ortner began to have gearbox problems in his Abarth and dropped out, leaving Vinatier to move into second place, although this was not to last long as Vinatier had to retire on the next lap with a broken chassis.

Bianchi also had problems during a pit-stop for refuelling, and the Abarth of Schütz went into the lead, only to lose it on the next lap with transmission failure, whereupon Bianchi re-took the lead. Furtmayer in the Abarth was now second, with the Alpine of de Lageneste moving up into third place. Then came

Damn it! A disconsolate Grandsire. (Photo MF)

Sign here, guv! (Photo PN)

Bianchi easily wins Macao GP in record time

Results

MAURO - BIANCHI Grand Prix de Macao

Hong Kong newspaper cutting. (Photo PN)

After the race: Albert Poon, Mauro Bianchi (centre), and Dr Harold Lee. (Photo PN)

Towards the end of 1966, on 14 December, extensive tyre testing took place on the Michelin Ladoux circuit with chassis 1720. Alpine was thinking about a new car and maybe a new engine, because Amédée Gordini had exhibited a proposed V8 unit at the Paris Salon. Design was started in the summer, following several years of study by Gordini. It consisted of a cast-iron block machined at Renault and with slightly modified light-alloy cylinder heads, two valves per cylinder. Renault looked closely at it and, whilst initially sceptical, would eventually give it the go-ahead in February of the following year. However, storm clouds were looming over the Sports Prototype racing class, though at the close of the year no one could foresee what was coming or predict what dramas would be acted out over the next three years.

7 1967: The V8 arrives - eventually

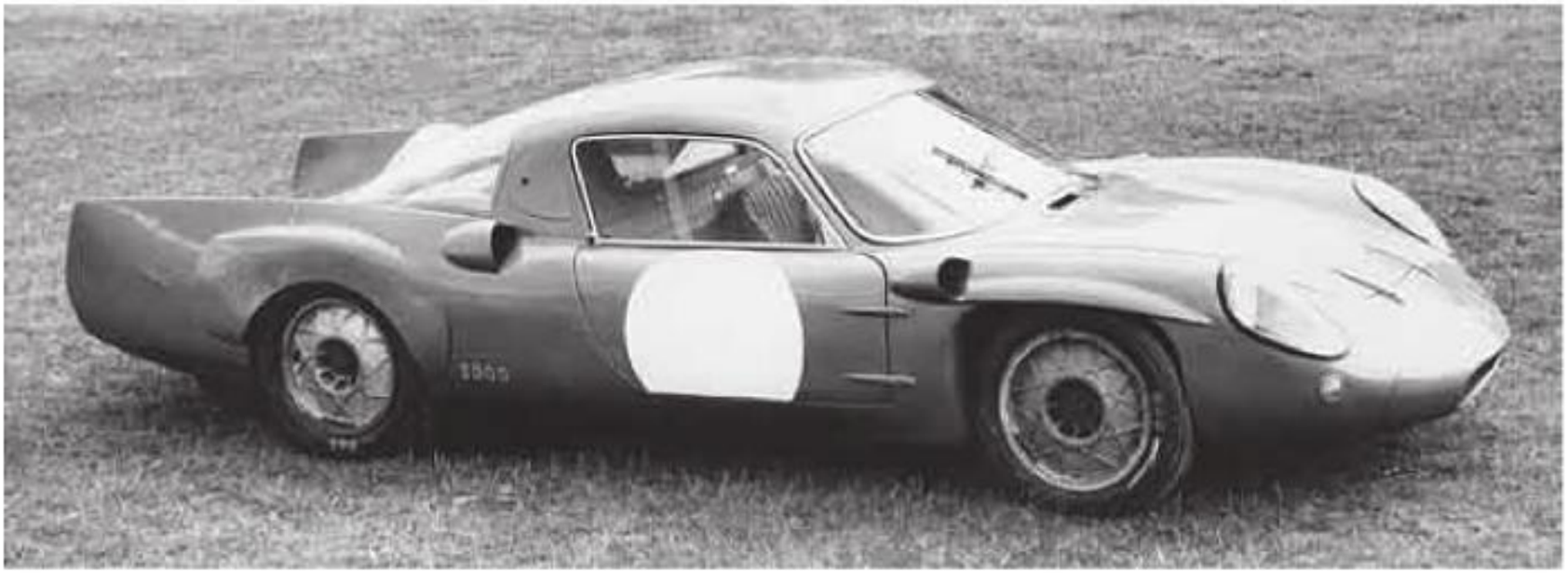
At the start of 1967 no one knew that the days of the great unlimited-capacity prototypes were numbered; the 7L Fords looked like the way the big class was going. At Alpine, thoughts were also turning to something larger than the 1300cc engines that had been moderately successful over the years. Gordini was developing a new engine, but it was delayed quite considerably and would not come out until later in the year. There would certainly have to be modifications to the chassis, and Richard Bouleau was keen to see a mock-up to determine what would have to be done.

For the moment, at the beginning of the year Alpine had the A210, and it would be a modification to this chassis that would first see the V8 go racing.

An interesting development took place the year before, and this would eventually affect the sports prototypes: the introduction of the rule changes that were now taking place in Formula 1, where 3L un-supercharged engines were now required, a rule that had been decided upon back in 1963.

Several engine manufacturers were coming on the scene, including key players Repco, Honda, Weslake, BRM, Matra and Cosworth. The most important of these would be Cosworth, but in the beginning it was Matra who caused consternation in Renault and at the blvd Victor premises of Amédée Gordini. Matra was starting to look at Formula 1 and was already involved in sports car racing with a V8 engine in the Matra 620. Matras would be seen in the lower formulae supported by Elf, the state-owned oil company, and at the Monte Carlo Rally that year Elf announced that it was entering motorsport with high ambitions and would certainly be working with Matra. In the years to come, Elf would become a major player in F1 and sports car racing. Led by the charismatic presence of its marketing director François Guiter, Elf's influence and products fuelled at first Matra and later Renault.

François Guiter, interviewed in 2007, tells the beginning of the story: "I was working at Caltex in 1966 when I got a call from the recently formed Société Nationale des Pétroles d'Aquitaine



The A211 V8 car as it appeared later in the year. (Photo GB)

(SNPA). Our French government had decided to create a national brand name for its rapidly developing oil interests. I left Caltex to begin this new adventure; my boss was to be Jean Prada. He said, 'I'm giving you the task of launching our new company and marketing its image.' Starting in 1967, the company's name was to be Elf. I asked Jean Prada how he saw the image of our new brand. His reply was, 'Young, dynamic, French; we will have to talk about the method.' We were looking for something that would excite the public at large and link their choice of oil to us, and we turned to motorsport. We knew nothing about it. I had never seen a race in my life! The first would be Monaco in 1967. Incidentally, Elf is not the initials of anything: it was just a random set of letters that came up in a meeting; it looked good, was short, and so we went with that. You know, of course, that at the time in French rallying there was Alpine, contracted to Shell then, but in circuit racing there was nothing much at all. Alpine had some small single seaters, as did Matra, and Matra had recently bought out René Bonnet. Most drivers were casuals, with few on permanent contracts. So we decided, very pretentiously, that we would put France back at the highest level. We knew about Matra – at the time it was mostly known for armaments for the military, but it was looking to expand its portfolio and image. It also helped that Jean Prada knew Jean-Luc Lagardère, the boss of Matra – they got on well together. F3 and F2 were becoming very popular. We went out to find some famous drivers and we found Beltoise, Servoz-Gavin, Henri Pescarolo and Jean-Pierre Jaussaud. We came to an agreement and, a few months before the launch of the 'Elf team,' we decided to reveal our ambitions at a press conference during the Monte Carlo Rally. We declared very brazenly:

– We are going to win in F3 this year. (That aim was achieved – Pescarolo was Champion of France with 11 victories.)

– We are going to win in F2. (Aim achieved with Beltoise the second year.)

–We are going to win in F1 and build an F1 engine. (Everyone smiled, but the third year we did it with Jackie Stewart, albeit with a Ford-Cosworth.)

– Lastly, we are going to win Le Mans. (This one we didn't achieve – at least not at first, as the 5L Porsche 917s were still there. Our turn came later.)"

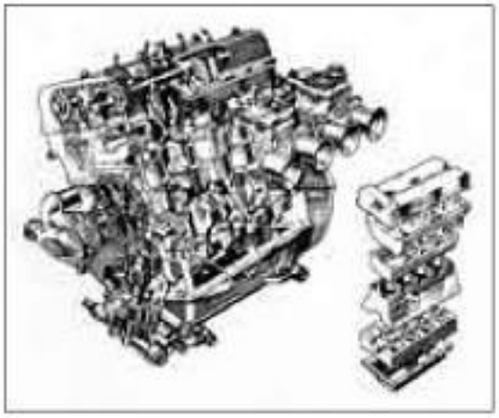
François Guiter continues: "Marketing-wise, when we started there was only Renault and its publicity machine involved in French motorsport. Renault's man was, of course, Jean Terramorsi; he was with their agency then – he was crazy about car racing. In the end our publicity annoyed some of the people at Renault and they asked us what we might do together. We agreed a contract for all cars leaving Renault to be lubricated by Elf (this contract is still valid). In 1968 we got involved in the Coupe Gordini and then Formula France which became Formula Renault. We also continued for four years with Matra. After Matra we made the decision to go with Renault 100 per cent." We will hear more of Elf as our story progresses.

As we go back to the beginning of 1967, Amédée Gordini's ideas and the V8 were still in development; it was not yet ready to go into a car. The big-capacity prototype battle of 1966 continued between Ferrari and Ford, but now Porsche became a serious contender to join the fight, with some interesting machinery in the 2L class. In the years to come, Porsche's entry as a factory team in various forms proved to be almost invincible.

At Alpine, this year would see the Gordini engines, the dry-sumped development of the Type 58C engine, feature a new recessed spark plug position with the plug set in the centre of the combustion chamber roof, and two ducts or grooves directing the firing process down into the combustion chamber. This design was decided upon because the valves had become very large and there was insufficient space for the plug to protrude into the combustion chamber.

One unforeseen problem was that the design led to hot spots that affected reliability on several occasions. The second development was that the valves were operated by a blade system, which was found to reduce friction, as opposed to a conventional rocker. New, too, was an idea for an engine with fuel injection. The chassis remained unchanged from 1966.

Engineer Igor Bourimoff with Giuseppe Albarea and Amédée Gordini in the blvd Victor drawing office. (Photo GA)



Type 58 construction.

En route before engine failure. (Photo MB)

The regulations for the 1967 championship season were the same as for 1966, and points scoring for each category would be nine, six, and then four, three, two, one. For the prototype class the big boys with the big engines were the stars, while further down in the 1300cc class interest had dwindled, and it was virtually the domain of Abarth, CD (Charles Deutsch) and Alpine. Alpine was still targeting Le Mans, of course, and a big effort would be made.

The opening race of the 1967 Manufacturers' Championship was the Daytona 24 Hours, followed by the Sebring 12 Hours. Although these races were of no interest to the Alpine factory this year, at Sebring a racing Berlinette was entered by local man Earl Nisanger for a lady by the name of Sierra 'Smokey' Drolet, her co-driver being an Englishwoman, Anita Taylor-Matthews; they completed 77 laps but weren't classified at the finish.

In Europe, the first race for Alpine was the Monza 1000km, for which only one A210 – a new car, chassis 1726 – was made ready with the new-style 1470cc engine.

Just a few days before, however, the Le Mans trial weekend, the annual pre-event testing session, was held on 8-9 April. This turned out to be a busy weekend, with 34 cars running, six of which were Alpines – five A210s and one M64. As before, we'll cover this test when we get to the Le Mans part of this year's programme.

For now, however, we move to 25 April and the Monza 1000km. Ferrari was out in force, but again slightly embarrassed by that man Jim Hall and his super Chaparral, this time a model 2F with Mike Spence and Phil Hill taking pole position. The Alpine entry was driven by Mauro Bianchi/Henri Grandsire, and featured the official entry of Michelin to the sports prototype championships; usually running on Dunlops, the A210 was found to be quick on either tyres – a good omen for the Michelin engineers.

Of the 43 cars that qualified, Grandsire got the car, entered in the Prototype up-to-2L class, into 25th place on the grid with 3min 23.7sec. As the grid got away on what was scheduled to be 100 laps of the 6.7-mile (10.10km) circuit, it was, of course, the Ferraris and the Chaparral that dominated out in front. Much to the crowd's dismay, the Chaparral was again proving to be a problem for the red machines.

The Ferraris of Bandini and Parkes both eventually managed to get by the Chaparral by lap 14, with Spence staying close on their tail until he stopped for what he thought was a flat tyre – it wasn't; it was driveshafts: game over. In the meantime, further back but lapping consistently, the Bianchi/Grandsire A210 was in full flight until, without warning, the engine suddenly expired, and it was all over; end of the race for Alpine. The first sign of problems with the uprated 1470 ...

Back to Dieppe to plan for the next time. That was to be Spa on 1 May. A210 chassis 1722, the Macau Grand Prix-winning car, still had the 1300cc engine installed and would be driven by Jean Vinatier/Alain le Guellec, carrying race No. 34, whilst a new engine had been fitted after Monza for Bianchi/Grandsire in car 33. Although not in the prototype category, it is worth mentioning a new name making his debut on the circuits: Gérard Larrousse. Already well known in rallying circles, he became extremely renowned in Sports Prototype racing as the years unfolded. Larrousse was shown against the entry for a factory A110 Berlinette, partnered by Jean-Claude Andruet.

In pole position again was that Chaparral, Phil Hill putting it there this time with 3min 35.6sec. It was dry in the Ardennes forest as he set that time. The No. 33 car of Mauro Bianchi/Henri Grandsire came round to 18th place on the grid, putting in a time of 4min 14.6sec and shaming many bigger cars. With the Vinatier/le Guellec car 20th on 4min 18.2sec, everything was looking good. All the cars were running OK and the Larrousse/Andruet Berlinette was also fine, back on 30th place with 4min 54.7sec.

"... the Alpine of Vinatier/le Guellec kept pounding round delivering consistent lap times, though they had to stop a few times to fix recalcitrant windscreen wipers, a desperate necessity at Spa in the wet!"

At start time, though, it was wet wet wet, and the mist and rain so familiar to this region returned. The Chaparral was out of its depth – it's not very wet in Texas – so it was the new Mirage Ford of Ickx and the Ferrari of Mairesse that raced off into the distance. On home soil, Ickx went on to win the 71-lap race. The Chaparral, although surprisingly setting the fastest lap at 4min 3.5 sec, failed early on at its first pit-stop when it would not restart due to sodden electrics. All the while the Alpine of Vinatier/le Guellec kept pounding round delivering consistent lap times, though they had to stop a few times to fix recalcitrant windscreen wipers – a desperate necessity at Spa in the wet! They eventually finished in 14th place on 58 laps with Bianchi/Grandsire in 16th on 54 laps, having been slowed during the race by ignition problems and separated from their sister car by the Matra Djet of Belgians de Keyn/Polak.

For Ickx it was his first ever sports car victory and, as we now know, the first of many in a glittering career. For Alpine it had not been a bad result – some problems, but the cars were still running and intact at the end, except for poor Larrousse on his first outing: he and Andruet suffered a broken crankshaft.

Targa promotion. (Photo JS)

Mid May, and it's Sicily Targa Florio time.

Alpine prepared and sent four cars: two Berlinettes, one prototype and a very special R8 Gordini. It was to be a bad day at the office. Not all the cars were Alpine factory entries: Renault itself was involved again this time, entering the race with its rally drivers. The de Lageneste/Rosinski Alpine entry – car 96, a 1296cc A110 Berlinette – was in class S1.

Car 182 was the M64 GT 'Sauterelle' with a 1500cc engine, entered in the Prototype up-to-2L class and driven by Mauro Bianchi/Jean Vinatier. Car 180, a Berlinette, was for Jean-François Piot/Gérard Larrousse, and car 164 – the 1300cc race-engined

13-inch wheels, this time for the 'Grasshopper.' (Photo MB)

R8 Gordini prepared by Alpine – for the Renault entry of Bengt Janssen/Harry Kallstrom.

Sunday 14 May was hot and, thankfully, dry, after the previous year's rather damp experience. Ten laps lay ahead of them, each of 44.739 miles (72km). Fastest in practice was Nino Vaccarella, the great Ferrari sports car driver, in the 330P4 with a time of 37min 12.2sec, an average speed of 72.153mph (116.11kph) – two minutes faster than the previous lap record. This was achievable partly because the circuit had undergone a resurfacing over its entire distance, but that does not detract from Vaccarella's extraordinary achievement, although it has to be said that as a school head teacher in Palermo he was in the right place for plenty of practice!

An exciting, dangerous and evocative place for many reasons, Sicily on a sunny day in May can be a blaze of spring flowers, with colourfully dressed spectators all chattering and gesticulating as is the Latin way. Formal practice was on Friday and, as ever, it was important for the pure racing drivers to get their eye in, because there are no run-offs or any thoughts of safety here; precision is everything, and the rally drivers who turn racers for a day just love it. The Vaccarella car was the only factory Ferrari against a legion of factory Porsches and Alfa Romeos. 62 cars started at 20sec intervals.

Alpine and Renault were about to regret coming, for, with only four laps completed, the first casualty was the Bianchi/Vinatier car – out in an accident.

value coin tucked in my driving moccasin. It was my sister's idea and one very wet day in the Tour de France my moccasins were completely wet and I didn't know how to dry them, so my co-driver put them on the pipe from the heater in the Alfa Romeo we were sharing. A journalist came by, looked inside the car, saw my moccasins and the coin and took a photo. The photo appeared in the press in a sports journal and it said, 'Roger de Lageneste: the gentleman driver who has a louis-d'or (a gold coin) as a good-luck charm.' It made a good story. Another thing: when I drove with Rosinski, he had bigger feet than me and the mechanics had to cut a hole where the accelerator pedal was so that his toe could fit through the hole and operate the pedal – a bit of a problem if it rained, because the water came in!"

Equipe Alpine packed up and headed home the next day. For the record, the race was won by Paul Hawkins, the Australian, and Rolf Stommelen in a Porsche 910 in 6h 37min, an average speed of 67.61mph (108.8kph).

Alpine decided to skip the next round of the Manufacturers' World Championship to concentrate on preparing for Le Mans. The V8 engine, though, would not be ready for the April test nor for the race itself. This frustrated Jean Rédélé, as he was now thinking that with the V8 they might even try for outright victory, not just the indices.

Le Mans 1967. As usual, the build-up began in April. The weekend of the 8th and 9th was designated for testing. The circuit, part of the public highway to the south of the city of Le Mans, was put into race mode once again for the tests to commence at 8am on the Saturday. They were to run until 4.45pm and from 9.30am to 4.30pm on the Sunday, with the usual break for lunch at 12.30pm to 2.30pm. Over 30,000 people turned up to witness this annual pre-race practice.

Alpine had originally planned to send two A211s with V8s but it wasn't to be, and they entered five A210s and the 'Sauterelle.' The line-up looked like this:

Car no:	*Type:*	*Chassis:*	*Test engine:*	*Race engine:*	*Test no:*
45	A210	1726	1470cc	1296cc	30
49	A210	1723	1470cc	1296cc	49
48	A210	1721	1296cc	1296cc	48
56	A210	1724[1]	1296cc	1005cc	56
47	A210	1722	1296cc	1296cc	47
–	'Sauterelle'[2]		1255cc	–	50

[1] Refitted with standard suspension earlier in the year.

[2] Now with Gordini push-rod engine giving 112bhp in place of the 1500cc used on the Targa Florio.

On hand to drive were Jean-François Piot, Jean Vinatier, Jean-Claude Andruet, Gérard Larrousse, Mauro Bianchi, Henri Grandsire, Alain le Guellec, André de Cortanze, José Rosinski, Roger de Lageneste, Robert Bouharde and that young man who would eventually really make it big-time in the motor racing world, Patrick Depailler.

It was the pure racer Mauro Bianchi who turned in the fastest Alpine time with 3min 58.6sec. History had been made: an Alpine had broken through the 4min barrier! To put this into perspective, though, the 7L V8 Ford Mk IVs were clocking 205mph (330kph) on the straight and the V12 P4 Ferrari of Bandini was lapping in 3min 25sec!

Things were not going to be easy this year (if they ever were easy), because that interloper from the year before had come to challenge the Alpines for the attention of the French public: the armaments manufacturer Matra, whose boss Jean-Luc Lagardère also had ambitions to win outright at Le Mans. Matra came to the test weekend with three powerful cars: one powered by a Ford (a new prototype which turned out to be the quickest of the three) and two BRM-powered cars. Matra was now mounting a new challenge for the nation's hearts; Rédélé needed to up his game, but unlike Lagardère he wanted to use only French engines. Unfortunately, national pride on this point would hold Alpine back, while Matra went on to shine. Except that this weekend would see tragedy.

The 1470cc Gordini engines were now putting out 150bhp at 7500rpm. The chassis had been modified a little, and, to allow for the bigger wheels and bigger brakes, the rear part of the bodywork was now enclosed. The wheels were of a new design, with eight inlets around the hub carrier to allow the flow of air to improve cooling of the hubs. Bianchi's car, No. 30, was fitted with the Hewland gearbox, as opposed to the Porsche unit, and, as no French car had run below 4min the French press made great capital of Mauro's quick lap. Jean Vinatier in the other A210, the 1470cc-powered car 49, could only get down to 4min 9sec, while de Cortanze ran the 1300cc-powered car 48 round in 4min 17.4sec. José Rosinski had been invited back to Alpine for Le Mans, and took car 47 to 4min 26.8sec, and the GT4M64-bodied 'Sauterelle,' car 50, was pushed by Piot to a creditable 4min 22.9sec. The 1005cc car 56 in Henri Grandsire's hands did 4min 24.6sec.

For Alpine the weekend had been interesting and successful engineering-wise but it was not a happy weekend for the personnel. The likeable Roby Weber, who had driven many times with Alpine and was a good friend of Mauro Bianchi, was tragically killed at the wheel of the prototype Matra-Ford M620

when it went out of control on the Mulsanne straight, flipped over and burst into flames. He was to have been married the following weekend. Jean-François Piot was following the Matra and saw the full horror of the accident. On returning to the pits, he immediately made the decision to stick to road events and never returned to Le Mans. There had now been deaths three years in succession – a clear demonstration again of the risks the drivers took every time they got into a car at Le Mans. Questions over safety at the circuit were raised once again by the teams, as little had been done since the accident the previous year.

The week of 6-11 June began warm and cloudy, but at least it was dry. The A210 V8 was taking shape as the A211 up in Dieppe, but unfortunately the programme was still behind schedule and they now knew that the two A211s planned for the race on 10-11 June would not be ready. With the V8 delayed, Alpine entered an armada of eight prototypes: seven A210s and an M64. After the April tests, the GT4/M64-bodied 'Sauterelle' was now deemed to be no longer suitable for Le Mans.

Back in April, Michelin had also been active, and tested a new idea for the first time in public: tyres without a tread pattern. At that time the word 'slick' meant a patch of oil; no one had thought of treadless tyres or the use of the word to refer to them.

Mauro Bianchi: "We had carried out a number of test programmes, all of them interesting, but of course that was in late 1966 and now in 1967 we had been using Michelins as well as Dunlops. One test would stay in my memory forever.

"We had been invited to Ladoux to test a new tyre, but imagine my surprise on arriving at circuit 3b (the famous 'Canard' – the 'duck,' so-called because of its strange outline) when I noticed the mountains of new tyres, obviously waiting to be tested: they had a completely smooth tread, except for hundreds of little holes which we were informed were to indicate wear.

"In the mid-60s, all competition tyres were treaded and, probably in common with most drivers at the time, I was convinced that the loss of efficiency of a tyre arose as much from the wear of the tread pattern as the degradation of the rubber. Rather concerned, I asked if we would have to test these tyres. The Michelin engineers exchanged an odd look; oh yes, the tests would indeed involve these 'already worn' tyres! You must remember that in the early 1960s all tyres were quite narrow; as a result, the driving style for racing cars required long slides, which I was very familiar with as drivers always competed to see who could corner the fastest and inevitably this meant who could slide the furthest!

"I did a few laps and thought that the car's behaviour was terrible! It was impossible to maintain a normal slide, and I struggled to control the car. At the end of the lap I gave my impressions to the technicians. They looked glum. They gave me the time sheet, which was of course very disappointing. They carefully noted all my comments, which were all negative. I decided to get ready to go back to Dieppe, convinced that the test would be considered very negative and not worth following up. The engineers went into a huddle and I was excluded. Then they came back to see me. Rather embarrassed, one of the engineers told me, 'We would like to redo the tests because we believe there may be a problem with your driving style.' I couldn't believe my ears! At the time I had a good reputation as a professional driver and with all the impulsiveness of youth I felt almost offended that they should question my driving style, which had up till then been considered pretty good. My heart missed a beat and I answered, in no uncertain terms, as quick as a flash, 'So what's wrong with my driving?' With a lot of patience and professionalism, they explained that this type of tyre needed a different driving style; in fact, I should avoid intentionally sliding the car.

"... Michelin had also been active, and tested a new idea for the first time in public: tyres without a tread pattern. At that time the word 'slick' meant a patch of oil; no one had thought of treadless tyres or the use of the word to refer to them."

"Very sceptical in face of this and still annoyed that they were criticising my driving, I exploded: 'Here at the Ladoux centre you have hundreds of chauffeurs (which is what Michelin called the test drivers in charge of tyre development); why don't you ask one of them to drive it the way you want?' Still very patient, the Michelin engineer replied that though their drivers were good, it was best that the tests be carried out by a proper race driver. Not exactly thrilled, I did as I was asked and drove another series of laps, trying my best to follow their directions; driving like this was not very exciting, although it required a huge amount of concentration. When I stopped, the faces of the Michelin engineers were still impassive, but imagine my surprise when they handed me the time sheet! I had just pulverised the best times ever achieved on that circuit with our car and at last huge smiles lit up the faces of our Michelin colleagues, and mine too! I was happy with the performance achieved, which opened extraordinary possibilities, but also a bit disappointed: was

this how we would have to drive in the future? The tyres were adopted for this year's Le Mans competition and would go on to play a considerable part in the good performance achieved by our cars, though at the time we were the first team to use them.

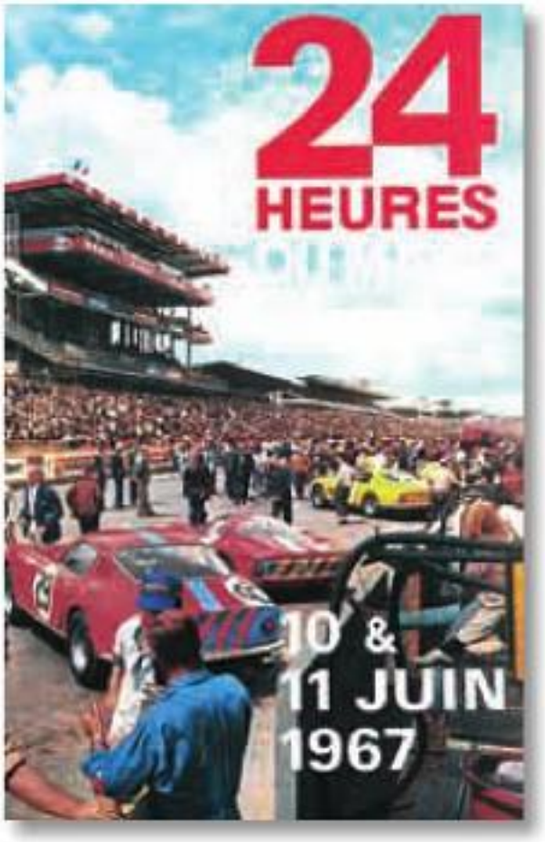
"However, this change to 'slicks' didn't come about without some difficulty. I remember the face of the scrutineer who checked our cars fitted with slick tyres for the first time back in April; he immediately demanded that we replace these very strange tyres with more classic tyres and it required all the weight and credibility of Michelin, with a statement and responsibility disclaimer signed by this major supplier to persuade them to allow us to use these extraordinary tyres. Of course, they were to go on to revolutionise motor racing."

Called the Michelin A1, these (still radial) slicks were fitted to three of the Alpines for the race and two of the entries of Charles Deutsch. 1967 was also the first year that advertising was allowed on the cars. Some might say it was the first step down a slippery slope, but it's sure that much-needed cash was brought to the teams, which in turn led to greater development.

The classes for Le Mans 1967 were Group 6 sports prototypes (Alpine entered in this category), Group 4 sports cars, and Group 3 GT cars. More than 100 entries were received, but just 55 were chosen to go into qualifying. Innovations were everywhere. The Chaparral arrived with its movable wing, and, as a result, the other sports proto teams began to take a different view from the scepticism some had shown before about this new development, especially as it was now appearing in F1 testing. The sceptics had included some engineers in Alpine, it has to be said. Many of the sports car teams were reviewing their aero packages. Marcel Hubert, of course, was in charge of that department at Alpine; out of step with the thinking of some within the team, he was already on the case, though we would not see a wing on an Alpine this year.

Without the hoped-for V8, there was no way an outright win could be considered. The sheer power required could not be squeezed from a smaller engine, so it was again the 'index' and class wins that Alpine was looking towards, while up front everyone was waiting for the big Ford vs. Ferrari showdown. Ford was reputed to have spent six million dollars to get to this point, and Mr and Mrs Henry Ford II were there to see where the money had gone!

A couple of housekeeping notes here might be interesting; in previous years the cars had carried a rudimentary transducer system to identify them as they completed each lap. This was abandoned in 1967 in favour of a return to a trusty manual visual system – a human being with a pen! However, there was major



Come the day! (Photo JS)

concern over safety in crashes, and so this year identification discs were introduced to enable the marshals to identify rapidly the materials of construction on the car: yellow for aluminium, red for glass fibre or other polyesters, blue for steel, and green for magnesium. The discs were 3-inch diameter and luminous. Some of the cars, mainly Fords, Ferraris and Porsches, were also using a type of phosphor-coated number disc background which had an electrical circuit attached and glowed at night when the alternator and lights were switched on. This made the black race numbers very clear.

In the few days of practice held before the race the speed of the Ford Mk IVs was astounding, but they kept losing their windscreens – not a great idea at Le Mans! Fastest round the 8.364 mile (13.461km) circuit was Bruce McLaren in a Ford with 3min 24.4sec. Second fastest was that Chaparral again, this time driven by Phil Hill, on 3min 24.7sec. For Alpine, Mauro Bianchi ran the fastest with 4min 12.2sec in the A210 car 45, chassis 1726 powered by a 1470cc twin-cam Gordini.

Bianchi/Vinatier. (Photo CD)

Larrousse/Depailler. (©R)

Here's how the Alpine cars lined up after qualifying:

Position:	*Car no:*	*Type:*	*Chassis:*	*Engine:*	*Drivers:*	*Time:*
35th	45	A210	1726	1470cc	Mauro Bianchi/Jean Vinatier	4min 12.2sec
37th	46	A210	1725	1296cc	Henri Grandsire/José Rosinski	4min 15.4sec
39th	58	A210	1720	1296cc	Philippe Vidal/Leo Cella	4min 19.2sec
40th	47	A210	1722	1296cc	Jean-Claude Andruet/Robert Bouharde	4min 21.1sec
41st	48	A210	1721	1296cc	Jacques Cheinisse/Roger de Lageneste	4min 26.6sec
(Ecurie Savin-Calberson entry)						
43rd	56	A210	1724	1005cc	Gérard Larrousse/Patrick Depailler	4min 28.5sec.
44th	49	A210	1723	1296cc	André de Cortanze/Alain le Guellec	4min 29.9sec
(Ecurie Savin-Calberson entry)						
48th	55	M64	1710	1005cc	Jean-Luc Thérier/François Chevalier	4min 35.2sec
(NART – North American Racing Team – entry[1])						

[1]The reason this was entered under the NART name and carried its decals was that for a period of time Luigi Chinetti Sr, the NART director, had put up a trophy, known as the Chinetti Trophy, to encourage and help two new young French drivers. Inaugurated in 1966, it had been given to ASA drivers Jimmy Mieusset and François Pasquier, then in 1967 to the Alpine pairing of Thérier and Chevalier.

Car 46: Grandsire/Rosinski. (Photo CD)

49: De Cortanze/le Guellec. (Photo CD)

Saturday 10 June started dull and overcast, so, even though it didn't rain, everyone had wet tyres ready just in case. 54 cars lined up for the start. The drivers walked over to their marks, and, as 4pm approached, the noise in the grandstands and above the crowded pits balcony dropped to whispers and almost silence. The crowd stirred in excited anticipation. Then came the sound of running men as the flag was dropped and the relative silence was split asunder as 49 of the 54 cars burst into life. The two Chaparrals hesitated, as did three other cars – one of them an Alpine. Eventually, with hearts thumping in panic at being left behind, all the drivers were off.

For Alpine the target was the two indices, but it was facing stiff competition and would eventually lose out to Porsche for the performance index and to the overall winning 7L Ford of Dan Gurney/AJ Foyt. It was hoped that the extra 180cc or so of the 1470cc engine would give a significant performance advantage, but, in fact, the true power advantage over the 1296cc was small. The results show that at the end of the day it was the 46 car, the 1296cc-powered entry of Henri Grandsire/José Rosinski, that would finish highest overall in ninth place and first in the 1300cc Prototype class.

The car ran well for most of the race and at one point looked like claiming eighth overall. With just a few hours to go, they were locked in battle with the much more powerful cars of

Cheinisse stands by; de Lageneste aboard. (Photo CD)

Steinmann/Spoerry in a 275 GTB Ferrari and Poirot/Koch in a Porsche Carrera 6. They had got past the Ferrari and were going after the Porsche when they had to stop and lost time due to a burst water pipe.

José Rosinski had a confusing time during one driving stint. The Alpine personnel who were in radio contact with the pits were putting up the pit boards on each lap giving the time of the driver's last lap. José saw the times, but thought he was going faster; he was a driver of some repute and very experienced. Anyway, this happened several times and each time he was driving flat out and could not believe that the time he was being shown was correct. It was only when he came in for a pit-stop that he realised that he had been looking at the pit board for the wrong car – he had forgotten his number was 46, not 47!

In tenth place, second in the 1300cc class and third in the thermal efficiency index was car 49 of André de Cortanze/Alain le Guellec. It had been an almost faultless run except for a broken accelerator cable which, luckily, was quickly fixed; they, too, got past the Ferrari 275 during the final hour.

In 12th place and behind the 275 GTB Ferrari was the A210 No. 48, another 1296cc car, with Jacques Cheinisse/Roger de Lageneste on board.

Bianchi heads Andruet. (Photo GB)

They could only manage eighth in the performance index and fourth in thermal efficiency, but even so, 12th overall in this gruelling event was no mean feat. In 1966 this had been the lightest car but this year it was the heaviest at 722kg, the lightest being the M64 car 55 on 671kg.

Next to finish was car 45 of Mauro Bianchi/Jean Vinatier, the first 1470cc car and the fastest in April.

After the first hour they were lying in 31st place, but by the middle of the night they had moved up to 19th and were leading the thermal efficiency index. Unfortunately, a long stop for brake maladies meant they lost three places, though they battled hard to get back up to 15th overall by 6am on the Sunday. However, the brake problem returned, and a long stop set them back, though with other cars dropping out they were to recover to 12th. At 2pm on the Sunday afternoon they lost out to the No. 48 Alpine and had to settle for 13th place, the highest place finish for Mauro Bianchi at Le Mans.

Jean Vinatier: "Mauro drove well. He had the great advantage of knowing the car very well as he had done a lot of testing in it – perhaps not every day, but every time they needed to test some little thing they went to the airport near Dieppe and he was always in the car, so I had complete confidence in his settings and I adapted to his style of setting up the car. He also tested it at Ladoux. The only thing I didn't agree on with Mauro was in the Berlinette, generally about spring and suspension settings, but on the protos I agreed entirely with what

Henri Grandsire, Roger de Lageneste, Mauro Bianchi, Patrick Depailler. (©R)

Depailler (l), Grandsire (r). (Photo P-3)

Bianchi and chassis 1724 with a 1296cc engine for local driver Jorge de Bagration, entered under the Escudería Montjuic name. The Bianchi car finished in third place to the Porsche 906s of Alex Soler-Roig, also entered by Escudería Montjuic and André Wicky; just behind him was de Bagration on the same lap.

Jorge de Bagration was an interesting character, a well-known and quite useful driver in Spain in the late 1960s and 1970s. Born in Rome in 1944 to the family of a Georgian prince, Irakli Bagration-Mukhraneli, a descendant of the Mukhrani branch of the Bagration royal family in Georgia. After the death of his father in 1977, Prince Jorge de Bagration claimed his right as legitimate heir and head of the Georgian royal family; not quite the usual pedigree of a racing driver!

Alpine didn't enter the aforementioned BOAC 500 at Brands Hatch, the next big prototype race. Ford didn't turn up; Chaparral won from Ferrari; Ferrari went on to win the Manufacturers' Championship for over 2L; and Porsche took the up-to-2L class.

The next race for the Alpine team was the Nürburgring 500km on 3 September, run as before for the smaller-capacity cars, but now up from the previous 1300cc limit to 1600cc. Again, 22 laps were to be run on the 14.189-mile (22.835km) circuit, a total of 312 miles (502km). This was the last round for the Championship title, so a lot would be at stake for Abarth who had done more rounds than Alpine and would not be happy if Alpine spoilt its celebration party.

Chassis 1723: de Lageneste. (Photo AAA)

Alpine sent four cars, all A210s. Chassis 1725, car No. 1, was to be driven by Henri Grandsire.

Chassis 1723, a 1296cc-powered car, was driven by Roger de Lageneste carrying No. 2.

1724, carrying No. 3, was for Patrick Depailler and again was a 1470cc car.

1726 had Mauro Bianchi on board – the winner in 1965. This, too, was a 1470cc-powered car and carried race No. 4.

After practice, the front of the grid was all Alpine; it seems that the Nürburgring again suited the cars well. On pole was Mauro Bianchi, who had set the fastest time of 9min 23.9sec, an average speed of 90.584mph (145.781kph). Next to him was Henri Grandsire in car 1, on 9min 27.8sec, with Patrick Depailler in third position on 9min 29.4sec. Roger de Lageneste was down in sixth place on 9min 36.2sec.

3 September was still remembered by various nations in the 1960s as the anniversary of the day that Britain and France declared they were at war with Germany in 1939. Thankfully, peace had led to the reopening of this fabulous circuit to stage battles of a more friendly nature. The weather that day in 1967 was cool and overcast, but so far no rain.

At the start, Grandsire was able to get away quicker than Bianchi, with Trevor Taylor in the Lotus 47 pushing past Depailler for the third slot as they headed for the first turn. Grandsire pulled away on the second lap with a storming drive to set the fastest lap – 9min 30.5sec – which would stand to the end of the race, but maybe the pace was too high, as he came into the pits on lap three with terminal overheating problems (the hot-spots on that new design of combustion chamber again). On this lap Depailler had retaken his third slot from Taylor. Mauro Bianchi took over the lead now and set a cracking pace for three laps before he had to dive into the pits to have his brakes attended to, so it was Depailler who inherited the lead. Driving immaculately, he led the race through to its midway point of 11 laps, but shortly after that also suffered the indignity of failure as his gearbox delivered a final blow. For Alpine it looked like another

Mauro waits at the start. (Photo MB)

Car 4 awaits the arrival of its running driver. (Photo P-3)

They all get away. (Photo RdL)

disaster with the bigger-engined A210s. Abarth, too, was having problems: its lone prototype had fallen by the wayside. Not so for everybody, though; this was the time of the very quick Minis and they were having an excellent race in the touring category. Gradually, almost unseen, quietly creeping up the order was Roger de Lageneste in car 2, driving as ever with impeccable style, though he was some 6km behind Trevor Taylor, who had assumed the lead after Depailler's car dropped out.

Suddenly, with just six laps to go, the electrical system on

Grandsire leads Bianchi. (Photo MB)

Smooth driving from de Lageneste. (RdL)

today and we didn't make many. We didn't do many tests either – perhaps 10, 15 tests for everything – Oh, were we green in those days! Still thinking like we did in the 1950s, and we younger guys, we were really just beginners!"

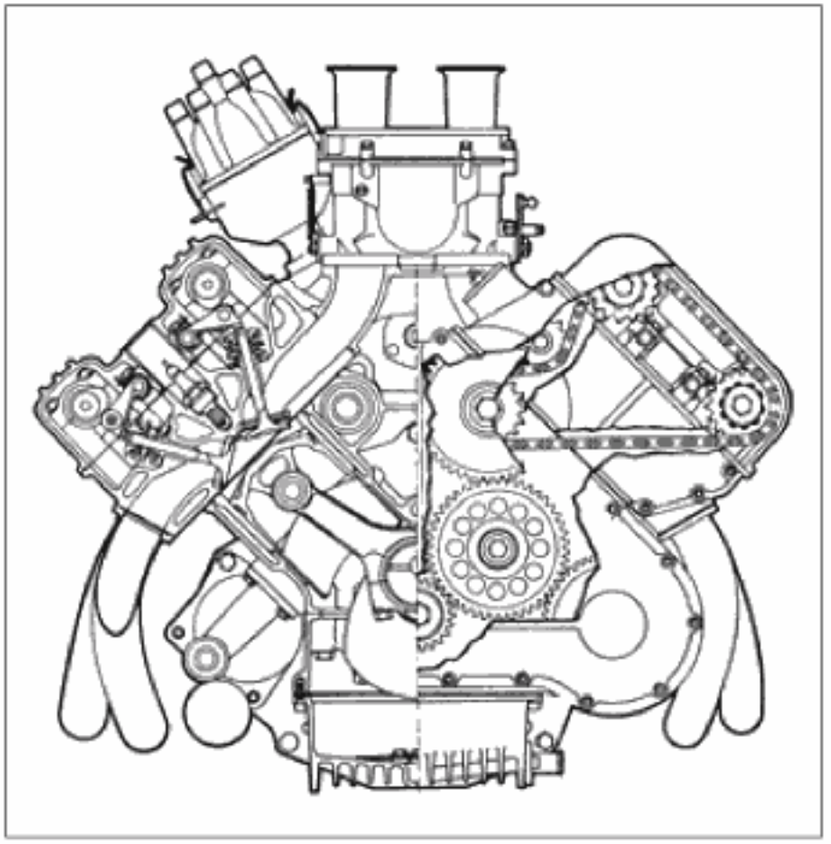
Renault thought about it for some time; the official go-ahead did not come until February 1967. Finally, by the autumn of 1967, it was ready.

Two sizes of engine were created in the beginning: the type 62, the 81 x 63mm unit, which gave a capacity of 2597cc, and the 62A racing engine which had a bore of 85mm, stroke of 63mm and a capacity of 2996cc. Gordini sent Alpine a mock-up (empty) engine, and the Alpine engineers were delighted to see the size and nature of the unit. It looked good: small, compact, perfect. However, there was a nagging problem with the indicated power output. Gordini said it was designed to produce 310bhp at 8000rpm, while Alpine knew the competition already had up to 420bhp.

The following is an extract from an article that appeared in the French press in 1967 at the time of the launch: "Gordini had designed several successful 4-cylinder engines and this led him to design a V8, based upon two 4-cylinders. Indeed, each of the rows of cylinders is exactly the same as one of his 4-cylinder engines, the 1500. But during the design process Amédée Gordini had some new ideas. He was thinking not only of his new engine, but also its assembly in the car which would use it.

"In fact, he originally had in mind a road car, because his ambitions were not limited to competition units. It was for this reason that there were no accessories on the front end of the engine – he was thinking of a rear-engined passenger car. However, some had other ideas and Renault gave Gordini the go-ahead to continue development for a competition unit. They decided that this engine was to be fitted in a specially-built Alpine to be ready for the Le Mans 24 Hours. The engine block was designed to take cylinder heads with conventional rockers, and already contained the fixing for the camshaft. In the competition version, these camshaft fixings are used to hold spindles to control accessories on the rear face, where access is easy.

"Having studied the most recent developments offered by modern casting, Gordini chose to make the engine block in cast iron rather than in light alloy. The complete engine weighs less than 150kg, representing less than 500g per bhp, in spite of the cast iron. His decision was motivated by the desire for block rigidity. Another characteristic of this engine block is that it doesn't have separate bearing caps. Here again, in the search for



Cutaway of the V8. (Drawing ETAI)

The engine in a transport cradle. (©R)

Amédée Gordini with his son, Aldo. (©R)

Jean Rédélé consults with Amédée Gordini. (©R)

rigidity, all the caps are grouped in a single piece which brings together the normally separate elements.

"On the block, the two cylinder heads are technically replicas of the cylinder heads we are already familiar with on 1500s, with only one difference: the valves, which were set at an angle of 34° in relation to the cylinder axis on the 1500, are set at only 30° on the 3L. In other words, the V of the valves has changed from 68° to 60°. This is apparently to lower the piston dome to the same volumetric ratio.

"As for the valves, the camshaft controls them by ball-bearing rockers. The inlet valves are 40mm in diameter, 10mm in stroke, 8mm stem diameter and 45° seating angle. The exhaust valves are 36mm diameter, 10mm stroke, 8mm stem diameter and 45° seating angle. Immediately after the valves, the pipes are 35.5mm diameter at the inlet and 33.5mm at the exhaust. At maximum speed of 7500rpm, the average speed of the pistons is 15.7m/s. At this speed, the corresponding gas speed in the pipe is 104m/s immediately before the inlet valve and 93.5m/s at the valve itself. For the exhaust these speeds are slightly higher: 116 and 104m/s. With 122.5mm rod length and 63mm stroke, the piston acceleration is 24.250m/s² at maximum speed.

"In the first stage of testing, they expect 310bhp at 7500rpm from this engine, i.e. 103bhp per litre of cylinder capacity and 13.6bhp per litre and per 1000rpm. With a compression ratio of 10.5, the pressure on each piston would be around 4200kg.

"The crankshaft comprises five bearings of 57mm diameter and 22mm length. The pistons are in light forged metal and have two piston sealing rings of 1.2mm and a 4mm U-flex piston ring. Each of the valves is returned by two springs with an overall setting of 25kg closed and 75kg open.

"The ignition setup gives 55° advance of inlet opening, 75° delay in inlet closure, 68° advance exhaust opening and 47° delay exhaust closure. In the initial trials four down-draught 40mm twin-choke Weber carburettors were used.

"It looks to be a sound, well-behaved engine, built to last. They are planning to have fuel injection to replace the Webers in due course."

After many delays at Gordini and Alpine, the waiting public would see the new engine's first outing in October for the Paris 1000km.

Mauro Bianchi: "It looked like a magnificent engine: small, compact. But we the prospective drivers were concerned. Mr Gordini said it would give 310bhp at 8000rpm. The competition at the time had between 360 and 420bhp." Alpine would need a new car. Richard Bouleau: "When we first saw the V8 Gordini engine which was placed at our disposal, we realised right away

A tight squeeze: the V8 in the A211. (Photo AAA)

The car is rolled out of the workshop for the first time. (Photo AAA)

that in reality it needed an entirely new chassis." However, time was against them, and the A210 had proven to be a good chassis with the only problems coming from the mechanical parts and the engine rather than the chassis and suspension. So, the designers chose to install the V8 in this chassis as an interim measure, with a modified rear section to take the new engine.

It would become the A211 and the new chassis, nicknamed the 'Grandmother,' would be numbered 1727. It was fitted with ventilated ATE brakes, 15-inch wheels, a 5-speed ZF gearbox, and enlarged rear cooling inlets. André Désaubry: "The engine had arrived in June and we worked at fitting it all through July."

"I asked Amédée what revs I should use; he told me, '8000rpm.' I followed his instructions; the engine blew up a few minutes later." – Mauro Bianchi

It had its first test in August on the disused airfield of St-Valéry-en-Caux, not far from the factory in Dieppe, a test which was to show up serious vibration in the engine. Mauro, test driver: "I asked Amédée what revs I should use; he told me, '8000rpm.' I followed his instructions; the engine blew up a few minutes later. The first engine was replaced and I asked him the same question. His reply was '7500rpm.' After a few kilometres at St-Valéry the second engine blew up and it had to be changed again."

The team began to wonder if the old 'Sorcier' had got it wrong this time. With a third engine in the A211, Amédée told Mauro to drop the revs to 7200. In the end he found the vibration was less at 7000rpm. The worry was: what power did they really have at 7000rpm?

Mauro: "The car itself and the chassis changes seemed to be OK, although at anything like a decent speed it became a little unstable, maybe due to the extra weight and power in a chassis that had been designed for the 1300 and 1500. Also, it was devoid of any aerodynamic aids such as were appearing on other cars."

Mauro spoke with some of the other drivers, who were also concerned at the lack of horsepower, but it was said that some team members thought the Alpine chassis would be good enough for them not to need the 400+ bhp that Ferrari, Ford and others had. It might have been true that the chassis was good, but it was also a racing car and racing cars need power – lots of it.

André Désaubry: "At the beginning of October there was a presentation at the Paris Salon in front of General de Gaulle.

'La Grand-mère' attracts attention. (Photo GB)

During the show the car went from the Salon to Montlhéry many times for the tests and each evening it was brought back to the Salon! Everyone was coming and going between Montlhéry and the show. I remember Gordini was a bit afraid with his new engine. For Jacques Cheinisse, who was in charge of the Salon de l'Auto stand, it was a nightmare as he had to juggle this with the Paris 1000km where he was to drive an A210. It was to be his last year as a driver; afterwards he decided not to race any more."

Montlhéry, the Paris 1000km, 15 October 1967. This non-Championship round was to be the début of the first V8-engined Alpine, chassis 1727, the A211. Mauro Bianchi/ Henri Grandsire were the chosen drivers. Alpine also entered three other cars, all A210s. Chassis 1726, which had led at the

ready, but he knew it would be a huge challenge. The design department began work on the all-new A220.

While work was started at a rapid pace in Dieppe, Renault had requested that Alpine send a car to the Kyalami 9 Hours to promote and support the new Renault businesses in South Africa. Alpine prepared and sent A210 chassis 1725 with a 1470cc engine to the famous 9-hour race to be held on 9 November. Driving would be Henri Grandsire/Patrick Depailler. A V8 had also been entered but did not turn up.

At 2pm, the scheduled start time, the drivers lined up in a Le Mans-style running formation. With the temperature well into the 40s centigrade, 80,000 spectators held their collective breath as the starter raised his flag, lowered it quickly, and the race was on. A clean start and they were all away. For the first two hours the A210 did not show on the leader board, but by the 4-hour mark Grandsire and Depailler were up into sixth overall behind the Mirage, Lola and Ford, but in front of a Ferrari. The little Alpine was outperforming some much more powerful rivals.

By 9pm, after seven hours of racing, the Attwood/Piper Ferrari had retaken sixth place, putting the Alpine seventh, a place it would hold to the finish two hours later. It also collected fourth in the performance index, a version of which was used in this race.

The Jackie Ickx/Brian Redman Gulf Mirage Ford took the chequered flag with 342 laps covered. Seven cars, including the Alpine A210, had improved on the previous year's distance

Depailler at Kyalami. (Photo RY)

record of 291 laps. The John Wyer Automotive Gulf Mirage had now taken three major victories in 1967 (Kyalami, the Spa 1000km, and the Paris 1000km). It had been a successful foray and enjoyed by all who ventured out of Europe for that last end-of-season race, and Mirage is a name we will learn more of in the second volume.

Now the work in Dieppe would be concentrated on the design and development of the new Alpine A220 V8. It was to prove a demanding task.

8 The dream and the risks

It became clear, after the early tests in the A211 (the modified A210), that the V8 would need a new chassis. On 10 and 11 January 1968 the A211 underwent extensive tests at Zandvoort before going back to Dieppe for adjustments and further testing at Montlhéry prior to leaving for the Sebring 12 Hours in the USA.

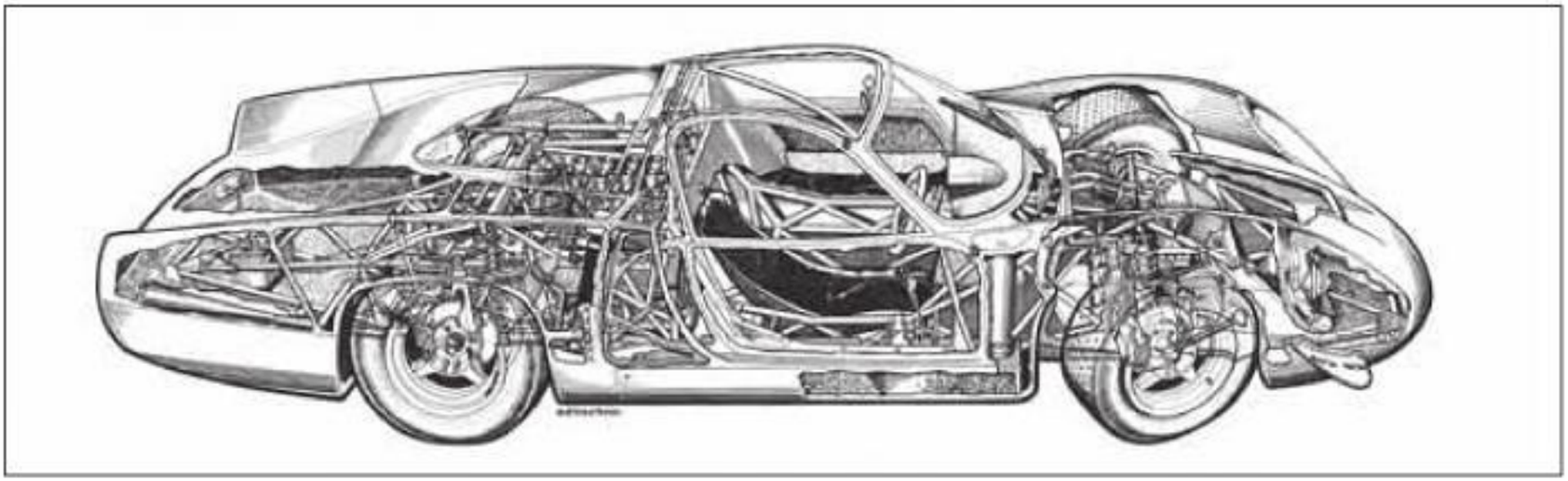
Mauro Bianchi says, "We knew that a new design was needed. Richard had already put some ideas on paper, though Jean (Rédélé) was much occupied with developing sales and frequently not at the factory, so our little team had begun to create this new chassis. It was a larger, much wider car with big wheels. By the end of the year we were well on with the design and when Jean returned one day in the autumn of 1967 we presented him with full details of this new proposal. It was something of a fait accompli, but fortunately he liked it and readily agreed to our progressing it further."

The new V8 from Gordini was still under development, and Renault, though a bit concerned about the claimed power outputs, had nevertheless given the go-ahead to continue, and both Alpine and Renault had high hopes for success in 1968. Because of the new 3L formula, the dream was even of a possible outright victory at Le Mans. The new regulations caused the demise of the 7L Fords, the 5L Chaparrals and 4L Ferraris. But Porsche and Ford were waiting to rise to the challenge, and Alpine would find outright victory a harder task than originally perceived.

The first A220, chassis 1730, was a different beast from the 211, and, contrary to the other Alpine protos, the A220 was a right-hand drive car; the designers reasoned it was better suited to circuit driving as the majority of circuit corners were right-handers.

The dimensions were:

Overall length:	464cm (182.4 inches)
Overall width:	169cm (66.53 inches)
Height:	103cm (40.55 inches)
Wheelbase:	230cm (90.55 inches)
Front track:	134.4cm (52.91 inches)
Rear track:	134.4cm (52.91 inches)
Weight empty:	680kg (1500lb)
Capacity of plastic tanks:	120L
Wheel dimensions:	Front 23cm (15 inches), rear 29cm (15 inches)



The A220. (Drawing ETAI)

First model of the A220. (Photo CD)

It was first tested at the little circuit at St-Valéry (department 76 in northern France). Mauro Bianchi did the test and found everything OK during the initial low-power, low-speed shakedown period, so the team returned to Dieppe and prepared to go to the Michelin test facility at Ladoux near Clermont-Ferrand for some serious testing.

Mauro Bianchi: "I had been looking forward to driving the new car and here it was at last! It was magnificent with its big tyres, big brakes, a beautiful silhouette and claiming to be much lighter. I couldn't wait to drive and test it. But as I stood there looking at it I had no idea how long and how complex the process would be.

"The car seemed OK at St-Valéry but I was very concerned at Ladoux. We used the No. 2 circuit, I think. As soon as I got up to high speed – maybe around 250kph (155mph) – the car seemed to become very light and I had no feedback on the steering. It would swerve at the slightest touch of the steering wheel. None of us had any idea why it happened." Marcel Hubert felt sure that it was an aerodynamic problem and he started to look at the new 'wing' ideas being tested by some of the competitors. Hap Sharp and Jim Hall had already shown the way with the Chaparrals during 1967, and Porsche had even tried a mid-wing design in the 1950s. Many teams were

The real thing: first shakedown. (Photo CD)

Rear cover off. (Photo CD)

The Chaparral with wing in 1967. (Photo AB)

The engine bay. (Photo CD)

beginning to understand the use of flip-up, so-called Gurney strips on the rear of their cars, and how the flow of air could be used to stabilise a car.

Mauro again: "At Ladoux it was impossible to go beyond 250/260kph. I didn't understand and neither did the design engineers. I thought at first that the problem was caused by the suspension geometry, but various attempts to change the ground clearance and other settings in relation to the ground clearance had no effect. Finally, the team decided that the phenomenon was indeed aerodynamic and that some of those wings and strips being tried by some of our competitors to stabilise their cars were not just silly ideas, as some of our team colleagues had thought. Marcel Hubert determined that the shape of the car itself at the back was making it light at the front. He went away and, with some parts that we had in stock, quickly created a sort of 'comb' which he said would supply some aerodynamic control and stabilise the car (see photo, page 144). It was primitive, but it worked. At last I had the steering feedback that I needed, and, although it was still very light at around 300kph (186mph) at least the car was almost going straight."

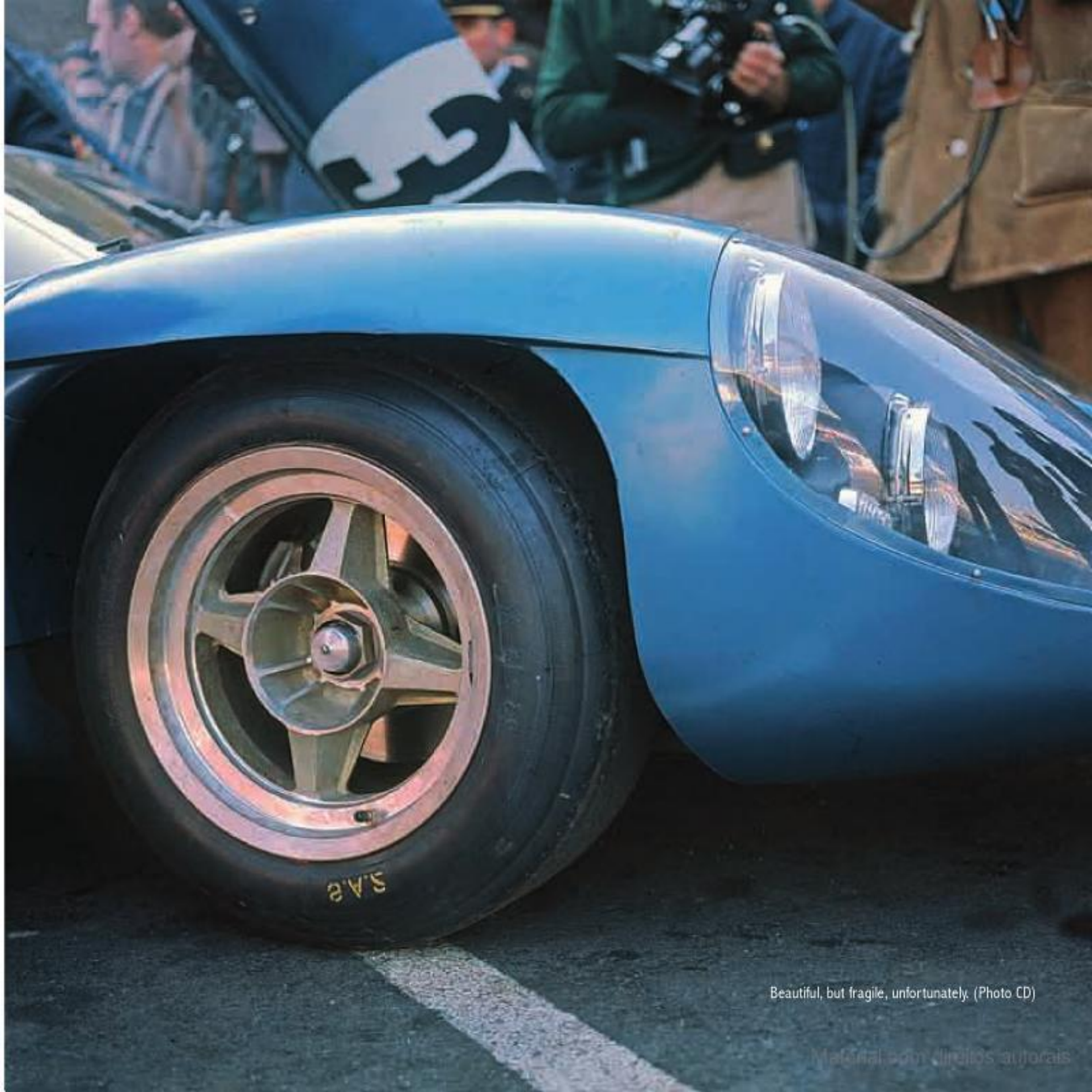
Mauro continues: "Encouraged by the fact that the car was now stabilised, we carried on with a series of tests at Montlhéry, on the circuit used for the 1000km. On the first run, all was going OK when suddenly I had the fright of my life. At full speed the front of the car lifted – I could see nothing but the clouds!

The comb fence aero modification. (Photo CD)

– and I really didn't know what to do. In panic I lifted my foot from the accelerator and the car came back down to land, happily well within the narrow section of track I was on and before a corner.

"I asked myself many questions, and eventually we grasped the fact that we had to maintain a very fine aerodynamic balance and the design office fitted two trim indicators in the cockpit. Each had a needle positioned between two areas – a red and a green – and as long as both needles stayed on the green everything was fine; but if they went into the red ... !"

Richard Bouleau: "At Ladoux I had a problem with the chassis, and Mauro found the car pretty much undrivable at high speed. I admit I was struggling with my pivot and castor angles before returning to the settings defined on the drawing board.



Beautiful, but fragile, unfortunately. (Photo CD)

Marcel, though, felt sure it was aerodynamic instability that was causing the problem."

After the initial tests, with the comb aero device added and trim indicators installed, the team went to Zolder. Mauro: "These new tests quickly showed that with its low weight, its new radial tyres, streamlined body that didn't produce much drag, and what appeared to be a good chassis, the car had real potential. We achieved some excellent times, very near the lap record.

"I had even invited my brother Lucien to give me his advice on this new car. Lucien went out to do a few laps, but suddenly he wasn't coming past any more. Very worried, we went to look for him and found him stopped on the hairpins with what looked like only three wheels: the left rear wheel was lying under the car! Thinking it was an isolated incident, we replaced the broken wheel and continued with the test. Less than an hour later, when I was driving this time, the new wheel broke again in the same way!

"What had happened? These superb wheels had been designed with the wrong strength calculations.

"This was serious, because a lot of rims had been ordered! With this new problem, we continued testing, at first very carefully. At Zandvoort, where the potential of the A220 was confirmed, we actually went faster than the lap record for sports prototypes."

It was now nearing the end of March and the team had entered the A211 for the Sebring 12 Hours in the USA, held on the 23rd. Development on the A220 continued while they were away. While they had hoped that the 12-hour race would help

Preparations off track, Sebring. (Photo PL)

Adjustments – Bianchi/Grandsire. (Photo PL)

development of the engine, in fact, it confirmed the limitations of the A211: it was too heavy and, with insufficient braking coupled with undersized tyres, the car was adequate but not perfect.

Running race No. 42, they put the car in 12th place on the grid with a time of 3min 4sec; not bad when one considers that the opposition was Porsche, Ford, and Lola, plus the hugely powerful Howmet gas turbine car.

Those marques filled the first 11 places. Porsche had come up with a new innovation, too, to help the drivers – a refrigerated 'cool suit,' which was being tried in preference to the then common alternative of Nomex. Great against fire, Nomex was, unfortunately, so tightly woven that it retained the driver's body heat inside the suit. Ventilation was still very poor in a hot cockpit and it was hoped the new suits would keep all the drivers cool.

Whether or not it was due to driver comfort, Porsche dominated proceedings, whilst the Alpine A211 suffered engine failure on lap 39 – not much to show after an expensive trip across the Atlantic. Pierre Dupasquier of Michelin wasn't too impressed, either. Pierre: "At the beginning of 1968, Alpine

Race day. (Photo MB)

The Howmet gas turbine car still running today. (Photo RS)

wanted to have a good test at the Sebring 12 Hours in the USA. I didn't want our tyres, which were also still experimental, to be shown to behave well or badly without our knowing why. So I accompanied a small Renault team to Florida, asking our local agent to make sure we had the necessary equipment on site.

"On the day after we arrived, we had done a short test to reassure us that everything was in order when I saw a newly-painted pickup truck arriving, driven by a young playboy in white overalls. He introduced himself as the Michelin agent, but his wide, forced smile did nothing to reassure me. In my English (self-taught by Linguaphone!) I asked him where the equipment was: fitting table, levers, etc. All he had was a box of hand soap – great! I thanked him and asked him to leave the soap and made him understand that henceforth I could manage without his help. I did manage, but changing racing tyres with the two levers that I had slipped into the Renault luggage as a precaution is easy on paper, but very difficult in reality. I can laugh at it now, but anyone who has tried this will know what I mean." The Alpine Renault/Michelin team packed up and went home to France. The next outing would be the Le Mans test weekend, and the team continued testing the new chassis, the A220, in the earnest hope that it would be ready for the test weekend. Unfortunately, as we have seen, during early tests with the A211, they had discovered problems of vibration and lack of power with the engine, and things hadn't progressed much during the winter.

Richard Bouleau: "Ah, the engine! We had a lot of adventures and some misadventures as well! The misadventures that tarnished the career of the A220 unfortunately arose principally from its power unit. Sadly this engine lacked power and balance. It suffered from vibrations which broke its accessories. Amédée (Gordini) and I were good friends – we had been for a long time – so I feel I can say that he normally built his engines well. A long time has passed now so maybe I can say some things that I could not say at the time. I can tell you a story relating to an investigation that I carried out to try to find the cause of some of the problems and how much power it was actually producing. I had had the clutch removed from an engine that was in the first A220 and had the main shaft fitted with strain gauges and recording devices with the help of some friends who were good at electronics. This was to measure the torque of the engine while it was running. But when the car was ready for testing, Amédée discovered the instruments and I was told in no uncertain terms to remove the testing equipment from the car immediately. He was not happy that I was measuring his bhp.

"Also, we had no choice but to use the ZF transmission and gearbox; at the time it was the only one strong enough, although everyone was complaining about it. Our competitors had drawn our attention to gearbox failures caused by poor gear selection. Taking into account the fact that the mechanism was a long way back from the driving position and the number of angular articulations which transmitted the movements from the gear lever to the gearbox, you could understand the frequency of gear selection malfunctions by a driver in the heat of the moment. Before installing one gearbox, I had a gadget fitted on the tubular shaft to mark the selection. I replaced the original shaft with a new one which allowed me to fit a device on the outside of the box to control precisely the slide and the rotation of the shaft. I then installed a control in the cockpit which mirrored the one on the gearbox. When the car was run for the first time, Mauro Bianchi was pleased with the precision of the gearbox control. Funnily enough, by the end of the season, ZF had installed the same system in a smaller casing on all its gearboxes."

Giuseppe Albarea: "François Castaing had joined us in the summer at a time when we were modifying the camshafts on the 4-cylinder units, as we had experienced a lot of wear. We were also thinking about fuel injection.

"Amédée Gordini had been talking and thinking about the idea of fuel injection for a while, and he asked François Castaing to follow this project. He eventually chose the Kugelfischer system for the 4-cylinders. At first, because it was all a bit new for us, we had been helped by the people at Lucas and we worked with Lucas injection for the V8. Amédée had visited Lucas in England with an Alpine driver who had worked with Lotus, Philippe Vidal, who spoke good English, to help him. The first job for Castaing was to do an injection system on the 58E engine – this engine would eventually run at Le Mans in the Alpine of Bob Wollek and Jean-Claude Killy, the French ski champion, in 1969, but work started seriously in 1968."

"Amédée Gordini had been talking and thinking about the idea of fuel injection for a while, and he asked François Castaing to follow this project. He eventually chose the Kugelfischer system for the 4-cylinders." – Giuseppe Albarea

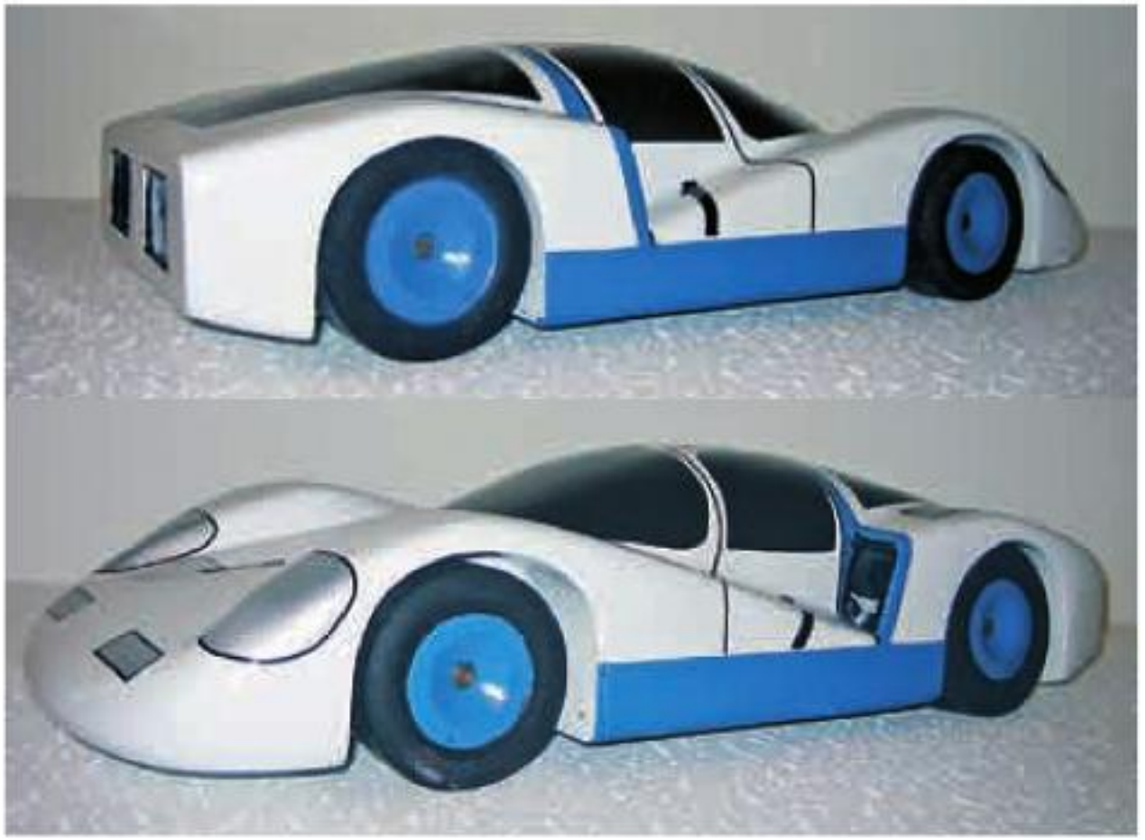
François Castaing: "In September 1967, Mr Gordini had come to the university – he went to the technical schools quite often – and at that time he said secretly that he was not satisfied with the type of cars Alpine was preparing for

Fuel injection for Gordini. (Photo CD)

the Le Mans 24 Hours with his new V8. He approached Mr Gironnet, professor at the Ecole Nationale Supérieure des Arts et Métiers in Paris and asked him for help. Luckily I was in the right place at the right time; I was starting my final year there and was looking for a good subject for my engineering thesis.

"Beyond our wildest dreams, Mr Gironnet asked three of us – Gilbert Tchobanian, Alain Robinson and me – to design a special Le Mans racing prototype for Mr Gordini. It was to use his V8 motor, a ZF transmission and some suspension parts from an Elva. Of course we took this dream project very seriously; we briefed Mr Gordini a couple of times during the remainder of 1967 and in May 1968 made our final report in his office. We presented all the drawings, some calculation results and the final model of the car.

"Clearly Mr Gordini was impressed, because he offered me a job when I went to his office in early June 1968. So I went to blvd Victor. It looked like an old workshop from the 1950s – there was not much science but there was a great deal of experience. Gordini was always trying to do things simply and on the cheap. He trusted me, however, and I went to Germany with Alain Marguet to learn about Kugelfischer, and then to England to learn about Lucas, and by the autumn of that year I was permitted to design a version of the injection for one of the 4-cylinder engines. This was to give me my first experience of the relationship between Alpine and Gordini. I had been hearing that the old mechanics at Gordini were frustrated with Alpine but also they recognised that it was also in some ways Gordini's fault, because he was still doing things as he had in the past, and frankly, as happens in any organisation, they were nearing the end of their careers: the mechanics there were due to retire soon."



The Castaing car. (Photo FC)

At the Le Mans tests in April, the first A220 chassis 1730 went round in 5min 04.6sec after a short and troubled time on the circuit – not very quick. After the Le Mans trials the Alpine team decided to take the car to Monza for the 1000km. It would be both a high and a low point for Alpine.

No. 2: Bianchi/Grandsire. (©R)

Two cars were taken. Chassis 1727, the A211, was put in the hands of Patrick Depailler/André de Cortanze. Running race No. 1, they qualified ninth on the grid with 3min 10.07sec in this V8 interim car – an impressive achievement, but more was yet to come. The new chassis 1730 A220, carrying race No. 2, with Mauro Bianchi/Henri Grandsire aboard, started in eighth place, with 3min 09.6sec! On pole was the John Wyer-entered GT40 of Jackie Ickx/Brian Redman with 2min 57sec, some 2sec faster than the next car, the Siffert/Herrmann Porsche 908.

For Alpine, though, there was more to this A220's eighth position start in its first race. Here is what Mauro Bianchi has to say: "Phew! You know, I took more risks at Monza that year than I ever did in my career. The problems started from the moment we began practice. After our tests at Ladoux, Montlhéry, Zolder and Zandvoort and the Le Mans test weekend, I was getting used to the car's behaviour. I went on track at Monza and after several laps gradually went quicker (but still well below the car's limit). Then at one point, as I approached the Curva Grande very fast, I touched the brake to get some of the speed off. The brake pedal suddenly collapsed on the floor! Already off the throttle, I just had time to let the car slow itself, allowing me to change down and get round the corner. With some urgency, I let the car continue to slow, changing down, to take the Lesmo corner which was coming up. I crept round and into the pits

The Eifel Mountains delivered a familiar mix of damp and dry weather as the cars got underway for practice. The same two Alpines were entered: the A211 chassis 1727 for Gérard Larrousse/Patrick Depailler and the A220 chassis 1730 for Mauro Bianchi/Henri Grandsire. But a disaster occurred: the A220 was completely destroyed with Grandsire at the wheel as it became airborne and actually looped the loop backwards over one of the notorious Nürburgring humps, the air pressure under the floor lifting the chassis and turning it into an aircraft. Hitting the ground on its roof, it smashed to pieces; luckily Grandsire was able to climb out with only minor injuries after scattering wreckage for a hundred metres or so. The car, of course, would not start the race – or any other after that.

The A211 fared better and started from 21st on the grid with a time of 9min 29.6sec for the 14.189-mile (22.835km) circuit. 76 cars qualified to start on a bitterly cold day. Porsches dominated the race, the 908 being suited to this sinuous circuit. For Alpine, Larrousse/Depailler finished in ninth place, albeit some three laps behind the winners. As we will see in a moment there was a lot of trouble in France with many strikes and industrial unrest. Gérard Larrousse explains: "I remember we had a lot of problems getting back to Paris because there was no fuel in the gas stations, so I took all the fuel we could get at the circuit and out of the cars, filled some jerry cans and put them inside the car to get us back to Dieppe. We just made it!"

With the Nürburgring over and the wreckage of chassis 1730 returned to Dieppe, there was just time to wheel out another new A220 chassis and hurry off to Spa the following weekend for the 1000km on 26 May. Alpine could get fuel in Belgium, was the hope. Although everyone was flat out at the factory, in the end Alpine decided not to take a brand new car but to take the old 211 again. After all, Le Mans was looming large – or so it was thought.

Larrousse/Depailler – Nürburgring 1000km. (©R)

The industrial unrest had started with rumblings of discontent within the universities of France; it began in Nanterre with the threatened expulsion of a number of students from the university there. This led to protests in Paris that escalated into more protest and riots after the French police entered the Sorbonne. Unrest spread quickly and started to threaten the ruling government when not only students but many of the general population reacted against the government and started several months of disturbance. Was this to be a another French Revolution? A general strike prevailed and over a million people marched through Paris. At Renault the factories at Boulogne-Billancourt and Flins went on strike as anarchy took a grip. The trouble had continued through May and into June and the Le Mans 24 Hours was postponed until the end of September.

Eventually, sanity returned and law and order were restored, but it was a different – some say more progressive – France that emerged from the troubles of that year. Alpine wanted nothing to do with the problems, but was inevitably affected by the supply of parts and having to deal with a few activists of its own.

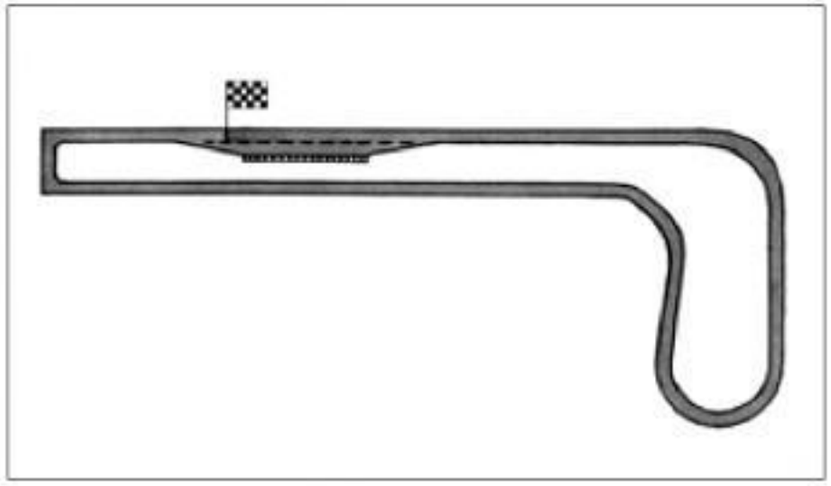
For the racing men from Alpine it was business as usual at Spa on 26 May, as it was for all of the sports prototype teams. Alpine, with the now well-used A211 carrying race No. 1 as it had at Monza, would go racing and forget the troubles back home for a short while. Mauro Bianchi and Henri Grandsire were selected to drive, with Jean Guichet as standby in case Henri hadn't recovered sufficiently from the Nürburgring incident. As it happened, he did recover and shared the drive to 13th overall from 17th on the grid, having set a grid position qualifying time of 4min 05.9sec. The race was wet – very wet – and many cars had problems with water in the electrics, but Alpine must have applied some of its rally experience as its cars' electrics never failed. There was one hiccup when Mauro, driving blind with no wiper, at last gave in to fear and returned to the pits to have a new one fitted. At Matra, a few pits up the pit lane, the crew was busy trying to dry out electrics. The A211 had to come in again for a longer stop when the wiper motor burnt out. Other than that, the car and its V8 kept going to the finish, and took third in the prototype class.

John Wyer's team won with the Ford GT40 of Ickx/Redman a lap ahead of the second car, the Mitter/Schlesser 907 Porsche. Alpine left Belgium and returned to a troubled France.

With Le Mans moved to September, all of the teams – and especially Alpine – were able to develop their cars with some time to spare. Alpine tried out a new A220 chassis at the Zeltweg airfield circuit in Austria on 25 August.

Listed as chassis 1731, the 3L-powered car carrying race No. 5 qualified in fourth place on a grid of 19 cars. The race was to be run over 157 laps of the 1.988-mile (3.2km) circuit, and would last 2h 55min in warm conditions. It was won by Jo Siffert in the new, rapidly developing Porsche 908. For many of the teams it would be a last trial before Le Mans, and, although only 19 cars lined up, it was a class field that would be watched by the great Juan Manuel Fangio who was attending the event whilst on a trip to Europe. Mauro Bianchi was chosen to drive alone, although André de Cortanze was on hand if needed. Although Mauro proved to be quite fast, in practice the car spent a lot of time in the pits with electrical gremlins.

Come the start, though, Mauro stormed away and, although eventually caught by the Porsches, was putting up a grand show with the new car until on lap 27, when he went a little off line,



Zeltweg airfield circuit.

Waiting to go out on track. (Photo MB)

caught one of the straw bales lining the course and not only damaged his steering but also broke an oil pipe, which led to a rapid loss of oil. His race was over.

Marcel Hubert was heavily involved in testing aerodynamic ideas whilst the team and its main test driver, Bianchi, continued to work on chassis development. Further tests were conducted at Zolder and Monza, as well as at the Ladoux Michelin test track and the local airfield close to Dieppe in the time between Austria and Le Mans.

The Nürburgring 500km had been a happy hunting ground for Alpine in previous years, and this time, although it would be a non-Championship round, on 4 September Henri Grandsire was entered and would have a good run in an A210, chassis 1725, with a 1470cc engine, finishing in fourth out of the 78 cars that started. There was another entry, too, for this race: the old chassis 1709 had reappeared, this time in the hands of 'Peter Rand.' Peter, or as we can now use his real name, Jean-Pierre Rémusat, takes up the story: "I bought this prototype chassis 1709 personally from Jean Rédélé in 1968. He said at the time that it was the one which won the energy index in 1964 at the Le Mans 24 Hours with Delageneste/Morrogh (No. 46), but, in fact, I found out years later that it wasn't! For reasons of reliability and endurance (and also of finance as a privateer), I had Alpine fit it with an R8 Gordini 1296cc engine with large valves, specially prepared by Mignotet, coupled to an R8 Gordini 5-speed gearbox, turned around and inverted as on the then Formula France, which later became Formula Renault." (This modification is confirmed by the documents kept by Gilbert Harivel from the time and the records of Jean-Claude Rehlinger.)The M64 came home third in the up-to-1300cc class on 19 laps of the scheduled 22. Peter Schetty was the overall winner of this year's Nürburgring 500km in a 1.6L Abarth.

'Peter Rand' again: "I had also entered the car in March 1968 for the Coupes de Pâques (Easter cup races) at Nogaro and also the Montlhéry events on 12 May that year along with Alain Douarche (Coupes de l'ACIF, AGACI, Salon, etc.). The problems which caused the June Le Mans to be put back to September allowed us to put in an entry but we did not qualify. I also did a race in Belgium on an airfield that year – the only thing I remember about it was that it was an airfield!"

A little over four weeks after Zeltweg and two after the Nürburgring 500km, it was time for the whole Alpine factory team to go down to La Sarthe for the re-scheduled Le Mans 24 Hours on 28-29 September. It was to be an eventful weekend.

Before we talk about that race, however, let's take that customary look back to the test days on the weekend of 6-7 April.

Alpine took seven cars; two were A110 Berlinettes and the others were prototypes:

Larrousse – April Le Mans test weekend. (©R)

Quick on the test day but not entered for the race: the V8 211. (Photo CD)

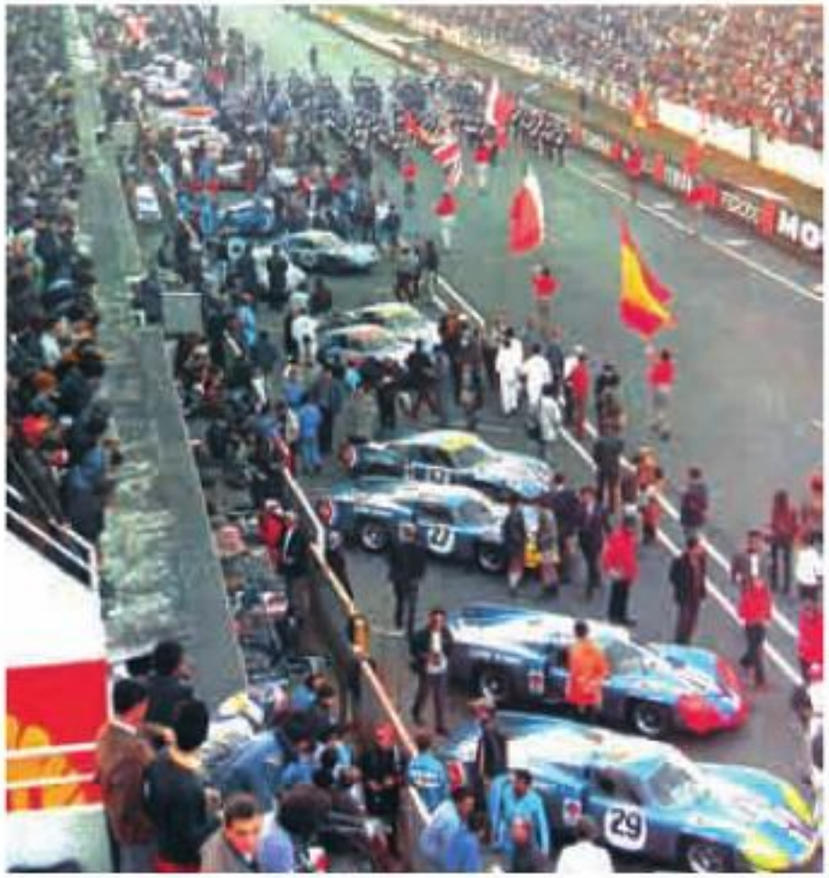
Car no:	*Type:*	*Chassis:*	*Engine:*	*Drivers:*	*Time:*
29 (not used in race)	A211	1727	V8	Mauro Bianchi	3min 49.4sec
67 (car 57 in race)	A210	1723	1470cc	Christian Ethuin	4min 20.0sec
52 (car 52 in race)	A210	1721	1296cc	Gérard Larrousse	4min 25.3sec
54 (car 56 in race)	A210	1726	1005cc	Gérard Larrousse	4min 36.7sec
30 (destroyed at Nürburgring)	A220	1730	V8	Mauro Bianchi	5min 04.6sec

The driver line-up: (l-r) Bob Wollek, Jean-Pierre Nicolas, Christian Ethuin, André de Cortanze, Jean Vinatier, Alain le Guellec, Bernard Tramont, Jean Guichet, Jean-Pierre Jabouille, Henri Grandsire, Gérard Larrousse. On the right on the wall: François Castaing. (Photo FC)

Saturday 28 September. Le Mans was warm and dry, though rain was forecast for the night. On pole was the new Porsche 908 of Jo Siffert and Hans Herrmann; Siffert had put it there with 3min 35.4sec, an average speed of 139.876mph (225.109kph).

As the cars lined up for a 3pm start this year (there being more light than at the traditional start time), a rain shower added spice to the excitement, making the track a treacherous proposition for the opening laps.

The nominated start drivers in each team took their places across the track and, as the clock ticked round to 3pm, the crowd fell quiet: only a few seconds to go. Suddenly, the drivers were off and running to their cars, followed by the tearing-calico sound of the smaller engines and deep rumbles from the big boys' engines as 54 of the 58 qualifiers got away. So began the drama; those that chose to start on slicks quickly benefited as the track dried and it was Jean Guichet in the A220 No. 29 who

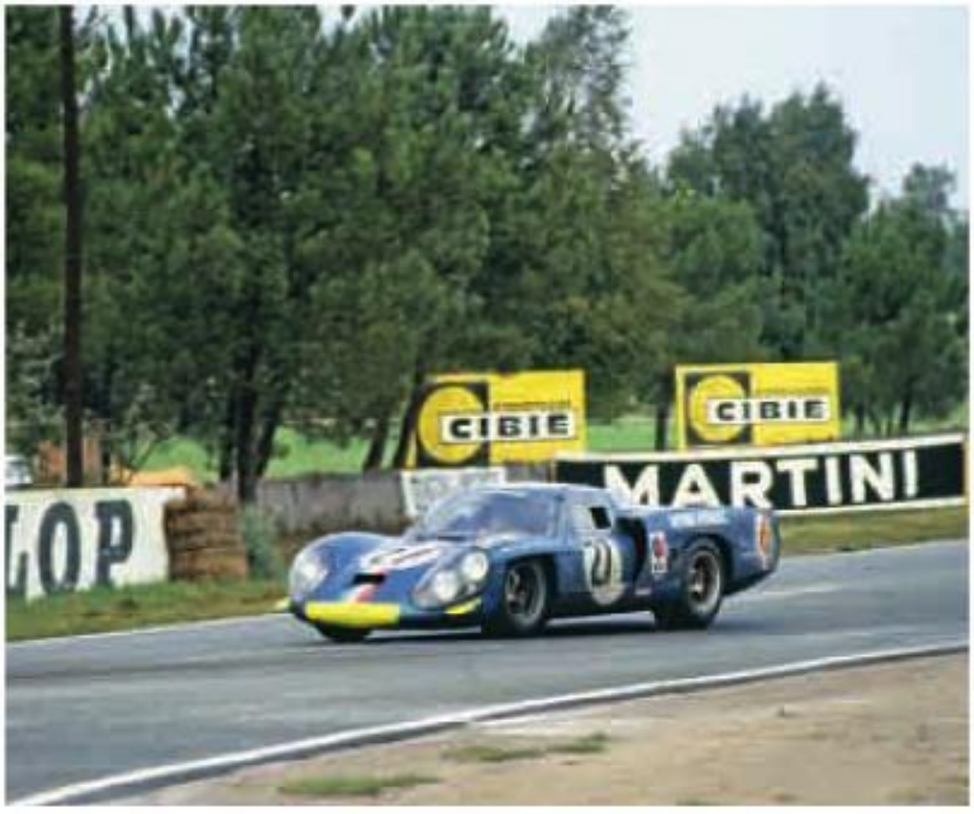


Saturday afternoon line-up. (Photo JS)

It always rains at some point! (Photo FXD)

was with the leading Porches and an Alfa Romeo at the one-hour mark. Things had started well. Would it last? We will look at each Alpine in turn.

The fastest of the Alpines in qualifying was car 27, with Mauro Bianchi at the wheel. He got off to a great start, slotting in behind the leading Porsches, but slipped back to 13th place at the end of the first hour following a pit-stop. The car was back up to sixth in the second hour with the flying Depailler at the wheel and overtook Guichet by the third hour to be the leading Alpine. Come the fifth hour, they were in sixth place overall. By now the race had settled down and it was the GT40s, Matra and Porsches that led the field. Things were looking good, but the team's optimism was premature; problems were about to start, with pit-stops not only to refuel and change drivers but also to repair exhaust brackets broken through vibration; they also had a door come loose. So it was that they dropped down the field and lost several places.



Bianchi running well at this stage. (Photo LAT)

No sign of a problem here. Siffert Porsche alongside. (Photo FXD)

Disaster for Mauro. (Photo MB)

Undeterred, Depailler and Bianchi pushed on hard through the night, and regained places to such an extent that by the Sunday morning they were back up to seventh position overall. Now that Jean Rédélé was witnessing his cars running near the front of the race, maybe the thought entered his head: could the dream really come true? At last they were nearly fast enough, but although speed counts here so does reliability and luck.

During the 20th hour, Depailler came in complaining of vibration again; the drivers changed over and Bianchi got in whilst the mechanics changed the discs and pads. All ready to go, Mauro found the car would not start; a very frustrated man, he waited, itching to get away, while the starter motor was changed and the competition streamed past; but let's hear Mauro telling the story:

"The car spun wildly into the fence at almost full speed and the right-hand fuel tank ripped off, spilling fuel everywhere; then the left tank exploded and ignited the rest in a ball of flame."

"All night we had been fighting in the rain, risking aquaplaning at over 270kph, almost leaping from puddle to puddle sometimes. Both of us were exhausted, but by morning we were challenging for sixth. We felt the race could go well

Debris and fire. (Photo MB)

for us and we kept ourselves going. Then Patrick came in saying everything was shaking. We found a cracked disc, and while they did the mechanical stuff I got in and settled down to wait. Then when the work was finished and I was ready to go, the starter didn't work so I sat fuming while they changed it, knowing our position was worsening all the time. I waited

of the rear bodywork flying off during qualifying, but in the race luckily managed to keep it on. They were not without problems, however, as they lost time in the early laps due to a windscreen wiper problem, then later a disc required changing. They also had a rear window split, but although they had several stops others had more, and by 7am they were running in 13th place. André Désaubry, engineer on the day: "I remember that I was with Jean-Pierre Legrand, responsible for this car of de Cortanze/Vinatier. We had to make a modification to the car on the Saturday morning. We were checking that everything was ready when de Cortanze, noting the likelihood of bad weather, said to me that we should drill a hole in the windscreen wiper motor spindle and make a little split pin to stop the wipers from coming off. Jean-Pierre drilled the spindle but didn't realise that the diameter of the hole was too big in relation to the diameter of the spindle. The race started and when the car was on the Hunaudières straight it started to rain; the driver put the wipers on and they flew off the car! De Cortanze came into the pits not a happy man! However it was repaired quite quickly and he pressed on, but during the night there was a problem getting the starter motor to operate and the engine was vibrating a lot. It was a disaster – we had those starter problems with four cars. Because of the problems of the starter on other cars I knew that we would have the same problem with the de Cortanze car. Sure enough, as Vinatier took over the wheel during the night he found his starter had failed. So to save time, although it was against the rules, I told Vinatier to pretend to start the car while we surreptitiously lifted the car and I touched the contact of the starter to avoid having to dismantle it. It looked as if Vinatier had started, but it was me who had started it! The car set off; we saved some time and nobody noticed. But we were not the only ones to play tricks!"

They survived the rainy night and a series of maladies to complete the race and finish in eighth place overall and third in prototype 3L – not so bad, plus it meant that at least one A220 with the V8 Gordini had got to the finish of the 24 Hours. It proved it could be done.

Car 52: Thérier/Tramont. (Photo CD)

Car 52, the Jean-Luc Thérier/Bernard Tramont A210 running with the 1296cc engine, proved a revelation in consistency and reliability. Chassis 1721, by now an old campaigner, had a race-long battle with team-mates Bob Wollek and Christian Ethuin, and also with the race-winning Ford of Lucien Bianchi/Pedro Rodriguez for the thermal efficiency index. Indeed, in the end car 52 came out the winner in that efficiency class and tenth overall in the race. Much of the credit went to the superb night driving of Thérier as he consistently lapped as fast as the bigger 3-litre engined cars. Tramont was delighted with his début and class victory.

Pit-stop for Christian Ethuin. (Photo Al)

Car 53, chassis 1724, weighing in a little heavier than the other A210s at 712kg, experienced brake problems two hours into the race. Overheating was suspected and the streamlined rims were removed. After this they climbed back up the field to finish 11th overall, third in the efficiency index and sixth in the performance index – a good result for Alpine; Bob Wollek and Christian Ethuin were happy men.

Jean-Claude Andruet and Jean-Pierre Nicolas were in car 55, A210 chassis 1725. It was fitted with the little 1005cc engine, the smallest capacity in the race, and whilst not the fastest they raised their game above their size and, after entering the night lying in eighth place in the performance index class, by morning they were in third place and were eventually to go on and win the performance index and the up-to-1150cc class, finishing 14th overall and fifth in the thermal efficiency index. A great result.

Not so lucky was car 56 of Jean-Louis Marnat/Jean-François Gerbault, chassis 1726; they too were running the little 1005cc in their slightly heavier car at 687kg. They were on Michelins, as opposed to the other A210s, which were on Dunlops, and were running at a steady pace until the ninth hour when the ignition system failed.

Alain le Guellec and Alpine debutant Alain Serpaggi had a great race in car 57, the A210 1470cc-powered car in the 1600cc class. It ran faultlessly for the full 24 hours, apart from tyre and brake pad changes, coming in ninth overall and winning the 1600cc class with a second in thermal efficiency.

It had been a traumatic, busy weekend. Worries over the condition of Mauro Bianchi dampened the celebrations for Alpine and Renault, but the 1600cc class victory, first and

Car 56, A210: Marnat/Gerbault. (©R)

Prix de la Corniche at Casablanca, Morocco. A mixed-car field saw André de Cortanze take victory in chassis 1734 from André Wicky in a Porsche 910. The second A220, chassis 1731, driven by local driver André Guelfi, failed to finish.

The race was held on Sunday 20 October. It was a scorching hot day and the crowd was estimated at around 35,000. At 4.15pm the competitors for the Corniche Grand Prix took their places on the grid. From the practice times it was obvious that unless something unforeseen happened victory would go to one of the Alpines. The local drivers were handicapped by ageing equipment and this had prevented them from getting good times in qualifying. There were only 13 drivers at the start of the race – it is reputed that some superstitious competitors asked the organisers to allow a 14th driver to take part! This they did, allowing a chap by the name of Lassus, who had won the F3 race in a Cooper and the tourist car race in a Mini Cooper, to line up in the Mini Cooper.

Delays during earlier races caused a problem for the organisers: the planned 50 laps could not be completed before nightfall. The organisers decided to cut the race to 40 laps. As the cars got away, de Cortanze took an immediate lead. André Wicky in a Porsche was in second place, with Dutoit on his heels. Guelfi, getting used to the car, was moving up as the race went on. By the sixth lap, de Cortanze's Alpine No. 124 lapped everyone except the second- and third-placed cars. Guelfi passed Dutoit and set off to catch up with Wicky, although he never looked a serious threat. However, Guelfi was struggling with a faulty gearbox (he had only two gears available by now) and eventually it caused his engine to break. De Cortanze was a minute in front of Wicky by the time the chequered flag came down giving victory to Alpine.

There had been another development during 1968. Alpine designed and built a car intended for its début in Formula 1, and back in June had entered the French Grand Prix with a single-seater car designated the A350 and

Fill-up and screen clean. (©R)

De Cortanze. (Photo JBB)

to allow cars to be developed which could still be creative but sticking to 3L.

No one expected what came next. At the Geneva Motor show in March 1969 Porsche unveiled what was to be the mighty 917, and not just one: back in Stuttgart 24 more of them were said to be almost all ready to go. They were 5L cars, meeting the regulations exactly and powered by a flat-12 engine claiming 500bhp – massive at the time. These cars heralded an era that many regard as the greatest ever – monsters, difficult to drive, spectacular to watch, blindingly fast and eventually dominant.

Alpine knew it had to up its game again, as did many other teams. Renault got more involved and the new factory for the engines, begun in 1968, was operational in Viry-Châtillon from February 1969, coinciding with the aforementioned opening of the new Alpine factory in Dieppe.

Alain Marguet, Gordini engineer in 1969, says: "There was at this time a fair bit of friction between the three parties – the relationship was not always fantastic. It was a big surprise to me, because, when I went to Gordini in 1965 I thought that everybody was special and worked for the same objective. In many ways they did, but then I began to see that there were some difficulties during 1967. In 1968, François Castaing had come as a trainee and he was on the dyno with me. I already saw he was a passionate guy. We worked together on the injection system and that was to be a major development in Gordini because they had always used carburettors. With the arrival of the Kugelfischer system, François and I went together to Germany to learn the mechanics of it for our 4-cylinder engines. Shortly after we returned from Germany, François had to go into the army in late 1968 to do his obligatory National Service, and while he was there we moved to Viry-Châtillon. Not everyone was pleased.

"I saw the bare ground at Viry-Châtillon and witnessed the construction of the new engine factory. Everyone knew 1969 would prove to be a huge challenge, but we thought that with nearly a year of experience with the A220 behind us, surely 1969 would see the 3L lightweights come to the fore and take on the less sophisticated and heavier, though well-crafted, 5L cars."

Gordini was developing a 4-valves-per-cylinder version of the V8 – the type 64 (the same 85 x 63mm targeted at 350+ bhp) using carburettors and the type 64A which was to be fitted with Lucas injection. So, although there was some criticism regarding the speed of development and power outputs, the Gordini side of things was looking to the newer technologies, although perhaps not fast enough.

Richard Bouleau's previously mentioned flat suspension

More 917s for homologation. (Photo AB)

Amédée Gordini with Giuseppe Albarea in the new Viry-Châtillon works, 1969. (Photo GA)

Interim car: note the side radiators and new nose. Jean-Pierre Jabouille at the back. (©R)

View of new rear part of the 69-type A220. (©R)

would be tested but not raced. Richard Bouleau: "On the rear axle of the modified A220, called an A221 with the flat (push-rod type) suspension, we obtained similar satisfying results as we had with our A350 single-seater car the previous year, but owing to shortage of time and some feelings within Renault, the development of the suspension was discontinued in the end, though we tried it at Le Mans in practice. However, the experience was amazing and gave us a lot of information at the time. Looking back I wonder, if only we had been curious enough to explore far beyond the things which were common then, what could we have achieved?"

For 1969 Alpine had decided to change the layout on the A220 and moved the water and oil radiators to the rear of the mid-engined car behind the rear wheels from the original positions, just behind the driver's cockpit. However, Marcel Hubert was not in favour of this idea, which came from André de Cortanze; he favoured the existing side-mounted radiators. Alpine also decided to be selective about its races and to concentrate on Le Mans and the development of the cars specifically to run there. Victory at the La Sarthe circuit was the prime target and thoughts of the sports prototype championship were now put aside. Everything was to be geared to getting the cars to Le Mans and to win – outright, if possible. The early-season races in the USA and at Brands Hatch were ignored and Monza would be the first outing for the new version of the A220, designated type 69. Aerodynamic devices were now in vogue and many teams were experimenting with wings, flaps, ailerons, Gurney strips, and small winglets on the front of the cars.

At the Le Mans tests, held that year on the weekend of 29-30 March, Alpine took three A220s, numbered 30, 29 and 28 respectively for the tests.

Car 30, chassis 1736, was a completely new car featuring the rear-mounted radiators and the slightly higher fins on the sides at the rear of the body which accommodated a lower-profile rear body centre section, allowing a deep conventional wing to be mounted between the fins.

Alpine was making detailed attempts not only to understand the performance effect created by the various aerodynamic devices, but also to take full advantage of the updated regulations to create a lower, sleeker-shaped car. However, as has been customary throughout this book, we will look more

New evolution chassis, car 16. (Photo MM)

The interim type 68/69 with side radiators and the 69 front. (Photo MM)

closely at the Le Mans tests in conjunction with the story of the race later on.

For racing we go again first to Monza, to look at the 1000km. Thankfully, this year it was warm and dry on 25 April, a national holiday to celebrate the anniversary of the liberation of Italy in 1945. The banking was still in use but there were now chicanes in place to reduce speed; even so, the top cars were hitting 273kph (170mph) on the pit straight. 80 cars were entered but only the quickest 52 would be selected.

Car 16, chassis 1736, the new type 69 car, was for André de Cortanze/Jean Vinatier; they qualified in 11th place with 2min 59.7sec.

Car 18, chassis 1735, was the older type 68 car for Patrick Depailler/Jean-Pierre Jabouille. They qualified in 12th with 3min 2sec.

Finally, car 15, a type 68 car, chassis 1731, with Jean-Claude Andruet/Henri Grandsire aboard, qualified 17th but failed to make the start due to engine failure in the second practice session.

52 cars got away at the 11.15am start as they moved from the dummy grid to the grid proper to commence a rolling start. Pole sitter Mario Andretti in the Ferrari 312P tore away looking like he owned the place, much to the delight of the Ferrari fans at their hallowed home track, with Siffert (Porsche) and Rodriguez (Ferrari) in very close attendance. Further back, the Alpines started a race-long battle with the Kelleners/Joest Ford and the Gardner/de Adamich Lola.

The start. (Photo RP)

The pace was fierce and the de Cortanze/Vinatier Alpine succumbed to engine failure after only 11 laps, leaving Depailler/Jabouille alone to fight the battle. It was a long fight, with the cars all swopping places on a regular basis. As they entered the final 10km of the race, the A220 No.18 was still in a side-by-side struggle with the Lola driven by Frank Gardner

and the Ford with Helmut Kelleners aboard, although all three were by now nearly seven laps down on the leader. Coming to the Lesmo curves with two laps to go, the front right-hand corner of the Lola collided with the Alpine, sending it spinning off the track. It turned over on its roof and, unfortunately, Depailler, who was at the wheel, suffered a broken rib, although he managed to get out. Incidentally, the pedal box was completely ripped out and found many metres away. They were classified, but not running at the finish, in sixth place on 91 of the scheduled 100 laps. Although the result was not good, in front of the Alpine were the now limping Lola T70 in fifth and the Ford GT40 in fourth, with the winner on the 100-lap mark being the Jo Siffert/Brian Redman Porsche 908. Second was the Hans Herrmann/Kurt Ahrens Porsche 908 on 99 laps, and third the privately entered Porsche 907 of Gerhard Koch/Hans-Dieter Dechent. What if the three-way battle with Alpine had gone to the line? The remains of 1735 chassis went back to Dieppe and did not race again.

"Coming to the Lesmo curves with two laps to go, the front right-hand corner of the Lola collided with the Alpine, sending it spinning off the track. It turned over on its roof and, unfortunately, Depailler, who was at the wheel, suffered a broken rib ..."

1969 would mark the end of several eras and here at Monza this was the last time the famous combined road circuit and banking would be used. The banking was beginning to show its age, and the speed and power of the current cars were assisting its decline; it was the end of a spectacular if hazardous period of motor racing at Monza.

Jean Vinatier: "I have an interesting memory of Monza: Michelin arrived with some wheels in a polyester-type material, basically plastic! A big surprise – wheels were usually aluminium or magnesium alloy and it was the first time Michelin had tried plastic. I didn't have any problems with those Michelin wheels and when I saw the wheels arrive, I discussed with Pierre Dupasquier the possibility that they might be interesting for rallies. I drove an SM on the Morocco Rally some time later with Michelin plastic wheels, but they were not used again for prototype racing." According to the records of Gilbert Harivel, chassis 1734 was also used to test these wheels in a separate test later in 1969, though the exact date is not recorded.

After the decision to cease using the Monza banking from

Jabouille inspects the wreck of the car. (Photo CD)

1970 onwards, there was also some uncertainty over the future of Spa, as the teams arrived in the Ardennes for the 1000km on 11 May 1969. The Grand Prix had been cancelled on safety grounds, but here they were running the very high-speed sports prototypes in the 1000km race! No one complained, though; in fact, everyone welcomed the race at Spa. Matra was to have sent three cars, but a fire in the engine test buildings had severely hampered Matra's activities, and it decided to concentrate on getting things repaired and preparing for Le Mans, so gave Spa a miss. 37 cars did turn up and appeared for practice, including Alpine who had regrouped and arrived with three cars. One of them turned up sporting a high wing configuration: this is believed to be chassis 1736, with the rear radiators and low rear engine cover. This car was fitted with a new dual Girling brake system as well as clutch pipework and four ventilated discs. Rear calipers were now fitted on the front of the hub mounting, and the modifications included new master cylinders for brakes and clutch. The fuel system, too, was modified and now had four pumps serving the right and left tanks. A small oil tank was relocated at the front of the car with pipes going through the

1731: Andruet/van Lennep. (Photo EM)

Grandsire had engine problems; shortly after Jabouille took over, the engineers traced the fault to the ignition. The de Cortanze/ Vinatier car finished the race in 17th, completing 57 laps (the race was over 71 laps). 21st were Jabouille/Grandsire, who had been obliged to stop several times due not only to the electrical fault but also to loose body panels and engine leaks. Andruet in car 3 stalled at the start and was late away, and later van Lennep stopped when a shock absorber failed, although another record states it was the gearbox – whatever the reason, it failed to finish.

Jean Vinatier: "André was a very good driver, you know, and he also had the advantage of having done a lot of testing with that car, because he did the tests at Michelin and everywhere else since Mauro was not available, still recovering from his burns from 1968. André was also in charge of the test team and, as he was to race the car and did the testing he was very used to it and drove very well."

As before, the cars ran well when everything worked OK, but the niggling problems with bodywork fixings and engine leaks were a cause for concern with the 24 Hours approaching rapidly. Depailler was still not fit after his accident (which was

The car's only time in Britain. Silverstone: Dunlop tyre testing. (Photo LAT)

why Jacques Cheinisse had contracted David van Lennep to join the team); Mauro Bianchi had by now decided not to race anymore.

After Spa, car 4, chassis 1736, was taken to Silverstone in the UK for a tyre testing session with Dunlop, where tests were carried using Dunlop CR82 tyres. As can be seen, the standard low rear engine cover with the low wing and tunnel under it had small aerodynamic tabs on the back of the wing section. (As far as the author is aware, this is the only time the Alpine sports prototypes of that period ever went to England.) The tests were interrupted by an ignition problem and an oil leak at the front caused by a broken chassis tube.

Chassis 1734 went on to the Bugatti Circuit at Le Mans for electrical system tests, though these were interrupted by a gearbox failure.

Alpine decided not to send any current factory cars to the Nürburgring 1000km. However, there was an Alpine there, an entry in the name of 'Peter Rand' again, the pseudonym of Jean-Pierre Rémusat, driving his own car, the old M64, chassis 1709; with him was Alain Douarche. They qualified 51st on

'Peter Rand'/Alain Douarche, M64. (Photo MR)

the grid with 10min 56.5sec but went out on lap 16: just as they were changing drivers, the starter failed. This race was one of the first to abandon the Le Mans-style running start: circuit modifications to the start area had narrowed the track, making a rolling start the safer option.

Jean-Pierre Rémusat: "In 1969, as in '68, Alain Douarche and I took part in various races in France and at the Nürburgring. Why 'Peter Rand'? At the time when I was rallying and circuit racing my profession as a lawyer prevented me from using my own name, so I made something up from the initials of my girlfriend's Christian and surnames!"

A week later, 'Peter Rand' ran the old M64 in the Grand Prix of Paris at the Montlhéry track just once more before selling his car to the AGACI school at Montlhéry.

A contemporary report states: "Jean-Pierre Rémusat, alias 'Peter Rand,' drove a Le Mans Alpine Renault 1296cc. He won the 1150-1300cc class brilliantly, at 108.29kph (67.28mph) average, in the international race for GT, sport, prototypes and

sport two-seaters. 'Peter Rand' also took the fastest lap in this class at an average of 111.176kph (69.44mph). His Alpine has just been sold to the AGACI Driving School."

So we come to June, to Le Mans. Renault and the whole Alpine team were hoping that this year's Le Mans would be their year, but they were not confident and justifiably so. The engine was not giving its claimed 300+ bhp and the envisaged 350bhp 4-valves-per-cylinder unit had not materialised, at least not for racing, though it had been run frequently on a test bed. The problem was not only the lack of horsepower: the engine still had a lot of vibration problems that had not been resolved after over a year of operation. Components failed, leaks occurred mysteriously – many things were not right.

The construction of the engines and testing were in question, too, and with hindsight it is sure that the move from the blvd Victor to the new engine facility in Viry-Châtillon played a part. Gordini had the testing rig at the blvd Victor but from March 1969 the engines were being built in Viry. The test bed in Viry was not yet up and running, so the engines had to be transported to and fro, as did many of the employees. Some were happy about it; others were not, and morale was not at its highest. Alpine was concerned that it could not do adequate testing due to the supply of engines and complained to Gordini. Gordini complained that the Alpine cars were not as fast chassis-wise as the competition. Renault was just expecting results.

On top of this, the Porsche 917s were now producing over 500bhp; Matra had 400+ bhp from its own V12, as did Alfa Romeo, though the Mirage drivers using the BRM V12 2-valve engines were also complaining bitterly at having only 375bhp.

In reality, things did not look good for Alpine. But this is Le Mans; anything can happen and many times the tortoise has managed to beat the hare, so the dedicated Alpine team members arrived with eight cars and at least some hope.

"Alpine was determined to turn out a full team of engineers and mechanics to support a raft of drivers to make the most of this test."

As previously, before we get into the race weekend let's take a look back just a few months to the Le Mans trials, held on 29-30 March. That weekend, 24 cars were entered including the new and very fast Porsche 917, which would end the weekend some 3sec faster than anyone else. A 3min 30.7sec lap put Rolf

Chassis 1709 at the AGACI Driving School, Montlhéry. (Photo FJ)

917 Porsche flat 12, 500+ bhp. (Photo MB)

I-r: Rédélé, de Cortanze, Bianchi, Jean-Luc Thérier (crouching), Tramont, Féret. (Photo CD)

Stommelen on top, hitting nearly 250mph (402.33kph) on the long Hunaudières (Mulsanne) straight.

Alpine was determined to turn out a full team of engineers and mechanics to support a raft of drivers to make the most of this test.

No. 28 was a 1968 car with side radiators and the comb-type rear wing section, chassis 1731.

No. 29 was a 68-69 evolution car chassis 1734, at this stage still with side radiators and also sporting a neat split-wing system on the rear. It was interesting in that it was activated by suspension movement, but the results were questionable! Its oil and water tanks were now in the front and all the radiators and coolers in the rear behind the wheels. The air intakes in the front were to cool the brakes, which had now been changed to Girlings, as with chassis 1736 which had the Girling system from the beginning. The suspension mounting points were lower and the team now used 'Le Carbon' shock absorbers in place of Konis. The engine on this car, though an upgrade, still claimed to develop only 307bhp at 7400rpm.

No. 30, chassis 1736, was the latest type 69 spec car, low rear engine cover with central low wing between the fins and splitters forming a tunnel between the wing and the rear cover. Late on the afternoon of Saturday 29, the still recovering Mauro Bianchi proved he had not lost his style when he took car 30 round in 3min 41sec (average speed 219.4kph – 141.3mph); even so, this was some 11sec slower than the new 917 (average speed 230kph – 142.91mph). Mauro also drove car 28, chassis 1731, to record 3min 50sec. Depailler at the wheel of car 29 recorded 3min 51.8sec. Clearly the A220 V8s could run reasonably quickly; they had the design right, but the competition was just going quicker. The Gordini still lacked power: if they had the 500bhp that the Porsche had, they may well have been competitive.

Because a spare wheel and luggage space were no longer mandatory, the cars could now have their batteries as well as oil tanks located in that space at the front. The huge side air intakes were smoothed over on the new cars now that the radiators were located in the rear, so the cars not only looked fabulous but were in effect much more slippery through the air.

Other cars that started on the Saturday of the 2-day test were chassis 1726, running with No. 51 (car 45 for the race) with a 1470cc engine and Porsche gearbox. This also had Girling brakes as opposed to the ATE system used on the other 210s and was driven by Bob Wollek. This car featured the injected engine that had been under development at Gordini by François Castaing just before he left to do his military service in late 1968. It had a basic system to begin with, but would carry a developed Kugelfischer unit in the race, allowing the engine to develop around 160bhp. Wollek turned in a 4min 7.9sec lap.

Car 52, A210 chassis 1725, 1470cc, with Porsche gearbox and ATE brakes, was driven by Henri Grandsire to a 4min 11.2sec lap.

Car 54, A210 chassis 1721, gave Andruet a 4min 21.7sec lap.

The final prototype was car 55 (car 50 for the race), A210 chassis 1723, 1005cc, Porsche gearbox, ATE brakes, which went round in 4min 43.8sec, also driven by Andruet.

Also on hand to drive the prototypes were Bernard Tramont (4min 49.6sec), Alain le Guellec (4min 23.2sec), Patrice Compain (4min 57.6sec), Jacques Foucteau (4min 59.4sec) and Jean-Pierre Foisy (5min 11.1).

The following day, Sunday 30 March, dawned cold and dull but initially dry; it would turn to rain as the day wore on. The fastest Alpine was de Cortanze on 3min 44sec. However, Jean-Claude Andruet had the kind of fright experienced by others the year before as the front wheels lifted on the Mulsanne; fortunately the car touched down without problem and Andruet was able to continue – somewhat shaken, if not stirred. Several others had gone out and returned after warm-up laps and were beginning to prepare to set times when suddenly it became a day of tragedy for the Bianchi family. After Mauro's brush with death

Car 55, Andruet's test car, takes a rest in the workshops. (Photo AAA)

Practice: Depailler/Jabouille. (Photo AJ)

the year before, he was present here at Le Mans when his brother Lucien failed to return to the pits. Lucien had touched the grass at full speed on the straight and crashed fatally in the Alfa Romeo 33/3. Mauro decided to stop racing from that moment on and left the circuit.

Testing continued at Alpine but in a subdued atmosphere, mainly concentrating on developing the new low-profile Michelins and the wet versions, while the small-engined cars tried the Dunlops. As the rain came down ever harder, Le Mans became a miserable place and after lunch most teams started to pack up. Alpine returned to Dieppe to plan for the Monza 1000km.

By June, many more safety measures had been installed at the La Sarthe circuit, with barriers the full length of the Mulsanne straight, bigger run-offs on corners, and, for the cars, a blanket ban on all aerodynamic devices that took the form of high or movable wings following a number of failures and accidents in Formula 1. A row developed over the movable flaps on the Porsche 917s: Porsche wanted to keep them but others protested. Finally it was agreed that the 917 was even more unsafe without them, so they stayed, but the 908s had theirs removed; peace was restored. Alpine had already decided not to pursue the high wing idea seen in the pre-qualifying tests at Spa. It ran the low, fixed wings between the rear wing fins. Also, in the same way that we saw the demise of the banking at Monza and the Le Mans start at the Nürburgring, which brought an era to an end at those tracks, so too at Le Mans it would be the last time the drivers would line up across the road and run across to jump into their cars in the traditional Le Mans start.

With the old ideas and ways changing, so a new era was about to begin. As in the 1930s, there would again be giants roaming the earth. Porsche would be represented in force – 16 cars including private entries would form the bulk of the 45 starters. Alpine brought eight cars. They were:

Chassis 1721, A210, 1296cc, car 49, for Jacques Foucteau/Patrice Compain.

Chassis 1723, A210, 1005cc, car 50, for Alain Serpaggi/Christian Ethuin.

Chassis 1725, A210, 1470cc, car 46, for Alain le Guellec/Bernard Transont.

Chassis 1726, A210, 1470cc, car 45, for Jean-Claude Killy/Bob Wollek.

Chassis 1731, A220 first model (type 68), 3L, car 31, for Jean-Pierre Nicolas/Jean-Luc Thérier.

Chassis 1734, A220 updated to new design (type 69), 3L, car 30, for Henri Grandsire/Jean-Claude Andruet.

Chassis 1736, A220 3L car 29, type 69, for Patrick Depailler/Jean-Pierre Jabouille. This was now additionally fitted with an SEV Marchal alternator and regulator, a new-type Teleflex screen wiper and Marelli electronic ignition. 1736 was able to reach 341kph at top speed. After testing, a fresh engine was fitted for the race.

Chassis 1737, car 28, A220 all-new 1969 design, 3L, for André de Cortanze/Jean Vinatier; this car was finished on 28 May and was tested at Ladoux prior to Le Mans.

Grandsire/Andruet in practice. (©R)

Coming here soon! (Photo JS)

A look at the qualifying times will give some idea as to the mountain Alpine had to climb. This was the beginning of the super-car age; the 917 Porsches had raised the bar. Ferrari had entered two cars – the beautiful 312Ps seen earlier in the year; they were fast, but not fast enough. Matra came with four cars; they looked good in practice and qualifying but their looks flattered to deceive: the race would be a different matter. Then, of course, there was the inevitability of the reliable Ford-powered cars, now in the form of the John Wyer GT40s.

Fastest, almost predictably, was the Porsche long-tail 917 of Rolf Stommelen/Kurt Ahrens. Their time in this 4.5L car was 3min 22.9sec, an average speed over the 8.369-mile (13.469km) circuit of 148.494mph (238.977kph) – considerably faster than they had been in the spring!

Second fastest was the Porsche long-tail 917 of Vic Elford/Richard Attwood on 3min 26.7sec, with the fastest Alpine being No. 28 of de Cortanze/Vinatier; their time of 3min 44.9sec was nearly 22sec slower than the Porsches, though quite respectable for the down-on-power V8s.

The Alpines lined up thus:

Car no:	*Place on grid:*	*Time:*
28	18th	3min 44.9sec
31	19th	3min 45.0sec
29	20th	3min 45.6sec
30	21st	3min 54.8sec
46	32nd	4min 17.0sec
45	34th	4min 22.4sec
49	35th	4min 25.8sec
50	44th	4min 40.3sec

Vinatier (28) presses on. (Photo CD)

Problems: de Cortanze tries to fix the wheel nut. (Photo AB)

race. He led the field in a mad charge, but as he was fighting with the handling of his fearsome car he went off at Maison Blanche. The car turned over and caught fire; as its fuel tank broke free, spilling blazing liquid all over the track, part of it became jammed under the Ferrari of Chris Amon. Furiously, Amon zigzagged the car and was luckily able to shake it free and continue, but Wolfe, who had failed to belt himself up in the car as it left the line, was thrown out of the wreckage as the car disintegrated. He died in the helicopter en route to hospital. The track was almost blocked and it was several minutes before all the cars could pass and many of these were to suffer problems caused by driving over debris left on the road after the accident.

Many teams were in difficulty, but as the track was cleared and racing continued, the 24 Hours settled down.

For Alpine the race developed as follows:

Car 28, the fastest in practice, was running in 16th place after an hour of racing and in 11th place after five hours, but the old problem of wheels reared its head again and just after 7pm a securing nut parted company with the left rear hub and the wheel was now almost off. De Cortanze, who was driving at the time, tried to return to the pits but was prevented from doing so by the marshals. Then a miracle occurred! As if by magic, the nut suddenly materialised (author's note: I saw a video that showed it being picked up by a marshal). The team, getting the message of André's problem, dispatched Claude Foulon, his mechanic for this race, through the infield of the circuit with a lightweight jack and wheel nut spanner together with a new nut. The marshals, who probably feared execution if they didn't turn a blind eye, allowed the French car on French soil to be repaired sufficiently to let him limp back to his pit. Back out with a new wheel and nut, it raced on until it ground to a halt between

Depailler/Jabouille followed by Larrousse. (Photo CD)

midnight and 1am approaching the Mulsanne: after 133 laps, oil pressure loss had resulted in engine failure.

Car 29 managed to steer clear of the crashing 917 of John Wolfe on the first lap, but Jabouille had to drive through a wall of flames which had ignited the car, necessitating a stop on the track to wield the fire extinguisher. After a pit-stop it was up to 19th place by the two-hour mark. Then began a series of horrors: oil leaks, pit-stops, gasket changes, and finally, after struggling through the night and with hopes that they might just survive, a broken connecting rod in the engine brought an end to their challenge just after 6am Sunday on the 209th lap.

Car 30, chassis 1734, had been modified to bring it up to 1969 spec, with rear radiators, improved bodywork, etc. It suffered overheating from early on and never ran higher than 17th, failing completely on lap 48 after six hours of racing – engine again. Poor Amédée Gordini, who must have been distraught by now, blamed Alpine for the lack of cooling on the cars. At the time, Alpine saw this as sour grapes, but an analysis of the situation and interviews with both Alain Marguet and several engineers from Alpine all indicate that Amédée Gordini did, in fact, have a point, though it was not the sole reason for the engine failures.

Car 31, the old-design 1968 car, chassis 1731, looked as if it might be successful and, in fact, by late evening it was up to tenth overall. But then the inevitable happened: pit-stops to secure broken brackets, overheating and eventual disaster on its

Car 30 had overheating problems from the start. (Photo LAT)

Oooh dear! (Photo CD)

Nicolas and Thérier, type 68 A220. (Photo CD)

Wollek heads the Herrmann/Larrousse 917. (Photo LAT)

160th lap when the head gasket let go and caused engine failure. All four of the 3L cars were now out. Rédélé was not happy with Gordini and the feeling was mutual.

Car 45, the A210 of Killy/Wollek, had had a nasty moment in practice, hitting the guard rails out on the circuit. However, the car was successfully repaired for the race, which began well and was, for the most part, uneventful for them up to breakfast time on Sunday morning. They had run fault free through the night, but, unfortunately, it was then that a suspension mounting bracket holding a shock absorber broke. Maybe it had been damaged in the practice incident. After a rapid inspection, the engineers found it impossible to repair at the track so the team was out, having completed 242 laps.

Car 46 had just about the shortest race of all. Whereas Jabouille had got through the fireball of Wolfe's tragic accident, Alain le Guellec like many others was held up by the debris on track. He called into the pits at the end of that first lap with the engine overheating – the head gasket had already let go. Only lap 1 and it was retired.

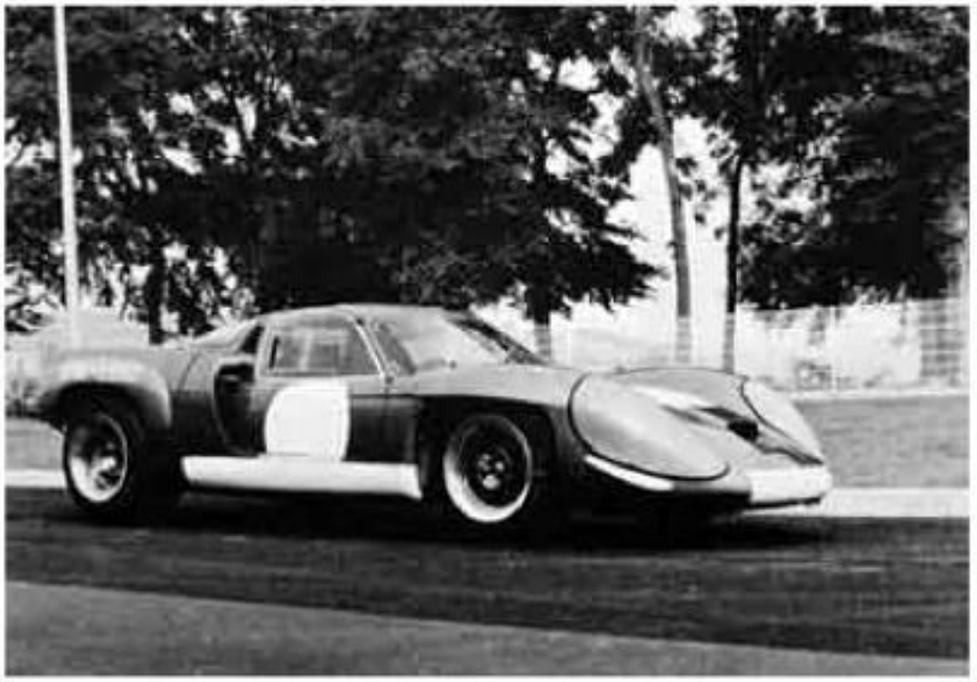
Car 49, a 1296cc-powered A210, started the race in fine shape and was running in 23rd place after 7 hours, but a shock absorber mounting broke and the car was also out with only 97 laps completed.

By Sunday morning things were desperate at Alpine. Renault management had gathered to see its name emblazoned on the cars in large letters. The idea had been to put Renault firmly on the map as supplier of great engines at its home extravaganza,

Nice technique. (Photo RP)

but as the race unfolded in front of them they were left fuming. Recriminations were flying in all directions; the poor, hard-working and hard-worked mechanics were distraught; Renault blamed both Alpine and Gordini. It was a mess. There was only one car left running of the eight that had started.

Class winner: car 50, Serpaggi/Ethuin. (Photo RP)



Short-tail modifications. (Photo CD)

Car 50 would save the day for Renault and for Alpine: Alain Serpaggi and Christian Ethuin would be heroes. Their 1005cc engine was the smallest in the race and even running flat out it was pretty much the slowest on the circuit, nearly a minute slower per lap than the lead cars, but it had managed to keep out of the way of the rapid Porsches and thundering GT40s. They kept on plugging round, climbing from 44th on the grid to 12th overall at the end of the 24 hours and, most importantly, coming home first in the 1001-1300cc class and first in the performance index. They completed 292 laps, 3931.780km (2443 miles), at an average speed of 163.824kph (101.7mph). (The winning GT40 of Jackie Ickx/Jackie Oliver completed 372 laps.) One can only imagine the joy and relief of the mechanics and the Alpine team; at least something had been salvaged from the catastrophe that had unfolded at Le Mans this year. The recriminations would go on over the radiator layout in the cars, which Gordini said caused overheating, while Alpine complained bitterly about lack of power, reliability, gasket failures on sumps, and oil leaks. The post mortem went on and on.

However, the engineers at Alpine were resourceful and started to wonder if the A220 might in fact be more suited to shorter, street-type circuit events rather than the long, high-speed races at Spa, Monza and Le Mans. So after Le Mans it was decided to modify chassis 1731 and fit it with a short body. It was tried on the Chamrousse Speed Hillclimb in the Isère department of France on 27 July, where Jean Vinatier recorded a climb of 8min 32.3sec to finish in third place behind Jean-Pierre Beltoise in a Matra F2 on 8min 11sec, and a Monsieur Rouveran in an F2 Tecno on 8min 31.8sec. Jean Vinatier: "After the Le Mans race it was decided at Dieppe – I think it was Rédélé's decision – that I should race it in the hillclimb at Chamrousse. It was a very fast hillclimb and in a beautiful region which had hosted the Winter Olympic Games. The car was shortened because on the tighter course it was a considerable advantage to have a shortened cantilever at the rear – it was easier with the hairpins; also, the team wanted to see if it could be used on other events rather than the Le Mans 24 Hours. I think that it was André de Cortanze who had the idea of shortening the rear of the car. During the practice runs I did a wonderful spin on the first right-hand hairpin; I was very surprised as it happened so suddenly. However, it turned out to be because the mechanics had removed one of the two fuel tanks, forgetting to close its fuel outlet, so when I turned a corner there was fuel pouring out in front of my rear tyres which caused the spin."

It was tried again at Nogaro on 17 August, again with Jean Vinatier at the wheel. On the front row of the grid between

Jabouille and Guénard. (Photo MM)

Short tail and fixed aero plates. (Photo MM)

two Porsches, he got away the quickest and took the lead. Jean Vinatier: "Nogaro was a circuit race and I was going very well – I was leading the pack. Behind was a Porsche – a 908 I think – a Spanish driver, Juan Fernandez. I was concerned about the cooling of the car and sure enough two or three laps before the end my water temperature shot up; I tried to nurse it. The Porsche was coming up behind; my water temp was 130°. I didn't want to overdo it and I didn't know if the engine would last but I wanted to try. Inevitably I lost the race – I had to let him go past and I finished second, 3.6sec behind him."

Finally, the team modified 1731 to road regulations, to be used in rally specification on the Critérium des Cévennes. For this event the car would be run on public roads and required what in France is called a 'certificat d'immatriculation,' which is a document of legal approval – a formal licence confirming that the vehicle complies with the laws of the land for highway motoring. Several of the early cars – the M63/4 and 210s – carried immatriculation numbers, but chassis 1731 was the only A220 to be road registered. Jean-Pierre Jabouille would be taking his faithful engineer Jean-Claude Guénard along as co-pilot; sadly, the car went out with electrical problems when the alternator failed. It was a quiet end to the rally and a quiet end to racing for the A220. However, the author is happy to report that this car still exists, as do many others. 1731 is resting with an ex-Alpine employee.

Chassis 1737, designated the A222, found its way to Jean-Charles Rédélé, son of Alpine founder Jean Rédélé. This car was fitted with a 4-valves-per-cylinder engine on 3 October 1969 and tested at Coulommiers during that month before being refitted with the standard 2-valve engine for tests on 24 October.

Chassis 1738 was built and tested but not raced until the coming of the Classic races of recent decades, where the revival in historic racing has allowed this car to stretch its legs once again.

As the autumn of 1969 arrived Renault was examining the whole operation very closely. The Le Mans race could be a great marketing tool for successful teams but it could also be a graveyard of dreams for the losers, and with a major manufacturer like Renault failing so spectacularly in front of the French nation in such a high-profile event, the management was not pleased. The order went out from the top to cease sports prototype racing immediately. As we have seen, there were several mitigating circumstances, and, although none taken in isolation was an excuse, these circumstances would certainly have had a collective bearing on the outcome.

During the takeover of Gordini by Renault, the move of

and set himself up in the old premises to design an engine with no cylinder head, i.e. with block and cylinder head in one piece. Gordini got his wish and Marc Bande and Giuseppe Albarea went with him to the blvd Victor in mid-September 1970.

Up in Dieppe things had been changing, too. The new factory was a godsend; production was streamlined and the dedicated engineers were developing new systems not only on the racing cars but for the production side of Alpine as well. However the Régie Renault had made its decision and 1969 saw the end of sports prototype racing, and, a little later, development on the V8.

Alpine went on to achieve many single seater and rallying successes under the guidance of Jacques Cheinisse, including winning the first Rally Manufacturers' World Championship in 1973. But with no sports prototype Alpines planned to be on the race tracks in 1970, it was the end of an era. The next decade would be a wholly different ballgame, and would demonstrate that with hard work, determination, the right equipment, and good financial backing, victory with a sports prototype at Le Mans could become reality.

Before we leave this era, let's hear from two people, a driver and a mechanic. First, Jean Vinatier, on what it was like to be a driver in the 1960s: "In the beginning we were just asked to drive the cars for the fun of it. We were passionate about racing and the fastest drivers got the drives – as we have seen, there were no contracts. The first I had was in 1966 when Renault asked me to sign up with them and I had a card and an official letter. Of course, safety wasn't the same as today; throughout this era there were many accidents and fatalities. With the data gathering systems of today's organisations, the driver looks at a diagram and knows exactly what is happening. We didn't have that. We had to trust what we could feel. When the car was tested and prepared by Mauro or by André de Cortanze, the factory had already done several tests in different places and, like other drivers brought into the team, I just got in and drove. If later we found some problems, we'd tell them we were a bit worried about such-and-such a thing and it was rectified, but even with the tyre pressures it was Michelin who adjusted them, not us; they were in charge of that. So the driver used the cars and just got used to them." Now we hear from André Désaubry, one of the mechanical magicians of Alpine. When asked by *Mille Miles* magazine, "What do you think was missing in those days?" André replied, "Budget! Winning a war depends on money. Although we were all highly motivated, we were lacking money, structure, and sometimes organisation. For example, when André de Cortanze took charge of the circuit part he was also wearing two other hats: driver and engineer; it's not ideal. And then rallying was going well so I suppose they had to concentrate on rallying. Anyway, I have no regrets; my professional life was very full and I'm proud to have participated in such an adventure."

Up to this point, Alpine was pretty much a family, but its days as a family were numbered. The world was changing, for better or worse.

From 1963 to 1969 Alpine and Renault had made a huge effort to compete at world level in the sports prototype category, led by a charismatic leader, Jean Rédélé, a man who dreamed of winning the Le Mans 24 Hours. He had some fine drivers and, to nearly everyone involved in the company, Alpine was indeed just like a family, with good times, bad times, falling out and making up. The sports prototype era of the 1960s was over. The rally era and victory in the first World Rally Championship for Makes was about to become a reality. In addition to this would come big sponsors, big money, a take-over of Alpine by Renault, a huge investment, a new challenge, and a re-entry to the world of the Le Mans 24 Hours and racing sports prototypes, again at world level. Three years on from 1969 a momentous decision would be made.

The end of an era. (Photo CD)

Summary

SUMMARY OF CHASSIS AND FACTORY ENTRY RACE PERFORMANCES - AN OVERVIEW

Collated from official records and race information, and also from the records of Gilbert Harivel (AAA), André Désaubry (AAA).

DNS = Did not start • DNF = Did not finish • ov = Overall • P = Prototype • L = Lap • grd = grid position • GT = Grand Touring • T = Time • w = weight
Note: Chassis numbers 1706-1707, 1712-1717, 1728-1729 were not allocated to any car.
Note: Chassis 01 and 03 Sebring cars had been fitted with the earlier Gordini single-cam R8 996cc engine not the twin cam when they were sent to USA

Chassis	Race	Date	No.	Car	cc	Drivers	Result	Notes	Entrant
1701	Nürburgring 1000km	19/5/63	92	M63	996	José Rosinski/ Lloyd Casner	11th ov, 1st P/GT	28th grd, T 10.41.5	Alpine
1701	Le Mans 24 Hours	15/6/63	49	M63	996	René Richard/ Piero Frescobaldi	DNF: clutch L63	w 601kg, 29th grd, T 4.42.8	Alpine
1702	Le Mans 24 Hours	15/6/63	48	M63	996	José Rosinski/ Christian Heinz	Accident: destroyed L50	w 608kg, 33rd grd, T 4.51.4	Alpine
1703	Le Mans 24 Hours	15/6/63	50	M63	996	Bernard Boyer/ Guy Verrier	DNF: con rod L227 (23h)	w 620kg, 40th grd, T 5.01.7	Alpine
1703	Reims Trophée Int	30/6/63	60	M63	996	José Rosinski	9th ov, 1st in up to 1Lit class	3 laps down	Alpine
1701	Reims Trophée Int	30/6/63	62	M63	996	Henri Grandsire	11th ov	4 laps down	Alpine
1704	Charade Auvergne	7/7/63	78	M63	996	José Rosinski	13th ov, 2nd P/GT	15 grd, T 4.10.5 (Barquette)	José Rosinski
1703	Charade Auvergne	7/7/63	76	M63	996	Henri Grandsire	15th ov, 3rd in 1300 class	–	Henri Grandsire
1704	Sebring 12 Hours	21/3/64	68	M63	996	Mauro Bianchi/ José Rosinski	DNF: L140	39 grd, T 3.40.5	Alpine
1701	Sebring 12 Hours	21/3/64	69	M63	996	Paul Richards/ Charlie Rainville	29th ov, 5th P/GT	49th grd, T 3.54	Autosport International
1703	Sebring 12 Hours	21/3/64	70	M63	996	Ray Cuomo/ Bob Tullius	DNF: "gearbox" L66	51st grd, T 3.75.4	Autosport International
1708	Targa Florio	26/4/64	190	M63B	996	Lucien Bianchi/ Mauro Bianchi	15th ov, 2nd P/GT 2Lit	9 L, T 7h 26min (M64 body, M63 chassis)	Alpine
1708	Nürburgring 1000km	31/5/64	110	M63B	996	Henri Grandsire/ Jean Vinatier	DNF: gearbox L5	52nd grid, T 10.58.3	Alpine
1709	Nürburgring 1000km	31/5/64	120	M64	996	Mauro Bianchi/ José Rosinski	DNF: engine L21	84th grd	Alpine
1708	Le Mans 24 Hours	20-21/6/64	59	M63B	1001	Roger Masson/ Teodoro Zeccoli	20th ov, 5th Perf, 2nd Energy	w 658kg, 43rd grd, T 4.48.3, completed 284 L	Alpine
1709	Le Mans 24 Hours	20-21/6/64	54	M64	1001	Philippe Vidal/ Henri Grandsire	DNF: transmission L133	w 663 kg, 40th grd, T 4.40.3	Alpine

Chassis	Race	Date	No.	Car	cc	Drivers	Result	Notes	Entrant
1710	Le Mans 24 Hours	20-21/6/64	47	M64	1001	Jean Vinatier/ Mauro Bianchi	Not classified on 230 laps	w 640kg, 42nd grd, T 4.44.0	Alpine
1711	Le Mans 24 Hours	20-21/6/64	46	M64	1119	Henry Morrogh/ Roger de Lageneste	17th ov, 1st P/GT 1300, 1st Energy	w 648kg, 36th grd, T 4.34.3, 292 L	Alpine
1708	Reims 12 Hours	5/7/64	52	M63	1001	Philippe Vidal/ Jacques Maglia	DNF: engine L32	32nd grd, T 2.52.4	Alpine
1709	Reims 12 Hours	5/7/64	50	M64	1001	José Rosinski/ Henri Grandsire	19th ov, 2nd P/GT 1300	30th grd, T 2.47.1, 239 L	Alpine
1710	Reims 12 Hours	5/7/64	49	M64	1001	Mauro Bianchi/ Jean Vinatier	20th ov, 3rd P/GT 1300	29th grd, T 2.47.1, 218 L	Alpine
1711	Reims 12 Hours	5/7/64	51	M64	1001	Roger de Lageneste/ Henry Morrogh	18th ov, 1st Proto GT 1300	31st grd, T 2.49.7, 241 L	Alpine
1708	Paris 1000km	11/10/64	60	M63B	1001	Jacques Cheinisse/ Teodoro Zeccoli	DNF: engine L98	30th grd	Alpine
1709	Paris 1000km	11/10/64	54	M64	1149	José Rosinski/ Henri Grandsire	16th ov, 1st P/GT 1300	28th grd, 116 L	Alpine
1710	Paris 1000km	11/10/64	55	M64	1296	Mauro Bianchi/ Jean Vinatier	DNF: fan belt/engine failure L12	25th grd	Alpine
1711	Paris 1000km	11/10/64	56	M64	1001	Roger de Lageneste/ Henri Morrogh	20th ov, 2nd P/GT 1300	32nd grd, 109 L	Alpine
1718	Targa Florio	9/5/65	164	M65	1149	Mauro Bianchi/ Henri Grandsire	DNF: accident L4	Destroyed by fire	Alpine
1709	Nürburgring 1000km	23/5/65	42	M64	1005	Roger de Lageneste/ Peter Ruby	DNF: wheel break L16	43rd grid, T 10.19.9	Alpine
1710	Nürburgring 1000km	23/5/65	40	M64	1296	Mauro Bianchi/ Jean Vinatier	DNF: cooling system L11	37th grid, T 10.08.3	Alpine
1708	Le Mans 24 Hours	19-20/6/65	61	M63B	1001	Robert Bouharde/ Pierre Monneret	DNF: ignition/engine L187	w 662kg, 45th grd, T 4.44.7	Alpine
1709	Le Mans 24 Hours	19-20/6/65	50	M64	1149	Philippe Vidal/ Peter Revson	DNF: valve failure L116	w 664kg, 41st grd, T 4.34.9	Alpine
1710	Le Mans 24 Hours	19-20/6/65	47	M64	1296	Jean Vinatier/ Roger de Lageneste	DNF: electrical L195	w 649kg, 35 grd, T 4.21.1	Alpine
1711	Le Mans 24 Hours	19-20/6/65	51	M64	1149	Guy Verrier/ Roger Masson	DNF: cooling system L148	w 677kg, 42nd grd, T 4.35.1	Alpine
1719	Le Mans 24 Hours	19-20/6/65	46	M65	1296	Mauro Bianchi/ Henri Grandsire	DNF: gearbox failure L32	w 669kg, 33rd grd, T 4.20.0	Alpine
5146	Le Mans 24 Hours	19-20/6/65	55	GT4/M63	1108	Jacques Cheinisse/ J-P Hanrioud	DNF: clutch L196	w 700kg, 51st grd, T 4.57.8	Alpine
1708	Reims 12 Hours	4/7/65	60	M63B	1001	Robert Bouharde/ Pierre Monneret	DNS	22nd grd, T 2.56.6	Alpine
1709	Reims 12 Hours	4/7/65	17	M64	1149	Philippe Vidal/ Mauro Bianchi	12th ov, 3rd P/GT 1300	15th grd, T 2.42.1	Alpine
1710	Reims 12 Hours	4/7/65	16	M64	1296	Jean Vinatier/ Roger de Lageneste	8th ov, 2nd P/GT 1300	16th grd, T 2.42.7	Alpine
1711	Reims 12 Hours	4/7/65	18	M64	1149	Guy Verrier/ Jacques Cheinisse	12th ov, 4th P/GT 1300	21st grd, T 2.50.4	Alpine
1719	Reims 12 Hours	4/7/65	15	M65	1296	Lucien Bianchi/ Henri Grandsire	7th ov, 1st P/GT 1300	13th grd, T2 36.5	Alpine

DNS = Did not start • DNF = Did not finish • ov = Overall • P = Prototype • L = Lap • grd = grid position • GT = Grand Touring • T = Time • w = weight
Note: Chassis numbers 1706-1707, 1712-1717, 1728-1729 were not allocated to any car.
Note: Chassis 01 and 03 Sebring cars had been fitted with the earlier Gordini single-cam R8 996cc engine not the twin cam when they were sent to USA

Chassis	Race	Date	No.	Car	cc	Drivers	Result	Notes	Entrant
1711	Trophée du Cognac	25/7/65	55	M64	1006	Mauro Bianchi	8th or 9th (record uncertain)	Oleo-pneumatic suspension	Alpine
1719	Nürburgring 500 km	5/9/65	7	M65	1296	Lucien Bianchi/ Mauro Bianchi	1st ov, 1st P 1300	22 L, 1st international outright victory	Alpine
1710	Nürburgring 500 km	5/9/65	8	M64	1296	Henri Grandsire/ Roger de Lageneste	31st ov; 8th P	19 L	Alpine
1709	Nürburgring 500km	5/9/65	9	M64	1296	refused entry by stewards	–	–	–
1719	Grand Prix Albi Sports	26/9/65	64	M65	1296	Mauro Bianchi	3rd ov	Winner Guy Ligier, GT40	Alpine
1709	Grand Prix Albi Sports	26/9/65	63	M64	1296	Henri Grandsire	4th ov	–	Alpine
5146	Grand Prix Albi Sports	26/9/65	74	GT4/M63	1108	Jean-Pierre Hanrioud	11th ov	–	Alpine
1709	Montlhéry	3/10/65	–	M64	1296	Henri Grandsire	2nd ov	–	Alpine
5146	Montlhéry	3/10/65	–	GT4/M63	1108	Jean-Pierre Hanrioud	9th ov	–	Alpine
1719	Monza 1000km	25/4/66	53	M65/210	1296	Mauro Bianchi/Henri Grandsire	DNF: engine L18	18th grid, T 3.27.3	Alpine
1720	Monza 1000km	25/4/66	52	M65/210	1296	Jean Vinatier/ Roger de Lageneste	18th ov, 1st P/GT 1300	31st grd, T 3.36.5, 81 L	Alpine
1720	Spa 1000km	22/5/66	22	M65/210	1296	Roger de Lageneste/ Jacques Patte	9th ov, 1st P/GT 1300	20th grd, T 4.25.6, 60 L	Alpine
1724	Spa 1000km	22/5/66	21	M65/210	1296	Mauro Bianchi/ Jean Vinatier	10th ov, 2nd P/GT 1300	21st grd, T 4.27.9, 57 L	Alpine
1720	Nürburgring 1000km	5/6/66	87	M65/210	1296	Roger de Lageneste/ Jacques Patte	19th ov, 4th P/GT 1300	61st grd, T 10.58.4, 38 L	Alpine
1719	Nürburgring 1000km	5/6/66	88	M65/210	1296	Henri Grandsire/ Jean Vinatier	DNF: fan belt/engine L4	47th grd, T 10.35.0	Alpine
1720	Le Mans 24 Hours	18-19/6/66	47	A210	1296	Pauli Toivonen/ Bengt Jansson	DNF: gearbox L217	w 70kg, 39th grd, T 4.20.2	Alpine
1719	Le Mans 24 Hours	18-19/6/66	55	A210	1006	André de Cortanze/ J-P Hanrioud	Not classified, 118 laps	w 695kg, 48th grd, T 4.37.0	Alpine
1721	Le Mans 24 Hours	18-19/6/66	44	A210	1296	Jacques Cheinisse/ Roger de Lageneste	11th ov, 2nd P 1300, 1st Perf	w 691kg, 45th grd, T 4.27.2	Alpine
1722	Le Mans 24 Hours	18-19/6/66	46	A210	1296	Mauro Bianchi/ Jean Vinatier	13th ov, 4th P 1300	w 700kg, 41st grd, T4.21.9	Alpine
1723	Le Mans 24 Hours	18-19/6/66	62	A210	1296	Henri Grandsire/ Leo Cella	9th ov, 1st P 1300	w 683kg, 44th grd, T 4.25.4	Alpine
1724	Le Mans 24 Hours	18-19/6/66	45	A210	1296	Guy Verrier/ Robert Bouharde	12th ov, 3rd Energy	w 740kg, 43rd grd, T 4.25.2	Alpine
1710	Le Mans 24 Hours	18-19/6/66	56	A210	1005	Jean-François Piot/ Alain Le Guellec	DNS	Practice 4.39.6	Alpine
1723	Trophée Auvergne	26/6/66	66	A210	1296	Henri Grandsire	3rd ov	23 cars start, Ferrari 1 and 2	Alpine

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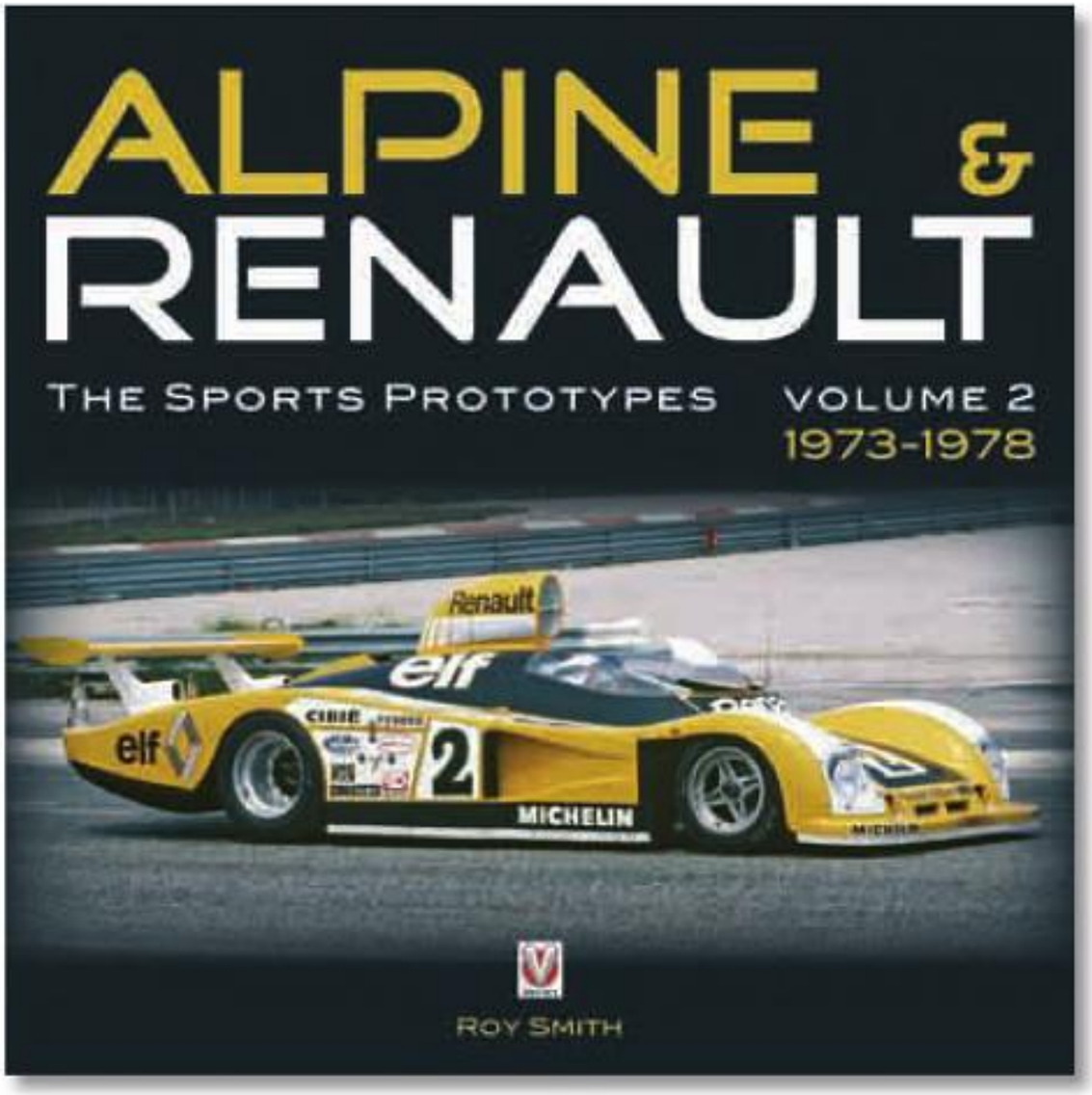

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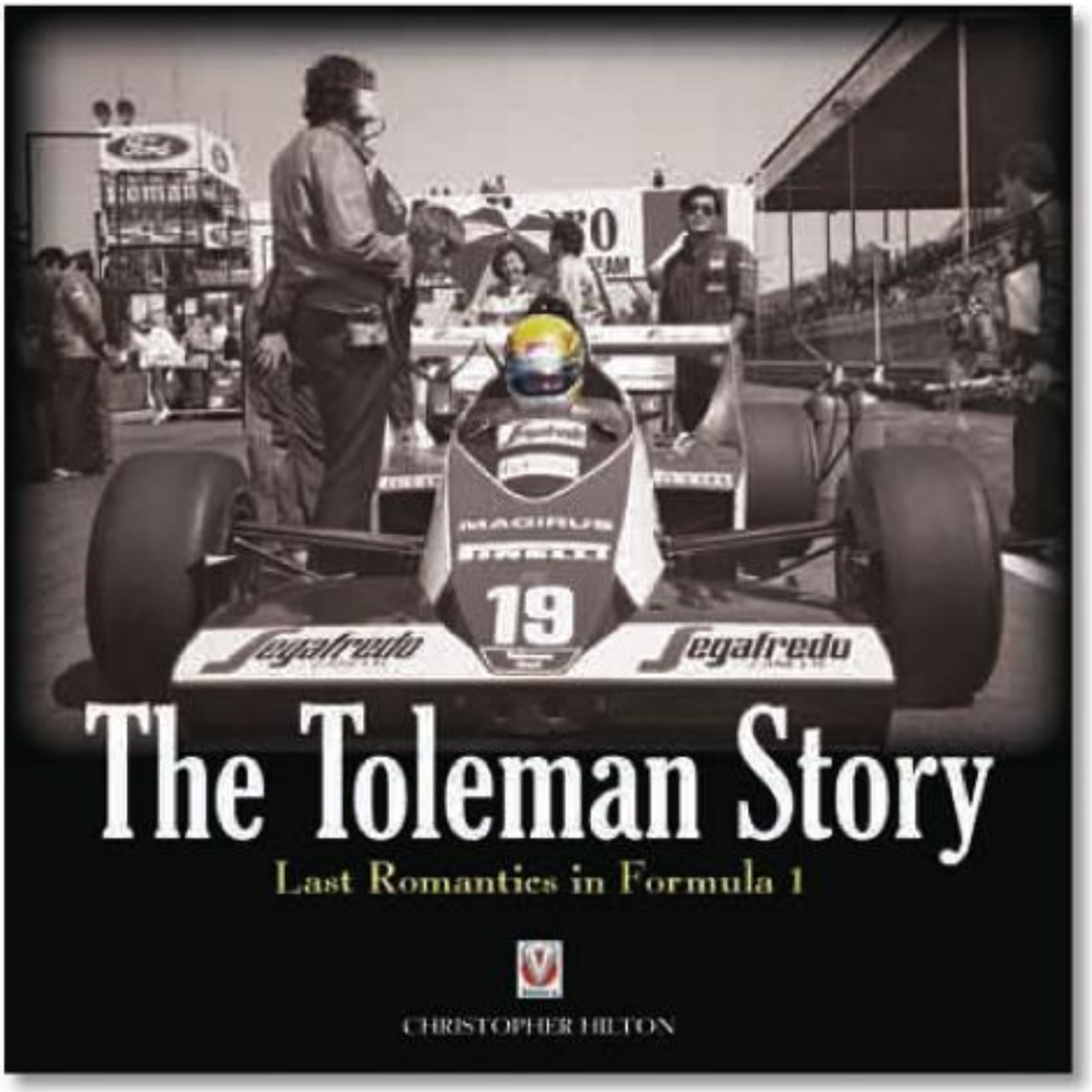

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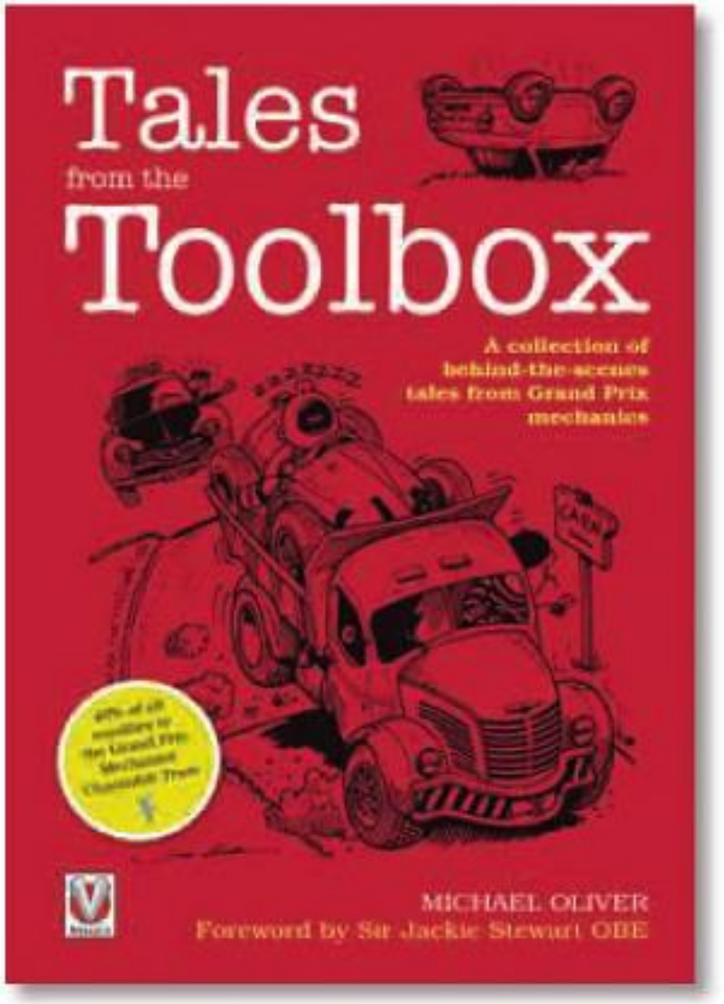

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