





Presented on the occasion of the Centenary  
General Assembly of the FIA

*Max Mosley*

Paris, 14 October 2004

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President

FEDERATION INTERNATIONALE DE L'AUTOMOBILE  
CENTENARY



FEDERATION INTERNATIONALE DE L'AUTOMOBILE

CENTENARY

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*Place de la Concorde, Paris.*

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## THE DEFENCE OF THE MOTORIST

Here, in the heart of Paris, an organization with global reach conducts its business representing the automobile and its users in all their many aspects. There are the pleasures of competition, from professional motor racing and rallying to weekend events just for fun: the FIA is the world governing body for motor sport. Just as important are the opportunities and problems of everyday motoring – as cities of the industrialized world come close to gridlock, motorization of some developing countries has only just begun. At the heart of the FIA are its members, the national automobile clubs of 118 countries. This is their forum. One of the first such international organizations when it was founded in 1904, the FIA today has more power and influence than at any time in its history.

October 2003: The flags of the nations stand proudly on either side of the book-lined conference hall. Representatives of 118 countries are gathered for the General Assembly. There is simultaneous translation in six languages. The delegates' dossier runs to more than 200 pages. The agenda contains 28 items – multiple reports, proposals and elections. Business is conducted swiftly and efficiently. This is an organization that represents more than 100 million people throughout the world. It is concerned with an activity that is vital to their personal and economic well-being, it governs a major sport – and it works with an ease and harmony that other international bodies envy. It is the Fédération Internationale de l'Automobile, the FIA.

The FIA celebrates its 100th birthday in 2004: bigger, stronger and more relevant than at any time in its existence. The public knows its name through the enormous television exposure of Formula 1 motor racing. It is less likely to know that the FIA started a process that has led to safer road cars in many parts of the world. Or that it created the standard international road signs that we take for granted; facilitated travel across borders while at the same time working to have customs barriers for motor tourists removed; and, more recently, played a significant role in ensuring that future regulations for car design are the same in all manufacturing countries.

This is an association of 163 national automobile clubs. The majority are most concerned with all motoring matters, but some are devoted only to 'touring' (the FIA's expression for everyday car use) and others specialize in motor sport. The FIA is dedicated to representing the interests of those

organizations and motor car users throughout the world and is the governing body of motor sport worldwide.

The FIA is not, as some may suppose, directly connected to the motor trade and industry, although it can take some credit for its development. In 1929, at the 25th anniversary of what was then the Association Internationale des Automobile Clubs Reconnus, the first president, Baron de Zuylen, recalled:

'The automobile clubs launched a new industry. The best way of interesting the public was through racing. After each race the enthusiasm of the crowd was enormous and this enthusiasm was translated into millions of orders so that money poured into the coffers of the factories that built these wonderful machines, creating an irreversible movement towards the motor car. The birth of our association therefore worked like a large advertisement campaign – the starting point for one of the world's major industries.'

So the history of the FIA is the history of that industry and of the shift of the motor car from an intriguing plaything to a tool for everyday use, an indispensable part of life for people in most parts of the world. In the beginning, the organization was united by the sheer enthusiasm of the pioneers, but soon it was more busily occupied defending the automobile against its detractors. Another past president characterized it as: 'a mutual aid association in the face of general hostility'.

The passenger car and the racing car were originally one and the same. Today, the higher echelons of motor sport have more in common with the aerospace industry than the car business. Governing this most technical of sports is not easy. As well as winning on the track, it is the job of the fiercely-competitive

Formula 1 teams to try to beat the rule-makers. Throughout its history, the FIA has constantly reviewed and revised the regulations for motor racing and its many associated activities to encourage participation, ensure fair and vigorous competition and, above all, maintain safety for all concerned.

All sports need strong, internationally-recognized authorities. The FIA runs world motor sport by consensus. Its status as the governing body is legally enshrined in some countries but generally it operates by a licence system agreed by its members throughout the world. Apart from setting the regulations for the cars and the conduct of events – all included in a complex multi-volume publication known as the International Sporting Code – it is the body

that recognizes and certifies production models for competition. The annual FIA International Calendar contains 850 motor sporting events. There are more than 30 official FIA championships, ranging from junior karts to drag racing, cross-country rallies to truck racing, and races, rallies and hill-climbs for historic cars.

The FIA also provides the administration for the International Court of Appeal, a body of independent judges competent in legal and sporting matters, that is the final arbiter in disputes about FIA rules and their application.

But surely there is something irrational about an organization that on one side stands for road safety and the sensible control of an ever-expanding car population and on the other



*The passenger car and the racing car were originally the same.*

is the administrator of a dangerous sport that glorifies speed? The FIA's 10th president, Max Mosley, thinks not. He believes that the two activities are complementary, that they learn from one another, and perhaps more importantly, that the FIA's high profile from motor racing eases access to important people in the wider world of the automobile, from car manufacturers to governments.

The FIA today is recognized by and collaborates with a wide range of other international bodies, from the United Nations and its specialized agencies to the International Olympic Committee. There is continuing dialogue with the European Union, at the Commission in Brussels and the Parliament in Strasbourg. In 2000, the FIA was instrumental in setting up the Forum for the Automobile & Society, an independent 'think tank' which includes 35 members of the European Parliament as well as representatives of the motor industry and other non-governmental organizations.

The automobile clubs that the FIA brings together are on five continents. Some are major enterprises in their own right. The American Automobile Association has 41.4 million members, the Japan Automobile Federation 16.9 million, the ADAC of Germany 14.4 million. By extreme contrast, the Club Automobile du Burundi has fewer than 20 members. The larger clubs value the fraternity and the world perspective that the FIA provides, while in this era of increasing globalization, the smaller ones benefit from contact with those with greater experience and resources.

The FIA and the Alliance Internationale de Tourisme (AIT) have long recognized that they should avoid duplication of effort. Of the 163

clubs affiliated to the FIA, 75 are also members of the AIT. From 2004, the touring and general motoring aspects of the FIA have been reorganized using the AIT's regional structure. As this is written, the elements are in place for the two organizations to merge in 2005.

Each club pays the FIA an annual subscription proportional to its membership. For the first 65 years of its existence such other income as the organization received came mostly from the sale of customs carnets and other travel documents; motor sport contributed very little financially. But gradually the tables turned. Racing, spearheaded by Formula 1, became more commercial, its popularity increased and so did the workload of the governing body. By the 1980s, finance from the sport was supporting all the other activities of the FIA.

As professional motor racing developed, the television rights for the Formula 1 World Championship came to represent wealth beyond the FIA's dreams – or its immediate needs. To satisfy the European Commission's competition rules, the FIA was encouraged to separate its commercial interests from its role as the regulator and governing body of motor sport. So, in 2000, it sold the commercial rights for Formula 1 to Bernie Ecclestone's management company on a 100-year lease.

That provided 300 million US dollars to establish the FIA Foundation for the Automobile & Society, a charitable trust that conducts and commissions research into safety, on the road and in motor sport, and takes an active part in the general debate about the environment and mobility.

Contributing to that wider debate is how the automobile and the private motorist must be defended in the modern world, for as the FIA

Foundation's major report in 2003, *The Automobile and Society*, concluded, rather than the car establishing its place in society, that society has largely restructured itself around the car.

The automobile is the great liberator, providing the freedom to travel where you want and when you want, and with whomever you choose. But sheer volume – 740 million motor vehicles in the world in 2003 and there could be 1 billion by 2020 – brings problems and responsibilities as well as utility and convenience. As it enters its second century, the FIA has a mission to make motoring as safe as possible, to minimize its impact on the environment, and to show how new technology can make it more efficient . . .

In the Library of the Automobile Club de France, in whose Paris premises the FIA is headquartered, President Mosley chairs the General Assembly with an impressive calm. He uses a lawyer's skill to sum up each issue and has a courteous but convincing manner that persuades doubters. He runs the organization from the front, heading both the World Council for Mobility and the Automobile and the World Council for Motor Sport, and pulling together the work and recommendations of their many commissions. And he describes, with obvious relish, the outcome of debates and negotiations with bureaucrats and others seen as obstructive to the FIA's cause.

Outside, the Federation's blue-and-gold flag flutters in the breeze above the classical 18th century mansion at the head of the Place de la Concorde. Significant events in world history have occurred in this place. Benjamin Franklin, ambassador and scientist, signed the Treaty of

Paris – which formally ended the American Revolution and recognized the United States of America – at the Hotel Coislin, number 4. President Woodrow Wilson and America's allies drew up the charter for the League of Nations – which the US Senate refused to join – in the Hotel Crillon next door. The Marshall Plan for Europe's reconstruction after World War 2 was administered from a matching mansion across the street once occupied by the statesman Charles de Talleyrand. Perhaps we should also mention that this square, then called the Place de la Révolution, was the site of the guillotine used to execute King Louis XVI and Queen Marie Antoinette in 1793.

Of course, the activities of the FIA have not featured so prominently in the history books. But they do reflect 100 years' development of the automobile, one of man's most significant inventions.

In 1904 the automobile was nearly a decade old but it had only just become clear that it was here to stay. Like a butterfly emerging from a chrysalis, the stuttering horseless carriage was supplanted by the sweeter and faster progress of a vehicle with a more distinctive character. The motor car as we know it was born – and so was the association of pioneer clubs that became the *Fédération Internationale de l'Automobile*.

This work records and discusses the history of the FIA for the first time. It describes a century of progress not only for one of the earliest international organizations of the mechanical age but also of the automobile in all its many forms and roles. It is a story of men and machines, of harsh political battles and gentle diplomacy and, above all, an unerring belief in the benefits and joys of a world on wheels.



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ORGANE OFFICIEL

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PATRISTE

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CASAC

DECAUVILLE

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BROUXES

"DIRECT."

LONDRES  
BERLIN

FIAT

120

BAYARD  
CLEMENT

EUVE & GARENE



## WHEN THE CAR WAS YOUNG

Pioneer motorists, united in their enthusiasm and wealth, formed the first national automobile clubs. These were conduits for discussion about the new-fangled motor car, the organizers of the first races and record events, and the advocates of motoring in the face of suspicion and hostility. In the beginning, all racing took place on public roads with few restrictions but there were disputes about the rules and the eligibility of competing cars. The Gordon Bennett Trophy races were for national teams, selection for which was in the hands of the national automobile clubs. The winner of the Gordon Bennett Trophy was entitled to host the event the following year. Thus, international motor racing was born – and an informal congress of clubs created which, in 1904, became the Association Internationale des Automobiles Clubs Reconnus.

Formally and officially, the association of automobile clubs that would become the FIA began at a meeting in Bad Homburg, Germany, on 20 June 1904. But its origins were in France.

France didn't invent the automobile, but it embraced motoring more enthusiastically than any other country. As Karl Benz – who, arguably, did produce the first viable car – once said: 'If Germany was the father of the motor car, France was its mother'.

Paris was ready for it. Baron Haussmann, whose mid-19th century master plan for the French capital produced wide, elegant boulevards and fashionable houses and apartments for the well-to-do, didn't know of the motorization that was to occur three decades later. But Haussmann's layout of paved streets with open intersections – designed to deter revolutions of a different kind – was perfect for the fledgling automobiles. There, horseless and horse-drawn carriages could co-exist.

Today, the car is regarded by many as the scourge of city centres; in Paris at the turn of century, car ownership marked a person of wealth and sophistication, embracing the latest developments of a fast-moving industrial world. Records show that in 1901 there were 5386 cars in France and 3800 of them were in Paris.

So it is not surprising that the first organization dedicated to the new activity of motoring should be the Automobile Club de France (ACF), founded in November 1895 and established in premises at number 4, Place de l'Opera, at the junction with one of the grandest of the grand boulevards. By 1898 a small group of its members had raised 15 million Francs to purchase two fine classical-style mansions in the Place de la Concorde, number 6 and number 8.

This aristocratic heart of Paris became the centre of the automotive world.

Similar organizations were soon established in other parts of Europe: The Royal Automobile Club of Belgium and the OAMTC in Austria in 1896; the Automobile Club of Great Britain in 1897; the Turin Automobile Club, KNAC in Holland, and the Automobile Club of Switzerland in 1898.

These were gentlemen's clubs. They were bound to be. Motoring in the pioneering days was extremely expensive and only those of substance could entertain the idea of buying, running and maintaining a car.

Enthusiasm for these new-fangled devices was what brought members together, but it was also clear that a united body of interested parties was necessary. The novelty and excitement of seeing a motor vehicle quickly wore off and were followed by a growing opposition to the car and its use.

Anything new which promises widespread changes to everyday life has its detractors. The traditional multi-faceted industry that revolved around the horse was threatened and even the companies that ran the railways, which had revolutionized long-distance travel only a few decades before, were worried by the prospects of faster and more efficient road transport.

And then, for some, there was the fear of the unknown. Speed seemed dangerous. Before the motor car, the fastest means of personal transport on land was the bicycle. Sages warned that the human body would not withstand the stress of being pushed through the air at more than 100km/h (60mph).

An unusual contest, held in 1899 between Paris and Trouville, on the Channel coast of France, puts speed at this time in context. It was a handicap event with different time allowances

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# THE CAR

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BY LAND, SEA, AND AIR.

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CHRISTMAS GREETINGS.

*The motor car quickly gave birth to journals.*



*Count de Dion (centre), Baron de Zuylen (left) and Paul Meyan meet to create the ACF, June 1895.*

for pedestrians, horses, cycles, motorcycles and cars. More than a century later, we can't know if the organizers wanted to prove that the old ways were best but their handicapping certainly favoured the horses, which finished first and second. In actual speeds, the best runner did 7.9km/h (4.9mph), the winning horse 13.7km/h (8.5mph), the fastest cyclist 31.2km/h (19.4mph), motorcyclist 52.3km/h (32.5mph) and the first car, a Mors, did 56.6km/h (35.2mph).

Motor racing had already begun. It was a natural extension of the activities of those who came together to form the ACF. Wealthy men raced horses, so it made perfect sense to challenge each other using the vehicles that were to replace the horse as their private transport.

Indeed, what first attracted Baron Étienne de Zuylen de Nyevelt de Haar to the early automobile was his love of horses and the promise that it could ease the burden of over-worked and ill-treated animals. He kept a stable of 50 horses in Neuilly, near Paris.

Baron de Zuylen was one of the founders of the Automobile Club of France. The idea was cast at a meeting in June 1895 with his friend, the pioneer car maker Count Albert de Dion, and Paul Meyan, a journalist and publisher, at de Dion's house on the Quai d'Orsay in Paris.

The previous November, Baron de Zuylen and Count de Dion had set up a 'committee for the direction of races for mechanical carriages'. This was referred to elsewhere as the Automobile Club of Paris and it formulated the rules for the 1895 Paris-Bordeaux-Paris event, which is now regarded as the world's first official motor race.

Earlier, in 1894, the newspaper *Le Petit Journal* had promoted the Paris-Rouen reliability trial at which de Dion's steam vehicle (not really a car but a tractor pulling a carriage) had averaged 18.67km/h (11.6mph) to take first place – but not first prize, as two men were needed to operate it.

The Paris-Bordeaux-Paris event was altogether more ambitious: at 1178 kilometres



*Individual starts in early races.*

(732 miles), 10 times as long as the Paris-Rouen trial, it had 22 starters of which nine survived to the finish, eight of them petrol-driven. Émile Levassor led throughout, but his two-seater Panhard, which had averaged 24km/h (15mph), was technically outside the rules which said that the winning car must have at least four seats.

So in the very earliest motor sport events there were disqualifications and arguments about the regulations: the scene for the future was set in more ways than one . . .

Once the ACF had been formed, the ad-hoc race committee became part of the Club, of which Baron de Zuylen was appointed president. The first race organized under its aegis was Paris-Marseilles-Paris in 1896. As an even longer contest, 1711 kilometres (1063 miles) over 10 days, in which 13 of the 32 starters

completed the course, it was a success. But those who condemned motor racing as dangerous pointed to the accident where Émile Levassor was thrown out of his car as it overturned, sustaining injuries to which he would succumb some months later.

Safety became a major issue. The great city-to-city races developed as demonstrations of the speed and reliability of the cars and daring adventures for the drivers. The French chamber of deputies had become increasingly concerned and in 1900 stopped all motor racing for a few weeks. By 1902 the authorities in Switzerland and Bavaria had also banned it, disrupting the planned route for the Paris-Vienna race.

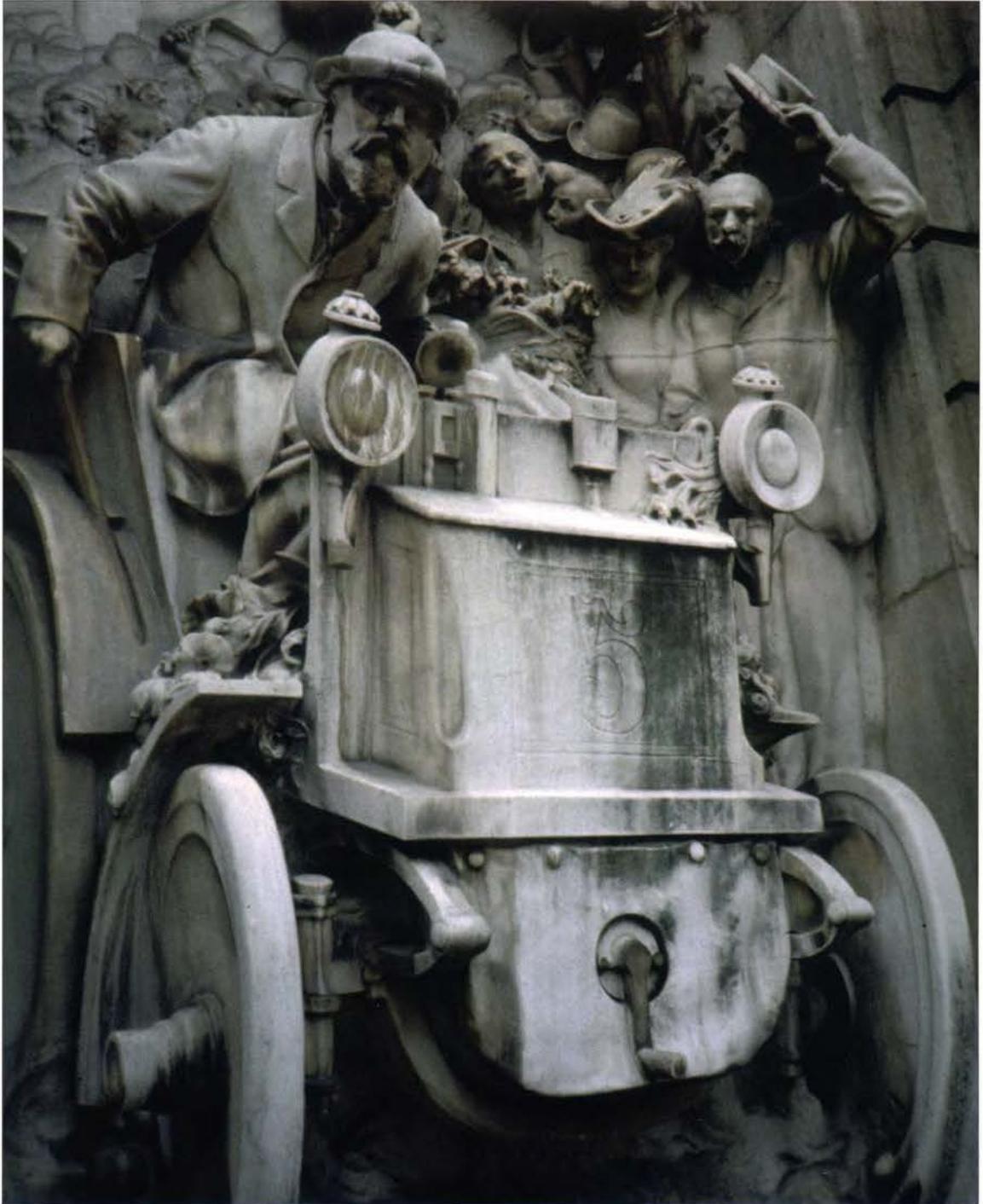
But the rise in support and enthusiasm for racing was relentless. As was the quest for speed. The fastest cars could now do nearly 160km/h



*Return to the fray – Gordon Bennett Trophy 1903.*



*In the early days roadside repairs were commonplace.*



*Levassor's 1895 Paris-Bordeaux-Paris achievement commemorated at Porte Maillot, Paris.*

(100mph) – surprise, surprise, the 100km/h mark had passed without dire effects on the human body!

The 1903 Paris-Madrid event attracted more than 300 entries and started 179 cars and it was said that three million people turned out to watch the first stage to Bordeaux. Fernand Gabriel's leading 70hp Mors averaged 105.09km/h (65.3mph) to Bordeaux, where the race degenerated into chaos. There had been a series of accidents along the way, six fatalities and many participants and spectators injured. The French government insisted that the police stop the event and the cars were not even allowed to return to Paris under their own power. They had the ignominy of being towed behind horses to the railway station where they were put on a train.

Paris-Madrid was to be the last of these great races on open roads in Europe. From 1904 racing was organized on road circuits, which had a very long lap distance by today's standards but were at least closed to normal traffic and kept the crowds of spectators back from the competing cars. The Circuit of Ardennes, first held in 1902 by the RAC of Belgium on an 85.3-kilometre (53-mile) loop of country roads, showed the way.

The Gordon Bennett Trophy races had been run by the ACF since 1900. These were national team events sponsored by James Gordon Bennett, Paris-based proprietor of the *New York Herald* and part-owner of the transatlantic telegraph cable. He put up a valuable silver trophy to encourage other countries to challenge the French domination of motor racing.

The idea of national racing colours started here, for easy identification of the team cars from each country. Blue was for France, green for Britain, yellow for Belgium, white for

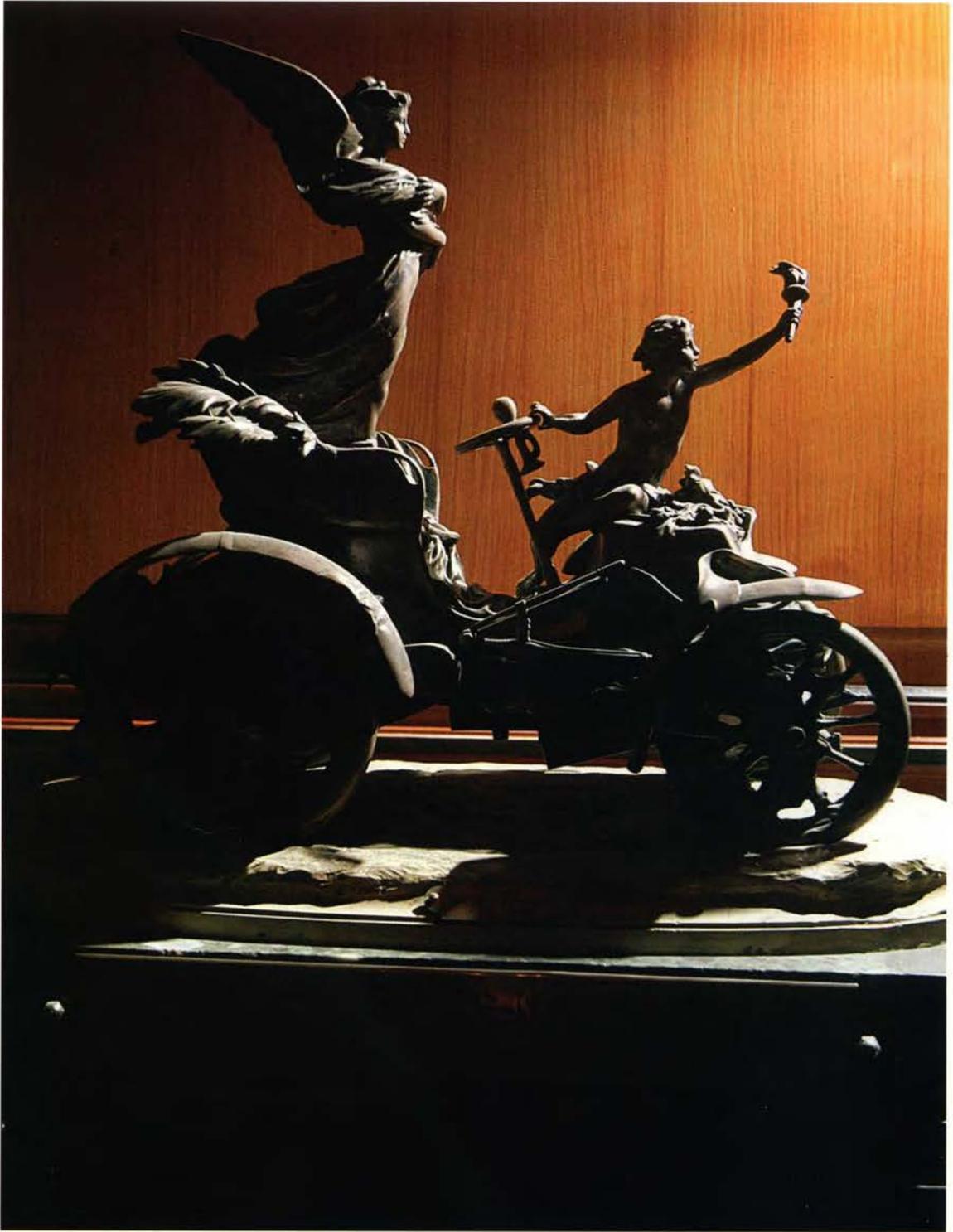
Germany, and, intriguingly, red – known to this day as the colour of Italy – was allocated to the USA.

The first Gordon Bennett Trophy, run from Paris to Lyons, was won by Fernand Charron driving a Panhard & Levassor. The rules required the winning nation to host the following year's event. In truth, the first race was a disorganized farce, with five starters and only two finishers. It was not surprising that it generated little interest from either competitors or the public. So it was decided to combine the 1901 Gordon Bennett Trophy with the more prominent Paris-Bordeaux race.

The Gordon Bennett element of the Paris-Bordeaux event received even less support than the first race. The French were the only starters and the winning Panhard & Levassor of Léonce Girardot was a long way behind the increasingly powerful and specialized 'city racers'. But it meant that the Trophy stayed in France for 1902, when it was run as a part of the Paris-Vienna race. This turned out to be blue against green, France versus Great Britain. Selwyn Francis Edge won for Napier. The Gordon Bennett Trophy headed across the Channel for 1903.

Racing was not allowed on the public roads on the British mainland so the fourth Gordon Bennett Trophy race was held at Athy in southern Ireland. The winner was the 'Red Devil' Camille Jenatzy driving a Mercedes 60hp, who covered 527 kilometres (327.5 miles) at an average of 79.2km/h (49.2mph). This was an amazing speed considering that the car was a standard production item, the 90hp factory racing models having been destroyed by fire shortly before the race.

But we digress – Mercedes' win meant that the following year's Gordon Bennett Trophy race would be held in Germany, which is how



and why the great and the good of the automobile movement came to be in Bad Homburg in June 1904.

Selecting national teams of three cars had become a controversial process – the French, in particular, with the largest number of car constructors, wanted to race for themselves rather than their country. But the Gordon Bennett rules required the national clubs to sanction their teams – and that required the presence of their officials at the event.

On 20 June, three days after the race – held on a 140-kilometre (87-mile) course in the Taunus hills – was won for France by Léon Théry driving a Richard-Brasier 80hp, the organizing club, AC Kaiserliche, invited those representatives to a meeting presided over by the Duke Victor of Ratibor. There it was proposed to form an international association of automobile clubs.

Delegates from seven countries agreed

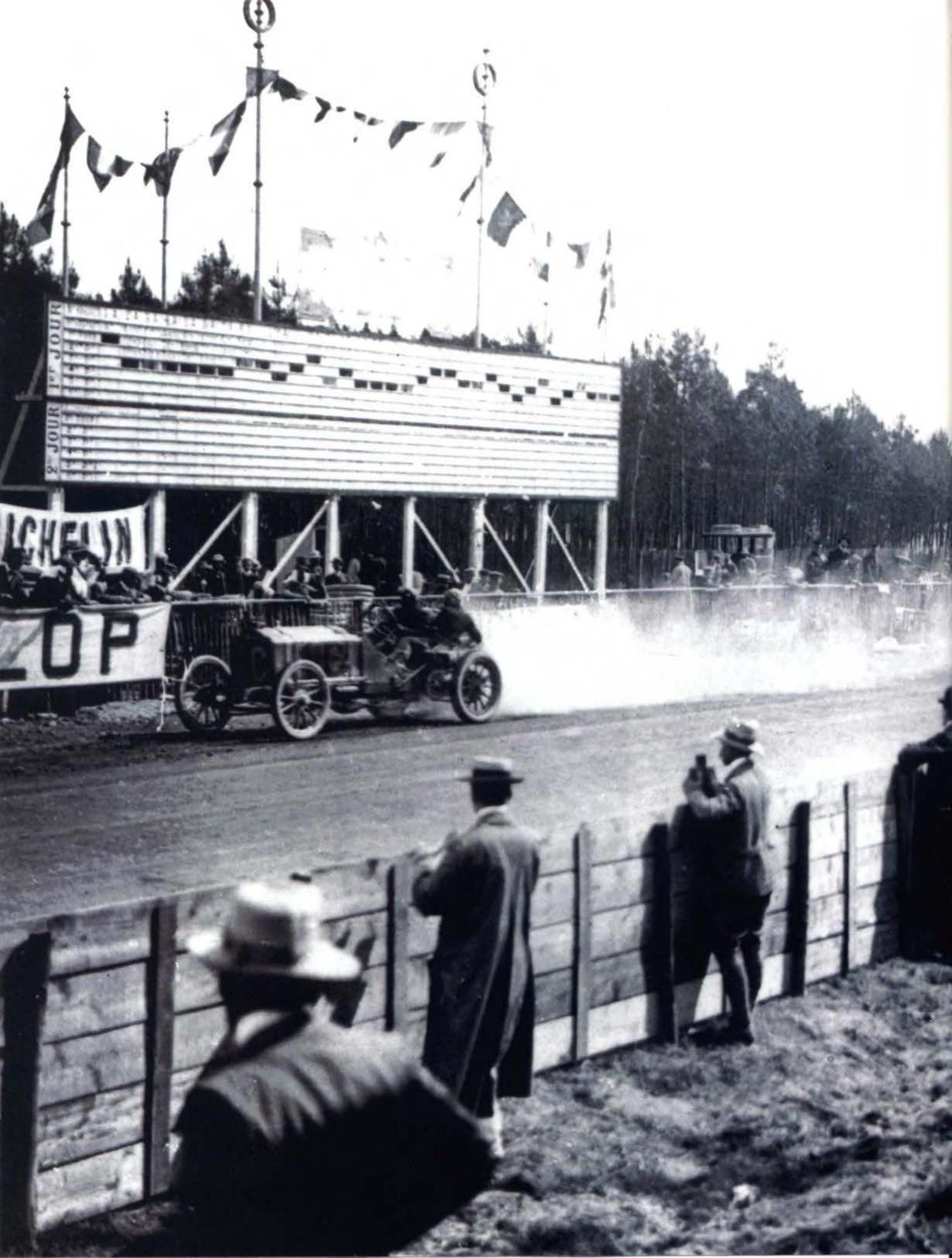
unanimously with the proposition that their clubs plus six others should form such a body. The agreed name was in French: Association Internationale des Automobiles Clubs Reconnus. It would soon be referred to as the AIACR.

As the organizer of most of the major motoring events until that time, it was logical that the Automobile Club of France should have a leading role in the new organization. Its president, Baron de Zuylen, was elected president of the AIACR. The ACF offered space in its palatial premises in Paris for the headquarters of the international body and to run its secretariat.

Some 42 years later, the AIACR would become the Fédération Internationale de l'Automobile. Its headquarters remained at number 8, Place de la Concorde, next door to the prestigious Hotel Crillon, as they are to this day, 100 years on.



*Starting point – the trophy (left) donated by James Gordon Bennett brought national clubs together.*





## BORN OF MOTOR SPORT

The new 'club of clubs' took control of international motor racing – and embraced the very first Grand Prix in 1906 – but it envisaged a broader mandate. When its statutes were drawn up they included no specific role in motor sport, although everyone concerned knew that racing was a vital part of its activities. As the automobile matured and became more affordable, and thus more widely available, motor tourism prospered and the AIACR provided a valuable link between the countries of Europe. Further afield, too, with racing in the United States and an expanded membership including clubs in China and South America. After World War I it was decided to establish a separate sporting commission, the CSI, to look after all issues surrounding motor sport.

Starting as it did from a meeting following a motor race, the Association Internationale des Automobile Clubs Reconnus can be said to have been born of the sport.

Those present at that inaugural gathering, who included Count de Sierstorpf and Count Archambault de Talleyrand-Périgord representing Germany, Colonel Henry Holden and Sir David Salomons from Great Britain, and Prince Solms-Brannfels of Austria, had a broader agenda. They wanted the organization to represent all users of the internal-combustion engine, in the air as well as on land, and on two wheels as well as four.

But at the beginning there were no rules, except those of racing which had been established by the ACF. So it is understandable that when tabling topics for discussion at the first business meeting of the AIACR, to be held in December 1904, sporting issues took precedence.

The very first item could have come from the agenda of the 2004 World Council for Motor Sport: 'Limiting the speed of racing cars'. Controlling the endless quest for speed is a recurrent theme in the history of the AIACR and the FIA. At the founding meeting, member clubs were urged to send their ideas for a formula to curb speeds in advance of the December General Assembly.

The 13 clubs 'recognized' and therefore eligible to join the AIACR from the outset were from Austria, Belgium, Denmark, France, Germany, Great Britain, Holland, Turin, Portugal, Russia (St Petersburg), Spain, Switzerland and the United States of America. At the December meeting, Hungary was also admitted, and the Marquis Ferrero di Ventimiglia, president of the Turin Automobile Club, announced the formation of Automobile

Club of Italy (ACI), which became that country's representative.

It was agreed that the AIACR, with three delegates from each club, would meet twice a year – in the summer, at the time and place of the Gordon Bennett Trophy races, and the Paris Motor Show in December.

The ACF wanted to replace the Gordon Bennett races with a Grand Prix, open to all car manufacturers and not contested by national teams, but after much discussion felt obliged to host the Gordon Bennett again in 1905. Run on the mountainous Circuit of Auvergne, this was to be the last such event. Léon Théry, driving a Brasier, won again. By the AIACR meeting in December that year, the French had declared that they intended to hold their Grand Prix in 1906 and were not prepared to stage another Gordon Bennett race.

The newly-formed AC of Italy therefore had the option to run the event in 1906 (Fiats finished second and third in 1905) but when a vote was taken at the AIACR on whether to support it, six of the prominent clubs abstained. The Gordon Bennett series was finished, although there would be periodic attempts to revive the idea in the years to come.

As the last winner – and the organizer of the series – it was decided that the ACF should retain the massive silver Gordon Bennett Trophy. It remains in number 6, Place de la Concorde to this day, the focal point of a conference room that has seen many a discussion about the future of motor racing.

For all its good intentions, the AIACR did not do much to control speeds or change racing regulations at its early meetings. It maintained a simple formula devised by the ACF in 1902: cars must have a maximum unladen weight of 1000kg (with an allowance of an extra 7kg for

those with the latest magneto ignition systems). It did, however, give international recognition to the ACF's system of warning signals for races – a blue flag to slow down, a yellow flag to stop.

The first Grand Prix of the ACF would be run to these same rules. This, it should be emphasized, was very much a French idea. The disquiet about the Gordon Bennett was largely because France had six or seven manufacturers eager to race, whereas other countries, also allowed three-car teams, had only one or two.

Let us divert for a moment to Le Mans in June 1906, for here was the start of Grand Prix racing – perhaps not as we know it today, but certainly the beginning for a new kind of international motor sport, introducing several elements that are now familiar.

At scrutineering, the 'weigh-in' that preceded the big race, there were 25 French cars, six Italian and three German. Cynical rivals said that this was the way the French wanted it, with overwhelming odds to win the race, but Chevalier René de Knyff, the president of the

ACF's sporting commission and doyen of the heroic age of racing (he won the 1898 Paris-Bordeaux and the first Tour de France in 1899) regretted that there were few overseas entries and that Great Britain and the United States of America were absent. He declared: 'The Grand Prix is essentially international, where overseas manufacturers can freely participate.'

The race was, by today's standards, a long, drawn-out affair. A fast, triangular course of 103.18 kilometres (64.1 miles) in the outskirts of Le Mans had to be lapped six times on two consecutive days. The total distance was 1238 kilometres (769 miles). The roads had been partially tarred to keep down dust and a short section, by-passing the narrow streets of the village of St Calais, was specially built – of wooden boards – for the event. This made it unnecessary to have controls and slow 'neutral' sections in towns, which had been a feature of most road circuit races until that time.

Although racing cars had become much more reliable over their first decade, such a long



*The first Grand Prix at Le Mans in 1906.*

race meant a good deal of maintenance as well as refuelling. The Le Mans course provided 'pits' on the right-hand side of the road at the starting area opposite the grandstand. The English name described sunken fuel and tyre depots, but these were actually trackside garage areas at road level. (Real trench pits were introduced two years later at Dieppe to give the spectators a clear view of the cars, as there the refuelling area was in front of the grandstand.)

Then, as now but for quite different reasons, tyres were a big issue. Pneumatic tyres were first used in racing by the Michelin brothers in the 1895 Paris-Bordeaux-Paris event; when he heard of the number of punctures the Michelines had suffered, Émile Levassor, the moral victor of that great race with a solid-tyred Panhard, confidently declared that the air-filled tyre would never be of any use for motor cars

Of course, Levassor was soon proved wrong. But although tyres had improved by 1906, they still did not last long on powerful cars driven hard on roads of sharp gravel. Punctured tyres and inner tubes were awkward and time-consuming to change. The solution was the detachable wheel rim that could be replaced by another, already shod with a tyre. Three teams – Fiat, Renault and Bayard-Clément – were equipped with this new Michelin development in the 1906 Grand Prix.

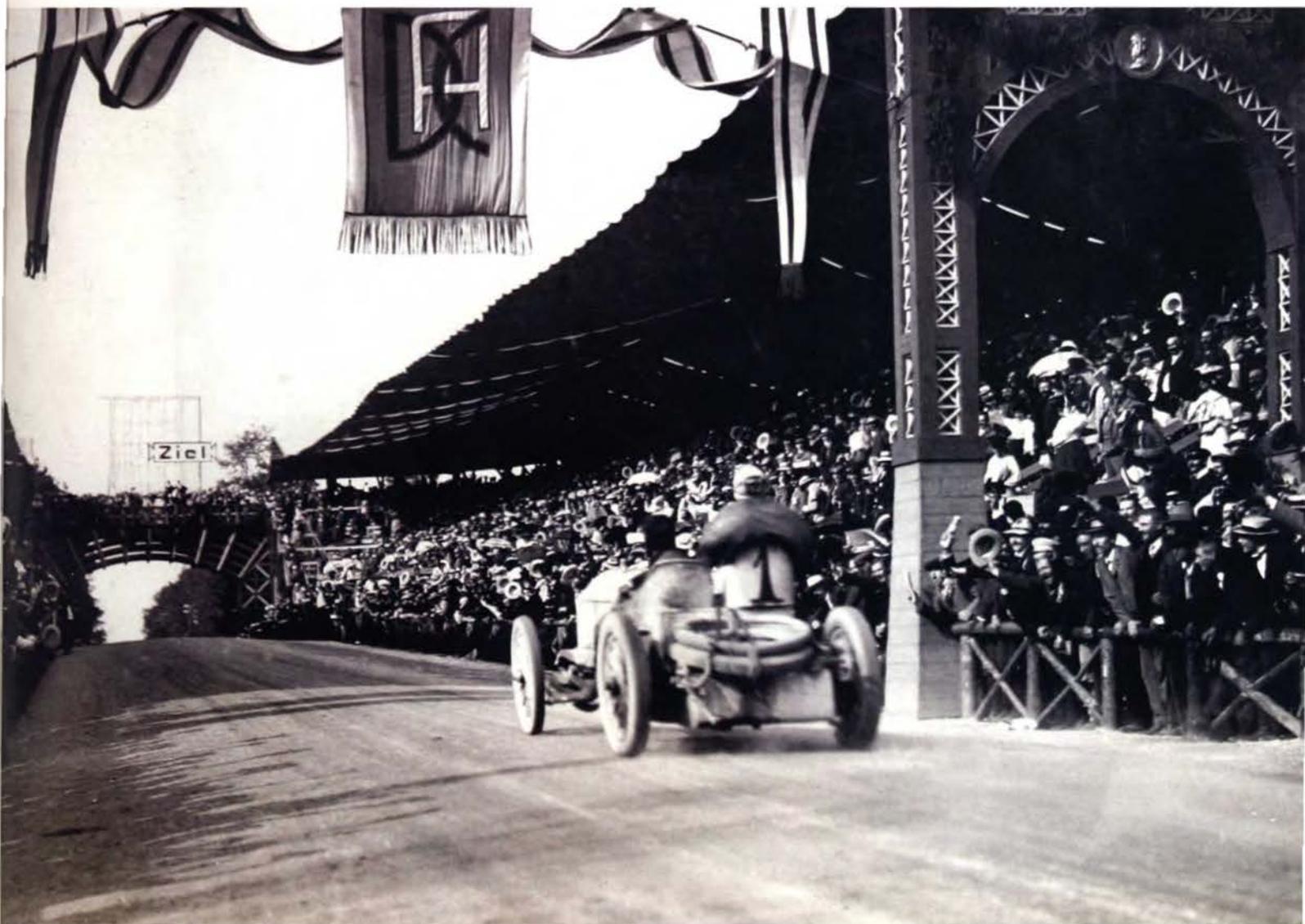
Detachables rims made the difference in the first Grand Prix. On the first day, the eventual winner, François Szisz in a Renault, demonstrated that he could change one in four minutes, whereas removing and replacing a tyre on a fixed wheel took his rivals a quarter of an hour. Szisz and his riding mechanic Marteau were to change rims 19 times in the two legs of the race. Apart from the time saved by the new system, it reduced the physical effort required of

the crews. Unlike the Gordon Bennett races, where any number of mechanics were allowed to work on the cars, for the Grand Prix, the ACF insisted that all maintenance, repairs and refuelling at pit stops be carried out only by the driver and riding mechanic.

As the Grand Prix cars finished the first day's racing they were taken into a locked car park and not released again until their starting time for the second leg. Using a tactic that was to be revived for Grand Prix races in 2003, when cars could not be altered between qualifying and the race, Szisz left the start line and went directly to the pits to refuel and change tyres.

In today's paddock environment of security guards and magnetic card turnstiles, it is hard to believe that in 1906 the policing of the parc fermé was done by dignitaries of the ACF: Prince Pierre d'Arenberg, Count Robert de Vogüé, and Quiñones de León – the only three members of the ACF sporting commission without motor trade connections – stayed on guard through the night to ensure that there was no tampering with the cars, by their owners or anyone else. The Count de Vogüé was to become president of the AIACR 25 years later.

The Grand Prix was a major public attraction. Thousands of spectators thronged the route, which was fenced in all the built-up areas, with barriers at side turnings and crossroads to prevent other vehicles, people and animals straying on to the course. Advertising banners, mostly for motor-related products, appeared on the fencing. The rich and fashionable paid for seats in the extensive grandstand at the starting area, and the hotels and restaurants of Le Mans did good business. The Renault team made its headquarters at the Hotel Moderne, an establishment that was later to become intimately linked with the Le Mans



*Germany's premier event in the early days was the Kaiserpreis.*



*Tyre changes were decisive in the first Grand Prix of the ACF.*

24-Hour race and remains so to this day.

There was no public address system, save for a couple of scoreboards opposite the grandstand, but to make it easier for spectators (and officials!) to follow the race, the ACF required competing cars to have racing numbers prominently displayed on front, back and sides. The numbering system emphasized the car's manufacturer: Lorraine-Diétrich was 1, Fiat 2, Renault 3, and so on, with the suffix A, B and C indicating the team's three drivers. Perhaps because the organizers wanted to draw a line under the Gordon Bennett series, national racing colours were not required and the winning Renault was resplendent in red. The organizers did, however, perpetuate the Gordon Bennett tradition of having a military band playing the appropriate national anthem as each car crossed the finishing line.

The Grand Prix had proved, literally, the big prize, but not for the ACF; despite sponsorship from the town of Le Mans, it lost a substantial amount of money in putting on the race.

But, to the outside world, the Automobile Club of France had once again shown the way forward in motor racing. The AIACR could not but congratulate the ACF on the organization of its first Grand Prix. Other national clubs sought to stage equally prestigious events. In Italy the Coppa Florio, run near Brescia, gave rise to the Targa Florio in Sicily from 1906. The German national club promoted the Kaiserpreis, held in the Taunus hills near Frankfurt, while the AC of Bavaria organized the Herkommer Trophy, a popular week-long event with set average speeds, which can be seen to be the forerunner of the modern rally.

It was obvious from the beginning that the AIACR should seek to co-ordinate these events and so a calendar commission was set up to

allocate (or negotiate) dates for international races. The longest established events would be designated grandes épreuves and have priority over newcomers and one-off promotions.

Clearly, it was also desirable for these races to be run to the same rules. But what should those regulations be? Although it accepted a responsibility for racing safety, and acknowledged that speeds should be reduced, the AIACR found it difficult to get its members to agree on how far they should go and how this should be achieved.

By 1907 this matter had become critical. The year's three major events – the Grand Prix, Targa Florio and Kaiserpreis – all required different types of car.

The competitors in the first Grand Prix had to weigh less than 1007kg – about the same as a modern small hatchback – but their engines were leviathans; the smallest was 7.4 litres, the largest 18.1 litres. The winning 13-litre Renault averaged 101.4km/h (63mph) for 12 hours of racing and recorded 148.4km/h (92.2mph) over a timed kilometre.

For the 1907 Grand Prix, held near Dieppe, the ACF abandoned the maximum weight regulation and adopted a fuel consumption formula, in the spirit of encouraging engine efficiency. The limit was 30 litres per 100km (equivalent to 9.4mpg by the British system and 7.8 miles per US gallon). But the manufacturers mostly entered the same cars as the previous year, and the winner's average speed increased to 113.5km/h (72.5mph). For the Kaiserpreis, the Germans restricted engine displacement to 8 litres.

That summed up the prevailing difference of opinion: France wanted faster, bigger cars; Germany, smaller and slower.

At the AIACR meeting held in Ostend,

Belgium, shortly after the 1907 Grand Prix, René de Knyff spoke eloquently of the need for speed: 'Racing is of immense interest to the automobile industry, particularly if it is a grand spectacle of speed. If the cars go gently they will lose that interest.'

The discussion was of restricting engine cylinder bores, combined with a minimum weight for the car. But there was no agreement on either value.

The German delegate, Dr Levin Stoelting, said: 'The cars proposed by the ACF are veritable monsters. They are too big and we don't want them.' To which René de Knyff retorted: 'The German idea is all very well for touring cars, but not for the great speed races.'

In the end, the meeting accepted a compromise proposed by the British. This increasingly technical discussion prompted Count Jacques de Liedekerke of the Royal Belgian Automobile Club (RACB) to propose that the AIACR should establish a sporting commission to deal with racing matters. His motion was not passed, evidently because some delegates felt that such a body would diminish their own authority. The truth was that many of those who attended AIACR meetings were racing enthusiasts, primarily interested in the sport.

Count de Liedekerke's proposal was timely because the AIACR was, belatedly, considering its own reasons-to-be. The association had started to operate with only a broad outline of purpose. Draft statutes were drawn up by the president, Baron de Zuylen, inevitably with the help of the ACF. They were to be adopted in July 1908 at the meeting held at the time of the Grand Prix in Dieppe.

By then the Association embraced 16 countries, the automobile clubs of Sweden and

Norway being the latest to join.

The AIACR statutes comprised 16 articles. The General Assembly was to be the supreme authority, comprising one club per country, each with one vote. Henceforth it would have two meetings a year, one, as previously established, at the time of the Paris Motor Show, and the other at a place and time to be decided each year. A Committee would be elected annually, with each member of a different nationality.

Interestingly, the statutes made no mention of motor racing as such. The main goal of the Association: 'To establish the closest relations between recognized automobile clubs in member countries and to deal with all questions related to motoring.' The link between clubs 'is intended to assist the development of touring and motoring'.

Of course, it was taken for granted that 'motoring' included racing, speed records and other sporting activities, but the publication of the statutes seems to have forced the Association into a reality check. There was an increase in AIACR activity around everyday road travel, vehicle and traffic regulations, crossing frontiers and motor tourism.

Perhaps this change of emphasis was also because international racing was about to hit the doldrums. The fall, like the rise in the years before, was led by the French. The 1907 Grand Prix, with 38 runners, 24 of them from France, had been won by a Fiat driven by the Italian ace Felice Nazzaro. The talk at the time was that Nazzaro had won because he had paid no heed to running out of fuel and had got away with it; Renault's François Szisz, who finished second, was supposed to have been more circumspect. So French honour was not too badly bruised by Italy's victory.

The 1908 race, run to the AIACR's

maximum bore-plus-minimum weight rules (which failed to reduce either the size of engines or the speed of cars) was a different matter. Strong foreign entries, nine from Germany, six each from Great Britain and Italy, three from Belgium, and one from the USA, threatened the dominance of the French manufacturers. German cars, Mercedes and Benz (then separate companies) dominated the proceedings, finishing first, second and third. There were only three French cars in the top 10.

Completely demoralized, the major French manufacturers mooted their withdrawal from racing. In November 1908, the ACF issued regulations for the 1909 Grand Prix, to be held at Anjou, with a caveat that the race would not take place unless 40 entries were received by 31 December. On the closing date it had received

just nine entries; the car makers had ganged up for a boycott. It would be four years before the Grand Prix was held again – and Germany could rest on its laurels.

Meanwhile, the AIACR noted an upswing in road racing in the United States. The Vanderbilt Cup race, established in 1904, was held on Long Island, New York. Top European cars and drivers took part – and won for the first three years. Although the Americans dismissed the need for national or international control – ‘gentlemen don’t need rules’ – the organization was put in the hands of the ambitious, newly-formed American Automobile Association (the ‘Triple A’).

The AIACR’s member in the United States was the longer-established and more exclusive Automobile Club of America (ACA). The



*Napier set the first speed records at Brooklands in 1907.*



*Mercedes finished 1-2-3 in the 1914 Grand Prix of the ACF at Lyons.*

rivalry between the two clubs intensified. The AAA's organization of the Vanderbilt Cup, particularly the control of notoriously unruly spectators, gained a bad reputation, and after a series of accidents in the 1906 event, no race was held in 1907. When it was revived a year later, on a new circuit including part of the Long Island Parkway, a concrete motor road specially built by its patron, super-enthusiast William K Vanderbilt Jr, it was an all-American affair. The European teams had entered the International Grand Prize instead. That was held in Savannah, Georgia – and organized by the ACA.

The Grand Prize followed the format of the Grand Prix de l'ACF and the AIACR's 1908 engine regulations and, with the encouragement of their national clubs, five French, three German and six Italian cars took part. It was run on better roads than those of Long Island and policed by armed militia. The Vanderbilt Cup faded as the Grand Prize grew in stature. Eventually, the ACA and AAA declared a truce, and later the two events were to be run at the same venues.

The Grand Prize and the Vanderbilt Cup continued until 1916 (and the Vanderbilt event was to be revived in the 1930s) but road racing in America reached a peak in 1911 as purpose-built speedways were introduced and proved more attractive to competitors and spectators alike.

Indianapolis Motor Speedway opened – as a dirt track – in 1909. After the first meeting it was declared unfit for racing and Carl Fischer, the owner with two other Indianapolis businessmen, hurriedly arranged for the 4.02-kilometre (2.5-mile) oval track to be paved with 3.2 million bricks. The first Indianapolis 500 at 'The Brickyard' was held in 1911, and was then the richest event in racing history with 25,000 dollars prize money. Among its innovations: a massed start of 40 cars, led by a pace car, and the admittance of a single-seater machine, a Marmon, which won the race.

The organizing club at the Indianapolis 500 was the AAA. At the AIACR, René de Knyff expressed concern that 'another body' was running motor sport in the USA, but it was clear that the international association could not

ignore what quickly became America's biggest motor sporting event.

Indianapolis was not the first paved motor speedway. That distinction belongs to the Brooklands Motor Course in England, built by H F Locke-King in 1907, primarily as a test track for the British motor industry, which was inhibited by a vigorously-enforced 20mph (32km/h) speed limit on its public roads. Brooklands is scarcely mentioned in the early proceedings of the AIACR, although the designer of the track, Colonel Henry Holden, was a representative of what had become the Royal Automobile Club of Great Britain and had attended the Association's inaugural meeting.

Brooklands was not ignored, it was simply irrelevant. Although the banked concrete track was used for Land Speed Record attempts – and saw the first official record at over 200km/h (124.2mph) by Victor Hémery in a Blitzen Benz in 1909 – the British club had shown no interest in running international races there.

Yet Brooklands was where racing and the development of the motor car came together and both subjects were of direct interest to the AIACR. After the British Sunbeams had trounced the French voiturettes in the 1912 Coupe de l'Auto, Charles Faroux, the French godfather of this series, wrote: 'The preparation of the British racers is much more thorough than ours. Their cars have been tested longer and more completely, something that is impossible for us to do here. We must have a Brooklands. Our industry has an absolute need for that incomparable laboratory.' The French equivalent, Montlhéry Autodrome, outside Paris, was not opened until 1924.

Motor sport met tourism in the Monte Carlo Rally, first run in January 1911. The oldest

event of its kind, it continues in a much modified form and is still the best-known rally in the world. It was devised in the tiny Principality of Monaco by Antony Noghes and Gabriel Vialon as a rival attraction to the carnival in nearby Nice, a way of enticing wealthy car owners who might stay for the winter to enjoy the mild climate of the Riviera. The pattern was that of the Italian Cycle Rally, with departure points in various European towns converging on Monaco. Of course, most of the competition took place outside the Principality, in France. The organizer was the Sport Automobile et Vélocipède de Monaco, which would become the Automobile Club de Monaco and apply to join the AIACR, but was turned down as it was deemed not to run a motor sports event in its own territory. Hence the Monaco Grand Prix, but that is another story, for later

The Grand Prix de l'ACF returned in 1912. Confusingly, there had been a race called the Grand Prix de France the previous year, run at Le Mans by the local Automobile Club de l'Ouest (ACO), which was later to become renowned as the organizer of the Le Mans 24-Hour race. Since the manufacturers' withdrawal following the 1908 Grand Prix, of the great classic events only the Targa Florio had continued. But racing with smaller, lighter cars thrived in France, Great Britain, Italy and Spain.

The revived Grand Prix, on the Dieppe circuit, was a free-for-all with just one restriction: the cars had to be no wider than 175cm (68.5in). Don't ask why there was a width restriction – the reasons are lost in time! The ACF went back to the two-day format and enormously long distance (1540 kilometres, 957 miles), but the real significance of the 1912 event was that it signalled the emergence of a new breed of racing cars.

Most of the manufacturers of the giant cars of the early years did not return to Grand Prix racing and the new front runners had come up from the light car class. It is true that the winning Peugeot had a 7.6-litre engine, but it was a smaller, more technically sophisticated car. The engine, a four-cylinder, twin-overhead-camshaft, 16-valve unit, was widely copied in the following years and set the layout for the (smaller displacement) engines that power many of our road cars today.

Furthermore, the voituettes, restricted to 3 litres, ran concurrently with the Grand Prix cars and made up 33 of the 47 entries. The monsters were slain; the era of the small car had begun.

In 1913, the AIACR's calendar commission, which had little to do during the hiatus in international racing, found it was back in business. Up to that time there had only been one 'real' Grand Prix, that of the ACF (the ACO's Grand Prix de France lasted for just three years, 1911-1913). Now the RACB applied to run the Grand Prix of Belgium in July 1914, the ACI scheduled the Coppa Brescia for

September, and the Automobile Club of Imperial Russia announced the Emperor's Cup as a 'touring competition'. But world events of more gravity than motor racing conspired to postpone – or cancel – these events.

The Grand Prix de l'ACF did take place in July 1914 and is regarded as one of the high spots of racing history. The AIACR had introduced the first Grand Prix formula based on total engine displacement. The maximum allowed was 4.5 litres and the car's maximum weight 1100kg. The race was held over 20 laps of a 37.6-kilometre (23.4-mile) road course outside Lyons, so, like the cars, circuit lengths and race distances were getting smaller. For the first time, the cars started at 30-second intervals in pairs, rather than one at a time, but their starting order was still by ballot.

The success of Peugeot and Delage over the previous two years was eclipsed by a notably well-prepared Mercedes team. In a way that became familiar in later years, Mercedes returned to Grand Prix racing with newly-designed cars which had been extensively tested. They



*Massed start for first Indianapolis 500, 1911.*

finished first, second and third. Georges Boillot's Peugeot provided a stout challenge, but his car failed on the last lap. And that was that: a German victory in the French classic just days before the outbreak of the Great War.

World War I lasted four years, but the disruption to normal life in Europe took much longer to repair and the war was followed by an economic slump. The AIACR did not meet again until June 1920.

Baron de Zuylen presided at the 1920 meeting at the ACF, where Britain's Brigadier General Sir Henry Holden and the Marquis Ferrero Ventimiglia of Italy were elected vice-presidents. The world order had changed as a result of the conflict but communications had become easier. The list of new members of the AIACR approved at that first post-war assembly included Czechoslovakia, Finland and Poland but also clubs as far spread as China, Cuba and Uruguay.

René de Knyff announced that France would restart motor sport in 1921 and that the Grand Prix de l'ACF would take place at Le Mans with 3-litre engine and 800kg minimum weight limits – the same rules as the Indianapolis 500, which had only missed two years' racing because of the war. So perhaps it was not so surprising that this first post-war Grand Prix was won by an eight-cylinder Duesenberg driven by Jimmy Murphy, one of a team of three cars brought over specially from America.

The AIACR General Assembly on 7 December 1922 was held in London, at the grand clubhouse of the Royal Automobile Club of Great Britain and Ireland in Pall Mall. Coincidentally, at the start of the meeting,

Count de Liedekerke, who had proposed the establishment of a sporting commission back in 1907, was elected a vice-president. The question of sporting authority was high on the agenda at the London meeting.

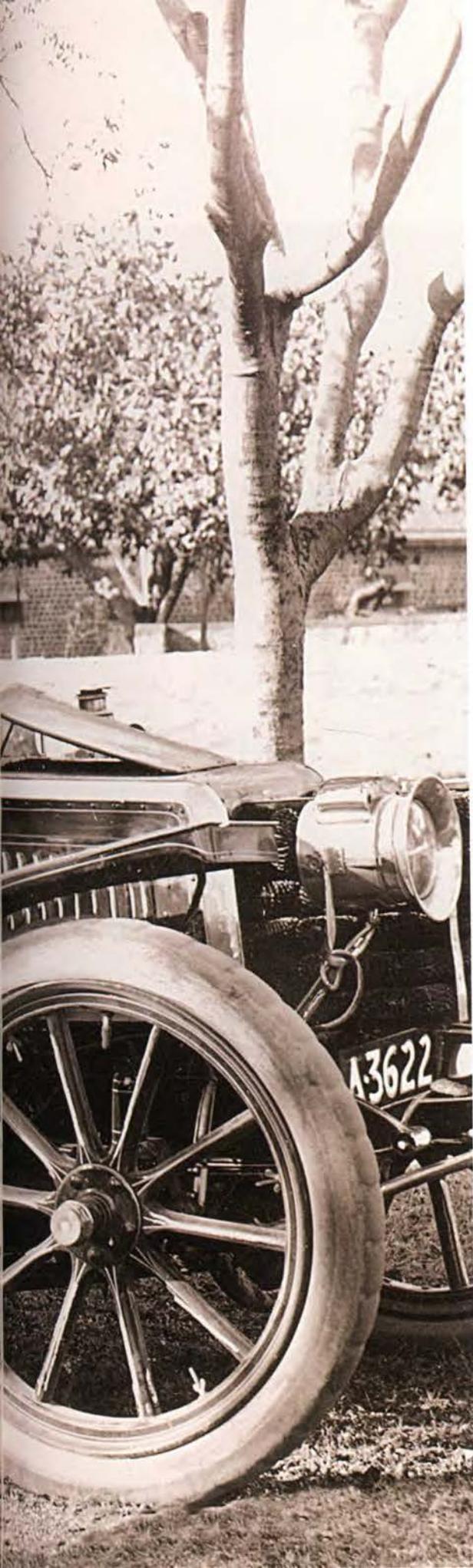
The Royal Automobile Club of Spain was being challenged by its country's motor manufacturers, who thought that they, rather than the national club, should be entitled to run motor racing. Mervyn O'Gorman, a representative of the RAC of Great Britain and an AIACR stalwart, said that he was not sure that the Association did have a mandate for the world control of motor sport.

It was to strengthen its claim for that authority that the General Assembly agreed that the time was right to establish a sporting commission. It would deal with all matters concerning racing, speed records and other events and report to the General Assembly of the AIACR.

The Commission Sportive Internationale, which was to become known universally as the CSI, was established with representatives from Austria, Belgium, France, Great Britain, Italy, Spain and the United States of America. Its president would be René de Knyff, who, as the head of the ACF's sporting commission, unofficially had led the AIACR through regulation changes and other sporting matters since its foundation.

It had taken 18 years to separate motor sport from the wider activities of the AIACR, but when the decision was taken, things moved with remarkable speed. The CSI held its first meeting that very afternoon at the Royal Automobile Club.





## DRIVING AROUND THE WORLD

Like any new invention, the car took some time to adopt a standard pattern. The early automobiles were not easy to master and the supporting infrastructure had yet to be developed. In some countries, public opposition to the car threatened its very existence. Traffic regulations and restrictions varied widely. With its aim to encourage the development of touring by car and assure the solidarity of the automobile movement, the AIACR began a process of consultation to harmonize vehicle and driving requirements internationally. The quality and quantity of roads was of particular concern; Europe showed the way with dedicated motorways in the 1920s and 1930s and road signs and rules of the road began to be regularized. The AIACR set up a service to provide touring information to member clubs.



*In the houses of the wealthy, the groom became the chauffeur.*

In a sense, all motoring in the early days was sport, because car ownership was a hobby – and a rich man’s hobby at that. There were visionaries who expected motorized private transport to spread to every class of society and all corners of the earth but, in the main, the pioneer motorists who came together to create the big automobile clubs were what today’s marketing experts call ‘early adopters’, simply keen to be first with the latest developments.

They needed not only money but patience and some mechanical aptitude. Charles Jarrott, one of the prominent figures of the British motoring movement, wrote that, in 1906: ‘It was impossible to know when starting out on a journey, when or whether one would return.’

The transport infrastructure was organized for real horsepower. A horse-drawn carriage and a railway train were more dependable means of getting from place to place. The new motor car often had to share the horses’ stables or the carriage house. Grooms became chauffeurs (not by coincidence a French word, referring to the person who had to heat up the hot tube ignition system of the earliest cars before a journey).

Chauffeur and owner had to learn to master the machine. With the exception of electric models that were particularly popular in America before 1910, cars were tricky to drive. Controls were different on every type and did not comply with the ‘hands for steering, feet to control speed’ norm of today. There could be two, three or four pedals – none of which was the accelerator – several levers with various functions, and the driver needed to master the art of ‘advance and retard’ with an ignition control on the steering wheel.

Hand-cranking engines into motion could be an exhausting and frustrating business; self-starters didn’t arrive until 1912. Various

points of lubrication needed frequent attention, perhaps several times even on quite a short trip. Grey-white natural rubber tyres regularly suffered punctures.

Bad roads exacerbated the situation but tyre technology didn’t keep pace with the rapid development of the car in early years of the 20th century. Tyres became the most expensive item in a car’s running costs.

There were no support systems along the way, no garages or filling stations. Fuel was obtained in glass jars from chemists’ shops or from hardware or paint stores in metal cans. Most motorists kept their own supplies. In Britain, petrol was delivered (usually by horse-drawn cart) in 2-gallon (9.09-litre) cans; British law allowed a car owner to store up to 60 gallons (272.7 litres) on his own premises. In 1905 it cost 10 pence (4p) per gallon.

If fuel was bought on an occasional basis, it could be hard to ensure that it was the right stuff. New formulations were given unfamiliar names but, confusingly, these were different in each country. In Britain, petroleum spirit, which became the standard motor fuel, had the trade-name petrol. In the USA, it was gasoline, in France, essence; for the French, pétrole is what the British call paraffin and the Americans kerosene. The unsuspecting traveller could easily fill his tank with either the wrong fluid or one which was adulterated, carelessly or intentionally.

So motor travel was neither simple nor reliable. And because car ownership was so expensive – in Britain in 1905, a car cost £500 or more when the average man earned £70 a year – many dismissed motoring as a pastime for dilettantes.

Not everyone wanted to go racing, but if they did, the cars were essentially the same.

Touring and racing cars, where they were identified as such, tended to be variations on the same designs. Sports cars as a genre appeared only after 1910. Until then, competition models were typically tourers with more power from a bigger engine and fewer creature comforts. The era of the specialized race car that has to be transported on a truck was decades away.

Yet racing could be justified by those who took part – individuals and manufacturers – as bringing quick and effective solutions to problems that still inhibited the development of the motor car in the first decade of the 20th century. The British journal *The Autocar* answered the question: Why should we race?

‘Because the man in the street who wishes to buy a motor says to himself “If these people can build cars and run them time after time in races at high speeds over long distances without breakdown, they can certainly build a reliable touring carriage for me.” Let it be remembered that manufacturers whose cars are competing in races are at once made aware of improvements, as these usually appear in public for the first time at races. Furthermore, racing has been the means by which excellence has been attained in yacht building and in bicycle making.’

It is clear that those who established the AIACR understood this well and it is one of the reasons that the Association gave most of its efforts in its first years to racing and other forms of motor sport.

Some members saw the AIACR in a much grander role, representing and encouraging the users of cars, motorcycles, motor boats and aircraft. It seemed natural to bring all these new machines together. The Wright Brothers had demonstrated powered flight in 1903 and flying looked as if it could be the next Big Thing for the technophiles of the new century.

Meetings of the AIACR regularly addressed the problems of definition: What exactly is a car? What should it be called? At the insistence of Count de Dion, the Association agreed on the terms *automobile* for a four-wheeled road vehicle, *automotrice* for a railcar, and *automoteur* for a motor boat.

It did not take long to realize that covering all motorized transport was too wide a brief. Many of the original automobile clubs embraced motorcycling and some were also involved with aviation, but both activities had their own umbrella organizations. In 1910, the AIACR held discussions with the FAI (Fédération Aéronautique Internationale), the outcome of which was that it abandoned its claims to represent flyers. Some years later, it accepted that vehicles with less than four wheels should be surrendered to the care of the FIM (Fédération Internationale des Clubs Motocyclistes).

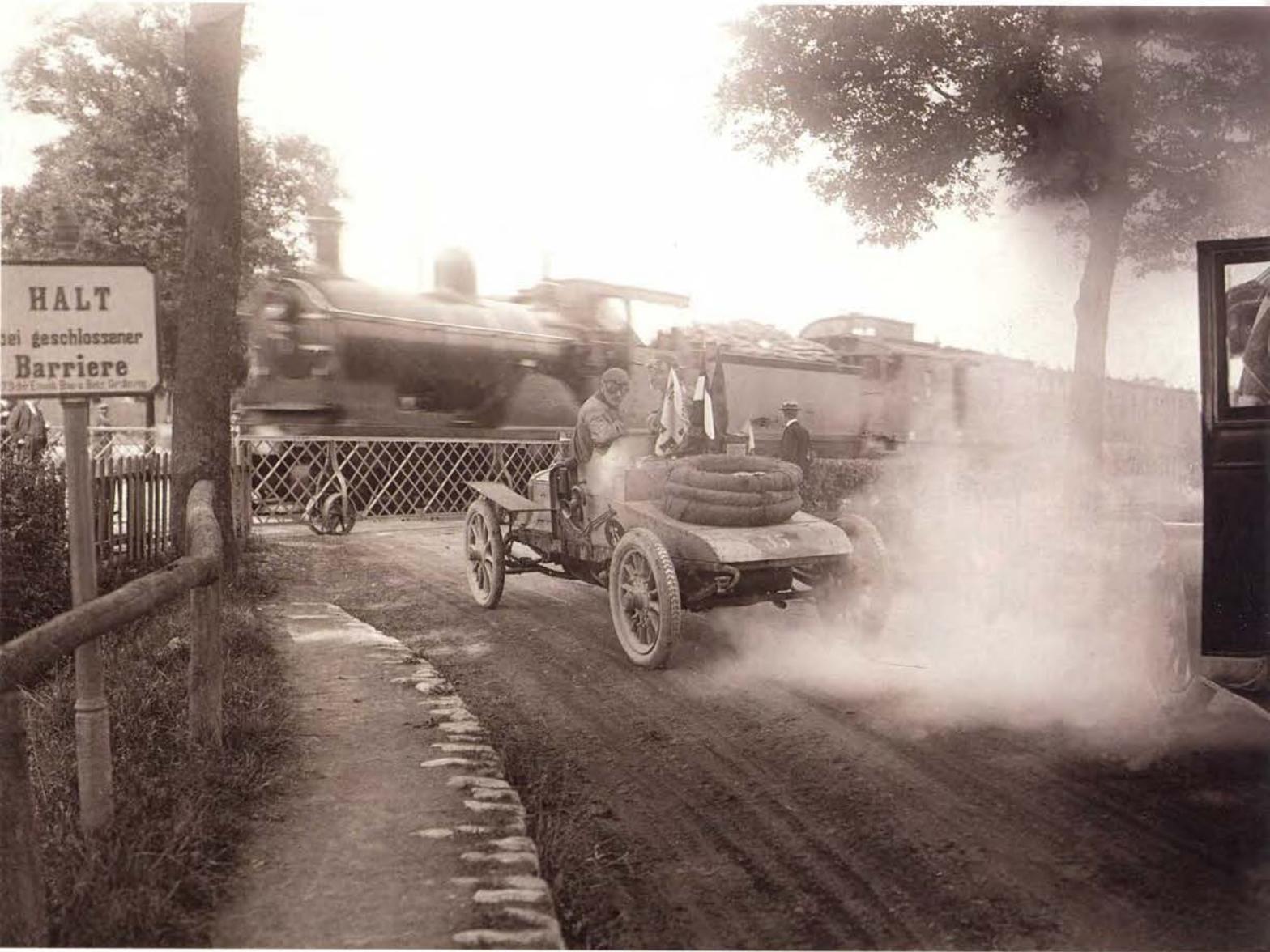
There was quite enough to do, representing car owners. The automobile clubs were the only collective voice of early motorists and before long they were required to defend the car against those who saw it as dangerous, noxious and socially divisive.

It is not difficult to understand how something which had been looked upon as a marvel of the modern age, gained a bad reputation only a few years later. Contemporary accounts of wealthy motorists driving across the Continent (William K Vanderbilt’s fascinating ‘Log of My Motor’ is one such) suggest that they had scant regard for either the populace or local rules of the road.

This public opposition to the car was particularly strong in some parts of America – which may be why Mr Vanderbilt preferred to adventure in Europe. In the USA, railway



*True endurance - survivors of the 1907 Peking-Paris event.*



*Level crossing but rail takes priority over road.*

companies, horse rental firms and insurance companies all sought to discourage motoring by exaggerating the inflammable dangers of gasoline. Hostility sometimes turned into vandalism and direct attacks on motorists. There was also exploitation. In Missouri, for example, motorists wishing to drive across the state – on deplorably bad roads – had to register and pay 50 dollars at each county line. And the farming community of Long Island, New York, soon learned that William Vanderbilt was prepared to make generous settlements for damage caused by his speeding cars and arranged for horses that were ready for the knacker's yard to stray into his path. It was estimated that these pay-offs made Vanderbilt's motoring cost more than 50 dollars a mile.

In 1906, Woodrow Wilson, the governor of New Jersey and a future president of the United States, brought the automobile into politics. 'Nothing has spread socialist feeling in this country faster than the automobile,' he expounded. 'It is a picture of the arrogance of wealth.'

At about the same time, Count Pierre de la Ville-Bauge, a French pioneer motorist, wrote: 'There will always be snobs willing to pay 110,000 francs for the name on the bonnet, but what most purchasers want is a reliable car, comfortable and commodious enough for their needs. The interests of tourists are becoming more and more divorced from those of racers, for whom cost is nothing.'

This was a realization that the car was maturing, that a chauffeur who was also a mechanic was no longer a vital accompaniment to car ownership. It would be some years before the average man could have a car of his own – Henry Ford did the most to popularize motoring when he started to make the Model T

fast and cheap in 1913 – but the rise in the motor vehicle population was inexorable.

The AIACR had seen that motor racing needed common regulations to prosper. And, as cars spread across the world in increasing numbers, some internationally agreed rules about their use would be essential. The AIACR, which had only decided on its own statutes in 1907, thought that it was the right forum to discuss and recommend such things.

So, in 1908, the Association set up a sub-commission to look at ways of harmonizing vehicle and driving requirements. Its suggestions have the tone of an elite group that was not keen on control from outside and would accept only the minimum of restrictions. For example, it proposed that driving licences issued by national police should be universally accepted 'until the general public is sufficiently accustomed to the presence of swiftly-moving vehicles, when driving licences should be abolished'.

It also recommended that there should be a standard rule of the road. As ideal and logical as that seemed, it was no more realistic then than it would be today. There was however some sense in persuading individual countries to adopt the same rule throughout their own territory; at that time, Italy and Spain drove on the right, but traffic in the cities of Milan, Rome and Madrid was on the left!

Traffic signs had been standardized in France in 1903 and the AIACR proposed that four be adopted internationally: round warning signals for a road dip, level crossing, corner, and dangerous intersection.

Perhaps most important of all was the recommendation that cars should be issued with a 'free movement licence', predicting the customs carnet, the issue of which would

become a vital activity in the Association's future.

The AIACR was able to put these ideas to a diplomatic conference convened in October 1909 under the patronage of the French ministry of foreign affairs. Not many were accepted, although it was decided to introduce an international road certificate, covering car and driver (that did come into being but soon fell into disuse). This International Convention on Road Traffic was a milestone, as it was the first official dialogue between the Association and national governments.

The state of roads was a regular subject of discussion. In Paris, where most AIACR meetings took place, the wide asphalt streets encouraged cars and by 1909 the volume of vehicles had brought the beginnings of planned traffic management with the introduction of one-way streets and the Champs-Élysées divided into lanes for motorized and non-motorized vehicles. In general, the main roads of France, and of Germany, were good – because there had been so much military activity in the previous century.

The idea of dedicated motor roads, from which animal traffic, bicycles and pedestrians would be banned, had been discussed at the 1909 Convention, but interestingly, was opposed by some members of the AIACR, particularly Britain's RAC. It was feared that, if they were built, such roadways would become like railways and cars would be excluded from ordinary roads.

Britain's roads had declined with the advent of the railways in the 19th century. In the USA there was no proper network at all. In 1913, as Ford was starting mass-production of Model Ts on a moving assembly line, it could still only deliver them by road within 100 miles of

Detroit. President Woodrow Wilson signed the Federal Road Act in 1916, aimed at creating a network of interstate highways, but these were single-track roads, not the freeways and thruways that characterize America today. The first of those, the Arroyo Seco Parkway in California (now part of the Pasadena Freeway) and the Pennsylvania Turnpike, would not be opened until 1940.

In Europe there were grand schemes for international routes, but for many years they remained a theoretical ideal, with existing roads joined at country borders and renumbered but not actually upgraded. The first World War was followed by a severe economic depression which meant that repairs to some routes which everyone agreed needed attention – like the war-torn roads from Paris to Brussels – simply could not be afforded.

It was Germany, the country with the worst economic situation of all, that first announced an ambitious programme of road improvement. In 1924, as the country came out of hyperinflation, it showed plans for 24,000 kilometres of super-highways. But the first city-to-city autobahn, from Frankfurt to Darmstadt, was not ready until 1935 and it was built under a new scheme devised by the Nazi regime of Adolf Hitler. By then, Italy, under dictator Benito Mussolini, had 20,000 kilometres of special motor roads, the first being the 21-km Milan-Varese autostrada opened in 1925. These were the forerunners of the motorways that cross the modern world.

It took a long time for Europe to return to normality after World War I. The AIACR was not revived until 1920. The responsibility for governing motor sport was transferred to its Commission Sportive Internationale in 1922 and thereafter the AIACR General Assembly

**PART II.**  
**SIGNALS TO BE GIVEN BY DRIVERS.**  
**(a) SIGNALS TO DRIVERS OF OTHER VEHICLES.**

**No. 1. "I am going to SLOW DOWN, or STOP, or TURN to my LEFT."**

Extend the right arm with the palm of the hand turned downwards, and move the arm slowly up and down, keeping the wrist loose.

**No. 2. "I am going to OVERTAKE."**  
(This signal may be necessary in cases where it is DANGEROUS to OVERTAKE.)

Extend the right arm and hand, with the palm turned to the right, and hold it in a horizontal position straight out from the side of the vehicle.

**No. 3. "You may OVERTAKE me on my RIGHT."**  
(This signal should only be given when it is safe for the overtaking vehicle to pass. The overtaking driver is not obliged thereby from the duty of satisfying himself that he can overtake with safety.)

Extend the right arm and hand below the level of the shoulder, and move them backwards and forwards.

**No. 4. "DRAWN VEHICLES should give signals, giving them priority, and in any case keeping clear of traffic."**

**DRIVERS TO POLICE STABLES.**  
Police constables engaged in driving all vehicles should be signalled to him by means of one of the signals in which they wish to pass in the diagrams as being the most convenient.

**"GO STRAIGHT AHEAD."**

Raise the hand towards the shoulder and move the forearm well forwards and then back in a vertical plane, making the movement sufficiently pronounced to be easily seen by the constable.

**Ministry of Transport.**  
**THE HIGHWAY CODE**  
Issued by the Minister of Transport with the authority of Parliament in pursuance of Section 45 of the Road Traffic Act, 1930.

LONDON:  
PRINTED AND PUBLISHED BY HER MAJESTY'S STATIONERY OFFICE  
15, BARRINGTON COURT, LONDON, W.C.2. (Printed in Great Britain)  
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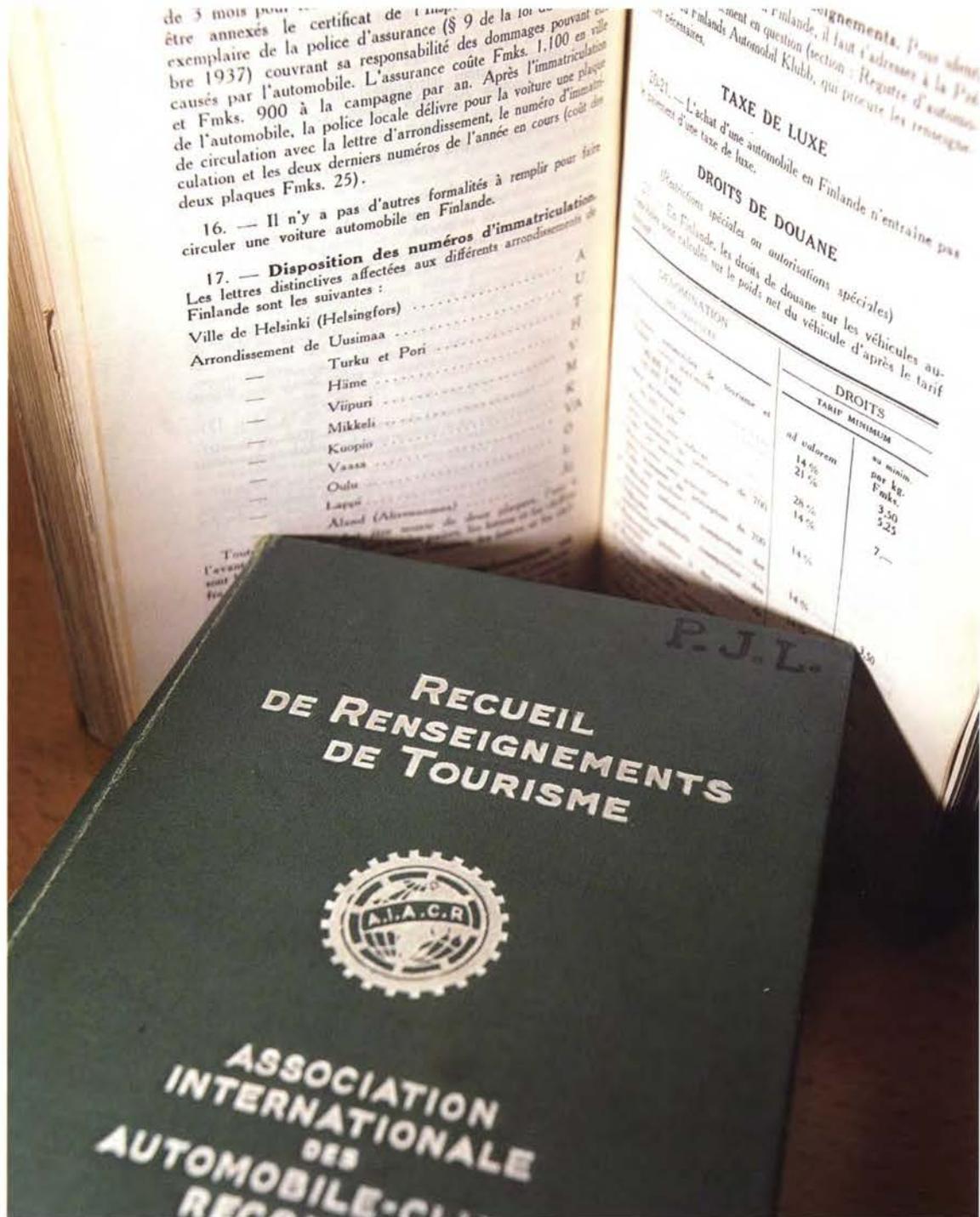
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Rules of the road - the first British Highway Code.



The Green Book - the ALACR's bible for touring

devoted more time and effort to broader motoring issues, particularly traffic, vehicle regulations, customs issues and international touring.

In 1924, the AIACR was 20 years old, and at the General Assembly, the President, Baron de Zuylen, reported on progress in all these areas. The first issue of the Association's Bulletin had just been published, intended to communicate its activities more widely. Touring activities and border crossing issues had brought the first links with the Alliance Internationale de Tourisme (AIT), which led to the creation of the Conseil Général du Tourisme Internationale. This was a neutral body that could represent both organizations, and other interested parties, at meetings about tourism with public authorities and governments.

What's in a name? At the 20th anniversary meeting, the Nordic countries represented proposed that the AIACR should become a 'federation'. The Italians were not comfortable with that idea, saying that it implied too close a link and a loss of national authority and that 'association' was better. The motion was passed but did not gain a two-thirds majority, so the change did not take place. Britain's Mervyn O'Gorman brought this up again in 1930, but it didn't find favour. It would take another 16 years – and a world war – to get the idea accepted.

The year 1926 was a key date for the AIACR as it widened the scope of its traffic commission and combined it with the customs commission, the CID (which had also been set up in 1911, as we will learn in the next chapter). This became the Commission Internationale de Circulation et Douanes (CICD). And, as if there were not enough confusing abbreviations, it also formed a Commission de Tourisme (CIT).

A second International Convention on

Road Traffic was held in Paris under the aegis of the League of Nations, and the AIACR was a major contributor. This 1926 meeting made some real progress. It agreed that:

All cars should be subject to a safety check by a competent authority.

Number plates should be carried front and rear with a national identity plate (with country abbreviations, to an agreed size and format) at the back of the car.

There should be an international registration document and an international driving licence to a standard format to ease translation. The registration document didn't happen, but the international licence continues to this day.

A classification into main and secondary roads would provide a system of priority at crossroads.

A standard design of traffic signals to indicate dangers – Z bends, crossroads, and bumps 250m ahead – should be introduced.

Thus, the motoring world as we know it today started to take shape.

Statistics show that once America had overcome the opposition to the car and motor vehicles became more affordable, it shot ahead of all other countries. Of the 277 million motor vehicles in the world in 1926 (23.5 million cars), 19.3 million were in the USA. The second biggest motoring country was Britain (754,000) ahead of France (585,000). By 1932, the global vehicle parc had increased to 35.1 million, with 22.2 million in the USA, 1.25 million in France and 989,000 in Britain. By then, Canada topped the list in terms of vehicles per head of population, with one vehicle for every nine people.



*The passing of an era – the horseless carriage overtakes the cart.*

Inevitably, with the rise in vehicle population, road safety became an international issue. To bring down the casualty rate – by 1934 there were more than 7000 deaths a year on the roads of Britain, which had by no means the worst record – road and traffic management, vehicle technology and drivers' skills needed to be developed.

There was a wide variation in all of these across the 34 countries now represented in the AIACR. Britain, which laboured under a 20mph (32.2km/h) speed limit until 1930, was seen to have taken an enlightened step with the publication of a Highway Code in 1931. Its architect was Mervyn O'Gorman, the voluble RAC representative at the AIACR, who at a General Assembly expressed the view, widely shared before and since, that the French system of priority to the right in towns was dangerous and inconsistent. The AIACR seems to have agreed as it stated that this system was against the 1926 Convention – but it went no further than that.

France had a compulsory driving test from the early days, but such an examination was not

introduced to Britain until 1935, and in many countries – and several states of America – driving licences were either not required or obtainable without any demonstration of competence until the 1950s.

At the next League of Nations traffic convention, in Geneva in 1931, the AIACR's suggestion that traffic signals should use symbols rather than words was accepted. The basis for universal traffic signals was thus established, although not all countries were signatories:

Triangular for danger – corner, bumps, crossroads .

Circular for instructions – no through roads, speed limits.

Rectangular for indications – parking, hospitals, etc.

Gradually, more precise traffic management was applied to major cities. In Paris, designated pedestrian crossings had resulted in a 20 per cent reduction in street casualties. Traffic lights, first introduced in Cleveland, USA, in 1914, had

come to Europe. In 1931 London's Oxford Street – one of the British capital's main thoroughfares – banned horses and slow vehicles, turning round in the road, and waiting at the kerbside.

By the 1930s, the AIACR's realm extended well beyond Europe and the USA. The national automobile clubs of China, Cuba and Uruguay had joined in 1920. During that decade most of the other South American clubs were welcomed into the fold: Argentina, Brazil, Chile, Colombia. In 1933, India, Lebanon, Mexico and South Africa were included, and Peru and Turkey followed in 1937. Within Europe, coverage was almost complete: the Automobile Club of Germany was re-admitted in 1925 and Estonia, Greece, Ireland, Latvia, Lithuania and Luxembourg all joined in this period. There had to be some adjustment of the rules as not all of these clubs were involved in motor sport as well as touring; in such cases, it was agreed, two organizations could be admitted from one country.

At the General Assembly in October 1931, Baron de Zuylen stood down as AIACR president. The founder of the ACF (and president of the French club until 1922) had been at the head of the Association since its formation, 27 years before. At 71 years of age, the Baron said it was time to find his successor. Count Robert de Vogüé, who had followed Baron de Zuylen as president of the ACF, was elected president of the AIACR and Baron de Zuylen was awarded the title of founding president of honour. The Association may have spread its influence far and wide, but its direction remained firmly in the hands of the French.

Through the 1920s many national motor clubs had been 'democratized', vastly increasing their memberships by the provision of roadside

assistance or breakdown services.

Reciprocal facilities, where a member of one club could request assistance when travelling in the domain of another, occupied quite a lot of discussion time at the AIACR's touring commission.

The AIACR felt it had a mission to encourage motor tourism and was well placed to co-ordinate the information available from each of its member clubs. Details on all aspects of motoring in each country – regulations, insurance, fuel grades, filling stations, garages and hotels, and more – were included in the 'Green Book', an AIACR publication which was available to all member clubs.

Furthermore, using the facilities of clubs throughout Europe, the AIACR was able to provide detailed travel itineraries. Routes were assembled in sections, each printed on a separate card. A dashboard holder was available to carry the cards. This 'special service of the AIACR' was called *L'Europe en Automobile* and run from an office in Geneva.

This was an area where the rival Alliance Internationale de Tourisme took a similar role. The AIACR and AIT each guarded their own members jealously. In 1929, Jules Hansez of Belgium, the president of the CICD, suggested that it made sense for there to be a formal link, perhaps even a merger, of the two organizations, but although they formed a joint commission to deal with matters of common interest, an underlying suspicion remained that each side was trying to steal members from the other. This was resolved at a high-level meeting in London in 1936 when the AIACR and AIT agreed that each should renounce exclusivity in certain countries – in other words, that some clubs could be members of both organizations.

With its parallel responsibility as the



*General Assembly of the ALACR, at the ACE, Paris, in 1930. The president Baron du Zuylen and his successors  
Count Robert de Vogüé and Viscount de Rohan are on the left.*

governing body of motor sport, the AIACR had a need to keep abreast of technical developments. Racing regulations were increasingly complex and the CSI needed to take advice from engineers and scientists to stay one step ahead of the race car designers. Hence the companion Commission Technique Internationale (CTI) which started work in 1935. One of its first assignments was to devise, with the car manufacturers, an acceptable, cheat-proof racing formula for Grands Prix at the end of the decade.

Although it reported on all the technical issues surrounding road cars and made recommendations about vehicle safety, fuel efficiency, and even road engineering, it is not clear that the CTI ever had much influence. Unlike the CSI, it had no powers and the AIACR's relationships with governments and the motor industry were at an international rather than national level. Member clubs enjoyed differing relationships with their national governments, but most were not able to be any more than campaigning pressure groups.

The AIACR may have been inspired by the need to regulate racing, but through the 1920s and 1930s it showed its wider purpose – defending motorists, supporting the development of the automobile, and promoting it both as a tool and an expression of human freedom. That freedom was soon to be curtailed by another world conflict.

Count Robert de Vogüé died in 1936, after six years as president of the AIACR. He was followed by Jehan de Rohan-Chabot, Viscount de Rohan – the third president of the ACF and the third president of the AIACR.

The Association had never been busier, healthier or more full of purpose, but there were

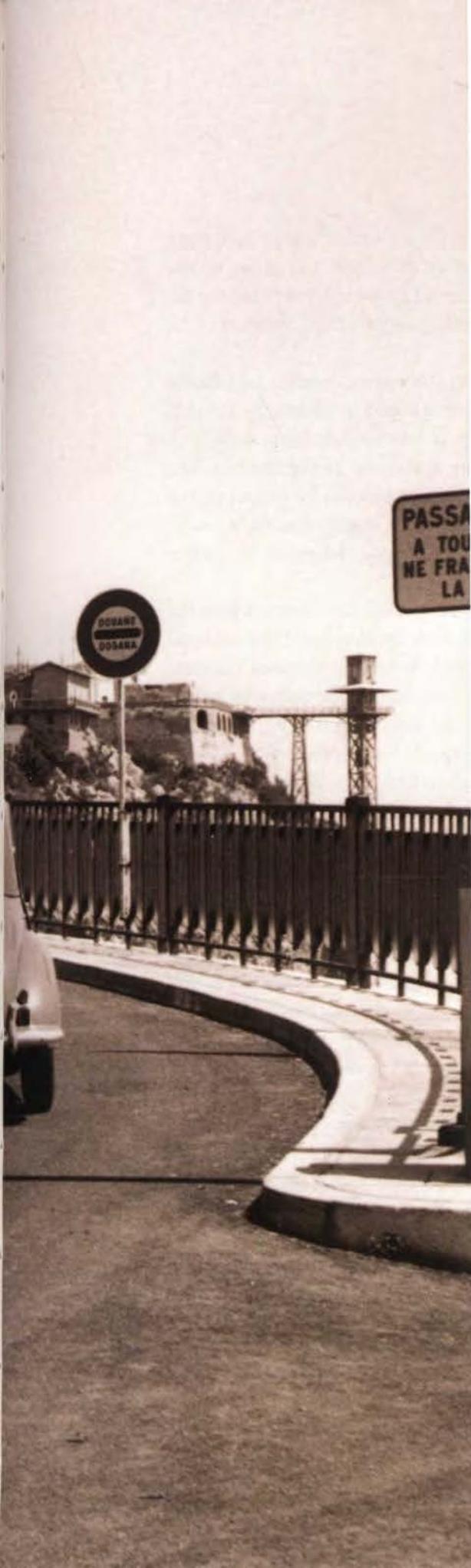
dark clouds on the horizon. The Spanish Civil War had already required the CIT to consider procedures that the clubs should follow when private cars are requisitioned during wartime. In June 1939, the AIACR's General Assembly took place in Washington DC, USA, and it considered an invitation from the German ONS to hold the 1940 summer meeting in Cologne. The decision was deferred to the October meeting.

There was no October meeting. Viscount de Rohan vowed to safeguard the AIACR through the war and the German occupation of France. To avoid requisition, the Association's monies were sent to banks in Britain and Monaco. On 12 May 1940, just a month before German troops entered Paris, a General Assembly was held under the patronage of the Swiss Automobile Club on its neutral territory at the Hotel Bellevue in Berne. Only 15 delegates representing eight countries were able to attend and the meeting concerned itself mostly with matters of war. The CICD had established which goods could still be exported from one country to another – only a few, things like camping equipment and kitchen utensils – and, anticipating mass movement of refugees, there was serious discussion about a common rule of the road for pedestrians.

Viscount de Rohan closed the Berne meeting with these words: 'I hope it will be possible to continue to function during the hostilities, albeit at a reduced level, but we must be vigilant and ready at the first opportunity to return the AIACR to the full activity of past years.'

That opportunity would not come for six years and when it did it was decided, quickly and with no dissension, that the AIACR should make a new start with a new name: the Fédération Internationale de l'Automobile.





## CROSSING FRONTIERS

Today, when crossing the borders between most countries can be achieved with the minimum of fuss, it is hard to understand how difficult international motor touring used to be. Using the good offices of its member clubs, the AIACR was able to simplify the passage of motor vehicles from one country to another by developing the triptyque and carnet system that avoids vehicles in transit having to pay duty at the frontiers. At the same time, it was working with national governments and international organizations to try to break down customs formalities. Its success in many parts of the world – much appreciated by today's motorists – was accompanied by a loss of what was for many years a main income stream for the AIACR and the FIA. In conjunction with the Alliance Internationale de Tourisme, the FIA continues to issue carnets for travel to those countries that require them.

In the first decade of the 20th century, international travel did not involve many formalities. Jean-Jacques Fréville, for 46 years the secretary-general of the FIA, described the requirements for crossing frontiers as simply 'a visiting card and some gold'.

That was for private travellers and their chattels. Most European countries had done away with passports – if they ever had them. Only Bulgaria, Romania, Russia and Turkey required every foreign visitor to have such a document. Automobiles presented more of a problem. National customs authorities regarded them as expensive goods that were subject to local taxes. The motor traveller was obliged to deposit the applicable duty with the customs authority at each border crossing and could – at least in theory – retrieve the funds when leaving the country at the same point.

This not only required a lot of gold, it was also inconsistent and inconvenient – a tourist might not want to leave the country by the same route as he had arrived. It could also be a long and complicated procedure, best handled by a customs agent.

Most of these intrepid long-distance motorists were members of the national automobile clubs and contact between those clubs led to the idea of an internationally-recognized document that could simplify the customs procedure and guarantee the vehicle owner, so that paying and retrieving duty would not be necessary. Such a document would have to be backed by a system for collecting the duty if the car did not return to its home country. The clubs would be the guarantors for their members.

The triptyque, as it became known, was first proposed in 1903. It identified the vehicle and proved that it was covered by a guarantee from the club in the country being visited. As the

name suggests, the document was in three parts, the first section of which was given to the customs officer when entering the country, the second on leaving, and the third returned to the issuing club.

The triptyque system worked by bilateral agreements, being issued in advance by the club in the country to be visited and sent to the club in the country at the start of the itinerary. The triptyque could also be used for several entries and departures, being stamped at each border crossing and surrendered when finally leaving the country.

If the car had not left the country within the time stipulated on the document, the customs authority would demand payment of the duty from the national automobile club, which then had to trace the defaulting driver through his national club to gain recompense.

Triptyques could only be used for one country and clubs making arrangements for a member to motor across Europe would have to draw up contracts with the clubs in each country to be visited and supply a separate document for each one.

The system preceded the formation of the AIACR, but when it was established the Association became the obvious conduit for communications between the clubs. At its second meeting, in December 1904, the AIACR president, Baron de Zuylen, reported that the French customs authorities had formally accepted the triptyque for multiple entries and departures.

Not all the founder members were as keen to ease the path for visiting automobiles. In 1905, AIACR delegates complained of the 'vexation' suffered when entering Switzerland and proposed a boycott of that country by car drivers. Naturally, the Swiss Automobile Club

objected (though even it accepted that there was a problem about the attitude of the Canton of Geneva) but the arguments continued and in 1906 the AIACR took the rather drastic step of suspending the Swiss club's membership for one year.

The triptyque was a useful tool, but its disadvantage was that it applied only to the crossing of one international border. The Touring Club of Italy proposed the customs carnet, which would permit passing through successive borders without payment of duty. The Automobile Club of Italy took up the idea and presented it to the General Assembly of the AIACR in 1910.

In view of the complexity of dealing with border crossings and different procedures in different countries for guaranteeing the triptyque, the Association had just agreed to set up the Commission Internationale de Douanière (CID) as a separate element. The carnet became an immediate issue for study by this customs commission.

It took two years of negotiation, but by 1913 the CID reported that it had been able to reach agreement with 13 customs authorities from around Europe to adopt the carnet. The documents would be issued by the AIACR to its member clubs. The first World War intervened before the system could be initiated and the first carnets were not actually available until 1921.

The customs carnet was a booklet of triptyques (five, 11, or 25 sheets), written in French, each sheet with two vouchers and a stub. It was accepted by customs agencies for multiple entries, backed by a single bond. This needed a multilateral agreement in which each club made a commitment to its national customs authority to guarantee carnets issued

by the other clubs that were signatories to the agreement.

The guarantees were backed by insurance, some of which was arranged centrally by the Association and in other areas set up locally. Thus, there was no standard fee for issuing a carnet. The AIACR printed and provided the documents for an administration fee, but the clubs charged different amounts to their members depending on the itinerary and the financial risk it represented.

The carnet cut down the time and procedures involved in crossing borders and contributed to a considerable increase in international road traffic during the 1930s – something that the AIACR saw as a sign of political and economic progress.

The number of carnets issued by the AIACR to automobile clubs grew quickly: from 250 in 1921 to nearly 4000 in 1924 and more than 25,000 in 1928. Through the 1930s the annual figures fluctuated between 53,500 and 77,350.

By 1927 AIACR carnets were accepted in 21 different countries, including all of central Europe. Negotiations were taking place with Greece, Lithuania, Portugal, Yugoslavia, Morocco and Tunisia. In the United States the ACA moved towards adopting a similar scheme.

It is interesting that this temporary import system had no official sanction other than individual governments giving approval to the national motor clubs running the scheme. The AIACR helped to maintain uniformity of conditions and regulations from country to country. The customs carnet was finally given legal status in 1937 when the AIACR was one of the participants in a meeting in Paris to draft an International Convention on Tourism.

Twenty-eight years earlier, the first

International Convention on Road Traffic had introduced an international road certificate that covered both the car and the driver, so that there would be no need to register the car in each country. But since cars changed hands regularly, and in 1909 most countries were relaxed about driving licences, this proved a cumbersome arrangement and didn't last very long. Passports for people were required by most countries after the first World War. But a vehicle passport, so often discussed by the AIACR, never materialized.

In 1911 the Association had established a traffic commission, the Commission Internationale de Circulation (CIC), which concerned itself with issues such as the reciprocity of driving licences and the consistency of regulations and traffic signs. In 1926, when the second International Convention on Road Traffic adopted a style for an international driving permit, standard traffic signals and road classification, the Association decided to combine its traffic and customs commissions into one body – the CICD – and to pass all touring issues to its newly-formed touring commission, the CIT.

There was a proposal to replace the term 'touriste' to 'voyagers en automobile' (car travellers), but Jules Hansez, the Belgian who took over as president of the CICD from the ACF's Edmond Chaix in 1927, preferred 'automobilistes'. It is probably just as well that there was no agreement to change as the abbreviations for the proliferating AIACR commissions were already causing confusion inside and outside the organization.

But the point was a good one. Customs authorities regarded cars used for business differently from those of tourists. Over time, the CICD was able to persuade national

governments to have private and business car travellers treated in the same way and to include expatriate nationals who were spending less than six months a year in the country on the same basis.

The International Convention on Tourism, drafted in 1937 – with the AIACR's distinguished secretary-general Lieutenant-Colonel G Peron as rapporteur – was supposed to establish new rules for the temporary import of private motor vehicles, boats and aircraft, but it was never ratified because of the onset of the second World War.

The main features of the 1937 convention were finally adopted at the 1949 Geneva Customs Convention. This also eased the passage of commercial vehicles across borders by specifying the TIR carnet for sealed trucks. Previously customs officers could, and did, require them to be unloaded to verify their cargo. TIR carnets required considerable guarantees from the issuing clubs. The FIA issued them at the beginning, but this is a specialized business and it was eventually devolved to a new organization, the International Road Union (IRU), representing the road hauliers.

Despite the difficulties of obtaining currency for travelling and fuel shortages, international car travel in Europe picked up quickly after the war. In 1947, the newly-named FIA issued 78,123 customs carnets to member clubs – exceeding the figure for 1938.

But in the post-war years the trend was to simplify the process of crossing borders. This was to mean less revenue for the FIA, but the free movement of cars was, of course, what the AIACR had been working towards for so many years. Its success on the diplomatic front inevitably meant a loss of business!



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BULGARIE : Union des Automobilistes Bulgares  
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CAMEROUN : Automobile Club de France  
CENTRAFRIQUE : Automobile Club de France  
CHILI : Automòvil Club de Chile  
CHYPRE : Cyprus Automobile Association  
COLOMBIE : Touring y Automòvil Club de Colombia  
COMORES : Automobile Club de France  
CONGO : Automobile Club de France  
COSTA RICA : Automòvil - Touring Club de Costa Rica  
COTE D'IVOIRE : Automobile Club de France  
DANEMARK : Dansk Automòbil Sports Union (D.A.S.U.)  
EGYPTE (R.A.) : Automobile et Touring Club d'Egypte  
EMIRATS ARABES UNIS : Automobile and Touring Club for United Arab Emirates  
EQUATEUR : Automòvil Club del Ecuador (ANETA)  
ESPAGNE : Real Automòvil Club de Espana  
FINLANDE : Automobile and Touring Club of Finland (Autoliitto)  
FRANCE : GUADELOUPE, GUYANE, MARTINIQUE, REUNION : Automobile Club de France

FUTUNA : Automobile Club de France  
GABON : Automobile Club de France  
GRANDE-BRETAGNE : The Royal Automobile Club  
GRECE : Automobile et Touring Club de Grece (ELPA)  
GUINEE : Automobile Club de France  
HONGRIE : Magyar Autoklub  
INDONESIE : Ikatan Motor Indonesia  
IRAN : Touring and Automobile Club of Islamic Republic of Iran  
IRAQ : Iraq Automobile and Touring Association  
IRLANDE : The RAC of Great Britain  
ISRAEL : Automobile and Touring Club of Israel  
ITALIE : Automobile Club d'Italia  
JAPON : Japan Automobile Federation  
JORDANIE : Royal Automobile Club of Jordan  
KENYA : The Automobile Association of Kenya  
KUWAIT : Kuwait International Automobile Club  
LESOTHO : The Automobile Association of South Africa  
LIBAN : Automobile et Touring Club du Liban  
LIBYE : Automobile et Touring Club de Libye  
LUXEMBOURG : Automobile Club du Grand-Duché de Luxembourg  
MADAGASCAR : Automobile Club de France  
MALAYSIA : Automobile Association of Malaysia  
MALAWI : Automobile Association of Zimbabwe  
MALI : Automobile Club de France  
MALTE : The Royal Automobile Club of Great Britain  
MAROC : Royal Automobile Club Marocain  
MAURITANIE : Automobile Club de France  
MEXIQUE : Association Nacional Automovilistica (ANAA)  
MONACO : Automobile Club de France  
NIGER : Automobile Club de France  
NORVEGE : Kongelig Norsk Automobilklub  
NOUVELLE-CALÉDONIE : Automobile Club de France

NOUVELLES HEBRIDES : Automobile Club de France  
PAKISTAN : Automobile Association of Pakistan  
PARAGUAY : Touring y Automòvil Club Paraguayo  
PAYS-BAS : Koninklijke Nederlandse Automobil Club  
PEROU : Touring y Automòvil Club del Peru  
PHILIPPINES : Philippine Motor Association  
POLOGNE : Polski Związek Motorowy  
POLYNESIE FRANÇAISE : Automobile Club de France  
PORTUGAL : Automovel Club de Portugal  
QATAR : Automobile et Touring Club de Qatar  
ROUMANIE : Federatia Automòbil Clubul Roman  
SAINT-PIERRE ET MIQUELON : Automobile Club de France  
SOMALIE (Rép.) : The Royal Automobile Club of Great Britain  
SUEDE : Kungl Automòbil Klubben  
SUISSE : Automobile-Club de Suisse  
SYRIE : Automobile-Club de Syrie  
SWAZILAND : The Automobile Association of South Africa  
TANZANIE : The Royal Automobile Club of Great Britain  
TCHAD : Automobile Club de France  
TCHÉCOSLOVAQUIE : Ústřední Automotoklub CSSR  
THAÏLANDE : The Royal Automobile Association of Thailand  
TOGO : Automobile Club de France  
TUNISIE : National Automobile-Club de Tunisie  
TURQUIE : Türkiye Turizm Ve Otomobil Kurumu  
UGANDA : The Royal Automobile Club of Great Britain  
U.R.S.S. : Federatsia Avtomobilnogo Sporta S.S.S.R.  
URUGUAY : Automòvil Club del Uruguay  
VENEZUELA : Touring y Automòvil Club de Venezuela  
WALLIS : Automobile Club de France  
YUGOSLAVIE : Auto-Moto Savez Jugoslavije  
ZAIRE : Federation Automobile du Zaïre  
ZIMBABWE : Automobile Association of Zimbabwe



*Lining up for the ferry - 1920s motorists wait to board ship.*

The FIA's CICD recommended that its customs carnets should be sold to anyone requesting them, whether or not they belonged to a national automobile club. This also had financial implications, as clubs worried about losing members.

As motor touring increased in popularity, the FIA encouraged clubs to start travel agencies and their members to benefit from facilities abroad by showing a special FIA Introduction Card.

It was also able to advise and mediate in disputes with customs authorities about the repair of vehicles damaged abroad. Currency restrictions were severe and import licences were required for car parts so, as clumsy as it now seems, it was better to obtain the necessary components in an owner's home country and add them to the vehicle carnet. The Federation worked towards international agreements for reimbursement of repairs abroad.

Closer relations with the AIT – which also issued customs carnets – had brought discussions about a common document as early as 1949, when the idea of a union between the two organizations was first discussed seriously. The merger plans stalled – as they would several times in the years to follow – but there was a

simple logic in joining together to issue customs documents.

Two United Nations protocols covering the temporary importation of vehicles, in 1954 (cars) and 1956 (commercial vehicles), recognized the FIA and the AIT as the two international organizations with the rights to issue CPDs, carnets de passages en douanes. Their documents were already very similar in content and format.

But the idea of a common carnet issued by a joint office was complicated by different networks of clubs being party to the guarantees. It was not until the 1992 that this was resolved. The customs networks were combined and a single FIA/AIT office in Geneva issued the carnets of both organizations. The document itself was not standardized, with both FIA and AIT logos, until it was revised in 1996.

Whilst the requirement for most types of vehicle in most of Europe and North America disappeared by the early 1960s, the carnet system still operates in many other parts of the world: Africa, Asia, Australasia, the Middle East and South America. Nowadays, the FIA/AIT customs affairs department in Geneva issues 150,000 carnets a year.



## A SPORTING CODE

Through the 1920s and 1930s, motor sport grew in size and complexity and away from the everyday world of motoring. The CSI drew up an International Sporting Code as the master document for motor sporting events throughout the world. France, Italy and then Germany dominated top-line motor racing in Europe through this period, which saw the creation of a short-lived World Championship for car constructors and a European Championship for drivers. The events that made up these championships included some of the classic Grands Prix still run today. The application of new technologies by the German teams in the late 1930s brought a massive increase in power and speed. Their 'silver arrows' were the fastest racing cars the world had ever seen.

By 1922, when the Commission Sportive Internationale was set up – many thought, not before time – the automobile had matured. Racing cars and road vehicles had grown apart. The world seemed to be smaller, as more people had travelled further and communications were easier and speedier than ever before.

The AIACR did well to establish itself as the supreme controlling body for motor sport when it did. The French dominance of all things motoring, and racing in particular, was no longer universally acceptable. The first World War had changed the balance of power. All the countries represented at the CSI agreed: what was needed was a comprehensive framework of regulations that would be applicable to all international events.

This was to be the Code Sportif International (International Sporting Code). Ironically, but logically in view of its long experience, the shared headquarters in Paris, and the CSI presidency of Chevalier René de Knyff, the Automobile Club of France compiled the Code. It was a long job, for although the idea was mooted at the outset, it was not until 1925 that the Code and its appendices, covering the regulations for the cars themselves, driver licensing, circuit requirements, and so on, were finally agreed and adopted by the AIACR.

The general principle was described thus: 'The AIACR shall be the sole international sporting authority entitled to make and enforce regulations for the encouragement and control of automobile competitions and records and shall be the final international court of appeal for the settlement of disputes arising therefrom.'

The Code came into force on 1 January 1926 'replacing all previous sporting rules'. It was a highly detailed document – more so than some

national clubs would have liked – and still subject to development. It did not reach the final version of the first edition until 1929 and not a year has gone by since without some further modifications.

Some 20,000 copies of the first edition of the International Sporting Code were published, in both English and French. It carried a note: 'In case of dispute, the French text is to be used.'

It was implicit in the Code that the AIACR would grant motor sport authority to one club in each country and that the Association and its CSI would neither organize nor control individual events directly. The international court of appeal was to be made up of senior representatives from 12 countries – a minimum of five of whom must appear at any tribunal.

The CSI saw its activities as extending beyond the sporting regulations and drawing up the international calendar of events.

It acted quickly to prevent manufacturers making false or exaggerated claims for their products. An edict was issued to advertisers of accessories, tyres, carburettors, magnetos, lighting etc. 'If these manufacturers want to make publicity from races they are obliged to declare which cars carry their equipment.' And to reinforce its authority, the CSI persuaded the international car manufacturers' association (BPICA) that its members 'should abstain from publicity relative to races which are not organized by a recognized national club'.

It also took tough decisions when there had been rule infringements. In the mid-1920s the Diatto and Maserati teams were both suspended for a while – Maserati, at the behest of the AC of Spain, for running a 3-litre engine in a race for 2-litre cars.

Finding an acceptable (and affordable) racing formula was still troublesome. A

ASSOCIATION INTERNATIONALE  
DES  
AUTOMOBILE-CLUBS RECONNUS

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STATUTS  
ET  
RÈGLEMENT GÉNÉRAL SPORTIF

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STATUTES  
AND  
GENERAL COMPETITION RULES

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*The International Sporting Code was first published in 1926.*

maximum engine displacement of 3000cc went down to 2000 and then, for 1926, to 1500cc, but supercharging, then new in cars (development had accelerated in the wartime aero industry) was allowed.

These cars were small but fast – inevitably, some people thought too fast. Louis Delage, whose cars were to be supreme in the mid-1920s, sent a letter to the CSI expressing his apprehension about supercharged 1.5-litre cars developing 160bhp. He asked the CSI to consider devices to limit speed to 120km/h (74.6mph). Senator Silvio Crespi, the president of the AC of Milan, called the 1500cc formula absurd, ‘the public wants to see bigger cars’. Baron Nothomb, representing Belgium, said: ‘Speed isn’t dangerous in itself. We should consider the security and stability of the vehicle. The solution is to add more weight!’ The arguments were already familiar and to be replayed again and again in the years to come.

By 1925, the riding mechanic had gone from Grand Prix racing – for very sensible safety reasons – although the cars remained two-

seaters. The Italians, ever-keen to promote their fine new autodrome at Monza, opened in 1922, said that ‘it was prudent to run these new light vehicles on a concrete track’. Also from Italy came a proposal for a racing formula based on aerodynamics: vertical rectangular plates at the front of the car would be required to increase air resistance with a minimum frontal area of 1.45sq.m. CSI president René de Knyff was scornful: ‘impractical and the public wouldn’t understand’.

It is clear from examining the CSI minutes of those years – blue carbon copies on rough, yellowing paper – that the Italians were intent on becoming the leading nation in motor racing. Indeed, the CSI’s first task, discussed in London on the day of its formation, was to consider a proposal from the Automobile Club of Italy that there should be an annual Grand Prix of Europe, the first of which would be in 1923 at Monza. Thereafter, the CSI would designate the title to a different country each year, where it would be the sole international race in that territory.

The ACI’s idea was for an international race



*Bentleys at Le Mans, where the 24-Hours pioneered endurance racing for sports cars.*



*Nürburgring in Germany, opened in 1927, attracted spectators and their cars in thousands.*

for car constructors with a valuable trophy awarded to the winner and kept between races at the appropriate national club. Which country should hold the Grand Prix of Europe, and when, was to be a recurring point of argument and also caused dissension between the CSI and the AIACR's General Assembly. The main assembly decided to award it to Belgium for 1925 and Spain in 1926, but Italy wanted it back again. Apart from the prestige, it had made good money; 150,000 paid to enter the Monza enclosures in 1923.

Italy's next move was to initiate an Automobile Championship of the World, a contest for makes which qualified by entering the Grand Prix of Europe and two other races from this list: the Grand Prix d'ACF, Grand Prix of Italy, Grand Prix of Great Britain and the Indianapolis 500. It had a simple points system – 1, 2 and 3 points for the first three finishers; all other finishers 4 points; did not finish 5; did not start (but signed on) 6. Only the best score per

make counted and the champion was the make with the lowest number of points. The prize was 70,000 francs plus a 'piece of art' (a trophy) worth 30,000 francs.

Bugatti was the first World Champion in 1926. But it was more interested in promoting its successes in lesser races with amateur drivers in customer cars. A typical Bugatti advertisement boasted: 'More than one victory a day. 1 January 1925 and 30 September 1925 – 273 days, 412 victories.' In 1927, Delage won every Grand Prix that it started and so took the championship.

By the mid-1920s there was a lot of racing going on. In 1926, 30 events appeared on the CSI's international sporting calendar, but a year later the list had crowded up to 65. The Grandes Epreuves – the Belgian, French and Italian Grands Prix and the Targa Florio – had their chosen fixed dates, but it was getting more and more difficult to avoid clashes of events. Some of the events the CSI was called upon to sanction were specialized, to say the least: in 1926 there was

an application for a Grand Prix for military tanks!

An important development in 1927 was the admission of the American Automobile Association's Contest Board to the CSI as the representative body for motor sport in the United States. This was pragmatic, as the AIACR's founder member, the ACA, was now hardly involved in racing, but it marked the first time that two clubs from one country became members, with different areas of activity.

The Triple A was to become a full member of the AIACR in 1931. But when first admitted to the CSI, it caused a stir in the committee rooms of the ACF by nominating the eminent journalist W F Bradley – the AAA representative in Paris – as a delegate. The CSI establishment had always kept its proceedings strictly confidential and was unhappy about having a journalist in its midst. W F Bradley soon made his mark by saying that a World Championship was inappropriate, that in reality it was a European championship, even if the Indianapolis 500 was listed among the *Grandes Epreuves*. The CSI debated this and decided not to change the title, as American cars could and sometimes did compete in *Grands Prix*.

The World Championship was, in any case, to be short-lived. In 1928, with world economics turning down (the Wall Street Crash was only a year away), several of the big races were cancelled and no marque contested enough races to qualify.

Even if racing was entering a bad patch, motor sport was getting more organized. International racing licences, for entrants and drivers, were introduced as part of the Sporting Code. National racing colours, most of which had been in use since the days of the Gordon Bennett Trophy, were made official and with more countries joining the AIACR, the CSI

would approve their own choice of colours provided that they were not already in use.

(As an aside, some of the racing colours had changed: Italy, originally black, took red; the United States went from red to white and red and then to white and blue; Switzerland, which had used red and yellow, changed to red and white.)

The trackside flag signal convention was expanded. A yellow flag meant stop; blue, move over, someone is overtaking; blue waved, attention, danger; black with a number, that car must stop. Several countries objected to the use of a red flag – presumably for political reasons.

But the CSI struggled to find an appropriate racing formula for such straitened times. It introduced fuel (and oil) consumption limits, together with minimum dimensions that were designed to limit speed but actually encouraged more aerodynamic shapes. In 1930, only the Grand Prix of Europe at Spa, Belgium, ran to these rules and although René de Knyff reported to the CSI that this was a 'great success' (Bugattis were first, second and third), there was no enthusiasm for such a formula from either manufacturers or race organizers.

The CSI was forced to conclude that the rules it proposed for 1931, based on the Indianapolis formula, 'are not of interest to constructors in Europe'. It declared that each national club was free to choose rules for its own Grand Prix – or have none at all, as had been the case for many of them for the previous three years – but the races should be of at least 10 hours' duration. Some *Grandes Epreuves* were run for sports cars, including the Belgian race, which became the Spa 24-Hours, the German Grand Prix at the recently opened Nürburgring, and Britain's Tourist Trophy.

Sports car racing, intended for touring cars,

had already gained momentum, thanks in part to the Le Mans 24-Hour race staged by the Automobile Club de l'Ouest since 1923, and the Mille Miglia in Italy, which was, in truth, the reincarnation of the town-to-town road races which had ended with the 1903 Paris-Madrid.

The ACF, which had occupied itself with such good (and far-sighted) works as a 'rally of national fuels' (entries ran on methanol, coal gas, gazogene and even solid combustibles), thought that a way of rekindling interest in racing would be to revive the Gordon Bennett Trophy. Augustin Pérouse, the president of the ACF's sporting commission, proposed an event for national teams of six cars, but the CSI voted against it.

Nation-against-nation racing was to return

in the mid-1930s, although not in the way that the ACF had envisaged. The free-for-all in Grand Prix racing lasted through 1933, by which time the CSI, in consultation with the car makers, had arrived at an acceptable formula for introduction the following year.

This became known as the '750 kilogram' formula, referring to the maximum permitted weight for the car without water, oil, fuel or tyres. The weight limit, intended to keep speeds down, had been the subject of much discussion, but was settled when M. Pérouse pointed out that the Alfa Romeo P3 Grand Prix machine – the dominant car of 1932 – weighed 740kg.

At its meeting in October 1933, the CSI noted: 'there is a big interest from several countries, all of which are preparing cars for the



*Monaco launched the concept of starting positions based on practice times.*

coming season'. In fact, the interest was concentrated in Germany and Italy, where, for reasons of national prestige, the governments were encouraging, and subsidizing, their racing car constructors.

National patronage on a smaller scale had brought the newly-formed Automobile Club of Monaco to some prominence in motor sport circles. The ACM's predecessor, Sport Automobile et Vélocipède de Monaco, had been refused admission to the AIACR because its only motoring event, the Monte Carlo Rally, did not take place on its own territory. Undaunted, Antony Noghes, co-promoter of the rally, proposed translating the early

American town races – he had seen an event in Santa Monica, California – to the winding streets of Monte Carlo. Prince Louis II of Monaco supported the idea, which then, as now, was primarily to encourage visitors. The first Monaco Grand Prix in April 1929 saw 16 cars compete over 100 laps of a 3.18-kilometre (1.97-mile) circuit. It was won by William Grover-Williams, an Englishman who lived in France, raced simply as 'Williams', and drove his own French Bugatti painted British green.

Apart from being the shortest, and slowest, circuit for Grand Prix cars, Monaco was to set several trends. It was the first (in 1933) to decide positions on the starting grid by practice lap



*'Williams' – the Englishman in his French Bugatti, winner of the first Monaco Grand Prix.*

times; the usual procedure of starting positions by ballot was thought unfair on a narrow circuit where it is difficult to overtake.

Well-controlled 'round the houses' racing was to become a successful tourist attraction for other towns and cities – and even encouraged Grand Prix racing back to America in the 1970s and 1980s with the races at Long Beach, California and Detroit, Michigan.

With the Monaco Grand Prix established as an annual event, the ACM was admitted to the AIACR and Antony Noghes became a delegate to the CSI. He quickly took up the cause for rallying, demanding recognition for the Monte Carlo Rally and others in the international sporting calendar and proposing the formation of a rally sub-commission of the CSI. That came into being and its first task was to define the term 'rally'. In September 1933, the CSI accepted this definition: 'An event which is ruled by average speed, has multiple itineraries, and fastest speed on the road is not a factor in the final classification.'

The multiple itineraries were the aspect of rallying that should, and did, most exercise the CSI, for the AIACR was uniquely qualified to co-ordinate events that travelled across national borders, involving the member clubs in each country.

It seems that the CSI was acutely and somewhat uncomfortably aware of the way that Germany and Italy were starting to use motor racing for national propaganda. It gave effusive welcome to the Grand Prix of Switzerland, held for the first time in 1934 on the Bremgarten circuit in Berne: 'As a neutral country, geographically central, Switzerland is very important. It is to be hoped that this Grand Prix will soon join the classic events, the Grandes Epreuves.'

But any misgivings about the motives of the

competitors were submerged beneath the self-congratulation for a brilliant first season of the 750kg Grand Prix formula. With the re-entry of Mercedes-Benz and the arrival of Auto Union, motor racing moved up a gear. Those cars had a new level of technical sophistication. It was already clear that rules based on experience of the previous few years – when there had been little technical progress – had brought speeds far, far higher than the CSI had envisaged.

For all that, the safety record in the first season for these mighty machines was not bad. Relatively, that is. The talented young Algerian driver Guy Moll had died in an accident at Pescara driving an Alfa Romeo of Scuderia Ferrari. But it was accepted that motor racing was dangerous and would, from time to time, involve loss of life.

Some public opinion, swayed by press comment, particularly in France and Britain, was that these new racing cars were too fast to be safe, and called on the AIACR to slow them down. The CSI answered the critics with this statement by René de Knyff:

'The view has been expressed that speeds of Grand Prix cars are exaggerated and dangerous. This season, cars have attained more than 300km/h (186mph). Speed is one of the principal factors of progress and we cannot stop progress. The CSI does want to reduce danger in races. The ACF sporting commission has proposed a ban on special fuels which would reduce the potential of the cars but banning fuels also inhibits progress and some of these fuels are starting to become commercially available, especially in England. The CSI is not won over by this proposition and the manufacturers are opposed to any change.'

The formula was intended to run for three years, until the end of 1936. The CSI started

regular meetings with the international association of car manufacturers (BPICA). It was agreed that they would start a joint study on the successor to the 750kg formula.

In the meantime, the AIACR, seeing that the manufacturers in Grand Prix racing were well able to generate their own publicity, started a European Championship for drivers. The winner of this, the forerunner of the post-war World Championship, would be awarded an AIACR gold medal.

The European Championship was to run for only five years, taking in just the Grandes Epreuves (which in 1935, poignantly, did not include the original Grand Prix of France, as the ACF objected to the European Championship proposed by the Germans). Mercedes' senior driver, Rudolf Caracciola, was champion three times, Bernd Rosemeyer won in 1936, and Hermann Lang scored the fewest points (for that was the way it worked, with one point for a win, two for second, and so on) in 1939 – although we can be fairly sure that he never received his gold medal.

The German cars, which used exotic lightweight materials and had scientifically-designed independent suspension, were able to keep on enlarging their engines while still keeping within the weight limit. The Mercedes supercharged straight-eight engines increased from 4 to 5.6 litres, the Auto Union V16, also supercharged, from 4.9 to 6 litres. These were the most powerful and fastest racing cars that the world had ever seen – or would see for many years to come.

The AIACR and BPICA's working party proposed a dual formula with different limits for supercharged and naturally-aspirated engines. There was much debate about the fairest equivalence between the two. Eventually a

coefficient of 1.5 was agreed; a 3-litre limit with supercharging, 4.5-litre without. The cars would have a *minimum* weight of 850kg. Unfortunately, this was not resolved in time for the 1937 season, which continued with the 750kg rules, but was introduced for 1938.

This '3-litre' formula did reduce power and speed – but not for long. By 1939, the use of two-stage supercharging developing very high boost pressure, and a better understanding of aerodynamics and suspension kinematics, brought lap speeds back to the heights of 1937.

While the Germans had been the most eager to take up the challenge of the CSI's new Grand Prix formula in 1934, the AIACR was in a dilemma about Germany. The Nazi administration had replaced its member club, the Automobile Club von Deutschland, with a government organization called ONS (Oberste Nationale Sportbehörde für die Deutsche Kraftfahrt). The AIACR disliked having a government body foisted upon it but actually had no choice than to accept. By all accounts, the ONS representatives, all with military rank, had a rather icy reception at their first AIACR and CSI meetings. But in 1938, when Germany's supremacy of motor racing was unchallenged, the ONS invited the CSI to hold its autumn meeting in 1939 in Berlin at the time of the Motor Show. Delegates could also inspect 'the special records track' near the city.

That meeting did not take place. The racing season was not finished when Europe was engulfed by war. The Yugoslav Grand Prix in Belgrade took place on September 3, the very day that Britain and France declared war on Germany. It was perhaps fitting that it should be won by a German car, an Auto Union, driven by an Italian, Tazio Nuvolari, who many regard as the finest of his era.



*The Monte Carlo Rally was one of the earliest and most famous road events, with routes converging from all over Europe.*

Some racing did take place in the war years. In Italy, the Mille Miglia continued in 1940 – albeit in reduced form on a circuit near Brescia – and in America racing went on through 1941, until the US entered the conflict. Not surprisingly, as an organization based in France, the CSI ceased activities.

When peace returned the AIACR became the FIA (Fédération Internationale de l'Automobile) but the CSI's role and composition was unchanged. Its first post-war meeting was on 28 February 1946 at the Automobile Club de France. It was used to take stock; serious discussions would begin at the meeting in October. There, the venerable René de Knyff, 82 years old, who had won the 1898 Paris-Bordeaux race, handed over the CSI presidency to Augustin Pérouse.

German drivers and manufacturers were now forbidden to compete in motor sport. The CSI was confronted with a difficult situation when two of the most famous German drivers tried to obtain racing licences through other countries. It had come to the attention of the AC of Switzerland that the Austrian club (which was not able to be represented in Paris) had received an application from Hans Stuck, who was not Austrian. This was refused. But the case of Rudolf Caracciola was more complicated, as he had presented himself at the 1946 Indianapolis 500 as Swiss. Caracciola had lived in Switzerland since long before the war but was not a Swiss citizen. His pre-war German passport was invalid and there was no way of getting it renewed. Sadly, the matter of racing, if not immigration, was resolved when he



*German Mercedes and Auto Unions dominated Grand Prix racing in the 1930s.*



*Fearsome Auto Union anticipated mid-engined Grand Prix cars over 20 years later.*



*European Champions Hermann Lang (left) and Rudolf Caracciola with Mercedes team manager Alfred Neubauer.*

**European Champions**

1935 Rudolf Caracciola

1936 Bernd Rosemeyer

1937 Rudolf Caracciola

1938 Rudolf Caracciola

1939 Hermann Lang



*Bernd Rosemeyer was 1936 champion for Auto Union.*

was seriously injured in a practice crash driving a Thorne Special.

Seven years and an increasingly 'technical' war presented the world at peace with the promise of wonderful innovations. To its credit, the CSI acknowledged this changing situation by considering new categories in the Sporting Code for cars driven by propellers, gas turbines and rockets. It accepted that vehicles with air propellers, jet engines and rockets could be admitted only for records 'on account of the risks from accidents that might occur in races'.

The cars that they had to deal with there and then were a very different matter. For 1947 the pre-war voituresses, with 1.5-litre supercharged engines, would become the senior racing category. These were matched with the 4.5-litre naturally-aspirated cars from the pre-war formula, which had shown that a coefficient of 3 was a more realistic way of relating supercharged and non-supercharged engines. There was no weight restriction and there was a choice of three types of standard fuel. A year later, fuel type was again unrestricted. But in post-war austerity, petrol was in short supply, rationed in most countries, and the components of the chemical brews which the supercharged engines required were also hard to obtain. In 1948, shortage of fuel would cause the

cancellation of a number of races – 10 in France and three in Britain.

The new rules, skilfully adapted from those of the glorious but now distant past, were called Formula 1. This was because the CSI had adopted the ACF proposal for a second formula for smaller cars, with the maximum engine displacement of 2 litres unsupercharged, or 500cc supercharged.

The CSI registered some 70 events on the international calendar for 1947, not far off pre-war numbers, but many turned out to be over-optimistic because war-ravaged roads could not be repaired in time, and the clubs concerned requested reimbursement of their fees. Among the cancellations, the Le Mans 24-Hours (which could not be run before 1949) and events at Brooklands (which never re-opened for racing).

Some motor manufacturers would never be the same again. The minutes for the CSI meeting in September 1947 include a special note of the death of Ettore Bugatti, just a few days before: 'He was a most enthusiastic supporter of international motor racing.'

In 1948, Augustin Pérouse announced that the CSI was to study how best to organize a motor racing World Championship to start in 1950. It would be based on Formula 1 and herald a new era in motor racing.



A vertical photograph on the left side of the page. It shows a person sitting on the nose of a car, with a long shadow cast on the ground. The background is a bright, overexposed sky and ground.

## THE RECORD-MEN

Through the first half-century of the car's existence, speed records captured the public's imagination more than race results. After a period of inconsistent claims for the World Land Speed Record, the AIACR established a set of regulations for record runs, adopted in the USA as well as Europe. Through the 1920s and 1930s, a daring contest developed which saw the ultimate speed rise from 200mph to nearly 400mph (300km/h to nearly 600km/h). The 1960s heralded the beginning of the jet era for speed records and by the 1990s the goal of breaking the Sound Barrier on land had been achieved. The Land Speed Record is the peak of a pyramid of world records for many different classes of car over different distances and times, all of which are recognized and certified by the FIA.

Speed, encouraging it, managing it and recording it, has been a constant throughout the FIA's 100-year history.

There are plenty of psychological theories about why one man wants to go faster than another or achieve a higher speed in his machine than anyone has done before. We do not need to go into those. Competition is a natural trait. Speed is thrilling. There is the greatest kudos in being the fastest of all: no more justification is needed.

But at the beginning of the automobile age, speed was an indicator of progress, the driving force that brought better, more usable and more durable cars. Since this was essentially a contest between manufacturers seeking to sell their latest products, independent verification was needed. Early cars did not have speedometers, certainly not reliable ones, and it was too easy to make false claims for the potential of a new machine.

Cars were timed and speeds published for the first automobile races, but those were averages over a long distance in varying conditions. Events intended purely to demonstrate maximum speed started before the turn of the century. In December 1898, Paul Meyan, one of the founders of the Automobile Club de France and director of the journal *La France Automobile*, arranged what would today be called a sprint. A 2km straight stretch of well-surfaced road alongside a sewage farm at Achères, north-west of Paris, was marked out precisely and two timekeepers with stopwatches stationed at each kilometre point. Fastest over the second kilometre – thus 'flying' rather than a standing start – was a Jeantaud electric car driven by Count Gaston de Chasseloup-Laubat.

Its speed was 63.157km/h (39.24mph),

which was actually slower than the prevailing record for bicycles – let alone trains, which had gone twice as fast – but was entered in the annals of the ACF as the first World Land Speed Record. Within five months, the Belgian Camille Jenatzy in his torpedo-shaped electric car, *La Jamais Contente* ('Never Satisfied'), had pushed the record over 100km/h. He ran over the measured distance at Achères at 105.9km/h (65.79mph).

Record-breaking became a serious business. Sprint events were held at various locations, notably on the paved sea-front at Nice, as part of its 'speed week' and attracted large crowds of intrigued spectators. Electric cars gave best to steam – Léon Serpollet's steam-driven 'Easter Egg' did 120.82km/h (75.06mph) at Nice in 1902 – and then to the internal combustion engine. By then an electrical timing system had been introduced, developed by Louis Mors, brother of Emile Mors, whose cars were to take the ACF's record on three occasions later in 1902.

In 1904, the year of the formation of the AIACR, the ACF received news that a budding car maker called Henry Ford had established a record on the frozen Lake St Clair, Michigan, USA, of 147.04km/h (91.37mph). The run had been timed, over a mile rather than a kilometre, by the American Automobile Association. The ACF, and the AIACR, did not recognize the AAA and refused to endorse Ford's record. Nor did it accept that of William K Vanderbilt, who took his 90hp Mercedes to Daytona Beach in Florida that summer and achieved 148.53km/h (92.30mph).

In 1906 steam power made its mark on the absolute speed record for the last time. The Stanley company built a low and aerodynamic special for the Florida Speed Week. Called the Rocket, its driver Fred Marriott steering with

two bars instead of a wheel, recorded a remarkable 205.34km/h (127.6mph) on the flying mile, but the ACF would only accept the figure of 195.54km/h (121.57mph) recorded over a kilometre.

This continuing transatlantic disagreement about recognition clouds the history of the Land Speed Record for many years. Even in Europe, the AIACR did not immediately assume jurisdiction over speed records, preferring to leave it to the established procedures of the ACF.

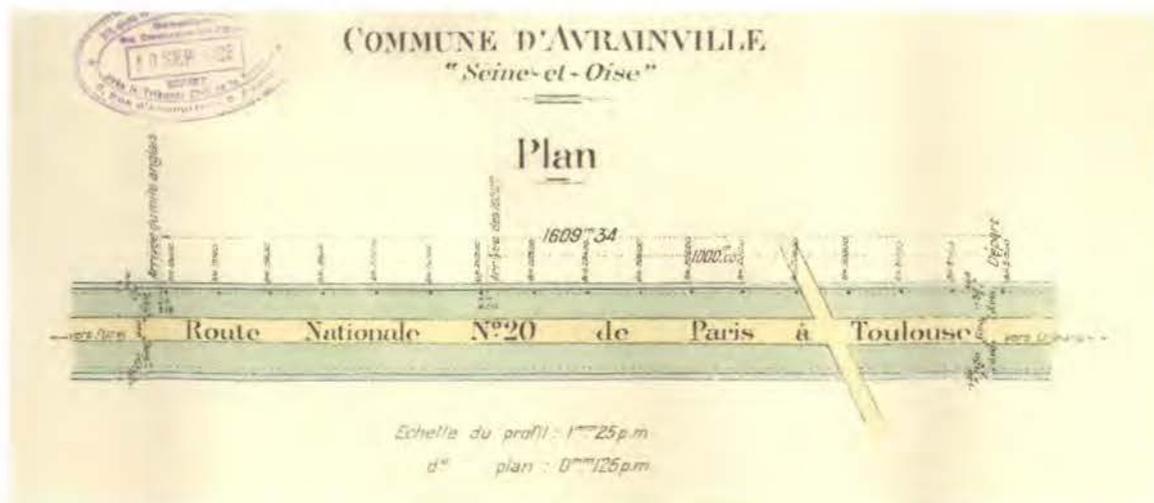
The world's first autodrome had opened at Brooklands, England, in 1907 and became the best site in Europe for record attempts. As speeds rose, normal public roads were increasingly unsuitable, although a Land Speed Record was established on part of the RN20 Paris-Orleans road at Arpajon, near Montlhéry, as late as 1924.

Brooklands was used for record-breaking even before the first race meeting when SF Edge drove a Napier 60hp single-handed for 24 hours,

averaging 106.08km/h (65.91mph). As it was the only long banked circuit in Europe, most endurance records in the early years were established at Brooklands. Of particular significance to the British was the 1913 record set by Percy Lambert driving a Talbot 25hp single-seater, the first to exceed 100 miles (160.9km) in one hour.

Britain's Royal Automobile Club did much to encourage more sophisticated timing methods. At Brooklands, the government Ordnance Survey office was brought in to mark out the record distances on the track and Holden electric timing apparatus was introduced. Using inflated rubber contact strips running across the track, this system measured seconds to three places of decimals. The RAC described its methods to the AIACR, so it could be seen that they met the standards set by the ACF.

The first absolute record set at Brooklands was also the first to be sanctioned officially by the AIACR, perhaps because all previous Land



*RN20, at Arpajon, the course for the last Land Speed Record set on a public road.*

Speed Records had been timed by the ACF at courses in either France or Belgium. In November 1909 Victor Héméry was the first to set a record beyond the 200km/h barrier when he achieved 202.7km/h (125.95mph) in the 'Blitzen' Benz.

In the interests of accuracy, compensating for the effects of winds, gradients and other factors, the RAC proposed to the AIACR that all short-distance records should be the average of two runs in opposite directions on the same course. This was adopted, for implementation from 1911, and is the reason that the 1914 record of Major L G Hornsted, also driving a Benz at Brooklands, is a lower speed – 199.719km/h (124.1mph) – than Héméry's set five years earlier.

Meanwhile, the very same Blitzen Benz that had set the Land Speed Record in 1909 had been timed in America, driven by Barney Oldfield and Bob Burman at 211.26km/h (131.275mph) and 227.50km/h (141.37mph), respectively, but the AAA was still at

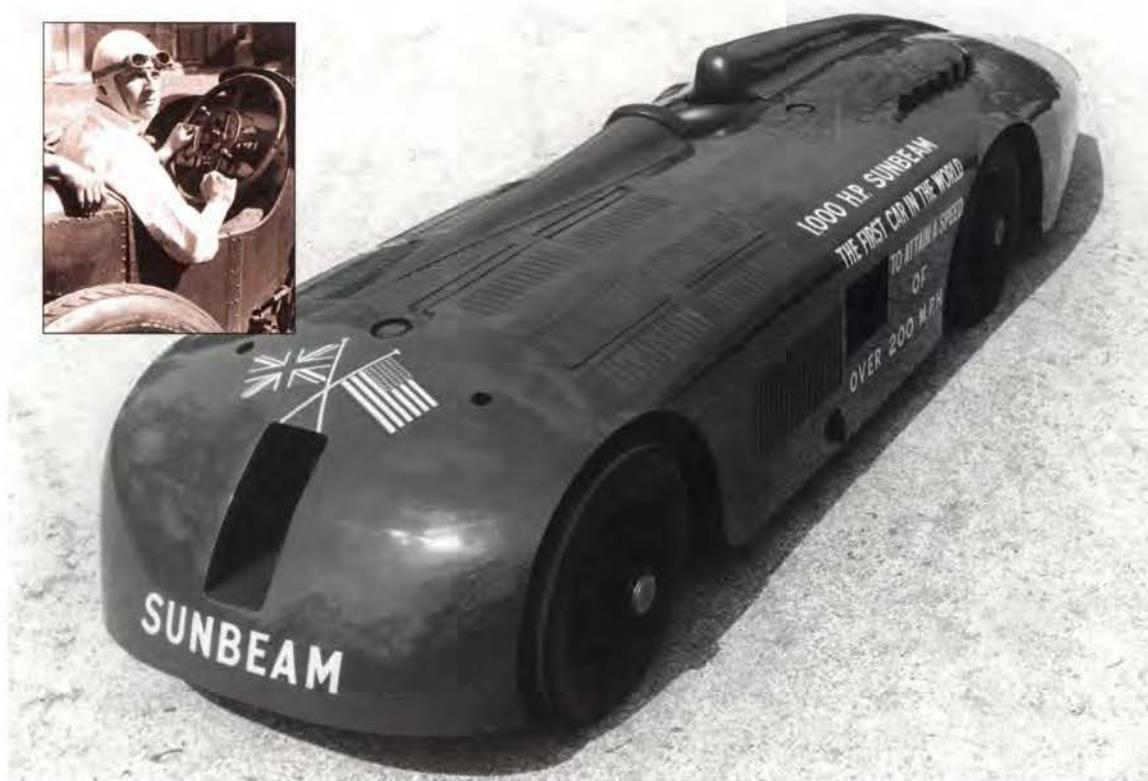
loggerheads with the AIACR, and did not accept the two-directions rule. By 1920 Tommy Milton had driven a twin-engined Duesenberg on Daytona Beach at 251.09km/h (156.03mph) – a figure that was not surpassed under AIACR rules until 1926, when the era of mighty purpose-built world record cars had begun.

After 1926, the formation of the AIACR's Commission Sportive Internationale (CSI) and the publication of the International Sporting Code, there was a proper framework for all speed records. The Code, drawn up by the ACF, prescribed classes for cars – from A (over 8 litres engine displacement) to J (under 350cc) – and an array of times and distances, with strict criteria for the course, timing requirements, and officials who should be present.

Records over short times and distances had to be timed to 0.01sec using fully automatic CSI-approved and independently certified devices and witnessed by official timers. To be valid, the time had to beat an existing record by



*Blitzen Benz held the record twice, the last set at Brooklands in 1914.*



*Henry Segrave and the '1000hp' Sunbeam were the first to exceed 200mph at Daytona in 1927.*

at least 1 per cent. Half an hour was set as the maximum time allowed between runs in two directions. For records within the new cylinder displacement classes, measurement of cylinder capacity was required immediately after the run. National clubs were to send all relevant documents to the AIACR for ratification.

Finally a rapprochement was made with the American Automobile Association, which had become the dominant club in the United States and was admitted to the CSI as the national authority for sporting matters in 1927.

Record breaking played a major part in bringing the two bodies together. The British driver Henry Segrave, equipped with a specially-built Sunbeam using two 22.5-litre aero engines,

realized that he would only reach his 200mph (320km/h) goal if he ran on the 24km sand course at Daytona (his rivals Malcolm Campbell and Parry Thomas had used the beaches at Pendine and Southport in Britain and Fanøe in Denmark, but these were not long enough for Segrave's Sunbeam to reach its full potential). Segrave wanted official international recognition for his record, should he achieve it, and used gentle diplomacy to persuade the AAA to talk to the AIACR and accept common standards.

So when, in March 1927, the massive '1,000 horsepower' Sunbeam (its two engines actually developed rather less than 900bhp) thundered down 14km of Daytona Beach and covered the kilometre at 326.678km/h (202.988mph) and



*Daytona 1933, timekeepers from the AAA watch the recording gear for Campbell's latest attempt.*

the mile at 327.971km/h (203.792mph), Segrave was accepted around the world as the fastest man on wheels.

The Land Speed Record was never again to be set in Europe. Mercedes-Benz had a plan for an attempt in 1940 with the Porsche-designed 445-litre T80 record car on an 11km stretch of the Dessau autobahn which had been widened by concreting the centre reservation, but war intervened before the T80 could turn any of its six wheels.

The new autobahns, unmodified, were used by Mercedes and Auto Union to set a series of class records with versions of their racing cars in the last years of the 1930s. The October speed week run on the Reichsautobahn between

Frankfurt and Darmstadt provided an intriguing addition to the propaganda generated by these teams' domination of Grand Prix racing and the European Mountain Championship, publicizing not only the technical achievements of the cars but also the unrivalled excellence of Germany's new motor roads.

Mercedes-Benz and Auto Union concentrated on Class B (5000-8000cc and Class C (3000-5000cc), flying and standing start, over various distances. In 1937, Bernd Rosemeyer, star driver for Auto Union, achieved his ambition of becoming the first man to exceed 400km/h (248.5mph) on a public road, setting seven new world records in the process.

(It is worth noting that this was only five years after the Land Speed Record – established on Daytona Beach – had risen above 400km/h.)

In 1939 these class records were left at 432.69km/h (268.9mph) for Mercedes-Benz and Rudolf Caracciola over a flying kilometre in Class B and 353.30km/h (219.5mph) for Rosemeyer in a Class C Auto Union over the flying mile. This battle had reached a tragic conclusion when, in January 1938, Rosemeyer was killed in a record attempt with an ultra-streamlined Auto Union which had fairings and side skirts, predicting the 'ground effect' racing cars of the 1970s. The car is thought to have been deflected by a sudden gust of wind, got out of control and crashed into the wooded verge. A memorial to one of Germany's greatest drivers remains to this day in an autobahn rest area at the Morfelden-Langen junction.

While the Germans went for the headline speeds over short distances, the French specialized in long-distance records. And long meant long – up to 300,000 kilometres (186,000 miles) and 133 days! The focus for this kind of record run moved from Brooklands to the Montlhéry autodrome, outside Paris, opened in 1924 and intended as a proving

ground for car manufacturers as well as a race track. Montlhéry did not suffer the objections of the local populace that required silencers at Brooklands and prevented running through the night.

In 1929 the AIACR declared 30,000km as the maximum record distance it would recognize, but lobbying from specialist record teams sponsored by the Yacco oil company persuaded the CSI to relent. Yacco's teams, mostly using production Citroens with modest modifications, covered various classes and set a veritable host of records at Montlhéry between 1932 and 1937. The list occupies many pages of the official records bulletins of the time, with successive records at each recognized time interval and kilometre and mile distance. Particularly notable was the 24-hour record in Class D (2000-3000cc) at 157.981km/h (98.16mph) set in 1934. The 300,000km record, set in 1933, was 93.469km/h (58.08mph); it had to be run in several sessions so that races could be held on the track at weekends.

In the 1930s, the heroic deeds of those who challenged and broke the outright Land Speed Record were big news, commanding more space in newspapers and on cinema newsreels than



*Malcolm Campbell and Bluebird went faster than a plane at Daytona – he was the first to 400km/h.*

Grands Prix or any other kind of motor sport.

The big guns that fought it out in America were mostly British. Not only were the speeds attained incredible by the standards of only a few years before, but the rate of progress was remarkable. That was partly because of the close competition; the most active periods in the history of the absolute speed record were invariably duels between men who had an unquenchable desire to be the fastest on earth. And at this time that is exactly what they were: the fastest aircraft had overtaken cars in the 1920s but the train record was way behind.

At first it was Segrave versus Campbell. In 1929, Henry Segrave's bigger and more powerful Napier-engined Golden Arrow achieved 372.478km/h (231.446mph). Segrave died in 1930 when his boat, Miss England II, capsized just after setting a World Water Speed Record. Malcolm Campbell, whose famous Bluebird cars had already held the Land Speed Record four times, beat his old rival's speed with 396.040km/h (246.090mph) at Daytona in 1931. Year after year at Daytona, Campbell raised the stakes. As an Englishman, his targets were the major miles-per-hour thresholds: 250mph, achieved in 1932, and 300mph, in 1935.

At those speeds even the expanse of Daytona Beach proved too short for comfort, so the Land Speed Record business moved to the vast tracts of Bonneville Salt Flats in Utah, USA. A wide circular course on the salt desert had been used by Ab Jenkins, the driver of a Duesenberg special called the Mormon Meteor (the centre of the Mormon faith being at Salt Lake City, Utah) to attack various long-distance records from 1932.

Bonneville provided endless possibilities for the record-men, but was remote, difficult and time-consuming to reach. The AIACR rules at

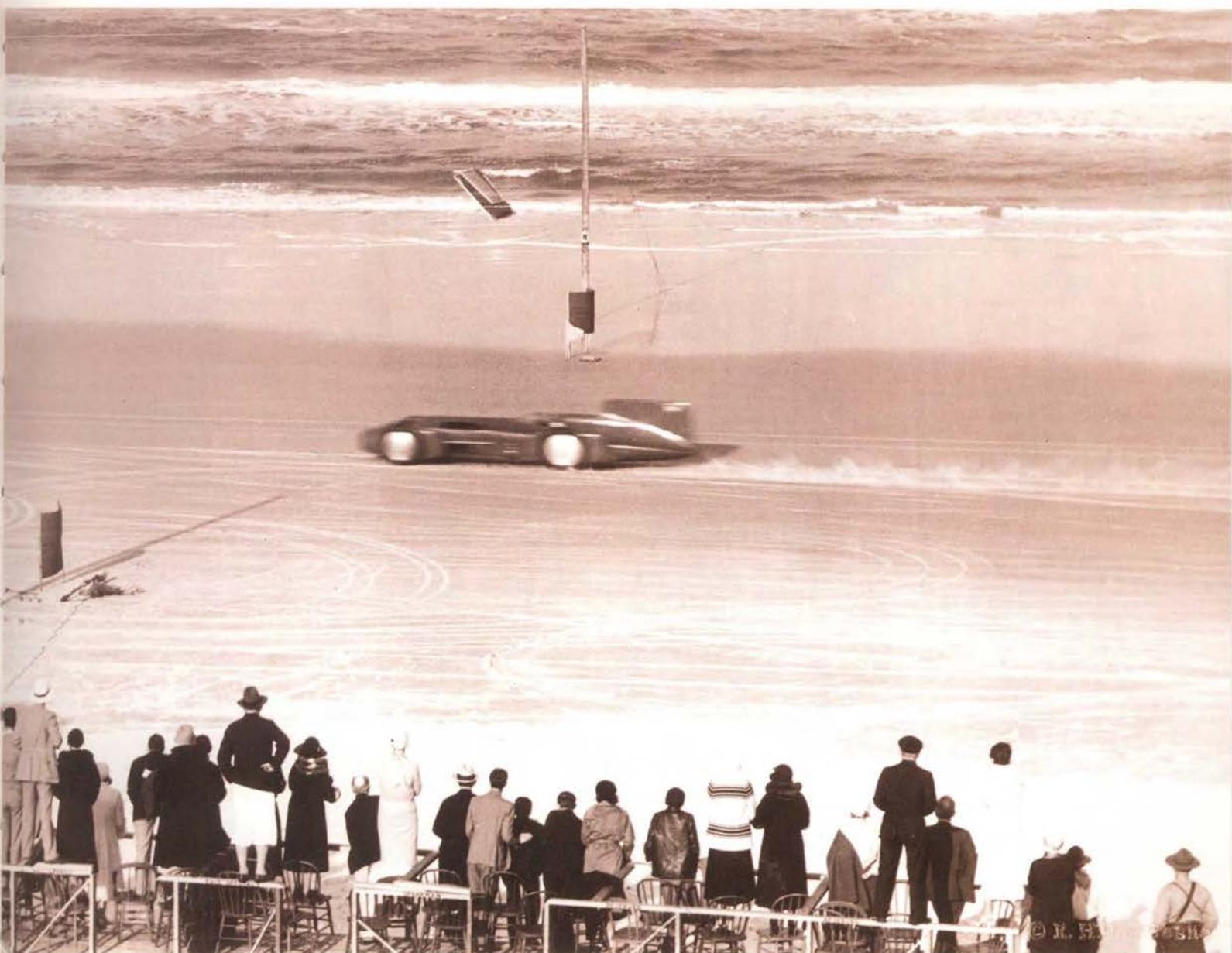
that time required immediate telegram notification of a world record claim, with the supporting documentation delivered to Paris within eight days of the event. A letter covering Jenkins' claims for runs on 18 August 1934 was not received by the CSI until 6 September. WF Bradley, the AAA representative at the CSI, had to explain the practical difficulties of communication with a site in the middle of nowhere and to plead for more time.

In July 1935 John Cobb took his Napier-Railton, an aero-engined Brooklands Outer Circuit special, to Bonneville and set a series of class records. Only weeks later, Cobb was followed by Captain George Eyston and Sir Malcolm Campbell. Although Eyston was later to take the Land Speed Record, he was a long-distance record specialist; the AIACR awarded him a Gold Medal in 1935 for establishing 248 records, 48 of them world records.

Campbell, though, was determined to reach 300mph. Bluebird was transported across America from Florida. A straight 19km course was scraped smooth and marked by a line of black oil. On 3 September 1935 Bluebird achieved 484.619km/h (301.129mph). His ambition realized, Campbell retired from land records and applied himself to the Water Speed Record.

By 1937 Eyston had graduated from Speed of the Wind, his Class A (over 8000cc) long-distance record car, to a monster machine designed for the outright Land Speed Record. Eyston's Thunderbolt was the largest petrol-engined record car – a 7-ton, eight-wheeler with two Rolls-Royce aero engines, totalling 73 litres and producing some 4700bhp. It broke Campbell's record by 177km/h – and took it over 500km/h for the first time.

Eyston's rival was John Cobb, who



*Over the timing line, and a new record at 438.46km/h (272.46 mph).*



*Campbell with his team and officials after the successful run.*

commissioned a new car from Reid Railton, the engineer responsible for the later versions of Campbell's Bluebird. It was more scientifically-designed than Thunderbolt, only half its weight and with two-thirds of its power. These two cars went head-to-head at Bonneville in the summer of 1938. Eyston took the record up to 556.0km/h (345.49mph), Cobb retaliated with 563.57km/h (350.20mph) and then the very next day Thunderbolt recorded a mean speed of 575.32km/h (357.5mph).

The following year, only nine days before the outbreak of war in Europe, Cobb was back with the Railton and left the Land Speed Record at 594.96km/h (369.74mph). But he was aiming for 400mph and as soon as peace returned, made plans for another attempt.

His car was only slightly modified, but Cobb brought another innovation which was to become the norm in all kinds of motor sport: it was renamed the Railton-Mobil Special. Traditionally, suppliers had provided finance for record-breaking, usually in the form of bonuses, and they advertised their part in the success. John Cobb persuaded the Mobil Oil Company to back his 1947 Land Speed Record bid as a title sponsor. He raised his own record substantially – to 634.396km/h (394.196mph) and did achieve over 400mph in one direction.

At the first post-war meeting of the CSI, there was discussion about how to deal with cars powered by pure jet or gas turbine engines. It was a prescient move for the controlling body as such engines were being introduced for aircraft, but delegates failed to come to any conclusions.

In 1947, Reid Railton sent a note to the newly-named FIA calling for the exclusion of jet and turbine vehicles from the official Land Speed Record. Railton said that in this context a

new definition of a car was needed, otherwise records could be made by a kind of low-flying aircraft. He suggested this as a starting point: 'wheels must be used for propelling, steering and supporting purposes'.

It was an important issue, but it dropped down the CSI agenda when it was clear that no-one was coming forward to challenge the Railton-Mobil Special's Land Speed Record. In fact Cobb was to hold the title for an unprecedented 16 years. But there was plenty of record activity, especially at the Bonneville Speed Trials, which started in 1949. The various class records established by the special streamlined Mercedes-Benz and Auto Union racing cars in the 1930s were beaten one-by-one by Americans who had learnt their skills making hot-rods and dragsters, but the outright Land Speed Record was too far out of their reach.

By 1960 there were some new challengers, among them Donald Campbell, son of Sir Malcolm, who had built a new Bluebird with a gas turbine engine from a Bristol Britannia airliner driving all four wheels. Four years later, after many trials and tribulations, Campbell Junior was to take the official Land Speed Record over 400mph with a speed of 648.8km/h (403.1mph) at Lake Eyre in Australia. But by then he – and the FIA – had to confront the speed set by drag-racer Craig Breedlove's Spirit of America.

In 1963 Breedlove achieved 655.68km/h (407.45mph) at Bonneville to usher in the jet age of the Land Speed Record. But not only was Spirit of America propelled simply by jet thrust, like the fighter aircraft it resembled, it also had only three wheels. The FIA still had not made up its mind about jet engines, but the rules stated very clearly that any car had to have at

least four wheels. So Breedlove found that his record was accepted by the world motorcycle authority, the FIM, but not by the FIA.

Obviously this situation could not be allowed to continue. In October 1964, the CSI decreed that any four-wheeled vehicle 'depending on the ground for support and controlled by an on-board driver' could qualify for the official Land Speed Record and that conventional axle-driven cars would have a separate category called the World Record for Automobiles.

Breedlove was not the first official jet-propelled Land Speed Record holder. That honour went to Art Arfons' simple but brutally effective Green Monster, at 863.72km/h (536.71mph). Arfons battled with Breedlove through 1965 and at the end of it, Breedlove's Spirit of America Sonic 1 (very different from its predecessor – and with four wheels) had exceeded 600mph with a record at 966.931km/h (600.841mph). In the first two years of the jet era, the ultimate record had increased by 300km/h!

After the jets came the rockets. That wasn't a post-war idea. Back in 1928, Fritz von Opel, of the German car company with that name, had built a car with 24 solid-fuel rockets which achieved 195km/h (121.2mph) in a test run at the Avus race track. In 1964, Walt Arfons, brother of Art, built a Land Speed Record car, Wingfoot Express II, on the same principle, using aircraft JATO (Jet Assisted Take Off) rockets, but its 'all or nothing' performance proved a risky proposition.

A liquid-fuelled rocket, which could be controlled, was more suitable, and in the 1960s the technology first employed in the German V2 weapon during World War 2 was being developed in the USA for space travel. Reaction

Dynamics of Milwaukee, Wisconsin, had produced a dragster with an engine of this type and were encouraged to build a Land Speed Record machine with the backing of the US natural gas industry. Thus it would use liquefied natural gas as well as the regular hydrogen peroxide rocket fuel and the car would be called The Blue Flame. Gary Gabelich was the driver, and in October 1970 he became the first to set the official Land Speed Record at over 1000km/h on land – 1014.628km/h (630.478mph). (Gabelich could also claim, unofficially, to be the fastest man on earth as the highest speed that The Blue Flame attained during the record runs exceeded the 1017km/h of Lieutenant-Colonel J P Stapp's rocket sled, which ran on rails.)

With 1000km/h and 600mph conquered, the record-men were running out of targets. But one stood out: breaking the Sound Barrier on land. American Bill Frederick had been a consultant to The Blue Flame project and had built a series of rocket-propelled cars, culminating in the Budweiser Rocket. Frederick and his collaborator Hal Needham, a Hollywood stunt man, were aiming for Mach 1, the speed of sound, but had no intention of playing by FIA rules. Drag-strip timing would be used, with the intention of recording simply the top speed – no two-direction runs, measured kilometre or mile.

The Land Speed Record establishment, which by then included Gary Gabelich and Art Arfons, was upset by the record-breaking speeds claimed for the Budweiser Rocket after its first runs at Bonneville. The attempt at Mach 1 was to be at Edwards Air Force base, in the California High Desert – from where General 'Chuck' Yeager had taken off in 1947 when he became the first man to break the Sound Barrier in the



**RECORDING**

Time	Speed M.P.H.
5-09-24.805	399.8087
5-09-19.210	643.481
4-36-51.635	388.019
4-36-45.870	624.44
0'-05.595"	
0'-05.765"	
0'-11.360"	
0'-05.680"	393.

**COURSE**  
One Kilometer

**RECORDING**  
1-Kilo

Start 1-Mile & 1-Kilo  
Run North  
Pacific Standard Time  
Sept. 16 1947  
Bangaville Salt  
Beds Utah U.S.A.  
John Cobb  
Run South  
4-36-42 P.M.  
Finish 1-Mile & 1-Kilo

as the regularly appointed officials of the Contest Board of the A.I.A.C.R. (in connection with the about R. Cobb of England, driving the Railton, at 3:16:47 P.M. on September 16, 1947, under A.A.A. Sanction No. 18247 and speeds are correct as shown and were made by the officials of the A.A.A. Contest Board and the Sports Commission.

**Chief Steward, A.A.A. Member**  
*John Cobb*

**Zone Supervisor & Recorder**  
*John P. Moore*

**Referee, A. A. A.**  
*John P. Moore*

**APPROVED**  
*John P. Moore*

**SUMMARY OF PIT STOPS**  
Technical Committee Report

**John Cobb**  
Railton Mobil Special

No. Driver Car	Lap	Fuel	Lubricants	Spares
John Cobb Railton Mobil Special	1	Mobil Special 19 Imperial Gal.	Mobilvac 100 and 6X 90	Spares K KLG-16
Same	2	14 Gal. Mobilvac 100 and 6X 90	Mobilvac 100 and 6X 90	KLG-16-18
Same	3	12 Gal. Mobilvac 100 and 6X 90	Mobilvac 100 and 6X 90	KLG-16-20
Same	4	12 Gal. Mobilvac 100 and 6X 90	Mobilvac 100 and 6X 90	KLG-16-16

**Notes:** Points on a graph plotted from the three mile line showing Cobb entered the mile at approximately 125 m.p.h. and reached the average of 403.125 m.p.h. at the center of the mile at approximately 412 m.p.h. acceleration with approximately 410 M.P.H. at the center of the mile.

I hereby certify that the data given above is accurate and tabulated from the best of my knowledge and belief, and was prepared from the pit-stop slips turned in by the Technical Committee in charge and attached hereto.

**John P. Moore**  
Clerk of Technical Committee.

Form C. D. 6-3m-9-27

**APPROVED**  
*John P. Moore*

**OFFICIAL PROGRAM**  
COBB ASSAULTS WORLD'S RECORD

**RAILTON NORTH SPECIAL**

AN OFFICIAL UTAH CENTENNIAL EVENT

THE SALT FLATS

Documentation detailing John Cobb's 1947 Land Speed Record.

X-1 rocket plane – and speed measurement by radar and computer, courtesy of the US Air Force. The Budweiser's rocket engine was supplemented by a Sidewinder missile which driver Stan Barrett ignited at 1000km/h. The highest speed on the single run was calculated by the USAF boffins at 1190km/h, 739.7mph, Mach 1.01.

No one knows for sure whether Stan Barrett and the Budweiser Rocket broke the Sound Barrier that day in 1979 and of course the FIA regarded the whole thing as an outlaw exercise and gave it no official recognition. But it changed perceptions of the Land Speed Record at a time when questions were being asked about the sense of such a difficult and dangerous pursuit. When man was exploring space and had landed on the moon and high-powered business folk travelled routinely at Mach 2 in the Concorde airliner, was there really any point in reaching any further in something that had long-since lost any resemblance to an automobile?

One man, Richard Noble, thought that there was. With enormous energy but very limited resources, this British management consultant built a jet-engined machine, Thrust 2, with the potential to run at 1050km/h – and beat Gabelich's 1970 record. Thrust 2, with Noble at the controls, first ran at Bonneville in

1981, but was defeated by the weather. Floods on the salt flats the following year caused the Noble team, with timers from the United States Auto Club, to divert to Black Rock Desert, north of Reno, Nevada. The record didn't fall in 1982, but when Thrust 2 returned to Black Rock a year later Noble's dream came true: 1020.406km/h (634.051mph) was 5.75km/h (3.57mph) faster than The Blue Flame. The Land Speed Record had gone back to Britain for the first time in 20 years.

Noble went off to do other things, but by the 1990s had decided to get back to record-breaking, this time with the speed of sound as his objective. Others, including the then all-conquering McLaren Formula 1 racing organization, were planning attempts on the Land Speed Record. Noble was really no better funded than before, but he had to develop a more powerful and more sophisticated vehicle. He called it Thrust SSC – the initials standing for Super Sonic Car.

After six years of work and a series of setbacks, Thrust SSC, with two Rolls-Royce jet engines, went to Black Rock Desert, Nevada, in autumn 1997. The driver was Andy Green, a Royal Air Force fighter pilot, and the sonic boom announced that he had, decisively and unquestionably, broken the Sound Barrier.



Left: First of the official jet record holders – Art Arfons with Green Monster. Centre: Craig Breedlove moved from three to four wheels with Spirit of America Sonic I. Right: Rocket-powered to over 1000km/h – Gary Gabelich in The Blue Flame.

Mach 1 in the conditions at Black Rock that day, 15 October, was equivalent to 1207km/h (750mph). Green's official speed for the first supersonic Land Speed Record was 1227.95km/h (763.035mph).

There was no counter-attack, and while there will surely be even higher speeds in the future, some regarded the speed of sound as a final frontier.

Record-breaking at lower levels continues to occupy the FIA's Records Commission; it approves some 15 international records each year. Each new record is published in the Bulletin of the World Motor Sports Council and on the FIA website, which contains an up-to-date list of

current record-holders.

Appendix B to the International Sporting Code lists 30 categories of special and series production cars, each with up to 18 classes, while Appendix D – the regulations for record attempts – describes 30 recognized times and distances for all classes of international and world records.

For some, the personal satisfaction of holding a record is the sole reward, but for manufacturers and suppliers, the motivation for record-breaking is much as it was at the dawn of motoring – to advertise the capability and durability of their products. And, now as then, the FIA is there to see fair play.



Official FIA certificate for the first record beyond the sound barrier.



## FASTEST ON EARTH

A century of milestones of the official Land Speed Record,  
recognized by the ACF, AIACR and FIA

Date	Car	Driver	Venue	km/h	mph
<b>100km/h</b>					
1899	Jamais Contente	C.Jenatzy	Achères	105.89	65.79
<b>100mph</b>					
1904	Gobron-Brillié	L. Rigolly	Ostend	166.65	103.55
<b>200km/h</b>					
1909	Benz	V.Héméry	Brooklands	202.7	125.95
<b>300km/h, 200mph</b>					
1927	Sunbeam	H.Segrave	Daytona	327.97	203.79
<b>400km/h</b>					
1932	Bluebird	M.Campbell	Daytona	408.72	253.97
<b>300mph</b>					
1935	Bluebird	M.Campbell	Bonneville	484.62	301.13
<b>500km/h</b>					
1937	Thunderbolt	G.Eyston	Bonneville	502.11	312.00
<b>600km/h</b>					
1947	Railton	J.Cobb	Bonneville	634.40	394.20
<b>400mph</b>					
1964	Bluebird	D.Campbell	Lake Eyre	648.72	403.10
<b>700km/h, 800km/h, 500mph</b>					
1964	Green Monster	A.Arjons	Bonneville	863.75	536.72
<b>900km/h</b>					
1965	Green Monster	A.Arjons	Bonneville	927.97	576.62
<b>600mph</b>					
1965	Spirit of America Sonic I	C.Breedlove	Bonneville	966.93	600.84
<b>1000km/h</b>					
1970	Blue Flame	G.Gabelich	Bonneville	1014.63	630.48
<b>1100km/h, 1200km/h, 700mph</b>					
1997	Thrust SSC	A.Green	Black Rock	1227.95	763.04

Left: Thrust SSC sends shock waves across Black Rock Desert, 1997.



A vertical photograph of the FIA flag, which is blue with a large yellow stylized 'A' in the center. The flag is shown in motion, with folds and ripples.

## A TITLE BEFITTING

In 1946, revived after World War 2, the AIACR became the FIA: the Fédération Internationale de l'Automobile. The new title was more appropriate for the composition of the organization, the breadth of its activities and its ambitions for the future. One of those was consultative status at the United Nations, granted in 1949. In 1954, the 50th anniversary of the organization's formation, the FIA encompassed 52 member clubs from five continents. Some national motor clubs began to devolve responsibility for motor sport to specialist bodies and, after the disaster at the Le Mans 24-Hour race in 1955, the American Automobile Association ceased involvement with the sport, necessitating the creation of ACCUS, a special motor sport control organization for the United States.

It was the time to make a new start: 20 June 1946, 42 years to the day after the formation of the AIACR. The first post-war General Assembly of the AIACR, at the ACF in the Place de la Concorde, Paris, became the inaugural meeting of the FIA. A new title had been discussed several times in the past, but the forces of conservatism had always resisted change. Now, as a symbol of a new era, the proposal to form the Fédération Internationale de l'Automobile went through unopposed.

There were reasons beyond the desire for a tidier title and a shiny new badge. The statutes established in 1908 had served the AIACR well, but experience suggested that they now needed revision. Most particularly, it was agreed that membership should be widened beyond the 'recognized' national automobile clubs to include other national organizations, even if they did not have control of motor sport.

It was also important to establish that there could be more than one member club per country, each with equal status. This was prompted by talks with the Alliance

Internationale de Tourisme, which had started in November 1945 in London. The AIACR and AIT had established a new joint body, which it called the General Committee, to represent their common interests. They also formed a working group to study the possibility of an amalgamation of the two associations as a world organization for touring.

Viscount de Rohan, president of the AIACR since 1936, became president of the FIA. Three commissions – the CSI, CIT and CICD – were reconstituted; indeed, the CSI had met in February and was already coordinating the revival of motor sport.

It was judged important to re-establish relations with the car and component manufacturers through their organization, the BPICA. The FIA believed that it should set standards for the industry and that the national automobile clubs should provide independent testing of performance, fuel consumption and technical innovations. History tells us that this aim was only partly achieved: in some countries, the national club became, and remains, the

The Association Internationale des Automobile Clubs Reconnus (AIACR) will take the title of Fédération Internationale de l'Automobile (FIA). Its headquarters will be in Paris.

**OBJECTIVES:**

- To promote the development of international motor traffic.
- To draft international regulations for traffic and vehicles.
- To ensure the unity of the automobile movement and safeguard the interests, material and moral, of automobilism in all countries.

**COMPOSITION:**

- National automobile clubs that are members of the AIACR.
- National clubs and associations concerned with motor circulation.
- Individual honorary members and presidents.

**CONTROL OF MOTOR SPORT:**

- The sole international body governing automobile sport.
- Recognizes one sporting authority in each country.

*An appendix to the minutes of the General Assembly spelt out the new constitution.*



*The FIA World Championship about to begin – European Grand Prix, Silverstone, 1950.*

official testing authority, whereas in others, government departments pushed them to the sidelines. But the principle remains and in 2004 is stronger than ever, with FIA initiatives like the EuroNCAP crash test programme.

Several national motor clubs disappeared during the war. Those of some countries in the Soviet bloc failed to communicate with the FIA, or to pay their dues, and were excluded, while others changed names and were enrolled on a provisional basis. The re-admission of the AvD and ADAC, representing West Germany, was not until the end of 1949. In 1948, the FIA membership numbered 40 clubs, two fewer than before the war in 1939. By 1951 it was up to 45.

In 1947, the FIA and AIT were invited to take consultative status as non-governmental organizations at the United Nations, but this

was 'subject to the exclusion of their Spanish affiliate'.

This was a difficult and embarrassing situation. The United States had vetoed the entry of Spain, ruled by dictator General Franco, to the United Nations. RACE, the Royal Automobile Club of Spain, founded by King Alfonso XIII, was the 'father' of the South American clubs, several of which had recently become affiliated. It was a founder member of the AIACR and had helped maintain the organization through the war. The Spanish delegates were important and respected players in these predominately aristocratic gatherings. Wilfrid Andrews of Britain's RAC described the RACE president, Gil de Reboleño, as 'a sportsman and a gentleman'.

But now the Spanish club would have to

A TITLE BEFITTING



*Early post-war years saw FIA clubs providing roadside assistance through road patrols.*

stand down. The FIA yearbooks for 1948 and 1949 carried an overprint on the entry for the RACE: 'no longer part of the FIA'. For the 1950 yearbook, Spain was removed completely. But Jean-Jacques Fréville, who became secretary-general when Lieutenant-Colonel Peron retired in October 1947, remembers this as being for appearances' sake only. When the matter was finally resolved with the United Nations in 1951, the FIA president welcomed Spain back, saying that it had 'voluntarily, and with great delicacy, abstained from meetings for two years'.

The FIA and AIT were granted consultative status, category B, by the United Nations Organization on 1 March, 1949, which meant that they were considered advisory bodies to the Economic and Social Council. The General Committee grew into a new organization with the two associations as founding members. It was called the Organisation Mondiale du Tourisme et de l'Automobile (OTA) – the World Organization for Touring and Motor Vehicles. The OTA had its own assembly with an equal number of delegates from the FIA and AIT plus a management board, two standing committees (for customs and traffic), and a secretariat in London. Its function was to represent the two organizations in international forums, including the UN Economic Commission for Europe in Geneva.

Meanwhile, the idea of a merger between the FIA and AIT was foundering. At a meeting in Cascais, Portugal, in June 1949, there was a depth of feeling that if the organizations joined together the AIT's involvement in touring of all kinds would overtake the specific interests of motorists. Earl Howe, of Britain's RAC, was particularly concerned about the position of motor sport and sought assurance that whatever happened, it would remain separate,

under FIA control. Having reached no conclusion, the FIA's relationship with the AIT remained one of friendly cooperation, with the main conduit the OTA to which they jointly subscribed.

Spain, reinstated as a participating member, began to press for Spanish to be the third official language of the FIA. It was pointed out that, in 1952, a third of the 52 affiliated clubs were from Spanish-speaking countries.

All international organizations face language difficulties, and before the advent of microphones, headphones and simultaneous translation, repeating the proceedings in two or more languages could prolong meetings to an unworkable extent. The FIA was based in France and its presidents up to that time were all French, so most of its proceedings were conducted in their language. English had become the organization's second official language in the 1920s after the Automobile Club of America had proposed that all communications should be in French and English, 'until an international language is advised by the League of Nations'.

But neither the League of Nations nor the post-war United Nations had Esperanto high on their agendas.

The FIA agreed in principle to adopt Spanish as a third official language but was concerned about the costs involved. The matter was settled when it was learned that the ACF's new grand conference hall, due for completion in 1955, would have facilities for multiple simultaneous translations. At the General Assembly, the AC of Argentina gave a vote of thanks on behalf of the Spanish-speaking members.

In the world outside, the FIA enjoyed success with the introduction of the World Championship for Drivers, which focussed

attention on the new Formula 1, and was encouraging new categories of motor sport.

There was concern, though, that motor racing was developing in different directions in other parts of the world. The CSI regretted that European and US racing continued to follow their different traditions. In 1952 it reported to the FIA General Assembly: 'There is no need to stress the advantages of all kinds that would be derived from a racing formula common to the two continents.' That is a theme rehearsed in the early days of racing and repeated at intervals ever since. In 2004 it has yet to be achieved.

There were also fears for the FIA's position as the supreme power in the motor sporting world. In 1952 the French government required the ACF and other motor clubs in France to establish a separate controlling body for motor sport, the Fédération Française du Sport Automobile (FFSA). Wilfrid Andrews of the British RAC exclaimed: 'Were other countries to follow this example, the FIA would lose control of motor sport'. At least one other country was known to have similar plans. Motor sport seemed in danger of being nationalized.

Viscount de Rohan said that the ACF retained ultimate authority in France and that in any case Augustin Pérouse, the president of the CSI, was also to be the first president of the FFSA. However, it was with evident reluctance that the FIA accepted the FFSA as the sporting authority for France. It was admitted provisionally to the CSI – in place of the ACF – for just one year.

Reinforcing its grip on motor sport was important because the emphasis within the FIA was shifting. Its influence over general motoring matters and international travel, and the profits that this brought to member clubs, were declining. The report to the General Assembly

in October 1953 by secretary-general Jean-Jacques Fréville drew attention to these changing circumstances and how the two sides of the organization could be reconciled:

'Sporting activity is more and more the cornerstone of our Federation, and demonstrates the vitality of the automobile. But there is no discrepancy between our sporting role and that of educator and protector of road users. Indeed, activity in the field of traffic and road safety is becoming more important, as the problem grows with the number of vehicles in use and the increase in traffic.

'The motor car is an everyday tool which is heavily taxed and still too expensive. A personality in the automobile world said to me that races where the sole aim is speed have no influence on the improvement of ordinary vehicles. Let us not neglect the trials that the users consider as most revealing the attributes of their vehicles are the most able to lead to their improvement.

'In touring matters, we foresee the disappearance of customs documents issued by clubs for European countries, in favour of liberalization, which means a loss of income from triptyques and carnets, and perhaps even a loss of members. Clubs are encouraged to find new sources of revenue, from maps and guides or from a slight commission on services they provide.'

Finance was becoming a worry. The time of big-money motor racing with commercial sponsorship and lucrative television rights was way in the future. The income from licences, race permits and calendar applications was minimal. The FIA's sporting activities had been supported by the touring section and that was in decline. That situation was mirrored at the bigger member clubs, which were beginning to

make most of their money from roadside breakdown assistance. That, as some pointed out, was a very different matter from running motor racing

These uncertainties did not prevent the FIA celebrating its 50th anniversary in June 1954 in fine style. There was a ceremony in the Great Hall at the ACF, a grand dinner in Versailles, and each General Assembly delegate was presented with a special commemorative medal. By 1954, the FIA had 52 member clubs from five continents.

A year later the Federation was faced with a crisis that had nothing to do with money, but drew further attention to its dichotomy. On 11 June 1955, the worst-ever motor racing accident occurred at the Le Mans 24-Hour race, when the Mercedes-Benz 300SLR driven by Pierre

Levegh somersaulted into a spectators' enclosure and caught fire, leaving hundreds of casualties and 83 dead.

The FIA was criticized for not being more active in the defence of motor racing in the aftermath of the Le Mans disaster when governments stepped in to ban events and a series of major international races, including four World Championship Grands Prix, were cancelled.

With what seemed like understatement at the time, the president Viscount de Rohan addressed the General Assembly: 'These serious difficulties might indicate a turning point in the FIA's history'. We can see now that they did, though not in the catastrophic way that some had feared.

As the CSI, somewhat belatedly, applied



*Le Mans 1955 - motor racing's worst disaster.*



*In memoriam - a day never to be forgotten.*

stricter safety measures to racing, there came the announcement from the American Automobile Association that it would no longer be involved in motor sport. The AAA, which had first linked with the AIACR through racing when its Contest Board joined the CSI in 1927, declared that, after the Le Mans accident, 'a conflict exists between the demands of motor sports and those of the promotion of safety in touring'. It would cease to sanction events at the end of the year; the last Triple A race was at Phoenix Fairground in the autumn of 1955.

The FIA dismissed the AAA's reasoning: 'Our Federation, which has always attached great importance to safety, has never had the impression that its sporting role has contributed to increasing the quantity of traffic accidents, nor hindered its affiliated clubs in their efforts to reduce the number of these accidents.' But it faced the dilemma of how to exercise control over motor sport in the USA. No other body in America was in a position to perform this function. (Its original member club, the ACA, had been dissolved in 1936.)

In the short term, the FIA took direct control of American racing by issuing special temporary permits to the principal race organizers, but there was concern about where responsibility would lie in the case of another serious accident.

The CSI came up with a more permanent solution. A delegation consisting of CSI president Augustin Pérouse, Major Harold Parker of the British RAC, and Count Giovanni Lurani Cernuschi representing the AC of Italy, went to America early in 1956. After consultation with race promoters, notably Bill France, who ran NASCAR from Daytona, it proposed the formation of the Automobile Competition Committee of the United States

(ACCUS), an independent body representing all organizing clubs, affiliated to the FIA, as the national sporting authority. Charles Moran, a respected figure in US racing circles, was appointed the first president of ACCUS.

The creation of ACCUS required the FIA's statutes to be modified to admit exclusively sporting organizations, independent of national motor clubs that were already members. This was fortuitous, as in the following decade an increasing number of national clubs were to devolve responsibility for sporting matters to other organizations, some of which would break away from the parent clubs and seek membership in their own right.

What was happening, slowly but relentlessly, was a separation of the two sides of the FIA. While the CSI coped with aftershock of the Le Mans disaster, the commissions concerned with everyday motoring were involved in more mundane affairs. Although its influence in this area was waning, the big increase in motor tourism was noted and an amendment to the FIA's statutes was made to acknowledge this, viz: 'Promoting the development of international motor traffic and tourism.'

The latest pronouncement of the technical commission, the CTI, seemed inconsequential by comparison with the crisis in racing; it called for a ban on dangerous protrusions on cars – decorative ornaments and sharp-edged bumpers that could hurt pedestrians. But more significantly, it added this statement: 'Up to now the greater part of the CTI's activity has been answering CSI questions. It now wishes to apply its efforts more to the important problems of noise, safety and braking and working with the International Standards Organization on lighting and other matters.'

By 1957, the split was official. For 'administrative reasons', the FIA formed two sections: the SITTC, including all non-sporting functions – technical, touring, traffic – and the SSI to deal with all sporting affairs. This was not destined to bring harmony to the organization, which continued to be short of money and in fact showed a deficit in 1957, blamed on the loss of carnet business, the increased cost of insurance for triptyques, and a 20 per cent devaluation of the French franc.

Attempts to bring greater involvement and benefits to the more distant outposts of the Federation created further financial strains. The CIT and CICD had set up a working party on African questions. One result was a comprehensive visitor's guide to the Congo. It did not sell well.

Over the next few years there was regular discussion about the role of the OTA, which was very active in its representations at government level in the areas of traffic engineering, road safety, customs and touring, but taking a large proportion of the FIA's modest annual budget. In 1957, the idea of a merger with the AIT arose again but was dismissed as 'desirable in principle but at this moment impossible'.

The FIA continued to attract new members, but in the era of the Cold War, some of these presented political and diplomatic problems. The USSR Auto Motor Club applied to join and was accepted, but it complained about the normal practice of two years' provisional membership on the grounds that other international organizations would accept it immediately and unreservedly.

When the German AvD followed the FFSA precedent and vested its sporting power in the ONS (now standing for Oberste Nationale

Sport-Kommission) and the East German ADMV – thus allowing the two sides of divided Germany to compete in national events – Gil de Reboleño of the Spanish club objected, as East Germany was not part of the United Nations. In that situation 10 years earlier, Spain had been required to withdraw from the FIA. Times had changed; his objection was overruled.

Then, in 1961, the ADMV complained that its delegates could not obtain visas to attend FIA meetings in Paris. The FIA, trying to remain apolitical, was not prepared to intervene but there was a novel diplomatic solution. Count Hadelin de Liedekerke Beaufort, who had become FIA president in 1958, was also the president of the ACF and in that capacity offered to take up the East Germans' case with the French authorities.

Count de Liedekerke Beaufort was only the fourth president of the AIACR and FIA. Viscount de Rohan, his predecessor, both at the FIA and the ACF, and then 73 years old, had tendered his resignation at the General Assembly in October 1957, but Wilfrid Andrews persuaded him to stay on. At the same time it was decided that henceforth the presidency would be for a three-year term; previously the incumbent had been re-elected, unopposed, each year. When he agreed to continue, Viscount de Rohan said that he would not run the full three-year term. He resigned in October 1958 and Count de Liedekerke Beaufort was elected by 23 votes to 6 for the Belgian Prince Amaury de Merode.

Count de Liedekerke Beaufort stood down after holding the presidency for five years – though he remained ACF president and continued to represent the French club at the FIA. At the General Assembly in October 1963 he proposed as his successor Prince Filippo

Caracciolo di Castagneto, who was elected unopposed.

Prince Caracciolo, the president of the AC of Italy, was the first non-Frenchman to head the FIA. His acceptance speech speaks volumes for the state of the Federation at the time:

‘Since the end of the last war we have witnessed a tremendous development of the motor vehicle which is no longer a luxury item or transport for a happy few but has become the instrument of the masses and will by degrees become of daily use in every family. This alone proves that our task must undergo deep changes.

‘Our Federation was born of sport and in the beginning had an entirely sporting outlook. Today this activity is not declining; on the contrary, it is increasing in most parts of the

world. However, compared with the other domains of the automobile, sport no longer ranks first. Among the new members of our Federation it is only a small proportion who enrol because of sport; the great numbers require services of another kind. We are also faced with difficulties of financing. Our alliances with the OTA and AIT are causing problems. We are in favour of a world federation, but it has proved impossible to achieve and in the last few years our relations have deteriorated rather than improved.’

Sadly, Prince Caracciolo held the post for less than two years. He died in July 1965. That October, for the first time, there was a three-way contest for the presidency. The candidates were: Wilfrid Andrews, chairman of the RAC of Great Britain; César Carman, president of the



*After the Le Mans disaster, American racing, including the Indianapolis 500, came under the jurisdiction of ACCUS.*



*Before sponsors' colours - Jim Clark in the Lotus-Climax.*

AC of Argentina; and Prince Amaury de Merode, president of the RAC of Belgium; 42 countries placed their votes. The result was Andrews, 28; Merode, 9; Carman, 5.

Wilfrid Andrews was not enthusiastic about motor sport. That was known at the British RAC, which he had chaired since 1946.

But he had been outspoken at the FIA about the dangers for the Federation of clubs abdicating their sporting power and this was to be a major aspect of his two terms as president.

France had been followed by the national clubs in Germany, Morocco, Denmark, Sweden, Spain and Australia in delegating authority for motor sport to a second organization. With the exception of ACCUS, which was directly affiliated to the FIA, permission to transfer the sporting power was granted for only 12 months, and renewed on application each year.

The newly-recognized motor sport authorities began to demand changes in the ruling body. Australia's motor sports interests had been represented by the RAC of Great Britain. The Confederation of Australian Motor Sport (CAMS) was set up in 1953 as an independent body and admitted to the FIA in 1958. A decade later, at the General Assembly in 1968, CAMS delegate Donald Thomson complained that the CSI was a European organization of which Australia had no chance of being a member, although it was the sixth busiest nation in the world in terms of motor sport.

This outburst did bring changes. At the 1970 summer meeting in Florence, the General Assembly agreed a series of amendments to the statutes, which included increasing the size of the sporting commission to 18, with the possibility of co-opting three extra members from countries hitherto not represented. The number of CSI members on the FIA committee

was increased from six to nine. And the bureaucratic division between the SITTC and SSI was abolished.

There was a history of disagreement between the ACF and the FFSA. This came to a head in 1967 when the ACF and some of its associate organizations resigned from the FFSA and said that it did not intend to apply for a renewal of the delegation of sporting power to the FFSA for 1968. The FFSA retaliated by suspending licences and cancelling events. Initially, the FIA agreed that the ACF had done nothing wrong and rejected the FFSA's application to join in its own right. But then the French government stepped in, arguing that this did not meet assurances given when the FFSA was established in 1952.

This was a delicate issue given the cohabitation of the FIA and ACF and the close association of their officials, but in 1968 the FIA committee did recommend to the General Assembly that the FFSA be admitted for the standard two-year probationary period. When this was agreed, the ACF relinquished sporting power in France.

In fact, the schism between the ACF and FFSA was only part of a wider dissatisfaction with the way motor sport was being governed. There had been a meeting of 'interested parties' in London in December 1967 with the initial purpose, later abandoned, of setting up a rival international sporting organization. The entrants, drivers and constructors in professional racing (which meant mainly Formula 1) complained that they had no representation at the CSI, which they accused of being autocratic and out of touch. They were also in dispute with race organizers over prize and starting money, which the CSI had capped for each European race at a figure (£30,000) that



*Albert Park, Melbourne, 1953 - the first Australian Grand Prix organised by CAMS.*

the so-called London Committee regarded as inadequate.

Wilfrid Andrews took a conciliatory approach. He promised to hold talks with the committee and that it would have consultation with and cooperation from the CSI. In fact, at a meeting the previous October, the CSI president, Maurice Baumgartner, had proposed the establishment of a number of sub-commissions and working parties including experts from outside the organization. This had raised eyebrows within the conservative FIA establishment, suspicious of outsiders, and others feared it would make the commission too cumbersome. An expanded CSI with two delegates per club and invited experts would be up to 50 people. 'That,' said Lord Chesham, Wilfrid Andrews' RAC colleague, 'is no longer a commission. It's a parliament!'

So motor sport issues were at the forefront during the presidency of Wilfrid Andrews, a confident but already elderly man who was temperamentally more suited to the management of committees and diplomatic missions. His successor, RACB president Prince Amaury de Merode, also in his seventies, had headed the FIA's finance committee, and was well connected internationally but not attuned to what was fast becoming a tough commercial world of motor sport.

Both of these presidents came to realize that the FIA was in need of reform, its structure having grown up in the different circumstances of earlier times. An ad hoc committee was set up to examine the functioning and future of the FIA. It reported in 1971 on an organization that included 86 clubs from 76 countries (an

aggregate membership of 21 million), had an annual budget of 15 million francs, and derived the largest part of its income (500,000 francs) from motor sport, as calendar, records and licence fees. It concluded that a complete redesign of the FIA's sports administration was required and that the Federation should benefit more financially from it: 'Sport is the FIA's unique feature – its rights as an international controlling body are never questioned – and there is the opportunity for the FIA to get a fair share from the commercial side of the sport.' A significant statement – and something that was to become a major issue in the years to follow.

Actually, the admission as full members of the FIA of separate sporting authorities and the expansion of the CSI had already pointed the way to a restructured and more autonomous sporting control body. That would emerge as the *Fédération Internationale du Sport Automobile* (FISA) when Jean-Marie Balestre – a founder of the FFSA, its secretary-general in 1969, and president in 1973 – was elected president of the CSI in 1978.

The election to FIA president in 1975 of Prince Paul-Alfons von Metternich, race and rally driver, president of the Automobile Club of Germany and scion of one of Europe's most famous families, was seen as a breath of fresh air on all sides at the FIA. He had been a popular president of the CSI since 1970 and was generally regarded as the right man to see through the transition from a touring organization that ran racing to a racing organization that embraced touring. But it is unlikely that even he expected the ferocity of the battles to come.



## WORLD CHAMPIONSHIPS

The first race for the FIA World Championship for drivers was held at Silverstone, Great Britain, in May 1950. This institution, which was to become the FIA's most public face, was started when Formula 1 cars, with their engines in the front and skinny tyres, ran in national racing colours. In two decades, Formula 1 would be transformed into a contest between winged ground-level projectiles carrying advertising messages aimed at a worldwide television audience. World Championships were devised for drivers and constructors of other classes of car and types of event, reinforcing the FIA's supreme authority over international motor sport. The rules of the game that it governed had become much more complicated



The idea of the FIA World Championship for drivers was a master stroke by the CSI. It would bring attention to the premier form of motor sport by highlighting the men rather than the cars, effectively disguising the fact that most of the machinery was more than 10 years old. And while the cars originated in only two or three countries, drivers came from far and wide.

It was a brilliant way of generating the international spirit that the new Federation stood for, and involving the maximum number of its affiliated clubs. That said, in 1950, the first year of the World Championship, it included only six Grands Prix, all in Europe, plus the Indianapolis 500 in the United States.

The Indianapolis race, to which the Formula 1 regulations did not apply, was there to justify the 'world' title. It had been similarly included in the short-lived World Championship (for constructors) in the 1920s. The CSI continued to hope that American and European racing could find some common ground, and at least this provided the opportunity for Formula 1 and American speedway drivers to take part in each other's events. As it turned out, they didn't to any great extent through the 11 years that the Indianapolis 500 remained on the World Championship calendar.

The scoring system gave points to the first five finishers in each race: 8 for first place, 6 for second, 4 for third, 3 for fourth, and 2 for fifth, with an extra point for the fastest lap in the race. In 1950, a driver's best four results counted.

It was appropriate that the very first round of the World Championship should hold the traditional title of the Grand Prix of Europe. For 1950 that was allocated to the British race at Silverstone – a wartime airfield which had been

turned into a racing circuit to replace the pre-war venues of Brooklands and Donington Park. This event, on Saturday, 13 May (in those days race meetings in Britain were not held on Sundays), was the first, and so far the only Grand Prix attended by a reigning British monarch. King George VI and Queen Elizabeth had been provided with a special grandstand but preferred to watch the race from a makeshift tower separated from the track by a simple rope barrier.

The royal party and 150,000 other spectators saw in that first race the pattern for the season. It was won by Giuseppe Farina, an Italian, driving an Alfa Romeo 158. The Alfas took all six Grand Prix victories that year. Farina and Juan-Manuel Fangio, from Argentina, won three races each but a fourth place for Farina in the Belgian Grand Prix put him ahead on points. The FIA presented Dr Farina with a cup and a diploma and also gave an award to the Alfa Romeo firm to mark its dominance of the series. Thus, unofficially, was the Formula 1 constructors' title born.

Alfa Romeo won again in 1951, this time with Fangio as World Champion, but the era of these supercharged 1.5-litre cars, which had started life in the 1930s, was coming to its end. The modern, naturally-aspirated 4.5-litre V12 Ferrari beat the Alfas for the first time at Silverstone in July and went on to two more Grand Prix victories in 1951.

Alfa Romeo didn't have the funds to develop a new car and withdrew from racing at the end of the 1951 season. The CSI was already planning a new Formula 1 to start in 1954, but was unprepared for the dearth of 1.5/4.5-litre machines available to race in 1952. The answer, fortunately, was found in Formula 2, which it had adopted as a second international racing

category. There were plenty of these less exotic and expensive 2-litre cars and they found the Grands Prix of 1952 and 1953 opened up to them. Ferrari won all the World Championship races in 1952 (apart from Indianapolis, where that year's World Champion, Alberto Ascari, did compete, though without success), and was only beaten once, by Maserati, in 1953.

As an emergency measure, Formula 2 had done well and the cars would still qualify under the new Formula 1 regulations which set a 2.5-litre displacement limit for naturally-aspirated cars and 750cc as a supercharged equivalent. When those rules were announced in October 1952, the CSI was careful to add that they would apply from 1 January 1954 'unless fewer than three manufacturers have prepared cars'.

The CSI explained the thinking behind the new formula thus:

'The 1.5 and 4.5-litre Formula 1 was doomed to disappear, as it was technically too successful; in fact, the speed that it enabled the drivers to reach skirted too closely the limits of safety. It

has become very difficult to find either drivers capable of using such machines to the maximum of their possibilities or constructors with the financial and material means of building them. With the lowering of the speed it will now be possible to reach, the public will lose nothing. On the contrary, the quality of the entertainment will be enhanced by a greater number of competitors.'

Read into this the familiar themes: reducing power and speed for reasons of safety and cost. The truth about the original Formula 1 was that it attracted very few new cars. Enzo Ferrari, who had run Alfa Romeos on behalf of the factory in the 1930s, was establishing a racing operation that was to be the most enduring of all, but other ambitious projects, like the British BRM V16 and the French CTA Arsenal, were destined to fail.

The CSI was already taking action on other aspects of racing safety. It agreed that a race could be abandoned for safety reasons – for example, in torrential rain – and that the official result



*The Grand Prix of Europe at Silverstone, 1950, with the Alfa Romeo of first World Champion Giuseppe Farina (depicted on page 112) at the forefront.*



*Britain versus America at Le Mans, 1951 - Jaguar and Coudreau.*

should be the order at the time it was stopped. Certain circuits had been identified as 'unreasonably dangerous' and a sub-commission was set up to investigate and suggest modifications. The working party consisted of experienced racing drivers Albert Divo and Piero Taruffi, Colonel Stanley Barnes of the British RAC, plus a representative of the FIM to provide a motorcycle perspective.

For 1952, it finally made the use of hard crash helmets compulsory for FIA-sanctioned events. This had been a long-running debate. Some countries already made this stipulation. For example, the RAC of Belgium had a requirement for head protection back in 1937, but drivers who wanted to continue with their cloth or leather helmets could instead sign a waiver exonerating the club in the case of an accident. The CSI considered the helmet issue again in 1949 but could not decide on a

specification. Eventually the type of crash helmet – none of them were very effective by today's standards – was left to drivers' discretion.

From 1951, all drivers in international events had to show, in addition to an appropriate competition licence issued by their national club, a medical certificate, and from 1953 the issue of the licence was made dependent on having a clean bill of health.

The international sporting calendar had become a complicated affair. The Grandes Epreuves, the classic races that comprised most of the World Championship series, had prior rights to specific dates, and all other events had to be positioned round them. For 1952 the FIA calendar included 125 races and 53 rallies. There were 29 races scheduled for the 500cc single-seater training formula which had been adopted as Formula 3.

Lord Howe, the British CSI delegate, called



*The master of the 1950s – Juan-Manuel Fangio in action in a Maserati.*



*The Mille Miglia survived as an Italian road race until 1957; Mercedes won with Stirling Moss and the 300SLR in 1955.*

for a reduction of the number of events on the international calendar, yet there were more applications from further afield. In an attempt to achieve a more even spread, for 1953 the calendar sub-commission split the world into three sections and required Britain, France and Italy to reduce their number of events by 20 per cent. 'Still too many,' said Lord Howe. For 1954 applications were limited to five per country, except for France and Italy, which were allowed 15, and Britain, seven.

Motor sport was on the rise. The success of the World Championship encouraged the FIA to set up similar series for other classes of competition. In October 1952, the CSI announced that a European Touring Championship for rallies would be inaugurated in 1953 and a few months later decided also to introduce an International Championship for Manufacturers of racing sports cars. Both these new series were for constructors rather than drivers, thus providing opportunities for car manufacturers and their suppliers to advertise their successes.

The single-seater formulae, with their limits on engine size, were simple and straightforward compared with the regulations for sports cars and touring cars.

The definition of a sports car had been argued about through most of the history of the automobile. In the 1950s it was articulated in Appendix C to the International Sporting Code, which specified dimensions and equipment that a two-seater racing sports car must carry. Touring cars, series-production models, were covered by Appendix J and had to meet certain production volumes and modifications were strictly limited. The limits of these regulations were constantly challenged by car makers seeking a performance advantage

over their rivals; checking cars' qualifications, the process known as homologation, was to become a major part of the CSI's activity.

The Manufacturers' Championship, which used the same scoring system as the World Championship for Drivers, was concerned with overall rather than class or team results. Support for it was weak in the first season – partly because the first round was scheduled only five weeks after the announcement. The series became known as the World Sports Car Championship and was more honestly global than Formula 1; the seven qualifying events for 1953 included the Sebring 12 Hours in the United States and the Pan-American road race in Mexico. The first winner of the CSI's Manufacturers' Cup and thus the World Sports Car Champion was Ferrari.

The Formula 1 World Championship did spread its wings in 1953, the opening race being the Grand Prix of Argentina at Buenos Aires. Argentine drivers Juan-Manuel Fangio and José Froilan Gonzalez were two the strongest competitors for the title and their home country wanted to exploit their success. The Argentine Grand Prix was the only World Championship Formula 1 race outside Europe, until the Moroccan Grand Prix in 1958 and the first United States Grand Prix held at Sebring a year later.

The CSI's fears that the 1954 2.5-litre Formula 1 might not have enough entrants were unfounded. Conveniently, the 2-litre cars of the now-obsolete Formula 2 could continue to run, but there were encouraging indications of participation from Mercedes-Benz and Lancia as well as new cars from Ferrari, Maserati and other existing competitors.

As on previous occasions, the return of Mercedes-Benz was a landmark in racing



*Thrills and spills in 500cc Formula 1.*

history. Its new cars made their debut at the French Grand Prix in July 1954 and were quite unlike any others, with all-enveloping bodies for optimum aerodynamics on the fast Reims circuit. Mercedes finished first and second there and, using open-wheeled cars for the later races, ended the season with four wins from six starts. In 1955 the domination of the silver cars was even clearer, but this was a season of disruption, with four World Championship Grands Prix – and many other races – cancelled in the wake of the Le Mans disaster which, ironically, was caused by a Mercedes careering into a packed spectator enclosure.

The Le Mans accident required the CSI to re-examine safety in racing. The areas that it chose to study were a direct response to the Le Mans situation, and the fact that Pierre Levegh, the driver of the stricken Mercedes, was 49 years old, not regarded as top rank, and inexperienced in a car of the SLR's potential. The CSI concluded that consideration should be given to reducing the number of international events and limiting the activity of 'first class' drivers, as well as imposing medical checks on all drivers before the start of a race. It would also look at

circuit width in proportion to the speed of the cars and consider reducing the engine size of sports cars competing in the International Championship for Manufacturers (of which the Le Mans 24 Hours was a qualifying round).

Once again there were questions about the speed of Formula 1 cars. The technical progress shown by Mercedes – which withdrew from racing after the 1955 season – had already pushed lap speeds up to and beyond their 15/45-litre predecessors. The CSI's intention was that the 2.5-litre formula should apply until the end of 1957. What rule changes could curtail these ever-increasing speeds? That is a question that had arisen every few years in the first 50 years of motor racing and is still regularly aired in the 21st century.

Although the Le Mans disaster had some lasting effects – the racing ban in Switzerland was never lifted – the World Championships settled down again remarkably quickly. Changes were made to the Le Mans circuit, and the organizer, the AC de l'Ouest, revised its race regulations which, among other things, restricted the engines of sport-racing prototypes to 2.5 litres – the same as Formula 1. Perversely,

this unilateral action saw the 24-Hour race removed from the Manufacturers' Championship. A year later, the CSI made wholesale revisions to Appendix C and incorporated most of the 1956 Le Mans regulations (but not the 2.5-litre engine restriction). The 24-Hour race accepted the new international standards and came back into the championship.

Sports car rules were complicated but allowed larger and more powerful engines than the single-seater formulae: the Ferraris and Maseratis that fought it out for the 1956 and 1957 Manufacturers' Championship used engines up to 4.5 litres. But an accident in the 1957 Mille Miglia in which Ferrari driver Alfonso de Portago, his co-driver and 11 roadside spectators were killed, not only spelt the end of this great road race – which was, in truth, an anachronism

in the mid-20th century – but also prompted the CSI to try to find a way of curbing the performance of sports-racing cars.

Its answer was to apply a 3-litre limit for the 1958 Sports Car Championship, but since the 1955 Mercedes-Benz 300SLR used a 3-litre engine and could do 275km/h (170mph), this achieved little other than discouraging Maserati, which was short of money, and the Jaguars that had won Le Mans five times.

More drastic action would be needed in Formula 1. The 2.5-litre rules were extended, at first for two years and then for two more, during which time they had to change from special alcohol racing fuels to commercially-available petrol (actually, high-octane aviation fuel). The cars themselves went through a major change in this period, as Cooper, a British racing car constructor, showed that a small and lightweight



*Mini Grand Prix – Formula Junior started with front-engined cars.*

car with the engine amidships, behind the driver, was more effective than the traditional front-engined machines. Of course the idea wasn't new, as the pre-war Auto Union was designed that way, but Cooper had persevered with it through the popular 500cc Formula 3 to the new 1.5-litre Formula 2, introduced in 1957, where its cars were fast enough on some circuits to embarrass the 2.5-litre grandees.

Stirling Moss was the first to win a World Championship race with a mid-engined car, when he took Rob Walker's 1.96-litre Cooper-Climax to victory in the Argentine Grand Prix, the opening event of the 1958 series. Jack Brabham's two World Championships for Cooper in 1959 and 1960 proved the point: the mid-engined revolution was complete.

Then, as now, designing and building new cars was expensive. After a year of intensive discussion, in October 1959 the CSI announced that the new Formula 1, to take effect from 1 January 1961, would be for cars with a

maximum engine displacement of 1.5 litres and a minimum weight of 500kg – effectively the existing Formula 2. The news was not well received by the Formula 1 fraternity. British constructors who had come to the forefront in racing, starting with Vanwall, which won the new, official Formula 1 Constructors' Championship in 1958, and continuing with the success of Cooper and Lotus, were united against the new rules.

The British were not the only ones to object. Following the FIA-inspired establishment of ACCUS, the Automobile Competition Committee for the United States, Formula 1 had at last made it to America with a Grand Prix at Sebring, Florida, in 1959 and at Riverside, California, in 1960. There was even an American F1 car, Lance Reventlow's Scarab. Specifying tiny 1.5-litre engines when ordinary American cars had enormous V8s was not going to encourage the long-sought transatlantic relationship.



*Cooper brought the rear-engined revolution to Formula 1.*

So a second formula was proposed, called Intercontinental, allowing engines up to 3 litres, as an alternative to Formula 1. Where that left the World Championship was not clear. In a manner that would become familiar in later years, the CSI set up a liaison committee with competitors, engine and component suppliers and the oil companies – which were the major behind-the-scenes sponsors of professional racing. The committee considered the idea of half the races run to the new Formula 1 and half to the old rules, or to the Intercontinental Formula. The CSI was reminded of its mission to reduce speeds and determined that the 1.5-litre formula would prevail, albeit with a lower, 450kg weight limit.

When it came to 1961, a number of races were run to the Intercontinental Formula but they were supported only by a few British teams who, sensing the inevitable rather late in the day, also entered cars in the 1.5-litre World Championship. Through all this, Ferrari had been working undeflected on its new Formula 1 car, an advanced mid-engined design that was to defeat everything and everybody except Stirling Moss in an underpowered Lotus-Climax and make Phil Hill America's first World Champion.

Through the five years of the 1.5-litre formula, the racing was close and the honours well spread between Ferrari, BRM and Lotus, but there was something wrong with a Formula 1 that was not at the top of the racing league. At many circuits sports cars were faster and the 1-litre Formula 2 cars, introduced in 1964, not much slower.

In 1964, under pressure from competitors and race promoters – and, once again, with an eye to a unified transatlantic formula – the CSI formally announced the return of power. From 1 January 1966, the permitted engine size in

Formula 1 would be doubled, to 3 litres, with the alternative of 1.5 litres supercharged. There was also provision for Wankel rotary and gas turbine engines, both of which had appeared in experimental road cars (and a gas turbine Rover-BRM had run at Le Mans).

Although it had initially welcomed this idea, the newly-formed Grand Prix Drivers' Association warned that the jump from a 1-litre Formula 2 to a 3-litre Formula 1 car would be too great for a newcomer and proposed a compromise of 2 litres. The CSI held many and long discussions with the drivers, constructors and other interested parties before eventually, at its meeting in November 1963, the 3-litre rules were agreed.

The proceedings of the subsequent FIA General Assembly include the following: 'The CSI is aware of the safety problems that an increase in power might bring. Race promoters must leave nothing undone to ensure that the new formula causes no accidents. On the whole, the new regulations have been greeted favourably ...'

A year later, before the new Formula 1 was introduced, the CSI was considering limiting the number of cylinders for the 3-litre engines, fearing that manufacturers might outbid one another in an expensive contest of engineering and thus eliminate those with the least resources. That rings true for Formula 1 in 2004. In 1965 the prospect of 400bhp from 3 litres was causing some discomfort; today, 3-litre racing engines produce more than twice that. (Just for the record, the number of cylinders was restricted to 12 from 1972, although the only engine to have more was the over-complicated BRM H16 in 1966-7.)

The 3-litre Formula 1 was to bring new prosperity to Grand Prix racing – but not yet.

Elsewhere, the 1960s saw an explosion of interest in motor sport of all kinds. In sports car racing the debate about the validity of pure sports-racing cars running against production-based models continued. The International Championship for Manufacturers was discontinued in 1961 – in its nine years of existence, Ferrari had won seven times – and replaced by separate FIA championships for sports prototypes and GT cars, of which at least 100 had to have been built (this was reduced to 50 in 1966). Ferrari carried on winning – it took both titles for the first two years.

Production cars were in need of the closer regulation that came with the creation of a new Appendix J to the International Sporting Code covering all types of competition cars. This, inevitably, was subject to regular revision but at the end of the 1960s, cars were divided into three categories and nine groups, thus:

Category A (recognized production cars, for

which a certain minimum number must be produced in 12 months)

- Group 1 Series production touring cars (5000)
- Group 2 Touring cars (1000)
- Group 3 Grand Touring cars (500)
- Group 4 Sports cars (25)

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Category B (Special Competition cars)

- Group 5 Special Touring cars
- Group 6 Prototype Sports cars

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Category C (Racing cars)

- Group 7 Two-seater Racing cars
- Group 8 Formula Racing cars
- Group 9 Free Formula Racing cars

Rallying, for which the FIA organized two contests, the International Rally Championship



*Ferrari dominated sports car racing in the 1960s.*

of Makes and the European Rally Championship for Drivers, was run for Groups 1-4. The FIA European Challenge for Touring Cars, initiated in 1964, was a complicated championship for the drivers of Group 1 and 2 Touring cars in a series of races and hill-climbs, split into six classes.

The minutes of CSI meetings through these years regularly refer to the need for affordable training categories to encourage and develop young racing drivers. Formula 3, using 500cc motorcycle engines, was successful in the immediate post-war years, but mainly confined to Britain, where it had originated. In 1958 the Italians introduced Formula Junior, a national single-seater formula specifying either 1000 or 1100cc production car engines with a weight

penalty for the larger displacement. The FIA modified this slightly as an international category in the following year. It evolved into a new 1000cc Formula 3 in 1964.

Meanwhile, karts – described by the CSI as ‘a new and very unusual type of vehicle’ – had emerged from America. It was clear that these simple, inexpensive machines could not be classified with other racing cars and, indeed, it was desirable that they should run under different regulations which would, among other things, allow competitors below car-driving age. Appreciating karting’s potential to bring forward new driving talent, in 1962 the FIA created the Commission Internationale du Karting (CIK).

The professionals at the top of racing were



*Versatile Ford Escort Twin-Cam won rallies and races.*

pleased by the introduction of the 3-litre Formula 1, but the fields for the first races in 1966 were neither large nor particularly healthy. While Ferrari was able to transfer a V12 engine from its sports cars, several of the British constructors were wrong-footed when engine provider Coventry Climax withdrew from racing and had to start the new formula using old cars with enlarged engines. The Australian Repco 3-litre V8 engine in the Brabham was not the most powerful, but it was consistent and reliable and allowed Jack Brabham to become World Champion driving a car of his own manufacture.

The introduction of the Ford-Cosworth DFV engine, with a debut win for Jim Clark's Lotus 49 in the 1967 Dutch Grand Prix, was a turning point for Formula 1. A year later it was available to everyone at a reasonable price (£7500) and was so eagerly adopted by participating teams that by 1969 there were races where it was fitted to all but two or three of the

competing cars.

Colin Chapman was the owner and design genius of Lotus, who had already led the change from tubular spaceframes to aluminium monocoque chassis and embraced newly-available wider tyres from America. Then, taking a cue from the Chaparral sports-racing and Group 7 CanAm cars, he was to be an enthusiastic exponent of high-mounted adjustable aerofoil wings for Grand Prix racing. Formula 1 would never be the same again. Engine power and outright speed on the straights became less important than speed through corners, and that had implications not only for the cars but also for circuit design, requiring more effective barriers, fences and run-off areas to protect both spectators and competitors.

All this became a perpetual headache for the rule-makers at the CSI. Aerodynamic aids had to be closely controlled for safety reasons – the huge rear wings seen in 1969 and the



*The Mini-Cooper enjoyed international rally success in the 1960s.*



*Grand Prix cars became biplanes briefly in 1969.*

'biplanes' with wing struts mounted on the front and rear suspension, were banned immediately after a series of accidents. Safety measures like roll-over bars, seat belts, fire extinguishers and safety fuel tanks were gradually being introduced in all classes of racing. But race organizers complained about the cost of bringing their venues – many of which were still public roads closed for the race weekend – up to the standards imposed by the CSI's expert sub-commission for circuits and safety.

As the cost of staging events rose, money – the amount of it and how it should be distributed – became the big issue in Formula 1. Once again Colin Chapman can be said to have been the innovator. It was during the 1968 Tasman series – a popular 'off-season' diversion for the Formula 1 teams in Australia and New Zealand – that the official Lotus team cars abandoned British racing green and appeared for the first time in the red, white and gold colours of John Player's Gold Leaf cigarette brand, the

logo of which appeared on the cars' flanks. Chapman had secured Formula 1's first major 'outside' sponsor, but the deal depended on the cars carrying advertising. (As an aside, because it is relevant to later events, Player's entry into Grand Prix racing followed a ban on advertising cigarettes on British television.)

Although sponsorship and advertising on cars had long been a feature of racing in the United States, most national clubs in Europe limited the size and type of advertisements that competing cars could carry. The FIA, and president Wilfrid Andrews in particular, thoroughly disapproved of Chapman's disregard for traditional standards of presentation. It was pointed out that two of the major oil companies and a tyre supplier had withdrawn their financial support at the end of 1967 and that Formula 1 needed the money. One by one, national clubs relaxed their restrictions (although there were still some difficulties on the occasions – then rare – when Grands Prix were televised). But Lotus had started

something from which there would be no turning back. The commercial era of Formula 1, and indeed of all international motor racing, had begun.

Two decades had seen enormous change. When the World Championship started in 1950, the teams and manufacturers fielded upright, front-engined cars that were proud to wear their national racing colours. By 1970 the machines had become winged ground-level projectiles that carried advertising to pay for

their development. With sponsorship from the world outside – and the ready availability of the Cosworth DFV engine – organizations could be set up and build cars simply to go racing. In that sense, the car maker was diminished. The focus of the watching world was on the drivers. The old guard deplored the cult of personality growing up around motor racing but were reminded that, although the reasons were different, it was why the World Championship was set up in the first place.



*Jim Clark raced in Gold Leaf Team Lotus colours for the first time in the 1968 Tasman series.*

## FIA WORLD CHAMPIONS

1950	Giuseppe Farina	Italy	Alfa Romeo
1951	Juan-Manuel Fangio	Argentina	Alfa Romeo
1952	Alberto Ascari	Italy	Ferrari
1953	Alberto Ascari	Italy	Ferrari
1954	Juan-Manuel Fangio	Argentina	Mercedes-Benz/Maserati
1955	Juan-Manuel Fangio	Argentina	Mercedes-Benz
1956	Juan-Manuel Fangio	Argentina	Lancia-Ferrari
1957	Juan-Manuel Fangio	Argentina	Maserati
1958	Mike Hawthorn	Gt. Britain	Ferrari
1959	Jack Brabham	Australia	Cooper-Climax
1960	Jack Brabham	Australia	Cooper-Climax
1961	Phil Hill	USA	Ferrari
1962	Graham Hill	Gt. Britain	BRM
1963	Jim Clark	Gt. Britain	Lotus-Climax
1964	John Surtees	Gt. Britain	Ferrari
1965	Jim Clark	Gt. Britain	Lotus-Climax
1966	Jack Brabham	Australia	Brabham-Repco
1967	Denny Hulme	New Zealand	Brabham-Repco
1968	Graham Hill	Gt. Britain	Lotus-Ford
1969	Jackie Stewart	Gt. Britain	Matra-Ford
1970	Jochen Rindt	Austria	Lotus-Ford
1971	Jackie Stewart	Gt. Britain	Tyrrell-Ford
1972	Emerson Fittipaldi	Brazil	Lotus-Ford
1973	Jackie Stewart	Gt. Britain	Tyrrell-Ford
1974	Emerson Fittipaldi	Brazil	McLaren-Ford
1975	Niki Lauda	Austria	Ferrari
1976	James Hunt	Gt. Britain	McLaren-Ford
1977	Niki Lauda	Austria	Ferrari
1978	Mario Andretti	USA	Lotus-Ford
1979	Jody Scheckter	S. Africa	Ferrari
1980	Alan Jones	Australia	Williams-Ford
1981	Nelson Piquet	Brazil	Brabham-Ford
1982	Keke Rosberg	Finland	Williams-Ford
1983	Nelson Piquet	Brazil	Brabham-BMW
1984	Niki Lauda	Austria	McLaren-TAG
1985	Alain Prost	France	McLaren-TAG
1986	Alain Prost	France	McLaren-TAG
1987	Nelson Piquet	Brazil	Williams-Honda
1988	Ayrton Senna	Brazil	McLaren-Honda
1989	Alain Prost	France	McLaren-Honda
1990	Ayrton Senna	Brazil	McLaren-Honda
1991	Ayrton Senna	Brazil	McLaren-Honda
1992	Nigel Mansell	Gt. Britain	Williams-Renault
1993	Alain Prost	France	Williams-Renault
1994	Michael Schumacher	Germany	Benetton-Ford
1995	Michael Schumacher	Germany	Benetton-Renault
1996	Damon Hill	Gt. Britain	Williams-Renault
1997	Jacques Villeneuve	Canada	Williams-Renault
1998	Mika Hakkinen	Finland	McLaren-Mercedes
1999	Mika Hakkinen	Finland	McLaren-Mercedes
2000	Michael Schumacher	Germany	Ferrari
2001	Michael Schumacher	Germany	Ferrari
2002	Michael Schumacher	Germany	Ferrari
2003	Michael Schumacher	Germany	Ferrari





## THE NEW WORLD ORDER

As the FIA developed and grew through the 1960s and 1970s, attitudes to the car were changing. In industrialized countries, what had been a symbol of liberation was seen as a source of traffic congestion, pollution and danger. Working behind the scenes, the FIA's many commissions sought to resolve some of the problems brought by rapidly increasing car use with research into road safety, traffic engineering and exhaust emissions. The Federation joined forces with the AIT to have a voice on legislative matters and it set up a series of Round Table conferences to discuss major transport issues. It initiated systems to collect and distribute touring information between member clubs.

One of the FIA's founding principles was to promote the development of international motor traffic. Car ownership increased dramatically as the world recovered from the hangover of the second World War. By the late 1950s there were 100 million motor vehicles in use, compared with 40 million in 1940.

In western Europe, travelling by car had never been so easy. The barriers between countries had yet to be dismantled but at many frontiers the tiresome formalities had been relaxed and triptyques and carnets became unnecessary. That in itself changed the FIA's activities. While there was loss of business issuing customs documents, there was an increasing demand for touring itineraries issued by the FIA through member clubs.

As the 1960s arrived it became clear that the time was approaching when the encouragement of motoring would be neither necessary nor appropriate – its popularity worldwide was immense and limited only by people's ability to pay for it. The FIA's role in furthering the cause of automobilism would be one of containment, exploring the best ways of living with an ever-increasing number of cars and encouraging safe and responsible motoring.

This was quite a shift of attitude. It seemed a world away from the FIA General Assembly in 1948 when the AC of Italy had proposed an International Automobile Day, including a conference, and exhibitions and rallies in various countries to encourage the public to see, buy and use the latest products. The Assembly liked the idea but pronounced that 'realization would be rather difficult' in those straitened times. The FIA did support plans for a Tour of Europe, along the lines of the Tour de France Automobile, and an ambitious rally from Cape

Town, South Africa, to the Mediterranean, although it declined to become directly involved in their organization. But as the conduit between national automobile clubs, the FIA was able to facilitate such cross-border events.

One of the FIA's earliest submissions to the United Nations – through the newly-formed OTA – was to call upon its Economic Commission for Europe to provide aid for economically underdeveloped countries to improve their roads, some of which were 'in a most deplorable state'. The 1952 General Assembly was impressed by the 'road fund' that existed in Britain, generated by an annual tax on motorists. This was a more naïve time; evidently, the Assembly did not know that British road tax had been diverted for other purposes for more than 25 years.

Good roads were not just a question of convenience and transport efficiency. They were fundamental to safety. In 1956, the FIA contributed to an international debate about the financing of roads. Its conclusion: 'At present there is no problem more urgent, or in fact more difficult, for some countries in western Europe where the quantity of cars is increasing rapidly. No other means can be found to fight against the disastrous increase in road accidents.'

The FIA recognized that motorists travelling across Europe needed better information about road and traffic conditions and in 1953 initiated a study on the feasibility of broadcasting traffic and weather reports by wireless, taking information from member clubs either by radio or telex link. By the winter of 1954/5 the first such scheme was up and running, with daily bulletins being broadcast from Paris. Soon there was a call for an international wavelength for traffic information.

In technical matters, particularly new

developments in automotive technology, the FIA was well established as an independent expert. The work of its CTI provided the material for the FIA to make forecasts and recommendations to international bodies and was available to member clubs so that they could be well informed for national debates.

For a few years in the 1950s, a joint technical commission with the AIT, and thereby linked to the OTA, assumed responsibility for most of the FIA's public pronouncements on technical matters. The FIA became increasingly uncomfortable with this arrangement, regarding its CTI as an essential element of the organization, not least because of its role in devising technical regulations for motor sport with the CSI.

The CSI sought to modernize and revise the International Sporting Code after World War 2 and, as a starting point, asked the CTI to redefine the automobile. At a time when jet aircraft were being developed for civilian use and some futurists were predicting the arrival of

flying cars and nuclear-powered road vehicles, it was a useful clarification:

'An automobile is a terrestrial vehicle running on at least four wheels, always in contact with the ground, two of which at least steer and two of which at least provide propulsion.'

At the same time, the CTI admitted failure in its attempts to devise a meaningful equivalence formula for piston and gas turbine engines. This requirement was highlighted by the British Rover company's trials in 1950 with JET 1, the world's first gas turbine-powered car, which two years later achieved 245km/h (152mph) at Jabbeke, in Belgium. Record and racing categories needed to encompass such vehicles and turbine-powered road cars would also have to be classified. At first, gas turbine cars were set weight limits only, but by 1970, when the CSI had established its own technical commission, it had settled on an equivalence formula for racing based on the area of the turbine's air intake. But gas turbine-powered



*The first gas turbine car was Rover's JET1 prototype.*

racing cars disappeared after Lotus' attempts with the Formula 1 Type 56B in 1971. And Chrysler, the company that came closest to a turbine production road car, gave up the idea when America introduced its first exhaust emissions regulations.

In the mid-1950s the CTI wanted to distance itself from racing and concentrate on issues surrounding road cars. The FIA divided itself into two sections – the SSI and SITTC. The CTI became part of the latter, the non-sporting division.

It had already drawn attention to the problem of exhaust emissions. A 1952 CTI report said: 'Abundant fumes let loose by certain vehicles run on fuel oil (diesel), with poor or incomplete combustion, are a danger for traffic.' It also considered 'noise pollution' – only it was not called that then. Campaigns to cut down vehicle noise had begun in several countries but there was no precise and consistent way of measuring it. The CTI undertook to investigate noise measurement equipment and what could

be an international standard.

The matters considered by the CTI in the early 1960s make a fascinating list of new developments that later would become commonplace on everyday cars: standards for flashing direction indicators (bright enough by day but not dazzling at night); iodine (halogen) headlamps – are they too bright?; safety belt design; windscreens made of laminated rather than toughened glass; locking devices for tip-up seats in two-door cars; even a prototype anti-lock braking system. In 1966 it reported that most of the safety measures that were proposed for legislation in the United States – seat belt anchorages, padded facias, safety locks and hinges, windscreen washers and safety glass – were already met by most European cars. It agreed with the US requirements for safety steering wheels with collapsible columns and divided hydraulic brake circuits and noted that these were being developed by European car makers.

In 1966 the CTI reported that car



*Chrysler came closest to production with this turbine road car.*

manufacturers had 'amplified their endeavours in the systematic study of vehicle impacts and their consequences'. It observed that the information from these tests would have considerable effects on vehicle structures and that there were important lessons to be learned about the behaviour of car occupants in crashes. Perceptively, it concluded: 'Ideas of high safety standards for cars have left the land of dreams and now foreshadow mass-produced vehicles of the next decade. For years it was true to say that safety did not sell, but that was because the public did not attach sufficient importance to it. Clubs can do much to speed up the opposite trend – which is slowly gaining ground.'

Safety standards certainly did improve in the 1970s, although that came about more because of American legislation than the voluntary efforts of the car makers. It took much longer for safety to become an important sales feature. Arguably, that didn't happen in Europe until the 1990s and the advent of independent crash testing that later became EuroNCAP.

Ironically, in view of the discord between the two sides of the FIA, the most tangible contribution to the safety debate 35 years ago was a single-seater racing car. At the Geneva motor show in 1969, the Italian coachbuilder and design house Pininfarina presented a concept car called the Sigma. Most motor show concept cars are fashion statements – an indication of the exhibitor's thinking about future shapes and style. Sigma was different. It was a safety demonstrator built as a Formula 1 car.

In the previous two seasons there had been serious accidents and a number of fatalities in professional motor racing – among them, twice World Champion Jim Clark. At the initiative of the Swiss journal *Revue Automobile*, technical

journalist and racing driver Paul Frère, Professor Ernst Fiala – director of automobile research at the technical university of Berlin – and racing safety expert Dr Michael Henderson planned a car incorporating a whole range of safety devices, some familiar, others experimental. The CTI endorsed the project. Pininfarina agreed to build a prototype, in duraluminium, using a V12 engine and other chassis components donated by its long-time associate Ferrari.

Features of Sigma included a rigid 'safety cell' for the driver surrounded by a deformable structure; 'bumpers' to prevent the wheel of another car riding up on its tyres, and forming deflectors for spray and gravel; rubber bag fuel tanks, resistant to perforation and self-extinguishing in a fire; a twin-circuit fire-extinguishing system for the cockpit and engine bay; a steering column that was collapsible in a crash; and a six-point body harness plus an 'anti-whiplash' belt for the driver's helmet connected to the car's head restraint. A data recorder, like the 'black box' of a commercial aircraft, was also envisaged.

The Sigma was shown to the CSI at its meeting in Zandvoort, Holland, in June 1969. Several of its proposals – the impact-protection side and front structures, safety fuel tanks and fire extinguishers – were subsequently included in Formula 1 regulations. Meanwhile, the CTI was quick to point out that it did not wish to encroach on the territory of the CSI but was convinced that the problems of road users were not essentially different from those of the racing driver. Safety lessons learned from Sigma, particularly about the protection of fuel tanks and pipes, the isolation of electric connectors and, indeed, the whole concept of a deformable structure were applicable to everyday cars.

It would be a long time before such claims



*Concept racing car – the Sigma was built by Pirelli in 1969 and had a profound influence on future race car safety features.*

could be made again. By the 1970s, racing and road car design had grown apart, and had little to give to each other.

Although the FIA was continually preoccupied by the need to reduce the speeds of racing cars for safety reasons, its attitude to speed on the road was more liberal. By the mid-1960s several European countries – and most of the United States of America – had overall speed limits. The FIA's traffic commission, the CIC, conducted research into speed limits and their effects and in 1966 concluded: 'Our study suggests that general speed limits may bring down accidents on ordinary roads but not on motorways. But we remain sceptical about this because of the difficulties of comparison. So we recommend speed limits on difficult sections of road and advisory speeds only on motorways.'

There are signs from this period that the FIA believed that the interest of motorists – the cause of automobilism – was best served by fewer rather than more controls. It condemned the spread of parking meters as inefficient use of road space and an unreasonable additional tax on motorists. Time restrictions on roadside parking and a disc system, as used in Paris, were preferred. It disapproved of on-the-spot fines for motoring transgressions.

But in 1969 there is a sense of the inevitable in this remarkable summary from the CTI:

'We have received submissions from several clubs in countries that have adopted blanket speed limits. The CTI considers that hitherto nothing has demonstrated the efficiency of such measures and that, on the other hand, the drawbacks are known all too well. Therefore a message was sent to the governmental conference in Vienna (in November 1968) acknowledging the need for certain speed limits but expressing the wish that such limits

imposed by special circumstances should remain localized and temporary.

'We have also considered the matter of parking and the restriction of entry to city centres. Parking spaces paid for by residents, to the prejudice of other road users, seem to us unfair, all the more so when linked to a policy of limiting parking spaces to force motorists off the road and on to public transport.

'We are perfectly aware of the facilities which public transport offers the community but we submit that it is by improving this service and not by penalizing private motorists that the public should be urged to make use of public transport.

'The same – and in our opinion, wrong – concepts have resulted in the proposal of a system whereby utilization of urban roads should be subject to a tax proportional to the distances covered on those roads and calculated by means of electric impulses recorded on meters mounted in the vehicles. It is foreseen that there would be several rates, according to the nature of the vehicle. This implies that, once again, the private motorist would be footing the bill for the operation.'

This statement, from 35 years ago, could have been made this year, in London or any number of other cities that have introduced or are considering road pricing as a solution to traffic congestion. The principle has not changed, although the FIA's approach today is more pragmatic.

Standardization of the rule of road was a recurring subject through the years of the AIACR, and at the founding meeting of the FIA in 1946, a representative of the traffic commission urged the adoption of the principle that: 'It is desirable as soon as possible to have right-hand drive traffic in all countries.'

Desirable, perhaps, but change was not high on the list of priorities for those who drove on the left. Except in Sweden, which chose to cross over from left to right on 3 September 1967. The OTA, representing the FIA and AIT, held meetings of its executive committee and traffic commission in Stockholm so that their members could witness this unusual event.

Sweden's switch was the result of a long campaign for unity with its neighbours in which the Swedish motoring organizations had played a leading part. The FIA delegates present on 3 September reported that the changeover was 'perfectly organized, with a quite remarkable sense of civic duty and discipline shown by one and all'. In the minutes of the FIA General Assembly in October 1967 it was described as the 'the most important contribution to date towards the standardization of road traffic conditions and towards the improvement of safety of international traffic'. The following year, the Royal Swedish Automobile Club, Kungl Automobil Klubben (KAK), was awarded the FIA Road Safety Challenge trophy for its part in the process.

Road safety had by then become an international object of concern. A survey of 54 industrialized countries shows that in 1964 there were 165,000 fatalities related to the motor vehicle; by 1972 this figure had reached 209,000. The UN Economic Commission for Europe had accepted definitions for 'passive' and 'active' safety (meaning, respectively, protection from and avoidance of accidents) as a basis for regulation. In 1969, through the CTI and the BPICA, 84 car manufacturers from 11 countries called for common safety standards worldwide. National governments, for their own reasons, chose not to adopt this logical proposal, although as the European Community

developed, its member countries gradually accepted unified rules.

There was no more of a consensus on the control of exhaust emissions. The United States of America, and California in particular, led in setting maximum permitted levels of hydrocarbons (HC) and carbon monoxide (CO), followed by a limit on oxides of nitrogen (NOx). These regulations were driven by specific problems of photochemical smog in the hot and sunny cities of Los Angeles, Phoenix and elsewhere in the American west. Some areas of Japan and Australia had similar conditions. In Europe, it was argued that this kind of pollution was rare and that such stringent controls would not be necessary.

In the late 1960s, the CTI examined the various exhaust cleaning systems and concluded that those that recycled evaporative emissions (hydrocarbons escaping from the fuel tank) worked well but the catalytic converter was far from perfect and the trend by car manufacturers to develop 'lean burn' low-emissions engines was preferable. History shows that this idea – widely held at the time – could not on its own meet the ever-tightening US emissions standards which came to be adopted, albeit in modified form, in Japan and Europe. The catalytic converter was perfected, without significant loss of engine performance or fuel economy, and is now a lifetime component for new cars sold in most parts of the world.

The electronic revolution started in the 1970s. It was to touch all aspects of everyday life. Cars, mostly because of the precise emissions limits, were among the first to benefit from the application of the computer chip. Electronic ignition control and fuel injection took over from their mechanical predecessors. By the end of the 1970s, family cars were available with a



*Mercedes-Benz was among the first manufacturers to start a crash test programme in the 1950s.*

'trip computer' that could provide instant readings of average speed and fuel consumption. In 1981, Honda presented an inertial navigation system using a dashboard screen with transparent overlaid maps on which the car's real-time position could be shown. This was to lead to on-board navigation systems using digital maps, the first of which were demonstrated in America and Japan in the mid-1980s, and to the combination satellite location systems available today.

By 1975, the world population of motor vehicles was estimated at more than 320 million (255 million cars). It was predicted that tourism would become the world's number-one industry. Figures from the European Community showed that 80 per cent of holidays in Europe were taken by car.

Obviously, there was an opportunity for the FIA to expand in touring information and assistance, but it was also clear that this activity would need to embrace new technology and

move into the electronic era.

Tourist Talk, a tourist information service run jointly with the AIT through the OTA office in Richmond, near London, was the FIA's first venture of this kind, but it did not develop fully. It was followed by WISE (Worldwide Information Service), an electronic databank of detailed touring and other motoring information available to member clubs and administered from the FIA office in Paris. WISE was, perhaps, ahead of its time. It required direct computer links when it was easier and cheaper to use telefax. Relatively few clubs subscribed and those that did participate were mostly in western Europe.

Its replacement was CETA, a more ambitious, commercial project later known as Magellan, which the FIA entered into with the IBM computer firm and the insurance company GMF and for which it received a grant from the European Community. Again based in Paris, it was to be a comprehensive source of tourist

information linked to a booking service, initially concentrating on France (where it could be accessed using the Minitel service) but with the intention of spreading throughout Europe and then worldwide. Several of the larger member clubs, including the AAA in the United States, the CAA in Canada, OAMTC in Austria, and the RAC of Great Britain, showed interest in this scheme but it ran into financial trouble when GMF withdrew its support in 1993. When Max Mosley was elected FIA president later that year he called for an end to this project, noting that it lacked the resources to achieve its objective.

This was a turning point in the direction of what had by then become the FIA World Council for Touring and the Automobile. Many of the larger member clubs were also affiliated to the AIT, which was more specialized in touring, and they saw the FIA's new initiatives in this field as a duplication of effort. It made sense, therefore, to combine forces in some of these activities.

In October 1992, it had been decided that the FIA's commissions, with the exception of the International Historic Commission (and FISA, which was a semi-autonomous body), would become joint FIA/AIT commissions. For its part, the FIA would place more importance on technical and political issues, representing consumers – the members of its constituent clubs – at governmental level and with international organizations.

The FIA had been consistently active in this area. Pre-war it had consultative status at the League of Nations, and when the United Nations was formed it was granted a similar advisory role. Initially, it was convenient and cost-effective to have joint representation with the AIT at the UN, though the OTA.

The OTA became directly involved in the

discussions about harmonizing road traffic rules and in preparing draft conventions on road signs, customs, road haulage and the importation of private cars. Its two founding organizations made the OTA their centre of information on traffic engineering, a new science in the 1950s, concerned with roads and infrastructure. The OTA set up traffic engineering courses in Europe in 1953 and 1954 and, later, Study Weeks every four years at venues around the world. Arranged in association with the AIPCR (Permanent International Association of Road Congresses) and the IRU (International Road Transport Union), these provided a forum to consider the wider aspects of road traffic and safety and were attended not only by members of the organizing bodies but also by government officials and the most eminent engineers in this field.

The series of Round Table meetings that started in 1974 was an FIA initiative which, over the next two decades, covered energy and the environment, the social and economic role of the automobile, the growth of the worldwide vehicle population, fuels, electronic guidance systems, safety, and harmonization of vehicle legislation. In 1992 the Round Table was held at the time and place of the 'earth summit', the United Nations world conference on the environment, in Rio de Janeiro, Brazil. The FIA conference had the title: Environment and Development – A Challenge for the Automobile and Society.

The FIA Round Table put a series of recommendations to the United Nations: the wider use of renewable energy; education for the more rational use of cars; town planning to reconcile housing and mobility requirements; and a code of conduct covering all aspects of car use, from production to recycling.

The Rio meeting set a theme for the future

activity of the FIA World Council for Touring and the Automobile. It also heralded a new era where the FIA took the initiative in organizing full-scale conferences and workshops on

subjects of wider public concern, involving not only member clubs but all interested parties. In a real sense, the FIA had found a new place in the world.



*At the 1992 'earth summit' at Rio the FIA staged a Round Table meeting on environmental issues.*



Mercedes-Benz

SAFETY CAR

AMG



## FROM RACING TO ROAD

The automobile itself unites the two strands of the FIA's activities – the defence and support of the motorist and the administration of motor sport. In the beginning, there was an understandable direct link between racing and touring cars. It went beyond publicity: win on Sunday, sell on Monday. Racing proved reliability. Many of the technical features of today's production models were first introduced and tested on the race track. But as the car became a 'mature' product, the requirements of competition brought ever-more specialized, purpose-built machines. Do developments forged in the white heat of professional racing and rallying still benefit the everyday road car? The answer is yes – but in some surprising ways.

The FIA's reluctance through the years to separate motor sport from its other activities was because it had grown up with the notion that racing and other forms of sport was a kind of high-speed laboratory for the development of better production cars: racing improves the breed.

That was valid in the early days as there was no fundamental difference between an everyday road car and one used in competition. Racing extended these machines to their limit. The quest for higher performance brought greater efficiency and races were tests of endurance, encouraging strength and reliability.

Virtually all aspects of cars before the first World War can be said to have been proved in racing.

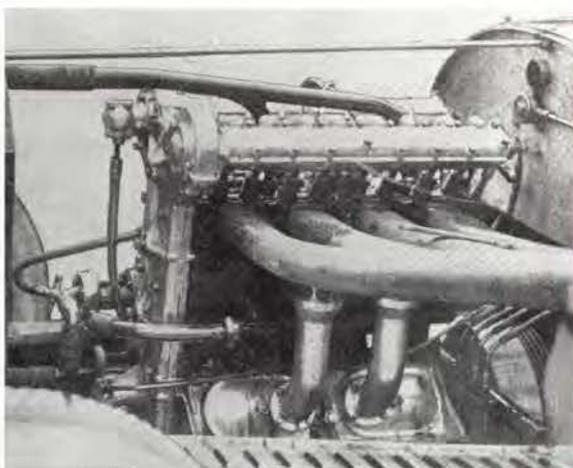
Early motor races saw the first steel chassis replacing wooden frames. Lower and wider cars were found to be more stable, and streamlining, smoothing the contours of the bodywork (the infancy of aerodynamics), featured on record-breakers at the turn of the 20th century (La Jamais Contente, Serpollet 'Easter Egg') and on

road racers not long afterwards.

The need for speed brought larger engines with more cylinders. Four cylinders, first seen in 1896 on the Panhard that won the Paris-Marseilles-Paris race, were the norm by 1900, but soon racing cars had six (Chadwick, Napier) and eight (Ader, Winton). Overhead valves (Clément, Darracq, Pipe) and then overhead camshafts (Isotta-Fraschini, Bugatti) appeared first in racing.

The 7.6-litre four-cylinder engine of the 1912 Grand Prix Peugeot is held as the distant forerunner of the modern twin-overhead-camshaft engines with four valves per cylinder, but it had four valves for lightness to allow higher revolutions – not for today's reasons of gas flow and combustion efficiency. Maximum engine speeds went up from 3000rpm for the best engines in 1912 to 6000 with the supercharged Delage Grand Prix car in 1925. It took nearly 50 years for regular production engines to match that Delage, and 6000 remains the rev limit for many of today's family cars.

Multiple carburetors, high-tension coil



*Four-cylinder twin-camshaft 16-valve engine – 1912 Peugeot Grand Prix set the pattern for the modern high-efficiency road car engine.*

ignition and supercharging were all introduced in competition before 1910 and applied to road cars within 20 years. Turbochargers – exhaust-driven superchargers – were invented for aircraft, used in heavy trucks, and appeared in racing in the 1960s. They became standard wear for Formula 1 in the 1980s, by which time the principle had been adopted for a number of high-performance road cars. Today, turbocharging is an essential in achieving good performance and high efficiency from automobile diesel engines.

A five-speed gearbox was used in the 1911 Grand Prix Delage, but five-speed transmissions were not commonplace on everyday cars before the 1970s. Such a long gap from first appearance to everyday use is surely not ‘racing improving the breed’. Nor can such a claim be made for front-wheel drive with a transverse engine (Christie) or four-wheel drive (Spyker), both of which were in motor racing in the mid-1900s but did not have widespread application in road cars for another 50 years.

We are on safer ground with the evolution

of tyres and shock absorbers, improvements to which moved quickly from racing to ordinary cars. Michelin’s detachable wheel rim, a decisive factor in Renault’s victory in the first Grand Prix in 1906, led directly to the easily detachable wheels used by all cars today. Competition between manufacturers on the race track forced the pace of change in tyre construction, materials and dimensions. Throughout the history of the car, major tyre developments have been made for racing and rallying before being transferred to production models.

Isotta-Fraschini pioneered four-wheel brakes on a racing car in 1913 – most road cars continued with rear-wheel or transmission brakes for some time thereafter. Hydraulic brakes were used on the Duesenberg which won the Grand Prix of the ACF in 1921. That same year, the American manufacturer was among the first to include a hydraulic braking system on its production cars. Everyone else was to follow – but not immediately.

The Bugattii Type 35 had cast aluminium-alloy wheels incorporating brake drums when it



*Bugatti pioneered light alloy road wheels, commonplace today.*

first raced in 1924. Similar wheels were used on production Bugattis, but those cars were exotic flowers, often no more than road-equipped racers. Alloy wheels were not widely used elsewhere but returned for racing in the 1950s. They did not become 'must have' options for ordinary road cars for another 30 years.

Bugatti, Alfa Romeo, BMW and others had demonstrated the advantages of low-drag all-enveloping bodywork before the second World War and these cars clearly had an influence on the design of 1950s sports cars. By that time the crossover between Grand Prix (Formula 1) cars and production models was negligible, but sports-racing cars and endurance events like the Le Mans 24 Hours did have something to contribute. Disc brakes, used by Jaguar from 1952, were to become the world standard. Halogen headlamps, which brightened up night racing and rallying from 1960, were fitted generally by the mid-1970s.

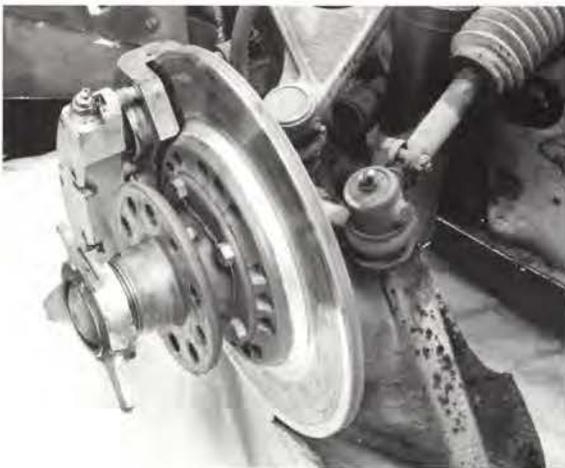
The use of plastics for car bodies, starting with glass-fibre reinforcement and progressing to stronger and lighter carbon-fibre, was

perfected in racing and these materials have found a place in road car production, though mostly in specialized, low-volume models. The highest volume for a production model with glass-fibre bodywork is the Chevrolet Corvette, which has reached over 50,000 a year.

The mid-engined revolution in racing car design in the 1960s led to road cars with the engine amidships, but this was the passenger car imitating the racer, rather than benefiting from a specific technical development. Whilst they can achieve a theoretically ideal weight balance, the practical disadvantages for occupant and luggage space restricts this layout to a small proportion of mainstream production models.

Similarly, advanced aerodynamic developments from racing, like harnessing the 'ground effect', have an application for very fast road cars but are usually ineffective at normal highway speeds.

Whilst engine technology has moved forward in racing for ever-higher combustion efficiency and more power, since the 1970s the demands on the road car makers have been



*Disc brakes proved by Jaguar in 1950s sports car racing, now universal.*



*Changing gear with steering wheel 'paddles' started in Formula 1, and is now common on small family cars with semi-automatic transmission.*

almost in the opposite direction – to reduce fuel consumption and minimize exhaust emissions.

Electronic ignition systems were first tested in Formula 1 racing in 1962 and over the next 20 years came to equip all production cars. A computerized engine management system controlling ignition, fuel injection and other parameters for the most efficient combustion, was used on the TAG-Porsche engine which powered the 1983 Formula 1 McLaren. Such systems were quickly adopted for road cars. But through the 1990s car electronics were in some respects more advanced in road vehicles than in racing. Anti-lock braking, and stability and traction controls, have all been restricted in Formula 1 but are now commonplace even in inexpensive road cars; from mid-2004, anti-lock braking (ABS) became compulsory on all models from the major manufacturers in Europe.

Passive safety measures – crash protection – cannot be said to have started in racing. Safety

belts were regularly used in American racing in the 1950s but not in professional racing in Europe until the end of the 1960s. Although deformable structures had been introduced to protect drivers of single-seaters, when scientific crash testing came to Formula 1 it used techniques and equipment developed for production cars many years before. However, the FIA's realization in 1994 that Formula 1 safety standards had improved so much that they far exceeded those for road cars led to the establishment of EuroNCAP, the European New Car Assessment Programme. That has become accepted by European buyers as an index of passive safety ratings – and is credited with improving the crash performance of today's new cars.

Robotized gearboxes, where electronics and hydraulic or pneumatic actuators operate the clutch and the driver changes gear at the touch of a lever, button, or steering wheel paddle, do owe their existence to Formula 1 racing. For a

road car they provide most of the advantages of a torque converter automatic transmission without the fuel consumption penalty – and they appeal to enthusiasts because of the link with racing.

Let us not forget the more superficial connections between motor sport and road cars. The spoilers and wings that adorn so many cars derive directly from aerodynamic work in racing in the 1960s. Electronic instrument displays, small leather-covered steering wheels, and form-fitting seats are – useful or not – fashion items generated by motor sport.

Years ago, in all but the biggest companies, the same engineers were responsible for both production cars and competition models. The nature of professional racing and rallying today demands specialized departments, if not completely separate organizations, to devise and build machines for motor sport.

The major car makers involved in Formula 1 have forged links with independent racing

teams and their involvement is primarily promotional – to create a good image for their brand through association with the sport and its worldwide television exposure.

Even where engines are built 'in house', the manufacturers do not claim to learn many lessons that can be applied to their road cars, although Honda is the exception. During the period 1983-1992 the Japanese company provided engines to Spirit, Williams, Lotus, McLaren and Tyrrell and won the Formula 1 Constructors title six years in succession. The engineers that built and serviced the Honda engines were drawn from the research and development department and seconded to the racing operation for a few months at a time. Honda believes that the pressures of motor racing, the teamwork, its deadlines and the need to find quick, effective solutions with the highest performance and quality, are invaluable training for solving problems in the real world of road cars.



*Development of high-intensity lighting was speeded through the needs of night racing.*



A vertical photograph on the left side of the page. It shows a blurred racing track with orange and white stripes. In the foreground, there is a large, bright orange and yellow fire or explosion, possibly from a race car. The background is dark and out of focus.

## RACING CHANGES GEAR

Top-line motor racing became more commercial in the 1970s and that brought conflict between the race organizers and the competitors and later between the teams and the governing body. Bernie Ecclestone, as the chief executive of FOCA, became a dominant force in Formula 1 racing. The arguments were about money but also technical development – the arrival of costly turbocharged engines and increasingly sophisticated aerodynamic systems; ‘skirts’ and whether they should be banned was a recurring issue. At the end of the decade, Jean-Marie Balestre proposed that the CSI should have more autonomy and become the Fédération Internationale du Sport Automobile (FISA), to which he was elected as the first president.

Commercial sponsorship was to bring undreamt wealth to the premier categories of motor racing but, for the CSI, money was a problem.

In 1971 the working party considering the structure and functioning of the FIA concluded that sport would be the dominant feature in its future and that the Federation was entitled to a share of the commercial benefits.

The CSI, and indeed many of the more prominent clubs of the Federation, were not comfortable with money being at the forefront of Formula 1. The FIA was the government of motor sport, and the CSI would set the regulations. They should let others deal with commercial matters.

The trouble was that if the FIA lost control of the financial side, it seemed to risk losing control of the sport. The early 1970s were turbulent times for Formula 1. Race organizers and circuit owners were under pressure to improve the safety of their facilities but, at the same time, pay more to the competitors as starting and prize money.

A series of fatalities in professional racing –

10 top-line drivers were killed between 1968 and 1973 – made safety modifications to circuits essential. The Grand Prix Drivers' Association (GPDA) became more strident in its demands for the removal of trackside hazards, the erection of safety barriers, and improved firefighting and medical facilities.

With its primary responsibility for safety, the CSI had to set new standards and ensure compliance with them. Owners of permanent circuits, which were neither busy nor profitable in those days, balked at the costs involved and for some races held on public roads, closed just for race weekends, it simply was not practical to meet the new requirements.

Pressure from the drivers on the one hand – three-times World Champion Jackie Stewart and GPDA president Jo Bonnier were the prime movers – and from the teams now united as the Formula One Constructors' Association (FOCA) on the other, encouraged the CSI to close ranks with the race organizers. This was a natural affiliation because Grand Prix organizers were national automobile clubs that were members of the FIA. It was also necessary, for in



*1958 Vanwall – first winner of Formula 1 Constructors' Cup.*

the autumn of 1969 some race organizers had proposed a breakaway series. A collective financial agreement between the European organizers and the Formula 1 entrants defused that idea but not before the CSI had made provision for the continuation of the World Championship using other cars (Formula 2, Formula 5000) in case of a boycott by Formula 1 teams.

Traditionally, Grand Prix prize money was less important than appearance fees, or 'starting money', which the teams negotiated individually with each organizer. The most celebrated teams and drivers demanded the most starting money and quite often there was not much left for the smaller and younger entrants. At its beginning, FOCA was there to achieve a fairer deal for the newly emerging teams and make advantageous travel arrangements to the events, including transportation of cars and equipment across the world.

It was not until Bernie Ecclestone took control of FOCA that the concept of a disciplined Formula 1 'circus' began to evolve. FOCA (which at different times was denoted as FICA and simply the Formula 1 Association) came to represent all the teams and offered their participation in every World Championship race as a package deal, for a lump sum to be paid by each organizer. How this money was distributed between the teams was then a matter for FOCA (in fact, it was allocated by a complicated scale which included previous results, starting grid positions, and positions at stages throughout the race).

Bernie Ecclestone emerged as the great entrepreneur of motor racing. A successful motor trader who had raced 500cc Formula 3 cars in the 1950s and managed the racing career of World Champion Jochen Rindt (who died in

a practice accident at the 1970 Italian Grand Prix), Bernie Ecclestone bought the Brabham racing business in 1971.

If Colin Chapman of Lotus was the first to bring outside sponsorship to Grand Prix racing, Bernie Ecclestone was the person who saw the commercial possibilities within Formula 1. Having secured the agreement of the teams to negotiate on their behalf, through 1972 he increased pressure on the race organizers for a large increase in the prize fund.

Money matters for most of the European Grands Prix were settled by the so-called Geneva Agreement, which covered payment for 25 starters at each race in 1972. The Monaco Grand Prix traditionally started only 16 (although 18 had been allowed the year before) and it was here that the FOCA was to face one of its first tests of strength.

There was stand-off in the underground garage that was being used as a paddock when the AC of Monaco said it would not allow 25 cars on the track. FOCA said that its teams would pack up and go home. The ACM called in the police as a first step to impounding the cars. The CSI stayed out of the row, leaving the decision to the competitors and the organizers; the number of starters was, at least in theory, about safety on the confined track. If those taking part thought 25 cars were acceptably safe, the ruling body had no problem. In the end, 25 cars started in a race that was run in the pouring rain and marked the last victory for the BRM marque. Two young lawyers resolved the matter: Max Mosley, a director of the March team, representing FOCA, and Michel Boeri, the newly-appointed president of the AC of Monaco. In 2004, Max Mosley is the president of the FIA and Michel Boeri the president of its Senate.

In the early 1970s, the FIA, through its CSI,



*Renault introduced turbochargers to Formula 1.*

of which Prince Metternich was president, remained uncertain about how far it should become involved in these financial affairs. This was a problem for the race organizers – FIA members – who felt the need to present a united front in resisting the demands of FOCA. During 1972 they established an organization called Grand Prix International (GPI) and were prepared to hold their own series, aside from the World Championship.

Had GPI succeeded, the later history of the FIA as the world motor sports authority might have been very different. But the solidarity of the race organizers did not hold and, one by one, they made individual agreements with FOCA. Although this assured the 1973 FIA World Championship, it indicated a significant shift of power towards the constructors. FOCA started to exercise control over the qualifying procedure, paddock facilities, access to working areas and other aspects of a race weekend that were, more logically, the province of the organizer or the CSI.

The 1973 Formula 1 season was far from peaceful. Hardly a race went by without a threat of cancellation, boycott by the teams, or some additional financial wrangle. In 1974 Bernie Ecclestone also took the responsibility for promoting and financing the Belgian Grand Prix at Nivelles. The success and smooth running of this race undoubtedly encouraged FOCA to consider taking financial control of other events.

In 1975 Prince Metternich was elected president of the FIA. His place at the head of the CSI was taken by Pierre Ugeux, a professional manager from the energy industry who represented the RAC of Belgium.

FOCA's power and influence continued to rise. Bernie Ecclestone ran it with a no-nonsense

efficiency, convening meetings at a plain hotel at London's Heathrow airport. Meanwhile, within the grander portals of number 8, Place de la Concorde, it was agreed that the CSI should emerge from the sidelines and become more hands-on in the business of Formula 1 racing.

Some delegates to the FIA, notably Sir Clive Bossom, chairman of the RAC of Great Britain, were firmly against the CSI becoming involved in financial deals between organizers and competitors. But the majority view was that Pierre Ugeux should lead the negotiations with FOCA and a meeting was held in Brussels in November 1975 which was attended by Bernie Ecclestone and Max Mosley, representing FOCA, and Pierre Ugeux and Jean-Marie Balestre, president of the FFSA, for the CSI.

Although they came to a 'Brussels Agreement' for 275,000 US dollars per race, the CSI's more direct involvement created difficulties for the organizing clubs. A solution was proposed that would, it was hoped, separate the financial and sporting aspects. Patrick Duffeler, a former executive of the Philip Morris cigarette company – a major Formula 1 sponsor – was appointed to head World Championship Racing (WCR), a non-profit organization blessed by the CSI, supported by bonds deposited by the organizers, that would negotiate on their behalf.

WCR, like GPI before it, failed to achieve the unanimous support it required. It was not effective as a counter to the ever-thrusting Bernie Ecclestone, who was intent on building Formula 1 into a very big business and was now asking race organizers not only for more money but also for three-year agreements.

There is no doubt that competing in the premier racing series became much more expensive as the 1970s progressed. There is an

ongoing debate about whether this inflation was because more sophisticated engineering was required or if costs rose simply to meet the new money that was available. But in any case, the basis of Formula 1 had changed. Most of the teams existed to go racing and had no other means of support, their income derived from sponsorship and a share of the FOCA appearance and prize money.

It was no wonder, then, that the return of a major car manufacturer to Grand Prix racing – something that the FIA had consistently encouraged – was viewed with concern by the new Formula 1 establishment. If a car maker was to make a wholehearted commitment to racing, as Mercedes-Benz had done in the 1930s and 1950s, even the most successful of the newly-emerged teams would not be able to match its resources.

So the appearance, in July 1977, of a Formula 1 car from Renault – winner of the very first Grand Prix 71 years before – was a significant event. The RS01, in the ‘telegenic’ yellow and black colours of Renault and Elf, marked a turning point in more ways than one. It was the first car since the ‘3-litre’ formula was introduced in 1966 to adopt the alternative of a supercharged 1.5-litre engine (which was originally included in case some entrants wanted to continue using cars from the previous formula). And although it took some time to achieve success, the Renault, using forced induction from an exhaust-driven turbocharger, pointed the way to a future inevitably more complicated, and more expensive, than the Cosworth-powered cars that made up FOCA’s race package.

Ferrari, the constant presence in Grand Prix racing, went along with FOCA in this period, although its terms of engagement were different

from the other teams’. But FOCA’s membership rules had to be rewritten to accommodate Renault. This was not an entirely comfortable situation and in the years to follow a gap would develop between the ‘manufacturers’ in Formula 1 and the ‘constructors’, the purpose-built racing teams that were the strength of FOCA.

Above all, the existing competitors wanted rule stability. The CSI was the unquestioned authority on regulatory matters and it understood that the basic 1966 Formula 1 should remain unchanged. It had proved to be the most successful racing formula in history, which after a tentative first few years now attracted full grids of closely-matched cars. By 1977 there were so many entries that pre-qualifying had to be introduced at Grands Prix to decide who should take part in official practice.

Ever conscious of its worldwide mandate, the CSI tried to bring other racing categories into line with Formula 1. The World Sports Car Championship was given the same 3-litre engine displacement limit and there was the perennial hope that the top-line American racing series would adopt the same rules. They didn’t.

There were the inevitable wrangles over details of the regulations. A number of new safety measures were introduced including a limit on the size and type of individual fuel tanks (to reduce the fire hazard) and a deformable structure to protect them, but most of the trouble was about clipping the cars’ wings to reduce cornering speeds.

The maximum size and position of downforce-inducing aerofoils was changed several times in the early 1970s and in the summer of 1975 the CSI announced a complete ban on wings to take effect from the 1976 season. The teams complained that they had not been

consulted and that there was not enough time to design and build new wingless cars. The CSI backed down.

Renault persevered with its Formula 1 engine and it won its first race – fittingly, the French Grand Prix – in July 1979. More sophisticated aerodynamics would be the key to keeping the cars using naturally-aspirated 3-litre engines competitive with the more powerful turbocharged 1.5-litre machines. As so often before, Lotus led the revolution. The 1977 Lotus 78 ‘wing car’ used the radiator side pods to contain fuel tanks shaped as inverted wing sections and so create downforce. The following year’s Lotus 79 took this principle one step further by employing the so-called ‘ground effect’, where the side pods formed venturis, creating a low-pressure area below the car which was retained by seals formed by sliding side ‘skirts’, rubbing on the ground. The chief development engineer for the ground effect Lotus was Peter Wright, today the president of the FIA World Motor Sport Council’s Sportscar

and GT Commissions and a member of its Safety and Research Commissions.

At the 1978 Swedish Grand Prix at Anderstorp, Brabham came – and triumphed – with its Alfa Romeo-engined BT46B which used a rear-mounted fan like a vacuum cleaner to draw air from under the car, effectively sucking it down on to the road. Brabham claimed that the fan’s primary purpose was cooling (the radiator was flat on top of the engine) but no-one believed that. Rival teams protested. A special meeting of the CSI bureau was to ban the fan car for employing a prohibited moving aerodynamic device but FOCA did the job beforehand: Colin Chapman of Lotus said that unless the car was withdrawn, Bernie Ecclestone, the owner of Brabham, could not continue to represent the constructors. The BT46B never raced again.

The Swedish Grand Prix (the last to be held) was in June. In August, at the Dutch Grand Prix at Zandvoort, the CSI announced that from 1 January 1979 there would be a ban



*The Lotus 79 was the first to apply the ‘ground effect’ principle.*



*A step too far – the Brabham BT46B ‘fan car’ ran only one race.*

on sliding skirts, which were also defined as movable aerodynamic devices. FOCA issued a statement saying that its members would ignore the ban at the Argentine Grand Prix which was scheduled to start the new season.

Thus the scene was set for a round of disputes about compliance with existing regulations and how the rules should be framed for the future. The CSI would need a strong leader to handle this and the continuing commercial battle between the race organizers and FOCA. Enter Jean-Marie Balestre, the controversial and outspoken president of the FFSA.

Jean-Marie Balestre had served on the CSI since 1968 and was a vice-president, but he resigned that title in 1976 as a protest about decisions taken that he regarded as detrimental to the Le Mans 24-Hour race and other French racing interests. Jean-Marie Balestre was known as an agitator within the CSI, which he believed was in need of complete reorganization. As he

made his public gesture of stepping down as vice-president, he determined to start work on a proposal for a new structure for the sporting authority, more appropriate for the fast-moving modern world and giving it effective autonomy.

The reforms, which the FFSA president had drafted in great detail, were discussed and agreed in principle by the FIA General Assembly in October 1977. A working party was set up to study and develop Jean-Marie Balestre’s plan and met on four occasions before the matter went forward to the next FIA General Assembly in Melbourne, Australia, in April 1978. The draft changes to the FIA statutes that were required to establish the new sporting body were adopted, with 22 votes in favour, none against, and seven abstentions.

Later, Jean-Marie Balestre would recall that when the reform proposals were first presented at the CSI they were given the go-ahead by the slenderest of margins – 51 per cent. Those who voted against were mostly concerned about

whether this was a bid for independence rather than an autonomous body within the FIA. That feeling seemed to be confirmed by Jean-Marie Balestre's insistence that the CSI should become a federation in its own right: 'Other major international sports, like football and tennis, are run by federations, not commissions', he said.

Jean-Marie Balestre then announced that he would stand for the presidency of the revised organization and commenced an election campaign of a kind never before seen in the FIA. Over the summer of 1978 he visited some 50 clubs around the world, including, famously, a day trip on a supersonic Air France Concorde from Paris to Rio de Janeiro for a meeting with officials of the ACs of Brazil and Argentina.

Pierre Ugeux declined to stand for a second term. At the election in October 1978 – still for the presidency of the CSI, as the name change had not been finalized – Jean-Marie Balestre beat his rival, Tom Binford of ACCUS, by 29 votes to 11.

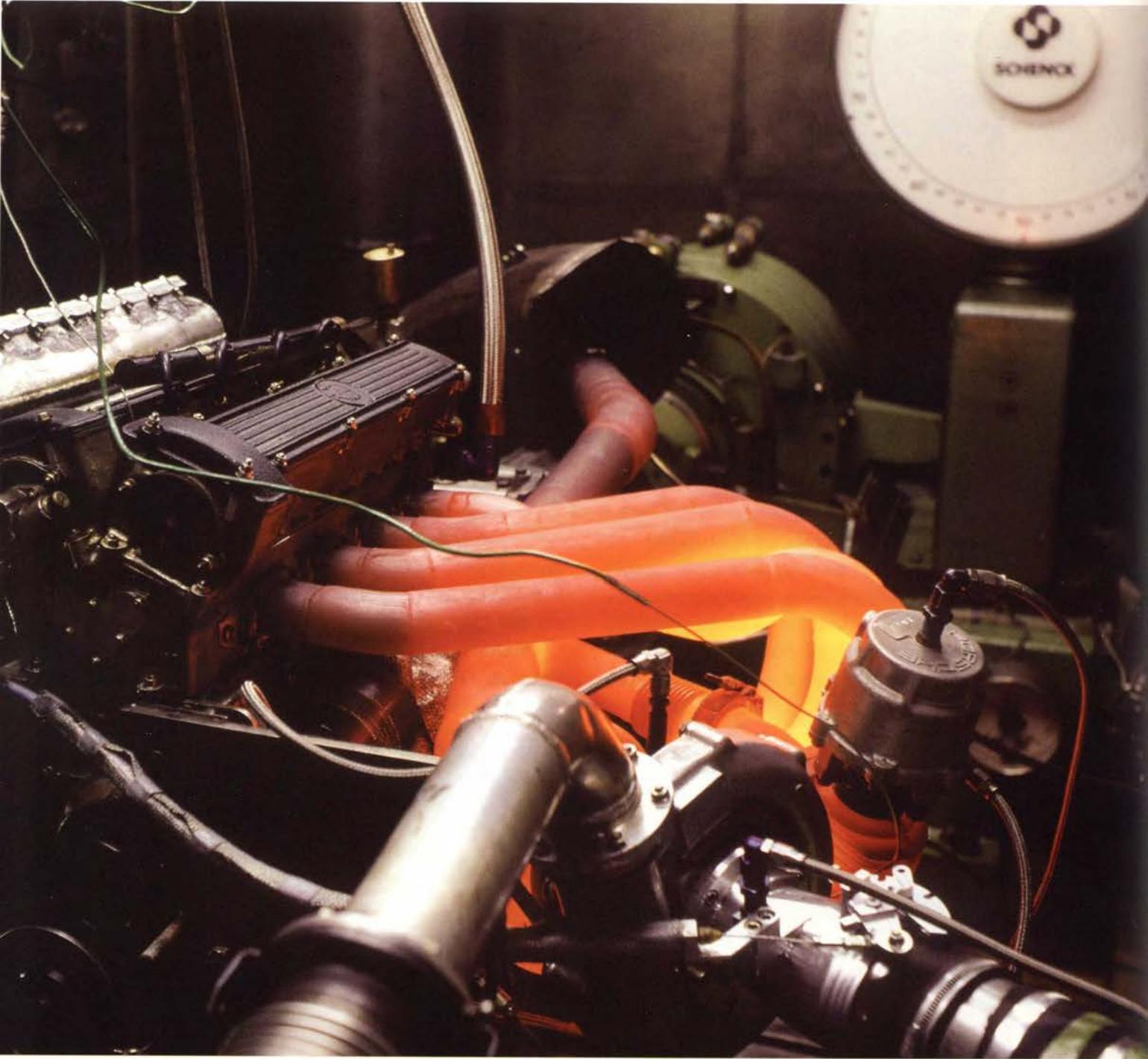
Jean-Marie Balestre vowed to 'return Formula 1 and motor sporting power to Paris'. His first move was to put the new structure in

place. The CSI bureau, the group of eight members that made day-to-day decisions between the quarterly CSI assemblies, was replaced by an executive committee of 15, with a wider composition, including Brazil, Ivory Coast, Japan, New Zealand and the Soviet Union, countries hitherto not represented, which would meet monthly. The new president said: 'Sixteen hours of meetings a year (four half-days) are not enough to run world motor sport.' A parallel sporting committee would deal with matters of regulations and the event calendar.

The working title for the new organization was *Fédération Mondiale du Sport Automobile*. The FIA decided that, although the internal restructure would take effect immediately, the new sporting body would be launched a year later, in October 1979. There was even a proposal for a simultaneous name change for the FIA itself – to emphasize the new approach and division of responsibilities. Roman Pijanowski of the AC of Poland – the distinguished president of the FIA Finance and Coordination Commissions – suggested *Organisation Mondiale de l'Automobile*. The FIA committee



*Sliding skirts channelled air beneath the bodywork to increase aerodynamic downforce.*



*BMW turbo power on test.*

rejected that idea, feeling that it would lessen the FIA's prestige and influence. Instead, it suggested that the new sporting body should have a closer identification with the parent federation's current title and be the Fédération Internationale du Sport Automobile – the FISA.

The planned gentle transition from CSI to FISA was overtaken by events. The minutes of the FIA General Assembly in October 1979 note that the announcement of FISA was made shortly after the FIA committee meeting in February because 'the CSI was engaged in a troublesome conflict at the time'.

This refers to the outcome of a FOCA meeting that took place during that month at the Ferrari headquarters in Maranello, Italy. The teams decided that Formula 1 should be divorced from the CSI and that henceforth FOCA would organize all aspects of Grand Prix racing. Jean-Marie Balestre's response was robust. Reforms were in progress and the administration of the sport – in all its aspects, including Formula 1 – would be in the hands of a revitalized body called the FISA.

Jean-Marie Balestre had come to power promising a 'programme of action'. This

specified the creation of a worldwide spirit in motor sport, respect for and compliance with international regulations, the revision and simplification of championships, and a reduction in costs of competing. There would be a revival of international sports car racing and a world championship for rally drivers.

In Formula 1, the president's plans had seemed to coincide with FOCA's wishes – an undertaking from each team to compete in all rounds of the World Championship, requiring non-FOCA teams to make a substantial deposit (\$30,000) at the start of the season, and restricting Grand Prix entry to drivers with Grade A licences. But by flexing the CSI's muscles in the first races of the 1979 season – notably the arbitrary imposition of a fine of 10,000 Swiss francs on McLaren driver John Watson for his part in a first-lap collision in Argentina – Jean-Marie Balestre found that the Formula 1 competitors were soon ranged against him. The 'troublesome conflict' mentioned in passing in the FIA proceedings was rather more than that. The Maranello meeting was effectively a declaration of war: FOCA versus FISA.

MICHELIN

MICHELIN

Karlboro  
Labatt



12

12

HEUER

Agip

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## FIA FORMULA 1 CONSTRUCTORS' CUP (UNTIL 1980)

### FIA FORMULA 1 CONSTRUCTORS' CHAMPIONSHIP

1958	Vanwall	1982	Ferrari
1959	Cooper-Climax	1983	Ferrari
1960	Cooper-Climax	1984	McLaren-TAG
1961	Ferrari	1985	McLaren-TAG
1962	BRM	1986	Williams-Honda
1963	Lotus-Climax	1987	Williams-Honda
1964	Ferrari	1988	McLaren-Honda
1965	Lotus-Climax	1989	McLaren-Honda
1966	Brabham-Repco	1990	McLaren-Honda
1967	Brabham-Repco	1991	McLaren-Honda
1968	Lotus-Ford	1992	Williams-Renault
1969	Matra-Ford	1993	Williams-Renault
1970	Lotus-Ford	1994	Williams-Renault
1971	Tyrrell-Ford	1995	Benetton-Renault
1972	Lotus-Ford	1996	Williams-Renault
1973	Lotus-Ford	1997	Williams-Renault
1974	McLaren-Ford	1998	McLaren-Mercedes-Benz
1975	Ferrari	1999	Ferrari
1976	Ferrari	2000	Ferrari
1977	Ferrari	2001	Ferrari
1978	Lotus-Ford	2002	Ferrari
1979	Ferrari	2003	Ferrari
1980	Williams-Ford		
1981	Williams-Ford		

*Ferrari benefited from a 'tyre war' to win both world championships in 1979.*



A vertical photograph on the left side of the page shows a person from the chest up, wearing a white racing suit and a helmet. A red banner with white text is visible, reading 'GRAN PREMIO DE ESPAÑA 20'. The person is looking down and to the right.

## SEPARATING SPORT AND COMMERCE

The 1981 Concorde Agreement settled the future of Formula 1 racing and its lucrative TV rights, effectively separating the commercial aspects from the sporting power, which remained with the FISA. The 1980s saw a revival in sports car racing with a new World Endurance Championship and international rallying gained new prominence as the World Rally Championship had a new category for drivers as well as manufacturers and was contested by four-wheel-drive cars with powerful turbocharged engines. But accidents involving these Group B 'supercars' caused the FIA to rethink the rules for rallying. Jean-Marie Balestre was elected to the FIA presidency in 1985 while continuing to head the FISA but in 1991 faced a challenge from Max Mosley, who won the election for president of the FISA.

The most significant change in the FIA's history – the establishment of the sporting authority as a separate, autonomous body – happened as the Federation was preparing to celebrate its 75th anniversary.

Three-quarters of a century of the premier international motoring organization was marked by a series of splendid events in and around Paris: a parade of 75 cars, each representing a year of the Federation's existence, starting in the Bois de Boulogne and culminating in a tour down the Champs-Élysées and a gourmet banquet for the presidents of FIA member clubs and other dignitaries in the Orangerie at the Palace of Versailles.

Jean-Marie Balestre, as president of the FISA, worked with speed and energy to exercise firmer control of motor sport and Formula 1 in particular. A new set of rules was introduced with financial penalties for non-compliance; the intention was to show who was in charge.

One new requirement was for Grand Prix drivers to attend pre-race safety briefings. This was an unlikely flashpoint in the FOCA/FISA confrontation but it caused a showdown early in 1980. At the Belgian Grand Prix, at Zolder, FOCA instructed drivers in its member teams not to attend the driver briefings. Something similar happened at Monaco two weeks later. For the next Grand Prix, at Jarama in Spain, the FISA declared that if the drivers' fines for not attending these briefings were not paid, their licences would be revoked and they could not race. The fines were not paid. The Spanish club, the RACE, was put in a difficult position for although it is the national representative at the FIA, and owned the Jarama circuit, motor sport authority in Spain was, and is, devolved to the

RFEA, a member of the FISA. King Juan Carlos, the honorary president of RACE, expressed his wish that the race should take place. The FISA then declared the race unofficial and not part of the World Championship.

By that time, June 1980, following intensive discussions and disagreements in the Formula 1 Commission about the rule changes (a reduction in car size and increase in minimum weight was seen to favour the turbocharged cars that were being developed, following Renault's lead, and the FISA was still determined to ban skirts), the teams had allied themselves with either the FISA or FOCA. So when the FISA officials walked out of Jarama, the 'manufacturers' (Ferrari, Renault and Alfa Romeo) felt obliged to withdraw, as they could not risk losing their licences for other forms of motor sport. Ironically, the Spanish Grand Prix was won by a Williams-Cosworth driven by Alan Jones, who was to become 1980 World Champion.

The 'constructors', FOCA – whom Jean-Marie Balestre disparagingly referred to as 'garagistes' – were moving towards forming a breakaway organization running its own races and championship. They were unable to get the FISA's agreement to a package of proposals agreed by all Formula 1 teams at a meeting in London in June 1980. By August, Jean-Marie Balestre predicted that, starting in 1981, the FISA would negotiate five-year contracts for Grands Prix and retain two per cent of the revenue – amounting to perhaps £100,000 a year. In other words, it would take over the distribution of money from FOCA.

That clinched it: FOCA said it would set up the World Motor Sports Federation as an independent sanctioning body for Formula 1 racing and would stage a professional drivers'

championship with a million-dollar prize for the winner. The architects of this scheme were FOCA president Bernie Ecclestone and Max Mosley, who had sold his interest in the March company and become FOCA's legal adviser.

FOCA already had contracts with most of the circuits. The FISA warned the tracks, through the national sporting authorities, that if they sided with FOCA they would not be allowed to run any other FIA-sanctioned events. FOCA took injunctions against eight circuits to prevent them from signing an alternative Grand Prix contract. For a while it looked like stalemate.

The first to break ranks was Renault – one of the FISA teams – which, because it owned American Motors, declared that it was obliged to take part in the United States Grand Prix West at Long Beach, California. Long Beach was

contracted to FOCA and scheduled as the first race of the 1981 World Championship.

FOCA ran the South African Grand Prix in January 1981 without the manufacturers. The FISA disregarded the race, classifying it as a Formule Libre event, but the fact that it took place set alarm bells ringing in the offices of some of Formula 1's most powerful sponsors. Aleardo Buzzi, the European head of Philip Morris – whose Marlboro brand supported teams in both camps – called a meeting in Lausanne, Switzerland. There, Marco Piccinini, sporting director of Ferrari, and Teddy Mayer, his equivalent at McLaren, both lawyers by training, put together the framework of a 'peace treaty' between FISA and FOCA.

Marco Piccinini, today deputy president of the FIA World Motor Sport Council, recalls that this meeting was conducted in the utmost



*FOCA's key players – Bernie Ecclestone and Max Mosley in 1979; Jean-Marie Balestre, first president of the FISA, promised to be tough.*



FÉDÉRATION INTERNATIONALE DU SPORT AUTOMOBILE

**FISA**

FORMULA 1 WORLD CHAMPIONSHIP

- I THE CONCORDE AGREEMENT
- II GENERAL REGULATIONS
- III SPORTING REGULATIONS
- IV STANDARD REGULATIONS
- V TECHNICAL REGULATIONS

1981

*Vital document – the Concorde Agreement set the pattern for Formula 1 for more than two decades.*

secrecy and that, at the time before E-mail, he had to sit at a telex machine and type out a metre-long document sending the proposals to Ferrari's colleagues among the manufacturers.

Enzo Ferrari, who believed that a balance should be struck between the sporting authority (FISA) and the commercial promoter (Bernie Ecclestone), took this initiative to the next stage by inviting the FOCA management to a meeting in Modena, Italy.

Perhaps symbolically, underlining Ferrari's unmatched experience in Grand Prix racing, the talks with Bernie Ecclestone and Max Mosley were held in the original Ferrari offices from the 1930s in Viale Trento Trieste. The teams' representatives came to an agreement on a set of proposals to be put to the FISA president Jean-Marie Balestre, who was at the time attending the Monte Carlo Rally.

It was thought wise to sort out the details on neutral ground. It seems appropriate that the meeting of lawyers and other representatives from each organization that brought the FISA/FOCA war to a conclusion should take place at the Cercle des Armées (a military club) in Paris.

So what became known as the Concorde Agreement was neither conceived nor negotiated at the FIA headquarters, even if it was there that Jean-Marie Balestre signed the document on 11 March 1981. Max Mosley and Marco Piccinini have been described as the parents of the Concorde Agreement, but Enzo Ferrari joked that he was not sure who was the mother and who was the father!

The Concorde Agreement, to run for four years, reaffirmed FISA's responsibility for setting the Formula 1 regulations. Skirts would be banned from the start of the 1981 season – a 6cm ground clearance rule was introduced – but

henceforth there would be two years' notice of minor rule changes and four years for an alteration to the basic formula. The Formula 1 commission was to be revamped to represent a wider range of teams and interests and would resolve all matters to do with Formula 1, submitting them to the FISA executive committee only for final approval. FOCA would take charge of commercial activities. Financial terms were to be agreed (by FOCA) before a Grand Prix was scheduled (by the FISA) as a World Championship event. The FIA successfully claimed ownership of the television rights which were assigned to FOCA, who would distribute the proceeds among the teams.

Television turned out to be the star prize from this agreement, as Bernie Ecclestone had known it would. In the first 25 years of the World Championship, TV coverage had been patchy – just a few races were televised and only a few countries broadcast the result. It was scarcely profitable for the race organizers and promoters, but valuable to the teams to give their sponsors wider exposure.

Towards the end of the 1970s there were the first signs that television could generate a good revenue; 20 broadcasters paid £100,000 for a season's coverage. The FISA saw the potential and Jean-Marie Balestre had set up a task force to expand TV coverage, but Bernie Ecclestone was already better prepared – and had a wider vision for its future.

Although it confirmed that the FIA held the rights, the Concorde Agreement did not provide the FIA with any income from television at this stage. Indeed, it was not until the second renewal of the agreement, in 1987, that a proportion of the TV fees was paid to the governing body.

Back in 1981, the FISA and FOCA may have

reached an accord but the situation in Formula 1 was far from settled. On the one hand there was the inevitable battle of wits between the car designers and rule makers. Colin Chapman's 'twin-chassis' Lotus 88, with an outer separate structure forming, in effect, a car-sized wing, was protested by other competitors when it first appeared at Long Beach and became the object of argument through much of the 1981 season; it never raced. Then Brabham designer Gordon Murray fitted hydropneumatic suspension to the BT49C which allowed the car to meet the 6cm overall ground clearance regulation when static but lowered to brush the ground at speed, thus restoring the ground effect. It was not long before all the teams developed Gordon Murray's idea by fitting hydraulic suspension that could be raised and lowered at will, so the point of banning skirts – reducing cornering speeds – had been negated.

At the same time, Grand Prix drivers were becoming more vociferous in their demands. Although they made money on an unprecedented scale, drivers' interests and opinions had largely been ignored in the disputes between the FISA and FOCA teams. 1979 World Champion Jody Scheckter, who became president of the Grand Prix Drivers' Association the following year, had expressed concern about the big increase in cornering speeds that came with ground effect and the danger and discomfort that cars with virtually no suspension movement represented to the drivers. His successor as World Champion, GPDA president, and therefore the drivers' representative on the Formula 1 commission, was Alan Jones, a man more interested in driving and winning than playing politics.

So Alan Jones played no part in the drivers' strike which disrupted the start of the Belgian

Grand Prix at Zolder in 1981. Ostensibly this was about crowded and cramped conditions in the pit area – a mechanic had been fatally injured, run over by a competing car – but in reality it was more a protest about not being consulted on the future of Formula 1.

There was worse to come. For 1982, the FISA introduced the 'super licence', required by all drivers in World Championship Formula 1 races. It was justified in the name of safety – ensuring that only drivers with appropriate experience could take part in Grands Prix – but the drivers suspected that, since it was linked to their contracts, it would limit movement between teams. On the first day of the first event of the 1982 Formula 1 season, the South African Grand Prix at Kyalami, 29 drivers signed a petition objecting to the super licence. They said that if their complaints were not addressed they would not race and they backed up their threat by leaving the circuit in a bus that took them to a Johannesburg hotel. They remained there – in solidarity, confined to the hotel's ballroom – until an agreement was reached the following morning. The race took place, but immediately afterwards the FISA suspended the licences of all those who took part in the strike. Two weeks later, the GPDA became the Professional Racing Drivers' Association, a stronger 'trade union' backed by lawyers specializing in sports law. The super licence business was sorted out but the PRDA did not endure.

There was still discord between the 'FISA teams' (the manufacturers, now all using turbocharged 1.5-litre engines) and the FOCA constructors that had the less powerful 3-litre Cosworth. Some of the latter had taken to finding ways of running below the minimum weight limit, fitting water tanks, ostensibly for

brake cooling, which were immediately emptied once the race started but replenished before post-race scrutineering. After the 1982 Brazilian Grand Prix, Ferrari and Renault protested Brabham and Williams, who had finished first and second, for this procedure. The matter was considered by the FIA Court of Appeal in Paris in April and the protest upheld, excluding Brabham and Williams from the result in Brazil. As a result, most of the FOCA teams boycotted the Grand Prix of San Marino, held at the Autodromo Dino Ferrari at Imola, Italy. Only 14 cars started and six finished. Ferraris were first and second – and the sixth-place ATS was disqualified at post-race inspection for being below the weight limit

Jean-Marie Balestre had his detractors and

many of his actions and pronouncements remained controversial, but he was re-elected for a second term as president of the FISA, dismissing a challenge by Basil Tye, the director of the British RAC Motor Sport Division. Jean-Marie Balestre was also appointed deputy president of the FIA. This recognized the overriding importance of motor sport in the Federation's activities – by the mid-1980s it was accounting for almost 80 per cent of the FIA's income.

It is interesting to note that the creation of the post of deputy president was proposed in 1979 by Jean-Marie Balestre. While he was thought at that time to be only interested in the sport – if necessary to the complete exclusion of the FIA – Jean-Marie Balestre actually had a



*Alan Jones on his way to the 1980 World Championship in the heavily sponsored Williams FW07.*

longer-term ambition to become president of the overall organization.

In the FISA, away from Formula 1, there was much to do. Jean-Marie Balestre wanted to encourage three world championships for drivers and car makers – Formula 1, sports car racing, and rallying. As Grand Prix racing became more popular and began to attract a worldwide television audience, so the championship for sports-prototypes started to struggle. Traditionally, endurance racing was supported by road car manufacturers but recently they had been attracted to the greater publicity that attached to Formula 1. By 1978 sports car racing was in one of its periodic crises. The World Championship for Makes was for Group 5 Special Production cars and was completely dominated by competition versions of the Porsche 911. BMW was Porsche's only – and distant – rival.

Running the series under Group 5 rules was an attempt to bring sports and GT racing into line with roadgoing models. This had been tried many times before and the problem, then as now, was to define a production car and restrict modifications to keep performance and costs within reasonable bounds. But at this time the classic endurance races had failed to attract other car companies and the costs were too high for most private entrants.

In 1982, Appendix J of the Sporting Code was extensively revised, allocating series production cars to a new Group N for entirely standard cars of which 5000 had been produced, Group A which allowed very limited modifications, and Group B for more extensively modified or low-volume sports cars. Group C was for sports-racing cars and its introduction, coupled with a fuel consumption formula, coincided with a new World



*Brabham pioneered pit stops in Formula 1 from 1982, turning mechanics into athletes as they changed wheels and refuelled in seconds.*

Endurance Championship. That was to bring four years of spirited rivalry between Porsche and Lancia, but it was not until the second half of the 1980s, and the entry of Jaguar and Mercedes, that sports car racing really enjoyed a revival.

Rallying presented another dilemma for the FISA and its president. The FIA World Rally Championship (WRC), for manufacturers, had been running successfully since 1973. The competitors, who tended to be selective about which rounds they would enter, wanted fewer events to keep their costs down. But more and more countries were keen to stage a round of the WRC, among them newly-appointed members of the FISA executive, like New Zealand and the Ivory Coast.

The first drivers' World Rally Championship was run in 1979 (there had been an FIA Cup for Drivers in the two previous years). Ford driver Bjorn Waldegaard, from Sweden, was the first official World Rally Champion.

By restricting the cars to Groups 1 to 4, and therefore prohibiting the most extreme modifications and purpose-built competition models, the WRC had attracted a good variety of car manufacturers using recognizable production touring cars. But when the new Group B was introduced in 1982 it was to lead to an explosion in the performance potential of competing cars. A minimum production of just 200 examples allowed the construction of specialized rally machines akin to racing cars.

The trend had started within Group 4 – which latterly required 400 examples to be produced. Lancia had produced the Stratos in 1974, a purposeful mid-engined, two-seat coupe powered by a Ferrari V6 engine, and won the World Rally Championship three years running.

In 1981 Audi introduced rallying to its four-wheel-drive, turbocharged Quattro sports coupe. It won a World Championship event, the Swedish Rally, on only its third outing and Audi took the first of its two manufacturers' titles the following year. Not surprisingly, four-wheel drive and turbocharged engines became the norm for WRC contenders. Group B allowed manufacturers to take a step further, building mid-engined machines which in most cases had a vague outward resemblance to a standard family hatchback.

Rallying had taken a deep dive into uncharted territory. The Group B specials (further developed 20-off 'evolutions' were allowed) had up to 500bhp, and phenomenal tyre grip. For the first time they asked the question: how fast is safe for a rally car running on mountain roads, forest tracks, on snow and ice, without fences or crash barriers?

The answer came, tragically, in 1986. An accident in the Rally of Portugal left three spectators dead and 30 injured. During the Tour de Corse in May the Lancia Delta S4 of Henri Toivonen crashed on a narrow mountain road, fell down a hillside and caught fire. Henri Toivonen and his co-driver Sergio Cresto were killed.

Jean-Marie Balestre reacted quickly. The FISA declared that the Group B cars would be banned from the end of the year. It was another controversial decision that brought protests and legal action from other manufacturers who had spent a fortune on developing high-technology rally cars that were now obsolete. The 1987 World Rally Championship would be contested by Group A cars of which 5000 had been made, with no 'evolutions', and a maximum of 300bhp. Rallies would have shorter routes with more rest time. It would take only four years for

the Group A cars to be setting stage times to match the Group B supercars .

Prince Paul-Alfons von Metternich retired from the presidency of the FIA in October 1985. His successor, as suggested by the appointment as deputy president four years earlier, was Jean-Marie Balestre. Thus, Jean-Marie Balestre held the titles of president of the FIA and the FISA. Having orchestrated the separation of the sporting authority from the parent body, he would now be able to bring them closer together again.

The president's relationship with Bernie Ecclestone was by then cordial. A suggestion by Bernie Ecclestone made during a meeting in 1986 was to have significant consequences. The car makers were represented at the FISA by the Manufacturers' commission, the president of which, Philippe Schmitz, was due for reelection. Bernie Ecclestone persuaded Jean-Marie Balestre that this was an appropriate

position for Max Mosley.

Jean-Marie Balestre drove this appointment through, despite the commission's preference for Philippe Schmitz, but at the time it caused hardly a ripple in the pool of officials at the FIA. Although there had been speculation that Max Mosley, who had ceased his involvement in Formula 1 in 1982, would head the motor sport division of the British RAC, that did not happen; in fact, he was never asked. Max Mosley could not, therefore, represent a national automobile club at the FIA or in the FISA. The presidency of the Manufacturers' commission was his quiet admission to the motor sport establishment that he had previously opposed.

It was not a very fulfilling job. One outcome of Max Mosley's time at the Manufacturers' commission was the plan, enthusiastically backed by Bernie Ecclestone, for a new 'second formula' that could replace the Group C sports-racing cars. This was known as Procar and



*Audi changed the face of rallying with the four-wheel-drive turbocharged Quattro.*

envisaged recognizable production touring cars with, in effect, Formula 1 chassis and engines. Brabham built and demonstrated a Procar Alfa Romeo 164 but, in the end, other manufacturers declined to support the idea and the televised series scheduled for 1989 was abandoned. One reason for their change of heart was increasing interest in Group C and the renamed World Sports Prototype Championship, thanks to the competition between Jaguar, Mercedes and Peugeot.

Bernie Ecclestone also joined the establishment. In a neat political gesture, Jean-Marie Balestre proposed that his old adversary be given the title of FIA vice-president in charge of promotional affairs. As well as cementing the settlement made by the Concorde Agreement – which was renewed in 1985 – the intention was that other areas of motor sport might benefit from the commercial skills that Bernie Ecclestone had demonstrated so convincingly in

Formula 1.

Looking back from 2004, it is clear that the FOCA chief was not able to replicate that success in sports car racing or rallying, although there was, and is, a logical argument for a professional motor sport series to be televised in the weeks between the fortnightly Grands Prix.

Meanwhile, in Formula 1 there had been another move to ban ground effect cars. This time, FOCA agreed that immediate action was needed for reasons of safety; there had been two incidents at the Circuit Paul Ricard in France, one in testing and one at the French Grand Prix, where Formula 1 cars had been launched into the spectator enclosures. For 1983 the cars were required to have flat bottoms as part of a 13-point list of changes including restrictions on wing size and fuel tank capacity.

In 1982, Brabham's Gordon Murray had recognized the possibilities of strategic pit stops. The extra speed achieved by running its latest



*Lancia Delta S4 was one of the most sophisticated of the mid-engined Group B rally supercars.*

BMW-powered turbo cars with high boost (using fuel extravagantly as a coolant further to increase power output) and grippier but faster-wearing tyres would more than compensate for the time needed for a well-drilled pit stop to replenish the tanks and change the wheels. By 1983 all the teams had adopted the same strategy.

Pit stops improved the spectacle, breaking up races that had too often become processional, but they presented an obvious fire risk. Besides, the cars were again getting too fast and too powerful. The FISA retained the right to alter the regulations with less than the agreed two years' notice if safety was at stake. So for 1984 permitted fuel tank capacity was reduced from 250 to 220 litres and refuelling banned – demanding improved fuel consumption and thereby reducing engine power.

By the summer of 1985 all Grand Prix competitors had turbocharged 1.5-litre engines. But having encouraged their development in the early days – Jean-Marie Balestre had often said that turbocharging was the future for road cars – the FISA had now concluded that they had gone too far. In the optimum qualifying trim (when there was no need to worry about fuel consumption), the most powerful 1.5-litre turbo engines could produce 1500bhp.

In October 1986 the FISA announced that, for reasons of safety, turbos would be banned from 1989 and in the interim would have restrictors to limit their power. Naturally-aspirated engines with a displacement to 3.5 litres would take their place and would be allowed to run with the turbos in 1987 and 1988. Those using them would qualify for separate



*BMW conducted the first scientific crash tests of Formula 1 cars with Brabham in 1985.*

categories within the World Championship – the FIA Jim Clark Cup was for drivers while the trophy for teams was dedicated to the memory of Colin Chapman, who had died unexpectedly in December 1982. It was fitting that Tyrrell, one of the longest-standing Formula 1 teams, and which in the early days had fought battles with the regulators about the legality of turbos, should be the recipient of the FIA Colin Chapman Trophy.

It is also worthy of note that the first crash tests were required for Formula 1 cars in 1985. For some time there had been regulations governing the dimensions and construction of the car's cockpit area to provide a 'survival cell' for the driver. But as car design developed, moving the driving position further forward, more safety measures were required for the pedal box area in the nose. Following some tests first carried out by BMW using a Brabham chassis, the FISA decreed that this should be a deformable structure that would crush progressively in an accident and devised crash tests that would measure its effectiveness. It was the start of a process that led the FIA to encourage more thorough and severe crash tests for road cars in the 1990s.

There was to be another demonstration of driver power at the first race of 1987, and once again it revolved round the super licences. The FISA had applied a large increase in the fee for a super licence – the justification being that money would be used to improve circuit safety facilities. The drivers did not object strongly to the 5000 French francs basic fee but they regarded an extra 1000 francs per point scored in the previous year's World Championship as too much.

Alain Prost, World Champion in 1985 and 1986, led a drivers' revolt on the eve of the

Brazilian Grand Prix at Rio de Janeiro. The race was in jeopardy for a while. Jean-Marie Balestre, who had suffered a heart attack in November 1986, was not present and it was left to the secretary-general of the FISA, Yvon Leon, to assure Alain Prost that there would be no more than an inflationary increase in the super licence fee in the future and get the opening race of the 1987 season back on track.

For health reasons and a need to reduce his travel schedule, Jean-Marie Balestre retired from the FISA at the end of 1986. But by the summer of 1987 he was back working at full speed and in the autumn he was re-elected to the FISA presidency. The closing years of the 1980s were relatively stable, by the standards of the previous decade, but in the background a campaign was being planned to challenge Jean-Marie Balestre's leadership of the FISA in 1991. The challenger was Max Mosley.

Jean-Marie Balestre had been the first to contest FIA elections using the techniques of real-life politics, but Max Mosley played those even more effectively, gathering promises of support from 29 of the 72 member clubs before his candidature was made public. The main thrust of his manifesto was that by holding the presidency of the FIA, FISA and the FFSA, the incumbent was presented with conflicts of interest and that heading the FISA alone was a demanding, full-time job. He promised consensus, to pay attention to the dangers facing motor sport – environmental, political and financial – and give more emphasis to the grass-roots and less to Formula 1. 'That', he said, 'is in good shape and can look after itself.'

Max Mosley was not involved in FISA matters as the representative of a club affiliated to the FIA, but such a national body would need to propose him for presidency of the FISA.

The RAC of Great Britain had political troubles of its own at this time, so Max Mosley found a more willing supporter in the motor sport authority of New Zealand.

At the election, in October 1991, Max Mosley beat Jean-Marie Balestre by 43 votes to 29. Because he was aware that some members were uncomfortable that he was not the representative of a national club, and that others were suspicious of his association with Bernie Ecclestone, Max Mosley pledged that he would

take the presidency for a 12-month trial period and then submit to re-election.

Jean-Marie Balestre remained the president of the FIA, but with the separation of powers that he himself had arranged when the FISA was formed, his influence on motor sport was diminished. Max Mosley's election as president of the FISA was only the beginning. He was 51 years old and ready for a new career as an international statesman, not just in motor sport but in the wider world of the FIA.



*Citroën – world champion manufacturer in rallying, 2003.*



## FIA WORLD RALLY CHAMPIONSHIP

### MANUFACTURERS

1973 Alpine-Renault  
1974 Lancia  
1975 Lancia  
1976 Lancia  
1977 Fiat  
1978 Fiat  
1979 Ford  
1980 Fiat  
1981 Talbot  
1982 Audi  
1983 Lancia  
1984 Audi  
1985 Peugeot  
1986 Peugeot  
1987 Lancia  
1988 Lancia  
1989 Lancia  
1990 Lancia  
1991 Lancia  
1992 Lancia  
1993 Toyota  
1994 Toyota  
1995 Subaru  
1996 Subaru  
1997 Subaru  
1998 Mitsubishi  
1999 Toyota  
2000 Peugeot  
2001 Peugeot  
2002 Peugeot  
2003 Citroën

### DRIVERS

1979 Bjorn Waldegaard Sweden  
1980 Walter Röhrl Germany  
1981 Ari Vatanen Finland  
1982 Walter Röhrl Germany  
1983 Hannu Mikkola Finland  
1984 Stig Blomqvist Sweden  
1985 Timo Salonen Finland  
1986 Juha Kankkunen Finland  
1987 Juha Kankkunen Finland  
1988 Massimo Biasion Italy  
1989 Massimo Biasion Italy  
1990 Carlos Sainz Spain  
1991 Juha Kankkunen Finland  
1992 Carlos Sainz Spain  
1993 Juha Kankkunen Finland  
1994 Didier Auriol France  
1995 Colin McRae Gt. Britain  
1996 Tommi Makinen Finland  
1997 Tommi Makinen Finland  
1998 Tommi Makinen Finland  
1999 Tommi Makinen Finland  
2000 Marcus Gronholm Finland  
2001 Richard Burns Gt. Britain  
2002 Marcus Gronholm Finland  
2003 Petter Solberg Norway



A photograph on the left side of the page shows a man in a dark suit and white shirt sitting at a table. He is looking down, and his hands are visible on the table. The background is a dark blue curtain with a large, stylized gear logo in gold and blue.

## A NEW STRUCTURE

The FIA was completely restructured in 1993, its activities divided between two parallel bodies, the World Council for Motor Sport, and the World Council for Touring and the Automobile. A newly-created Senate, responsible for finance and administration, formed a bridge between these two pillars. At the head of the new organization was Max Mosley, who succeeded Jean-Marie Balestre as president of the FIA. The FISA was abolished after 15 years of existence; motor sport was once again fully integrated with the FIA. A larger political role brought unexpected clashes with the European Commission and cooperation with other international sporting bodies. An imaginative deal to lease the commercial rights for Formula 1 provided the funds to secure the FIA's future and establish the FIA Foundation.

1992 turned out to be important for the FIA, the year in which the seeds were sown for a fitter and more appropriate organization to move towards the 21st century.

The FIA Round Table conference at the Rio 'earth summit' in June showed that the Federation could have a strong voice in the future development of the car and its use. In October, the General Assembly agreed to cooperation with the Alliance Internationale de Tourisme (AIT) on an unprecedented scale, forming joint FIA/AIT commissions on all but sporting and historic matters.

Max Mosley was unanimously re-elected as president of the FISA after his voluntary 12 months 'on approval'. For his part, Jean-Marie Balestre, the man who had created the FISA, had concluded that it had served its purpose and should be abolished. Motor sport was to return to the main body of the FIA. A coordination commission was set up to study how this osmosis could best be achieved.

In the background, Jean-Marie Balestre and Max Mosley were working together on a restructure of the organization, which would give the FIA's sporting and non-sporting activities equal weight and importance. At a special General Assembly convened in December 1992, Jean-Marie Balestre, as president of the FIA, prefaced his proposals with the bleak forecasts for the world economy (there had been a dramatic fall in share values on both the New York and Tokyo stock exchanges): 'We are going to witness the creation of a whole new world. In order to survive, we must adapt.'

He said 'the walls of the house are still trembling' from rumours that he wanted to sell the FIA to the AIT. Nothing could be further from the truth, the president explained. The new cooperation was a union, a joint venture,

that was logical because as many as 55 clubs belonged to both organizations and the FIA and AIT could 'no longer exist side-by-side working towards the same goals'. If anyone thought that this would lead quickly to the full-scale merger that had been discussed so many times they were to be disappointed. Such an arrangement would not even be agreed in principle until October 2003 – with an expectation of implementation a year later.

In December 1992, though, there was a subtle but significant, post-Rio, change in the FIA's statutes on the touring side. The second paragraph of Article 2 – the Object of the FIA – was revised to read thus: 'Promoting the development of international motor traffic, motor safety and touring, and contribute to the improvement of the environment.'

The new structure was detailed at a meeting of the FIA executive committee held in Prague, the Czech Republic, in April 1993. The FISA was to be replaced by one of two councils – the World Council for Motor Sport. In parallel was the World Council for Touring and the Automobile. Each World Council would be under the authority of the president of the FIA but have its own deputy president. A newly-created FIA Senate would form an administrative bridge between these two pillars and take the responsibilities of the previous committees for finance, politics and general affairs. The Senate would meet three times a year and comprise eight members: the president of the FIA, the immediate past president, the two deputy presidents, the vice-president in charge of promotional affairs, and three other elected delegates. An important proviso was that decisions made by the Senate would be ratified by the appropriate World Council.

During the executive committee meeting,

Jean-Marie Balestre made it known that he would not stand for the FIA presidency at the election scheduled for that year and that he supported the candidacy of Max Mosley.

The whole plan was put to the General Assembly in Paris on 10 June 1993 and unanimously approved. Rosario Alessi, president of the AC of Italy, described this as 'an historic day for our organization'.

Jean-Marie Balestre was elected, unopposed, as the first president of the FIA Senate. But for the overall presidency of the FIA, Max Mosley had a last-minute rival: Jeffrey Rose, chairman of the British Royal Automobile Club. Jeffrey Rose accepted that it was unconventional for there to be two candidates from the same country but believed that the FIA president should be 'a voice in the automobile world with the competence and experience as head of a national automobile club'. He was also concerned that the organization should not be 'handed over to unrepresentative motor sport interests'.

Jeffrey Rose withdrew on the day of the election when he realized the body of support that Max Mosley had already garnered. Max Mosley was duly elected and would take over the presidency when the new statutes took effect on 1 October 1993. Paul Verkuil of the AAA was elected deputy president for the World Council for Touring and the Automobile and Alfredo Cesar Torres, president of the AC of Portugal and a former national rally champion, was a popular choice for the equivalent position in the World Council for Motor Sport.

Max Mosley had already shown his teeth in the two years he had headed the FISA. Although he had said during his presidential campaign that Formula 1 could look after itself – something that was misconstrued as passing

complete control to Bernie Ecclestone – at the end of 1992 he announced sweeping changes for Grand Prix racing. The first, for immediate implementation, was a regulation for a new 'commercial' fuel to replace the expensive and toxic cocktail of chemicals that had grown up with the turbocharged Formula 1 cars. Other immediate changes were to restrict the qualifying laps per competitor, the number of tyres allowed, and the use of spare cars. Pace cars were introduced to slow the racing field when there was a specific danger on the circuit. Much more controversial were new regulations for 1994 banning electronic devices like anti-lock brakes, traction control, automatic transmission and active suspension, as well as radio and telemetry links between the car and driver and the pit crew.

Predictably, objections came from the McLaren and Williams teams, which between them had enjoyed a decade of success in the Formula 1 Constructors' Championship. These changes, they contended, were 'technical' rather than 'sporting' which meant, under the Concorde Agreement, that they should have unanimous agreement and a longer notice period.

Max Mosley's position was that these were sporting matters, even if they had a technical element. The smaller and less wealthy teams represented on the Formula 1 commission had called for a limit to electronic driver aids. The FISA's proposals would cut costs and reduce the gap between the richest and poorest teams. In fact, they were more significant than that. They made a decisive cut to a line of development that the FISA feared would lead Formula 1 up a blind alley. Early in 1993, Max Mosley explained:

'We have to decide whether racing should continue to follow the same path as road cars or



*Adelaide 1993 – Ayrton Senna's last race for McLaren and his final Grand Prix victory.*

take a different route. We are close to the racing car as the ultimate white-knuckle ride where technology can correct all a driver's mistakes and achieve a perfect qualifying lap. The next step would be to make a car that is inherently unstable, like an F16 fighter plane. For example, if you move the centre of pressure away from the centre of gravity you could have a car that would turn into corners wonderfully but with impossible rear end instability – and that would be sorted out by a computer. The World Championship is to find the best driver. If we accept that argument, the sooner we stop the development of computer aids the better.'

These electronic devices are difficult to police and whether or not a particular car had or was using traction control or another driver aid became an object of controversy in the years following the ban. In any case, speeds were increasing and for safety's sake, Formula 1 would need its periodic wing clipping.

Safety issues came to the forefront after the tragic weekend at Imola, Italy, for the 1994 San

Marino Grand Prix when three-times World Champion Ayrton Senna died in an accident that was beamed to millions of TV viewers from a camera on board his Williams-Renault. Ayrton Senna's accident came the day after newcomer Roland Ratzenberger had perished in a crash during qualifying – the first fatal accident at a Formula 1 race meeting in 12 years.

One immediate result, introduced mid-season, was the requirement for Formula 1 cars to fit a flat wooden plank under the front of the chassis which would raise their ride height and reduce aerodynamic downforce. The Grand Prix Drivers' Association reappeared and called for various modifications to circuits, which were granted – mostly by the insertion of low-speed chicanes created with temporary barriers. The FIA, in turn, decided to get tough on dangerous driving and disregard of the rules, with the result that two drivers were penalized with race bans. One of them was Michael Schumacher, who came through a season in which he was banned from two races and disqualified from

two more, to win his first World Championship driving a Benetton-Ford.

Formula 1's engine displacement limit returned to 3 litres in 1995, dropping power outputs. Slicks (tyres without tread patterns, standard wear since the 1970s) were banned from 1998, when grooved tyres were made compulsory and the maximum width of the cars was reduced. These measures were effective in cutting straight-line and cornering speeds – but, of course, only for a while. In Formula 1, technology catches up fast.

Some of these moves were unpopular with the teams, but they simply represented good governance. Formula 1 continued to thrive. The biggest problem that the premier racing series presented to the FIA was commercial. This was not a disagreement with Bernie Ecclestone's organization, by then called Formula One Administration – the Concorde Agreement remained a sound basis for the separation of sport and commerce – but with the European Commission.

As its new president, Max Mosley determined that the FIA should have a voice in European affairs. A joint representative office had been set up in Brussels at the time of the 1992 rapprochement with the AIT but that did not deal with motor sport matters. In 1994 David Ward came into the FIA as director general of the FIA bureau in the Belgian capital. He combined political experience – he had worked for many years with John Smith, the leader of the British Labour Party – with a knowledge of and enthusiasm for motor sport as an amateur competitor. And he knew a lot about European treaties and institutions.

One aspect of this new European Union legislation that concerned the FIA's expert advisers – and its president, himself a

commercial lawyer of some repute – was competition law. Aware that the FIA's sole authority to issue licences for motor sport events might be questioned, in 1994 it decided to notify its rules to the Competition Department of the European Commission. There was no query about these rules – indeed, no response at all – for two years.

To encourage progress with the notification, the FIA held constructive meetings in 1996 with the European Commissioner for Competition, Karel Van Miert. But relations with the Commission deteriorated sharply when, in 1997, two complaints were made against the FIA concerning truck racing and GT racing.

At the end of the year, the Commission sent the FIA a 'warning letter' setting out possible areas in which the Federation may have been in breach of competition rules. This letter should have been strictly confidential but was leaked to the press by the Commission and followed with public comments by Karel van Miert that prejudged the case and were detrimental to the FIA.

The FIA lodged an action at the Court of First Instance against the Commission's unlawful disclosure of the letter and the prejudicial remarks made by Karel van Miert. It took until July 1999 but this case was settled in the FIA's favour when the European Commission was forced to issue an apology and pay costs.

Some member clubs doubted the wisdom of the FIA making a legal challenge to the EC, but the success of the action proved an important demonstration of the Federation's integrity and independence. Underlining the unusual nature of the case, Herbert Smith, the FIA's lawyers, won an award for their work: it was nominated Competition Law Case of the Year.

The areas of FIA activity to which the Commission objected were the licence monopoly and its claim to the television rights for the international championships that it organizes.

The FIA's position was that licensing was primarily about safety, that without the FIA as an independent governing body setting worldwide standards, national governments would have to set up motor sport authorities at their tax payers' expense.

The matter of television rights arose because the television rights for all FIA championships were contracted to Bernie Ecclestone's group of companies and a complainant, who had previously televised the FIA European Truck Racing Cup, lost business as a result. The far more significant and longer-standing deal to televise Formula 1 became involved by association; it was never the subject of a complaint to the Commission. That did not prevent the Commission from questioning the length of the contract with Bernie Ecclestone (15 years, at that time) and the fact it was awarded without a competitive tender. The FIA explained how the relationship had developed and that Bernie Ecclestone was the only one in a position to run the commercial aspects of Formula 1 as it was constructed.

As the FIA pointed out, the stakes in this dispute were high. If the Competition Commission were to insist on other bodies being able to run motor sport and issue licences, or that local organizers rather than the FIA owned the TV rights to events within the EU, the FIA would be forced to reduce the European component of the world championships. The EU, it reminded, included just 15 of the FIA's 118 member countries.

As the notification process continued, both

the truck and GT complaints were withdrawn. The Commission issued an official Statement of Objections and in January 2000, the FIA took the unusual step of publishing both the Commission's statement and the Federation's detailed reply. That reflected the confidence with which the FIA could negotiate a settlement. Subsequently, the FIA made proposals to its rules and procedures which included standing back from commercial involvement in Formula 1. Among other concessions was the removal of Bernie Ecclestone from the roster of vice-presidents, because his official position in the FIA could be regarded as a conflict of interest.

These proposals were accepted by the new Competition Commissioner Mario Monti and in October 2001 the Commission announced the closure of its investigation. The settlement was subject to a monitoring period to check compliance, which ended in October 2003, finally drawing to a close a process begun voluntarily by the FIA in 1994. The nine years of controversy and confrontation did result in clear official recognition of the FIA as the government of motor sport – which was of course one of the reasons it was founded 100 years ago. The Commission stated that it 'fully recognizes the need for organizations such as the FIA to regulate the organization of its sport, its sporting rules and its competitions'.

At the same time, the FIA was involved in discussions and negotiations on another commercial issue, although it was not one that affected the Federation directly. Proposals to ban tobacco advertising and sponsorship were of great importance to the teams, race organizers, and of course the television coverage of Formula 1. France already had a legal ban, and voluntary restrictions on showing cigarette brand names in



*Michael Schumacher – a great driver supported by great Ferrari teamwork.*

televised events applied in some other European countries. But this went beyond Europe; indeed, it was Australia that revived this issue when, in 1992, it announced it was to bring all forms of tobacco advertising to an end.

The European Commission had published a draft directive on this subject some time before, but it had not been implemented as several EU countries disagreed with the wording and timetable. However, in many parts of the world, the intention was clear: for public health reasons, cigarette and tobacco advertising was to be curtailed. The FIA's contribution to the debate was to suggest a worldwide phased withdrawal of tobacco advertising and sponsorship linked to an EU directive. It reasoned that television, which provides by far the biggest publicity exposure, has no national boundaries. If only some countries prohibited tobacco advertising, inevitably there would be a swing to events organized in territories where it was still allowed.

In December 1997 the EU Health Council agreed to a ban on sports sponsorship by tobacco companies to come into force in October 2006. The FIA pursued its idea of worldwide implementation with the Australian government (which agreed) and the World Health Organisation. To assuage those calling for more urgent action, it wrote to the health ministers of countries that host Formula 1 World Championship events asking for evidence that non-smokers had been encouraged to take up smoking as a result of tobacco sponsorship of Formula 1 racing. It did not receive many replies.

With the EC directive foundering for legal and procedural reasons, the FIA took unilateral action. In October 2000 the FIA World Council for Motor Sport sought to encourage diversification away from tobacco sponsorship

by adopting a resolution for a worldwide ban on tobacco advertising and sponsorship in international motor sport from the end of the 2006 season.

Then, in May 2001, the EC published a new directive calling for a ban from July 2005. This decision was particularly damaging as many teams had negotiated sponsorship agreements with tobacco companies until the end of 2006. Meanwhile, the WHO had adopted a Framework Convention for Tobacco Control but without any date for a mandatory termination of sports sponsorship.

The FIA's attempt to introduce a ban in 2006 was now in difficulty, particularly as part of the settlement of the competition case in Brussels included an undertaking by the Federation not to be involved in commercial issues associated with Formula 1. The authority of the FIA to ban tobacco sponsorship had already been questioned by one team principal. So, on legal advice, in June 2003 the World Motor Sports Council decided to change the proposed ban to a recommendation.

This experience with governments, and the European Union in particular, led the FIA to consult with the controlling bodies of other sports. In February 1999 it published a memorandum 'Sport and the European Union' as a response to the European Commission's consultation paper on the 'European Model of Sport'. The FIA called for a clear legal basis for sport in the EU, particularly for competition law. This was necessary because the treaties that established the European Union make no reference to sport. The FIA suggested a voluntary code of practice for sports governance. Such a code could help distinguish between sports organisations as governing bodies and their more recently developed



*The changing climate for tobacco sponsorship. Top: BAT's message is still clear. Centre: Benson & Hedges in disguise. Bottom: NiQuitin offers another solution.*

commercial interests.

Two years later, the FIA joined with the European Olympic Committee to organize 'The Rules of the Game', Europe's first conference on the governance of sport, in Brussels. Max Mosley co-chaired the conference with Jacques Rogge, then president of the EOC, who later became president of the International Olympic Committee. This event attracted 180 delegates from sports of all kinds, as well as politicians, representatives of national authorities and legal and commercial organizations. Among the speakers was Mario Monti, the European Competition Commissioner. Referring to the question of a single federation per sport, he said: 'Some may ask why the Commission should accept a sale of the FIA's interest in Formula 1 to Mr Ecclestone's companies. Such a question betrays a misunderstanding both of the Commission's remit and, indeed, its objections to the way motor sport was being regulated. It is not our role to determine who owns what part of the motor sport business.'

The FIA had just finalized a very satisfactory arrangement concerning the future ownership of the commercial rights of Formula 1.

In 1995 the Concorde Agreement was renewed, with a separate commercial agreement between the FIA and Bernie Ecclestone's company which was to run for 15 years. The unusually long term was because Bernie Ecclestone was about to make a heavy investment in digital television to provide a multi-screen, pay-per-view service that would take some time to become profitable. (As it turned out, this pay-per-view scheme was a commercial failure – perhaps ahead of its time – and the service was stopped after the 2002 season.)

In 1997 Bernie Ecclestone's companies were highly profitable and he had the idea of floating the business on stock exchanges in London and New York. For that, he would need the security of an even longer contract – a 10-year extension to the 15-year agreement was suggested. The FIA Senate was minded to agree to this in return for 10 per cent of the shares from the flotation with enough money in advance to secure the future of the FIA.

As time went on, it became clear that a general flotation was not appropriate for Bernie Ecclestone's business. And the FIA, needing to be seen to distance itself from the commercial aspects of Formula 1 to satisfy the European Competition Commission, found a radical alternative. It could lease the commercial rights to Formula 1 and the World Championship for 100 years for a substantial one-time payment, thus retaining the rights in perpetuity but disengaging from the business day-to-day and year-by-year. This was Max Mosley's idea. He likened it to the Duke of Westminster in London making his fortune by retaining the freehold of the land on which a large number of houses and offices were built by holders of 99-year leases.

Max Mosley stood aside from the final negotiations, which were conducted by a team comprising Rosario Alessi, then president of the FIA Senate, and three senior vice-presidents. The deal was put to and approved by the Senate and then the General Assembly in June 2000. The final sum involved was 313.6 million US dollars. It was more than enough to secure the FIA's future and pay for the establishment of the FIA Foundation which could conduct research work to the benefit not only of motor sport but also the FIA's wider audience.

The FIA Foundation for the Automobile



*Max Mosley, Mario Monti (EU Competition Commissioner) and Jacques Rogge (President of the EOC) discussing Governance in Sport.*

and Society would be based in Britain. Max Mosley had maintained a small office in London from the time when he was first elected to the FISA presidency. It was a minor aspect of a shift from a French to an English emphasis. Another was that whilst the definitive version of the FIA statutes continued to be in French, any dispute about the sporting regulations referred to the English text.

The location of the FIA headquarters was under debate; for the first time, there was serious consideration of moving from number 8, Place de la Concorde. Back in 1979 the FIA committee had approved in principle the idea of acquiring its own building, both to provide the

bigger offices it required and as an investment, but then negotiated for more space from the ACF instead. But in 1994 the administrative staff moved to rented premises in the nearby Rue Boissy d'Anglas, leaving only the presidential offices at the official address.

By 1997 a new government in France threatened the favourable tax status of international organizations based there. The FIA and AIT were getting ever closer and it seemed sensible that their administrative offices be in the same place. The AIT was based in Switzerland and would not be able to obtain equivalent tax concessions in France, so it was the FIA that decided to move its headquarters.

## A NEW STRUCTURE



*The World Council for Motor Sport in session in the new conference chamber in April 2003.*



*The FIA's offices in the Place de la Concorde were completely refurbished over the winter of 2002/3.*

In June 1998, it acquired two floors of a modern building which houses the Touring Club of Switzerland, close to Geneva's Cointrin airport. The AIT moved from elsewhere in Geneva to share the new offices and part of the secretariat.

In fact, a body called 'The FIA in Switzerland' had existed since 1959, but now the new Geneva office became the Federation's administrative headquarters. The issue of customs documents was already integrated with the AIT and done from Geneva. At the end of 1998, the motor sports department moved in its entirety. A staff of just three people remained in Paris, headed by Jacques Sarrut, secretary-general of the FIA World Council for Touring and the Automobile. Significantly, the International Court of Appeal continued to be held in Paris; the FIA was established and has always operated under French law.

The relocation did not last very long. Another change in the French government brought encouragement to return to Paris. The money in the bank from the 100-year lease of the commercial rights in Formula 1 provided the opportunity to furnish and equip a headquarters building. An agreement was reached with the ACF to rent more space at number 8, Place de la Concorde – and take back the offices that had been relinquished only a few years before. The accommodation, over three floors and including a conference chamber that can be converted into a court room, a commissions room, and several smaller meeting rooms, was completely redesigned, equipped and furnished to the highest standards.

The FIA officially returned to its ancestral home in January 2002. General administration and the motor sport bureau, headed by secretary-general Pierre de Coninck, remains in Switzerland. The FIA Foundation, set up in the

United Kingdom as a charitable trust, purchased a newly refurbished building, number 60, Trafalgar Square, at the symbolic centre of London. David Ward, who had previously run the FIA Brussels bureau, was appointed director-general of the Foundation.

One constant remains from the organization's earliest days: the International Court of Appeal. As the judge of any dispute resulting from the application of the FIA rules, this is the ultimate authority for all the Federation's activities, although in practice in recent times it has dealt mostly with sporting matters. These cases are usually brought by the relevant national sporting authority on behalf of its licence holders.

The Court of Appeal consists of a panel of independent legal experts from different countries and 'with international competence, both sporting and legal'. Members belonging to countries involved in the dispute are not called to attend such cases. By tradition, the secretary-general of the World Council for Touring and the Automobile has acted as the secretary to the Court of Appeal, but in 2003 it was agreed that the holder of this position should be elected on the joint proposal of the two World Councils. The FIA Foundation's director-general David Ward was elected the Court's first secretary-general, and to emphasize its independence, reports only to the FIA General Assembly.

Hearings of the International Court of Appeal are now open to the media. In 2003 a case was televised for the first time. The idea was to demonstrate the impartiality of the Court and to improve the public's understanding of the appeals process.

Back in 1995, Max Mosley had been aware that it seemed that sporting and European matters were taking a disproportionate amount



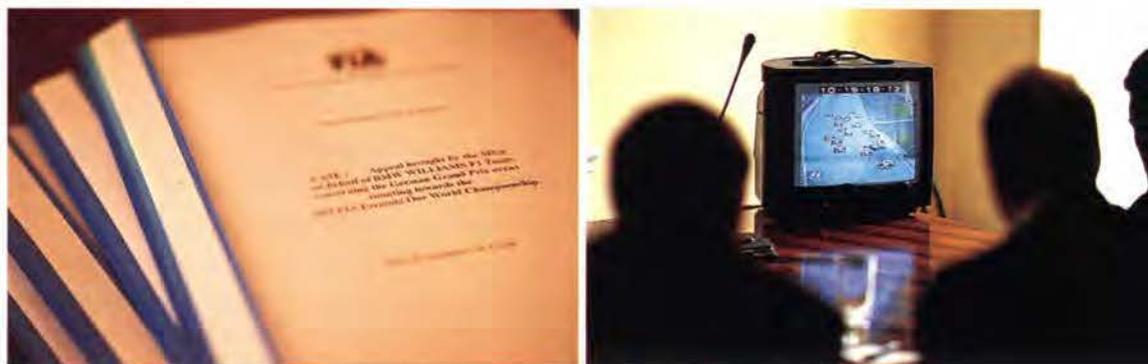
of the Federation's time and effort, so he had called for a working group to study new initiatives for the FIA which could be useful to non-sporting clubs and their members worldwide and also generate revenue. The group's recommendations included travel services, several aspects of new information technology, FIA-branded credit cards and insurance, and alliances with hotel groups and travel companies that would give discounts to members of affiliated clubs. Most of these things had been tried or considered before but the most promising of them duplicated the activities of member clubs. As it turned out, the windfall from Formula 1 was to relieve the revenue requirement and the strengthening links with the AIT covered others of the working group's proposals.

In reality, the FIA's future on the touring side was to act as a lobby group, investigating and promoting specific issues of cars and motoring that would be valuable to the consumer. Accordingly, from January 2004 the World Council for Touring and the Automobile was renamed the World Council for Mobility and the Automobile. Robert Darbelnet of the AAA,

president of the AIT, continued as FIA deputy president for this World Council.

As an aside, the 1995 working group examined roadside assistance schemes that are very big business for some member clubs – actually, the basis on which some of them were founded. Over the years, links through the FIA had facilitated exchange arrangements whereby one national club would provide services to members of another, but this was not a source of revenue for the Federation, and did not hold the prospect of becoming one. The reason was a varying level of commercialization: some clubs sub-contracted their breakdown services to outside companies while others had 'demutualized' and become themselves entirely commercial organizations. Several of the major national clubs in Europe – members of the FIA, AIT, or both – had formed ARC Transistance in 1990 with the specific aim of providing a pan-European roadside assistance service for motor manufacturers and fleet operators.

Regional cooperation had become more important. In 2003 the FIA decided to adopt the AIT's four-region structure for the non-sporting clubs which would also mean



*A matter of public interest – the Court of Appeal hearing of Ralf Schumacher's incident in the 2003 German Grand Prix was its first session in the FIA's revamped premises and was open to the media.*

dismantling most of the joint FIA/AIT commissions of the World Council for Mobility and the Automobile. In the future the work of those commissions would be at a regional level with the World Council as coordinator. Peter Doggwiler, director-general of the AIT, was already acting as the secretary-general of the FIA World Council. The regional groups of FIA clubs concentrated on motor sport, in Africa and South and Central America, continue as valuable information exchanges.

In his two years as president of the FISA, Max Mosley trod the path of so many of his predecessors in trying to unify the regulations for the main sporting championships across the world. CART (Championship Auto Racing Teams), which had run the premier single-seater racing formula in the United States without FIA sanction, finally joined ACCUS. The car specifications and power outputs of Formula 1 and US IndyCars were tantalizingly close and Max Mosley hoped that the two formulae might come together, even proposing that modified Formula 1 cars be allowed to run in American speedway events like the Indianapolis 500.

To the FISA president it seemed so logical: 'It's like playing football with different-sized balls in different parts of the world. It is the task of the governing body to unite the various factions.' Apart from achieving transatlantic harmony, his idea would also bring the United States closer to the World Championship.

America and Formula 1 had never got along very well. There had been Grands Prix all over the United States, from Watkins Glen, New York and Detroit, Michigan to Long Beach, California and Phoenix, Arizona, but by the mid-1990s there was not enough support in America for a round of the World Championship to make economic sense.

But neither was there any enthusiasm from promoters or competitors for Formula 1 to join up with an American speedway series. Through its first 11 years, the FIA World Championship had included the Indianapolis 500, although the rules there were never the same as Formula 1. There is a certain irony in what eventually arose from this latest failed mission for a common formula. In 2000, the United States Grand Prix was reinstated – at Indianapolis Motor Speedway. The Formula 1 cars ran on a circuit which consisted of the start-and-finish straight and two corners of the 500's oval track connected by a twisty infield loop.

The first Grand Prix at Indianapolis was won by Michael Schumacher in a Ferrari. This was hardly a surprise, for the German driver in the Italian car won nine out of 17 races in 2000 and was at the start of his period of dominance in Formula 1. No-one doubted that Michael Schumacher, the highest-paid racing driver in history, was the world's best, but Grands Prix had become processionary and the results all-too-predictable. Through 2000 and 2001 there was evidence that the audience, at the trackside and watching television, was getting bored. It is not the job of the governing body to diminish the performance of the best competitor, but with the costs of Formula 1 continuing to rise and big car manufacturers increasingly using it as a high-tech advertising medium, Max Mosley thought it appropriate to find ways of closing the gap between the fastest and the also-rans, the wealthiest and the (relatively) poor.

In October 2002, the FIA president implored the 26-man Formula 1 commission to agree to a package of changes that would improve racing and reduce costs. Predictably, it could not. The arguments continued until just before the start of the 2003 season when, in the

face of the president's implacable determination, there was a majority agreement for the immediate implementation of single-lap qualifying in one session using the cars in race trim – and keeping them in parc fermé between Saturday qualifying and the race – new tyre restrictions, and an extension of the World Championship points scale, rewarding finishers down to eighth place.

Longer term proposals included a further ban on electronic driver aids – traction and launch controls had been readmitted in 2001 – standard braking systems and rear wing configuration, a ban on spare cars, and an engine durability requirement, first to one full race weekend and eventually to six races.

The 2003 changes did produce better racing. Michael Schumacher and Ferrari won again – the German driver was World Champion for a record sixth time – but it was not the walkover of previous seasons, success was more evenly spread among the teams, and the television audience increased.

Television became an important aspect of the World Rally Championship in the new century. International Sportsworld Communicators (ISC), the company established by Bernie Ecclestone that was responsible for the TV coverage of the WRC, was bought by David Richards, a former international rally co-driver whose company Prodrive had developed the Subaru team into championship winners. ISC's contract for the television rights is until 2010.

Top-level rallying had also been subject to new rules designed to reduce the cost of competing, improve spectator safety – and make it more accessible to television. Restricting the number of places and times for servicing, banning service helicopters and aircraft, and

controlling reconnaissance of special stages were keys to the FIA's strategy for the World Rally Championship. All events were to be run to a standard four-day format from a central location – finally abandoning the town-to-town itineraries that had their origins in the earliest days of motor racing. A formula for World Rally Cars, recognizable production models but allowed four-wheel drive and turbocharged engines up to 2 litres restricted to 300bhp, worked well and encouraged the participation of as many as eight factory teams. If the 1990s were dominated by the Japanese – Mitsubishi, Subaru and Toyota – from 2000 onwards the World Rally Championship has been a showcase for the Peugeot Group of France, with Peugeot and Citroën cars winning the manufacturers' title.

Although the major car manufacturers were well represented in Formula 1 – and increasingly discontent with their proportion of its income coming from the commercial rights holder – rallying brought the FIA into more direct contact with the world's motor industry.

And, thanks to Max Mosley's ambitions for the Federation, there was a great deal of contact with the car manufacturers in the first decade of his presidency. This chapter may have given the impression that from 1993 onwards the FIA was preoccupied with sporting matters. In fact, the president was equally active in promoting the FIA as the voice of the motorist and car buyer, working in conjunction with governments and other international organizations. This was to make the FIA unpopular in some circles of the motor industry. Max Mosley was sure that the principles were worth fighting for and that the FIA would emerge as a stronger world body as a result. He was right.



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## IDEAL TRAINING

Karting is the established route to motor racing stardom. In the early 1960s, the FIA recognized its potential as an inexpensive training ground for racing drivers and set up the Commission Internationale de Karting (CIK) to encourage, develop and control the karting movement. The FIA World Championship of Karting was held for the first time in 1964 and continues to this day. The sporting authority has gone through changes, including a period of semi-independence in the 1990s, but was brought back into the body of the FIA as the CIK in 2000 and in 2004 became more closely linked with the World Council for Motor Sport. Karting attracts more participants than any other form of motor sport. The FIA assumes the responsibility for making it as safe and environmentally friendly as possible.

When, in 1960, the CSI reported to the FIA General Assembly that it was drawing up regulations for karts, it could not have envisaged the importance and influence of these smallest and simplest racing vehicles in the training of the world's top racing drivers of the future. Since 2000, every prominent Formula 1 driver has served his apprenticeship in karting.

The CSI described the first karts as 'new and very unusual, a gift from America to Europe'. Art Ingels, a race car designer for Kurtis Craft in California, is credited with the original idea, devising the first of the genre in his spare time with his friend Lou Borelli. That was in 1956. It was a rudimentary thing with a steel tube frame, front and rear axles, a seat, and a hoop supporting the steering column. The two-stroke single-cylinder engine came from a lawnmower, developed 2.5 horsepower and drove through a centrifugal clutch.

How it came to be known as a kart, with a 'k', is a mystery, but not long afterwards, a hot-rod enthusiast called Duffy Livingstone was the first to put what he called Go-Karts into production. The Kart Club of America was formed in 1957.

Karts found their way across the world via US military bases that were spread far and wide in the years following World War 2. Because it was so much cheaper than car racing, and therefore accessible to more young people, karting quickly gained momentum in Europe. In 1959, Jean-Marie Balestre was instrumental in setting up a karting commission within the FFSA, Britain's RAC was formulating its own karting rules, and several other FIA member clubs were embracing this new form of motor sport.

Early in 1962, the FIA Committee agreed to

the proposal from the CSI that it should form an international karting commission. It was prompted by a move by the Fédération Internationale Motocycliste to take control of karting. The FIA president, Count de Liedekerke Beaufort, was quick to remind the FIM: 'The vehicles in question have four wheels and four wheels are the domain of the FIA.'

The statutes of the Commission Internationale de Karting (CIK) were put before the FIA General Assembly in October 1962. Twelve countries would be directly represented at the CIK, the purpose of which was to 'encourage, develop and control the karting movement' by issuing international rules about the general discipline of events, the safety of racing, and the construction and equipment of karts and karting venues.

Jean-Marie Balestre was elected president of the CIK in October 1962. It was his first official position within the FIA. The CIK was different to other FIA commissions because of the nature of karting. Circuits were shorter and the facilities required were different from car racing. Also karting allowed competitors below the minimum age for car drivers.

Although responsible to the CSI and ultimately the FIA, the CIK developed almost into a federation in its own right, with specific members (drawn from, or approved by, FIA members), and its own General Assembly.

The World Championship of Karting started in 1964 and was won by the Italian Guido Sala. The rules for World Championship karting have changed over 40 years but the main title continues to be run for the 100cc direct-drive class – the descendants of the original American karts.

Today, the main category is Formula A, but in previous years there have been World



Championship categories for Formula K and its successor, Formula Super A. Karts with larger engines and gearboxes that can run on longer circuits were a British invention. Formula E, with 250cc engines, now called Superkarts, had its own World title from 1983. The 125cc Formula C gearbox karts also had their own championship from that time. Formula C, now called Super-Intercontinental C, runs on short circuits and has rules that are similar to the 100cc categories.

In 2003 there were nine official FIA kart championships: three on a world level and six European, including a Junior championship for 13 to 15-year-old drivers.

Survey the World Championship results over the years and it becomes clear that the CIK's influence has been strongest in Europe, with relatively few competitors from the USA, although there has been regular participation by Japanese drivers and Brazil has been represented consistently since a certain A. Senna finished second in the championship in 1979 and 1980.

In most years the World Championship has been one single event. Kart racing is fiercely competitive and whilst several drivers who were later to win Grands Prix appear in the top three, a karting World Champion has yet to progress to Formula 1 World Champion. Ayrton Senna came closest, with those two second places.

Karting has the advantage of allowing drivers to start racing when very young – from seven to 10 years old, depending on the country. It requires razor-sharp reactions, puts a premium on vehicle control and is very good for developing racecraft. The racing is always close and crowded and the professionals have a lot of track time, with practice, heats and finals; by comparison, car events provide fewer

opportunities behind the wheel. Karting has proved a fine training ground for budding racing drivers, and at the very highest level costs about a quarter of a season in Formula 3 car racing.

Strict regulations keep karting relatively inexpensive; 100cc karts have to be constructed in a certain way within fixed dimensions, are not allowed suspension or the use of exotic materials. In some respects, karting has led other forms of motor sport: 'slick' tyres, without tread patterns, were fitted to the tiny wheels of karts long before they appeared on full-size racing cars. In the early days all bodywork was forbidden, but now the 100cc direct-drive and 125cc gearbox karts have prescribed bumpers and side fenders to prevent wheels tangling during close racing. Long-circuit Formula E Superkarts are allowed more elaborate bodywork including limited aerodynamic devices. Although the six-speed Formula E machines are the fastest karts – they can reach 250km/h (155mph) and lap race circuits faster than Formula Ford single-seaters – in most countries Formula E is now predominantly an amateur category.

Pierre Ugeux, who was to become the president of the CSI in the 1970s, was president of the CIK for seven years. He was followed by Charles Defrancesco from Switzerland and then in 1979 by Ernest Buser, also from Switzerland.

After the CSI became the FISA under Jean-Marie Balestre, the CIK gained even more autonomy, to the point where the FIA agreed that the karting authority could be delegated to an outside organization on an annual basis. In 1997, with Max Mosley as president of the FIA – and the prospect of moving the FIA headquarters to Geneva – it was decided to create a legally separate institution, the Fédération Mondiale de Karting FIA (FMK-



*Aryton Senna's racing skills were honed on kart tracks.*

FIA), to be based in Switzerland and run by Ernest Buser.

The FMK-FIA only lasted three years. An investigation conducted by the World Council for Motor Sport concluded that karting would be better served if it was brought back into the overall Federation. The CIK was thus re-created and Yvon Léon, former secretary-general of the FISA and a consultant to the FIA, was elected to its presidency in 2000. Since then, the CIK has gradually become more integrated with the World Council for Motor Sport in the new structure of the FIA. Ninety-three clubs are affiliated with the CIK.

Discussions continue about future regulations and, in particular, the use of high-revving two-stroke engines which have been banned in some places for reasons of noise and exhaust emissions. The CIK has taken an initiative by devising a World Formula, using a standard chassis design with a 15bhp, 200cc four-stroke engine. These karts, the costs of which are carefully controlled, have proved increasingly popular for regional championships.

The FIA estimates that there are some 45,000 holders of kart racing licences in Europe and 11,500 in Japan. Leisure karting does not require competition licences so it is impossible to judge the total number who go karting worldwide, but undoubtedly more people participate than in any other form of motor sport.

At an international level, karting has professional teams and drivers and whilst some use it as a stepping stone to full-scale motor racing, others are content to be the masters of their particular branch of the sport.

One such is Sauro Cesetti, an Italian driver, who had the satisfaction of beating Michael Schumacher when the Formula 1 World Champion returned to karting for the final race of the five-round 2001 World Championship held in his home town of Kerpen. Michael Schumacher loves karts and, most of all, loves to race. This time he finished second, but his very presence, wearing his Ferrari racing suit and helmet, in the category where he first developed his racing skills, was a tribute to karting's place in the wider motor sporting world.





## THOSE WHO HAVE PRESIDED

The 10 presidents who have graced the FIA in its first 100 years:

Baron Étienne de Zuylen (France)	1904-1931
Count Robert de Vogüé (France)	1931-1936
Viscount Jehan de Rohan (France)	1936-1958
Count Hadelin de Liedekerke Beaufort (France)	1958-1963
Prince Filippo Caracciolo di Castagneto (Italy)	1963-1965
Wilfrid Andrews (Great Britain)	1965-1971
Prince Amaury de Merode (Belgium)	1971-1975
Prince Paul Alfons von Metternich (Germany)	1975-1986
Jean-Marie Balestre (France)	1986-1993
Max Mosley (Great Britain)	from 1993

Outsiders find it surprising that the world's most important automobile institution has never been headed by a representative of the motor industry. Several of the FIA's prominent member clubs were established by motor manufacturers and distributors as a way of encouraging business.

It might have been different had it not been for Count Albert de Dion de Malfiance, who was the instigator of the committee that promoted the Paris-Bordeaux-Paris race in 1895, and formed the Automobile Club de France. His fellow founders of the ACF, Baron de Zuylen and Paul Meyan, proposed Count de Dion as president but he declined. De Dion-Bouton was the most successful car and engine builder in France at that time – its steam tractor put up the best performance in the Paris-Rouen trial of 1894 – and the Count, who was to become a prominent politician in later life, thought it more appropriate for an independent motoring enthusiast to lead the club. Baron de Zuylen graciously accepted the presidency and

Count de Dion became vice-president.

When the AIACR was established in 1904, the ACF gave it a home in the Place de la Concorde, Paris, and Baron de Zuylen was elected its first president. A pattern was set. For the next 59 years the presidency of the AIACR and the FIA would be held by a representative of the ACF. Those who followed Baron de Zuylen had a similarly aristocratic background. Of the 10 presidents in the FIA's 100 years, only three – Wilfrid Andrews, Jean-Marie Balestre and Max Mosley – are without noble titles.

By tradition, though not decree, the FIA presidency is an honorary position. Some holders, with other business commitments, have really been non-executive chairmen, distinguished figureheads presenting policies decided in the Federation's many commissions. In recent times, starting with the energetic Jean-Marie Balestre, the president has taken a 'hands on' role in running the FIA's complex affairs. It is, as Max Mosley will attest, very much a full-time job.



1904-1931

### Baron Étienne de Zuylen de Nyevelt

The founding president of an organization dedicated to the furtherance of the horseless carriage loved horses. Baron de Zuylen saw no irony in this; the motor vehicle would relieve horses of their heavy duties and mistreatment.

As well as early automobiles, the Baron kept a stable of thoroughbred horses at his home in Neuilly, near Paris. Born in Belgium to a prominent family of ambassadors and statesmen, Baron de Zuylen was a banker by profession and married into the Rothschild family.

The founder, with Count de Dion, of the committee that established the Paris-Bordeaux-Paris race, he personally put up a 10,000 franc prize. Baron de Zuylen delighted in the company of other pioneer motorists. He was a fervent believer in the future of the automobile,

encouraged the great city-to-city races of the first decade of the 20th century, and worked hard with national authorities to facilitate cross-border motor tourism.

His personal contacts and experience did much to expand the scope of the AIACR and its activities.

Baron de Zuylen remained president of the AIACR for 27 years. He combined the ACF and AIACR presidencies until 1922. In 1931, at the age of 71, he announced his retirement as the head of the international organization and was nominated founding president of honour – which gave him the right to continue attending AIACR meetings and vote in the same way as the representative of a national club. Baron de Zuylen died in Nice in May 1934.



1931-1936

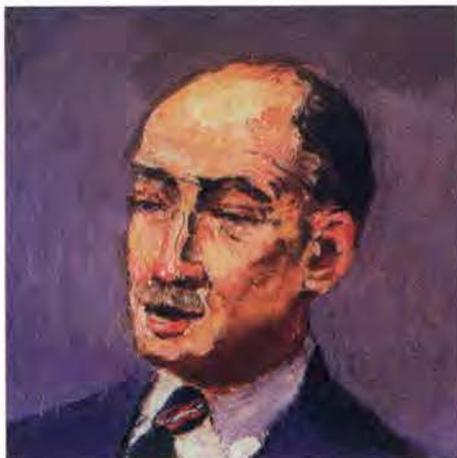
Count Robert de Vogüé

Count Robert de Vogüé had succeeded Baron de Zuylen as the president of the ACF in 1922 and a vice-president of the AIACR when the General Assembly asked him to take the presidency in 1931.

Also from a family of diplomats, the Count was an officer in the French navy in the first World War and served with distinction, being awarded the Croix de Guerre and the Légion d'Honneur. After leaving the navy he applied himself with equal vigour to automobile and nautical activities.

Earlier, he had been prominent in the ACF's

sporting commission and was clerk of the course for the 1902 Paris-Vienna race, which included the Gordon Bennett Trophy. At the first Grand Prix in 1906, Count de Vogüé, together with the Prince d'Arenberg and Quiñones de León, were the overnight guardians of the competing cars – they were chosen for this task because they had no business connections with the car manufacturers. By the time that the Count de Vogüé had become president of the AIACR, Quinoné de Léon, an honorary member, was the Spanish ambassador to Paris. Count de Vogüé had only five years in the post. He died in 1936.



1936-1958

**Jehan de Rohan-Chabot, Viscount de Rohan**

Once again, the president of the ACF was unanimously elected as the president of the AIACR. Viscount de Rohan, from a family with regal connections in France and Brittany, was to preside for 22 years, including the difficult period of the second World War, when the premises of the ACF and AIACR were annexed during the German occupation of France, the change of name and statutes in 1946 to form the FIA, and the 50th anniversary celebrations in June 1954.

A medical doctor by training, his first love was for things mechanical (he built his own motorcycle and motor boat at 16). Viscount de Rohan had served as a fighter pilot in the first World War and later ran the French division of the BP oil company. He had travelled widely and was well known for his diplomacy.

Although he had an interest in motor sport,

Viscount de Rohan had specialized in traffic issues and had been president of the AIACR's touring commission, the CIT. He was to be president of the OTA, the FIA's joint venture with the AIT, from 1950 to 1958.

Jean-Jacques Fréville, secretary-general of the FIA in the latter part of Viscount de Rohan's long presidency, describes him as: 'Having the sight of a doctor – he could see through people. He was very exacting to work for but respected by everyone.'

At the General Assembly in October 1957, the 73-years old Viscount de Rohan tendered his resignation but he was persuaded to stay on as president. When he did retire, a year later, he was made president of honour of the FIA and he continued to attend meetings until not long before his death in 1968.



1958-1963

**Count Hadelin de Liedekerke Beaufort**

Until 1957, the FIA president was re-elected each year as a unanimous formality at the General Assembly. Then it was decided to set a three-year term. When he was persuaded to stay in office, Viscount de Rohan said that he would serve for only one more year. So in October 1958 there was an election for a president to stand for the remaining two-year period. There were two candidates – the Franco-Belgian president of the ACF, Count Hadelin de Liedekerke Beaufort, and Prince Amaury de Merode, president of the RAC of Belgium. Count de Liedekerke Beaufort won the election, continuing the tradition of dual presidency with the ACF.

A naturally charming man with a literary

background, he was described as ‘morally and physically elegant’.

Count de Liedekerke Beaufort’s presidency – renewed for a full three years in 1960 – came at a low point in the FIA’s history, when finances were stretched and there was an uncertain balance between sporting and touring activities. He was to need all his diplomat’s skill to deal with the difficulties presented by the admission to the FIA of national clubs from Communist eastern Europe. In 1963, at the age of 76, he resigned as president of the FIA, although he continued as president of the ACF and, like his predecessor, was made a president of honour of the Federation. He died in 1974.



1963-1965

**Prince Filippo Caracciolo di Castagneto**

The first non-Frenchman to be FIA president was proposed by Count de Liedekerke. Prince Caracciolo, the president of the AC of Italy, was already a vice-president of the FIA. A multilingual career diplomat, holding a doctorate in economics and social science, the Prince was for five years the secretary-general of the consultative assembly of the Council of Europe.

Prince Caracciolo had been made a special ambassador by the AC of Italy in 1944 and been able to arrange the seamless continuation of the club and its membership of the FIA after the second World War and Italy's Mussolini era. He held presidencies of several international

organizations including Italia Nostra and Europa Nostra, both of which sought harmony between countries of Europe. He favoured a merger with the AIT but found it impossible to achieve.

For the first time, the FIA had to adapt to working with a president based outside France. Prince Caracciolo conducted activities from both Paris and Rome. It was an important first step in showing the world that the FIA really was the international body that it claimed to be. The promise of Prince Caracciolo's presidency was not fulfilled, for he died in July 1965, after less than two years of his term of office. He was just 62 years old.



1965-1971

Wilfrid Andrews

Wilfrid Andrews, chairman of the RAC of Great Britain, took the FIA presidency across the English Channel for the first time. He was 73 when elected and had a formidable reputation as a dictatorial chairman and as a public speaker.

His approach at the RAC, where he had presided for three decades, was to champion the ordinary motorist, which fitted well with his parallel chairmanship of the British Roads Campaign Council, a group which sought to persuade government of the need for and value of better roads. This tribute was paid to him when he retired from the RAC: 'Wilfrid Andrews was, more than any man, responsible for getting the British motorway programme off the ground.'

At the time he became president, motor sport was becoming the dominant aspect of the

FIA. Wilfrid Andrews did not share the enthusiasm for racing and rallying of some of his predecessors – and successors. Furthermore, he regarded the RAC, and therefore the FIA, as a service rather than a business, which created some difficulty at a time when motor racing was becoming more commercial.

Although Wilfrid Andrews travelled a lot – by chauffeur-driven car, of course – and had visited most countries of Europe, he did not speak French. Conducting proceedings in English meant another adjustment for the FIA, its delegates and staff. In fact, he rarely went to Paris, the secretary-general travelling to meet him in London instead. Wilfrid Andrews, who was held in respect rather than affection, died of cancer in 1975.



1971-1975

**Prince Amaury de Merode**

Prince de Merode had stood twice before for election as FIA president and been unsuccessful, but at the General Assembly in October 1971 he received a unanimous vote. He had been the president of the RAC of Belgium since 1955 and a vice president of the FIA since 1959. For five years he had presided over the FIA finance committee.

As Grand Marshal at the Belgian royal court, the Prince de Merode was well known throughout Europe but did not travel extensively on FIA matters. He did, however, apply himself ceaselessly to the defence of the motorist, nationally and internationally, and the problems of traffic management. Jacques Sarrut, who began working at the FIA in 1971 and was to become secretary-general, describes Prince de Merode as 'a perfect gentleman of the old style'.

We can appreciate that from a letter the Prince wrote in 1974 to members of the FIA in advance of the General Assembly: 'I felt a very

great pride for having been chosen by you to carry your flag and the very pleasant feeling of being surrounded by affectionate friends on whom I could always rely and who were always ready to back me with their competency and service. I am fully aware that I have not always completely fulfilled your expectations and desires. But I was utterly and wholeheartedly dedicated to my mission. There comes a time when the tasks with which we are entrusted should be passed on to younger hands and I am therefore asking you not to propose me for a second term.'

However, at the General Assembly in October, Prince de Merode was persuaded to continue for one more year. Stability was needed at a particularly difficult time – an oil crisis affected much of the industrialized world – and the Prince's 72-year old hands were reassuringly safe.



1975-1986

**Prince Paul Alfons Fürst von Metternich-Winneburg**

Another Prince was waiting in the wings but was at that time busily engaged with affairs of the CSI, of which he had been president for five years. Prince Paul Metternich, great-grandson of the 'man who shaped Europe' at the 1815 Congress of Vienna and president of the German AvD, was 58 when he was proposed and elected to the highest position at the FIA.

This was an enlightened move on the part of the FIA committee. Motor sport accounted for the major share of the Federation's activities and in Prince Metternich they had an experienced competitor in racing and rallying and a confident chairman, who spoke five languages and had connections in the highest places. With his sporting and business background and the traditional values of one of Europe's most respected families, he was surely the ideal person to lead a moribund FIA into the modern world.

Prince Metternich had driven Porsche and Mercedes in the Mille Miglia, the Pan-American road race, and other endurance events, a Pegaso

in the Le Mans 24 Hours, and BMWs in European rallies.

Though he tried to show interest in every aspect of the FIA, those who worked with Prince Metternich remember that he remained mostly involved with the sport. One recalls, wryly, that 'carnets and tryptiques were not his cup of tea'.

Actually, offices and committee meetings were not much to his liking either. He gained a reputation as a charming man who travelled the world as an ambassador for the FIA but shied away from its bigger problems. But he knew that the FIA, and the CSI in particular, needed to be reorganized – and the man who was most likely to make it happen. Prince Metternich believed that Jean-Marie Balestre was the fighter who would reshape the CSI (as the FISA) and when he had done so there was natural succession to the FIA presidency when he, Prince Metternich, retired.

That was at the end of 1985. Prince Metternich enjoyed a quieter retirement at his fine Schloss Johannisberg on the banks of the Rhine. He died in 1992, aged 75.



1986-1993

**Jean-Marie Balestre**

A Frenchman returned to the presidency but it was not a continuation of the ACF line. Far from it. Until the late 1970s, FIA elections had always been cosy affairs. Proposals for candidates were made from a small inner circle, and often elected unopposed. Jean-Marie Balestre, one of the founders of the FFSA in 1952 and its president from 1973, brought the ways of real-life politics to the Federation when he won the presidency of the CSI in 1978 and changed its name to the FISA.

Although he had been a member of the CSI for 10 years, Jean-Marie Balestre was regarded as an outsider by the FIA establishment. There was no love lost between the FFSA and the ACF – which abdicated responsibility for motor sport in 1968 – and Jean-Marie Balestre called for a complete change in the structure of the CSI and the way that motor sport was administered. He took his vision of the future to the delegates from clubs around the world to enlist their support. Never before had the FIA seen this kind of electioneering.

A self-made man who founded the

magazine *L'Auto Journal* and became a director-general of the extensive Hersant media group, Jean-Marie Balestre has had a life-long interest and involvement in motor sport. His father, Joseph Balestre, who was a journalist, was the president of the Auto Moto Club of Saint-Remy de Provence and competed in speed events with an Amilcar.

Jean-Marie Balestre was himself an amateur competitor in rallies and hill-climbs. He is particularly proud of the increase in number of competition licences issued and events sanctioned during his long tenure of the FFSA, of founding the karting commissions for France and within the CSI – and of creating the FISA.

The FISA, with Jean-Marie Balestre as president, was seen by some as a step towards the sporting authority breaking away from the FIA. In fact, the intention was the opposite. Although he did not make it widely known at the time, Jean-Marie Balestre's longer-term objective was also to be president of the FIA.

He moved a step closer to that goal when he was appointed deputy president of the FIA in

1981 and was perfectly placed to succeed Prince Metternich when he retired at the end of 1985. No-one stood against him.

With the full mandate – president of both the FIA and the FISA – Jean-Marie Balestre sought to bring the various factions of the Federation closer together, speaking with one voice. Among the commissions and secretariat of the ‘touring’ side there was a fear that non-sporting activities would be diminished. That fear was unfounded. The president was well aware that some of the FIA’s biggest member clubs were – and are – completely non-sporting.

Even his closest associates admit that Jean-Marie Balestre is not easy to work for, or with. He was the Federation’s first executive president, and yet also maintained his position with the FISA, the FFSA and the FFAC, the French federation of regional clubs.

It may all have been too much. Reflecting on those days in December 2003, Jean-Marie Balestre said: ‘I was too ambitious.’

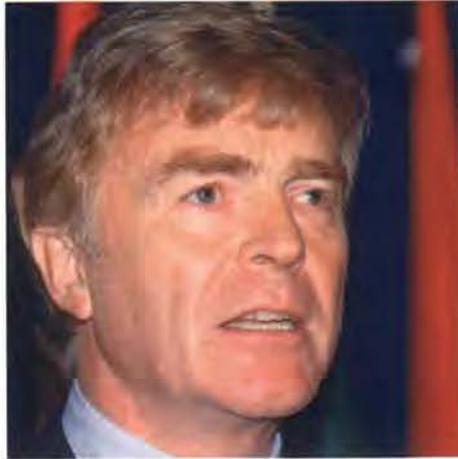
But with the clarity of hindsight we can see that Jean-Marie Balestre ensured the very survival of the FIA. Weaker characters without his steely determination and political skill would have lost the Formula 1 battle and perhaps all of professional motor sport. He points out that the first paragraphs of the 1981

Concorde Agreement are the most important as they recognize the FIA’s rights of ownership of the World Championship. Separating the sporting and commercial affairs was essential – as controversies surrounding the Olympic Games and other great sporting events have since proved.

We can see that Max Mosley’s path to the FIA presidency was remarkably similar to Jean-Marie Balestre’s: a successful campaign for the presidency of the FISA and thence to the top job with the agreement of his predecessor.

For Jean-Marie Balestre that meant abolishing the organization which he had created 14 years before. The FISA would once again become an integral part of the FIA. In Max Mosley’s second year as president of FISA, he and Jean-Marie Balestre worked together on devising the FIA’s current ‘two-pillar’ structure, with the Senate as its supreme authority bridging the parallel motor sport and touring arms. Jean-Marie Balestre did not stand for the FIA presidency in 1993 but became the first president of the FIA Senate. He was also made an FIA president of honour.

He has remained an active participant in FIA affairs ever since. Jean-Marie Balestre was asked to preside over the FIA Academy that was established in 2002.



from 1993  
Max Mosley

Like Jean-Marie Balestre, Max Mosley moved from vocal and active opposition to establishment power: poacher turned gamekeeper, as they say in Britain. He had been Bernie Ecclestone's closest associate in the FOCA v FISA war and, as FOCA's legal adviser, was one of the architects of the Concorde Agreement.

When Max Mosley decided to stand for the FISA presidency in 1991, he conducted his campaign with considerable skill, quietly gathering support from member clubs to the point where he had promises of a majority before his opponent was aware of his challenge.

Max Mosley promised calm stability at the FISA – though it turned out to be less peaceful and more controversial than he anticipated – and formed a good working relationship with FIA president Jean-Marie Balestre. Together they planned the restructuring of the FIA, integrating the FISA as the World Motor Sport Council, and agreed on Max Mosley's

candidature for the FIA presidency when Jean-Marie Balestre stood down in June 1993. A late challenge by Jeffrey Rose, chairman of the British RAC, was withdrawn on the day of the election, when it became clear that Max Mosley had majority support.

Jeffrey Rose said that he made his bid because Max Mosley did not represent a national automobile club and lacked credibility in the wider world of motoring as his experience was entirely in motor sport. Others had similar misgivings, but Max Mosley was able to convince them of his commitment to the non-sporting aspects of the FIA, in particular the role that it could play in improving road safety.

Max Mosley's family background is interesting and unusual: the son of Sir Oswald Mosley, the leader of the British Fascists in the 1930s, and writer and socialite Diana Mitford, he was educated in Britain, France and Germany, and so is fluently multi-lingual. At Oxford

University, where he read physics, he was the secretary of the Oxford Union, a debating society that is usually a springboard to a career in politics. But he chose to train as a lawyer, becoming a barrister specializing in patent and trademark law. In his leisure time Max Mosley went motor racing, at first with a Clubman's sports car, then progressing to international Formula 2 driving Brabham and Lotus cars. He retired from race driving in 1969 to be one of the founders of March Engineering, a brave new racing car constructor that was to have six Formula 1 cars competing in its first full season.

So, for the first time for generations, the FIA was to be run by a relatively young man with top-line racing experience. Max Mosley was 53 years old when he assumed the presidency. He has twice been re-elected, each time unopposed. His present term is due to expire in 2005.

Max Mosley's pledge that the FIA should make a difference in the world outside motor

racing has been more than fulfilled by the EuroNCAP crash test programme, close involvement in the 'auto oil' and exhaust emissions discussions, a series of international conferences and seminars on motoring and sporting issues, and the Federation's high profile at the European Commission and Parliament and the United Nations. Wilhelm Lyding, vice-president of the German ONS, said at a conference in 2002: 'Max Mosley's non-sporting work makes the FIA one of the most important NGOs (non-governmental organizations) in the world.'

Motor sport has funded these activities and Max Mosley's legacy to the FIA will be seen as the sale of a 100-year lease of the commercial rights for Formula 1, the proceeds from which not only give the FIA lasting financial security but have enabled the establishment of the FIA Foundation to carry out research work of benefit to motorists all over the world.



*FIA president Max Mosley addressing the 2003 General Assembly in Paris.*



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## MAKING AN IMPACT

The FIA has made great strides in devising regulations to improve safety in motor sport. Applying the same thinking to road cars inspired EuroNCAP, a crash test programme that has brought safety to prominence in the marketing of new cars. It is part of a wider campaign for road safety that has global scope and only one of a series of initiatives to deal with the current issues surrounding the automobile. The FIA has taken an active role in debates on the car and the environment, exhaust emissions legislation, the composition of motor fuels, standardization of vehicle regulations, and new technology as it affects the motorist. This work has given the FIA a strong voice in the wider motoring world as it looks to the future of the automobile.

**E**uroNCAP stands for European New Car Assessment Programme. It is an index of the passive safety (occupant protection) of production road cars, based on the results of scientific crash tests. The European Commission has described it as 'the most cost-effective car safety measure in 20 years'. EuroNCAP, as it operates today, owes its existence to the FIA.

Appropriately, the idea started from motor racing – although in the saddest of circumstances. Ayrton Senna was killed in the 1994 San Marino Grand Prix in an unexplained accident when his car hit a concrete barrier at more than 300km/h (186mph). Formula 1 had to review its safety regulations. A safety working group was set up, chaired by Professor Sid Watkins, a neuro-surgeon who is the Formula 1 medical chief. Max Mosley suggested that it looked first at best practice elsewhere: 'Let's see what governments do in setting standards for road cars.'

Max Mosley was horrified. The group learned that the European legislation covering crash tests had not changed in 20 years. As it stood, there was a 50km/h (30mph) frontal crash into a solid concrete barrier, the main purpose of which was to prove that the steering column did not intrude into the passenger compartment and injure the driver. Racing had already progressed way beyond that, with crash tests designed to measure the deformable structure of Formula 1 car nose sections introduced in 1985 and since then more vigorous standards for structural rigidity and the 'survival cell' of the cockpit.

The chances of injury in a road accident were greater than in a racing car travelling at much higher speed. Some 25,000 car occupants were killed in the European Union every year.

Despite what happened at Imola in 1994, the death and serious injury record in Formula 1 racing had improved by 90 per cent since the 1970s, although speeds on the track had increased considerably in that time.

Proposals for tighter and more meaningful safety standards for road cars had been made in the 1980s but they had become caught between two divisions of the European Commission – the transport directorate was keen to adopt them but they were blocked by the industry directorate. The car manufacturers had lobbied the latter to ease the new crash test rules, implementing them in two stages – the first of which most then-current cars would pass without modification. There was a draft directive before the European Parliament calling for the first phase to be introduced in 1995 although the second would not be enforced before 2004.

The FIA recognized that here was a worthwhile campaign that could bring a significant improvement in road safety. Through its new Brussels office run by David Ward, the FIA sponsored an Intergroup for Automobile Users at the European Parliament, chaired by Alan Donnelly MEP, the rapporteur on motor industry matters.

A detailed dossier was prepared which Alan Donnelly submitted to the Parliament. It incorporated research from the European Experimental Vehicles Committee, the results of crash tests conducted by FIA member clubs, and its safety experience in motor sport. Max Mosley attended the public hearing of the European Parliament Economic and Industrial Policy Committee in March 1995 and took with him Gerhard Berger, the Austrian Formula 1 driver, whose presence ensured wide publicity – and who spoke convincingly about the safety



*In 1994 Max Mosley was horrified to find that European car safety had not changed for 20 years.*



*The ADAC, with other FIA clubs pioneered consumer crash test programmes.*



*Gerhard Berger played a key role in persuading members of the European Parliament to vote for better safety standards.*

example set by motor racing. As a result of this lobbying, on 12 July 1995 the European Parliament unanimously adopted 44 pages of amendments to the draft directive, effectively reinstating the original 1980s crash test proposals, and these were subsequently accepted by the European Commission and the Council of Ministers.

ACEA, the trade association of the European motor industry, was deeply opposed to the changes and sought a compromise. Alan Donnelly and Max Mosley persuaded Martin Bangemann, European Commissioner for Industrial Affairs, that there should be no more discussion. The revised legislation – which eliminated the first phase of the diluted directive – would take effect from October 1998 for models newly introduced to the market and

2003 for all new cars sold. It gave Europe the world's toughest car safety standards.

The introduction of the new crash tests represented a notable success for the FIA in its role as a political force. Some of the FIA's member clubs, which had lucrative deals to provide car manufacturers' roadside assistance, were nervous about disagreeing so publicly with the motor industry. Others disapproved of the FIA becoming involved in European politics at all. EuroNCAP would convince them that Max Mosley had moved in the right direction.

EuroNCAP was formally set up in 1996 and published its first results in February 1997. Its crash test procedures were broadly in line with the forthcoming EU regulations – a 56km/h (35mph) frontal crash into an offset and deformable barrier and a 50km/h (30mph) side

impact at a height of 300mm. But where legislation sets only minimum standards for integrity, EuroNCAP could provide comparative data showing how far an individual model exceeded the legal requirement.

It is worth noting here that the EU legislation does not require the fitting of airbags but that this equipment is essential for a good result in the EuroNCAP tests. The crash test car's dummy occupants are of a standard type, with instruments measuring the various forces on them during the impact. From these figures, and an examination of the vehicle after the crash, experts can assess the degree of injury to real people that would be likely in an equivalent road accident.

The test regime of EuroNCAP was based on procedures developed by the insurance industry in the States. Britain's Transport and Road Research Laboratory had studied the European application of the American programme and asked the FIA for advice and assistance. Some member clubs, notably the ADAC in Germany, were already carrying out such tests, as were government departments in the Netherlands and Sweden. At the suggestion of the FIA they pooled resources for this Europe-wide programme, and other automobile clubs, as well as consumers' associations and, indeed, the EU itself, were to become involved as sponsors and to publicize the results. FIA president Max Mosley was the first chairman of EuroNCAP.

The idea was to give star ratings so that the buyers could compare directly the safety provisions of cars of the same size and type. When it became clear that the public was taking notice, the car companies whose products had not done well in the initial batch of tests denounced this 'unofficial' safety league table

and called on the EU to stop its funding.

Now all concerned accept that EuroNCAP is a successful mechanism for raising safety standards. There are star ratings for a combination of the results for the frontal crash (increased to 64km/h, 40mph) and side impact tests, and for another test that assesses the likely injuries to a pedestrian hit by the car travelling at 40km/h (25mph). EuroNCAP also publishes percentage points scores for each test. A later development was the head protection test in which the car is propelled sideways at 29km/h (18mph) into a rigid pole. This made a five-star result achievable.

At the beginning, four-star cars were exceptional and two stars not unusual. Now four stars are the norm and manufacturers that have five-star models are keen to advertise the fact. Those cars with embarrassingly low scores have either been withdrawn from the market or modified and improved. The data suggests that a driver or front seat passenger is 37 per cent more likely to survive an accident in a five-star car than in one that meets the minimum standard set by the latest legislation.

EuroNCAP achieved what 30 years of American laws, safety activist Ralph Nader, and several highly publicized vehicle recalls failed to do: it made safety an important factor in the car-buying decision.

In 1998, the FIA took an active role in setting up the first genuinely pan-European road safety campaign. Backed by the EC, national governments and its member clubs, the '10 seconds' campaign was to raise awareness of the preparations that all drivers and passengers should take before the start of every car journey. In other words, to use their seat belts. Motor sport personalities including Formula 1 World Champion Michael Schumacher and World



*Ayrton Senna's death in 1994 led quickly to the introduction of additional cockpit protection.*

Rally Champion Carlos Sainz supported this campaign. Members of the public were invited to ride on a sprung sled to experience the forces involved in an impact and the value of a seat belt. 'Ten seconds that can save your life' proved a powerful message.

The safety working group established by the FIA World Motor Sport Council after Ayrton Senna's death concluded that the only acceptable safety objective should be zero fatalities and serious injuries. That required a 'systems approach' to the problem, which involved not only the driver and car but also the circuit infrastructure and the administration of the event. It was assumed that accidents would happen; the challenge was to minimize the effects. The FIA called this Formula Zero.

A road safety programme called Vision Zero was introduced in Sweden in 1997. It emphasized that deaths and personal injuries had to be

eliminated, but did not assume that all accidents could be avoided. Human beings will make mistakes but those should not lead to loss of life or serious injury. Vision Zero is based on shared responsibility for safety between road users and those who are in charge of the structure and function of the road transport system.

There was a realization that these two strategies – one for motor racing, the other for road safety – were, in principle, the same. In 95 per cent of road accidents, driver error is a contributory factor. But with the Formula Zero approach, changing driver behaviour through information, education and training is combined with the consideration of the road environment in which this behaviour takes place.

In a policy document issued in 2001, the FIA identified four priority areas to improve driver safety over a 10-year period: education (including more advanced training, particularly



*In the FLA's 'ten seconds' seat belt campaign people were invited to experience the forces of a head-on impact.*

for new and young drivers); the use of seat belts for every journey; a responsible attitude to speed (by drivers and authorities, who should set speed limits to engender compliance); and a continuing awareness campaign on the dangers of driving under the influence of alcohol or drugs. Car safety was covered by the tougher crash test legislation and EuroNCAP but more attention was required to pedestrian safety and child seats. Finally, it pointed out that the benefits from raising driving standards and the safety design of cars would be undermined if roads were unsafe or poorly maintained. Road design and modernization are central to the Formula Zero strategy. The FIA called for a recognized EU-wide road audit system along the lines of the European Road Assessment Programme (EuroRAP) which identifies and grades roads that pose an unacceptable safety risk. The FIA is an active partner in EuroRAP.

While the safety programme was gaining momentum, the FIA also began to play a leading role in the drive towards cleaner cars. This was, in a sense, development of the policy formulated at the 1992 Round Table held at the Rio 'Earth Summit'. In a joint statement in 1996, the AIT and the FIA declared their support for the goals of the 1992 United Nations Framework Convention on Climate Change but expressed concern about the European Commission's approach to carbon dioxide emission from passenger cars. The EC had issued a document proposing controls but seemed to disregard the fact that cars accounted for only 12 per cent of total carbon dioxide emissions in the EU and only half the CO<sub>2</sub> emissions from the transport sector.

The FIA took an early initiative on carbon sequestration. This approach, complimentary to reducing the burning of fossil fuels, increases the ability of the earth to re-absorb greater amounts

of carbon dioxide. Sequestration occurs naturally through plant photosynthesis, the reaction of carbon dioxide and sunlight, so planting and growing trees is a 'carbon offset' project which can make a contribution to international efforts to curb global warming. By its very nature, Formula 1 racing cannot be a fuel economy (and therefore CO<sub>2</sub> reducing) example for everyday cars. To deflect possible criticism of Formula 1's consumption, the FIA became a founder participant in *Scolec Té*, a pilot programme for carbon sequestration and community forestry in Chiapas, Mexico. Through the International Carbon Sequestration Federation, the FIA agreed to purchase 5000 tons of 'proto-carbon credits' per year, which offsets the CO<sub>2</sub> emissions from a season of Formula 1 racing.

In November 1997, in Brussels, a joint AIT/FIA Euroconference, Air Quality & the Car, brought together all the key participants in the 'Auto-Oil' package and resulted in a series of recommendations which subsequently passed into European law. Auto-Oil, which started in 1993, was a revolutionary idea because for the first time it brought together the industries on the two sides of the vehicle emissions issue – the vehicle and engine manufacturers and the fuel companies. The EC, governments of the EU states, the FIA, AIT and other non-governmental organizations were also involved.

This was concerned less with carbon dioxide and global warming and more with harmful pollutants: carbon monoxide, hydrocarbons, oxides of nitrogen and particulates. The EU legislation that emerged in 1998 after long discussions at the Auto-Oil forum included tough, staged regulations to control these emissions (up to the so-called 'Euro 4' which will apply from 2005).



*Modern screen-based electronic systems can provide navigation and diagnostic information.*

Complying with the new rules would require an improvement in the quality of petrol and diesel fuel – notably a sharp reduction in sulphur content – something for which the FIA had been campaigning. President Mosley said: ‘The car is often depicted as the principal cause of poor air quality. In fact, the latest cars are 40 times cleaner than vehicles of the past. They can be made cleaner still. The 21st century must become the era of the ultra-clean car. The technology exists to make this possible.’

Of particular importance to the FIA and AIT’s member clubs was its campaign to gain unrestricted access to on-board diagnostic systems (OBDS) in cars. Already mandatory in the USA, these electronic devices were about to become compulsory for new models in the EU. Their purpose was to detect and warn of any emissions-related malfunction. While uniform connectors and the provision of repair information were guaranteed in the United

States by the Clean Air Act, manufacturers in Europe had each developed their own systems, accessible only to official dealers. This made the job of roadside assistance services run by FIA members difficult and sometimes impossible. The legislation – and the EU block exemption regulations affecting the motor trade – required manufacturers to make the OBD electronic codes generally available.

The OBD stance was a specific practical requirement, generally applauded by FIA member clubs. But the Federation’s position in the broader environmental picture took some members by surprise as it was standing alongside pressure groups which were regarded as anti-car. How could that liaison be reconciled with the FIA’s founding objective of promoting the cause of automobilism?

This was, indeed, an intellectual change of position. Max Mosley reasoned that applying all available technology to make the cars as clean as

possible removed the arguments that opponents might have for restricting their use. By reducing the social costs of the car, there would be no reason for city centre bans. Traffic congestion would remain a problem but, with safe and ultra-clean cars, that was not a matter of public health.

In fact, congestion was, and is, one of the foremost issues for the future. Recognizing this, the FIA became involved in ERTICO, Intelligent Transport Systems and Services – Europe, a body that exists to accelerate the introduction of electronic systems that promise to enhance safety and mobility. In June 2001 Max Mosley was elected chairman of the supervisory board of this public/private partnership embracing 90 organizations from the transport and electronics industries, public authorities, infrastructure and service providers, and research institutes. Its objective is to make ITS, Intelligent Transport Systems, part of everyone's daily life.

ITS has a role in private and public transport, commercial vehicles, and traffic management. Examples where it can bring safer and more efficient use of cars include: telematics providing traffic information; navigation systems that not only find the route but also locate a parking space; driver assistance like collision warning and avoidance and vision enhancement; and speed alert and control.

Max Mosley says: 'ITS is widely accepted as the way forward to achieving the goal of sustainable mobility while at the same time improving the quality of life. Already the great strides made in ITS technology are improving the safety of our roads, decreasing journey times and encouraging multi-mode transport use whilst alleviating the impact of transport on the environment.'

This broad application of electronics is the 21st century equivalent of mechanical evolution of the motor car that has occupied the FIA through most of its first century. In this field, perhaps more than any other, partnership is the key. Inventing and producing something brilliant is not enough; vehicles are becoming integrated with the infrastructure. Manufacturers and service providers must work to the same rules.

Providing a global conduit, an independent international forum, has always been a strength of the FIA. In the past, it has regularly called for – but only occasionally achieved – standardization of vehicle and traffic regulations. But in 1998 the FIA was able to make an important contribution to an international treaty on future vehicle standards negotiated by the United Nations Economic Commission for Europe. This gained global scope after a 1996 conference on the subject in Washington DC, USA, that was co-sponsored by the FIA. Working Party 29 of the UNECE was renamed the World Forum for the Harmonization of Vehicle Standards.

Previous attempts at harmonization had been thwarted by countries that used arcane regulations as trade barriers to protect their domestic industries. There is no room for that today. That is partly because of the globalization of the motor industry.

But a more important reason is that while we can admire the cult of the individual, as a personality, a car, or a behaviour trait, freedom of movement in an ever-more crowded world requires organization by the application of technology. And that means universal standards, with everyone, at least technically, speaking the same language.

ALWAYS USE YOUR  
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FIA Foundation  
for the Automobile and Society





## A SOLID FOUNDATION

Monies received from the commercial rights of Formula 1 racing have been used to establish the independent FIA Foundation for the Automobile & Society. Its brief is to conduct and encourage research that will pursue the original objective of the FIA: to ensure the unity of the automobile movement and safeguard its interests in all countries. The FIA Foundation took over work in progress in safety and environmental issues and provided the catalyst for the first United Nations debate on global road safety in 2004. It also published *The Automobile and Society*, an important study on the impact of the car in the modern world and the implications for the future. In 2004 the FIA Motor Sport Safety Institute took over some of the research, partly funded by the FIA Foundation.

The sale of a 100-year lease on the commercial rights for Formula 1 racing allowed the FIA Foundation for the Automobile & Society to be established with an endowment of 300 million dollars. The Foundation is a charitable trust, registered in the United Kingdom and both legally and financially independent of the Federation. It has members in its own right, national motoring clubs from the FIA and AIT.

When it was formed in 2001, the Foundation took from the Federation responsibility for the background work on safety – in motor sport and on the road – exhaust emissions and vehicle regulations, as well as education and academic studies on the changing role of the car in society. In addition to its own research it is able to offer support to other projects through a grants programme, provided that applications meet the Foundation's objectives. Those are:

- To disseminate the results of research and provide information in any matters of public interest which include road safety, automobile technology, the protection and preservation of human life and public health, transport and public mobility and the protection of the environment.

- To promote the improvement of safety in motor sport, and of drivers, passengers, pedestrians and other road users.

Its trustees are drawn mostly but not exclusively from the senior officers of the FIA (among those from outside the organization is Ari Vatanen, the Finnish MEP and 1981 World Rally Champion). The founding chairman is Rosario Alessi, the distinguished former

president of the Automobile Club of Italy. David Ward has been the Foundation's director-general from the outset.

The Foundation continues the FIA's participation in EuroNCAP, EuroRAP and the carbon sequestration programme in Mexico. A glance at the report of its activities for 2002 shows that in its first year it ran six major projects internally and gave financial support, totalling more than 4 million Euros, to 23 others.

For some years, the FIA had sought to push road safety higher on the international public policy agenda. The environmental lobby had been successful in getting the attention of governments and international bodies in the 1990s; in the first decade of the 21st century, road safety should raise its political profile.

So, at the core of the Foundation's road safety work is an effort to highlight the rapidly rising number of deaths and serious injuries worldwide. The World Health Organisation estimates that 80 per cent of the 1 million-plus road deaths a year are in developing countries and that by 2020 road traffic injuries will have risen from ninth to third place globally as a cause of death or disability.

The Foundation organized a major conference on global road safety, Sharing Responsibility for Safer Roads, in London in 2003. Speakers included the director-general of the WHO, Gro Harlem Brundtland, transport ministers from the United Kingdom and Costa Rica, representatives from the car industry, the World Bank, and the Ambassador of Oman to the UN, Fuad Mubarak Al Hinai. Following this conference the WHO designated 2004 World Health Day (7 April) to road safety and the Oman Ambassador tabled resolutions to the UN General Assembly in New York, culminating in a unique debate of global road



*April 14, 2004 – United Nations General Assembly holds its first ever debate on road safety.*

safety issues on 14 April.

Road safety has never previously had this kind of attention at a world level. The Foundation has helped to finance the WHO's five-year strategy for road traffic injury prevention, supported the publication of a joint WHO-World Bank report on the issue, and encouraged the creation of a focal point within the United Nations to deal with road safety issues.

Although the UN has a maritime organization and an aviation authority, there is no dedicated agency for road safety. The Foundation has been a leading advocate for the formation of such a coordinating body linked to the United Nations Economic Commission for Europe's working parties for traffic safety and vehicle standards. In January 2004, these road safety activities received strong endorsement from UN secretary-general Kofi Annan. He applauded the FIA Foundation for 'their leadership and the initiative they have taken'.

Continuing to think globally, the FIA Foundation joined the Partnership for Clean Fuels and Vehicles, an organization founded after the 2002 World Summit on Sustainable Development in Johannesburg, South Africa, with the aim of improving fuel standards and reducing vehicle emissions in developing countries where urban air pollution is a serious and growing problem.

The Partnership, which is run in conjunction with the United Nations Environment Programme (UNEP) in Nairobi, Kenya, assists in the transfer of experience and technology from the industrialized world. Among its objectives is the phasing-out of leaded petrol. The Foundation is enlisting the help of member clubs in this campaign.

The success of the EuroNCAP in providing star ratings as an index of car safety led the Foundation to a similar formula for the toxic emissions and carbon dioxide output of cars sold in Europe. For the EcoTest, the research



*Michael Schumacher flanked by David Ward, director-general of the FIA Foundation, and Seamus Brennan, Irish transport minister, at the signing of the European Road Safety Charter in Dublin, April 2004.*



*Rosario Alessi, past president of the FIA Senate, is the founding chairman of the FIA Foundation for the Automobile and Society.*

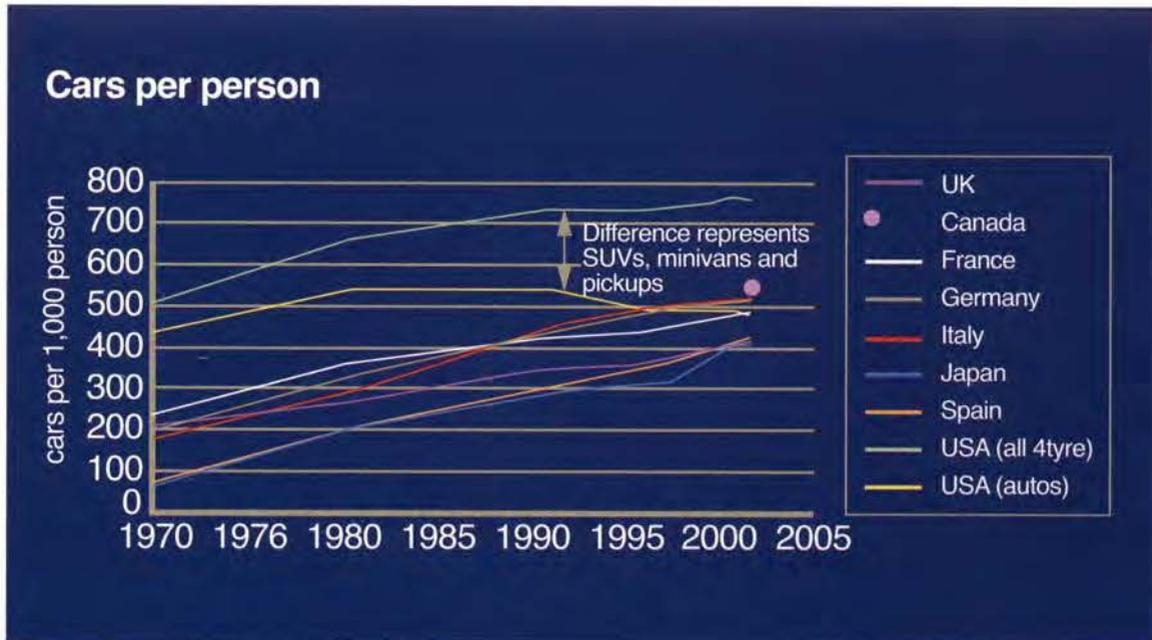
laboratory of the ADAC in Germany was commissioned to test a series of popular cars and give them star ratings on a combination of exhaust emissions; as with EuroNCAP, this produced league tables of improvement over the legal requirements for various classes of car. The results were publicized and posted on the FIA Foundation website. It is fair to say that the car buying public has not accepted the EcoTest with the same enthusiasm as the safety tests, probably because results have to accommodate two quite different factors – toxic pollutants and carbon dioxide, which is not harmful to humans but is nevertheless a contributor to global warming.

The major report, *The Automobile and Society*, published in 2003, is an essential bedrock for the Foundation's work on sustainable mobility. By examining the impact

of the car on modern industrialized society, it evaluates the opportunities and problems of car use and provides indications for the future. Introducing the report, Rosario Alessi, chairman of the FIA Foundation, said: 'The way in which rich industrialized societies live with the car today will, in many respects, be reflected in the ways new automobile societies develop tomorrow.'

Apart from bringing together all the relevant data – numbers of cars, distance travelled, traffic density, safety and environmental statistics, transport costs and expenditure – the study surveyed 12,000 motorists in eight countries: Canada, France, Germany, Italy, Japan, Spain, United Kingdom and United States of America.

The report starts with the premise that car use had more than doubled in the last quarter of



*A graph by the FIA Foundation showing the world car population increase over 30 years.*

the 20th century and that in the next 20 years it is predicted to increase by 40 per cent in industrialized countries and by 90 per cent across the whole world. Nowhere is there evidence that motorization has reached a limit; in the United States there are already more cars (or personal vehicles, as light trucks, sport-utility and multi-purpose vehicles are included) than there are adult persons. A great majority of those interviewed in this international study depend on the car, would find it difficult to live without one, and are prepared to absorb a surprising amount of financial pain to continue using it.

The prospects, held out by OECD and EU policy statements, of de-coupling transport demand from economic growth – reducing car use in favour of other forms of transport, by road charging and other fiscal measures – are not promising. ‘In many respects’, the report

observes, ‘society has restructured itself around the car. Governments are only too aware how sensitive the public can be to taxation and constraint of their mobility.’

It proposes a re-mixing of the blend of policy instruments, combining technical progress (the cars, roads and ITS) with demand management (to tackle traffic congestion) to create a consensus for change. This approach recognizes that the car will remain the transport mode of choice, but is much safer and cleaner than before and that technology will bring more progress that can further reduce the negative effects of the car.

This is the FIA Foundation supporting one of the FIA’s founding principles – safeguarding the interests of the automobile movement – while facing the realities of the 21st century. The Foundation also looked at the issue from the opposite direction. It provided funding for a



*This dramatic accident at Le Mans led the FIA Foundation to examine the aerodynamic stability of racing sports cars.*

high-level symposium on urban mobility organized by the Automobile Club of Italy in October 2002 and commissioned a further international study on the mobility of the poorest and most excluded sections of society, which was published in 2004.

About 50 per cent of the FIA Foundation's research funds have been used for motor sport safety projects. In Formula 1 this included working with DaimlerChrysler, the parent company of Mercedes-Benz, on the adaptation of the HANS neck support device which had been developed in the United States and which became compulsory for the 2003 season; research on improving wheel tethers to reduce the risk of wheels flying off cars in race crashes; and the replication of accidents to see what lessons could be learned for improved safety. It carried out an urgent programme of research into the aerodynamic stability of racing sports

cars – some of which had taken to the air, in one case with fatal consequences. The result was a proposal that was adopted by the FIA World Motor Sport Council and became part of the 2004 technical regulations. Fire-resistant clothing for rally drivers to use in hot conditions was also the subject of study as were improved fences for motor racing circuits, and a crash test programme for karts with the aim of making this starting point in motor sport as safe as possible.

After two busy years of this work, the FIA and the FIA Foundation could see an advantage in separating the motor sport research and entrusting it to a specially-created body with specific expertise. Thus, a proposal was made at the World Motor Sport Council in spring 2004 to form the FIA Institute for Motorsport Safety. This was to be established in Paris on the same non-profit legal and fiscal basis as the FIA. The



*Racing driver protection – the HANS neck support device.*

chairman, Professor Sid Watkins, and technical adviser, Peter Wright, both head FIA sporting commissions.

The Institute assumes responsibility for non-regulatory safety activities for motor sport. These include research into vehicle design, driver equipment, circuit design, rescue facilities and race organization; training of officials and circuit personnel in safety procedures; and monitoring motor sport safety trends.

The FIA Foundation will be the primary source of finance for the Institute, but instead of requiring a separate application for each research project it would be possible for the Foundation

to make a single annual grant to cover all the Institute's project costs. The Institute will also obtain funding from motor manufacturers and other commercial organizations active in motor sport.

Membership of the Institute is open only to FIA-affiliated national automobile clubs, but associate membership (without voting rights) is available to other interested parties, from manufacturers to circuit owners and research laboratories. The inaugural general meeting of the FIA Institute for Motorsport Safety was due to take place in October 2004, at the time of the FIA General Assembly.



*Professor Sid Watkins heads the newly-formed FIA Motor Sport Safety Institute.*





## THE ROAD AHEAD

The centenary of the FIA in 2004 was an appropriate point to streamline the organization. The World Council for Touring and the Automobile became the World Council for Mobility and the Automobile and adopted the regional structure of the Alliance Internationale de Tourisme (AIT) in expectation of a merger between the two organizations. The World Motor Sport Council, as the governing body of motor sport, had ceased direct involvement with commercial affairs. The FIA Foundation and FIA Motor Sport Safety Institute exist as independent non-profit bodies to conduct and commission research. The FIA Academy is a high-level committee to award the FIA World Prize for the Automobile and FIA Gold Medals to individuals or organizations who have made substantial contributions to international motor sport.

The Motor Sport Safety Institute is the final piece of a wide-ranging reorganization due for completion in the FIA's centenary year. As we have seen, the FIA's structure has changed extensively over 100 years. That was necessary, to reflect the evolution of the car and motoring and the sport that is inextricably linked.

This book is, inevitably, a forest of federations, commissions and abbreviations: enough to confuse even the most avid reader. The chart opposite is an attempt to clarify the organization as it was in October 2004.

Independence is a key to the FIA's success. It is a not-for-profit organization. The information and advice that it provides through its member clubs is trusted by the consumer. Where necessary, to support its aim of defending the motorist, it challenges the motor industry and the legislators. It has a mission to improve the safety and environmental impact of everyday motoring and the political influence to get results.

Where there are cars, there will be motor sport. The FIA's parallel role as the governing body of motor sport also relies on its independence. The separation of sporting power and commercial interests agreed with the European Competition Commission underlines this. Indeed, the FIA is the first major regulatory body for world sport to be recognized officially and has been praised in the EU and elsewhere for the transparent way it conducts its affairs.

The FIA runs motor sport with a permanent staff of some 50 people – far fewer than most comparable international sporting bodies – and operates in this immensely

complex field with professionalism and a clear understanding of its fast-changing character. The Court of Appeal, the ultimate authority for all the Federation's activities, continues to be entirely separate from the FIA's administration and has also opened its doors to the media, in the interests of transparency.

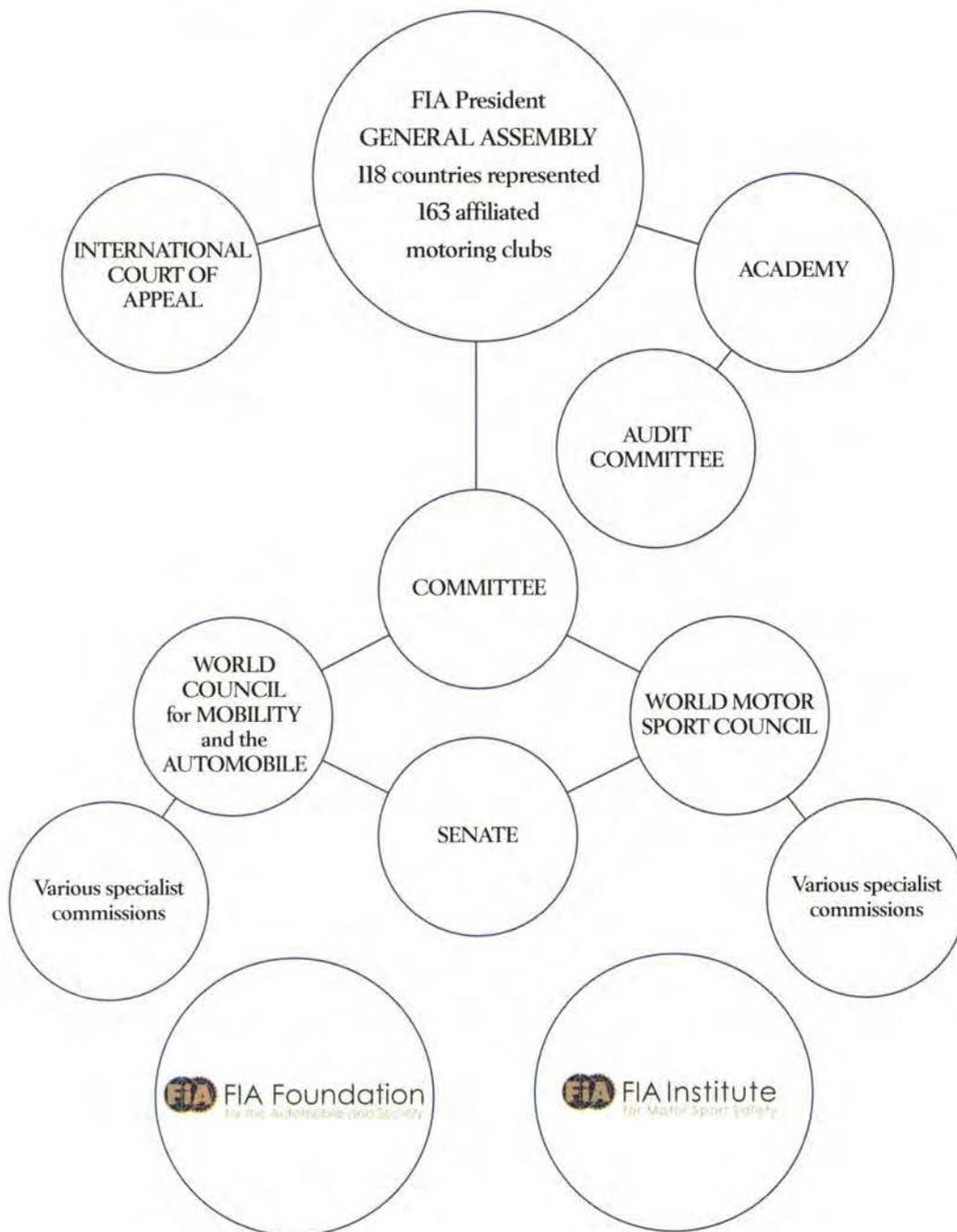
Links with other world organizations always have been important in the FIA's work. In the 1930s, the Federation had the same sort of consultative status at the League of Nations as it does, through the FIA Foundation, with the United Nations today. And, because of its dual role as a defender of mobility and the rule-maker for motor sport, the FIA has close relations with national governments and the motor industry internationally.

Its unique position in the automotive world made it appropriate to establish an FIA Academy. This is a committee of six senior delegates appointed by but separate from the FIA General Assembly, which is charged with choosing individuals who have made a substantial contribution to international motor sport to receive FIA Gold Medals and award an organization or an individual the FIA World Prize for the Automobile. Fittingly, these prestigious awards were first made at the FIA's centenary celebration in October 2004.

The FIA today has a very different attitude to the association that was formed in Bad Homburg in 1904. What was a private, aristocratic, club of clubs is infinitely broader in scope and accessibility. And yet it was the vision of those 13 founder members that inspired the development of the strong independent body which thrives as the *Fédération Internationale de l'Automobile* 100 years later.



FEDERATION INTERNATIONALE de L'AUTOMOBILE



FIA MEMBER CLUBS 2004

National motor clubs affiliated to the Fédération Internationale de l'Automobile are listed by country and include the official abbreviation, area of activity (M – Mobility, S – Sport) and date of joining.

<p><b>(A)</b> Autriche Austria Austria</p> <p>Osterreichischer Automobil-, Motorrad- und Touring Club (ÖAMTC) MS 1946</p>	<p><b>(BDS)</b> Barbade Barbados Barbados</p> <p>Barbados Rally Club (BRC) MS 1994</p>
<p><b>(AND)</b> Andorre Andorra Andorra</p> <p>Automóbil Club d'Andorra (ACA) MS 1956</p>	<p><b>(BG)</b> Bulgarie Bulgaria Bulgaria</p> <p>Union des Automobilistes Bulgares (UAB) MS 1963</p>
<p><b>(ARM)</b> Arménie Armenia Armenia</p> <p>Fédération de l'Automobile d'Arménie (FAA) MS 1996</p>	<p><b>(BIH)</b> Bosnie Bosnia Bosnia</p> <p>Bosnia and Herzegovina Automobile Club (BIHAMK) MS 1994</p>
<p><b>(AUS)</b> Australie Australia Australia</p> <p>Australian Automobile Association (AAA) M 1972</p> <p>Confederation of Australian Motor Sport Ltd (CAMS) S 1960</p>	<p><b>(BOL)</b> Bolivie Bolivia Bolivia</p> <p>Automóvil Club Boliviano (ACB) MS 1946</p>
<p><b>(AZ)</b> Azerbaijan Azerbaijan Azerbaijan</p> <p>Azerbaijan Auto Sport Federation (AASA) S 2000</p>	<p><b>(BR)</b> Brésil Brazil Brasil</p> <p>Automóvel Club do Brasil (ACB) M 1926</p> <p>Associação Automobilística do Brasil (AAB) M 2002</p> <p>Confederação Brasileira de Automobilismo (CBA) S 1970</p>
<p><b>(B)</b> Belgique Belgium Belgia</p> <p>Royal Automobile Club de Belgique (RACB) MS 1904</p>	<p><b>(BRN)</b> Bahrein Bahrain Bahrayn</p> <p>Bahrain Motor Federation (BMF) MS 1997</p>
<p><b>(BD)</b> Bangladesh Bangladesh Bangladesh</p> <p>Automobile Association of Bangladesh (AAB) MS 1970</p>	<p><b>(BU)</b> Burundi Burundi Burundi</p> <p>Club Automobile du Burundi (CAB) MS 1982</p>

<p><b>BY</b> Bielorussie Belarus Belorussia Fédération de l'Automobile de Bielorussie (FAB)</p>	MS 1993	<p><b>CR</b> Costa-Rica Costa Rica Costa Rica Automóvil Club de Costa Rica</p>	MS 1957
<p><b>C</b> Cuba Cuba Cuba Federación Automovilismo y Kartismo de Cuba (FAKC)</p>	MS 1995	<p><b>CY</b> Chypre Cyprus Chipre Cyprus Automobile Association (CAA)</p>	MS 1966
<p><b>CDN</b> Canada Canada Canada Canadian Automobile Association (CAA) Autorité Sportive Nationale du Canada (ASN CA)</p>	M 1961 S 1989	<p><b>CZ</b> Tchèque (République) Czech Republic Republica Checa The Autoclub of the Czech Republic (ACCR) Ustredni Automoklub Ceské Republiky (ÚAMK CR)</p>	MS 1992 M 1992
<p><b>CH</b> Suisse Switzerland Suiza Automobile Club de Suisse (ACS) Touring Club Suisse (TCS)</p>	MS 1904 M 1998	<p><b>D</b> Allemagne Germany Alemania Allgemeiner Deutscher Automobil-Club (ADAC) Automobilclub von Deutschland (AVD) Deutscher Motor Sport Bund (DMSB)</p>	M 1951 M 1951 S 1985
<p><b>CI</b> Côte d'Ivoire Ivory Coast Costa de Marfil Fédération Ivoirienne de Sport Automobile et Autres Sports Mécaniques (FISA)</p>	S 1971	<p><b>DK</b> Danemark Denmark Dinamarca Dansk Automobil Sports Union (DASU)</p>	S 1978
<p><b>CL</b> Sri-Lanka Sri Lanka Srilanka Ceylon Motor Sports Club (CMSC)</p>	S 1963	<p><b>DOM</b> Dominicaine (République) Dominican Republic República Dominicana Federación Dominicana de Automovilismo Inc (FDA)</p>	S 1992
<p><b>CN</b> Chine China China Federation of Automobile Sports of the People's Republic of China (FASC)</p>	MS 1983	<p><b>DZ</b> Algérie Algeria Argelia Fédération Algérienne des Sports Mécaniques (FASM) Automobile Club et Randonnées d'Algérie Touring Club d'Algérie (TCA)</p>	MS 1987 M 1993 M 1994
<p><b>CO</b> Colombie Colombia Colombia Touring y Automóvil Club de Colombia (ACC)</p>	MS 1928		

AFFILIATED NATIONAL CLUBS

<p><b>E</b> Espagne Spain España</p> <p>Real Automóvil Club de Catalunya (RACC) M 1998</p> <p>Real Automóvil Club de España (RACE) M 1904</p> <p>Real Federación Española de Automovilismo (RFEA) S 1981</p>	<p><b>ETH</b> Ethiopie Ethiopia Etiopía</p> <p>Ethiopian Motor Association (EMA) MS 1997</p>
<p><b>EAK</b> Kenya Kenya Kenya</p> <p>The Automobile Association of Kenya (AAK) MS 1974</p>	<p><b>F</b> France France France</p> <p>Automobile Club de France (ACF) M 1904</p> <p>Fédération Française des Automobile-Clubs et des Usagers de la Route (FFAC) M 1998</p> <p>Fédération Française du Sport Automobile (FFSA) S 1968</p>
<p><b>EAT</b> Tanzanie Tanzania Tanzania</p> <p>Automobile Association of Tanzania (AAT) MS 1987</p>	<p><b>FIN</b> Finlande Finland Finlandia</p> <p>Automobile and Touring Club of Finland (ATCF) M 1920</p> <p>Finnish Automobile Sport Federation (AKK-Motorsport) S 1980</p>
<p><b>EAU</b> Ouganda Uganda Uganda</p> <p>The Automobile Association of Uganda (AAU) M 1995</p> <p>Federation of Motor Sports Clubs of Uganda (FMU) S 2001</p>	<p><b>FL</b> Liechtenstein Liechtenstein Liechtenstein</p> <p>Automobilclub des Fürstentums Liechtenstein (ACFL) MS 1972</p>
<p><b>EC</b> Equateur Ecuador Ecuador</p> <p>Automóvil Club del Ecuador (ANETA) MS 1948</p>	<p><b>GB</b> Grande-Bretagne Great Britain Great Britain</p> <p>The Royal Automobile Club (RAC) M 1904</p> <p>RAC Motoring Services M 2000</p> <p>The Automobile Association Ltd (AA) M 1998</p> <p>Motor Sports Association Ltd (MSA) S 1998</p>
<p><b>ES</b> El Salvador El Salvador El Salvador</p> <p>Automóvil Club de Salvador (ACES) MS 1972</p>	<p><b>GE</b> Georgie Georgia Georgia</p> <p>Georgian Automobile Federation (GAF) MS 1995</p>
<p><b>EST</b> Estonie Estonia Estonia</p> <p>Estonian Autosport Union (EASU) MS 1993</p>	<p><b>GR</b> Grèce Greece Greece</p> <p>Automobile and Touring Club of Greece (ELPA) MS 1929</p>
<p><b>ET</b> Egypte Egypt Egypt</p> <p>Automobile &amp; Touring Club of Egypt (ATCE) MS 1922</p>	

<p><b>(H)</b> Hongrie Hungary Magyar Autóklub (MAK) M 1922 National Automobilsport Federation of Hungary (MNASZ) S 1994</p>	<p><b>(IRL)</b> Irlande (Eire) Ireland Royal Irish Automobile Club (RIAC) S 1929</p>
<p><b>(HK)</b> Hong-Kong Hong Kong Hong Kong Automobile Association (HKAA) MS 1976</p>	<p><b>(IS)</b> Islande Iceland Icelandic Motorsport Association (LIA) S 1992</p>
<p><b>(HKJ)</b> Jordanie Jordan The Royal Automobile Club of Jordan (RACJ) MS 1956</p>	<p><b>(J)</b> Japon Japan Japan Automobile Federation (JAF) MS 1964</p>
<p><b>(HR)</b> Croatie Croatia Hrvatski Autoklub (HAK) M 1992 Croatian Car &amp; Karting Federation (CCKF) S 1992</p>	<p><b>(JA)</b> Jamaïque Jamaica Jamaica Motoring Club (JMC) MS 1996</p>
<p><b>(I)</b> Italie Italy Automobile Club d'Italia (ACI) MS 1905</p>	<p><b>(KWT)</b> Koweït Kuwait Kuwait International Automobile Club (KIAC) MS 1967</p>
<p><b>(IL)</b> Israël Israel Automobile and Touring Club of Israel (MEMSI) MS 1952</p>	<p><b>(KZ)</b> Kazakhstan Kazakhstan Automotorsport Federation of Republic Kazakhstan (AFRK) S 1992</p>
<p><b>(IND)</b> Inde India The Federation of Motor Sports Clubs of India (FMSCI) M 1976 The Federation of Indian Automobile Associations (FIAA) M 2002 Motorsports Association of India (MAI) S 2000</p>	<p><b>(L)</b> Luxembourg Luxembourg Automobile Club du Grand Duché de Luxembourg (ACL) MS 1935</p>
<p><b>(IR)</b> Iran Iran Touring and Automobile Club of the Islamic Republic of Iran (TACI) M 1952</p>	<p><b>(LAR)</b> Libye Libya Automobile and Touring Club of Libya (ATCL) MS 1967</p>

AFFILIATED NATIONAL CLUBS

<p><b>LT</b> Lituanie Lithuania Lituanía</p> <p>Lithuanian Automobile Club (LAC) M 1997</p> <p>Association of Lithuanian Automobilists (LAS) M 1992</p> <p>The Lithuanian Automobile Sport Federation (LASF) S 1994</p>	<p><b>MK</b> Fyrom (Macédoine) Macedonia Macedonia</p> <p>Auto-Moto Sojuz na Makedonija (AMSM) MS 1993</p>
<p><b>LV</b> Lettonie Latvia Letonija</p> <p>Latvijas Automobiliu Federācija (LAF) S 1994</p>	<p><b>MN</b> Mongolie Mongolia Mongolia</p> <p>Mongolian Automobile Motorcycle Sport's Federation (MAMSF) MS 1998</p>
<p><b>MA</b> Maroc Morocco Marroccos</p> <p>Royal Automobile Club Marocain (RACM) M 1959</p> <p>Fédération Royale Marocaine de Sport Automobile (FRMSA) S 1995</p>	<p><b>MO</b> Macao Macau Macao</p> <p>China-Macao Autosports Club (CMAC) MS 1993</p>
<p><b>MAL</b> Malaisie Malaysia Malaysia</p> <p>The Automobile Association of Malaysia (AAM) MS 1963</p>	<p><b>MS</b> Maurice (Ile) Mauritius La isla Mauricio</p> <p>Club Automobile de Rallye (CAR) S 1993</p>
<p><b>MC</b> Monaco Monaco Monaco</p> <p>Automobile Club de Monaco (ACM) MS 1930</p>	<p><b>N</b> Norvège Norway Norvegia</p> <p>Royal Norwegian Automobile Club (KNA) MS 1908</p>
<p><b>MD</b> Moldavie Moldavia Moldavia</p> <p>Moldavian Association of International Automobile Transport (AITA) M 1993</p>	<p><b>NAM</b> Namibie Namibia Namibia</p> <p>Namibia Motor Sport Federation (NMSF) S 1998</p>
<p><b>MEX</b> Mexique Mexico Mexico</p> <p>Automóvil Club de Mexico (ANA) M 1933</p> <p>Organización Mexicana del Deporta Automovilistico Internacional (OMDAI) S 1986</p>	<p><b>NL</b> Pays-Bays Netherlands Les Payses Bajos</p> <p>Koninklijke Nederlandse Aotomobiel Club (KNAC) M 1904</p> <p>Koninklijke Nederlandse Toeristenbond (ANWB) M 2000</p> <p>KNAC Nationale Autosport Federatie (KNAF) S 1988</p>
	<p><b>NZ</b> Nouvelle Zélande New Zealand Nueva Zelanda</p> <p>MotorSport New Zealand Inc (MSNZ) S 1971</p>

<p><b>OM</b> Oman Oman Oman Oman Automobile Association (OAA)</p>	MS	1979	<p>Qatar Motor and Motor Cycle Federation (QMMF)</p> <p>S 2000</p>
<p><b>P</b> Portugal Portugal Portugal Automóvel Club de Portugal (ACP) Federação Portuguesa de Automobilismo e Karting (FPAK)</p>	M	1904	<p><b>RA</b> Argentine Argentina Argentina Automóvil Club Argentina (ACA)</p> <p>MS 1926</p> <p><b>RC</b> Chine de Taïpei Taiwan Taiwan Chinese Taipei Automobile Association (CTAA) Chinese Taipei Motor Sport Association CTMSA)</p> <p>M 1991</p> <p>S 1998</p>
<p><b>PA</b> Panama Panama Panamá Asociación Automovilística de Touring y Deportes de Panamá (ASAI)</p>	MS	1978	<p><b>RCB</b> Congo Congo Congo Fédération Automobile de la République Démocratique du Congo (FEDACO)</p> <p>MS 1967</p>
<p><b>PE</b> Pérou Peru Peru Touring y Automóvil Club del Perú (TACP)</p>	MS	1937	<p><b>RCH</b> Chili Chile Chile Automóvil Club de Chile (ACCHI) Federación Chilena de Automovilismo Deportivo (FADECH)</p> <p>M 1928</p> <p>S 1975</p>
<p><b>PK</b> Pakistan Pakistan Pakistan Automobile Association of Pakistan (AAP) Pakistan Motor Sports Club (PMSC)</p>	M	1995	<p><b>RI</b> Indonésie Indonesia Indonesia Ikatan Motor Indonesia (IMI)</p> <p>MS 1935</p>
<p><b>PL</b> Pologne Poland Polonia Polski Związek Motorowy (PZM)</p>	MS	1920	<p><b>RL</b> Liban Lebanon Libano Automobile et Touring Club du Liban (ATCLB)</p> <p>MS 1933</p>
<p><b>PY</b> Paraguay Paraguay Paraguay Touring y Automóvil Club Paraguayo (TACPy)</p>	MS	1952	<p><b>RM</b> Madagascar Madagascar Madagascar Fédération du Sport Automobile de Madagascar (FSAM)</p> <p>S 1994</p>
<p><b>Q</b> Qatar Qatar Qatar Qatar Automobile and Touring Club (QATC)</p>	M	1975	<p><b>RO</b> Roumanie Roumania Rumania Automobil Clubul Român (ACR)</p> <p>MS 1960</p>

AFFILIATED NATIONAL CLUBS

<p><b>(ROK)</b> Corée Korea Coreia</p> <p>Korea Automobile Association (KAA) M 1969</p> <p>Korea Automobile Racing Association (KARA) S 1996</p>	<p><b>(SCG)</b> Serbie-Montenegro Serbia and Montenegro Serbia y Montenegro</p> <p>Automobile and Motorcycle Association of Serbia and Montenegro (AMSSGC) MS 1947</p>
<p><b>(ROU)</b> Uruguay Uruguay Uruguay</p> <p>Automóvil Club del Uruguay (ACU) MS 1920</p>	<p><b>(SGP)</b> Singapour Singapore Singapur</p> <p>Singapore Motor Sports Association (SMSA) MS 1983</p>
<p><b>(RP)</b> Philippines Philippines Filipinas</p> <p>Automobile Association Philippines (AAP) MS 1952</p>	<p><b>(SK)</b> Slovaquie (République de) Slovak Republic Eslovaquia</p> <p>Národn? Automotoklub Slovenskej Republiky (NAMK) M 1994</p> <p>Slovensk? Autoturist Klub (SATC) M 2000</p> <p>Slovak Association of Motor Sport (SAMS) S 1994</p>
<p><b>(RSM)</b> Saint-Marin San Marino San Marino</p> <p>Federazione Auto Motoristica Sammarinese (FAMS) S 1970</p>	<p><b>(SLO)</b> Slovénie Slovenia Eslovenia</p> <p>Auto-moto Zveza Slovenije (AMZS) MS 1992</p>
<p><b>(RUS)</b> Russie Russia Russia</p> <p>Russian Automobile Federation (RAF) MS 1992</p> <p>Russian Federation of Autosport and Tourism (RFAST) M 1992</p>	<p><b>(SN)</b> Sénégal Senegal Senegal</p> <p>Fédération Sénégalaise de Sport Automobile et Motocycliste (FSSAM) S 1963</p>
<p><b>(RWA)</b> Rwanda Rwanda Rwanda</p> <p>Rwanda Automobile Club (RAC) MS 1997</p>	<p><b>(SYR)</b> Syrie Syria Siriya</p> <p>Automobile Club de Syrie (ACS) MS 1952</p>
<p><b>(S)</b> Suède Sweden Suecia</p> <p>Kungl Automobil Klubben (KAK) M 1905</p> <p>Svenska Bilsporförbundet (SBF) S 1969</p>	<p><b>(T)</b> Thaïlande Thailand Tailandia</p> <p>The Royal Automobile Association of Thailand (RAAT) MS 1938</p>
<p><b>(SA)</b> Arabie Saoudite Saudi Arabia Arabia Saudi</p> <p>Saudi Automobile Federation M 1989</p> <p>Saudi Automobile &amp; Touring Association (SATA) S 1995</p>	<p><b>(TN)</b> Tunisie Tunisia Tunisiya</p> <p>National Automobile Club de Tunisie (NACT) MS 1960</p>

<p><b>(TR)</b> Turquie Turkey <i>Türkiye</i></p> <p>Türkiye Tüving ve Otomobil Kurumu (TTOK) M 1937</p> <p>Turkish Automobile and Motorsports Federation (TOMSFED) S 1992</p>	<p><b>(YMN)</b> Yémen Yemen <i>Yemen</i></p> <p>Yemen Club for Touring &amp; Automobile (YCTA) MS 1996</p>
<p><b>(TT)</b> Trinidad &amp; Tobago Trinidad &amp; Tobago <i>Trinidad y Tobago</i></p> <p>Trinidad &amp; Tobago Automobile Sports Association (TTASA) S 1993</p>	<p><b>(YV)</b> Venezuela Venezuela <i>Venezuela</i></p> <p>Touring y Automóvil Club de Venezuela (TACV) MS 1949</p>
<p><b>(UA)</b> Ukraine Ukraine <i>Україна</i></p> <p>Fédération Automobile d'Ukraine (FAU) MS 1992</p>	<p><b>(Z)</b> Zambie Zambia <i>Zambia</i></p> <p>Zambia Motor Sports Association (ZMSA) S 1992</p>
<p><b>(UAE)</b> Emirats Arabes Unis United Arab Emirates <i>Emiratos Arabes Unidos</i></p> <p>Automobile &amp; Touring Club for UAE (ATCUAE) MS 1968</p>	<p><b>(ZA)</b> Afrique du Sud South Africa <i>Sudáfrica</i></p> <p>The Automobile Association of South Africa (AASA) M 1967</p> <p>Motorsport South Africa (MSA) S 1997</p>
<p><b>(USA)</b> Etats-Unis d'Amérique United States of America <i>Estados Unidos de America</i></p> <p>American Automobile Association (AAA) M 1933</p> <p>Automobile Competitions Committee for the United States, FIA, Inc (ACCUS) S 1958</p>	<p><b>(ZW)</b> Zimbabwe Zimbabwe <i>Zimbabwe</i></p> <p>The Automobile Association of Zimbabwe (AAZ) M 1967</p> <p>Zimbabwe Motor Sports Federation (ZMSF) S 1993</p>
<p><b>(USA)</b> Porto Rico Puerto Rico <i>Puerto Rico</i></p> <p>Primera Federación de Automovilismo, Motociclismo y Kartismo de Puerto Rico-FIA Inc (FAPR) MS 1975</p>	

## WHAT'S WHAT AND WHO'S WHO – A GLOSSARY OF ABBREVIATIONS

The world of motoring and motor sport is beset by abbreviations for organizations and activities. Most of the national automobile clubs that make up the FIA have their own shorthand name, by which they are most often referred; these are included in the list of member clubs on pages 246 to 253. Listed here are other abbreviations, including those of the FIA's own institutions, which appear in this book.

ABS	Anti-lock Braking System	CHI	Commission Historique Internationale (FIA)
ACA	Automobile Club of America (dissolved 1936)	CIC	Commission Internationale de Circulation (FIA, established 1911)
ACEA	Association des Constructeurs Européens d'Automobiles	CICD	Commission Internationale de Circulation et Douanes (FIA)
AIACR	Association Internationale des Automobiles Clubs Reconnus (forerunner of the FIA)	CID	Commission Internationale de Douanes (FIA, established 1911)
ACN	Automobile Club National	CIK	Commission Internationale de Karting (FIA, established 1962)
ACO	Automobile Club de l'Ouest (organizer of Le Mans 24 Hour race)	CIT	Commission de Tourisme (FIA, established 1926)
AIT	Alliance Internationale de Tourisme	CPD	Carnet de Passages en Douane
BPICA	Bureau Permanent Internationale de Constructeurs Automobile	CSI	Commission Sportive Internationale (FIA, established 1922)
CART	Championship Auto Racing Teams (USA)	CTI	Commission Technique Internationale (FIA, established 1935)
CETA	Consortium d'Études Touristiques et Automobiles (1991)	EC	European Commission
		EOC	European Olympic Committee
		EU	European Union



ERTICO	Intelligent Transport Systems and Services - Europe	LSR	Land Speed Record
EuroNCAP	European New Car Assessment Programme	MEP	Member of European Parliament
EuroRAP	European Road Assessment Programme	OBD	On-Board Diagnostics
FAI	Fédération Aéronautique Internationale	OECD	European Organisation for Economic Development
FIA	Fédération Internationale de l'Automobile	OTA	Organisation Mondiale de Tourisme et de l'Automobile
FIM	Fédération Internationale Motocycliste	PRDA	Professional Racing Drivers' Association
FISA	Fédération Internationale du Sport Automobile (FIA, 1979-1992)	SITTC	Section International de la Technique, du Tourisme et de la Circulation (FIA, 1957-70)
FIVA	Fédération Internationale Vehicules Anciens	SSI	Section Sportive Internationale (FIA, 1957-70)
FOA	Formula One Administration	TIR	Transports Internationaux Routiers
FOCA	Formula One Constructors' Association	TAI	Tribune d'Appel International (FIA International Court of Appeal)
FOM	Formula One Management	UN	United Nations
GPDA	Grand Prix Drivers' Association	UNECE	United Nations Economic Commission for Europe
GPI	Grand Prix International	UNEP	United Nations Environment Programme
ICC	International Chamber of Commerce	USAC	United States Auto Club
IOC	International Olympic Committee	WCR	World Championship Racing
IRU	International Road Transport Union	WFMS	World Federation of Motor Sport
ISC	International Sportsworld Communicators	WHO	World Health Organisation
ISO	International Standards Organisation	WRC	World Rally Championship (FIA)
ITS	Intelligent Transport System		

## ABOUT THE AUTHOR



For more than one third of the FIA's 100 years, Ray Hutton has been commentating on its activities, first in motor sport and later in the wider field of motoring and the motor industry. A former editor-in-chief of the British journal *Autocar* – established 1895 – he writes for newspapers and magazines worldwide, is president of the international Car of the Year jury and an associate member of the British Racing Drivers' Club. He lives in London.

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