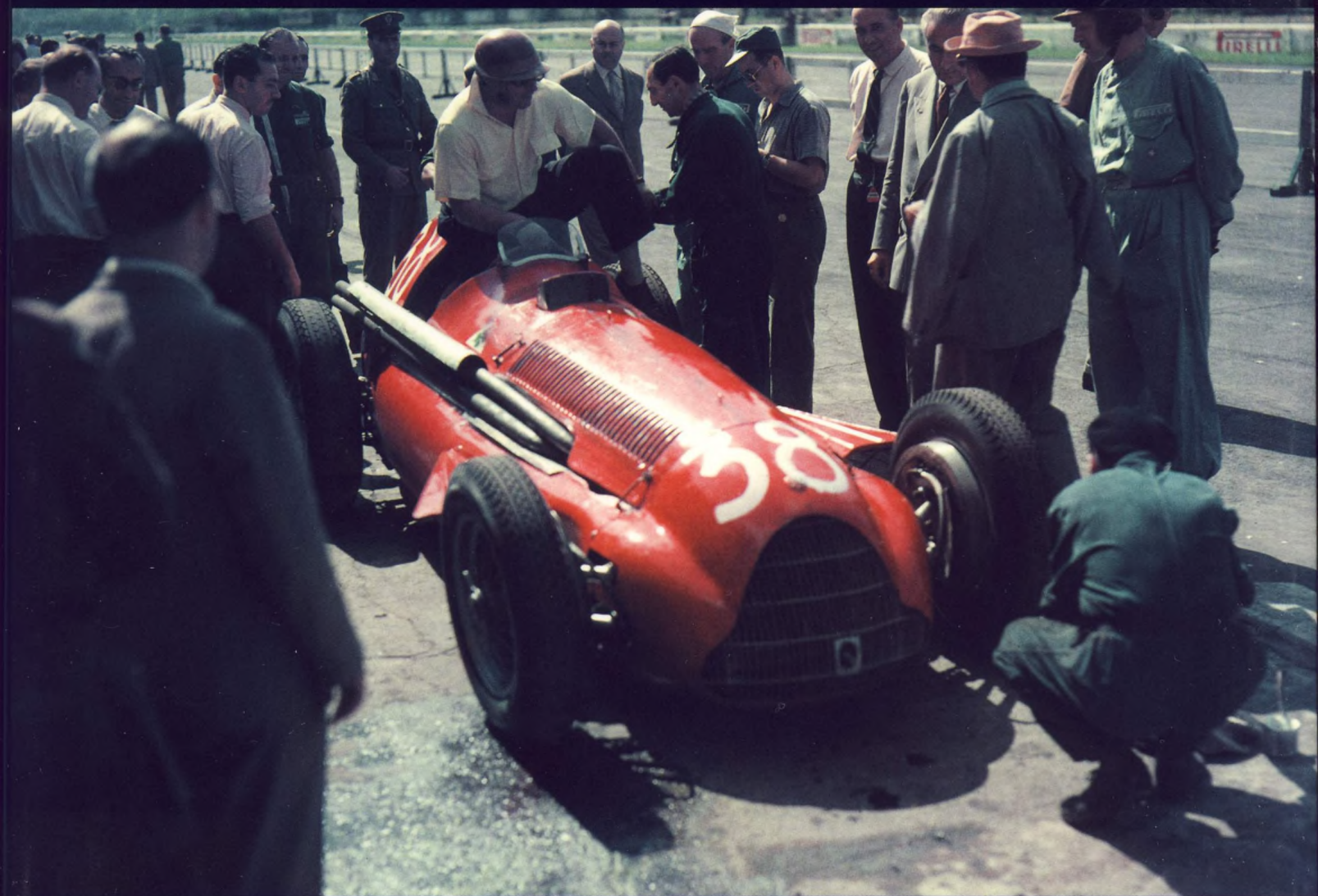


ALFETTA

The Alfa Romeo 158/159 Grand Prix Car



Ed McDonough

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The Alfa Romeo 158/159 Grand Prix Car

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Ed McDonough



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Dedication

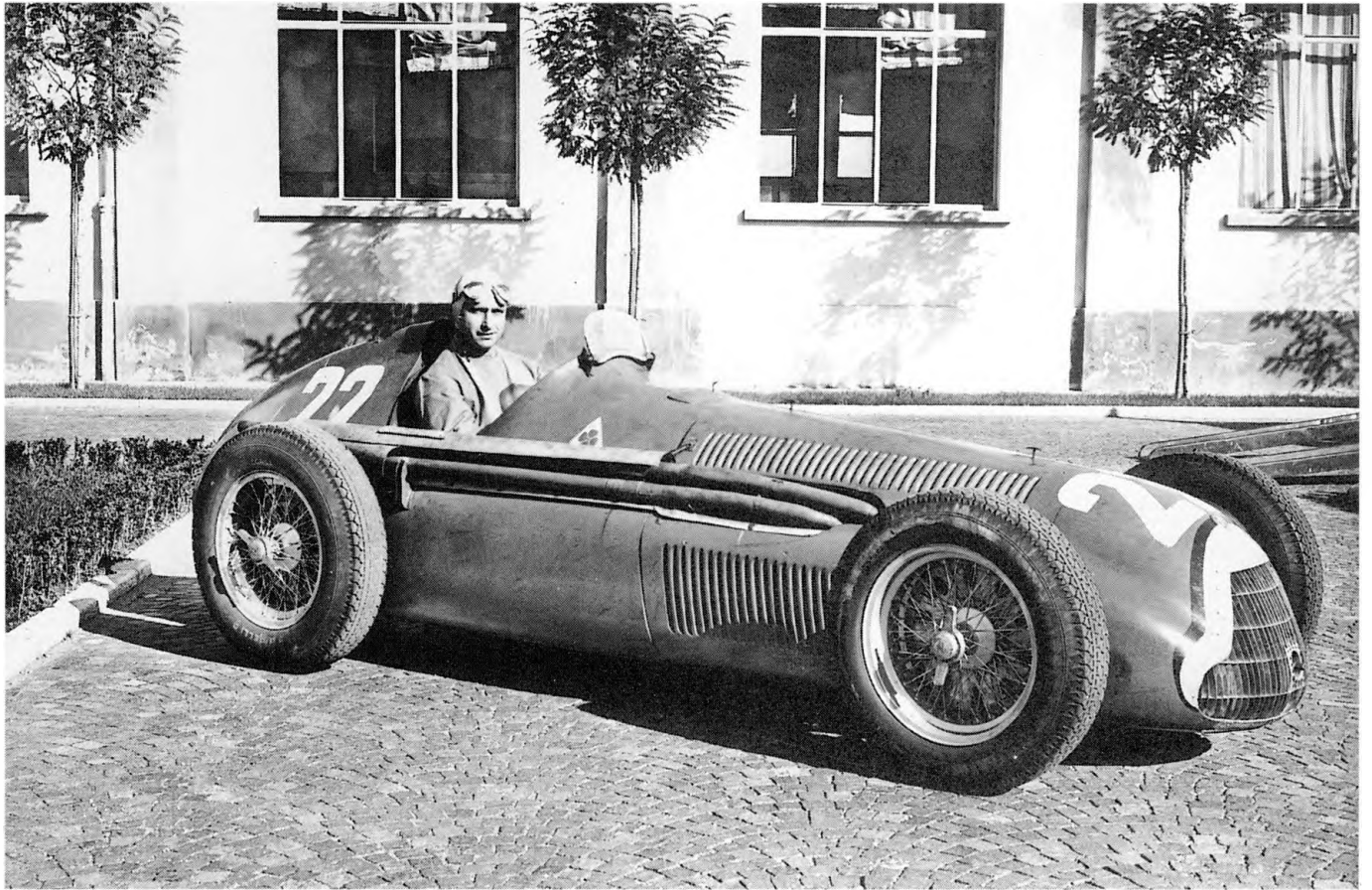
This book is dedicated to: Elvira Ruocco, who manages the Alfa Romeo Archive at Arese and keeps Alfa Romeo heritage alive and accessible . . . long may that continue; Thierry Inghels, Director of Garage van Steenkiste in Ghent, Belgium, the oldest surviving Alfa Romeo dealership, who is the ultimate Alfa Romeo enthusiast; the Alfa Romeo Clubs worldwide for their part in preserving automotive history.

Unless otherwise credited, photographs in this book come from the author's collection.

Front cover: Juan Fangio in the pits during practice for the 1951 Italian Grand Prix. De Graffenried can be seen to the right. (Grand Prix Photo)

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Foreword by Emmanuel de Graffenried



Baron Emmanuel 'Toulo' de Graffenried. (Pirelli Archives)

I remember very well being invited to drive the Alfetta. Frankly, I felt I was very lucky to get the drive, and had gone to Monza for a brief test, which Gianbatista Guidotti had invited me to do. Guidotti was satisfied with the test and asked me to drive. My first impression of the car was that it was so far ahead of anything else. It had a wonderful motor, which was so good at 8,000 revs in those days, and a four-speed gearbox – not like the gearbox in my Maserati, which was basically a Fiat box. For me it was so different and interesting to drive this car which already had such an important reputation.

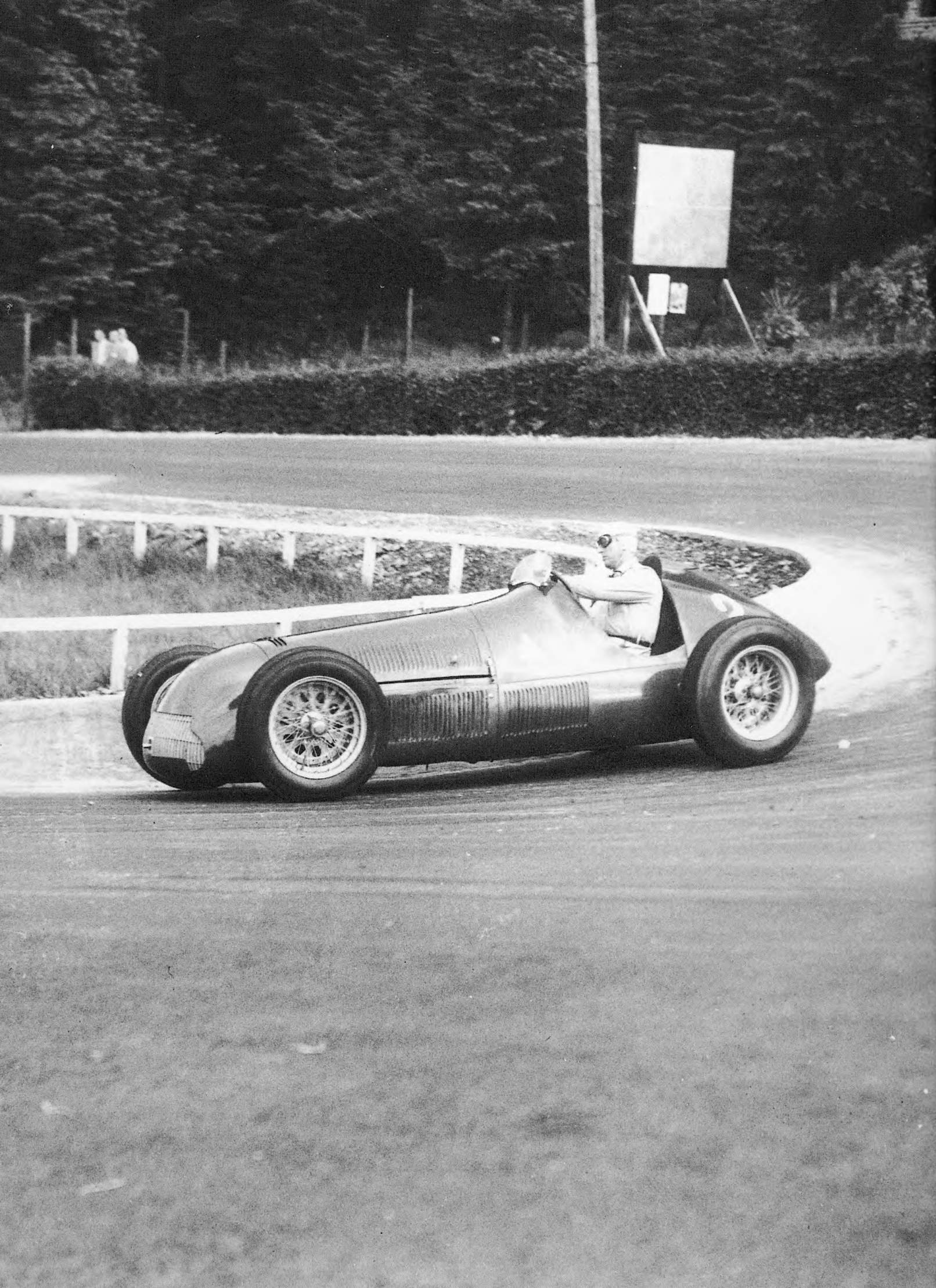
OPPOSITE TOP: Juan Fangio in the Alfetta.

OPPOSITE BOTTOM: Two 159s during practice for the 1957 French Grand Prix. Car #6 is Sanesi's car.

The difference between the Alfetta and anything else I had driven was like night and day; it was so much better than the other cars of the time. It was also such a good experience to have been in such a nice team with Fangio and Farina and Bonetto, and then in some races Sanesi was there as well. Of course, I knew Fagioli and some of the others from all the races we did then, but I found the Alfa Corse team very pleasant, and Guidotti very helpful. In those days it was a very big family, and a great honour for me to drive with all those boys – Fangio and Farina, who became World Champions, and Bonetto, who was another very good Italian driver. We had a good relationship with each other. We would go to the races in the Argentine on the boat in the winter when it took fifteen days, but we all got on well together and we really enjoyed it. It isn't the kind of thing that happens today.

I used to go to the workshops at Portello during 1950 and 1951, which was interesting, and I felt welcomed there. I also remember going to see Commendatore Ferrari at his workshops at Modena when he first ran the 158. I never thought then that I would be driving this car later on, but I did know Ferrari in those days. I was driving the Ecurie Autosport Maserati 6CM, and drove against the first 158 at the Coppa Ciano at Livorno . . . they were winning even then. It was all a long time ago . . . over sixty years . . . but I remember those days because we enjoyed ourselves.

Emmanuel de Graffenried



1 Introduction

The Greatest Ever?

Was the Alfa Romeo 158/159 the greatest Grand Prix car ever built? In my opinion, the answer to that question is ‘yes’. Many historians have argued the case in general terms, but I intend to provide far more detail of what went on behind the victories of 1950 and 1951, and to tell the tale of the people who created this motor-racing legend. While the Grand Prix Alfa Romeo won the first two World Championships in those years, the legacy goes back much further, back into the 1930s. In the eyes of many experts, the significance of the achievement is the fact that Alfa Romeo won these championships with a car that was essentially a pre-war one – it had raced for eight seasons over a span of fourteen years.

Alfas have played a dominant part in my motoring interests for many years. In around November 1953, as an impressionable twelve-year-old, I happened across a copy of the American magazine *Motor Trend*, which, like the later *Sports Car Graphic*, was excellent in its coverage of international motor racing. This particular issue carried the report of Juan Fangio’s desperate last hundred or so miles in the Mille Miglia the previous May, when he suffered a steering-arm breakage while leading, and had as the result steering on only one of the front wheels. He fought on to finish second. The car was an Alfa Romeo. Specifically, it was a 6C 3000CM, although it was for ever known as the Alfa Romeo *Disco Volante* (‘Flying Saucer’) – in an era of American pre-occupation with

flying saucers, UFOs, and threatening things from other places.

Juan Fangio rose pretty rapidly in the estimations of that twelve-year-old, and would always remain high on my list of heroes. (Interestingly, 1961 Formula 1 World Champion Phil Hill has said that Fangio’s deed on that day was high on his own list of personal inspirations. And these days, he is driving that car himself in historic races and indeed winning with it!) It was only a matter of time before Fangio and Alfas would come together in my interests.

The story of the car produced by the Italian manufacturer is far more complex than the tale of a great driver who won the World Championship. In fact, Juan Manuel Fangio went on to play a relatively small part in the history of the Alfa Romeo 158/159; he was in the Alfa Romeo Grand Prix squad for only two years, and these were the last two years that the car raced. The year 1951 was no runaway dream for Fangio by any means. In his Championship year, the team came close to being eclipsed by their Italian rival Ferrari, while Fangio’s title was seriously threatened all season by friend and Argentine countryman Froilan Gonzales, and by Ferrari’s other driver, Alberto Ascari. Fangio just managed to squeak the world title, and for many reasons Alfa Romeo then decided to quit Grand Prix racing. That was at least partly why the Fangio and Alfetta legend remain intrinsically linked.

Alfa Romeo came back to Grand Prix racing, of course, which was great for the fans, but their effort in the late 1970s did little to

add to Alfa's glory. The dominance of 1950 proved to be a distant memory.

As dramatic as the 1950–51 portion of the car's history was, it was but a small part of the total. The design for the 158 had been on the drawing board midway through the 1930s; it first raced and began its incredible record in 1938 at the Coppa Ciano Junior race in Italy, where Emilio Villoresi gave it a true dream debut. Immediately the 158 was dubbed the 'Alfetta', in accordance with its status as a 'junior' division car, or *voiturette*. It raced on until racing was interrupted by the Second World War in 1940, and then, amazingly – and successfully for the most part – it reappeared at the end of the war to continue racing, becoming a genuine Formula 1 car. It even went on to win the title of World Champion formally when the Drivers' World Championship commenced, in 1950.

Although the 158 became the 159 for the final year of its racing life, this is the story of essentially a single race-car design that lasted for a phenomenal fourteen-year period, and won almost every race it entered. It is also a story of design and engineering brilliance, as well as intrigue, political manoeuvring and trickery, industrial connivance, and true motor-racing heroism.

The period of the 'Alfetta' – the name has now become synonymous with both the 158 and 159 versions of the car, pre- and post-war – was Alfa Romeo's greatest era in terms of design, engineering, management and driving genius. Although most renowned for its World Championship successes, the Alfetta had links right back to the period of Vittorio Jano, who was present at the outset of the car's career. In fact, the 158 was primarily the work of engineer/designer Giacchino Colombo, a name much lesser known than Jano's; indeed, Colombo's contribution started much earlier than has ever been acknowledged.

One of the reasons that the early history of the Alfetta has remained somewhat cloudy is that it came on to the world racing stage at a sensitive time, both in relation to developments

in the motoring industry and because of the political climate. Throughout the 1930s, and especially in the last two years of that decade, two national leaders used motor racing to advance their own personal and political status and influence. Adolf Hitler had poured huge resources into Mercedes-Benz and Auto Union so that German cars could dominate international motor-racing competition. The second figure, Italy's Benito Mussolini, was equally desperate to play on the world stage, and he also saw motor racing as a means to an end. Unlike Hitler, however, Mussolini enjoyed the activity in its own right and was knowledgeable about the motor industry. He could see the wider benefits for the Italian car industry that might result from involvement in motor sport, and manipulated car manufacturers, including Alfa Romeo, to work for national ends as well as to boost his own prestige. He particularly saw racing as a way of playing on Hitler's stage, although in the late 1930s he remained uncertain and uncommitted to being 'in the same team'. On at least a few occasions, motor racing became a way of upstaging the Germans, and Alfa Romeo was a key tool in Mussolini's strategy. Mussolini also had a substantial impact on Alfa Romeo and the staff of the company. He forced them into the invidious position of supporting fascism, although many of them became expert at treading the middle ground and blowing with the existing political wind.

The nature of the European political situation of the period means that certain aspects of history were less well recorded than others. Because of the alliances in Italy, or the fear of being in these alliances, individuals were often reluctant to claim responsibility or credit for certain achievements. Giacchino Colombo was one of the few people who did not make outspoken claims that the Alfetta was 'his' car.

Many other important people feature in the story: in his early career, Enzo Ferrari raced Alfa Romeos and then became the manufacturer's competition manager; there was the



Benito Mussolini in the 1930s with Nuvolari and the P3. Mussolini always had a special interest in the Alfa Romeo competition cars and was not averse to using them for boosting his own image. (Alfa Romeo Storico)

Spaniard Wifredo Ricart and his contemporary Ugo Gobbato; Gianbatista Guidotti was the post-war racing team manager and an excellent test driver; and there were many others. Enzo Ferrari claimed that he was the 'creative and directive force' behind the 158 project. There were also more than twenty drivers, some of whom raced once, while others were involved for several seasons; Farina was one who drove both pre- and post-war.

The Alfetta story is also one of sacrifice. Serious injury and even death were not uncommon during its time; tragedy visited the team on more than one occasion and there was not always an easy escape from blame. However, above all, this is the chronicle of a superb racing design, and how, through a

combination of engineering and driver talent, that design was honed to give a record number of years of racing success – a success that was often achieved in spite of, as well as because of, the forces and difficulties that existed during the period.

Period racing cars, especially those with a pre-war provenance, rarely survive a hectic career and then last another fifty years, and then have a further career in historic racing. However, some of the 158/159 heritage has survived. One of those cars was tested and has a chapter here devoted to it. The Alfa Romeo Museum in Arese houses three descendants of the original 158 and the Biscaretti in Turin has another, but only one Alfetta ended up in private hands. Shortly before the Goodwood

Revival meeting in 2003, I had the privilege of testing this car and finding out what it is like to get behind the wheel of the car which, to all intents and purposes, won the 1951 World Championship for Alfa Romeo. The story of this single chassis and how it was discovered and returned to the race circuit is a fascinating one, and I have been fortunate to talk to the principals in that drama.

Writing this book would not have been possible without the valuable assistance of several people. First and foremost, Carlo Voegele was generous enough to allow me to use his nearly priceless Grand Prix Alfa Romeo. Renowned racing-car restoration expert Tony Merrick (now mostly retired) helped to facilitate this part of the story, as did GTO Engineering's staff, especially Simon Bish, who looked after the car during its test session at the Long Cross test track at Chobham. Simon helped to strip the car down for detail photography the day afterwards, as well as passing on the knowledge gained from looking after it for over ten years. Carlo Voegele and historic racing driver Willie Green shared their experience of driving the car, and I was able to have a close acquaintance with it during nearly a year of historic competition. Voegele confided to me that the car still remains something of an enigma to him, and that he believes that its power lies in the myth that surrounds it, including the possibility that his chassis is a genuine pre-war example.

The Biscaretti Museum in Turin extended a similar courtesy to me and to photographer Peter Collins, when we needed to get more detailed views of the 158 in the museum's collection; a staff member appeared and left us with a box of screwdrivers and spanners! The museum also supplied some of the photographs in this book. Elvira Ruocco, who maintains the Alfa Romeo archives at Arese, gave the greatest assistance in respect of photographs; she has always been a personable and positive source of historical materials and has helped thousands of Alfa Romeo enthusiasts

over the years. She deserves a very special thank you for her contribution to keeping alive Alfa Romeo's heritage. Thanks also go to Antonio Magro, Curator of the Museo Storico at Arese, for access to the cars in the museum and for details of the chassis numbers.

Photographic material for this book was also supplied by Ted (Ferret Photographics) Walker, and by Peter Nygaard of Grand Prix Photographic. My long-time friend and colleague Peter Collins was responsible for most of the photos taken at the test session and for the detail photography of the car, as well as for some of those taken in various historic events. Phil and Michael Ward also provided photos at the test drive, and Keith Booker and Ken Carrington photographed Grand Prix Alfas in historic events over a number of years. Further photographic assistance and advice came from Sam Turner at the Ludvigsen Library, and from Tony Adriensen, Thierry Inghels, Bernhard Volker, Jos Hugense, Robert Newman, Bob Dunsmore, Casey Annis, the Pirelli Archive and Patrick Italiano and Jim Stokes, who furnished original documents about the cars and Mario Aquati. David Venables kindly shared his thoughts with me.

I am greatly indebted to Mike Sparken, who provided details of his search for discovery and ownership of the car now owned by Carlo Voegele, and to Paul Grist and Jim Stokes for sharing their part in the history of that car. Mike Sparken brought out his important collection of Alfetta drawings, photos and detailed notes, and shared his considerable research on the cars. He also described the emotion of driving that car for the first time when its restoration was complete. More importantly, Mike Sparken was the key to understanding the significance of engineer Colombo in the Alfetta story.

Baron Emmanuel 'Toulo' de Graffenried was one of only two people still surviving during my writing who raced a 158/159 in period; Paul Pietsch was the other. Baron de Graffenried was at the early testing of Mike Sparken's car at Monza as well as having been

a member of Alfa Romeo's race team in the 1950s. I am immensely indebted to him for his contribution to this book, and for taking the time to sit down in his Lausanne home and recall some of the great moments of his career and of driving in the Alfa Romeo team. Thanks are due to Maria Terese di Filippis for helping to facilitate this meeting, as well as to Daniel Leu. Gertrud Schmid-Heupel of Motor-Press Stuttgart enabled a contribution to be made to the story by Paul Pietsch, who was 93 at the time. Having contact with these two great figures of motor racing was a special privilege. Motorcycle champion Geoff Duke kindly contributed a unique piece of the Alfetta puzzle to the story too.

Gratitude also goes to Willie Mearns and his fellow biographer Jean-Michel Paris, for sharing the labours of their detailed research on the great Alfa Romeo 158 driver Jean-Pierre Wimille, the man Juan Fangio called the 'greatest driver of the period'. Willie and Jean-Michel introduced me to the tale of Parisian *chanteuse* Juliette Greco, Wimille's 'close friend' – the story of that relationship should really become a film! Peter Marshall contributed interesting bits of information on 158 engines that went into speedboats, as well as helping to hunt down the first reference to the 158 as the 'Alfetta'. Helpful information on 158/159 chassis numbers came from David Seielstad (although I accept full responsibility for any inaccuracies). John Reynolds assisted in accessing information about Sir Harry Ricardo as did Rob Palmer and Anne Hope of the Motor Industry Archive. My appreciation also goes to the ever-helpful and informative Mike Jiggle and his library. I apologize if I have left anyone out.

Why was this book written? Most accounts of motor-racing history include the significant role of Alfa Corse and the 158/159, although

most of them pay less attention to the racing of the pre-war and immediate post-war periods. However, very few accounts delve into the fascinating world of how the team operated, and the politics of those operations. Some of those that have done so have largely depended on the writings of very few period historians, and thus the history of the team and the cars over the years has been repeated again and again, often failing to question events, and also failing to credit their sources. I have tried to pull the tales together, question the recorded history, and set aside a few myths. For example, with the shadow of Mussolini hovering over people such as Wifredo Ricart and Ugo Gobato, only Griff Borgeson and David Venables have treated them with the seriousness they deserve. No one, as far as I can determine, has ever wanted to give Mussolini credit for some of the achievements of Scuderia Ferrari, Alfa Romeo and Alfa Corse, but clearly his drive and patriotism and personal enthusiasm for cars were factors in their success as well as in their difficulties. Perhaps our justified contempt for fascism has clouded the picture of some of the more positive activities Mussolini supported. A friend of mine, 90-year-old Virgil Poggioli, worked for the railways during the war: 'Of course Mussolini got the trains running in Italy, but he would have you shot if you didn't get them running . . . you have to look at both sides of what he did.'

This book attempts to get to grips with the multiple dimensions of race-car design, construction and competition pre-war and early post-war, and to investigate the many myths and uncertainties about the nature and origin of the Alfetta. Indeed, it was these very uncertainties and contradictions that made me want to keep on digging.

2 158: The Origins

Colombo's Role

Long before he became a respected engineer at Alfa Romeo and Ferrari, Gioacchino Colombo sat in the co-driver's seat of an Alfa Romeo 1750, which finished third in the 1929 Mille Miglia. The 1,000-mile race round Italy was won by Campari and Ramponi in a similar car, at a speed that was slightly faster than their winning speed had been in the previous year. An O.M. was second and Colombo and Achille Varzi were close behind in third.

The experience stood Colombo in good stead for his career in the late 1930s, when control of Alfa Romeo racing was no longer in the hands of Enzo Ferrari, and the great designer Vittorio Jano had departed for Lancia. Colombo found himself in charge of Alfa Romeo race-car design, in something of a working partnership with Luigi Bazzi, an early and key ally of Enzo Ferrari. By this time, Colombo had not only gained an enormous amount of design and engineering experience, but he was also a hands-on racing expert, who knew exactly what it was like to be in a winning racing car. Aged twenty-seven, he was chief of design at Alfa Romeo's Portello factory, having worked alongside Jano in the late 1920s and early 1930s, doing the detail work on much of Jano's brilliant and sometimes eccentric designs, such as the Tipo A in 1930 with two 6-cylinder 1750 engines lined up alongside each other (Venables, D., 2000).

While Hull and Slater (1982) were inclined not to pinpoint Colombo's significant role in the development of what became the 'Alfetta', Colombo had had his own ideas about racing-



Gioacchino Colombo was based at Enzo Ferrari's premises but the design work on the 158 was very much his. (Alfa Romeo Storico)

car design generally – and specifically a 1.5-litre car – much earlier. Luigi Fusi (1978) equally was cautious about the significance of Colombo in the design of the Alfetta, although he always accepted that 'the person on the drawing pencil throughout was Colombo' (Borgeson, 1990, p.115). He would be the key person behind the development and success of the Alfetta.

Gioacchino Colombo

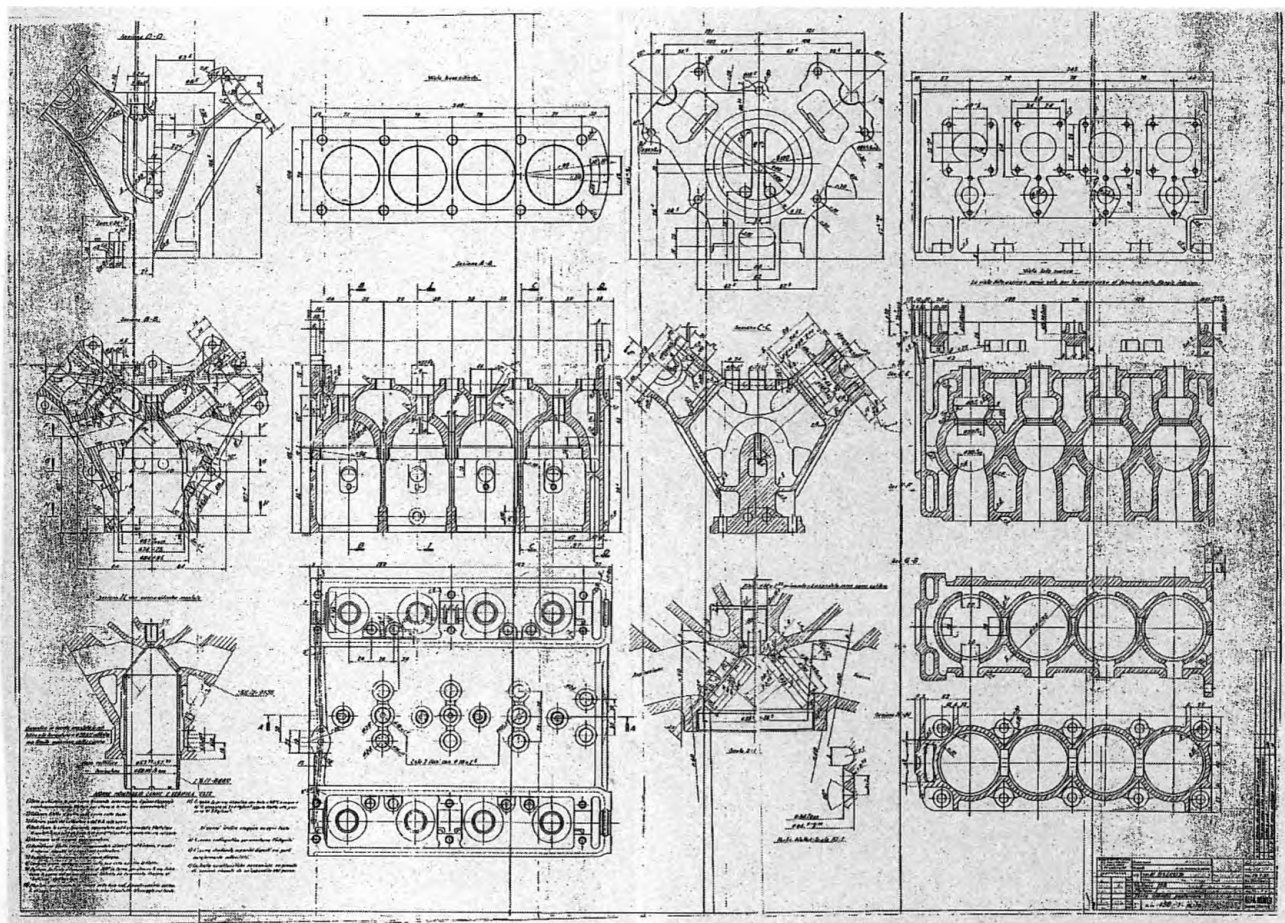
Gioacchino Colombo was born north of Milan, at Legnano, in January 1903, and started work as an apprentice mechanical draughtsman at a local factory when he was only fourteen. He worked on a wide range of engine projects, which gave him a broad understanding of engine design from an early age. He joined Alfa Romeo in 1924 and was immediately involved in Vittorio Jano's team, which was working on the famed P2. He was bright and energetic, according to Luigi Fusi, who knew him for many years; Jano had the same view of him.

In 1928, he was promoted to head the drawing office at Alfa Romeo's Portello plant. He was thus involved both in race- and passenger-car design and

engineering, with particular responsibility for taking design ideas from people like Jano and turning them into practical realities. Colombo's skill in this area meant that he became increasingly indispensable to Jano, who was working on a wide range of projects, including aero engines and utility vehicles, trucks, buses and trams. It also fostered in Colombo the ability to create his own ideas, something that would later be helpful when the need for a 1.5-litre engine became apparent. He was used to working on his own and had a capacity for seeing what designs would have a future. He tended not to be the sort of person who 'blew his own trumpet' and in some ways could be over-shadowed by the strong personalities around him.

Colombo's role, of course, has to be seen in the context not only of automotive and racing design of the period, but more importantly in

the light of the way in which motor racing and Alfa Romeo had evolved.



These cylinder-head drawings by Colombo are dated 29 July 1937, and it is likely that Colombo's early hand drawings go back to 1935. (Jim Stokes)

Scuderia Ferrari

Racing was as old as Alfa Romeo itself. Virtually the first cars produced had quickly found their way into racing, and had been successful at both national and European level. In the early days, one of the stalwarts to campaign the cars was Enzo Ferrari, who enjoyed reasonable success as a racing driver at the beginning of the twentieth century. Ferrari more or less retired as a full-time driver in 1924, and concentrated on building up his own businesses, including a large and growing chain of Alfa Romeo dealerships in his region. In December 1929, he used the connections he had made with businessmen who raced, mostly in Alfa Romeos, and formed Scuderia Ferrari. The purpose of the business was to prepare cars and enter races for wealthy customers.

One of Scuderia Ferrari's early partners was Alfa Romeo, although it was involved with only a small amount of cash. The agreement was that Alfa Romeo would supply Scuderia Ferrari with cars at substantial discount, and act as a semi-official team. While Alfa Corse got on with Grand Prix car development, and ran its own team in major events, Ferrari would mainly look after sports cars in lesser events. The first headquarters for the team was located in Modena.

Over the next three years, 1930–32, cars were run in a variety of races by both Alfa Corse and Scuderia Ferrari, and both teams enjoyed considerable success. However, it was often unclear which team was supposed to be doing what. This was hardly surprising, since Enzo Ferrari knew Alfas and the Alfa Romeo operation very well. He also had his own engineering team, which contributed to what was being developed at Alfa Romeo's factory at Portello in Milan, and vice versa.

The politics of motor racing were no less complex in the 1930s than they are in the twenty-first century; indeed, perhaps it was even more complicated, as much more national pride was at stake. This was also emerging as the era of the 'ace driver', and

drivers such as Tazio Nuvolari were good at negotiating the best deals for themselves. At the end of 1932, Alfa Romeo, in the grip of a European and worldwide depression, decided that in 1933 it would not continue as a separate entity in motor racing. Enzo Ferrari assumed that the cars would be handed over to him and he would act as the sole racing arm of Alfa Romeo. Alfa Romeo, however, decided not to do this, and kept the cars, mainly the successful P3, locked up in the factory for a large part of the season.

As it was no longer able to field new and competitive cars for its customers, 1933 became a crisis year for Scuderia Ferrari, and Enzo Ferrari even thought of going to Maserati for racing machines. The Scuderia endured a hard season until the Alfa P3 was released for some races, and mainly had to do its best with the 2.3 and 2.6 Monzas, which could be used in both sports-car and single-seater trim.

As 1933 advanced, Alfa Romeo was in dire financial difficulty, and Fiat's Giovanni Agnelli proposed to the government that either Alfa Romeo should be absorbed by Fiat, or be closed down altogether. Benito Mussolini interceded directly, rejecting the notion that one of Italy's engineering and production jewels should be lost. Various attempts at reorganizing and restructuring the company were argued, and a series of managing directors came and went. In December 1933, Mussolini had a direct hand in the appointment of Ugo Gobbato as the new managing director. Gobbato had won Mussolini's respect with his work at Fiat and he had come to be seen as a leading expert in industrial organization. He understood the complexity of the organization, but had a reputation for never losing sight of the importance of the individual workers. He was welcomed at Alfa Romeo with open arms, although Mussolini's blessing would eventually end up being the kiss of death for this able man. His arrival was also welcomed by Enzo Ferrari who had been 'out in the cold' for almost a year. Ferrari knew

Gobbato would support the type of racing programme in which Enzo Ferrari could play a big part.

Gobbato and Alfa Romeo

Gobbato's task was to rescue Alfa Romeo from financial ruin. As his appointment had been blessed at the highest level of government, he was assured by the all-powerful IRI, the Institute for Industrial Reconstruction, that there would be sufficient funding to get the company back on a firm footing. This reconstruction plan was based on shifting the emphasis away from car manufacture and racing to military production. War in Ethiopia and Fascist involvement in the Spanish Civil War made this a practical and necessary move. As Griff Borgeson has said (1990, p.99), 'automotive output and car racing went back to being the image-making sideline which Nicola Romeo had visualized when he first began building cars'.

As Scuderia Ferrari had evolved into virtually an official Alfa Romeo team in 1933, in spite of car-supply problems, Gobbato confirmed that Alfa Romeo itself would not run a racing programme and all racing would be done by the Scuderia on behalf of Alfa Romeo. Of course, Enzo Ferrari welcomed this, and in the early issues of the Scuderia Ferrari magazine in 1934, he was effusive in his praise of Gobbato, expressing his belief that Gobbato would save Alfa Romeo for 'Fascist Italy'. Ferrari, always self-serving, was also good at dancing to more than one tune, and was a great supporter and fan of Gobbato when it looked like they all had a bright future together. (Of course, everyone in public life who came in contact with Mussolini had to be very cautious with their alliances in those days.) Ferrari would, however, change allegiance later on when the Alfa Romeo management made some decisions that were less favourable to him.

Gobbato's arrival also created another set of tensions. Gobbato had impeccable academic

credentials while Vittorio Jano, still seen as the design genius at Alfa Romeo, did not. Jano was somewhat sensitive about this, and it is reasonable to speculate that he was uneasy about Gobbato from the outset; Gobbato also had a strong reputation in the automotive industry. Given that the P3 was already an 'old' design, the pressure was on Jano to produce cars that would keep the Alfa image healthy for the next few years. This pressure was substantially increased by two factors: the greater attention being given to racing cars in Germany, and Jano's added responsibility for working in other areas of engine development, especially in aero engines. Maybe Jano's eventual inability to produce a winning car in the mid- and late 1930s had its origins in 1933. In retrospect, it seems inevitable that, against a background of reduced resources in the racing department and an increased workload, he was bound not to live up to expectations. That is not to say that he did not try, and it was in this environment that Giacchino Colombo gained greater influence in racing design.

Early Origins of the 'Alfetta'

Historian Griff Borgeson believes that it is impossible accurately to trace the origins or 'paternity' of the Alfa car that finally appeared in racing in 1938. This is a reasonable assumption; indeed, the situation is not particularly unusual – in motor racing generally, and in Italian design particularly. However, Borgeson was on personal terms with Colombo, who shared his view of the history, and showed him his drawings. Colombo had drawings in his own hand of parts of the car dated 1936 and 1937. Mike Sparken has had access to further drawings of Colombo's, via his family, which were dated early 1936; these were so early yet so advanced, that his design work must have started as early as 1935, if not even earlier.

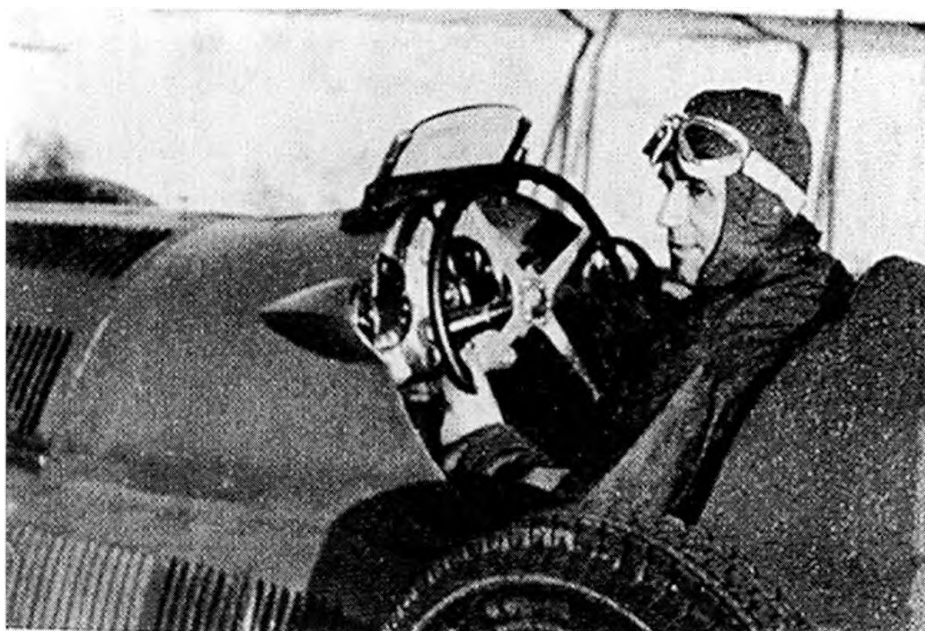
Borgeson is almost poetic on the subject of the car's 'paternity'. He dates Colombo's 'rise' to importance in design terms from 1932–33, when Jano was working on other projects, and

doing less direct drawing-board work. When the racing department from Portello was transferred to Modena, Colombo remained at Portello. This meant that whatever work he was doing was likely to be seen as emanating from Jano, or at least as being under Jano's influence. This fact alone makes understanding exactly what Colombo did on his own initiative less than easy to understand. Colombo moved to Modena in May 1937, when the Tipo 158 project was officially given the go-ahead. Enzo Ferrari requested Gobbato's permission to develop a 1.5-litre engine project, and this permission was forthcoming. Ferrari himself has cited his chief engineering advisor, Luigi Bazzi, as the leading collaborator in the project, and Angelo Nasi, the draughtsman, was credited with the design of the 158's steering and front suspension. According to Ferrari, Ferrari employees Federico Giberti and Alberto Massinino were responsible for a range of parts, the latter's name being associated with the transmission and rear axle. On occasions, he gave collective credit for the intellectual input to Bazzi and Colombo.

Despite all these contributions, many components of the engine and suspension were classic Jano. Jano himself once said of the 158 that it was one of 'my engines', although he

was sitting in front of a drawing of that engine with Colombo's signature on it. Jano was patronizing at times about Colombo, saying he was a clever designer, but that he lacked the courage of his convictions. However, Colombo's convictions must always have been shaped by Jano's wishes and control, something that inhibited Colombo and to some extent seems to have forced him to produce designs on his own that could later be used when a particular project was to be developed.

In later years, Enzo Ferrari claimed responsibility for the 158 project and for the car itself. Would the claims have been the same if the car had been a failure, or if all those involved had seen the Colombo drawings with early dates on them? Even Luigi Fusi was inclined to give Ferrari a great deal of credit for the momentum of the car as a project, although he was clear that the design came essentially from Colombo. Given the existence of the Colombo drawings and ideas, it is not then so dramatic a scenario to comprehend, and the role of many of the players was to act on Colombo's ideas. As for Ferrari himself, his ego played a major part in the history of his life, cars, team and business, and this means that he sometimes loses credit for his actual accomplishments. Indeed, it seems likely



Spaniard Wifredo Ricart was a contentious character at Alfa Romeo, but played an important part in racing car development in the late 1930s and early 1940s. (Alfa Romeo Storico)



Ing. Ugo Gobbatto became managing director of Alfa Romeo in December 1933 and revitalized the company's fortunes. (Alfa Romeo Storico)

that he did initiate the notion of a 1500cc voiturette formula, which the Automobile Club of Italy organized in 1938. Maybe Ferrari saw there was a formula for which a winning car could be built, in which case, he can be given credit for the Tipo 158. If, however, the basic plan for the car already existed some time earlier, perhaps Ferrari dreamed up a category that would suit a car that he knew could be built! In either event, Ferrari deserves credit – but for what?

It is important to note that while initial work was going into developing a 1.5-litre engine, this was a small, less important part of the overall racing scene at the time, and the greater effort was going into full-size Grand Prix cars. Nevertheless, the scene was being set for a serious change, which would come into being at the end of the decade.

Racing in the Mid-1930s

While 1.5-litre cars were not new to the European racing scene, they were very much in the second rank for many years, possibly even in the third rank behind Grand Prix cars and sports cars. Certainly, the major racing events across Europe, if not America, were for Grand Prix and sports cars. This would change significantly, but in the mid-1930s, the battle of the manufacturers and teams was going on in Grand Prix races.

The list of Alfa Romeo victories in 1933, 1934 and 1935, when the P3s had been handed over to Scuderia Ferrari, looks impressive: six wins in 1933 with the P3, fourteen in 1934 and fifteen in 1935. However, although there were a number of gallant performances, many of these wins were in lesser races. When the P3 days were over, and the new cars, the 8C-35 and 12C-36, arrived, the list of Alfa Romeo victories became much shorter; the wins were more elusive and none of them were coming in the big races. Alfa Romeo struggled to build a car that could exploit the regulations as well as the other teams could.

Regulations governing motor racing had been in existence since 1895. The Automobile Club of France was formed in that year, and organized a race that was called the 'Grand Prix'. The French Grand Prix was first run in 1906 and from that year the ACF attempted to influence other countries to run races to an agreed formula. This initiative was reasonably successful in the light of the task faced by the ACF. Local and national requirements meant that there were numerous variations, and regulations were often limited to particular events, or specific aspects of racing, such as the size of the car or class variations. The voiturette class first appeared in 1900 and referred to a class of 'lesser vehicles', usually those with smaller engines, often more similar to cycles than cars.

Engine-capacity regulations varied across the world, and American racing evolved according to the needs of American manufacturers. In Europe, Grand Prix racing had a

2-litre formula in 1925, and riding mechanics were barred. A minimum weight limit of 650kg was established. Formula Libre rules appeared in 1935, but these tended to dictate the length of races. The most significant set of rules, which would influence racing through the rest of the 1930s, came into being in 1934. The 750-Kilogram Formula mandated a maximum dry weight of 750kg, a free choice of fuels and a minimum race distance of 500km. This formula was to run for three years, from 1934 to 1936, but it was later extended through 1937. What this meant was that design efforts were focused on extracting as much power as possible from an engine in a car that was as light as possible. This was an expensive enterprise for the period, and it suited those teams whose resources were abundant – essentially, the German teams. At Alfa Romeo, where the will to win was not necessarily matched by the means, Scuderia Ferrari struggled with outdated and under-powered cars.

These regulations led to some unique developments, such as the Alfa Romeo Bimotore with two P3 engines. This car was immensely quick but a failure in terms of results because it wore out tyres at an astounding rate. The pressure on the racing side was such that there was neither the orientation towards or time for testing and development over a sensible period. The Bimotore might have been reasonably successful with tyre development and the time to recognize that it needed to be driven rather less than flat out, but neither of those possibilities seems to have been considered at the time. (It is a side issue here, but neither Enzo Ferrari nor Alfa Romeo, nor even the great Nuvolari seemed able to develop a strategy for getting the best out of a given car, especially the Bimotore. When Nuvolari drove it, he drove it to lead, which meant not winning; in retrospect, the Bimotore seems to have been a car capable of winning if driven with some restraint.) In those days, a sense of strategy was never allowed the time to develop before the Scuderia found itself engaged in the next project. It

is then somewhat surprising that the Alfetta was born out of this period.

In 1934, Scuderia Ferrari had learned a number of lessons that helped it to gain results. They widened the 2.6 Alfa Romeo Monza chassis to meet the new regulations and inserted the 2.9 P3 engine. This car was quick enough to win the Monaco Grand Prix for French-Algerian Guy Moll. The early races saw battles between the Alfas, Bugattis and 2.9 Maseratis. In Tripoli, in a race run to Formula Libre rules, Maserati brought the W5 16-cylinder cars, but Achille Varzi won in an Alfa P3. Guy Moll managed to beat the Auto-Union 4.3-litre 16-cylinder car at Avus in Berlin later in May with the 'streamlined' P3 with enlarged 3.2 engine, but the Mercedes team had been absent. Only a week later, the Mercedes W25 3.3-litre 8-cylinder dominated at the Nürburgring, leading the Auto Union Auto Unions; the Alfas could not match the pace at all. The Alfas did have a lucky win at the French Grand Prix at Montlhéry, where the Mercedes and Auto Unions both had problems, and they had won at Le Mans in the 24 Hours, so hope remained high. Auto Unions won at the German Grand Prix. For the rest of the 1934 season, whenever the Mercedes and Auto Unions were present, the Alfas, Bugattis and Maseratis could not win.

At the end of 1934, a somewhat discouraged Vittorio Jano was looking for something to redress the balance against the German teams, but he was limited in terms of both financial resources and time; he had to apply his brilliant mind, and came up with a significant modification for the P3. He replaced the existing rear suspension and fitted quarter elliptic rear springs, mounted in a reversed position. He adapted the successful Chedru-designed Dubonnet front suspension, which was an independent front suspension using an axle beam mounted to the frame. Jano cut the dumb irons from the front of the P3 and clamped the Dubonnet axle to the Alfa frame. While this provided a good handling race car,

it was only an interim measure. Jano was intent on a V-12 but this was still some time away. Instead, he gained Gobbato's agreement to develop the 6C-2300 that had appeared in 1934, and, with an enlarged P3 engine, eventually produced a new car, the 8C-35. This car did not race until September 1935, and during that period the concept of the Bimotore was turned from a vague idea into a real car. This was essentially the work of Luigi Bazzi at Scuderia Ferrari, who saw it as something that could do well in the races run to Formula Libre rules. The idea was clever but it has to be said that much more might have been accomplished if projects such as this had been better coordinated between Alfa Romeo and Ferrari.

When the 1935 season proper started, at Monaco, it was not the revised Alfa that challenged the Mercedes but the Maserati; Fagioli's Mercedes was still the winner. Auto Union then beat the Alfas in Tunisia. The Bimotores showed great potential at Tripoli and Avus but they shed tyres at a rate that dropped them well back, even though Nuvolari led at various stages. He ran the car with two 3.2 engines while Louis Chiron had two 2.9 litre engines in his. Frankly, Chiron had the wiser approach to his racing, which showed in the results. The 3.8-litre engine in the modified P3 was able to threaten the German cars but not beat them, although the power of the engine gave Jano some hope that the 8C-35 might possibly be a winner. More races went to the Germans, and it was expected that Mercedes would win the German Grand Prix at the Nürburgring. It certainly looked like Manfred von Brauchitsch would do just that. Late in the race, however, Nuvolari started driving with abandon, catching the leaders, until a totally disorganized Scuderia Ferrari pit stop dropped him back to sixth. He went out and started again, caught the leader on the last lap, forced the Mercedes to burst a tyre, and won in front of 200,000 dumbfounded spectators.

In retrospect, the glory of that race and of

Nuvolari at his best are long remembered, but the reality of the time was harsher; the Auto Unions won at Pescara in August and the Mercedes and Auto Unions both led the Alfas at the Swiss Grand Prix at Berne. The 3.8 engine was then taken from one of the P3s and tried for the first time in the 8C-35, with Guidotti and Marinoni doing the testing. Nuvolari and Rene Dreyfus were behind the wheel of the 8C-35s at Monza on 8 September for the Italian Grand Prix. The opposition consisted of four Mercedes and four Auto Unions, and the new Maserati, which was already out of date. The Alfa Romeos received a huge welcome, and Nuvolari was leading when Stuck's Auto Union pitted for fuel. When Nuvolari's car broke a piston, Gobbato himself was in the pits and insisted that Dreyfus be brought in so that Nuvolari could drive. It was a serious mistake. Not only did the Mantua driver ruin the brakes and need another stop, but the misjudgement meant that Dreyfus/Nuvolari finished second by less time than the driver change had taken. Left to carry on, Dreyfus would have won on the car's debut.

The 8C-35 won a lesser Italian race before retiring at the Spanish Grand Prix and losing to the Auto Unions in Czechoslovakia. In early October, the Italian Army invaded Abyssinia and Italy was at war. This brought car production at Alfa Romeo to a complete stop, but it fired Mussolini's desire to demonstrate Italian industrial superiority. In practical terms, this meant that there would be support from important quarters for continued development of racing cars, and this was good news for Scuderia Ferrari and for Jano, who felt that the 8C-35 with a 12-cylinder engine could win.

In 1936 there were numerous changes in motor racing, many of which were the result of a world edging ever closer to hostility. Several drivers felt they could not drive for certain teams, and certain teams only wanted drivers of their own nationality. The French decided to turn most Grand Prix races into

events for sports cars so that the Germans would not win as much. New drivers came on the scene: Englishman Richard Seaman went to Mercedes, while Giuseppe 'Nino' Farina signed for Scuderia Ferrari. They were both accomplished voiturette drivers, and Farina particularly was destined to have a long-term relationship with Scuderia Ferrari and with Alfa Romeo.

Several new 8C-35s had been built, and testing showed them to be quicker than the P3s, but the Mercedes W25 now had a 4.7-litre engine. The first 1936 clash was at the Monaco Grand Prix, scene of a multi-car pile-up and a win for Caracciola and the Mercedes. For the Tripoli Grand Prix, Jano's V-12 was ready and three of the 8C-35s had the V-12 engine fitted, but little else was done to the cars. The engine was producing 370bhp from its 4064cc but was still less powerful than the main rivals. In truth, although the engine internals had many clever Jano touches, it was fundamentally two 6C-2300s on a common crankcase, and did not represent any revolutionary development. Venables (2000, p.112) refers to cars at Tripoli as both 8C-35s and 12C-36s, and is not clear whether what was being called the '12C-36' was just the 12-cylinder engine in the old chassis, or whether further modifications had been made to the chassis. Hull and Slater, however, are clearer on this point, stating that the chassis was the 8C-35 chassis and the only outward difference was that the 12C had twin exhausts, running underneath the car, while the older car had an outside exhaust on the offside (Hull and Slater, 1982, p.185).

The Auto Unions now had a remarkable 6 litres and the Mercedes 4.7 was in a smaller, shorter chassis. They were getting the power-to-weight key to the formula more quickly than any of the other teams, and were much faster. The 12C-36 cars all finished but were a lap down on the German opposition. Caracciola's Mercedes won in Tunis, but at the Penya Rhin Grand Prix, in Spain, Nuvolari raised Italian hopes enormously by taking the

12C-36 to its first win ahead of Caracciola, with Farina's 8C-35 in third. At the Nürburgring a week later, it looked as if Nuvolari might repeat his 1935 win, but Rosemeyer's Auto Union beat him by two minutes. The Jano 12C-36 was showing considerable promise, although a lack of reliability had decimated much of the opposition in that race.

The Coppa Ciano was run at a very fast road course at Livorno, and Nuvolari pulled off another of his miraculous drives. When his 12C-36 retired, he walked back to the pits, eventually took over Pintacuda's 8C-35, and proceeded to drive through the field, past the Auto Unions, bringing the team cars of Brivio and Dreyfus with him. Rosemeyer's win the following week at the Coppa Acerbo at Pescara gained some revenge but Nuvolari was clearly capable of incredible driving. Auto Union won again in Switzerland, and then at the Italian Grand Prix at Monza. Nuvolari won the American Vanderbilt Cup in a 12C-36 at the end of a year in which Alfa Romeos had done reasonably well, Mercedes badly, and Auto Union had had their best season yet.

The new 3-litre formula for Grand Prix races was not announced until September 1936, so it was decided to continue with the 750 Kilogram rules for one more year. Alfa Romeo ran the 12C-36; they eventually produced a lower version of the chassis, the 12C-37, later in the year, but it was ineffective and slower than the older car. Mercedes had done major development work between seasons to compensate for their terrible year in 1936, producing the 5-litre W125, and 1937 saw the Mercedes and Auto Unions very evenly matched. None of the other teams had a chance against them. Alfa Romeo won only one race with the German cars present, at the Circuit of Milan in June, when Auto Union sent a single car for the young Rudolf Hasse to gain some experience. Nuvolari won in the 12C. Alfa Romeo experimented with engines between 4.1 and 4.5 litres in 1937, but they could not come near the pace of their opponents.

3 The Arrival of the 158

A number of threads had come together in 1936 and 1937 which were to shape the future for Alfa Romeo and Scuderia Ferrari. Mid-way through 1936, Gobbato had recruited Wifredo Ricart to Alfa Romeo, ostensibly to work on aero engines, although he soon moved on to other areas of endeavour. Ricart had left Spain in something of a hurry during the Spanish Civil War and his political and ideological views made him more comfortable in the Fascist-leaning environment at Alfa Romeo. Gobbato knew Ricart when he was working for Fiat in Spain.

At around the same time, Jano's inability to design a successful and competitive racing car to beat Mercedes and Auto Union, and the immense workload he carried in other areas, saw him receive what was effectively a demotion at Alfa Romeo. He had been chief engineer, with responsibility for all technical development. His responsibility and authority were then reduced to the automotive sector alone. Ricart's arrival was another blow for Jano, who saw him, quite rightly, as a threat. Then, in March 1937, Gobbato confounded everyone by announcing that Alfa Romeo had purchased 80 per cent of the shares of Scuderia Ferrari, almost certainly behind the back of Enzo Ferrari. The racing would continue to operate from Modena, but under the control of Gobbato himself. Enzo Ferrari would, at this stage, remain in charge of the day-to-day running of the team. One major aim of this 'reorganization' was a shift in focus towards beating the German cars, something that clearly did not happen. How it made Ferrari

feel about Gobbato and Ricart is largely unrecorded, but when the war ended some years later, it seems likely that he was not offering support to the pair when the anti-Fascists were looking for people to punish.

The failure of Jano's 12C-37 at the Italian Grand Prix, at Livorno in September 1937, was the official nail in Jano's coffin as far as Alfa Romeo was concerned. There are indications that Jano had decided to leave Alfa Romeo as he was finding conditions so bad. There is stronger evidence that the Livorno result was Gobbato's excuse to dismiss him, claiming that he was no longer able to produce good work. What is clear is that, at the time, there was no acknowledgement of how much Jano had done for the company, and how brilliant his designs had been. What is less clear is the extent to which Jano's views of Ricart and of Gobbato himself, and the political climate, may have hastened his departure. He returned to Turin and joined Lancia, where, years later, he would reappear with further master designs in Grand Prix racing. Vittorio Jano's experience showed how difficult it was to work at Alfa Romeo during that period, and how badly such a talented person could be treated.

In May 1937, Colombo was transferred from Portello to Scuderia Ferrari at Modena to work on a number of projects. The exact chronology of these projects – the 158, 308, 312 and 316 – is impossible to ascertain. There are long-held views that the 316 engine was simply Alberto Massimino's concept of taking two 158 8-cylinder engines and joining them with a common crankcase and twin crankshaft

system. On the other hand, there are those who have it the other way round – Colombo developing an engine using half of the 316! Enzo Ferrari said later in his life that he had asked for Colombo to come to Modena to work on various projects, specifically the 158, and that he had made this request early in 1937. He argued that this timing was related to his own pressures on the Automobile Club of Italy for a national 1500cc formula. This makes sense if he was at that time still unaware of Gobbato's intention that Alfa Romeo should buy the major share of the Scuderia. Venables (2000) is clear the buy-out was in March and that Ferrari would go on running the racing programme from Modena. He is equally clear that in December of that year, 1937, the situation changed completely and all operations would return to Portello. Whatever was happening at Modena between March and December would have been greatly affected by each individual's perception of who was in charge. It is therefore difficult to understand how Ferrari could later see the 158 as his initiative if Gobbato was so clearly the decision-maker. It leaves the door open to speculation that Gobbato was capable of making Enzo Ferrari think he was responsible for a number of projects when these were already under way.

It is impossible to establish an indisputable timetable to which the 158 was designed, built and tested. Even authoritative sources such as Denis Jenkinson (*Motor Sport*, August 1990) have said that the 158 was designed in 1938, which is certainly inaccurate. Many writers – both at the time, and subsequently – have differing views on the timing of the Alfa Romeo purchase of the Scuderia Ferrari shares, the role of Enzo Ferrari then, the timing of the move back to Portello, and Ferrari's subsequent role and title there. Some sources have him as 'a mere employee', some as team manager, some as director of Alfa Corse, and some as consultant or combination of the above. Some accounts have four, five or six 158s being built completely at Modena and

tested, partly built with the engines run at Modena, or completely assembled at Portello. Subsequent 'authoritative' reporting of these therefore depends on which account the writer had read or believed. Many such accounts have passed into legend. (Incidentally, a similar problem occurs in relation to the diverse cars built to contest the 1938 Grand Prix season: the 308, 312 and 316. Colombo is variously described as having worked on the design of these cars in 1937 or in 1938, both at Modena and at Portello. He would have found it difficult to do the work at Modena if in fact he and the cars were at Portello!)

Borgeson (1990), from his personal contacts with Colombo and Guidotti, states that the 316 emanated from Modena under the management of the Scuderia Ferrari, and, in contrast, the 308, another effort to exploit the 3-litre regulations, was an Alfa Corse in-house project. Hull and Slater's work, often cited as the best book written about Alfa Romeo history, especially the competition history, does not deal with the details of this period. It simply says that after Vittorio Jano left, 'future racing-car design was in the hands of Gioacchino Colombo, and Luigi Bazzi working under the Spaniard Wifredo Ricart' (Hull and Slater, 1982, p.199). Interestingly, Ludvigsen (2001, p.67) states that Colombo designed the 308 by late 1937, but he also indicates – somewhat oddly – that the Alfetta was first called the 308, which seems unlikely.

Several people have claimed various degrees of responsibility for the 158, or have had it claimed on their behalf. Whatever the exact chain of events, it is clear that 1500cc engines were not new to Alfa Romeo, and that Jano had been involved in the design of them, although these had been 6-cylinder units. With Colombo's range of experience by the mid-1930s, his working relationship with Bazzi at Ferrari, and the knowledge that motor racing demanded flexibility, it is not so surprising that he had already committed numerous ideas to the drawing board which might possibly be called upon in the future.

Also relevant during this period were the actions of people such as Raymond Mays and Enzo Ferrari, who wanted to give wider attention to a voiturette class of racing. The argument was that such racing was gaining in popularity, and there would be an audience for a voiturette race at Grand Prix meetings. There was also reasonable speculation that a 1.5-litre formula would be a possible successor to the 3-litre rules when they ran out. While a number of organizing bodies listened to these arguments, no immediate action was taken to formalize them, except in Italy.

Certainly, when Colombo was drawing up versions of a 1.5-litre engine, he was not thinking of something for voiturette racing, but something that would one day be an effective race engine for whatever needs existed at that time. It should be added that the drawings that appeared as early as 1935 and 1936 did not show a single 1.5-litre unit, but variations. Mike Sparken has in his possession drawings of the engine which differ from others that still exist, and from those that have been published by Alfa Romeo. It may only be a matter of coincidence that some of Colombo's early drawings were penned around the same time that Mays and Enzo Ferrari were putting forward arguments for 'upgrading' voiturette racing, but it seems likely that Alfa Romeo and Colombo sensed that having a 1.5-litre car would be a practical idea. Indeed, Venables points out that a document emerged after Colombo's death laying out the specification of a complete 158, and that this document was dated 25 January 1936, some thirty months before the 158 appeared in public. It is possible that he even thought that 1.5-litre rules would come into effect instead of the 3-litre supercharged/4.5-litre unsupercharged regulations that were passed for 1938.

Perhaps, as far as credit for the 158 is concerned, we should leave the final statement on this issue to Colombo himself. When he spoke to Griff Borgeson in 1964, he acknowledged that Enzo Ferrari had played a very key role in the 158 being built at Modena. However, he

also put his views in writing in his book about the design of the earliest Ferrari cars (Colombo, 1987, p.13–16):

Eight years earlier, in May 1937, I had arrived at Modena with a well-defined plan in mind: to build a small car with a rear engine, a kind of miniature Auto Union. For some time I had been thinking about this project, and I'd been studying some possible solutions in my spare time. Enzo Ferrari listened very closely to my proposal. He wanted to know all the details, and asked for explanations which he followed with great attention. And then he vetoed the whole scheme! 'No,' he said, 'it's always the ox that pulls the cart.' It was clear that this was his joking way of concluding the discussion on good terms. But I learned from then onwards that while Enzo Ferrari always gave his designers absolute freedom to put forward their ideas and paid the closest possible attention to what they said, he always reserved the final decision for himself, too.

In a little room in the old Ferrari works in Modena, we worked very enthusiastically for several months on planning the new car. Cavaliere Bazzi, Ferrari's friend and right-hand man, was with me; years earlier he had been one of the technicians who worked most closely with Vittorio Jano. Then there was Nasi, a very young designer, also 'on loan' from Alfa Romeo, and finally Alberto Massimino, the engineer who had been taken on directly by Ferrari to strengthen our little working team. I recalled all the episodes of that exciting experience: the long days in the little room in the Ferrari Team, the evenings we all spent together in a *trattoria*, Enzo Ferrari racing from one supplier to another to put together the various parts of the car we watched growing to life in front of our eyes.

And then came the other memorable days which followed in rapid succession: the excitement of the first trial, on a fine morning in the spring of 1938 – 5 May, to be exact – when the tester Nardi took the wheel of the *Alfetta* for the first few miles on the Monza track.

Colombo's words raise a number of issues, but one thing is clear: a rear-engine car may have been on the cards at an early stage. Whether this had grown from discussions with Ricart, who was later mainly responsible for the rear-engine 512, or whether it was another product of Colombo's own fertile mind, is uncertain. It did not take a great deal of imagination to see how successful a rear- or mid-engine car might be, but it fell on Ferrari's deaf ears. It was as if Auto Union had not been there, although the 'if it wasn't invented here' syndrome existed at Modena for many years. Colombo does make the Alfetta seem very much a *team* project, whatever the details of the design origins and motivation. Finally, he notes that Enrico Nardi, the man who would go on to build his own race cars and create a steering-wheel empire, first tested the car on 5 May 1938; there is evidence that testing had taken place considerably earlier, although Karl Ludvigsen has the first testing of the 158 in the hands of Attilio Marinoni in June 1938 (Ludvigsen, 2001, p.67). There are other errors in Colombo's book, locating the Ferrari workshop in Milan rather than Modena, and there is always the feeling that this retrospective look at his career perhaps plays down some of the less pleasant events.

The 'Alfetta' Comes to Life

Although 1937 would be a tumultuous year for Scuderia Ferrari, there were nevertheless

The first 158 prototype, perhaps as early as June 1937. According to Mike Sparken, the very first chassis built were not raced as they required fuller development. (Biscaretti Museum)

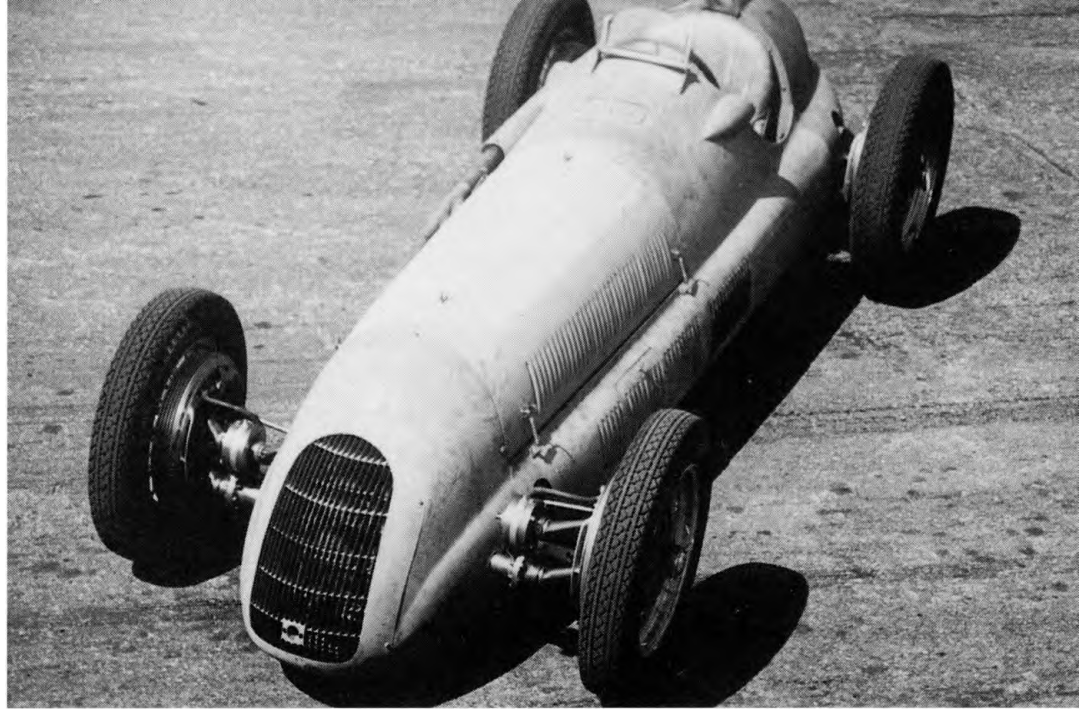


certain constants. One was that there would be continuing support to develop a Grand Prix winner even though there were constraints on these ambitions, and Italian dictator Mussolini was increasingly wanting to rival Adolf Hitler in gaining glory through industrial achievement. There was also the growing belief that there would be a place for a good 1.5-litre car, albeit in *voiturette* racing, a belief held largely by Ferrari himself, probably by Colombo, and perhaps even by Gobbato and possibly by Ricart. As the year advanced, despite a lack of success on the Grand Prix front that would see hopes increasingly pinned on the following year, work in earnest was begun on the 158, converting Colombo's initial design drawings into a real car.

Venables (2000) dismisses the long-held view that the 158 'was born out of Italian despair', a view shared even by meticulous historians such as David Hodges (1966), among others. The notion was that the car was a reaction to the beating Alfa Romeo and Italian cars were taking at the hands of Mercedes and Auto Union. But this was in Grand Prix racing and the 158 was not being built as a Grand Prix car but as a *voiturette*; at the time it was started even the most imaginative team member could not have accurately predicted when, or even if, there would be a 1.5-litre Grand Prix formula.

As Colombo himself admitted, it was probably better for himself and for Jano that Colombo should be based at Modena. This

Overhead view of the first 158 prototype. (Biscaretti Museum)



gave him greater scope to work, and put less pressure on Jano in his final months at Alfa Romeo. The team that went to work on the 158 project was a small one. There is no evidence that the project, at this stage, had either a Ferrari or Alfa Romeo *tipo* number or designation, but there is some evidence that the term ‘Alfetta’ was already being used. Credit for that term, like the car itself, is attributed to diverse sources – the public, team members, Colombo himself. This is an imponderable, but there was a precedent for use of the term. Numerous accounts say that ‘Alfetta’ was used after the first public appearance of the car because the car was smaller than a Grand Prix car; it was a *voiturette*, and it was relatively small in size, and this name came from the ‘public’. The more likely scenario is that the team, some of whom had also worked with Jano on the 1500 6-cylinder, recalled that ‘Alfetta’ was used as the nickname for that car, as the engine and chassis were smaller than those of its predecessor. ‘Alfetta’, of course, means ‘little Alfa’ in Italian. Pre-war issues of *Motor Sport* reveal that, when the overseas press heard about the car, especially in Britain, they anglicized the name and called the cars the ‘Alfettes’.

The nomenclature used in the workshop is not recorded, and it seems likely that the car may have also been referred to as ‘158’, denoting the engine size and number of cylinders. According to current practice with Grand

Prix cars, it would have been 8C-38, but it was not then a Grand Prix car and that would have been confusing. In any event, in 1938 there was a change in nomenclature, whereby the 308, 312 and 316 referred to engine size and number of cylinders without reference to the year as previously. Some diehards argue that ‘Alfetta’ referred to the 158, but not the 159 of 1951, but this is inaccurate, as the 159 was virtually the same car as the 158, and by this time the 158 itself was a proper Grand Prix car, no longer a *voiturette*.

The origins of the nickname ‘Alfetta’ will remain another mystery, then, but it was a name that came to be synonymous with Alfa Romeo victory.

Borgeson, again, from his discussions with Guidotti and Colombo, probably provides the best evidence as to the detail of what was happening at Modena with the 158s. He states that four chassis were laid down at Modena, and that these were not revolutionary but relied on Alfa Romeo state-of-the-art design ideas. According to Mike Sparken, a set of chassis was laid down and tested and found to be wanting. It is not clear whether these were then modified and used or whether they were scrapped. The disparity in discussions about when testing first took place gives some credence to this view. It may also be the case that, when the project was moved back to Portello, in December, serious changes were carried out.

The 158 Chassis

The first of the chassis frames built at Modena was made up of flat steel tubing, which had a thickness of 0.06in (1.5mm), and was 0.877in (22.3mm) wide by 4.8in (122mm) high. The following frames were changed and the width was increased substantially, to 1.38in (35mm). The frame was thus comprised of two sets of parallel rectangular-section tubes, joined by four cross-members, and the rectangular sections were 18in (457mm) apart. The final drive and the engine were also used as chassis cross-members, with the intention that this would produce a rigid frame assembly. It seems likely that this did not happen with the first chassis, and that modifications were made. It is also possible that the lack of rigidity was not discovered until testing had taken place, leading to further modifications.

It is useful to note that, in total, only nine engine blocks were ever cast. This is an indication of how much development went into the 158 over a period of years. Owing largely to financial restrictions, the development team was not able continually to produce new parts, but had to make the best of what was available. The car was therefore under continued development, some of which was recorded, and much of which was not.

Front suspension consisted of trailing links, and there were swing axles at the rear, enclosed in housings with in-board u-joints based on American types. At both front and rear were six-leaf transverse springs. Hydraulic dampers of a direct-acting telescopic type and friction dampers were used, and these were adjustable. The front leaf springs were low-mounted and connected to the wheel hubs, which were located by the trailing arms. At the rear the single transverse spring was located under the main axle housing and connected to the hubs by means of pivot links. Pomeroy (1965, p.36) describes the suspension's 'salient features being swing-axle rear suspension with negative camber and a neutral position, and toe-in as the wheels rise to the full bump. Front suspension is by trailing arms, transverse leaf springs being used fore and aft.'

Braking was by means of hydraulic drums, which were mounted outboard on each hub. The drums were ventilated and had very prominent fins. The brakes, like most aspects of the 158, were refined over the years. Power increases came rapidly, which meant the brakes needed development. The original size and location of the fuel tank, in the tail, also changed as fuel consumption increased with greater power. Steering was by means of worm and wheel gear mounted directly above the clutch housing, with a 'push-pull' rod, which extended forward underneath the exhaust system to a bell crank mounted on the front cross member. Equal-length track rods were split and inclined slightly backwards.

The 158 Engine

Although there are some variations in Colombo's early drawings, the major features of the 158 engine remained reasonably consistent and the first engines were hardly altered in any major way over a long period, although various refinements and a move from single- to two-stage supercharger brought enormous advances in power. The initial design had an inherent weakness, which was never fully corrected in the nine blocks that which were cast. (It was quite amazing that Alfa Romeo could achieve what it did with cracked blocks!) The cylinder liners and single-stage superchargers were made at Portello rather than in Modena.

The straight-eight 158 engine consisted of a light alloy crankcase, which was split on the centreline of the crankshaft, with dry-sump lubrication. Colombo had moved the cam drive to the front of the engine, and this allowed the use of a shorter block than on previous 8-cylinder engines. The scavenge pump drew oil from the rear end of the crankcase, after oil had been fed through an external pipe to the seven main bearings, and an eighth out-rigger bearing adjacent to the flywheel. The crankcase itself was finned and the surplus oil from the supercharger gears was also drained back into the sump. The cylinders were bolted

on to the top of the crankcase, which was cast in electron. The cylinders consisted of two alloy castings bolted together, and the dry liners were inserted into the four bores in each cylinder. The crankshaft itself had been machined from a single chrome steel billet. Nye (1989, p.97) had stated that there were eight main bearings and a subsidiary ninth, but later amended this to what Pomeroy had described some years earlier (Nye, 1993; Pomeroy, 1965). (Most of the existing written material on the detail of the 158, and many other Grand Prix engines, emanates from the meticulous work of Pomeroy, who subjected engine design and construction to endless analysis, and to whom all historians are greatly indebted.)

Pomeroy (1965, p.34) describes the operation by which

a train of gears drives accessories and two overhead camshafts from the nose of the engine, also a Roots-type supercharger placed initially in the centre of the engine on the left side of the crankcase and inspiring through an updraught carburettor which feeds mixture directly to a manifold placed directly above it. Two valves per cylinder are used with a 90-degree included angle, with central position for sparking plugs, and the water offtake is by four risers mounted on top of the cylinder blocks directly beneath the exhaust ports.

There was one plug per cylinder fired by two Marelli magnetos, which were driven from the front of the engine. Bore and stroke was 58mm × 70mm, with a capacity of 1479cc. The fuel pump was driven from the rear end of the inlet camshaft, and the water and oil pumps from the train of gears at the front of the engine. The magneto was driven from this train of gears as well.

When first tested at Modena, the 158 engine was producing 180bhp at 7,000rpm with 17.6psi boost from the supercharger. Unsurprisingly, in view of what was a relatively rapid development, various authors quote different but similar power outputs at this early stage. However, the final figure in 1951 was nearly

450bhp, showing what a solid basic design this was, since very few major design changes had been made to it. The suspension had followed Jano principles as used on the 8C 2900 and so did the engine, in that the cam followers and the early blowers were the same as on the 8C 2900.

The drive from the engine went through a multi-plate clutch to the rear-mounted four-speed gearbox, which was built in unit with the final drive. Here, the term 'rear-mounted' is a relative one, meaning to the rear of the engine, as the gearbox itself was situated under the driver's seat. The final drive unit was bolted to one of the cross-members of the chassis frame. Final drive ratios between 4:1 and 6:1 were used. The gear selector was located in a left-mounted gate in the cockpit, with an oil tank located in the right side. This transmission did not depart from existing Alfa Romeo practice in any notable manner.

The car was essentially a trim and simple machine, designed and constructed to be easy to work on. The first version of the 158 bodywork was not particularly attractive, and it would not have won many prizes for aesthetics, but it was nevertheless to prove effective.

Technical Specifications – The Early 158

Cylinders	8
Bore and stroke	58mm × 70mm
Stroke/bore ratio	1.21
Piston area	32.8sq in (212sq cm)
Capacity	1480cc
Supercharged	Single-stage
Power	180bhp @ 6500rpm
Piston speed	3,136ft/min (956m/min)
Valves no. and angle	2 @ 90 degrees
Horsepower per litre	120
Gears	4
Wheelbase	98.6in (2.5m)
Track	Front and rear – 50in (1.32m)
Front suspension	Trailing arms
Rear suspension	Swing axle
Frontal area	11.5 sq ft (1.07sq m)
Laden weight	19.5cwt (991kg)
Fuel capacity	37.5 gallons (170 litres)
Maximum speed	168mph (269km/h)
Tyres	5.50 × 17 front, 7.00 × 18 rear

4 The Racing Begins – 1938 to 1940

The Creation of the ‘New’ Alfa Corse

The 158s were being built at Modena under the supervision of Enzo Ferrari, and some early testing may have taken place at that stage, although this has not been confirmed. In September 1937, Jano finally got his marching orders, much against the wishes of the majority of Alfa Romeo and Scuderia staff. On 1 January 1938, Gobbato made an announcement that came as a shock to most of Italy: Scuderia Ferrari was to be closed down and Enzo Ferrari would become the manager of a newly constituted Alfa Corse.

This was a blow to Ferrari, who had come to believe that Gobbato was happy to let him run his part of the Alfa Romeo racing effort from Modena. Ferrari would be based at Portello under the new arrangements and all the staff and equipment would be moved from Modena to Portello. Venables (2000, p.131) says this included ‘the partly built 158s, with all the jigs and all the components for these cars’. The term ‘Tipo 158’ would appear to date officially from the return of the cars to Portello.

There remains a question over whether any of the cars had in fact already been completed and tested, and, if so, what was transferred to Portello could have been revised chassis, or possibly even new chassis if early testing had found the ‘originals’ wanting. This uncertainty has occasionally left the door open to those who would like to believe there were additional chassis left at Modena! The detective

work of Mike Sparken eventually located a so-called ‘lost’ 158; more of this later.

The ‘new’ Alfa Corse was wholly owned by Alfa Romeo, and the separate Ferrari team was placed in the hands of a liquidator. The stated intention of Alfa Corse was to develop, construct and manage new racing cars from a two-storey building adjacent to the Portello factory. Photographs published of this building in January 1938 indicated that work on it had been going on for some time. The Alfa Romeo dealership run by Enzo Ferrari was left behind at Modena but everything else came to Milan. Alfa Romeo were putting their hopes for future racing success in the 158, even though this would not be a Grand Prix car. The 3-litre projects also came from Modena so that Alfa Romeo had greater control over the general racing effort, and this amounted to a serious criticism of Enzo Ferrari’s work. It does, perhaps, seem odd that Ferrari was kept on, or it would have seemed so at the time; perhaps his future departure was already on the cards?

With the return to Portello, a great weight of responsibility fell on the shoulders of Giacchino Colombo to design, improve and develop the contenders for Grand Prix races, as well as the 158s for voiturette races, once the decision was made by Alfa Corse to race these cars in that category in 1938. It is impossible to say whether there was a clear decision not to enter these events until later in the year. It is more likely that there just was not enough time for Colombo and the team to get the Grand Prix cars and the 158s going as well.

Venables (2000) argues that the 158 had been tested at the end of 1937 by Marinoni, on one of the *autostrade*. It seems possible that this might well have occurred when other cars were getting similar tests. Records were not kept for testing as they are now, and it seems quite likely that the cars went out more times than were ever noted for posterity.

In the early months of 1938, Alfa Corse was engaged in signing drivers for the coming season. Tazio Nuvolari had been seriously discouraged by the unreliability of the Grand Prix cars, and had had a number of accidents, but he signed a contract nevertheless. Within weeks he had another accident, at Pau. He said he was retiring and made it clear to the press that he was very unhappy with Alfa Romeo and the cars he had been given. This led to a rebuke from 'certain Fascist quarters' about giving press interviews.

There were ten Grand Prix races in 1938, and fourteen voiturette races. Alfa Corse entered eight and ran in seven of the former, and six of the latter, not entering any voiturette race until August, as the major focus remained on the Grand Prix events.

Grand Prix Disappointment

Emilio Villoresi had been brought into the Alfa Corse team to partner Tazio Nuvolari in Grand Prix races to the new 3-litre formula. This was a very short-lived partnership; Nuvolari's Pau crash in practice saw his departure from the squad, and Villoresi himself had a fire in practice, so neither of the 308s started the race – a bad omen for the season. Rene Dreyfus scored a good win at Pau in the Delahaye 145 from a Mercedes W154 shared by Lang and Caracciola.

The 308s entered for Nuvolari and Giuseppe Farina did not materialize at the next race, at Cork in Ireland, and Dreyfus won again, and it seemed at first that the German cars expected supremacy would be challenged. Sadly for Dreyfus, his 'winning streak' did not continue. In fact, ten Alfa Romeo-powered cars had

been entered for that race, including six private Tipo Bs, or P3, and Chris Staniland's Multi-Union, but only Ken Evans' P3 showed up; he was fourth. Jean-Pierre Wimille was a retirement in his Type 59 Bugatti.

In mid-May, the first major race of the year, the Gran Premio Di Tripoli, took place at the Mellaha circuit. Sixteen 1500cc voiturette cars were also invited, but all of these were Maserati 4CMs or 6CMs. It was a tragic race for Alfa Corse as Eugenio Siena's works 312 crashed while lapping a slower car, with fatal results for Siena. Then Giuseppe Farina, a driver always known for his aggressive style, touched the Maserati 4CM of Laszlo Hartmann. Hartmann was killed, and Farina suffered minor injuries. The forty-lap race went to Hermann Lang's Mercedes W154. Raymond Sommer managed to salvage fourth in his works 308, but that was poor compensation considering the effort Alfa Corse had made for this race, with two 312s, a 16-cylinder and the 308. The Alfa Romeos

Emilio Villoresi

'Mimi' Villoresi has always tended to be overshadowed by his older brother Luigi, and rather less is known of the details of his early driving career. Born in 1913, he raced small Fiats for some time, competing in the Mille Miglia. Like his brother, he raced a 1.5 Maserati in voiturette races, and was signed to drive for Scuderia Ferrari in 1937. He finished third at the Coppa Principessa Di Piemonte at Posillipo in Naples in a 2900A behind Farina and Biondetti, and was third again a few weeks later, this time behind Trossi and Tadini, at the Circuito Della Superba in Genoa. These were relatively minor races but there were good drivers in the field. Villoresi also drove a Scuderia Ambrosiana Maserati 6CM in five voiturette races in 1937, where he won heats, then often led, and was forced to retire with mechanical problems. In 1938, he raced the 308 at Pau, where he had a fire in practice, and he practised for the Italian Grand Prix at Monza but was a reserve driver for the race in the 308. He made his 1938 voiturette debut at the Coppa Ciano Junior race in the 158. He came to be considered the quickest of the pre-war 158 drivers.

The Racing Begins – 1938 to 1940

and some of the Maseratis had been able to match the pace of the Mercedes in practice, but could not sustain it in the race, and, in many ways, that was the end of any opposition to Mercedes for the 1938 season.

No Alfas went to Reims in July, where von Brauchitsch won in the W154. A few weeks later, Nuvolari – out of retirement, and having defected to the opposition – showed up in an Auto Union for the German Grand Prix at the Nürburgring. It was a move that did not go down well at Alfa Corse, or with Mussolini, although the latter could hardly argue as the Mantuan was driving for his ‘colleague’. The race went to Englishman Richard Seaman in one of five W154s. Farina and Clemente Biondetti both retired the 312 Alfas and privateer Renato Balestrero finished a creditable seventh. This was the race which history has been in the hands of von Brauchitsch until a huge fire during his pit stop put Seaman in the lead. Von

Brauchitsch rejoined, but crashed, claiming the steering wheel had come off, and that he would have won, although team members have said that neither claim was true!

Seven voiturette races had been run by the time the Coppa Ciano at Livorno was due to be run on 7 August 1938. This was the type of event to which many organizers aspired, with a full Grand Prix supported by a high-quality 1.5-litre voiturette race. The Italian National Championship was now being run to the 1500cc regulations, and that gave added importance to the events. The smaller division had been dominated by either 4CM or 6CM Maseratis, which were virtually the only cars in Italian races. In other events in France, and at the Cork race earlier in the year, there had been a handful of ERAs, Talbots, MGs, an Alta, the occasional Bugatti and Delage. However, testing had been taking place with the 158s, and three cars were entered for Emilio



The first public viewing of the 158 was at testing at Livorno prior to the Coppa Ciano Junior race, in August 1938. (Alfa Romeo Storico)

Villoresi, Clemente Biondetti and Francesco Severi.

After limited testing, the team managed to improve the power output of the 158 8-cylinder engines to 195bhp at 7,000rpm, mainly by increasing the manifold pressure. According to Ludvigsen (2001, p.67), Scuderia Ferrari's chief tester, Attilio Marinoni, was out in the car in June, pronouncing it competitive. Hull and Slater (1982) confirm this, and were probably the source of the original information. Unfortunately, Hull and Slater had such a wide brief for their research that much of their detailed knowledge is not recorded. Francesco Severi carried out testing at Livorno in the days before the race, and it was evident then that the three cars could be competitive with the Maserati opposition.

In the main Coppa Ciano race for Grand Prix cars, works Alfa 312s were entered for Farina, and for new team member Jean-Pierre Wimille, while Balestrero's private 308 was in the hands of Vittorio Belmondo. Farina and

Clemente Biondetti

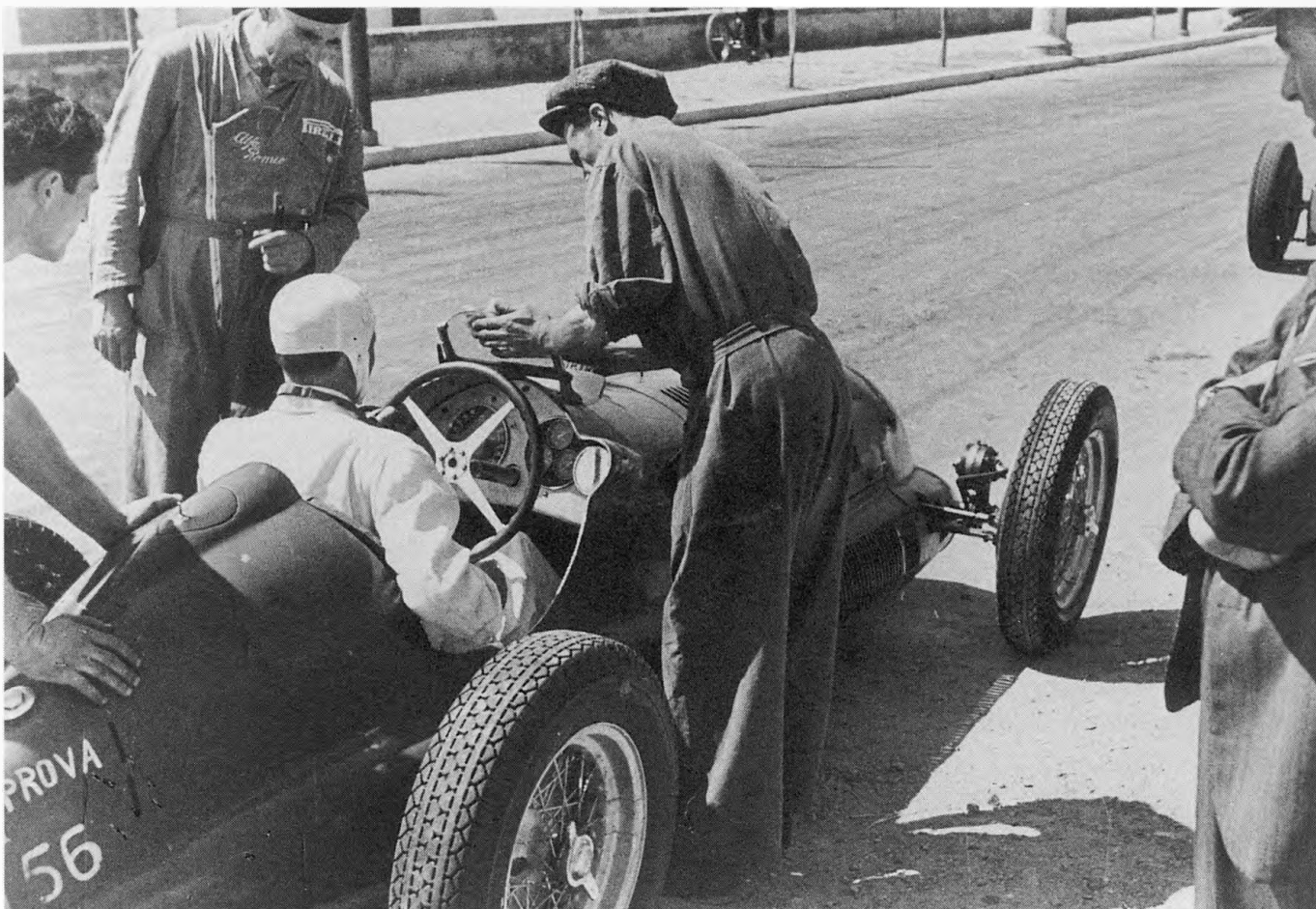
Biondetti was a native of Sardinia, and started as a motorcycle racer in 1923, moving to cars four years later. He raced a variety of machines, including Talbot, Maserati and Alfa Romeo, winning the Italian Championship for 1100cc cars in 1929 and the 1500cc class in 1930. He was a works Alfa Romeo driver for the first time in 1936, coming eighth in the Mille Miglia. In 1937, he drove the Scuderia Ferrari Alfa Romeo 12C in the same race at Naples where Villoresi was behind the wheel of the 2900A, beating him by one place. He retired in the Genoa race in the 3.8 12C (he had driven the 4-litre version at Naples). He retired at the Monaco Grand Prix in the Scuderia Maremmana Maserati 6C, and from the Italian Grand Prix in the 4-litre 12C again. Like Villoresi, he found himself doing a number of Grand Prix races in 1938. He qualified the Alfa Corse-entered 316 on the front row of the grid in Tripoli and ran well until forced into retirement. He was in the 312 at the Nürburgring but crashed on the second lap. He was a versatile driver, coming to prominence in long-distance sports-car races particularly.

Francesco Severi

Severi is something of a mystery man, and there are references to a Giulio and Guido Severi, as well as a Francesco, but it is thought that these all refer to the same person. (There is also a Martino Severi, who tested for Ferrari, but he was involved a number of years later.) Francesco Severi was racing Scuderia Ferrari cars as early as 1931, taking the wheel of an Alfa Monza at Pescara. He won the Targa Abruzzo sports-car race in 1934 with Franco Cortese, and did it again with the same partner in 1935. In 1936 he appeared in an Alfa 8C-35 in several races including Tripoli and the Eifelrennen at Nürburgring, and he and Raymond Sommer won the Spa 24 Hours in a 2900. Severi entered a Maserati 6CM at the Tripoli Grand Prix in 1937, finishing seventeenth overall and third in the voiturette class. He crashed a 3.7 6C Maserati in the German Grand Prix. He completed the rest of the season in voiturette races, eight in total, gaining a number of top three finishes, including a win in the XXVIII Targa Florio (run as a single-seater race in a park in Palermo). Severi was running his own 6CM Maserati, although twice he appeared in a works car. He won the Spa 24 Hours again in early 1938 before racing the 158.

Venables (2000, p.133) refers to Severi as one of Scuderia Ferrari's 'competent drivers', and elsewhere he is variously viewed as 'an occasional test driver'. According to Hull and Slater (1982), he distinguished himself by his sports-car drives, but this underestimates his experience and skill. He was far more than just a sports-car driver, and his testing input influenced the rapid development of the 158.

Maserati 8CTF driver Carlo Trossi both gave the three Mercedes drivers a difficult time. Trossi was quickest in qualifying, and he and Farina bracketed Carraciola and Lang on the front row. Trossi led some of the race until he had brake and engine problems. Farina then finished second to Lang, with Wimille having handed over to Biondetti in the other 312, which came third. It was a good race for the Italian teams, but nothing compared to what the voiturette cars had done in the earlier supporting race.



Francesco Severi seen in the first public testing of the 158 at Livorno, August 1938. (Alfa Romeo Storico)

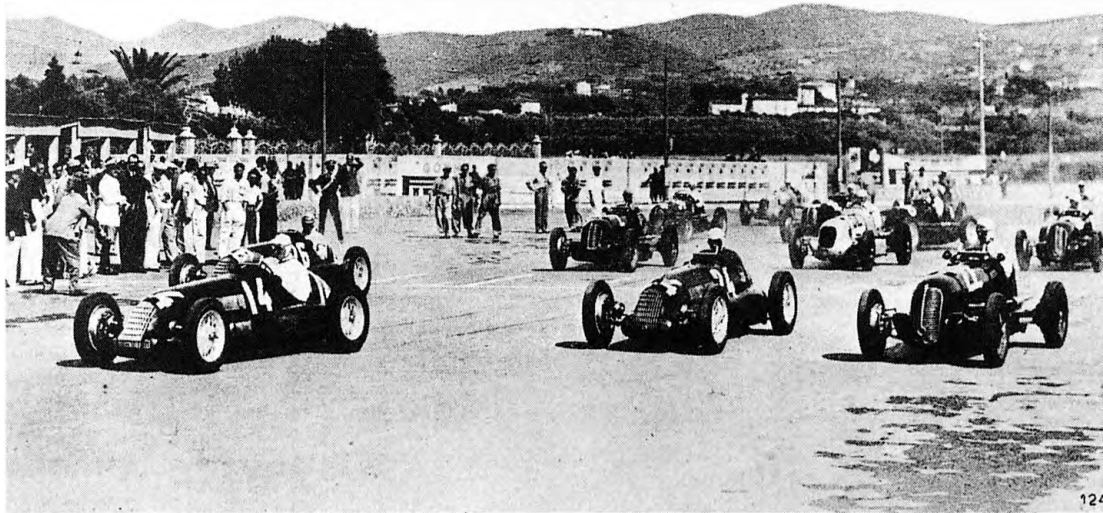
First Race for the Alfetta

It seems fair to say that no one expected the Coppa Ciano Junior on the Montenero circuit at Livorno in Italy to be a major turning point in the racing of the period, never mind in motor sport in general. Twelve Maseratis, a mix of 4CMs and 6CMs, turned up for the race on 7 August 1938, and these were all cars which had been contesting the numerous voiturette races. The only 'outsiders' were three red Alfa Romeos. They were seen as both different and more attractive than the Maseratis, although in fact the 'cheese-cutter' grille and front-end shape of the new car was not aesthetically brilliant, and would be changed the following season. Still, the knowledgeable and the local race-goers flocked to see the new cars. Photographer George Monkhouse and German driver

Manfred von Brauchitsch were both admirers of the new-look Alfa Romeo 158, or 'Alfetta', as the public came to know it.

The main opposition would come from Emilio Villorosi's brother Luigi in his works 6CM Maserati, and from the Scuderia Ambrosiana 6CM of veteran Franco Cortese. German Paul Pietsch, who would figure in the Alfa Corse history some years later, was there with his own 4CM, along with Aldo Marazza in a 4CM. They were all drivers who had proved themselves in the closely fought voiturette races for the last few seasons. Luigi Villorosi's Maserati engine had been uprated by the factory with a light alloy block and a number of changes to the suspension, and attention had been paid to reshaping the body for a better aerodynamic effect. Word of the Alfa testing had been leaked – hardly surprising,

The Coppa Ciano Junior race, 7 August 1938, at Livorno. This first race for the 158 saw a victory for Emilio Villoresi in number 14 with Severi (26) seventh and Biondetti (24) second. (Alfa Romeo Storico)



since much of it was done on public roads and *autostrade*. Indeed, it was not unusual for the competition to show up and watch a team testing, with their own stopwatches in hand. As late as 1963, testing was still being done out in the open; Carlo Chiti's ATS had its first run on the dirt roads of the farm where he was putting up his new factory!

Practice on the street circuit ended with the three Alfa Romeo 158s on the front row. Francesco Severi was quickest of all, on 2min 32sec, ahead of team-mates Emilio Villoresi and Clemente Biondetti, and a full three seconds faster than the Maserati of Luigi Villoresi. Commentators on the event have subsequently argued that the previously dominant Maseratis had been rendered obsolete as soon as the race was under way. This may seem to have been something of an overstatement but it turned out to be accurate.

Cortese, Pietsch and Edoardo Teagno were on the row behind the first four as the flag came down, and Francesco Severi led for most of the first lap until Luigi Villoresi got past, with Biondetti and Emilio Villoresi chasing Severi. On the fourth lap, Emilio was up to third, and Severi dashed into the pits for a long stop. Luigi Villoresi led until just before half-distance, but he was driving the Maserati on the limit and the engine could not take the strain. The two Villoresis had run very close together, and younger brother Emilio took over as Luigi was forced to retire. In the end, Emilio won the twenty-five-lap, 90-mile (145km) race at an average speed of

82.75mph (132.5km/h), with Biondetti two seconds behind him. An Alfa 1-2-3 was ruined as Severi had a spin and another stop for new plugs, so he was seventh. Aldo Marazza in the second works Maserati was third, from Cortese, Barbieri and Ruggieri, with Severi another lap down. The Maserati drivers just could not contain the Alfas, and Emilio Villoresi set fastest lap at 85.69mph (137km/h).

The Coppa Ciano Junior had been an amazing debut, and, although not a Grand Prix, was an indicator of what was to come. Enzo Ferrari was in the pit that day with Gioacchino Colombo to see 'their' car win its debut event.

Overseas news of the Alfa Romeo victory was quick to break, *Motor Sport* (Sept. 1938, p.340) acknowledging that the appearance of the Alfas 'was undoubtedly the most important event of the month . . . at Livorno where they won, they never gave the slightest trouble'. The magazine even ran a photo of Severi, although it had been taken the following week at Pescara, not at Livorno.

Failure at Pescara

The Italian motoring press was glowing in its tributes to what Alfa Romeo had accomplished. The win in the voiturette race and a reasonable showing for the Grand Prix cars had gone a long way towards restoring Alfa's waning reputation. However, the team's joy proved to be slightly premature.

One week after the voiturette race, the teams moved south to Pescara for the Coppa Acerbo, on 14 August. It was an exceedingly busy race programme, with a six-hour sports-car race on the Saturday, followed by the Coppa Acerbo Junior race in the morning on the Sunday and then the Grand Prix cars. Two 158s, now regularly being referred to in the press as 'Alfettas', were entered for Emilio Villorosi and Francesco Severi. Biondetti was being saved for the main event, in which he was driving a 312. It was a smaller field for the Junior race, but nevertheless an experienced one, with Marazza and Luigi Villorosi in the works 6CM Maseratis, Ettore Bianco in a 4CM and Pietsch again in his 4CM; the only non-Italian car was Luigi Plate's Talbot 700. As had happened the week before, the 158s were quickest in practice, with Emilio Villorosi this time taking pole from Severi, and Marazza also on the front row.

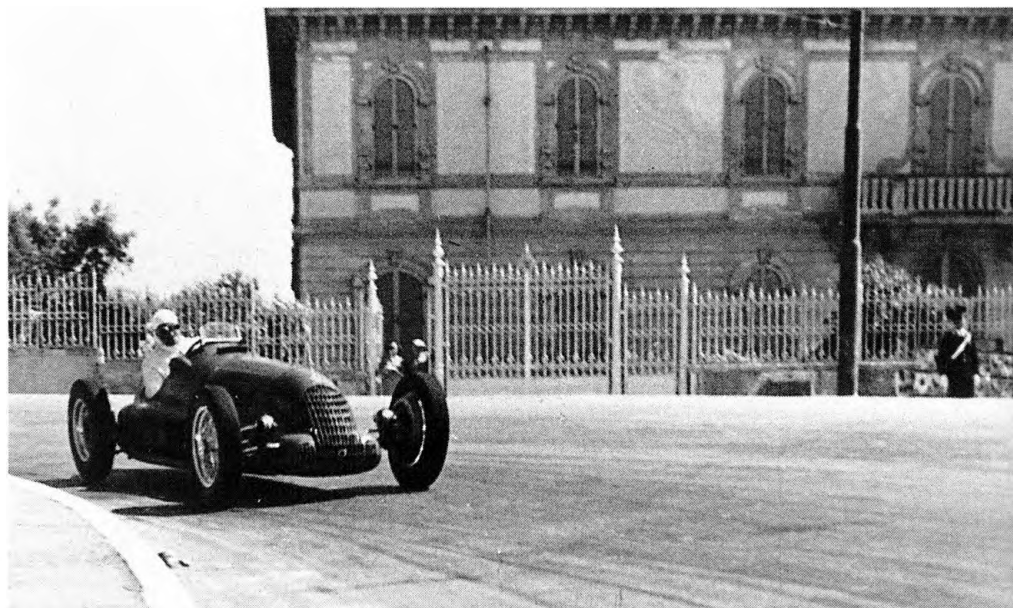
The race turned into an Alfa shambles almost immediately when Emilio Villorosi went off the road just after the start and pitted, retiring on the second lap. Severi then had a long stop and he dropped to fourth at the end behind Luigi Villorosi, Paul Pietsch putting in an impressive performance, and Barbieri, as Marazza had also retired. The Alfa unreliability took everyone by surprise after the previous week's victory; the long 15-mile (25km)

Pescara road circuit had severely tested the new Alfa 158. In fact, neither Severi nor Emilio Villorosi could match the speed of the Maseratis in the race, although at one point Severi was being timed at over 140mph (225km/h) for a sustained period on the long straight.

It is the view of Venables (2000) that Emilio Villorosi's carburation set-up could not cope with the change of altitude, as the circuit ran from the sea into the mountains. Hull and Slater (1982) argue that the cars had spark-plug problems and later histories tended to repeat the view that somehow the spark plugs were at fault. Most subsequent comments about the performance in that first season were based on the remarks of Laurence Pomeroy (1965), who described what actions Alfa Corse took at the end of the season to improve reliability. It would appear that no one at the time ever seriously questioned what the problems were. *Motor Sport's* 'Auslander', in his 'Continental Notes and News' (Sept. 1938), also accepted the story that the plugs could not cope with the altitude changes, and predicted that this would soon be cured.

Fortunately, Griff Borgeson pursued the question through his good relationships with ex-Alfa Corse personnel, and used his inside knowledge to write a two-part tribute to the

On 14 August 1938, Severi (8) was fourth at the Coppa Acerbo Junior at Pescara, while Emilio Villorosi retired. (Alfa Romeo Storico)



Alfetta in *Road and Track* (March and April 1965). Borgeson probably knew more about the people at Alfa Romeo over the period of its history than anyone else, certainly outside of Italy. He sums up his discussions with Colombo and mechanic/test and race driver Consalvo Sanesi as follows:

It was during this early period (between the races at the end of 1938) that the one real weak point of this engine manifested itself. The bearing caps were held in the magnesium crankcase by two short bolts each. Directly above them were short hold-down bolts for the cylinder blocks. It was between the ends of these upper and lower bolts that each of the original four crankcases developed large and serious cracks. Colombo pleaded for new castings in which he could run big single bolts from cap to block and thus eliminate the repetition of this failure. But this was never a large-budget operation and his management told him to make the best of what he had, which he did. He drilled the cracked cases, installed the new through bolts, and in this patched up form the engine went on to develop ever-higher output for another dozen years. And of course no one ever knew. (Borgeson, *Road and Track*, March 1965, p.56)

The timing of Colombo's intervention to effect repairs is unclear. The team missed the next two races and returned a month later to win, but then the cars failed again a week later. Temporary work may have taken place after the Coppa Acerbo meeting, but it seems more likely that it was done at the end of the season. There are also reports that six cars were complete by this time, so it has to be assumed that the same weakness in the blocks had to be dealt with in the other two engines. Indeed, there is some suspicion that all nine blocks that the team used over the period of 1938 to 1951 had some cracking, and this was evident in the engine of the Mike Sparken car. One interesting aspect of this little-known occurrence is

that it indicates that either Alfa Corse were not willing to share information in the period, or that they were never asked . . . or both!

The Coppa Acerbo for full Grand Prix cars followed the voiturette event. With three Mercedes W154s for Caracciola, Lang and von Brauchitsch, and Auto Union Type Ds for Muller, Nuvolari and Hasse, optimism about Alfa's fortunes were guarded as Farina in the 312 was only on the third row, and Biondetti and Vittorio Belmondo, also in 312s, were slower. Luigi Villorosi in the factory Maserati 8CTF was two places behind Farina. After three hours of racing, Caracciola's Mercedes was the only German car still running, and a restrained Farina finished a good second, four minutes behind, with Belmondo five minutes further back but still on the winner's lap. Comotti's Delahaye was a further lap behind. These were the only finishers, so Alfa Corse went away with some sense of achievement.

Withdrawals and a Win

The Swiss Grand Prix at Bremgarten took place a week later, and Alfa Corse had made entries for Farina and Jean-Pierre Wimille in 312s, and for Emilio Villorosi and Raymond Sommer in the Prix de Berne for voiturettes. Farina trailed home in the big race behind three Mercedes and Stuck's Auto Union, and Piero Taruffi was sixth in a Scuderia Torino-entered Alfa 308. The 158s were withdrawn from the Prix de Berne after the Pescara disaster so that some work could be done before the next Italian races. Alfa Corse did not want to do badly in one of the most prestigious of the voiturette races, and the Swiss crowd were happy when one of their own, the relatively little known Armand Hug, in his Maserati 4CM, won the final after two heats.

A single car was entered for Emilio Villorosi at the Coppa Edda Ciano at Lucca on 4 September, but a more important race was coming up at Monza a week later, so the 158 was again withdrawn. Luigi Villorosi won the

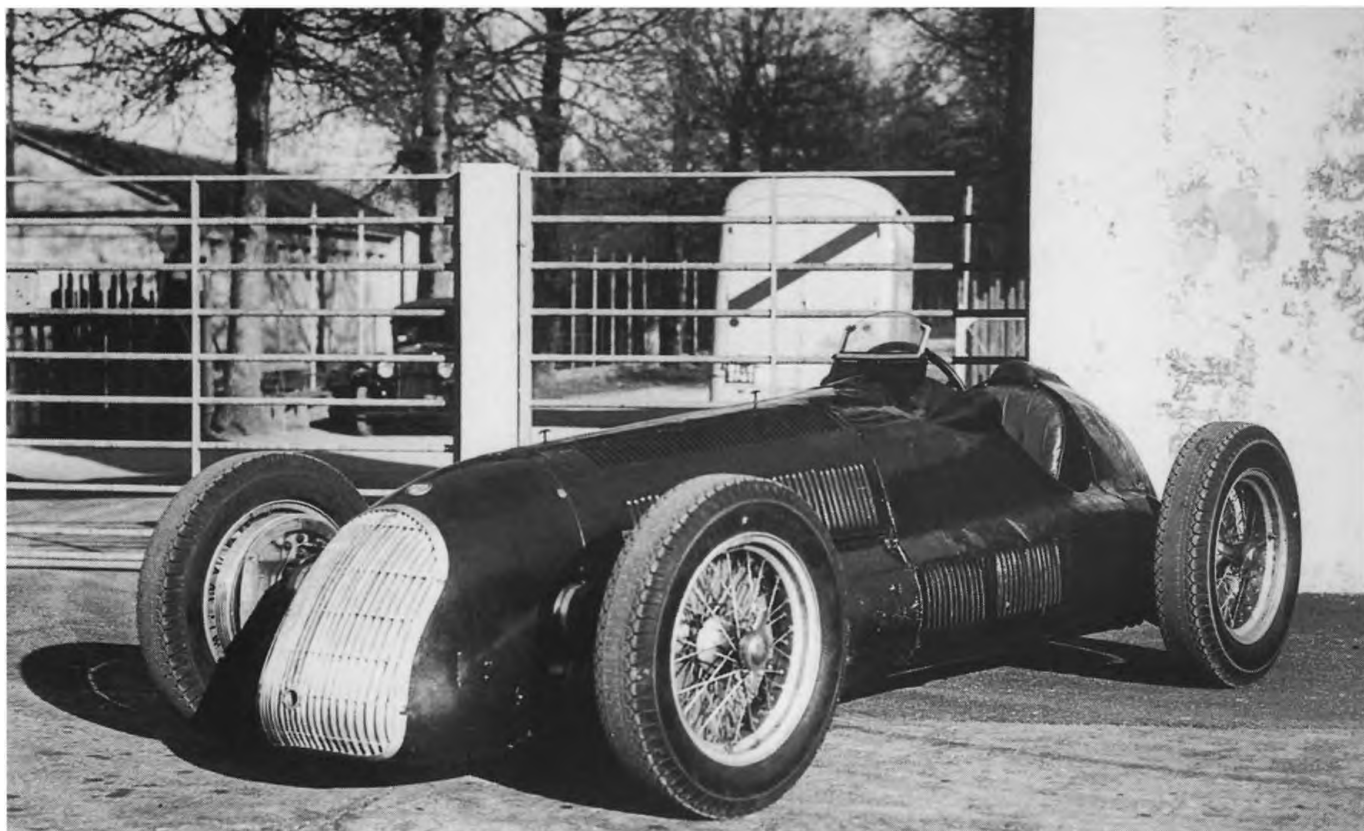
race in his works Maserati 6CM from Franco Cortese, and Paul Pietsch managed third, with Villoresi securing the Italian 1500cc Championship.

On 11 September, the Italian Grand Prix and the Gran Premio di Milano for voiturette cars were to be run at Monza. Alfa Corse was making a major effort for this final important race of the season; two 312s for Piero Taruffi and Wimille, and two 316s for Biondetti and Farina were entered, and private 308s were in the hands of Belmondo and Pietro Ghersi. No less than four 158s were wheeled out for practice, for Emilio Villoresi, Raymond Sommer, Francesco Severi and test driver Attilio Marinoni. The opposition was almost all Maserati, with the exception of Arthur Dobson's ERA B and Plate's Talbot.

Emilio Villoresi was on form in practice at Monza and he and Sommer headed the first row from Luigi Villoresi, with Severi next and Marinoni on the third row. The opening laps

Attilio Marinoni

Marinoni was not a well-known public figure, and was generally described as an 'Alfa Romeo test driver'. This was partly true as he did most of his testing on Alfa Romeos, but he was also a chief mechanic at Scuderia Ferrari and had done some serious races, although not as many as Severi. He was born in 1896, so he was already 42 when he drove the 158 at Monza. In 1934 he was third in the Marne Grand Prix and fifth in the Italian Grand Prix, then fourth in Belgium in 1935, and fourth in the Italian Grand Prix. He went to the Rio de Janeiro Grand Prix in 1937 but did not finish, and in 1937 he was eleventh at the German Grand Prix. He drove the Scuderia Ferrari 8C-37 in that race, was on the same row of the grid as Severi and Sommer, and was the only Alfa running at the end. The Monza race was his only event in 1938, although he did the bulk of the limited testing that was carried out that season, and was regarded as an expert test driver as he was also a skilled mechanic. He was a good example of that group of test drivers/mechanics, like Severi and Sanesi, who were also capable racing drivers.

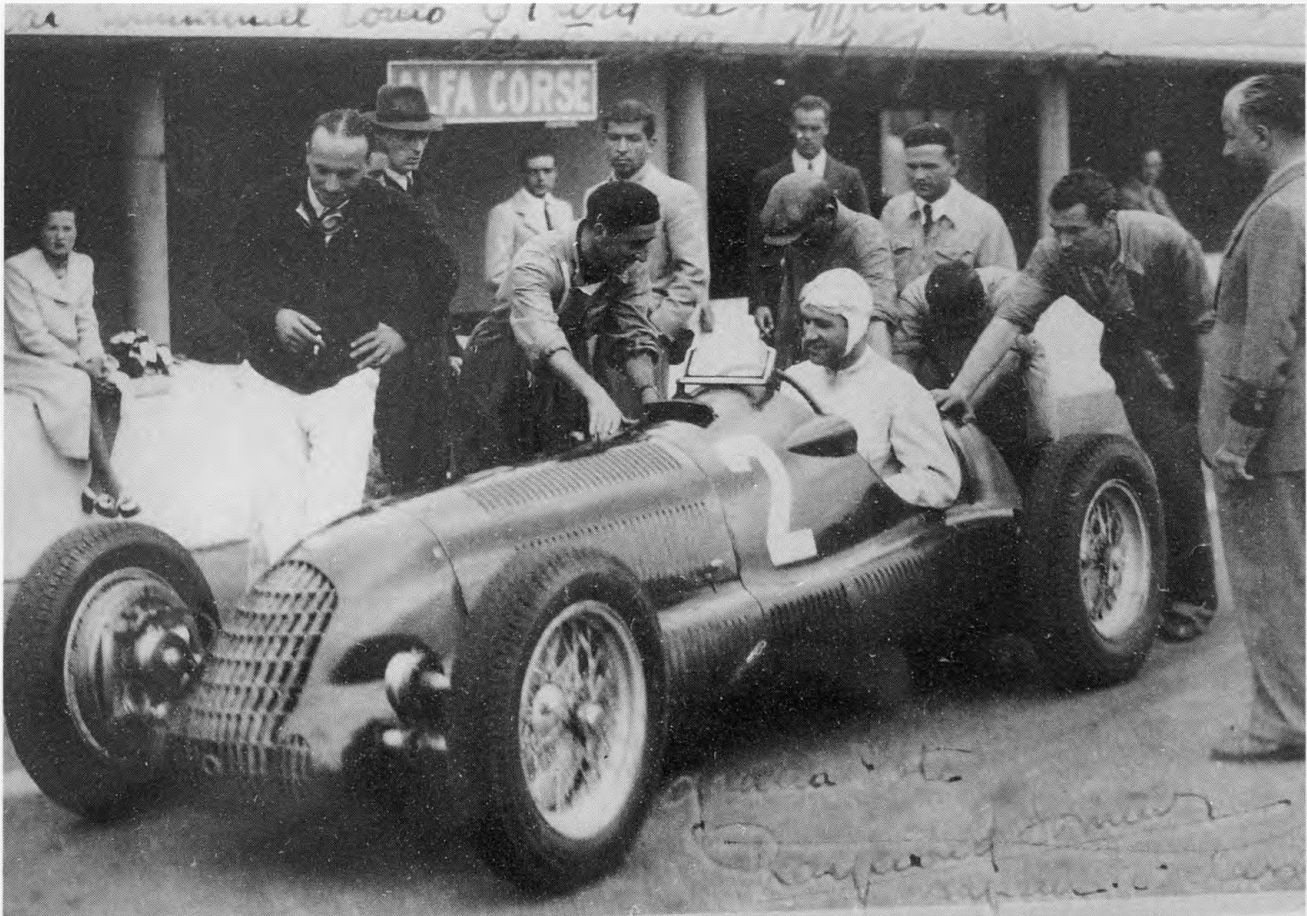


The 158 at Milan in September 1938, before the Gran Premio di Milano at Monza, on 11 September 1938. (Biscaretti Museum)

Raymond Sommer

Sommer was born in Paris in 1906 and rapidly established himself as soon as he began racing in 1928. His father was one of France's pioneer aircraft manufacturers. Sommer was probably the most committed, never-give-up driver of the pre-war period, and he turned down a number of works drives to be independent. He seemed to relish the task of running out-classed machinery against works opposition. He drove for Alfa Romeo in sports cars, and he won at Le Mans

in 1932 in the 2.3 with Luigi Chinetti, and again in 1933 with Nuvolari. He did a number of Grand Prix races in 1934, with some results and a number of non-finishes, had a better season in 1935 when he won the Comminges Grand Prix, won the French Grand Prix in 1936 and the Spa 24 Hours, and had more sports-car victories in 1937. He drove the Alfa Corse 308 at the Tripoli Grand Prix in 1938 and was fourth, the best-placed Alfa Romeo.



A rare photo of Raymond Sommer signed to 'Toulo' de Graffenried; Sommer was only tenth at Milan. (de Graffenried Collection)

were scintillating, with Alfa and Maserati almost indistinguishable. Sommer held the early lead and Marazza, Severi and Pietsch got past the Villoresi brothers, who were embroiled in their own fight. It was a twenty-five-lap race but the strain started to take a toll at an early stage when Raymond Sommer made the first of a number of stops, allegedly

for plugs, an indication that the engine problem had possibly not been sorted by this stage. Alfa Corse did not say this time that it had to do with the altitude, and were just as happy that Emilio moved into the lead on the fifth lap, when his brother's Maserati engine let go. As various cars pitted, Marinoni found himself in third, behind Severi, but then he

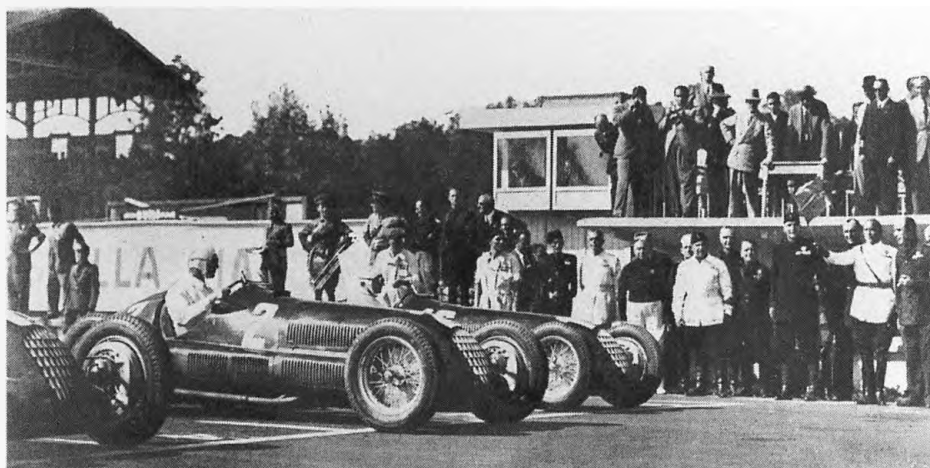
The Racing Begins – 1938 to 1940

stopped on lap 17 and retired three laps later for unspecified reasons.

On the last lap, Sommer's engine caught fire on the run-up to the flag, probably because of a broken piston, according to Venables (2000). It is thought that Marazza, who had stopped and then regained third place, was distracted, missed the flag and drove flat into the Lesmo corner. He crashed into the trees and died later from his injuries. Marazza was mourned as a great talent who had yet to peak; it was very likely that he would have been signed by Alfa Corse for 1939.

Emilio Villorresi took a very welcome win by one second from the flying Severi, with Hug third, Cortese fourth, and Marazza credited with fifth. Sommer's stops saw him finish tenth. Alfa Corse were left in the puzzling position of having two cars that finished brilliantly and two that broke.

In the Grand Prix race, Farina did another face-saving job for Alfa Corse by coming second to Nuvolari's Auto Union. The defeat of the Mercedes, unexpectedly, and Nuvolari winning at Monza tended to overshadow Farina's good drive, while Biondetti was

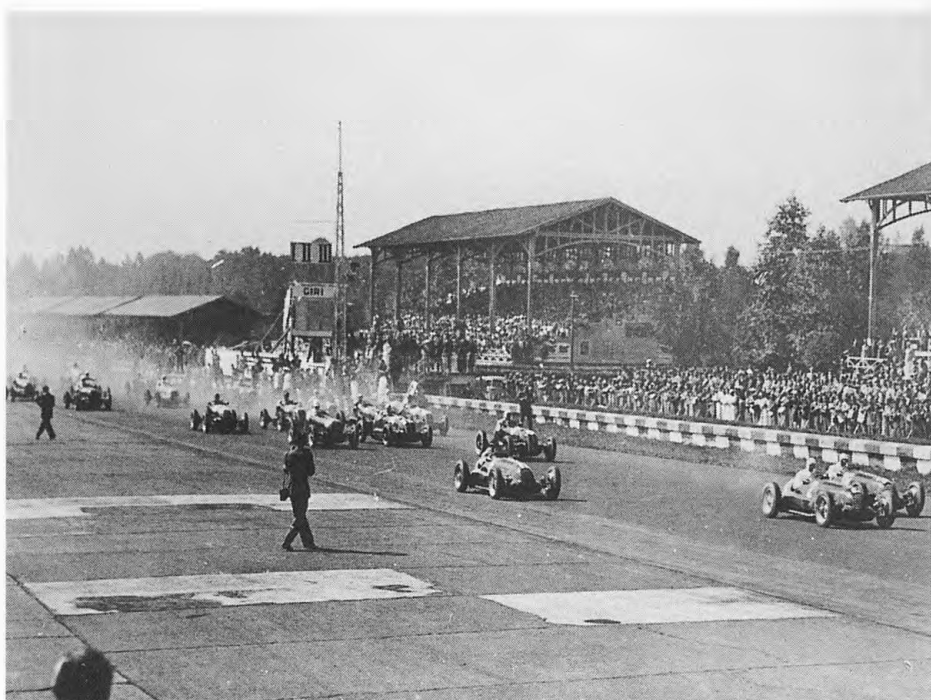


S. E. DINO ALFIERI MOSSIERE DEL G. P. MILANO

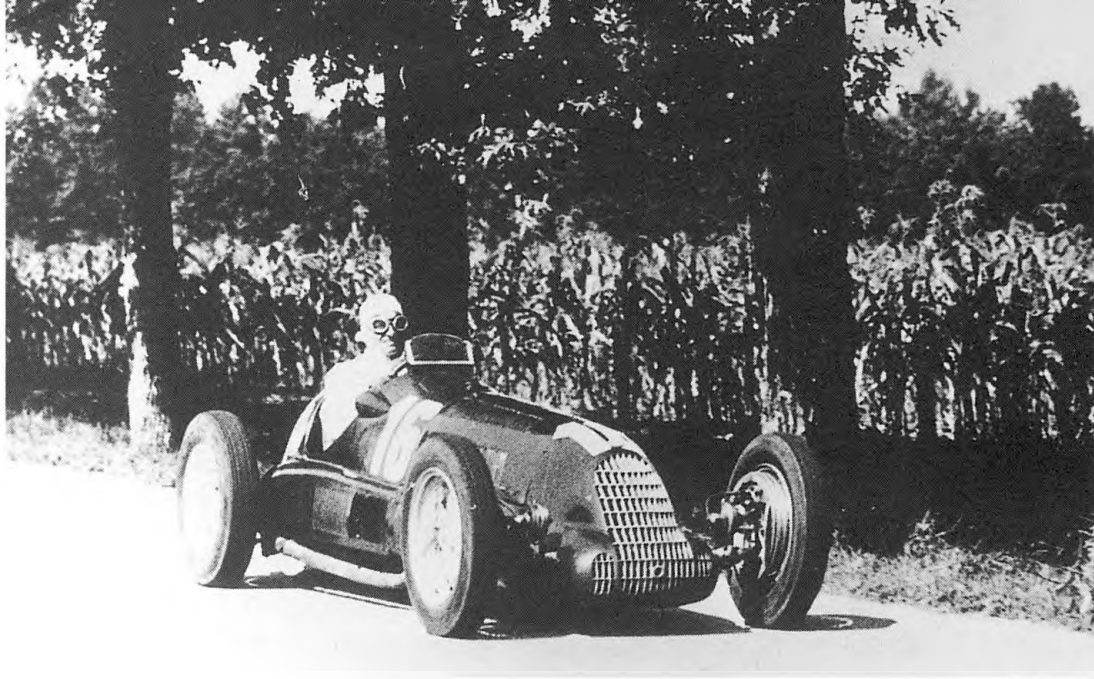
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The 158s heading the grid at the Gran Premio di Milano: Sommer (centre, 2), Severi (far side, 16), and Villorresi (closest to the camera, 8). (Alfa Romeo Storico)

The 158s lead away at the drop of the flag at Monza. (Alfa Romeo Storico)



Francesco Severi was one of a number of Alfa Romeo test drivers who did well in selected races. He was second to Villoresi at the Gran Premio di Milano at Monza.



fourth and Ghersi sixth. Only these six managed to complete the distance. It looked like a positive omen for Nuvolari and the revitalized Auto Union for the race at Donington five weeks later, and, indeed, he totally dominated that last race of the season. Mercedes went but no Alfas were entered.

The final voiturette race in 1938 was scheduled for 18 September, a week after Monza, at the Circuito Di Modena. There was some doubt as to whether the race would go ahead as war was coming ever nearer; German and Italian activities in Africa and Eastern Europe made many commentators feel that conflict was now inevitable. The race was not cancelled, however, and Alfa Corse had an ambitious entry of four cars, for Emilio Villoresi, Severi, Sommer and Clemente Biondetti (who was free from Grand Prix commitments). Again, the opposition was all Maserati with the exception of Arthur Dobson, who remained in Italy with his ERA, which had broken a half-shaft at the start at Monza. (The English drivers often came in for criticism in Italy and at home for not supporting the 1500cc racing abroad. Good start and prize money was given to foreign entries, but most preferred to race at Brooklands and Donington for far less.) Dobson improved his Monza practice performance by moving up to the fifth row of the grid at Modena. However, the Alfas were quickest again, with Severi again

fastest of all, from Biondetti, Luigi Villoresi, Emilio on the second row, with Cortese, and then Ghersi, Pietsch and Sommer.

The Maseratis charged away at the start, Luigi Villoresi towing Franco Cortese away from the pack at first, with the 158s of Emilio Villoresi, Severi and Biondetti opening a gap to Pietsch and Sommer. Then Biondetti moved to the front and just as quickly was rushing into the pits after only four laps of the fifty-five-lap race on the 2-mile circuit. Emilio moved to the front as his brother retired – again – and Severi chased Cortese. Then Sommer made a stop with no oil pressure, followed by Severi with the same complaint. The bearings were apparently beginning to break up, but Emilio Villoresi looked safe until half-distance, when Cortese caught up and went past. Emilio was having his brakes fade, and then he was in the pits and out of the race, and all the Alfas had retired.

Villoresi had set fastest lap, at 65.91mph (105km/h), but that was little consolation. Oil-system and bearing problems were given as the reasons for all the 158s going out, and the promise they had shown earlier in the season remained just that. Severi also had his suspension break, the first time that had occurred. The cars were clearly very quick, but had not done enough races to establish the reputation that would come later. Alfa Corse also knew there was a major difficulty to sort

out over the winter to get ready for 1939, if there was to be a 1939.

In the end, Cortese won the Modena race, Armand Hug was second and none other than Arthur Dobson in his ERA was third, taking home a fair amount of prize money. Plate was the fourth and final finisher. 'Auslander' in his column (*Motor Sport*, October 1938, p.373) expressed surprise that the Alfas had failed, but in an optimistic mood was predicting that the new 158 was going to be sold to private customers, that Louis Chiron was already organizing the purchase of more than one, and that a 'well-known English driver [had] been in direct negotiation with the factory'. Who this might have been is unclear, and no such rumours seem to have appeared in the Italian motoring press, or in the reminiscences of Alfa Corse personnel. This odd story was followed up in the November issue of *Motor Sport*, with 'Auslander' indicating a belief that Alfa Corse were selling all the cars and building new ones, and that at least two English drivers who had raced on the Continent were making serious enquiries. All of this speculation tended to divert attention from the possibility of war, although there were a few acid comments about the 'Rome-Berlin axis'.

In the political climate that existed at the time, those with an interest in motor sport, especially a vested interest, were inclined to see that what they cared about would survive. All the important Italian races in 1939 were to be run to the 1500cc rules rather than the current Grand Prix rules. There was concern in Britain about this – not that the Italians were trying to have it their own way, but that it might open the door to Continental success for the ERAs. Certainly, the Italians were looking to ensure success for Italian cars, but there was also a political edge to this move, and it is difficult to imagine that Mussolini had not been consulted. Making all Italian races run to the 1500cc regulations would reduce the impact of German wins. The move came at a time when Mussolini was being pressed to establish a firmer alliance with Hitler and the

'axis'. He was ambivalent, wanting to extend his own power and influence, wanting to use Hitler's support to achieve this, and perhaps hedging his bets against Hitler's plans not coming to fruition. He must surely have been involved in using motor racing in much the same way as Hitler did. Mussolini also supported the ban on Italian drivers and teams competing in France in 1939, and it was made clear that Alfa Corse were not to use non-Italian drivers. Raymond Sommer, however, was kept on for some sports-car races, and he had a 308 available to him as a non-works entry for Grand Prix events.

Engine Revisions for 1939

At the end of the 1938 season, it was clear that 1500cc racing would be very important to Alfa Romeo the following year. Colombo, from his Portello base, had to find a remedy for the reliability problems which had affected the 158 engines. It became clear that the basic engine was capable of very considerable development, and that a great deal of power could be extracted from it, especially by use of supercharging and the relatively simple expedient of increasing manifold pressure. However, the power increase put additional strain on many of the components and the engine would not run efficiently. Beyond 7,200rpm, the existing plain rod bearings would 'wash out'.

Borgeson (Borgeson, *Road and Track*, March 1965, p.57) detailed the solution that Colombo put into practice as follows:

The remedy was found in needle bearings, which embodied some interesting touches. There were 'big' needle bearings which alternated with ones which were 0.0008in. smaller. The smaller ones had blunt ends because they acted as guides between rod and crankshaft and their ends were chamfered for oil flow. The larger needles had radiused ends for the same purpose and the microscopic difference in diameter between the two provided perfect clearance for oil film. These

bearings and the through bolts put an end to the Alfetta's lower-end troubles and the top end was never significantly changed, except for one major change to the cooling system.

Laurence Pomeroy (1965) confirms that the power output had risen to 225bhp at 7,500rpm after the engine had been modified to the roller needle-bearing crankshaft arrangement instead of the rod bearings. Pomeroy also confirms that the engine specifications remained largely unchanged from this point, although efficiency and power were increased at a later stage.

Somewhere in this period of development, it was also decided to dispense with the single exhaust system and replace it with a dual system with a single manifold and exhaust pipe serving cylinders 1, 2, 7 and 8, and another manifold and pipe serving the others. It was later discovered that this could be modified further by having the two manifolds feed into a single exhaust. This would improve torque on fast circuits, and the full dual system was more efficient for the remainder of circuits with slow, medium and some high speed elements.

All of these developments occurred against a backdrop of worsening European relations, and an increasing alliance between Germany and Italy. Mussolini had, or thought he had, something of a restraining influence on some of Hitler's ambitions. In the spring of 1938, Hitler annexed Austria, which had been clearly opposed by the Italian dictator, but there was little he could do about it. It seemed that Hitler and Mussolini played a long-term cat and mouse game with each other, each requiring the other's support in various ventures. The atmosphere deteriorated considerably at the end of the summer and into the autumn as Hitler pressed his plans to occupy Czechoslovakia, while Mussolini tried to hang on to being neutral. By the end of September, Neville Chamberlain had made his famous trip to Munich, and effectively the door was open to Hitler to go into the Sudetenland.

This gave the rest of Europe time to prepare for the war to come and Mussolini was seen, in some circles, and for a short time, as a peacemaker; in hindsight, he was a go-between who would not oppose Hitler with force. Even at the beginning of 1939, Mussolini was attempting to retain some degree of neutrality for Italy.

Ricart's Projects

Some name Wifredo Ricart as the father of the 158, but his role in the 158 story is mostly a matter of speculation. Certainly, the claim of his paternity is inaccurate, but his position as technical consultant to the general management and head of the special projects section did give him authority and responsibility in diverse areas, and he had freedom to hire the people he wanted. In 1938, he recruited Orazio Satta, who would become a key person in the post-war years. The special projects area included Alfa Corse, and thus, technically, as Director of Alfa Corse, Enzo Ferrari answered to Ricart, although he acted as if that were not the case.

Ricart masterminded the design of the Tipo 162. The design work started in late 1937 and was progressed through 1938–39 as the 308, 312 and 316 were being raced in Grand Prix events. The 162 incorporated Ricart's two-stage supercharger, and this was the first-ever automotive use of a two-stage blower. Ricart intended to try this on the 158 before the war but he was insistent on it being carefully developed first. This supercharger was made up of two low-pressure, three-lobe Roots blowers, a pair of similar high-pressure blowers, a centrifugal diffuser and two three-barrel downdraft carburettors. It was considered a technical masterpiece and, when mated to the 162's 3-litre V-16, immediately produced 490bhp at 7,800rpm. The car ran for the first time in April 1940; just two months later, Italy found itself at war.

Ricart was equally involved in the design of the radical 512, a 1.5-litre flat twelve lying

behind the driver. Ricart was one of very few people who could see the wisdom of Auto Union's approach, but his engine, also with the two-stage supercharger, produced 335bhp at 8,600rpm. That was a remarkable and record-setting 225bhp per litre, 90 more than the Alfetta. Not even the Mercedes W165 could match that. Sadly, the car never raced, and the war put an end to both the 512 and 162, though much of what was learned from these projects was applied to other cars, especially the 158 in the post-war period under the guidance of Satta, who had collaborated closely with Ricart.

Ricart or Ricardo?

Wifredo Ricart played an interesting role in the development of Alfa Romeo, especially in the racing department, although his influence spread much wider than that. He had been brought to Italy personally by Ugo Gobbato, and that had immediately upset Jano and his supporters. Enzo Ferrari never liked him, was threatened by his power, and never missed a chance to vilify him. Griff Borgeson has a collection of stories that exemplify the negative feelings towards *lo spagnolo* or 'the Catalan', as he was sometimes referred to. Once, Enzo could not resist asking Ricart why he wore what Ferrari considered to be gauche and thick crepe-soled shoes. Ricart, with a straight face, told him that it was necessary to cushion an intelligent man's brain. Ferrari totally failed to recognize that he was being wound up and repeated the story as a sign of Ricart's arrogance and instability!

There has been much confusion and inaccuracy relating to Ricart's name. He was often confused with the British designer Sir Harry Ricardo. (Indeed, he consulted with Ricardo in 1938 on aspects of the 162 engine, and Ricardo offered him some advice. He was criticized by some for 'going outside the family', but Ricardo later wrote about how impressed he was with Ricart's ideas.) Luigi Fusi failed to spell Ricart's name correctly, and many others referred to him as Wilfredo, including a prominent English motor-racing historian. The Ferrari memoirs call him Wilfredo Ricard, and his name was even spelled incorrectly in his own obituary.

Racing in 1939

There were only seven Grand Prix races in 1939. Alfa Corse sent official entries to only one, the Swiss Grand Prix, and that was for the 158s as 1500cc cars were invited to fill the field. Where 3-litre cars appeared, they were entered under the name of the driver: Sommer in a 308 at Pau, where he was third; Farina in a 316 at Spa, which retired, and Sommer in a 312, which was fourth (both works cars, of course); and Sommer at the Nürburgring in a 308, which retired. Hermann Lang won four races for Mercedes and Caracciola one, while Hermann Muller and Tazio Nuvolari won one each for Auto Union.

Fourteen voiturette races were scheduled for the year, and Alfa Corse despatched cars to only four of these, one of which was the race combined with the Swiss Grand Prix. The last race of the season, the Bangkok Grand Prix, was cancelled as war had commenced, and it seemed likely that the Yugoslav Grand Prix would also be cancelled. It only took place because the German teams were in the country when Germany invaded Poland, on 1 September. Nuvolari drove his Auto Union to victory over the Mercedes of von Brauchitsch, the Auto Union of Muller, and, as Lang crashed, one Bosko Milenkovic was fourth in a Bugatti Type 51. It was apparently an exciting race despite a field of only five cars.

The first 1500cc race in 1939 for Alfa Corse was to be the Gran Premio Di Tripoli over thirty laps of the Mellaha circuit, a distance of 244 miles (390km), on 7 May 1939. The British motoring journals were full of debate as to whether the English ERAs would be ready and able to make the trip for this important race. *Motor Sport* (Dec. 1938, p.434) felt that the high-speed circuit would mean the ERAs had a good chance of winning. That journal was aware that considerable work was going on at Portello to make the 158s more reliable, and had by that time learned that needle bearings were replacing the rod bearings. They also reported that

The thirteenth Gran Premio di Tripoli was on 7 May 1939, and the Alfas were surprised by the presence of the Mercedes W165 and the streamlined Maserati 4CL of Luigi Villorosi (shown here), which was fastest of all but only lasted one lap. (Ferret Fotografics)



'Righetti and Aldrighetti (funny they should rhyme with spaghetti!) have been enlisted for the 1500cc team next year'. The January issue of the same magazine also reported rumours of a Mercedes 1.5-litre engine being developed. 'Auslander' used his column to support the idea for a future 1500cc formula for Grand Prix cars, and, in spite of the anti-German sentiment, was looking forward to these cars racing in 1940, '41 and '42. The same column also predicted that the Tripoli race would now be contested between the Alfas and the Mercedes, as the ERAs were not going.

The British commentary is interesting in the light of the number of historians who believe that the 1.5 Mercedes W165 was built in utmost secrecy, and that no one knew about it until it appeared at Tripoli. Alfa Corse knew about it when the entry list was published, but it seems that the team may not have taken this entry seriously. The political scene at the time meant that Mussolini was very keen that Alfa Romeo should win this race, and was fully behind Gobbato in getting the cars ready to take victory. The tactic of using motor racing for nationalist purposes had reached a peak, with the Fuhrer now bestowing awards on his drivers. Benito Mussolini had, by early 1939,

more or less fallen into the German camp, but he still wanted to retain parity with Hitler and may have been instrumental in getting the Tripoli race run to 1500cc rules so that the Alfas would win. This would provide credibility at home and in Africa. There was undoubtedly a strong element of beating Hitler at his own game, and thus the stage was set for the 158s to rule.

Mercedes either read the Italian intentions, or found out about them in some other way, but clearly work was started on a 1.5-litre car in late 1938. This may well have been with the notion of building a car for a 1.5-litre formula anyway, rather than a car for one race, which is what it turned out to be. Luigi Villorosi later said that he went to Tripoli expecting the battle to be between the Maseratis and the Alfas. He also was of the view that the Mercedes had been built in secret. However, Valerio Moretti reports an Alfred Neubauer account in which Auto Union's team manager Sebastian had heard the rumours and managed to discover when the car was going to be tested at Hockenheim. He apparently came out of the woods with his field glasses and Neubauer asked him if he had lost something. Sebastian replied that he had – the Tripoli Grand Prix! (Moretti, V., 1994). It

seems an unlikely event or remark, as Auto Union would not have been preparing a car anyway.

At Alfa Corse, whatever they knew or thought about Mercedes, preparations were in hand for the Tripoli race. The cars had final testing at Monza on 30 April, and were now known as the 158B. The B was in recognition of the modifications which had been carried out. The early 158 does not seem to have been known as the 158A in period, but in retrospect. Reference will be made to the changing designations as we progress.

Moretti (1994) argues that Alfa Corse were over-confident after the Monza test and despatched the cars off to Tripoli without a check-over or an engineer to go with them and fettle them before the race. Meo Costantini was sent as the team manager for the race, something he was probably going to regret. Bartolomeo 'Meo' Costantini was a friend of Gobbato's from his younger days, and had been working at Bugatti. Gobbato lured him away in 1935 to work on the racing projects, hoping he had some new ideas. He worked reasonably closely with Ricart, which did not earn him many friends, especially among the supporters of Enzo Ferrari.

The Tripoli entry was impressive. Alfa Corse sent their full complement of six cars, all to the B specification, for Emilio Villoresi, Clemente Biondetti, Francesco Severi, Giuseppe Farina, Giordano Aldrighetti and Carlo Pintacuda.

As practice started in Tripoli, the heat was oppressive. Costantini was worried that the heat would force the cooling system to burst, so he ordered the mechanics to reduce the pressure in the system. The 158s were in immediate trouble with overheating, and it apparently did not occur to Costantini to raise the pressure in the system. Farina only managed fourth-quickest, but that was four seconds off the pace of the pole-sitter, which somewhat surprisingly was not a Mercedes, but the Maserati 4CL of Luigi Villoresi. This new car was clothed in an attractive aerodynamic all-enveloping body,

Dr Giuseppe 'Nino' Farina

Nino Farina made his first appearance in the 158 in Tripoli. He came from a wealthy family, his father having been the founder of the coach-building firm Stabilimenti Farina, and started racing in 1930 at the age of 24 with an Alfa 1500. His win over Nuvolari in 1933 earned the Mantuan's respect, and to some extent Nuvolari acted as a mentor for him. Farina was always considered to be a very stylish driver, whose straight-armed manner at the wheel is known to have inspired Stirling Moss. He also had a reputation for being aggressive, was involved in a number of unfortunate and sometimes fatal accidents, and was occasionally accused of having pushed other drivers off the road. He was an intelligent man with a doctorate in political economy, rather uncommunicative, and could seem brusque, if not arrogant. He drove for Maserati in 1935 and moved to Scuderia Ferrari Alfas in 1936. He drove in both Grand Prix and sports cars, and was an adaptable driver. He won the Italian Championship in 1937 and 1938 and shared the title in 1939. He was the only driver at Alfa Corse to be involved with the team for the entire period of the 158/159, a remarkable record in itself.

Giordano 'Nando' Aldrighetti

Aldrighetti was born in 1905, and established himself internationally as a motorcycle racer, generally riding a Gilera 4-cylinder in TT races. He was a Scuderia Ferrari driver as early as 1934, but was mainly seen in sports-car races. He made his debut as a voiturette driver at Tripoli. There is some argument that he was in the team as 'new blood', but that seems unlikely as he was the same age as most of the other drivers, if not older. Although Tripoli was his first race in the 158, he had done some of the testing of the car.

and it looked superb as it sped round the quick roads of the 6-mile (9.5km) circuit.

The two Mercedes W165s were next, with Hermann Lang less than a second slower, and Caracciola another second back. Some cars at the back of the grid were over a full minute

Carlo Maria Pintacuda

Pintacuda was born in 1900, and was a graduate of the so-called 'Florentine' school of racing drivers, along with Biondetti, Brilli Peri, Masetti and Materassi. He had come by an inheritance at the age of 25, which allowed him to start racing, mainly in minor events in Italy. He ran out of money in 1929, but was offered a chance to drive at the Mille Miglia in an Alfa Romeo. He was off the scene until 1934, when he reappeared in and won the Giro d'Italia in a Lancia Astura. He then won the Mille Miglia in 1935 in an Alfa with Alessandro Della Stufa, and was third there in 1936. He won again in 1937 and in that year also beat the Auto Union of Hans Stuck to win the Grand Prix of Rio de Janeiro. He took that race again the following year as well as the 24 Hours of Spa, and was second in the Mille Miglia, always in Alfa Romeos. Pintacuda was a regular voiturette racer in 1938 in a Maserati, with a number of good results.

Gherzi, Ruggieri, Plate and Barbieri were way off the pace.

The race day was full of pageantry and politics. The Fascist Governor, Marshal Italo Balbo, something of an air ace and a car enthusiast who possessed some interesting machinery of his own, reviewed all the competitors, moving through the field to greet all the drivers. Walking with him was the Swiss-born Giuseppe Furmanik, who was the secretary of the Fascist racing drivers' sporting federation, and a Maserati driver himself. There was some suspicion that Furmanik might have been 'keeping an eye' on Balbo, as Mussolini was said to be somewhat jealous of Balbo's local popularity.

It was later thought that perhaps the Villoresi brothers had put together a race strategy, whereby Luigi would use the speed of the streamlined Maserati to force the pace for the two Mercedes. Luigi was pretty sure he would not last the distance, but thought the reliability of his brother's Alfetta would pay off and give him a win. Although this was another Tripoli Grand Prix with a large lottery win attached to it, it was not thought they were in any way trying to do anything but win. Whatever the possible strategy, it did not work, as Luigi's Maserati gearbox gave problems at the start, the gear selector refusing to work, and

slower. The 158Bs of Emilio Villoresi, Biondetti and Aldrighetti filled the second row, with Pintacuda on the third, and Severi on the fourth among the Maseratis. Severi was thirteen seconds slower than Farina, as the high speeds of the Tripoli circuit demanded more of a certain type of driving experience than many of the competitors possessed. Even

The start of the Gran Premio di Tripoli race in 1939, with the two Mercedes already disappearing with Farina's 158, while Emilio Villoresi (48) leads his brother Luigi in the Maserati. (Alfa Romeo Storico)



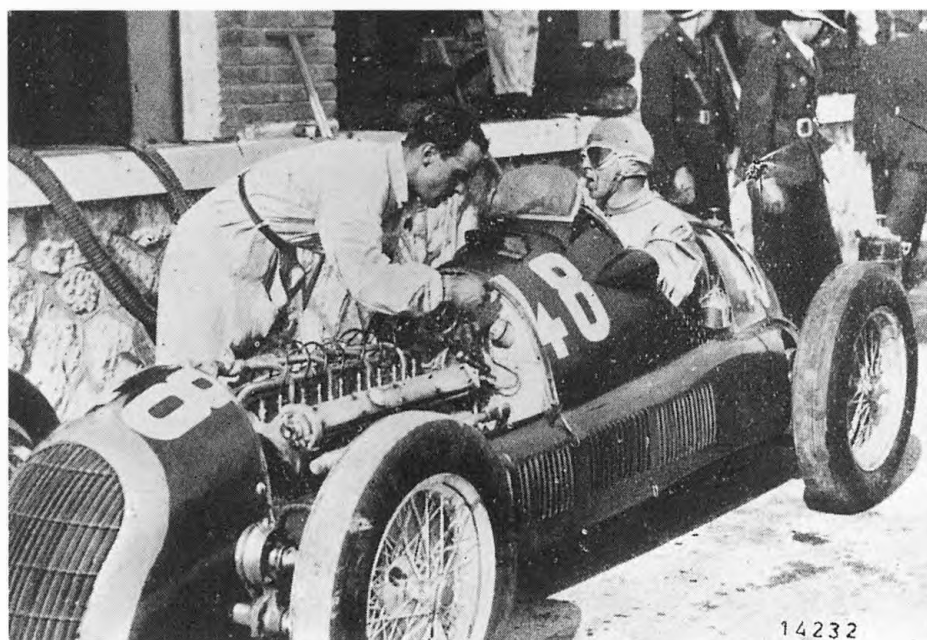
then a piston broke, so he only completed a single lap. Trossi and Cortese suffered similar piston failure in their Maseratis and did not complete a lap, and neither did Ghersi, Baruffi or Ruggieri. Luigi Villorresi described his streamlined body on the Maserati as akin to a white-hot wrapper and said no one could last more than five or six laps in the car in those conditions.

Farina managed to put the 158 on the tail of Lang's W165 for five laps until Caracciola steamed past, and Farina retired on the ninth lap with an overheating engine. Emilio Villorresi hung on out of pure determination as all the other Alfas dropped out as heat got to the engines. As cars expired, drivers stuck out on the course were desperate for a drink, and stories of some of the substances that passed their lips do not bear repeating. Villorresi finally managed third place, some eight minutes behind Lang's winning car and five minutes behind runner-up Caracciola. Lang averaged 122.90mph (196.5km/h) for two hours, setting the fastest lap at 130.94mph (209.5km/h). In temperatures of 35°C in the shade, that was very impressive as the Mercedes never missed a beat. Piero Taruffi started last in his Maserati 6CM and finished fourth, with the reliable Hug in fifth.

Many years later, Giacchino Colombo was to comment on the race in critical terms:

We could have put up an honourable defence with a good final result, instead of which all four of our cars were forced to retire because the engines boiled and vapour formed in the fuel lines [in fact, there were six cars and Villorresi *did* finish]. Although we sportingly accepted defeat, we were very upset over this fault because we thought we had taken all possible precautions to prevent it. It was only after the race, once the team had returned to Italy, that we had managed to understand what had happened. The Alfa Romeo team manager and famous Bugatti racing driver, Meo Costantini, had been worried about the May heat in Tripoli and had told the mechanics to reduce the water pressure in the radiators in order to prevent them bursting. It was an incredible misunderstanding. Evidently Costantini did not know that we in Milan had foreseen the kind of weather which was to be expected and had designed the water system to withstand temperatures up to 110 degrees centigrade. (Colombo, G., 1978, in Moretti, 1994, p.159)

Not only had the Mercedes punished the



Villorresi made a quick pit stop with overheating at Tripoli in 1939. (Alfa Romeo Storico)



Giuseppi 'Nino' Farina made his first appearance in a 158 at the Tripoli race in 1939, held on to the Mercedes for five laps, but then retired. (Alfa Romeo Storico)

Italians by beating them so thoroughly, but they had also added injury to insult by pouring noxious fumes out of their exhausts, the result of an additive that the Mercedes engineers had put in the fuel. Many of the drivers came in with red and sore eyes as a result. Moretti quotes Villoresi recalling how, after he retired from the race, Capelli came into the pits in his Maserati, 'stoned' from the effects of the fumes. Villoresi gave him a sponge to wipe his face and a lemon for his thirst. Capelli ate the sponge, wiped his face with the lemon, and jumped into the car before he could be stopped. Fortunately, he pulled off down the road before fainting (Moretti, 1994, p.164).

It is surprising that punishment was not meted out to Costantini on his return to Portello, although clearly he was being used as a scapegoat in this matter. Colombo, in retrospect, would appear to have been putting the blame squarely on Costantini, but the writings of Sir Harry Ricardo reveal that Ricart wrote to him shortly after Tripoli about the overheating, and made critical comments about the water flow in the cylinder head, around the valve seats and liners (Reynolds, 1999). Borgeson confirmed that the work was aimed at dealing with the heat that was the natural result of increased power, something in the order of 240bhp by the time of the Tripoli

race. Alfa Corse increased the cooling system's cap pressure significantly, from 4 to 17.6psi. They then drilled the cylinder heads and installed a coolant manifold with a pressure outlet for each of the combustion chambers, while retaining the manifold at the base of the block. This provided an effective and permanent cure for overheating for the Alfetta.

One account at least implies that Ricart may have contacted Harry Ricardo in advance of the Tripoli race, as he knew that the conditions would be very hot, and that the information that came back was unheeded. Venables (2000, p.146) wonders if in fact Colombo himself was unwilling to admit that the original design was not up to the task, but that the blame for this was passed on to Costantini. There would have been those who were willing to see anyone connected with Ricart as responsible for problems in the car. Some resented Sir Harry Ricardo's visit to Alfa Romeo in 1938 to see Ricart, and a few may well have had knowledge of the on-going correspondence between this talented pair. At the time, many people frankly disbelieved Pomeroy's occasional reference to the fact that Harry Ricardo was involved in the design of an Alfa Romeo 16-cylinder engine, and thought he must have been confusing the names of Ricardo and Ricart. Many of these doubters did not believe that a 162 16-cylinder had existed, as the car

never raced and did not survive the war. This was true in the 1960s even after Luigi Fusi produced his listing of all Alfa Romeo models. It was only after Harry Ricardo's death that his correspondence was discovered in the Ricardo archives in Shoreham in Britain, revealing in-depth discussions between the two.

After Tripoli, on 20 June, disaster struck the team in the most unexpected manner. Alfa Romeo was hosting a reception at Monza for trade personnel and dealers, and the race cars were being displayed. Emilio Villoresi was present and was asked by Enzo Ferrari to take the 158 for a demonstration after lunch. Villoresi did not want to, as he had not expected to be driving and had been drinking wine at lunch. Ferrari was apparently insistent, Villoresi reluctantly drove off, and, within a few laps, the fastest Italian voiturette driver had been killed. At first it was announced that he had been killed in a testing accident – Hull and Slater (1982, p.206) record Villoresi's death as occurring during testing – but Luigi Villoresi would not let the matter rest. To add to the pain, the insurance company refused to pay the claim on Emilio's policy as they said he had been unfit to drive. Enzo Ferrari took no action to accept responsibility or to support the family's claim, the claim was never paid, and Luigi held a life-long grudge against Ferrari.

The loss of Villoresi, a highly valued member of the team, was a blow to Alfa Corse's hopes for the future. It was a bad time. Later that week, the Grand Prix team returned from Spa, where Englishman Richard Seaman had been killed in his Mercedes, then the popular and ever-improving voiturette driver Armand Hug crashed at the Albi Grand Prix, fracturing his skull and damaging his spinal cord, which left him partially paralysed for the rest of his life.

Three Wins in a Row

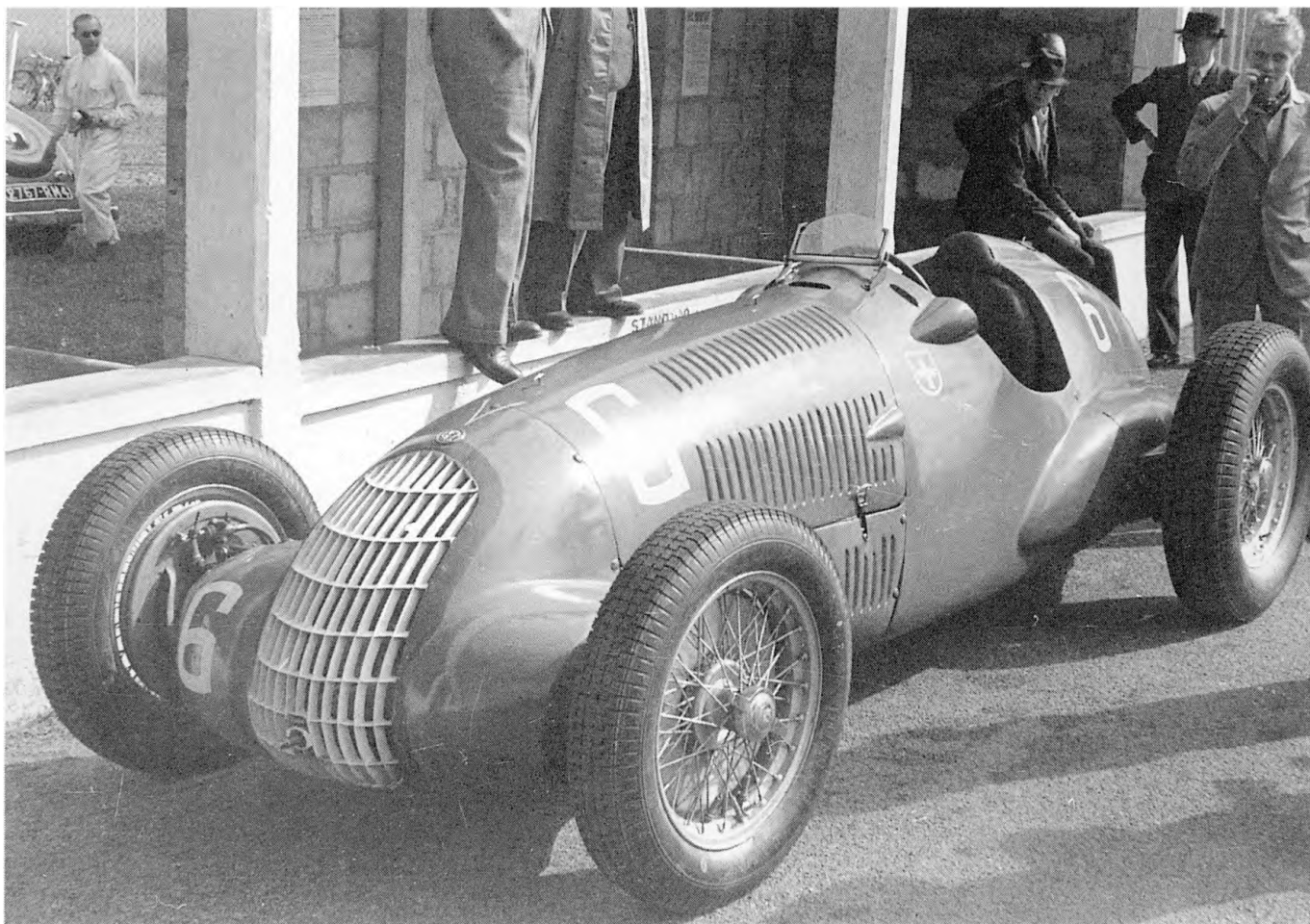
The significance and location of the voiturette races on the schedule for the rest of the 1939 season influenced Alfa Corse to miss a number

of events. The growing threat of war also encouraged Alfa Corse to reduce its programme. They had an entry at Reims on 9 July for three cars but this was withdrawn, possibly because Mussolini did not want Alfas racing in France, and possibly to give sufficient time to modify all the team cars. They did not appear again until the two major Italian voiturette races at Livorno and Pescara, on 30 July and 8 August.

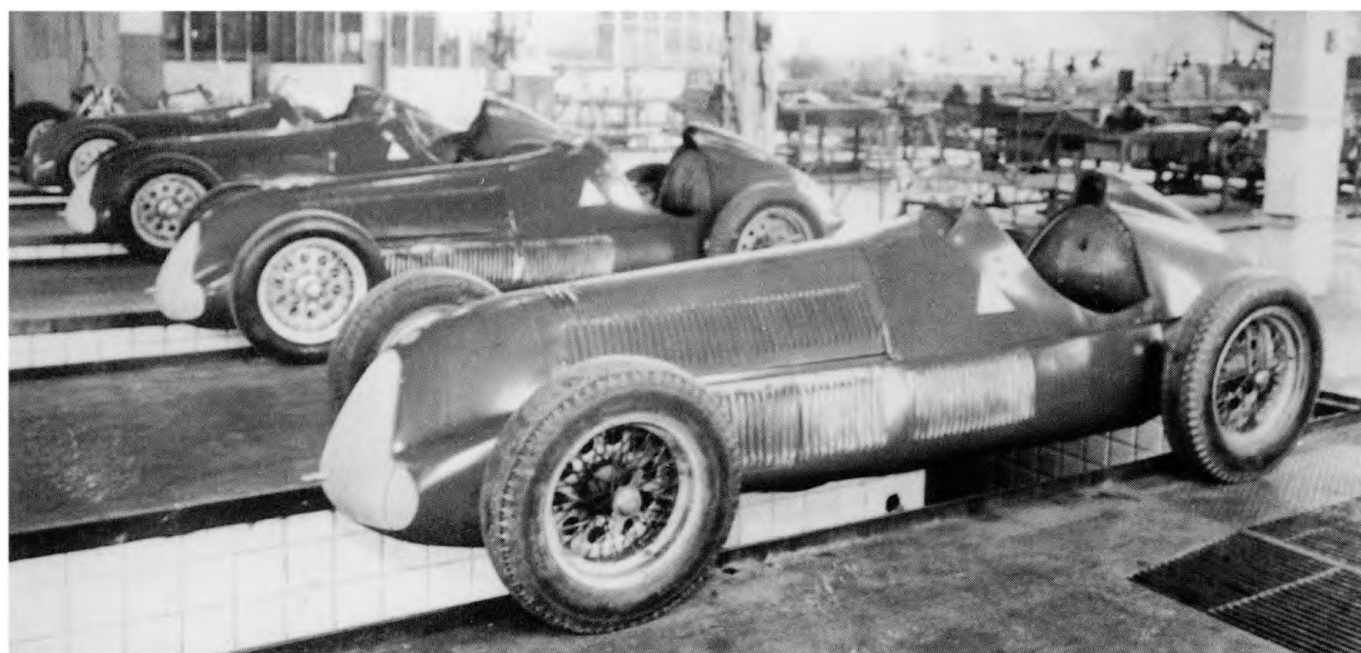
The Coppa Ciano race on the Montenero circuit at Livorno was divided into two heats, the first for independents or amateur drivers and the Coppa Ciano itself for the professional and factory teams; the second race had only eleven entries, including four 158s, more or less in the form they would retain until 1950. They had shapely new bodies, which were striking and more aerodynamically efficient. The rear-view mirrors were now inside the cockpit, although this location had a habit of changing according to driver preference rather than scientific considerations. The new body had been re-shaped to enclose the front suspension, and there was the addition of a small head fairing. With a more rounded nose and elegant tail, the Alfetta was now a superb-looking car, but performance was needed to match the new look.

The four cars at Livorno were for Farina, Biondetti, Pintacuda and Aldrighetti, with Farina comfortably quickest, from Cortese and Biondetti. Pintacuda did not adapt quite so well to a circuit favoured by Farina and was at the back of the grid. Before the start, there was an emotional one-minute's silence for Emilio Villoresi, and considerable compassion for his brother who had decided he would keep to his racing programme. Farina was in the lead from the start, chased by Cortese, Luigi Villoresi, Pietsch and Biondetti, the Alfas and Maseratis both having a comparable performance. Farina, before the halfway point, set a new lap record, which was quicker than von Brauchitsch had achieved in the Mercedes Grand Prix car the year before.

Cortese eventually finished over a lap



In 1939, Alfa Romeo had several cars contesting Grand Prix races, including the private Francis Matra-driven 308, which bears a strong family resemblance to the early 158. (Ferret Photographics)

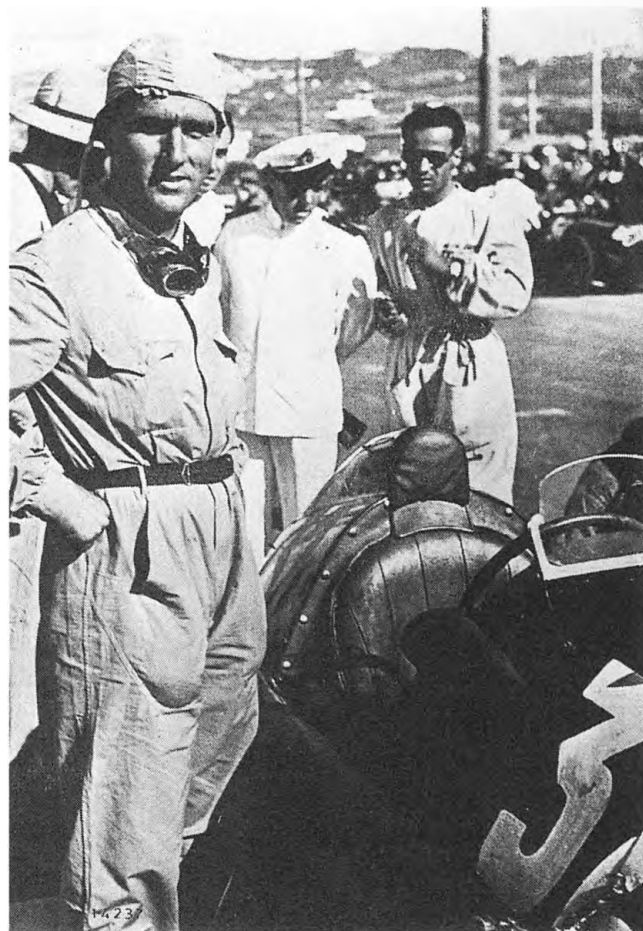


Four 158s with the revised body with a fifth being constructed, probably mid-1939. (Biscaretti Museum)

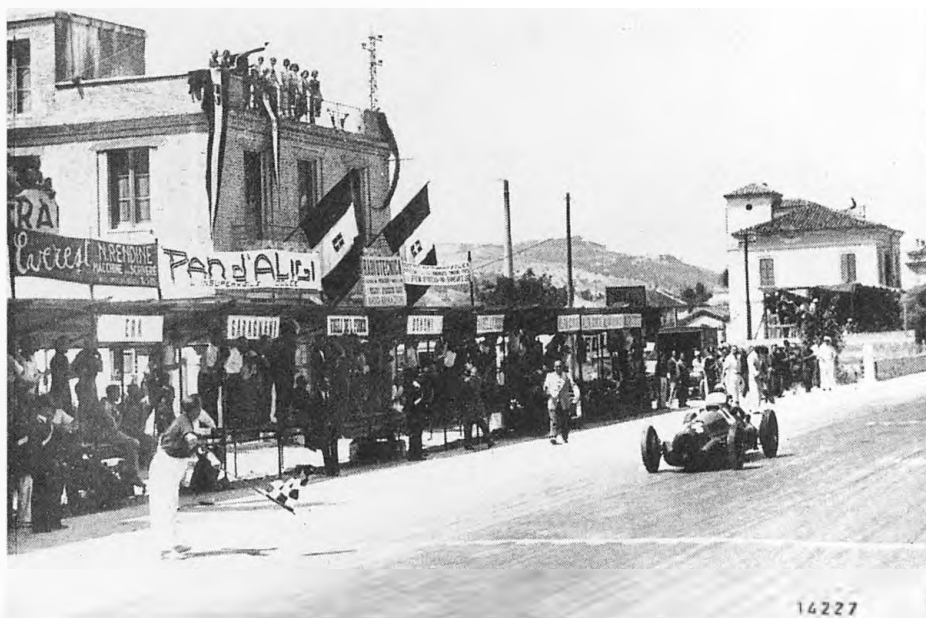
behind Farina, Biondetti took over Pintacuda's car to come third, and Severi drove Biondetti's repaired car to fifth. Pintacuda had apparently refused to take over Biondetti's car, which had repairs to the carburettor. Aldrighetti retired on lap 31 for reasons that were not specified.

A week later, the team went to Pescara for the annual Coppa Acerbo over the long, 15-mile (24km) circuit with its combination of long seaside straight and twisty mountain sections. The format was the same as at Livorno, with one heat for the independents and one for the professionals, with the difference that the first three from Heat One would be allowed into the final. Four Alfettas were entered, for Farina, Pintacuda, Biondetti and Severi. Aldrighetti was nominated as the alternative driver for Pintacuda's car, and he went out in practice and crashed seriously. He was trapped underneath the burning car and, although he was extracted, he died of burns the following day. It was the second tragedy to strike the team in less than two months.

The race itself produced a further fatality when poor Catullo Lami finished third in his Maserati 6CM in the first heat, so was able to start in the final. He started late after needing a spark-plug change and, in his rush to catch the field, crashed and overturned on his first lap. He died a short time later.



'Nino' Farina scored his first 158 victory at the Coppa Ciano at Livorno on 30 July 1939, when the 158s appeared for the first time in the revised bodywork that would remain fundamentally the same to 1951. (Alfa Romeo Storico)



Clemente Biondetti's 158 (44) takes the flag at the Coppa Acerbo at Pescara. (Alfa Romeo Storico)



Clemente Biondetti. (Alfa Romeo Storico)

In the race Villoresi had an early lead, but Farina was soon past, and Villoresi then had a spin and fuel problems. Farina made a long stop on lap 8, allowing Biondetti into the lead. The pursuing Maseratis ran out of fuel, and that meant Pintacuda was second and Farina third, with the fourth 158, in Severi's hands, in fourth. The official results are somewhat sketchy: Villoresi and Cortese should have been next, but ran out of fuel so were not classified, so fifth was given to the ERA of Con Pollock, who somehow had been allowed into the 'professional' race, much to his delight.

Aldrighetti's accident occurred near Spoltore village on the mountainous section of the course. The road turns right at Pescara into the hills and the crash was about 3 miles (5km) into this section. His car was destroyed in the fire, and Villoresi's car had also been destroyed

at Monza. The car which Pintacuda raced in Aldrighetti's place was one of the team's total of six, and the body had not yet been updated on it. It would appear that the team was now down to four cars, although it is unclear whether either engine survived the crashes. However, Consalvo Sanesi, who had been working at Alfa Romeo since 1929, and had risen to number two *collaudatore* (test driver), recalled the event very clearly. Through former Ferrari team manager and translator, Franco Lini, Sanesi remembered some, if not all, of the chassis changes made to the 158. In later interviews he also said that four chassis came from Modena to Portello and a fifth was built at Portello so that five cars were available in 1938. He also said that he believed that both Villoresi's and Aldrighetti's crashed cars had been rebuilt. This of course confuses the total count of chassis, and there are those who will say that it was unlikely that these cars could be rebuilt – and what is the correct definition of the term 'rebuilt'?

It was now only a matter of days before the next race, at which the Prix De Berne for voitures was run as a heat, from which the

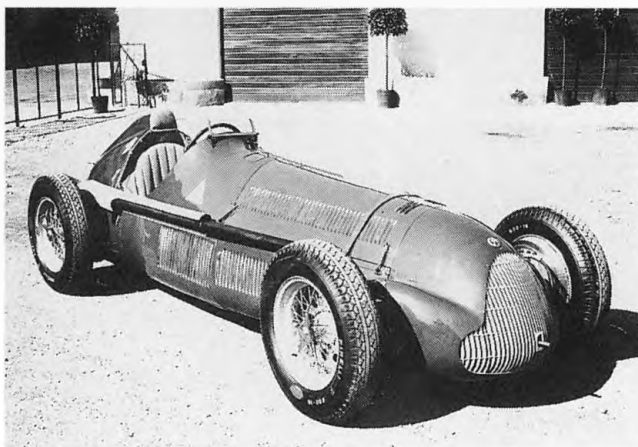


Fraternità di tecnici, piloti e meccanici dell'Alfa Romeo dopo la vittoria
11712

The technicians, mechanics and drivers celebrate the team's win at the Coppa Acerbo on 15 August 1939: Sanesi kneeling, Severi standing left, and Farina next to him. (Alfa Romeo Storico)

first six finishers would run in the main Swiss Grand Prix with the bigger cars. According to one source, Alfa Corse were so confident that they sent only two cars, for Farina and Biondetti, but in reality it is much more likely that they were attempting to recover from the great loss of two drivers and two cars (Sheldon and Rabagliati, 1993). Tension was increased at this meeting by news of the German military pincer movement, which was cutting Poland into chunks; some British entries were said to be virtually packed and ready to leave Bremgarten immediately after the race to avoid getting trapped on the Continent when war came.

Farina was nearly three seconds quicker than the second car, the works Maserati 4CL of Rocco, followed by Paul Pietsch, also in a works car this time, a 6CM. Biondetti seemed to have recorded second-quickest time but was somehow down on row two. It took him all of five laps of the 4.5-mile (7.25km) circuit to get into second behind Farina, who was now flying, and led all the way to the flag, with Biondetti half a minute behind. Neither the Maseratis nor the ERAs had much to offer against the Alfettas and Heat One was an impressive Alfa win. Heat Two would be for the Grand Prix cars, and then the final would put both groups up against each other. Baron Emmanuel de Graffenried chose to run his voiturette Maserati 6C-34 with the Grand



Farina's car before practice at Bremgarten, August 1939. The new body shape is evident. (Alfa Romeo Storico)

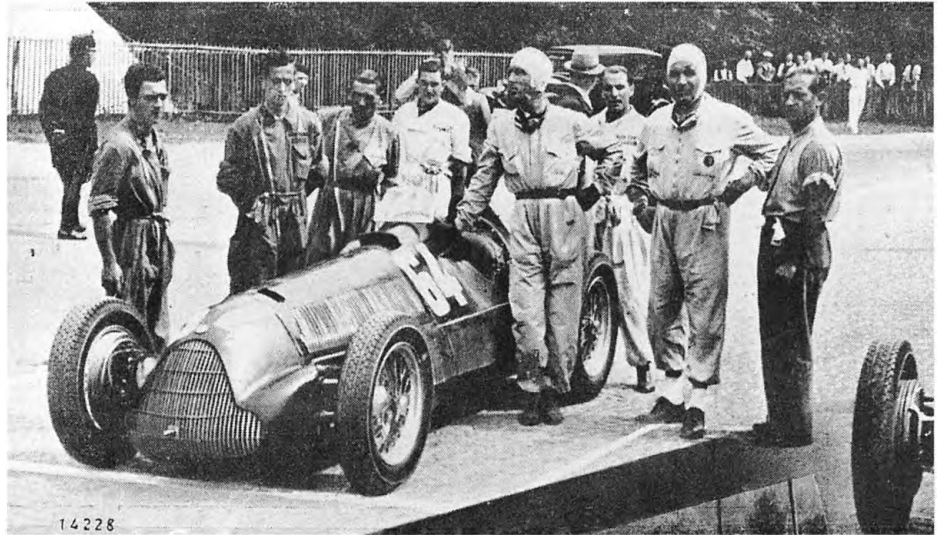


The cockpit of the 158, which hardly changed from 1938 to 1951. (Alfa Romeo Storico)

Prix cars, but there was no practice time recorded for him to compare this with the Alfettas. Farina's qualifying time, however, would have put him on the third row of the Grand Prix heat. That would put him behind the Auto Union of Muller and the Mercedes W154 of Hartmann, but ahead of Dreyfus' Maserati 8CTF. Lang led a Mercedes 1-2-3 in the heat from Caracciola and von Brauchitsch.

The final was to be the last round of the European Championship and proved to be the last major Grand Prix before war finally broke out. Just before the start, the fine weather disappeared and a light rain dampened proceedings. If the rain lasted, the conditions certainly favoured Farina's Alfetta. As it was, he made a superb start, launching himself past the row in front of him until the only car ahead of him at the first corner was Lang's Mercedes, which was on pole position. Muller, on the fourth row, who had failed to get his steering wheel

The first heat for the Swiss Grand Prix at Breilingarten on 20 August 1939 was also the Prix de Berne for 1500cc cars, which Farina won. Biondetti (right) was second. Farina then came sixth overall in the Grand Prix itself, with Biondetti ninth. (Alfa Romeo Storico)



fastened in his heat at the start, was now busy firing up the car when the flag came, so all behind him made huge avoidances.

At the end of the first lap, Lang led by five seconds from the crowd-pleasing Farina, and then the rest of the Grand Prix cars: Carraciola, Nuvolari, von Brauchitsch, Hasse, and then Biondetti in the second Alfetta. The rain stopped on lap 7 and the Mercedes were able to start getting past Farina, except on one stretch of track with overhanging trees where it remained wet. Eventually, Caracciola cleared Farina and set off after Lang, failing to catch him by only three seconds. Another Mercedes, driven by von Brauchitsch, was third, followed by the Auto Unions of Muller and Nuvolari, and in sixth the magnificent Alfetta, which was not giving a lot away to the bigger cars, even in the dry. He was lapped by the faster cars but managed to keep his nose in front of Hartmann's W154. Biondetti was ninth behind Dreyfus, so the Alfettas were first and second among the 1500cc cars, as they had been in the Prix De Berne.

Although a few Grand Prix cars went to Yugoslavia, that was the end of the season, and the final voiturette race. Less than a fortnight after the Swiss race, German tanks and troops were in Poland and the war had started. There would be only two international races in 1940, one of which was significant for the Alfettas, but, for everyone else, racing was to go into

mothballs, and many of the projects that were being developed never materialized. The Mercedes W165, which was so quick in Tripoli, never raced again. However, the complex two-stage supercharger that was being advanced by Ricart, and was hoped to be on a 158 before war started, was destined to survive and reappear later.

1940: a Taste of Revenge

For historians, motor racing is divided into two periods: pre-war and post-war. This is a somewhat artificial division, but useful in many ways, and technology developed rapidly



There was very limited racing in 1940 and the 158 had its only event at Tripoli on 12 May 1940, where Farina avenged the defeat of the previous year. (Alfa Romeo Storico)

just before, during and immediately after the war years. However, there is no category for the period during the war; of course, there was very little racing at that time, so the dilemma is less taxing.

Of the few races that did take place during this period, hardly any were internationals, although there had been the expectation that racing in Italy might continue for some time. Mussolini pressed Alfa Romeo even harder to turn its attentions towards military and aviation equipment, which it did, although car development, and racing development particularly, carried on for a reasonably lengthy period, presumably with a 'nod and a wink' from on high. Racing work was restricted by a number of factors, including work demands on the staff and fuel shortages, but there were many who were optimistic about the war lasting no more than a year or two.

At Alfa Corse, Ricart continued to be engaged in a number of projects. Indeed, work continued on several fronts for Alfa Corse, which had to keep an open mind about what would happen in the future. According to Venables, 'two 158s had been destroyed, so during the winter months a further six cars were built. These were similar in specification to the original cars in their final 1939 form and it seems that four surviving 1938/39 cars were broken up and parts probably incorporated into the new cars' (Venables, 2000, p.149). At this point it is not totally clear whether that means six cars, incorporating the earlier ones then existed in 1940, or possibly ten, although the former figure seems more likely. The notion that the cars were 'broken up' is interesting as it implies they were in some way destroyed, but there is very little evidence of that. In fact, it seems that the routine procedure at Alfa Corse was probably to strip cars down after the races, rebuild what needed to be rebuilt, and put the same components back together. Inspection of the components of the Mike Sparken car (*see* pages 169–181), demonstrates that components did not only

not go back into the same chassis from which they came, but engine components also did not always end up in the engine that they had come from. Alfa Corse's practice of stamping every part from each car has helped historians to understand that components moved around considerably. Often, the identifying numbers of one part do not match those of the others in the same engine. Major engine parts carried the numbering that was assigned to a particular block and cylinder head. Griff Borgeson's revelation in 1965 that there were only nine blocks ever cast is important, as it would seem to indicate that no more than nine cars ever existed, and probably that many never existed at the same time. The term 'broken up' has to be viewed with caution, therefore, and it is much more likely that chassis were refurbished and repaired but not necessarily replaced.

The most significant event at Portello at the end of 1939, in relation to the Alfa Corse personnel, was the departure in November of Enzo Ferrari. Ferrari, who had been very much used to having his own way in running Alfas within Scuderia Ferrari, took that attitude with him when Alfa Romeo bought the large shareholding in the Scuderia. Even as the Director of Alfa Corse, it was impossible for Ferrari to alter his style very much, and the situation became increasingly difficult as Gobbato wanted to make greater use of the talents of Wifredo Ricart. An agreement was reached whereby Ferrari would be given a generous compensation and would return to Modena. Additionally, he agreed, on paper, not to revive the Scuderia for a period of four years, or to engage in motor racing in his own name for the same period. When Ferrari left Alfa Corse, Alberto Massimino and Enrico Nardi went with him, but Colombo decided to stay at Portello. More surprising was the decision of Luigi Bazzi to remain there as well, after his long association with Ferrari.

In February 1940, the Ferrari-constructed 815 was being tested on the roads around Modena. Two cars were built, under the company name of Auto Avio Costruzione,

essentially for use by Alberto Ascari in association with the Marquis Lotario Rangoni. They were obviously constructed in a hurry, but it seems impossible that the whole process, from design to a running car, could have happened between November and February. The new 815 had immediate teething problems. It was a straight 8-cylinder based on the use of two Fiat blocks, with a 1500cc capacity, although it bore no relation to the 158's 1500cc engine; it was very much production-based. Most chassis and suspension components were taken from the Fiat 1100, with two separate cylinder heads that were standard parts, as were valves and con-rods. The crankshaft, engine block and camshaft were made by AAC.

The cars looked good, but failed in the event for which they were built, the Mille Miglia, the first event on the 1940 Italian calendar. Alberto Massimino took the brunt of the blame for the cars not working well. The onset of war ended any further use of them, which was perhaps just as well for Ferrari, who was then able to keep to his agreement with Alfa Romeo by not racing them until the four-year deadline was up. Nevertheless, even in 1940 Enzo Ferrari was a racing-car constructor.

Given the world situation by the time the Tripoli Grand Prix was due, on 12 May 1940, with war raging in Northern Europe, it is amazing that the race took place. In one sense, Libya was virtually an Italian enclave, and only Italian cars – twenty-one Maseratis and four Alfa Romeos – were entered for the race on the usual Mellaha circuit. An appeal had been made to Alfa Corse by the Fascist Party of Milan for Tazio Nuvolari to drive one of the cars, but the team had not forgotten the bitterness that had surrounded his departure two years earlier, and refused. Instead, four cars were sent, for Farina, Pintacuda, Biondetti, and the new recruit from Maserati, Count Carlo Trossi, who was no longer enjoying his term at Maserati.

With no Mercedes at Tripoli, the race was bound to be an Alfetta walkover, as the

Carlo Felice Trossi

Born in Biela in 1908, Count Carlo Trossi did a lot more racing than some of the drivers who got behind the wheel of the Alfetta. Despite playing a major role in Italian motor racing, he remains a relatively little known character.

Trossi began racing in the late 1920s and attracted attention for his driving of a Mercedes SSK, the same car that now belongs to designer Ralph Lauren in the USA and appears regularly in prestigious concours events. In 1932 he started as an Alfa Romeo driver and he and Brivio were second in the Mille Miglia that year. At that time, Scuderia Ferrari was running Alfa Romeo's race cars, notably the P3. The Scuderia's president, Caniato, resigned and Enzo Ferrari picked the twenty-three-year-old Trossi to succeed him. This would appear to have had more to do with Trossi's aristocratic background than his driving ability. Trossi lived in a magnificent castle, and his friendship with that other 'minor' aristocrat, Marquis Antonio Brivio, meant that Ferrari had two wealthy and well-connected men in the Scuderia.

Trossi won five races in 1933, and took part in that year's Monaco Grand Prix, said by many to have been the toughest Grand Prix of all time, when Nuvolari and Varzi fought tooth and nail the whole distance. Trossi was fifth, in the smaller 2.3 Alfa. At the Italian Grand Prix he was running a Dusenbergs (strangely, under the Scuderia's banner), which had piston failure and left a trail of oil. Compari and Borzacchini crashed and were killed, and then Czaykowski did the same thing. Trossi bore the blame for this for some time, although there were also reports that no oil had leaked from his car, and that the track was damp and the drivers pushing too hard.

The finger was pointed again at Trossi at Monaco in 1935 when he was alleged to have balked Nuvolari and caused him to crash, although the claim did not come from Nuvolari. Trossi was on the Alfa team of P3 drivers who beat the Mercedes and Auto Union at Montlhéry. He regularly appeared in a 12C-37 during 1937 but, when Brivio retired, Trossi left Ferrari and went to Maserati. He was a prominent 8CTF and voiturette driver in 1938 when the Alfetta first appeared. He was rarely seen without his pipe in hand, and was beginning to have health problems as a result of his heavy smoking. He did not like the atmosphere at Maserati after the Orsi family took control from the Maserati brothers, so he was happy to be invited to drive an Alfa Romeo again, although no longer for the Scuderia Ferrari.

Maseratis were no longer on the pace of the Portello cars. When Giuseppe Farina went out for the practice session he was soon turning in very impressive times, and he finally managed a pole position time a full five seconds quicker than the W165 Mercedes had the previous year. It must have rankled at Alfa Corse that Mercedes were not there to be beaten to make up for the humiliation of the previous year.



Count Carlo Trossi made his 158 debut at Tripoli. (Alfa Romeo Storico)

A holiday atmosphere was conjured up at the Mellaha circuit, in a vain and slightly desperate attempt to be optimistic about the future. In fact, Germany had been at war with France and Britain for eight months, and Italy's formal entrance into the war on the side of the axis was inevitable. There were no parades or foreign visitors for this final running of the Tripoli Grand Prix, but the Governor,

Marshal Balbo, was present to greet the teams and start the race.

The intrigues behind the scenes in Tripoli were as fascinating as the race. Listed in the entry was Tazio Nuvolari, who had 'completed' his contract with Auto Union due to the war, and was looking at other possibilities. The approach to Alfa Corse did not work, but he was welcomed at Maserati, where he tested the new car, the 4CL, in Italy, coming to the conclusion that it had potential. However, when Nuvolari showed up in Tripoli, it was for appearances only. The success of his testing had reached Auto Union and the German government, and they were disturbed to think that anyone might imagine that he had left Auto Union because Maserati was better. Of course, with the world situation, the Auto Union drive was impossible, but none the less someone brought pressure to bear on both Maserati and Nuvolari. Nuvolari was in Tripoli enjoying himself, therefore, but the car was officially withdrawn for being 'too slow'.

That verdict must have come as a surprise to Luigi Villorosi, whose new 4CL was the only car to get and stay anywhere near the Alfettas. Moretti (1994) argues that Villorosi did not need the car to motivate him, as he was embittered over the recent death of his brother, blaming not only Enzo Ferrari, but also the entire Alfa Corse team, and Moretti implies that this included the cars. Villorosi had revealed that it took far too long for medical aid to reach Emilio, and he was fiercely anti-Farina, who had taken Emilio's place as team leader. All was not well, therefore, when the cars started to run very close together in the race.

There was another name to conjure with on the entry list, one Alberto Ascari. He had ordered one of the new Maserati 4CLs, but it was not ready for the race, so he bought a share in one of the Maseratis, a 6CM, owned by Piero Taruffi. Ascari was in the second half of the grid, and did not particularly shine in the race – all the drama was at the front. Farina looked untouchable, six seconds faster than



The start of the 1940 Tripoli Grand Prix. (Alfa Romeo Storico)

Biondetti, seven seconds faster than Villorresi, and eight seconds ahead of Trossi, all members of the front row. A time was posted for Nuvolari but it is not totally clear as to whether he drove at all. Photos of him during practice show him in a suit and tie, and he was said to have had a fair entourage of women following him. One report said he drove Cortese's car and was not impressed, but it seems possible that it was Cortese who drove the Nuvolari car and set a time for it. Moretti mentions Nuvolari's 'last-minute defection' from the race, but it is quite possible that the idea of him driving had been staged from the beginning.

Marshal Balbo dropped the flag for the start and the determined Villorresi charged into the lead. This did not necessarily mean that Farina was not as quick at the beginning, but it seems that Alfa Corse had learned their lesson from the previous year and were anxious to preserve the cars and win. In fact, Meo Costantini was back acting as team manager, and he had drilled the mechanics on pit stops, the cars were immaculately prepared, and the drivers were briefed to drive a sensible race.

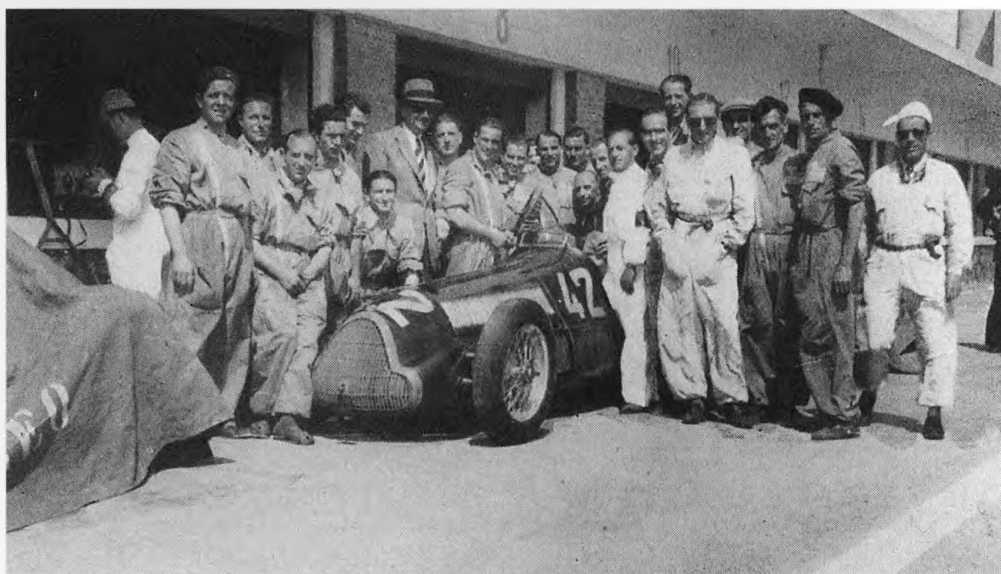
Farina got back in front, then Villorresi retook the lead, Farina charged back, and then the Maserati had it again on lap 7. Costantini had wanted the Alfettas to run in convoy, but Villorresi's mood, focused on Farina, broke this up, and as Farina responded the two of them broke away. Villorresi reported later that Farina

was edging him on the sand at the side of the road, at a slight but difficult bend on the circuit, being his usual aggressive self, but Villorresi was in no mood for backing off, and the duel continued right up to the fuel stops.

Costantini's practice with the mechanics worked beautifully and, even when three of the team cars came in at once, they were all refuelled and sent out in under thirty seconds. Farina's stop was in the order of twenty-four seconds, which was astonishing for the time. Villorresi took a full minute more for his, and that was the gap right through to the end of the race.

After the fuel stops, the three Alfettas of Farina, Biondetti and Trossi were in command, with Villorresi still in the fight ahead of Pin-tacuda, who made a stop as he sensed an engine problem. Cortese got past him and he was sent out to finish sixth, but it was finally a real Alfa triumph, with Farina twenty seconds ahead of Biondetti, having eased off to orders towards the end. There was no sign of the overheating that had destroyed the effort in 1939, but also there were no Mercedes. To be fair to Farina, he ran the same distance as the winning Mercedes had done the year before in five minutes less. This was a tribute to the speed of the car, and to Costantini, whose pit work redeemed his previous effort. Ascari finished in a reasonable ninth, but there was no evidence of what was to come from him.

There was a sad postscript to this final running of the Grand Prix in Tripoli. On 28 June, Air Marshal Balbo was flying a mission and returning to land at Tobruk Airfield shortly after a British bombing raid. On his approach, Italian anti-aircraft guns opened up on him in error, and brought him down, killing him in the crash. There were theories that this was no miscalculation, but a deliberate attack, given that Balbo had made forthright attempts to persuade Mussolini not to enter the war. This was as much to save Libya from an onslaught as anything else. The weight of opinion, however, tends to favour the idea that it was just another serious blunder of wartime.



The team celebrates Farina's win next to Trossi's car. Meo Constantini (in the hat) managed the team, Sanesi and Trossi (glasses) are to the right of the car, and Farina is at the back. (Alfa Romeo Storico)

With the death of Balbo, the man who had been its spirit for some time, the sun really did go down on the Tripoli Grand Prix – and on motor racing for the time being. With the exception of the running of the so-called Targa Florio as a voiturette race for the second time in the park in Palermo two weeks after Tripoli, racing was finished. Perhaps it was only fair that Villoresi should win that last race, although it was an all-Maserati field.

Racing Stops but Development Continues

Although racing had ended, development did not, and to a limited extent neither did car production, particularly on projects such as the passenger car designated the 6C-2500. Whereas all previous Alfa Romeo passenger cars had been sent to coachbuilders for the bodywork, Alfa Romeo had decided that it would provide the bodies for some models of the 6C-2500. This was a car that the company felt had a strong future, perhaps in the American market, and some versions were therefore influenced by American design. The records of chassis numbers on the 6C-2500 run right into 1943 before commencing again after the

war, and work continued in some parts of the factory on these cars, alongside the work on military and utility projects.

Ricart's work on racing cars also continued well past the outbreak of war in September 1939. After Harry Ricardo had written to Ricart in November of 1939, asking him why he had not heard from him about the 16-cylinder car, Ricart replied with an explanation of the constraints under which he was working: 'We also are busy but racing has been relegated to a secondary importance.' The implication was plain; with its German rivals otherwise occupied, and with any Grand Prix contest with Mercedes Benz and Auto Union unlikely for the foreseeable future, funding of the Alfa Romeo project (almost certainly provided by Mussolini's government in a bid to impress Hitler and uphold Italian prestige on the Grand Prix circuits of Europe) had been withdrawn. Once again, circumstances had conspired to deny Harry Ricardo the opportunity to be identified, along with his partner Wifredo Ricart, as a mechanical designer of the highest calibre and a master of the design of high-performance engines (Reynolds, 1999, p.194).

In spite of the efforts of Marshal Balbo and others to convince Mussolini that he should

stay out of the war, Italy declared war on France and Britain on 10 June, believing that the war was likely to be over in a few months. This was in some ways useful to Alfa Corse because it allowed them some leeway to continue developments, although there would be very limited funding for it.

On 18 June, Alfa Corse suffered another significant loss when veteran test driver Attilio Marinoni was killed in a bizarre testing incident. The 48-year-old Marinoni had long been a valuable member of the team, and had acted as a riding mechanic as early as 1919. There are a number of variations in the accounts of what happened – the Ferrari memoirs state clearly that Marinoni was killed while driving the Ricart 512, giving Ferrari another chance to get a dig in at Ricart. The incident itself involved the fairly common practice of testing on a public road, in this case the Milan–Varese *autostrada*. A truck coming from the opposite direction ran head-on into Marinoni's car, the driver apparently having fallen asleep. Venables (2000) was of the view that is now the more accepted one, that Marinoni was testing new rear suspension for the 512, which had been fitted to a modified 158 chassis. This is more likely as the 512 tested in September 1940 and there is no record of there being two cars at the time. It is also possible that front suspension had also been changed. There is also reference to the crashed car as an 'experimental' 158, so in fact it might have been the first attempt to use a de Dion rear suspension on the 158, which eventually came some years later.

Another possibility is that the car was the 162, which was run for the first time in April and then again in June, at about the time Marinoni was killed; Ricart himself was the driver on at least one occasion. There are no more details than that, but the two-stage supercharger from the 512 had been fitted to the 158 with hardly any modifications at all, and there was obviously a great deal of experimental swapping going on at this time. As there is no clear account, year by year, of how many 158 chassis survived, it is not possible to eliminate

the slim chance that the car may have been the 162, which seems to have disappeared around this time. When Consalvo Sanesi, another test driver who had started as a mechanic (in fact, still was a mechanic) and then become a respected team driver, did test the 512 on 12 September at Monza, he found the handling seriously lacking. In spite of prodigious power, the car could not lap Monza within two seconds of the Alfetta. In fact, Sanesi said that he could lap Monza quicker, which also means that he had become a test driver for the Alfetta in this period. He appears to have taken over Marinoni's role as chief test driver.

The poor handling of the 512 was just more fuel to the fire for the anti-Ricart faction. Ricart was immensely sensitive to the criticisms of his work, which according to Borgeson (1990) made him even less willing to listen to comments, even those that were well intended. Sanesi discovered this and finally got Ricart to listen to his very considered feedback.

In a 1986 interview, Sanesi was asked if Marinoni had been driving the 512 at the time of his accident:

No, it was a 158, actually an updated 158 which was called the 158B with the semi-de Dion torsion-bar rear suspension of the 512 instead of the regular swing axles. He was testing it on the Como–Milano *autostrada* which then was a simple two-lane main road, and he crashed at the Bivio Castellanza junction. He was running towards Milano, he couldn't see what was on the other side of the bridge and there was a large truck coming in the middle of the road and he hit it absolutely head-on. We didn't close the road for such tests, there was not a lot of traffic, we just drove the Grand Prix cars in amongst it. His 158B was completely destroyed in that accident. (Nye, 1986)

Everything Stops

Ricart worked on into 1941 on a competition coupé with rear-mounted engine, the 163, but

this car was never built. More of his time was given over to aero projects such as his vast Tipo 1101, a radial engine of twenty-eight cylinders. When this first ran, in January 1942, it was producing 2,000bhp and then Ricart turbocharged it and got the output up to 2,500bhp, or would have if it had ever been built. Bombing finally reached Milan in October 1942 and that meant that much of the aero, racing and experimental divisions had to move. Many accounts say the racing cars were packed off to a cheese factory where they were hidden for the duration of the war. That was a somewhat over-simplified view of a rather more complex situation.

Ricart moved special projects, design and experimental personnel to Lago d'Orta, north of Milan, with many staff taking up residence in Orta. In Borgeson's account, a 'wealthy Alfisti' had a number of properties and he was able to provide shelter for several cars (Borgeson, 1990). Alfa Romeo already had a number of factories and warehouses in the area and a lake venue for testing boats with Alfa engines. According to Consalvo Sanesi, the 512s went to the motor-boat factory at Abbita Grasso, which was owned and run by a man named Castoldi. He also had a stocking factory, and was, it seems, the person who owned the cheese factory at Melzo. The 158s were first moved to various sites around northern Milan in the Brianza area, then to Lago d'Orta and Melzo, where many other pieces of equipment had been relocated.

Ludvigsen is more precise about the dates of the movements, stating that 'seven of Alfa Romeo's 1½-litre racing cars were stored in the paddock garages at Monza' in 1942, and that they were then moved further north to the Lago d'Orta area after the Germans came into Milan, in September 1943. This implies that

these were the Alfettas but could well have included the 512, which seems likely (Ludvigsen, 2000, p.112). At least one account says that one of the cars was an experimental 158D with a de Dion-type rear suspension. This particular account has Marinoni being killed in a 158D, but also mistakenly dates that accident as happening in 1942. This casts some doubt on whether he was in a 158D, if that car was then secreted away, unless there was more than one of these experimental cars (Nye, 1993).

Bombing of Milan continued through 1943 and into 1944, the Americans causing particularly heavy damage to Portello in October 1944, killing many Alfa Romeo workers and local civilians. Mussolini had resigned in July 1943 and was in hiding in numerous locations. Through this dangerous period, Ricart made regular trips into Milan to argue that his staff should not be moved to work for the Germans. Ricart had a contract that expired on 31 March 1945 and he worked until the very last day, although it was clear he was being seen as a friend of the Fascist-friendly management. He immediately left and returned to Spain.

Less than four weeks later, Ugo Gobbato was assassinated on the way to work by unidentified 'partisans'. He had been charged with criminal collaboration with the Germans before a Peoples' Court on two occasions, on 25 and 27 April, and found not guilty, but there were grudges to be settled and someone had to pay. Gobbato was a kind, dedicated man who saved Alfa Romeo from disaster and had enormous respect for his workers. The anti-Fascists were busy that day; Mussolini, who had been located and captured on the way to Como, presumably heading for Switzerland, was shot, with his mistress Claretta Petacci. Their bodies were taken to Milan and hung before the public.

5 The Post-War Revival

At the end of the war, Orazio Satta Puglia was appointed as the new technical director of Alfa Romeo, and one of his first actions was to announce that Alfa Corse would return and that racing would be a priority. As development had never entirely ceased in many Alfa Romeo departments, this meant that Alfa Corse could get an early advantage if motor racing recovered quickly. It was thought that Colombo might have been elevated to the position finally given to Satta, but the unions insisted that he be investigated for his connections with the Fascists, and he was suspended while this was going on.

Enzo Ferrari jumped at the opportunity and worked on a number of ideas with Colombo, until Colombo was cleared and brought back to Alfa Romeo. However, he found himself outside the mainstream area of design and racing, and that was not to his liking. It was a serious blow to someone like Colombo, who had worked for the company and had few if any political ambitions. Of course, Gobbato could be said to have worked even harder for the company and the workers, but was seen by the anti-Fascists as being part of a pro-Mussolini management.

A race meeting – the Coupe de la Liberation – was organized in Paris in the Bois de Boulogne on 9 September 1945, only four months after the war had ended, while much of Europe was still in financial and social chaos. It was a minor event, but it did show that there were people who wanted to get racing going as quickly as possible. The major race at this meeting was the Coupe des Prisonniers, run



Orazio Satta Puglia, the man behind Alfa Romeo's advance in production cars, was also responsible for the development of twin superchargers on the 158, and for the 159 modifications. (Alfa Romeo Storico)

in memory of the racing people killed in the resistance, most notably Robert Benoist and 'Williams' (although some rumours have it that 'Williams' was not killed during the war and survived for many years subsequently as a British agent). As well as these two, several other drivers never reappeared after the war, including Johnny Wakefield, Ernst Burggailer, Georg Meier, Hermann Muller and Hermann Hasse.

Wimille, Sommer, Etancelin, 'Levegh', Trintignant, Chaboud and several other

drivers of note managed to find sufficient cars for the race in Paris and they put on an extremely good show. Wimille had been late in arriving and was not allowed to practise his Bugatti so he started from the back of the grid. At the end of the 75 miles (120km), he had got through the entire field and pulled out a twenty-second gap on Sommer's Talbot. The race had managed to stir serious enthusiasm for the next season.

France was at the forefront of organizing race meetings, and these gradually began to increase in number. It was not long before an event was being held every week. The Italians dropped the ban on drivers racing in France, although Germany remained banned for some years. The only country in Europe which was slow off the mark was Britain, with the loss of Brooklands and Donington, and the number of British drivers going abroad was limited at first, in spite of the extent to which the ERA threat had been touted even into 1942.

The Paris Coupe des Prisonniers race had been run to the 3-litre supercharged/4.5-litre unsupercharged Grand Prix rules. The races in 1946 were essentially Formula Libre events, incorporating the 3-litre and 1.5-litre cars. Luigi Villorosi was at the head of the field at the end of the Grand Prix de Nice in April and Raymond Sommer won the Gran Prix de Marseille in mid-May in his Maserati 6CM. He repeated his victory a week later at the Grand Prix du Forez at St Etienne, a pleasant, little-known circuit which hosted very few events. The Coupe de la Resistance was run in the Bois de Boulogne in Paris on 30 May, and this time Jean-Pierre Wimille's Alfa Romeo 308, entered by Ecurie Naphtra Course, was the victor from Louis Chiron.

Alfettas Return

A race in Paris, the Coupe Rene La Begue, was announced for 9 June, to be run on a street circuit in the St Cloud area of the city, and promoted as having works entries. This was not, however, the first race to do so post-war,

although it may have been the most important. Automobiles Ettore Bugatti and Automobiles Talbot-Darracq were there right from the first race in 1945, although the Alfa Corse entry of two cars was seen as a signal that serious European motor racing was again under way. The Paris race did not have any particular significance and it is uncertain why it was chosen by Alfa Corse for the post-war debut. The two 158s were to be driven by Nino Farina and Jean-Pierre Wimille.

After the death of Marinoni, Consalvo Sanesi had been elevated to the role of chief test driver, and as part of that role he brought the racing cars that had been dispersed north of Milan back to the factory, or at least to that part of the factory that was sufficiently intact to house the racing team. According to Nye, two cars 'hastily hauled out of their cheese-plant hidey hole, were race-prepared and competed in the June 1946 Paris GP' (Nye, 1993, p.44). Apparently it did not take very long for them to be fettled and Sanesi was soon driving up and down the *autostrada* closest to Portello in late 1945. However, it was anything but hasty as the cars were in Portello for seven months before the race, and it would appear that all the other cars were too, not just the two 158s.

Company president Pasquale Gallo had given Satta full authority over Alfa Corse and Satta decided which races would be run in 1946. The Federation Internationale Automobile (FIA), through its new sporting arm, the CSI, announced the 1.5-litre Formula A for Grand Prix cars for 1947, but races were being run to those regulations by the later part of 1946. Formula B was to cater for the unsupercharged 2-litre cars. The importance of the 1.5-litre engine which Alfa Romeo, and Scuderia Ferrari, had worked on for so long was now becoming clear. Under Satta's direction, Sanesi supervised the first revisions to the 158 in the post-war period, although the details of these remain somewhat sketchy. Borgeson (1965) implies that the 158s ran in 1946 with the two-stage blowers but is not

specific about the date and he quotes 254bhp at 7,500rpm as the power output. This would seem to come from Pomeroy's history of the 158's development, as Pomeroy also states that 'the engine output when the cars reappeared in the immediate post-war racing of 1946 was 254bhp at 7,500rpm, this representing a b.m.e.p of 294lb/sq in at 3,450ft/min' (Pomeroy, 1965, p.35). Pomeroy also makes it clear that this was prior to the adaptation of two-stage blowers.

Whatever the details of the revisions, two 158s were sent to Paris for a race that was important mainly in retrospect; it turned out to be the event that spurred Alfa Corse to make the in-depth modifications that would result in a run of no losses until July 1951. It seems that this race came about at least partly through the efforts of Jean-Pierre Wimille. By now, Gianbatista Guidotti was acting as Alfa Corse team manager, although he may not have been officially appointed to that post and was also carrying out other responsibilities in Milan. He had heard of Wimille's involvement in a Paris garage selling cars and apparently had the authority to invite Wimille to Italy, where he asked him if he would like to import Alfa Romeos into France. A little-known story had emerged about what happened at this meeting. Perhaps to celebrate Alfas going to France, there was a gathering in Nice, where Wimille drove the Alfetta in a demonstration run starting at the Hotel Negresco; he even drove it up the La Turbie hill-climb course, beating his old record with the 308, in the presence of

Jean-Pierre Wimille

Wimille was born in Paris in 1908 and started racing in 1930. Until recently, his place in motor racing has been generally overlooked, although Juan Fangio had enormous respect for his talent and considered him to be the best driver in the immediate post-war period, by which time he had already accumulated an impressive record. The recent biography of Wimille is a very important addition not only to what is known about the driver, but to what is known about the 1940s. Wimille would have been better known but for a number of factors over which he only had partial control. One was that he was a Bugatti driver when Bugatti was less successful, and he then engaged in a fascinating war-time period in the French Underground, about which very little ever came to light. He was a star Gordini driver but the Gordini was not a star car, and of course, the 1945-49 period of racing was hardly recognized in historical writing.

With the exception of the Monte Carlo Rally in 1931, when he drove a Lorraine, Wimille raced only Bugattis from 1930 to halfway through 1932. At that time, he started racing the Alfa Romeo 8C-2300, and gained his first victory at the Lorraine Grand Prix on 26 June 1932. He remained with this Alfa, in spite of its reliability problems, to the end of 1933, and then returned to Bugatti for forty-six races in 1934, '35, '36 and '37. At the end of 1938 he was in the Grand Prix Alfa Romeo 316 before returning again to Bugatti in 1939 and after the war in 1945, accumulating a total of twelve wins for Bugatti. He was the winner of the first 1946 race in Paris in the 308 and for the rest of his career drove only Alfa Romeos and Simca-Gordinis.

Jean-Pierre Wimille was Alfa's best post-war driver and, according to Fangio, one of the all-time best. (Alfa Romeo Storico)



luminaries such as Porfirio Rubirosa, Charles Faroux and others.

Wimille had been in the Air Force in the war and one of his pilots, who also had raced, had subsequently become the Mayor of the St Cloud area of Paris. A section of *autoroute* with a tunnel was being completed there, and Wimille convinced the Mayor that a race was the best way to celebrate the project. Alfa Romeo were persuaded to pay their expenses to the French-Italian border, from where the Mayor would pay the remainder (Paris and Mearns, 2002). Whether Wimille got his drive on the strength of this deal is not certain. It seems more likely that he was offered the drive as Guidotti thought he was a prime candidate for the team, and the race came about as a result of the sales deal and the relationship Wimille forged with the Italians.

The St Cloud circuit was impressive to say the least: 4 miles (about 6.5km) in length and the tunnel half a mile (almost a kilometre) long. The entry for the race was the best so far, partly because this new street circuit had captured the imagination of drivers and the public. Tazio Nuvolari, Raymond Sommer and Araldo Ruggieri were all in Scuderia Milan Maseratis, Chiron had a Talbot 26, Eugene Chaboud a Delahaye 155, Harry Schell and Maurice Trintignant were also in Maseratis and Charles Pozzi had a Delahaye.

Raymond Sommer was not put off by the general reckoning that the Alfas were about to dominate and he flew around the circuit two seconds quicker than Wimille, with Farina four seconds further back, ahead of Nuvolari. Race day was wet, which made Sommer happy as he thought this gave him a chance to contain the Alfettas. He was off into the lead, but Wimille came around in front at the end of the opening lap, just holding off Sommer, and Farina headed Nuvolari, Chiron, Ruggieri and Mazaud. Farina got past Sommer, not easily, on lap 10. He then ended up in the pits with a failed clutch, and then Nuvolari was gone with a broken cylinder. After nineteen laps, Wimille too was in with a clutch failure and Sommer went on to win from Louis Chiron.

It was a humiliating defeat for Alfa Corse. The sleeve holding the disc pressure-bearing of the clutch overheated and this caused it to seize on the spline shaft (Hodges, 1966). While many historic accounts say that the cars were 'hastily prepared', this is untrue; Sanesi himself has said that they were being sorted before 1945 was over. It might be that the clutches were not changed, or that the small improvement in power put too much of a strain on the clutch. Virtually all subsequent historians agree that Alfa Corse learned an important lesson, that cars would be prepared

Farina's car before the start of practice at the 1946 Grand Prix des Nations in Geneva. (Biscaretti Museum)



Before the start of the Grand Prix des Nations at Geneva, on 21 July 1946, where Wimille and Farina won a heat each and Farina the final. (Alfa Romeo Storico)



much better in the future, and that there would be sufficient entries to guarantee victory. This strategy worked.

Sanesi was charged with the responsibility of properly preparing the Alfettas for the next race, the Grand Prix des Nations at Geneva on 21 July. According to Pomeroy,

as early as July 1946, a car made its appearance with two-stage supercharging. This was contrived by placing an enlarged first-stage blower behind the original central blower, the first-stage component drawing mixture from a triple-choke downdraught Weber carburettor and feeding, through an interconnecting pipe, into an updraught inlet port on the second stage (Pomeroy, 1965, p.35).

Nye (1993) argues that two of the cars entered for the Swiss race were 158/46B models for Farina and Varzi and they had the two-stage blowers, and Hodges agrees with this, although he says that this raised the power to 254bhp at 7,500rpm; Hull and Slater (1982) contend that the power was rated at 260bhp and that three cars, including Wimille's, had the two-stage supercharging and only Trossi ran the single-stage version. Sheldon and Rabagliati (1993) hold to the version that has Farina and Varzi in the 'later' cars, referring to

the other two as '1939' cars, and this implies that the twin-supercharged cars were something newer and had perhaps more than just the addition of the blowers.

The Grand Prix des Nations was run on a street circuit of less than 2 miles (3km), passing the Palace of the League of Nations in central Geneva. Venables' (2000) account of this race is interesting from several points of view. He notes Varzi's return to health and freedom from his earlier drug addictions, and he also says that the team of mechanics was headed by Alessandro Gaboardi, rather than Consalvo Sanesi. Perhaps Sanesi's *capo collaudatore* designation meant some mechanical responsibility but did not include the role of chief mechanic. The other note is that the team, in spite of looking well prepared and orderly, was working on a very small budget. Much of the Alfa Romeo hierarchy attended this prestigious race, including technical director Orazio Satta Puglia, his deputy Garcea, who was heading the experimental division, and Garcea's deputy Livio Nicolis, who was about to assume much greater responsibility for racing programmes. Gioacchino Colombo was visiting and reporting back to Enzo Ferrari, who had Colombo working on several engine designs; at this stage, it seems, Colombo was engaging in some 'moonlighting' as well as retaining his post at Alfa Romeo.

Achille Varzi

Little is recorded about how Varzi came to be driving an Alfetta in Geneva. Team manager Gianbatista Guidotti must have made the choice when he was recruiting Wimille, but there does not appear to be an account as to how this came about.

Varzi was a legendary and charismatic person. Born in Galliate in 1904, he always seems to have been a chilly and unsmiling driver, and there are few photos of his remarkable career that portray him with a smile on his face. He started on motorcycles in 1923 and then raced Bugattis from 1928. His success with the French cars led to an offer from Alfa Romeo to drive the P2 and he finished second at the Grand Prix of Europe at Monza. His victory in the 1930 Targa Florio was one of several that earned him a reputation as a 'legendary' driver. Certainly, he was capable of incredible performances, always with a smooth and calculated style.

In 1934, Varzi won the Mille Miglia and the Bordino, Tripoli, Penya Rhin and Nice Grand Prix, as well as the Targa Florio. The following year he won the Tunis Grand Prix and finished well in several others, as he did in 1936 when he won in Tripoli for the second time. That victory is now also viewed as marking Varzi's descent into drug addiction. After discovering that the Tripoli race had been fixed to appease Italian interests, Varzi fled the politics he hated, into the arms of Ilse Pietsch, wife of driver Paul Pietsch, who comforted Varzi with morphine. Their relationship and mutual addiction caused erratic behaviour in Varzi, although he is considered to have been 'rehabilitated' after the war. His sensational pre-war Mercedes drives tended to make his signing for Alfa Corse seem too late in the day, but he none the less became a force to be reckoned with within the team.

With four 158s on hand, for Farina, Wimille, Varzi and Trossi, Alfa Corse looked like it had the upper hand. Venables expresses some surprise that Wimille immediately set fastest time, given that Wimille was, as he believed, in one of the single-stage blown cars. The opposition appeared to be formidable, with Sommer, Villoresi, Nuvolari and Ruggieri in Scuderia Milan Maseratis. ERAs were present to challenge the Continental teams, some time after the British press had hoped for this confrontation, with Bira and Raymond Mays entered, among others. The event was to consist of two qualifying heats and a final, the first six from each heat going into the final. Wimille put his 158 on to pole position by a second over Varzi who was just quicker than Luigi Villoresi in the qualifying for the first heat, and Farina, Trossi and David Hampshire's ex-Seaman Delage led the other group.

In the wet first heat, Wimille disappeared into the distance and left Varzi and Villoresi in his wake. In the second heat, it took Farina three laps to catch Nuvolari, and then Trossi did likewise, with de Graffenried fourth.

The final was dramatic, in front of a huge

crowd. Wimille, Farina and Varzi blasted away into the lead, and Villoresi crashed on the first lap, forcing Reg Parnell to do the same. Trossi caught up with the leaders having passed Nuvolari (to Trossi's delight) and Raymond Sommer, but Varzi stopped in the pits to have his engine looked at. Farina and Wimille were exchanging the lead every lap, and when they lapped Nuvolari on lap 32, he took exception to this and knocked Wimille off the road. Wimille had to bump-start the car but Trossi had gone past, and then the famous incident occurred: the black flag was shown to Nuvolari for his behaviour, but he studiously ignored it, and the organizers finally gave up and put the flag away. Count Lurani later said that Nuvolari was desperate to beat the 158s as an act of revenge for the way he felt he had been treated by Alfa Romeo (Lurani, 1959). Some reports state categorically that Wimille's ability to keep pace with Farina in spite of having the single-stage blown engine showed how remarkable a driver Wimille was.

Varzi managed to get going again and was seventh. It took a great deal of persuasion to get Wimille to shake hands with Nuvolari after

the race, and the crowds hissed and shouted at the Italian for the way he had broken up the lead battle. What no one knew at the end of this race was that Alfa Corse and the Alfettas would not lose another race until 1951.

The 'First' Formula 1 Race

The FIA had decreed, with general agreement from national organizations and constructors, that the 1947 Grand Prix races would run to Formula A, which rapidly became known as Formula 1. This meant that 1500cc supercharged or 4500cc unsupercharged cars, with no weight restrictions, would race in events of not less than 300km in length, or three hours in duration. Some of the organizers in 1946 were using this as the rule of thumb in their events, but it was the Gran Premio del Valentino in Turin on 1 September 1946 that became the first race to accept only cars meeting the new 1947 regulations. Turin therefore goes down in history as the 'first Formula 1 race', in spite of the fact that many people believe Formula 1 only began in 1950 when the World Championship for Drivers was instituted and the official change of name from Formula A to Formula 1 took place.

Jean-Pierre Wimille's fastest lap at Geneva, in the 158 that most historians consider to have been running with only the single-stage supercharger, was viewed as a credit to his considerable ability, and did not interfere with plans to continue adaptations to the other cars at Portello. Two more cars then had the two-stage arrangement fitted. The same four drivers as at Geneva – Wimille, Varzi, Farina and Trossi – were entered, along with a fifth car for Consalvo Sanesi.

Venables (2000) alludes to some pressure being brought to bear on the team by the trade unions at Portello to put a 'working' mechanic into the driver's seat, but the true situation was somewhat more complex. In the Alfa Romeo archives at Arese, among the important historical documents, the records of the unions have been preserved, including the newsletters of

the communist unions of the various periods. Many of these records are militant in tone, and the communist union was often putting pressure on a number of areas of management to provide opportunities for the workers. With some sense of irony, many of the anti-Fascists who looked carefully at Sanesi's record immediately post-war were the same characters who were arguing for Sanesi's inclusion in the team as a driver.

Sanesi's view of his role in the team was somewhat different: 'I was *capo collaudatore* and it was normal for him to drive on the racing team if he was willing to do so. I was never appointed for the unions, I was not a strong union man. This was not true!' (Nye, 1986, p.49). However, Sanesi also agreed that it was Satta who came and invited him to drive after he had done such a good job preparing the cars for the Geneva race.



Mechanic and test driver Consalvo Sanesi got his first race in the 158 at the Gran Premio del Valentino, in Turin on 1 September 1946. This was the very first race to be run to the new Formula 1 regulations.

In an interview in 1994, Sanesi was less definitive about how his first race had come about, agreeing that while it was within his role to race, and he had raced before, it was certainly likely that technical director Satta had come under pressure from the unions, not only the communist unions, and may have thought it was expedient to include Sanesi in the team. 'At that time,' Sanesi said, 'I was confident enough in my own ability to accept the offer and believe that I could do a good job.' Borgeson does not mention the union issue in his writing and that in itself gives some credence to the view that Sanesi did not know that pressure may have been applied to Satta. Borgeson had numerous discussions with both Satta and Sanesi, and there would appear to be some evidence that Satta would not have made this gesture if he did not want to do it himself.

This issue also raises the other quirk of historical writing – recollections of an event not only change with time, but do so inconsistently. In interviews, Guidotti, Colombo and Sanesi have all been reported to be charming men, seemingly reluctant to contradict the interviewer, and the interviewer's own version of events. Perhaps this is characteristically Italian? Certainly, it occurs often enough to warn the interviewer to be cautious in making an absolute statement about complex events.

Thirty-five entries were received for the Turin race, but twelve dropped out when they learned that the narrow width of the circuit had forced the organizers to allow only twenty starters. This would mean three would not qualify, and that included Wimille's friend and associate 'Raph', and Harry Schell.

The five Alfettas had the first five places on the grid, and even Sanesi was quicker than the Maserati 4CL of Nuvolari. Farina had been quickest of all, but when the flag dropped it looked like Alfa Corse might struggle again as Farina's transmission broke immediately and he was out. Other reports say it was a broken half-shaft or an axle. Varzi and Wimille were in front as Nuvolari nipped past both Trossi and Sanesi into third. Varzi's position in front

Consalvo Sanesi

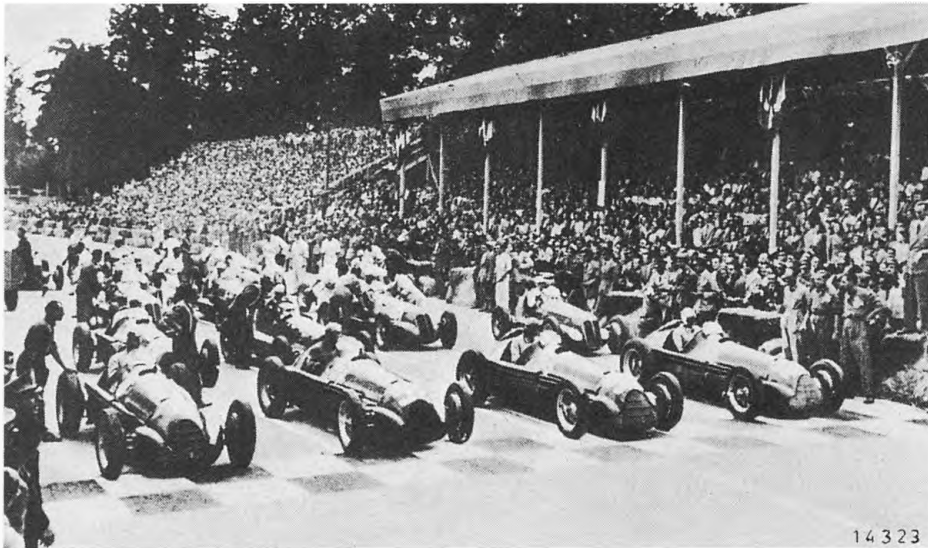
Sanesi was born in 1912 just south of Florence, where his family by coincidence got to know the family of driver Gastone Brilli Peri. Sanesi was thoroughly overwhelmed by racing at an early age and his parents asked Brilli Peri if he could help the seventeen-year-old Consalvo get a job. Brilli Peri had won the Italian Grand Prix and other events in Alfa Romeos and he arranged with Jano for Sanesi to have a trial at Portello. Sanesi was then subsequently employed. He essentially worked and rode as mechanic with Brilli Peri until his death in a crash in 1930, when Jano then assigned Sanesi to work with Campari, Borzacchini and Zehender.

When Scuderia Ferrari took over racing in 1933, Sanesi remained at Portello to work with Marinoni, until Marinoni also went to Modena, being replaced by Guidotti. They did not have an easy relationship and Sanesi became a roving consultant to dealerships in Italy until the racing efforts returned to Portello. Gobbato wanted to turn some testers into drivers for development work. He then officially became a test driver in 1938 alongside Emilio Villoresi and Giordano Aldighetti. This meant he did some races as well, and he won the so-called 'African Mille Miglia' (the Tripoli-Tobruk road race), in 1939 with co-pilot Ercole Boratto, who was Mussolini's personal chauffeur.

Villoresi and Aldighetti were both killed in 1939 in 158s, and when Marinoni came back, he was also killed, in 1940, and thus Sanesi became chief test driver. He worked closely with Ricart, both testing and consulting, and continued to do a number of races such as the Mille Miglia and the Carrera PanAmericana before getting his first race in the 158. Sanesi probably put more miles on the Alfettas than any other person.

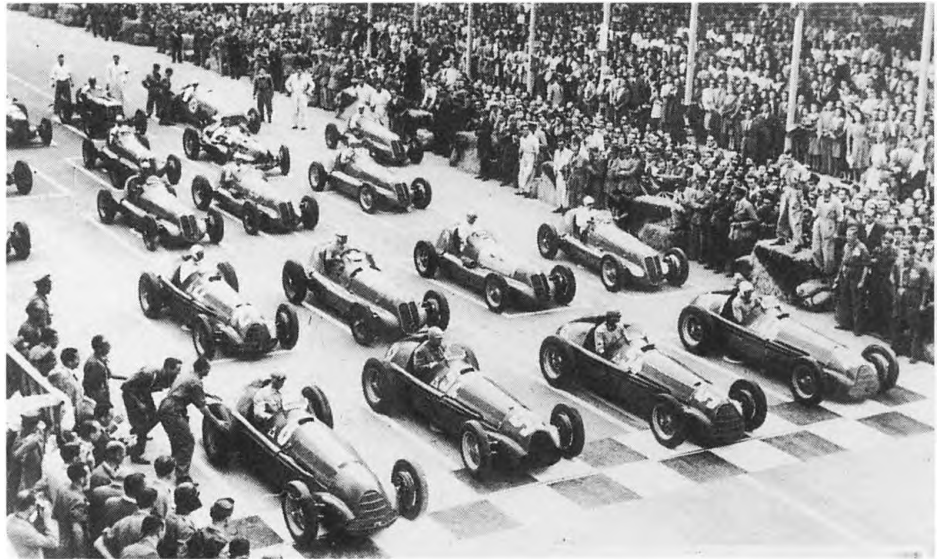
was appreciated by the large crowd, and he seemed to have returned to full health. Sanesi's good position was also applauded, and the Sheldon and Rabagliati version of this race is strongly of the view that Sanesi was there because of the unions (1993, p.152).

A groan went up as Sanesi coasted to a halt on lap 8 with magneto failure, and then Trossi was overtaken by Sommer's 4CL, the steady



The cars prepare for the start of the Gran Premio del Valentino, with four 158s on the front row: (left to right), Farina, Wimille, Trossi and Varzi. (Alfa Romeo Storico)

Just before the start of the Gran Premio del Valentino, which was won by Achille Varzi.



Chaboud in his Delahaye 135, and Enrico Plates' 4CL. The latter was about to retire from racing to become a team entrant and manager. Trossi's sixth place looked better on paper than it actually was, as he was a full nine laps behind at the finish. Varzi and Wimille had a close battle for several laps, until they had opened up a huge lead, and team orders intervened – the first time there was clear evidence of team orders with the Alfettas. Varzi took the victory, with Wimille on his tail, and Sommer two laps adrift.

Paris and Mearns (2002) speculate that Guidotti began to worry that Wimille would disobey team orders and take the victory he

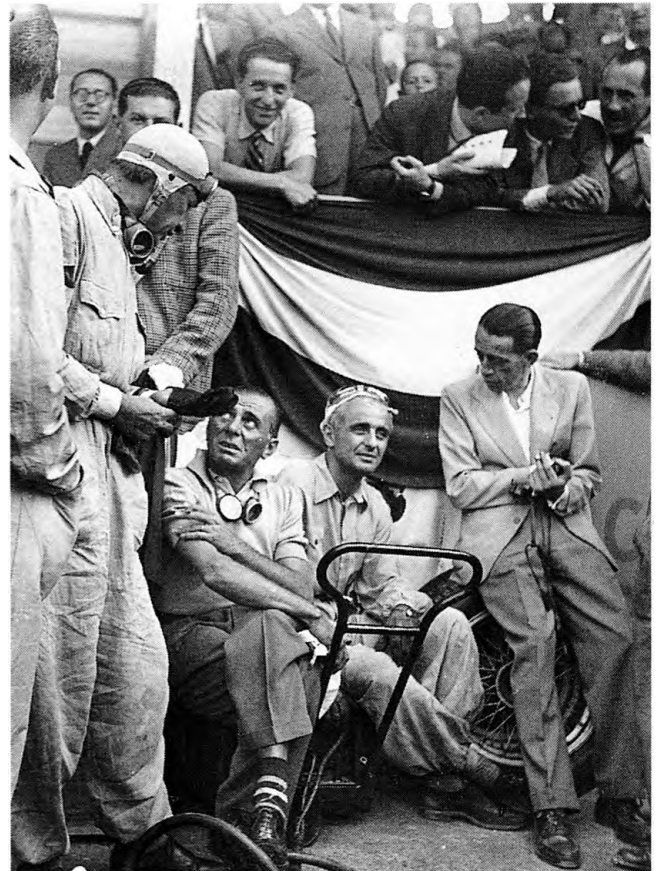
felt he deserved; in the presence of a large section of Alfa Romeo management, this would not be desirable. In the event, whatever Wimille thought, he did allow Varzi to win, although there would be repercussions later. Both had driven extremely well on the tight and difficult circuit and the mechanical weaknesses of the other Alfettas did not afflict the first two, although the Valentino Park circuit put considerable strain on brakes and transmission. (This circuit still exists just above the River Po in Turin, surely one of the most evocative of the old street circuits of the period.) This race had been run in the dry, although a number of subsequent events took

place there in much worse conditions on a very slippery surface.

The final race of 1946 for Alfa Corse was run – to the same 1947 regulations – two weeks after Turin, at Sempione Park, which was not far from the Portello factory in Milan. Using public roads, the very tight and arduous 1.7-mile (2.75km) Circuito di Milano was to consist of two twenty-lap heats and a thirty-lap final, in front of another large crowd. Five Alfettas were entered, for the same drivers as at Turin with the exception of Wimille who was absent. According to Venables (2000), he was dropped as not being needed for this home race, which seems an over-simplification. He had clearly been annoyed at the outcome of the Turin race, and this, added to the fact that he had requested Alfa Corse to lend him a car for the Grand Prix du Salon in Paris on 6 October and had been turned down, may have led him to opt out. Alfa Corse were beginning to demoralize the Maseratis with the speed of the 158, so it does seem odd that they would drop one of their top drivers.

Nevertheless, the race on 21 September had a strong entry, with Nuvolari, Villoresi, 'Raph' and Sommer all prepared to challenge the Portello cars in their 4CL Maseratis. Piero Dusio was entered in a Cisitalia but did not appear. Villoresi proved quickest in practice for Heat One, with Varzi and Trossi behind him. With only five cars qualifying from each heat for a ten-car final, the competition at the front was ferocious. It was Trossi who was moving slightly before the flag dropped, with Varzi in tow, and he eventually took over the lead from Trossi, Nuvolari, Villoresi and Giorgio Pelassa's 4CL. Farina blatantly jumped the start of Heat Two, so much so that everyone went with him, but this time the officials put out the red flag for a restart. Consalvo Sanesi had difficulty starting and had to be pushed at the first attempt so would have been disqualified but for the restart. Farina again anticipated and jumped the start, for which a minute was added on to his time. This

meant the lucky Sanesi won the heat, from Sommer, Farina, Reg Parnell in an ERA A-type, and de Graffenried's 4CL, while the new Cisitalia driven by Piero Taruffi just failed to qualify for the final.



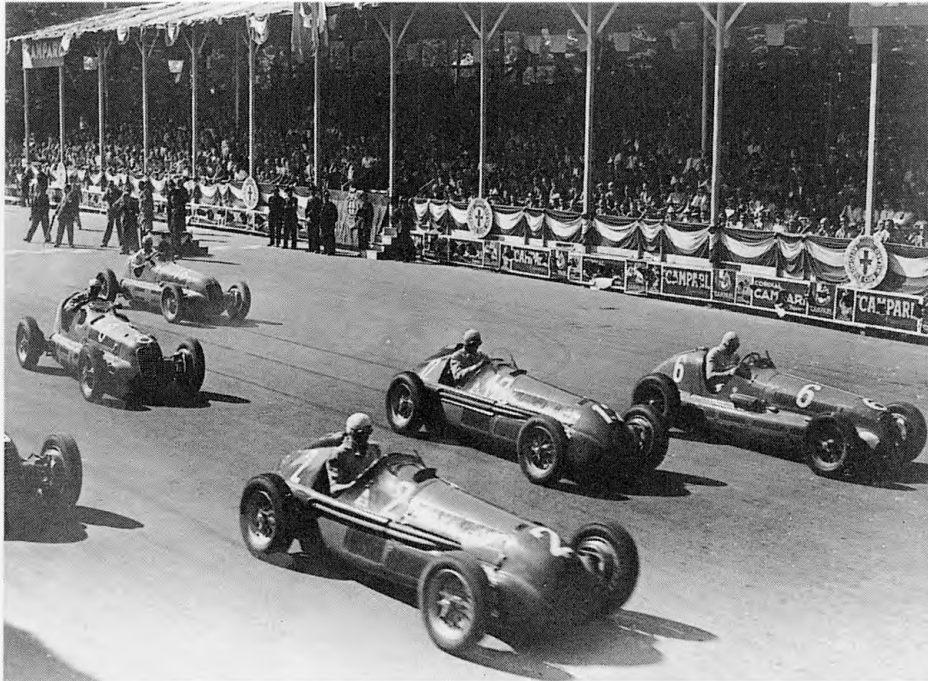
The drivers before the start of the Circuito di Milano on the road circuit in Milan, on 30 September 1946: (left to right), Trossi, Achille Varzi and Maserati driver Luigi Villoresi. (Alfa Romeo Storico)

Farina was on the second row for the final, but was again on the move before the flag fell, although this time he was forced to brake to avoid exclusion. The smooth and unruffled Trossi came around in front at the end of the opening lap from Varzi, with Farina and Sanesi close behind. Tazio Nuvolari had been with the lead group but retired on only the third lap. This was a sad departure for a man who was now ill and for the most part in decline. Trossi was overtaken by Varzi but retook the lead in one of his best drives. Farina spun and is alleged to have retired because he could not

accept that the Maserati of Sommer was going to beat him to the flag. Trossi won, from Varzi, Sanesi, Villoresi, Sommer and de Graffenried. Varzi and Farina shared the fastest lap. Venables (2000) argues that Trossi, with his characteristic pipe in his mouth, was earmarked for the win, and Farina's petulance may have been

related to this. There were many drivers who wanted strong action taken against Farina for his behaviour at the start and perhaps also for his general recklessness.

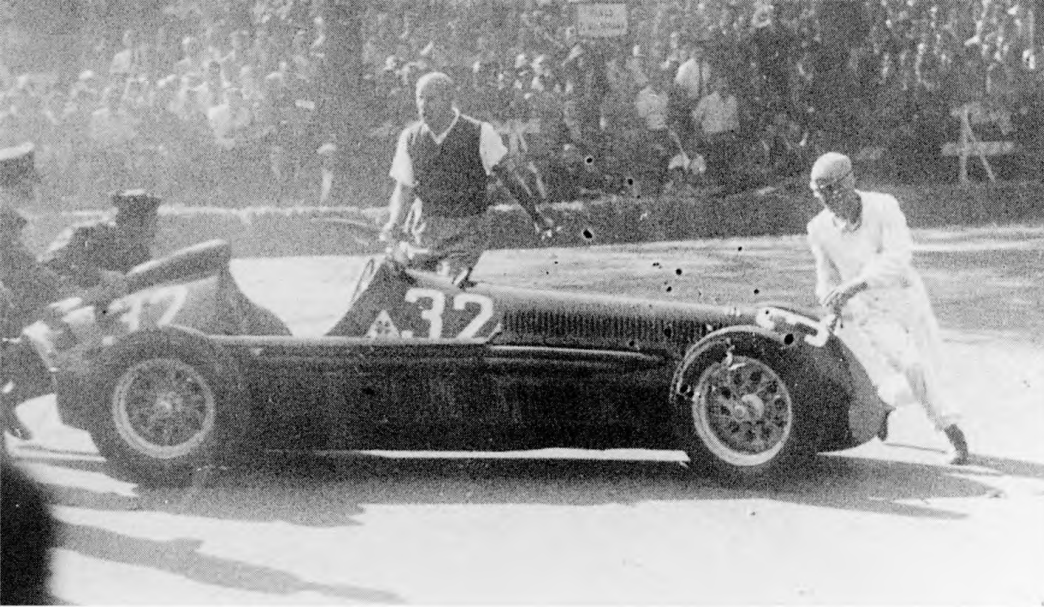
This was to be the last race of the season, but activity did not stop, and a fairly ambitious winter plan of improvements was put in hand.



The start of the Circuito di Milano, with Varzi (2), Trossi (12) and Ruggieri's 4CL Maserati moving for Heat One. (Alfa Romeo Storico)

Varzi won Heat One and was second in the final, to Trossi. (Alfa Romeo Storico)





Sanesi required a push start before he could get going in Heat Two, which he won, after Farina was penalized for a jumped start. (Alfa Romeo Storico)

Changes for 1947 – the 158/47

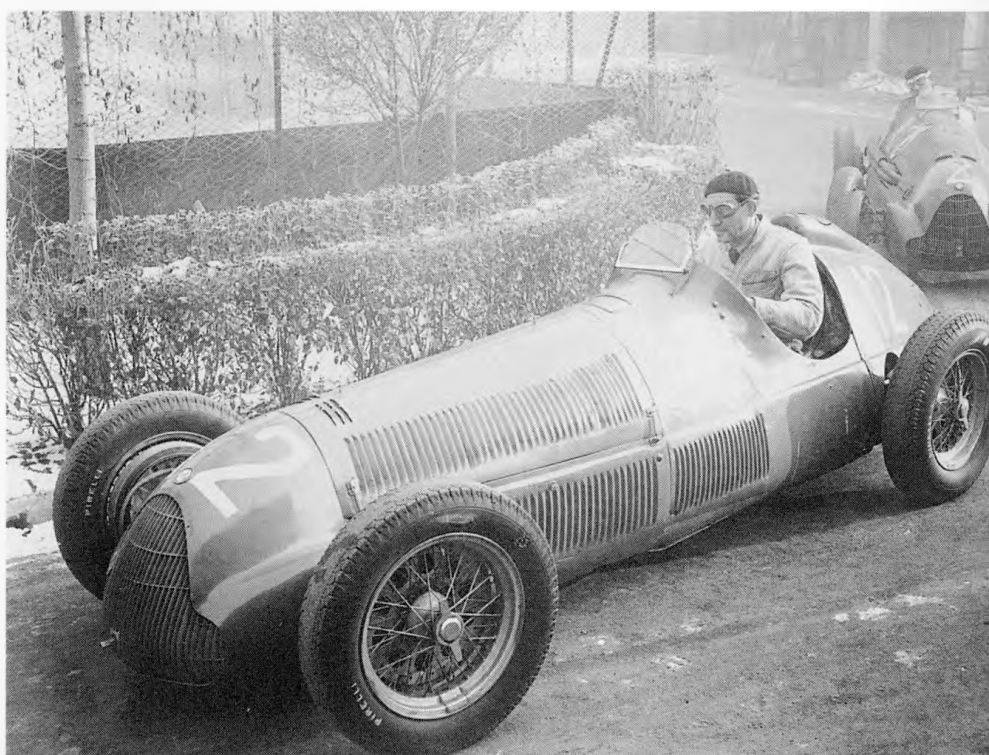
All the 1947 Grand Prix races were to be run to the new regulations (a few had already taken place under these new rules in the latter half of 1946). Alfa Corse made a number of important decisions for 1947, although there is little evidence as to the rationale for these.

First, Alfa Corse would enter only four Grand Prix events for 1947, picking presumably what were seen as the most important, as an international championship had not yet been established. There were to be twenty-one Grand Prix races throughout Europe – most of them in France, with others taking place in Italy, Sweden, Switzerland, Belgium, Ulster, the Isle of Man and Jersey – so four seems a very small number indeed.

The second significant decision concerned the size of the team, which was reduced by the departure of 'Nino' Farina. This was apparently precipitated by indications from the team that Jean-Pierre Wimille would be team leader. According to Tony Hogg, 'his pride and patriotic spirit made it inconceivable to Farina that Alfa Romeo should offer pride of place on the team to a Frenchman' (Hogg, 1965, p.60). There are no other references to Wimille having number-one status, and in fact he felt at something of a disadvantage being the only foreigner in the team. Farina would not rejoin the team until 1950, and even then he would be in similar disputes over Fangio's status at Alfa Corse.

The major change involved modifications to the cars, and these came in two areas. In

Mechanic Augusto Zanardi and chief mechanic Alessandro Gaboardi test the revamped 158/47 at the San Siro Park in Milan in the beginning of 1947, with snow still on the ground. (Alfa Romeo)

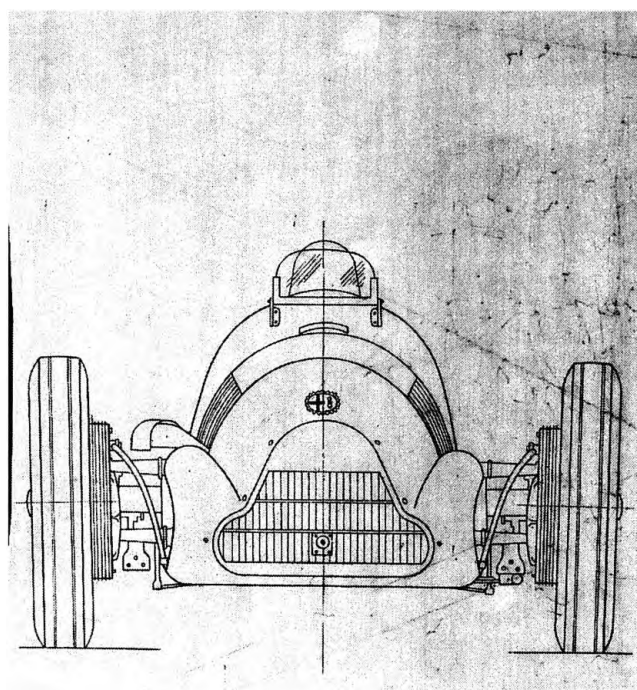


1944, Livio Nicosi, who had been with Alfa Romeo since 1941 except for his spell as an inspector of aircraft in the Italian Air Force, was back working under Giampaolo Garcea in the new experimental department. In 1947, Garcea, with Satta's agreement, put Nicosi in charge of all racing activities, and gave him direct responsibility for the Grand Prix cars. Nicosi, in close collaboration with Satta, headed development for the cars and together they established the policy of competition development for customer cars that would last for many years.

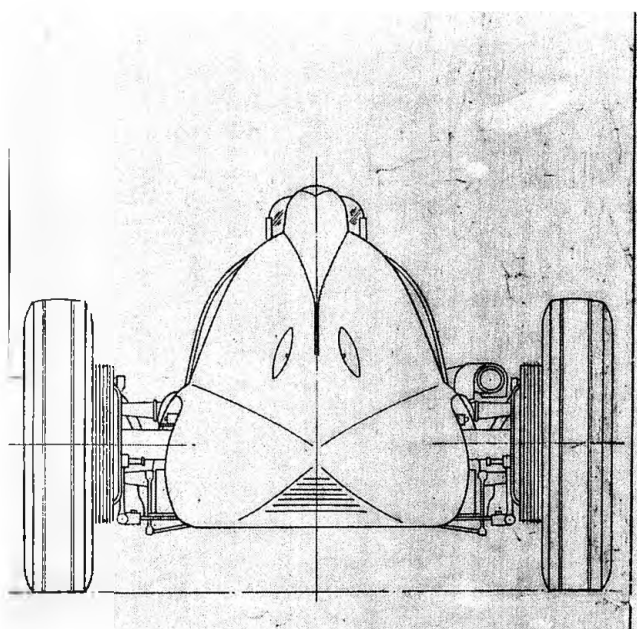
There are several versions of the modifications made to the team 158s for 1947. Basically, five cars had minor changes and a new variant, the 158/47, was developed although not raced in that year. All the writers who describe the changes for 1947 tend to mix those modifications for the five cars with some of the adaptations to the 158/47, and thus exact detail of the cars used through the season remains somewhat cloudy. Pomeroy (1965) is the source of most of the other material, and Pomeroy's style of recording construction and subsequent development is not easy to follow. However, he states that power for 1947 was raised primarily by means of increasing manifold pressure. He adds that the shield between the exhaust and the magneto was not sufficiently effective and the magneto was moved to a cooler location to be driven from the front end of the inlet camshaft. He describes a rearranged water circulation system as follows:

The four offtake pipes, placed on the centre line of the head and between numbers 1 and 2; 3 and 4; 5 and 6; and 7 and 8 cylinder bores, were supplemented by four down pipes feeding high-velocity cold water into the head immediately above the exhaust ports of cylinder numbers 2, 4, 6 and 8. (Pomeroy, 1965, p.37)

Ludvigsen (2000) quotes the engine power as 254bhp, although this had already been achieved in 1946, and in his slightly later work



Blueprint drawing of the 158/47, front view. (Alfa Romeo Storico)



Blueprint drawing of the 158/47, rear view. (Alfa Romeo Storico)

(2001) he says that it was up to 265bhp. However, according to Nye (1985), the 1947 figure was 275bhp at 7,500rpm. Pritchard (1965) had it at 265bhp but also (inaccurately) had the twin-stage superchargers being used for the first time in 1947.

Venables (2000) dates the work on 158/47 as happening alongside that being done on the team's five 158s which would be racing in 1947. However, he indicates that further work was done on one of the cars, and it is not entirely clear whether this might have been a new chassis, one of the five, or a sixth which had been in use in 1946. Work on the 158/47 consisted of enlarging the low-pressure first-stage blower, and fitting an additional fuel tank to the right side of the cockpit. Changes were also made to the ducting for the blower's air intake. It would now draw from the vent in front of the cockpit, which had been used to force cool air to the driver. The exhaust was returned to the single-pipe system, which had been tried some time earlier, and the modifications gave 310bhp at 7,500rpm. The additional fuel tank was necessary as the fuel consumption increased significantly, and more tankage would be added at later stages. Some accounts claim that the increase in power brought other problems. According to Hodges, the 275bhp 1947 cars were certainly suffering from it:

But even the small increase in power achieved in the engines raced during the year found a weak spot. Crankcases - Elektron castings with an ultimate tensile strength of approximately 16 tons/sq in developed minor cracks at the main bearings. On all the engines, therefore, tie rods were fitted between the caps of the crankshaft main bearings and the block(s). With this seemingly makeshift repair, they were to serve for another four years. (Hodges, 1966, p.6)

As these repairs are not mentioned in any race reports, it seems impossible to date them. It is also unclear as to whether Hodges may have been referring to the engine in the 158/47. Nye (1993) makes almost the same statement as does Hodges and, in the light of no reference to Colombo's repairs to the engines before the war in either of these works, it seems that these repairs must only have come to light in 1947, but must have happened at a

much earlier stage. The limited detail in Nye's comments about what repairs took place makes it quite possible that he is referring to Colombo's earlier 'patching up'.

Pomeroy gave further details of the 158/47, and implies it was the model for the 1950/51 cars as well. He says that 'air was ducted to the downdraught carburettors by a forward-facing trunk, this at first extending to about the mid-point of the engine and on later models being carried forward to just behind the front spring. The exhaust system at first had a single discharge pipe but on later models the centre four cylinders and the two end pairs discharged into separate pipes' (Pomeroy, 1965, p.37). He also notes that the front and rear spring rates were lowered on the 158/47 and this carried over into later cars.

Borgeson discussed even further refinements made to the 158/47, which had continued developmental work into 1948:

Originally a large air horn had delivered air to the blower from a low position near the front of the car. This resulted in the aspiration of dust and grit, rapid blower wear and even jamming. Then the air horn was turned around and pointed towards the firewall, with some improvement in this problem. In the 158/47 the air horn was brought through the firewall, where it drew air directly from a shutter in the cowl. This shutter had been a cockpit-cooling feature of the bodywork from the very beginning and so the change went unnoticed by all but Alfa's racing team, which thought that the 'forced' air thus delivered to the blowers at high speed added as much as 25bhp to the engine's output. Something else that went unnoticed and has not been mentioned until now is the fact that after this change Alfettas always started a race with these shutters closed. Usually after two laps a white flag would be waved as each car passed the Alfa pits and this was the signal for the driver to open the blower-intake shutter. The reason for this was that it had been learned from hard experience that during the

Team manager Guidotti (left), driver/journalist Count Johnny Lurani (centre) and Giachino Colombo (right) at the 1947 Swiss Grand Prix at Bremgarten.



first couple of laps of any race great quantities of rubber particles were thrown from brand-new tyres. This was of no significance to the unsupercharged competition but it had been known to cause jamming of the Alfetta's blowers. (Borgeson, April 1965, p.49)

A Year of Victories

The 1947 season had started somewhat surprisingly at the far northern circuit of Rommeled in Sweden in February, on an airfield with gravel embedded in the snow for traction, but it was a disaster, as all but four cars were in an ice-bound ship in harbour at Gothenburg. Reg Parnell led the three finishers in an ERA! The second race took place only a few weeks later on a frozen lake, after the cars had been released from the ship. Pagani's 4CL Maserati won the race at Pau in April, and Maseratis shared victory with Talbots for the next few events until Alfa Romeo showed up at the Swiss Grand Prix at Bremgarten on 8 June.

The Swiss Grand Prix was the first important event of the year, even though it was already June. Again, there was a large crowd and this made the Bremgarten circuit even more dangerous than usual, as there was virtually nothing between the cars and the spectators. Trossi and Varzi were able to show the Alfa threat in the

first of the two heats and final. Trossi was a long way (some thirteen seconds) ahead of Varzi and this was partly accounted for by the crowds pressing on to the road. As it was, Guidotti had done virtually all the driving on the first day of practice in order to make sure the cars were running well. Bira in a Maserati 4CL was another seven seconds off the pace. However, as the heat got under way, Trossi gave way to Varzi, who won as rain made the conditions even more treacherous. Mays and Pagani followed the two Alfas in as conditions worsened. On the slowing-down lap, a small boy ran across the circuit, to be hit by Varzi. The unconfirmed story is that he died of his injuries, but details and confirmation apparently never emerged.

Disaster was close at hand in the second heat as well. Villoresi and Sommer now had two-stage superchargers fitted to their Maseratis, but practice seemed to dispel any hopes they might have of defeating the cars from Portello. Wimille was eleven seconds quicker than Villoresi, with Sanesi four seconds further back and Sommer a huge twenty-six seconds behind Wimille. Although Villoresi and Chiron made a fight of it at first, while Sommer was in plug trouble, Wimille and Sanesi eased away to win. Leslie Johnson in his Talbot 150C struck two spectators standing on the road, killing them, and the atmosphere became tense before the final. Many wanted



The engine of Sanesi's 158 is worked on in practice for the Swiss Grand Prix, 1947.



Team manager Guidotti drove all four of the team's cars in practice for the 1947 Swiss Grand Prix.



Varzi in practice for the Swiss Grand Prix. He won the first heat and was second in the final. He and Leslie Johnson both hit spectators in practice, when crowd control was poorly managed. (Ferret Photographics)

the race abandoned, but the organizers worried there would be a 'bad reaction' from the crowd. (Eventually, the Le Mans disaster of 1955 would provoke action from the Swiss, who decided to stop racing completely, rather than provide reasonable security, which they should have done years before.)

Although Sommer got the jump at the start of the final, Wimille and Varzi soon sped past and Wimille opened up a gap to Varzi. He was supremely in control and driving at his best. He slowed towards the end to let Varzi catch up, and this pair led Trossi and Sommer's intervening Maserati across the line before Sanesi brought the fourth 158 over the line. The drivers all stopped immediately as the crowd invaded the circuit.

Wimille at Spa

The Belgian Grand Prix was considered another of the 'important' races, so most of the regular teams were present at the daunting and magnificent 9.2-mile (14.75km) road circuit in the Ardennes on 29 June, although there was no sign of the two-stage Maseratis after their problems in Switzerland.

Alfa Corse sent four cars, for Wimille, Varzi, Trossi and Sanesi, and the Frenchman was quickest, and full of confidence after his Swiss win. In fact, Wimille did only three practice laps and set his time on the second

The Post-War Revival

Swiss Grand Prix 1947: Varzi laps the Cisitalia D46 of Harry Schell in Heat One.



Swiss Grand Prix 1947: Jean-Pierre Wimille had superb victories in Heat Two and the final.



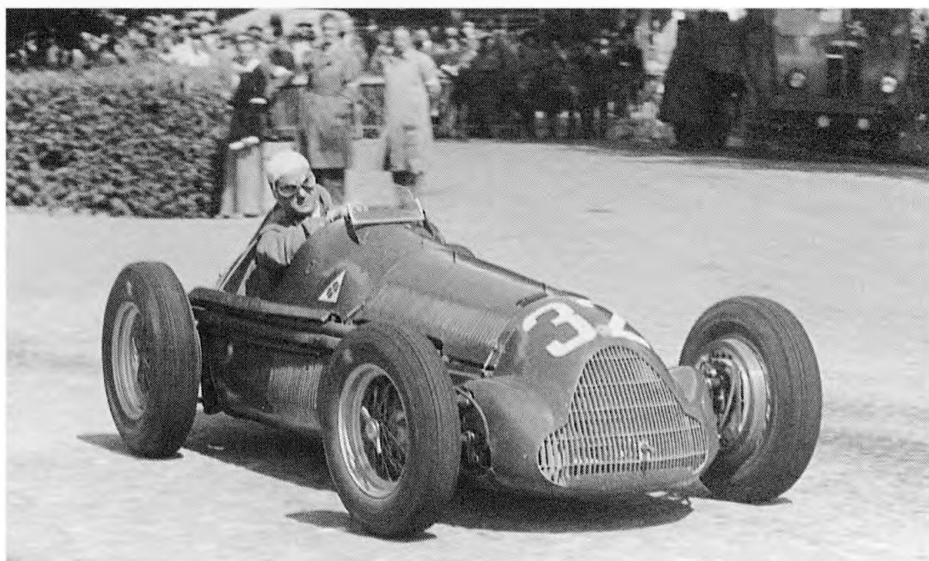
Swiss Grand Prix 1947: Count Carlo Trossi was on pole for Heat One but finished second behind Varzi, and was third in the final.

Swiss Grand Prix 1947: Varzi's total concentration is evident.



The Post-War Revival

Swiss Grand Prix 1947: Varzi grits his teeth over the bumpy Bremgarten cobbles.

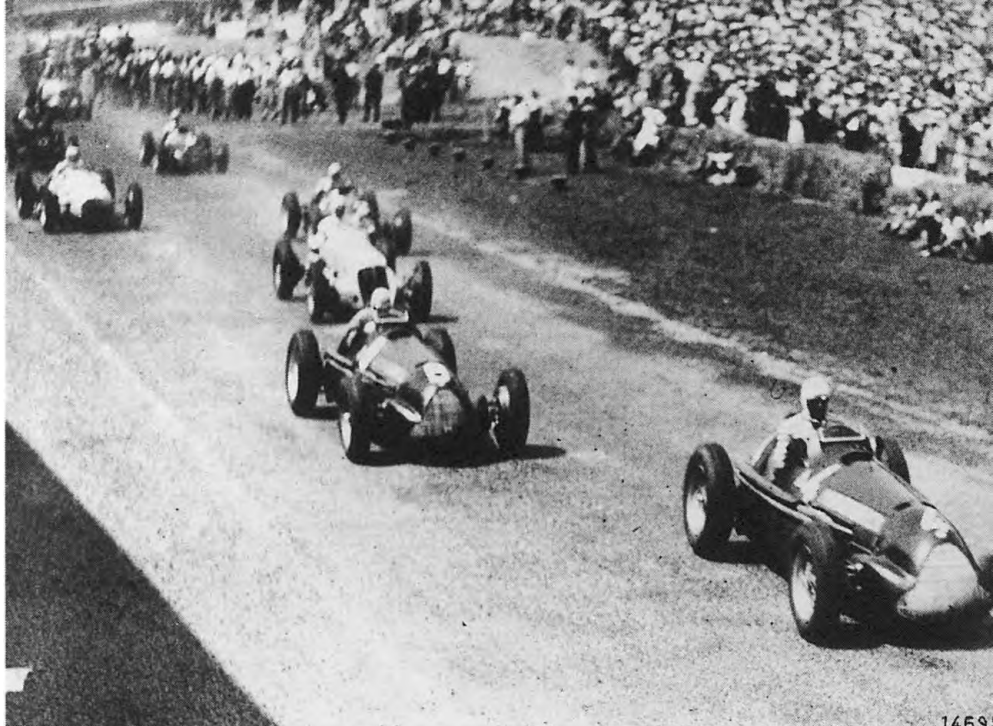


Swiss Grand Prix 1947: Consalvo Sanesi managed second in Heat Two and fifth in the final.

Swiss Grand Prix 1947: Wimille was at his relaxed best in both his heat and final. (Ferret Fotografics)



Varzi leads Wimille at the Grand Prix de Belgique on 29 June 1947, although Wimille won, with Varzi second, and Trossi and Guidotti and Sanesi shared third place. (Alfa Romeo Storico)



with a new lap record. Varzi, Chiron, Trossi and Sommer were next on the grid, with Villorosi not appearing at Spa. Team orders seem to have dictated a Varzi win but it was soon apparent that Wimille was unhappy with team orders when he was fastest. Chiron crept at the start better than the others and was away first, although Varzi and Sommer were soon past. Wimille was not content to sit back, and forced the pace. In the early stages, Trossi was hit in the face by a stone from another car. He came into the pits and team manager Guidotti took over while Trossi had his injuries treated, much distressed by the damage done to 'my beautiful nose'!

Wimille and Varzi started an enormous battle, changing places lap after lap, disregarding team orders; as Guidotti was on the circuit himself, there was little he could do. Varzi, unlike Farina, was on good terms with the other drivers, but still wanted every advantage he could get. Sanesi has said that he checked out each car for an advantage, but the cars were allocated on a random basis. Varzi was absolutely determined to win where possible but Wimille had the edge. As it turned out, Varzi put considerable strain on his brakes, and a brake pipe broke. Even after losing nine minutes he managed to come back out and regain second place, five minutes behind Wimille; the shared Trossi/Guidotti car was

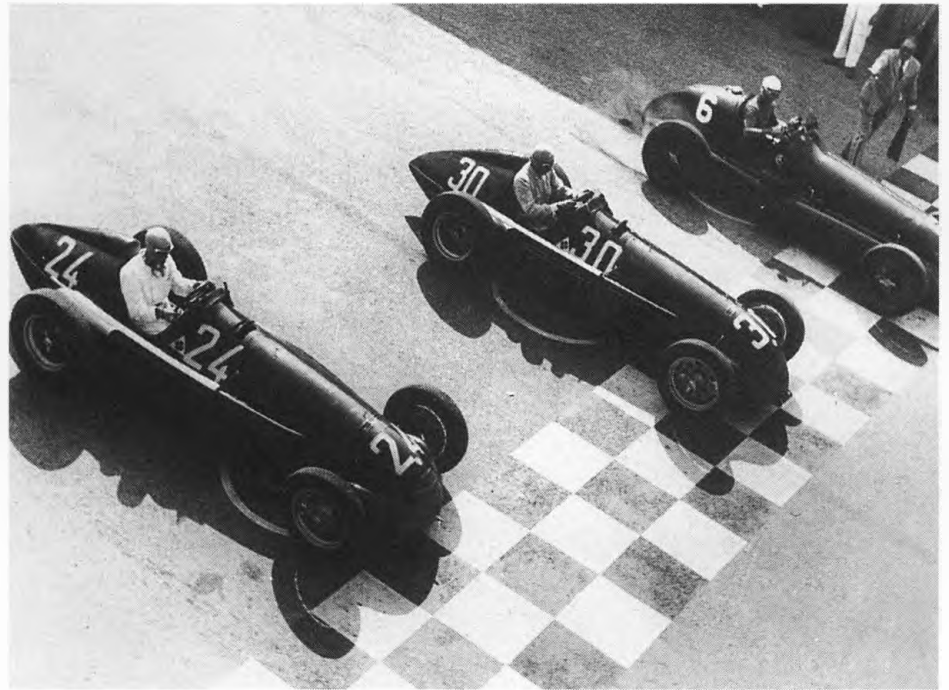
third, in a tribute to Guidotti's ability as a driver. Sanesi should have been fourth but stopped and failed to cross the finish line, giving the place to Bob Gerard and Cuth Harrison sharing an ERA B-type. Both Sommer and Chiron failed to finish, and the 60,000 crowd gave Wimille a rousing reception. Winning the European Grand Prix, as this race was entitled, also made Wimille the European Champion, an appropriate recognition of his position in Grand Prix racing at the time. He had also set the fastest lap at over 101mph (162km/h).

Hull and Slater (1982) make an interesting point in quoting Trossi as having complained about the slow pace of the race in the early stages, the Alfas being so much faster than everyone else. Apparently, Trossi felt it was rather like being in a *concours d'elegance* instead of a race, and reminiscent of the Alfa team at Spa in 1925 when they took a lunch break in the race, just to rub in their superiority.

Varzi at Bari

Alfa Corse made the decision to skip the Grand Prix de Reims and also the race at Albi on 13 July, and chose instead to go to a very minor meeting at Bari with just three cars, for Varzi, Sanesi and Trossi. There is no indication as to whether this was a warning to Wimille

Sanesi, Trossi and Luigi Villorosi's Maserati were on the front row of the grid at the Gran Premio D'Italia in Milan on 7 September 1947, with Sanesi quickest. Trossi won, from Varzi with Sanesi third. (Alfa Romeo Storico)



for not obeying pit signals, and it seems more likely that there was an agreement to let him race the Simca-Gordini at Albi. Wimille was racing for the Gordini team whenever his Alfa commitments allowed, although it is not possible to say whether there was a clause in either contract which gave preference to one over the other. Presumably, driving the Alfetta would have been more important.

There was virtually no opposition to the Alfettas at the 5.3-mile (8.5km) circuit on the south-east Adriatic coast. Chico Landi showed up in an Enrico Plate-entered Maserati 4CL and managed to get on to the front row with Varzi and Sanesi, but that was because Trossi had not made it to Bari. The race was something of a farce as Landi retired and there were no other quick cars. Consalvo Sanesi injected some interest when he had a spin and was forced to push the car to an incline, then set it off downhill, jump in and restart. While the 158 was the height of technology at the time, it was still possible to get it restarted while hot without great difficulty, a feature which remained with the cars until their career was over. Varzi also added to the 'show' by slowing and waiting for Sanesi to catch up so they could be running together. This was possibly

an example of sportsmanship on Varzi's part, but just as likely a slap in the face to Wimille, who was considered at the time to be a little lacking in team spirit.

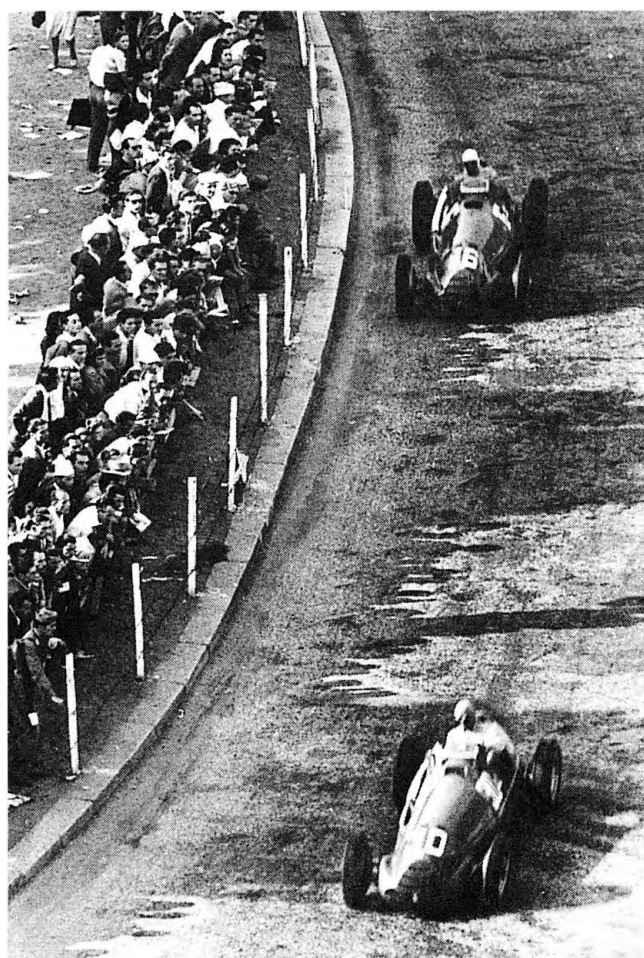
Season Finale at Milan

While the rest of the 1947 races were being shared between Chiron, Villorosi and Bob Gerard in the British events, Alfa Corse chose to do only one more race, the Gran Premio d'Italia, which was being run on a 2-mile (3-km) circuit in the Milan fairgrounds, not far from Sempione Park, which had been used in the past. Monza was still being repaired from war damage, as thousands of heavy vehicles had been used and then stored there.

Five Alfettas were entered, for Wimille, Varzi, Sanesi, Trossi and Alessandro Gaboardi. Wimille then failed to appear and opinion is divided as to what had occurred, some arguing that Wimille had been dropped because of his failure to follow team orders at Spa, and some saying he was replaced by Gaboardi under pressure from the unions; the same had happened to Sanesi in the past, in spite of his denial of it. Both arguments probably apply; Guidotti presumably bowed to pressure to

sanction the non-Italian, and followed this up by refusing to loan two cars for Wimille for the Grand Prix de L'A.C.F., which was to run two weeks later, on 21 September. Five cars, not four, had been entered so it seems unlikely that Gaboardi substituted for Wimille, and Alfa Corse surely would not have been so churlish as to replace the clear team leader with a 'mechanic'? Of course, the team was churlish enough to drop drivers for indiscretions, whether this might mean the difference between winning and losing a race.

The race at Milan was interesting from



Trossi on his way to a fine win from Varzi at the 1947 Gran Premio D'Italia. (Alfa Romeo Storico)

several perspectives. Consalvo Sanesi was quickest of all in practice on a circuit new to everyone, and that was by 0.8 of a second over Trossi and a full 1.5 seconds over Villorresi in the new 4CLT Maserati with tubular chassis.

Alessandro Gaboardi

Relatively little is known about the life of the Grand Prix newcomer Gaboardi, at least before his Alfetta drive, although he was Guidotti's assistant and chief mechanic in the period between the wars. He had also been a riding mechanic in the pre-war period, sharing fifteenth place at the 1935 Mille Miglia with Mercanti in an Alfa 6C-2300. He is credited with one voiturette race in 1937, and went on to take part in many more races after 1947. He did a substantial amount of testing of the Alfettas alongside Guidotti, when the cars would be driven down to Sempione Park for impromptu tests.

Varzi was relegated to the second row, three seconds slower than Sanesi, and he was followed by Ascari in a 4CLT, Chiron and Sommer in 4CLs. The ever-improving de Graffenried was next in his own 4CL and then came Gaboardi, acquitting himself well after being flung in at the deep end.

At the end of the first lap, it was Trossi in front, and Villorresi already having troubles. By lap 6, Trossi, Sanesi and Varzi were the front trio. When Varzi went into the lead, he started swapping places with Trossi to keep the crowd happy, but these two drove an excellent race and pulled away from the field. The Maseratis were having a terrible time and one by one they dropped by the wayside, only Alberto Ascari staying anywhere near the Alfas, until he too struck trouble. Gaboardi moved up into fourth behind the other Alfettas for an Alfa 1-2-3-4. It became obvious that a decision had been made to give the win to Trossi. He had eased away from Varzi but slowed to let Varzi catch him, and Trossi then crossed the line with his hands in the air, making it clear that he knew he was not quicker than Varzi. The crowd resented this and booed, to Trossi's consternation.

With no cars going to Reims for Wimille, that was the end of the 1947 season. The Maseratis had presented less of a challenge this year, although some of the other cars such as

the Talbots did, but none were in the same league as the Alfetta.

As Venables (2000) gets to the end of his review of 1947 he mentions the problems the team had with cracked blocks, but again there is no certainty as to when this was dealt with. Clearly, he chooses to link it to 1947, which may mean either that it was dealt with at the end of the year, or that Venables is as much in the dark about it as all the other writers.

1948: Highs and Lows

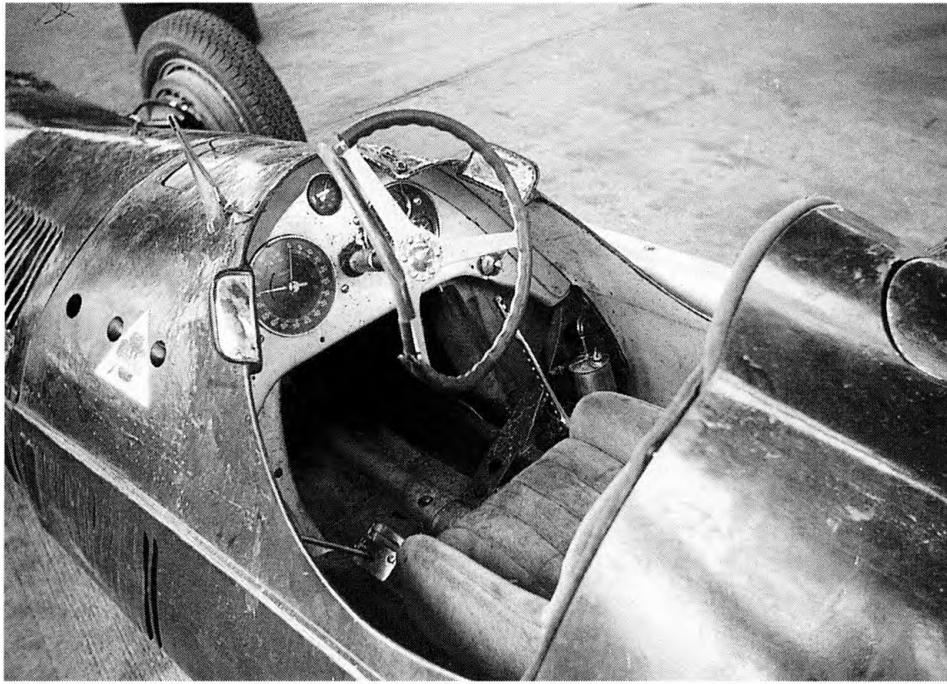
While Alfa Corse's first Grand Prix race did not take place until 4 July, at Bremgarten, again entitled the European Grand Prix, it certainly was not the case that the racing department was inactive. In addition to the busy sports-car calendar, a number of cars had been sent for a South American season during the European winter, where Jean-Pierre Wimille had done particularly well. It was as a result of his performances in those races that Juan Fangio would later recall Wimille as the greatest driver of the time.

The race at Bremgarten is a source of some confusion, and was the occasion of a great tragedy for Alfa Corse. According to Venables

(2000), four cars were sent, for Wimille, Varzi, Sanesi and Trossi, and a fifth, the 158/47, went to be used in practice. Venables states that it was in this 158/47 that Varzi had the accident in which he was killed. He also clarifies the point that no further conversions to 158/47 specification had been made in 1947, and the 'regular' cars were viewed as sufficient for 1948. Pritchard (1965) confuses the issue by saying that the cars for 1948 had 310bhp, which they did not, as only the 158/47 had that power rating. Pritchard does say Varzi was killed driving an 'experimental car'. Ludvigsen (2001) on the one hand says that Varzi was killed when he rolled the 158/47, but contradicts himself (2000) by arguing that the 158/47 was only raced first at the end of 1948. Nye (1993) agrees with Ludvigsen's first version. Hodges has both Sanesi and Varzi trying the 158/47 in practice in Switzerland with Varzi crashing. Hodges then has the car reappearing at Reims, but Pomeroy has the 158/47 being used for the first time in practice at Reims, not Switzerland, and then racing in the following races. Hodges has its race debut at Monza for Wimille. Borgeson dismisses the 158/47's presence at the Swiss race and says it made its debut at Reims.



The Swiss Grand Prix of 1948, at Bremgarten on 4 July, was also the Grand Prix of Europe. It was entirely overshadowed by the death of Varzi in a practice crash. (Alfa Romeo Storico)



The car in which Varzi was killed showed relatively little damage. Christian Kautz was also killed, in another crash. (Alfa Romeo Storico)

The variety of interpretations is interesting but largely academic. If Varzi was killed in the more powerful 158/47, it might have indicated serious problems inherent in the design. If he was driving that car, and photos of the car after the accident show light damage, then it was obviously repaired and immediately run again at Reims, as no second car to that specification had been built. Hull and Slater (1982) were also adamant that Varzi was killed in the 158/47, but said that he had misjudged 'the corner on the quarry leg of the circuit' in the rain and mist, overturning and causing crushing injuries to the skull. Paris and Mearns (2002) quote Canestrini in describing Varzi's accident as having happened because Varzi was blinded by the water from Wimille's tyres, as Wimille was just in front of him. The Wimille biographers accept that Varzi was in the 158/47. In fact they remind us that this model was also occasionally called the 158A, and they do say that the car was immediately repaired as Wimille drove it next. The 158A designation adds more confusion and David Owen (1982) refers to this car as the 158D. Sanesi later refers to Wimille driving the car with two blowers as the one that would later become the 159 and Lurani (1959) mistakenly

says that Varzi was killed in a 159. This is an interesting comment as twin blowers were being used on the other cars and it seems likely that the particular type of blower arrangement, as well as the chassis modifications, were essential ingredients in the latest version of the car a few years hence.

Satta and Nicolis, shattered by the loss of the charismatic and legendary Varzi, were, along with many others, keen to cancel the race. However, Norma Colombo, a former attachment of Varzi's, whom he had married on breaking off with Ilse Pietsch, persuaded Satta that the team must race as a tribute to Varzi. The other drivers must have had some reservations about this, given the terrible conditions that persisted throughout the weekend.

The race had Wimille, Farina in his own Maserati 4CLT, Villoresi, Trossi, Ascari and Sanesi in the leading grid positions. Disaster was not far away and struck on the third lap, as de Graffenried, Fagioli and Christian Kautz, in an Enrico Plate-entered Maserati 4CL, tangled and Kautz was killed. While he did not enjoy the fame and stature of Varzi, Kautz was one of the few to have raced the Mercedes and Auto Union pre-war; the race was now totally overshadowed by these accidents. Wimille was



Trossi leads Wimille in Switzerland in 1948; Trossi had another good win and Wimille was second. (Alfa Romeo Storico)

leading and it took Trossi twelve laps to pass Farina so that Alfas were 1-2. Then Wimille made a stop to add water and Trossi was in front, and Wimille spent the rest of the race trying to catch him. When Farina had his engine go, Villorosi inherited third and Sanesi fourth ahead of Ascari and Chiron's quick Talbot.

Trossi enjoyed his win in this dismal race, but it would prove to be his last victory as he was already ill with what would turn out to be lung cancer. Four drivers had now died in the 158: Emilio Villorosi, Giordano Aldrighetti, Attilio Marinoni and the great Achille Varzi.

French Win for Wimille

Although the Grand Prix de L'A.C.F. took place only two weeks after the Swiss race, on 18 July, Trossi was stood down by Alfa Corse,

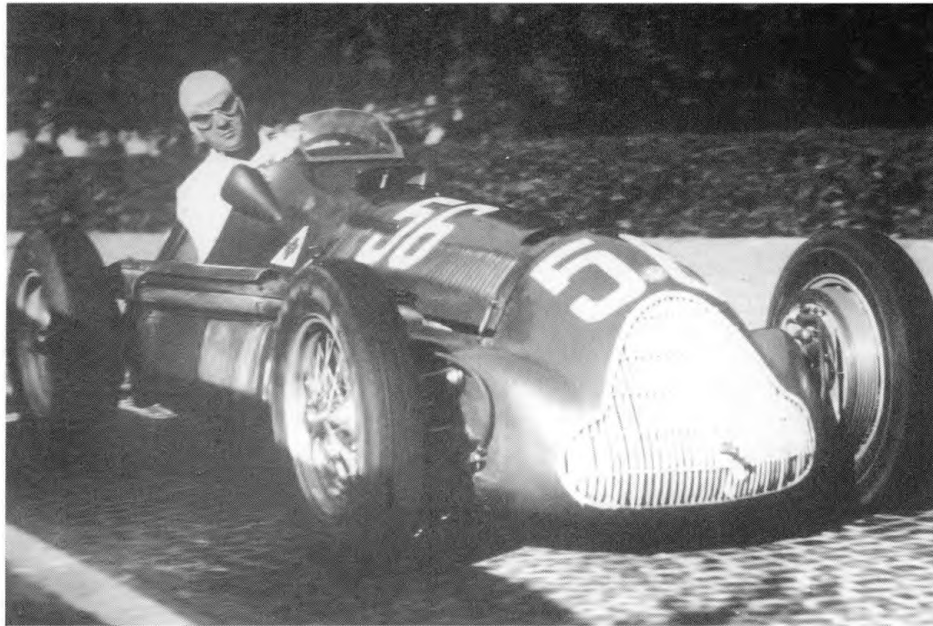
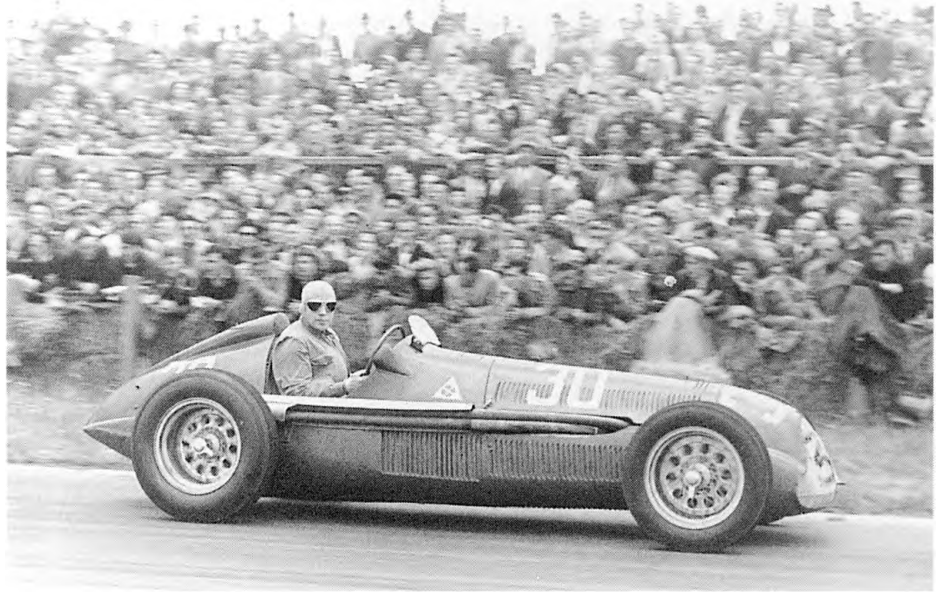


Trossi concentrates on the road during the Grand Prix of Europe, 1948. (Ferret Photographics)

Sanesi's Role

Some years after the Bremgarten race, Sanesi confided that he rarely looked for or received help from any of the team's drivers, and if any had been offered it would have been vague and not likely to help anyway. The exception was at the Swiss race, when he had said to the management that he was too slow and wished to stand down. However, he spoke with Wimille whom he saw in a very positive light (unlike some of the other drivers), and Wimille advised him that he should be taking a particular corner in fourth rather than second gear and using the throttle to balance the car to get it to come out of the corner more quickly. This confirms Wimille's ability to use higher gears on specific corners than some of the other drivers did, accounting for his rare damage to gearboxes and engines, and it possibly demonstrates his better feel for using the torque inherent in the 158 engine. Sanesi also remembered his time as being two or three seconds off the pace when in fact he was twelve seconds slower than Wimille, and this must cast a degree of doubt on his memory. Sanesi also expressed unhappiness at the pay he was getting as a regular employee whose job included driving, as opposed to the fee the contracted drivers received, perhaps indicating he was more of an aggrieved worker than some of his earlier statements indicate. (Nye, 1986)

Wimille takes time to look at the photographer. (Ferret Photographics)



Sanesi tries as hard as ever, finishing fourth in the Swiss Grand Prix. (GPP)

The post-race celebrations at Bremgarten in 1948 were muted after Varzi's death. Guidotti is at the centre rear. (Alfa Romeo Storico)



or more likely by himself, on the grounds of poor health. He was very keen to make sure he could do the Italian races later in the season so agreed to be 'rested'. His place was taken by Alberto Ascari, who had been virtually a works Maserati driver in the Scuderia Ambrosiana 4CLT/48 only one race before, and had been given permission to take up the offer of a one-off drive from Alfa Corse. This was at a time when Ascari's skill was clearly emerging, so it is surprising that any team would allow a driver of his talent to drive for the opposition.



The Grand Prix De L'A.C.F at Reims on 18 July 1948 saw another Wimille win and Alberto Ascari's only appearance in an Alfa Romeo Grand Prix car; Ascari ended third behind Sanesi.

Four cars, according to the most reliable sources, were brought to Reims by Alfa Corse, one of these being the repaired 158/47 with which Wimille attempted to break the 1939 circuit record of Hermann Lang in the 3-litre Mercedes. He did not manage to achieve this, although he improved his own circuit best by several seconds, making it clear that the Alfettas were very much at home on this very quick

Alberto Ascari

Alberto Ascari was born in 1918, the son of driver Antonio, who was killed just before Alberto's seventh birthday, while leading the French Grand Prix at Montlhéry. Alberto was determined to get into motor racing from an early age, perhaps to emulate his father, and he was active on motorcycles as soon as he could buy one. His first race was in the 1940 Mille Miglia, where he drove the Auto Avio Costruzioni 815. This was Enzo Ferrari's first car, but it was run under a different name so that Ferrari would not be caught violating his contract with Alfa Romeo. That was not very successful, but after the war, Ascari teamed up with Luigi Villorosi and was able to buy a Maserati 4CLT. While he did not achieve many wins at the start of his career, Ascari's skill was evident and it was only a matter of time before he became a force to be reckoned with.

track. Even in the 'regular' 158, Wimille was miles faster than everyone else, although it is not clear whether his grid time was set in the 158/47 or in the car he raced. He was more than eight seconds quicker over the 4.8-mile (7.75km) road circuit than Ascari, who had adapted quite well to the new car and the high speeds of Reims. Sanesi was another six seconds further back, with Etancelin's Talbot-Lago going well, as did Chiron's Talbot 26SS. Villorosi had set what appeared to be second-quickest time but was starting from the back, while Sommer and de Graffenried were slow. In the middle of the grid was one Juan Manuel Fangio, making his debut in the smaller class that was supporting the Grand Prix, and also running the same Simca-Gordini-11 in the main race.

As expected, the three Alfettas more or less disappeared at the start, although Villorosi charged through the field. His passionate contempt for the Alfettas was apparent as he passed Sanesi, but he soon paid the price for over-working the engine. He handed over to the ailing Nuvolari, who really should not have been racing at all. Wimille made an unscheduled stop to change a tyre, which

gave the lead to Ascari, then he and Ascari made their regular stops, and Wimille was forced in a third time as water was leaking from a hole in the radiator from a stone and he was beginning to overheat. On the fortieth lap, Ascari was ordered to slow to allow Wimille to catch up, which he did, along with Sanesi, and they finished in that order. Ascari could and should have won – perhaps his career direction might have been different had Alfa Corse allowed him to take the victory that he had earned.

Although Raymond Sommer had done only two laps before his Maserati engine broke, it was a completely different story in the supporting event. While Formula B had followed Formula A into the rulebooks in 1947, it was being referred to as Formula 2, as Formula A was seen as Formula 1. However, some organizers still preferred to invite cars for an 1100–2000cc class race, the old voiturette formula, and it was here that Enzo Ferrari was finally appearing as a constructor. In the Reims support race Sommer, in a Scuderia Ferrari 166GP, was seven seconds quicker than Fangio's Gordini in practice and he and Righetti's Ferrari 166SC finished three minutes ahead of the competition.

Ferrari was starting to come to the fore at this time. Giacchino Colombo had left Alfa Romeo in 1947, after being away from mainstream competition, and he was happy to take up an offer to join Ferrari. He had been involved in a number of projects, and had Alfa Romeo had the sense to use him where he was most capable, history might have been quite different. As Enzo Ferrari himself would not have come up with the V-12 design, the Scuderia would have remained well behind Alfa Romeo.

Back to Turin

When the entries were announced for the Italian Grand Prix, to be held again in Valentino Park in Turin, on 5 September, there

were three Ferraris on the list, for Sommer, Bira and 'Nino' Farina. They were all the new 1.5-litre supercharged 125 model, which had been seen testing in the park a few weeks earlier.

Alfa Corse brought four cars again, including the 158/47, which some writers have reported as making its debut here, although this seems inaccurate according to Wimille's own words. Apparently, the damage to the Varzi 158/47 was light because it rolled on a grass bank and the injury to Varzi was inflicted by the windscreen on to his head. According to Hull and Slater (1982), the threat of the Ferraris at Turin encouraged Alfa Corse to let Wimille run the '158A' (as they referred to the 158/47) in the race, with Trossi returning to the wheel alongside Sanesi. Two Alfas were quickest in practice, although Wimille was 'only' 1.8 seconds ahead of Trossi who was the same gap ahead of Villoresi's Maserati; Raymond Sommer in the new Ferrari was also on the front row, less than a half second slower. Sanesi was quicker than Farina, and Bira was down on the fourth row, not quite getting the hang of the new car.

Rain poured down on Turin on race day and the crowd was small for Ferrari's big debut. The Ferrari of Sommer led off the line, but before long Wimille was in his stride, with Sommer, Sanesi, Ascari, Farina and Trossi following. The best duel, between Sommer and Villoresi, carried on for many laps. After forty of the seventy-five laps, Sanesi slid into the hay bales, bending the front axle and suspension, and had to return to the pits. Trossi came in feeling unwell, to be relieved by Sanesi, but the car's supercharger broke, a rare occurrence for the team. Wimille drove a superb, controlled race in appalling conditions, taking fastest lap, six seconds slower than his qualifying time. Villoresi had done well to keep second, and a Ferrari with Sommer driving took third. Alberto Ascari was fourth in the Maserati.

The Post-War Revival

The start of the 1948 Gran Premio D'Italia, held at Turin on 5 September 1948, with Wimille on the left next to Trossi. The race took place in wet conditions, and Wimille continued Alfa Romeo's winning streak. (Alfa Romeo Storico)



Wimille laps de Graffenried's Maserati during the Gran Premio D'Italia of 1948, notable for the terrible conditions and the debut of three of Ferrari's new Tipo 125. (Alfa Romeo Storico)

Wimille was complete master of the wet conditions at Turin in 1948. (Alfa Romeo Storico)



Jean-Pierre Wimille after his Turin victory. (Alfa Romeo Storico)



The Season Finale and a Year Off

Jean-Pierre Wimille had again tried to borrow a 158 for a French race, this time the Grand Prix du Salon at Montlhéry on 10 October; it had been entered by Alfa Corse, but it was withdrawn before the race. As the Gran Premio dell'Autodromo at Monza was due to take place on 17 October, this would have been a good enough reason not to go to Montlhéry. Sanesi was testing at Monza in the week before the race on the track, which was being used for the first time since before the war, and presumably was in one of the three 158/47s that had been built. Conversion seems to have taken place in the six weeks since the previous race at Turin and Sanesi was testing their race-worthiness. In the process, he became the first person to drive on the reopened circuit.

The three 158/47s were entered for Wimille, Trossi and Sanesi, with a 'regular' 158 for Piero Taruffi. The race would be run over eighty laps of the 3.9-mile (6.25km) road circuit, as repairs were still needed to the banking.

Taruffi fulfilled his potential as far as Alfa Corse were concerned by putting his less-

Piero Taruffi

Taruffi had started as a motorcycle racer and had been very successful, winning a number of championships, before turning to cars, and particularly sports cars. He finished fifth overall and won the voiturette class at the Tripoli Grand Prix in 1938 in a Maserati 6CM, and then drove a Scuderia Torino Alfa 308 at the German Grand Prix in the same year, but had to retire. He drove the same car at that year's Swiss Grand Prix to sixth place, and this led to a works drive in the Alfa Romeo 312 at Monza, where he was forced to retire once again. Taruffi was fourth in the voiturette race, the Coppa Edda Ciano, in his 6CM, and had several good results in voiturette races in 1939. He drove a Cisitalia in 1946, 1947 and 1948, before returning to his Maserati. He ended up having a long career, with most success in sports-car races.

modified 158 second on the grid behind Wimille, by a margin of some four seconds. Trossi matched Taruffi's time, as did Sanesi, so the front row was all Alfa Romeo and closer than usual. Taruffi had spoken of being invited to drive the 158, which was the most powerful car he had driven up until that time, although he mistakenly attributed 400bhp to



Piero Taruffi, more usually seen in a Maserati or Ferrari, came into the Alfa team for the first of three races at the Gran Premio Dell'Autodromo di Monza, on 17 October 1948.

it (Taruffi, 1964, p.78). His saloon and sports-car drives earned him support at Alfa Corse. Trossi was as smooth and quick as ever in spite of his worsening health. The two Ferraris of Sommer and Farina and the two Maseratis of Villoresi and Ascari were next and after that, again, no one else was in the hunt.

It was a strange race, again dominated by team orders. The Alfas led away, with Sommer's Ferrari among them, but Trossi got past Sommer when it seemed that the Ferrari was in trouble. Sommer was in fact having an asthma attack, which forced his retirement, and from then on the Alfas had it more or less their own way, especially after Farina and Villoresi both dropped out. Most accounts have a straightforward report that the 158s finished 1-2-3-4, which they did, but it was more dramatic than that. Paris and Mearns describe the race as follows:

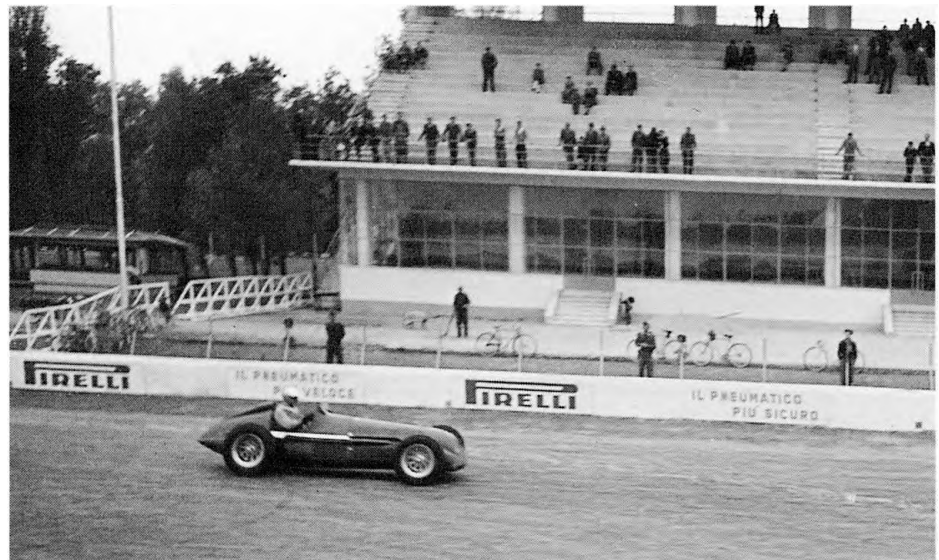
The Alfa Romeo management had pre-selected him [Sanesi] to be their winner of the Gran Premio dell'Autodromo. . . . The Frenchman [Wimille] was content to hold station behind Sanesi, who had loyally served his team and deserved the reward of a win. Trossi, however (might he have realized this

could be his final race?), shot past the pair of them. Seeing the team orders being torn up, Wimille pulled out from behind Sanesi, gave a cheery wave, and set off in pursuit of Trossi. He caught and passed him, and never looked back. Some slight consolation for Sanesi was that he had set fastest lap, but the man of the day was again, undoubtedly, Jean-Pierre Wimille. (Paris and Mearns, 2002, p.257)

Sanesi had indicated that it was Wimille who had suggested that the race should go to Sanesi, and although Sanesi had little affection for Trossi, he apparently kept his views to himself. Sanesi had also switched to the spare car as he was having a problem with the supercharger of his regular car. He had found that it was slower and he had been struggling to keep ahead, a factor that could well have had a bearing on Trossi's decision to pass his teammate.

Alfa Corse took no part in the last two races of the 1948 season. A week after Monza, the Circuito del Garda race saw a win by Farina in a Formula 1 Ferrari. This was officially a Formula Libre race but all the cars met the Formula 1 regulations, although there was nothing in the competition to match the

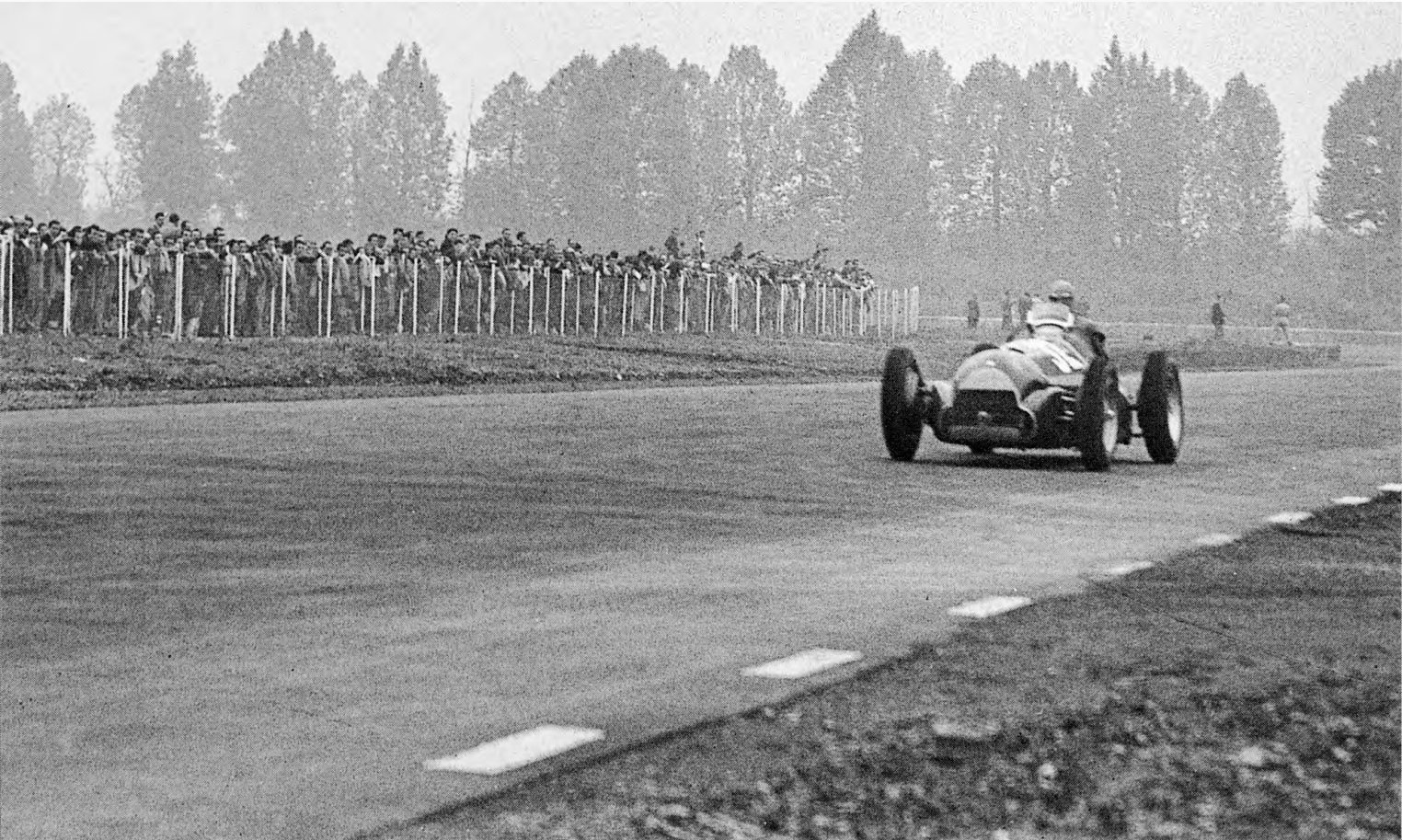
Rare photo of Taruffi testing before the Monza race, October 1948. (Farabola)



Guidotti also tested before the Monza race, as was his habit; many of the circuit workmen took time to watch. (Alfa Romeo Storico)

The field lines up on the pit straight before the start of the Monza race, with the Alfas to the right: Wimille (32), Sanesi (36) and Trossi (18); Taruffi (6) is obscured. (Alfa Romeo Storico)





Wimille led an Alfa 1-2-3-4 at Monza, the first time the classic road circuit was used. This was the last race for the team until 1950, and it was also the last race for Trossi and the final Formula 1 race for Wimille. (Alfa Romeo)



Trossi, suffering from cancer, was brought in to Monza by Guidotti (in beret), to see if he was well enough to continue. He finished second, but it was to be his final race. (Alfa Romeo)



Taruffi in for his fuel stop in the Monza race, with Guidotti, in his familiar beret, in the background. (Alfa Romeo Storico)



Wimille has a drink at Monza during his stop, while Guidotti advises and Wimille's wife 'Cric' takes notes. (Alfa Romeo)



Wimille smokes as 'Cric' congratulates him after his Monza win – his last for Alfa Romeo. (Alfa Romeo Storico)

Ferrari. Villoresi won the final event, the Gran Premio de Penya Rhin at Barcelona in Spain.

Retrospective reports of Alfa Romeo's decision to withdraw from Grand Prix racing in 1949 have often stated the reasons for this decision to be the death of the team's drivers, and 'financial problems'. The timing of this decision is also somewhat mysterious, Sheldon and Rabagliati (1993) implying that it was made at the end of the 1948 racing season and Paris and Mearns (2002) saying it was taken in December 1948. However, only Varzi was dead by this time, and the diagnosis of Trossi's cancer had only just been made, and he was still very much alive. Hodges (1966) argues that the company was preoccupied with the new production 1900, and much of the company funding was going into this project. He also gives the death of the drivers as a

reason but does not offer a date. Hull and Slater (1982) simply say that the withdrawal was for financial reasons. Even Borgeson (1965, p.54) gets confused on this issue, saying that Alfa Romeo lost three drivers in the 1948 season: Varzi, Trossi (who did not die until May 1949) and Wimille, and then contradicts himself by saying Wimille was killed in early 1949. It is interesting that Borgeson does not discuss this in his later fine analysis of Alfa Romeo people and policy. Pritchard (1965) offers the view that Alfa Romeo management had seen the 158s as eleven-year-old cars, and thus a new model was required, for which there was not sufficient finance. Pritchard also says that the 159 was built in 1949 for 1950 and that the car campaigned at first in 1950 was the 159. However, Venables (2000) would appear to have the most comprehensive view

Farina in the 1950 Italian Grand Prix. (Biscaretti Museum)

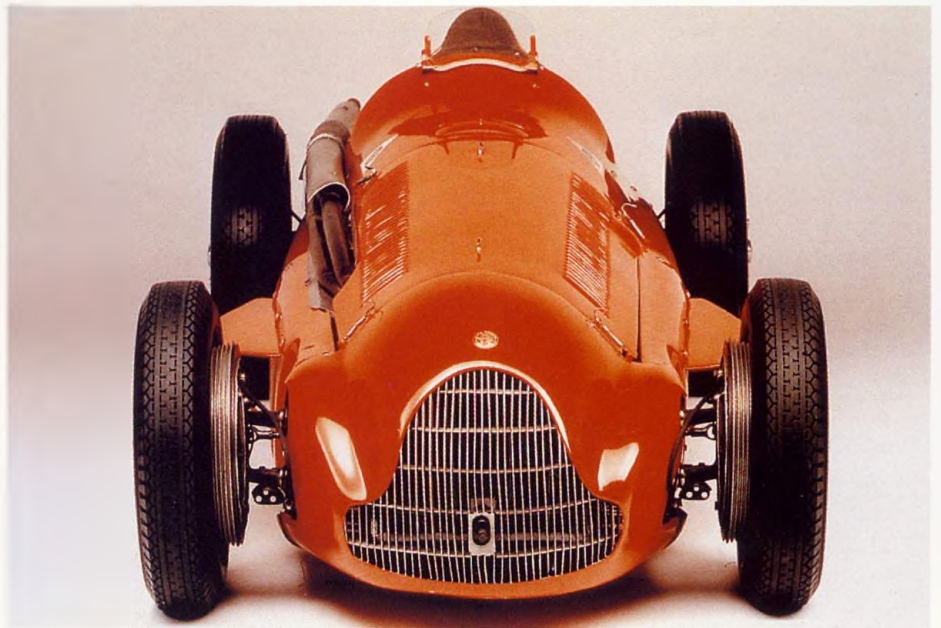


Paul Pietsch makes a pit stop during practice for the 1951 German Grand Prix. Satta is standing on the wall under #9. (Paul Pietsch Collection)

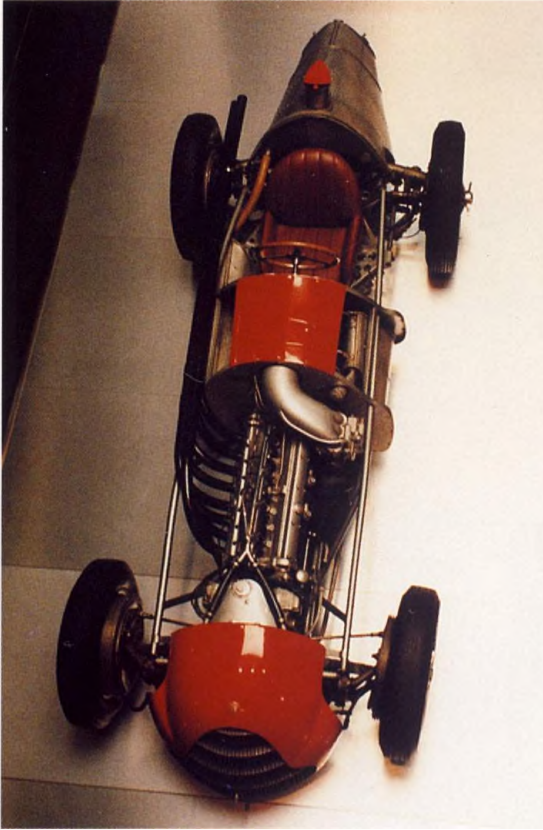


Fangio behind the wheel, at Laguna Seca in the early 1990s. (Bob Dunsmore)

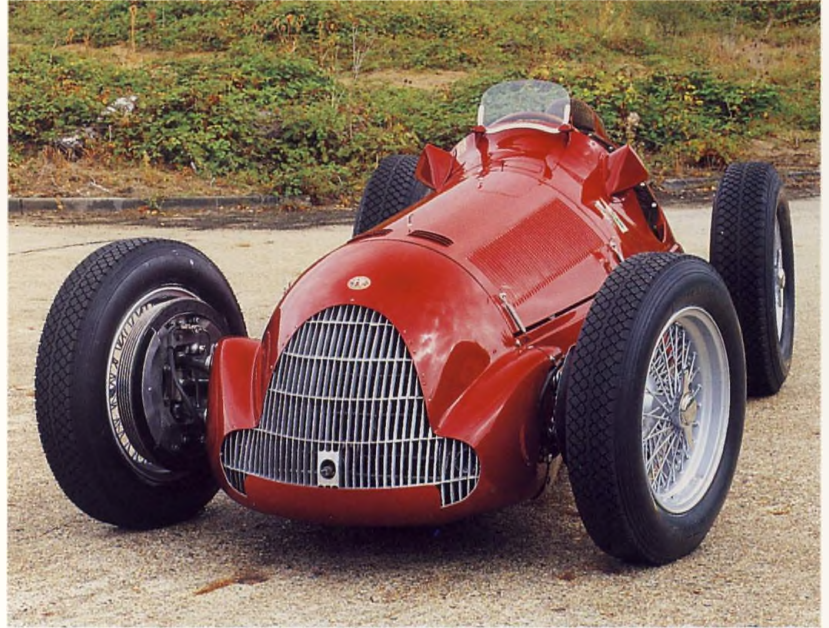
The Alfa Romeo 159 in the Alfa Romeo Museum. (Alfa Romeo Storico)



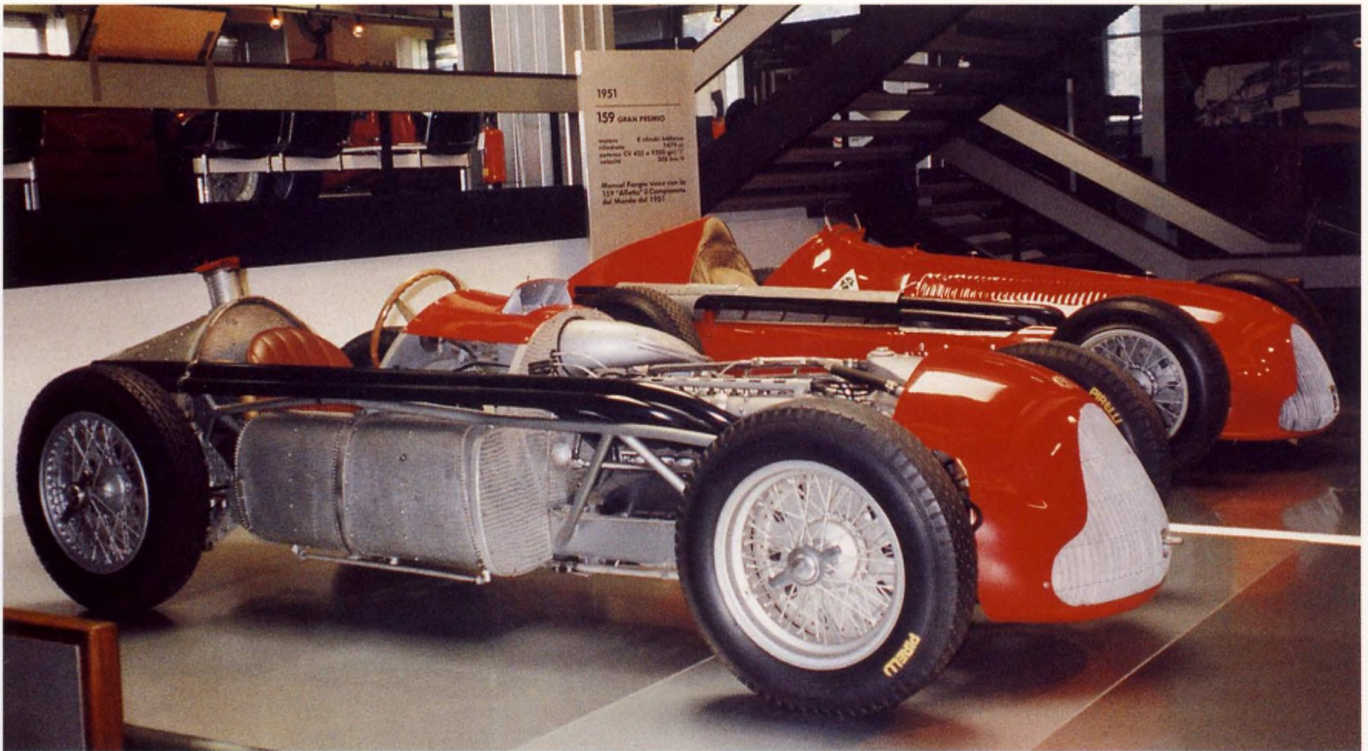
The 158 in the Biscaretti Museum in Turin. (Peter Collins)



One of the 159s in the Alfa Romeo Museum.
(Keith Booker)



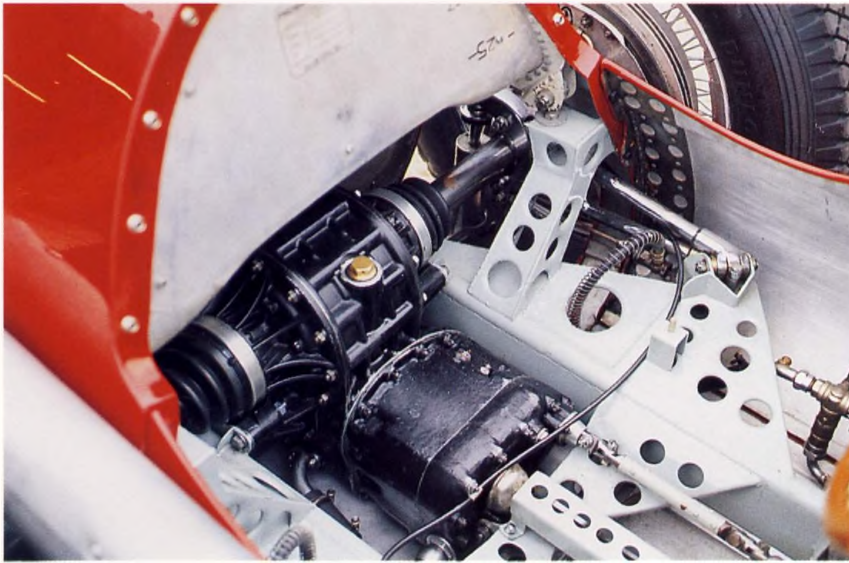
This is the 158/159 that Mike Sparken 'liberated' from Alfa Romeo,
which the author tested. (Peter Collins)



Two 159s at the Alfa Romeo Museum. (Keith Booker)



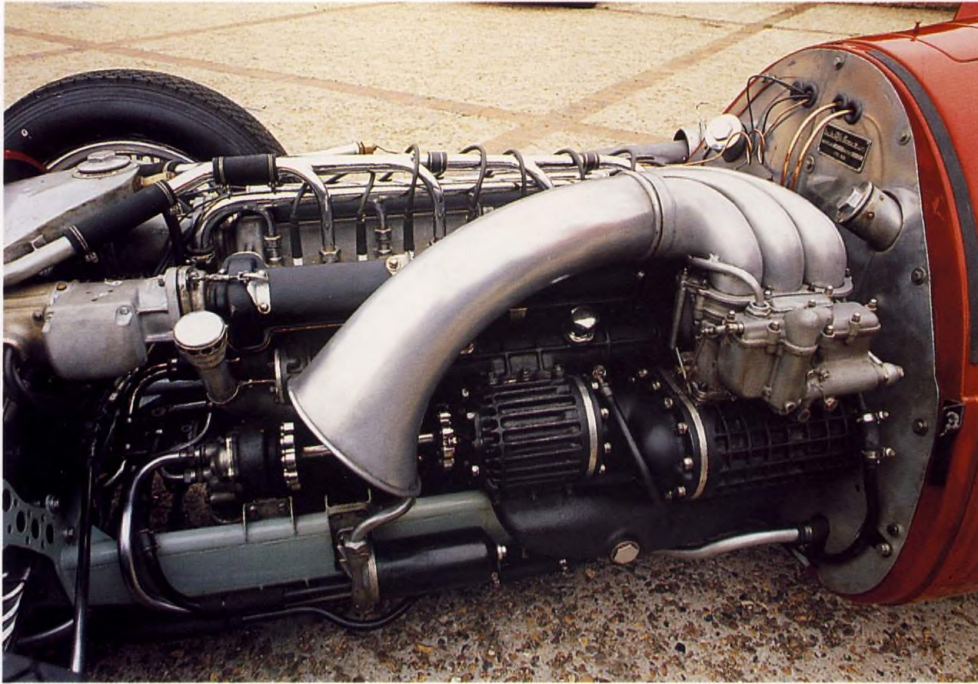
A rear view of the 'Mike Sparken' car now owned by Carlo Voegele. (Peter Collins)



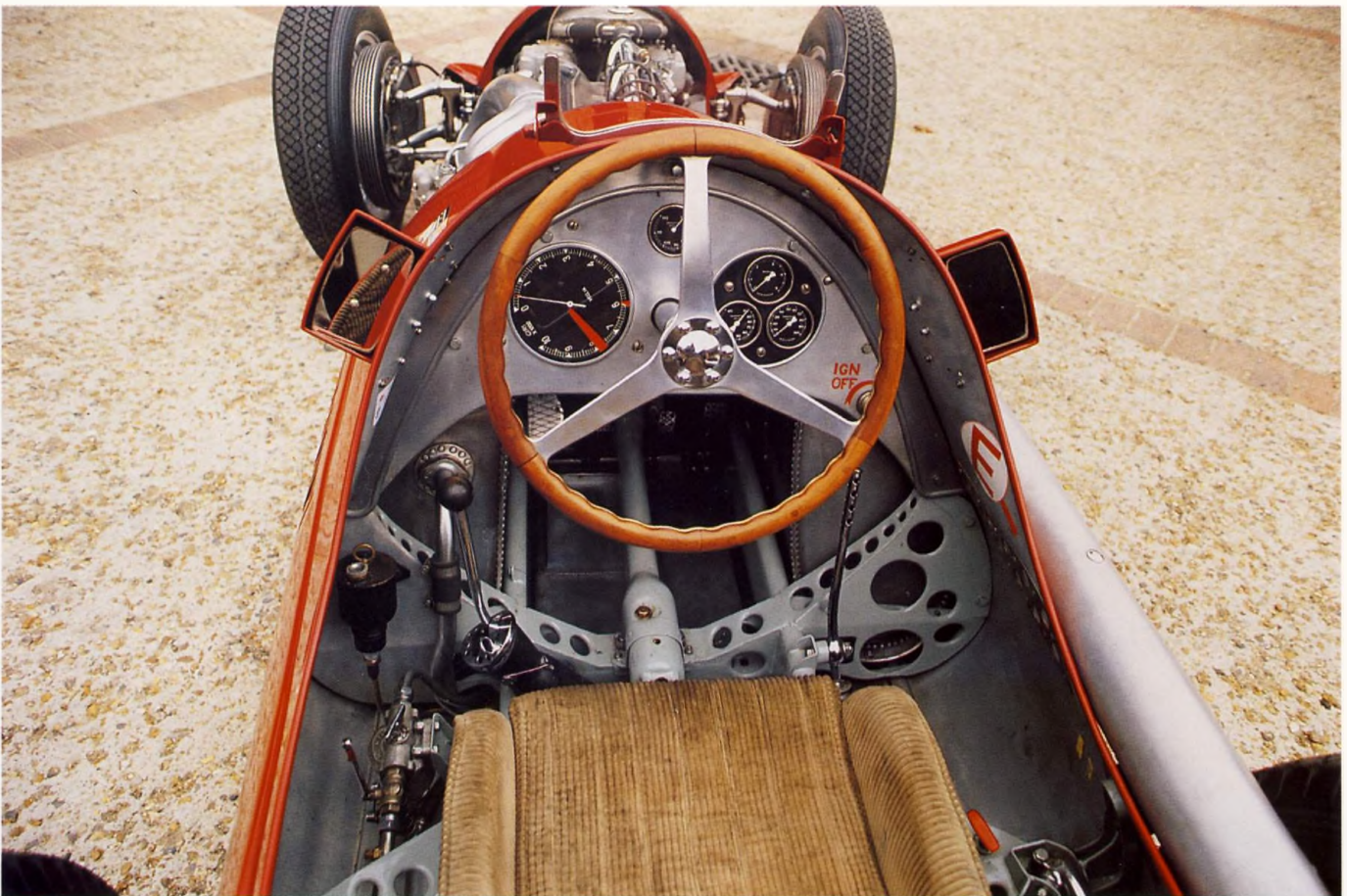
The very small 158/159 gearbox, located under the driving seat. (Peter Collins)

The front suspension and large drum brakes. (Peter Collins)

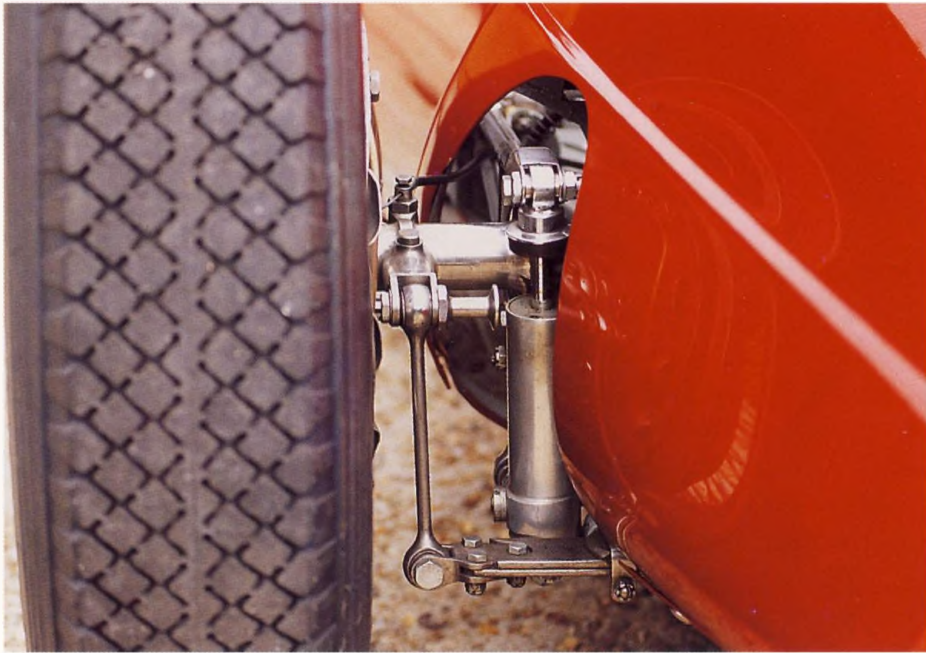




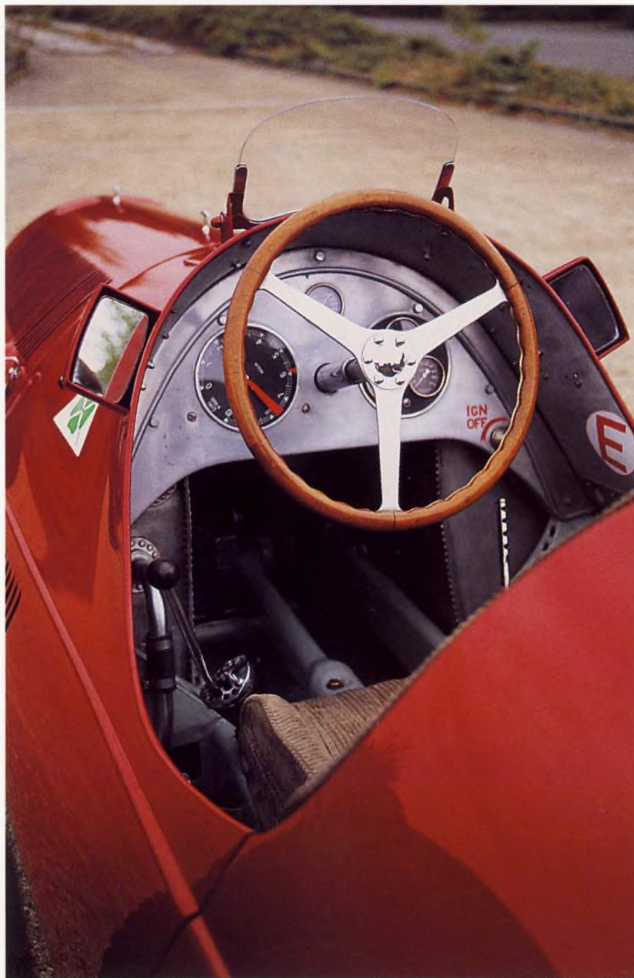
The 'elephant trunk' air-intake fabricated by Jim Stokes from an original wooden model. (Peter Collins)



The cockpit, with drive from the engine passing under the driver to the gearbox. There is a central throttle pedal. (Peter Collins)



Detail of the finely engineered rear suspension. (Peter Collins)

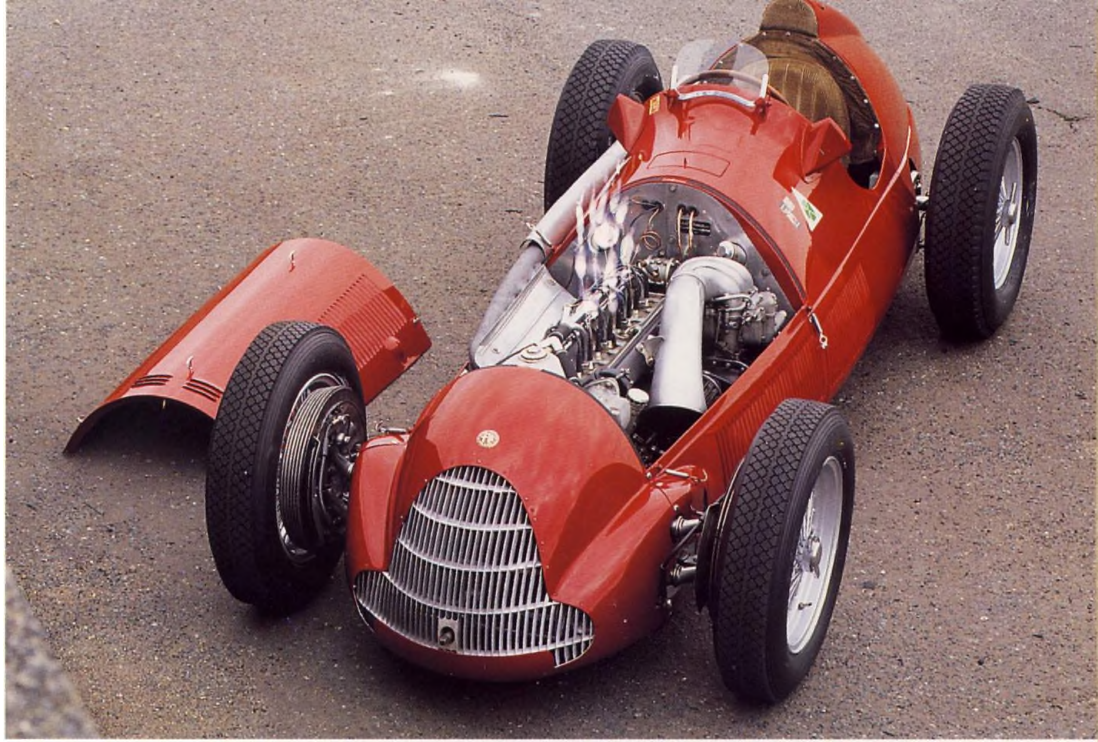


The mirrors are now located outside the cockpit on this car, though they often appeared inside. The gear-shift lever is on the left. (Peter Collins)



A close-up view of the gear lever, a straight-forward 4-speed mechanism, with a fuel tap down to the left. (Peter Collins)

This overhead view shows the clean lines of the body, even with the engine cover removed. (Peter Collins)



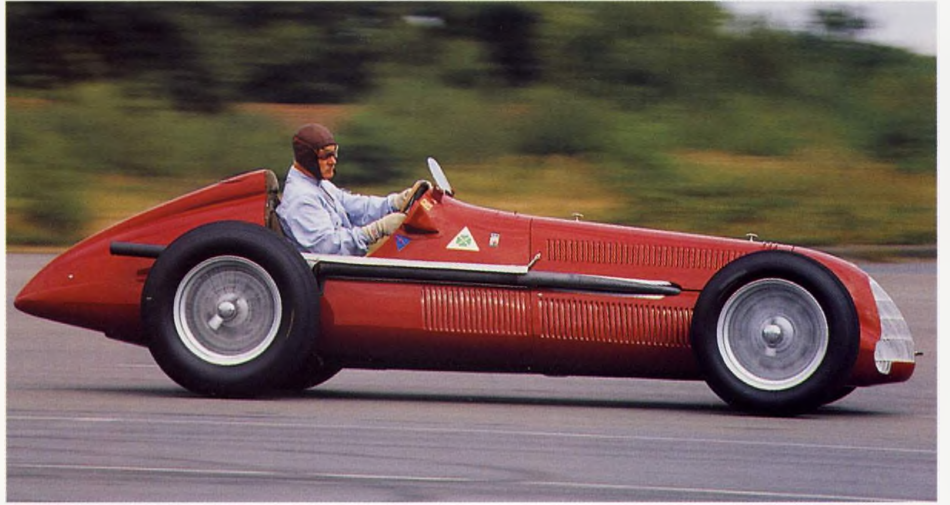
The author experiences the power of the 56-year-old-plus Alfetta. (Peter Collins)



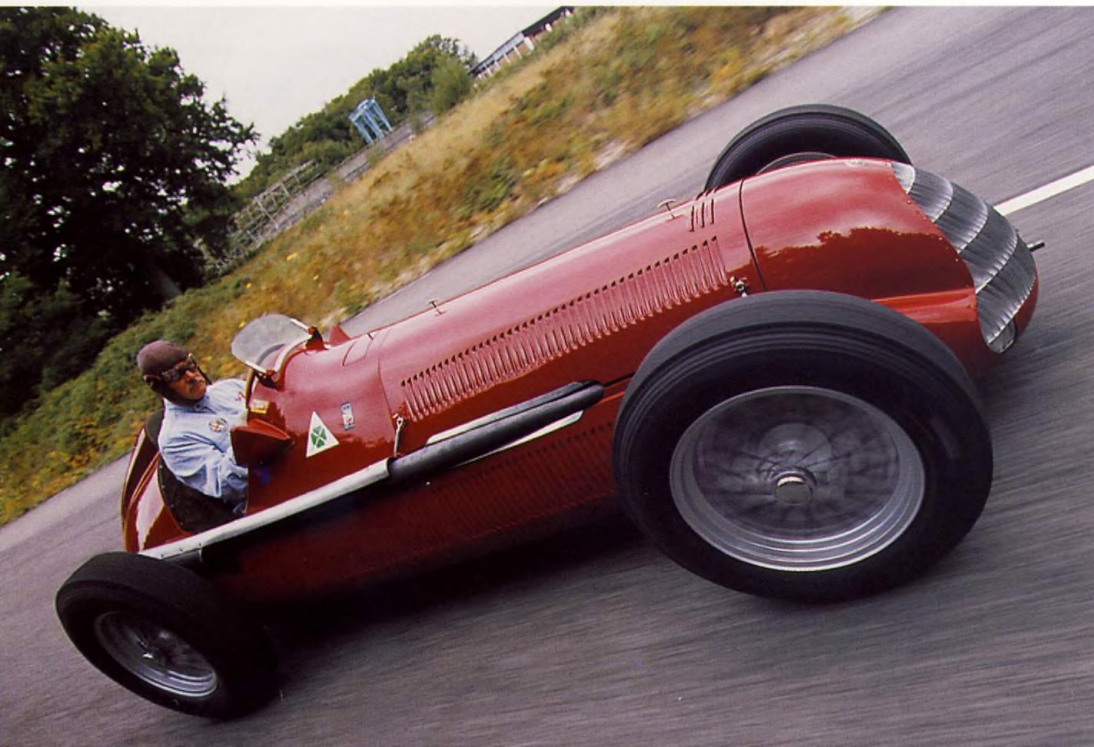
The author accelerates in the Alfetta, which could easily spin the wheels in any gear with little effort. (Peter Collins)



A study of the smooth and aerodynamic lines of the Alfetta at full speed with the author behind the wheel. (Peter Collins)



The Alfetta was equally impressive under braking, especially on the entry to fast corners. (Peter Collins)



The author found the Alfetta an incredibly easy car to learn to drive, though the thought of using full revs remained daunting. (Peter Collins)

of what happened, although not necessarily when, although he implies it was after the death of Wimille and when it was known Trossi was dying, so this would have been February 1949 at the earliest.

Venables agrees that the key was the 1900, Alfa Romeo's first mass-produced automobile. However, he adds that it was the injection of finance under the Marshall Plan to re-establish European industry that made racing in some way inappropriate when all eyes were on a production vehicle. There were elements within Alfa Romeo – and elsewhere – who were quite content to rest on the laurels of the

last three years, as well as those who had less use for racing. Venables argues that the combination of the focus on the 1900 and the lack of drivers brought about the decision. However, he adds that Pasquale Gallo and Orazio Satta both wanted a one-car effort with the 158/47 in 1949; team manager Gianbatista Guidotti was up in arms about this, absolutely refusing to agree. His long-standing argument had been that Alfa Corse should never again go to a major race without sufficient force to win, and to him that meant a team of at least three cars as well as excellent preparation. The management bowed to that

Chassis and Chassis Numbers

It is and always has been difficult if not impossible to attribute particular chassis and particular chassis numbers to a given event, year or driver. Yet, this aspect of racing-car history is an obsession with many fans, historians and collectors (either of cars or of such information). For a table of chassis types, *see* page 183, but how many chassis were built and how many survived in the pre-war, post-war and 1950–51 period, and beyond?

Venables (2000) quotes Gianbatista Guidotti as saying that the first batch of six cars completed in 1938 were given factory chassis numbers, but were stripped after every race and the components were transferred to other chassis, so that individual identity was lost. He apparently did not say at that time what identification may or may not have been put or stamped on to chassis or components, although at least some 159s had numbers linking parts to an engine number. Guidotti added that a second batch of cars (six) was built in the winter of 1939–40, and that these were not allocated chassis numbers but that at that point components were numbered. The practice from this time was to attach a plate to the bulk-head with Tipo 158/ plus the race number of car in the event to which it was going, this being solely to satisfy customs officers. As these were the cars that raced post-war, Guidotti was of the view that a similar practice had occurred before the war, although it is also known that there were chassis numbers stamped on chassis cross-members.

According to Venables, when cars were sold to private owners, they would have had a chassis number, but while the cars were in the hands of Scuderia

Ferrari and Alfa Corse, the 'identities were speculative'. This may have been true of some cars sold to private owners, but no 158 or 159 was sold to a private owner until the 1970s (*see* page 169 for more on this one car).

There may have been early chassis built that were found wanting and discarded (indeed, this is Mike Sparken's view), but apart from these it seems that six chassis were built in time for the Coppa Ciano, on 6 August 1938, and these six chassis were complete at the end of that year. Best indications are that the Emilio Villoresi and Giordano Aldrighetti cars were destroyed, leaving four cars at the end of 1939. It would appear that the four chassis were used in the building of six 'new' cars in the winter of 1939–40. Marinoni's car was destroyed in 1940, leaving five cars, but reports say that six cars were in the Monza garages in October 1942, possibly meaning a new car had been built, or that at least one of the above had not been destroyed. In August 1943 six 158s were moved north of Milan, to Melzo and other locations.

Six cars comprised the team at the beginning of 1946 and were in existence at the end of that year. The same number applies to 1947 and 1948, it being reasonably certain that the 158/47 had not been destroyed, although there is evidence that this was not the car crashed by Varzi. The 1948 cars then survived essentially unused through 1949 and it is likely that they were the cars that eventually appeared for 1950.

It seems safe to say that, as there were no records kept of chassis numbers, very few absolute conclusions can be drawn about total numbers or individual chassis.

wish, so 1949 was to be used as a rest year, during which the 158/47 could be improved.

While these developments were going on, the South American season was beginning in Argentina, with the first race, the Grand Prix Juan Domingo Peron, at the Palermo circuit outside Buenos Aires. Wimille was to race the works Simca-Gordini, and went out for very early practice on the morning of 28 January 1949. After a handful of laps he went off the road, struck a hay bale, lifted into the air, and came down, striking a small tree. He suffered head injuries and crushing chest injuries and died very soon afterwards. There were numerous accounts and rumours of the details of the incident, but they matter little – the best driver of the time was dead, and Alfa Romeo had lost another star, although not this time in one of its own cars.

The improvements to the 158/47s went ahead and consisted primarily of work on the superchargers and the manifolding, and the six cars that were the team complement by the end of the year were all to 158/47 specifications. Work on the induction system was now producing 350bhp at 8,500rpm according to Ludvigsen (2000) and Pritchard

(1965), although Hodges (1966) says it was 350bhp at 8,600rpm. Nye (1985) also uses the 350bhp at 8,600rpm for the engine during 1949, specifying this was while it was on the test bench. Ludvigsen also states that the improvements to the braking and a stronger gearbox warranted the new designation of 159 and that these cars were phased in during 1950, implying also they had been built in 1949. However, Ludvigsen again has a different view in his later work (2001), in which he says that the 310bhp achieved for the 158/47 with occasional production of 335bhp in 1948, reappeared in 1950 in the 310bhp guise, and only as the Ferraris got more threatening in 1950 was the boost put up to 20psi, which gave 350bhp at 8,500rpm. In this later work, Ludvigsen does not mention the designation of the 159 before 1951. Pomeroy (1965), however, says the cars were lying idle in 1949 and that the detail changes were not made until 1950, bringing the power up to 350bhp at 8,500rpm. Hull and Slater (1982) slip in the added note that, despite the 350bhp available, the agreement was to run the cars at an 8,000rpm limit at which the power was 335bhp.

6 1950: 'The 3 Fs' and a World Championship

A Return to Grand Prix Racing

The details of the return of Alfa Romeo to Grand Prix racing are about as clear as the details relating to their withdrawal for 1949. The key factor seems to have been the loosening of the strings attached to the Marshall Plan funds and the West's concern that Italy would fall to Communist dominance if it was alienated by the West, and especially by the USA. The 1900 was now ready and those same parties who said it did not need racing to promote it now said the opposite, so it seemed in early 1950 that a return would be welcomed in many sectors. This was all helped by the success of Ferrari in 1949 when Alfa Corse had been away, and a fear that Enzo Ferrari would scoop the recently announced Formula 1 World Championship for Drivers. After all the effort made by Portello, and bearing in mind Alfa Romeo's awareness of just what Enzo Ferrari intended, it did not take long for the team to resume its role as a serious contender for the new title.

While rumours of this return circulated as early as January, the announcement was not made by Alfa Romeo until May, and that meant the start of the season was not far off. Funding, however, was still inadequate and sources outside of Alfa Romeo itself needed to be found. These came mainly in the form of Italian dealers and distributors, some of whom were probably 'coerced' into providing funds, although there were others for whom pride made them support the effort. According to Sanesi, one key source of funds was the



Juan Manuel Fangio joined the team for 1950. (Alfa Romeo Storico)

managing director of the Como dealership, a Signor Pivarelli, who was a great racing enthusiast (Nye, 1986).

There had been twenty-two Formula 1 races in 1949, and there was a strong Ferrari presence at only seven or eight of these (depending on how you view the privateer cars

of Tony Vandervell and Peter Whitehead). Giuseppe 'Nino' Farina had gone back to driving his own Maserati 4CLT/48 and managed a few wins and placings; Juan Fangio had victories in his Squadra Argentina 4CLT/48; and Villoresi and Ascari had wins for Scuderia Ferrari. It was perhaps surprising to see Villoresi in a Scuderia car after his vehement oath that he would never drive for them again.

The process of driver selection for 1950, given that it was already fairly 'late' when the decision to return to racing was made, remains, like many other issues, obscure, although it appears that feelers were already out to drivers at the end of 1949. Satta and Gallo at Alfa Romeo had had some discussions about this, and as the season came closer, they realized it would be necessary to have a strong driving team if Ferrari particularly showed improvements. The Ferrari twin-supercharger had not proved to be that dominant in 1949, but the beginning of a proper championship would be an incentive to all the teams. Thus, when it was seen that Farina had remained independent for 1949, he was a logical choice for 1950, and his lack of team spirit and temperament were overlooked in favour of his seventeen years of experience and knowledge of the cars.

On the basis of their impressive record up to 1950, Alfa Corse were confident that a return would pay good dividends, although clearly

An Impressive Record

From the start of the 158's racing career to the beginning of the 1950 season, the Alfetta had appeared in twenty-eight races, which included those events with heats and a final. Ninety 158 entries had taken place in those races and sixty-eight finishes had been achieved, of which twenty-three were wins, twenty were second places and thirteen were third places. The cars had placed first and second twenty times and 1-2-3 on ten occasions, and they had not been beaten in their last seventeen races before their withdrawal for 1949.

Juan Manuel Fangio

Fangio was born in 1911 in Balcarce, about 220 miles (350km) from Buenos Aires, in Argentina, and by his own account was a car fanatic as long as he could remember, starting work as a garage assistant and mechanic as a young boy. In his early twenties, he took part as the riding mechanic in the first of many long-distance road races in an old Chevrolet. He started driving in these events himself in 1938, and entered twelve of them until 1942, winning for the first time in 1940. He drove in fourteen more of these events in 1947 before getting a chance in a Maserati in early 1948, and then went to Europe to drive a Gordini at Reims in July 1948. The Automobile Club of Argentina backed his 1949 expedition to Europe with a Maserati 4CLT and he won at San Remo and again at Pau, Perpignan, Marseille (in a Gordini), Monza and Albi. In the early part of 1950, he was in a private Ferrari 166C, then won at Pau in the 4CLT on 10 April before starting as a member of Alfa Corse the following week.

they were not complacent as they had sometimes been in the past. They decided to hire the brightest 'new' driver on the European scene, the Argentinian Juan Manuel Fangio.

On returning to Argentina at the end of the 1949 season, Fangio had implied that Alfa Romeo were making him an offer to drive in the future. When he went back to Europe in March 1950 he was approached for a one-race deal with no contract, to which he agreed as he wanted some flexibility with his plans for the year (Fangio and Carozzo, 1992). However, this contradicts Fangio's explanation in his 1961 autobiography of how he came to drive for Alfa Romeo:

I opened a telegram from Alfa Romeo, inviting me to race for them. The news was even more exciting because the year before the Milan firm had given up racing. Soon after, I went to Portello to visit the factory. With me were Juan Carlos Guzzi, sent by the Argentine A.C., and Jose Froilan Gonzales. We were received by Alessio and Gallo, two directors of Alfa, who made it clear that their

firm would help the drivers who, in their eyes, had a chance of winning the world title.

I did not hesitate to accept the offer they made me to drive the 158 Alfa, spoken of by every European driver with extreme admiration. The Alfa team was also to include Nino Farina, and the stout-hearted dean of drivers, Luigi Fagioli. As reserves, Alfa were thinking about their chief test driver, Gonsalvo [sic] Sanesi and Felice Bonetto.

My Alfa Romeo contract retained me for all the races on the F.I.A. calendar for the World Championship. That meant the Grand Prix of Europe at Silverstone, the Grand Prix of Monaco, the Grand Prix of Switzerland, at Berne, the Grand Prix of France at Reims, the Grand Prix of Germany and, finally, the Grand Prix of Italy at Monza. A few minutes after the signing with Alfa, the heads of the firm took me to see a 158 model, covered with a tarpaulin. When I laid my eyes on her, I saw what a gem she was. Immediately I wanted to get behind the wheel, to take it in my hands. It was a new sensation; one that I felt again each time I made the acquaintance of a new model. (Fangio and Giambertone, 1961, p.87)

Luigi Fagioli

If Fangio was the 'youngster' in the 1950 team, at 38, and Farina was his senior at 44, then Fagioli at 52 was positively ancient, certainly in today's terms. He had a long and distinguished career behind him, having driven for Maserati, Mercedes, Auto Union and Lancia. He had first been part of the Alfa team as long ago as 1933, when he replaced Nuvolari upon his move to Maserati. In a P3 Fagioli had beaten Nuvolari at the 1933 Italian Grand Prix and that had helped to clinch the Italian National Championship for him that year. In 1934 he joined the German teams. In 1937 he had stellar performances in the Auto Union at Tripoli, Avus, the Coppa Acerbo and in the Swiss Grand Prix, although he did not manage a win. He was off the Grand Prix scene for a while before reappearing at San Remo and Bremgarten in 1948 with a Maserati, retiring both times. Aside from a few sports-car races, he appeared to have retired completely when he was called up by Alfa Romeo.

The choice of Fagioli as the third team member was astonishing, not so much because of his age, but because he was practically retired. Neither Fangio nor Farina seemed to have questioned it, however; indeed, Fangio seemed delighted that such a veteran would race alongside him at Alfa Corse.

The two major formulas were now officially known as Formula 1 and Formula 2. Farina managed to crash in the first Formula 2 race in March and broke his clavicle, putting him on the sidelines for the first Grand Prix, at San Remo. The first non-Championship race at Pau had already gone to Fangio in his Maserati, and Ferrari had sent two Formula 1 cars to get as much track time in as possible. Enzo Ferrari could not get the twin-stage superchargers to work for him with the power that Alfa Romeo had demonstrated and had already made the decision to build a 4.5-litre unsupercharged car for the Championship. This motivated Colombo eventually to leave Ferrari and return to Alfa Romeo, so Aurelio Lampredi was left with the responsibility of designing the 4.5-litre car.

San Remo, on 16 April, was also a non-Championship event, and Alfa Corse were regretting their decision to send a single car, for Fangio; Ferrari were going to try to overwhelm them with numbers, and Fangio was still the new boy who had not yet proven himself in the team. The original entry had been for Farina, and there were murmurings in the press that Fangio, a foreigner, should not be in the team. The engineers were in a flap, wanting to withdraw the car in order to avoid bad publicity. Ferrari looked bound to win, as they had sent no fewer than six works cars: Vallone and Bracco had the new F2 166s, but with Formula 1 engines, and there were Formula 1 cars for Sommer, Villoresi, Ascari and Serafini, as well as Whitehead's private 125.

Fangio, in his later autobiography (Fangio and Carozzo, 1992, p.133), described the situation as follows:

I had never driven an Alfetta. Then on Saturday, they let me try one out a bit.



Fangio made the mechanics very happy with his debut 158 victory at the Gran Premio di San Remo on 16 April 1950. He beat the six Ferraris sent to overhelm the single Alfa Romeo. (Biscaretti Museum)

Unfortunately, there was a terrible down-pour, but I drove a few laps. They [the engineers] retired to talk among themselves and reach a decision. It was then that I said this to them, to cheer them up and convince them, 'Look, you've got nothing to lose. I'm an unknown, and if I lose, Fangio loses. If I win, Alfa Romeo wins.' They agreed to let me race. Sanesi took the tyres to Genoa to have them treated for the rain, and brought them back on Sunday, not long before the race. I didn't even have time to test them. At the start I accelerated too much and skidded. A group of the leading cars got away from me. That was one of the worst starts I ever made in my life, as my future depended on that race.

This revelation is interesting from several perspectives. The decision to take only one car had reversed the long-standing policy that Alfa Corse would never go to a race with only one car/driver. It also slightly overlooks the fact that, in the practice session, Fangio put himself on the front row of the grid only a few tenths behind Ascari. Fangio goes on to recount how, after the race, the contract was brought out for him to sign for the rest of the season (although his 'other' autobiography clearly recalls that he had already signed for the season). It also ignores the fact that one account said Fangio signed for the World Championship races, and San Remo was not one of these.

In any case, Ascari did lead the race but a spin let Fangio into the lead, having passed

Sommer and Villoresi after his bad start. Some of the Ferraris were in trouble by lap 13, and Fangio stretched his advantage to twenty seconds. Ascari was trying hard and beginning to reduce this gap when he had another spin, this time damaging the car. Even though it was a damp day, the Ferraris were overheating. Fangio finally recorded a masterly win by just over a minute from Villoresi's Ferrari 125, which had survived; none of the other fancied runners were in the top six.

According to Fangio, Colombo, who had not yet come back to Alfa Romeo but was present at this race, asked the Argentinian driver whether an automatic gearbox had been installed because he could not detect Fangio making gear changes. Fangio often commented on the smoothness of the Alfetta gearbox, and it was certainly something that he would use to his advantage later. The gearbox also benefited from flexibility, in combination with the stunning torque Alfa Corse was now getting, with the engine capable of 350bhp. The car used in this race was, of course, the 158/47, as all the team cars had been raised to this specification. The Alfetta had also appeared for the race with part of the grille covering in place to keep the engine temperature where it should be and this would reappear in several later races.

Considering the team's misgivings before the race, the Alfetta had performed well. The view of Venables (2000) was that the easy days of the past were over as Ferrari was getting stronger. While that was undoubtedly true, it was not demonstrated very well at San Remo, where bringing six cars had made the Scuderia look pretty weak when they failed to get a result.

The First World Championship Race

The RAC British Grand Prix was also the European Grand Prix, scheduled for Silverstone on 13 May, the converted airfield having been used several times for major races since

the war. Four 158/47s were entered, each with the front radiator cowl painted a different colour. The drivers were Fangio, Farina, who had recovered from his injuries, Fagioli and Reg Parnell. The choice of Parnell was a surprise, as Consalvo Sanesi had been considered the most likely reserve or additional driver for the team. However, Sanesi had suffered a minor injury in the Mille Miglia. Reg Parnell's son Tim later said that he thought London-based Alfa Romeo engineer Giulio Ramponi might have had something to do with Reg getting the drive.

Reg Parnell

Reg Parnell was born in 1911 and got behind the wheel early, driving buses and trucks illegally as a teenager. He got in to racing in the 1930s, and raced an MG K3 Magnette from 1934 to 1937, when he was banned from racing for a year as the result of an accident involving Kay Petre. He resumed in 1939 with BHW Special at Brooklands and Donington. After the war, he raced in Europe in a Maserati 4CL and ERA B-type R8B, getting some results in 1946 and 1947, although both cars were unreliable. Wins came his way in 1948 in a 4CLT, which he raced regularly through 1949, and into 1950. Most of his victories seemed to come at Goodwood but he was considered the best and most professional of the English drivers by the Continentals.

Ferrari chose not to enter the British Grand Prix, deciding to concentrate instead on the 4.5-litre development programme. This meant there were no serious challengers to Alfa Corse for the first-ever Championship points to be won, although Prince Bira was not very far behind the four cars from Portello on the grid in his Enrico Plate-entered Maserati 4CLT/48. Farina was quickest on 1min 50.8sec from Fagioli and Fangio on the same time of 1min51sec and Parnell with 1min 52.2sec, only four-tenths ahead of Bira. A surprising Yves Giraud-Cabantous was next, with a Talbot-Lago T26, from Eugene Martin's similar car, ahead of 1949 winner de Graffenried, Bira's team-mate.

1950: 'The 3 Fs' and a World Championship

Great pomp and ceremony accompanied this Grand Prix, which was attended by the King and Queen. The 'great British hope', the BRM 16-cylinder car, did a demonstration run; it remained uncompleted, despite a number of years on the project. Indeed, it is hard to understand how anyone at that stage still managed to see it as a Grand Prix hopeful. The race itself was something of a let-down after all the fuss and royalty, as the Alfettas went off and left the opposition. Interestingly, the ERA E-types could not take the pace, but the older ERAs of Harrison and Gerard kept going. These cars had also started life as

voiturettes the same time as the Alfettas but they very much looked their age, while the Alfas looked and performed like modern cars. It was a stunning contrast, as the Alfa Corse team members swapped places. The only weakness showed when Fangio's car hit a hay bale, but it managed to continue until the engine went off song and it was retired with a broken con-rod. Farina won by three seconds from Fagioli, who was forty-five seconds ahead of Parnell, whose car was fitted with a higher rear-axle ratio; Parnell in turn was two laps in front of Giraud-Cabantous.

According to team orders, Reg Parnell was



'Nino' Farina started his road to the first World Championship with a win at the British Grand Prix at Silverstone, 15 May 1950. (Ferret Photographics)

The 3Fs – Fagioli, Fangio and Farina – made their first appearance together at the 1950 British Grand Prix. (Biscaretti Museum)

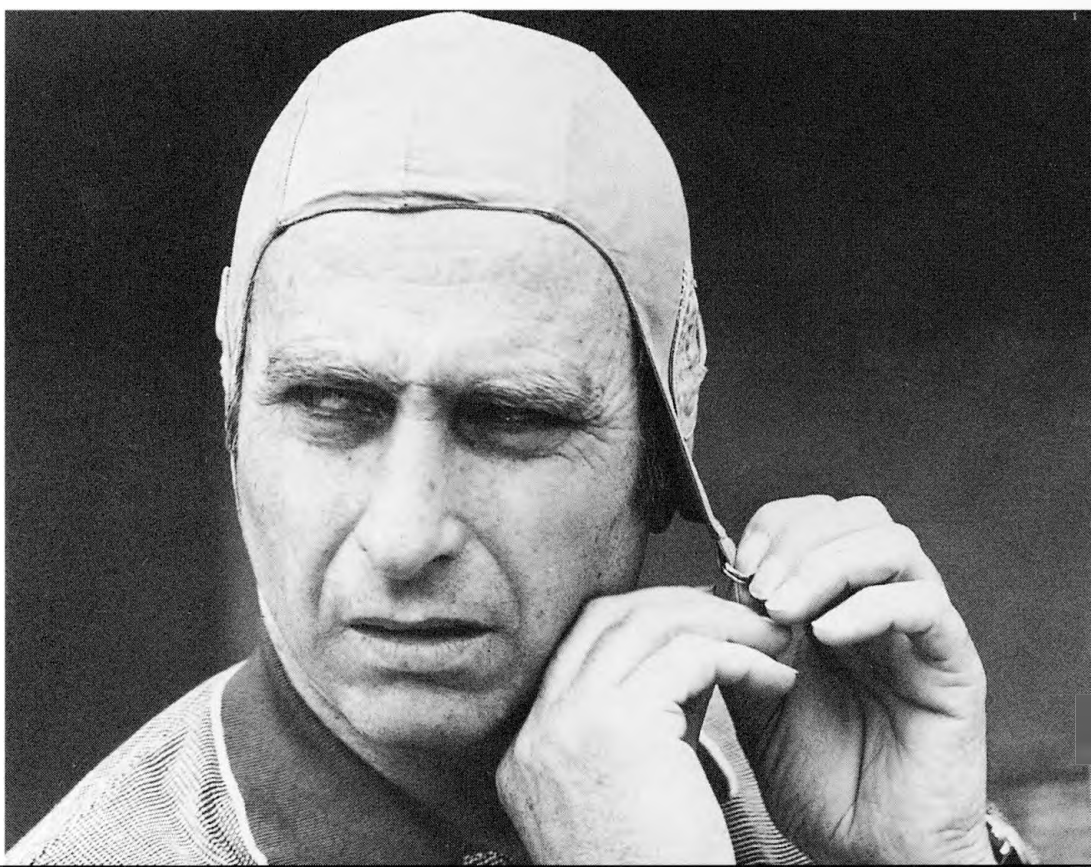


due to finish fourth but took third after the retirement of Fangio, despite hitting one of Silverstone's resident hares, which did little more than dent the car. Reg's son Tim, later to drive Formula 1 himself and manage BRM, was at the race as a boy and recalled staying at Northampton's Grand Hotel, where Luigi Fagioli starred on the piano in the evenings.

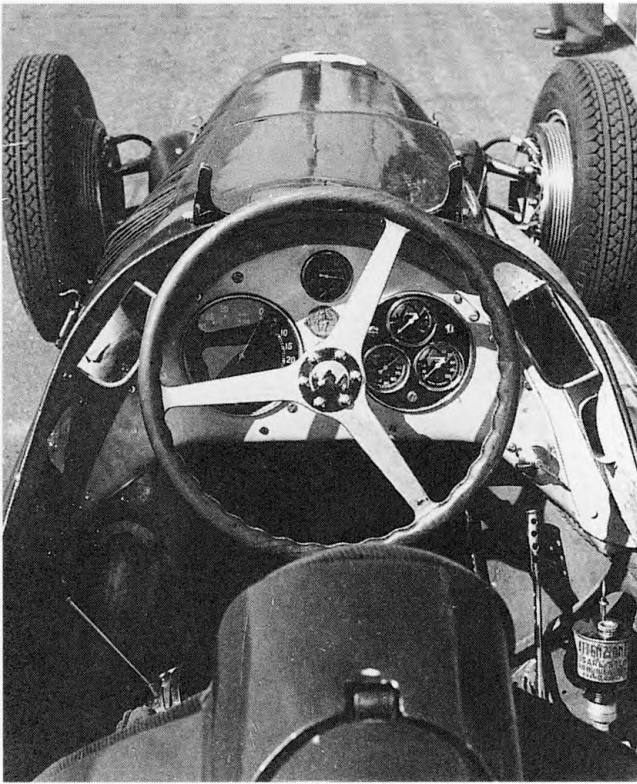
Graham Gauld adds an additional note of

interest about this race, saying that the Alfa was only doing 1.5mpg (188 ltr/100km), and that 110 gallons (400ltr) were being carried in tanks in the tail, on either side of the cockpit and in the saddle tank over the driver's knees. In spite of this, Parnell stopped twice for fuel and tyres. The camber to the wheels was obvious when the fuel tanks were full, and changed as the fuel was used, forcing the driver to adapt to altered handling (Gauld, 1996).

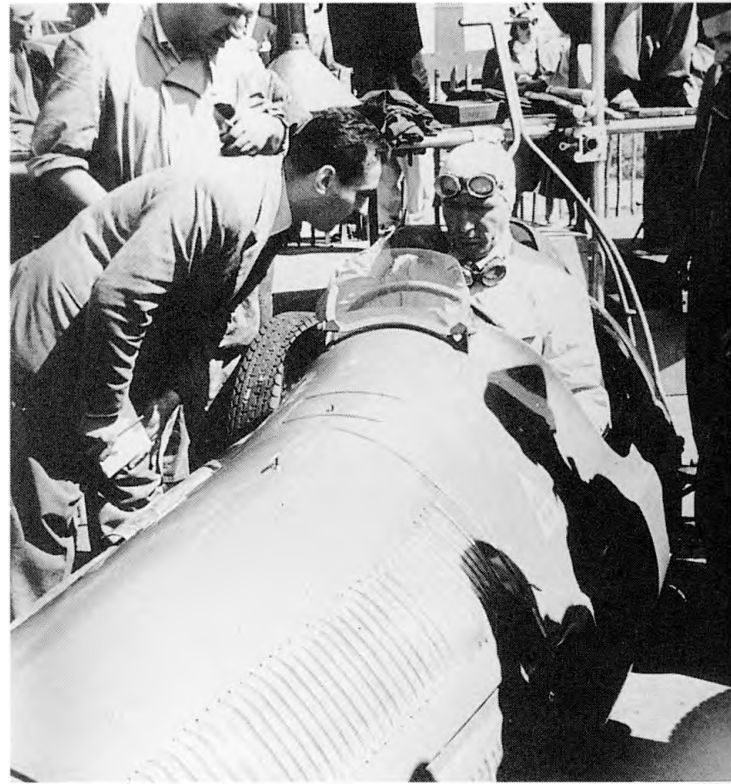
Fangio prepares for practice at Silverstone, 1950. (Alfa Romeo Storico)



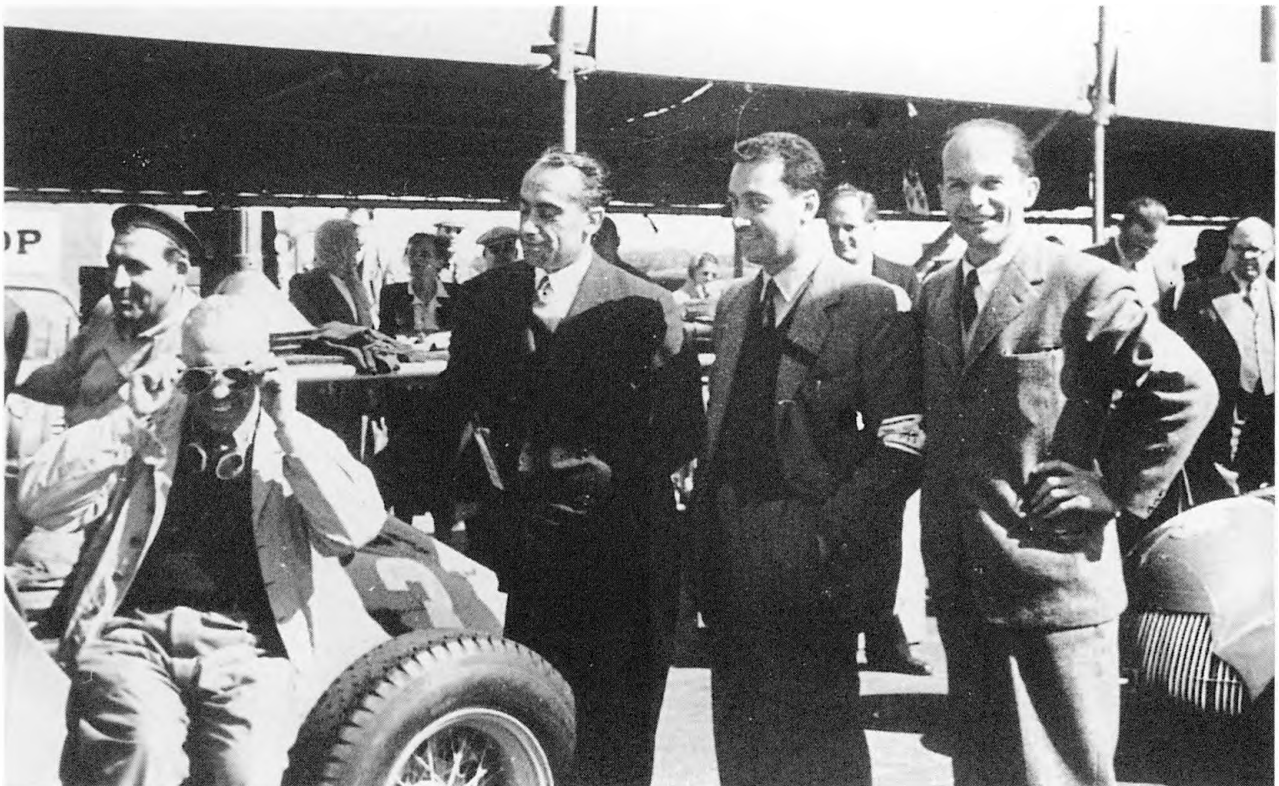
1950: 'The 3 Fs' and a World Championship



Cockpit shot of Farina's car at Silverstone 1950, showing little change from the pre-war layout. (Ferret Photographics)



Farina in practice at Silverstone with Livio Nicolis, who had technical responsibility for the racing team, and mechanic Augusto Zanardi behind him. (Alfa Romeo Storico)



Guidotti adjusts his glasses while sitting on Fagioli's car in practice. Watching are Orazio Satta, Livio Nicolis, and Giuseppe Busso, one of Satta's two deputies. Busso was responsible for design of mechanical parts for race and production cars. (Alfa Romeo Storico)



Luigi Fagioli in the pits at Silverstone, 1950, during practice. (Ed McDonough)



Fangio (left) and Farina chat during practice at Silverstone, 1950.

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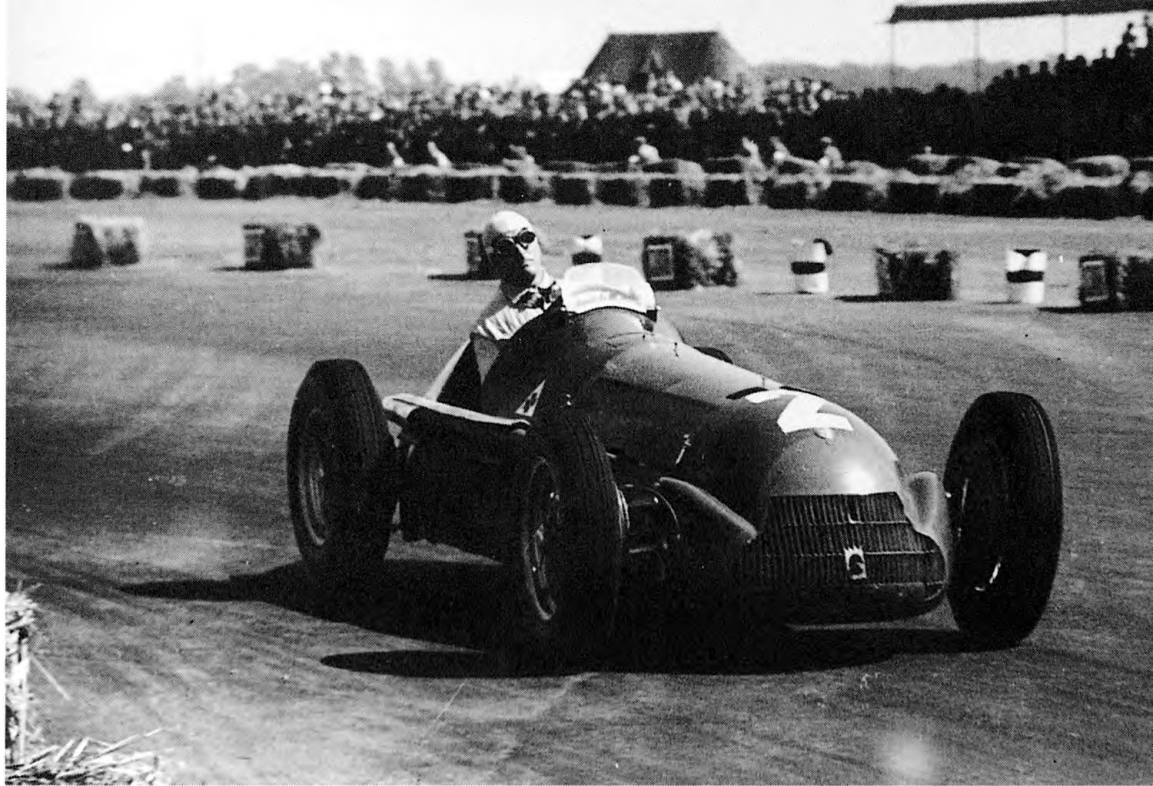


British driver Reg Parnell was invited into the team at Silverstone, and finished third, behind Farina and Fagioli. (Ferret Fotographics)



Luigi Fagioli finished less than three seconds behind Farina at the British Grand Prix, 1950. (Ferret Fotographics)

Farina on his way to winning the 1950 British Grand Prix. (Ferret Photographics)



Monaco and the Ferrari Challenge

The Monaco Grand Prix, the second Championship round, brought some surprises. Although it was only eight days since the last race, Ferrari had used the time well and had saved themselves the trouble of going all the way to Silverstone in order to come back almost to where they started. The Alfas were in the hands of 'The 3 Fs', as Fangio, Farina and Fagioli became known. Gonzales put his Maserati 4CLT/48 on to the front row, partly because of some spirited driving and partly because of Monaco's peculiar system of allotting grid positions by session rather than by time. Villorosi should have been second on time but was down on the third row, with Ascari, who should also have been higher up.

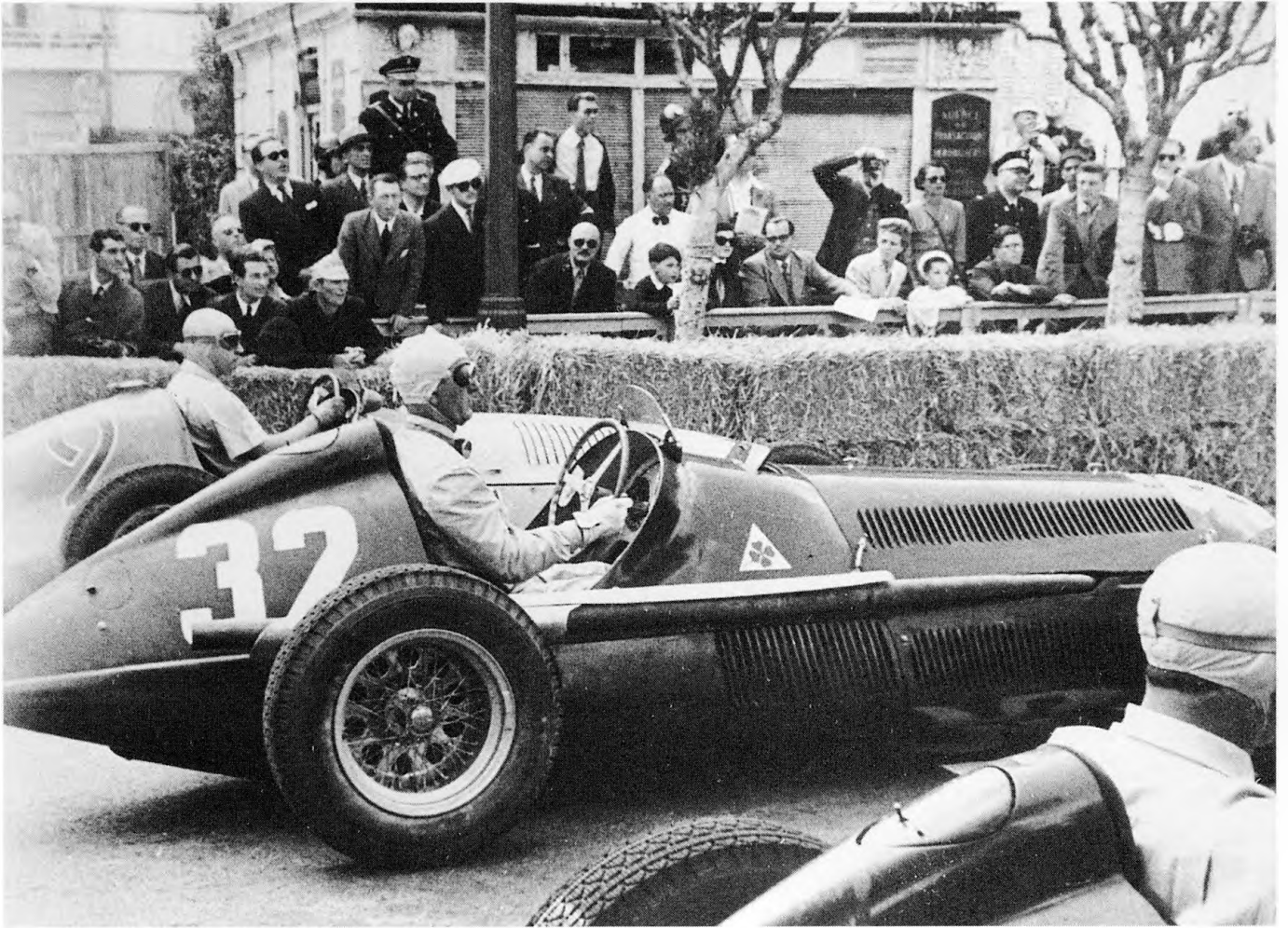
Although the weather for the race was fine, a strong wind was whipping the waves and Tabac Corner was wet. Fangio had got past initial leader Farina and got through Tabac, when Farina spun; Villorosi squeezed past, but Gonzales did not and he hit Farina. It was 1936 all over again. Fagioli was stopped sideways on, and was hit by Rosier, having been pushed by Manzon, and then Schell piled in, with de Graf-fenried hitting Rosier's car. Then Trintignant, Rol and Cuth Harrison all collided, with Rol

suffering the only injuries, which were slight. Gonzales' car was on fire just down the road. Nine cars were out on the first lap, including two of 'The 3 Fs'. Fangio came upon all of this carnage on the second lap and just managed to get through but Villorosi stalled trying to manoeuvre through and Alberto Ascari got past into second. Villorosi later caught him up, but was eventually forced to retire with a broken rear axle. Ascari found that his Ferrari required two fuel stops to Fangio's one, and Fangio cruised to victory by a full lap from Ascari, Chiron, Sommer and Bira. Although much of the competition had been wiped out on the first lap, there was no doubting the driving skills of Juan Fangio. He and Farina now each had nine Championship points.

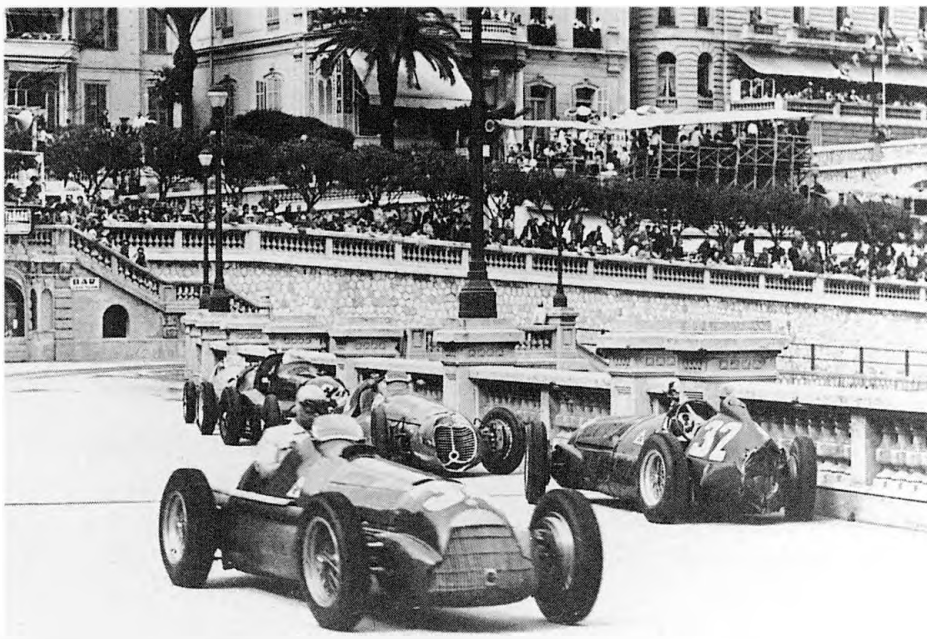
Fangio Retires Again in Swiss GP

The Bremgarten venue again hosted the Swiss Grand Prix, on 4 June, and while stories of Ferrari's new engine persisted, the real change came in the shape of a de Dion rear axle instead of swing axles on Villorosi's 125. The Alfettas were unchanged, although they had undergone the usual precaution of a total strip-down back at Portello, and a rebuild with new parts where required. As far as can be

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The start of the 1950 Monaco Grand Prix, on 21 May 1950, with Farina (32) centre, Gonzales's Maserati 4CLT on the outside, and Fangio's 158 on pole by over two seconds from Farina. (Alfa Romeo Storico)



Fangio speeds past Farina (32) to win the 1950 Monaco Grand Prix. Fangio got the lead by Casino Square on lap 1, which meant he avoided Farina's spin, and the resultant pile-up that eliminated ten cars on the first lap! (Alfa Romeo Storico)

Fangio's 158 finished five seconds ahead of Ascari's Ferrari 125 at Monaco. (Alfa Romeo Storico)

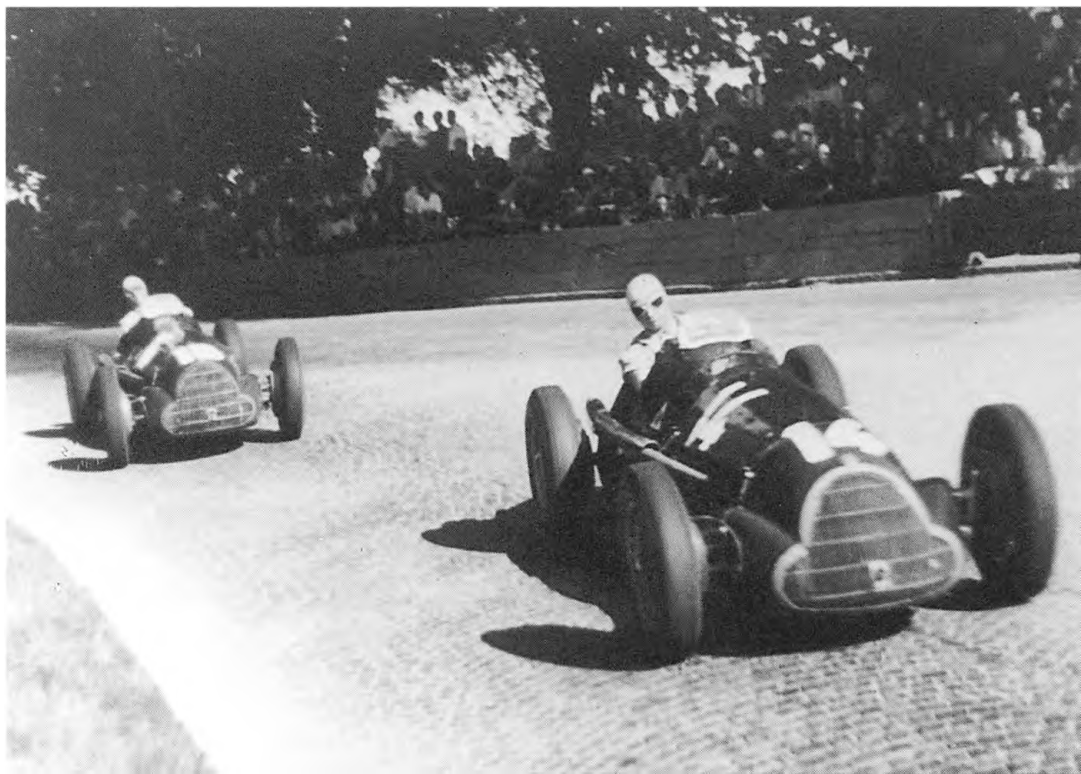


determined, this process happened as a matter of course, and in retrospect must be seen as the key to the team's continued success, although failures nevertheless occurred.

Fangio and Farina comfortably dominated the grid, with Fagioli three seconds slower, and the Ferraris of Villoresi and Ascari were on the second row. Sommer was further back, in the car that he had used to win the F2 race earlier in the day. The two F1 Ferraris departed in the first ten laps, leaving the Alfas of Farina and Fangio to draw away from Fagioli. It would

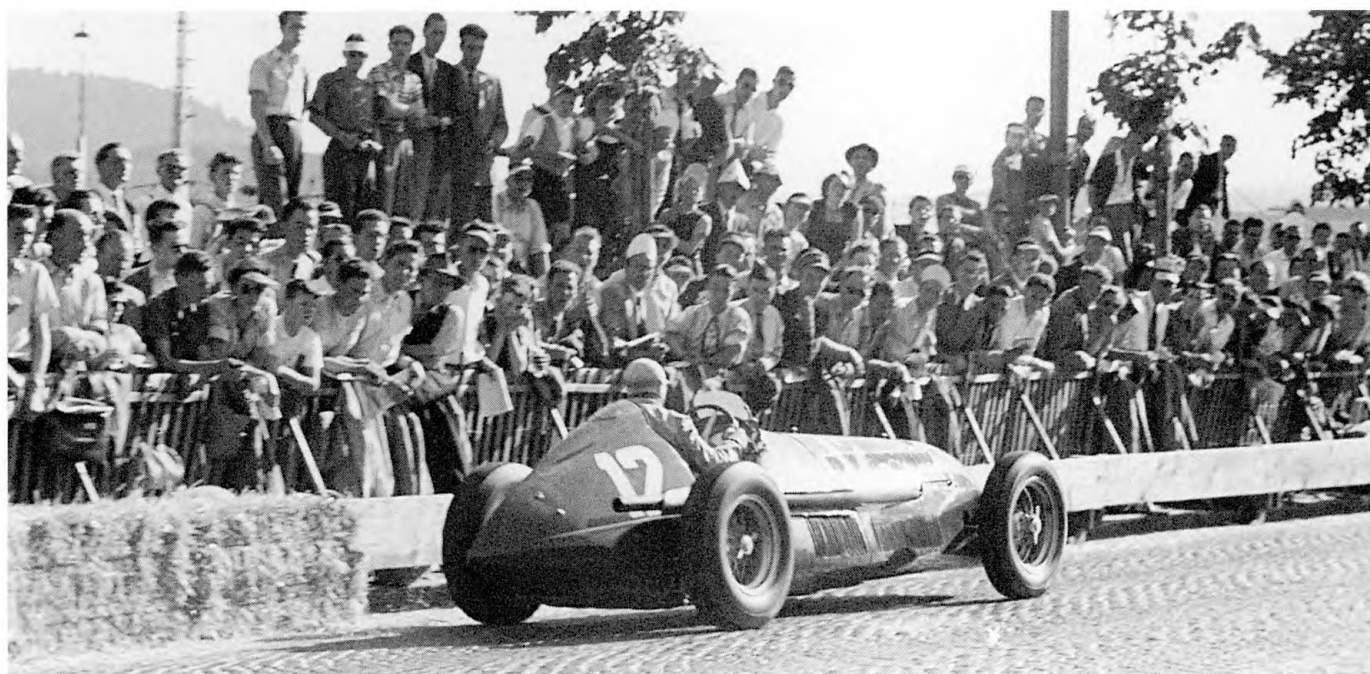
appear that Farina's old aggressive style had returned as he was forceful in keeping Fangio at bay. The Argentinian decided he would hang on in Farina's wake, but he suddenly stopped out on the circuit on lap 34, with what has variously been described as a cracked valve seat or electrical troubles. Hull and Slater (1982) report that the rev counter on Fangio's car read 8,000rpm while Fagioli's read 7,700rpm. They do not comment on whether there was a connection between Fangio's higher use of rpm and the valve problem, and it seems slightly

Fangio leads Farina in the Swiss Grand Prix at Bremgarten on 4 June 1950. Fangio eventually retired on lap 33 with electrical problems. (Alfa Romeo Storico)





Luigi Fagioli finished less than half a second behind Farina in the 1950 Swiss Grand Prix.



Rear view of Fagioli's 158 on the cobbled surface at Bremgarten.

odd, as the engines were tested regularly for use at 8,500rpm. Perhaps this was an indication that the 158 engine could deliver an impressive power figure, but could not actually do so for a prolonged period.

Rosier, Bira and Bonetto came next behind the two Alfas. The Talbot of Rosier was impressive for its durability if not for outright pace, and managed to do the complete Grand Prix without a fuel stop.

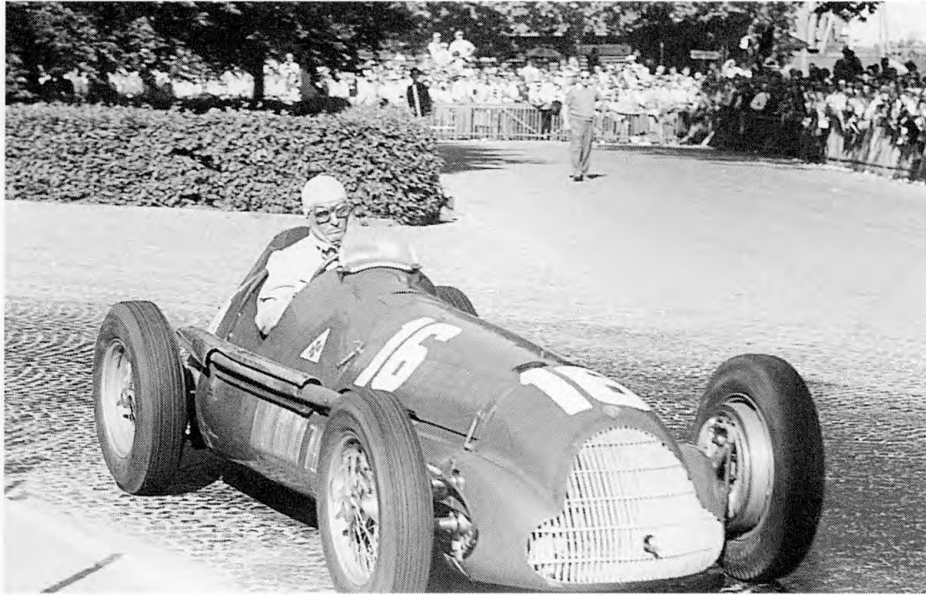
Ferrari's 'New' Car at Spa

While it was known by now that a 4.5-litre Ferrari was on the way, the Scuderia's transporter disgorged a regular 125 for Villoresi, and a similar chassis for Ascari, but with a 3.3-litre engine. It was surely an interim measure, although it was unclear why the Scuderia was unable to produce a 4.5. Apparently, the point of the race was to allow Ferrari to see how they could improve fuel consumption, and as such

it did not work. The Alfettas got on with the job in hand and Farina and Fangio set equal fastest time, with Fagioli third, and then Villorosi and Sommer on the same time. The 4.5-litre engine in Sommer's Talbot-Lago was quicker than Ascari's, showing that the 3.3-litre Ferrari engine was not meant to be competitive.

In the race, the Alfettas again went off on

their own but, to everyone's amazement, it was Sommer up in fourth giving chase, and when the Alfas came in early for fuel, Sommer was in front. This lasted only four laps as the Alfas got past and then Sommer's engine gave up, allowing the steady Rosier to keep on the same lap as the leading trio. Farina felt his gearbox begin to break up so he slowed, allowing Rosier into third. Fangio thus won



Farina was absolutely determined to win the first Drivers' Championship.



Rear view of Farina going past the huge crowd at Bremgarten.



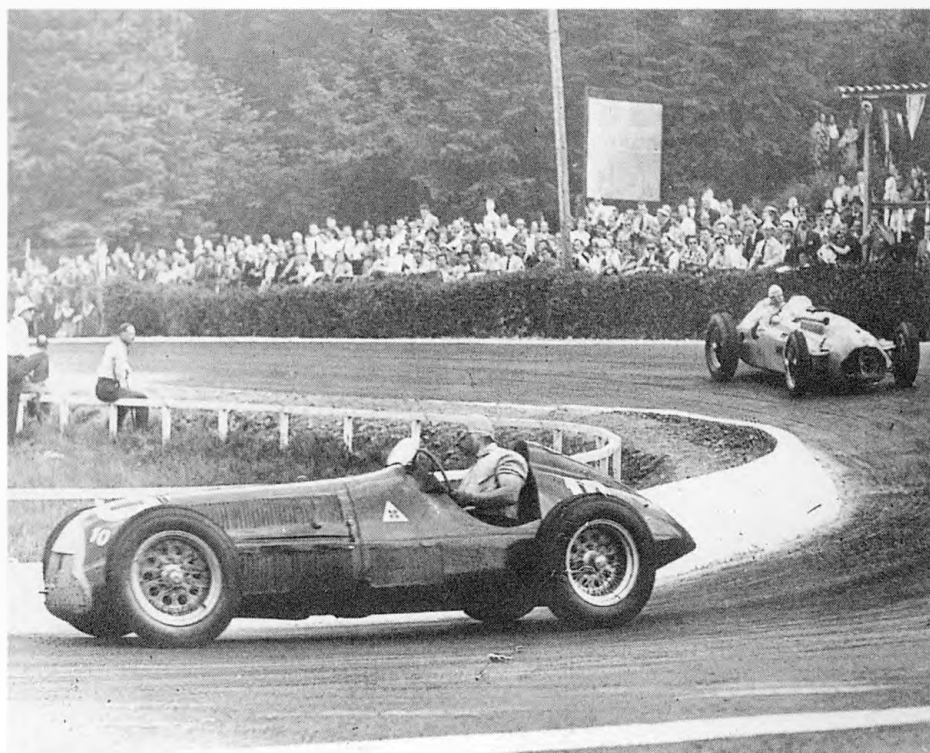
Fangio would occasionally invite a friend to sit in his car. Gonzales was the lucky one at the 1950 Belgian Grand Prix. Satta looks on behind Fangio. (Alfa Romeo Storico)

another World Championship Grand Prix, with Fagioli second, Rosier and Farina next, and then the two Ferraris.

The Spa race had been substantially longer than the previous two, with a total distance of 307 miles (491km), and was a test of endurance as well as speed for the 158s. There were no comments in the reports about what rev limit

had been used, as there had been in the Swiss race, but Fagioli had been timed on the Masta Straight at 200.75mph (321.25km/h). The drama in 1950 had come down to seeing which Alfa driver might take the first World Championship, and when Ferrari would start to offer significant competition to the Alfettas, as clearly no one else could.

In the Belgian Grand Prix at Spa on 18 June 1950, Fangio leads Rosier's Talbot-Lago T26C. Sommer had led for four laps. (Alfa Romeo Storico)



Gonzales the Alfa Driver?

One photograph dating from the Spa Grand Prix has caused much confusion and questions over the years. During the weekend, a picture of the Alfa Corse team had been organized and all were posed and ready when Froilan Gonzales walked by. Fangio called him over and he was put into the race car, and thus appears in the team photo that can be found today in the Alfa Romeo archives.

The 159 'Mystery'

Hull and Slater (1982) suggest that interest in a 'new' 158 was aroused when the teams arrived at Reims for the Grand Prix de L'A.C.F., on 2 July. Fangio's car was described as 'experimental' and had an increase of 20bhp, bringing it up to 370bhp, and Fangio broke Lang's old circuit record (made in the 3-litre Mercedes) by 1.5mph (2.5km/h), something Wimille had got close to but could not manage. Venables (2000) contends that this increase was achieved by using more supercharger boost, and also mentions that the brakes were improved. This was probably due to a developmental improvement in the brake linings provided by Ferodo, and the 158 brake cooling had always been efficient in comparison with Ferrari and Talbot. Nye (1993, p.44) repeats the above claims but does not link these changes to the French race, implying they occurred 'some time' during the 1950 season. He then adds 'at the same time some described the cars modified this way as the Alfa Romeo 159'. While Venables does not use the term '159', Hodges (1966) dates the 370bhp engine as coming after the Swiss race, and says that a '158/50 with a 159 engine' was driven by Farina at the International Trophy Race at Silverstone. Borgeson (1965) is adamant that the 159 did not appear until 1951 and that the big change in the 159 included use of a de Dion rear end.

What does this all mean? First, it indicates that the difference between the 158 and the 159 was not a big one, that is, it did not

comprise a clearly different design to the car. Very few people could ever distinguish between the two by standing next to them. It also reveals that the designation '159' was phased in, and that it referred both to suspension changes and engine changes, but that it was not used universally at the time. Some believe that two-stage supercharging was an element of the 159, although that is clearly inaccurate, as this was employed on the 158 long before the notion of a 159 or other modifications had even been considered. Historians depend on what other historians have said before them, sometimes repeating what has been said and sometimes interpreting it. When the facts laid out are unclear, as they sometimes are in the complex writing of Pomeroy, certain writers will put their own 'spin' on what they think is being said and that may turn out to be inaccurate. The reality is that there is no indisputable evidence about the exact timing and definition of a 159, and this issue will surely remain ambiguous.

Whatever the designation of the Alfetta driven by Fangio at Reims, it was extremely quick, and it probably had the addition of a higher top gear ratio to achieve the speeds it did. The only outward difference between the three cars of 'The 3 Fs' was that Fagioli had his rear-view mirrors outside the cockpit, while the other two had theirs inside, but this could be changed according to driver preference. The other significant aspect of this race was that Scuderia Ferrari did not bother to show up, realizing that work had to proceed on the 4.5-litre car. This meant that the Alfettas would be even further in front of the opposition in a race that was slightly longer, by 2 miles (3km), than the Belgian event. Fangio qualified two seconds quicker than Farina, who was in turn two seconds ahead of Fagioli, and no one else was near the pace. While these races, in retrospect, may not have seemed very exhilarating, anyone who was there at the time was moved by the awesome power of racing cars, especially the 1.5-litre Alfetta, which had a booming exhaust note that was unforgettable.



Farina gets ready for the start of the XXXVII Grand Prix de L'A.C.F., again held at Reims, on 2 July 1950. (Alfa Romeo Storico)

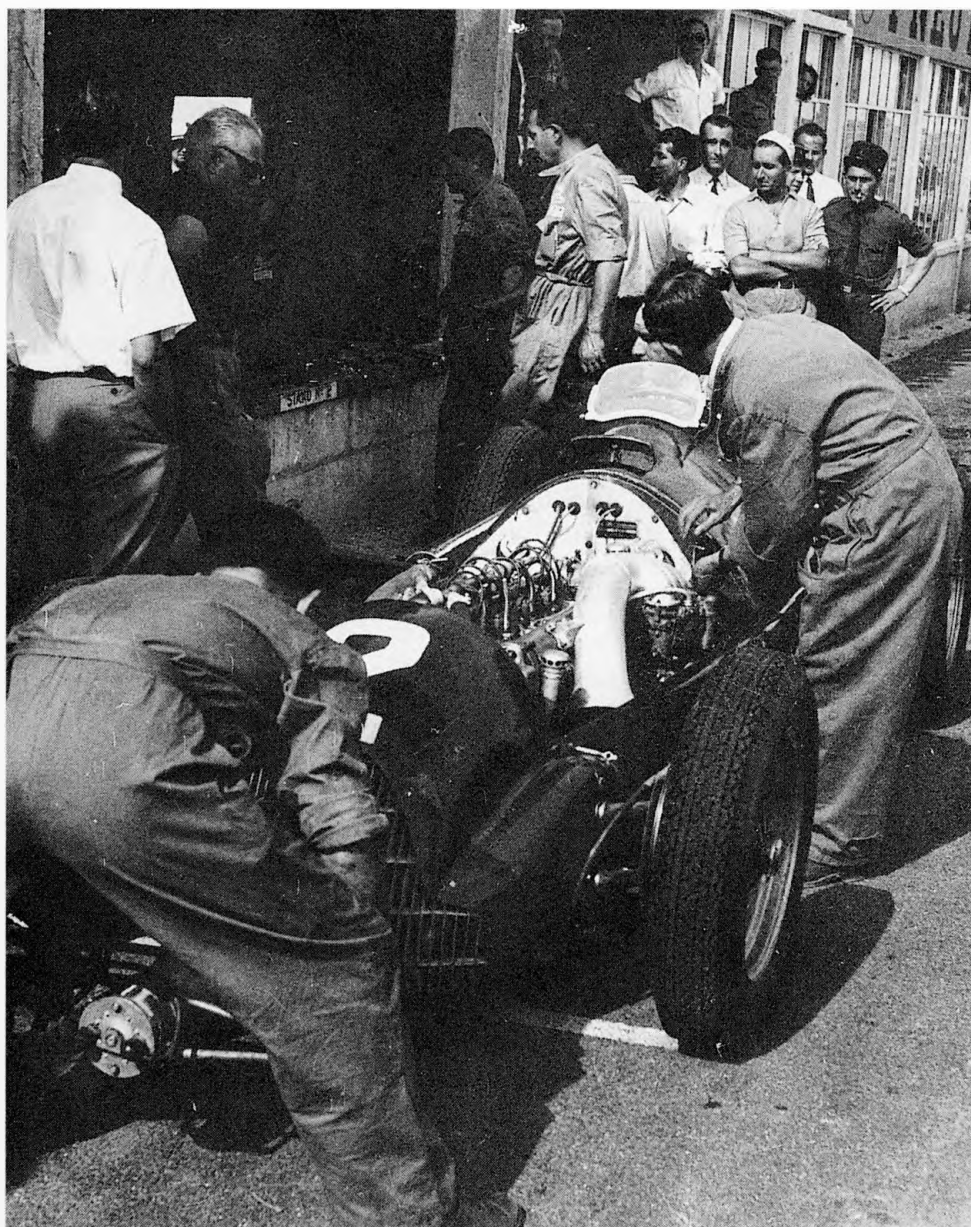
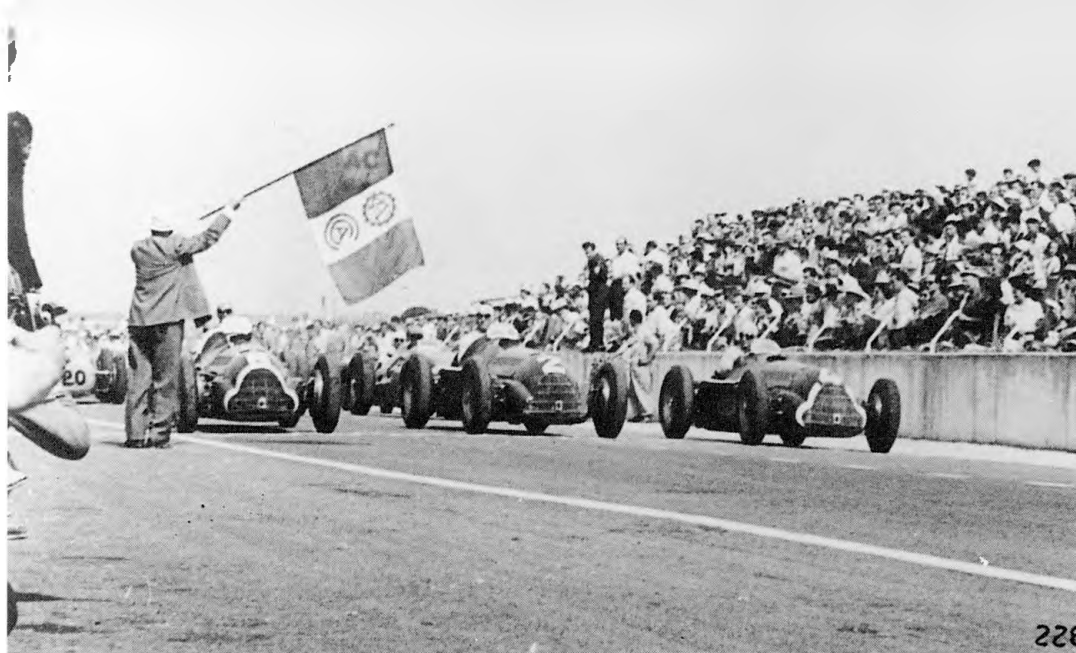
Fangio led the race for all sixty-four laps. Farina had to stop with fuel starvation, started again, but then found that his fuel pump was not working and ended up unclassified with only fifty-five laps. Fagioli was twenty-six seconds behind Fangio. British driver Peter Whitehead, a very loyal Ferrari privateer, impressed again with his smooth and unruffled driving; his 125, which had been at the back of the grid, managed to finish third. Fangio set the fastest lap.

With the completion of the race at Reims, five of the six races counting for the World Championship had been run. With each

driver's best four results being counted, Fangio led on twenty-six points, followed by Fagioli on twenty-four and Farina on twenty-two.

On 9 July, a rather thin entry showed up for the non-Championship Gran Premio di Bari, with only two Alfettas, for Fangio and Farina. The Ferraris had scratched the Formula 1 entry, although two 1950 Formula 2 cars were sent for Ascari and Villoresi. Farina led first until Fangio took over and then Farina got back in front on the fourteenth lap, but the race was generally significant only for the skilled display put on by a young Stirling Moss, at the wheel of a Formula 2 HWM-Alta. Moss

Fangio (6), Farina (2) and Faigioli (4) watch for the drop of Toto Roche's flag at Reims, 1950. (Alfa Romeo Storico)



Farina had fuel-starvation problems and his pit stop saw him finish seventh, but unclassified. (Ferret Photographics)

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Fagioli finished twenty-six seconds behind Fangio at Reims. (Ferret Photographics)



Farina and Fangio celebrate, with Fagioli behind the bottle! (Pirelli Archives)

harried the two Ferraris into retirement with rear axle failure and finished third overall. This was almost as close to an Alfetta as Moss would get, but not quite. Fangio's mechanics gave him insufficient fuel in his stop and he had to come in for more on the final lap, losing any chance of catching Farina.

While Fangio and Farina both drove Maseratis at the non-Championship Circuit de l'Albigeois at Albi on 16 July, as the Alfettas were not entered, a 3.3-litre Ferrari and an older supercharged machine showed up for

Villoresi and Ascari, but none of the four drivers achieved very much. It was very similar for all concerned at the non-Championship Dutch race at Zandvoort on 23 July.

Fangio at Geneva

Even though the Grand Prix des Nations at Geneva on 30 July was another non-Championship round, the entry was superb. Ferrari sent a 3.3 for Villoresi and a similar car for Ascari, but with the engine now bored out to

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Farina beat Fangio at the non-Championship Gran Premio di Bari on 9 July 1950. A young Stirling Moss was third, in an HWM. (Alfa Romeo Storico)



Fangio in practice, with mechanic Augusto Zanardi, for the Grand Prix des Nations non-Championship race, held on 30 July 1950 in Geneva. (Alfa Romeo Storico)

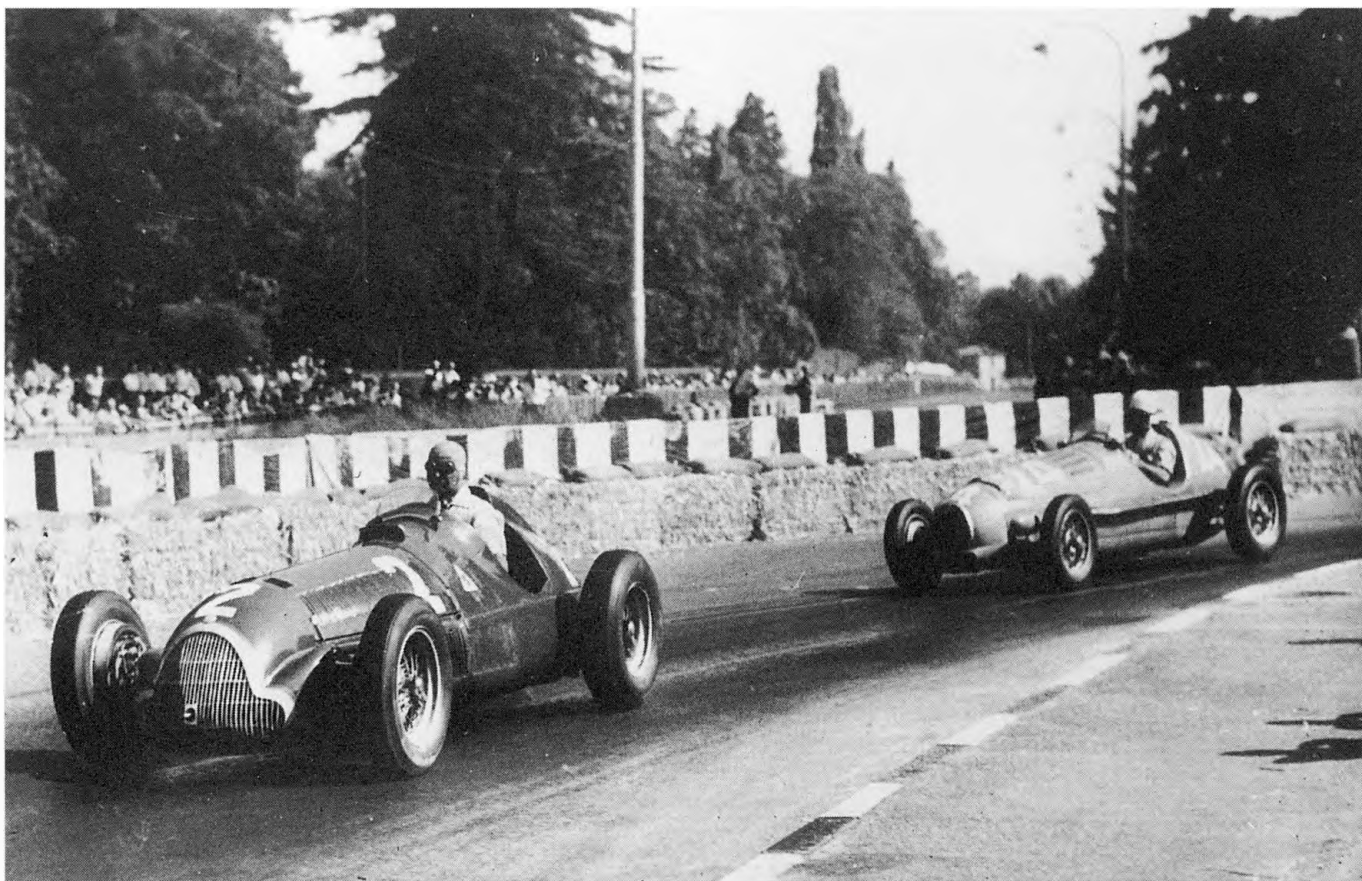
4.1 litres. Alfa Corse, for unspecified reasons, decided to replace Fagioli with Piero Taruffi, who had one previous race in the Alfetta, and offered a fourth car to the veteran Swiss privateer Baron Emmanuel 'Toulo' de Graffenried.

Emmanuel de Graffenried

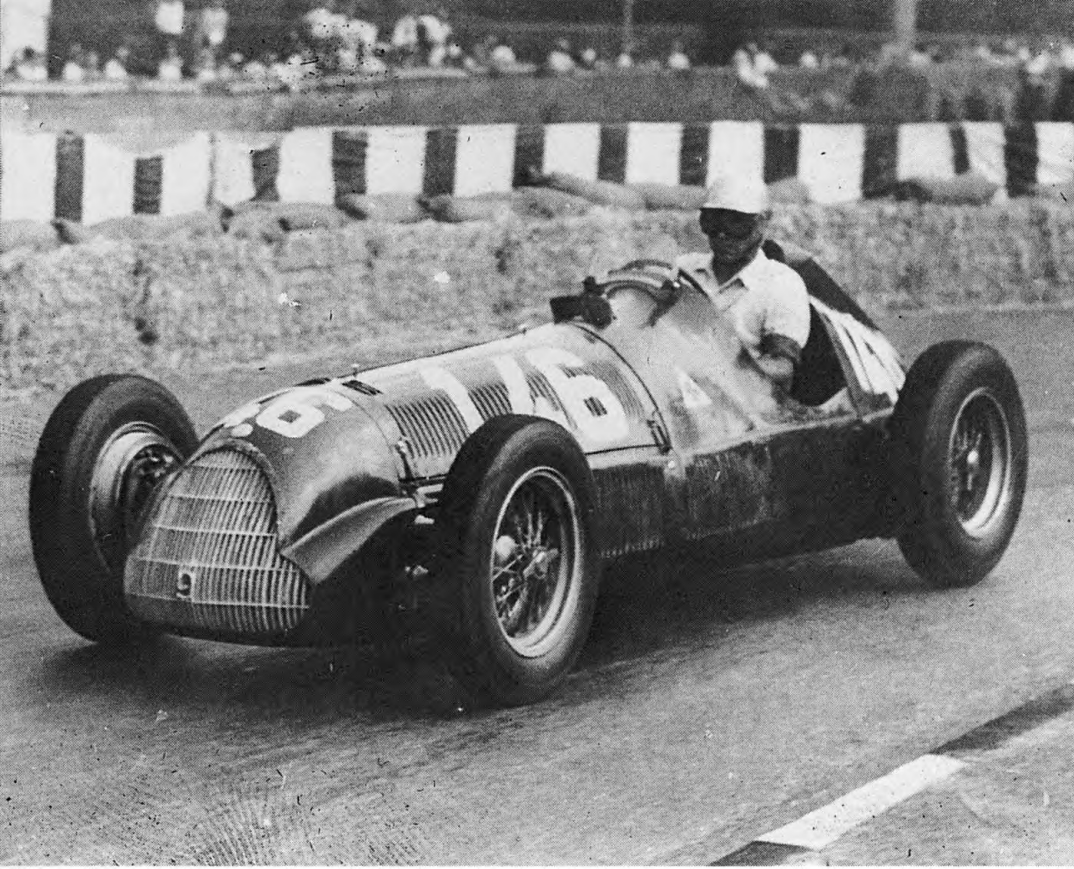
Swiss driver de Graffenried was primarily known for being one of the most loyal of all Maserati privateers, both before and after the war. He started in voiturette races in 1937 in Team Autosport, and in that year had good results at Naples, the Isle of Man, Picardie and the Czech Grand Prix. He started in the 1938 German and Swiss Grand Prix races and in 1939 at Pau, Albi and, again, the Swiss GP. By 1948 he was a top Maserati driver, and his best win came at the British Grand Prix at Silverstone in 1949. A further win in 1950 led to his being offered an occasional place in the Alfa Corse team.

In spite of the technical interest at the race in Geneva, the main focus was on the likely battle between the Alfas and at least one of the Ferraris. The race was also enhanced by the presence of a new car, the Scuderia Milano-built Milano-Speluzzi. This Maserati-based device had a Speluzzi engine, which had marine origins. Bonetto had one of these engines in his Maserati 4CLT while Gianfranco Comotti had a new chassis with the same engine. While well off the pace, they were by no means the slowest.

Although Fangio was on pole position by a comfortable two seconds, the Ferraris, both with de Dion rear ends instead of swing axles, were now threatening and had the other two front-row spots, with Ascari and Villoresi on the same time. Farina was half a second slower than Villoresi with de Graffenried next, showing his ability to adapt to a car he had



Fangio practised his and Farina's car for the Grand Prix des Nations and is here ahead of Robert Manzon's Simca-Gordini 15. De Graffenried made an excellent Alfa debut, finishing second. (Alfa Romeo Storico)



Piero Taruffi's 158 finished just behind de Graffenried in the Grand Prix des Nations. During the race, Farina spun to avoid Villorosi's Maserati, which overturned and killed three spectators. Swiss racing quickly came to an end. (Alfa Romeo Storico)

tested only very briefly. Taruffi was on the third row, a further second and a half behind de Graffenried.

Fangio took the lead but found that Ascari could stay with him, and these two pulled away. The other Alfettas could not keep up with Ascari and the race looked to be the first straight confrontation between Alfa Romeo and Scuderia Ferrari. Then there was a major accident on lap 60, as Villorosi slid on oil and overturned over the protective hay bales, seriously injuring him and killing three spectators. Farina hit the bales to avoid striking Villorosi so he was out, although he had been a lap ahead of the Ferrari at the time. Two laps later, Ascari's head gasket failed and water poured from the exhaust pipe. This allowed de Graffenried and Taruffi into second and third with Ascari classed as fourth and Farina sixth. At last, a real threat to the Alfa dominance had appeared.

'Toulo' de Graffenried recalled with enthusiasm his races in the Alfetta in 1950 and 1951. Sitting in his home overlooking Lake Geneva at Lausanne in March 2004, de Graffenried recounted his first impressions:

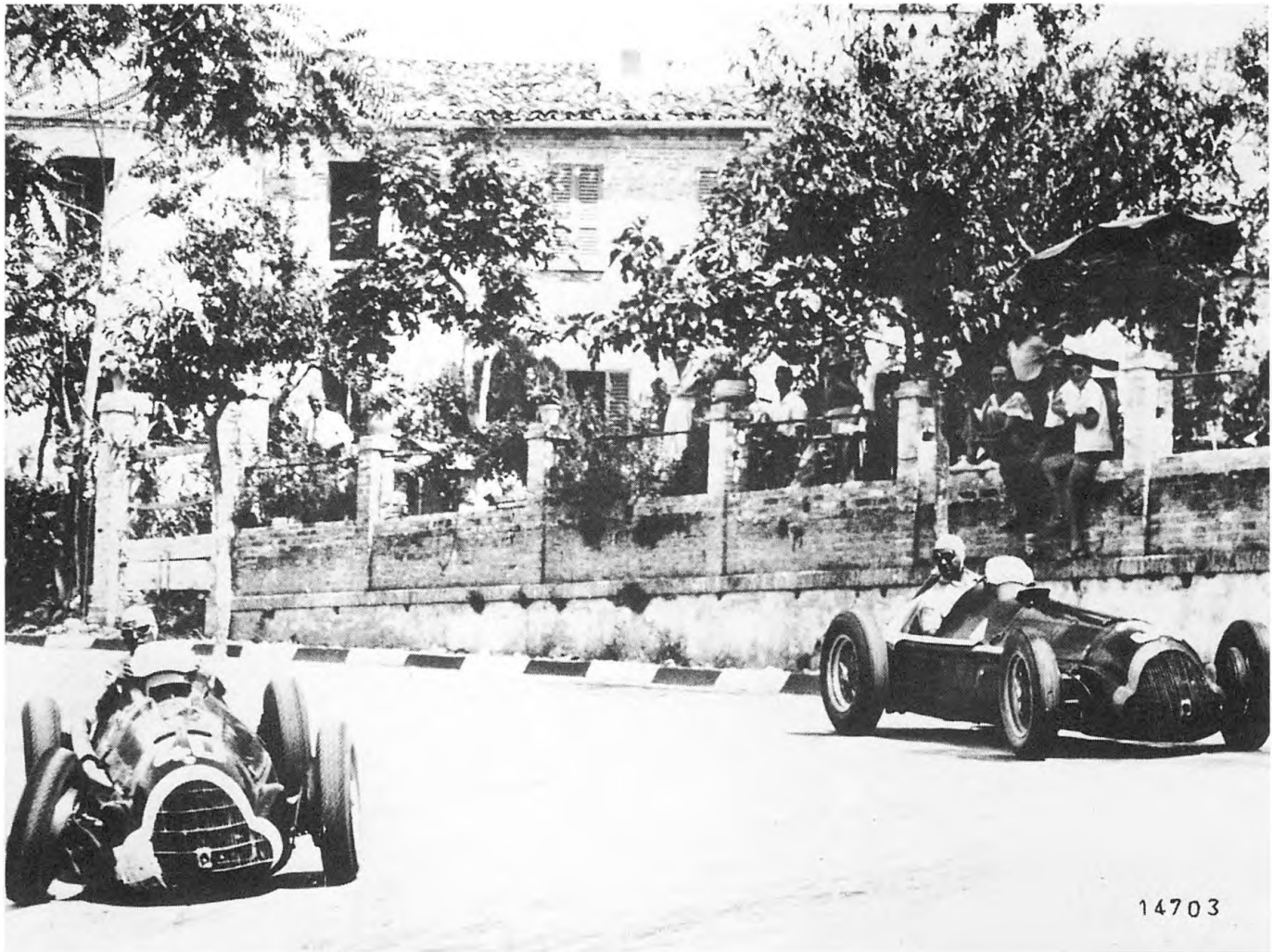
I was invited into the team by Guidotti because, I believe, Sanesi was still recovering from an injury. I went to Monza for a short test and this went well and I was offered a place on the team, though it would be on a race by race basis. I was very impressed with the car, and I considered it a step above everything else. I was very lucky again in Geneva for the Grand Prix des Nations, where Villorosi had a very bad crash. I was behind him and I went into the bales . . . Farina was there already . . . and I stalled the engine, but it was so well tuned that I was able to get it started again, and that was what allowed me to finish second. The road holding and power was so advanced compared to the Maserati, with the combination of the eight cylinders and the two blowers, it was like the difference of night and day. After Geneva, Guidotti spoke to me and said I should do some more races with them. I think they were satisfied that I got second place, especially after the accident and Farina retired.

Both works Ferraris and Maseratis withdrew from the Circuito di Pescara on 18 August, another non-Championship race, and that

meant the Alfas would have it almost all their own way over the long and fast Pescara road circuit. Fangio was in another sphere in practice, hurling his 158 around no less than twenty seconds quicker than Fagioli, who was twenty-eight seconds faster than Rosier's Talbot-Lago. Fangio was timed on the straight, a narrow piece of road that ran along the sea, at 192.84mph (308.5km/h). The grid was hardly livened up by the appearance of Otto Schwelm in a Jaguar XK120, which may have been a C-Type, and Clemente Biondetti, with a C-Type Jaguar with a Ferrari engine. How they got into the race is uncertain.

Team orders had come into play again for this non-Championship race and it had been

decided that Fagioli would win. The two Alfettas were playing among themselves miles ahead of anyone else and Fagioli was in the lead on the final lap with only a couple of miles to go. A front trailing link broke in the suspension and one of the front wheels sagged in on to the bodywork as Fagioli was bringing the car to a halt. Fangio pulled alongside Fagioli, determined that the wheel would not come off and urged his teammate to drive to the finish. As they both looked over their shoulder for the third-placed Rosier in his Talbot, Fagioli set off slowly. With less than half a mile (1km) to go, Fangio spotted Rosier in the distance and sped off to make sure both Alfas were not overtaken. Rosier went past



A non-Championship Circuito di Pescara race was held on 15 August 1950. Fagioli was leading when his front suspension collapsed on the last lap. He was about to retire when Fangio pulled alongside, inspected the car, and urged him to continue. In the end, Rosier's Talbot just beat Fagioli into second place. (Alfa Romeo Storico)

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Fagioli with a few hundred metres to go, and took second place, six seconds ahead of poor Fagioli.

Fangio himself (1961) identified the offending part on Fagioli's car as one of the springs, and says how the pair had come to a complete stop to decide what to do. Fangio said he was almost seasick watching Fagioli's damaged car heave up and down as they headed for the finish. By the time the pair had left the Capelle Pass on to the straight the wheel was locked solid. Fangio says it was his team-mate who first saw Rosier and urged him to leave and win, and later Fangio said he really regretted that win.

There were now only two races left for the Alfa Corse team and only one was a Championship race. The first non-Championship event was the International Trophy at Silverstone on 26 August. Hodges (1966, p.7) makes

the point that by this stage of the 1950 season 'the Alfa drivers had kept revs in hand (to order), certainly they had not used all the bench power available to them, and at least one car in the team had been run with an "easy" final ratio. Time was catching up with the twelve-year-old design, and as few chances as possible were taken to ensure reliability (further to this end, major components such as crankshafts were used for only a few races, and then discarded).' At this point, Hodges also argues that the increased engine power (370bhp) and brake improvements justified the designation of the car as the 159. It was at the International Trophy that Hodges says that Farina was driving a '158/50 with a 159 engine', using a set of terminology that has not been used elsewhere. It could also be argued that the 159, whenever it came out, was essentially a 158 with a more powerful engine.



At the International Trophy at Silverstone on 26 August 1950, Farina and Fangio were the drivers, but Consalvo Sanesi (left), Felice Bonetto (centre) and team manager Gianbattista Guidotti (right) all tested and practised. (Alfa Romeo Storico)

Farina refuels during practice at Silverstone.



At Silverstone, which took place only a week before the Championship decider at Monza, two Alfettas appeared, for Fangio and Farina, and they each dominated their heats. A supposedly new supercharged Ferrari was present for Ascari, entered by Tony Vandervell, but it was another scam by Enzo Ferrari. Vandervell caught on, and this led to years of argument about who owned what and who owed what to whom! The BRM made its famous, or infamous debut, and after a reasonable wet practice run, specially arranged as it had missed the regular session, it managed about one foot at the start when the transmission or a half-shaft broke.

The two Alfettas went out in front in the final, where the more forceful Farina kept Fangio four-tenths of a second behind at the finish, with Peter Whitehead's private Ferrari again third. Ascari had tussled briefly with Fangio but spun and retired in the second heat. Fangio (1961) later complained that his car was performing poorly, and that he was getting unhelpful and contradictory information from the mechanics when he quizzed them. It is slightly odd that Fangio should say this when his race times were comparable to Farina's and he set fastest lap; perhaps he felt

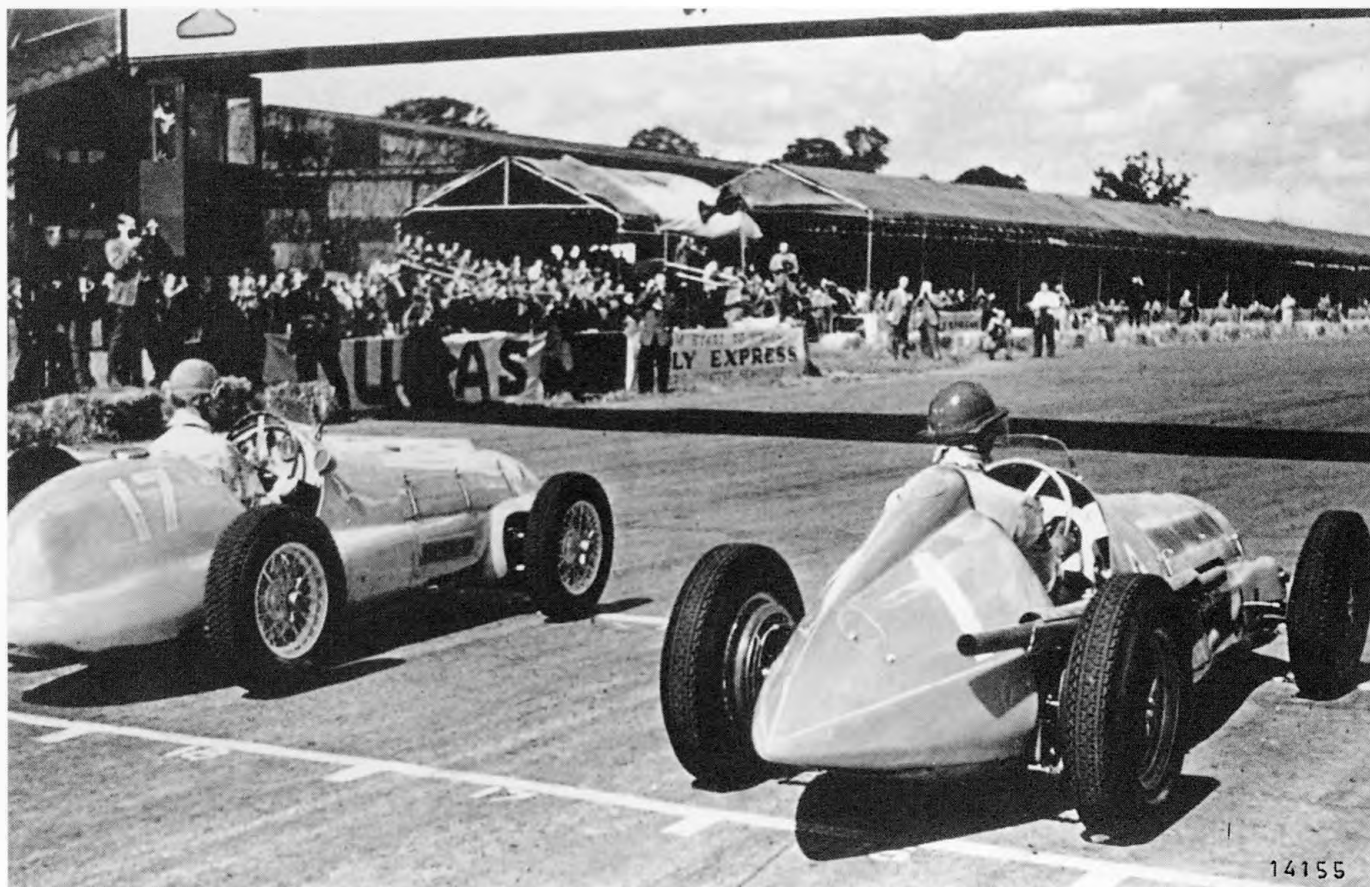
that the car should have been quicker at Silverstone.

The saddest feature of the Silverstone meeting was the appearance of Tazio Nuvolari who had been invited to race a Jaguar in the sports-car race. He did three laps and had to be told that he was too slow. His worsening illness meant he never drove on a circuit again.

The Championship Decider

'The 3 Fs' all had a chance of winning the inaugural World Championship at the Italian Grand Prix at Monza on 3 September. In addition to cars for the team leaders, there were also entries for Sanesi and Taruffi. Venables (2000) states that Sanesi was back again as a sop to the unions, which may be true, but it is just as likely that Alfa Corse wanted this capable driver behind the wheel anyway. Presumably, Sanesi himself would have said that he was just doing his job. Sheldon and Rabagliati (1993) go as far as saying that it was the pressure from the Communist union/s that put Sanesi behind the wheel. No record of the Communists or any other union wanting Sanesi to drive appears in the various union newsletters, and it may well have been Satta

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Farina (right) leads Peter Whitehead's Ferrari 125 off the line for Heat One at Silverstone, which Farina won. (Alfa Romeo Storico)



Fangio won Heat Two at Silverstone and finished second to Farina in the final.



Farina acknowledges the flag after winning the final of the International Trophy. (Alfa Romeo Storico)

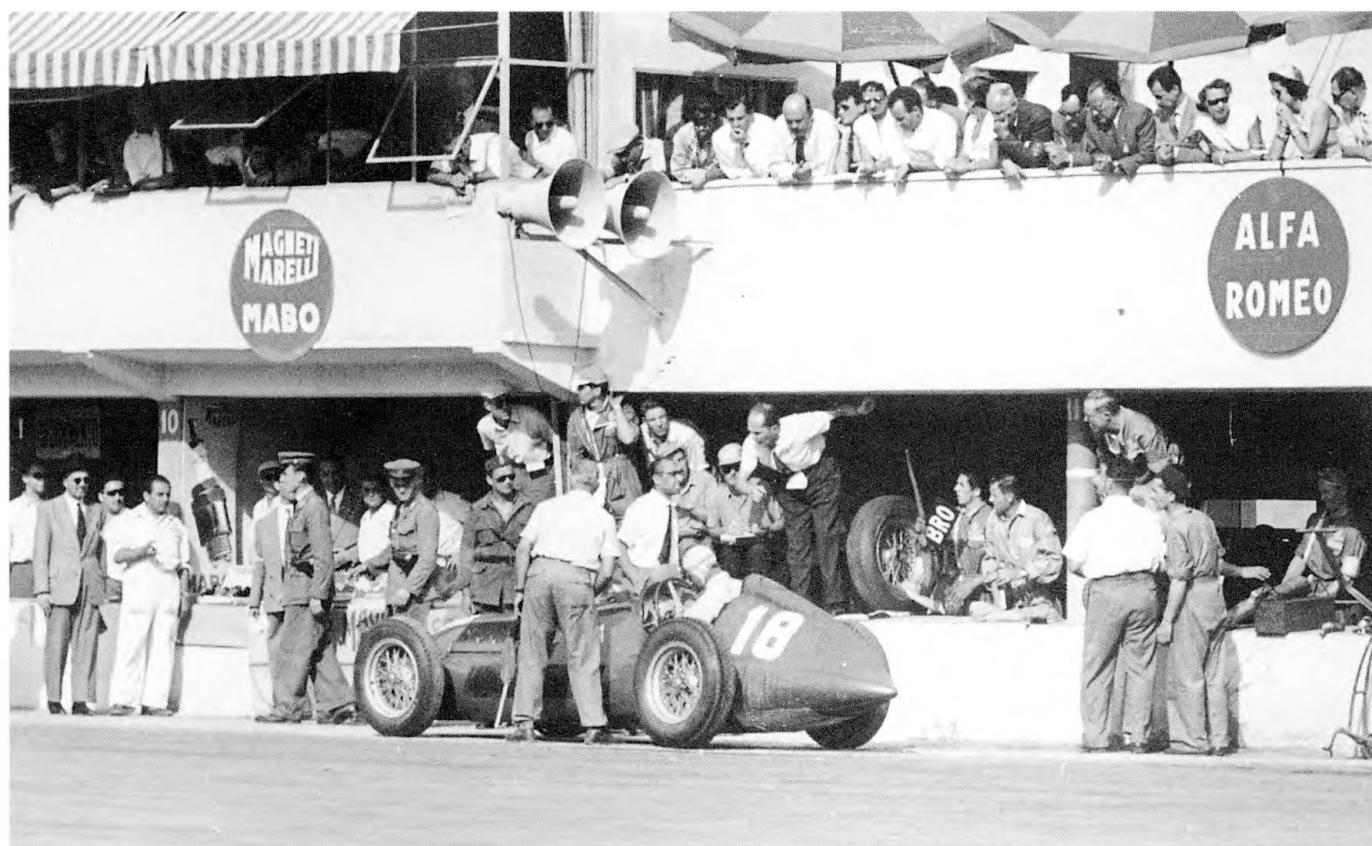
and Gallo saying they agreed to this move to keep the unions happy and quiet.

Although Fangio was quickest in practice, it was only by two-tenths of a second, and he was followed not by one of his teammates, but by Ascari, making the debut of the Ferrari 375 with unblown 4.5-litre engine. Dorino Serafini was replacing the injured Villoresi in a similar car, but he was six seconds slower than Ascari, and Farina, Sanesi, and Fagioli were quicker than him, with Taruffi just behind. According to Sheldon and Rabagliati (1993), Farina was chosen to win because he had been given the latest car, a 159, although in their view it was a reworked 158. (This is probably true of all the 159s.) Hull and Slater (1982) say that Farina had the latest 370bhp car but do not call it the 159, while other writers are

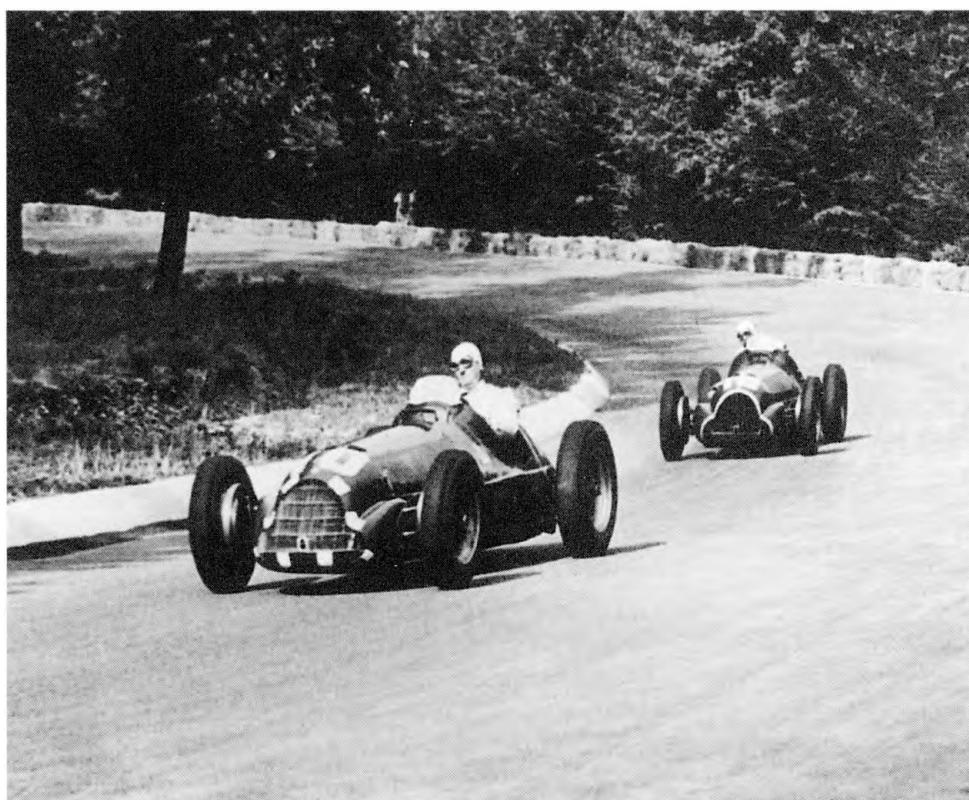
of the opinion that the 370bhp engine had already been used. Perhaps this was the car Fangio drove at Reims?

According to Fangio (1961, p.108), Farina's 159 had 'additional horsepower built in by the factory engineers. I, too, had a very fast 159, but in fact it let me down on the eighteenth lap in an inexplicable way.' Hull and Slater (1982) report Ascari retiring on lap 22, and then Fangio pulled in with a seized gearbox. As Ascari took over Serafino's car, Fangio took Taruffi's, but this later retired with a dropped valve. Venables (2000) however, argues that Fangio came in with a boiling engine, and agrees that the Taruffi car went out with the dropped valve with Fangio driving. Farina was left in the lead and Ascari did well to come back up into second place,

1950: 'The 3 Fs' and a World Championship



Fangio in practice for the Gran Premio D'Italia, held on 3 September 1950 at Monza. Fangio is in the 158.



Farina was a full second and a half slower than Fangio in practice, although Farina was driving the 'new' 159; in truth, a 158 with a more powerful engine. Fangio chased Farina but was forced to retire. He took over Taruffi's car but that failed as well. (Alfa Romeo Storico)



The unions argued for mechanic/test driver Sanesi to be in the Italian Grand Prix. He got on to the front row but retired with engine trouble. (Alfa Romeo Storico)

1950: 'The 3 Fs' and a World Championship

ahead of Fagioli. The reliable Rosier was fourth, although only Raymond Sommer got anywhere near the pace of the Alfas and Ferraris in his Talbot-Lago. Tragically, Sommer was killed at Cadours a week later in a

Formula 2 race, in a major blow to French racing enthusiasts.

When the first World Formula 1 Championship went to 'Nino' Farina, the Italian press went wild, and Fangio went home,



'Nino' Farina became the first World Drivers' Champion, although there were many who felt Fangio was more deserving of the title. (Alfa Romeo Storico)

disappointed by losing and by the joy that was felt because the 'foreigner' had lost. It is interesting that in his 'other' autobiography, Fangio (1992) recalls the events at Monza as having involved a tyre puncturing and the radiator being holed, as steam was pouring from under the engine cover. Indeed, he says, the valve failure stopped the Taruffi car. His co-writer in 1992 argues that there was no need to be bitter, but his earlier account displays considerable bitterness; whether this was Fangio's view or that of the co-writer is impossible to say.

Farina had won the Championship on thirty points, with Fangio second on twenty-seven and Fagioli third on twenty-four. These three drivers had won a total of eighty-one points and all the other drivers who scored managed only fifty-one points between them.

Autosport (Sept. 15, 1950, p.99) announced that 'Alfa Romeo are said to have a new 4.5-litre Formula 1 car, and also a hush-hush 4-cylinder Formula Two 2-litre'. These rumours and stories of the revised 512 also appeared in the press before the 1951 season.



After winning the 1950 World Championship, Alfa Romeo was asked to exhibit their cars and the complete range of products, including ovens and buses, through the streets of Milan. (Alfa Romeo Storico)

↓

GESTIONE C O S E 1950

Freni incassati		L. 59.000.000,==
Spese: trasferite, viaggi, assicurazioni, trasporti, premi a corridori	L. 45.000.000,=	
Spese studio, progettazione, costruzione, revisione, mon- taggio, riparazione	" 37.000.000,=	
	L. 82.000.000,=	L. 59.000.000,==
Perdita a pareggio		" 23.000.000,==
	L. 82.000.000,=	L. 82.000.000,==

Nel considerare il bilancio di cui sopra occorre tenere pre-
sente che anche quando l'Alfa non ha preso parte a competizioni
sportive ha dovuto ugualmente sopportare spese per studio e miglio-
ramento delle vetture da corsa. Queste spese, nel 1949 (stagione
nella quale l'Alfa non prese parte a competizioni sportive), ammon-
tarono a L. 21.000.000,= .

Di conseguenza, se dalla spesa per la stagione 1950, toglia-
mo questo importo fisso di L. 21.000.000,=, il bilancio è pressochè
a pareggio.

han

5/2/51

An outline of costs incurred during the 1950 racing season. The accounts are done in a fairly basic manner! (Patrick Italiano)

P R E M I C O R S E 1950

C O R S E	F I R E L I			F E R O P O			L O D G E			B E R L I			B R E T O I L	C A S T R O L	T I P. T. I N T E R I P.			I M P. D A I M C A S S. A S P R O V. D E S T. G A R E			
	1°	2°	3°	1°	2°	3°	1°	2°	3°	1°	2°	3°			Fr. Fr.	1°	2°	3°	Lira	Lst.	Fr. Fr.
1000 MIGLIA	-	-	-	-	-	10.000	-	-	-	-	-	-	-	-	-	-	-	-	10.000	-	-
SAN REMO	200.000	-	-	25	12	5	-	-	-	-	-	-	-	-	-	50	30	20	200.000	25	-
G.P. D'EUROPA	1.000.000	500.000	250.000	50	25	10	75	40	20	200	60	30	20.000	-	-	30	30	20	1.750.000	510	20.000
MONACO	300.000	150.000	-	25	12	5	35	18	12	-	-	-	20.000	-	-	50	30	20	300.000	60	20.000
BERNA	1.000.000	500.000	250.000	50	25	10	75	40	20	-	-	-	20.000	-	-	50	30	20	1.500.000	190	20.000
SPA	300.000	150.000	-	50	25	10	75	40	20	200	60	30	20.000	-	-	50	30	20	450.000	450	20.000
BRUXELLES	1.000.000	500.000	250.000	50	25	10	75	40	20	-	-	-	20.000	-	-	50	30	20	1.500.000	190	20.000
BARI	300.000	150.000	-	-	-	-	35	-	-	200	60	30	20.000	-	-	50	30	-	450.000	295	20.000
GINEVRA	300.000	150.000	-	-	-	-	75	40	20	-	-	-	20.000	-	-	50	30	20	450.000	135	20.000
SILVERSTONE	300.000	150.000	-	25	12	5	35	18	-	200	60	-	20.000	-	-	50	30	-	450.000	450	20.000
PESCARA	500.000	250.000	-	-	-	-	35	-	-	200	60	30	20.000	-	-	50	30	-	500.000	265	20.000
ROMA	1.000.000	500.000	250.000	50	25	10	75	40	20	200	60	30	20.000	-	-	50	30	20	1.250.000	385	20.000
BARCELONA	300.000	150.000	-	25	12	5	35	-	-	-	-	-	20.000	-	-	50	30	-	-	-	-
SARAJEVO	300.000	150.000	-	-	-	-	35	-	-	-	-	-	20.000	-	-	50	30	-	-	-	-
INTEREUROPA	50.000	-	-	-	-	-	-	-	-	-	-	-	20.000	-	-	-	-	-	50.000	-	-
													100.000 (una volta tanto)	2.000.000 (una volta tanto)					2.000.000	-	100.000

La R.I.V. vi ha concesso che netto a na/ disposizione 1.000.000 per tutte le corse (vedi da 25/51)
 Gagne 1.000.000
 100.000

= 1950 = P R E M I C O R S E A L F A R O M E O = 1950 =

C O R S A	PREMI INGAGGIO	PREMI DI CORSA	PREMI delle GARE			BINEFORBI	TOTALI DA IMCASSARE					I G E R I
			L. It.	Lst.	Fr. Fr.		Lire It.	Lst.	Fr. Fr.	Frav.	Fr. Belg.	
Gr. Pr. SAN REMO	200.000 Lit	200.000 = Lit.	200.000	25	=	45.000	1.845.000	25	=	=	=	1.
Gr. Pr. EUROPA	1.000 Lst	1.000 = Lst.	1.750.000	510	20.000	carico org.	1.750.000	2540	20.000	=	=	6.
Gr. Pr. MONACO	1.050.000 Frf	675.000 = Frf.	300.000	60	20.000	parc. ser. org.	300.000	60	1.745.000	=	=	3.
Gr. Pr. SVIZZERA	12.000 Frs.	12.000 = Frs.	1.500.000	190	20.000	===	1.500.000	190	20.000	24.000	=	5.
Gr. Pr. BELGIO	200.000 Frb	163.000 = Frb.	450.000	450	20.000	✓30.000 Frb.	450.000	450	20.000	=	393.000	6.
Gr. Pr. FRANCIA	1.050.000 Frf	800.000 = Frf.	1.500.000	190	20.000	250.000 Frf.	1.500.000	190	2.120.000	=	=	5.
Gr. Pr. BARI	1.500.000 Lit	1.150.000 = Lit.	450.000	315	20.000	carico org.	3.100.000	315	20.000	=	=	3.
Gr. Pr. GINEVRA	14.000 Frs	15.000 = Frs.	450.000	115	20.000	===	450.000	=	20.000	29.000	=	4.
Gr. Pr. PESCARA	1.500.000 Lit	1.400.000 = Lit.	500.000	265	20.000	carico org.	3.400.000	265	20.000	=	=	4.
Gr. Pr. DALLI ELPR	700 Lst	395 (645) = Lst.	450.000	327	20.000	9 250 Lst.	450.000	1922	20.000	=	=	3.
Gr. Pr. ITALIA	3.000.000 Lit	1.125.000 = Lit.	1.250.000	385	20.000	==== x	5.650.000	385	20.000	=	=	6.
Premio RIV unico per tutte le gare			1.000.000				1.000.000					1.
Premio CASTROL unico per tutte le gare			2.000.000				2.000.000					2.
Premio BRET-OL aggiuntivo ai premi per ogni corsa				100.000					100.000			
Gagne				100.000					100.000			

I cambi sono stati calcolati fino al Gr. Pr. di Bari al cambio ufficiale del giorno 12 luglio 1950 e dopo tale gara sono stati calcolati al cambio ufficiale del giorno 12 settembre 1950.

(1) nuovo rapporto di cambio Lit. / Fr. Fr. = 57,29 (cambio 1950) (cambio 1950) (cambio 1950)

An account of income and expenditure during the 1951 season, in various currencies. (Patrick Italiano)

7 1951: The Final Chapter

If there had been a Constructor's Championship in 1950 and points awarded on the same basis as in the Drivers' Championship, Alfa Romeo would have scored fifty-four and, on the basis of best scores, thirty-six for four wins, while Ferrari would have had eighteen gross and eighteen net, with Talbot on fifteen and thirteen. A year or two before, or possibly not even that long, many would have had Maserati at least third and possibly second in that table. They only managed eight points in 1950, and did not look like they would do any better at the beginning of 1951; it seemed that 1951 would be a straight fight between Alfa Romeo and Ferrari. The odds were pretty even as to whether Ferrari could topple or even beat the Alfas, although their final performances of 1950 looked serious indeed.

Plans and Developments for 1951

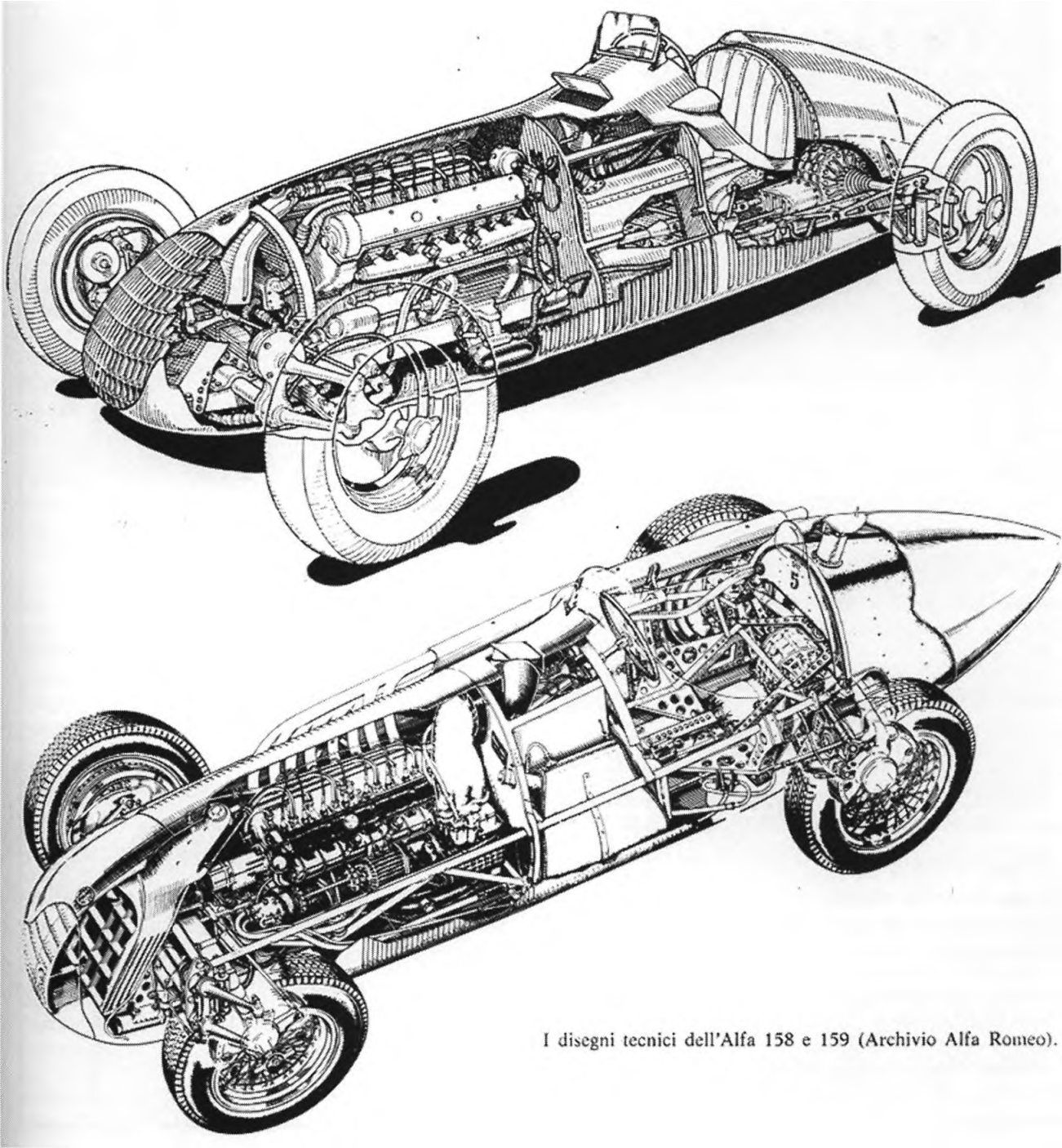
Twenty-one Formula 1 races were scheduled in 1951, although only seven would count for the World Championship, Spain having been added after the first year. It seemed likely that Alfa Corse would enter all seven Championship races and perhaps four non-Championship events – the same number as the previous year – and budgets were worked out accordingly. Ferrari were expected to do more early-season races to get the 4.5-litre car running competitively. They appeared at Siracusa in March, where Villoresi won and Ascari retired, and again at Pau later in the month with the same cars and the same result, although the new Ferrari twin-plug cylinder

head had not yet appeared. In April, this development did appear for Ascari and he duly won at San Remo; this time, Villoresi was out of luck. The first direct confrontation would be at Silverstone for the International Trophy, which had been moved to an earlier spot in the calendar, on 5 May.

In January 1951, Gioacchino Colombo left Ferrari after being replaced in the important design areas by Aurelio Lampredi, and Pasquale Gallo asked him to return to Alfa Romeo. He returned to Alfa Corse with a brief to improve the team's chances of retaining the title for at least one more year. There had already been discussions about what was to be achieved after the Championship had been won in 1950, but the management was in favour of a second attempt, and possibly a third. There had also been some initial discussions about what formula the World Championship might be run to in 1952, as there was concern in the FIA and elsewhere that there were not enough manufacturers to make the Championship attractive and draw the crowds for the race organizers. A decision on this was still some way away, however.

Colombo and Guidotti planned their season, and convinced the management not only to modernize the six existing 158s, but also to build four new cars. These would be officially known as the 159, even though they would share many characteristics of some of the 1950 cars (which had already been tagged with that label by various reporters!). In fact, there would be very little differences in the chassis.

Anthony Pritchard (1965) had several sets of



I disegni tecnici dell'Alfa 158 e 159 (Archivio Alfa Romeo).

These two cutaway drawings show the early 158 with single supercharger, and the 1951 159. (Alfa Romeo Storico)

figures when he described the new 1951 cars, and stated that, while 8,500rpm was the normal limit, the 1951 cars were capable of 390bhp at 9,000rpm, could give 405bhp at 10,500rpm on the test bench, and had survived longer runs at 9,500rpm. Pritchard was less convinced about the value of the de Dion rear axle, which he thought gave little advantage over the swing-axles. The de Dion

arrangement was adapted to the existing hubs at the rear, with double-jointed half-shafts on each side of the final drive. Pritchard did not seem to agree with Pomeroy's view that this arrangement improved cornering stability. He also noted that the 159 had enlarged brake drums fitted and that the fuel capacity had been raised to 75 gallons (325ltr). He says the new '159A', by which he is referring to the

four new cars built for 1951, was consuming fuel at better than 1.5mpg (188 ltr/100km). As his views were retrospective, he advises that various fuel tank sizes and numbers were tried during the season.

Pomeroy seems to refer only to the cars used for the last two races of 1951 as '159A', and says that these had the forward-facing orifice air intake removed and replaced by a conduit drawing air from an opening cut into the top of the scuttle. He also says that the fuel capacity was 65 rather than 75 gallons (282ltr rather than 325ltr). Pomeroy's argument in favour of the de Dion set-up – not only with the Alfetta but with other makes as well – was that the de Dion maintained the vertical balance of the wheels on the road, being less susceptible to significant changes of camber when the heavy fuel load lessened. This had become an increasingly important factor as fuel consumption rose with power and weight went up as well as more fuel became necessary.

Pomeroy (1965) confirms some of Pritchard's views (perhaps Pritchard, like many others, drew his information from Pomeroy in the first place), writing that by April 1951 an engine had been on the test bed producing 404bhp at 10,500rpm and 385 at 9,500rpm, and that engines with this capacity were the basis for the 159 designation. Internal cooling was provided by 'very rich mixtures of alcohol fuel having good values for latent heat, and . . . very large angles of valve overlap, to a point where this phase of the engine's operation was referred to in the Milan Design Department as a cooling "fifth stroke"' (Pomeroy, 1965, p.37). It was as a result of this process that fuel consumption rose so much and, of course, some 135bhp were being absorbed just to run the twin-stage superchargers. Ludvigsen (2001) adds that cool water was now being pumped directly to alternate exhaust valve guides to aid the cooling, and that a return was made to the use of twin manifolds and exhaust pipes, also to reduce the heat loadings.

By 1951, Alfa Corse had established a clear

policy on maintenance, whereby the transmission and axle gears were replaced after every race, pistons, cylinder liners and roller bearings every four races, connecting rods every six, and crankshafts and superchargers after the season. This contradicts at least one report about crankshafts being replaced much more often than that (Ludvigsen, 2000).

According to Venables (2000), one of the new cars built in 1951 was fitted with the de Dion rear end, and this had been derived from the type that had been tried on the 512 and on the 158 in which Marinoni had been killed. He also states that the cars had longer tails to assist in accommodating the new tanks, although all the cars were fitted with more tanks. Venables helpfully explains the new nomenclature for the 159 as follows:

The four new cars were called the 159, but to avoid customs and frontier problems all the cars, including the six veterans, were now called Tipo 159s, and when outside Italy carried '159/...' plates on the bulkheads, a point that sometimes confused contemporary journalists.

Venables resorts, in his story of the 1951 season, to calling the older cars '158s' and the four new ones '159s' (Venables, 2000, p.184). It seems that not only journalists of the period were confused by this system!

Borgeson (1965) was firm in his belief that the 159 did not exist before the new 1951 cars, whatever specifications may have appeared on earlier cars. While quoting 420bhp at 9,600rpm, he differs from some of the other sources on this subject, but presumably gained his knowledge directly from Colombo himself. He points out that Colombo never had to redesign the valve springs, which maintained the same pressure as they had many years before when some 2,600rpm was being used. As Jim Stokes was to argue later, the cars were 'over-engineered' in several areas. Colombo did manage to remove some 23g from each of the valves. The oil tank to the

Fangio won the first heat of the 1951 International Trophy at Silverstone, and Farina the second, but the heavens opened during the final and Fangio, shown here in the 159, dropped away to fourth. Reg Parnell was in the lead in the Vandervell Ferrari Thin Wall Special when the race was stopped, at six laps. It was the first time since 1946 that the Alfas had been beaten.



driver's left in the cockpit had been moved for 1951 to a location under the cowl, and replaced by an additional fuel tank.

Through his relationship with principal figures at Alfa Corse, Griff Borgeson had more detailed information than many others writers, much of which never appeared until many years after the cars finished racing. Colombo revealed to him that the chassis changes for 1951 – to the four new cars – included an increase in the thickness of the chassis tube material, to 0.079in, and the addition of 1-in cantilever tubes high above the two frame rails. The cantilever frame was only used once, in the last race of the season, but the thicker tubes were used on all the new cars. An exhaust cooling box helped to keep heat away from the engine and this box also had an air intake to the blowers. This air came in through a tube located underneath the right side of the radiator, and it also pushed air through the exhaust box to carry the heat away. The Porsche-type trailing arms were lightened slightly and worked on one friction and one tube shock on either side. The two leading-shoe front brakes had Alfin drums, now

enlarged to 14.8in diameter and 2.2in wide. The four-speed shift mechanism for the unsynchronized rear-mounted transmission remained on the left of the driver, and was gated with a lock-out for reverse gear. A perforated metal cover had been added to fit over the driveshaft as it passed between the driver's legs. The standard St Christopher medal was retained on the dash of the 159 as on the previous cars.

The First Race of the Last Season

A strong entry was received for the International Trophy at Silverstone (although Scuderia Ferrari withdrew its entry for Ascari and Villorese), resulting in a good field for the two heats and the final. Alfa Corse sent four cars, which Sheldon and Rabagliati (1993) list as 159s. This is technically correct because they would have carried 159 chassis plates, but Venables points out that they were 158s, cars from the previous years; in another puzzling aspect of the Alfetta history, they might have been many years old. Fangio, Farina and Sanesi were joined by Felice Bonetto.

Felice Bonetto

Bonetto was no youngster when he came to drive the Alfetta. He was 48, three years older than Farina (but five years younger than Fagioli). He came from the Brescia area and had raced motorcycles for a year in 1920 before switching to cars. After many years in fairly minor cars and events, in 1933 he drove a privately owned Alfa P3, coming third at the Monza Grand Prix and winning the Mountain Grand Prix in Switzerland. He disappeared from racing for many years, before reappearing in Portugal to win a race in a 12-cylinder Alfa Romeo, which he had driven from Italy to the race. He went on, after 1951, to become an important long-distance driver, although only for a short period.

At Silverstone, the weather was changeable through practice, and Sanesi was the fastest qualifier of all, several seconds ahead of everyone else. However, Heat One turned into a fierce battle between Fangio and Reg Parnell. Parnell was entered by Tony Vandervell in the Thin Wall Special, a 4.5-litre Ferrari that the Vandervell team was turning into the quickest of these cars by using technology that was often well ahead of what Scuderia Ferrari could come up with, particularly in the bearings department, which was Vandervell's forte (McDonough, 2003). Parnell hung on to Fangio and was only three seconds behind at the end of the heat, and forty-two seconds ahead of Bonetto. In spite of having to come from the third row of the grid, Farina soon made it into the lead, and was thirty seconds in front of Sanesi at the end of the fifteen laps, with Prince Bira's Ecurie Siam Maserati 4CLT/48 an equal distance behind.

As the grid lined up for the thirty-five-lap final, the skies opened and the rain soaked everyone and everything on the circuit. The officials decided, none the less, not to delay the start and Bonetto went out into a short lead, which was taken over by Parnell, who stayed in front for six laps. By this time the Alfettas were dropping back, being unable to put their power down, and the race was then stopped

and not restarted. In his report, Venables (2000), calling the cars the 159s (although earlier he had said they were the 158s), states that the 159 engine might not have been strong enough to deal with the Ferraris.

Venables also claims that this was the first time the Alfettas had lost since 1946. Strictly speaking, this is not accurate, since the race was declared 'no race', which means there was no result. Even though the places and prizes were awarded to Parnell, Hamilton and Whitehead, with Fangio 'fourth', the race had no real meaning. In any case, the conditions were so appalling that the final order was something of a lottery, although many reporters credit Parnell for staying in front and out of trouble. The six laps of power-boating simply bore no relation to a full race in wet or dry conditions.

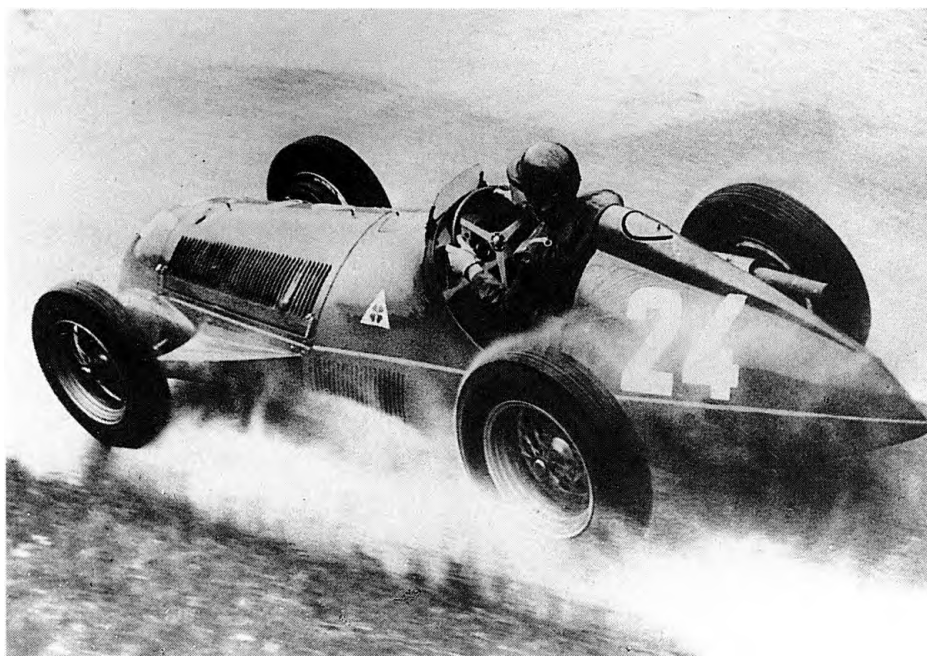
Taruffi in the 'Swiss Mix'

As there was no Monaco Grand Prix in 1951, the first Championship race was the Swiss Grand Prix at Bremgarten on 27 May, three weeks after Silverstone. Farina in a Scuderia Milano Maserati had beaten Froilan Gonzales in a Talbot-Lago at the Grand Prix de Paris in the Bois de Boulogne. Gonzales had earned respect for his performance over the winter when some pre-war Mercedes were allowed to race in the South American series by the FIA, and the rotund Argentinian had been quite successful. His Paris race in the Talbot had only served to enhance his growing reputation. Fangio had led that race in the super-charged Gordini, but as usual the Gordinis did not last the distance.

Five cars were sent, for Fangio, Farina, Sanesi and de Graffenried, who was back in the team, as Guidotti had promised, and was the best Swiss driver. There was a spare, and the cars consisted of three 158s and two 159s, according to Venables (2000); one of the 159s had the de Dion rear end and the other had the older swing axles. Sheldon and Rabagliati (1993) again list all the cars as 159s, and for the



Consalvo Sanesi was fourth in the 1951 Swiss Grand Prix, held at Bremgarten again, on 27 May 1951. (GPP)



The rain reappeared at Bremgarten as it had at Silverstone, but Fangio splashed his way to victory. (Alfa Romeo Storico)

first time indicate that Sanesi had chassis number 9, a hint that possibly this car was examined more closely, as it might have had the de Dion rear end. In fact, Venables confirms this, and Sanesi was in the de Dion car and Farina in the swing-axle 159, with the other two in 158s. The allocation was not made until after practice, which had been dominated by Fangio and Farina and then Villorresi, who was four seconds behind Fangio but ahead of Sanesi, with de Graffenried going well again, Taruffi and Ascari in the other Ferrari. At this point the Ferraris were looking unthreatening.

Race day was wet but not nearly as bad as at Silverstone. The cars were fitted with splash guards behind the front wheels for the first time, having learned a lesson at Silverstone and in other races. Fuel was topped up on the grid, although there was some betting that Sanesi was going to try and manage without a stop. Fangio was absolutely determined that he would get in front in the wet as he had been enormously disappointed by the Silverstone race. He realized that he had to be in front of the blinding spray if he was to have a chance of winning (Fangio, 1961). He did exactly that, followed by Farina and Sanesi in front of

the first Ferrari of Villorresi, which passed Sanesi and, blinded, drove into a hedge! Fangio made a fuel stop but came out behind the one-stop Farina and re-passed him, while Taruffi was making up for being overwhelmed by the wet at the start. After Taruffi got past Farina, Farina spun near the end, but was still third, in front of Sanesi and de Graffenried, with an unimpressive Ascari sixth. Fangio (1992) recollected that the '159s had four of the first five places', indicating that possibly he did not pay much attention to the precise labelling of the Alfettas as it would seem he was in a 158.

De Graffenried threw more light on the car situation in a recent interview:

The Swiss race in 1951 was when it rained, and I had been given the most powerful car. In those days there were four drivers in a team and they could change cars. That car was meant for Fangio but he didn't need it because it was wet. That one had 400 horsepower and I managed to keep the car on the road, which was not easy because it was so powerful, but I finished fifth and Fangio won the race; he had made a good choice, and he was very good at planning his race.



Sanesi on the slippery cobbled Bremgarten track.

In answer to the question as to which car he was driving, and the difference between the 158 and 159, his answer was very interesting:

I think the main difference was that the 159 had the de Dion suspension, and that made it have better roadholding. This didn't matter so much in that race because it was wet and we were going slower, but I felt the de Dion car was an improvement, even in that race.

This will come as something of a surprise to anyone who thought Sanesi was racing the de

Dion 159, although de Graffenried pointed out several times that there was no problem in switching cars around in those days, even at the last minute. He believed it was quite possible that Fangio had settled for the less powerful car, with which de Graffenried had practised. This makes sense in light of the fact that Fangio set a blistering pace in the practice, presumably driving the 400bhp car, coming close to Lang's outright circuit record, set in the Auto Union. His fastest lap in the wet race was considerably slower, at 95mph (152km/h).

Rare photo of 'Toulo' de Graffenried in the 159 in the Swiss race, where he was fifth. (de Graffenried Collection)



A Biker in the Alfetta?

There was a long-standing mystery relating to a certain photograph of a young man sitting behind the wheel of one of the Alfettas, apparently at this Swiss Grand Prix. It seemed to be multiple World Champion motorcyclist Geoff Duke. Apparently, he had been in Switzerland that weekend for a bike race, and it was not far from the Grand Prix, so he went along to have a look. As Duke was looking at the car, Fangio recognized him and invited him to sit in it, being very pleasant to him, one professional to another. That was when the photo was taken. Although Duke would go on to do some interesting races in cars, he did not manage to get back into an Alfetta.



Motorcycle champion Geoff Duke was racing in the 500cc Grand Prix on the same day as the Formula 1 race in Bremgarten, and was invited by Fangio to sit in his 159.

Farina's Trips to Ulster and Spa

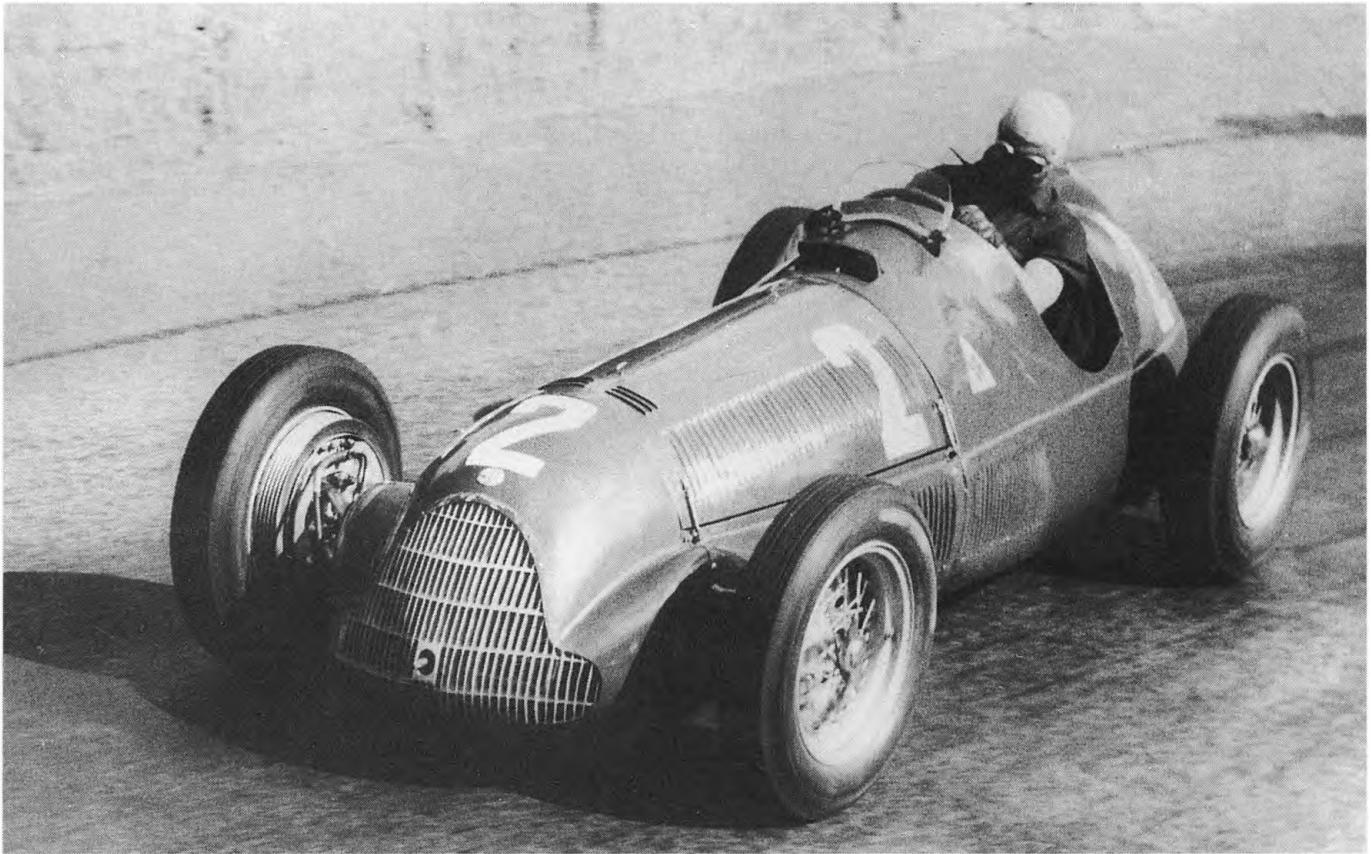
In the three-week gap before the Belgian Grand Prix, a single car, a 158 according to Venables (2000), was sent to the non-Championship Ulster Trophy race at Dundrod in Northern

Ireland, on 2 June. This was a difficult and dangerous 7.4-mile (11.85km) road circuit. While Sheldon and Rabagliati (1993) say this was a 159 in Farina's hands, it did not seem to make much difference. Farina's skill and the car's roadholding on the twisting circuit meant that Reg Parnell in the Thin Wall Special Ferrari was less of a threat than he had been on the open spaces of Silverstone. Parnell finished over a minute behind Farina after 200 miles (320km), with Brian Shawe-Taylor getting another good result in third in his ERA B-type.

When the cars showed up at Spa for the Belgian Grand Prix on 17 June, there were three Alfettas, all 159s, with Fangio in the de Dion chassis number 9, and Farina and Sanesi in the swing-axle 159s. (This time, the key sources seem to agree on the cars for the race.) The Fangio car now had the full complement of fuel tanks, with the usual one in the tail, two alongside the driver's legs, one in the scuttle and even one on the offside of the engine bay. This meant that there was a 70-gallon (305ltr) capacity, and with all that fuel at the start, the driver must have been required to have a lack of imagination. Farina's car did not have the tank in the scuttle, and Sanesi had three cockpit tanks (Hull and Slater, 1982). The Alfettas had 19in Engelbert tyres on 19in rims with offset spokes, these to raise the gearing on the long, long Masta Straight.

The Ferrari opposition was for the first time complete with three twin-plug ignition cars, for Ascari, Villoresi and Taruffi. Amazingly, while there were seven Talbot-Lagos, there were no Maseratis, although it was clear that the fight would be between the Alfas and the Ferraris.

Fangio and Farina were quickest, from Villoresi, Ascari, Taruffi and Sanesi. In the race, the start was dramatic as Villoresi moved into the lead, from Farina and Ascari, with Fangio fourth. Sanesi stalled on the line but was soon up to sixth, the slowest Alfa being so much quicker than anything else. Farina was then in the lead, timed at 193mph (309km/h) on the Masta Straight, and after some laps Taruffi



Fangio set the fastest lap in the Grand Prix de Belgique on 17 June 1951, but dropped to ninth after a jammed wheel cost fourteen minutes in the pits and Farina won.

retired with a rear-axle failing. Farina and Fangio were taking Eau Rouge corner going up the hill at Spa in huge breathtaking drifts. When it came to refuelling, Farina was away in one minute but Fangio had a wheel spoke head on the new 19in wheels jam behind the hub splines and he lost a full fifteen minutes as the tyre had to be changed on the rim on the car. This allowed Ascari into second but he finished nearly three minutes behind with Villoresi another ninety seconds adrift. Sanesi had his radiator explode on lap 11, forcing him to retire.

Farina had moved into the lead of the Championship, but not by much, and, although the Ferraris looked good on paper in second and third, they had really not challenged the Alfettas on this high-speed circuit. Alfa Corse could go to the next race with a degree of confidence.

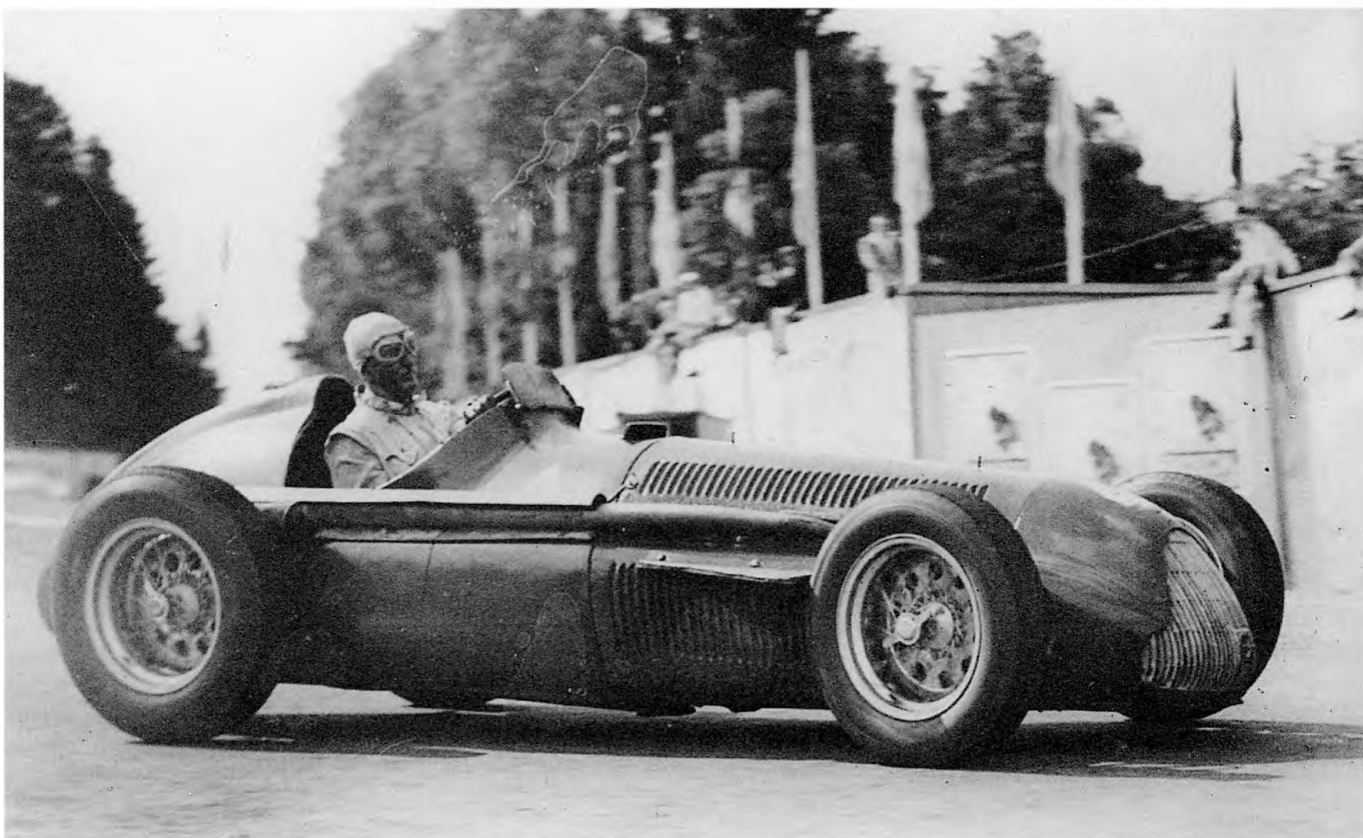
'2Fs' Win in France

The French Grand Prix on 1 July at Reims was also the Grand Prix of Europe. Fagioli rejoined the Alfa Corse team for his first 1951 outing, Sanesi was in the de Dion 159 chassis 9, and Farina and Fangio were in the other two team cars from Spa. Ferrari entered four cars to attack the Alfas, adding Gonzales to the Scuderia strength. Venables (2000) lapses into calling the Alfettas both 158s and 159s, but it would appear that they were all 159s, although it was interesting that the de Dion suspension had not yet found its way on to a second car. The *Autosport* report of the race hinted that the Alfetta bodies seemed 'fatter', indicating that there may have been panel changes to accommodate the fuel tanks, although these do not seem to have been noticed at Spa.

1951: The Final Chapter



Ascari finished second to Farina in the 1951 Grand Prix de Belgique as the Ferrari threat got more serious in 1951.



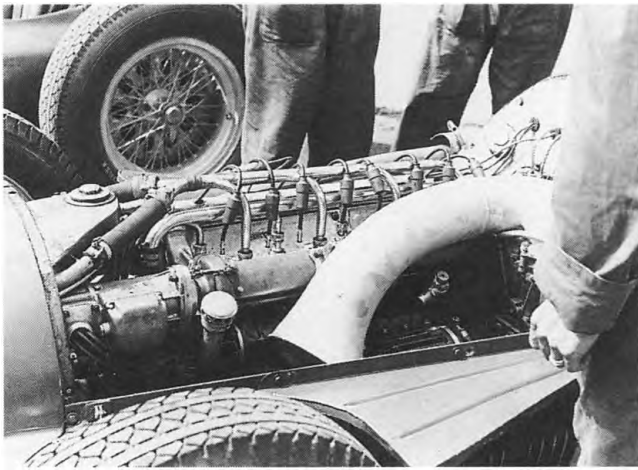
Farina in action at Spa in 1951. (Alfa Romeo Storico)



Farina is congratulated on his win at Spa in 1951.



The race director's office at Reims for the Grand Prix de L.A.C.F., on 1 July 1951.



Engine detail of the 159 with the 'elephant-trunk' air intake, at Reims 1951.

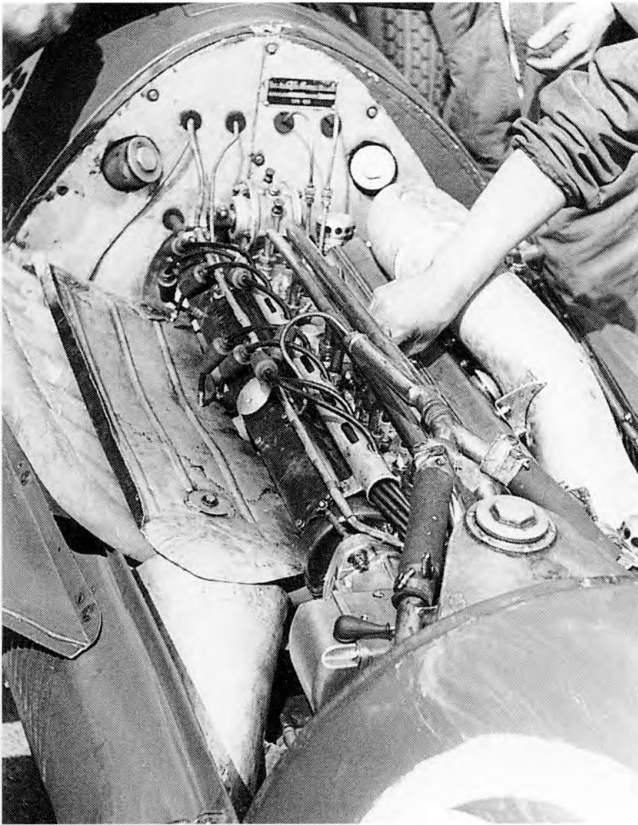
Fangio and Farina again led in practice but Ascari was not that far away this time, with Villoresi just ahead of Sanesi, Gonzales and Fagioli, and Chiron in the Talbot-Lago. The Alfetta splashguards had been fitted for part of practice and were then removed. Farina made the worst start, spinning his wheels at the beginning of the seventy-seven-lap race, which would be all of 374 miles (nearly 600km) in blazing heat. As the pack of red cars appeared over the hill on the way down to Thillois before turning right towards the pits, it was Ascari in front of Fangio, and it stayed that way for nine long laps. Then Ascari was



One of the 159s being prepared without the 'splash guards', which appeared in 1951.

The 159 with the 'splash guards' added behind the front wheels. Sanesi's car is behind. Zanardi watches on the right.

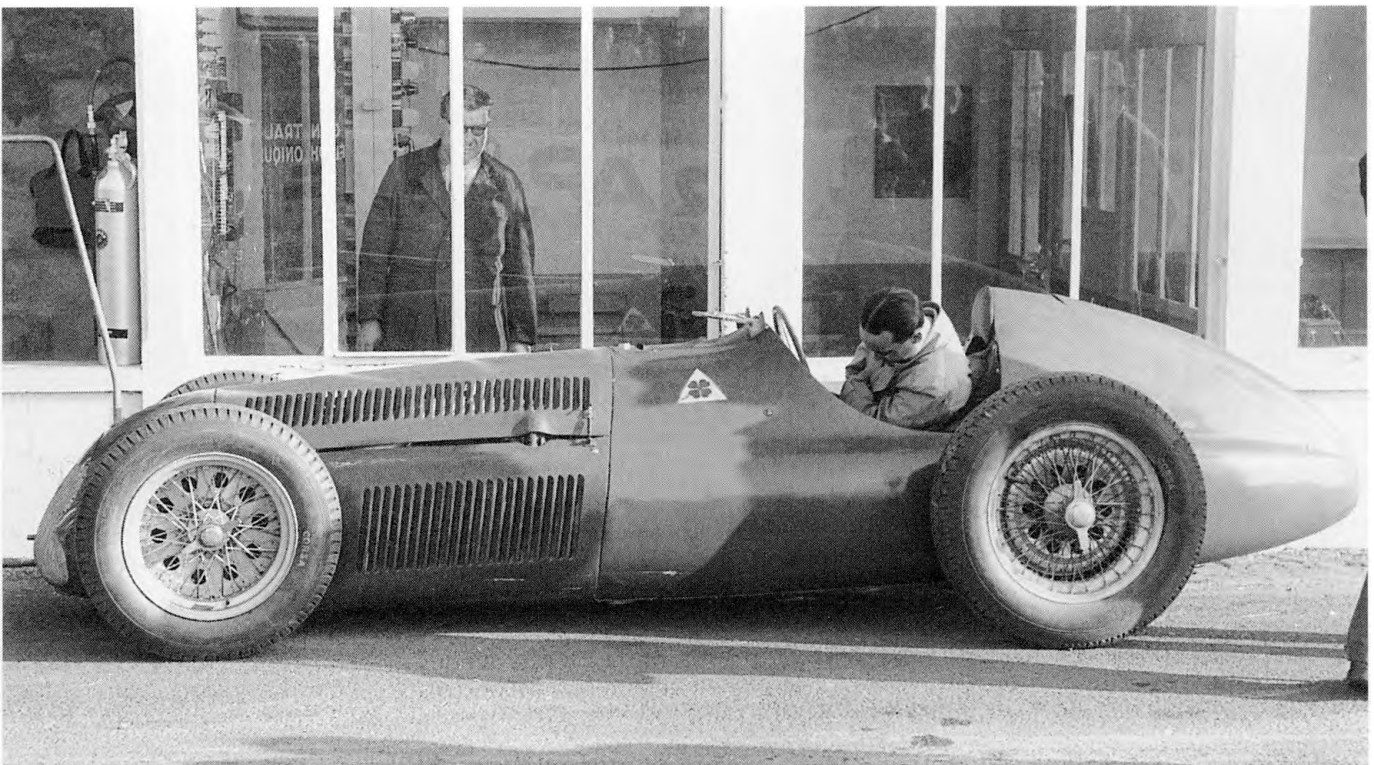




Sanesi's car, which is identified as chassis 159 9, one of the few cars to have been identified with a chassis number in period, being worked on before practice.



Detail photo of the right rear suspension and exhaust.



A circuit official watches work on the 159.

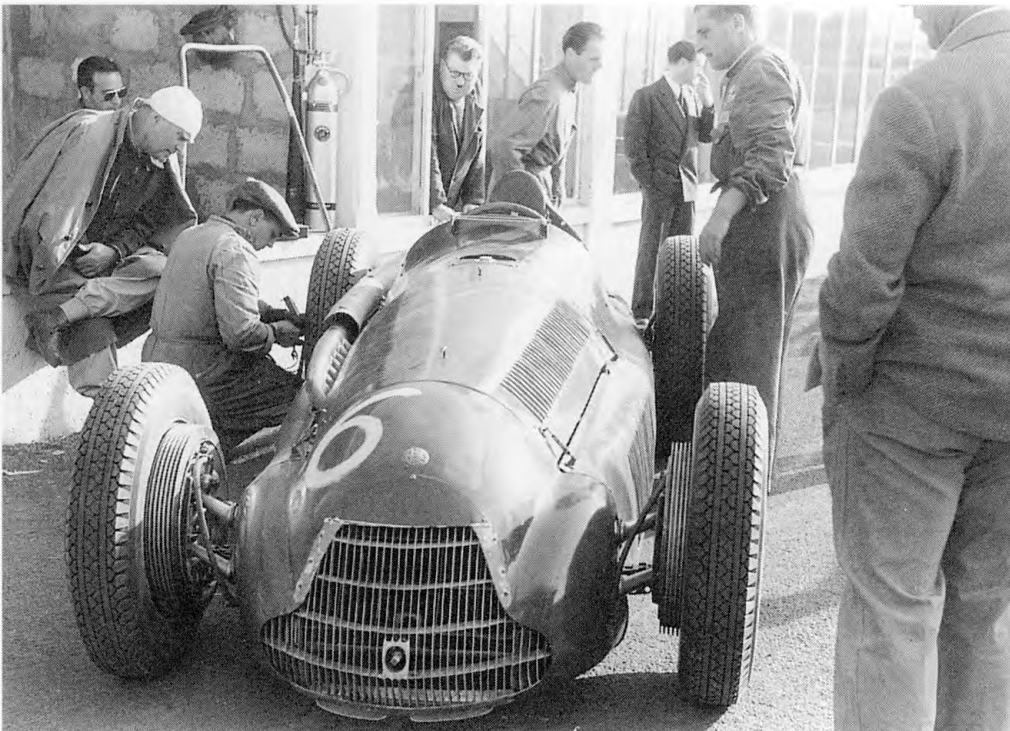
1951: The Final Chapter



The cockpit of the 159, again mostly unchanged, although the St Christopher's medal has gone. Note the interior rearview mirrors.

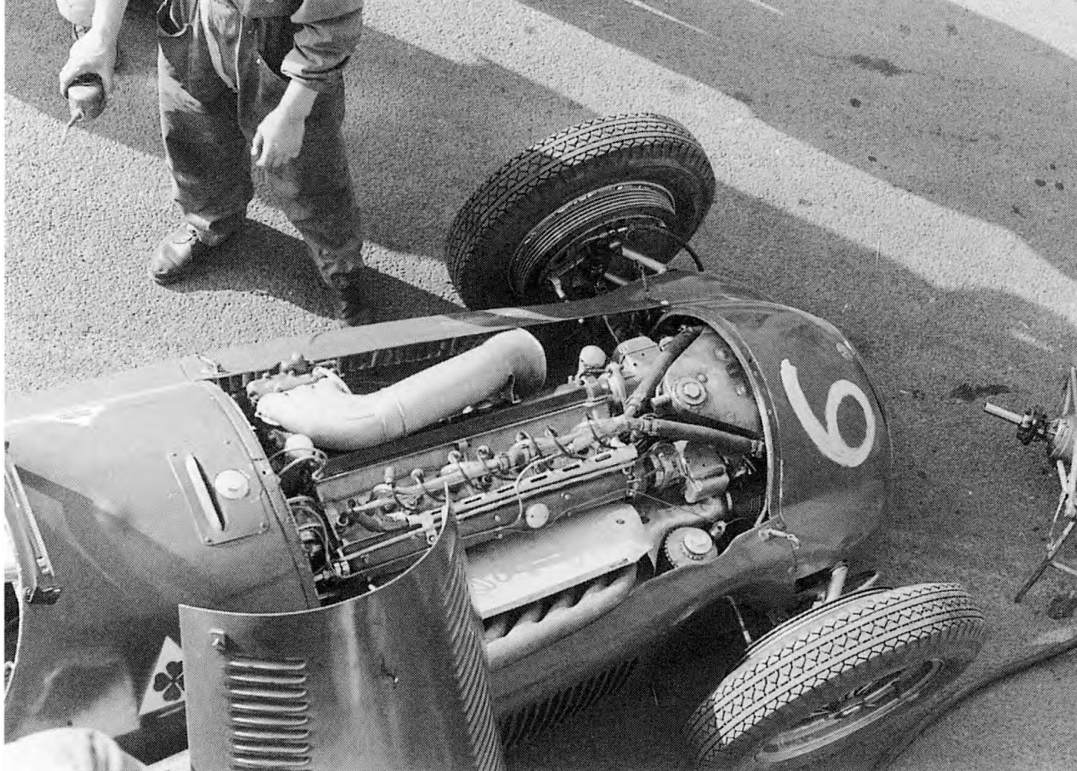


Overhead view of Fangio's car pre-practice. Even with the exhaust guard, it was still possible to get burnt on the right arm.



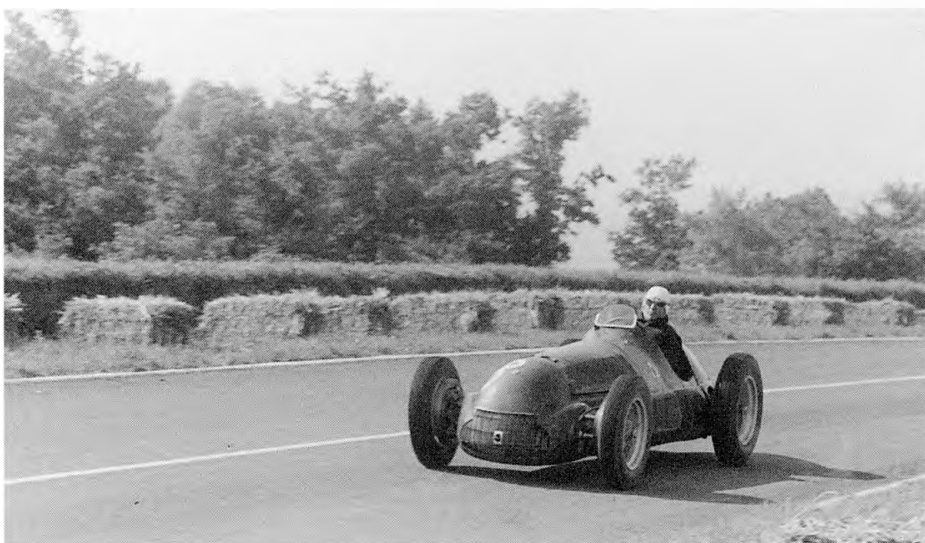
Luigi Gafoli oversees tyre-pressure adjustments on Sanesi's car. The circuit official is still intrigued.

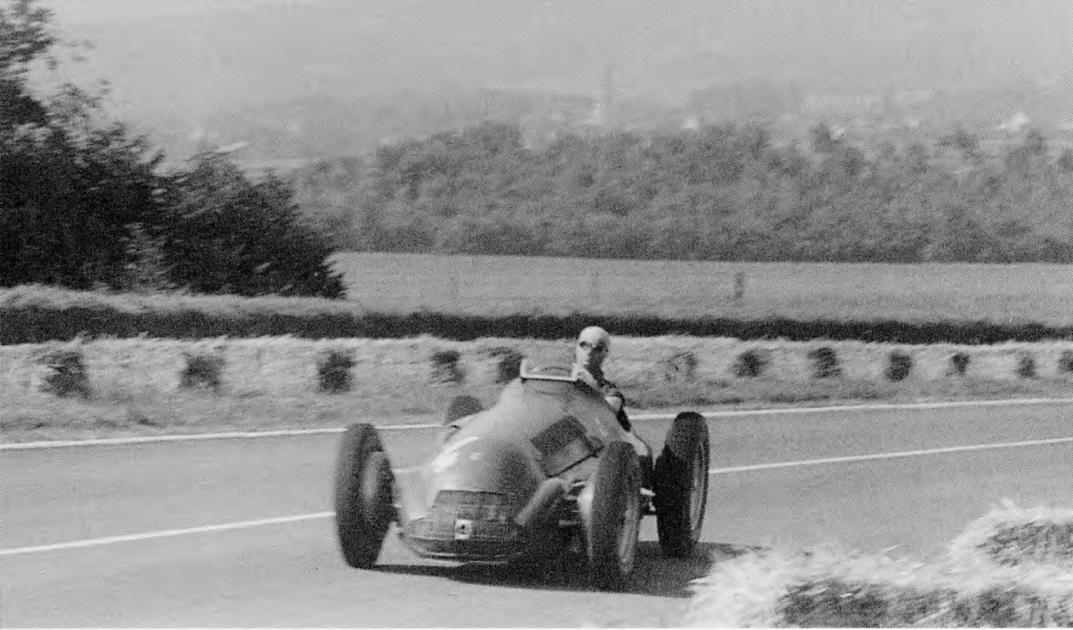
Overhead view of Sanesi's car showing the air-intake system.



Sanesi at the 1951 French Grand Prix. (GPP)

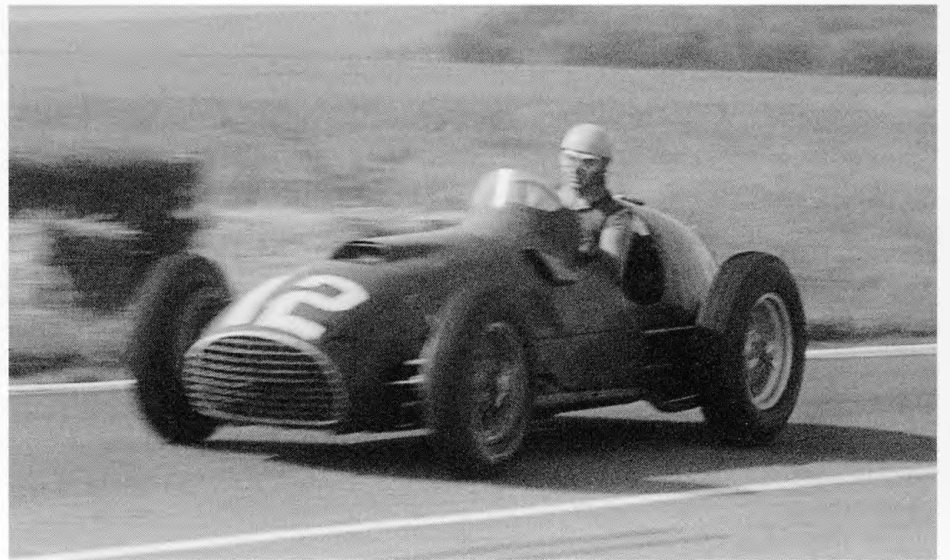
Fagioli in practice at Reims in 1951. Note that the grille shutter has not been fully removed.



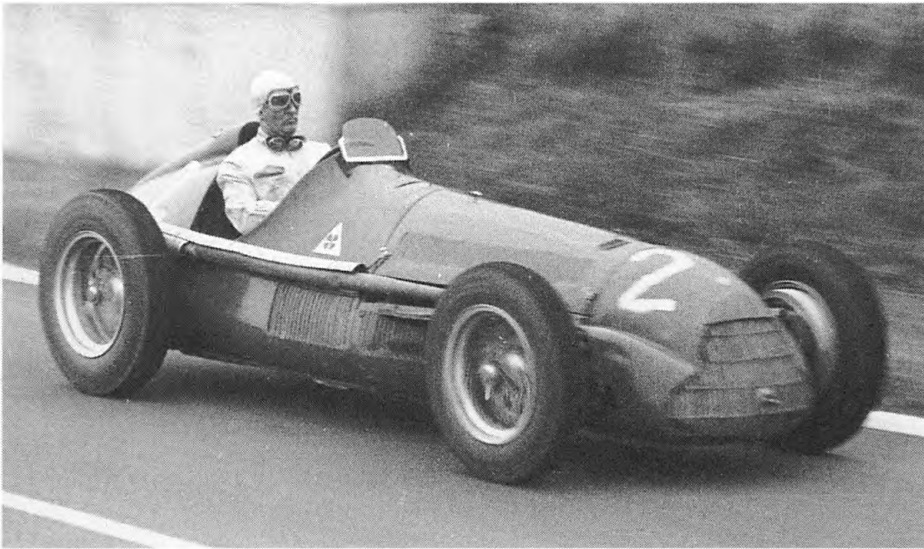


Fangio in four-wheel drift in practice at Reims. The individual nose markings have not yet been added.

Ascari in the Ferrari 375 in practice.



*Another view of Fangio in practice.
(Ferret Fotografics)*



Farina looks stern in practice at Reims. He was two seconds slower than Fangio. (Alfa Romeo Storico)

in the pits, his brakes gone and his gearbox going, and he lasted only another lap. Then Fangio slowed, his magneto giving trouble, as was Sanesi's. Then smoke was billowing from Villoresi's Ferrari and Gonzales and Fagioli were in front. When Fagioli pitted for fuel and tyres, he handed his car over to Fangio, and got into Fangio's repaired car.

Farina then led, made his stop still in the lead, and Gonzales handed over to Ascari, leaving Farina a minute ahead of the Fangio/Fagioli machine. During the next set of pit stops, Fangio and Farina both dropped behind the Ascari-driven Ferrari, but that then

stopped again with brakes failing; Fangio was into the lead, and now Farina had magneto trouble. Fangio/Fagioli shared the points for victory, with Fangio getting an extra one for fastest lap, at 118.29mph (190km/h), with Gonzales/Ascari second, Villoresi plodding on to third, and Reg Parnell in the Thin Wall Special fourth. Farina just stuttered round to fifth, while poor Sanesi had to push his car to the finish for the last mile, his magneto gone, possibly as a result of getting so hot.

Fagioli's achievement was to become the oldest driver ever to win a World Championship race, even though it was a shared win.

A real road circuit – trees and all. Farina in practice at speed on Reims' main straight.



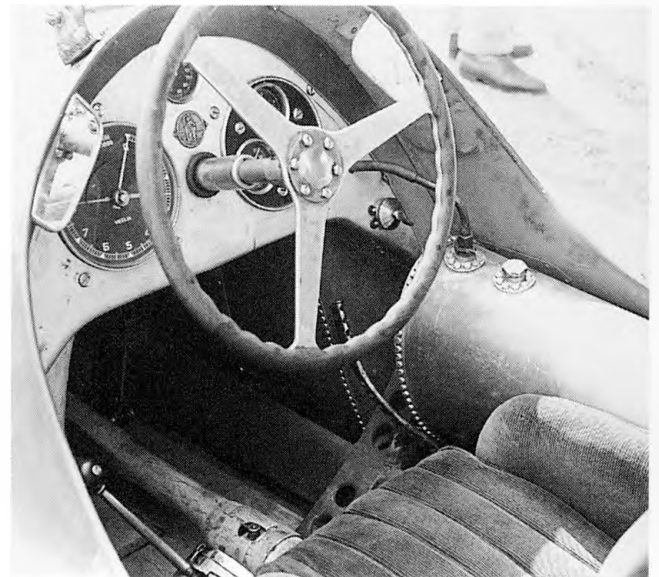


Sanesi in practice, and the view down the main straight towards Thillois.



The individual nose markings being applied in the pit lane before the 1951 French Grand Prix.

Fangio now led the Championship by a single point from Farina, whose car had been throwing treads in the latter part of the race. Interestingly, Reg Parnell went the distance without changing tyres. Surely, Ferrari only needed a bit



Fangio's car, which retired in the 1951 Reims race. The St Christopher medal is in this cockpit.

more reliability to get their hands on the victor's cup?

Silverstone: the Winning Streak Ends

Fagioli's feat at Reims was not rewarded with another drive at Silverstone for the British Grand Prix. The Italian was replaced by his countryman, Felice Bonetto, having a second run at Silverstone in this season. According to Venables (2000), all the cars at Silverstone on 14 July were 159s, and Fangio (chassis 7), Farina (chassis 9 with de Dion rear) and Sanesi (chassis 8) had the full complement of fuel tanks, but Bonetto (chassis 1) had only the side



Fangio (4) leads Ascari (12) at the start at Reims.

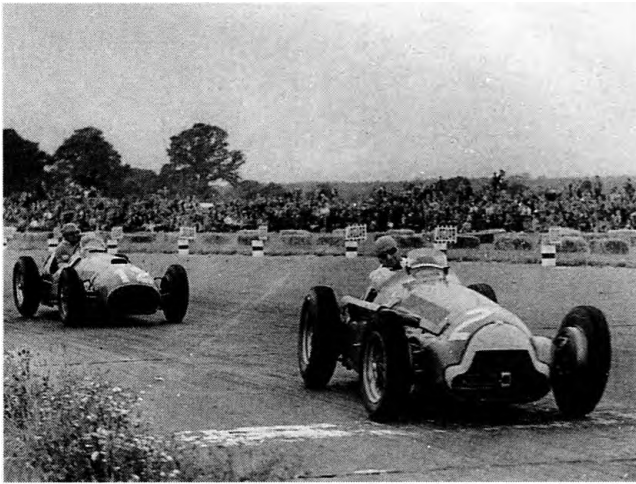
Sanesi and Farina acknowledge the large French crowd. (Ferret Fotografics)



tanks and older-style, slimmer body. Bonetto was to run on Pirelli tyres, with 550-17 fronts and 700-18 rears, while the other cars would all have 550-17 fronts and 750-16 rears. By working backwards it might be possible to determine that chassis 1 was the car driven at Spa by Farina on the basis of the fuel tanks, but that would be far too speculative, as the tank arrangements changed so regularly. The chassis numbers listed for this race in Sheldon and Rabagliati (1993) would appear to be accurate. They go against Alfa Corse's policy of giving a race number to go on the Tipo 159

plate and this may indicate that the numbers were also stamped on the chassis or firewall. Hull and Slater (1982) describe Bonetto's car as the 'old Monza car', which would seem to imply it was Farina's winning car from 1950, and at the time it had been referred to as a 159 by some, at least having had all the latest modifications. There would be some logic in this being chassis number 1, although no certainty.

Several significant things happened at the British Grand Prix. The BRMs appeared, raced, finished, and even placed well. The following week's *Autosport* would have them as



Fangio leads Gonzales at the British Grand Prix; Gonzales was quicker in practice and won by a comfortable margin, in a major defeat for Alfa Romeo.

competition now for the tired Alfettas! Gonzales put a 12-plug Ferrari on pole position ahead of the Alfettas, his 24-plug team-mates, and everyone else. Then he made the most of the opportunity as he had done at Reims, and flogged the Ferrari all weekend right into the winner's circle. It was stunning, no doubt about it. And Felice Bonetto had even led the race!

Gonzales beat the Alfettas in practice, or the 'Alfettes', as some British journals were still referring to them, for the first time almost in living memory. Fangio and Farina were not that far away, but Ascari was right on their tail, as was Villoresi, with Sanesi and Bonetto trailing. Parnell and Peter Walker in the hopeless BRMs did not even record a practice time. After practice, the Alfa Corse mechanics were observed at their Brackley garage headquarters welding up a broken 159 chassis frame.

As the flag fell, Bonetto charged into the lead, but he was soon passed by Gonzales and Fangio, and Fangio then displaced Gonzales. Gonzales drove like a man possessed, using every inch of the road and quite a few inches that were not part of the road, and he stuck to Fangio, and edged away from Farina and Ascari. Fangio pitted for fuel and tyres on lap 40 and came out over a minute behind his friend and countryman. Farina kept ahead of Ascari through the stops but then Ascari went

out with a broken gearbox. When Gonzales stopped on lap 64, he moved to hand the car over to Ascari, who waved him back into it. Fangio just could not catch him and then Farina had a fire on lap 75; obviously, the engine had gone, not the clutch, as was reported (although Fangio himself later said that it was the clutch on fire). After ninety laps and 260 miles (416km) it was over: two Argentinians were 1-2.

The Alfetta had finally lost a race, although Fangio was inclined to see it as Gonzales winning – and Gonzales even more than the Ferrari. Fangio (1992) did acknowledge that Ferrari had scored its first-ever Championship win, the first for an unsupercharged car over a supercharged one, but he took his mechanics to task for putting in too much fuel at his stop, making the car heavier than it needed to be. Clearly, according to Fangio, it was Gonzales' day. This victory was the occasion when Enzo Ferrari is alleged to have said that he felt as if he had 'killed his mother' by beating Alfa Romeo, although the veracity of the story has long been contested, as Ferrari's memoirs are full of sentiment sweetened with the passage of time. One journalist of the period is also supposed to have remarked that, if it were true, then for Ferrari it 'simply would have been the price of winning'.

Ascari's Turn

Two weeks went by before the drama was due to played out again, at the Nürburgring on 29 July. This was the first post-war German Grand Prix at the circuit, where the Alfettas had not raced before.

Venables (2000, p.192) describes the pre-race scene splendidly. as follows:

The team . . . was Fangio, Farina, Bonetto and Paul Pietsch, whose former wife Ilse had been Varzi's lover. There had been indecision about the choice of Pietsch; as first Willi Daetwyler, the Swiss sports car racer, then Chiron were considered, and as a result

Fangio's 159 being unloaded at the Nürburgring for the German Grand Prix, which took place on 29 July 1951. (Biscaretti Museum)



Pietsch only managed two practice laps. Defeat had rattled the Alfa Romeo team, and in practice there were many problems. Fangio had hit the bank and bent the nose and tail of his car, there was difficulty in getting the right carburettor settings, the gear ratios were changed several times, then it was found that the notorious bumps and swerves of the circuit were making the chassis frames flex. A car was built up within hours at Portello with stiffer cross members and rushed to Germany for Fangio to drive; this may have been built up from a 158 and fitted with a 159 engine, as it had a 158 body.

This car then had further problems in the final practice as the clutch would not disengage. It was stripped and no fault was found, but Guidotti was forced to test it on the pit road and short stretch of circuit. The spring housings had been wrongly machined but there was nothing they could do, and it would only disengage at lower revs. Fangio did seem to manage with it in the race. This time both Ascari and Gonzales out-qualified the Alfas, the order then being Fangio, Farina, Villorosi, Taruffi, Pietsch, with Bonetto well off the pace on the third row.



Guidotti testing one of the cars before Paul Pietsch's test drive. (Bernhard Volker)



Satta (left) briefs Fangio, Farina (centre) and Paul Pietsch (right) at the Nürburgring. (Bernhard Volker)

Paul Pietsch

Pietsch was the last new driver to be brought in to drive the Alfetta. His choice was questioned at the time as not being very well considered and the result of confusion in the team. However, he had a long career behind him and was highly respected, if not that successful against the major pre-war teams. Born in 1911, he was reserve driver for Auto Union in 1935, and had several races in Maseratis pre- and post-war. He raced a Maserati 4CLT.48 in the 1950 Italian Grand Prix, and would go on to found the respected German journal *Auto Motor Und Sport*, and the publishing empire that owns it. He was also well known, less fortunately, as the husband of Varzi's morphine-addicted lover Ilse.

At the start of the 283-mile (453km), twenty-lap race around the daunting Eifel Mountain circuit, Fangio was soon into the lead past Farina. Ascari and Gonzales soon passed Farina as well, and Pietsch was in an

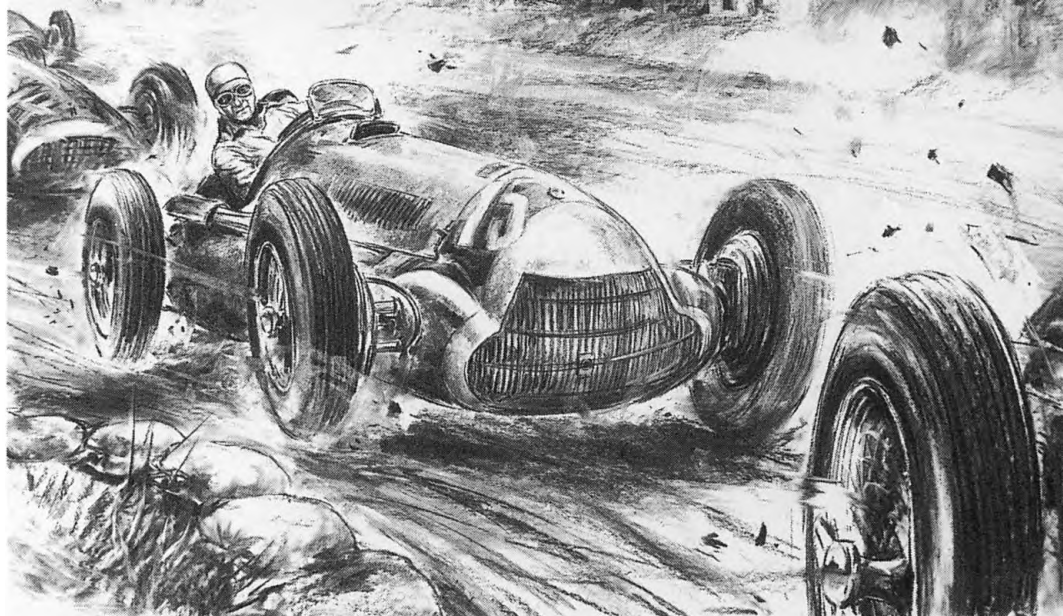
impressive fifth spot, ahead of Taruffi and Villoresi, after running off the road and managing to get back on. When the Alfas started to pit from lap 6, it was clear they were not running well, as cooling and oil pipes had been damaged in practice. The clutch trouble meant Fangio was only using third and fourth after lap 14 and changing 'by ear'. Farina had gone on lap 8, the flexing chassis having damaged the pipes too much to continue. Pietsch then disappeared up and over a bank on lap 11, and Bonetto had the Reims magneto trouble strike him, forcing him out. Fangio at one point had managed to get back into the lead but his second stop dropped him back, although he drove like a demon in only top gear by now. Ascari had a tyre problem but had enough of a gap to win, with Fangio second, and the Ferraris of Gonzales, Villoresi and Taruffi third, fourth and fifth. Fastest lap did go to Fangio in his effort to catch Ascari.

Fangio at the 1951 German Grand Prix. (Biscaretti Museum)



Fangio could not sustain this early lead over Ascari at the Nürburgring and lost for the second time, by thirty seconds. (Alfa Romeo Storico)

Hans Liska drawing portraying Fangio's battle at the Nürburgring.



German driver Paul Pietsch raced the 159 at the 1951 German Grand Prix, but crashed early in the race. (Pirelli Archive)

While this was a stinging defeat for Alfa Corse, it did mean that Fangio had gained Championship points. However, so had Ascari, and it was clear now that the battle to win the Championship would be between these two and that it might go all the way to the final round.

During the writing of this book, 'Toulo' de Graffenried and Paul Pietsch were the only surviving Alfetta drivers. At the age of 93, Pietsch kindly sent his comments about his single race with Alfa Corse:

Alfa Romeo was the only brand of racing car that managed to bring some of the glamour of the pre-war period into the 1950s. From the late 1940s the Milano firm with the 158 and later the 159 had really set the pace, with drivers such as Villoresi, Farina, Wimille and Trossi, who won one race after another. Then Farina won the first Championship and the Alfas were a long way in front of the Ferraris, and then Fangio did it the following year. Alfa signed Farina and Fangio, and test driver Sanesi for 1951. The team also wanted to put drivers from their own country into the 159, and with this chess move they hoped to get the sympathy of the local fans. De Graffenried was the driver in the Swiss Grand Prix. In July, for the German Grand Prix, they had not yet signed a fourth driver. They first approached Lang, who said 'no', and then thought of de Graffenried. They talked to several people who they wanted to compete in a test around the Nordschlieffe circuit, but we only had a few laps. Sanesi knew the car, but I knew the circuit like the back of my hand. There was also Willi Daetwyler and Louis Chiron. Freiburger was tried and did an excellent time, but I was faster on my second lap and was given the drive.

It was unfortunate that Alfa had left the decision so late because with only a few laps, it was possible to be fast but have no idea where the limits might be. Because the regular driver Fangio had damaged his car, he took 'my' car so I had the reserve car which I think hadn't been run. But I had a lot of experience and thought that I could do well. During training, there was a debate over whether any of the Alfas could beat Lang's record lap from the German Grand Prix in 1939. Fangio went out in the training to do a fast lap, but then Ascari and Gonzales went quicker. I was behind some of the others but happy with my position.

There were 200,000 spectators there for the race on Sunday, although that was fewer than in the pre-war days, but of course there were no German cars there. Fangio went to the front at the start but with the Ferraris right behind him. I managed to get away from Villorosi into fifth. On the second lap I went into a spin, and many cars went past, and I drove very hard to make up ground. The brakes were hard to get used to, and I had to try very hard to stay on the track. I tried to out-brake Villorosi into the South Curve and almost managed it but the car went off. I wanted to get him before the curve but I didn't and it was my mistake. The Alfa slid and almost turned over but it did stay upright.

But in fact I had reasonable luck and didn't go into the fence. If I had, I think that would have been it. I only bit my lip and bruised my legs against the dash and I really didn't get hurt. I think I was very lucky. The Alfas and Ferraris were having a big battle, which I could see and I noticed that soon Fangio was the last Alfa driver still running. I think Fangio wasn't happy and wouldn't settle for second, but he did manage to win the World Championship. For me, it had been a chance to drive a great car in a great team.

Fangio . . . One Gear in Bari

Alfa Corse skipped the race at Pescara, which saw Gonzales take another Ferrari win, although at non-Championship level, and no one including the organizers could have been more surprised at the entry that turned out for the next non-Championship race, at Bari on 2 September. No fewer than four Scuderia Ferrari and a pair of Alfa Corse 159s showed up, with Maseratis, Simca-Gordinis and Talbot-Lagos alongside. The usual Formula 1 Ferraris were sent, for Ascari, Villorosi and Gonzales, and a new 500-F2 for Taruffi. Little did Enzo Ferrari realize, even at this late point in the season, that this would be not only their Grand Prix contender for the following year, but their Champion.

Farina dropped out of the non-Championship Gran Premio di Bari on 2 September 1951 and Fangio, who had been quickest, won. (Alfa Romeo Storico)



Fangio and Farina flew the Alfa flag in 159s, and Fangio was back on pole, although the Ferraris of Ascari and Gonzales were quicker than Farina. Fangio and Farina were soon in charge though Farina was then out with a broken piston on lap 8, followed by Ascari. On lap 31 Villorresi had a back-marker run into him, smashing his oil tank. After his final stop, Fangio found that he only had top gear left. After his experience at the Nürburgring, however, he knew how to drive the 159 smoothly and make the most of its superb torque. He did the last third of the race in top gear only and still held a lead of over one minute from Gonzales. It was a very satisfying and reassuring win for Fangio and for Alfa Corse. It also again demonstrated the usable torque from the Alfetta engine to do so many laps with only fourth gear.

Ascari Ascendant

The entry for the Italian Grand Prix at Monza on 16 September and the amount of work going on at Portello and at the Scuderia Ferrari headquarters were indicative of how important this race was to both teams. Indeed, it was vital to both companies, as Ferrari was now producing production cars as well.

While the entry from Alfa Corse indicated that it would be sending 'four 159s', development activity behind the scenes was frantic. Guidotti would later say that the damage to the cars at the Nürburgring, especially the flexing of the chassis, led to the introduction of what he called the 'true 159', which incorporated additional triangulated tubes welded into the chassis to provide greater stiffening and rigidity. According to Nye (1985, 1993), many at Alfa Romeo viewed this car as the true 159, but Fusi referred to it as the '159M', 'M' standing for *maggiorata* or 'increased/enhanced'. Ludvigsen (2001) refers to the car specially modified for the last two races – presumably meaning Monza and Spain, and not Goodwood – as the '159A', and agrees with Nye that these cars drew air for the carburettors from the

cockpit or alternatively from the scoop on the cowl. This was driver-operated and its use would depend on weather conditions. Fangio reported an increase in power when opening this scoop, and the engineers thought it might give as much as 25bhp extra. Ludvigsen, in this account, does not mention special modifications to the chassis.

Both Nye and Ludvigsen say that the 159 in its final form was producing 420–425bhp at 9,300rpm by the final race, and do not specify whether this was the figure achieved for Monza. Borgeson (1965, p.56), appearing to take his information directly from Colombo, argues that the 159 was modified after Monza to ensure a win on the rougher roads at the Spanish circuit, and these changes incorporated the addition of the cantilever tubes. He is adamant that the 'cantilever frame was used on that one occasion, the one which gave Fangio his first World Championship'.

Venables (2000) argues that the changes for Monza consisted of de Dion suspension being fitted to three cars, although it is not clear whether this means three additional cars or two more plus the existing car. These three cars had the twin-exhaust system, with the top pipe providing the exhaust for cylinders 1, 2, 7 and 8 and the other pipe cylinders 3, 4, 5 and 6. He adds that brake size was again increased and the tail reshaped.

In a recent interview, de Graffenried recalled the race at Monza as follows:

There had been some discussions about me driving the 159 at the German Grand Prix but that did not happen as they decided on a German driver. Then it was not certain when I would drive for them again, though Guidotti had said I would. I was entered for Monza anyway in the Maserati, and was then told that Sanesi had received burns when the car they were going to race caught fire during testing the week before. I was asked if I would like to take his place so I went and drove in practice. Driving the 159 was interesting at Monza because you drove almost the whole

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way in fourth gear, possibly you would use third at the end of the straight. I remember for the race that the cars were changed, and I was given the car that Fangio was supposed to drive. This was not unusual, but for some reason they changed. This was bad for me because the shaft for the blower broke after only one lap and the blower seized and I was out. I remember that the crowd was sympathetic to me. The car was very highly tuned, a little more than the one I drove in the practice, and it must have had the most power that they developed from that engine.

Venables (2000) points out that de Graffenried had been given an older 159, at least for practice; apparently, few historians were able to keep track of car and driver changes during a race weekend. Alfa Corse had by this time become very secretive about what they were doing, desperate to protect the Championship.

Ferrari had six cars in the entry, all 375s, but one did not appear and Chico Landi was too slow and did not start, although, oddly, he was not the slowest qualifier. Fangio and Farina led the qualifying, ahead of Ascari, Gonzales, Villoresi and Taruffi, before the Alfetta of

A mechanic puts out a fire in Sanesi's car at testing for the 1951 Italian Grand Prix. (National Motor Museum)



Felice Bonetto's car at Monza for the Italian Grand Prix. (Biscaretti Museum)

In practice for the Gran Premio D'Italia at Monza on 16 September 1951: Fangio (38) leads Farina (34), Ascari in the Ferrari (2), Gonzales in the Ferrari (6) and Guidotti in Bonetto's car (40). (Publifoto)



Bonetto, Parnell's BRM and then de Graffenried.

Whatever the car-switching machinations before the start, Fangio led Ascari, who then led a few laps before Fangio took over again. He then had a tyre burst as he was coming into his pit. Farina had stopped on lap 6 with what was described as an 'oil problem'. With Alfa Romeo this was sometimes a euphemism for a huge hole in the block where all the oil had leaked out, although the exact nature of this problem was not clear. Farina sat and waited until Bonetto's stop so he could replace him. De Graffenried was out. Fangio was catching the leaders from fifth after his stop, but the engine was misfiring and he retired on lap 39 with a broken piston. While Ascari led, Farina drove well trying to catch Gonzales but had to make another stop, so he finished behind the two Ferraris, with Villosresi next.



Farina practises in Bonetto's car at Monza. (Publifoto)

Fangio retired from the Gran Premio D'Italia; Farina's car broke, so he took over Bonetto's and mauaged third, but the Ferraris had won again. (Publifoto)





A single 159 was sent to Goodwood for the Goodwood Trophy on 29 September 1951, which Farina won fairly easily. (Jim Stokes)

Fangio (1992) went into some detail in describing how there were concerns that the Alfettas had been tampered with. He says that a number of people were 'thrown out' of Portello after Monza, and that the fuel filter was not right in his car, that Bonetto's fuel tank was damaged, and that there were refuelling problems. This would lead to an interesting strategy for the Spanish race. After Monza, Fangio had only a two-point lead over Ascari and would be required to drop some points, so whoever won in Spain would be 1951 World Champion.

With a month to go to the final Championship race, in Spain, the BARC persuaded

Alfa Corse to send a car for Farina to race in the Goodwood Trophy event at Goodwood on 29 September. While the car was listed as a 159, that information came from the chassis plate and it was a revised 1950 158, one of the cars not being fettled for the final event. While this race went down in history as a fairly easy win for Farina, over the Thin Wall Special of Reg Parnell (and with Stirling Moss in fifth in an HWM), it should be noted that Farina also took part in a five-lap handicap race which he won from the back of the grid, adding another victory to the Alfetta total.

Farina at Goodwood after the Trophy race.



The Final Race and the Championship

When the cars arrived for the Spanish Grand Prix at the Pedralbes circuit on the streets of suburban Barcelona on 28 October, there were the five Ferraris, including Peter Whitehead's private 375 and four 159s, with the three de Dion cars for Fangio, Farina and Bonetto. Again, there was an 'older' 159 for de Graffenried, as Sanesi had still not recovered from his Monza testing burns. Ferrari had decided to run their cars on 16in tyres, some say to get a higher top speed on the long, long straight, although Taruffi later said it was because the Scuderia thought the half-shafts would not be able to take the pounding from the rough roads with 17in wheels. It turned out to be a fatal error for Ferrari.

Ascari was on pole, from Fangio, Gonzales

and Farina, with Villorresi, de Graffenried, Taruffi and Bonetto next. Fangio (1992) recalls that his car was 'camouflaged' for the race by fitting two side fuel tanks, making it unnecessary to stop for fuel – or at least this seems to be what Alfa Corse wanted Fangio to believe, assuming that he might reveal any strategy to his friend Gonzales. Just before the start Colombo came up to Fangio and said he would have to make a stop, and it seems Fangio already knew they could not go the distance on that circuit with its high speeds. The idea had been to get Ferrari to chase hard from the outset. Fangio knew that Colombo had done a lot of work on his car, including putting in a foot-level air duct, which was not for the feet but an additional ducting for the blowers. He was instructed not to use this at the beginning as there would be too much



Satta (left) was at the Spanish Grand Prix at Pedralbes on 28 October 1951 to witness Fangio clinch the World Championship, his first of five. (Alfa Romeo Storico)

dust about, and it came into play about lap 10. It would also appear that Fangio set his qualifying time in the swing-axle car with older-shape bodywork, and perhaps this was also designed to keep Ferrari guessing.

Ascari did indeed charge in the early stages, and Fangio realized that the Ferraris were throwing chunks of tyre tread. He set his mind to drive smoothly, pulling into the lead, and not sliding around the corners. He recalls not having to change tyres when he made his fuel stop, and that must have been humiliating for Ferrari. Ascari dropped back and his car was eventually fitted with 17in wheels. Gonzales had the same treatment, but earlier, which allowed him to finish second to Fangio, nearly a minute behind. Farina was third and Bonetto

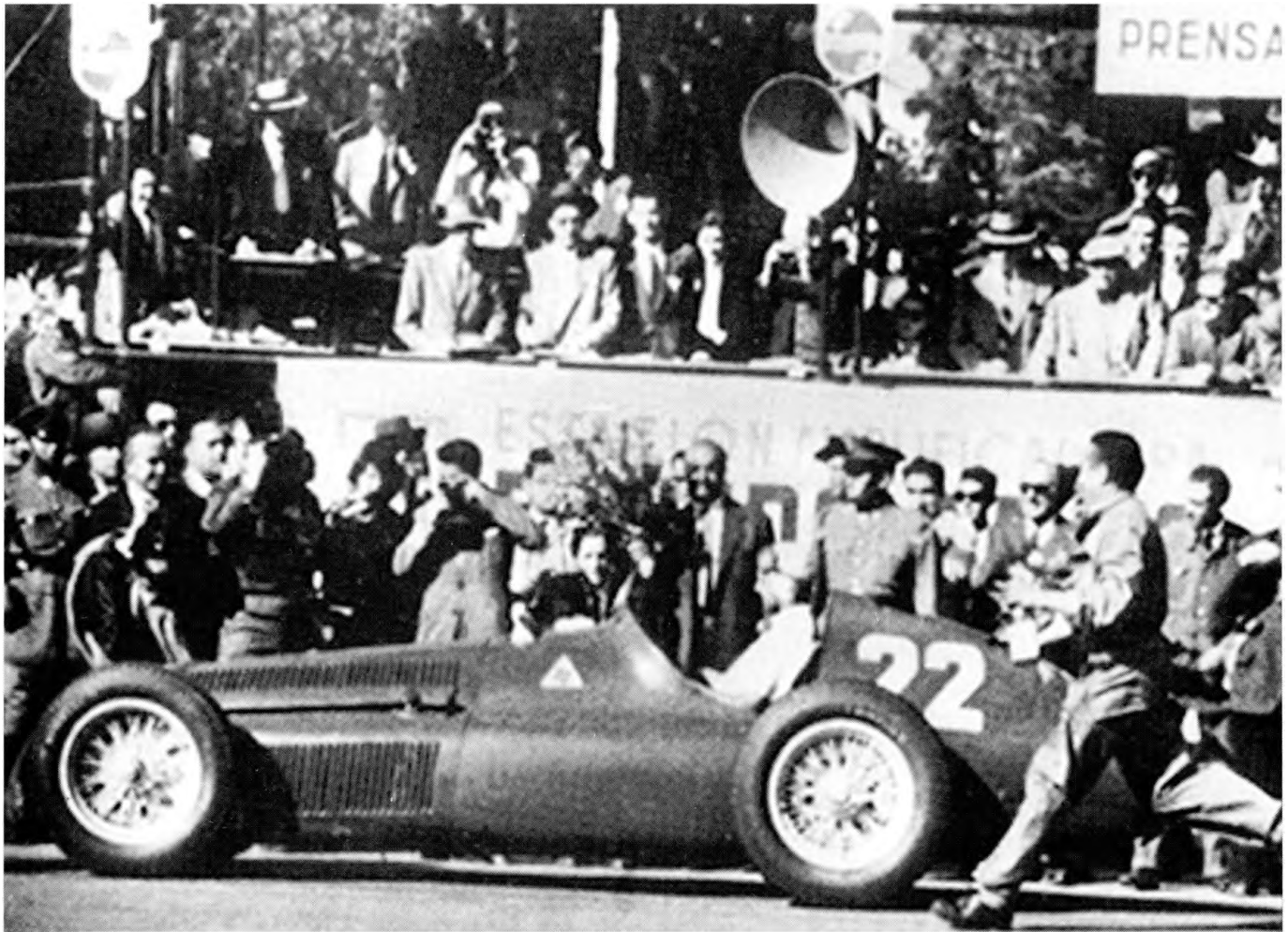
had an engine misfire, which dropped him behind Ascari.

De Graffenried described his race and the events afterwards in a recent interview:

I was going well in the race until I had a water leak and that caused me to stop three or four times, and I managed to finish the race. I was unlucky because I should have finished much higher if I didn't have that problem. The car was going very well and I was enjoying it on that circuit. Of course, everyone was very happy after the race, especially Guidotti. We all went to a dinner and congratulated each other. In those days, Formula 1 was a big family, and we were all friends.



Fangio makes a pit stop at the Spanish Grand Prix. (Alfa Romeo Storico)



The end of the Spanish Grand Prix and the career of the Alfetta 158/159. (Alfa Romeo Storico)

Fangio finished on thirty-seven Championship points and had to drop six for a net total of thirty-one, six ahead of Ascari's final net twenty-five, with Gonzales one behind, and Farina in fourth on nineteen, and perhaps not quite the force he had been the year before. Bonetto, Fagioli, Sanesi and de Graffenried had all also scored points as Alfetta drivers in 1951.

An Unmatched Record

The Alfetta had amassed an unmatched record of victories in the races in which it was entered; no other team had won all the races in a single year and the Alfetta did it several times. Pomeroy considered it the most successful Grand Prix car of all time on the basis of it

being the same basic car over a fourteen-year period. It had won its first race as a voiturette in 1938 and its last race as a full Grand Prix car in 1951. In the period from 1947 to 1951 there were ninety-nine separate entries in thirty-five races, and the Alfetta won all but four, with thirty-one wins, nineteen second places and fifteen third places. The Alfetta set the fastest lap in twenty-three races and had only twenty-eight retirements. They completed 18,153 racing miles (29,208km) under Formula 1 regulations which meant 6,800 miles (10,941km) per car for an overall reliability factor of 81 per cent (Ludvigsen, 2001, p.67).

A number of 158s and 159s have survived (*see* Appendix II), though Venables (2000) says some were scrapped, and has a photo of half a chassis. This does not say what happened to



Hollywood actor Tyrone Power visits Alfa Romeo and tries the 159. Sanesi is in the background. (Alfa Romeo Storico)

the engines, for example, some of which went into record-setting powerboats, and still survive. At least one was used in an aero-engine project. In fact, if only nine were originally built, they all seem to have survived.

Technical Specifications – the Late 159M

Cylinders	8
Bore and stroke	58 × 70mm
Stroke/bore ratio	1.21
Piston area	32.8sq in (212sq cm)
Capacity	1480cc
Supercharged	Twin-stage
Power	425bhp @ 93,00rpm
Piston speed	3,888ft/min
Valves no. and angle	2 @ 90 degrees
Horsepower per litre	282
Gears	4
Wheelbase	98.6in (2,504 mm)
Track	Front 50in (1,270mm) Rear 52in (1,321mm)
Front suspension	Trailing arms
Rear suspension	de Dion axle and transverse leaf spring
Frontal area	11.5sq ft (1.07sq m)
Laden weight	21.5cwt (1,092kg)
Fuel capacity	65 gallons (282ltr)
Maximum speed	192mph (309km/h)
Tyres	5.50 × 17 or 5.50 × 18 front 7.00 × 18 or 7.00 × 19 rear

8 Last Days of Alfa Corse

Alfa Romeo had more or less decided earlier in 1951 that they would retire from racing if they won the Championship. Borgeson (1965) was aware of the points Colombo had made to the management about what would have to be done to stay competitive for another year. The 159 was now 575lb (261kg) heavier than the original 158, and, although the power had doubled to over 425bhp, and was even recording 450bhp in final tests, the blowers absorbed a huge portion of this. Handling was getting worse and tyre wear was increasing. Colombo had worked out that it had taken ten years and 200bhp to reduce the lap time at Monza by only six seconds. Colombo thus produced a proposed redesign, which would reduce the weight and the power, and the fuel capacity. In 1951 Alfa Romeo had received a government grant for racing of 100 million lira, but the cost for five new cars and expenses for 1952 was put at five times this amount. The grant was turned down and, although Colombo had designs for a 2.5-litre engine, the decision was made to retire.

In spite of the team's attentions being turned elsewhere, such as long-distance sports-car racing, the Alfettas were not quite finished. Stirling Moss had just one 'close encounter' with the Alfetta, which has been reported in some of the accounts of Moss's life and career. Moss was testing the BRM at Monza on 6 October 1951, and Guidotti was there with the Alfetta, in preparation for the Spanish race. When Moss went over to watch Fangio practise, team manager Guidotti offered the British driver the chance to drive



'Nino' Farina at home. (de Graffenried Collection)

the car. He did some laps in the car and recorded a reasonable time, without trying very hard. Moss did not like the brakes very much but thought the roadholding was 'good and steady', and made him aware of how heavy the BRM was (although the BRM had good disc brakes). Guidotti then invited Moss to tea at Como the next day and asked him to drive for the team the following season, offering Moss an Alfa Romeo 1900 Sport if he agreed (Raymond, 1953, p.117). Burke's account also has Guidotti taking Moss to lunch at the

Italian Grand Prix and discussing Moss having a drive in the Alfetta. (The timing is interesting, of course, because it is an indication that Guidotti at least thought there would be racing the following year.) Moss turned down the offer and went in other directions. If there is a photograph of that test session at Monza, it is probably the rarest photo in motor racing.

When it became clear to the rest of the world, early in 1952, that Alfa Corse was truly gone from the Grand Prix scene, leaving Ferrari as the only real force, it had a huge impact. By April, most race organizers had decided that they would run their Grand Prix races to Formula 2 regulations, as there were now many serious and quick cars for this category, and the World Championship in 1952 and 1953 therefore ran to these rules.

The Great Drivers

There are many things that could be said about drivers such as Fangio, who went on to win four more World Championships and became

considered one of the best drivers of all time, if not the very best. He remained a great ambassador for motor racing until his death in 1995. Farina also drove for four more seasons, retiring in 1955; he was killed in a road accident in 1966 in a Lotus-Cortina. Luigi Fagioli crashed a Lancia Aurelia at Monaco in 1952, and although his injuries had not seemed serious, he died of complications a few weeks later. Felice Bonetto was winning the Mille Miglia and Carrera Panamericana for Lancia, and then was killed in the 1954 race in Mexico when his Lancia crashed. Gioacchino Colombo worked for Maserati, even having a hand in the 250F, and also in the Bugatti rear-engine car, and for MV Agusta before his death in 1987. De Graffenried and Pietsch both still maintain an interest in motor racing.

Consalvo Sanesi finally retired in 1967, after several more big crashes. He remained an Alfa enthusiast and was an accessible man for people who wanted to talk about racing history. He died just a few years ago, well into his eighties.



Fangio back in the 159 for a film about his career, made in the early 1970s. Augusto Zanardi (left) is still looking after the car. (Alfa Romeo Storico)

9 One Man's Dream

Mike Sparken's Alfetta

Early in 2004, I arranged to visit Michel Podberejsky, better known under his pseudonym of 'Mike Sparken' for personal and business reasons while racing for Gordini in single-seaters and then his own Ferrari sports cars. Paris-born Frenchman Podberejsky was seventh in the British Grand Prix at Aintree in 1955 and co-drove at Le Mans in 1955 with Masten Gregory. Standing at the corner past the pits at the 1951 Italian Grand Prix, he recalls being impressed by the boom of the Alfetta's 8-cylinder engine. (*Motor Sport's* Continental Correspondent Denis Jenkinson was also at the race and later wrote that, although he did not realize at the time that 'Mike Sparken' was there, he felt they had a similar response to the car.) It was at that Grand Prix that the young car enthusiast decided to pursue a dream to have an Alfetta.

More than fifty years later, the author and photographer Peter Collins were sitting in Sparken's home in St Jean Cap Ferrat, in the south of France. Sparken had laid out his large collection of material regarding the Alfettas in general, and the car he had owned in particular, going through numerous original Gioacchino Colombo drawings that had been given to him by Colombo's daughter:

I always believed that the story that Enzo Ferrari came up with the voiturette was not entirely accurate and that Colombo, who already had a good design in his pocket, suggested to Ferrari that this was what he should ask for. After all, if you look at the drawings,

they are dated January 25, 1936, and they are complete specification sheets for the car and for the engine, and if they were dated early in 1936, they would have been done in 1935. The original car, which changed a lot after that, is there in the drawings before it ever existed. He had a great design already, one of the greatest designs ever as it turned out, and I believe he would have suggested this to Ferrari who knew the 3-litre cars could not beat the Germans. The drawings dated from 1937 have the Ferrari stamp on the back and these were the drawings used once the project was under way in 1937. Some of the 1937 drawings are by Colombo himself and some by Nasi, but all the important drawings are by Colombo, with his name or his initials on them. I have a blueprint of a driveshaft by Colombo dated 1936, and on the back is a drawing of the early car, so the idea of what the car would look like existed in 1936.

But I became interested in all these parts of the story after my first experience. In 1946, as a student, I went to see the Grand Prix des Nations in Geneva, and I saw the Alfettas with Wimille, Varzi, Farina and Trossi. I saw them race and it left a mark on me, the noise they made stuck with me for ever as if it was something invincible. Then I started racing in sports cars and Formula 1, but I always thought back to these Alfettas, which I thought were more beautiful and faster than the cars I was driving . . . they had so much more power down the straight. When I started collecting cars, people asked me why I didn't have a racing car, because I had raced,



Mike Sparken, who found the 158/159, in 2004. (Peter Collins)

and my reply was always that there was only one car, and I couldn't have it so I wouldn't have any. But in the end I managed to get it. It is the only single-seater I have ever owned and the only one I ever wanted. To me it was the greatest car ever, and it still is.

I pursued the car for many years when I had a hint of an idea that there might be one car more than was on display in museums. I eventually got to visit the 'crypt' at Portello with Guidotti, who was my very good friend by then. There was such an atmosphere in that place which they had used for storage, and it was one of the cleaner buildings, as some of the others had been demolished and others were in a bad state. I went into this large room with Guidotti and Antonio Magro, and there were all these engines everywhere – V-12s and 16s – and large boxes of files and records. There were no interesting cars in this first room, but mountains of spares . . . final drive ratios.

Getting into those rooms was a long way into the story. In the beginning I didn't try to get a car because I didn't think it would be possible, so I just became friends with Guidotti. I eventually told him that it had been my dream to find one of the cars. He said that was the dream of many people who

came to the factory. The Shah of Persia was in the museum with his nose in a blower and he said he wanted one. Guidotti said he couldn't have one and told the Shah, 'Think how lucky I am, I have them all.'

We thought it would be impossible but one day I thought I might as well try. The way it started was with the Fusi book, and the last page is the list of special cars. It says there were so many cars built and so many left. If you look at the 158, it says 'twelve built and three exist'. In those days I accepted that three existed. There was the obvious one – chassis 005 – which is at Arese, and there is the one at the Biscaretti Museum in Turin, and I thought, 'Where is the third one?' The third one must be at Portello, so I said to Guidotti that Fusi had written three, and I can only see two, the others are 159s, or so-called 159s. He said he didn't know, and I asked if he could think of any explanation and he said he would ask Bonini who was responsible for 'heritage' in that period. Bonini couldn't remember, so Guidotti and I went to see Fusi at his flat. He was pretty deaf and I was screaming away, 'HOW MANY CARS WERE BUILT?' And he would say, 'Ah, the independent suspension, yes.!' It went on like that and it drove me insane, but

his memory was not good and he was trying to be helpful. Finally, I got the book out and said, 'You say three 158s . . . *tre*', and he said, 'Oh, *si, si, si*', and I asked where the third one was. Guidotti translated, '*Dove la terza?*', and Fusi suddenly registered and said, 'Oh, that, it's at Portello.' And I thought, 'Ah, if ever there is going to be one that comes out, it's there.'

It seemed he knew it was at Portello, and he said it was in very poor condition and I thought, 'Wonderful . . . it will be so tatty that they would throw it away.' It was tatty and in pretty bad condition, in appearance anyway, but it was there. I began to think of how we could do an exchange, because there was never a question of money. The museum side of the factory never wanted to hear about money coming in or out. We offered the 1938 2900 Le Mans Coupe that I had by then and it went on for a year or a year and a half with no replies.

So one day I talked to Guidotti and he had gone to see the car at Portello. I asked him if he had seen it, and he said, 'Oh, yes, I've seen it, it's in very bad condition and you must tell them to restore it before you do your swap.' I asked him what the chassis number was and he said, 'I don't know . . . who cares?' He told me that when the cars came back from races to Portello when they were racing, the engine was taken out of the chassis, the chassis was restored in one corner of the workshop, the brakes were done, the gearbox, the axle . . . and the engine was taken to the engine department and taken apart and restored. The procedure was that the first engine that was ready and the first chassis that was finished were put together. It was like taking all the parts and putting them in a big salad bowl and stirring it up, and then putting the five or six cars back together. Guidotti said that was how it happened. When I asked him who drove this car, he said he thought Fangio probably drove 'lots of parts of this car'. It shows the difficulty in making a connection between a car and the drivers or the races, and even in

identifying an individual car. This car has the Tipo 158 identification on the lower chassis rail, in the front behind the suspension. Guidotti explained to me that they had so many customs *carnets*, perhaps three or four and maybe they had six cars, they didn't have one for each car. Whenever the car was going out of the country to race, if they didn't have a *carnet* for that car, they would change the chassis plate. I am not aware that they ever kept a record of who drove which particular car.

Anyway, eventually we were invited to go to Portello. Bruno Bonini unlocked a big gate at the warehouse and we went to what was called the 'crypt'. This was a large room that felt like an old abandoned church, with some rows of more modern cars. There in the row was the Alfetta, with the nose and tail intact. I was surprised at how complete the car was. Some of the panels were missing and the dash with the instruments, and the seat. But it was clearly a 1951-specification car with non-de Dion rear. The shelves behind the car were full of 158 and 159 spares. There was some surface rust on the axles, and the rear fuel tank was near by, and the car was on the wrong wheels. The missing parts had been used on some of the museum cars but there were lots of spares. Of the spares that existed, there were dozens of each, but back axles, gearbox casings and blocks were missing.

We kept a steady contact with Alfa Romeo over a long time after we had seen the car. We often didn't get a response from them for months. They were trying to sell themselves to Ford and then to FIAT and they didn't know what was going to happen. I took the Le Mans Coupe to the *concours* at Villa d'Este with a Bugatti and I had planned to drive the Alfa to Arese, which I organized with Magro who helped to look after me. I took the car to Arese and parked it in front of the building. I found out that the new administrator, Signor Tralamontana, was in place, somebody with new ideas who might think differently

about keeping all the cars. He came out and looked at the car and thought it was very nice and interesting and Signora Cattaneo, who had been looking after my interests in correspondence with Alfa Romeo, suddenly said to him, 'You know he's offering this car for a 158 we have in Portello?' He didn't know what a 158 was, and she told him, 'It's an old racing car.' He told her to look into it. Nothing happened at all for months and months and apparently one day she asked him, 'What is happening about the offer?' He had forgotten but he suddenly said, 'Yes, OK, if he wants an old racing car, we can do that.'

So, one day years after I had started this, Signora Cattaneo telephoned me and said, 'The deal is on.' Well, I just couldn't believe it. I had the Le Mans Coupe, although I hadn't bought it specifically to try and make an exchange, because I didn't believe it could happen, but it was in the back of my mind. I thought they might swap something for it. I knew they rebuilt a 159, which went to Fangio's museum for some months. That had a new body on it, and I thought they might see that as an extra car and we could do something with that. At least it cleared up that there were three 158s and two 159s, both of which belong to the museum, and one of those, which I refer to as Arese 4, had a new body in December 1986 . . . chassis 159.112. That's the one that Fangio actually wanted and they lent it to him for a while for his museum. The Fangio car – of course, he didn't drive only one car, but I mean the car they refer to as the Championship car – was 159.111 and I believe that that was 'converted' into 159.112. Then there is the car that is on display without a body and often goes on exhibition – 159.109. As it happens the car in the Biscaretti Museum is a 158, but it carries a similar chassis numbering as the bare-chassis car . . . 158.109. I have confirmation, which I got myself from the factory, that all the cars that were entered in 1951 were called 159s. From Monza 1950 onwards, Farina had one, and possibly

Fangio. Essentially that was psychological warfare and almost nothing more.

One of the interesting questions has always been, 'How many cars were built?' The usual answer, according to Fusi, is twelve – six in 1938 and six in 1940 – and three exist. This is the number of 158s. Looking at one of the Colombo chassis blueprints, dated 21 August 1937, you can see by examining the chassis cross-member that everything about it is wrong, compared to the later chassis, the chassis which was actually built in 1938. There was no cross-member for the engine, and it does not resemble the later chassis, and yet this would appear to be the blueprint for the first chassis which was built. My feeling, and it is only a feeling, but it is based on a number of facts, is that they built four chassis to this first blueprint in 1937/1938 and they were unsatisfactory, and right away they built another batch of four. What I refer to as the later chassis is the 158 as it first raced in 1938. These were the same as the 158 which exists in the museum at Arese, 005, it's always the same chassis, and the 159 had the added welded tubes.

I think they built that first batch of four, which they saw were not good, and built the second batch, which were numbered 5, 6, 7 and 8. Then they built a last batch of four. Fusi says they built six but I believe that to be wrong. In Ferrari's own writings, and in his book, he says that when they moved back to Portello from Modena they brought the parts that had been prepared to make four cars, so I think that is the last batch of four cars. If you think of eight definitive cars being built, not including the first unsatisfactory ones, you can then do a bit of mathematical work. Three disappeared with Villoresi, Aldrighetti and Marinoni, and I am sure they were destroyed, and that leaves five. We have an article written by Colombo which says five cars returned from hiding, in the cheese factory, or wherever they were hidden, after the war, so that does fit. Guidotti also told me that there were problems with the very first

cars, and even the later chassis were not 100 per cent rigid.

When you come to the 159s, you read in Fusi that four 159s were built, but I have seen documentation that shows they were just transformed 158s. They raced 158s with the swing axle but with a new body on it, and Farina won at Spa in 1951, and it still has a swing axle. It looks like a 159 in so far as what the later bodies looked like, but it is a 158 rebodied. It proves you can't develop something any more than it has been developed. They needed more fuel so that they could last longer than the Ferraris, so they had to add more tanks. Then they had to make a new body and made it so they could put in even more tanks. Then the car was undriveable because they had up to 332 litres of fuel. So then they thought of adding stiffening, and then came the de Dion to make it handle. In the end they drove it with the de Dion but with much less fuel in it. It was one of those things where they tried to stretch further than was possible. It is possible that there might have been two chassis built new in 1951 that were called 159s but they weren't the only ones called 159.

When it comes to the car we found at Portello, I really can't say when this was built. It could have been built in 1950, or it could have been built in 1938/39. When I first saw the storage place at Portello, I saw they had masses of spares, and I said to Guidotti, 'You have lots of spares but no spare chassis.' He said they did have spare chassis hanging on a wall when they were racing. If a chassis was bent or damaged when they took it apart and were changing an engine or gearbox, they might also have changed a chassis. That information came directly from Guidotti. We don't know if these chassis had been stamped, or stamped when they were first used. In fact, the engine was more important than the chassis. In the 159, the number referred to the engine. That is why the old cars with the swing axle were called 159s because they had what they decided was now the 159 engine.

When people ask me the question about the difference between the 158 and the 159, I say it's the engine, but I know that there are lots of views on this.

The other problem with chassis number records is that if there was a chassis number associated with a particular driver or race, it might have been true for that particular race, but not for any other. This is true in relation to the 159s where the plates were changed. There does not seem to be reference to the numbers stamped on any of the 158 chassis. What I do know about my car is that the crankshaft that came out the engine that is now in the car was in the car in which Fangio won the Spanish Grand Prix in 1951. We know from Guidotti's notes that there were two small cracks on that crankshaft, which was numbered 221, although it had come out of engine number 227. We used a new crankshaft when we rebuilt the engine. When we had first seen the car, we thought if we ever had it, it would have the engine that was in it at the time. When it finally came to collecting it, Antonio Magro revealed a complete spare engine, number 227.

Looking at the machining drawings of the engines reveals another complication on their identity. Some of these are titled 158/159, with an original date of 1937 on them, and the addition of the words 'up-dated to 1951'. This particular drawing is of the final engine block, which is hardly changed from the original. An early drawing of the clutch is labelled '*vetture* 158/1947-1948 - 158/66', dated 17/3/47, and it is the same as the clutch drawing dated 1937. This particular drawing was given to me by Fusi. We were talking about the early drawings and he was saying he was about to give his collection of drawings back to Alfa, but he was worried as he saw giving them to Alfa was like their being lost. That was when his wife said to give me some of the drawings. I have some drawings of brake drums for the 159 dated 1951, and these are different from early ones. However, the 159 is written over the original 158 and



Mike Sparken tests the 158/159 for the first time at Chobham. (Mike Sparken Collection)

the updating is fairly minimal. On several of the updated drawings that originate in 1937, where the 158 has been changed to a 159, this indicates that many components never had a full redesign but rather minor modifications. There were changes on the blowers, not just the change from single to two-stage, but also other revisions. When I looked at the spares, I thought I should take some of the spare blower parts, and Guidotti said to make sure I only took the ones which fitted because there had been changes. Certain blower parts were never used because it was found that they didn't fit the changes to the manifold.

When we got the car back to London, Jim Stokes dismantled it, and fitted the spare 227 engine into the chassis so it could go off to Paul Grist to have the body done, while Jim rebuilt the other engine. When we had rebuilt 'our' engine, we had it on the dyno, and we got the same power curve Fusi has in his book on page 465. That was the curve for the 159 engine, which was the engine in the car. We had to stop because we had a problem

with the relief valves. They were set at 50lb. And there was more boost pressure than that. I thought it had gone 'bang' but it was just the relief valves. This was when we had it on Terry Hoyle's dyno and we stopped at 7,700rpm because beyond that there was too much boost pressure for the setting on those valves, which Jim Stokes then changed and put stronger springs in. But it makes you wonder why they went above 9,000 when you didn't have to. We didn't think there would be that much pressure. At 7,700rpm we got 3.2 bars, 3.19 bars to be precise, which was incredible for Roots blowers in 1951. We think it would have got to 3.5 bars, because they are the same blowers as on the Ricart 512. We thought that if we had gone to 8,600rpm, we would have 403bhp fairly easily. I have seen some of Guidotti's paper work which indicates that the drivers were not happy to reach 9,000rpm but were happy at about 8,500rpm. Before that, they were happy at 8,000rpm, because they were totally safe but when they needed to pull everything

they could out of that engine and car, they took them to 8,500rpm. And occasionally 8,600 and 8,700 and they could go to 9,000, but never beyond that.

The car is easy to drive when you are using the engine at a reasonable level, and you don't even have to change gears. We know that Fangio won Bari with a broken gearbox and only used top gear, but what few people know is that, at Silverstone, they used third and fourth gear normally. In Guidotti's documents is the information that Fangio tried doing laps there without changing gear, and was one second quicker because he didn't waste time changing gear. With the gearbox of that time, they took longer to change gear than they do now, and what he lost on acceleration, he made up in time saved. When we first had the car, the gears weren't quite right and it was jumping out of second. The factory did it over with new shafts, and gave me a set of different gears as well. But the gearbox is very nice, and they would have used a different set of ratios for circuits like Monaco to still be able to use all the torque.

The body parts that we had with the car were a tail and a cowl but that was not much. When we were trying to decide how to build a complete body, I first discovered that there were no two cars alike. I did my research on the basis of about 300 photographs, and we used the 158 in the Biscaretti as the basic model. But when we had it almost done, I realized the body line was wrong and we did it again, which cost a fortune but we lowered a key body line by 1cm, and then it was right. Because we were applying calculations from one car to another, there were mistakes, and that meant we got this key line wrong. And that was because no two cars were the same!

When we did the grille, there were pieces that didn't look right, so Terry at Jim Stokes made some of the small pieces and they looked perfect. Paul Grist thought it was very hard work, but we re-did the tail in aluminium. It has a very difficult line and it was very difficult to do. At Paul's, I used to go

every other day, in the morning, and it was the first glance that counted. I would look at it and look at it and then say it was OK. It was very funny, one day I walked in and walked around and walked around and didn't say anything, and Paul asked, 'What's the matter?' I said, 'Nothing. I can't find anything!' It was keeping in mind that the cars themselves changed over the races with little things being modified, and using all the photographs and then picking the best characteristics. It probably most closely resembles a car which Farina was driving at Silverstone at the British Grand Prix in 1950. Even things that might look wrong on my car were done deliberately, and were not necessarily the same on other cars. The tail on the car was the one Fusi had made, which had been moulded in fibreglass. He took it off 005. I don't know whether they were thinking of making another car, but that fibreglass tail came with the car and we used that as the mould and hammered over it to make an exact copy. We used it as a pattern but destroyed it in using it. On the other hand, the front cowl was there.

Eventually, the car was complete and we just had a chance to run it for the first time at Chobham test track before being invited by Alfa Romeo to go to a reunion at Monza. I drove it for the first time at Chobham and it was a great thrill but I realized it was a gentleman's car; it was easy to drive and very well behaved. We then went for an emotional trip to Monza where de Graffenried and Luigi Villorosi joined, as did Guidotti, and I drove it around Monza for several laps. That was a very special time as the dream had come true.

The Mechanical Restoration of the 158/159

Jim Stokes, now principal of Jim Stokes Workshops, considers the 158/159 and the Lancia D50 the two best-engineered racing cars he has ever come across. He not only did the mechanical restoration on Mike Sparken's car

but also went to Italy with him when it was finally ready to leave Alfa Romeo, and then looked after it for several years.

I had done Mike Sparken's 2.3-litre 8C engine for him some time before he approached me and asked if I was interested in getting involved in restoring a 158 Alfa. It was something I did not know that much about at the time, so I had to do some research. When the time was getting closer to exchange the Le Mans Coupe for the 158 with Alfa Romeo, he asked me to go Italy with him, so we flew over and went to Portello where the old cars were still being stored. We went into this incredible vault, the 'crypt', with all the racking with the spares on one side and on the other side all these odd-shaped vehicles under covers. What they did was just walk down and pull the cover off and there was, for all intents and purposes, most of a 158 Alfa, with a nose, tail, chassis, as well as an engine, transaxle and all the other bits and pieces in it, some of them in a dilapidated state.

Mike asked me to check over what we were looking at, and I pulled a cam cover off the engine that was in the car, to discover that the blocks were either pre-production or had been made by apprentices after the cars had stopped racing. It was obvious that the blocks would need a huge amount doing to them to make them work. So Mike just said this to the curator, Magro, and he said, 'OK', and took the cover off another object, saying, 'You had better take this one as well!' It was a spare engine on a stand, the same stands as they used in the museum. It was pretty much a complete spare engine, which I had a look at and could say that it was original kit. It had numbers on most of the parts and the engine itself had number 227. We collected together the car, the spare engine, and the bits and pieces and the next time I saw it was outside Mike's mews garage in London.

After we had seen the car in Italy, we went back to the factory and I was sitting in on the

negotiations, and Guidotti was there. I was just there on the technical side, but the deal was done. Hands were shaken and we walked out of the factory and I can remember that, all the way to the airport, Mike was sitting in the back of the taxi saying, 'I can't believe we've done it, I can't believe we've done it.'

It all arrived back in England fairly shortly after that and I went up and collected it and brought it back to my workshop. I went right through the vehicle, and the first thing was to restore the chassis. I had the spare engine and the transaxle, and started to make modifications like putting in a new clutch. When we had the basics done it went off to Paul Grist to have the bodywork finished.

One thing we didn't have at the time was the 'elephant trunk' air intake from the later engine so Mike got in touch with a local pattern shop that worked with the museum and they allowed us to have the information and the original wooden mould to make the 'elephant trunk'. The whole thing was a phenomenal project, and I remember after we had dynoed the engine at Terry Hoyle's in Essex, I read an article in *Motor Sport* by Denis Jenkinson, which was entitled 'Vans'. It was basically about how you do not realize what is going round the M25 motorway in the back of a van, because he had come over to Terry Hoyle's to have a look at the engine when it was on the dyno. That was the first time I met Denis Jenkinson, but the engine wasn't running that particular day. It was an incredible project to do, and I made myself ill doing it. The last three months I did the equivalent of thirteen and a half hours every day. We had to get it ready to go to Monza for September 1989. Alfa Romeo wanted to have the car there. We had managed to test it, but that was the first time it was seen in public, with Guidotti and de Graffenried, on a very special occasion. The following week it was taken to Clermont Ferrand, and Fangio was there with his brother and I was introduced to him. Fangio said the car looked absolutely incredible, far better than it had

been in his day. It was just the most amazing car to be involved with.

I think the 158 was Italian engineering at its absolute best. It was quite interesting where they had gone on to hydraulic dampers but they hadn't quite got past the friction dampers as a back-up, so the car had both. They were obviously using new technology but they wanted to make sure that there was something of the old technology still there, which they totally understood. They had made the front-axle tube, which was stamped with the different castor angles, in a particular way, so for Monaco or Monza they would have different front-axle tubes, then re-bolt the ends of the suspension units on to the axle tube, which would alter the castor angle. The engine design itself and the way that it was worked out were in my view absolutely beautiful.

The engine I rebuilt was the engine and the crankcase that were in the car, but we replaced it with the cylinder block from the spare engine that came with it. That was number 227, a 159 engine, and a pretty late one. The engine when we got it was more or less complete, but for some reason the fire-wall bulkhead was missing. It was there, but it was off the car, so we had to re-attach it. For what particular reason that had been removed from chassis 007, I don't know. All the pick-up points were there, everything else was right, with the chassis number stamped on it, but this forward bulkhead had been missing. Whether they had been experimenting, thinking about turning things around, changing body design, I don't know. This incident doesn't add anything specific to identifying the car.

Only one race was won by a true 159, and the others by 158s. The 158 had a single exhaust, and forward-pointing 'elephant trunk' induction, not rearward-pointing, which took the air from the cockpit areas. The biggest thing was that the 159 had the de Dion rear end, not the swing axle. This wasn't always consistent or understood. Mike

Sparken's car is a 158 with a 159-spec engine, without the de Dion rear and without the additional geodetic tubular framework, which they added a little higher up to give a bit more chassis stiffness. That was one of the other tweaks they did with the 159, but the original concept with the swing axle was related back to the amount of fuel they had to carry and the fact that you would end up with a huge amount of negative camber.

There was evidence on this car of different kinds of tanks being used. It had saddle tanks, one oil and one fuel, so that there was probably 10–12 gallons (44–52ltr) on the right-hand side of the car, and the tail tank to run the rest. The tanks that we had were original tanks and they had original writing on them, handwritten that they had been pressure-tested. The tanks that we had fitted perfectly without any modifications.

I think, from looking at this car when it arrived, from the state of it, with that bulkhead missing, everything on that frame suggested to me that it was a proper race car that had been used. I agree with the view that, when you look at 1951 photographs, that car is in one of those photos, but you just don't know which one it is. The rest of the spare engine was later built up into a complete, empty exhibition engine and that was sold to Parabolica Motorsport and then I believe it was sold back to a well-known collector in the UK who still has it. We rebuilt it to look like a ready-to-run engine, complete with the magneto wires, and it still has the original wooden plugs that were in the pipe work that came with it. It is still on exactly the same stand as it came with. I was asked if we could make that engine work and I said it would be possible; it would be costly, but it could be made to run.

The engines were an amazing piece of work. As I understand it, they had a life of five hours and a fresh engine would go in to do a Grand Prix. They would strip the engine out after a race, and rebuild the car to suit whatever the next circuit was they were

going to. Then the engine would go back in, and they would designate a car as the *muletto* and practise with that, and then put a fresh engine in for the Grand Prix. The weakest part of that engine was the valve stem because there is an 1/8 by 1mm valve stem, and the strength of the valve spring to close the valves has to be extremely high. I think the seat pressure, when you work out the area at the back of the valve head when you are running 3.2 bars of boost, you have got that pressure on the inlet manifold trying to get the valves off their seats so you have to have enough load on the springs not only to shut the valve but also to keep them shut with that kind of boost pressure behind them. Working on an 8mm thread, that means those stems are taking 30 tons of load. Opening and shutting at 8,500 or 9,000rpm, you are expecting a lot from the components.

When we rebuilt the engine originally, I was very concerned about how much use it would get before it would have to have some major re-working. In fact, the engine ran for thirty-five hours, from the time that we rebuilt it until we had a problem when it dropped a valve at Avignon. Subsequently, I rebuilt the engine using a slightly modified valve system so that it would not alter the characteristics of the engine whatever, or the operation, but it would take some of the high maintenance away from the valves.

The chassis, when we stripped the car, was straightforward. It was very nicely constructed, it was very straight and there were no major problems with it. Getting the information to do it wasn't too bad, as Mike was able to get the drawings from the factory, and retrospectively was able to get drawings from Colombo's sisters after he died. These were mind-blowing as they weren't photocopies; they were the original drawings, original pencil drawings. I remember a sketch Mike had of the clutch assembly and it was as good if not better than any modern cad-cam drawing. Early on in the paper work we got, Mike had a piece of A4 paper and it was just

like a Gestetner specification sheet of a '158 Alfa Romeo car'. It had the engine's specs and worked through the design of the engine, and it was done in Colombo's own hand and on the back there was a little pencil drawing of the supercharger rotors and other bits. This was actually the piece of paper that produced that vehicle, the 158. It was incredible to be able to see these and work from them.

I remember when we were at Monza in 1989 and Mike was running the car and it was such an experience to be on the pit wall when the circuit was still as it had been, and to watch and listen to the sound of that car pulling 8,000rpm in top. That is something I will never forget. I was really worn out from all the work to get the car there, but to stand on the wall and watch it go by, it was a pivotal moment for me, it was that wonderful. But a funny thing happened, because I had to get back to England and left for the airport while Mike was still running. He had been doing more laps than I had expected, so he ran out of fuel. Due to the saddle-tank situation, we would run petrol in the right-side tank so we could fill the carburettor full of petrol to start it before we turned it on to methanol. So what Mike did, as soon as he realized he had run out of fuel, he turned back over on to petrol and trickled back into the pits. Of course that would mean the car would run full rich, and it was smoking. They saw the look on the faces of the Italians who thought the car had gone 'bang'. We didn't know what they were thinking, because we guessed that they might not have been so pleased that the car had escaped from Italy, and I think they were bemused to see the state of the car after it had been restored.

That reminds me that we had the formula for the fuel mixture that they ran the cars on in period, which was methanol plus one to one and a half per cent distilled water and one per cent oil. We ran it with a small percentage of acetone and a small percentage of oil as well.



Mike Sparken's 158/159 at Silverstone in 1990. (Keith Booker)

It was a difficult restoration to do because we wanted to restore the car but we didn't want to overdo it. It was difficult to do it sympathetically. For example, all the oil pipes, the pressure pipe and the temperature capillaries are shown in period photographs with no clips holding them down. Because the engines were in and out every five minutes, they wouldn't bother to clip these down and they were all over the place. We had to resist the temptation to make it overly neat. We could have made it look 'too English' by overdoing it, so we had to try to resist that. The only modification where we came away from standard was that we weren't running a mechanical fuel pump, but had an electric pump. I was trying to make the car user-friendly because I knew it was going to be used quite a lot. I was interested to see that the 159 run by the factory had been modified since.

We had to use a new crank, but what Mike did get was a set of con-rods. We ran original rods. Because it used to run needle rollers on the big ends not shell bearings, they used to keep about thirty partially finished con-rods. When they had to service the engine, because they weren't going to grind them down to the next bearing size like shell bearings, they would just polish and clean, and then refinish the new con-rod to suit the smaller size. They always had con-rods part-machined so they would have a service item ready to use.

In learning the engine, I found out a great deal about how they had increased the power without really changing the design of the components, just by adding the second supercharger. They tried things like changing the pulses between the first and the second supercharger. They were really on the ball with the technical aspects of improving the engine. Mike was very interested in getting the engine to the factory specifications so we had to know a great deal about it. When we dynoed that engine and finished it, and got to the graph of the engine performance, we found that at 4,000rpm it was three horsepower less than the 1951 figures, and at 7,500rpm it was three horsepower more. So we had been able to build an engine to the same specifications and I was pretty impressed that we could do it. We built it and it then ran for thirty-five hours and I know that's correct because I had put a clock on the car. After thirty-five hours it broke a valve stem, and when we got in there to repair the valve stem, we discovered some cracks in the combustion chamber. We came up with a repair scenario to overcome that. Basically we machined the valve seats and put threaded valve seats in, because a 58mm bore is pretty small, and we put inserts into the spark-plug holes to blank out where the cracks were there. We repaired the cracks at the same time as we were working on the valve gear. I think I must have grinned for the whole two hours' driving home after we finished that first session on the dyno.

Working with Mike on the project was always good, he was always a gentleman. He would go on holiday sailing around Corsica for four or five months and every two or three days he would call into a beach bar on the island and phone me to find out where we were and how we were getting on. He was always in touch, and he would come down once a week when he was in England to see us; we had to supply sandwiches, a glass of water and a tin of beer, and he would just walk around the workshop to see what we were doing. He would arrive about 9.30am and it was so nice to have a customer that keen. When we first ran the car at Chobham when it was finished, he came out with his Herbert Johnson crash helmet. There were just a few things not finished, but he did some laps and then came on to the assembly area in front of the control tower and did doughnuts with it!

The car was basically so good. It was beautifully crafted all the way through, and Alfa Romeo had got it right from the beginning. The development from 200bhp to 425bhp was done very thoughtfully, thinking about the cooling system and the oiling system. To me it was a perfect piece of design work. The Italians had a wonderful way of producing engineering not only practically but also with their hearts.

When I was building the engine, I was also building a Ferrari 166 engine at the same time, and of course Colombo was responsible for both. It was amazing that I could take the starter dog unit off the front of the motor and switch it to the other engine. It was exactly the same piece. It was designed at a time when he was going back and forth between Ferrari and Alfa Romeo. That bit of beautiful engineering just fascinated me. On some of the things they did, like relining the brakes and the drums, where I had all the original drawings, I found something amazing, which I thought to be an error at first. It said that the interference between the lining and the drum itself was 0.9mm, which is 0.036in, which is absolutely enormous, but

when you worked out the coefficient of the expansion of aluminium, that was exactly what it should be. When I relined the drums, that's what I worked to and it worked. But being able to use the original Alfa Romeo drawings was wonderful because they were so good, and they were such wonderful practitioners.

Paul Grist – Clothing the Alfetta

Paul Grist has restored and raced some famous and beautiful cars, especially Alfa Romeos. Mike Sparken came to him to build the body for his car:

The car had arrived back in England with very little bodywork, but it had a cowling, which wasn't right, and it had a plastic or fibreglass tail, which we saw as a buck to work on. Jim Stokes did all the mechanical work. I had never seen the car in Italy, only when it had arrived in England. It needed a lot, as there was no grille, and the cowling just dropped on. It was really a rolling chassis. We built the body and Terry who works with me did the exhaust system.

If you look down on the cars there is what Mike used to call the hernia. If you look at the front of the car, on the right-hand side, there is the bulge where the carburettors are. So we knew we had to build the 'hernia' into it. In order to do the bodywork, Mike, Carol Spagg and I had a trip to Italy to the Biscaretti Museum. The Biscaretti car had been wheeled away untouched after its racing career. We took the bodywork sections off wherever we needed to and I had big sheets of card to do outlines, enough so that we could come back and build the body. We had a chance then to talk to Guidotti while we were there.

We had started work on it, and there is a line that goes through the bonnet edge, right the way down through the car and drops away at the point of the tail. It's a beautiful part of the body. So Mike was looking at it,

and then went away and came back the next day and said it was millimetres too high. It was painful but I said I thought he might be right. Well, to change a line that has been joggled in, you can't re-joggle it, and you can't flatten it because the metal is fatigued, so for 12mm we did this line again, and that made it perfect, but it was a lot of work. In fact the body is much more perfect than any of the originals were. They were made roughly and crudely, and the bodies were not maintained and looked after. So the danger was that this car was almost too perfect. When we were working on the bodywork, Mike would be here for days and we would eat down the pub and come back and do more. When we had it finished, it took a long time to decide how to get the colour right. It was difficult because colour photos of the time were not accurate.

We used the cowlings that came originally but there was no grille so I had to make the cheese-cutter grille and Terry did loads of work on that. I always remember Terry saying, 'I don't want to know if this car gets stuffed up the front . . . I never want to do that again!' Fortunately, it hasn't been damaged. The other thing that was interesting was the missing 'elephant-trunk' air filter, and while we were at Biscaretti, Mike was able to borrow that, and an Italian sheet-metal pattern maker made it. We made the instruments, and we had to make the dashboard and all the connections for it, as well as the cockpit.

I understood from Mike and also from Guidotti that there was no difference between the 158 and the 159, except for the de Dion rear end. That was the only difference, and there may have been upgrades in power, but the actual mechanics of the car did not change. Of course, the body shape had changed from 1938 onwards, and Mike had decided to use the Biscaretti car as the best example of the 158 body, although we didn't use everything exactly as it was on that body because Mike wanted some things a bit

different. I understood from Guidotti that the chassis didn't matter, that the engine identified the car. If Fangio had done well with a particular engine, he wanted that engine, and they didn't care about chassis identity. The Italians always saw the engine as the heart of the car. But when it came to deciding on the body shape, we used the classic 158 shape from the Biscaretti car.

The Experience of Driving an Alfetta

Eventually, Mike Sparken, having acquired the Alfetta and breathed life back into it, and having taken it back 'home' to Monza, needed to sell it. This must have been a painful decision, although Mike is very clear that he had completely realized his dream that first started back in 1946. The car was sold to Brazilian Carlos Monteverde, who drove it and sent it to Monaco, Goodwood and Silverstone, where it raced extremely well, usually in the hands of historic racer Willie Green. After a fairly short period it came on the market again and was purchased by Swiss collector and historic racer Carlo Voegele, whose father had also been a well-known driver. The car had been looked after by Tony Merrick for some time, and it was brought to Brooklands in 1998 for a photo shoot, and that was the first time I got behind the wheel, for a very short but impressive spell. In September 2003, Tony Merrick facilitated another more thorough investigation of the car's driving characteristics with owner Carlo Voegele, who generously allowed me to drive it more seriously at the Chobham test track, the place where it first turned a wheel in 1989 after it had been restored.

The car was about to race at Goodwood, and it was known that the owner treasured it perhaps beyond the ten million pounds at which it is now valued. Nevertheless, shepherded by long-time mechanic Simon Bish, the car rolled out of the transporter, much as it had so many times in the past at Monza,

Valentine Park, the Nürburgring and Tripoli. This car has enormous presence even standing still; as Jim Stokes has said, it was a pleasure just being involved with it. After I had shared some of the understanding of the car's background with Simon Bish, really just to gain some degree of his confidence, it came to the moment of truth.

I dropped into the corduroy seat (chosen over leather because it was always cooler), and could reflect on the significance of where I was. While no statement can be made about the exact identity and record of this car, it is certain that it ran in 1950 and 1951, and thus was driven by Fangio, Farina or Fagioli, or any combination of the three, plus possibly de Graffenried and one or two others. The only real hint of the possibility of this car with the chassis number 158.107 is that it might be the car referred to as Fangio's 'number 7' at the 1951 British Grand Prix, but the link is

tenuous. The first striking fact was that the mirrors had been moved from their in-cockpit location to the outside since the last meeting. Everything else was as it was, and probably as it was fifty years ago. The St Christopher medal is still on the dash between the instruments.

Although Simon Bish was there with reminders, the presence of a central throttle had already been drilled home. The gear change on the left is 'reversed', with first gear closest to the driver and forward, and back for second, and away and forward for third, and back for fourth. This should not be a problem because most of the running would be in fourth or third, and, with a rev limit around 7,000rpm, the torque should be sufficient to use mainly top gear. The major revelation of the car, as Mike Sparken had said, was that it was so easy to drive. (The other important point to remember is not to lean out on to the



Jim Stokes, who carried out the restoration of the car. (Peter Collins)

exhaust on the right, even though it has a degree of covering.)

The spacious cockpit made it a comfortable place to work. The hydraulic starter banged the engine into life with no trouble, and throughout the day the car would start with the easiest of pushes. The spark plugs had been checked and were up to the job. No throttle is used during starting, but, once the 8-cylinder engine bursts into life, a few revs are all that are required to warm it up and prevent the plugs from fouling. The clutch was certainly user-friendly, and in first gear it pulled away without a stall, the exhaust noise increasing rapidly and crisply, the valves making a slight clatter and the blower whine noticeable until 3,000–4,000rpm, where it all smoothed out into one growing crescendo. There have been those who say the Alfetta does not have the boom of its racing days, and that is simply because no one drives it at 8,500 to 9,000rpm. But the sound and fury was still impressive, even at a more modest rev limit. You would never guess that this engine is only 1.5 litres.

While the car normally had been running on 17in wheels and tyres, 18in were being used in preparation for Goodwood, reflecting the years of experimentation that had been carried out with tyres and castor and camber settings to counter the increased weight that had come with more power. However, the overwhelming impression was of vast torque, and how usable that torque was. Sitting in an upright position, the driver sees everything happening to the suspension, and can detect where the front end moves under acceleration. A squirt on the central throttle brought the nose up slightly as the car charged down one piece of the road after another.

Chobham is reminiscent of Monza, with high-speed straights and very fast bends, and even a small bit of banking. It was clear the car could be driven on that huge reserve of torque in fourth gear, allowing the driver to concentrate on getting the most out of the handling, picking the right line through the bends. This

was Fangio again at Bari and Silverstone, using one gear to save time and employ the power and control inherent in Colombo's masterpiece. After a few laps, it was possible to line the Alfetta up on the right side of the road and power through the apex of the fast left-handers, using all the allowed revs in fourth gear, watching the front suspension rise and fall as the wheel clipped the bumpy edge of the road. The car surged on to the straight, not with a slam in the back, but with a sense of being pulled at great speed.

The steering was markedly light and as a result the car moved about on the bumpy surface but always felt totally controllable. After a few more laps, the fast sweeps can be taken flat in top with the imposed rev limit, and this is when the car stands out as something very, very special, surging through the corners. What must it have been like when the previous occupants of the driver's seat were nearer 9,000rpm? Braking did not come in for a lot of testing at this fast circuit, but the brakes were never problematic, being smooth and immediate, with lots of feel. The Alfetta remained perfectly balanced into a braking area, and it never felt that something unexpected would happen. With a slight dab on the brakes where necessary, it was then possible to get right back on the throttle and keep up momentum.

The challenge to drive every corner more smoothly, not losing time changing gear, to get out on to the straight quicker, soon grew into a palpable rhythm. All the work was in the throttle foot and the fingertips, feeling the amount of power going down with the least possible restraint. The other effort is in the head, as it would be easy to get carried away. Several gallons of methanol mixture had disappeared very quickly – ten or eleven, which, at around 1.5 to 2mpg (188–141ltr/100km), is not a lot of miles – but it did get me over fifty years back down the road to meet 'The 3 Fs' in the greatest Grand Prix car of all time.

Appendix I The Chassis Types

According to Hull and Slater (1982), there is some evidence that the factory used a straight-forward alphabetical sequence to describe the evolution of the Alfetta, although there is no universal agreement.

158A The original model to appear in the Coppa Ciano in 1938. Narrow body and 190bhp @ 6,500rpm, single exhaust.

158B Appeared in 1939 after Tripoli. Body-work wider, larger radiator cowl, roller-bearing crankshaft, 225bhp @ 7,500, single exhaust higher on the body offside.

158C GP des Nations 1946, first of the two-stage supercharged cars; 260bhp @ 7,500rpm, twin exhaust, forward-facing under-bonnet air-induction trunk.

158D Developed in 1947, also known as 158/47 or even 158A. Larger primary blower, 310bhp @ 7,500rpm increased to 350bhp @ 8,500rpm, single exhaust pipe, lowered front and rear springs, carburettor intake extends to front spring, first raced in 1948 at Monza by Wimille.

159A The 159 in its final form, with de Dion rear axle, twin exhausts, carburettor intake via scuttle scoop, large diameter and width brake drums. Fusi refers to this as 159M.

There are additional references to the 159 as being variously called 159, 159A and 159B, but as there is also no absolute definition of the 159 as opposed to the 158, these labels have meaning only in the context of the person using them and their definition of the difference between the 158 and 159.

Appendix II Existing Cars

158

Chassis 158.005 on display in the Alfa Romeo Museum at Arese with engine 158.102.

Chassis 158.107 with engine 159.227 sold to Mike Sparken to C. Monteverde to C. Voegele.

Chassis 158.109 on display in the Biscaretti Museum, Turin.

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Chassis 159.109 on display in the Alfa Romeo Museum as a chassis without bodywork, with engine 159.211.

Chassis 159.111 on display in Alfa Romeo Museum.

Chassis 159.112 on display in Alfa Romeo Museum and used in events.

Appendix III The Races

1938

- 7 August, Coppa Ciano Junior: E. Villoresi (#14) 1st, C. Biondetti (#24) 2nd, F. Severi (#26) 7th.
- 14 August, Coppa Acerbo Junior: F. Severi (#8) 4th, E. Villoresi (#10) Ret.
- 11 September, Gran Premio di Milano: R. Sommer (#2) 10th, E. Villoresi (#8) 1st, F. Severi (#16) 2nd, A. Marinoni (#32) Ret.
- 18 September, Circuito di Modena: E. Villoresi (#6) Ret., F. Severi (#24) Ret., R. Sommer (#28) Ret., C. Biondetti (#32) Ret.

1939

- 7 May, Gran Premio di Tripoli: G. Aldrighetti (#34) Ret., C. Biondetti (#40) Ret., F. Severi (#42) Ret., G. Farina (#44) Ret., E. Villoresi (#48) 3rd, C. Pintacuda (#50) Ret.
- 30 July, Coppa Ciano: G. Farina (#32) 1st, G. Aldrighetti (#34) Ret., C. Pintacuda (#54) 3rd with C. Biondetti (#48).
- 15 August, Coppa Acerbo: G. Farina (#32) 3rd, C. Pintacuda (#38) 2nd, C. Biondetti (#44) 1st, F. Severi (#46) 4th.
- 20 August, Prix de Berne: G. Farina (#64) 1st, C. Biondetti (#66) 2nd.
- 20 August, Swiss Grand Prix: G. Farina (#64) 6th, C. Biondetti (#66) 9th (ran in the Grand Prix Final).

1940

- 12 May, Gran Premio di Tripoli: G. Farina (#14) 1st, C. Biondetti (#16) 2nd, C. Pintacuda (#22) 6th, C. Trossi (#42) 3rd.

1946

- 9 June, Coupe Rene La Begue: J.-P. Wimille (#1) Ret., G. Farina (#2) Ret.
- 21 July, Grand Prix des Nations: J.-P. Wimille (#18) 1st Heat 1, 3rd Final, A. Varzi (#20) 2nd Heat 1, 7th Final, G. Farina (#42) 1st Heat 2, 1st Final, C. Trossi (#44) 2nd Heat 2, 2nd Final.
- 1 September, Gran Premio del Valentino: G. Farina (#8) Ret., C. Sanesi (#24) Ret., A. Varzi (#46) 1st, J.-P. Wimille (#52) 2nd, C. Trossi (#54) 6th.
- 30 September, Circuito di Milano: A. Varzi (#2) 1st Heat 1, 2nd Final, C. Trossi (#12) 2nd Heat 1, 1st Final, G. Farina (#24) 3rd Heat 2, Ret. Final, C. Sanesi (#32) 1st Heat 2, 3rd Final.

1947

- 8 June, Swiss Grand Prix: C. Sanesi (#32) 2nd Heat 2, 5th Final, C. Trossi (#34) 2nd Heat 1, 3rd Final, A. Varzi (#36) 1st Heat 1, 2nd Final, J.-P. Wimille (#38) 1st Heat 2, 1st Final.
- 29 June, Grand Prix de Belgique: C. Trossi (#2) 3rd with Guidotti, A. Varzi (#4) 2nd, C. Sanesi (#6) Ret., J.-P. Wimille (#8) 1st.
- 13 July, Gran Premio di Bari: A. Varzi 1st, C. Sanesi 2nd.

7 September, Gran Premio d'Italia: A. Gaboardi (#2) 4th, A. Varzi (#16) 2nd, C. Sanesi (#24) 3rd, C. Trossi (#30) 1st.

1948

4 July, Swiss Grand Prix: C. Trossi (#26) 1st, A. Varzi (#28) Crash in practice, J.-P. Wimille (#30) 2nd, C. Sanesi (#56) 4th.

18 July, Grand Prix de L'A.C.F.: A. Ascari (#26) 3rd, C. Sanesi (#28) 2nd, J.-P. Wimille (#30) 1st.

5 September, Gran Premio D'Italia: C. Sanesi (#6) Ret., C. Trossi (#46) Ret., J.-P. Wimille (#52) 1st.

17 October, Gran Premio Dell' Autodromo Di Monza: P. Taruffi (#6) 4th, C. Trossi (#18) 2nd, J.-P. Wimille (#32) 1st, C. Sanesi (#36) 3rd.

1950

16 April, Gran Premio di San Remo: J. Fangio 1st.

13 May, British Grand Prix: J. Fangio (#1) Ret., G. Farina (#2) 1st, L. Fagioli (#3) 2nd, R. Parnell (#4) 3rd.

21 May, Grand Prix de Monaco: G. Farina (#32) Ret., J. Fangio (#34) 1st, L. Fagioli (#36) Ret.

4 June, Swiss Grand Prix: L. Fagioli (#12) 2nd, J. Fangio (#14) Ret., G. Farina (#16) 1st.

18 June, Grand Prix de Belgique: G. Farina (#8) 4th, J. Fangio (#10) 1st, L. Fagioli (#12) 2nd.

2 July, Grand Prix de L'A.C.F.: G. Farina (#2) 7th, L. Fagioli (#4) 2nd, J. Fangio (#6), 1st.

9 July, Gran Premio di Bari: G. Farina (#11) 1st, J. Fangio (#12) 2nd.

30 July, Grand Prix des Nations: G. Farina (#2) 6th, J. Fangio (#4) 1st, E. de Graffenried (#6) 2nd, P. Taruffi (#46) 3rd.

15 August, Circuito di Pescara: J. Fangio, 1st, L. Fagioli, 3rd.

26 August, International Trophy: G. Farina (#1) 1st Heat 1, 1st Final, J. Fangio (#2) 1st Heat 2, 2nd Final.

3 September, Gran Premio D'Italia: G. Farina (#10) 1st, J. Fangio (#18) Ret., L. Fagioli (#36) 3rd, C. Sanesi (#46) Ret., P. Taruffi (#60) Ret.

1951

5 May, International Trophy: J. Fangio (#1) 1st Heat 1, 4th Final, G. Farina (#2) 1st Heat 2, 9th Final, F. Bonetto (#3) 3rd Heat 1, 10th Final, C. Sanesi (#4) 2nd Heat 2, 16th Final.

27 May, Swiss Grand Prix: G. Farina (#22) 3rd, J. Fangio (#24) 1st, E. de Graffenried (#26) 5th, C. Sanesi (#28) 4th.

2 June, Ulster Trophy: G. Farina (#9) 1st.

17 June, Grand Prix de Belgique: J. Fangio (#2) 9th, G. Farina (#4) 1st, C. Sanesi (#6) Ret.

1 July, Grand Prix de L'A.C.F.: G. Farina (#2) 5th, J. Fangio (#4) 1st with L. Fagioli, (#8) C. Sanesi (#6) Ret.

14 July, British Grand Prix: G. Farina (#1) 14th, J. Fangio (#2) 2nd, C. Sanesi (#3) 6th, F. Bonetto (#4) 4th.

29 July, Grosser Preis von Deutschland: J. Fangio (#75) 2nd, G. Farina (#76) Ret., F. Bonetto (#77) Ret., P. Pietsch (#80) Ret.

2 September, Gran Premio di Bari: J. Fangio (#4) 1st.

16 September, Gran Premio D'Italia: G. Farina (#34) 3rd with F. Bonetto (#40) E. de Graffenried (#36) Ret., J. Fangio (#38) Ret.

29 September, Goodwood Trophy: G. Farina (#2) 1st.

28 October, Gran Premio D'España: G. Farina (#20) 3rd, J. Fangio (#22) 1st, F. Bonetto (#24) 5th, E. de Graffenried (#26) 6th.

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