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Special edition: 2005 season

Sauber Petronas: Visiting Hinwil, Alain Prost: Interview with the champion, Calendar: Tracks/dates/drivers



www.volkswagen.ch Phaeton 3.0 V6 TDI 4MOTION, 165 kW (225 PS). Treibstoff-Normverbrauch gesamt: 9,6 1/100 km. CO₂-Ausstoss 259 g/km. Energieeffizienz-Kategorie: B.



Hinterlässt nichts als ein gutes Gefühl. Auch was den Verbrauch angeht.

Jetzt ist das Motorenprogramm des Phaeton komplett und um einen weiteren Hightech-Turbodiesel reicher: Der neue Phaeton 3.0 V6 TDI 4MOTION mit Dieselpartikelfilter, einer Leistung von 165 kW (225 PS), einem Drehmoment von 450 Nm und einem sagenhaft tiefen Verbrauch von nur 9,6 Litern auf 100 km. Kein Wunder, fühlt man sich im neuen Phaeton V6 TDI gleich noch besser. Der neue Phaeton V6 TDI bereits ab Fr. 87720.– (empfohlener Verkaufspreis inkl. MwSt.).



Aus Liebe zum Automobil



Teamwork sets the pace

Beginning March 6 those fast cars with the sleek styling will be turning their laps once again. The speedometers all show zero, while excitement levels are revving up to red line territory. As with every year, Formula One has seen a few changes: new regulations have somewhat reduced grip and required the motors to be rather more durable; the Jaguar racing team has disappeared only to be reborn as Red Bull Racing; every team (except Ferrari) has changed at least one of its drivers, with Williams BMW and Toyota changing both. Sauber Petronas has also played a part in the general trend toward change: this year, for the first time, the Hinwil headquarters will be rolling out the first car whose aerodynamic attributes have been engineered completely in the new wind tunnel. And then there's a certain Jacques Villeneuve sitting in one of the cockpits.

On the other hand, the C24's blue-green livery remains – as do the Credit Suisse logos on the front and rear wings. The partnership between the Swiss bank and the Swiss racing team is now entering its fifth season. Both partners have learned a lot from each other over the four years of this unlikely marriage. And also found that Formula One and finance have more in common than one would first think – particularly because Formula One has long since been a business with a strong financial base of its own, and boasts figures of approximately three billion TV viewers per season. The commonalities also exist on a deeper level, where the foundations for success are laid. They're called teamwork, precision, and commitment. In the end, although the media like to focus on the stars, nothing happens without the people who work tirelessly in the background to make things run.

On the subject of plying one's trade, there are other uncanny parallels between engineers in the world of Formula One, and those in the financial sector. In both spheres, the secret lies in finding the right balance. With a race car, it's a matter of starting from scratch at every race track to get the wing settings, tire choice, and gear ratios just right; with a financial product, it's all about making adjustments to meet the specific requirements of every client. It's even possible to draw a parallel between the financial world and motorsports at an emotional level - a quick market rally will boost adrenalin levels just as much as outbraking an opponent into the hairpin. There is, however, one big difference: while in the stock market, even the most seasoned pros get caught flat-footed every now and again, the Formula One rankings - at least at the top - have remained amazingly predictable over the last few years. Too predictable, many would say. But perhaps this season we'll see a collapse in the speed market

Marco Taborelli, Global Head of Marketing, Credit Suisse





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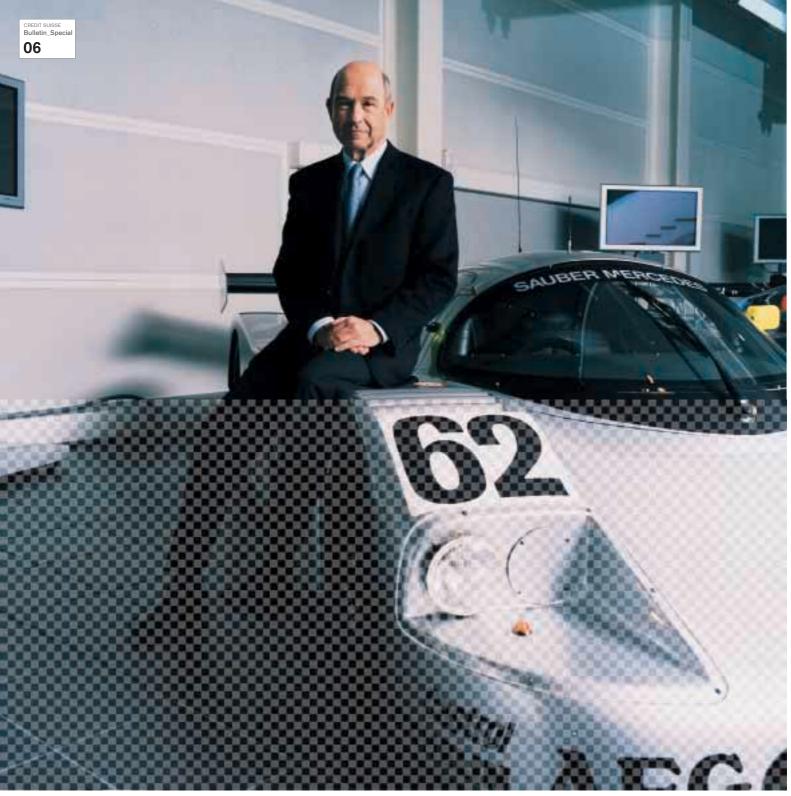
Shock-resistant Sapphire crystal Water-resistant 100 m Stainless Steel CHF 445.–



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Peter Sauber: The C9 has been his most successful car to date. It was the "Silver Arrow" that earned the Sauber team the driver and constructor titles in the Sportscar World Championship in 1989, and which took them to a one-two victory in the 24-hour race in Le Mans.

Text: Andreas Thomann Photos: Eva-Maria Züllig

The mechanics of speed

Every year, the roughly 300 employees of Switzerland's Formula One racing team, Sauber Petronas, accomplish something that the automotive industry can only manage every four years at best: the construction of an entirely new car. Seven employee profiles document the genesis of the extraordinary vehicle.

Hinwil is a sleepy village in the Zurich Oberland. It's here, of all places, nestled between cow pastures, potato fields, and an incinerator plant that the last 30 years have seen the evolution of a unique center of "Made in Switzerland" high technology: Sauber Motorsport AG. Here's a seven-part tour of the company.

Peter Sauber, Team Principal

Peter Sauber built his first race car by hand – in the basement of his parents' home in Zurich. The qualified electrician constructed the tubular frame chassis and the body, added the suspension from a Brabham F3, and to power it all, he threw in a 997 cc Ford Cosworth SCA motor that developed 115 bhp. He christened the yellow two-seater "C1" – the 'C' standing for "Christiane", his wife's first name. The vehicle with the simple abbreviation was an immediate success. In 1970, Sauber drove his C1 to a first place finish in the Swiss Sports Car Championship.

The 'C' designation in Sauber race cars continues today – at the beginning of 2005, the C24 rolled out of the Sauber development center. Other than that, just about everything else has changed in Hinwil, headquarters of the Sauber Petronas Formula One racing team. The one-man operation has grown into a high-tech facility with 300 employees and an annual budget of approximately CHF 100 million. The yellow two-seater with 115 bhp has evolved into a blue and green single-seater with about 900 bhp. And the ambitious tinkerer has become one of the most esteemed entrepreneurs in the country. He's a pioneer who's competed in the top tier of motorsports for the last 12 years.

Sauber's quick expansion says a lot about the current state of Formula One, where six of the world's ten biggest automobile manufacturers compete in a relentless battle of technology. The results have been exploding budgets that, for some teams, are in the neighborhood of CHF 500 million per year. Private teams like Sauber Petronas essentially have two options: rushing to the front, or getting out. Peter Sauber opted for the former. The CHF 70 million wind tunnel, which went online in December of 2003, is symbolic of Sauber's attitude. The impressive structure, with its futuristic blue-grey façade and tinted glass, houses one of the most modern facilities in motorsports. The new wind tunnel has not only improved the team's chances, but also increased the expectations from the fans. With former world champion Jacques Villeneuve taking the wheel of a Sauber for the current season, the media are already talking about the "year of truth". A former world champion driving for Sauber – that's never happened before. Though indeed there has been a future world champion on the team. None other than Michael Schumacher drove for the Hinwilbased team in 1991, when, alongside teammate Karl Wendlinger, he drove his Sauber Mercedes C291 to a phenomenal victory in the final race of the season. It was also the end of Sauber's successful sports car era, during which the team won two consecutive team and driver championship titles (1989 and 1990). On top of this, there was the one-two finish in the legendary 24-hour race of Le Mans in 1989.

A Formula One victory – this is a joy that, so far, has eluded Peter Sauber, although on more than one occasion a Sauber driver has come close to finishing first. Maybe the team has been saving this feat for its thirteenth season. And why not a winner's podium like in Le Mans, with a pair of Sauber drivers occupying the top two spots? Fanciful? Perhaps. But Peter Sauber has proven that sometimes the wildest dreams can come true.

Willy Rampf, Technical Director

It all began 11 years ago in South Africa. Willy Rampf, who was then working with the BMW car development team, experienced his first Formula One race standing next to the Sauber team in Kyalami. "The sophisticated technology and the well-oiled procedures got my engineer's heart pounding." The Bayern native was hooked on motorsports, an addiction that he's still consumed with today. Rampf offered his services to Sauber. Six months later, there was an opening for a race engineer in Hinwil. Rampf didn't hesitate.

For the last five years, Rampf has been the team's Technical Director. Thus, the last five race cars to come from Sauber Petronas have been his creations – which is indeed not the way the man with the strikingly aerodynamic forehead would put it. That's because Rampf takes pains to underscore the point that Sauber's cars are the result of intensive teamwork. "Unlike many of its competitors, Sauber doesn't have a head design engineer. Rather, we have individual design groups that work very independently – suspension, chassis, motor, power- > train, computation." Willy Rampf is, in a manner of speaking, the spider in the middle of the design web, and keeps all the threads together.

As complex as the workflows between the groups are, the Technical Director's requirements remain simple: the new car must be faster than the old one. Which has been the case every season to date. The Formula One race cars get roughly two seconds a lap faster every year – discounting rule changes. The lion's share of this increase in speed comes from the tires, while the motor only plays a small part. Since Sauber Petronas has no influence on either of these – the motors come from Ferrari, and the tires are coming from Michelin this year – the team concentrates on the only remaining variable in this technical competition: the aerodynamics.

It's precisely this field that threatened to put Sauber Petronas on the sidelines. That's because a year ago the team didn't have the most important tool necessary to make their cars even sleeker: their own wind tunnel. Since then, this shortcoming has been eliminated. The new mega-fan delivered solid results to the constructors surprisingly quickly. While in earlier years the Sauber cars tended to lose ground to the competition over the course of the season, last year, the team made great strides toward the front of the pack from mid-season onward. This surge to the front was so significant that, by season's end, teams like Williams-BMW and Renault were under threat. "For us, the season could have had a few more races," grins Rampf. "Now we're hoping to carry that momentum with us into the new year."

The passionate glint in Rampf's eyes tells the tale: even after 11 years in motorsports, the competitive spirit from the days in Kyalami remains unbroken. "Formula One isn't just a battle between 20 drivers, it's also a competition between 1,000 engineers," says Rampf with conviction. "And after every race we know precisely how well we did our jobs."

Seamus Mullarkey, Head of Aerodynamics

Seamus Mullarkey's career with Sauber shows one thing in particular: the field of aerodynamics is becoming more and more dominant in Formula One. When Mullarkey took on his job six years ago, the racing team employed just ten people in the aerodynamics team. In the meantime, that figure has tripled – and Seamus Mullarkey has also become head of this growing team. As the "Lord of the Wings", he makes the final decisions on the design the cars will have as they roar around the racetrack.

With passenger cars, the exterior shape is also designed to impress potential buyers. That's not the case with Formula One, where the laws of aerodynamics are the sole determinants of a car's design. And in spite of this – or maybe because of it – this functional design sends almost erotic reverberations through the fan base. "With its wasp-like waist", the car looks like an "insect with almond-shaped eyes," raved Automobilrevue magazine shortly after the C24 was officially unveiled in January.

When Seamus Mullarkey and his aerodynamics team sat down with Technical Director Willy Rampf last May to flesh out their initial ideas for the C24, they hardly had an entomologist's slide show in mind. Instead, their thoughts revolved around the perpetual optimization between getting the greatest possible downforce with the least possible drag. As a racing car increases speed, downforce also increases, pushing the racing car onto the track with more force. The various aerodynamic components – especially the front and rear wings – transform a Formula One car into an inverted airplane, so that at about 170 kph, the downforce is so great that it would be possible to drive the car upside down on a ceiling. It's downforce that allows drivers to rocket through curves at frightening speeds, with the result that up to four times the normal force of gravity, i.e. 4 g, is applied to their bodies. By comparison, a typical sports car starts to slide at just 1 g.

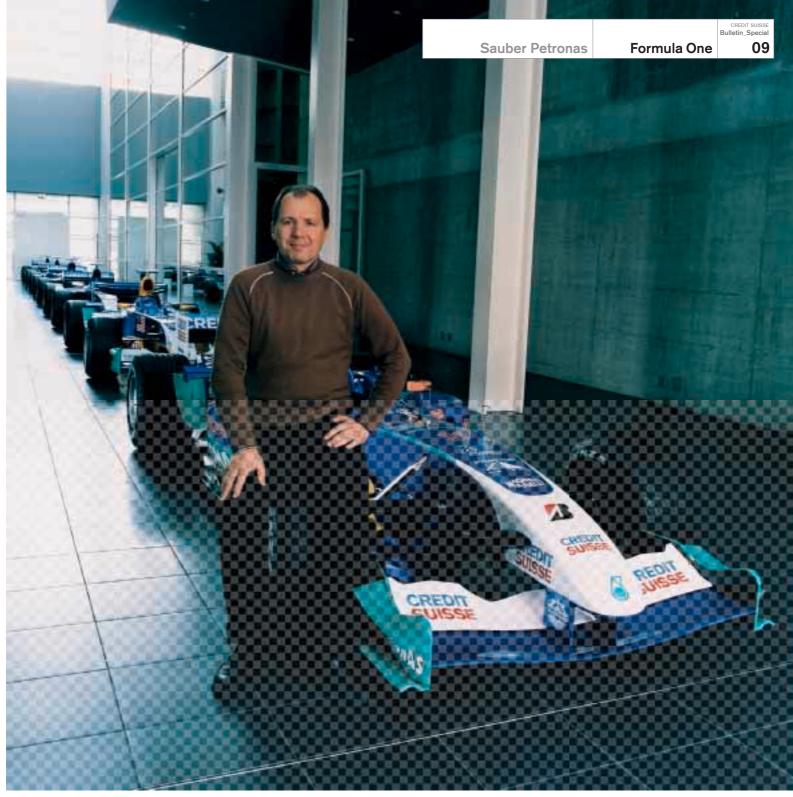
Coming into this season, the Sauber aerodynamicists were faced with two additional challenges: constructing the first car based on data gleaned from the wind tunnel, and dealing with new regulations from the FIA. Once again, Formula One's governing body had found the cars to be too fast, and had looked for ways to slow them down. In addition to the tires – beginning in 2005, the same set of tires must be used for both qualifying and the race – the FIA's Technical Working Group has made significant changes impacting aerodynamics. The front wing has been raised 50 mm, and the rear wing brought forward 150 mm. The height of the diffuser is now limited to 125 mm – the diffuser is a control surface on the car's undercarriage that rises toward the back of the car, and which causes the resulting airflow to create downforce.

"The new regulations reduce downforce by 25 to 30 percent," estimates Mullarkey. "Expressed in lap times, that would be a loss of 2.5 to 3 seconds per lap." Admittedly, we're talking about an amount that is more or less theoretical. That's because the teams will be doing everything they can before the season gets under way to reduce the lost time. It seems that at Sauber the new regulations, together with the new wind tunnel, have stimulated the aerodynamicists' creativity. The new C24 proves this, not just because of the slimmer side pods. The entire rear fairing has become more compact on the latest race car. The exhaust pipes have been seamlessly integrated into the bodywork. The new front wing features a second wing above the conventional lower wing.

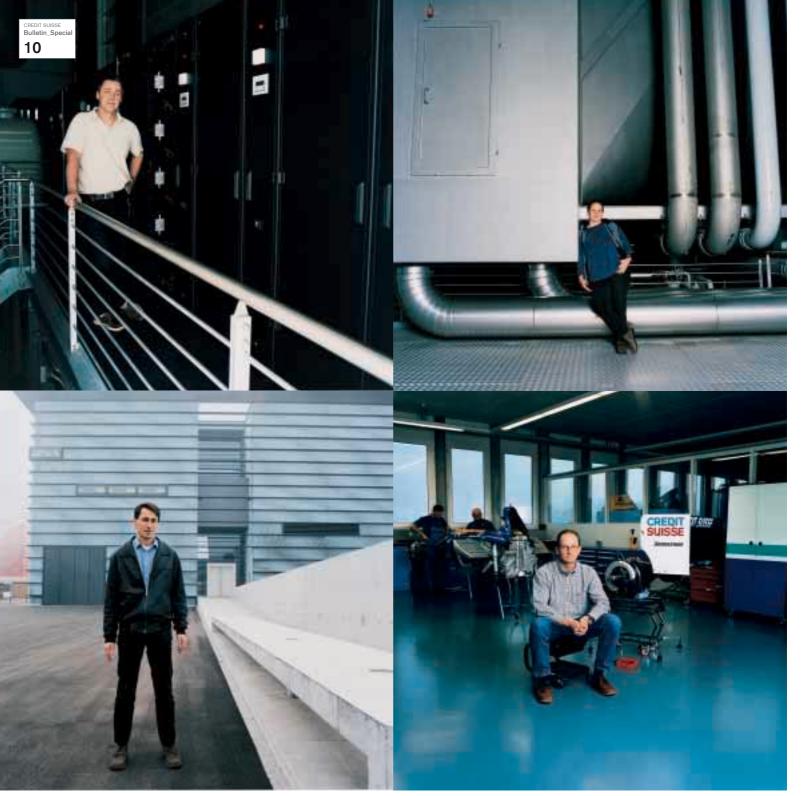
With such a wealth of inventiveness, it wouldn't be surprising if the enforced speed reduction was all but counteracted by the middle of the season. And the FIA would then have to counter with new regulations for the coming year. Mullarkey's team is armed and ready.

Christine Lear, Wind tunnel specialist

Even as a kid, Christine Lear sat glued to the television when the fast cars turned their laps on a Sunday. With time, the initial appetite for spectacle gave way more and more to delight in technology. "I heard the commentators talking shop about new aerodynamic components, and I thought to myself: 'I'd like to know more about that.'" Today, the Irishwoman is one of those tinkering away on the very things that the clever commentators remark on. However, before she took up her dream job as an aerodynamicist in Formula One, the trained IT spe- >



Willy Rampf: The line-up of cars takes you back in time through six Formula One seasons. At the back, the C18 from 1999, at the front the C23 from 2004. The five most recent bear the hallmarks of Technical Director, Willy Rampf.



Top left: Torbjoern Larsson: The fluid dynamics researcher has a new friend, the 18-ton supercomputer, "Albert". Top right: Christine Lear: When the aerodynamicist presses the button, winds blow through the tunnel at up to 300 kph. Bottom left: Seamus Mullarkey: "This is my turf." The Head of Aerodynamics poses in front of the CHF 70 million wind tunnel. Bottom right: Dominik Stockmann: His transmission consists of 400 components and still weighs less than 40 kilograms.

CREDIT SUISSE Bulletin Special

cialist and lawyer had taken a long side-trip into the computer industry. One day, her former love returned, and Lear began studies in aeronautical engineering at Imperial College in London. With a PhD in her pocket, she found herself in the wind tunnel at Sauber Petronas, where she has been working since May of last year.

Before Christine Lear arrived on the scene in Hinwil, the new hightech bastion of the Swiss racing team was firmly in the hands of men. For Lear, this was nothing new. "In the computer industry, as a woman I was always in the minority." This didn't bother her since her employers have always been interested in her intellectual abilities, not in her ancestry, hair color, or her gender. The same was true at Sauber. The only difference was that her gray cells were busy not with finding software solutions, but with airflows that occur around a race car. Like behind the front wheels – one of the problem areas that Christine Lear is responsible for. The parts there, whose job it is to calm the turbulence caused by the front wheels, are called turning vanes.

When we visited the aerodynamicist one day in December, she was in the middle of a three-day wind tunnel test. They're always "crazy days, especially now, just a few weeks before the rollout of the new car." Sometimes the 3,000 kilowatt unit can run all night long. But normally, the 66-ton fan blows air through the 141 meters of steel pipe at speeds of up to 300 kph for only 12 hours a day. The heart of the tunnel, which runs like a closed loop along the interior walls of the building, is the test section, which features a rolling steel runway, like a giant treadmill. There's enough room here to put a full-scale race car on the belt, but for cost reasons, a 60-percent model is used instead. Sensors on the model deliver data directly to the control room, which is separated from the test section by a glass partition.

However, the test in the wind tunnel is just the (provisional) end of a process that moves through the same stages again and again according to a strictly defined cycle: three-dimensional design on the computer, check done by the aerodynamicists, modification, second check by aerodynamicists, forwarding results to model builder, completion of the model, wind tunnel testing, data analysis. If a new component passes all the tests successfully, Christine Lear recommends that her boss puts it into production. If he gives it the green light too, the component is produced and given a workout on the test track, or, if there's no time, put to the test on race day.

Torbjoern Larsson, Fluid dynamics simulation

Since last December, Torbjoern Larsson's had a new friend. His name's "Albert", he's 10 meters wide, 2.3 meters tall, and weighs 18 tons. This oversized super-brain, whose namesake is physicist Albert Einstein, is fitted with 530 AMD Opteron processors, and can handle 2,332 billion computing operations per second. This makes the supercomputer 30 times more powerful than its predecessor, which had also borne the "supercomputer" moniker. Needless to say, Albert, who was built by the Swiss firm Dalco, is one of the most powerful computers in the automotive industry.

Albert will be putting his power toward supporting Larsson and the Swede's team of five in their daily work: fluid dynamics simulation,

otherwise known in the industry as CFD (computational fluid dynamics). You could also refer to it as a virtual wind tunnel. The difference is that the components that Larsson's team tests for their aerodynamic characteristics don't even need to be built - a computer-designed 3D CAD model suffices, which greatly expands the field of play for the constructors. Thanks to CFD, there's no limit to the number of designs that can be created on the computer. That's followed by a methodical process whereby the wheat is separated from the chaff. Larsson describes the process, using the rear wing as an example. "In developing a new wing, we made perhaps 200 2D models. From those, we narrowed it down to half a dozen versions, which we tested further using 3D models. The two best versions were then made into real existing 60-percent models and tested in the wind tunnel." The 3D simulations, in particular, chew up incredible amounts of computing power. The computer constructs the components as huge gridworks and has the virtual wind blow around them. "The previous computers could create gridworks consisting of up to 50 million cells, Albert can do that several times over." The data is more precise, and it's available faster. This begs the question of why a wind tunnel is even necessary in the first place. "Even Albert has his limits at some point," Larsson replies. The computer can even calculate the aerodynamic characteristics of the entire car - however, only if the conditions remain constant. If you wanted calculations for various wind speeds, angles of incidence of the wind, or to investigate the car's center of gravity, the computer would need several weeks to complete the work. The wind tunnel takes care of the job in minutes." On the other hand, according to Larsson, the wind tunnel can't explain why one shape is better than another - but the computer can. "For example, we can understand on the computer screen the measurement results that the wind tunnel has provided." In this respect, the wind tunnel and computer are nothing more than twins that have to be as close to each other in terms of technological status as possible. And since the new wind tunnel is much more precise than the old one, Albert had to be brought in.

Dominik Stockmann, Transmission

Dominik Stockmann has had some tough times. He has Ferrari to thank for that. More precisely, its seven-speed transmission built in 2003. Last season, this was the part that was responsible for transferring the cumulative power of the 850 bhp motor (also from Ferrari) to the wheels of the C23. This was an exception because in previous years the transmission had borne the insignia "Made by Sauber". This will be the case again this season – manifested in transmission boss Stockmann's increased stress. That's because last year's Ferrari model set the bar quite high. "The Ferrari transmission is arguably the most compact in Formula One," says Stockmann in praising his colleagues at the Ferrari works in Maranello.

The more compact, the better, is the recurring theme for transmission builders, since achieving compacter designs leaves more room for aerodynamic considerations. It should be as light as possible too, but at the same time as stiff as possible. Ultimately the transmission housing is one of the car's primary components, one to which the > entire rear axle is attached. And of course its efficiency should be as high as possible, so that almost none of the motor's power is wasted.

Working under the constraints of the regulations, engineers have, in recent years, continually pushed back the limits of physics, mechanics and electronics. A Formula One driver changes gears about 2,500 times per race. To change gears, the driver pulls a paddle mounted on the steering wheel – 30 milliseconds later the gear changes. The transmission is checked after every race to see how well it's standing up to this punishment: the entire transmission is completely disassembled, cleaned, checked for cracks, and re-built if necessary. Each of its roughly 400 components has a clearly defined lifetime, ranging from one racing weekend to an entire season.

In choosing the materials, only the best will do. This year, the Sauber transmission will get a titanium housing – just like the Ferrari's. The bearings are ceramic, the cogs are made out of high-strength steel, as used in the arms industry. Due to its low weight requirement, aluminum and various plastics are also used. Practically each individual part is custom-made, right down to the bearings and gaskets. In the end, this highly customized and extremely trimmed-down construct weighs in at somewhere between 30 and 40 kilograms (the exact weight is top secret). "In the last five years alone, transmissions have become around 20 kilos lighter," says Stockmann in summing it up.

Transmissions are assembled at speeds worthy of the Formula One name. It takes seven months to get from the first draft on the computer, to the construction stage. This includes the actual fabrication time of just three months. At the end of December, the individual components, which are all produced by suppliers in Germany, France, England, and Italy, arrive in Hinwil. Just under two weeks later, the new car is already on the test track – there's no time for a check on the test bench. "We produce a prototype of sorts that has to be ready on day X, and that also has to be functioning 100 percent from the start." The procedure worked again this year. On the evening of January 14, following the first 64 problem-free laps on the test track in Valencia, Stockmann knew that "Mission Impossible" had been successfully completed.

Christoph Zimmermann, Construction

It was 1989. The Sauber team was celebrating a one-two finish at the legendary 24 hours of Le Mans. And a certain Christoph Zimmermann, who had just completed his apprenticeship at ABB, joined Sauber as a machine draftsman. The team's sports car era is ancient history. But Christoph Zimmermann remains – together with about ten other employees from those glory days.

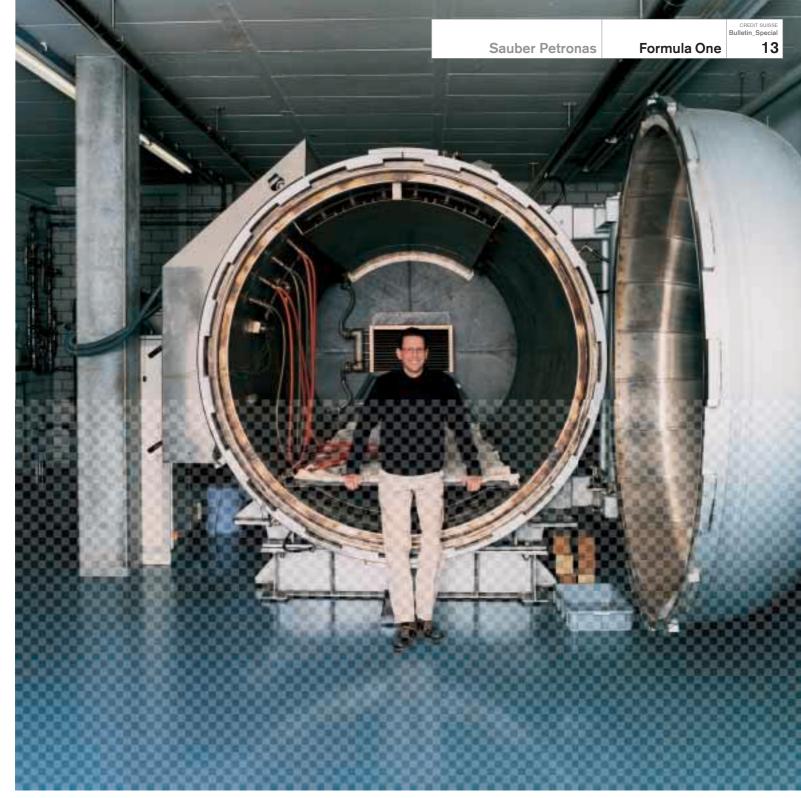
The native of Zurich is living proof that you don't necessarily have to change employers to enjoy a varied work routine. Just once, after completing his technical night school course in 1999, has the downto-earth man ventured into the wide world, to the US, where he was hired by a manufacturer that built race cars for the CART racing series. But after the company withdrew from the racing series just a year later, the prodigal son suddenly returned to his first employer. Since 2001, he's been the group head of composite construction, and leads a team of eight employees. Composite, fiberglass, or carbon: the synonyms refer to the same, extremely strong and at the same time lightweight material from which practically the entire Formula One car is made, with the exception of the motor, transmission, and a few mechanical components.

"The aerodynamicists define the car's external shape," explains Zimmermann in defining what his job entails. "They give us a CAD file with the three-dimensional data for the part that we're supposed to build." Whereby the specification is always more or less the same: as light and rigid as possible. And as fast as possible. For Zimmermann's team, construction doesn't start until three months before the rollout. That's the latest point at which construction must begin on the chassis, the biggest, and thus most time-consuming part of the car. The term "construction" is somewhat misleading since Zimmermann isn't faced with manual work other than holding a mouse and using the keyboard in order to calculate, virtually, the requisite properties of the part.

"In contrast to the aerodynamicists, we can't work to make the car faster – at most, we can make it slower." That still doesn't make the task easy. The components of a Formula One car are subjected to extreme loads. Especially the chassis: it has to withstand the vibrations from the 850 bhp motors, handle the impacts from the suspension, and absorb up to 1.5 tons of downforce on the front and rear wings. And if the car smashes into a tire wall, the driver has to come away from the crash as unscathed as possible. In spite of all this, the chassis weighs considerably less than the driver himself. It's an equation with many unknowns.

When the answer is found, the blueprints come to the people in the "clean room", where the parts are produced piece by piece. First, a positive mold is made from plastic, then a negative mold is made from fiberglass, and only then can production of the actual part begin. It's a craft that requires the utmost precision – the carbon sheets are layered one on top of another, and bonded together with an epoxy resin. The parts are then subjected to the extreme heat and pressure of the autoclave, which is essentially an oversized oven.

The composite people can breathe deeply only around Christmas, when the approval tests required by the FIA have been passed. The celebration usually comes to an end with the first test drives, when the bodywork often suffers some sort of damage. Then they stoke up the big oven in Hinwil again.



Christoph Zimmermann: Whether rear wing or chassis – whatever begins its life as a three-dimensional drawing on the composite constructor's computer eventually finds its way into the autoclave, where it's baked into a durable and light fiberglass component.



First the bulldozers, then the race cars: The inaugural Turkish Grand Prix will be contested some 75 kilometers outside of Istanbul in August.

Text: Elmar Brümmer

Orient-Express

With new racetracks in Malaysia, Bahrain and Shanghai, Formula One has expanded far to the east. This season, the racing express stops in Istanbul for the first time – and in so doing closes the gap between Occident and Orient.

You can't exactly say that Formula One boss Bernie Ecclestone's strategy for conquest leads absolutely nowhere. In correct geographic terms, you'd have to say directly to Kurtdogmus. Up to two years ago, there really was nothing there – except for a Turkish hamlet whose name translates as "Where the wolf was born". Wolves haven't howled there for a long time, but soon 10-cylinder motors will be doing some howling of their own. Not far away, the inaugural running of the Turkish Grand Prix is set for August 21, 2005. The full Grand Prix calendar is geared up to go for the 2005 season.

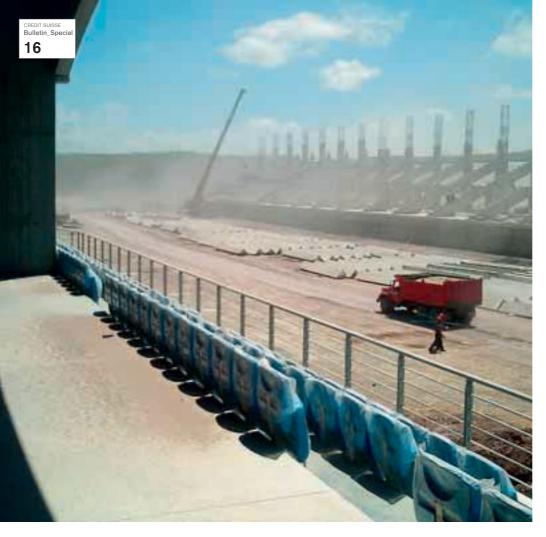
Although the venue is officially called Istanbul Racing Circuit, the city center of the only metropolis on earth to straddle two continents is a good 75 kilometers away. Even members of the Grand Prix caravan aren't quite sure what to make of the latest stopover. Turkey's hosting of Formula One means that the teams now have an additional race on their schedule. Race number 19 means additional work, but additional revenue at the same time. Formula One is continuing its expansion course, regardless of how healthy this growth might be in the end. In this sport, limits have always been just notional ones.

Old continent fears for its traditional races

Beyond the short-term cost-benefit analysis, the exodus to the Bosporus is also an expression of the master plan of continuously opening up new markets for the top tier of racing. This comes on the heels of last season, when the addition of Bahrain and China saw two blank spots disappear from the racing map. That has consequences for other regions closer to home: If the Grand Prix calendar isn't to be expanded substantially (the figure of 20 is reputed to be the threshold, at least for the current format of a three-day racing weekend), more traditional venues will have to give way. This is particularly true of European ones, although the old continent will always form the basis of the racing series, which television ratings, alone, bear out. While the countdown to mid-summer continues its relentless course on the Turkish site's website (www.formula1-istanbul.com), Mexico, as the next F1 hopeful, sees its chances as good, South Africa is hoping to make a comeback, and India and Moscow are putting together revamped applications.

Cash infusion from the state needed to get things going

Critics claim that the admission procedure for potential applicants is conducted as a function of how big the potential organizer's checkbook is. In order for a new world championship race to be profitable from the perspective of Formula One participants and owners, annual guaranteed sums of USD 15-25 million have to be earned by the event organizers. The local organizer must also cede the marketing rights and advertising banners along the track to the relevant Formula One body. The organizer's cut comes from admission receipts alone. This causes a vicious circle: The higher the appearance fee is, the higher the ticket prices become - and thus more people rethink (at least after the initial excitement wears off) the idea of attending a race. But anyone who wants to be a global player in motorsports also has to have the capacity to be a global payer. Even the two races on Germany's tradition-steeped racetracks, the Nurburgring and Hockenheim, are just barely in the black. If for structural reasons, the respective state governments didn't help to fill the coffers, the future of these races would now be history. Subsidization in order to maintain a venue - for this reason the longestablished Formula One organizers are copying the system being employed by newcomers to the racing series, whose grand financial commitments mostly have state backing. The current example involves Istanbul's chamber of commerce, which is supporting the race financially to the tune of more than EUR 60 million. The objective is in no way scandalous: the Grand Prix should attract tourists who spend time in the region before and after the race. After sev- >



The ultra-modern facility on the Bosporus can accommodate 150,000 spectators

eral natural catastrophes in the recent past and the increased fear of terrorism, the traditional holiday destination needs something to polish its image.

The 150,000 seats, with prices ranging from EUR 40 for the openair grandstands to EUR 350 for gold-class seats featuring the usual GP standard, are expected to be filled mostly by foreign tourists who will, however, have to travel in from hotels in Istanbul or nearby beach resorts due to a lack of infrastructure in the immediate vicinity of the track. "We're expecting a huge economic boom from Formula One and have invested money from a state fund in it," said Turkish Prime Minister Erdogan at the ground-breaking ceremony. The agreement with Formula One runs for the next seven years.

For racetracks newly accepted into the Formula One fold, it's not just a matter of sports and money – there's also an increasing element of prestige. Those who have the opportunity to organize a Formula One GP belong to an exclusive circle. To date, F1 supremo Bernie Ecclestone has used this bait most skillfully. At the same time, he has set limitations to the expansion: A mammoth season such as the one found in the popular North American Nascar racing series, which includes 39 racing dates, would inflate his product. And exclusivity remains the biggest, if also most intangible, asset that Formula One has.

The dramatic bulldozer race that went into full swing on the outskirts of Kurtdogmus proves one thing to the Turks: It's easier and faster to gain admittance to the world of Formula One than it is to get into the European Union. Construction of the 5.378-kilometer track, which rises and falls and includes 13 curves, began only in the fall of 2003. The imposing structures along the highway from Istanbul to Ankara reflect the elements and ornaments of the local lifestyle. The oriental impact can't mask the influence of the Teutonic architect: his name is Hermann Tilke, he comes from Aachen, Germany, and is also the father of the most recent (successful) Formula One mega-projects in Kuala Lumpur, Manama, and Shanghai. In addition to the facility's qualities and topography, which is somewhat reminiscent of the Spa circuit in the Ardennes, there is another unique characteristic: The Istanbul circuit runs counter-clockwise. Organizer Mumtaz Tahincioglu, president of the Turkish Automobile and Motorsports Federation (TOMSFED) promises that "it will be one of the most unusual circuits in the world." According to the construction plans, the top layer of asphalt should be laid down in May. Whether or not the Grand Prix gets final approval depends on Formula One's Technical Director, Charlie Whiting, who'll be making that determination based not on promises, but on the quality of the circuit.

Turkey has alarmed its neighbors

In order to put the new circuit to best use, it'll be hosting the German Touring Car Masters in early October. Beyond the prestige, the Turks are also interested in establishing motorsports in the country with its 65 million citizens. The Anatolian Rally, run for the first time in 2003, was the first step. Since then there's also been the addition of Osmanian race driver Can Artam to the GP2 series, which is now the Formula One's foundation level.

Meantime, top-tier racing's incursion into the northwestern end of Turkey has alarmed its neighbors. Greece's Ministry of Development is drafting corresponding plans. Cyprus, which lies just off the Turkish coast, is also working toward getting its own Grand Prix. Recently, none other than Max Mosley, president of the FIA, the governing body of international motorsports, was in Nicosia for talks. Staging a race on the divided island would put Formula One ahead of even global politics. Even if it's just a beautiful, tranquil dream. <



" To choose a partner means to show trust in his competence and fairness."

Peter Sauber, Entrepreneur



Major Formula One competition

Take part, and you might soon be there in person!



1st prize

A VIP weekend for two at the Italian Grand Prix in Monza (September 2–4, 2005). This exclusive weekend includes grandstand seats, a guided tour of the paddock area, a visit to the Sauber pits, merchandising items, two nights' accommodation in a double room, as well as transfers from your hotel to the racetrack and back (excluding travel).

2nd prize

A one-day trip for two in the fall of 2005 to a Sauber Petronas test day in Europe (including travel).

3rd prize

A Certina watch – DS Podium Titanium, shock-resistant, multi-functional movement, scratch-resistant sapphire glass, water-proof to 100 meters.

4th to 10th prizes

VIP sets including rucksack, T-shirt, driver's baseball cap and much more.

Competition rules: Winners will be notified directly. Credit Suisse reserves the right to publish winners' names. No correspondence regarding the competition or draw will be entered into. No legal recourse is permitted.

Closing date: June 6, 2005

You can enter the contest at: www.credit-suisse.com/f1.



Sauber Petronas

Fan items on special offer

Blue polo shirt featuring logos of Sauber and the two main sponsors as well as a driver's cap (Jacques Villeneuve or Felipe Massa). Order your polo shirt (available in sizes S, M, L, and XL) and the driver's cap of your choice today for the package price of CHF 137 (including postage). Orders can be placed directly via www.credit-suisse.com/f1. The package price saves you CHF 22, compared with the cost for these items individually. The offer applies from the beginning of April 2005, and is valid while supplies last.



Formula One Yearbook

2004 season

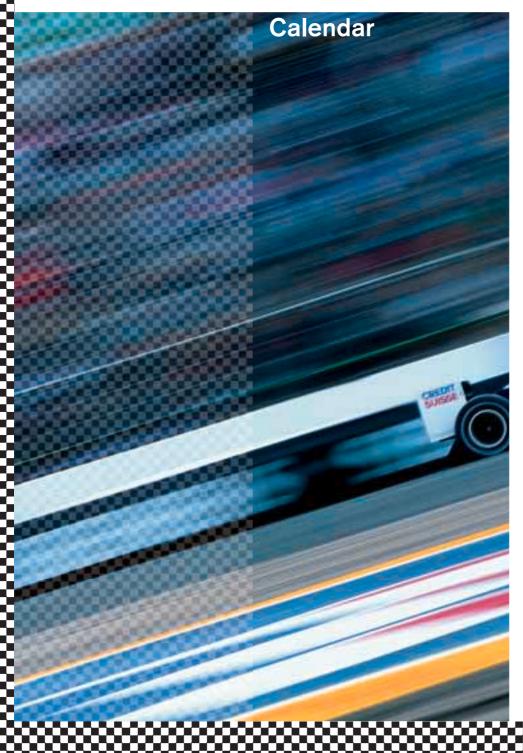
Relive the 2004 Formula One season: all the emotion, tension, sporting highs and lows. The official Formula One Yearbook 2004 with an introduction by Bernie Ecclestone offers an insight into the exciting world of Formula One and its protagonists – on 256 pages. Order your copy (hardback) at www.credit-suisse.com/f1 for the special price of CHF 39 and save CHF 10. This offer applies while stocks last.



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THE F1 2005 SEASON Circuits, teams, drivers



| 06.03. | Australia, Melbourne |
|--------|-----------------------------|
| 20.03. | Malaysia, Kuala Lumpur |
| 03.04 | Bahrain, Manama |
| 24.04 | San Marino, Imola |
| 08.05 | Spain, Barcelona |
| 22.05 | Monaco, Monte Carlo |
| 29.05 | Europe, Nürburgring |
| 12.06 | Canada, Montreal |
| 19.06 | United States, Indianapolis |
| 03.07 | France, Magny-Cours |
| 10.07 | Great Britain, Silverstone |
| 24.07 | Germany, Hockenheim |
| 31.07 | Hungary, Budapest |
| 21.08 | Turkey, Istanbul |
| 04.09 | Italy, Monza |
| 11.09 | Belgium, Spa-Francorchamps |
| 25.09 | Brazil, São Paulo |
| 09.10. | Japan, Suzuka |
| 16.10 | China, Shanghai |
| | |

Teams and drivers

| leams and drivers |
|---|
| Team Ferrari Founded 1929 Formula One debut 1950 Wins 183 Drivers 1 Michael Schumacher, 2 Rubens Barrichello Tires Bridgestone |
| Team BAR Honda Founded_ 1998 Formula One debut 1999 Wins 0 Drivers 3 Jenson Button, 4 Takuma Sato Tires Michelin |
| Team Renault Founded 1977 Formula One debut 1977 Wins 17 Drivers 5 Fernando Alonso, 6 Giancarlo Fisichella Tires Michelin |
| TeamWilliams BMWFounded_1968Formula One debut1977Wins113Drivers7 Mark Webber, 8 Nick HeidfeldTiresMichelin |
| TeamMcLaren MercedesFounded1963Formula One debut1966Wins138Drivers9 Kimi Räikkönen, 10 Juan Pablo MontoyaTiresMichelin |
| Team Sauber Petronas Founded1970 1970 Formula One debut 1993 Wins 0 Drivers 11 Jacques Villeneuve, 12 Felipe Massa Tires Michelin |
| Team Red Bull Racing Founded2004 2004 Formula One debut 2005 Wins0 0 Drivers14 David Coulthard, 15 TBD TiresMichelin |
| Team Toyota Founded1999 1999 Formula One debut2002 2002 Wins0 0 Drivers16 Jarno Trulli, 17 Ralf Schumacher TiresMichelin |
| Team Jordan Founded 1981 Formula One debut 1991 Wins 4 Drivers 18 Narain Karthikeyan, 19 Tiago Monteiro Tires Bridgestone |
| Team Minardi Cosworth Founded 1980 Formula One debut 1985 Wins 0 Drivers 20 Christijan Albers, 21 TBD |

March 6, 2005 <u>Australian GP</u> in Melbourne



i = gear | 220 = speed (in kph) | 2.4 = centrifugal force (in g) = checkpoint | 29.0 s = section time | 1.26.8 min= lap time

| Name of circuit | Albert Park Melbourne |
|------------------|-----------------------|
| Circuit length | 5.303 km |
| Number of laps | |
| Race distance | 307.574 km |
| Asphalt quality | smooth |
| Grip level | low |
| Tire compound | moderate |
| Tire wear | moderate |
| Brake wear | high |
| Max. throttle | 61% |
| Fuel consumption | moderate |
| Circuit debut | 1996 |

Brief description

Although overtaking is considered to be not exactly straightforward in today's Formula One, it is certainly possible on the Albert Park Circuit. The first opportunity presents itself at the end of the starting and finishing straight. If a driver is close to the man in front at the end of any of the 58 laps, he can overtake by emerging from his slipstream and then outbraking him before the first turn. The same is possible before turn 3. It is also possible to overtake in the penultimate curve of the circuit if the man in front is not paying attention and leaves a gap open.

Recent winners

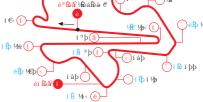
| 2004 | Michael Schu | umacher, Ferrari |
|-----------------|----------------------|------------------|
| 2003 | David Coulthard, Mcl | _aren Mercedes |
| 2002 | Michael Schu | umacher, Ferrari |
| Best finish for | Sauber Petronas | 4 (2001) |
| Best Swiss dri | ver | |

Internet

Grand Prix: http://cars.grandprix.com.au Tourism: www.grandprixtravel.com.au

"The track is great; it's a long lap with a series of straights and heavy braking and I really enjoy racing there. The race weekend in Melbourne will be our chance to find out how competitive we are." Jacques Villeneuve

March 20, 2005 <u>Malaysian GP</u> <u>in Kuala Lumpur</u> (R 1ab) (R 1



| Name of circuit | Sepang International Circuit |
|------------------|------------------------------|
| Circuit length | 5.543 km |
| Number of laps | |
| Race distance | 310.408 km |
| Asphalt quality | smooth |
| Grip level | high |
| Tire compound | soft |
| Tire wear | moderate |
| Brake wear | moderate |
| Max. throttle | 60% |
| Fuel consumption | moderate |
| Circuit debut | |

Brief description

In Sepang it is, above all, the heat and the extreme humidity that sometimes reaches 90 percent which cause problems for Formula One team members. At the same time, it presents a special test for the technical equipment. However, most members of the Formula One wagon train like coming to Malaysia, as the Sepang International Circuit is one of the most beautiful circuits in the Formula One calendar. At 16 meters, the track is the widest in Formula One and practically has two starting and finishing straights that run almost parallel to one another.

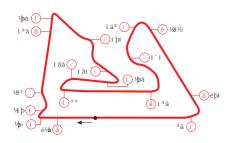
Recent winners

| 2004 | Michael Schumacher, Ferrari |
|---|----------------------------------|
| 2003 | Kimi Räikkönen, McLaren Mercedes |
| 2002 | Ralf Schumacher, Williams BMW |
| Best finish for Sauber Petronas5 (2002) | |
| Best Swiss driver | · |

Internet

Grand Prix: www.malaysiangp.com.my Tourism: www.tourism.gov.my/index.asp

"I enjoy this circuit, but don't like turn two. The hear makes the race difficult, but I arrive early to acclimatize This is a home race for us as Petronas is based here It's important to have a good race." Jacques Villeneuve April 3, 2005 Bahrain GP in Manama



| Name of circuit | Bahrain |
|------------------|-----------------------|
| | International Circuit |
| Circuit length | 5.417 km |
| Number of laps | 57 |
| Race distance | 308.769 km |
| Asphalt quality | very smooth |
| Grip level | moderate |
| Tire compound | moderate |
| Tire wear | moderate |
| Brake wear | moderate |
| Max. throttle | n.a. |
| Fuel consumption | n.a. |
| Circuit debut | |
| | |

Brief description

Formula One celebrated its debut on the Arabian peninsula on April 4, 2004, and had a worthy first winner in the form of Michael Schumacher. However, at the victory ceremony they had to do without the otherwise obligatory shower of champagne – a concession to Islamic customs. The Bahrain International Circuit poses a number of challenges to the drivers. Five left-hand and seven right-hand curves need to be mastered, and a good top speed is required on the 1.090-kilometer starting and finishing straight.

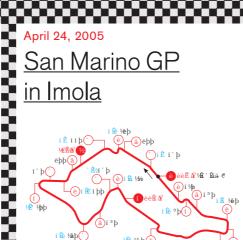
Last winner

2004_____ Michael Schumacher, Ferrari Best finish for Sauber Petronas _____ 11 (2004)

Internet

Grand Prix: www.bahraingp.com.bh Tourism: www.bahrainguide.org

"I've heard good things about the track. There will be new things to deal with racing in the desert; sand, wind, dry heat and so on. I look forward to driving the track, as well as seeing the country."



| Name of circuit | Autodromo |
|------------------|-----------------------|
| | _ Enzo e Dino Ferrari |
| Circuit length | 4.933 km |
| Number of laps | |
| Race distance | 305.609 km |
| Asphalt quality | smooth |
| Grip level | low |
| Tire compound | soft |
| Tire wear | moderate |
| Brake wear | high |
| Max. throttle | 64% |
| Fuel consumption | moderate |
| Circuit debut | |

Brief description

The track bears a heavy burden. In 1994, Ayrton Senna and Roland Ratzenberger died here. At the time, the track was still designed purely for high speed. Following that fateful year, the organizers toned down the autodrome. Now there are four slow chicanes, which force the cars to brake – sometimes from over 300 kph to below 100 kph. Of course, this places enormous demands on the brakes. Just as in Sepang and Interlagos, the combination of slow and fast sections poses problems for the set-up.

Recent winners

| 2004 | Michael Schumacher, Ferrari |
|--|-----------------------------|
| 2003 | Michael Schumacher, Ferrari |
| 2002 | Michael Schumacher, Ferrari |
| Best finish for Sauber Petronas 4 (1994) | |
| Best Swiss driver: Marc S | Surer6 (1983) |

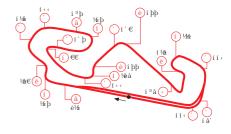
<u>Internet</u>

Grand Prix: www.autodromoimola.com Tourism: www.stai.it

"Imola is not one of my favorite tracks, but things have gone well for me here. The curbs on this track are very different. I think it would benefit other circuits to copy them because they work very well."

May 8, 2005 Spanish GP in Barcelona

Calendar



| Name of circuit | Circuit de Catalunya |
|------------------|----------------------|
| Circuit length | 4.627 km |
| Number of laps | |
| Race distance | |
| Asphalt quality | smooth |
| Grip level | high |
| Tire compound | soft |
| Tire wear | high |
| Brake wear | low |
| Max. throttle | |
| Fuel consumption | moderate |
| Circuit debut | |

Brief description

The Circuit de Catalunya offers a good mixture of fast, medium-fast, and slow curves. The track is known for constantly changing over the course of the weekend. This is due partly to the fact that there is often a strong wind blowing over it. Moreover, the strength and direction of the wind change constantly, and there is also the unknown factor of the new asphalt that was laid in the winter. Due to the lack of overtaking opportunities, it is important to achieve a good starting position in qualifying.

Recent winners

| 2004 | Michael Schumacher, Ferrari |
|---------------------------|-----------------------------|
| 2003 | Michael Schumacher, Ferrari |
| 2002 | Michael Schumacher, Ferrari |
| Best finish for Sauber Pe | tronas 5 (2002) |
| Best Swiss driver | |

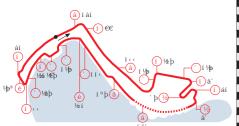
Internet

Grand Prix: www.circuitcat.com Tourism: www.bcn.es

"Although there aren't many overtaking opportunities, it is a tough track and this makes for a good race. I've won here and like the circuit, but it's hard on the brakes. The city is great and the people are fun."

Formula One

May 22, 2005 <u>Monaco GP</u> in Monte Carlo



i = gear | 220 = speed (in kph) | 2.4 = centrifugal force (in g) = checkpoint | 29.0 s = section time | 1.26.8 min= lap time

| Name of circuit | Circuit de Monaco |
|------------------|-------------------|
| Circuit length | 3.340 km |
| Number of laps | |
| Race distance | 260.520 km |
| Asphalt quality | bumpy |
| Grip level | moderate |
| Tire compound | soft |
| Tire wear | low |
| Brake wear | moderate |
| Max. throttle | 41% |
| Fuel consumption | low |
| Circuit debut | 1950 |

Brief description

This most unusual of all GP circuits presents a tough test to drivers. The problems presented by the circuit include its uneven surfaces, the road markings and the difficulty of judging the curves. Concentration is required to prevent a swift exit from the circuit. In Monaco, the cars drive with a lot of ground clearance in order to counteract the unevenness. The tunnel is the fastest part of the circuit, and here the cars accelerate up to around 300 kph.

Recent winners

| 2004 | Jarno Trulli, Renault |
|---------------------------------|-----------------------------------|
| 2003 | Juan Pablo Montoya, Williams BMW |
| 2002 | David Coulthard, McLaren Mercedes |
| Best finish for Sauber Petronas | |
| Best Swiss driver: | Clay Regazzoni2 (1979) |

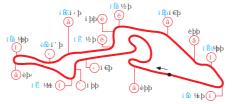
Internet

Grand Prix: www.acm.mc Tourism: www.visitmonaco.com

'Monaco is an extremely difficult, glamorous race. Qualifying is important, as it is really hard to overtake. There is no room for error. This adds to stress levels, which do not happen at other races." Jacques Villeneuve

<u>European GP</u> on the Nürburgring

May 29, 2005



| Name of circuit | Nürburg Grand Prix Kurs |
|------------------|-------------------------|
| Circuit length | 5.148 km |
| Number of laps | |
| Race distance | 308.863 km |
| Asphalt quality | slippery |
| Grip level | low |
| Tire compound | soft |
| Tire wear | moderate |
| Brake wear | moderate |
| Max. throttle | n.a. |
| Fuel consumption | n.a. |
| Circuit debut | 1951 (north ring) |
| | |

Brief description

Following serious accidents, the managers of the Nürburgring changed the circuit dramatically. However, these changes caused some of the special character of the so-called "green hell" to be lost. On the other hand, the numerous ascents and descents and the generally unpredictable nature of the weather in the Eifel remain. The modern circuit is a mixture of fast and slow curves, and offers excellent opportunities for overtaking both before and after the start and finish.

Recent winners

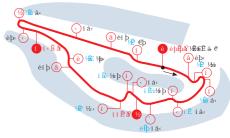
| Michael Schumacher, Ferrari |
|-------------------------------|
| Ralf Schumacher, Williams BMW |
| Rubens Barrichello, Ferrari |
| r Petronas6 (2004) |
| ay Regazzoni 1 (1974) |
| |

Internet

Grand Prix: www.nuerburgring.de Tourism: www.eifel.info

"I have good memories because it is where I won my first and last Grand Prix! But, I'm not a great fan of the track. The layout isn't very interesting and the barriers obscure your view." Jacques Villeneuve

June 12, 2005 <u>Canadian GP</u> in Montreal



| Name of circuit | Gilles Villeneuve Circuit |
|------------------|---------------------------|
| Circuit length | 4.361 km |
| Number of laps | |
| Race distance | 305.270 km |
| Asphalt quality | bumpy |
| Grip level | moderate |
| Tire compound | soft |
| Tire wear | moderate |
| Brake wear | high |
| Max. throttle | 58% |
| Fuel consumption | moderate |
| Circuit debut | |

Brief description

Montreal is one of the quicker tracks in the calendar; it is driven with low wing settings and requires late braking. At four points, the drivers reach speeds of over 300 kph. Most of the curves and chicanes are narrow and demanding, and are hemmed in by crash barriers and concrete walls.

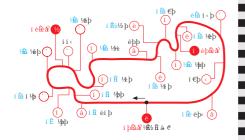
Recent winners

| 2004 | Michael Schumacher, Ferrari |
|---|-----------------------------|
| 2003 | Michael Schumacher, Ferrari |
| 2002 | Michael Schumacher, Ferrari |
| Best finish for Petronas4 (2004) | |
| Best Swiss driver: Clay Regazzoni3 (1979) | |

Internet

Grand Prix: www.grandprix.ca Tourism: www.tourisme-montreal.org

"Races here are always exciting. You reach speeds of 330 kph on the straight and brake heavily for a midspeed chicane that is the entrance to the pits. A lot of drivers have had accidents here, me included." Jacques Villeneuve June 19, 2005 United States GP in Indianapolis



| Name of circuit | Indianapolis |
|------------------|----------------|
| | Motor Speedway |
| Circuit length | 4.192 km |
| Number of laps | |
| Race distance | 306.016 km |
| Asphalt quality | smooth |
| Grip level | moderate |
| Tire compound | soft |
| Tire wear | moderate |
| Brake wear | high |
| Max. throttle | 65% |
| Fuel consumption | moderate |
| Circuit debut | |

Brief description

The Indianapolis Motor Speedway has the longest maximum-throttle percentage of any Grand Prix circuit. In the infield, there are both slow and fast curves, which require a lot of downforce – in contrast to the straight and the sharp curve. For this reason, the teams make do with a lower top speed on the straight in order to have sufficient downforce in the infield.

Recent winners

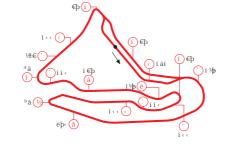
| 2004 | Michael Schumacher, Ferrari |
|-----------------------------|-----------------------------|
| 2003 | Michael Schumacher, Ferrari |
| 2002 | Rubens Barrichello, Ferrari |
| Best finish for Sauber Peti | ronas 3 (2003) |
| Best Swiss driver | |

Internet

Grand Prix: www.usgpindy.net Tourism: www.indy.org

"Indy isn't bad, although it's not as good as it could be. If I'd designed it, I'd have used both straights on the oval, not just one. Indy feels like a home GP because of all of the Canadian fans that come." Jacques Villeneuve





| Name of circuit | Circuit de Nevers |
|------------------|-------------------|
| Circuit length | 4.411 km |
| Number of laps | |
| Race distance | 308.586 km |
| Asphalt quality | very smooth |
| Grip level | moderate |
| Tire compound | soft |
| Tire wear | moderate |
| Brake wear | moderate |
| Max. throttle | 51% |
| Fuel consumption | moderate |
| Circuit debut | 1991 |

Brief description

The French course is one of the most modern racetracks in Formula One, and offers a few "gems". The "Grande Courbe" curve, for example, is one of the fastest in Formula One – it is taken at over 250 kph. Another type of challenge is posed by the curves that drivers are forced to take completely blind, because they are so hard to judge. The very flat surface allows teams to run with low ride heights. This in turn means that the FI cars handle the fast curves very well.

Recent winners

| 2004 | Michael Schumacher, Ferrari |
|-----------------------|-------------------------------|
| 2003 | Ralf Schumacher, Williams BMW |
| 2002 | Michael Schumacher, Ferrari |
| Best finish for Saube | er Petronas 4 (1994) |
| Best Swiss driver | |

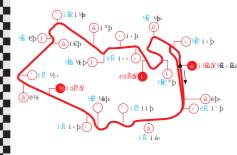
Internet

Grand Prix: http://gpf1.ffsa.iside.net/ Tourism: www.crt-bourgogne.fr

"To be honest, it's not one of my favorite tracks, but there are a couple of high-speed chicanes, which are fun. The atmosphere is pretty laid back because it usually takes place at the beginning of the summer." Jacques Villeneuve

July 10, 2005 <u>British GP</u> in Silverstone

Calendar



Formula One

23

| Name of circuit | Silverstone |
|------------------|-------------|
| Circuit length | 5.141 km |
| Number of laps | 60 |
| Race distance | 308.355 km |
| Asphalt quality | smooth |
| Grip level | moderate |
| Tire compound | soft |
| Tire wear | moderate |
| Brake wear | low |
| Max. throttle | 60% |
| Fuel consumption | moderate |
| Circuit debut | |

Brief description

Silverstone has been improved continuously over the years. "Beckett's" curve is one of the most unusual curves in Formula One and can be taken at speeds above 200 kph. This interesting curve combination permits several ideal lines. It therefore presents the drivers with a different challenge on each lap. The asphalt in Silverstone is relatively smooth and offers good holding, but without placing too strong demands on the tires.

Recent winners

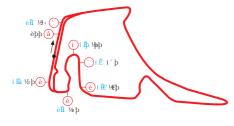
| 2004 | Michael Schumacher, Ferrari |
|---------------------------|-----------------------------|
| 2003 | Rubens Barrichello, Ferrari |
| 2002 | Michael Schumacher, Ferrari |
| Best finish for Sauber Pe | etronas5 (2001) |
| Best Swiss driver: Clay R | legazzoni 1 (1974) |

Internet

Grand Prix: www.silverstone-circuit.co.uk Tourism: www.southnorthants.gov.uk

"I have great memories of winning here in 1996 and 1997. There's always a huge crowd and the fans are great. You need a high amount of downforce and high aerodynamic efficiency. It's a very interesting track." Jacques Villeneuve

July 24, 2005 <u>German GP</u> Hockenheim



 i) = gear
 220 = speed (in kph)
 2.4 = centrifugal force (in g)

 ii) = checkpoint
 29.0 s = section time
 1.26.8 min=lap time

| Name of circuit | Hockenheimring |
|------------------|-------------------|
| | Baden-Württemberg |
| Circuit length | |
| Number of laps | 67 |
| Race distance | 306.458 km |
| Asphalt quality | smooth |
| Grip level | high |
| Tire compound | moderate |
| Tire wear | moderate |
| Brake wear | high |
| Max. throttle | |
| Fuel consumption | normal |
| Circuit debut | |

Brief description

The atmosphere is like that of a football stadium. The new Hockenheimring has nothing in common with its predecessor except for the motodrome. The long highspeed straights through the woods have disappeared to be replaced by a number of curves that encourage overtaking maneuvers, which immediately made the track very popular with drivers.

Recent winners

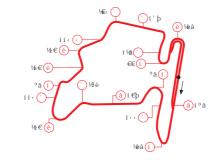
| 2004 | Michael Schuma | acher, Ferrari |
|--------------------|-----------------------|----------------|
| 2003 | Juan Pablo Montoya, W | illiams BMW |
| 2002 | Michael Schuma | acher, Ferrari |
| Best finish for Sa | uber Petronas | 5 (2000) |
| Best Swiss driver | : Clay Regazzoni | 2 (1979) |

Internet

Grand Prix: www.hockenheimring.de Tourism: www.cvb-heidelberg.de

"I have good memories of the old track. The new track is no longer a low downforce track and it's now like many of the other circuits. There are a few overtaking opportunities, which makes for an interesting race." Jacques Villeneuve

July 31, 2005 Hungarian GP in Budapest



| Name of circuit | Hungaroring |
|------------------|-------------|
| Circuit length | 4.381 km |
| Number of laps | |
| Race distance | 306.663 km |
| Asphalt quality | dusty |
| Grip level | low |
| Tire compound | soft |
| Tire wear | moderate |
| Brake wear | high |
| Max. throttle | 61% |
| Fuel consumption | moderate |
| Circuit debut | |

Brief description

The Hungaroring is not to everyone's taste. With its 15 curves over 4.384 kilometers, it is very narrow and allows hardly any overtaking. On Friday in particular, this comparatively bumpy circuit is very dusty and thus slippery too. The almost constant high summer temperatures, combined with a relatively long race of over 70 laps, mean that drivers are sometimes pushed to the limits of their ability.

Recent winners

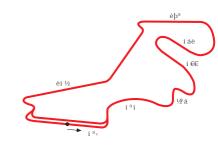
| 2004 | Michael Schu | macher, Ferrari |
|----------------------|-------------------|------------------|
| 2003 | Giancarlo Fisiche | lla, Jordan Ford |
| 2002 | Michael Schu | macher, Ferrari |
| Best finish for Saub | er Petronas | 3 (2001) |
| Best Swiss driver: C | lay Regazzoni | |

Internet

Grand Prix: www.hungaroring.hu Tourism: www.budapestinfo.hu

"It's a strange track because it doesn't really have straight lines, it turns all the time, which is normally not a good thing, but somehow the layout is fun and it has a good rhythm." Jacques Villeneuve

August 21, 2005 <u>Turkish GP</u> in Istanbul



| Name of circuit | _ Istanbul Racing Circuit |
|------------------|---------------------------|
| Circuit length | 5.378 km |
| Number of laps | 57 |
| Race distance | 306.546 km |
| Asphalt quality | n.a. |
| Grip level | n.a. |
| Tire compound | n.a. |
| Tire wear | n.a. |
| Brake wear | n.a. |
| Max. throttle | n.a. |
| Fuel consumption | n.a. |
| Circuit debut | 2005 |

Brief description

After Shanghai and Bahrain, which were new additions to the 2004 racing calendar, Istanbul is the third newcomer within the last two years. The German, Hermann Tilke, was again responsible for the circuit design. With its six right-hand curves and seven left-hand curves, the circuit is driven counter-clockwise, just as in San Marino and Brazil. On the longest straight (720 meters), the cars accelerate up to 320 kph. The race date in the middle of August is expected to turn the circuit into a cauldron.

Internet

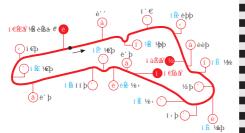
Grand Prix: www.formula1-istanbul.com/f1 Tourism: http://english.istanbul.com

"A new track in the race calendar is always a good thing. It keeps life interesting. Also it's the same for all the drivers the first time around. I am sure that it will be outstanding."

Jacques Villeneuve

September 4, 2005

<u>Italian GP</u> in Monza



| Name of circuit | Autodromo di Monza |
|------------------|--------------------|
| Circuit length | 5.793 km |
| Number of laps | |
| Race distance | 306.720 km |
| Asphalt quality | smooth |
| Grip level | moderate |
| Tire compound | moderate |
| Tire wear | high |
| Brake wear | very high |
| Max. throttle | |
| Fuel consumption | high |
| Circuit debut | 1950 |

Brief description

The high-speed circuit at Monza favors cars with a high top speed, as well as those that lose little time when driving over the high curbs in the chicanes. The built-in chicanes are designed to reduce the speed of the cars, and this places heavy demands on brakes and tires. The last curve before the start and finish area, the "Parabolica", demands strict observance of the ideal line in order to have sufficient momentum for the start-finish straight, which is driven at speeds far in excess of 300 kph.

Internet

Grand Prix: www.monzanet.it Tourism: www.milanoinfotourist.com

"Monza is one of the places I know best in the calendar because I used to race there when I was in Formula Three. The people are very passionate about racing and it's a special place to compete." Jacques Villeneuve



| Name of circuit | Circuit |
|------------------|----------------------|
| | de Spa-Francorchamps |
| Circuit length | 6.973 km |
| Number of laps | |
| Race distance | 306.812 km |
| Asphalt quality | variable |
| Grip level | moderate |
| Tire compound | soft |
| Tire wear | moderate |
| Brake wear | moderate |
| Max. throttle | 63% |
| Fuel consumption | high |
| Circuit debut | |
| | |

Brief description

At almost seven kilometers, the Circuit de Spa-Francorchamps in the Ardennes is the longest circuit on the calendar, and also one of the most challenging. The combination of very fast curves and chicanes, as well as the "Eau Rouge" drop, make racing on it a true challenge for all drivers. It is difficult to find a good set-up due to the circuit's length. Rain is common in Spa and adds to the excitement.

Recent winners

| 2004 | _ Kimi Räikkönen, McLaren Mercedes |
|--------------------|------------------------------------|
| 2003 | No race |
| 2002 | Michael Schumacher, Ferrari |
| Best finish for Sa | auber Petronas3 (1998) |
| Best Swiss drive | r |

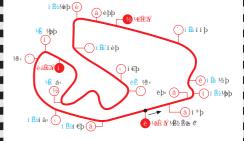
Internet

Grand Prix: www.spa-francorchamps.be Tourism: www.aqualis.be

"Spa is a great race! I've got memories of big crashes here, although I've never had a good race, only a good qualifying. It's one of the last high-speed circuits and I like the fact that it follows the layout of the land." Jacques Villeneuve



Calendar



| Name of circuit | Autodromo |
|------------------|------------------------------|
| | Jose Carlos Pace, Interlagos |
| Circuit length | 4.309 km |
| Number of laps | |
| Race distance | 305.909 km |
| Asphalt quality | bumpy |
| Grip level | moderate |
| Tire compound | soft |
| Tire wear | low |
| Brake wear | low |
| Max. throttle | 60% |
| Fuel consumption | low |
| Circuit debut | |

Brief description

The Autodromo Jose Carlos Pace is made up of a very fast and a very slow section. As in Malaysia, this poses problems for the cars' set-up. The extreme unevenness requires an undercarriage with a soft set-up. The teams attempt to make a compromise between being fast enough in the straights with the lowest possible wing settings on the one hand, and having sufficient downforce for the tight curves on the other.

Recent winners

| 2004 | . Juan Pablo Montoya | ı, Williams BMW |
|--------------------|----------------------|-------------------|
| 2003 | Giancarlo Fisiche | ella, Jordan Ford |
| 2002 | Michael Sch | umacher, Ferrari |
| Best finish for Sa | uber Petronas | 3 (2001) |
| Best Swiss driver | : Clay Regazzoni | 2 (1974) |

Internet

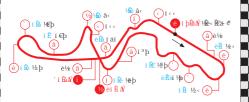
Grand Prix: www.gpbrasil.com.br Tourism: www.embratur.gov.br

"The circuit definitely has character, but is not among my favourites. It has some difficult corners and a tight infield section. It's also pretty bumpy. The fans create a really special atmosphere." Jacques Villeneuve

Formula One

25

October 9, 2005 Japanese GP in Suzuka



e gear | 220 = speed (in kph) | 2.4 = centrifugal force (in g) = checkpoint | 29.0 s = section time | 1.26.8 min=lap time

| Name of circuit | Suzuka International |
|------------------|----------------------|
| | Racing Course |
| Circuit length | 5.807 km |
| Number of laps | 53 |
| Race distance | 307.573 km |
| Asphalt quality | smooth |
| Grip level | high |
| Tire compound | soft |
| Tire wear | moderate |
| Brake wear | low |
| Max. throttle | |
| Fuel consumption | high |
| Circuit debut | |

Brief description

Suzuka is one of the most demanding circuits. There is a mixture of slow and fast curves, and the S curves at the start require strict observance of the ideal line. If you miss the ideal line, it is impossible to take the subsequent curves properly.

Recent winners

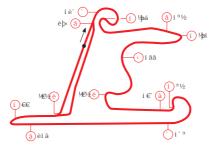
| 2004 | Michael Schumacher, Ferrari |
|---|-----------------------------|
| 2003 | Rubens Barrichello, Ferrari |
| 2002 | Michael Schumacher, Ferrari |
| Best finish for Sauber Petronas6 (1999) | |
| Post Swies driver | |

Internet Grand Prix: www.suzukacircuit.com Tourism: www.jnto.go.jp

"Suzuka is an amazing track. I don't really like the chicane and the hairpin is not fun, but it's logical. It's quite technical, very challenging and there are a lot of demanding high-speed corners."

Jacques Villeneuve

October 16, 2005 Chinese GP in Shanghai



| Name of circuit | Shanghai Circuit |
|------------------|-------------------|
| Circuit length | 5.451 km |
| Number of laps | |
| Race distance | 305.256 km |
| Asphalt quality | ····· very smooth |
| Grip level | n.a. |
| Tire compound | n.a. |
| Tire wear | n.a. |
| Brake wear | n.a. |
| Max. throttle | n.a. |
| Fuel consumption | n.a. |
| Circuit debut | 2004 |

Brief description

Shanghai, the second new item on last year's racing calendar in addition to Bahrain, was also designed by Hermann Tilke. His goal was to create a good mix of fast and slow curves. The circuit has the form of the Chinese character "Shang", which means "success". The cars drive at an average speed of 205 kph around the circuit, which has 14 curves (7 left, 7 right).

Last winner

2004_____ Rubens Barrichello, Ferrari Best finish for Sauber Petronas _____ 7 (2004)

<u>Internet</u>

Grand Prix: www.f1china.com.cn Tourism: www.cnto.org

"The immediately impressive thing about the race in China is the brand new infrastructure, circuit and hospitality. It's nice to drive but difficult. Basically, it's a showcase of what a track should be." Jacques Villeneuve Rules – a summary of the key points

The following stays the same: Qualifying

In both qualifying sessions, each driver drives a single timed lap. The driving order for the second qualifying session is determined by the times recorded in the first session: the fastest from the first session is the last onto the circuit and vice versa. Following the second session, the fuel volume and set-up of the cars may not be changed prior to the start the race.

Parc Fermé rules

The cars must be parked in the Parc Fermé following qualifying. No further work may be undertaken on the cars.

Vehicle weight

A Formula One car must weigh at least 605 kilograms at all times when on the circuit, including driver, oil and brake fluid.

Tires

Each driver can use a maximum of 16 dry and 28 wetweather tires per Grand Prix.

The following stays the same:

Motors

The motors must now last for two race weekends, instead of one – i.e. about 1,500 kilometers.

Tire changes

There will no longer be tire changes during the race. The last qualifying session and the race are contested with the same set of tires.

Aerodynamics

New guidelines with respect to the outer form of the chassis should cause the areodynamic downforce to be reduced by around 20 percent. The aim is to achieve lower curve speeds. Among other measures, the front wing has been raised and the rear wing pushed further forward.

<u>Timetable</u>

Friday 11:00–12:00 1st free practice 14:00–15:00 2nd free practice Saturday 09:00–09:45 3rd free practice 10:15–11:00 4th free practice 13:00–14:00 1st qualifying Sunday 10:00–11:00 2nd qualifying From 14:00 Race

A Sunday afternoon in the south of France

The hidden charm of a hobby in which absolutely nothing happens, but is deafening.

Before my friend Christian came to visit me in southern France, I couldn't have cared less about Formula One. Although I'd always enjoyed watching all kinds of sports on TV (football and tennis of course, but also volleyball, table tennis, basketball, and even curling and snooker), I'd never really gotten into motorsports. That's probably because I basically don't care for cars unless I'm sitting in one and have to get somewhere. Even then, depending on how far I've got to go, I usually prefer to go by bike or train. Nonetheless, I didn't find motorsports to be completely inane, although that seemed like a natural assumption to make - at least to anyone except race drivers and mechanics. Many people claim that Formula One races are about as entertaining as standing on a freeway overpass waiting for some lunatic doing 200 kph to attempt a pass and plow into one of the concrete columns. Assuming that the point of showing sports on television lies in offering the audience an enjoyable blend of action and relaxation, Formula One races truly are a concoction straight from the loony bin: nothing happens, and at the same time it's deafening. Of course, you can turn down the volume, but then you're left with absolutely nothing. In any case, it was all the same to me. Sometimes I even watched a little on Sunday afternoons. Just for the hell of it, like when you're staring off into space, or gazing into an aquarium, while your thoughts revolve around any number of things - except for racing cars, that is.

Christian arrived on a Thursday, and by Sunday morning, we'd sampled a lot of wine. It was summer, and most of the time we sat out in the garden, or inside with the windows open. It was noon on Sunday, and we'd just gotten up, a little worse for wear. While drinking our coffee, it dawned on us that, for a change, an afternoon without wine could do no harm. In any case, we rejected out of hand all the suggestions that were rattled off between us on how to spend a Sunday afternoon, sitting and talking, any activities even loosely associated with drinking wine. Instead of that, we came up with: going on a bike trip, taking a walk, or heading to the seaside. However, each of these activities demanded a certain degree of exertion, which is why today I think the suggestions were an expression more of imagination than intent. In other words, to us, it involved the image of friends who knew how to do more than just blithely guzzle away, friends who could also engage in sensible, mature activities that were fitting for the south of France in summer, and in keeping with our age. But we were prudent enough to avoid turning this image into reality. After a while, Christian came up with "Well, we can watch Formula One." "Oh, yeah," I replied.

And that's how it happened. I closed the shutters to block out the midday sun, we sat back and I turned on the TV. For the next one and a half hours we sat in peaceful silence sipping our coffees, watching as Michael Schumacher led from the start without even once being threatened by a competitor, and in the end won with a lead of I don't know how many days. So much for excitement. The point is that since that afternoon I've associated Formula One with a friendship involving sensible, mature things without losing sight of what's humanly possible. We were, of course, in no condition to ride a bike - once around the house at best. On the other hand, we did have to stop drinking for a while (if only so that we could once more enjoy the next glass of wine and the conversation). What else could have helped us then? Surely not a Champions League final between Barcelona and Arsenal. Much too exciting. We'd have hit upon the idea of cooling our emotions with a little beer within the first ten minutes. Maybe a stage of the Tour de France, or a golf tournament. But it just happened to be a Formula One race. And today, if on a Sunday afternoon wellintentioned but hardly manageable plans for the day and the future threaten to get me

down, I simply need to turn the TV on, watch Michael Schumacher, and think about that afternoon with Christian. I somehow feel secure in the knowledge that it's loud and totally boring indeed, but I'll watch it for a while. At the moment, I can't manage to do anything better anyway. <



Jakob Arjouni

Jakob Arjouni was born in Frankfurt am Main on October 8, 1964, and now lives in Berlin. He rose to fame through his crime novels in which the German-Turkish private eye Kemal Kayankaya slogs his way through the less savory parts of Frankfurt, and enjoys a beer or two. His first novel, "Happy Birthday, Turk!", was published in 1987. He was awarded the German Critics Award for Crime Fiction for "One man, one murder". Arjouni has also written plays and the novel "Magic Hoffmann". His books have been translated into several languages. 28

Text: Andreas Thomann Photos: Daniel Reinhard

Opposites drive each other

<u>Felipe Massa versus Jacques Villeneuve, youth versus experience, Brazilian nonchalance versus Canadian</u> rebelliousness. The two Sauber drivers are so different in temperament, yet resemble each other so closely once they're sitting in the cockpit – ready to fight tooth and nail.

Normally, 13 is an unlucky number. However, for the Sauber Petronas racing team, its 13th season in Formula One could well bring good fortune. The omens have seldom looked so good: the C24 is the first car whose outer shape has been engineered completely in the new wind tunnel. The new partnership with tire supplier Michelin has already yielded promising lap times during the winter testing sessions. Once again, a brand new Ferrari motor will be sitting under the cowling. And last, but not least, beginning this season a certain Jacques Villeneuve will be lining up alongside Felipe Massa for the Hinwil-based Sauber team.

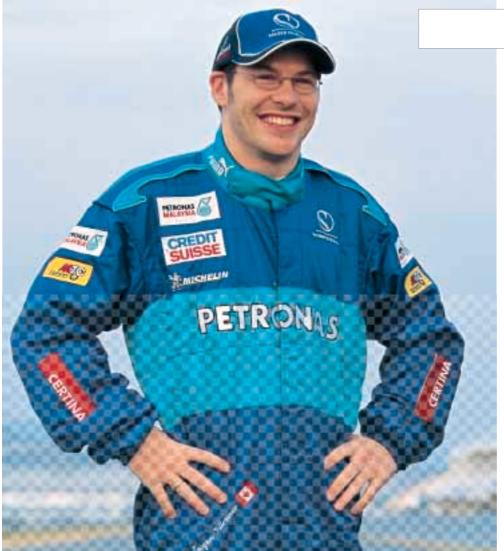
A former world champion in a Sauber cockpit – that's never happened before. The media called it the "deal of the year", and were thankful that, after a rather dull Ferrari-dominated season, Peter Sauber had given them a subject that they could sink their teeth into for weeks. The prodigal son is making his comeback after a year off, and joining of all things a racing team whose austere image doesn't at all seem to fit the Canadian's colorful past – that's truly the stuff that gives rise to speculation. This is the charismatic racer whose hair color has covered the spectrum over the course of his career, whose overalls are always a few sizes too big, and who prefers to travel to the races in his motor home rather than gliding into five-star hotels. And this Jacques Villeneuve will now be driving for a team that to date has been steeped in such traditional Swiss virtues as hard work, precision, and inconspicuousness.

The Villeneuve-Sauber connection was in fact anything but foreseeable. For quite some time, the unemployed former champion eyed a cockpit spot with Williams, the team with which he made his meteoric rise to Formula One fame in 1996, and with whom he won the world championship title the following year (then still with Renault motors). The other hope lay with a return to BAR-Honda, Villeneuve's previous employer, who had signed him in 1998 for a record-breaking salary. He had helped them establish their team over five disappointing seasons until the end of 2003 when team owner David Richards axed him. But the Canadian gave both teams the brush-off. Peter Sauber had stepped into the breach and offered Villeneuve the cockpit previously occupied by Giancarlo Fisichella, who was switching to Renault for the coming season. Villeneuve gratefully accepted the offer, well aware that a ride with Sauber was more or less a last chance.

Felipe Massa still has a score to settle

With the spotlight currently aimed at Sauber's newest acquisition, the second "Sauberman", Felipe Massa, is finding himself relegated to the shadows to some extent. That could quickly change if the Brazilian can manage to clearly outperform his new teammate in the first race of the season. There's nothing Massa would rather do. The boy from Brazil has had a score to settle ever since 2002, Massa's rookie year in Formula One, when Villeneuve publicly criticized him for a driving error. In the meantime, it must be said that in interviews Villeneuve continues to highlight the great improvement that Massa has made since then. However, you're left with the lingering impression that the Brazilian is out for nothing less than revenge. Last year in Suzuka, Villeneuve got an initial taste of what it means to insult Brazilian racing honor. Driving the last three races of the season for Renault, Villeneuve was passed twice by Massa, who was on a tear in Suzuka.

Don't expect Felipe Massa to show any restraint simply because Jacques Villeneuve is now racing for the same team. It's more likely that we'll see just the opposite. "Your teammate is your primary opponent," challenges Massa. There's a great deal of truth in that, since in Formula One, where the car plays such a large role in the success or failure of a team, driver performance is very hard to compare – unless they're driving for the same team. If Massa should succeed in dominating former world champion Villeneuve for the entire season, he'll secure himself recognition in the paddock. From that point of



Sauber duel

CREDIT SUISSE Bulletin Special

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Jacques Villeneuve

Born: 9.4.1971 Nationality: Canadian Residence: Villars (Switzerland) Height: 1.71 m Weight: 67 kg Hobbies: skiing, hockey, music (writes his own songs) Number of GP starts in Formula One: 133 Victories: 11 Pole positions: 13 Greatest success: World Champion (1997 season)

"Jacques Villeneuve loves the thrills just as much as any win." Gerald Donaldson, Formula One journalist

view, Felipe Massa stands to gain a lot, while Villeneuve has a great deal to lose.

Although the two rivals might, on a few occasions, be very close together on the racetrack, it's rather unlikely that this will be the case away from the paddocks. The new Sauber duo are too dissimilar. It starts with appearances. With his boyish facial features and tousled locks, Felipe Massa looks more like a talented youngster than a Formula One professional, who, at 24, already has 14 years of racing experience under his belt. In contrast, there's Villeneuve. He's ten years older, and with his steel-rimmed glasses and slightly gelled brown hair, once again a natural color, he could pass as a stage critic. Accordingly, the two rivals have different personalities. Massa - the nice young man who lives next door, the ideal son-in-law who'd rather give you a friendly smile or a jovial greeting than offend you. Villeneuve, however, comes across as an eccentric, a loner who indifferently goes his own way and is outspoken at the same time. With his pointed and sometimes ironic comments regarding teammates, team owners, and even the Formula One establishment, Villeneuve has not made friends in every corner. For example, when the FIA, the governing body of Formula One, required smaller cars for the beginning of the

1998 season, his response was only four letters long: "Shit." The FIA was insulted and summoned Villeneuve to a disciplinary hearing in Paris, where the 30 FIA members in attendance sanctioned the insolent driver.

As different as the two are, they are remarkably similar once they're sitting in the cockpit: as great competitors. If the Formula One championship was decided in duels alone, Felipe Massa would have to be considered a serious contender. Last season, nobody passed an opponent as often as the Brazilian did - 29 times in total. If you're going to duel with someone, you need perfect control over your car, a good overview, and plenty of killer instinct. There's a reason why Willy Rampf, Technical Director for team Sauber, told the Blick newspaper that Felipe Massa was the most aggressive driver Sauber had ever had. He's a hothead who can keep his cool when the chips are down, praises Rampf. "A lot of the time he had to leave the racing line - and there, on the dirty part of the track, that's where you make the most mistakes." Anyone who witnessed how Massa, battling wheel to wheel against Williams driver Juan Pablo Montoya, went flat out into Spa's infamous Eau Rouge curve and emerged in front knows what the German means.



Felipe Massa

Felipe Massa Born: 25.4.1981 Nationality: Brazilian Residence: Wollerau (Switzerland) Height: 1.66 m Weight: 59 kg Hobbies: soccer, waterskiing, tennis Number of GP starts in Formula One: 34 Best result: 4th place (Belgium, 2004)

"Massa is the most aggressive driver Sauber has ever had." Willy Rampf, Technical Director for Sauber Petronas

Felipe's Eau Rouge duel was the stuff Formula One legends are made of. Jacques Villeneuve already secured a spot for himself in racing lore with a move that earned him the world championship. It was in Jerez de la Frontera, in southern Spain, the final Grand Prix of the 1997 season. Michael Schumacher started the race just one point ahead of Villeneuve in the standings. The showdown came on lap 47. In the approach to a right-hander, Villeneuve outbraked race leader Schumacher, darting past him on the inside. Schumacher reacted by swerving right and giving the Williams Renault a shot with his right front wheel. Villeneuve and most observers agree that Schumi deliberately tried to knock him out of the race in order to win the world championship title. However, the attempt failed, and it was Schumacher who ended up in the gravel bed; Villeneuve became world champion.

Eight seasons later, the Formula One world would like nothing more than to see a world championship title come down to the final race. Realistically, however, Jacques Villeneuve won't be a factor in the race for the title this time. But he'll be good for a few scenes worth seeing. That's because restraint is a virtue that neither the Canadian nor his Brazilian challenger share to any great extent. "He's a fearless guy who loves thrills just as much as any win," says Canadian journalist and Villeneuve confidant Gerald Donaldson. "If he sees an opening, he'll go for it." It's no wonder that the gutsy fighter has totaled his car on more than one occasion. Some self-proclaimed psychologists accuse Villeneuve of having a reckless streak and suspect that his father's tragic death is the reason. In 1982, Gilles Villeneuve, who already had eight GP wins to his credit, was killed when his Ferrari crashed during a training session at the Belgian Grand Prix – his son, Jacques, was 11 at the time. Jacques Villeneuve vehemently rejects any such theories. "If I had a reckless streak, I would have been dead long ago. I love being alive." It's precisely this love of life that drives him to push the limits of physics. "There's nothing that makes me feel so alive as when I can roar through a curve flat out."

With so much pent-up aggression in the two cockpits, the Sauber camp can look forward to a few goose bumps this season. Hopes remain that fate will steer the energy along the road to success. And for those who still worry about the safety of their idols, take to heart these words that Jacques Villeneuve had for Formula 1 magazine a few years back: "Compared with the time when my dad was driving, the risk to drivers has dropped tenfold, while the salaries have gone up by the same factor. What do we have to complain about?" <

CREDIT SUISSE Bulletin Special

Natacha Gachnang: "Racing is in my blood"

At 17, Natacha Gachnang isn't your typical teenage girl. She doesn't have the time to daydream about clothes or boys. Instead, her concentration is fully geared on becoming a professional race driver.

Based on interest shown in her by the likes of former F1 world champion, Niki Lauda, and Michael Schumacher's manager, Willi Weber, her aspirations are not so farfetched. Impressed by the potential of the energetic young Swiss girl from Aigle, both of these top shots approached her with offers to manage her career. Each would like to see a woman compete within the upper echelons of Formula One. "My father and I weighed both offers and we decided that Weber's was best for me," she says. "This is a great opportunity for me and I am giving my best so that I become a professional racecar driver."

Natacha is not the first in her family to entertain such dreams. Her grandfather, Georges, made a name for himself as a semi-professional racer in the early sixties by competing in the extreme Nurburgring 1,000-kilometer race. Her father, Olivier, was an enthusiastic kart racer in his youth, but did not pursue racing with the same fervor as his father. "Racing and cars are my family's passion," says Natacha. "My family also has two car repair garages and an auto dealership. You could say that I've got high octane in my blood." Her own love affair with racing began at age five when her father first placed her behind the wheel of a go-kart. "I don't remember asking to try it - it was my dad's idea, really. But, once I started I liked it and I haven't regretted it yet."

Fighting for pole position

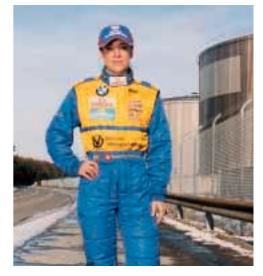
Natacha has sped her way through the karting ranks to the coveted BMW ADAC Formula Junior Cup and its championship racing series. The series, which gives 16- to 18-yearolds the chance to race Formula cars powered by BMW motorcycle engines, has paved the way for successful Formula One drivers such as Ralf Schumacher. Along with the motorsport training, these racing hopefuls learn everything from basic automotive engineering, to getting sponsorship funding. Sponsoring is an ever-present issue in any driver's mind and can make or break a career, even more so in the case of women who want to make it into the top tier. The reality is that women must be talented and attractive to gain the interest of sponsors. "It is an advantage that my daughter is pretty. If she were unattractive, she wouldn't stand a chance," said Olivier Gachnang matter-of-factly in a 2004 interview with "Facts" magazine. To give Natacha the foothold she needed in car racing, her father invested 60,000 euros for her first season in 2003. This paid off. By the end of the season, Natacha was one of eight drivers who qualified for a 50,000-euro sponsorship from BMW and ADAC for 2004.

Competition for sponsorship remains fierce, and even family members have joined the battle. Natacha's 16-year-old cousin, Sebastien Buemi, drove off with this prime prize for the 2005 season. He is giving her a run for her money in more ways than one. Sebastien placed third out of 23 in the Formula BMW ADAC Championship in 2004. Natacha came in twelfth. Some consolation is that she was 10 points ahead of Federico Montoya, the younger brother of Formula One driver Juan Pablo Montoya.

Just one of the boys

Natacha isn't intimidated by the fact that so few women have made it as professional drivers. She believes her chances are just as good as those of her male counterparts. "There are few sports where men and women compete against one another with equal chances. I like that aspect of my sport and I don't worry about the fact that I'm racing against men. That is just the nature of the sport today," she explains. "Last year, I was the only woman competing in my category. I don't think the men have a problem with it either – until I beat their times. Men just don't like it when a woman is faster than them."

If Natacha has her way, more than one male ego will get a bit dented this season. <



The fast women of Formula One

Are men really superior behind the wheel? They'd like to think so, but there are women who have done their best to prove them wrong. Consider Maria Teresa de Filippis, Desiree Wilson, Lella Lombardi, Giovanna Amati and Sarah Kavanagh. Unlike the female racing fans who are content to adorn the pit lanes, these daring ladies made it into the driver's seat. Read more about these women racers in the emagazine.

www.credit-suisse.com/f1



In the tire factories, up to 250 ingredients are always being combined in new ways in an effort to make the rubber even faster.

Text: Elmar Brümmer Photos: Daniel Reinhard

Getting to grips

Michelin dominates the field, Bridgestone and Ferrari win the race – this was the story again last season. In March the French – Japanese tire war heads into round five. Is the time ripe for a revolution?



The Michelin man currently adorns seven of the ten Formula One teams.

All the true Formula One starlets come dressed in basic black. But each of these latex outfits is a custom job, and that's what makes the business so laborious - and expensive. Of course we're talking about the tires, perhaps the most underrated high-tech product in motorsports. At the same time, tires are the spare part that permits the biggest performance advancements. Depending on team and circuit, last season saw lap times shaved by three to five seconds as compared to the previous year. That's not just worlds ahead, it's galaxies. Engineers toiling away on the motors and aerodynamics can only dream of making such advancements. "The advances in the tires are greater than those that we can achieve after a whole winter's work in the wind tunnel. You have to institute incredible developments to cut a second off a car's time," confirms Willy Rampf, Technical Director for Sauber Petronas. For rivals Bridgestone and Michelin, the recipes coming out of their witches' kitchens are sufficing. Up to 250 ingredients - including oil, steel, sulphur, polyester, zinc, resin, tetraoxosilicic acid, and up to 80 different types of rubber - are continuously being recombined there in order to find an even better racing tire compound.

New tires standing racing strategies on their heads

Vulcanizers are facing a new challenge for the 2005 season. Instead of the usual 150 kilometers, their tires will now have to last more than twice as long, because in the future tire changes during a Grand Prix will be permitted only in emergencies. The shift from sprint tires to endurance tires could see the current balance of power turned upside down, and will change strategies in any case. These especially durable tires will rob racing spectators of an immensely exciting element, but for regulators at the governing body of international motorsports, the FIA, the incredible time gains were frightening – and citing safety concerns, they stepped on the brakes. Slowing things down by introducing harder tire compounds is, comparatively, the easiest and most effective option. Whether or not the desired savings effect will also be realized with the test drives remains to be seen. The big racing teams have long had their own tire test-drivers, who drive tens of thousands of kilometers in addition to the usual training program. The true test of a tire comes on the test track, while the Grand Prix is just an exhibition.

Not every tire works in harmony with every race car on every circuit. Only after completing the complex set-up process of getting the wings, suspension, and motor working together with the tires do you arrive at the right balance and the requisite grip. During this process, the various possibilities are multiplied individually by factors such as asphalt conditions, driving style, and weather. If the track surface is too rough or if the tires aren't within the ideal operating temperature range of 90 to 100 degrees Celsius, this will increase wear on the tire. Then drivers start to worry about graining and blistering. The tires also reveal their individual character through the so-called comeback phenomenon – tires that suffer performance loss in the course of a race, but later improve again. Real prima donnas.

Rivals Michelin and Bridgestone will be carting new tire developments out to the racetrack in racing rhythm, i.e. every two weeks, and the manufacturers are talking loftily about "new generations". The tire makers essentially have just two options for improvement: the construction of the tire, and the compound used. The possible combinations are infinite. So, at every track each driver gets new types of tires and has to test them in order to find the most suitable combination. That's why over the course of a year roughly 100,000 Formula One tires are produced. Each takes two to three hours to make, and the large amount of manual work required drives the price as high as EUR 1,000 apiece. Most wind up in the shredder – having been rejected for being too slow. This evolution leads to costs in the hundreds of millions.

"Retirement" in Hinwil

Bridgestone, which held a monopoly after Goodyear left Formula One at the end of the nineties, has had to deal with a new challenger since 2001. In the meantime Michelin is supplying seven of the ten Formula One racing teams, including Sauber Petronas, which has switched from Bridgestone for the coming season. The idea behind the French company's move to cover such a large spectrum, the counter to Bridgestone exclusivity for Ferrari: the sizeable wealth of common experience, which will pay off for all. The hope from the Sauber racing team, which to date has had to make do without their own tire-testing department: to improve as quickly as BAR-Honda has managed to do. In 2003, despite huge investment, the British-Japanese team only managed to place fifth in the Constructors Championship. The move from Bridgestone to Michelin, however, saw the team slingshot up the standings, and they finished a sensational second in 2004. The change of supplier is intended to truly tap the full potential of the C24. By the way, the relationship between Hinwil and Clermont-Ferrand isn't exactly a recent development. In 1989 they teamed up for a one-two finish in the 24-hour race in Le Mans.

Everyone who wants to make a career for themselves with Michelin starts off in the tire school at the main factory in the Auvergne. There they learn that in the tire production process, it's better to refer to a "formulation" than to simply "rubber". Formula One tires are also produced in the industrial complex in Cataroux, which was built in the 1920s. Factory hall C2 is like an industrial monument, but in the hall, full of nooks and crannies and tired-looking machines, the latest formulations of rubber are prepared for battle with Schumi. Then the hall is declared a high security zone. Under the watchful eye of the counter espionage team, the basic compound is brought to a simmer at 170 degrees Celsius, then rolled flat after it cools and cut into small strips. These are then wound layer by layer around a rotating drum according to a procedure that looks as complicated as the assembly instructions you get with furniture you put together yourself. In the end, the drum is covered, and it's off to the vulcanizer, which is essentially a huge waffle-iron. The tires get their shape and tread pattern from the 12-25 minutes they spend there under high water pressure and temperatures up to 300 degrees. This transforms the plastic material into an elastic one. The tire makes it into Formula One only after it has passed all 130 of the quality assurance tests.

Pierre Dupasquier has only had two jobs in his life – piloting fighter jets, and making tires. The brow of Michelin's Sports Manager reveals his competitive nature, as the number of frown lines etched there clearly outnumber the four grooves prescribed for Formula One racing tires. Consumed by passion: "We're in Formula One to fight, to make new advancements, to invent, to give it our best." The French revolution needs to, and must take hold. It looked like they were in the lead last winter until Bridgestone rolled out a new tire construction one week before the season started. Fitted with the new Bridgestones, Ferrari left the competition in its wake. Dupasquier is planning his revenge. Bridgestone counterpart, Hiroshi Yasukawa, has a brow profile that's beginning to approach Dupasquier's – no doubt the result of the technical competition running right at the cutting edge. If you've experienced the two contrasting rivals put under constant pressure, a thought comes to mind: that both must have been yearning for a time when standardized tires would bring the grueling competition to an end. FIA president Max Mosely is working on that for well-known reasons: cost savings, safety, and equal opportunity. But the business thrives on the marketing championship that stems from this rivalry.

As the challenger, Michelin naturally has more to gain. "For us, beating Ferrari is much more valuable than winning with them," says the man from Clermont-Ferrand. "Ferrari's successes are never attributed to its tire suppliers. It's either the Ferrari name or Schumacher that gets the spotlight." It's clear to see that Dupasquier enjoys stirring things up. Like in the late seventies when Michelin introduced radials. In 1984 "Bibendum", the famous Michelin man, was retired after a one-two finish in the World Championship.

Red and blue are the trim colors of the two competing firms, just like in the military's map exercises. After each race, the position of the sporting frontline is shown in the form of colored dots in an on-screen graphic accompanying the final placings. The top half of the finishing results shows a few red dots surrounded by Michelin blue. Even pacifists can't seem to come up with a term more fitting than "tire war". A changing of the guard is the first thing on the agenda. <

Formula One tires by the numbers

Compound: 79 per cent rubber, 18 per cent steel, and 3 per cent textile (greatly simplified) Load: 3,000 revolutions/minute Tread: four grooves distributed evenly across the surface. Groovings must be at least 14 mm wide and 2.5 mm deep Optimal operating temperature: 90 to 100 degrees Celsius Optimal tire pressure: 1.0 to 1.2 bars of dehumidified air or nitrogen Maximum width: 355 millimeters front, 380 mm back Diameter: 660 mm Rim diameter: maximum 330 mm (13 inches) www.michelin.ch, www.bridgestone.ch

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Despite his fifty years, Alain Prost is racing again – although this time not on asphalt, but on ice.

Text: Andreas Thomann Photos: Pia Zanetti

Alain Prost: "My biggest mistake? That I tried."

As a racing driver, a living legend; as a team boss, a spectacular failure.

<u>Alain Prost's Formula One career reads like a Charles Dickens novel – "It was the best of times, it was the</u> worst of times."

<u>Mr Prost, You won the world championship four times, but</u> also finished runner-up four times. When you look back, does it sometimes bother you that your trophy case isn't bigger?

Well, you can replay the past over and over and ask yourself what could have been if only... Certainly, some defeats were painful. In 1983 I finished only two points behind Nelson Piquet. A year later, Niki Lauda edged me out by just a half a point. And when Ayrton won the world championship in 1988, I had 11 more points than him – but at that time, only the 11 best results counted. To me, more important than the victories is the fact that from 1981 I was in contention for the title in just about every season, often with the last race deciding the championship.

<u>Piquet, Lauda, Senna: These three drivers were also your</u> greatest rivals over the course of your Formula One career. Who impressed you the most?

In the beginning, Piquet was the benchmark – a very tough competitor. Niki was impressive in terms of his consistent performance. When he beat me for the world championship in 1984, I was actually faster in the races most of the time, but he put his strengths to better use. I learned an important lesson from that. But if there's a driver who stood above the rest – both for his driving and his mental abilities – it was Ayrton Senna.

The duels between you and Senna have long been a part of Formula One history. Here, the cool, calculating "Professor", there, the impulsive Brazilian. How much substance is there behind this cliché? As with all clichés, there's a grain of truth in it. The fact is, however, that in the course of his career, Senna gradually changed his driving style to become more like mine.

The media played up the rivalry. How great was it in fact?

Of course we were rivals. For two seasons we even drove together for the same team, with the same material. And there's a saying in Formula One: your teammate is always your biggest rival. That's because you can directly compare only those drivers who drive for the same team.

Unless there is a team hierarchy.

Yes, but McLaren didn't have any at that time. The team deliberately set up a competitive situation. And the fans were delighted. A lot of people started to become interested in Formula One thanks to our rivalry. Of course the media and sponsors actively pitched in. Despite our rivalry, we never lost respect for each other.

Then why did you change to Ferrari for the 1990 season?

To be honest, I'd had enough of doing Ayrton's work for him. While he was taking three months off for winter holidays, I was doing hundreds of kilometers of testing. So, I informed the team during the season that I didn't wish to extend my contract. At that time, I had no idea where I'd end up.

<u>The two years with Ferrari weren't anywhere as glorious as the</u> previous six years had been with McLaren. Do you now regret having made that decision?

Not at all. The first year was fantastic, possibly the most enjoyable of my career. The team did a fantastic job, and the atmosphere was $\,>\,$

"It won't be so easy for Michael Schumacher. The new generation with Button, Räikkönen, Alonso and Montoya is threatening a changing of the guard."

sensational. Had the management been more far-sighted, I would have been world champion again. In contrast, the following season was a disaster – we failed to pick up a single victory and wound up a dismal third. Accordingly, the atmosphere turned sour. I've thus experienced both sides of Ferrari: both fire and ice

Your adventure as a team owner also wound up a disaster. What went wrong at Prost Grand Prix?

To begin with, the expectations were too high. We started practically from square one, and aside from Minardi we had the smallest budget in Formula One. In such a case, it takes years for you reach the top. And it takes solid partners, which we didn't have. Above all, our engine supplier Peugeot lacked the motivation right from the start to establish a long-term presence in Formula One. On top of that, the economic crisis made it harder and harder to find sponsors. For example, we signed a deal with South American TV network PSN, but they went bankrupt shortly after. We also had an agreement with Yahoo, but then the internet bubble burst. There was no way to stop the downward spiral.

In retrospect, what would you do differently today?

Actually, there's only one thing I'd do differently: I wouldn't get into it at all. I often didn't have any choice at all in the decisions that resulted. Financially, I had my back up against the wall.

Besides Prost, the Arrows team also disappeared from the scene. Are the private teams a lost cause in the face of the powerful works teams?

Today, the best a small team can hope to accomplish is to develop a competitive car over the season. But there's no chance anymore of competing at the front over several seasons. The mighty works teams have a clear advantage there: They can adapt to rules changes much more quickly because they've got special teams set up to deal with just those types of issues. Today it's no longer possible to get right to the top in Formula One with sponsorship money alone, particularly since sponsor interest is dwindling somewhat as Formula One becomes more and more monotonous.

<u>Today, the big teams have budgets of about 500 million francs.</u> <u>How can the exploding costs be stopped?</u>

First and foremost, all the parties responsible have to be interested in reducing costs. This is where the main problem lies.

Let's assume that everyone agreed. What specifically would have to happen?

In order to really change anything, the number of tests would have to be reduced drastically. In doing so, you have to bear in mind that a lot of jobs would be lost. Some teams currently have between 800 and 1,000 employees. The only way to drive down costs is by laying people off.

What do you think about standardized tires?

I don't think it's a good idea. If you introduce standardized tires, why not standardized motors? From there it's just a small step to standardized cars. Formula One has always been a parallel competition between drivers and technologies. I wouldn't challenge this basic premise.

How do you rate the chances for Sauber Petronas in a Formula One dominated by the works teams?

In my view, there are basically three categories of teams in Formula One: the big works teams, the private teams, and somewhere in the middle there's Sauber. Peter Sauber has truly done a superb job in the last few years. At the beginning of last season he even had McLaren in check, and finished ahead of Toyota and Jaguar in the Constructors Championship.

So, is Sauber the exception that confirms the rule?

Probably. Peter Sauber's greatest advantage is that he could line up two big sponsors, Petronas and Credit Suisse, for long-term deals. They give him the stability required to be successful. There's also the good relationship with motor supplier, Ferrari. However, I doubt whether Sauber can ever make it all the way to the top on its own. That would require a deal with an automobile manufacturer.

In the meantime the team appears attractive enough for former world champion Jacques Villeneuve to agree to terms. What do you think he's capable of?

Jacques is an excellent driver, with a lot of charisma. He was the last driver to challenge Michael Schumacher. But I never really understood his move to BAR. A driver of his caliber should have always driven for a team with which he could have competed for the world championship. He certainly won't be granted that chance with Sauber either. But he could well have a successful season with a few podium finishes.

<u>Villeneuve's comeback brings back memories of the 1993</u> season when you, too, returned from a year off to sit in the cockpit again and went on to win your fourth and last world

39



On his way to his fourth F1 title: Alain Prost in South Africa in 1993.

championship title. How tough is it to find the racing rhythm after a break?

An interruption is always a risk. You lose your stride quickly, both physically and mentally, and you lose touch somewhat with technological developments. Fortunately, in my case the break lasted only nine months, and I switched to the best team of the day, Williams-Renault.

Every year the fans hope for an exciting season. Are the chances good that we'll see an end to the Ferrari domination this year?

I think it'll at least be harder for Ferrari. The new generation with Button, Räikkönen, Alonso, and Montoya are pushing for a changing of the guard. Let's imagine that Ferrari no longer manages to build a car as outstanding as those in the past, and that Michael Schumacher has to battle to win in every race. Will he still have the motivation to hold off the attack of the "young guns"? Perhaps we'll get an answer to this question in the coming season.

Is there any similarity between today's dominator and four-time world champion Alain Prost?

Of course there are always parallels between champions. But I think his driving style is quite different from what mine was, and his career path has been different too. Moreover, he's the number one driver with Ferrari - I was never the number one driver on a team, but several times the number two.

And still: just like you were, Schumi is a good tactician who coolly weighs all the options during a race...

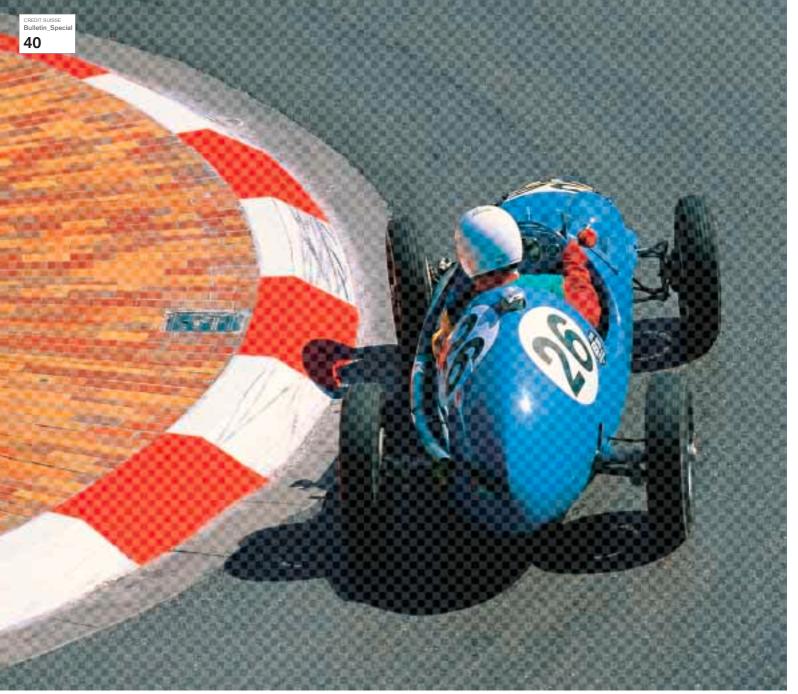
Today, tactics are determined more by the team than the driver. Today's cars are also much more reliable, so a driver isn't as concerned with how much he has to take it easy on the tires, the transmission, or the motor. That's what makes it difficult to compare drivers from different generations.

You turned fifty in February. But you still race regularly - sitting at the wheel of a Toyota Corolla in the "Trophée Andros" ice rally series. Are motorsports a drug?

Well, if you enjoy doing something, why should you quit? When I was a team owner, I never dreamed of getting back into the cockpit. But then the old passion was rekindled. Ice racing is something completely new to me; that makes it appealing. It's also absolutely safe. At my age, I don't take risks anymore... <

From zero to one hundred and back again

In fact, he wanted to be a soccer player. When he was growing up, Alain Prost regularly played on club teams and even earned a trial at St. Etienne. However, at just eight he was introduced to the downside of what it's like to be soccer player. He injured his knee, and a short time later it was his wrist. While he was recuperating, and after some coaxing from his brother, Alain climbed into a go kart - it was love at first sight. From then on, Prost was speeding around race tracks across Europe, going from victory to victory. First, it was the kart championship, later the Formula Renault series, and finally, in Formula 3. In 1980, at the age of 25, Prost was ready for Formula One. He was up to speed in the top tier of the racing world in no time. In just his second year, he drove his Renault to four victories. However, he would have to wait another four years before earning his first world championship, at that time in a McLaren. By the time he retired as a Formula One driver in 1993, Prost had racked up four world championship titles, and finished another four seasons in second place. In the beginning, Nelson Piquet, Nigel Mansell and Niki Lauda were his biggest rivals, later it was mainly Ayrton Senna who regularly stood in the Frenchman's way. For two seasons (1988 and 1989) Senna and Prost battled it out as teammates for McLaren, who dominated Formula One at that time. The bitter duel between the hot-blooded Brazilian and the cool, collected "Professor" thrilled racing fans and brought about a boom in Formula One. Prost's career as a team owner stands in stark contrast to the success he enjoyed as a driver. Prost Grand Prix made its Formula One debut in 1997 - five years later, after a season that brought no points, the company filed for bankruptcy. Today, Prost is an advisor for Formula One marketing company ISE, and races in the French "Trophée Andros" ice rally series.



Burning sun, melting asphalt, quivering air. It all fits. Whether Bugatti or Bentley, nobody settles for second best.

Text: Marcus Balogh

Going round in circles

Historic track races measure time in years rather than in seconds. Drivers still jostle for position, but mostly with a smile.



Just like the old days: Stirling Moss belts round a curve in a Cooper against the Monaco harbor backdrop.

Fredy Kumschick in a Williams FW07/C-14 on the Formula One circuit in Bahrain. In 1981 Carlos Reutemann won two Grand Prix races in this 430 bhp car.

The lake beckons, invites us in for a swim. That's how it used to be. Today tourist managers beckon and every idyllically located lake invites us not for a swim, but to take a ride in a classic car. Nowadays, there's hardly a region that does not offer oldie tours, hardly a mountain without a mountain race, hardly a day in the year without some classic car event. The glut of such events has at least led to great variety. From a relaxing jaunt for the fashionably minded to the punishing Paris-Peking Rally for masochistic gasoline junkies, there's a tailor-made ride awaiting each and every oldie fan.

For about ten years now, this has increasingly applied to aficionados of historic races. But the focus here is not on media events like the Mille Miglia or the Monte Carlo Rally. Admittedly, the Mille Miglia does have an unearthly touch, despite a selection procedure that can best be described as complicated, with its impressive caravan of top-end oldtimers and the enthusiastic veneration of Italians thronging to stand as a guard of honor to the passing vehicles. Simply Italian. And no devout oldie fan will ever want to retire without having at least once taken part in the historic Monte Carlo Rally. Nevertheless, what we are concerned about here are the "true" race courses. They can be deemed the Jurassic Parks of classic car events. Archaic, loud, and not without their perils. Rims don't get cleaned with Q-tips here, nor will you see models that have become too portly for the catwalk behind the steering wheels. These are venues for chasing, jostling and overtaking.

Roaring like hell hounds let loose

Probably the most exclusive events in this category are the historic automobile races in Laguna Seca, California. They take place in a dusty basin near the upscale towns of Monterey and Carmel, where Doris Day looks after stray kittens on a small farm and Clint Eastwood served as mayor for a couple of years. For one weekend in August, the race course hewn into the hillside becomes home to more than a billion dollars worth of venerable automobiles. Parked in colorful tents beside monstrous tractor-trailors incorporating well equipped workshops, awaits every-thing that ever made a name for itself in the automotive world: Bugattis, Bentleys, Aston Martins, Ferraris – no road vehicles, mind you, all of them racing cars. Most of them rare, nearly all of them expensive.

Yet it would be wrong to think that such awe-inspiring cars are then driven gingerly. To ensure that the differences in performance are not all too evident, the vehicles are divided into roughly a dozen categories. When the starter's flag goes down, the illustrious vehicles roar away like a thousand hell hounds let loose on their mad, serpentine trek. The drivers do their best – which is not always good enough. Often enough, the million-franc cars skate through the aptly named Corkscrew Bend with their back ends fishtailing. And even Sir Stirling Moss, a living legend as a driver, managed to slam an Aston Martin DBR1 worth around GBP 3 million into a Ferrari 250 Testa Rossa worth nearly twice as much. Cold bent sheet metal, as insiders say. Still, it's considered more of a peccadillo than a disaster in these circles.

Each race a childhood dream fulfilled

Naturally, you can follow in the tracks of the great drivers and for a lot less money, even on one of the famous race tracks such as Monza, Jarama, or Estoril. And, for those with a taste for the exotic, Bahrain has opened its Formula One race track to historic racing car events. The very first winner of a race on the Bahrain International Circuit was, by the way, not Michael Schumacher. He did indeed win the Formula One race, but the first man to step up to the winner's podium was Fredy Kumschick, a garage owner from Lucerne. He took first place in the grandiosely staged kick-off race with classic Formula One cars which preceded the Grand Prix event. In this case, fortune favored someone with a solid reputation in the classic car race scene. Besides running a Lotus dealership, the versatile Kumschick manages a racing firm that, for 18 years, has offered everything related to classic car racing, from the search for suitable cars to all-inclusive racing service. Procedures at Kumschick's racing team mirror those of the Formula One world. The cars are transported to the race venues by teamowned trucks, mechanics fuss and fret over them, engines, tires, spares - it's all there. Fredy Kumschick explains this as follows: "By taking part in such a race, our customers are seeing a childhood dream come true. Of course it's a pretty costly dream - the full race package comes to CHF 6,000 for a weekend. For that, the driver can climb into a perfectly prepared vehicle and concentrate totally on the driving." >



Kumschick himself competes in a further category besides the historic Formula One, and that is the Jochen Rindt Formula 2 Trophy. Six races a year in two runs each. The delicate one-seaters have comparatively modest 265 bhp, but weigh only 450 kilos. For Kumschick, this is more than sufficient. "Each unit of hp has only about two kilos to propel, and this includes the driver. Compare that with a present-day road vehicle. Then you'll see that these cars really move!" Correct. In the case of the current Porsche 911 - not exactly a gutless wonder each of its 325 horses moves more than twice as much in weight: 4.5 kilograms. Acceleration and braking power ensure that beginners crawl out of the tight cockpit white as a sheet after their first few Formula 2 trial laps. However, not everyone can take a seat behind the tiny steering wheels. For any oval circuit race with historic vehicles, drivers need a racing license that can be obtained at specialist courses. Besides, each vehicle needs to be checked and approved by a strict racing commission.

Spinning and drifting to the cheers of the crowd

Finally, the least costly way of going around a race track in a historic car is the clubsport scene. What does that mean exactly? "Quite honestly, it's not easy to define, because there are so many different clubsport series. For us, clubsport means having fun on the race track, enjoying a good dinner together and sharing all the car talk," explains Kumschick with a laugh, and then adds, "Maybe it's one of the last opportunities to push your car to the limit, well away from radar guns and speed limits."

There is indeed an impressive number of clubsport events and series. For example the Triumph competition, the historic Touring Car and GT Trophy, the FIA Cup for Historic Grand Touring Cars, the FIA Lurani Trophy for Formula Junior Cars, and much more. Many of these race series are held in accordance with FIA rules (Fédération Internationale de l'Automobile). At others, for instance the Group C/GTP Racing series in England, the organizers reserve the right to admit "any other interesting vehicle from a similar period". Thanks to this variety, the right racing environment for almost any budget can be found. Alfa, Maserati, BMW – elsewhere you're not even allowed to touch these icons of automobile racing. In Laguna Seca the drivers expose them to the fray as if there were no tomorrow.

Richard West, a leading Swiss importer of replacement parts for British classic cars, has been supporting drivers in the British Race Challenge and Triumph Competition for ten years. "But there are no enormous sums involved. What it's all about is that the championship should remain affordable." The TR Competition is no historic race series like, for instance, the Jochen Rindt Formula 2 Trophy. The series' organizers, the TR Register (Germany) association, calls the Triumph Competition a "modern series with classic cars". This comprises primarily British cars, most of which are furnished with down-toearth production line technology. The benefits are obvious: low costs. Whereas some rapturous commentators might speak of black gold in rubber form when referring to the tires, here the tires are simply called tires. And they are meant to last for a whole season. Or two. Compared to the elitist Formula One, the general manner is far more relaxed and jocular. People help each other out and the spectators tend to show an anglophile rather than performance-oriented bias. Spectacular spins and drifts are rewarded with cheers.

Oh yes. There is something to be won, too. Fame and honor may remain limited, but there are a few trophies in each class to adorn a living room or garage. Asked what else there is to be won at the Triumph Championships, the organizers have a concise reply at hand: "We have one thing in plenty, and that is fun!" <

Further information:

www.kumschickracing.ch > www.tr-competition.de/ www.fia.com/sport/Championships/Secondary/2004/hist_race.html www.htgt.de > www.west-classic.ch Trust in our relentless commitment to perform.

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