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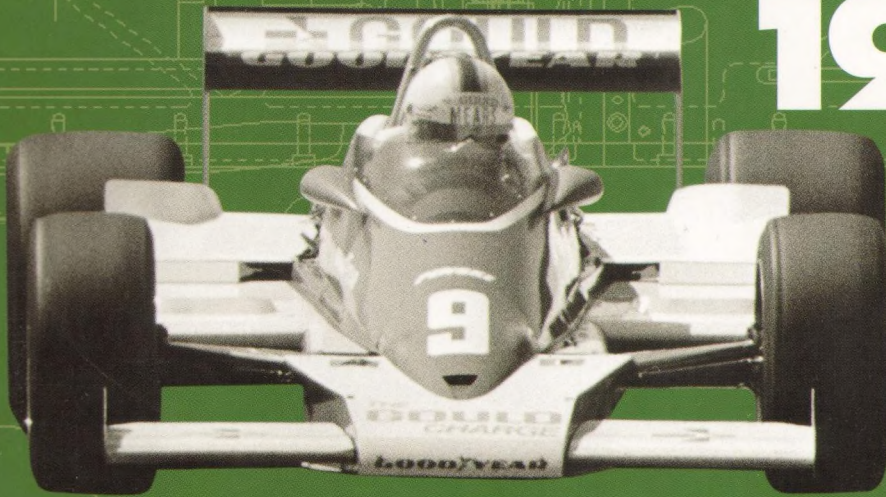
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CART



THE FIRST 20 YEARS

1979-1998



RICK SHAFFER

CART™



THE FIRST 20 YEARS • 1979-1998



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FOREWORD

It's a great privilege to be the chief executive officer of Championship Auto Racing Teams as the organization celebrates its 20th anniversary.

While I have witnessed a mere quarter of the company's life, it is remarkable to look around the paddock on a race weekend and see so many people who have been involved with CART from the very beginning. Equally remarkable is the way in which the series has grown and developed over the years. Full fields of competitive cars are something that we regard as the norm in 1999 but this was far from the case in the early days. And it's not just the quantity of cars that has increased, the quality of every aspect of the series has changed for the better as each year has gone by.

None of this would have happened without the vision of a small group of far-sighted individuals who, 20 years ago, took the first steps to transform the sport. Of equal importance are the contributions made by literally thousands of dedicated men and women who have given their time, their ideas and their talents so freely to the sport.

Finally, we owe a great deal to our fans. It would be hard to find a more committed group in the world of sports.

I am proud to salute everyone for their respective contributions to our first 20 years.

Sincerely,

Andrew L.



by ANDREW CRAIG

INTRODUCTION

It would be difficult to sum up a racing organization by only one event. But when one considers the magnitude of the event, perhaps it is understandable why it should be used as an example.

On September 27, 1997, a Brazilian racing driver named Mauricio Gugelmin qualified for the Marlboro 500 at the new California Speedway at an average speed of 240.942 miles per hour. The lap earned the pole position for Gugelmin at an event that was the season finale for the CART series.

The Brazilian's quick lap was the fastest ever in the sport of Championship Car racing. It was also a world record for a closed course. And, perhaps even more importantly, it gave Championship Auto Racing Teams (CART) the right to claim that it has the fastest racing cars in the world.

Rule changes will preserve Gugelmin's mark for the time being, but his feat represents more than an important milestone.

That's because the record lap came at CART's newest and most spectacular venue. At a site that once was a Kaiser Aluminum plant in the Los Angeles suburb of Fontana, legendary racing team

owner Roger Penske and his Penske Speedways organization had produced a state-of-the-art racing facility to rival anything in the world.

In other words, the achievement of Penske & Co. made Gugelmin's achievement possible. And both were made possible because of the success and growth of CART over the years.

This is the story of CART, a racing organization that completed its 20th year of competition in 1998. It is the story of a plan to make Championship Car racing a more professional entity. It is a story of owners, drivers, teams, racing cars and tracks. And as Gugelmin's record lap will indicate, it is also the story of speed.

The record lap at the impressive California Speedway underlines only part of what that plan intended. Make no mistake about it. There will be other records at other gleaming new facilities. There will be great teams, drivers and cars. That is CART's future.

In the meantime, here is a look at CART's history and how it got where it is today.

Rick Shaffer
Greenwood,
Indiana

Photo: Michael C. Brown



TEAM KOOL GREEN'S OWNER BARRY GREEN REFLECTS ON HIS YEARS IN CART

BARRY GREEN has worn many hats on his climb up from a mechanic and driver to become one of the most respected franchise owners in Championship Auto Racing Teams (CART) today. 'Baz', as the owner of Team KOOL Green is known in the CART community, has also enjoyed considerable success along the way. Most recently, he negotiated a \$50-million sponsorship agreement with Brown & Williamson's KOOL brand to continue as title sponsor of his two-car operation and signed his current drivers, Paul Tracy and Dario Franchitti, to multi-year contracts.

'Building a competitive team is probably what I know best,' says Green, confidently. 'I have the ability to get the most out of the talent behind the wheel, as well as from the guys in the pits. I also have a burning desire to win every race, without losing sight of the ultimate goal of winning a championship. I've won championships before and intend to do so again with Team KOOL Green.'

Green ranks among CART's most successful team owner/managers. Since first becoming involved with CART in 1983, Green has been associated with teams earning 26 pole positions, 31 race wins — including two Indianapolis 500s — and two PPG Cups.

Green is one of the more qualified people to look back on the 20-year history of CART. He joined the series in its infancy as a team manager and today sits on the CART Board of Directors. As such, he has a unique perspective on the evolution of the series.

'There's no question that CART has come a long way,' laughs Green, pausing to reflect on some of his memories. 'Since CART began in 1979, we have always had great drivers and fans that are committed to the sport. Over the years, however, away from the track, companies began to sit up and take notice of what we had to offer. Corporations began to see the tremendous sponsorship opportunities CART afforded.'

Team KOOL Green debuted in 1996, with a two-car effort in the Indy Lights Championship. Green and his new sponsor went into battle with Indy Lights rookies Chris Simmons and Greg Ray. In 1997, Team KOOL Green expanded its involvement to include sponsorship of a Champ Car entry for driver Parker Johnstone and a three-car Indy Lights team of Simmons, Mark Hotchkis and Naoki Hattori.

Green expanded to a two-car Champ Car team in 1998, with the signing of Paul Tracy and Dario Franchitti. Being able to secure two high-profile drivers for their Champ Car team was a coup for both Green and KOOL. Tracy and Franchitti kept Team KOOL Green in the spotlight for much of the 1998 season with aggressive driving and race wins.

'As a team owner it was gratifying to see Dario earn five poles and three victories for Team KOOL Green,' says Green. 'For Dario to get his inaugural victory on the same Road America course where Jacques Villeneuve earned two victories for us was very special. My team now has three CART victories on that wonderful road



Barry Green hugs his driver Dario Franchitti after the Scot's first CART win at Road America in 1998.





Left: Paul Tracy and Barry share a joke during practice.

Far left: The Team KOOL Green Reynard-Hondas of Dario Franchitti and Paul Tracy sandwich Michael Andretti's Swift-Ford.

Opposite bottom left: Barry Green believes that in Paul Tracy and Dario Franchitti he has two of the best drivers in the business.

Below: The joy of winning his first race for Dario Franchitti.

course. It's easy to know why Elkhart Lake, Wisconsin is one of my favorite places. Road America is one of the finer traditional road courses where CART has raced in my 17 years.'

Tracy's inaugural season with Team KOOL Green was no less spectacular. It was a common sight to see Tracy making daring passes and charging his way through the field. However, his aggressive style also led to several sanctions by CART officials throughout the season. Tracy has his detractors, but he also has a legion of fans because of his driving ability and desire to win. One of his biggest fans remains Barry Green.

'I'm not going to dwell on the kind of season Paul and I had with the #26 car in 1998,' Green explains. 'It's honest to say that we both expected to do better and we didn't live up to expectations. But I know this guy has talent and I'm the guy to help him channel it. Paul Tracy is a thoroughbred just like Andretti and Unser Jr. He is as talented as any driver that I've worked with in the past. He just needs the right hand at the reins.

'The fact remains Paul continues to be a terrific member of the team, sharing information with Dario and his engineers. Our ability to work together as a team is what led to the great season Dario enjoyed. There's no question that Dario is a superb driver, but he needed everyone pulling in the same direction.'

The emphasis Green places on teamwork and team chemistry has a lot to do with his own CART experience. The list of successful drivers Green has been associated with is impressive: Teo Fabi, Danny Sullivan, Michael Andretti, Bobby Rahal, Al Unser Jr., Jacques Villeneuve, and now Tracy and Franchitti.

Green's ability to get the most out of these drivers stems from his own time as a driver, when he raced everything from karts, stock cars and Formula Fords right up to Formula 3. His career as a driver ended when he broke his leg in a racing accident. Upon recovery, Green came to North America, accepting the position of team manager with Newman Racing, a Can-Am team owned by Hollywood actor Paul Newman. In 1983, he joined CART as the team manager of Forsythe Racing. His skills as a team manager came to the fore, however, with Kraco Racing and Galles-Kraco Racing from 1986 to 1992. In those years, he helped Michael Andretti to his first CART victory in 1986, and won the Indy 500 with Al Unser Jr. in 1992 and his first PPG Cup with 'Junior' in 1990.

In 1993, Green became a team owner in partnership with Gerry Forsythe. They entered a two-car team in the Toyota Atlantic Championship under the banner of Forsythe-Green Racing with drivers Claude Bourbonnais and Jacques Villeneuve. In 1994, Green was back at the Champ Car level shepherding Villeneuve to CART and Indy 500 Rookie of the Year honors. The following year Green was the sole owner of the Villeneuve entry, which won the Indy 500 and the PPG Cup.

'Barry's experience is one of the big reasons I signed with Team KOOL Green,' says Tracy. 'You've got to respect someone who has built a business from the ground up like him. Racing isn't something he approaches lightly like some hobby. And as one of the veterans in the CART series today, I can tell you that he has put together a first class outfit and has a quality sponsor in KOOL.'



Barry and Dario take center stage on the podium at Elkhart Lake after Team KOOL Green's breakthrough win in 1998.

Tracy's teammate, Franchitti, echoed those sentiments, saying, 'Team KOOL Green is one of the premier teams in CART, and that has everything to do with a winning combination in Barry and KOOL. There's no lacking of resources or of highly skilled people on this team. I'm fairly new to CART compared to Paul, but I can't imagine a better situation to be in right now.'



Barry (far right) with his driver lineup for 1999. Left to right are Indy Lights newcomer Jonny Kane and Champ Car stars Dario Franchitti and Paul Tracy.

'All of the advancements we have made have necessitated greater commitments on the part of our sponsors. I'm delighted that KOOL has renewed its association with our organization and that we'll be racing together for three more seasons. KOOL has never wavered in their commitment to us. And last year, we all began to see the fruits of our combined efforts. They have come to know, feel and expect the excitement of winning and it's my job to deliver it.'

Green clearly has the support of his two drivers, as well as another 50 employees based at his 44,000 square-foot workshop on the north side of Indianapolis. The shop houses all Team KOOL Green race operations necessary for the team's CART FedEx Champ Car and PPG-Dayton Indy Lights programs. The facility features 16 workstations, each measuring 16 ft. x 24 ft., for race-to-race preparations. Eight stations are race car bays for stripping the car down to the tub for inspection and refurbishing. The eight other workstations are for subassembly, transmission, shock absorber development, engine preparation, electronics wiring and radio maintenance. There are also three state-of-the-art CMC/Boltek paint booths and a 3,200 square-foot fabrication department featuring CNC (computer numerically controlled) lathe and mill, capable of reworking 90 percent of car parts in house.

'There's a tremendous feeling of satisfaction to be able to provide all those jobs and to give my people the kind of equipment they need to be successful,' says Green. 'Without question, you need this kind of set-up to be able to compete at the CART level. Over 20 years, we've become a lot more sophisticated with the technology in racing today.'



GOING FAST ... IN CIRCLES

FOR the benefit of those who either have not followed the sport of auto racing or perhaps have been in a state of hibernation for the past 20 years, Championship Auto Racing Teams is an organization that sanctions a series of races featuring the fastest racing cars in the world.

Better known as CART, it conducts those races on four different continents with a majority of the events being staged in the United States and Canada. CART's races are held on a variety of tracks.

The competing cars — known as Champ cars — race on high-banked superspeedways, flat ovals that range from one mile to 1.5 miles in length and fully fledged road courses as well as temporary circuits set up in cities, using the streets or the roadways of a park. In one case, they even race on the runways of a major city airport. The cars are capable of speeds in excess of 240 miles per hour.

The series has an international flavor with drivers from Europe, Asia, South America and Canada as well as the United States participating. The equipment also comes from a number of different countries. Chassis are built in England and the United States. Engines are provided by Japanese, German and American companies. Brakes can come from Italy. Shock absorbers can come from Holland.

Because of that international aspect and also because it provides some spectacular racing, CART can boast of having a global television audience with approximately 190 countries having access to race telecasts.

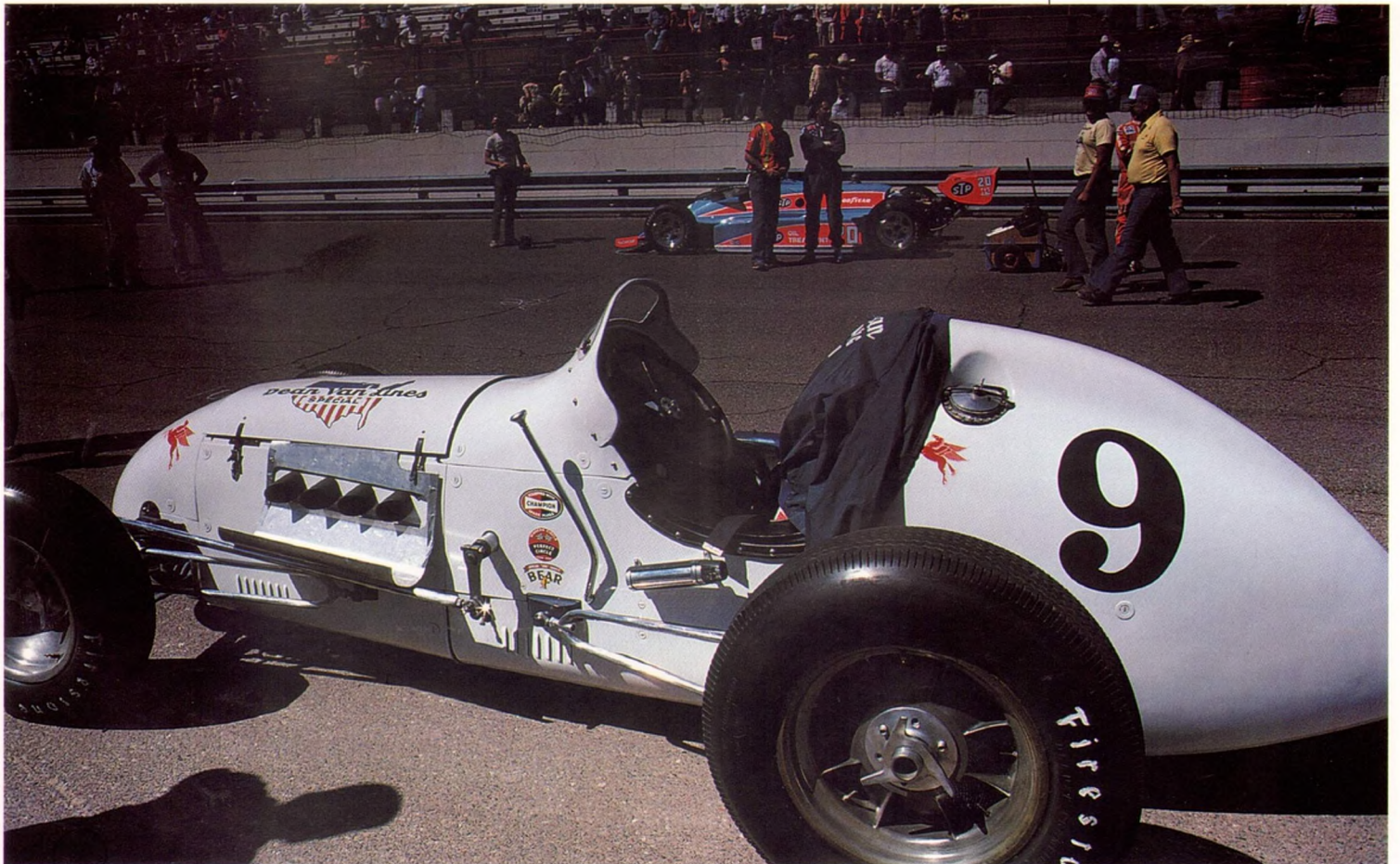
All of this has been accomplished in just 20 years. Today, the series is growing rapidly, with its first 20-race schedule planned for 1999 and expansion in Europe a distinct possibility.

Although it began life as a purely American series, CART can rightfully claim that it has roots in both America and Europe. Its birth was influenced as much by the early contests staged on European roads as it was by the one-mile American fairground tracks originally built for horse racing. It is also safe to say that CART never would have happened had the Indianapolis 500 not assumed its stature as the 'greatest spectacle in auto racing.'

And thanks to the success of auto racing's most glamorous event, the Monaco Grand Prix, CART has also seen fit to export its product to large cities and markets that do not have purpose-built racing facilities nearby. It has been influenced by the sheer speed and danger that has made Indianapolis so legendary while likewise enjoying the fruits of the technological developments of Formula One.

Put simply, it is the best of both racing worlds.

This Kuzma-Offenhauser driven by 1954 champion Jimmy Bryan was built primarily for American fairground dirt tracks. Like its rear-engined successor of the 1980s seen in the background, it was a state-of-the-art design in its time.



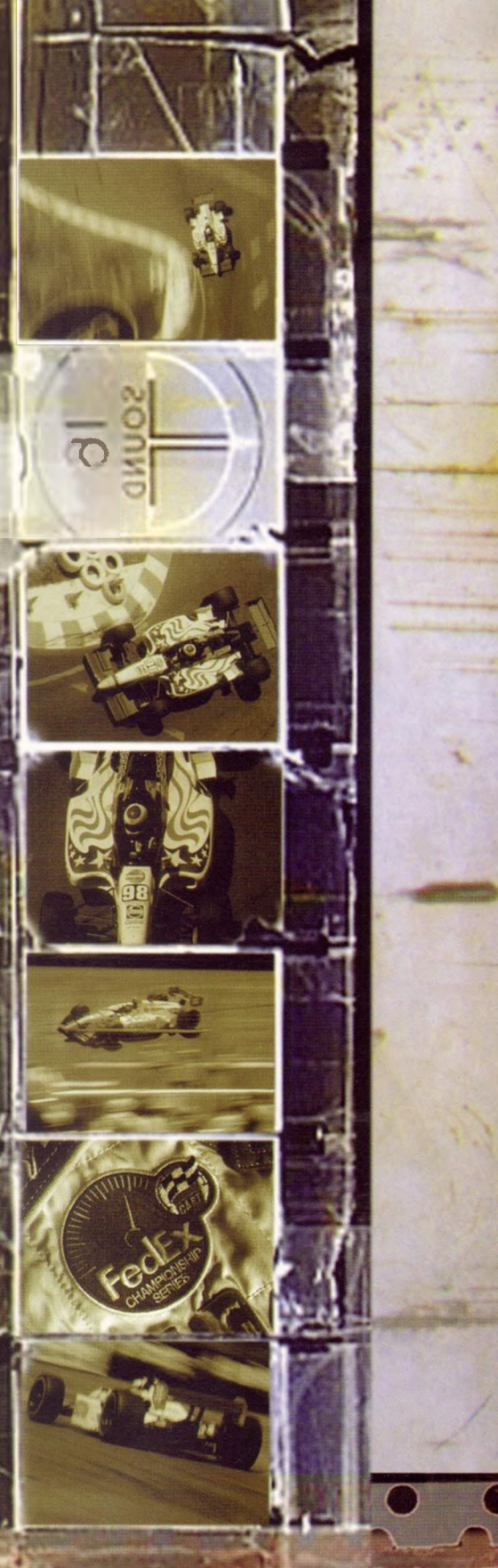
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GOING THEIR OWN WAY: THE CREATION OF CART

In the oil business, the term 'wildcatter' refers to someone who would drill for oil without the benefit of extensive geological findings. In other words, such an individual takes a gambler's approach in his search for oil.

U.E. 'Pat' Patrick of Jackson, MI., has been involved in the oil exploration business and has often been called a wildcatter. Since 1969, Patrick has also been involved in auto racing as the owner of a team competing in Championship Car racing.

In a figurative sense, over the years Patrick's teams have 'struck oil' by winning major races like the Indianapolis 500 and national championships. Other years, Patrick's teams have also 'come up dry,' so to speak. When Patrick decided to have his own Champ cars built, he named them Wildcats. But the analogy to wildcatter/gambler ends here because Patrick's teams have also been professionally run operations with first-rate equipment, the best drivers and top mechanics and management people.

Coincidentally, Patrick is also one of the founders of Championship Auto Racing Teams, which at the time of its conception was considered a major gamble on the part of its participants. It was the soft-spoken Patrick who put the idea behind CART in a nutshell.

Patrick recalled: 'There we were on the starting grid at Trenton with about a half-million dollars in equipment racing for a purse of \$11,000! That was just unrealistic.'

Three-time F1 World Champion Jackie Stewart, then a commentator for ABC Sports, added his assessment of the situation in the 1979 edition of *Autocourse*. 'In many ways, this is a very backward segment of the sport. This is not something that's new, it's been like this for years. You can see it in USAC's attempts to keep the 40-year-old Offenhauser engine competitive. You can see it in many of the cars that fill out the field which are no more than service station specials! Here we have the most sophisticated racing cars in America, and yet they race in dilapidated, unattractive old stadiums while tennis, football, golf and all kinds of other, newer sports enjoy brand new, clean stadiums where you can eat and drink in comfort and enjoy the day.'

Patrick and fellow Champ Car team owner Roger Penske ended up spearheading an effort to convince the sanctioning body, the United States Auto Club (better known by its acronym, USAC), that drastic changes were needed to improve the sport. The alternative, should that strategy prove unsuccessful, was to set up an organization of team owners that would take matters into its own hands.

USAC had been formed in 1956 after the American Automobile Association (AAA), which had previously sanctioned the national championship, decided that, following a number of fatal accidents during the 1955 season, it no longer wished to be involved with auto racing. The most important race sanctioned by the AAA had been the Indianapolis 500, held at the Indianapolis Motor Speedway on Memorial Day weekend each May, and the owner of the Speedway, Tony Hulman, was instrumental in the formation of USAC.

Unfortunately, while the concerned team owners were talking about the desirability of reform, USAC was suffering something of a leadership vacuum as a result of the death of Mr. Hulman in October of 1977 and the loss of eight officials in a private plane crash six months later.

However, there were still serious issues to address and Patrick and Penske were not alone in their frustration. Dan Gurney, the respected owner of the All American Racers team, had pondered the situation for years and wound up writing a letter to a number of other team owners, including Penske, who showed it to USAC president Dick King. The letter, best described as a review of the 'state of the union,' is now known as 'The White Paper.'

Gurney wrote:

'Over the past three or four years, I've had conversations with almost all of the car owners and team directors. I've had talks with drivers, with sanctioning body directors, with track owners and promoters and big sponsors and fans and other interested parties. Generally, there is agreement that something is wrong with our sport — it is not reaching its full potential by any means, and there is great need for a change!

'Early in my discussions I realized that we are so intent upon racing each other that we do not stop to look at and analyze our situation. In frustration I decided that things must get worse before we will all wake. Our sport has the potential to be financially rewarding and healthy from a business standpoint for all participants. Many of the car owners and team directors are excellent and very successful businessmen in their own lives

À LA CART

HOW CART WAS LAUNCHED ON A COUCH

It may have been a case of being in the right place at the right time.

There were a number of reasons why CART was formed. Most people are not aware of just how it was formed.

In November of 1978 at a Christmas party for employees of Michigan International Speedway, a number of Champ Car team owners were on hand. One of the guests was Jan Shaffer, who ultimately would become CART's first public relations director.

During the evening, Shaffer observed a group of Champ Car team owners including Roger Penske, Pat Patrick, Tyler Alexander and Bob Fletcher.

Shaffer continues with the story: 'They were in the lobby of the hotel sitting on a couch and obviously they were having some kind of serious discussion. I walked past them and Roger said to me, "Don't leave, I will need to talk to you." Later on, I went out in the lobby and they were still there. Penske saw me and said, "Make sure you see me before you leave — we need to talk." What they were doing was forming CART and it happened right there on that hotel lobby couch.'

Opposite: U.E. 'Pat' Patrick was a driving force in the formation of CART. The Michigan oilman also served as its first president and chairman.

outside of racing. We as businessmen should be ashamed of ourselves for being involved in a prestigious sport such as Championship racing with all of its potential while it is as weak and disorganized (sick) as it presently is. It is truly strange that with all these "Heavyweights" involved, we still do not have our act together. ("Divide and Conquer" still seems to be working, doesn't it?)

'OK! What shall we do about it?

'First, let us digress for a moment. Let's study some history. Back in the early '70s the status of Formula One Grand Prix racing was similar to our own USAC Championship racing right now. The crowds were quite small, sponsors were hard to find, the news media was not overly interested, expenses were high and going higher and the entire scene was one of disorganization.

'It was at this moment in time that the desperateness of the situation made the various "teams" (constructors) unite and form an organization called the Formula One Constructors Association (FOCA). They appointed a man named Bernie Ecclestone as the chief of operations officer and negotiator and they made a solemn pledge to abide by his decisions 100 percent. They rolled up their sleeves and proceeded to upgrade the entire sport to the point where the paying spectator crowds are much, much larger. Sponsors are numerous and happy to be involved. The media is vigorous in covering all the events on TV and so are weekly magazines and daily newspapers on a worldwide basis. And money is coming back to the constructors and track owners in the form of larger ticket sales, more sponsorship, more prize money and expense money and the spectator is getting a much bigger, better spectacular for his ticket money.

'The obvious fact is that the FOCA has transformed the Formula One Grand Prix racing scene from what was a weak and scattered group of teams without any bargaining or negotiating strength into a bona fide business. They did it by uniting and making that "no turning back" commitment. They speak with one voice (that of the chief negotiator) and that voice has gained authority by leaps and bounds.

'Now it is true that the Championship racing scene is somewhat different from Grand Prix racing and therefore it will require a slightly different organization to bring about an improvement. I only mention the FOCA organization as an example of something that has succeeded, on no uncertain terms. I think everyone agrees that the cost of Championship racing has escalated to the point where it is virtually ridiculous. And at the same time, many of the rewards have not increased at all, but have actually declined when you consider the effects of the general inflation in the U.S. economy.

'At the moment, we the car owners are the ones who have put forth by far the most effort, by far the most financial stake with little or no chance of return. And yet, because we have been so busy fighting each other, we have let the track owners or promoters and the sanctioning body lead us around by the nose while they reap the benefits.

'It is obvious that if Long Beach can afford to pay approximately \$1 million per [Formula One] race after only five years of existence and [a] maximum paid attendance of 70,000, [then] Indy with its 600,000-plus audience and its 60-year tradition and international television coverage [can] afford to spend over \$2 million on the purse if it [is] to be fair.

'As Mr. Lindsey Hopkins said, "We are the ones who did more to build the stands at Indianapolis than anyone else. IMS should thank us each year in addition to our thanking them."

'In all of our discussions as car owners and team leaders, we have agreed that it is essential that we continue to support USAC as the sanctioning body for Championship racing. The only improvement will be that USAC will work for us and support our causes and our policies.

'It should be clearly understood that the purpose of this organization is to make racing better in an overall way. Not just for the car owners and drivers, but also for the track owners and promoters and the sanctioning body and the sponsors and supporters and last but certainly not least, the racing fans and paying spectators.

'In the final analysis, of course, large crowds of paying spectators are the keys to success for all. Track owners (the sanctioning body must help also) who aggressively promote these big events — which by contract will feature the teams and driving stars — will get the crowds, etc., thereby upgrading the entire sport/business. It is my firm belief that rather than cutting the cost of racing, which in itself is nearly impossible, it is far more important to make money more readily available by increasing the popularity and prestige of the sport with the general public.

'Tracks that refuse to put forth the necessary enterprise and promotion in order to meet the minimum purses should not be allowed to hold races. Another alternative is to allow our organization (this idea is borrowed from the FOCA) to take over the track on a reasonable lease arrangement and we can do the promotion and the running of the race where we feel it can be successful. Still USAC-sanctioned, of course. For instance, the German GP at Hockenheim will be promoted by the FOCA this year [1978].

'Now, how do we get there from here? As I see it, the first step is to analyze the situation, get together and form the organization. (Let's call it CART or Championship Auto Racing Teams.)

'I believe that the organization can be operated by a staff of three people. One director/negotiator, one secretary and a staff accountant and gopher if needed. [The director/negotiator] will need an air travel card, a telephone credit card and an expense account. It is rumored that Bernie [Ecclestone] takes none of this. He only works on a two percent commission of everything that is done through the FOCA.

Opposite: Dan Gurney authored a letter that served as a review of the current state of affairs in Championship Car racing. Gurney's so-called 'White Paper' influenced a number of team owners and gave CART its name and direction.





'It appears that a "showdown" with the Indianapolis Motor Speedway is or should be the first target. They are the ones who can afford it. We should renegotiate the TV contract (our rights — not theirs) and we should double the purse.

'Other tracks should be negotiated with on the basis of what is a reasonable amount of revenue to come from all sources such as TV, gate receipts, advertising, sponsors, etc. The entire picture should be shared from the standpoint of cooperation rather than killing each other.

'We must work together to learn how to upgrade the overall marketing/advertising. If CART can send in drivers and media material beforehand to the newspapers, the television stations, the Chamber of Commerce as well as various civic organizations and schools, etc., then we should do so. It is vital that we solve the riddle of getting more money coming in from spectators and sponsor/advertisers and TV networks so that there is a bigger pie to carve up. The only way our demands for more money in the form of a prize fund can have any validity is if the money is there in the first place. Unless we reach the point where we can see the books of these various tracks, we will be negotiating from a position of ignorance. It seems to me that we could all be further ahead if we worked together rather than being divided. We must see the tax returns and books.

'With the correct program of exposure, a fuel company can still get the right sort of benefits from being the exclusive Championship series sponsor. Cigarettes, whiskey, banking, unions . . . we need a very aggressive sales promotion team with super people heading it.

'How do we finance this CART operation? Dues? Memberships? Entry fees? Percentage of the purse?

'Someone (our man from CART) must be a part of all Dick King's negotiations with race track promoters and television network people and series sponsors, etc.'

Gurney later explained his 'White Paper' letter to veteran racing journalist Robin Miller.

Gurney said: 'I can only speak for myself and I'm not really sure when it exactly started or if there was an exact date. I had some lengthy conversations and soul searchings in late 1976 and early in '77 with people involved in the inner workings of the sports entertainment business. I sat down and wrote a white paper, state-of-the-union type idea early in '78.

'The letter was born of the frustration of trying to earn a living in the business of racing. I tried to figure out why this wasn't happening and I kept running across roadblocks. Gradually, it became apparent — it got down to who controlled things and I began to see why there was no chance of it ever working under the current control structure. I'm not saying this was the beginning of CART, but this was when I first realized the problem.

'The guys that realized they loved motor racing were the guys that had dedicated the biggest portion of their lives to it. They realized if it was ever going to be a success, it was going to have to make sense business-wise, or it would crush itself.

'We were stagnated — dead in the water, so to speak — and our roadblock was USAC's 21-man board of directors. They were unresponsive to the idea there needed to be a major overhaul and it was a feeling of pure frustration on our part. While it's not quite the same as taxation without representation, it certainly affects whether or not we can make a living from racing.'

Stagnation might have been an understatement. Race officiating was handled by what some would refer to as a 'Good ole boy' system. It wasn't what you knew, but who you knew.

Then there were the venues.

A look at USAC's championship schedules from 1971 through 1978 reveals that they employed only eight oval tracks — Phoenix, Trenton, Indianapolis, Milwaukee, Pocono, Michigan, Texas and Ontario. With the exception of Ontario, which was located near Los Angeles, none of the tracks was in big media markets.

And the tracks at Phoenix, Trenton, Milwaukee, Michigan and Texas usually had two dates per season. In some years, one of those venues might host three separate races. The only real variations to the schedule came in 1971 when USAC held a pair of 150-milers at an oval track in Rafaela, Argentina and in 1978 when road-course events at Mosport in Canada, and Brands Hatch and Silverstone in England were added to the schedule.

Most of the aforementioned U.S. facilities were in serious need of renovation.

Then there was the matter of equipment. More than half of the races in the '70s were won by Offenhauser-powered cars. Although turbocharged in the '70s, the Offenhauser engine had only four cylinders and had been designed for Harry Miller in 1920 by the legendary Leo Goossen. When Miller faced bankruptcy during the 1930s, Fred Offenhauser took over the company and his name remained on the engine through the 1970s.

Despite the arrival and success of the new, state-of-the-art Cosworth DFX engine, USAC was trying to keep the Offy competitive against its eight-cylinder rivals. The failure to look to the future and progress was alarming to team owners who now had major amounts of money invested in their racing operations. They were trying to make the sport more professional. All they asked in return was for the sanctioning body to do the same.

Unfortunately, attempts to improve the situation fell on deaf ears. When the USAC board could not decide

À LA CART

THOSE RACES THAT DIDN'T MAKE IT

Although the schedule for CART's inaugural season in 1979 ultimately comprised 13 races staged at seven venues, its proposed '79 schedule included a couple of events that might have been very interesting had they been held.

One of the races tentatively planned was at the North Carolina Speedway in Rockingham, N.C. Gordon Johncock actually tested his Patrick Pense at the track and felt it would be a good facility for the fledgling series. However, a deal could not be arranged with the promoter and the Rockingham race was dropped.

One CART owner who probably would have liked to run there was Roger Pense. The reason we say this is because Pense is now part-owner of the track.

The other intriguing race that fell from the proposed schedule was in Honolulu, Hawaii. Hawaii had previously hosted short-track racing, but never an event of the magnitude of a Champ Car race.

As at Rockingham, the promoter was unable to reach an agreement with CART. Speaking of Hawaii, the idea of holding a race there was still being discussed in 1994. That particular event would have been held near the Hula Bowl football stadium but it seems there was a problem with the pavement that would have formed the track surface. The roads were paved with lava, which has an abrasive quality that would have resulted in excessive tire wear.

However, in 1999 the dream of staging a Champ Car race in Hawaii is set to become reality. A non-championship event is to be held on a course at Barbers Point airport outside Honolulu in November, two weeks after the season finale at Fontana, with the winner receiving a prize of \$5 million.

Opposite: The man most responsible for raising the level of professionalism in Champ Car racing, Roger Pense was convinced that the establishment of CART was the way to proceed.

CHAPTER ONE

A number of men in influential positions helped shape CART in its early years. Phoenix tire magnate Bob Fletcher (right) was one of CART's 'Big Six.' John Frasco (far right) successfully reinstated a number of CART teams barred from entry at Indianapolis and later became CART's president. J. Kirk Russell (below far right) was CART's first technical director, a position he still holds. John Capels (right) was chief mechanic for the Morales team in 1979 and became CART's vice president during the final turbulent months of 1989.



Photos: CART

Below: Competitors take a variety of lines during the 1979 California 500 at Ontario Motor Speedway. Ontario hosted CART's first 500-mile race but would hold its final Championship Car event a year later before being plowed under for a real estate development.



a stable set of rules for 1979, CART made several proposals that would have increased owner participation in the area of rules and administration.

At a special board meeting in November of 1978, Patrick proposed that USAC establish an 11-man board to control Champ Car racing with six members from CART and five from USAC. The proposal was vetoed unanimously by the USAC board as was a subsequent proposal of a board with six CART members and six USAC members.

That set things in motion for CART and the announcement was made that it would be conducting its own series of races. On November 30, Patrick was elected president and Jim Melvin vice president/general manager. On December 13, CART signed with the Sports Car Club of America to sanction its races.

CART was formed on the following concepts:

- *The organization would be more responsive to competitors, sponsors, promoters, news media and racing fans.*
- *Champ Car racing would be reinforced as a major league sport and entertainment medium.*
- *The economic viability of the Champ Car racing business would be improved for all concerned.*
- *There would be greater emphasis on media visibility.*
- *Better competition would be stimulated through rules stability.*

CART then hired three veteran officials — chief steward Don Garner, technical director J. Kirk Russell and director of safety Steve Edwards. It was also able to persuade NBC-TV to televise its opening event.

After that historic first race at Phoenix on March 11, 1979 and a double-header at Atlanta, the action moved off the track and into the courtroom.

USAC decided it was time to play hardball. On April 19, it voted to reject the Indy 500 entries of the Penske and Patrick teams, Chaparral Racing (owned by Jim Hall), Team McLaren (whose ownership interest was represented by Tyler Alexander), Fletcher Racing and Dan Gurney's All American Racers because they were 'not in good standing with USAC.' It was more than coincidental that the owners of those teams were CART's so-called 'Big Six,' the key figures in its formation.

CART responded by filing a suit to have the teams reinstated. Following a four-day trial, U.S. District Judge James Noland enjoined USAC from barring the teams. CART was represented by Detroit labor attorney John Frasco. It would not be his last job with the organization.

For the time being, CART was able to continue with its racing and began to take steps to build for its future. One came at the end of the season, when Patrick was elevated to chairman.

CART received a major shot in the arm when PPG Industries announced that it would be the sponsor of the series for 1980. PPG's Ditzler Paint Division had sponsored the 150-miler at Trenton in August of 1979.

Fred Rhue, the vice president of PPG's automotive finishes division at the time, was the force behind getting the company involved in the sport. PPG's involvement in racing centered on the marketing of its automotive finishes, with two major business groups — Automotive Original Equipment and Refinish — sharing the load. From PPG's perspective, not much has changed in terms of what the company expects from the sport since the early days of its involvement.

Rhue made several wise decisions, among them the hiring of highly respected public relations consultant James P. Chapman and the formation of the innovative PPG Pace Car Team. The latter involved the participation of major auto manufacturers, who were given the opportunity to display their concept car designs while showcasing PPG automotive finishes.

Millions of race fans have seen the pace car fleet pace each CART event since the team's inception in 1980. It was a major investment in PPG's future participation in the sport that continues to this day.

With its first season successfully completed, CART was off and running, but the warring parties suddenly reunited the following April prior to the season opener at Ontario. CART and USAC joined forces to form the Championship Racing League with a six-man board composed of Penske, Patrick and Hall from CART and King and team owners A.J. Foyt and Rolla Vollstedt from USAC. The reunification was an 11th-hour situation.

'We were already in Ontario for CART when the merger took place,' recalled Jan Shaffer, CART's first PR director. 'It reverted sanctioning power back to USAC and we ended up running the first five races under the CRL banner.'

'The CRL deal came unglued after Pocono, but USAC went ahead and officiated the race at Mid-Ohio which followed three weeks later. After that, it was CART.'

Although the schedule had dropped to 12 events, new races were added at Mid-Ohio and Mexico City as CART sought to expand its fan base. The Mexico City race also became CART's first event outside U.S. boundaries. It would not be its last.

À LA CART

DOING WHAT NEEDED TO BE DONE

During CART's first season, there were inevitably many unforeseen problems to be overcome and everyone associated with the new series lent a hand to insure that things went according to plan. As Jan Shaffer, CART's former PR director, recalls, the organization's staff gathered for the first time prior to the opening event at Phoenix.

'A lot of us had never met before and we got acquainted in the parking lot over a few beers,' Shaffer said. 'There were Nick Formoro, Steve Edwards, Billy Kamphausen, Kirk Russell, Jimmy Yates, Don Garner, Jack Fisher, Dr. Steve Olvey and Duke Garner. Some of these officials knew each other. Edwards and Russell had been with USAC and they brought Don Garner out of retirement to serve as a father figure to a lot of us. They had a lot of talented people.'

'One of the first problems facing us was the annual flood of the Maricopa River. It washed the main road into the track and there was Jay Signore, who worked for Penske at the time, operating a front-end loader. Roger Penske even got into the act, passing out race tickets to Maricopa County workers sent to open the road.'

'It was a fascinating period. You had big teams helping little teams. You had people making sure others got to the track. People would call each other up to see if they were going to be able to go to the next race. The camaraderie was very special and a lot of lasting friendships were made.'

Shaffer also recalled the thrash to get ready for one of the Trenton races.

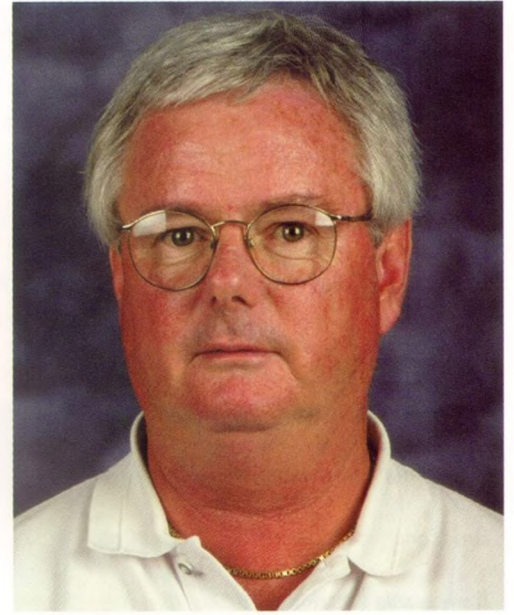
'I had gotten called by Rick Nadeau on Thursday and he told me to get a flight from Detroit to Fort Wayne. I rented a car to drive to Logansport to get valve springs from Rockwell and drove to Indianapolis.'

'I needed to get a flight to Philadelphia, but it was weathered in. So I called Jim Melvin and said they had better send Penske's private jet because otherwise I could not make it by 6 a.m. when they needed to have me deliver the valve springs. He said I was on my own. I had to fly from Indy to Atlanta and catch a late flight to Philadelphia and arrived about 6 a.m. and rented a car to drive to Trenton.'

'When I arrived at the track, the first thing I saw was Jim Melvin with his sleeves rolled up pushing a broom. I said, "Well I finally have learned what presidents do." He replied, "It's good for the soul."'



Art Flores



Allsport USA/CART

Above right: Former Philadelphia sportswriter Michael Knight was CART's first director of communications.

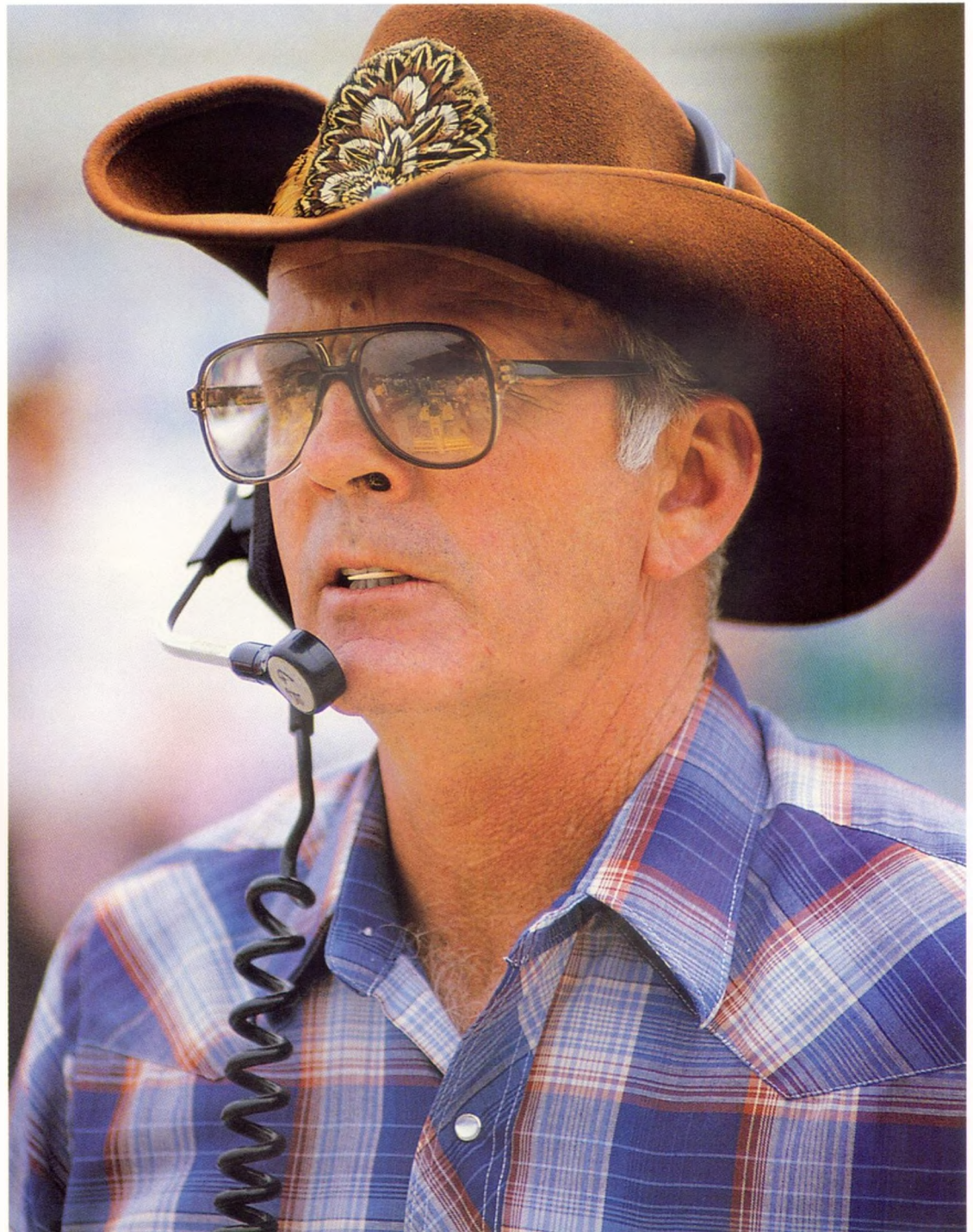
Above far right: CART director of logistics and assistant technical director Bill Kamphausen has been involved with the series since its inaugural season in 1979.



Art Flores

Above: CART staged its first overseas race during William Stokkan's term as president, but it was a stormy period in the organization's history.

Right: Highly respected Wally Dallenbach retired as a driver in 1980 and became CART's chief steward.



Art Flores

Ontario, which had hosted Champ Car races since 1970, staged its last races in 1980. For the California 500, 37 starters took the green flag. That made it the Champ Car race with the biggest post-World War II starting field ever.

Following the season finale at Phoenix, CART began to make some changes. Because of the CRL, Melvin had lost his job and became executive director of the SCCA. Frasco, who had been instrumental in keeping CART teams from being barred entry in the 1979 Indy 500, was named chairman. Russell and former Philadelphia racing writer Michael Knight were brought in as CART's first full-time employees. Russell was named director of operations while Knight was named director of communications.

Prior to that, Rick Nadeau, Jan Shaffer and Barry Gibson had handled most of CART's administrative duties. The administration of CART had been undertaken out of offices at Penske's Michigan International Speedway. CART now had its corporate headquarters in the Detroit suburb of Bloomfield Hills.

CART also got an added boost from series sponsor PPG, which announced it would establish an unprecedented \$1 million point fund for 1981. The series also gained the services of recently retired driver Wally Dallenbach, who was named co-chief steward with Garner.

With PPG support, the introduction, in July 1981, of the first 500-mile race at Michigan and growing interest in the series, CART was starting to take off. The aforementioned Michigan 500 also had the distinction of giving television viewers the first on-board coverage of a live Champ Car race, courtesy of a camera mounted in the nose of Bill Alsup's car. The in-car cameras would continue to improve over the years and give armchair fans a number of different views of the races from a driver's perspective.

If one goes back to the original concepts for CART, it is clear that the focus on all areas has pretty much remained the same. Although those participating in the series would be the first to admit that it is far from perfect, they will tell you it is better for competitors, sponsors, promoters, the news media and racing fans alike, and can continue to improve. Significant changes have been made to many venues while a number of new modern facilities have been added to the CART circuit.

Thanks to ideas like the Winners Circle Club and autograph sessions, average fans are getting more opportunities to make contact with drivers and owners. In 1997, CART Licensed Products (CLP) was launched to implement a comprehensive licensing and merchandising program that involves CART logos, drivers, teams and a number of race facilities.

Thanks to some of the ideas advanced by past CART chairmen like Frasco and William Stokkan as well as the current CART chairman, Andrew Craig, the series is being treated as a major league sport and entertainment medium.

Frasco was instrumental in getting CART into new markets like New York, Los Angeles and Miami. And during his tenure, the series shed its USAC oval-track image and introduced a host of successful road course and temporary circuit events. The series also got better during this time with the arrival of a number of new teams and world-renowned drivers like Mario Andretti and Emerson Fittipaldi.

However, Frasco also got into the promoter business, and in addition to his duties as CART chairman he became involved in promoting races at places like the Meadowlands and Vancouver. The dual role was instrumental in Frasco's departure from CART in 1989.

But as one CART team owner who declined to be identified said, 'You can't really fault John. He basically did what we hired him to do. He definitely got us races in places we had never been before and the series grew under his guidance.'

CART founder Pat Patrick recalled CART's early structure in an interview with *Indy Car and Championship Racing* magazine:

'When we started CART, the way we organized it is that Roger [Penske] would look after the rules side of things and do all of the press work, because I didn't like it and still don't,' Patrick said. 'I looked after the business end of things.'

'We worked very well together, until we got some professionals in there. John Frasco came in and was very helpful, and then John got tired of it and I don't blame him. But now we have solid management and Roger, of course, is no longer the enforcer of the rules.'

Although they would have a falling out, former CART PR director Jan Shaffer has kind words for Frasco.

'With Kirk Russell and Mike Knight working full time in the early days, they got things going,' Shaffer said. 'John Frasco wanted it to be a clone of the success for Formula One. He had a big-event concept. He wanted to create big events. Pros and cons of Frasco notwithstanding, he was successful in building big events.'

Succeeding Frasco was Stokkan, who had built a solid reputation in marketing for Playboy Enterprises. The Danish-born Stokkan was a man with a plan.

'My one agenda was getting the two parties — CART and the Indianapolis Motor Speedway — back together,' Stokkan pointed out. 'I came to CART as a businessman, a marketing man and someone who had never been a race fan.'

'I inherited a company that had negative revenue at the time. When I left CART, I was able to give them 30 percent increase in revenue and 20 percent increase in profits. There was money in the bank.'

'I am proud of my record, but I do feel that I failed at the most important part of my job and that was to

À LA CART

MARICOPA GRAND PRIX GRID

Racers have always been notorious for getting speeding tickets. Of course, CART's current rules stipulate that if one of its drivers gets suspended for acquiring too many traffic violations, that driver will also lose his CART competition license.

Sometimes, speed traps are set up near race tracks to catch those trying to imitate the racers or racers who forget they are no longer on the track. Jan Shaffer recalls one such speed trap set up near Phoenix International Raceway.

'Sometime in the 1980s, the Maricopa County Sheriff's Department set up a speed trap to catch a number of race personnel on their way to PIR,' Shaffer said. 'So many people got nailed, CART's PR staff decided to establish the Maricopa County Sheriff's Department Memorial Trophy Dash. To qualify for the grid, participants would display their speeding citations. The grid was based on cited speed.'

'Paula Arnold of Galles Racing won the pole with a speed of 80 mph. Ultimately, there would be 18 starters although Shierson Racing's Neil Micklewright was added as a promoter's option — he had been cited for running a stop sign.'

'Johnny Rutherford quipped: "If I had known we had been qualifying, I would have tried harder." Rutherford started on the outside of row three alongside Rick Nadeau.'

Dario Franchitti enjoyed a successful sophomore season in CART in 1998 for Barry Green. The popularity and growth of CART over the years has lured a number of top European drivers like Franchitti away from a possible career in Formula One.

bring CART and the Speedway back together. I guess I can say that I am proud of the fact that when I left, [Indianapolis Motor Speedway president] Tony George and the CART owners hated me equally. We were in striking distance of getting together and my sadness is the fact that both sides were 50 percent right.'

With the growth in CART's popularity, helped by a global television audience, the series is in good financial shape despite the fact CART has been excluded from Indianapolis since 1996. CART as an organization grew stronger financially in 1998 by making a public stock offering on the New York Stock Exchange.

The funds raised by the stock sale enabled CART to purchase the Indy Lights and Toyota Atlantic series. Those acquisitions will play an important part in CART's future expansion plans.

'One way CART plans to expand is through its ladder system with development series like Lights and Atlantics,' current CART chairman Andrew Craig said. 'Most companies start small and grow over a period of time. You build a strong foundation. NASCAR has done this.

'CART is unusual in that it started big. You had a group of car owners taking over the management of a national championship. CART has never had the underpinnings you find elsewhere. We call it "growing the business down."

'Everybody knows the procedure for a player to get into the National Football League. A player becomes a star in high school and gets to play in college and then he joins the NFL. By the time that player arrives in NFL, everybody knows who he is because they have been following his career since high school.

'In our cars, our drivers just arrive. What we want to do is provide them with clear steps on what they want to do to get to the championship level. We want to identify young talent and build a fan base. The acquisition of Lights and Atlantics are big steps.'

What helped increase CART's popularity during the Stokkan administration was Nigel Mansell's popularity that exposed more fans than ever to CART's competitive races. The growth that has followed in the years since can be attributed to Andrew Craig.

'Over the last few years, there has been profound change in both the quality and quantity,' Craig said of the CART entry list. 'It used to be there was a philosophy that the front of the grid must move back. Now, if you want to compete, it's up to you to move up. You've got to put yourself in front.

'Another change that has emerged has been the arrival of a different kind of team owner. CART at one time was polarized. There were a few very well-funded teams and a lot of very small teams.

'Over the last few years, there have been some different team owners — people who do this full time like Derrick Walker, Steve Home, Barry Green and Cal Wells. They are full-time professional racers. Now it's no



Michael C. Brown

longer a case of where a couple of people can win races. Many people can win today.'

One area of change particularly pleasing to Craig has been the rise in the number of competitors.

'In the last 10 years, the number of competitors has gone up dramatically,' Craig continued. 'For example, from 1989 to 1994, the number of competitors who completed a full season averaged out to 17.5. In the last five years, that average has grown to 26.4.'

Rules stability has been a major concern of CART and efforts to make the cars safer and affordable have resulted in the closest competition in its history. The 26 starters at the 1998 Bosch Spark Plug Grand Prix at Nazareth were separated by slightly more than one second.

'You had to have rules stability,' CART founder Pat Patrick said in an *Indy Car and Championship Racing* magazine interview. 'We had a concord agreement and it takes 100 percent and certain things take two-thirds. When you think it through, it's worked very well.'

'The engine supply rule insures reasonable access — at least seven cars can get a particular engine,' added Craig. 'It is a very good rule. The chassis situation is such that anyone can buy a competitive chassis off the shelf.'

'Something else that has contributed has been the engine leasing situation, which I think has been widely misunderstood. It doesn't matter who you are, you will get the same quality product and service as anyone else. In the beginning, I think a lot of people didn't like the idea because they lost control. But it frees teams from having to maintain engine shops and programs.'

One of the by-products of the rules stability has been the close competition.

'All you have to do is look back five years,' Tasman Motorsports owner Steve Horne pointed out. 'Then you had three/four/five good teams capable of winning races. Now there are 10.'

'In 1982, when I first came to CART, you had Penske and Patrick and that was about it. I am especially pleased with the dramatic improvements in the safety of the cars. My first year at Indy was 1982 when Gordon Smiley had his accident and that just about made me want to get out of the sport. You won't see an accident like that today.'

'The speeds the cars are running are incredible. The growth and stature of CART have gotten better. It's not perfect, but it is still a tremendous series. Personally, I am sorry we are no longer going to Indianapolis, but that is what unified the CART owners to move onto the next level of business.'

'It's grown up a lot in spite of itself,' adds Demick Walker, the only man in CART's ownership ranks apart from Roger Penske who can boast involvement in the series for all 20 of its years. 'It's dragged itself away from what I used to refer to as the "Boys' Club," which was a majority of mostly wealthy owners. Now it is driven by the fans and the sponsors as well as the investors.'

'Today, it is ruled in a more organized way. It is run more as a business. Since 1989, I have been to almost every board meeting and in the last 10 years, it has started to take shape. We often compare our series to NASCAR but NASCAR is 50 years old and we have just turned 20. I think if you compare our first 20 years to their first 20 years, you will see that we have done one heck of a job.'

'But we haven't even scratched the surface yet. The challenge is still there to motivate more businesses to get involved. We need to take opportunity by the horns and maximize it. There is more competition on and off the track. It will not be easy to achieve our goals, but they are achievable.'

One idea Craig has in mind is to give fans a closer look at the sport.

'One of the facets of our expansion is that you have racing on one side and racing entertainment on the other,' Craig said. 'Most people play the games they follow so they can relate to them. Very few people, however, will get to drive a race car.'

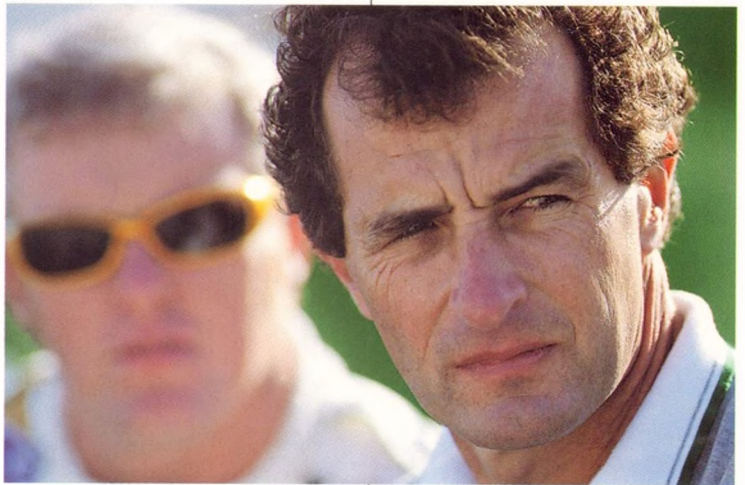
'We want to give more people the chance to get as close as possible. We want it to be a virtual experience. We can do that in the form of video games. Fans can race at any track against any driver.'

'For example, you may decide to race against Michael Andretti at Laguna Seca. If you watch the Laguna Seca race and see Michael Andretti, you have kind of been there and done that. This sort of idea helps us build our business and build our family.'

CART has also grown as a corporation. From two full-time employees in its early years, the company now has more than 60 full-timers on its staff and a considerable number of 'weekend warriors' who help put on each CART race.



Michael C. Brown



Michael C. Brown

Top: Steve Horne tasted success early in his CART career as head of the Truesports team. Horne ultimately would go his own way and form another successful team, Tasman Motorsports.

Above: Like Horne, Barry Green came to CART from Can-Am and also found early success. Green's rookie driver, Teo Fabi, nearly won the 1983 CART title.

À LA CART

THE BIG SIX

The driving force behind the formation of CART was a group of Champ Car team owners known as the 'Big Six,' comprising U.E. 'Pat' Patrick, Roger Penske, Bob Fletcher, Dan Gurney, Jim Hall and McLaren Racing, represented by Tyler Alexander. All of the so-called 'dissidents' owned successful, well-financed teams. Each had won Champ Car races. By the end of 1978, the 'Big Six' had grown to 21 team owners, although by the time CART held its first race in Phoenix on March 11, 1979, A.J. Foyt and Sherman Armstrong had experienced a change of heart and returned to USAC.

Those who stood by CART in addition to the aforementioned 'Big Six' were Bobby Hillin, Larry Hamm, Pat Santello, Bill Alsup, George Walther, Jerry O'Connell, Alex Morales, Herb and Rose Wyszard, Ted Field, Carl Gelhausen, John Mahler, Tom Frantz, and Gus and Dick Hoffman.



David Hutson

Longtime McLaren man Tyler Alexander had joined the company as a mechanic and rose through the ranks to serve as its team manager and director of racing. Unfortunately, because McLaren was undergoing reorganization at the time, 1979 would prove to be the last year for the team in Champ Car competition.

In fact, one of the reasons for CART's success has been the staying power of its top race officials.

For example, J. Kirk Russell, one of the original CART hires, has been technical director since 1979. Today, Russell holds the titles of vice president operations/technical director/steward. Bill Kamphausen has also been involved since 1979. Kamphausen is currently the director of logistics and assistant technical director.

Chief steward Wally Dallenbach left a successful career as a race driver to become a CART official in 1980. He was elevated to chief steward in 1981. One of the most respected drivers in the Champ Car community, Dallenbach always had the reputation of competence, talent and good sportsmanship. That made him a natural for the chief steward position in CART. Dallenbach has attempted to retire twice, but CART has been unable to find someone of sufficient stature to succeed him.

Bob Funk, the director of timing and scoring, has held that position since 1981 while technical coordinator Dick Perry has been involved with CART since 1982. CART's director of safety, Lon Bromley, has been involved in the safety program since 1986 and has held the director's title since 1990.

In recent years, CART has also gone global by adding a number of international events to its schedule. Although it would only race in Mexico in 1980 and 1981, it has held races in Canada since the mid-Eighties — at Sanair (from 1984 to 1986), Toronto (from 1986 to the present) and Vancouver (from 1991 to the present). In 1991, CART went overseas for the first time with a race in Surfers Paradise, Australia. The event is still being held today.

In 1996, South America got its first Champ Car race since 1971 with the introduction of the Rio 400 in Rio de Janeiro, Brazil. In 1998, Japan hosted its first Champ Car event since 1966 with the Budweiser 500 that showcased the new Twin Ring Motegi circuit north of Tokyo. Current plans are being considered for a race in Germany.

'In terms of expansion, the series has grown from 16 races to 20, the most ever for a CART season,' Craig said. 'We will be getting a lot of good presence with these races. We need more presence, but when you look at NASCAR, they have 30 races, which is almost twice as many as CART, and as a result they get twice as much exposure. We certainly will not be doing 30 races in a year.'

'CART is looking to the future with a number of exciting new markets in the USA. I think you will see some change in the current schedule. There are some attractive international races proposed.'

'What CART seeks is to be paid well. We want to race in markets where our sponsors want us to go. And we want to bring sponsors back home by showcasing local companies. For example, we expect to attract more Japanese companies now that we have a race in Japan.'

'Realistically, we won't have more than five or six races overseas and in Canada where we now have two races. We are going to be extremely selective.'

In 20 years, CART has come a long way. It's been quite a ride.

HAIL TO THE CHIEF(S)

In its 20-year history, Championship Auto Racing Teams has undergone a number of changes. Some of those changes have come at the top.

But considering that an unresponsive board of directors at USAC served as a catalyst for the formation of CART, it is no surprise that there have been four changes in leadership over the years — Pat Patrick to John Frasco to William Stokkan to Andrew Craig.

All four have held the post of chairman. At different times, the chairman has also had a vice president or president to work with. Jim Melvin, originally the vice president/general manager, became CART's president after the 1979 season.

Melvin, who is now promoter of CART events at Milwaukee and Houston, left CART for the SCCA when the CRL was briefly formed in 1980. When Frasco became chairman, John Caponigro was made president. Both were ousted in 1989.

Caponigro was replaced by former CART team owner John Capels, who was named executive vice president and chief operating officer. Capels was in charge until the arrival of Stokkan early in 1990. However, Capels left his position in June of 1990 and CART has since restructured its hierarchy.

Under Stokkan's watch, the series added a second race in Canada and got its first race overseas with the addition of the event at Surfers Paradise, Australia, to the 1991 schedule.

Stokkan had the misfortune of serving as CART chairman during some very turbulent years. There had been considerable resistance from Bernie Ecclestone and the FIA, the international governing body of motor sport, over the Surfers Paradise race. Stokkan, CART and the Australian race officials were able to stand firm and held the event, despite Ecclestone's protests.

Another challenge came in the form of Tony George, the president of the Indianapolis Motor Speedway. George, whose grandfather was the late Tony Hulman, the man credited with saving the Speedway and with it Championship Car racing in America, attended CART's winter meeting at Houston in 1991 and made a proposal to CART's board of directors. The proposal was that CART should revamp its board and that Goodyear's Leo Mehl should replace Stokkan as chairman.

Not surprisingly, the proposal was resoundingly defeated, but CART would hear from Mr. George again.

The FIA also offered a challenge in the form of a proposal for the Indianapolis Motor Speedway to adopt a common rules formula with FI racing. FIA president Max Mosley attended the 1992 Indy 500 and made a plea for changes that would allow FI cars to run at Indianapolis.

Even though Indianapolis was sanctioned by USAC, the Indy 500 was still the premier race involving CART teams and drivers. The proposed changes posed a threat to future participation at Indianapolis by CART. That idea died quietly, but history shows that other rule changes would indeed keep CART from running at Indy.

Stokkan and CART tried to placate George and the Speedway. In 1992 at Toronto, CART announced it had reorganized its board and it now was composed of seven members: five owners who had voting privileges, and Stokkan and George who were non-voting members.

Having weathered those storms, CART also enjoyed a major expansion in its worldwide television coverage during Stokkan's tenure. Nigel Mansell's decision to run in the CART series in 1993 instead of defending his FI World Championship gave the series a boost, particularly in Europe where millions of fans were able to see Mansell taking part in highly competitive racing.

CART also got a new name during this time. Ever the marketing man, Stokkan believed that the CART acronym was unfamiliar to the average sports fan. So he proposed the name of IndyCar and arranged a contract with the Indianapolis Motor Speedway for its usage.

For Stokkan, undercurrents from some disgruntled CART owners resulted in his decision to not seek extension of his contract, which expired at the end of 1993. CART also opted to expand its board to all owners with franchises after George decided he no longer wanted to be involved.

As Stokkan left office, a search began for a replacement. Enter Andrew Craig, whose background was in sports marketing and the Olympic Games.

Craig became CART's fourth president in 1995 and in 1997, he was elevated to chairman/president.

Like Stokkan, Craig found himself embroiled in a battle with George and the Speedway. The end result was the formation of the Indy Racing League and new rules that all but barred CART teams from participating in the Indianapolis 500.

This civil war had a number of ramifications the civil war of 1979 had lacked. One was a threat of legal action by the Speedway over the word IndyCar. Rather than go to court, the decision was made to settle and CART reverted to its original name.

To Craig's credit, the organization has taken the attitude that it will have to go its own way. And despite the loss of Indianapolis, the series has thrived. It has also expanded internationally with new races added in Brazil and Japan and new American venues.

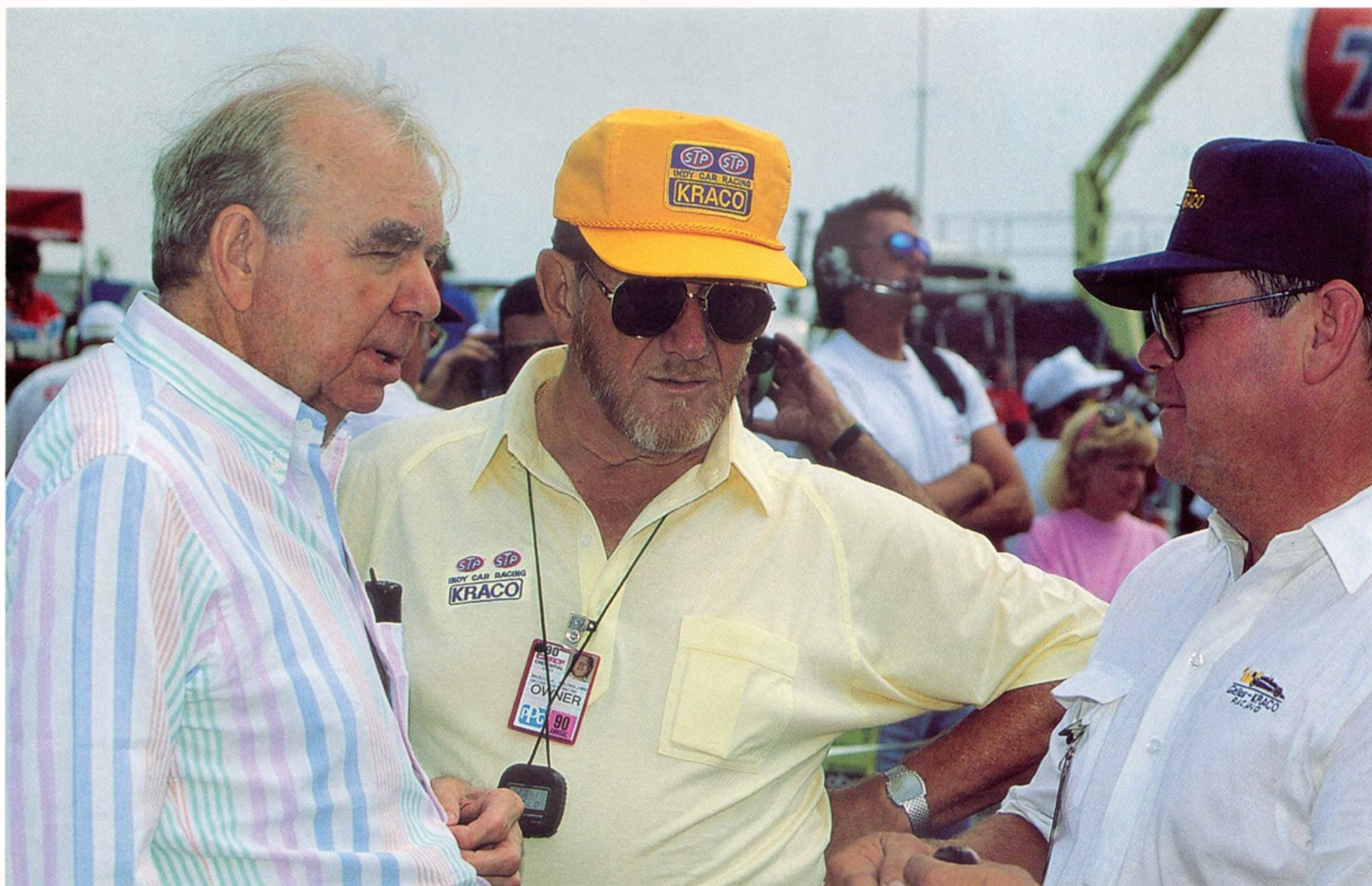
In the last three years, CART has raced at new facilities in Miami, St. Louis and Fontana, CART's second superspeedway. It has also added a street race in Houston to give CART a major market in Texas and in 1999, it will hold a race in Chicago.

And in 1998, CART became a publicly traded company on the New York Stock Exchange under the symbol of MPH. The influx of capital allowed CART the leverage to purchase two support series — Indy Lights and Toyota Atlantics.



Art Flores

CART chairman Andrew Craig has been at the helm through some of CART's rockiest times as well as some of its most prosperous times.



Art Flores

PPG's Jim Chapman (left), shown here with team owners Maurice Kraines (center) and Rick Galles, was Championship Car racing's unofficial ambassador and made the CART paddock a nicer place to visit.

CHAPMAN EXERTED CONSIDERABLE INFLUENCE

On October 10, 1996, Champ Car racing lost one of its most influential figures.

James P. Chapman succumbed to throat cancer after a year-long illness and was given a memorial service in November befitting a man of his considerable stature.

Chapman was the quintessential southern gentleman, although he spent a good portion of his life in the north. Born in Charleston, South Carolina, Chapman became a journalist but later parlayed that career into public relations.

A longtime resident of Detroit, Chapman's connection to Ford Motor Company led him to a farewell tour by baseball legend Babe Ruth. Ruth ironically would die of throat cancer following the tour.

Chapman first became involved in auto racing by helping promote a NASCAR stock car race on the dirt fairgrounds track in Detroit in 1950. The race was a success and years later, Chapman found himself at Indianapolis handling public relations duties for Olsonite, which sponsored Dan Gurney at the time.

When PPG Industries decided to get involved in Champ Car racing, PPG's Frederick Rhue tabbed Chapman as its man at the races. Chapman was able to negotiate a sponsorship package with the Indianapolis Motor Speedway in 1982 that resulted in the Indy 500 becoming part of the PPG World Series once more the following season despite the fact the race was still sanctioned by USAC. That was indicative of Chapman's public relations skill as well as his influence in the sport.

'That was one of the most satisfying moments of my career,' Chapman recalled. 'Roger Penske, among others, told me it was the best thing that had ever happened to CART.'

In fact, *Indy Car Racing* magazine named him its 'Most Influential Man of the 1980s.' He had that kind of clout.

One of the many facets of PPG's innovative PR program was the PPG tent, the place where anyone who was anyone would go during down time at a CART weekend. The first man to see was Jim Chapman himself, who would welcome you and make sure you had the proper credential. He was the man who made the introductions as well as the man who made sure the food was up to standard.

Jim Chapman also made sure that everything was first class. It was simply part of the process in which auto racing was able to upgrade itself from a lower- to middle-class sport to the highly professional and extremely corporate business it has become over the years.

As Dan Gurney pointed out in Michael Knight's eulogy to Chapman, 'Jim was one of the most innovative and imaginative PR men ever to grace the pit lane. Jim practically invented most of what is now considered

routine sponsor PR work. He was the first, as far as I know, who thought of putting up a sponsor hospitality tent alongside a racetrack, filling it with extravagant race car ice sculptures, beautiful food and beautiful people from the business, sports and movies industries.

'However, I think Jim made his greatest contribution to the sport in the early years of CART, when he started to work for PPG Industries. He created a home in the shape of a tent for the [Champ Car] family. It is my opinion that the cohesiveness that the CART community enjoys today can be directly traced to the camaraderie we all enjoyed then, with Jim as the beloved and wise patriarch who orchestrated it all.'

Frederick Rhue, who was vice president of automotive products for PPG in 1980 and the man responsible for PPG's involvement with CART, had this to say:

'In my opinion, Jim Chapman's guiding hand was almost totally responsible for the success of PPG's [Champ Car] program. There is no doubt that he had numerous successes in his lifetime, many of which might have been of more importance in the scheme of things than PPG's [Champ Car] program.

'To me, however, Jim's contributions to PPG were of monumental importance and should go down in [Champ Car] history, not only as being of monumental importance to PPG, but to CART and the Indianapolis Motor Speedway as well.'

Knight concluded his thoughtful eulogy with these remarks:

'It is a sad reality that many of CART's current-day movers-and-shakers never knew Jim Chapman, nor had the privilege of working with him, nor truly understand that there would be no PPG Cup series as we enjoy it without him. They are the poorer for it.'

In 1992, he retired from PPG although he returned frequently to the racing scene and even lent a hand in the 1994 Arrivederci Mario retirement tour of Mario Andretti. Even in retirement, he could be seen using his influence and urging people in the sport to make it better.

He definitely succeeded in that aspect.

PPG PUT A NICE FINISH ON ITS PACE CAR PROGRAM

The involvement of PPG as CART's series sponsor which began in 1980 was more than that of a large corporation pouring money into a program in exchange for name recognition.

What set PPG Industries apart from other sponsors in CART was the fact it was a large company that did not sell products to the general public. Its primary product was and is paint finishes for the automotive industry. However, PPG saw CART as a means to enhance its ties to Detroit.

It offered a pair of promotions that would heavily influence the CART circuit. One was its large hospitality tent. In the early years of the CART series, very few teams had the coaches and hospitality areas seen today. Hospitality in CART's paddock in the early 1980s was the PPG tent. It provided shelter from the elements, hot food and cool drinks with a warm welcome from a venerable Southern gentleman by the name of James P. Chapman.

Everyone went to the PPG tent in those days. There were CART officials, mechanics, team owners, drivers and the media. Of course, there were also plenty of PPG employees and their guests. It was a big tent and the place to be and be seen.

It also was a good location for doing business. For example, a PPG salesman would bring customers to a CART race and give them a behind-the-scenes look at the sport of auto racing. With the PPG tent, they could enjoy comforts not available to the average fan. They could also hobnob with the 'Who's Who' of racing. It set the standard for CART paddock hospitality.

There was another promotion that was unique to PPG — its Pace Car Team. The brainchild of PPG vice president Fred Rhue, it was formed in 1980. The team featured a fleet of customized cars that could showcase PPG's line of automotive finishes. Modified for racing purposes and therefore illegal for road use, the cars were also used to give PPG customers and guests a chance to enjoy a high-speed ride around each CART track.

Another feature of the team was the fact that all of the drivers were women who raced. All had competition licenses and some had distinguished themselves in the sport. One team member was Desire Wilson, the only woman who has ever won a Formula One race. Wilson's victory had come in the British Aurora AFX Series for older Formula One cars. Another team member was Lyn St. James, the holder of the world closed-course speed record for women and a future CART competitor. Yet another team member was Patty Moise, who would wind up racing in NASCAR.



Shiny and speedy, one of PPG's pace cars is ready for a run. A host of major auto manufacturers are involved in the pace car program.

Below: A familiar sight before the start of each CART race is the lineup of PPG pace cars that lead the field on a designated number of parade laps.

Originally, there were six PPG pace car drivers. Currently, there are 14.

Selected PPG pace cars and members of the pace car team also make appearances at auto shows, trade shows and auto dealerships. It gives them an opportunity not only to promote PPG, but the CART series as well.

'The pace car program represents a seamless relationship between a manufacturer and a supplier,' says Kears Pollock, senior vice president of PPG's Coatings and Resins Division. 'The pace cars are done as a showcase for car companies as well as for PPG's automotive finishes. You can't tell where PPG ends and the customer starts.'

'By involving automotive manufacturers' design and engineering staffs in building pace cars for our racing program and then bringing designers, engineers, plant managers, paint supervisors and key executives to the races to see their cars on display, and even giving them rides around the track in their own pace cars, PPG validates its role as a leading and innovative producer of the finest automotive finishes.'

Currently, PPG's pace car fleet includes an Acura NSX-T, a BMW M3, a Chevrolet Camaro, a Chevrolet Corvette, a Dodge Viper, a Dodge Ram pickup truck, a Ford Mustang Cobra, a Lexus SC400, a Pontiac Formula Firebird, a Toyota Supra, a Nissan Maxima, a Pontiac GTP Twin Turbo and a Cadillac Catera.

A former member of the fleet had a bit of history. In 1987, Ferrari unveiled a one-of-a-kind car that was to be the last car designed under the supervision of Enzo Ferrari himself. Ferrari died at age 90 and after the car had given a few years of service, it was returned to Italy where it is now in the Ferrari museum.

In addition to the popular pace car rides offered during practice and qualifying days, the PPG pace cars also pace every race. Select PPG customers and dignitaries get the thrill of riding around the track for the pre-race parade and then return to the paddock in time for the start of the race. The car designated as the official race pace car then remains on the track for the final pace lap before the green flag is shown.

Over the years, the team has been guided by Ken Lowe, formerly the head of Goodyear's Racing Division. In addition to overseeing the maintenance and transportation of the pace car fleet, Lowe has been responsible for coordinating the customer ride program and related pace car driver functions. Lowe also serves as the liaison between race control and the designated pace car during the race.



Michael C. Brown

PPG paint shines brightly on the official pace cars at all PPG Cup races.

protect the beauty of wood on home siding and outdoor decks.

PPG's Olympic Stain finishes



**We're
Everywhere
You Look**



PPG chemical additives keep snack foods staying fresh.

PPG coatings enhance the appearance of beverage cans and bottles.



PUTTING ON A CART RACE

Contrary to popular belief, CART FedEx Championship Series races don't just happen. It requires a lot of people to work behind the scenes for a long time prior to a race and then work the race weekend itself for an event to be successful.

For example, CART provides staff personnel for technical duties, pit observation, course observation, timing and scoring, registration and public relations. Usually, more than 200 people are needed for a race weekend with road course events requiring more course observers.

CART also takes three support transporters, a business unit, the medical center and on occasion a display truck to the races. The transportation fleet is headed by Bill Luchow, who has been connected to CART since 1979. During a race, Luchow also becomes a pit official.

Also involved in the detailed preparations for a race weekend is Omega, which has provided the timing and scoring equipment for CART since 1997.

CART has a number of different venues on its schedule. There are races on permanent ovals and super-speedways. There are road races on purpose-built road courses and temporary facilities. And there is also the airport runway circuit where the Cleveland Grand Prix is held annually.

Like its team owners, CART's promoters are a diverse group. In some cases, the promoters are CART owners.

Roger Penske, for example, owns the Penske Speedway group that operates Nazareth Speedway, Michigan Speedway and California Speedway. Penske Speedways also is part-owner of the Homestead track.

Chip Ganassi was involved in the promotion of the Meadowlands races and in 1999, he and his business partners will host a CART race in Chicago.

Carl Haas promotes the races at Milwaukee and Houston and is also on the board of directors at Elkhart Lake. Elkhart Lake's Road America circuit has the distinction of being CART's longest-serving permanent road course — it has continually hosted a CART race since 1982. The only other road course event that can make that claim is Cleveland, which is a temporary circuit.

According to Road America spokesman Roger Jaynes, it is a year-round job promoting a CART race even though Road America hosts a number of other events.

'Our CART race is our biggest event,' Jaynes said. 'As soon as the race is over each year, we sit down and

Scott Pruett rounds a turn during the inaugural CART race at Houston in 1998. The Houston race was the latest example of CART's expansion into major markets.



look at what needs to be improved. We look at all areas, from promotions to how we stage the post-race celebration.

'In the fall, a lot of racing publications are doing their preview issues so we have to provide them with updated maps and information that may be relevant. We are also constantly looking for more sponsorship.'

Jaynes estimates that it requires 475 paid personnel and another 300 volunteers to put on the CART race at Road America, which at four miles in length is the longest course on the CART circuit. He adds that Road America has six full-time staffers the rest of the year.

A former racing journalist, Jaynes has seen Road America and CART improve over the years.

'I've been here for every CART race since 1982,' Jaynes said. 'In the early years of CART, there was a predominant number of oval-track racers who weren't used to turning right. Over the years, there have been a lot more road racers involved and the racing has gotten better.'

'We have also upgraded the facility a lot since 1990 and come out with a fabulous event. I can recall speaking with John Frasco [the former CART chairman] right before the start of the 1982 race and he said, "You know, if they promote this the right way, this could become the Indy 500 of road races." And I think they have really made it into a great event.'

The promoters also include sports management companies like IMG, which runs the races at Detroit and Cleveland and also represents the race in Australia.

It is a similar situation for the Molson Indy races that are staged in Toronto and Vancouver. The promoter of those races is Molstar Sports and Entertainment, which is the sports properties division of Molson Breweries.

According to Molstar spokesperson Shannon Emily Davidson, it takes 1,200 volunteers and more than 200 full-time staff personnel to run each race. She added that it takes two full months to construct the temporary circuits and two days to take everything down.

The Toronto race is held on the streets of Toronto's Exhibition Place facility while the Vancouver race is held on city streets. In each case, there are a number of similar tasks involved in staging the events.

'Permits are required because we are using public streets for each race,' Davidson pointed out. 'We have contracts involving renewals for renting buildings. We need city permits for such things as street closures. There are leases on buildings that need to be dealt with.'

Like any race on the CART circuit, it takes a year-round effort.

'Right now, we are having driver appearances because our tickets go on sale in January for our race in Toronto in July,' Davidson continued. 'Our hospitality and sales forces are also very busy at this time because this is their biggest sales season.'

Auto racing is very popular in Canada. The CART races in Toronto and Vancouver are the second and third biggest single-day sporting events in the country. The biggest single-day event is also an auto race — the Grand Prix of Canada.

During the 1998 season, the role of promoter for the Indy Carnival in Rio de Janeiro, Brazil, was turned over to former drivers Emerson Fittipaldi and Nelson Piquet.

There are also people like Chris Pook. Pook ran a travel agency in Long Beach and devised an idea to upgrade his community. That idea was to hold what at the time would be only the second major street race in the world.

In 1975, the first Long Beach Grand Prix was held — a Formula 5000 event won by Brian Redman. From 1976 to 1983, Long Beach hosted a World Championship Formula One Grand Prix.

Since 1984, Champ Car teams have occupied the Beach and the race has become CART's most glamorous event. With its annual Toyota celebrity race, numerous entertainment personalities and the *Queen Mary* as a backdrop, its status is well-deserved.

Pook has also diversified, staging a CART race at the new Gateway track near St. Louis and looking at bringing Formula One back to the west coast.

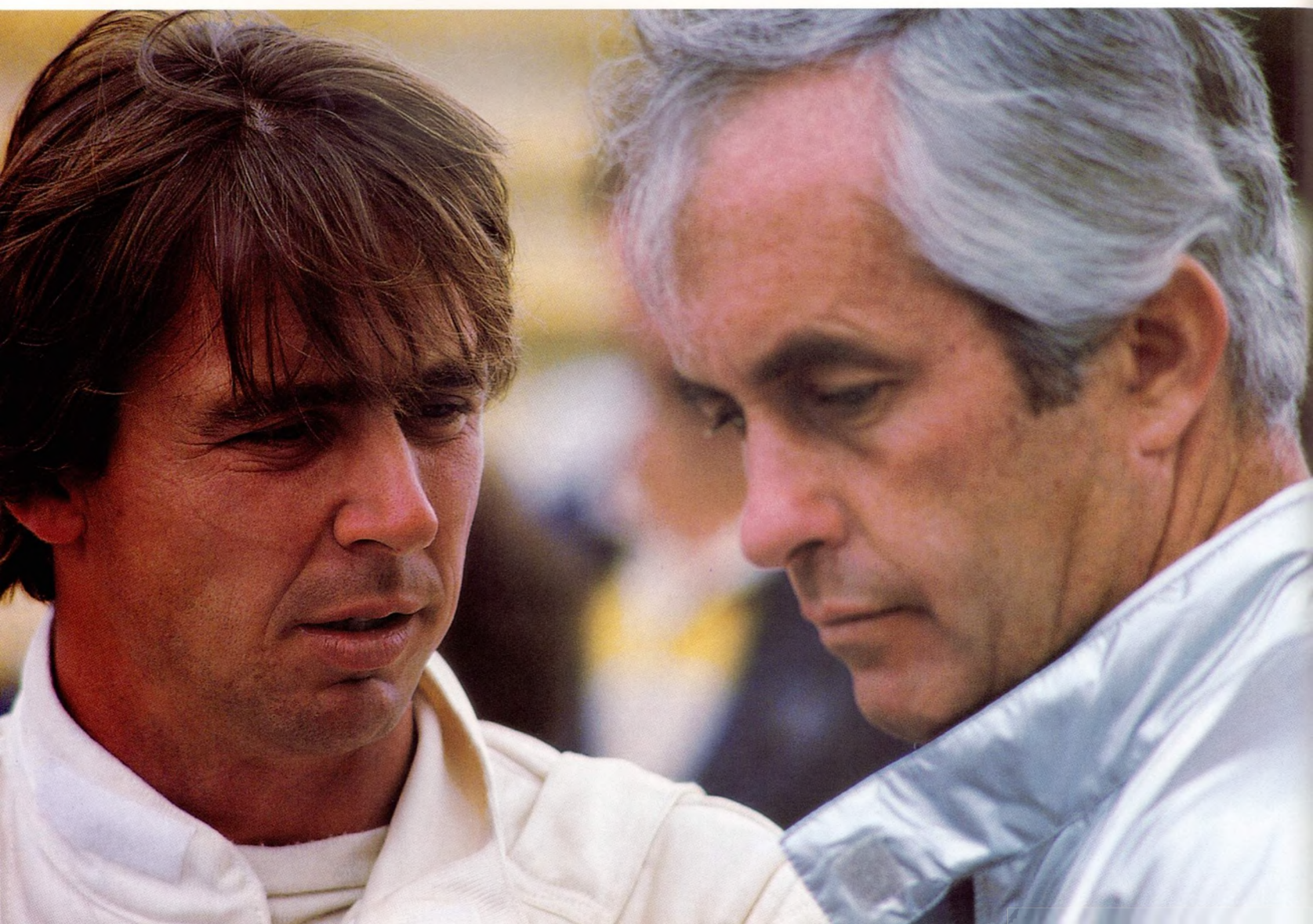
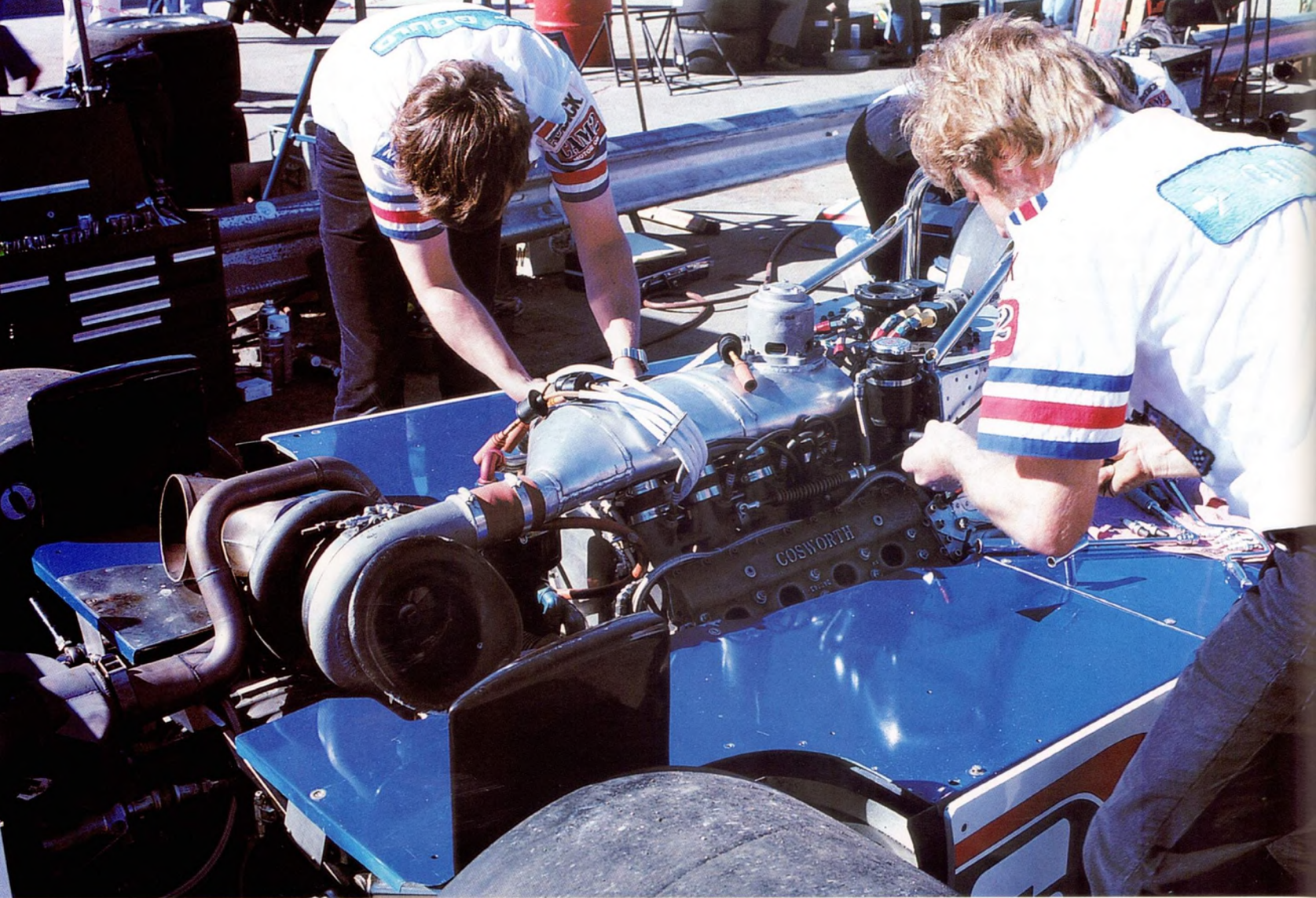
Another unique example on the CART circuit is Portland, which combines its annual civic Rose Festival with the Budweiser/G.I. Joe's 200. The race is a favorite with fans and CART teams alike.

But when one considers, the same can probably be said for each CART venue.



Michael C. Brown

One of the Team Rahal Reynards is lowered via the tailgate of the team's transporter. In addition to hauling the racing cars, CART transporters also serve as rolling race car shops and have most amenities such as air conditioning and cable television access.



UNFAIR ADVANTAGE: THE PENSKE ERA

THE record books will show that Gordon Johncock edged Rick Mears by one second in the inaugural CART race at Phoenix International Raceway. Johncock drove for Pat Patrick while Mears drove for Roger Penske. Each man was at the wheel of a Penske, Mears the latest PC7, Johncock a PC6 that had been designed for the previous season. The two drivers' owners, Patrick and Penske, of course, had been instrumental in the formation of CART.

The new sanctioning body's first priority had been to organize a schedule. Roger Penske already owned Michigan International Speedway and he quickly leased Trenton in order to insure at least a partial schedule.

The first season featured 14 races, with 13 of them on oval tracks. The only road race on the schedule that season was at Watkins Glen.

In order to bolster the schedule, there was repetition. Phoenix, Atlanta, Trenton and Michigan accounted for 11 of 14 races. Some of the dates featured a twin-bill format — Atlanta hosted twin 125-mile races, Trenton had twin 100-milers and Michigan International Speedway had twin 126-mile events.

The schedule was completed by 500-mile races at Indianapolis and Ontario. Over the years, Indianapolis would hold the unique distinction of counting towards the CART championship while being sanctioned by the United States Auto Club.

Phoenix, Trenton, Michigan and Ontario had all been sites of USAC Champ Car events. Atlanta had even hosted a pair of USAC races in 1965 and '66. Watkins Glen was only the fifth Champ Car road race since 1970. It was CART's stated intention to expand to bigger markets but scheduling races at new venues would take time. For the moment, the fledgling championship was primarily an oval-track series.

But that didn't matter. CART was in business and with most of Champ Car racing's top teams and drivers in the fold, it was only a matter of time before the series diversified and played to cities that either had never hosted Indianapolis-type cars or had not done so for years.

At the time of CART's birth, Penske Racing was the strongest program in Champ Car racing. With an impressive driving lineup of veteran Bobby Unser and promising newcomer Rick Mears, a healthy sponsorship package and reliable equipment, the team gelled by the fourth race of the season.

Unser was the established veteran who had already won Indy twice and the Champ Car title once. In his formative years, he had raced everything and was the epitome of the self-made racing champion.

Mears, by contrast, had raced motorcycles but made his name in off-road racing. He had tried to run at Indianapolis in 1977 with a small team, but a chance meeting with Roger Penske at Wally Dallenbach's annual 'Colorado 500' motorcycle ride resulted in an offer for Mears to drive for Penske in '78. It was an offer he could not refuse and he would remain with Penske for the remainder of his career.

Together, Mears and Unser would be a formidable duo in CART's inaugural season.

Following Johncock's victory at Phoenix, Johnny Rutherford gave Team McLaren back-to-back wins at Atlanta, the site of Rutherford's first Champ Car win back in 1965. Now it was time for the Penske pair to assert themselves.

First, Mears captured Indianapolis from the pole after switching to a PC6 chassis. Next it was Unser's turn as he scored a pair of victories at Trenton. Johncock took the first of the twin races at Michigan, but Unser won the other and followed up with a win at Watkins Glen. Mears won the final Trenton race, with Unser posting victories in the Ontario 500 and the Michigan 150.

Then Mears won the 150-mile event at Atlanta and CART's first season closed at Phoenix as Al Unser gave the radical new Chaparral ground-effects car its first victory. In addition to winning three races, Mears had finished every race (never lower than seventh) and easily out-pointed teammate Unser to become CART's first champion.

'It was one of those years where everything goes right,' Mears said in an *Indy Car Racing* magazine interview. 'During Indy, Wally Dallenbach lost a wheel on the back straight and it rolled right in front of me. A split second different and it could've taken us out.'

'I didn't really think about the championship. When you get into a championship race, guys say, "Make sure you finish." I didn't have to back up because I always wanted to finish. I hadn't changed my game plan.'

Mears, like his colleagues, had been caught in the middle of the CART—USAC war.

Opposite: A potent combination in CART's early years: the Penske chassis and the turbocharged Cosworth DFX engine.

Below far left: Key factors behind the domination of Penske Racing were the driving talent of Rick Mears (left) and the leadership of team owner Roger Penske.

À LA CART

IT'S ALL IN THE SYSTEM OF POINTS

And now, a look at some revisionist history. In 1979, Rick Mears beat Penske Racing teammate Bobby Unser to the inaugural CART title by a score of 4,060 to 3,780. CART had essentially adopted the points system used by USAC that awarded more points to races of greater lengths.

For example, the winner of a 500-mile race would earn 1,000 points. The runner-up in a 500 earned 800 points. Mears won Indy and finished second in the California 500 for a total of 1,800 points. Unser won the California 500 and was fifth at Indy for 1,500 points. The difference in the points scored by Mears and Unser in those two races basically accounts for the difference in their year-end totals.

On his way to his first CART title, Mears won three races and scored four second-place finishes and two thirds. Unser won six races and had two seconds and a third. That accounts for nine podium finishes for each driver.

Now, if one were to apply CART's current point system of 20-16-14-12-10-8-6-5-4-3-2-1 for the top 12 finishers and a point each for the pole winner and the driver leading the most laps, Unser would have actually won the title.

In 1981, CART revised its point system but still offered more points for longer races. In 1983, the system that is still in use by CART was adopted.

Of course, that was not the system used in the 1979 championship and this fact is indisputable — Mears won the title.



GOULD

9

THE GOULD
CHARGE

GOODYEAR

'Everybody was a little skeptical as to what would take place,' Mears said in the same *Indy Car Racing* magazine article. 'I'd only been around a year and a half at the time but I agreed with it. I didn't get involved with it that much.'

'I knew it was a gamble. I did think, "Here I get an opportunity and now all this taking place and who knows?" But I had a lot of faith in Roger [Penske] and Pat [Patrick] and their ideas.'

'Fortunately, I didn't have to be involved and I could focus on what I was doing. I was there to race and that was good.'

Laurie Gemish, chief mechanic for Mears' teammate Bobby Unser, maintains that the crew members took the same stance on the issue.

'Politically, I didn't have any views on the CART—USAC split — I didn't care,' Gemish said. 'Every race was just another race to win. I had come over to Penske Racing from Formula One where it was a nice safe bubble. Then all of a sudden, you had all of the political rumblings and then the split from USAC by CART. My feeling was that I worked for Roger Penske and we had to win races and that is what we did.'

'When the CART—IRL split happened [in 1996], it was exactly the same feeling. The guys working on the cars were working to win races.'

Gemish, who served as a chief mechanic and team manager in CART from 1979 to 1993, recalled how different it was in CART then compared to now.

'This series has grown a hundred-fold over the years,' Gemish said. 'There are so many more good teams now and look at the amount of money in the series. Look back at some of the sponsors of the teams. Our team had a major sponsor like Gould, McLaren had Citicorp and Jim Hall had Pennzoil. But some of the smaller teams had local car dealers and root beer companies. Their sponsors were very small. It's different now.'

While there is no doubt that, with CART's first season successfully completed, Champ Car racing had entered a new era, it could also be argued that the era of ground effects had arrived. After all, with the exception of Johncock's wins at Phoenix and Michigan and Mears' victory at Indianapolis, ground-effects cars won every race.

The pioneering ground-effects machines employed an underwing with tunnels designed to pull the car down to the ground and allow it to corner at a higher rate of speed. The concept had been perfected in 1978 by legendary English designer Colin Chapman, whose Lotus 79 had been victorious in the Formula One World Championship.

Opposite: For Rick Mears, shown en route to a second-place finish at Watkins Glen, the ability to score points consistently enabled him to snatch the 1979 CART title from Bobby Unser.

Below: The Penske crew goes to work during a pit stop for Bobby Unser. Unser drove the new PC7 chassis to six race wins in 1979, the most by any driver in the series.







Opposite: Gordon Johncock opened the era of CART by winning the season opener at Phoenix in Pat Patrick's Penske PC6-Cosworth.

Below far left: Although it would score only one victory — the season finale at Phoenix — one of the sensations of 1979 was the Chaparral driven here by Al Unser.

Left: Chaparral crew members go to work during a stop in the 1979 Ontario 500. Al Unser would finish fifth in this race, but mechanical breakages plagued the car all season.

Champ cars had been using wings to generate aerodynamic downforce since 1971, and following the success of Jim Hall's Chaparral 2J sports car, known as the 'Sucker Car,' skirts of Lexan and rubber began to appear at the bottom of various Champ Car tubs beginning in 1973. The skirts may have helped somewhat, but the first true ground-effects car did not appear in Champ Car racing until the Chaparral 2K and Penske PC7 arrived on the scene in 1979.

Hall's Chaparral 2K, painted yellow for sponsor Pennzoil and naturally dubbed the 'Yellow Submarine,' was a pure ground-effects car. Designed by John Barnard in collaboration with Hall, it largely copied the Lotus 79. It was constructed in England by Bob Sparshott of B.S. Fabrications and featured a pair of large, rounded underwing tunnels.

By contrast, the Geoff Ferns-designed Penske PC7 was more of a semi-ground-effects car, since it was basically an updated version of the PC6 with sidepods and sliding skirts. The PC7 may have lacked the tunnels of the Chaparral, but it more than made up for any deficiencies with its reliability.

The Chaparral made its debut at Indianapolis in 1979 with defending 500 champion Al Unser at the wheel, and caused a predictable stir. Possessing one of the most aesthetically pleasing designs of all time, it was state-of-the-art and unlike any car that had ever run at Indianapolis. Unser qualified it on the outside of the front row, but when the green flag dropped, he took off and left the field behind for the first 100 laps. Then an oil seal on the transmission failed and the Chaparral was out of the race.

Unfortunately, Indianapolis proved to be a foretaste of the entire '79 season for the Chaparral team. Although unquestionably the quickest car in the CART series, the 2K suffered from reliability problems. Unser was trying to win races, but in reality he was also developing the car during the race weekends.

At year's end, Unser parted company with Hall.

'I just didn't like the way things were being done,' Unser said in Gordon Kirby's book, *Unser: An American Family Portrait*. 'That entire time, we only tested one time and that was before the last race at Phoenix [which Unser won]. Nobody on the team was happy. John Barnard left. Franz Weis, the engine man [who would partner Hall in his 1991 return to CART], went to do his own thing. We all agreed that things weren't being done in the right way.'

With the demise of McLaren's Champ Car program, Johnny Rutherford became a free agent. His timing could not have been better as he soon was able to conclude a deal to drive for Hall.

Rutherford made the most of the opportunity as well as the development the Chaparral had undergone in 1979. He opened the 1980 season by winning the 200-miler at Ontario from the pole. Next up was Indianapolis, where he scored his third victory in the 500, having started from the pole once more.

'We came [to Indianapolis] with the best car and the best team,' Rutherford would point out. 'They [the team] did their job perfectly and it was up to me to do the same thing. If I did, there was no way anyone was going to beat us, and that's exactly what happened.'

1979 CART CAPSULE

Champion: Rick Mears

Race Winners: Bobby Unser (6), Rick Mears (3), Gordon Johncock (2), Johnny Rutherford (2), Al Unser (1)

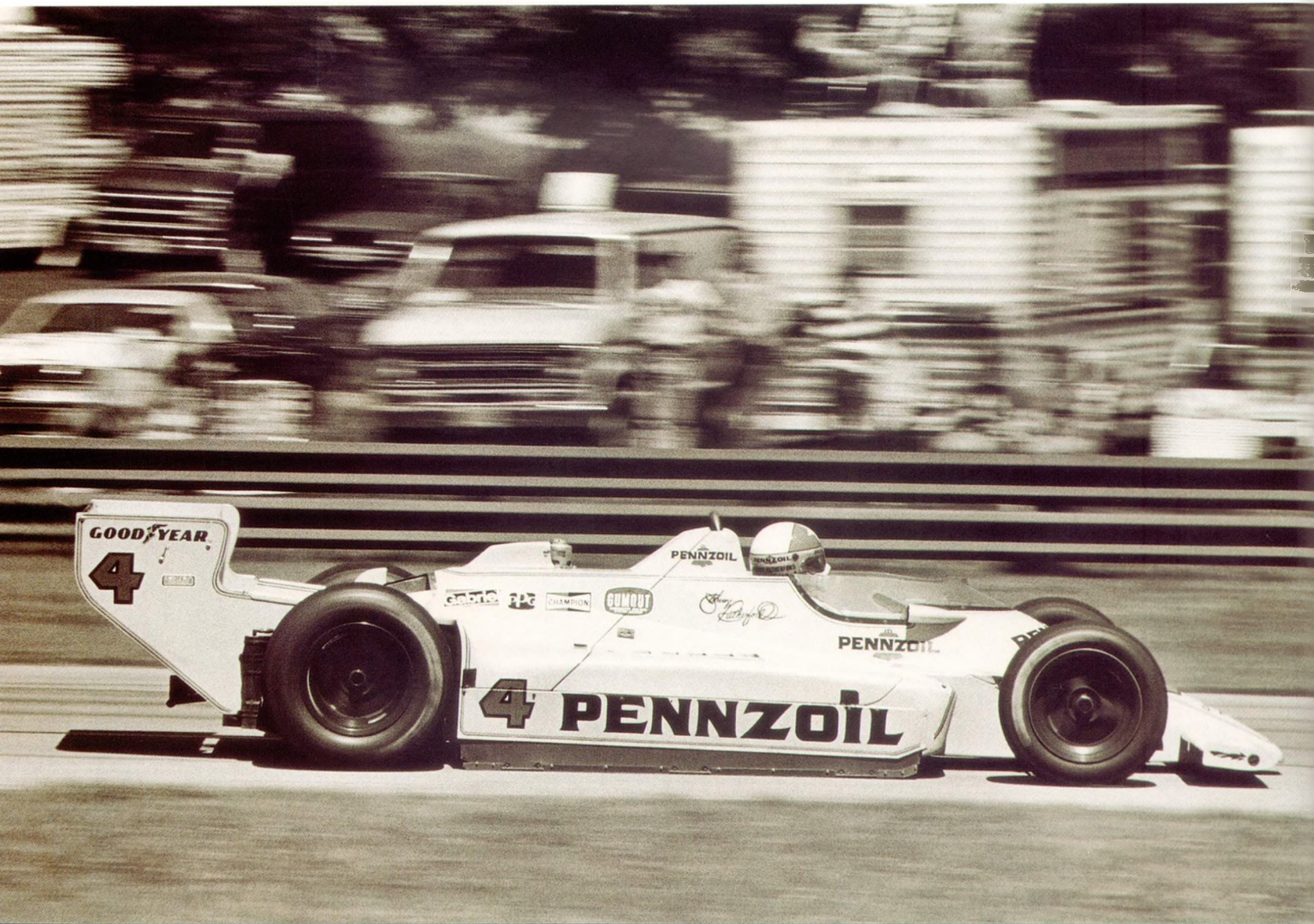
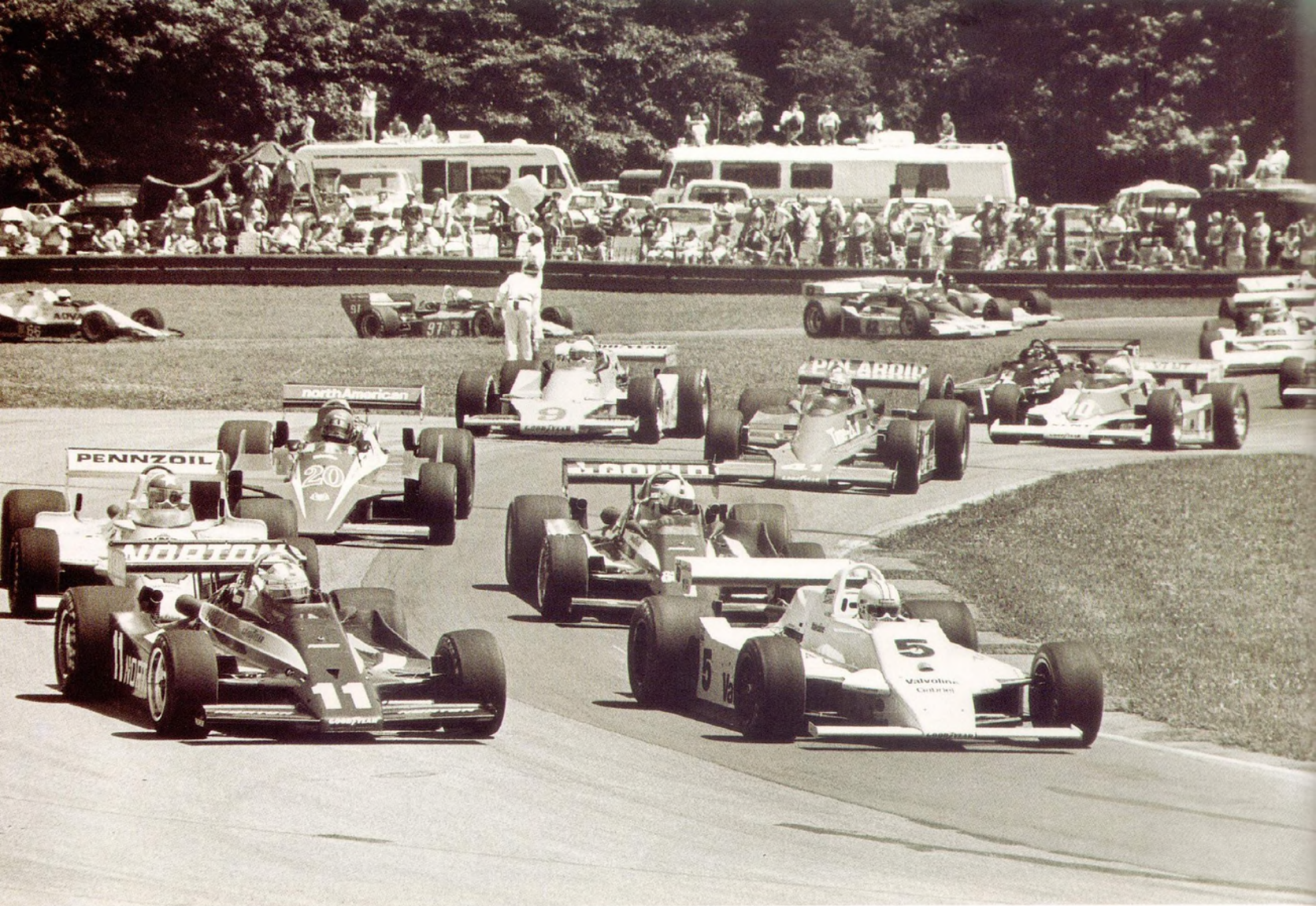
Pole Positions: Bobby Unser (7), Gordon Johncock (2), Rick Mears (2), Johnny Rutherford (2), Al Unser (1)

Rookie of the Year: Bill Alsup

Most Improved Driver: Spike Gehlhausen

New Races: Watkins Glen

Notable Highlights: Six race victories by Bobby Unser are most in one season by a driver who did not win the championship in same season



Rutherford would win three more times and capture the CART title, his first in Champ Car racing. A key factor in Rutherford's success was the impressive reliability of the Chaparral. The niggling problems that had afflicted the car the previous season had been remedied, and Rutherford managed to finish 10 straight races on the lead lap.

After his victories in the first two races of the season, he was second at both Milwaukee and Pocono. He won at Mid-Ohio (the only road-course victory in his career) and Michigan. He was fifth at Watkins Glen. Then he won from the pole at Milwaukee and was second at Ontario. Next, he was fourth at Michigan.

The streak came to an end at Mexico City when he finished 10th, 11 laps down to race winner Rick Mears. Rutherford had run a staggering 2,828 race miles without a mechanical problem.

In the final tally, Rutherford led more laps (448) than anybody else and completed 2,899.056 miles out of a possible 3,005.336 miles for the season. It's safe to say the bugs were worked out of the Chaparral.

Like Mears the year before, Rutherford could enjoy the best of both worlds with his title. He had won the PPG Cup as well as the world's most prestigious race, the Indianapolis 500.

'I can't say which one is better,' Rutherford would say. 'This is the only national title [in Champ Car racing], but I won Indy in the same season. I had both of the glories.'

'It is a tremendous feeling. It's an accomplishment. There is a sense of accomplishment. You are working hard all year. The crew is working hard as a team. Everything is clicking.'

For the second straight year, Bobby Unser was runner-up in the points, winning at Milwaukee, Pocono, Watkins Glen and Ontario. Unser's Penske teammate Rick Mears won at Mexico City, CART's first international race, while Mario Andretti won at Michigan in a third Penske entry and Tom Sneva captured the season finale at Phoenix with Jerry O'Connell's Phoenix.

The Chaparral had been the car to beat in 1980, but in racing nothing stands still. And even though Rutherford would open the 1981 season with a victory at Phoenix, it was to be the final win for the 2K. Two years after its debut, Jim Hall's revolutionary car was starting to show its age.

The title passed to Rick Mears, whose 1981 championship victory was more clear-cut than his 1979 triumph had been. This time, the Penske driver dominated — even more than Rutherford had the previous year.

Mears started out the season by finishing fourth at Phoenix. After missing the Milwaukee race due to

Opposite: Polesitter Al Unser (5) paces the field at Mid-Ohio in 1980 in the Longhorn-Cosworth with brother Bobby Unser (11) alongside in the Penske-Cosworth. Following them are Rick Mears (1), Johnny Rutherford (4), Bill Alsup (41), Gordon Johncock (20), Tom Sneva (9) and Pancho Carter (10).

Below far left: Johnny Rutherford cruises home to victory at Mid-Ohio in this 1980 photo. It was Rutherford's only road-course win and the final CART race sanctioned by USAC.

Below: Johnny Rutherford took advantage of the Chaparral's outright speed and new-found reliability to score five race wins and capture the CART championship in 1980.





NORTON

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Bobby Unser

Simpson

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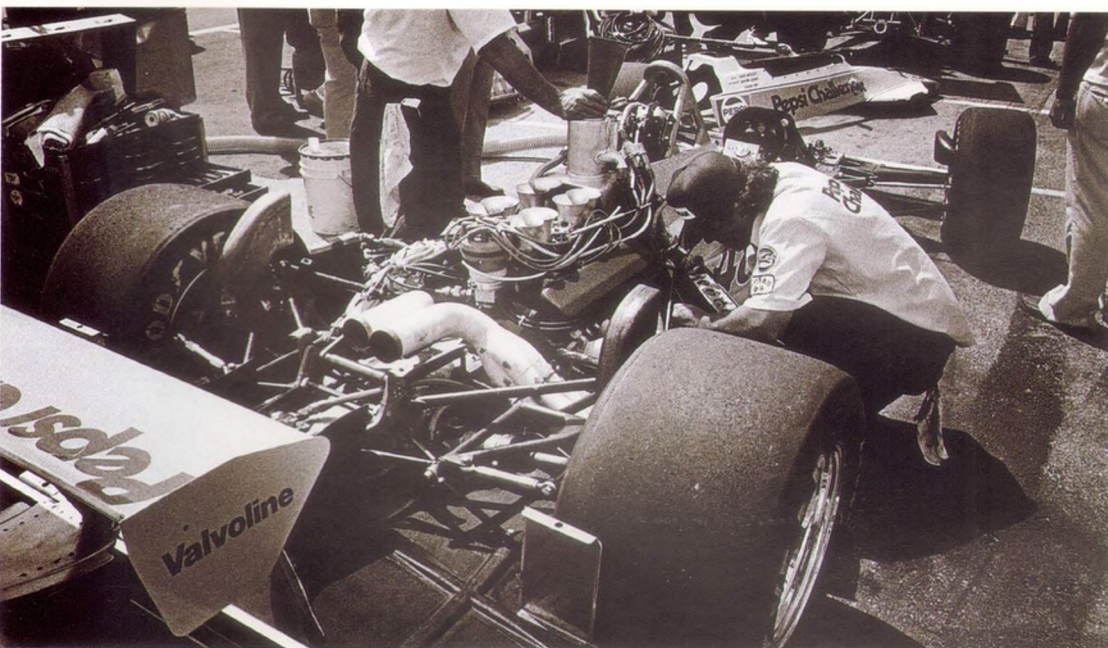
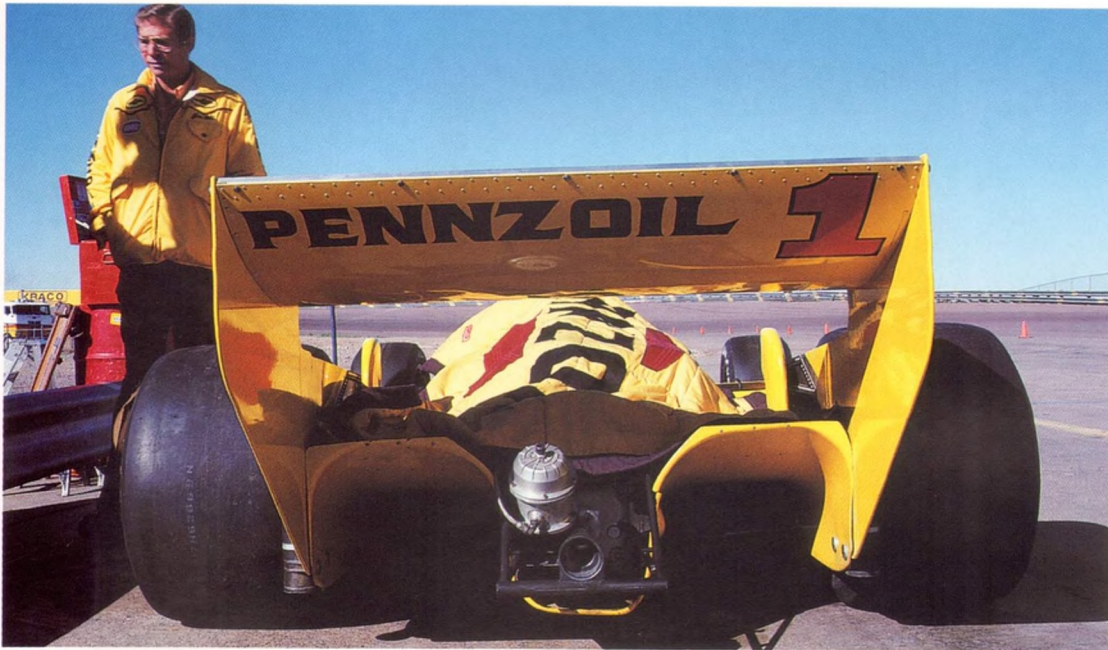
burns suffered during a pit stop fire at Indianapolis, Mears began his charge to the title, capturing both Atlanta 126-milers. Following a third-place finish at Michigan, the Californian went on a tear by winning four of the next five races — at Riverside, Michigan, Watkins Glen and Mexico City. By September, he had clinched title number two.

The season also produced a number of interesting highlights. In June, Mike Mosley went from last to first to win at Milwaukee in an Eagle powered by a Chevy stock-block engine. Mosley had qualified the car on the outside of row one at Indianapolis and the engine represented an attempt by USAC to make racing more affordable.

In July, Michigan International Speedway hosted what would be the track's and CART's first 500-mile race. It was marred by a pit fire that temporarily stopped the event and an accident in which A.J. Foyt was injured. The race was won by Pancho Carter, who scored his only Champ Car victory that day.

Another driver to taste success was Tom Sneva, whose wins at Milwaukee and Phoenix were the first for the new March chassis.

Also worthy of mention are the 500-milers at Indianapolis and Pocono, although neither was included in the CART championship. Both sanctioned by USAC, the events were dropped from the schedule as a result of the reopening of the CART—USAC split. Bobby Unser won at Indy only to be disqualified and then reinstated as the winner several months later. It would be his last victory in Champ Car competition. At Pocono, the legendary A.J. Foyt emerged triumphant from a limited field that included dirt cars to score the final Champ Car win of his remarkable career.



1980 CART CAPSULE

Champion: Johnny Rutherford

Race Winners: Johnny Rutherford (5), Bobby Unser (4), Mario Andretti (1), Rick Mears (1), Tom Sneva (1)

Pole Positions: Bobby Unser (4), Johnny Rutherford (3), Mario Andretti (2), Al Unser (2), Gordon Johncock (1)

Rookie of the Year: Dennis Firestone

Most Improved Driver: Bill Alsup

New Races: Mexico City

Notable Highlights: Alsup becomes first and only driver to win Rookie of the Year and Most Improved Driver awards in consecutive years



Art Flores

Above: Affable Bill Alsup was CART's top rookie in 1979 and its most improved driver in 1980.

Opposite: Although no one knew it at the time, Bobby Unser closed out his Champ Car career in 1981 by winning the pole and finishing second at Phoenix.

Above left: Jim Hall's Chaparral 2K, shown in this 1981 photo, was a true ground-effects chassis as this view of its underwing tunnels will attest.

Left: This stock-block Chevy powered Mike Mosley's Eagle to victory at Milwaukee in 1981 and was the only non-Cosworth to win in CART's first eight seasons.

Overleaf: CART post-race celebrations have changed although Johnny Rutherford doesn't seem to mind as he is the center of attention following a race win.



PENSKE
RACING

PENNZOIL
CHARRAL

PENNZOIL
CHARRAL

MORTON + GOULD ABDICK





GORDY

Star

Gordy

While 1981 would be remembered for its controversy, 1982 would be remembered for its speed and tragedy with Gordon Smiley being killed in a violent qualifying crash at Indianapolis and Jim Hickman dying following a practice accident in the August Milwaukee race.

Rick Mears' bid to capture his third CART title got an early boost when he won from the pole at Phoenix and Atlanta and scored a third-place finish at Milwaukee and a fourth-place finish at Cleveland.

However, Gordon Johncock had also gotten off to a good start with a fifth at Phoenix, a second at Atlanta, a victory from the pole at Milwaukee and another fifth at Cleveland.

Prior to Milwaukee there was also an epic battle in the Indy 500 (which once again did not count towards the CART championship). Although Mears and his pole-winning Penske PC10 made a valiant attempt to regain the lead on the last lap, Johncock was able to cross the finish line 0.686 of a second ahead to win his second Indy 500 in the Patrick Wildcat-Cosworth.

As the season progressed, Johncock actually passed Mears in the point standings. Following Cleveland, Johncock had won at Michigan while Mears failed to finish. The return visit to Milwaukee had little effect on the final outcome as Johncock finished 11th while Mears was one place further back but had also scored a PPG Cup point for winning the pole.

The next three races would be decisive in the championship race — decisive in Mears' favor, that is.

Mears won from the pole at Pocono to regain the points lead. Then he scored his fourth victory of the season at Riverside and followed with a fifth at Elkhart Lake. He won the pole at Michigan but placed 25th and then closed out the season by finishing second at Phoenix after taking the pole. Prior to Phoenix, Mears had already clinched the title.

The race was won by Tom Sneva, who had also taken victory at Milwaukee in August.

A pair of rookies made their initial CART starts in 1982 and both would ultimately become CART champions. Can-Am veteran Danny Sullivan finished third in the second race of the season at Atlanta to establish a mark for the best debut by a rookie in a CART race that would stand for 11 years. Fellow rookie Bobby Rahal had finished 18th in the season opener at Phoenix but he would take second place in the championship and garner the top rookie honor after winning at Cleveland and Michigan.

Another rookie of note was Mexico's Hector Rebaque, who inherited the lead at Elkhart Lake after the four cars ahead of him ran out of fuel in the closing stages. Rebaque won the race but opted to retire at the end of the season.

CART's first four years had seen Rick Mears claim three PPG Cup titles for Penske Racing. Those triumphs followed consecutive USAC Champ Car titles for then-Penske driver Tom Sneva. And Penske Racing had more winning in its future.

For 1983, Mears got a new teammate, Al Unser Sr., who was hoping to resume his winning ways after three barren years with Longhorn Racing. Although Unser would visit Victory Lane only once during his first season with Penske, he would go after the title in his own special way.

For Unser, racing meant being smooth and consistent and taking care of the equipment. On the days when he had the fastest car, he won. On the days his car was not the fastest, he usually brought it home and scored

1981 CART CAPSULE

Champion: Rick Mears

Race Winners: Rick Mears (6), Tom Sneva (2), Pancho Carter (1), Mike Mosley (1), Johnny Rutherford (1)

Pole Positions: Bobby Unser (3), Rick Mears (2), Johnny Rutherford (2), Mario Andretti (1), Geoff Brabham (1), Gordon Johncock (1), Tom Sneva (1)

Rookie of the Year: Bob Lazier

Most Improved Driver:

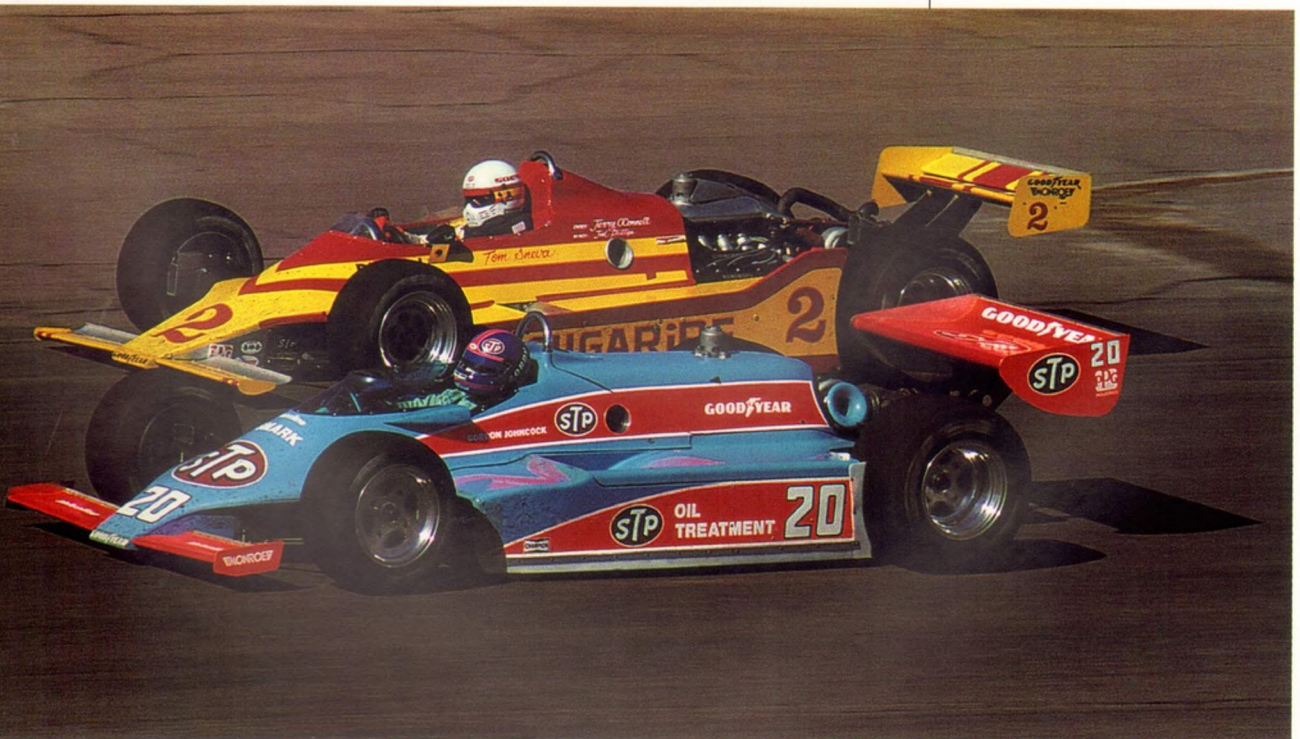
Tony Bettenhausen

New Races: None

Notable Highlights: Seven separate drivers win pole positions — the most in one season

Opposite: One of the hardest chargers in the sport was Gordon Johncock, winner of CART's first race.

Below: Gordon Johncock (20) and Tom Sneva go side by side through the corner at Phoenix International Raceway in 1981.



1982 CART CAPSULE

Champion: Rick Mears

Race Winners: Rick Mears (4),
Gordon Johncock (2), Bobby Rahal (2),
Tom Sneva (2), Hector Rebaque (1)

Pole Positions: Rick Mears (8),
Kevin Cogan (2), Gordon Johncock (1)

Rookie of the Year: Bobby Rahal

Most Improved Driver: Roger Mears

New Races: Cleveland, Elkhart Lake

Notable Highlights: Three separate
drivers win pole positions — the fewest in a
season



Above right: In order to help Rick Mears defend his 1981 CART title and contest the emerging challenge of the March, Penske Racing responded with its new PC10 chassis for 1982.

Right: In his career, Tom Sneva won at Phoenix four times, including the 1982 autumn race.



points. And so he did in 1983 with a Penske that was obviously slower but perhaps more reliable than the March of his chief rival for the title, rookie sensation Teo Fabi.

After success in the Can-Am series, the diminutive Italian had landed a drive in Formula One with the Toleman team, but that move had proved disastrous and Fabi switched to the Champ cars for 1983 in a bid to revive his career. It would be a wise decision.

Fabi was to drive for the Forsythe team run by Barry Green and designated as the March factory team in CART. With March co-founder Robin Herd personally handling the engineering of Fabi's car, he was quick from the start.

The 1983 season also produced two other standout rookies — Al Unser Sr.'s son, Al Jr., who had finished fifth at Riverside in his initial CART start the previous season, and a promising young sports car racer named John Paul Jr. Another driver to have made his mark in Can-Am, Unser was graduating to Champ Car racing with longtime backer Rick Galles, who was making his debut as a CART team owner.

Another notable 'rookie' making a CART debut was actually a team. It was the result of a collaboration between longtime Lola distributor Carl Haas and movie superstar Paul Newman, who had joined forces to form Newman/Haas Racing, which would field a new Lola-Cosworth for Mario Andretti.

Andretti recalled in an *Indy Car Racing* magazine article: 'Carl was talking to me at the same time I was being courted by Paul. We had been talking on and off for a long time. Paul even asked me to do some Can-Am while I was in Formula One and I did drive one race for Carl in Can-Am.

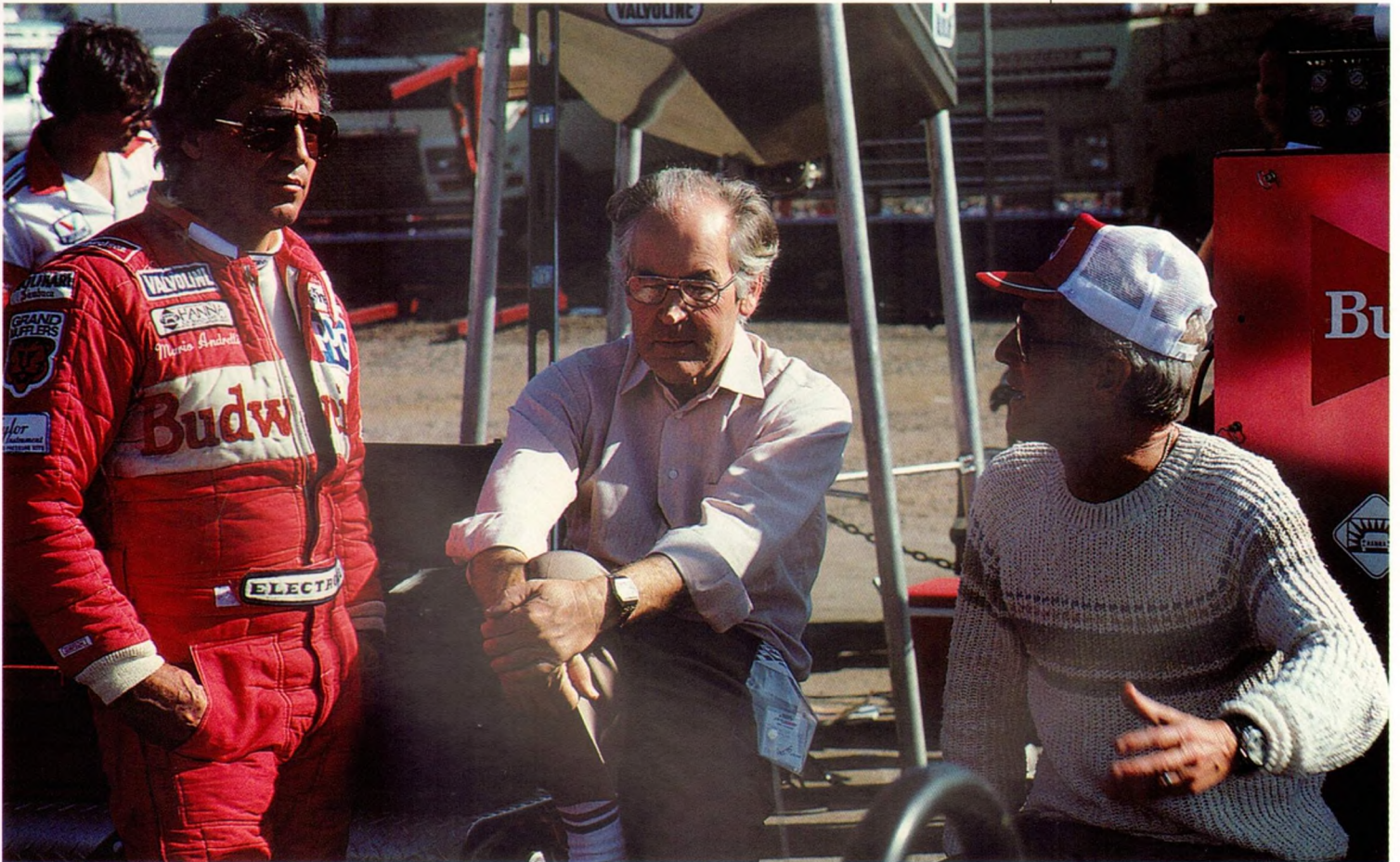
'Really, I was torn between the two. Then one day, I figured, "What if I put these guys together?"' Actually that was a real unlikely situation because they were not real amicable adversaries in Can-Am. In fact, they were all-out rivals. Carl thought it was a good deal right away, but when I mentioned it to Paul there was a long silence. Then he said, "Very interesting." They got together not too long after that and put together a pretty good deal.

'The March was state-of-the-art at the time, but Carl needed to be with Lola because he was their U.S. distributor. I realized it was a risk, but I thought, "What the hell, take a chance."

'We were still talking about the project in October of 1982. Can you imagine we didn't have a car at that point? Then when we did get the car, it wasn't any good at all at the beginning. But we made consistent progress during the year and eventually won a couple of races.'

Gordon Johncock captured the 1983 season opener at Atlanta and the win became noteworthy on a number of fronts. It would be the last CART event in Atlanta. It would also be Johncock's final Champ Car win. And the victorious Wildcat chassis would be the last American-built Champ car to score a win for 15 years.

Fame is the name of the game as Mario Andretti (left), Lola's Eric Broadley (center) and Paul Newman, who joined forces with Carl Haas to form the Newman/Haas team in 1983, consider their next move.



1983 CART CAPSULE

Champion: Al Unser Sr.
Race Winners: Teo Fabi (4), Mario Andretti (2), Tom Sneva (2), Gordon Johncock (1), Rick Mears (1), John Paul Jr. (1), Bobby Rahal (1), Al Unser Sr. (1)
Pole Positions: Teo Fabi (6), Mario Andretti (2), Bobby Rahal (2), Rick Mears (1), John Paul Jr. (1), Tom Sneva (1)
Rookie of the Year: Teo Fabi
Most Improved Driver: Chip Ganassi
New Races: Mid-Ohio, Las Vegas, Laguna Seca
Notable Highlights: Al Unser Sr. becomes first CART champion to win only one race during championship season



Photos: Art Flores

Above: Crutches were no deterrent for John Paul Jr., who scored a spectacular victory in the 1983 Michigan 500. Paul had broken his leg earlier in the year at Indianapolis.

Right: Always a threat on ovals, Tom Sneva could also be aggressive on road courses as shown at Mid-Ohio in 1983, where he finished seventh.

After a DNF at Atlanta, Fabi surprised the racing world by shattering the track record and capturing the pole at Indianapolis. He ran away with the race in the early stages only to be sidelined by a pit stop snafu. After being given the 'go' signal, Fabi left the pit before the fuel hose could be uncoupled. That tore the fuel tank and he was out of the race.

More memorable was the late-race battle between Tom Sneva and the Unseers. Only once he had passed Al Unser Jr. was Sneva able to overtake Al Unser Sr. to take the lead with nine laps to go for the biggest win of his career. The younger Unser, a lap down in 10th place, had actually been Sneva's biggest obstacle en route to victory.

Following Indy, Fabi continued to impress. He won poles at Milwaukee and Michigan and scored a podium finish at Cleveland in between. Sneva continued his winning ways with a victory at Milwaukee while Al Unser Sr. battled extreme heat to win the 310-mile race at Cleveland.

Then there was Paul. Like Al Unser Jr., Paul had made his initial CART start in 1982, qualifying an impressive eighth at Elkhart Lake but finishing 21st. In 1983, he started off the season by placing third in Atlanta for Count Rudi Van der Straten and then missed a couple of events after breaking his leg at Indianapolis. Then in only his fourth CART start, Paul astounded the racing world by outlasting Rick Mears in a last-lap duel to win the Michigan 500.

Mario Andretti came home first at Elkhart Lake to give Lola its first win in CART (he would also win at Las Vegas) and Fabi finally made it to the victory circle by winning at Pocono. He followed with the pole position and a second-place finish at Riverside (won by Bobby Rahal), a victory at Mid-Ohio and a third place at the Michigan 200, which fell to Rick Mears.

However, while others grabbed most of the headlines, Al Unser Sr. was accumulating points with characteristic consistency. He started the season by finishing second at Atlanta, Indianapolis and Milwaukee before winning the race at Cleveland. Next came a second at Michigan followed by a third at Elkhart Lake. Pocono and Riverside resulted in 11th-place finishes, but both paid points nonetheless. Then he placed fourth at Mid-Ohio, fifth in the Michigan 200 and fourth at Las Vegas to amass a healthy lead with two races to go.

Trailing Unser by 33 points, Fabi ended the season with a flourish, winning at Laguna Seca and the season finale at Phoenix — both from the pole. He still came up short by only five points.

Unser had captured his first PPG Cup title and first Champ Car crown since 1970. Surprisingly, he wasn't all that pleased with the manner in which he had won. The '83 title was certainly a far cry from the total domination he had exerted in 1970.

"I'm still not happy winning the championship and not being more competitive in the last races of the year," Unser told Gordon Kirby in the Unser family album book. "Even though I won the championship, it's not a fulfillment within myself because I was disappointed with both myself and the car right there at the end."

"But you know, all of us would say as we started each and every race — and this was from the first race of the year — remember the points. We wanted to win the championship. And with Penske, you can do that. You can take that approach."

For Penske Racing, it had been business as usual — the team had now won six of the last seven Champ Car titles and four of the first five CART titles.

Call it an unfair advantage, if you will. It was truly a dynasty.





Soft-spoken Teo Fabi (left) made plenty of noise in 1983 by winning four races and six pole positions in the Forsythe March-Cosworth (below). The Italian was CART's top rookie and almost its champion. That honor, however, went to Al Unser Sr. (bottom) who won one race but racked up sufficient PPG Cup points in the Penske-Cosworth to win the title.



HALL FAMED FOR INNOVATION

Was it merely coincidence that the first five years of CART competition were dominated by teams whose owners were noted for their organizational skills and professionalism?

The comparisons between Roger Penske and Jim Hall are endless. Both were successful sports-car racers who retired from the cockpit to devote their full attention to running racing teams. Both built their teams from scratch and developed them into professional, highly maintained operations.

What sets Hall apart, however, is his reputation as a technical innovator. A college education in mechanical engineering was to lay the foundations for a spectacular career in auto racing.

The son of a Texas oilman, Hall and his siblings inherited the family oil business when their parents and a sister were killed in an airplane crash when he was just 17. He first became involved in the sport in the mid-1950s, when he raced a number of exotic European sports cars. He displayed sufficient talent as a driver to land a ride in Formula One, driving a Lotus-BRM for the BRP team in 1963, but he would be best known as the constructor of a series of racing cars which he christened Chaparrals.

The first Chaparral appeared in 1962. A front-engined, Chevrolet-powered car that bore a strong resemblance to the Lister that Hall had previously raced, it enjoyed a degree of success over a two-year period but it was Hall's next creation, the rear-engined Chaparral 2, which was to become the sensation of the American sports car racing scene. Like the original Chaparral, it had been built by the firm of Troutman-Barnes, but all subsequent Chaparral sports cars would be built in Hall's shop in Midland, Texas.

The project marked the beginning of a long and somewhat secretive relationship with Chevrolet which would see Hall give free rein to his boundless creativity. During the mid-1960s, Hall's Chaparrals pioneered features such as automatic transmissions, adjustable spoilers and high, strutted wings. This sensational program included an attempt to conquer the international endurance racing scene in 1966 and '67, which, although ultimately unsuccessful, extended Hall's reputation as an innovator to Europe. For 1970 he developed the world's first true ground-effects car, the 2J, which used a pair of suction fans to achieve higher cornering speeds. The so-called 'Sucker Car' was ultimately banned, but it gave other designers a direction that would ultimately influence the sport in a profound fashion.

For a while, Roger Penske was closely associated with Hall's program. The pair were teammates in 1964, and the following season, having retired as a driver, Penske served as Hall's team manager. That year, Chaparrals scored 16 wins (including the 12 Hours of Sebring),

nine seconds, two thirds, one fourth and one sixth. They also set the fastest lap of the race on 16 occasions. It was a very Penske-like season.

'After my retirement from racing, Jim gave me the chance to manage his team at the races in 1965,' Penske said in Dave Friedman's book, *Chaparral*. 'It was a great opportunity for me to learn things that helped me with my own team in later years.'

Hall finally retired as a driver in 1970 after being seriously injured in an accident in 1968. After a successful partnership with Carl Haas in U.S. Formula 5000 and Can-Am competition, he turned his attention to Champ Car racing.

Ironically, Hall had tested his Chaparral sports car at Indianapolis in 1965 and had even constructed a Chaparral Champ car.

As Hall told this writer in 1978: 'I actually built a car for the Speedway to run here in 1969. But when they [USAC] outlawed the high-strut wing, I scrapped the project. I had designed that car around that wing. It would not have worked without it.'

When Hall finally got around to running a Champ Car program in 1978, he did it with conventional equipment — a Lola powered by a Cosworth DFX engine. But what he and driver Al Unser ended up doing was unconventional: Unser was able to win all three 500-milers that season, earning Champ Car racing's first and only 'Triple Crown.'

With a successful first season behind him, Hall turned to his innovative side and collaborated with John Barnard to build the Chaparral 2K, the first true ground-effects design in Champ Car racing. After a season of development in 1979, the Chaparral and new driver Johnny Rutherford captured the 1980 CART title.

By 1982, the Chaparral was starting to show its age. Hall would end up purchasing a March and then halted his racing activity for a time. He would return to CART eight years later, but Champ Car racing had seen the last of the Chaparrals.

However, the Chaparral 2K Champ car had certainly lived up to its legendary name.



David Hutson

Opposite: Wearing his trademark Stetson, Jim Hall looks over Johnny Rutherford and his Chaparral prior to the 1981 season opener, which Rutherford won.



PENNZOIL

PENNZOIL

1
CHAPARRAL

GOODYEAR

FORD AND COSWORTH, PERENNIAL VISITORS TO THE WINNER'S CIRCLE

Hours after Michael Andretti took the checkered flag to win the Texaco/Havoline 200 at Elkhart Lake in 1991, journalists noticed an unusual sight across the track from the press room at the Road America circuit.

Busy writing and filing their stories about Andretti's record-tying seventh victory of the season and his imminent run to the CART title, they observed that the pit/paddock area was empty except for a lone Newman/Haas transporter. What made the sight so unusual was the fact that once CART events at Elkhart Lake had concluded in previous years, there had been a mad dash by the teams to load up their equipment and head for home. But here was one team that obviously was in no hurry to go anywhere.

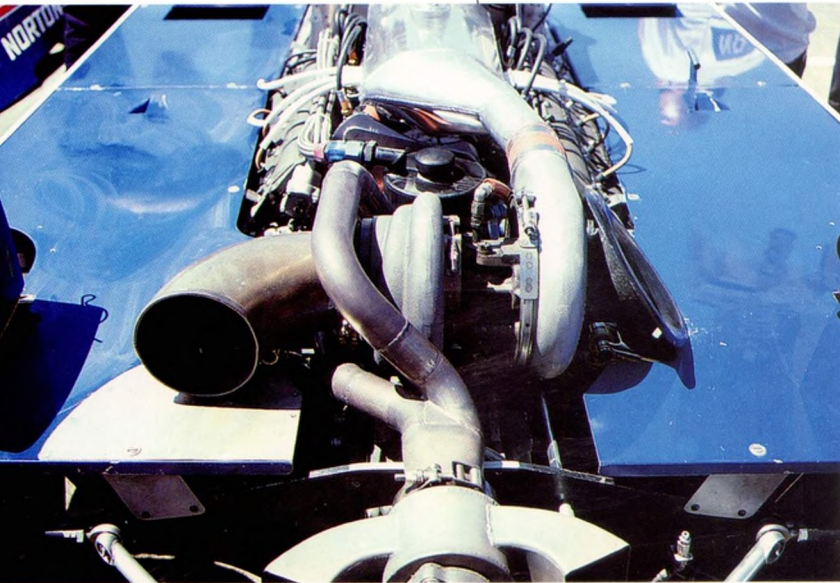
Soon, the rumor surfaced that Andretti and his crew would be staying behind to test the new Ford-Cosworth XB engine at the track the following day. So, you ask, what is so unusual about Andretti and his team testing a racing engine?

Well, remember that in 1991, every CART event was won by cars powered by the Chevy/Ilmor engine, including the aforementioned seven by Michael Andretti. That Newman/Haas should consider abandoning a program that had obviously been so successful was newsworthy indeed.

Following the test at Elkhart Lake, Andretti resumed his quest for the title in a Chevy-powered Lola. He would finish third in the penultimate round at Nazareth and then score a record-setting eighth victory of the season at Laguna Seca that also enabled him to win the PPG Cup. Shortly afterward, Ford Motor Company and Cosworth Engineering announced a joint effort to produce a turbocharged engine for CART that would be used in 1992 by the Newman/Haas and Chip Ganassi Racing teams.

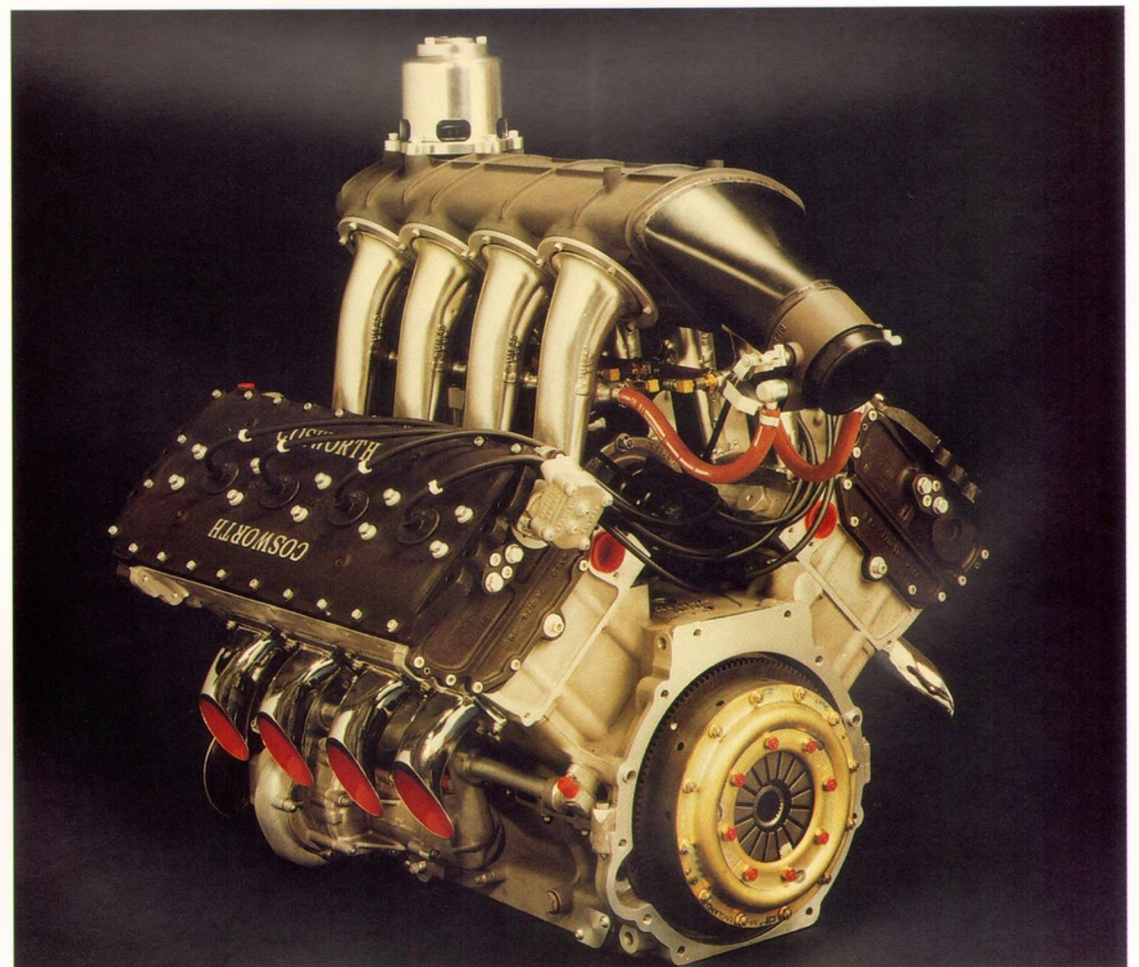
Of course, this would not be the first effort in CART or Championship Car racing by Ford or Cosworth. Ford's first factory effort came in 1935 when Harry Miller constructed a number of front-wheel-drive Ford-powered cars for Indianapolis.

Although those cars were considered abject failures, Ford returned in 1963, providing the powerplant for



Above: Affordable, reliable and available, the Cosworth DFX dominated the CART series until the late Eighties. The neat installation of the massive turbocharger is clearly visible in this view of a 1982 Penske.

Right: The all-conquering Cosworth DFX won more than a hundred CART races and powered every CART champion from 1979 to 1987.



Courtesy of Cosworth

Art Flores

the Team Lotus entries of Jim Clark and Dan Gurney. That engine was the stock-based Fairlane V-8 and Clark nearly won with it at Indianapolis (he would capture the Milwaukee 200 later that season). One year later, Ford unveiled its revolutionary dual-overhead cam V-8 racing engine, which would soon become the engine of choice in Champ Car racing.

Although the venerable four-cylinder Offenhauser got a reprieve of sorts, thanks to turbocharging, the Ford also took advantage of forced induction. The Ford V-8 would continually make it to the winner's circle up to the early 1970s when A.J. Foyt purchased the rights to the engine and renamed it the Foyt. It continued to win races through 1979.

During this time, Ford's involvement in racing waned and the name disappeared from both the F1 and Champ Car circuits. Where American oval-track racing was concerned, it was now Cosworth's turn.

Cosworth Engineering was a British firm started by Mike Costin and Keith Duckworth that gained fame in modifying Ford engines for racing purposes. In 1967, with hefty support from Ford Motor Company, the Cosworth DFV engine was introduced as the powerplant for the new Lotus 49 Formula One car.

In the hands of Clark, it won on its first outing in the Dutch GP at Zandvoort and by the following year, it was the dominant engine in F1. In fact, Ford-Cosworths would power the next seven World Champions — Graham Hill (1968), Jackie Stewart (1969, '71 and '73), Jochen Rindt (1970) and Emerson Fittipaldi (1972 and 1974).

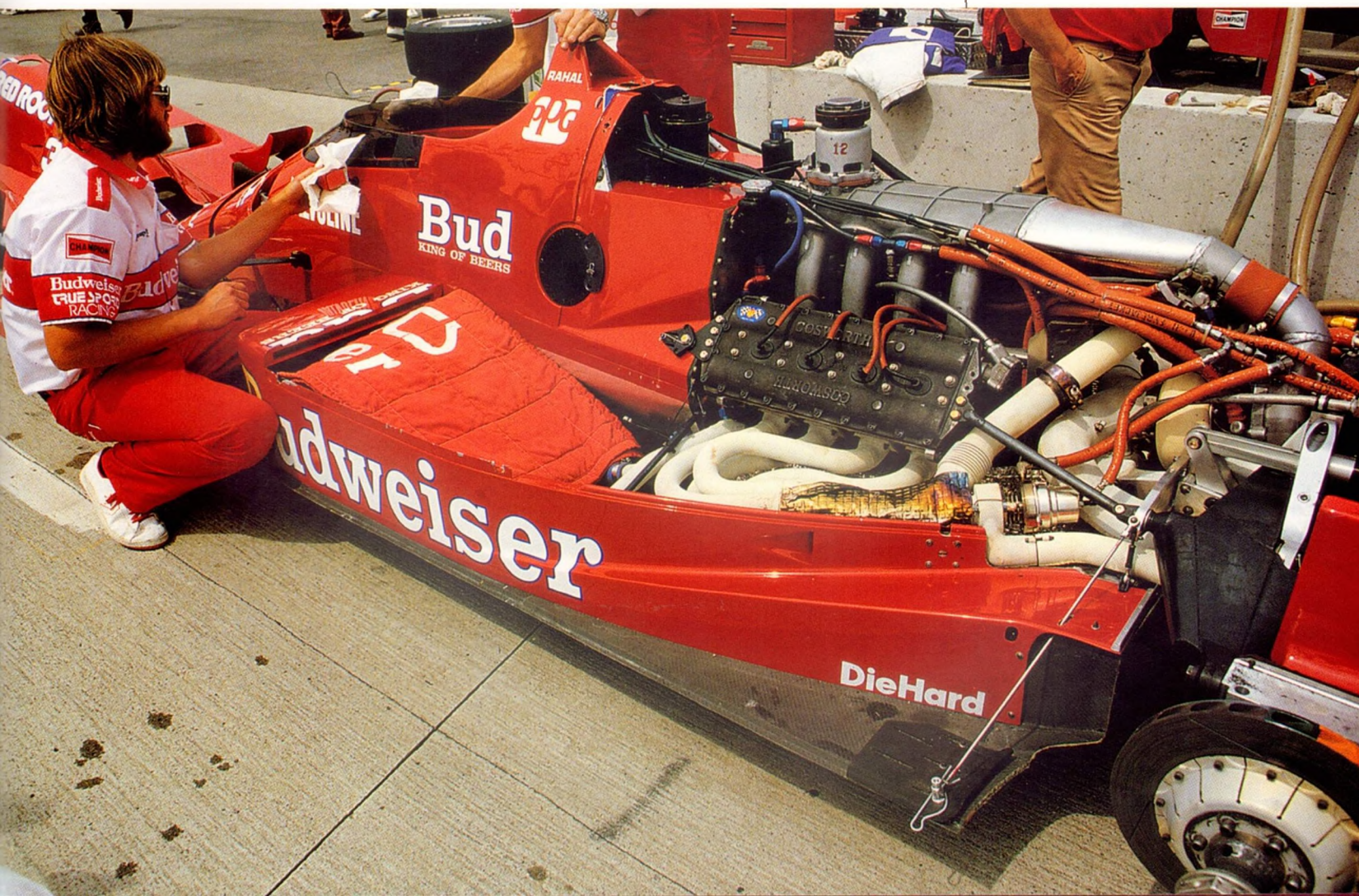
Niki Lauda captured the title for Ferrari in 1975 and 1977, but Cosworth came back to power the World Champion in 1976 (James Hunt), 1978 (Mario Andretti), 1980 (Alan Jones), 1981 (Nelson Piquet) and 1982 (Keke Rosberg).

The Cosworth was affordable, reliable and, perhaps even more importantly, it was available to everyone. Ironically, it was turbocharging that made the Cosworth DFV (and its successor the DFY) obsolete in F1. But considering the fact that the engine and its revised versions were successful for 15 seasons, it truly was a remarkable design.

What's more, the success of the engine would carry over to American Championship Car racing for additional years of dominance.

In 1975, the successful Vel's-Parnelli Jones team made the fateful decision to modify its VPJ5 Formula One chassis and use it in Champ Car racing events with a turbocharged version of the DFV, the DFX. Designed by the legendary Maurice Phillippe and driven by Al Unser, the VPJ6-Cosworth was competitive by 1976 as Unser finished fourth in the championship with victories at Pocono, Milwaukee and Phoenix.

Below: Engine and chassis in perfect harmony: the Truesports March-Cosworth of 1996 PPG Cup champion Bobby Rahal reveals some of its secrets.



By 1979, the year CART held its first championship, the Cosworth DFX was the engine, powering the winners of the first 27 races in CART's history. Mike Mosley's victory at Milwaukee in 1981 with an Eagle powered by a stock-block Chevrolet temporarily broke Cosworth's streak, but that hardly mattered. Thereafter, every CART event through the end of the 1986 season would be won by a Cosworth-powered car and the engine scored its final victory in 1989 when Bobby Rahal splashed to victory in a rain-shortened event at the Meadowlands.

As had been the case in Formula One, the Cosworth engine was affordable, reliable and available to the masses. By the time the Cosworth lost its edge, it had won 119 CART races, 34 other American championship races and had powered every CART champion from 1979 to 1987.

The situation began to change with the arrival of the new Ilmor design for Chevrolet and with it the lease arrangement and exclusivity clause. In 1986, the Ilmor had been used solely by Penske Racing and in the years that followed, only select teams were permitted to lease the engine.

Although the exclusivity aspect did cause some hard feelings, the leasing program made sense. After all, a team no longer had to employ engine specialists and construct such amenities in its shop as a dynamometer. And a team could now take advantage of the technology offered by a large company like Chevrolet or Ford.

In 1991, Ford, seeing the success of Chevrolet in CART, decided to return for the 1992 season in partnership with Cosworth. The XB engine was smaller and slimmer, giving it an aerodynamic advantage over the competition. It also could rev higher than the previous Cosworth CART engines.

After the usual teething problems, the engine gained reliability and Andretti gave the powerplant its first CART win at Portland in 1992. Andretti would add victories at Milwaukee, Toronto, Vancouver and Laguna Seca to his tally that season. He also captured seven pole positions to finish a close second to Bobby Rahal in the final point standings. Andretti also established a CART mark by leading 1,136 laps during the season.

The Ford-Cosworth would power its first CART champion the following year and perhaps it was appropriate that the victorious driver should be reigning F1 World Champion Nigel Mansell, who had opted to switch to the CART series. Mansell joined Mario Andretti at Newman/Haas while Michael Andretti decided to try his hand at F1.

Mansell won his CART debut race at Surfers Paradise and then took victory in four straight oval-track events which, along with five other podium finishes and six pole positions, gave him the PPG Cup. Teammate Mario Andretti also scored what would be his final CART victory at Phoenix.

Although 1994 would essentially be a Penske/Ilmor year, the Ford-Cosworth did power race winners Michael Andretti (Surfers Paradise and Toronto), Scott Goodyear (Michigan 500) and rookie sensation Jacques Villeneuve (Elkhart Lake).

The following year would be much more rewarding as the Ford-Cosworth again powered the series champion. With Villeneuve recording victories at Miami, Indianapolis, Elkhart Lake and Cleveland and capturing seven pole positions, he was able to outpoint reigning CART champion Al Unser Jr. Villeneuve's engine was the Series II, a revised version of the XB.

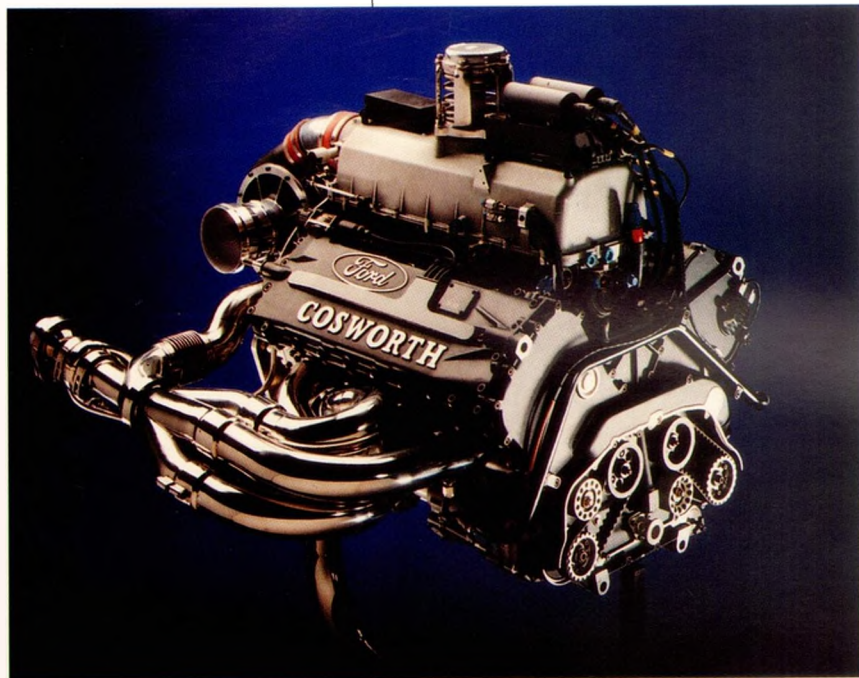
The season also marked the first year of CART's Constructor's Championship, which was won by the Ford-Cosworth, thanks to the 310 points amassed by its drivers. In addition to the wins by Villeneuve, race victories had also been recorded by Paul Tracy (Surfers Paradise), Michael Andretti (Toronto) and Scott Pruett (Michigan 500).

The Ford-Cosworth XD appeared in 1996 and continued to win races over the next three seasons although the Honda and new Mercedes-Benz engines made the series more competitive. Honda would win the majority of the races from 1996 to 1998, but tires and chassis choices became more important as the competition tightened.

The XD was smaller, lighter and reputed to be more powerful than its predecessor. In 1996, Michael Andretti won five races, but the following season his win at Homestead and Pruett's win at Surfers Paradise would be the only Ford victories of the year.

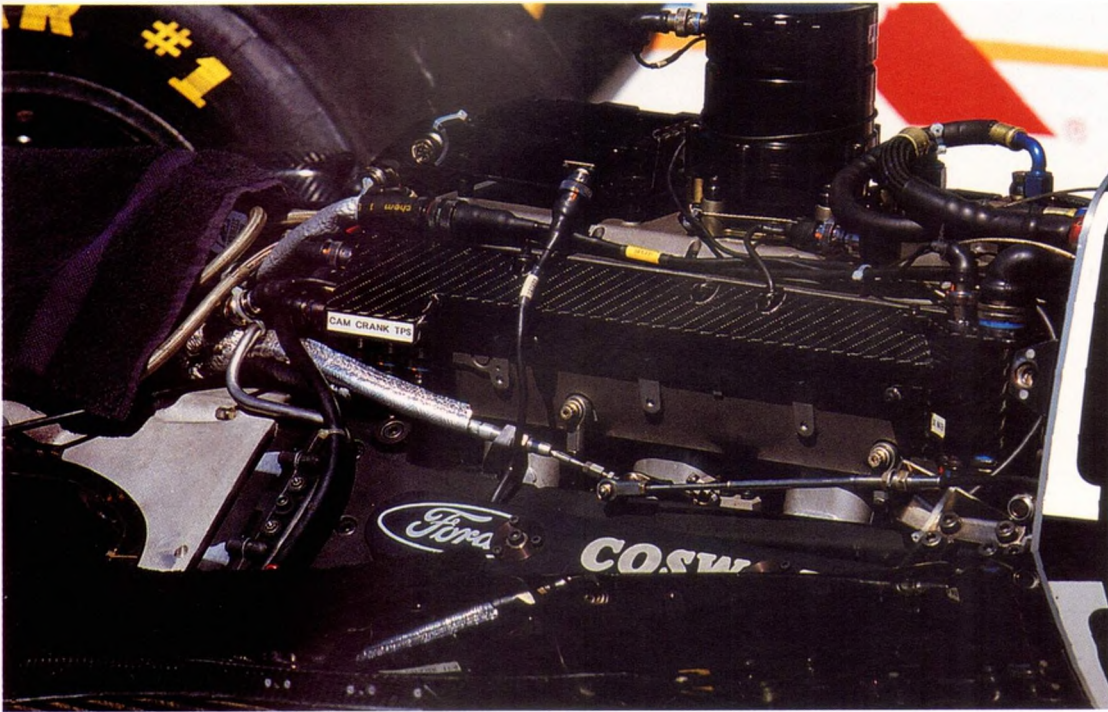
For 1998, the XD was again competitive, although only four wins were recorded — by Andretti (Homestead), Adrian Fernandez (Motegi and Mid-Ohio) and Bryan Herta (Laguna Seca).

Those victories gave Ford and Cosworth a total of 301 wins in American Championship Car racing. But looking back, it's been a winning partnership and you can expect more race wins from Ford and Cosworth in the future.



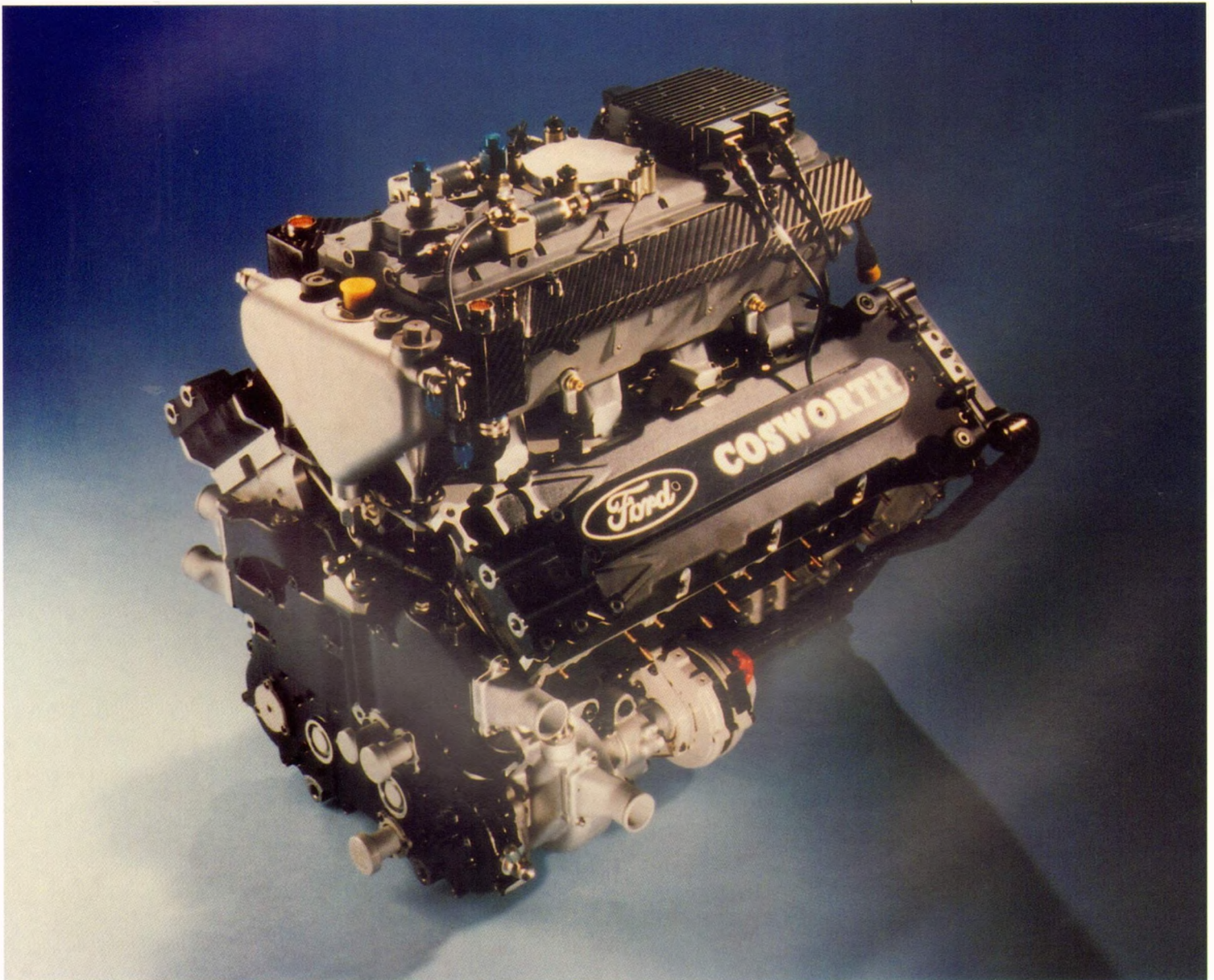
Courtesy of Cosworth

Introduced in 1992, the compact Ford-Cosworth XB helped Nigel Mansell to the CART title the following season.



Left: The Ford-Cosworth XD engine, seen fitted to one of the Newman/Haas team's Swift chassis, was once again highly competitive in 1998.

Below: Smaller and lighter than its predecessor, the XD has maintained the proud tradition established by Ford and Cosworth in Champ Car racing.





David Hutson

HOW DRY THEY WERE

One of the more interesting races during the period covered in this chapter came at Elkhart Lake in 1982. At four miles in length, Road America is easily the longest circuit visited by the CART series. Teams competing there invariably find out the importance of computing fuel mileage. The fortunate ones learn during practice. The unfortunate ones learn during the race.

In 1982, there were a number of unfortunate ones. In what must have been a multiple case of Murphy's Law, four drivers suffered the indignity of running out of fuel while running in the lead pack late in the race. The lucky man that day was Mexico's Hector Rebaque. Running fifth, Rebaque improved his position as each of the drivers ahead of him ran out of fuel.

Without making a pass, Rebaque went from fifth to first and scored his only win in CART competition. First Bobby Rahal ran out of fuel and had to pit, moving Rebaque to fourth. Josele Garza, running third, was next to run dry and head for the pit. Rebaque was now third. Rick Mears was next to run dry and even though he made it to the pit, he lost two laps getting there. Rebaque was now second.

On the final lap, race leader Al Unser Sr. ran out, giving the lead to Rebaque, who got to lead the most important lap of the race. Unser finished second, but was a lap down to Rebaque.

He became the first Mexican driver to win in CART competition and his victory was the first for Gerald Forsythe, one of CART's present-day team owners.



CART

THEY ALSO RAN DRY THAT DAY

What would be a beginning for one owner at Elkhart Lake's economy run in 1982 became the beginning of the end for another. The last leader to run dry that day was Al Unser Sr., who was trying to give owner Bobby Hillin his first-ever win in CART competition.

One of CART's original owners, Hillin was an oilman based in Midland, Texas and had been involved in Champ Car racing since 1977.

That year, Hillin's Longhorn Racing team had entered cars at Indianapolis for dirt-track specialists George Snider and Bubby Jones. Both drivers qualified, Snider in an ex-Patrick Wildcat and Jones in an Eagle. Jones qualified the Wildcat at Indy the following year and for 1979, Tom Bagley qualified Hillin's Penske PC6. Then he made what would prove to be a very expensive decision — he would have his own car constructed and call it the Longhorn.

Over the next three years, Hillin poured millions of dollars into the effort.

The first car, the Longhorn LR-1, became the first Champ car to have onboard computers. The car was built in Indianapolis in Jackie Howerton's fabricating shop a mile from the Indianapolis Speedway. It enjoyed limited success.

Unser won poles at Mid-Ohio and Watkins Glen and nearly won at Milwaukee, where suspension failure put him into the wall while leading. His top finish for the year was a third at Mexico City and he ended up eighth in the points.

However, it is important to remind everyone that Unser had vacated the Chaparral that Johnny Rutherford would drive to five race wins and the PPG Cup title that year.

Hillin had even contracted the services of Patrick Head of Williams Grand Prix Engineering fame in his pursuit of success. Head's car for the 1981 season bore a strong resemblance to the 1980 F1 world-title-winning Williams FW07. That car's success did not transfer to CART racing, however, although Unser qualified well, led races and scored some podium finishes.

In the end, the wins simply were not in the cards for Hillin and after losing a fortune on the project, he ended the program.

Top: Al Unser Sr. came close on a number of occasions, but was unable to score a victory for Bobby Hillin's Longhorn.

Above: Texas oilman Bobby Hillin was unlucky to never win in CART despite investing millions of dollars trying to develop his own cars from 1980 to 1982.

DATELINE: CART

1978

November: Championship Auto Racing Teams, Inc. co-founded by Roger Penske and Pat Patrick. Patrick is elected president and Jim Melvin is elected vice-president and general manager.

1979

March: Gordon Johncock, driving a Penske-Cosworth for Patrick Racing, wins the inaugural race for CART at Phoenix International Raceway.

April: USAC votes to reject the Indy 500 entries of Penske Racing, Patrick Racing, Chaparral Racing, Team McLaren, Fletcher Racing and All American Racers. Attorney John W. Frasco, acting on behalf of CART, files suit to have teams reinstated.

May: U.S. District Court Judge enjoins USAC from barring entries of CART drivers and teams at Indianapolis.

August: Bobby Unser wins the CART race at Watkins Glen, the first road-course event in CART history. The race is also the first Champ Car event at Watkins Glen, the long-time home of the U.S. Grand Prix.

November: CART President Pat Patrick is elected chairman of the board. Recently retired driver Wally Dallenbach is named chief steward. PPG Industries announces it will sponsor the entire CART series for 1980.

1980

January: Former Chaparral designer John Barnard unveils the McLaren MP4 Formula One car, the first to have a carbon-fiber chassis.

April: CART and USAC temporarily unite to form Championship Racing League. CRL will last through fifth race of the season before union dissolves.

August: Bobby Unser wins the final California 500 held at Ontario Speedway. The race featured a starting field of 37 cars, the most ever in post-World War II Champ Car competition.

October: Rick Mears wins the CART race at Mexico City, Mexico. The race is the first CART event to be held in a foreign country and the first-ever Champ Car race in Mexico.

November: Tom Sneva wins CART season finale at Phoenix in a car appropriately called a Phoenix-Cosworth. It will end up being the only Champ Car victory for the British-built car, owned by Jerry O'Connell.

1981

January: PPG posts a \$1 million point fund for CART participants and introduces its PPG Pace Car Team. Future CART champion Emerson Fittipaldi announces his retirement from Formula One as a driver.

May: Bobby Unser wins second pole position in Indianapolis 500; the race is marred by controversy over the 'blend-in rule' that results in Unser being disqualified; Mario Andretti declared winner of the race.

June: Future CART chassis manufacturer Adrian Reynard joins March F1 design team.

October: Bobby Unser reinstated as Indy 500 winner. Future CART driver Geoff Brabham captures SCCA Can-Am title.

November: Future CART champion Al Unser Jr. captures SCCA Robert Bosch Super Vee title.

1982

February: Mario Andretti and team owner Pat Patrick lose their appeal against decision to reinstate Bobby Unser as 1981 Indy 500 winner.

March: Future CART champion Bobby Rahal makes CART debut at Phoenix.

May: Future CART champion Danny Sullivan makes CART debut at Atlanta; Sullivan's third-place finish establishes mark for CART rookie driver's debut. Occasional CART competitor Gordon Smiley killed in qualifying crash at Indianapolis. Gilles Villeneuve, father of future CART champion Jacques Villeneuve, dies following crash in practice for Belgian Grand Prix. CART champion Rick Mears and Mario Andretti are among driver names considered by Ferrari to replace Villeneuve. PPG's director of racing, Jim Chapman, is able to negotiate a sponsorship package with the Indianapolis Motor Speed-



GORDON SMILEY

way which will make the Indianapolis 500 part of the PPG Indy Car World Series once more in 1983.

July: Future CART champion Bobby Rahal scores first CART win with victory at Cleveland. Jim Hickman becomes first CART driver fatality following practice crash at Milwaukee.

August: Future CART champion Al Unser Jr. makes first CART start, finishing fifth at Riverside for Forsythe Racing.

September: Mario Andretti, substituting for injured driver Didier Pironi, captures pole

position for Italian Grand Prix for Ferrari and finishes third in the race.

October: Future CART champion Al Unser Jr. captures SCCA Can-Am championship.

December: Legendary Lotus founder Colin Chapman dies of a heart attack in England.

1983

January: CART adopts new point system awarding points for top 12 finishers, pole position winner and driver who leads most laps in a race.

March: Caesar's Palace announces CART race in Las Vegas for October 8.

April: Lola returns to CART competition as new Newman/Haas team and Mario Andretti compete at Atlanta.

June: Future CART team owner Al Holbert wins 24 Hours of Le Mans, co-driving a Porsche with Vern Schuppan and Hurley Haywood.

September: Future CART champion Michael Andretti wins SCCA North American Formula Mondial championship, a forerunner of what would become CART Atlantic championship.

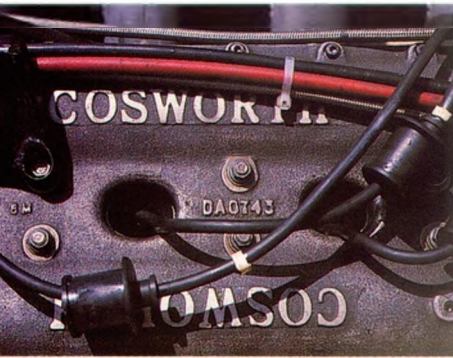
July: Desire Wilson qualifies at Cleveland and finishes 10th to become first woman to compete in a CART race.

October: Future CART champion Michael Andretti makes first CART start at Las Vegas. Future CART race and pole position winner Jacques Villeneuve (uncle of future CART champion Jacques Villeneuve) wins SCCA Can-Am title.



DESIRE WILSON AT CLEVELAND IN 1983

CART'S KIT-CAR ERA: LOLA AND MARCH



Above: Cosworth transferred the winning heritage of its DFV Formula One engine to CART with the turbocharged DFX version that won every race but one from 1979 through 1986.

Right: A year after the Newman/Haas team introduced the first ground-effects Lola chassis to CART competition, Mario Andretti used the 1984 design to capture the PPG Cup.

Teo Fabi had a lackluster 1984 season with Gerald Forsythe's March 84C-Cosworth (below) and left the team at mid-season to go F1 racing. The year wasn't a total loss for March, however, as its chassis won seven CART events.



WHEN the entry list for a racing series is filled by teams using the same chassis or engine, it is often referred to as kit-car racing. The term implies that a team owner can purchase a chassis, purchase an engine, hire a driver and a crew and go racing. Sounds simple, doesn't it?

If one examines the win column of the CART championship during its formative years, it will appear that the kit-car philosophy was alive and well.

The Cosworth DFX, a turbocharged version of the engine used by the majority of Formula One teams since the late 1960s, the DFV, had been introduced to Champ Car racing in 1976. By the time the CART series was started in 1979, virtually every team was using a Cosworth DFX. Everyone winning races was also using the Cosworth.

From 1979 through 1986, Cosworths won 108 of 109 races. Cosworth-powered chassis captured 27 straight race victories before Mike Mosley broke the streak by winning at Milwaukee in 1981 in Dan Gurney's Eagle-Chevy.

Cosworth-powered cars then won the next 81 CART races before Mario Andretti gave the new Ilmor Chevy Indy V-8 its first win in the 1987 season opener at Long Beach. Cosworth-powered cars would win 10 of the next 14 races but that would be the end of its reign.

The prevalence of the Cosworth coincided with the introduction of ground-effects chassis. In 1979, when ground-effects chassis appeared from Chaparral and Penske, a demand was created for the latest in chassis design. It would take a pair of British racing car manufacturers — Lola and March — to meet that demand.

During the seasons of 1984 through 1987, Lola and March chassis powered by Cosworth DFX engines dominated the CART PPG Cup World Series. In fact, Lola-Cosworths and March-Cosworths won every race from 1984 through 1986 and won 10 of 15 races in the 1987 season.

Lola was formed in 1958 by an engineer/driver named Eric Broadley who designed a winning sports car and named it Lola. From sports cars, Broadley expanded his operation to include Formula Junior, the level right below Formula One. Broadley's cars were successful and he began to mass-produce them.

Between 1966 and 1978, Lolas won a number of American Champ Car events. Lola would then go on a four-year hiatus before producing its first ground-effects design for the 1983 season.

In the meantime, there was a rival company already doing that — March.

Started in 1969, March was a partnership between Max Mosley, Alan Rees, Robin Herd and Graham Coaker. The March name was an acronym of Mosley, Alan Rees, Coaker and Herd.

After building a Formula Three car and signing talented newcomer Ronnie Peterson, the young company soon found itself in Formula One. March made a promising start with Jackie Stewart winning the 1970 Spanish Grand Prix for Ken Tyrrell in one of its cars.

Like Lola, March was enjoying a healthy customer car business, producing mass quantities of Formula Two and Three cars while maintaining a factory F1 program.

Early in 1980, it received an inquiry that would result in a major change in focus. The inquiry came from Champ Car team owner Sherman Armstrong, who wanted his own ground-effects chassis.

The result was the Orbitor, which was based on the March 792 Formula Two chassis. With Howdy Holmes at the wheel, the car turned in laps fast enough to make the Indy 500 field. Unfortunately, Holmes suffered a mechanical failure during a final-day qualifying run and brushed the wall. Although he went out for another attempt after the car had been quickly repaired, he was unable to find the necessary speed to qualify.

After promising performances elsewhere on the CART circuit, March got additional inquiries for the 1981 season — this time from Florida sports-car racers Don and Bill Whittington and Champ Car legend George Bignotti. March engineers Gordon Coppuck and Ian Reed designed a Champ car derived from the RAM March 811 F1 car. Coppuck, of course, had been the designer of numerous McLarens, including the McLaren M16 Champ car that had been so successful over the years.

Qualifying at Indy went much better this time as both Whittingtons qualified their cars and Tom Sneva, driving for Bignotti, actually posted the quickest qualifying time in the 33-car field. In the race, Sneva went from 15th to first and was a contender until rear end problems sidelined the car near the midway point.

Sneva gave March its first CART win three months later at Milwaukee and followed that up with a win in the season finale at Phoenix.

In Alan Henry's book *March: The Grand Prix and Indy Cars*, racing journalist Gordon Kirby observed: 'The big point about the March 81C was that it had downforce at a time when Indy car technology was in the Dark Ages from the aerodynamic standpoint. As an example, two years earlier, the ground-effect Penske PC7 had set new standards straight out of the box. It established benchmarks that the PC9s were struggling to match several seasons later. In that respect, March timed their Indy car debut perfectly.'

For 1981, March had constructed and sold nine chassis. That figure would go up considerably over the next few years. In 1982, March built 20 of the new 82Cs, which now featured a March-designed gearbox. The new car recorded five race wins with two by Sneva, two by rookie Bobby Rahal and one by fellow rookie Hector Rebaque.

Predictably, orders continued to come in and 21 of the latest 83C chassis would be built for 1983. It would be a noteworthy season. March would be the most successful chassis, winning seven of the 13 Champ Car races that year. Sneva would give March its first Indy 500 victory while rookie driver Teo Fabi would win four CART events, narrowly losing the championship to Al Unser Sr.

Eric Broadley had been designing race-winning Lola chassis for American Champ Car racing since 1966 and was able to make a successful return in 1983 on the CART circuit.



Art Flores



David Hutson

Robin Herd, one of the four founders of March Engineering, discovered a healthy market for his company's product in CART's PPG World Series.



By the end of 1983, March had established something of a milestone by having constructed 50 Champ cars. The arrival of the first 83C also marked the 1,000th racing car produced by the factory since 1969.

Lola and March were perfectly equipped to be suppliers to the masses. Both possessed large factories and had access to necessary amenities like wind tunnels, vital for cars employing the ground-effects concept.

In addition, both had strong engineering staffs, with legendary designer Eric Broadley still in charge at Lola, where his design team included respected engineers like Nigel Bennett and Bruce Ashmore, while over at March Robin Herd had highly regarded staff such as Ralph Bellamy, Gordon Coppuck, Ian Reed and Adrian Newey.

Both factories were located in Great Britain, where the manufacture of racing cars and the deployment of carbon-fiber technology had developed into a thriving cottage industry. (Even the American-based Penske team was constructing its cars at a shop in Poole, England.)

For 1984, March was swamped with orders and wound up building 47 of the new 84C chassis. The list of customers included Penske Racing, which opted to replace its own chassis with Marches prior to Indianapolis. Lola, by contrast, continued its arrangement with Newman/Haas, which would field a single entry for Mario Andretti, but also sold a customer version of the T800 to Doug Shierson (which was to be driven by Danny Sullivan) after Shierson's new DSR-1 was deemed a failure.

Despite the discrepancy in numbers, Lola wound up having the best season, although at one point it appeared that March might have the upper hand.

Andretti opened the season by winning at Long Beach, where CART replaced Formula One to give the U.S. its first-ever Champ Car race on city streets, but Tom Sneva responded with victories at Phoenix and Milwaukee in the Mayer Motorsports March-Cosworth, separated by Rick Mears' win in the Indy 500 in Roger Penske's March-Cosworth. Then Al Unser Jr. made it four in a row for March-Cosworth after scoring his initial CART win at the inaugural race at Portland.

But the pendulum began to swing the other way when Andretti won in the parking lot circuit at the Meadowlands and Sullivan scored his first CART win at Cleveland. Andretti then scored back-to-back wins in the Michigan 500 and at Elkhart Lake while Sullivan got his first 500-mile victory at Pocono. The trend was now clearly in Lola's favor.

Andretti won at Mid-Ohio while Sullivan won for a third time in 1984 at the short-track oval at Sanair, Canada. Unfortunately, Mears suffered serious foot and leg injuries during Sanair practice and would be sidelined for the remainder of the season.

(Mears was one of several drivers to suffer serious injuries to the lower extremities in the mid-Eighties. The

1984 CART CAPSULE

Champion: Mario Andretti

Race Winners: Mario Andretti (6), Tom Sneva (3), Danny Sullivan (3), Bobby Rahal (2), Rick Mears (1), Al Unser Jr. (1)

Pole Positions: Mario Andretti (8), Rick Mears (2), Tom Sneva (2), Bobby Rahal (1), Danny Sullivan (1), Jacques Villeneuve (1), Johnny Rutherford (1)

Rookie of the Year: Roberto Guerrero

Most Improved Driver: Pete Halsmer

New Races: Long Beach, Portland, Meadowlands, Sanair

Notable Highlights: Most new venues added to schedule since beginning of CART

Opposite: An on-board camera gives a spectacular view over the shoulder of Al Unser Jr. as he hustles his Galles Racing March-Cosworth down the backstretch at Long Beach in 1984.

Below: Temporary road courses, like the rainswept Meadowlands circuit shown here, allowed CART to bring Champ Car racing to major U.S. markets like New York City.



David Hutson



Photo: David Hutson



Previous spread: Mario Andretti negotiates the hairpin in the Newman/Haas Budweiser Lola-Cosworth en route to victory in CART's first Long Beach Grand Prix in 1984 and eventually the '84 CART title.

Opposite: Al Unser Jr., shown in the Domino's Lola-Cosworth at Laguna Seca, came oh-so-close to winning the 1985 PPG Cup, losing the title by a point to his father.

Below: Ex-Formula One driver Roberto Guerrero made his CART debut at Long Beach and turned in a number of competitive drives during his initial season in 1984.

injuries were attributed to the position of the driver in the new ground-effects chassis. With the drivers' feet ahead of the front axle line, they were vulnerable to injury there. Surprisingly, it would take eight years for rules changes that would effectively protect the drivers.)

Following Sanair, Andretti won his sixth race of the season with a victory in the Michigan 200. Bobby Rahal then scored wins in a March-Cosworth at Phoenix and Laguna Seca and Sneva closed out the season with another victory for March at Las Vegas.

However, the title belonged to Andretti, who finished second at Las Vegas and held a 13-point advantage over Sneva in the final point standings. It was his first title in Champ Car racing since 1969.

The season also had produced a pair of notable newcomers.

Michael Andretti, Mario's oldest son, made an impressive debut by placing seventh in the points in the Kraco Racing March-Cosworth. And two-time F1 World Champion Emerson Fittipaldi came out of retirement to try his hand at CART racing. Fittipaldi drove for a couple of small teams before settling in with Patrick Racing after its driver Chip Ganassi was injured during the Michigan 500.

Lola would come close to repeating in 1985, a season that will long be remembered for its emotional close finish. In the off-season, there were some significant changes. Sullivan had been signed by Penske, who decided to use Al Unser Sr. on a limited basis. Al Unser Jr., who originally had planned to drive the new Lotus for Roy Winkelmann, found himself without a ride until Sullivan's departure opened up the ride at Shieron.

If the start of the 1985 season was any indication, it appeared that Mario Andretti would be repeating his 1984 title. Andretti won the season opener at Long Beach and then finished second following Sullivan's now-famous 'spin and win' at Indianapolis. He then won at Milwaukee and Portland to take a firm lead in the championship.

But Al Unser Jr. got hot and won the next two races at the Meadowlands and Cleveland. That made the tally five wins in six races for the Lola-Cosworth.

Now it was March's turn. In fact, March would win the final nine events.

Fittipaldi scored his first oval-track victory by winning the Michigan 500. Jacques Villeneuve, whose nephew would rule CART in the future, scored his sole CART victory in the rain-swept event at Elkhart Lake.

Mears, so seriously injured the year before at Sanair, showed he had lost none of his ability with a win at Pocono. However, he was still far from fit and was forced to sit out all but five of the season's 15 races — all on oval tracks — as he continued his recuperation. His place in the Penske lineup was taken by Al Unser Sr., who had been gathering points with typical consistency and now found himself in the title chase.

Rahal won at Mid-Ohio and Johnny Rutherford scored his first CART win since 1981 by outlasting Pancho Carter at Sanair. Leading the race under caution on the final lap, Rutherford was surprised to see the green flag and the checker wave simultaneously. Although Carter passed to apparently win the race, Rutherford was





Art Flores

declared the winner: the rules stipulated that a race would end under caution should the caution flag be shown on the final lap.

Rahal would win the next two races at Michigan (the 200-miler) and Laguna Seca while Al Unser Sr. solidified his chance at the title by winning from the pole at Phoenix.

With only Miami left on the schedule, it would come down to a father and his son to decide the title. While Al Sr. had been amassing points, his son had followed suit and finished second at Pocono, fourth at Mid-Ohio, third at Sanair, third at Laguna Seca and second at Phoenix. The point standings gave a 139—136 nod to Al Sr.

Initially, it appeared that the younger Unser was going to prevail. Running third behind eventual race winner Sullivan and Rahal, he had the title in his grasp by one point — his father was running fifth behind Roberto Moreno.

After slowly reeling in Moreno, the elder Unser pulled right up behind him as the two prepared to lap Randy Lanier. With five laps to go, Al Sr. moved into fourth place behind his son. The title was now in the father's possession. He would not lose it.

The 12 points for fourth place were enough for Sr. to defeat Jr. by one point, 151—150. It was the closest battle in the history of the series. (In fact, the only major championship with a closer finish had been the previous year's FI World Championship won by Niki Lauda by one-half a point over Alain Prost.)

'You have mixed emotions about something like this,' Al Sr. said afterward. 'When I was catching Moreno, it crossed my mind what would happen. But I'm a racer and I can't back off.'

'I've lost titles before and you wonder why things happen the way they do. Al [Jr.] is going to win this championship — he's too good.'

The son was as gracious as his father in defeat.

'I was just trying to run my own race and stay out of trouble,' Al Jr. said. 'I found a hole and ran by myself. The water temperature was up all day and I had to worry about that. I couldn't do anything about my dad. I'm so happy for Dad. I love him very much.'

Although March had won plenty of races since 1981, Unser was the first March driver to have captured the PPG Cup. However, the company would retain its crown the following season with the emergence of the Truesports team as a dominant force.

Truesports was started by motel magnate Jim Trueman, who had raced in the under-2-liter category of the Can-Am series. Trueman had a reputation for helping a number of drivers, including providing free motel rooms during race weekends. The grateful drivers would wear 'Sleep Cheap' decals on their helmets in return.

1985 CART CAPSULE

Champion: Al Unser Sr.

Race Winners: Mario Andretti (3), Bobby Rahal (3), Danny Sullivan (2), Al Unser Jr. (2), Emerson Fittipaldi (1), Rick Mears (1), Johnny Rutherford (1), Al Unser Sr. (1), Jacques Villeneuve (1)

Pole Positions: Bobby Rahal (7), Mario Andretti (3), Rick Mears (2), Danny Sullivan (2), Pancho Carter (1), Al Unser Sr. (1)

Rookie of the Year: Arie Luyendyk

Most Improved Driver: Ed Pimm

New Races: None

Notable Highlights: Final championship tally between Al Unser Sr. and Al Unser Jr. — 151 to 150 — is closest in history of CART; nine separate winners is most for one season in history of CART; for the second time, Al Unser Sr. wins only one race en route to the title and remains only CART champion to win only one race in championship season

CART champions past, present and future lead the field into Turn One at the start of the 1985 Pocono 500. Bobby Rahal (3), Danny Sullivan (4) and Michael Andretti (99) head Penske teammates Al Unser Sr. and Rick Mears, the polesitter and eventual race winner.





1986 CART CAPSULE

Champion: Bobby Rahal

Race Winners: Bobby Rahal (6), Michael Andretti (3), Mario Andretti (2), Danny Sullivan (2), Kevin Cogan (1), Emerson Fittipaldi (1), Johnny Rutherford (1), Al Unser Jr. (1)

Pole Positions: Rick Mears (4), Michael Andretti (3), Mario Andretti (3), Emerson Fittipaldi (2), Danny Sullivan (2), Bobby Rahal (2)

Rookie of the Year: Dominic Dobson

Most Improved Driver: Raul Boesel

ARS (Indy Lights) Champion: Fabrizio Barbazza

New Races: Toronto

Notable Highlights: Rahal becomes first Rookie of the Year to win CART title

À LA CART

SWINDELL WAS SURPRISINGLY GOOD

One of the more surprising entries for a CART event came when sprint-car standout Sammy Swindell was signed to drive for Pat Patrick at Michigan in 1985. Although he had never driven a Champ car before, Swindell impressively qualified 12th fastest. A year later, he finished ninth in the Pocono 500 after qualifying 26th.

His final attempt to make a Champ Car event came in 1987, when his March-Pontiac was too slow to make the Indy 500. Telemetry showed Swindell had been flat out on all four qualifying laps — the stock-block engine simply lacked the necessary horsepower. Swindell returned to the World of Outlaws, where he still competes to this day.

Opposite: Johnny Rutherford displays the smile of a winner and his first-place trophy after scoring a surprise victory in the 1986 Michigan 500.

Overleaf: Bobby Rahal and his Truesports March-Cosworth (3) take the lead from the Patrick March-Cosworth of Kevin Cogan (7) with the Penske March-Cosworth of Rick Mears close behind in what was to be the closest three-way finish in Indy 500 history. Rahal won the 1986 classic and dedicated the victory to his terminally ill car owner Jim Trueman.

The team had contested the CART series for the first time in 1982 and made an immediate impact, rookie driver Bobby Rahal scoring a pair of wins and finishing as runner-up in the point standings. Truesports was by no means the only team with a background in Can-Am to have joined the burgeoning CART championship in the early Eighties. Although the Can-Am in its latest guise was not like its predecessor of the 1960s, it had become a respectable series with professional teams and talented drivers. When it began to decline for the final time, CART received a boost, since many of those good teams, mechanics, engineers and drivers would switch to CART, which would also gain tracks like Elkhart Lake, Mid-Ohio, Portland and Laguna Seca.

Truesports team manager Steve Home was one of those who had moved to CART from the Can-Am series. 'In 1980 and '81, you had a lot of good teams,' he said. 'You had teams like Newman-Freeman which had Eliot Forbes-Robinson and Danny Sullivan as drivers. There was the VDS team that I worked for. Carl Haas was running a team with Keke Rosberg. Al Holbert had a team.'

'The series had good competition. Unfortunately, the SCCA came up with some rule changes that would kill the series and that happened about the same time CART came along. We came to the rational conclusion that we could run ovals and road courses and so we joined CART.'

Can-Am's loss would be CART's gain. In addition to Truesports, Newman/Haas Racing (formed when Paul Newman and Carl Haas opted to pool their resources) and the VDS team, both of which had joined the CART series in 1983, had emerged from the ranks of the Can-Am entrants, while Holbert, who would be the driving force behind Porsche's CART program, did a full season in 1984 with Alex Morales.

By 1986, Truesports, Home and Rahal were more than ready to capture the championship. After winning once and finishing fifth in the title race in 1983, Rahal rounded off the 1984 season on a high note with a pair of race victories that helped vault him to third in the final standings. In 1985, Rahal had a strong series of races in the second half of the season to once again place third.

The 1986 season started off with two drivers scoring their first CART wins. Kevin Cogan opened the year with an impressive victory at Phoenix in the Patrick Racing March-Cosworth and Michael Andretti finally got the monkey off his back by winning at Long Beach in the Kraco Racing March-Cosworth.

At Indianapolis, it would be Rahal's turn, but Cogan would make him earn it.

Starting fourth, Rahal was a man on a mission. Sadly, team owner Jim Trueman had been stricken by cancer and was in such a weakened state by May of 1986 that everyone knew he would not be around long. Rahal wanted to win the race for Trueman as much as he did for himself.

Michael Andretti was the early leader, but Rahal hovered in the top four during the first 80 laps. Rahal took the lead for the first time on lap 75, and from lap 83 on it became a two-way battle between Rahal and Rick Mears.

But Cogan, who had led on a couple of occasions early in the race, was right behind the combatants in third place. On lap 188, he made his move, passing Mears and then Rahal. The race appeared to belong to the hard-luck driver from California.

Cogan maintained a slight lead, but on lap 195 Arie Luyendyk spun and hit the Turn Four wall. Because it was a minor accident, the damaged car was removed and Cogan brought the field down for the lap 198 restart. Rahal, anticipating the green flag, got a better run off of Turn Four, drafted Cogan and swept past going into the first turn. He then held off the unlucky Cogan to win the race.

The Rahal—Cogan—Mears finish had been the closest in Indy 500 history — 1.881 seconds separated the top three.

'I was kind of glad to see the yellow [on lap 195] because there was a big concern we would not finish the race on the fuel,' Rahal said in the post-race interview. 'The [fuel] light had been on for a number of laps and we knew it was going to be risky. And, of course, in 1984 at Pocono I backed off on the boost and ended up finishing but finishing third, and this time there was no way in hell I was going to do that. But there is no question the yellow definitely helped.'

'After we got the jump on the restart and drafted past Cogan, I said, "Now go. You are going to drive two laps as hard as you can. Now is the time." And I drove them. I looked in my mirror coming off of [Turn] Two and Kevin was a ways back and I could see that Rick had caught up and I thought those two would bother each other enough.'

'They dropped away and with one lap to go we had a good lead. And coming down the backstretch, I was thinking, "Don't leave me, baby. Don't leave me. When I got through [Turn] Four I knew — providing the emergency brakes didn't lock on — that it was ours and just looked over and saw the pit going crazy and I didn't even look at the checkered flag. I just felt a great sense of well being and particular satisfaction for all the things that Jim has done for me over the years. If anything can repay him, maybe this can.'

Rahal had Trueman join him in the pace car for a lap of honor. Eleven days later, Trueman died. Those who knew him said he had clung to life the last days of May to see his car win at Indy.

For Rahal, Home and the Truesports team, there was still the matter of the PPG Cup. The victory at Indianapolis had given Rahal his first points of the 1986 season. For much of the year, the standings were headed by Michael Andretti, who had scored his second win in the fourth round of the championship at Milwaukee, but Rahal's title challenge was to gain momentum as the season unfolded.



DANA

Vermont
American
[Signature]
RACING TEAM



YEAR

NOSON



DODGE





Opposite: Always a bustle of activity, the Indianapolis Motor Speedway's Gasoline Alley connects the garage area to the pits. Being towed to the pit area is the Arciero March-Cosworth of rookie Fabrizio Barbazza, who would finish third in the 1987 Indy 500.

Below: Rain was often in abundance at the Tamiami Park circuit; this 1986 photo shows Michael Andretti negotiating a wet track in the Kraco March-Cosworth.

Rahal recorded another victory in Toronto, but the year saw a variety of race winners. Mario Andretti triumphed at Portland and Pocono, Danny Sullivan won back-to-back events at the Meadowlands and Cleveland while Johnny Rutherford won the Michigan 500 and Emerson Fittipaldi won at Elkhart Lake.

By the time the series reached Laguna Seca, it had pretty much become a two-man race between Rahal and Michael Andretti, with Rahal now slightly ahead after he had scored three successive victories at Mid-Ohio, at Sanair and in the 250-miler at Michigan and placed fifth at Elkhart Lake. Rahal then won at Laguna Seca and finished third at Phoenix to maintain his lead (Andretti had finished third at Laguna Seca and won at Phoenix). It would come down to Miami to decide the title.

In qualifying, Rahal appeared to have the advantage, starting fourth while Andretti was relegated to the fifth row in 10th position. The race itself, which was won by Al Unser Jr., proved to be an anticlimax. Andretti had engine trouble and ended the day out of the points in 18th. Rahal was able to take it easy and finish eighth to lift the PPG Cup title by an eight-point margin over Andretti, who would finish runner-up in the point standings twice more before winning his first PPG Cup. But that's another story in another chapter.

In the off-season, Home took what appeared to many as a gamble. For 1987, Truesports would be using Lola chassis for the first time. Ever since the team had entered CART competition in 1982, March had been the chassis of choice.

Heading into the 1987 season, Rahal had won a PPG Cup title, 14 races and 11 pole positions and scored 12 other podium finishes — all with March-Cosworths. What's more, March had won the last nine races of 1985 and 14 of 17 races in 1986. There was every reason to believe that March would continue to dominate in 1987.

As it would turn out, Home's move may have been a gamble, but it had been a calculated one. No chassis/engine combination would dominate. With the Chevrolet Indy V-8 engine now widely available and being used by Penske, Newman/Haas and Patrick Racing, it was on its way to becoming a dominant force in CART. Of course, the Lola/Cosworth and March/Cosworth combinations were also very competitive.

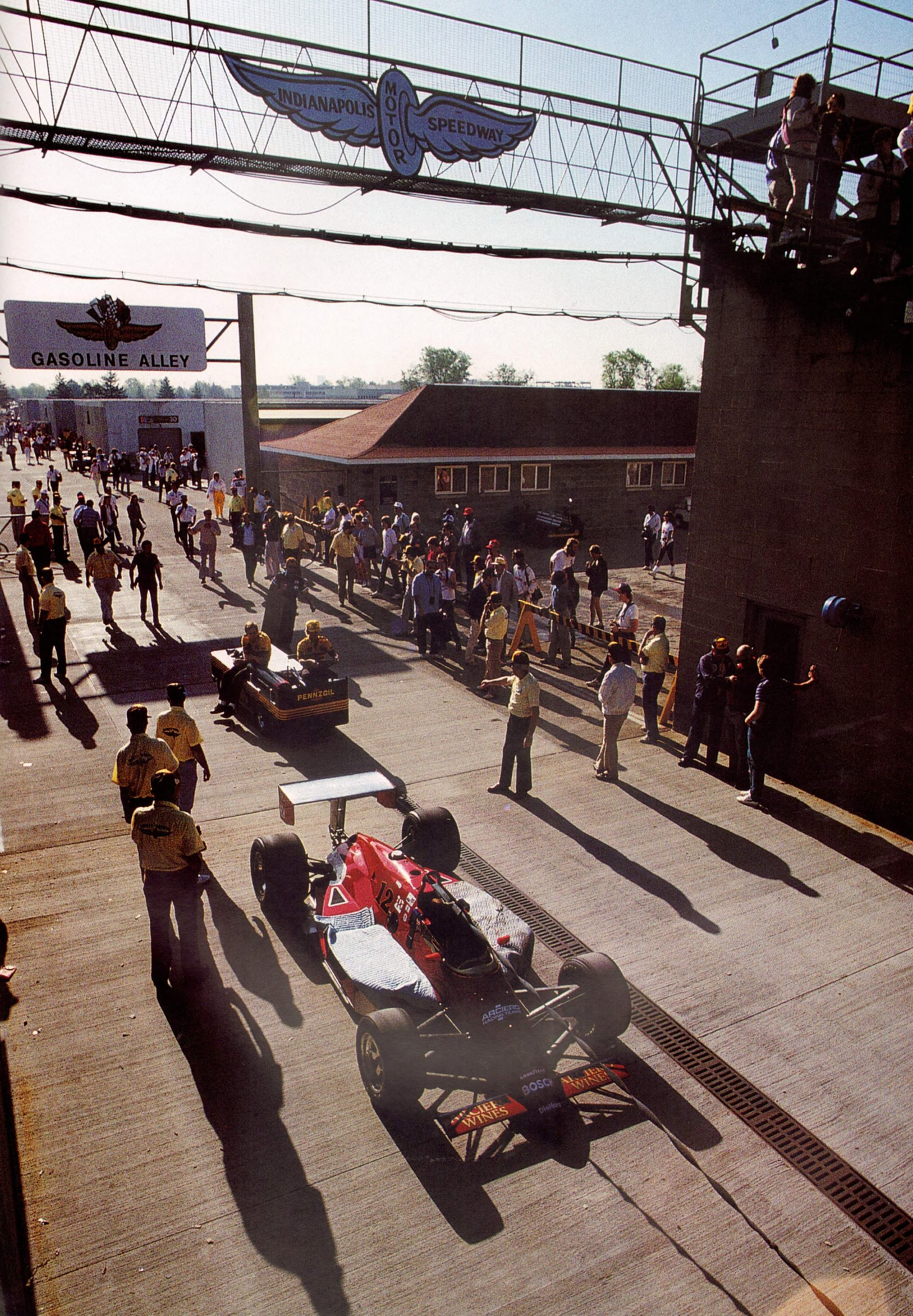
For that matter, the CART series, now in its ninth year, was increasingly competitive. Five different drivers — Newman/Haas's Mario Andretti (Lola-Chevy), Vince Granatelli Racing's Roberto Guerrero (March-Cosworth), Penske Racing's Al Unser Sr. (March-Cosworth), Kraco's Michael Andretti (March-Cosworth) and Truesports' Bobby Rahal (Lola-Cosworth) — won the first five races of the new season. Rahal, who had won at Portland, became the first double winner of 1987 by following up with a victory at the Meadowlands. Rahal held the lead in the point standings over Michael Andretti by a 74—70 margin.

Next, it was Emerson Fittipaldi's turn to win back-to-back events at Cleveland and Toronto in Pat Patrick's March-Chevy while Michael Andretti returned to the Victory Circle in the next event (Michigan) to score his



INDIANAPOLIS MOTOR SPEEDWAY

GASOLINE ALLEY



A.J. Foyt has time for refreshment as his crew works on his Lola-Cosworth during a pit stop in the 1987 Miller 200 at Milwaukee. Foyt had his best race of the 1987 CART season here, starting seventh and finishing sixth.





Right: Al Unser Sr. started out the 1987 season as an unemployed driver, but found himself in demand after winning his fourth Indy 500 in a year-old March-Cosworth.



David Hutson



David Hutson

Above: Roberto Guerrero scored his elusive first CART victory at Phoenix in 1987 in impressive fashion — he went from last to first to win in Vince Granatelli's March-Cosworth.

Above right: Porsche became a full-time participant in CART in 1988 under the guidance of sports-car ace and former CART driver Al Holbert (center).

Right: Racing is undoubtedly the topic of conversation as (left to right) Emerson Fittipaldi, Danny Sullivan, Al Unser Jr. and Kevin Cogan share a laugh during the 1986 season.



first 500-mile race win. Rahal, by virtue of podium finishes in all three of those races, still enjoyed a 119—110 lead in the points over Andretti.

Rahal finished fifth at Pocono as Rick Mears became the seventh different winner in the first 10 races of the season in a March-Chevy. After dropping out of Elkhart Lake (won by Mario Andretti) with turbo failure, Rahal rebounded with a runner-up finish at Mid-Ohio. He now led Michael Andretti by a 146—115 margin with three races to go.

Rahal would undoubtedly have won at Mid-Ohio — he was enjoying a healthy lead over eventual victor Guerrero only to be punted off the track by Rick Miaskiewicz, who was 10 laps down to the leader at the time. Even with the setback, Rahal had managed to salvage the race with a bunch of points.

For Andretti, it was now a matter of sweeping the points and hoping Rahal's reliability would desert him. At Nazareth, Andretti won the pole, led the most laps and won the race for a 22-point sweep. However, Rahal finished second. It was now 162—137 in favor of Rahal. Rahal could now clinch the title at Laguna Seca.

And he succeeded in the best way possible. Starting third behind Mario and Michael Andretti, Rahal stayed put in the early going. Michael led the initial laps, but began to experience spark box problems and was out of the race and the title chase.

Home was asked if Rahal would 'sit back, relax and hold second' or 'go for it.' Home replied, 'We think Mario's going to come back to us and we will win.'

The man who had gambled on a chassis change the previous off-season called it again. The elder Andretti's car let him down once again and Rahal was now in a lead he would never relinquish. Rahal and the Truesports team had their second straight PPG Cup title.

'It's nice to win a title, but to clinch it by winning the race makes it more special,' Rahal said after the race. 'Last year, we dedicated the title to Jim Trueman. This one is for us.'

Michael Andretti's victory in the season finale at Miami would come too late to make any difference.

For the seasons of 1984, '85, '86 and '87, the chassis had been an important choice. You literally could not win a CART race without a March or Lola chassis. We are talking about 63 consecutive races over a four-year span. Now that's domination.

In the years to come, the engine would become more of a key element to success. During the kit-car years of March and Lola, the Cosworth powered the winners of all but five of the 63 races between 1984 and '87. With the emergence of the Chevrolet and the competitive threat of the Porsche and Judd engines, there were more decisions to be made.

1987 CART CAPSULE

- Champion:** Bobby Rahal
- Race Winners:** Michael Andretti (4), Bobby Rahal (3), Roberto Guerrero (2), Mario Andretti (2), Emerson Fittipaldi (2), Rick Mears (1), Al Unser Sr. (1)
- Pole Positions:** Mario Andretti (8), Roberto Guerrero (4), Michael Andretti (2), Bobby Rahal (1)
- Rookie of the Year:** Fabrizio Barbazza
- Most Improved Driver:** Arie Luyendyk
- ARS (Indy Lights) Champion:** Didier Theys
- New Races:** Nazareth
- Notable Highlights:** Eight pole positions by Mario Andretti are most by non-champion in one season

Bobby Rahal leads the pack at Laguna Seca in the Truesports Lola-Cosworth en route to his third race victory of 1987, clinching a second consecutive PPG Cup in the process.



Art Flores

Below: Rick Mears practiced for the 1987 Indy 500 in the Penske-Chevy (shown here), but opted to run a year-old March-Chevy in that year's race.

Bottom: Derrick Walker was a member of Penske Racing for a number of years, serving as a chief mechanic and then team manager before joining the Porsche team in 1988.

IN THE MEANTIME, THERE WAS THE PENSKE

How good was the March chassis? Perhaps the best indicator came when Roger Penske decided that if he couldn't beat them, he would join them — at least for the time being. For Penske, the decision to switch came in 1984, although history shows it was not the radical departure one might suppose.

Penske had gone the customer car route during his first years in Champ Car racing, purchasing Eagles, Lolas and McLarens before having Geoff Ferris design the first Penske Champ car, the PC5. Actually, the PC5, which was used for a limited time in 1977, strongly resembled the McLarens raced by the team that season. It was the PC6, which clearly shared a common ancestry with the Ferris-designed PC4 Formula One car, that began the Penske chassis dynasty in Champ Car racing with the 1978 championship.

The title was the second straight for Tom Sneva, but he had failed to score a victory during the 1978 season and would be released at year's end. Meanwhile rookie teammate Rick Mears had shown everyone he was the driver of the future with victories at Milwaukee, Atlanta and Brands Hatch.

For 1979, Penske signed Bobby Unser to partner Mears and the two drivers dominated the new CART series with Mears winning three races and the title and Unser scoring six victories. Although Mears started off the season in a PC6, the new semi-ground-effects PC7 was soon setting the pace.

Ironically, although Penske had been the team to beat since its arrival in Champ Car racing in 1969, it had not begun to dominate until 1979.

Derrick Walker, now a CART team owner but once a chief mechanic and later the team manager for Penske Racing, recalls that Penske's involvement played a role in the team's success during those years.

'At one point, Roger was getting into a lot of new businesses and he simply wasn't able to put his energy into the race program,' Walker pointed out. 'When CART was beginning to become a reality, he found it was best to focus his energy again.'

'A lot of people don't realize



David Hutson



Art Flores

that from the end of 1983 to the beginning of 1988, Penske never had one successful car. There were some models we built that never made it to the track. I can remember when we flew over to March and bought some cars for the 1984 season. Then Rick Mears went out and won Indy in a March that year.'

Although Penske would campaign Marches from 1984 through 1987, the intention was always to produce a winning Penske chassis. For the 1986 season, the team developed the PC15, which was designed by Alan Jenkins and would be mated to the new Chevy Indy V-8 engine. Driven by Al Unser Sr., the car showed promise but suffered from reliability problems.

It was a similar story with the PC16 designed by Jenkins for 1987. The car was considered a failure and abandoned in favor of the more reliable March 86C.

Former Lola designer Nigel Bennett then replaced Jenkins and his first creation, the PC17, put the Penske chassis back in the win column with six race wins and the CART title for Danny Sullivan in 1988.

Penske chassis would continue winning well into the 1990s, setting new standards during the 1994 season when the team captured 12 of 16 races and the title for driver Al Unser Jr. Unser, in his first year for Penske, won eight times. Teammate Paul Tracy won three events and Emerson Fittipaldi won once. The trio also captured 10 pole positions and finished 1—2—3 on five occasions. Right behind Unser in the final standings were Fittipaldi and Tracy.

Interestingly, Penske chassis would win only eight races over the next four years, but because of the team's history and reputation, a comeback is predicted with the start of each new season. Time will tell if future Penske chassis will dominate. In the meantime, a rumor persists: Penske may be purchasing a Reynard . . .

The Penske-Cosworths of Al Unser Sr. (foreground) and Rick Mears are lined up during practice for the 1983 Indianapolis 500. Although Unser and Mears would finish second and third, respectively, to Tom Sneva, the Penske team would switch to March chassis for 1984.



Right: With the dominance of CART by foreign-built chassis from March and Lola, the days were numbered for American chassis like the 1981 Patrick Racing Wildcat of Mario Andretti shown here.



Art Flores

THE FLIGHT OF THE PHOENIX, AND OTHERS

With ground effects and carbon-fiber chassis concepts making their respective marks in Formula One, it was only natural that Champ Car racing would be heavily influenced in those areas by European manufacturers already familiar with both.

Over the years, the chassis most widely used have been March, Lola, Reynard and, to a lesser extent, Penske, which has rarely sold its new cars to customers. Today, CART teams also have the American-built Swift available for purchase and Dan Gurney is hoping to be able to sell Eagles again.

A quick look at the record books will also reveal some CART races won by teams using McLaren, Chaparral and Wildcat chassis.

McLaren's last year in Champ Car racing was 1979, the first year of CART competition. Johnny Rutherford won both 125-mile heats at Atlanta to record the final Champ Car victory for McLaren. At the time, however, McLaren was undergoing reorganization with Ron Dennis and his partners ultimately taking over the team and concentrating solely on Formula One. When Tony Bettenhausen finished a close second to Pancho Carter in the inaugural Michigan 500 in 1981, it was the last competitive race for the McLaren.

The Chaparral's Champ Car career was brief but spectacular. The first true ground-effects chassis in Champ Car racing when it appeared in 1979, the Chaparral 2K carried Johnny Rutherford to the CART title in 1980 but by 1981 it was apparent that the car was becoming obsolete. Midway through the following season, Rutherford's owner Jim Hall purchased a March and then went on a hiatus from racing for the next eight years.

As mentioned in a previous chapter, Wildcat was the name given to a series of cars built for team owner Pat Patrick. The first Wildcat appeared in 1975 and was driven by Patrick drivers Gordon Johncock and Wally Dallenbach. When Johncock won the inaugural CART race at Phoenix in 1979, however, he was actually driving a Penske.

Of course, Patrick was not finished with the Wildcat racing car idea and for 1981, he commissioned Gordon Kimball to design a ground-effects Wildcat chassis. With Johncock and Mario Andretti handling driving duties, the car was competitive in its first season. The new Wildcat claimed its first victory at Indianapolis in 1982 with Johncock edging out Rick Mears. Johncock triumphed again the following weekend at Milwaukee and also won the Michigan 500 the following month.

For 1983, Kimball designed an updated version of the car and Johncock opened the '83 season at Atlanta with a convincing win. But following a series of accidents involving Johncock and new teammate Johnny Rutherford, Patrick abandoned the program and purchased a March for the 1984 season.

Those were the most successful of the chassis in CART's early years. One other chassis manufacturer, Phoenix, produced a ground-effects car that showed a little promise. Built in England, Phoenix chassis were purchased by Jerry O'Connell's Sugariprune team and Patrick Racing for the 1980 season. Tom Sneva qualified O'Connell's Phoenix eighth fastest at Indianapolis before destroying the car in a practice accident.

Suspension failure was blamed and Sneva jumped into the team's backup McLaren and finished second in the race after starting 33rd. Sneva returned to the car after Indianapolis and scored its first and only victory when he won the season finale at Phoenix.

David Hutson



Above: Tom Sneva gave the British-built Phoenix-Cosworth its most successful 'flight' when he captured the 1980 season finale, appropriately at Phoenix International Raceway.

AN AMERICAN DREAM

There have been many other attempts during CART's twenty-year history to develop competitive chassis for the series, some more successful than others.

Surely, you recall hearing about the Galmer and the Truesports? Remember the Longhorns, the Lightnings and the Kingfish? Did you know that Ligier, the F1 team, tried a Champ Car program? Did you know that another F1 team, Theodore, built a Champ Car chassis?

What about the car they called the Rattlesnake? How about the Argo? Ever see the DSR? Did you know about the Kraco? Then there was the Schkee — or was it a revamped Lightning?

Actually, in its short career, the Galmer enjoyed considerable success when you figure that it won two races, including Indianapolis, and enjoyed an incredible degree of reliability. Designed by ex-March engineer Alan Mertens and funded by New Mexico auto dealer Rick Galles, the Galmer was built in England where Mertens had established Galmer Engineering.

In 1992, Galles drivers Al Unser Jr. and Danny Sullivan drove in all 16 CART events. Unser captured his first win at Indianapolis, scored points in all 16 races and was in the top 10 on 15 occasions. He won the pole at Surfers Paradise and had 10 top-five finishes including six trips to the podium. He finished third in the points.

Sullivan won at Long Beach and scored points in 14 races. He recorded 11 top-10 finishes with five of those finishes in the top five. He wound up seventh in the points.

Unfortunately, Unser and Sullivan were never happy with the car and by year's end, the decision was made to abandon the project. For 1993, Galles would go back to Lolas. The Galmers were sold to Dominic Dobson, who qualified for three races that year.

The Truesports debuted in 1991 and was the first American-built Champ car since Dan Gurney's last Eagle in 1986. Built by the Truesports team, which had won the CART title in 1986 and '87, the car was designed by Don Halliday and benefited from extensive wind tunnel testing at a facility in Columbus, Ohio.

The program had promise. It had the organization of Steve Home as well as a winning heritage from Truesports. Halliday was, and is, highly regarded as an engineer. The driver was Scott Pruett, who was making a comeback after a serious test crash had forced him to skip the entire 1990 season. There was adequate sponsor backing from Budweiser.

The winning Galmer-Chevy of Al Unser Jr. gets cleaned up for the photographers following the 1992 Indy 500. Unser's victory was the second straight win for the Galmer and clearly the pinnacle of the car's short life.



Right: One foreign-built chassis that did not enjoy success in CART was the French Ligier, shown driven at Long Beach by Kevin Cogan in 1984.

Below: Chris Kneifel needed an extended rollbar to protect his 6-6 frame in the Primus-Cosworth during this 1983 CART event.



On its first outing at Surfers Paradise, Pruett brought the car home in fifth. That would be the high point of the first half of the season. By the end of the second half, many felt the Truesports might have become the best chassis in CART. The only problem was that it had the Judd engine, which lacked the horsepower of the all-conquering Chevy Indy V-8. The following season, Pruett continued to score points, although the car did not seem to be as strong as it had been in 1991.

For all practical purposes, the program came to an end in '92. Midway through the season, Home parted company with Truesports and Pruett became a free agent at the end of the year. By 1993, Truesports was also gone, having had its assets purchased by the new Rahal-Hogan team. The car was renamed the RH-1 and driven in six CART races by Mike Groff before the project was permanently abandoned.

Elsewhere in this book (Chapter Two), you can read about Bobby Hillin's Longhorns that came so close so many times with Al Unser Sr., but failed to win a race. After exhausting a personal fortune designing, building and racing the cars, Hillin called it quits. However, his final car, the Longhorn LR03, did get a reprieve.

In 1983, Chris Kneifel, a young racing car driver from Chicago, purchased the car. Kneifel, who stood 6-6, formed the Primus Racing Team and after a time, the car became known as the Primus. Because of Kneifel's height, the car featured an extended rollbar.

The Lightning was the car constructed for long-time owner Lindsey Hopkins. In terms of CART competition, there were flat-bottomed Lightnings that had been designed by Roman Slobodyski and a ground-effects Lightning designed by Dave Klym. Both cars were as sleek as they came, but unfortunately, neither chassis made it to the winner's circle.

The Kingfish was actually an Eagle look-alike from the mid-1970s, but former driver Norm Hall decided to



Right: One of the best chassis during the 1991 season was the Truesports-Judd, shown here with driver Scott Pruett. The Truesports was the first American-built chassis in CART since 1983.



try CART racing on a limited budget and took the car to several races with Phil Krueger driving. Hall's Kingfish also had a stock-block Chevy engine.

Two programs with strong ties to F1 tried and failed — miserably. In 1984, Ligier decided to launch the first French effort at Indianapolis since the Peugeot and Delage teams from pre-World War I days. The car was driven by Kevin Cogan and strongly resembled the Ligier Formula One car. Unfortunately, the car was woefully slow and never came close to reaching a competitive speed. The project was then shelved.

The Theodore Champ car, designed by future Penske designer Nigel Bennett and funded by Hong Kong businessman Teddy Yip, bore a strong resemblance to the 1983 March. Although Tom Sneva and Kevin Cogan took practice laps in it at Indy in 1983, the car actually made one race appearance in 1985 — at Portland, where Brazilian driver Chico Serra started 26th and finished 25th. Afterward, Yip announced he was abandoning the project.

The Rattlesnake was the product of a team called Rattlesnake Racing, which was headquartered in Florida. The car was designed by Roman Slobodyski, who also designed the Interscope, the Lightning and the 1972 Eagle. This car stood out only because of its distinctive high-sided sidepods that were reminiscent of the Interscope.

And then there was the Argo. It made its debut with Bill Alsup at Indianapolis in 1983. Unfortunately, the car arrived too late for Alsup to get it up to an acceptable speed. The car was designed by Jo Marquart, a former McLaren engineer who had designed the Argo Super Vee Alsup had used to win the 1978 championship.

'We made progress every time on the track,' Alsup said in an interview for the Indianapolis 500 Yearbook. 'We were faster and we made gains, but we were just a day late and a dollar short.' Alsup would race it the remainder of the CART season and in selected events in 1984 before retiring as a driver at year's end.

The DSR-1 was Doug Shierson's lone attempt to have his own car. The car was designed by ex-March engineer Ian Reed and resembled a more compact version of the current March.

For a time, it seemed like a promising project and Shierson was able to sign Johnny Rutherford and Danny Sullivan as his drivers. Unfortunately, Rutherford suffered a major testing accident in one of the cars and that put the program behind as the team prepared for Indianapolis. Neither Rutherford nor Sullivan could get up to speed in practice for the 500.

And then there was the Kraco, designed by Don Halliday and tested twice early in 1986 by Pete Halsmer at Laguna Seca and Phoenix. Although the project showed some promise, Kraco made the decision to go with the March 86C, which proved to be one of the best Champ cars of all time (it won 14 of 17 races in 1986 and Indianapolis the following year).

As for the Schkee, it did make the 1981 Indy 500 field with Can-Am veteran Tom Klausler at the wheel. Powered by a turbocharged Chevy and strongly resembling the Lightning chassis, the car started 30th but finished only 29th after being sidelined by gearbox problems.

À LA CART

AN EARLY PREVIEW OF RACING'S TIRE WAR?

The 1987 season produced something of an oddity for the period. For the first time since 1974, Champ Car racing included Goodyear and Firestone. No, we aren't speaking of the tires.

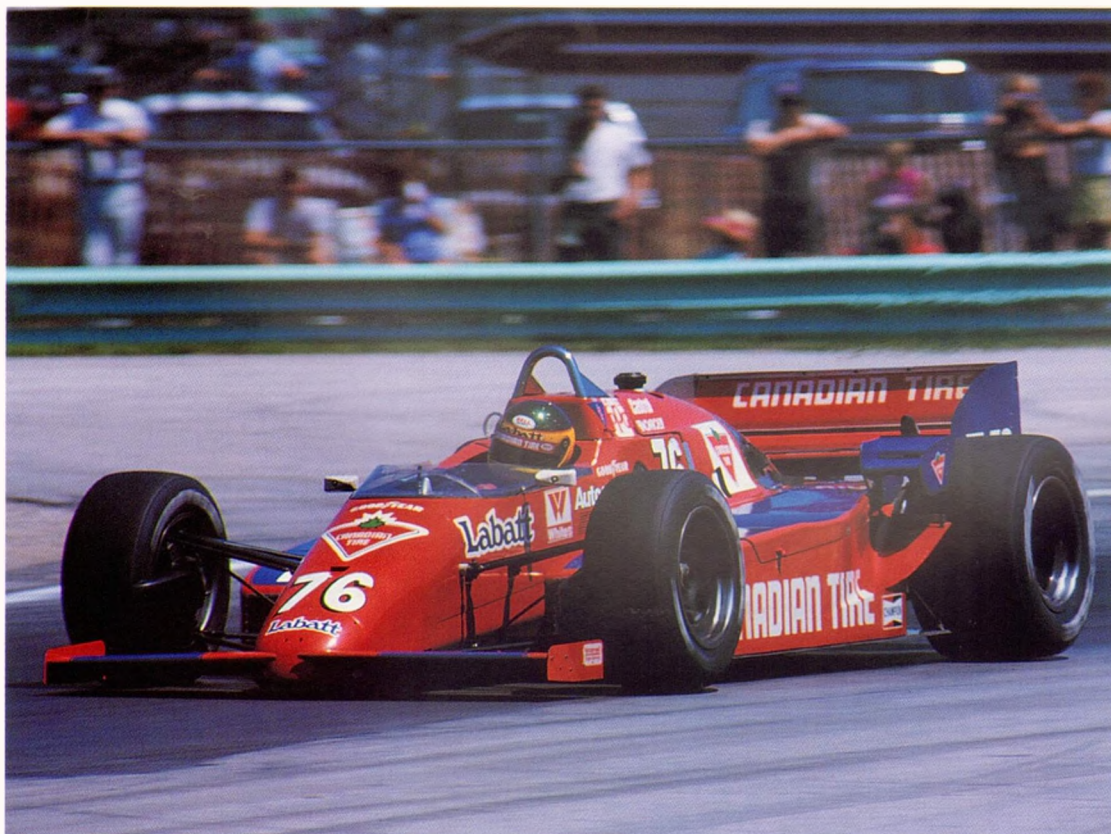
During the 1987 season, a driver named Scott Goodyear made his first CART start while a driver named Dennis Firestone made his final CART starts (he decided to retire after being injured at Indianapolis). Ironically, neither driver was related to the families whose ancestors had started the respective tire companies.

UNCLE JACQUES WAS RACING'S LITTLE BIG MAN

Jacques Villeneuve, one of the smallest CART competitors, drove a specially altered March for the Canadian Tire team. The car was actually shortened and tailored around the diminutive Villeneuve. However, after a pair of alarming practice crashes at Indianapolis in 1985, Johnny Parsons Jr. was asked to substitute for Villeneuve.

The selection of Parsons was prompted by a couple of factors. In addition to the fact that he was a highly experienced competitor at Indianapolis, it certainly helped that he was the same size as Villeneuve. Parsons was able to qualify for the 500 and finished fifth, equaling his best Champ Car finish. Villeneuve then returned to the car and ended up winning at Elkhart Lake (left).

There is a footnote to this story. In the cockpit was a memorial of sorts to his brother, Gilles, who had been killed during practice for the 1982 Belgian Grand Prix. Affixed to the side of the cockpit was an aluminum plate with Gilles' likeness etched into it.



1984

April: Future CART champion Emerson Fittipaldi makes CART debut by finishing fifth at Long Beach.

May: Teddy Yip announces he is closing down his Theodore Champ Car program.

June: Team Lotus announces it will design and build chassis for two-car effort for 1985 season.

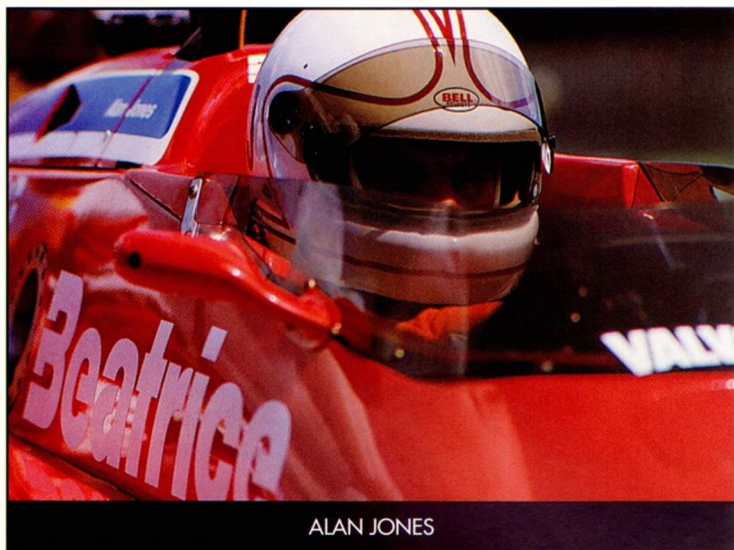
July: Future CART champion Danny Sullivan scores first CART victory by winning at Cleveland.



DEREK DALY

Art Flores

September: Rick Mears suffers serious foot and leg injuries in practice crash at Sanair; Derek Daly seriously injured during Michigan 200. In light of rash of accidents involving foot and leg injuries, USAC and CART make separate announcements concerning rule changes governing boost and chassis construction. CART rule change mandates extension of front bulkhead; USAC ponders return to flat-bottom chassis.



ALAN JONES

David Hutson

November: Mario Andretti wins CART title, first Champ Car championship in 15 years.

December: Danny Sullivan signed by Roger Penske.

1985

January: Al Unser Jr. signs with Shierson Racing after Winkelmann Lotus project fails to attract sponsorship package. CART owner Carl Haas announces plan for Formula One program involving Lola, Ford Motor Company and Beatrice, sponsor of his CART team.

April: Future CART 'Rookie of the Year' Stefan Johansson joins Ferrari F1 team.

July: Suggested F1 rule changes governing turbo boost restrictions cause Ferrari to consider CART program. Michigan 500 postponed following practice accidents related to failure of new radial tires.

August: Emerson Fittipaldi scores first CART victory and first oval-track win in Michigan 500. Former F1 World Champion Alan Jones named to replace Mario Andretti after Andretti is injured in Michigan 500. Jones then finishes third at Elkhart Lake but relinquishes seat when Andretti returns for Pocono 500. Bobby Rahal is rumored to be considered as driver of possible Ferrari CART program; rumor gains credibility when Rahal and Truesports March run at Ferrari test track at Fiorano.

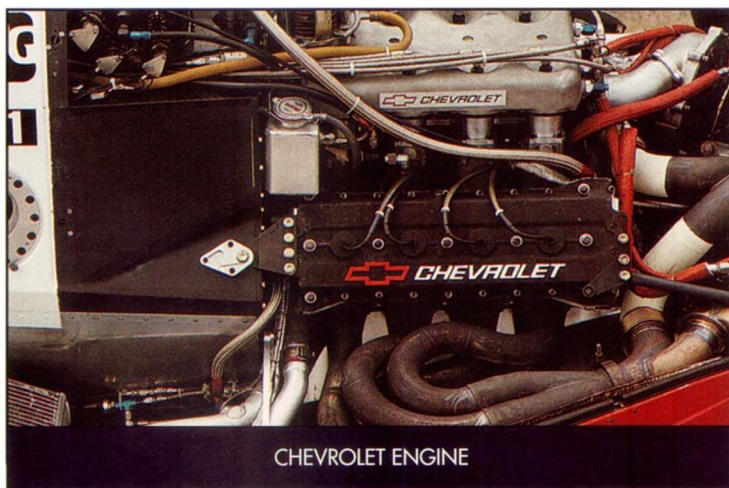
October: Future CART driver and race winner Mauricio Gugelmin wins British F3 title.

1986

January: American Racing Series announced by Pat Patrick.

February: Beatrice, sponsor of Haas-Lola F1 team and Newman/Haas CART team, announces withdrawal from racing.

April: Ilmor Engineering's Chevrolet Indy V-8 makes debut at Phoenix, mated to new Penske PC15 chassis. Driver Al Unser Sr.



CHEVROLET ENGINE

David Hutson

qualifies respectable seventh but finishes 18th after brushing the wall and sustaining suspension damage.

May: John Paul Jr., winner of the 1983 CART Michigan 500, draws five-year prison sentence for racketeering and holding a false passport. Bobby Rahal wins Indy 500 after passing Kevin Cogan two laps from the end.

June: Jim Trueman, owner of the Truesports CART team and the Mid-Ohio track, succumbs to cancer 11 days after Rahal's win at Indianapolis. Highly respected engineer/designer Adrian Newey leaves March to join Haas-Lola F1 team. Future CART team owner Al Holbert wins 24 Hours of Le Mans, co-driving Porsche with Hans Stuck and Derek Bell. Honda engine makes CART debut with Geoff Brabham driving Lola-Honda for Galles Racing at Portland.

August: Rick Mears establishes world closed-course record by winning Michigan 500 pole position at speed of 223.401 miles per hour in Penske Racing March-Cosworth.

September: Rick Mears gives Chevrolet Indy V-8 engine its first CART pole position after recording quickest time in qualifying at Sanair.

October: Fabrizio Barbazza becomes first ARS champion.

November: In a private test session, Rick Mears sets a world closed-course record at Michigan International Speedway in a March-Chevy with a lap of 233.934 miles per hour. The lap was considered unofficial because it came during a test session. Mears also benefited from higher-than-allowable boost.

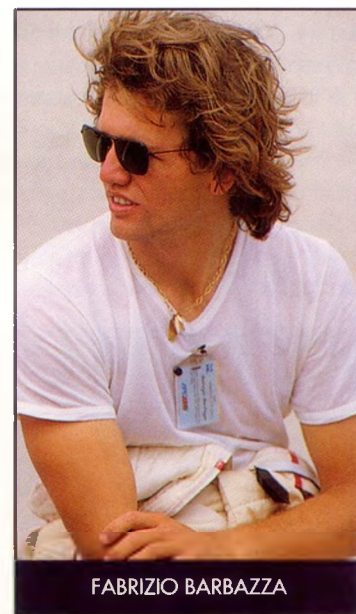
1987

January: CART chassis manufacturer March announces plan to return to Formula One.

April: Mario Andretti gives Chevrolet Indy V-8 its first CART race victory after starting from pole position at Long Beach.

May: Two-time CART champion Al Unser Sr. wins fourth Indianapolis 500.

August: Galles Racing announces Al Unser Jr. will rejoin team in 1988. Future CART race winner John Andretti, son of Mario's twin brother Aldo, makes his debut at Elkhart Lake. Signed by Mike Curb to replace Tom Sneva, the latest member of the Andretti clan in CART competition qualified 15th and finished a very respectable sixth.



FABRIZIO BARBAZZA

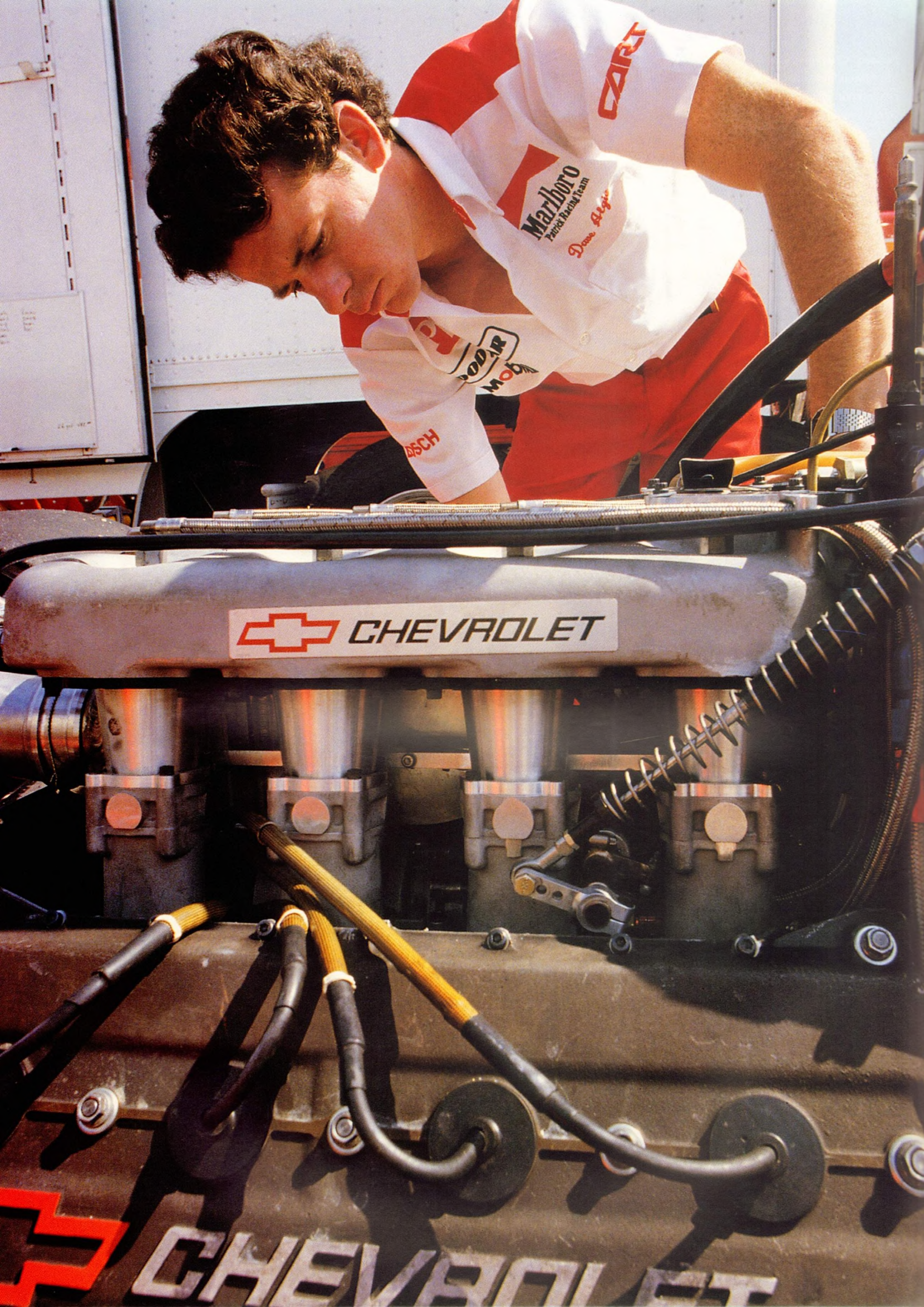
Art Flores

September: Roberto Guerrero, winner of 1987 CART races at Phoenix and Mid-Ohio, suffers serious head injury in test accident at Indianapolis. Driver Raul Boesel wins FIA Sports-Prototype World Championship while on temporary hiatus from CART. Porsche unveils CART program during Nazareth weekend.

October: Porsche CART car makes debut with Al Unser Sr. at Laguna Seca, qualifying 21st and finishing 24th. Bobby Rahal wins at Laguna Seca to clinch second straight CART title for Truesports team. Rahal also wins first Marlboro Challenge at Miami, an exhibition race for the top 10 in the point standings held the day before the season finale.

Roberto Guerrero, wife Katie and son Marco find second place little consolation after an overheated clutch cost him a chance of victory in the 1987 Indianapolis 500.





THE BOWTIE BRIGADE: THE CHEVROLET ENGINE ARRIVES

OUTSIDE of the Hall of Fame Museum at the Indianapolis Motor Speedway is a bust of Louis Chevrolet inscribed with the words: 'Never Give Up.' Somehow, these words seem fitting when you look at the careers of Danny Sullivan and Emerson Fittipaldi, the men who captured the CART championship in 1988 and 1989, respectively. There is even a bit of coincidence involved when one considers that each drove cars powered by Chevrolet racing engines.

History records that Louis Chevrolet did little more than lend his family name to the enterprise which was to make it world famous. Chevrolet had been hired by a businessman called William Durant to design cars to be marketed under the Chevrolet name. However, when he objected to a particular model that Durant wanted to sell as a Chevrolet, the two parties quarreled and split.

Unfortunately for Chevrolet, Durant owned the rights to the name and continued to produce Chevrolet automobiles without the aid of Louis Chevrolet. Chevrolet would go his own way and find some success with his Frontenac automobiles.

Nevertheless, Chevrolet would undoubtedly be proud that his family name became synonymous with winning. And as an avid racer himself, Chevrolet would have been equally proud of the two Chevy banner carriers who captured consecutive national championships in 1988 and 1989.

Of course, before taking a look at those two champions, we must look elsewhere first. Engines bearing the Chevrolet name had won Champ Car races prior to the arrival of the Chevy Indy V-8 that would prove to be so successful in CART racing. The first victory came in 1969 and another followed in 1981. These winning engines were stock blocks, however, while the Chevy Indy V-8 was a purpose-built racing engine.

The story of the Chevy Indy V-8 engine begins in England where a pair of engineers named Mario Illien and Paul Morgan decided to pool their talents and form a company that would specialize in designing and producing racing engines.

Illien and Morgan had met in April of 1979 when Illien joined the staff of Cosworth Engineering, whose DFX engine was to dominate the CART series over the next few seasons.

Morgan had been raised in England and became involved in automobiles at an early age. His father, Brian, operated a business that restored vintage cars. For his 15th birthday, the younger Morgan was given a 1904 De Dion Bouton in serious need of restoration.

The youngster restored the car and as he became older, he began to compete in hillclimbs and sprints. In 1970, a magazine article on Cosworth interested him enough for him to apply for a job with the company. He was hired that year and in 1976 he was assigned to Cosworth's Indy engine project to look after the necessary engineering.

Illien was born in Switzerland and even though his parents did not own an automobile, he developed an interest in them as a boy. At age 16, he became an apprentice draftsman and later on, he went to engineering school where he took courses in automotive engineering.

In 1971, he joined Jo Bonnier Racing. Bonnier, a Swede, had moved to Switzerland and operated his endurance sports car team there. Unfortunately, Bonnier was killed during the 1972 24 Hours of Le Mans. Illien went back to Hans Funda, the man he had worked for prior to joining Bonnier.

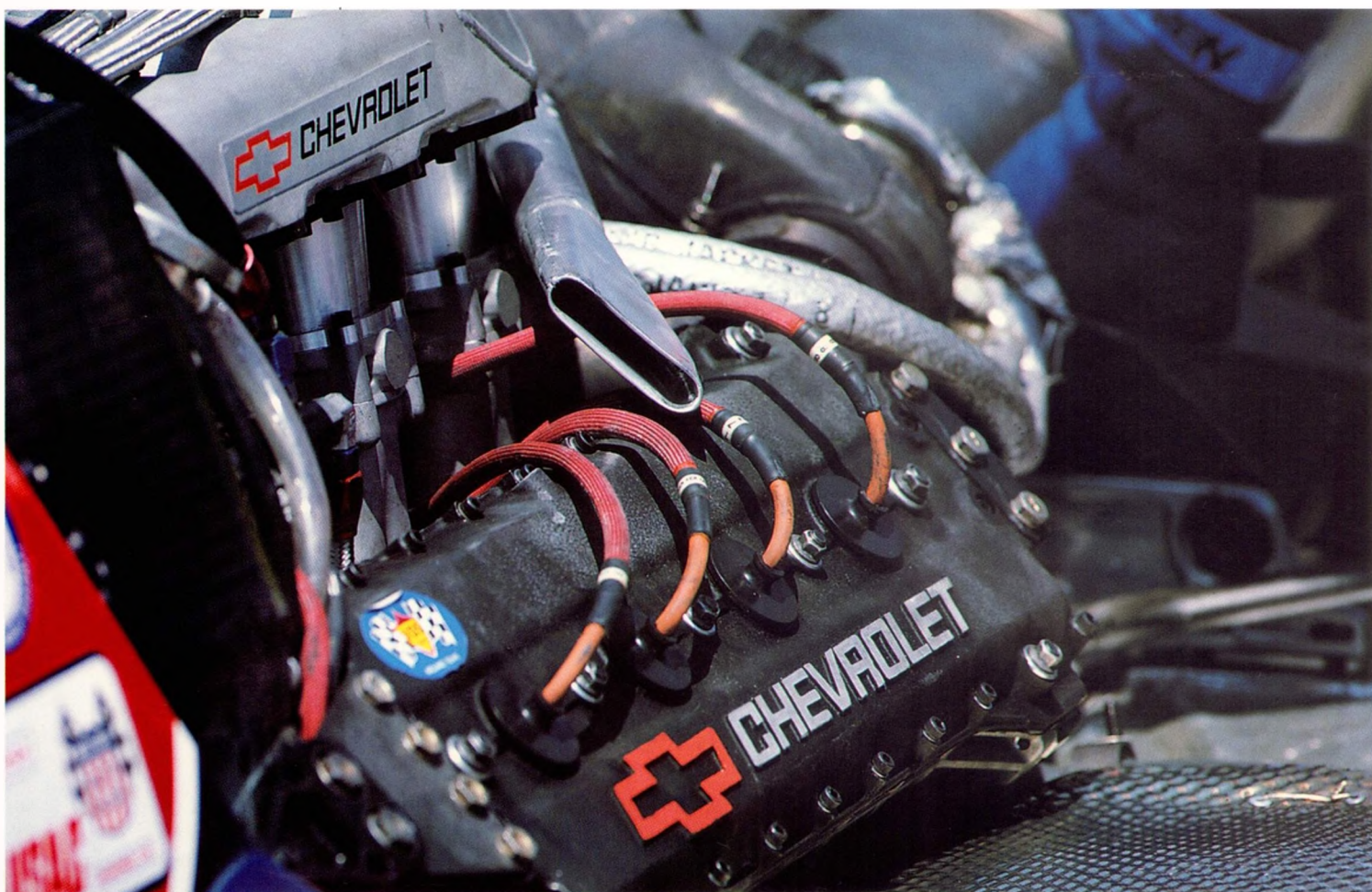
Funda owned a company that rebuilt racing engines. During his second stint with Funda, Illien would design his first engine, the ROC. Over the next few years, Illien would be involved in a number of projects, including the design and construction of a solar heating system for his father's house.

In 1979, Illien got an interview with Cosworth co-founder Keith Duckworth. The interview came about at the behest of Heini Mader, who had run Bonnier's team and had seen Illien's potential and talent. In April, he was hired for the job.

By 1983, however, Morgan and Illien found themselves frustrated with the political atmosphere at Cosworth. Illien had been assigned to Cosworth's project for a 1.5-liter turbocharged Formula One engine. Because the engine would not run until 1984 and it was apparent that turbos would soon be outlawed, Illien could see no future in such a project.

At the same time, Morgan felt that his proposed improvements for the Cosworth DFX were not receiving enough consideration from the management.

Opposite: A member of the Patrick Racing crew checks out the Indy Chevy V-8 mated to the team's 1987 March. Patrick was one of three teams to use Chevy power in 1987.



David Huxton



LAT Photographic

Top: After coming so close to victory in the Indianapolis 500 in 1987, the Chevy Indy V-8 was the dominant powerplant on its return trip to the Speedway in 1988.

Above: Mario Illien (pictured here) joined forces with Paul Morgan to create the Ilmor Engineering firm that would quickly make its mark in CART competition.

As Illien would point out in *Prime Movers*, Karl Ludvigsen's book on Ilmor, 'Cosworth had such a monopoly in Indy car racing it meant that effort in the project was not all that high.'

Morgan had been considering going on his own and when Illien confided that he was considering leaving Cosworth, both parties began a dialogue. They decided they would start a company with Illien designing the engines and Morgan running the business.

They had one major problem despite their good intentions.

'Our pockets were empty, but our heads were full of good ideas. We needed a customer,' Illien recalled in the Ludvigsen book.

Morgan immediately thought of Roger Penske. Morgan was casually acquainted with Penske, who had been a Cosworth customer since 1977. Surprisingly, Penske was interested from the start.

On October 13, 1983, Morgan and Illien sent Penske a 30-page handwritten proposal outlining their plans, philosophies and the projected costs of the project. On November 3, Morgan traveled to the U.S. to meet with Penske and his attorney, David Atlas.

Later that month, Atlas traveled to England and showed Morgan and Illien a contract. Illien was especially perturbed at the restrictions in the contract. They had viewed Penske as a customer and perhaps even a parts agent. Penske had other ideas in mind — he wanted to be a partner.

On November 22, Morgan and Illien traveled to the U.S. to meet with Penske, who learned they were not interested in his initial contract offer. Penske agreed to start over and ultimately the three men came to terms. Penske gave Morgan and Illien a check for \$130,000 to start the company and began a search for a backer. He also informed them that if the engine did not work properly or if he could not find a backer, he would have to close down the company. They understood.

Using their own legal help, they were able to acquire a company named Hubview Limited and renamed it Ilmor. The 'Il' represented Illien while the 'Mor' was for Morgan.

One of Illien's first tasks was to design a logo. Morgan, meanwhile, found a suitable property in Brixworth to locate the new company. Illien also set about designing the engine, which would be designated the 265A, which referred to the engine's capacity of 2.65 liters.

Upon his agreement with Illien and Morgan, Penske immediately began looking for a backer. In December, he contacted Jim McDonald, the president of General Motors. McDonald would set things in motion and following a number of meetings, Ilmor and Chevrolet signed a 10-year agreement. Three days later, on October 15, 1984, Chevrolet announced the news at the SEMA show in Las Vegas.

On May 16, 1985, the first engine ran on the dyno for the first time. In August, Rick Mears tested the engine in one of Penske's 1984 Marches at Bruntingthorpe, an airfield near Brixworth. Mears was suitably impressed.

'It was definitely more powerful than the Cosworth,' Mears said at the time.

Because Penske was a principal partner in Ilmor, the decision was made to give his team exclusive use of the engine for the 1986 season. A total of 20 engines would be built. Penske, in turn, decided to build cars again and commissioned Alan Jenkins to design the Penske PC15.

Unfortunately, developing a new car and a new engine proved troublesome. Despite reliability problems, the engine was competitive. Al Unser Sr. qualified the car fifth at Indy although he would retire from the race with clutch problems.

Additional problems plagued the engine at Milwaukee and the Meadowlands and after a two-race hiatus, Penske decided to try the engine in one of his March 86Cs. In testing, Mears ran laps in excess of 222 miles per hour.

For the Michigan 500, Unser returned and qualified the Penske March-Chevy with the second fastest time. Clutch problems again plagued the car. At Pocono, Unser was running well until making contact with Ed Pimm.

After an unproductive race at Mid-Ohio, Mears put the Chevy on the pole at Sanair, this time with the PC15 chassis. Mears led the first 23 laps before retiring and placing 18th. Mears followed up with a second pole in the 250-miler at Michigan where he finally finished — in eighth place. A week later, Mears was on the podium after finishing third at Elkhart Lake.

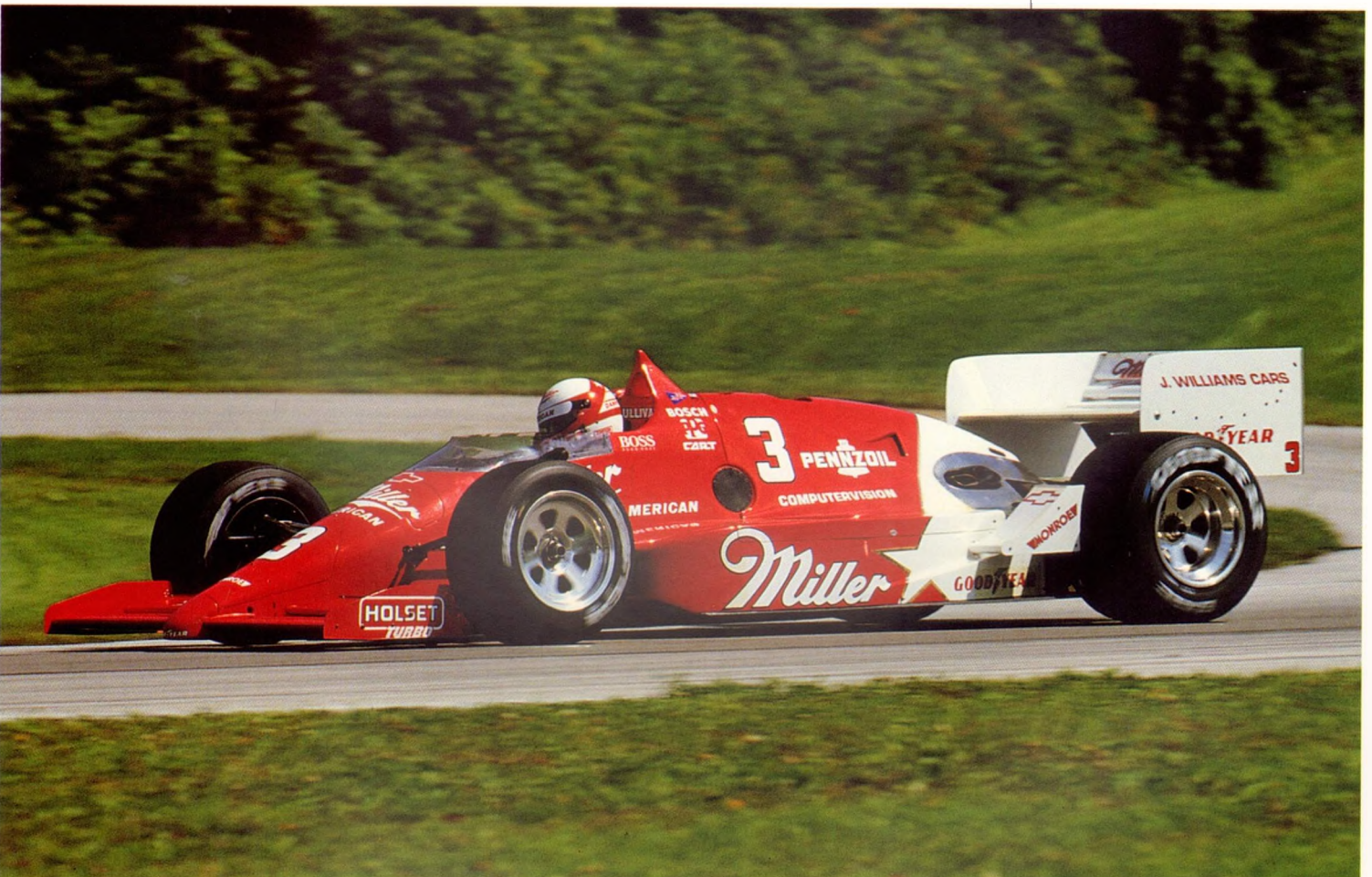
Mears rounded off 1986 with an unofficial record run at MIS. Using enough boost to generate 900 horsepower, Mears had a top lap of 233.934 miles per hour, establishing an unofficial world's closed course record.

For 1987, Penske was hopeful the new engine would prove competitive in Jenkins' latest chassis design, the PC16. One change for 1987 concerned the number of teams using the engine. It had been exclusive to Penske in 1986, but Ilmor was able to offer it to others in 1987. Newman/Haas ordered engines for Mario Andretti's Lola T87/00, as did Patrick Racing for its March 87Cs, which would be driven by Emerson Fittipaldi and Kevin Cogan.

While Penske drivers Mears and Danny Sullivan struggled at the season opener at Long Beach, Andretti captured the pole and the race to give Ilmor and the Chevy V-8 its first CART win. It had been 81 races since a Chevy had last won (at Milwaukee in 1981 with Mike Mosley) and it broke the incredible streak by Cosworth.

Below: Danny Sullivan spent most of 1987 in a 1986 March-Chevrolet while Penske Racing's engineering department worked on a new Penske chassis that would dominate in 1988.

Overleaf: Rick Mears takes a break during practice at Indianapolis in 1988 to reflect on a month of May that would see him win his fourth pole and third Indy 500.



David Hutson



PENNZOIL

217



Opposite: Following a long struggle to establish himself, Danny Sullivan made the breakthrough during a successful season with Doug Shierson's team in 1984 and went on to win the PPG Cup with Penske Racing four years later.

By Indianapolis, it became apparent that the new Penske chassis was not going to make it. Newly signed Penske driver Danny Ongais destroyed his car in practice and Mears decided to run a March 86C for qualifying. Sullivan qualified his PCI6, but decided against racing it. Penske withdrew the car and Sullivan requalified, this time in a March 86C. Like Mears, Sullivan's car had been fitted with the Chevy V-8.

Reliability problems plagued all five Chevy starters and ironically, the race was won by Al Unser Sr. in a Penske-owned March-Cosworth that had been pulled from show car duty for the race. There had not been enough time to fit Unser's March with a Chevy.

Fittipaldi would give the Chevy its next two victories at Cleveland and Toronto and Mears won the Pocono 500, still driving a March-Chevy. Mario Andretti then won easily at Elkhart Lake to give Chevy its last win of 1987.

Domination would come very soon.

In fact, Chevy-powered cars would win the first nine races of 1988, and following Bobby Rahal's Pocono 500 victory (which would be the Judd engine's only CART win) there would be victories in 52 of the next 53 races.

There would also be the first PPG Cup championships for Ilmor and Chevrolet, courtesy of the capable Messrs. Sullivan and Fittipaldi.

Sullivan and Fittipaldi delivered an air of glamour as PPG Cup champions, but each took a different route to winning his title.

For John Daniel Sullivan, Chevrolet's admonition to persevere applied not only to how he started in racing, but how he became a top driver after years of apprenticeship. Unsure of what he wanted to do in life, Sullivan tried a variety of jobs including that of New York City taxi driver.

It took the persuasion of a Sullivan family friend, Dr. Frank Faulkner, to put Sullivan on his life's course. Faulkner convinced Sullivan that auto racing might be fun and the young Kentuckian found himself moving to Great Britain, where he would work for the Tyrrell Racing Organisation while competing in Britain's ever-popular Formula Ford series. The year was 1971 and it would take Sullivan several seasons to reach the top.

After a successful Can-Am series campaign in 1981, Sullivan was signed by the new Forsythe Racing team to compete in the 1982 CART PPG Cup series. Sullivan quickly made his mark by finishing third at Atlanta, his first race. That finish was the best debut by a rookie since CART's formation and Sullivan's feat would not be topped until 1993 when Nigel Mansell won at Surfers Paradise in his first CART start. The third-place finish at Atlanta would be the highlight of Sullivan's season and for 1983, he returned to Europe to race in Formula One for Tyrrell.

With a fifth place at Monaco as his top finish, Sullivan returned to CART for 1984 to drive for Doug Shierson, whose team planned to campaign a new Shierson chassis, the DSR-1 designed by former March engineer Ian Reed. Unfortunately, the DSR-1 was unsuccessful. Faced with the prospect of missing that year's Indianapolis 500, Shierson purchased a new Lola chassis and Sullivan safely qualified. In the race, he launched himself over the back wheel of the car driven by Teo Fabi, who had slowed due to Patrick Bedard's accident. With his front suspension seriously damaged, Sullivan was out of the race. Despite the setback Sullivan's career was about to take off.

First, he won at Cleveland. Then he added a second win by capturing the Pocono 500. Finally he won on the short oval at Sanair, near Montreal. Sullivan wound up with nine top-10 finishes and was fourth in the final point standings.

Considered one of the hottest drivers in the series, Sullivan was signed by Roger Penske for 1985.

'Frank Faulkner, who really was Danny's mentor from Louisville, always communicated to me about what Danny was doing, and a year ago, Danny came to the Speedway and drove for Doug Shierson,' Penske recalled. 'As the season rolled out, we started to realize that this was the guy to beat. He won the Cleveland race.

'Then we went to Pocono and I felt that Rick [Mears] was as hot a guy on the Pocono track as anyone and Sullivan beat us fair and square. Then we went up to Sanair, a place where nobody had raced, and Sullivan won the race [Mears had suffered serious foot and ankle injuries in a practice crash there].

'So fortunately for me, Sullivan was available at the end of the season and based on his performance, he got the quarterback job. I'll tell you with Rick hurt, it was tremendous because he spent from probably the middle of November on testing for us every single week somewhere, never complained about his schedule or anything else, and I guess he has run two or three thousand test miles for us.'

Sullivan would reward Penske's confidence by producing one of the most memorable performances in the sport's history to win that year's Indianapolis 500. Starting eighth, Sullivan moved up to challenge race leader Mario Andretti. On lap 120, he made his move, attempting a pass on the inside of Turn One. Sullivan almost made it, but spun, narrowly missing the wall and Andretti. With the yellow out for the spin, Sullivan was able to pit for new tires and when the race restarted, his pursuit of Andretti resumed.

'We had been running pretty good and my car was working,' Sullivan said in the post-race interview. 'I needed to get in front of him [Andretti] because the turbulence was quite bad and the car tended to push a little too much when I was behind him.



1988 CART CAPSULE

Champion: Danny Sullivan

Race Winners: Danny Sullivan (4), Al Unser Jr. (4), Emerson Fittipaldi (2), Mario Andretti (2), Rick Mears (2), Bobby Rahal (1)

Pole Positions: Danny Sullivan (9), Rick Mears (4), Michael Andretti (1), Emerson Fittipaldi (1)

Rookie of the Year: John Jones

Most Improved Driver: A.J. Foyt

ARS (Indy Lights) Champion:

Jon Beekhuis

New Races: None

Notable Highlights: Rahal win at Pocono is first and only one for Judd engine

'I had him going down the straightaway but not a real clean shot. Going in to [Turn] One, he went ahead and took his line and we were kind of side by side and I was down on the apron. As I started to come back up, I hit the little stripes, the painted line, and just looped the car and I thought that was all she wrote. It just spun around and didn't hit anything and all of a sudden, the smoke cleared. I was facing toward [Turn] Two and I just stuck it down a gear and took off.'

On lap 140, he again tried to pass Andretti on the inside of Turn One. This time the pass attempt was successful. Sullivan never surrendered the lead and went on to a 'spin and win' at Indianapolis.

'I knew I had a few more laps to pass him this time and I wasn't going to screw it up again,' Sullivan continued. 'I wanted to get by clean and I knew I could take him. It was just a matter of setting him up. These things are so critical that if you back out of that throttle almost an amount that you couldn't even tell sitting here — if you just kind of breathe it just a little — you lose all that tow going down the straightaway. Mario did that one time and I closed right up on him and got a tow off of Turn One. Also, I didn't let him push me down on the apron this time.'

Sullivan would go on to win the season finale at Miami and score two other podium finishes to place fourth in the final point standings. In 1986, he would win back-to-back races at the Meadowlands and Cleveland and score four other podium finishes to place third in the final standings behind Bobby Rahal and Michael Andretti.

In 1987, Sullivan's progress took a step backward. In addition to developing the new Chevy Indy V-8 engine, Penske Racing was trying to sort out the problems with its new PC16 chassis. Forced to switch back and forth between the March 86C and the Penske PC16, Sullivan saw his three-year streak of scoring CART race victories end. He could only muster three podium finishes and ended up ninth in the final standings.

Wanting to see his chassis achieve the success the Chevy engine was now enjoying, team owner Roger Penske made the decision to replace Alan Jenkins with Nigel Bennett. Bennett had been a race engineer for Firestone before working for a succession of Formula One teams including Hesketh, Ensign, Theodore and Lotus. More recently, Bennett had been the chief designer of Championship cars for Lola.

After being persuaded to join Penske, Bennett devised the PC17, a chassis that would make Champ Car history and carry Sullivan to new heights.

From the start of the 1988 season, it was apparent that the Penske chassis was going to be good. Rick Mears took pole position for the first round of the championship at Phoenix and ran away with the race until a collision with backmarker Randy Lewis eliminated him. Sullivan had already retired with oil pressure problems and Mario Andretti emerged as the race winner.

At Long Beach, Sullivan won the pole but was sidelined with engine problems 10 laps from the checkered flag. Mears started third and finished eighth. Al Unser Jr., now back with Galles Racing, won his first of four straight races at Long Beach.

What happened at Indianapolis would be historic. Joined by Al Unser Sr., the Penske team did something unprecedented in qualifying — they captured the entire front row. Mears took the pole (his fourth at Indy tying the record held jointly by Rex Mays and A.J. Foyt), Sullivan was second and Unser third.

In 71 previous Indy 500s, teams had placed two cars on the front row on 15 occasions. Penske had done it the most times by placing two cars on row one four times. Now it owned the entire front row as well as a place in the history books.

In the race, Sullivan jumped into the lead immediately and dominated the first half of the race, leading 91 of 100 laps. Unfortunately, Sullivan's ride ended on lap 101 when the right front wing broke while exiting Turn One and his car went into the wall hard. Sullivan was unhurt and teammates Mears and Unser went on to finish first and third.

Disappointed but unfazed by the incident, Sullivan began his assault on the title. He finished second at Milwaukee behind Mears and then won from the pole at Portland. Cleveland saw him win the pole and finish third behind Bobby Rahal and race winner Mario Andretti. At Toronto, he captured his third straight pole and finished second to Al Unser Jr. After placing fourth at the Meadowlands (also won by Al Unser Jr.), Sullivan won the Michigan 500, giving him a victory in each of the existing championship 500-mile races.

'Michigan really put the icing on the cake,' Sullivan would say. 'I felt that if we could keep going and keep steady, we could win the championship. We had a shot at it.'

Pocono produced what was to be a temporary setback for Sullivan. As he was battling Mario Andretti for the lead, both came to lap Dick Simon. Andretti and Simon made contact and spun. Sullivan had nowhere to go except the wall and was out of the race. Rahal went on to win the race and give the Judd its only CART victory.

Sullivan responded to the Pocono disappointment with pole positions and top-five finishes at Mid-Ohio and Elkhart Lake (both won by Emerson Fittipaldi) and then headed to Nazareth.

Although he did not know it at the time, the result at Mid-Ohio proved to be significant in the scheme of things. The 11 PPG Cup points (10 points for fifth place and one point for the pole) gave Sullivan a one-point lead in the championship over Al Unser Jr. It turned out to be a lead he would never surrender.

'When we went to Nazareth, I felt the best way to win the championship was to win the last three races and all of the poles,' Sullivan said.



He nearly got his trifecta. He won from the pole at Nazareth to take a commanding lead in the championship. He would wrap it up at Laguna Seca. Winning the pole by more than a second from Mario Andretti, Sullivan led 60 of 84 laps to win the race and clinch the title.

'This is the best,' Sullivan said in the winner's circle. 'It's so special. It was so hard this year — I only had two points after Indianapolis. The points for the pole positions helped keep me in the hunt, but I'll take these four race victories. Winning Indianapolis was great, but there is something special about a championship. It takes all year to do it. It's not just one race, the championship is a season-long deal.'

'Danny ran strong right from the beginning,' added Penske. 'He did a terrific job all season. He won four races and all of those poles. He deserves to be champion.'

With an insurmountable lead, Sullivan captured the pole in the season finale at Miami and finished fifth in a race won by Al Unser Jr. In the final tally, Sullivan had won four races, scored seven other top-five finishes and captured nine poles, the most ever in a CART season.

Sullivan's title was the first for Penske Racing since 1985 and the first for a Penske chassis since 1983. The PC17 had captured six victories and 13 poles out of 15 races. It was an even better year for Ilmor and the Chevy Indy V-8, which had won the title and 14 out of 15 races.

At the season-ending banquet in Miami, Sullivan received a tribute from his old family friend and mentor, Frank Faulkner. Faulkner told the audience of Sullivan's early days in racing and how he struggled to make it to the top. It almost made one think of Louis Chevrolet and his advice to 'never give up.'

One of the reasons behind Danny Sullivan's conquest of the 1988 PPG Cup title was the successful marriage of the new Penske PC17 chassis and the fully developed Chevy Indy V-8 engine.

Two-time F1 World Champion Emerson Fittipaldi came out of retirement in 1984 and the following year spent his first full season in CART at the wheel of Pat Patrick's March-Cosworth.



Art Flores

Emerson Fittipaldi's path to racing fame was considerably different from that of Sullivan.

The second son of a Brazilian motorsports journalist, Fittipaldi obviously got an early exposure to the sport. With older brother Wilson, he raced go-karts. Next the brothers raced Formula Vees, the single-seat racing cars that use a liberal amount of parts from Volkswagen Beetles.

The brothers even tried their hand at manufacturing, first making a racing steering wheel and then a Formula Vee, which they dubbed the Fitti-Vee. With wins and titles in all categories of racing in Brazil, the younger Fittipaldi set his sights on England and moved there in 1969.

Like Danny Sullivan, he eyed the Formula Ford circuit as the next step in his career. Unlike Sullivan, however, Fittipaldi quickly found success. By 1970, he had earned a test drive in a Formula One car with Team Lotus.

Fittipaldi did so well he was hired as the number two driver to Jochen Rindt and the young Brazilian found himself on the starting grid for the British Grand Prix. He finished eighth that day and two weeks later at Hockenheim, he scored his first World Championship points by finishing fourth.

But after Rindt was killed during practice for the Italian Grand Prix, Fittipaldi was elevated to number one driver. Because mechanical failure was believed to be the cause of Rindt's fatal accident, Team Lotus withdrew Fittipaldi's car from the Monza meeting and also skipped the next event on the schedule, the Canadian Grand Prix.

Fittipaldi's next race, only his fourth in Formula One, was the U.S. Grand Prix at the picturesque Watkins Glen circuit in upstate New York. Although Jackie Stewart dominated most of the race in the new Tyrrell, he did not win that day.

Fittipaldi, running third when Stewart's car began to experience problems, took over the lead when Pedro Rodriguez had to pit for fuel with eight laps to go. That gave the lead to Fittipaldi and the Brazilian went on to win the race.

Relaying the story to racing writer Gordon Kirby, Fittipaldi recalled: 'Going over the finish line, I saw for the first time Colin [Chapman] jumping and throwing his hat, something I'd seen him do for Jim Clark and Graham Hill and Jochen. And I kept saying to myself, "He's doing that for me. I won the race. I won the U.S. Grand Prix!" It was unbelievable.'

It was also the first of 14 career Formula One victories. What's more, Fittipaldi's victory also clinched the world title for his fallen teammate, giving the series its first posthumous champion.

Two seasons later, Fittipaldi would become the youngest World Champion and in 1974 he became champion for a second time.

Interestingly, Fittipaldi now turned his attention to the Copersucar project, Brazil's first Formula One car. The team would subsequently race under the Fittipaldi banner but by the end of 1982, it had been forced to close. After spending several million dollars trying to develop a series of uncompetitive cars over a seven-year period, Fittipaldi had only a couple of podium finishes to show for his efforts. He had retired as a driver in 1980 and now devoted his energies to business pursuits. And in the years that would follow, Fittipaldi would show the world that he had never given up.

Sadly, European journalists had written him off as a driver in the final years of his F1 career. Maybe he believed them as he pondered a life without racing. But two years after retiring, Fittipaldi had returned to his Brazilian racing roots, competing in go-karts and winning a championship in the process. Then he got an offer to drive in a race in the United States, to be held in February 1984.

Businessman Ralph Sanchez was promoting an IMSA sports-car race in the streets of Miami and needed a name driver to boost ticket sales. Fittipaldi, who maintained residences in Brazil and Miami, agreed to drive a March/Chevrolet GTP. Although the car retired with mechanical problems, Fittipaldi had qualified on the pole and led for a time. More importantly, he found the desire to race was as strong as ever.

'After I stopped racing in Formula One, I didn't miss driving a racing car for a couple of years,' Fittipaldi recalled in an *Autocourse* Driver Profile. 'Those last few years in Formula One were so unhappy that I didn't miss driving at all, until after we close down the team. But in 1983, I started racing superkarts with some friends in Brazil and that got me excited again about driving.'

Fittipaldi's performance at Miami resulted in an offer to drive in CART.

Fittipaldi had driven a Lotus 56B, the Formula One version of the four-wheel-drive turbine car built for the 1968 Indy 500, in 1971. He had also had the opportunity to test one of Johnny Rutherford's McLarens at Indy in 1974 when both drivers were employed by McLaren Cars Ltd. He enjoyed the experience, but his Formula One commitment meant putting off driving at Indianapolis.

After placing fifth at Long Beach on his CART debut, Fittipaldi and his pink March-Cosworth (owned by Jose 'Peppy' Romero) arrived at Indianapolis. The two-time World Champion easily qualified for the May classic but retired early with a broken oil line. Fittipaldi and Romero parted company after Indianapolis and the Brazilian then competed in a pair of CART races for the California Cooler team.

He was simply biding his time and when Chip Ganassi was injured in that year's Michigan 500, team owner Pat Patrick offered Fittipaldi the ride for the remainder of the season.

Below: 'Honest, it was this close,' race winner Emerson Fittipaldi seems to be telling third-place finisher Mario Andretti during podium ceremonies for the 1989 Detroit Grand Prix.

Overleaf: A familiar sight throughout 1989 was that of eventual CART champion Emerson Fittipaldi and the Patrick Penske-Chevrolet (shown here at Portland) leading the pack.







1989 CART CAPSULE

Champion: Emerson Fittipaldi

Race Winners: Emerson Fittipaldi (5), Rick Mears (3), Michael Andretti (2), Danny Sullivan (2), Al Unser Jr. (1), Bobby Rahal (1), Teo Fabi (1)

Pole Positions: Rick Mears (5), Emerson Fittipaldi (4), Teo Fabi (2), Michael Andretti (2), Al Unser Jr. (1), Danny Sullivan (1)

Rookie of the Year: Bernard Jourdain

Most Improved Driver: Scott Pruett

ARS (Indy Lights) Champion: Mike Groff

New Races: Detroit

Notable Highlights: Fabi win at Mid-Ohio is first and only one for Porsche team

One year later, Fittipaldi would drive Patrick's car to victory in the Michigan 500, the Brazilian's first victory on an oval track and more importantly the prelude to what would be a long and successful partnership. The win and points-paying finishes in nine other races vaulted Fittipaldi to sixth overall in the final point standings. There was another victory at Elkhart Lake in 1986, when he finished seventh in the standings.

For 1987, Patrick was able to get Chevy power for his Marlboro-liveried Marches, but there was one small problem. Whereas the March 86C had been one of the best Champ cars of all time (as evidenced by 14 wins in 17 races by six different drivers and the PPG Cup for Bobby Rahal), the March 87C was not in the same league. One difficulty was that Goodyear's new radial tire did not work as well on ovals with the March as it did with the new Lola. After a rash of accidents at Indianapolis, a number of March runners reverted back to the 86C.

Fittipaldi was likewise unhappy with his car. Although he would win back-to-back races at Cleveland and Toronto, he managed only one other podium finish and placed 10th in the championship.

The following year, equipped with the latest March 88C, Fittipaldi got off to a slow start although he did take second at Indy and followed up with third-place finishes at Milwaukee and Portland. Patrick then decided to replace the March with Lolas, and after three straight DNFs at the Meadowlands, Michigan and Pocono, Fittipaldi got back in the win column by scoring victories at Mid-Ohio and Elkhart Lake.

He finished seventh in the final standings, but there was good news for 1989. Because Marlboro would be leaving Patrick Racing for Penske Racing after the 1989 season, Roger Penske agreed to sell his new PC18s to Patrick. Fittipaldi was about to embark on his greatest CART season ever.

Fittipaldi opened with a fifth at Phoenix (won by Rick Mears) and a third at Long Beach (won by Al Unser Jr.). Then he dominated at Indianapolis, surviving a wheel-banging incident with Al Unser Jr. to win his first Indy 500. The win was especially important in that it offered Fittipaldi the first \$1 million winner's prize in the history of the sport.

'I always compare [winning at Indianapolis] to winning my first World Championship,' Fittipaldi told David Phillips in *Indy Car Racing* magazine. 'It was more important than any Grand Prix win I had in my career. Some drivers think not so good about Indianapolis, but I always think good about Indianapolis because I was able to focus for four weeks on the car, on the race and I loved that.'

Although he would crash trying to pass Bernard Jourdain while leading at Milwaukee, where victory went to Rick Mears, Fittipaldi followed up with wins at Detroit, Portland and Cleveland. Next came more valuable PPG Cup points through second-place finishes at the Meadowlands (won by Bobby Rahal) and Toronto (won by Michael Andretti).

Following non-points finishes at Michigan (won by Michael Andretti) and Pocono (won by Danny Sullivan), Fittipaldi finished fourth at Mid-Ohio (won by Teo Fabi) and fifth at Elkhart Lake (won by Sullivan). With a little luck, he could win the PPG Cup at the penultimate round at Nazareth.

It would be a daunting task for Fittipaldi, who, despite winning 10 Champ Car races in his career, had never won on a short oval. Making it more difficult was the fact that the only man who could beat him for the title was Mears, who would be driving on a track where he had recorded countless test miles.

Mears took the pole but Fittipaldi qualified second. The race became a battle between the two championship contenders. Late in the race, the final pit stops would be decisive. Mears pitted first, but left his pit early with the vent hose still attached to his car. Fittipaldi then pitted for fuel only and got out in 4.5 seconds.

He was in the lead when Mears, having been black-flagged for the pit violation, was forced to return to the pits. Even though the vent fell off as soon as he stopped, the extra stop would keep him from winning. Fittipaldi, no longer threatened by Mears, was able to score his fifth victory of the season. Mears came home in second.

Fittipaldi was now 22 points ahead of Mears with one race left. However, even if Mears took the pole, led the most laps and won at Laguna Seca to claim the 22 available PPG Cup points, the best he could do was tie Fittipaldi, assuming the Brazilian was unable to score any points. And because Fittipaldi had five wins and a victory at Laguna Seca would give Mears three, the tiebreaker would go to the Brazilian by virtue of more first places. The title was his.

'I'm very happy, very pleased — everything is beautiful,' Fittipaldi said after winning, at first unaware he had also clinched the PPG Cup title. 'The fuel mileage was not as good as we thought. The last few laps I had a misfire so I came in for fuel. I did not know what was happening with Rick [Mears]. Once I got into the lead, I just kept going. But I am very pleased. This is a great emotional moment for me.'

Mears, who had nearly won the PPG Cup for the first time since 1982, took the near-miss in stride.

'My car was fantastic,' said Mears. 'We had a push in traffic, but once we got through it, the car was great. I messed up in the end. I tried to get out of the pits too quick. It just killed us. I thought I had heard someone say, "Go," but in my excitement, I got overanxious. I dropped the clutch and left. They weren't unhooked yet. There was nothing I could do. It was too late.'

Mears went on to score his third win of the season at Laguna Seca but the PPG Cup belonged to Fittipaldi. It was his first CART title and his first title of any kind since winning the F1 World Championship in 1974. He may have been written off by Formula One. But he had never given up.

Opposite: Emerson Fittipaldi had much to smile about in 1989 as he capped a successful career comeback by winning four poles and five races to capture the PPG Cup.



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GERMANS, ITALIANS INVADED CART IN LATE '80s

The 1988 and '89 CART seasons saw an invasion of sorts by the Germans and Italians as Porsche made its first foray into American Championship Car racing while Alfa Romeo made its return after an absence of 40 years.

Ironically, Porsche had planned a Champ Car project several years earlier. In 1979, it agreed to design a car for Ted Field's Interscope team and driver Danny Ongais. For test purposes, a 2.65-liter V-6 was mated to an Interscope Pamelli VPJ6 chassis. Helmuth Flegl was given the task of designing Porsche's own chassis.

Unfortunately, the timing of the project could not have been worse. With several team owners breaking away to form CART, the new organization found itself at odds with USAC over turbo boost limits.

Adding to the problem was the fact that USAC had no rules to govern a six-cylinder engine. Porsche was asked to run its V-6 at the same boost rating as a V-8. Although in the mid-1980s USAC would give the Buick V-6 a 15-inch advantage, the stalemate over the current rule resulted in Porsche's withdrawal.

When Porsche returned in 1987, a totally new car was ready — or so they thought.

With endurance sports-car racer Al Holbert now guiding the program, the new Porsche was unveiled to the media at Nazareth in September. Reigning Indianapolis 500 winner Al Unser Sr. had been signed to drive the car and it made its debut at Laguna Seca three weeks later.

Unfortunately, its debut was highly unsuccessful. Unser qualified a disappointing 21st and placed 24th after the water pump broke on lap 7. In the season finale at Miami, Holbert failed to make the field.

With March and Lola possessing several years of experience in the design and construction of Champ cars, Porsche was at a severe disadvantage. For 1988, the German company turned to March while figuring out what to do about designing a chassis. Teo Fabi was signed as the driver and the results were a little more promising.

In 15 races, Fabi scored eight top-10 finishes with a fourth at Nazareth as his best result. He also qualified in the top 10 on six occasions with the high point coming at the Meadowlands, where he started third. However, the team was dealt a major setback when Holbert perished in a private airplane crash.

Leadership of the team went to Derrick Walker, who moved to Porsche after more than a decade with Penske Racing.

Porsche decided to stay with March and while it had employed the normal March 88C chassis in 1988, it contracted the Bicster manufacturer to produce a special chassis for the 1989 season. The car was the March 89P and with Fabi returning for a second season, the program began to show considerable promise.

After a slow start to the season, Fabi recorded a string of 10 straight top-10 finishes. He was third at Milwaukee, fourth at Detroit, fourth at Portland, fourth at Cleveland, ninth at the Meadowlands, fourth at Toronto, second in the Michigan 500, fourth in the Pocono 500 and second at Elkhart Lake.

However, the highlight of the season came at Mid-Ohio a week before the race at Elkhart Lake. After surviving a terrifying practice crash, Fabi rebounded to give Porsche its first pole position in CART. In the race, the team relied on a pit strategy devised by engineer Tony Cicale that snookered the competition into believing that Fabi would need an extra pit stop. The ruse paid off as Fabi had no serious challenge in the final laps and coasted home to victory. Fabi wound up fourth in the championship.

For 1990, the team expanded by adding John Andretti as teammate to Fabi while maintaining its relationship with March. With two full seasons under its belt, Porsche was now ready to unleash some German ingenuity on the CART series and its new car caused quite a stir. Designed by Gordon Coppuck and Tino Belli, the March 90P was as radical as they came. The turbo was mounted ahead of the engine and the gearbox was mounted ahead of the rear axle line — all for improved weight distribution.

Low and missile-like, the car was literally designed around Fabi and Andretti, the two smallest drivers in CART. It was an approach not unlike Formula One.

Porsche also had March make the chassis entirely of carbon fiber, in contrast to other Champ cars of the period, which were built around a chassis that was half carbon fiber and half aluminum honeycomb. With its all-carbon fiber chassis, not only was the March lighter and stiffer, but crash testing proved it would also stand up better to multiple wall contact.

In no time, rival CART team owners began to cry foul. Following a vote, the new car was banned.

'I think it was a very dark time for CART,' Walker said of a decision that would hamper the progress of the program in what was to be its final year.

March, Porsche and the Walker-led team spent the remainder of the season trying to find ways to lighten the car and make it more competitive. Andretti finished 10th in the points while Fabi dropped down to 14th. The highlights had been Fabi's pole position at Denver and third place at the Meadowlands while Andretti was able to consistently score points throughout the season.

'Every car we had was 100 pounds overweight,' Andretti pointed out. 'Porsche came up with three sheets of paper with ideas on how to make the car lighter. One idea was to drill holes in the steering wheel to save three ounces! I told them for three ounces to leave the steering wheel alone and I would personally lose the three ounces.'

Opposite: Although Porsche won only one CART race in three seasons, its cars were usually competitive. Teo Fabi (top photo) scored an impressive victory at Mid-Ohio in 1989 in the March-Porsche. A ruling against its radically designed chassis put the team behind for most of 1990; John Andretti (bottom photo) is shown piloting one of the cars to a fifth-place finish at Vancouver. The 1990 season would be the swan song for Porsche.



À LA CART

FAREWELL TO MIAMI FOR NOW

Miami, which had been on the CART schedule since 1985, hosted its last race in Tamiami Park in 1988. Promoter Ralph Sanchez would not be able to lure CART back to Miami until 1995. (In 1995, Sanchez would hold a race in downtown Miami on a temporary circuit before moving the event to his newly built Metro-Dade Homestead Motorsports Complex the following year.)

THE DAY THE COYNE-OPERATED CAR KEPT RUNNING

Although racing is a serious business, there are occasions of levity. One such occasion occurred during the running of the 1988 Miami Grand Prix. Owner/driver Dale Coyne, who was operating the least-well-funded team in CART at the time, had a number of races cut short by engine-related problems. Coyne raced an older model March chassis with a stock-block Chevy engine. It was affordable and allowed Coyne the opportunity to race.

During this particular race at Miami, however, the engine was continuing to perform. That brought a dilemma for his crew.

As Goodyear PR rep Bill King would convey to members of the news media, his monitoring of the various teams revealed that Coyne's crew was getting very worried about his pending pit stop. 'I'm listening to Coyne's guys on their frequency and right now they're worried because their driver is about to make a pit stop and they haven't done a stop all year!' Coyne's engine had usually failed prior to the first round of stops in the previous races that season. (Fortunately for Coyne, he would persevere and today, his team is well-funded and growing.)

Opposite: After a promising eighth-place finish in its debut race in the 1989 Detroit GP the week before, Roberto Guerrero finished a disappointing 23rd at Portland in the March-Alfa.

'Finally, by the race in Denver, Teo got the first car that was down to weight. My new car arrived at Nazareth, but by that time there were only two races left in the season. It was difficult to get caught up.'

Although his stint at Porsche would last only one season, Andretti was happy with the experience.

'Porsche did a great job in the engine department,' said Andretti, who also drove CART cars powered by Cosworth, Buick and Chevrolet engines. 'They did a lot to the engine. The first Porsche engines broke a lot. The engines I drove didn't break.'

By the season's end, the future of the program was in doubt. For a time, it appeared that the team would return with backing from Moneytron, the electronic financial outfit that Belgian Jean-Pierre Van Rossem had used to bankroll the Onyx Formula One team.

Van Rossem was hoping to get Porsche engines for F1 in 1991, but when they were awarded to the Footwork team, he pulled the plug on both programs. With the loss of its sponsor compounding the difficulties caused by a global recession, Porsche decided to withdraw from CART and focus on its F1 program.

'There was no sense of failure,' recalled Bob Carlson, public relations director for Porsche North America. 'We used a lot of composites in engine components that we later utilized in our passenger cars. We learned a lot about fuel management from our [CART] program. We actually thought our system had an advantage when we went in, but what we learned we also utilized in our passenger cars.'

What happened in CART following Porsche's departure was ironic, to say the least. In an interesting change of heart, CART's board of directors voted to allow all-carbon-fiber chassis for 1991. Regardless of motives, the cars would now be much safer.

Alfa Romeo's return was even less successful, although its program had parallels to that of Porsche. Like Porsche, it turned to March, which would provide it with an exclusive chassis design for the 1990 season. Participating in only a partial season in 1989, it used a March 89CE, a modified version of the 89C that March had hoped would serve as its customer car.

Alfa joined the series at the Detroit Grand Prix with a team largely based on the old Alex Morales Autosports operation. Roberto Guerrero had been signed to drive the car, and he gave the Italian company a good start by finishing a promising eighth after qualifying 22nd. However, that would be the best finish of the season in what was considered a fact-finding mission.

Despite a lack of success, Alfa had big plans. At the 1989 season finale at Laguna Seca, it unveiled a model of its new March chassis design and announced it had entered into a partnership with Patrick Racing and secured sponsorship from Miller Brewing.

Despite the promise of the program, it was not a good fit. For starters, the new March 90A was bulky looking. The latest Alfa Romeo V-8 proved to be down on horsepower. It also suffered from reliability problems. In short, the car was slow.

By mid-season, Patrick decided to ditch the March and purchase a Lola. Guerrero responded to the change by finishing fifth in the Michigan 500 and he scored two more top-10 finishes before the season ended, but the program was clearly in trouble.

'It was obviously a difficult project,' Guerrero recalled. 'It started out with great expectations. They flew me to the Alfa factory and it was very impressive. I thought in a couple of years, we would be winning every race. They had incredible resources. It was disappointing we were never able to get the engine going.'

Added to the woes in the engine department was the choice of chassis. Guerrero felt the March was the wrong direction.

'The chassis was something else that was not my decision,' he said. 'To me, it made no sense to have a manufacturer build a special car when you were trying to develop an engine. All you had to do was look at what people were using in CART. March was no longer the best chassis as it once had been.'

'That in itself was a problem. The engine people would always blame the chassis people and the chassis people always blamed the engine people. It really didn't matter because the car was not competitive.'

However, Alfa apparently decided to blame Guerrero as well, and Danny Sullivan was signed as his replacement for 1991. Sullivan had been informed that Penske Racing would no longer require his services after the 1990 season.

Once again, Lola was the chassis of choice and Sullivan gave the combination its best result in the season opener at Surfers Paradise where he finished fourth. He placed 11th at Long Beach and then finished seventh at Phoenix.

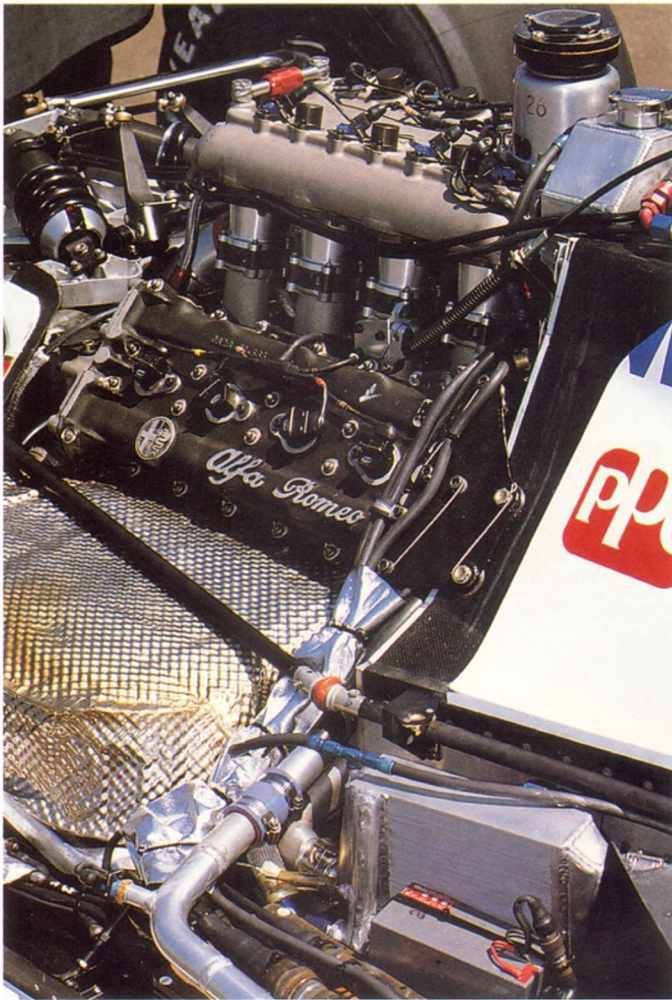
The Phoenix performance was noteworthy. Sullivan led for two laps. Those laps would be the only laps ever led in Champ Car competition for the Alfa Romeo engine. They also would be the only two laps in the entire season that were not led by a Chevy-powered car.

Sullivan would score points in six more races and finish 11th in the final standings. At the end of the season, Alfa Romeo withdrew from CART.

It would take a driver named Zanardi for Italy to make an impact in the series, but that would not happen for five years.

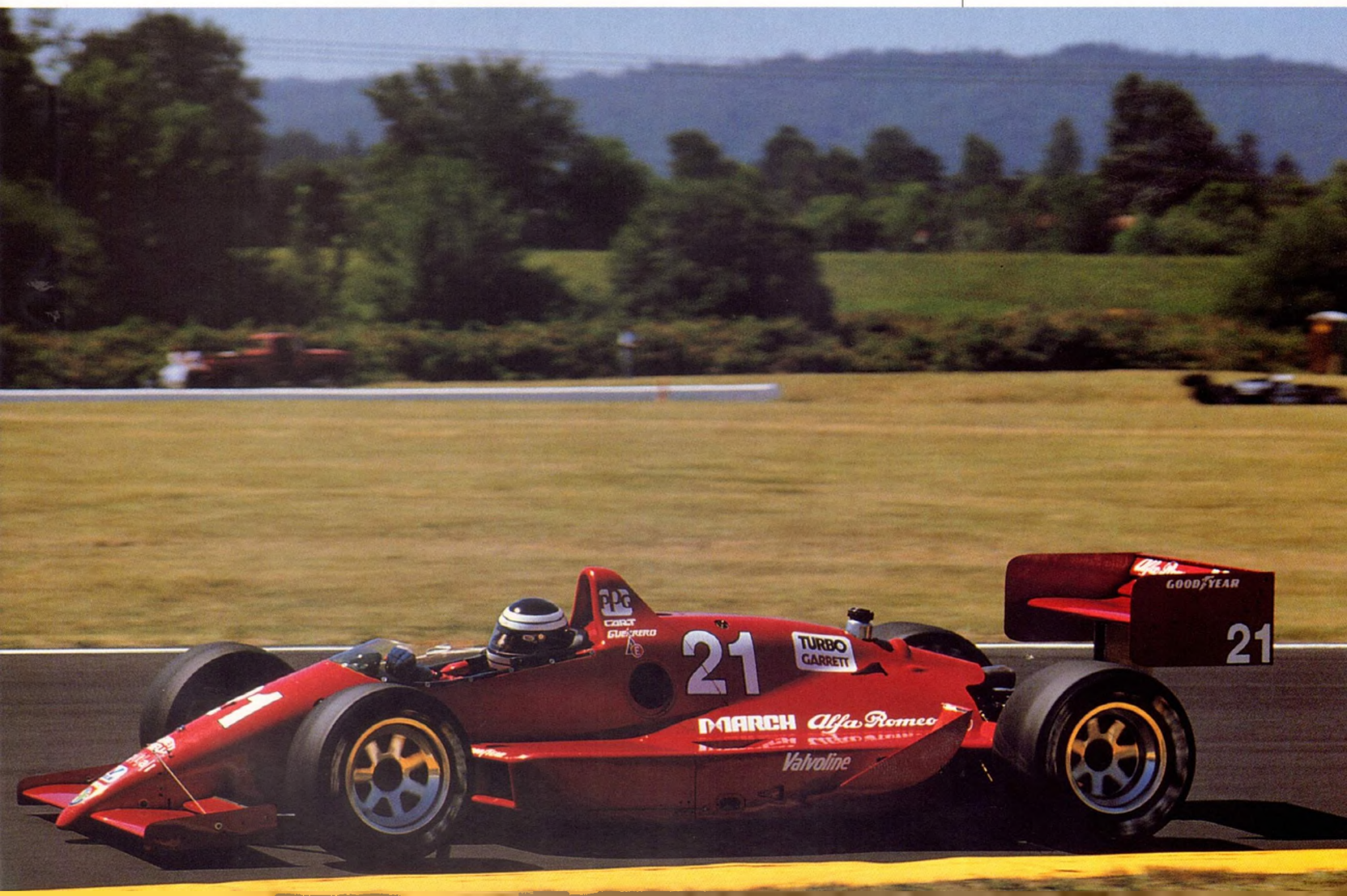
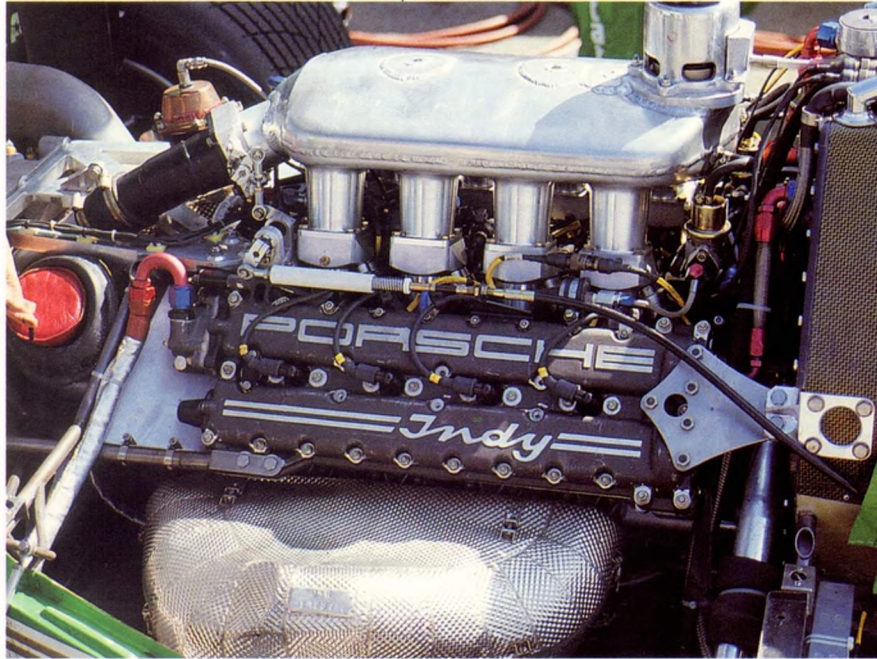
As for Germany, there would be another effort in the future — from Mercedes-Benz — and this one would reap much better results in the form of 17 race wins and the 1997 Manufacturer's Championship.

THE BOWTIE BRIGADE: THE CHEVROLET ENGINE ARRIVES



Left: After using what was to have been the engine for a Ferrari CART project during the 1989 season, Alfa Romeo introduced an engine of its own for 1990.

Below: The Porsche V-8 engine was reliable enough during its three-year stint in CART, but the project was often plagued by chassis problems.



Art Flores

Art Flores

À LA CART

WELL, IT LOOKED LIKE A MILLION BUCKS!

When Emerson Fittipaldi won the 1989 Indy 500, he returned the day after the race for the traditional winner's photo session on the main straightaway of the Indianapolis Motor Speedway. What made this day stand out was the unusual number of security guards on hand for the proceedings. Because Fittipaldi would be receiving the first \$1 million winner's purse in 500 history, track officials decided to surround his car with stacks of money. The problem was, once they stacked \$1 million in bills, they found it really didn't look like much. So IMS officials arranged to have additional cash brought to the track for the session. Fittipaldi and his car were photographed surrounded by stacks of bills representing his \$1 million prize. In actuality, it was probably closer to \$3 million in cash!

CART MAINSTAY MARCH WOULD SOON DEPART

Prior to the 1988 season, March Engineering had enjoyed an incredible run of success in CART over a seven-year period with 56 race victories and championships for Al Unser Sr. in 1985 and Bobby Rahal in 1986.

Now, however, March began to experience a desertion of sorts within the ranks of team owners. Penske was once again using its own chassis while teams like Kraco and Patrick switched to Lolas during the season. A year earlier, Rahal's Truesports team had made a similar switch.

The new March 88C would win only four times during the season — all the victories coming from Al Unser Jr., who benefited greatly by the work of March designer Alan Mertens, who had been assigned to the Galles team.

In 1989, March produced special chassis for Porsche and Alfa Romeo. Teo Fabi won at Mid-Ohio to give Porsche its only CART win and March its last victory in the series.

For 1990, March continued its arrangements with Porsche and Alfa, but there would be no wins. The Porsche project might have been successful had March been allowed to use its all-carbon-fiber chassis design. However, at the end of the season, Porsche withdrew from the series.

The March-Alfa had been a bigger disappointment and Patrick Racing switched to Lola chassis by mid-season. For March, its chapter in CART was over.

FERRARI ALSO HAD CHAMP CARS IN MIND

Race fans may recall that in 1952, the famed Ferrari team and driver Alberto Ascari competed in the Indianapolis 500.

The effort was forgettable as Ascari qualified in 19th position and finished 31st after breaking a wheel hub on lap 40.

What they may not know, however, is that Ferrari almost made a return to Championship Car racing with a fully fledged effort in CART in the 1980s. Here's what happened.

In 1985, after finishing second in the season finale at Miami, Bobby Rahal traveled to Ferrari's test track at Fiorano to demonstrate the Truesports CART car. The car was an appropriately red March 85C with a turbocharged Cosworth DFX engine.

'Ferrari had approached Goodyear about [a Champ Car] program and Goodyear recommended Truesports,' said Steve Home, who ran the Truesports program. 'It was probably Leo Mehl who suggested us. He and Jim Trueman had been close.'

'In 1985, Jim [Trueman] and I went to Italy to meet with Enzo Ferrari. It was like meeting the Pope. Basically, we dealt with Marco Piccinnini, who was Ferrari's team manager. We signed a contract with them that was something like an R&D program.'

'At the end of the 1985 CART season, we shipped a car with a Cosworth engine and some crew members to give them a demonstration and help them establish a baseline. We left the car behind and they took it apart and examined it to see what they would have to do to build a car of their own.'

Rahal and Michele Alboreto, who was the number one driver for Ferrari's F1 team at the time, both drove the car. Home continues:

'In 1986, we continued working with them. Gustav Brunner designed the car and it was beautiful. They completed the car and it did run — Alboreto drove it. We had a signed contract and had things worked out; you probably would have seen us use it in 1987.'

'Unfortunately, when John Barnard went to Ferrari to get it back on track, he told Mr. Ferrari that until the [Formula One] operation was back on track, they should not be running in CART. We were mad at the time, but he [Barnard] really made the right decision.'

'Overall, Ferrari was great to deal with. You hear all of these horror stories about dealing with Italians, but that wasn't true. Ferrari was extremely professional. And I am quite proud of the secrecy we maintained. We kept that story under wraps for more than a year.'

Enzo Ferrari died in 1988 at the age of 90 and presumably his desire to run a CART program died as well. But what happened to the car?

'I suppose it is still over in Italy in the Ferrari factory,' Home said. 'As for the engine, it was a development engine and it was taken over by Alfa Romeo when they started their CART program. Of course, by the time Alfa got it, it was two years old, so they started out behind.'

CHEVY STOCK-BLOCK SCORED A WIN, TOO

When Mario Illien and Paul Morgan formed Ilmor Engineering to build the Chevrolet Indy V-8 engine in 1983, many people assumed that it was Chevrolet's first Champ Car effort. Obviously, with a string of CART race victories from 1987 through 1993, the Ilmor Chevrolet project was easily the most successful to bear the Chevrolet name in Championship Car racing.

However, rules that attempted to make racing more affordable caused a few people to flirt with the idea of running production-based stock-block engines in the early 1980s. Mike Mosley qualified Dan Gurney's Eagle on the outside of row one at Indianapolis in 1981 and a week later, he went from last to first to win at Milwaukee. The car was powered by a stock-block Chevy V-8 engine and the victory would be the last for Chevrolet until Mario Andretti won the 1987 CART season opener at Long Beach with one of the Ilmor Chevy Indy V-8s.

Andretti's win would be the first of 85 and at one time, the engine enjoyed a 41-race win streak that spanned four seasons. Chevrolet's involvement in CART lasted until the end of the 1993 season, and it ultimately sold its interest in Ilmor to Mercedes-Benz.

Although they never got successful results, a few other teams tried Chevy stock blocks in the early 1980s. For a number of years AJ. Foyt annually entered a car powered by a stock-block Chevy V-6 engine at Indianapolis. Penske Racing and Truesports also tested stock blocks, but both stuck with the familiar turbocharged Cosworths.

Demck Walker, who served as chief mechanic and later as team manager for Penske Racing, recalled Penske's brief fling with the Chevy stock block.

'We never raced the stock blocks, but we did test them,' Walker said. 'We were seriously considering running them. We perceived it as a gain. Then there came the rumbling that the engines should be banned. So we realized that we might be testing an engine we would not be able to use so we abandoned the project.'

DATELINE: CART

1988

January: Teo Fabi is signed by Porsche to drive its CART entry, a March 88C-Porsche with sponsorship from Quaker State.

April: Fabi scores first top-10 finish for Porsche at Phoenix.

May: Penske Racing achieves unprecedented feat in Indianapolis qualifying by occupying entire front row. Rick Mears wins the pole position with Danny Sullivan second fastest and Al Unser Sr. third fastest. Mears goes on to win his third Indy 500.

June: McLaren director Creighton Brown confirms that McLaren is seriously considering a return to CART racing. Michael Andretti is rumored to be in line to drive for Ferrari in Formula One. A Porsche 962 driven by Mario, Michael and John Andretti finishes sixth in the 24 Hours of Le Mans.

August: After seven years, 16 race victories and two CART titles, Bobby Rahal announces he will leave Truesports to join Kraco Racing.

September: CART Chairman John Frasco announces that CART has joined the Automobile Competition Committee of the United States (ACCUS), the country's FISA affiliate. The ACCUS membership was necessary for CART's potential expansion outside of North America. CART team owner Al Holbert is killed in a private airplane crash following an IMSA sports-car race in Columbus, Ohio.

October: Porsche CART team, now headed by Demick Walker, announces it will have an exclusive chassis deal with March. Carl Haas confirms that Michael Andretti will become teammate to his father at Newman/Haas in 1989.

December: FISA rejects CART plans for overseas expansion.



VINCE GRANATELLI

1989

April: Ilmor Engineering receives the Queen's Award for Export and Technology

as the result of the success of its Chevrolet Indy V-8 engine project.

May: Rick Mears wins record fifth pole position for Indianapolis 500 and records first official qualifying lap at Indy under 40 seconds.

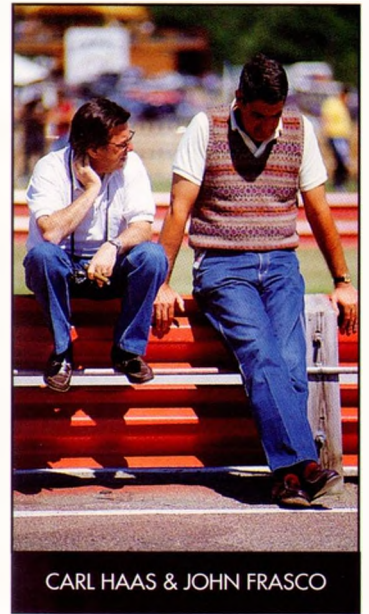
June: Champ Car designer Maurice Phillippe is found dead in his home, the apparent victim of a suicide. Former CART team owner Teddy Mayer is made managing director of Motor Racing Developments, the Brabham F1 team. CART's Detroit Grand Prix becomes first Champ Car race in Detroit since 1957 and is also the first CART race to offer a \$1 million purse. Alfa Romeo uses Detroit venue to debut its CART program. Roberto Guerrero finishes eighth in a March-Alfa run by Morales Autosports team.

July: For second time in two-year period, John Andretti is signed to replace Tom Sneva. This time, Andretti is named to drive for Vince Granatelli Racing.

August: USAC concern over CART's proposed tunnel insert rule causes furor.

September: Teo Fabi gives Porsche first CART win with victory at Mid-Ohio. The victory is the first in Champ Car competition for a German manufacturer since 1937 when Bernd Rosemeyer won the Vanderbilt Cup in an Auto Union.

October: March and Alfa unveil model of exclusive chassis for Alfa to be used in 1990. Patrick Racing also announced as team affiliat-



CARL HAAS & JOHN FRASCO

ed with Alfa. In shakeup of CART organization, John Frasco is ousted as chairman and team owners given vote for each franchise they own.

November: CART President John Caponigro is ousted and replaced by John Capels, whose Morales Autosports team is disbanded.

December: Indianapolis Motor Speedway President Joseph Cloutier dies. Tony George, grandson of Tony Hulman and son of former Champ Car driver Elmer George, is elevated to the presidency of the Speedway.



ALL-PENSKÉ FRONT ROW FOR 1988 INDIANAPOLIS 500



THE SONS ALSO RISE: SECOND GENERATION CHAMPS

WHEN Mario Andretti was signed in 1972 by Vel's-Pamelli Jones Racing to be a teammate to Al Unser and Joe Leonard, the media dubbed the operation the 'Super Team.' It was a natural fit. After all, team owners Vel Miletich and Jones had the best drivers, mechanics and engineers in the business. Thanks to Viceroy, they had a healthy sponsorship package.

With major corporate support and the potential to gain exposure, there were ample opportunities for promotional activity. One idea involved three go-karts made to look like miniature Championship cars for a 1972 exhibition race in Ontario, California, involving drivers named Unser, Andretti and Jones.

However, in this particular race, Unser was 10-year-old Al Unser Jr., Andretti was 9-year-old Michael Andretti and Jones was 3-year-old P.J. Jones. Unser recalled that he won the first heat and Michael captured the second, but 'the guy who could lead into the first corner would win the race.'

Is anyone surprised that the participants in this race would make it to the top? Probably not when one considers each driver's pedigree. Like father, like son. Today in CART, Andretti and Unser are the superstars. (With only three seasons under his belt, the jury is still out on Jones, whose cars, in fairness, have always been underpowered. He is, however, considered a driver of promise.)

In studying the early careers of Michael Andretti and Al Unser Jr., it is interesting that they would parallel each other so much despite taking such different paths to the top.

Unser broke into CART first, qualifying 10th and placing a very respectable fifth for Jerry Forsythe on his debut at Riverside in 1982. He then turned in a number of respectable performances the following year for Rick Galles, finishing seventh in the championship.

'I'm raising my boy to be a race driver,' Al Unser Sr. unabashedly told people who inquired if his only son would be following in his footsteps. The younger Unser was racing mini-bikes, go-karts and quarter midgets before he was 10. He was driving sprint cars on the World of Outlaws circuit at age 16. But after one year of the sprinters, the father moved his son into the safer world of sports cars and road racing. Sprinters had taught him how to race. The sports cars would teach him about finesse.

The youngster's unique schooling soon began to pay dividends. At age 19, he won the Bosch-VW Super Vee Championship. At age 20, he was Can-Am champion and by year's end, he had made his first CART start.

'Next to my dad and my Uncle Bobby, the drivers I always admired were A.J. Foyt and Gordon Johncock,' the younger Unser once said. 'But in that first race at Riverside, I lapped A.J., I lapped Gordon and I passed my dad. I lost something. It was the day I knew I was one of them. I couldn't look at them the same way ever again.'

And the feeling was probably mutual.

Despite his boyish looks, it was already apparent that Al Unser's son was going to be a force. In fact, in his second full season of CART racing in 1984, he made it into the winner's circle. The race was the inaugural event at Portland. Driving a March-Cosworth for Rick Galles, Unser started 10th, steadily improved and took over the lead late in the race.

Unser recalled that his radio had failed during the run and he was not aware he was in the lead until he got the white flag. One lap later, he became the third member of the Unser family to win a Championship Car race.

One of the first people to greet Unser was his proud father, who had retired early in the race. It was a tearful reunion but few Father's Day gifts could be more memorable than the one the son had just presented to his dad. Al Unser Jr. was truly on his way to the top.

If mini-bikes, go-karts and quarter midgets were the indicators of Unser's future, a pedal car showed that Mario Andretti had similar intentions for his eldest son. In 1966, spectators at the Indianapolis 500 could see a replica of Mario Andretti's pole-winning Dean Van Lines Hawk-Ford on the roof over the team garage in Gasoline Alley. The plastic-bodied pedal car was specially made for Mario's 3-year-old son Michael.

For most 3-year-olds, a pedal car was enough of a thrill. For an Andretti, it was that all-important first step toward a racing career. Go-karts would be next and, of course, there was that exhibition race against Al Unser Jr. and P.J. Jones.

Left: Al Unser Sr. (left) always said he raised his son, Al Jr., to race and by 1983, father and son were competing against each other full-time on the CART circuit. Two years after this photo, they were locked in a battle for the PPG Cup title.

Below left: After an unsuccessful foray into Formula One, Michael Andretti (right) rejoined his father and former Newman/Haas teammate, Mario Andretti, in CART for the 1994 season.

1990 CART CAPSULE

Champion: Al Unser Jr.

Race Winners: Al Unser Jr. (6),

Michael Andretti (5), Danny Sullivan (2),

Emerson Fittipaldi (1), Rick Mears (1),

Arie Luyendyk (1)

Pole Positions: Danny Sullivan (4), Michael

Andretti (4), Rick Mears (3),

Emerson Fittipaldi (2), Al Unser Jr. (1), Bobby

Rahal (1), Teo Fabi (1)

Rookie of the Year: Eddie Cheever

Most Improved Driver:

Scott Goodyear

ARS (Indy Lights) Champion:

Paul Tracy

New Races: Denver, Vancouver

Notable Highlights: Unser becomes first second-generation champion in CART history



BOSCH
BOSCH

GENIEVE DRAFT
RACING

STP STP STP STP STP STP STP STP

AC-Delco

20
6
7
1
5
2

Marlboro

Marlboro

PENNZOIL

KRACO

Volvo

It is interesting to note here that Mario Andretti's formative years were similar to the younger Unser's. He had started out road racing in Italy but adapted to American short tracks after his family emigrated to the United States and the state of Pennsylvania. However, Michael's education was devoid of dirt tracks and sprint cars.

At age 16, he and his cousin, John Andretti, attended Andre Pilette's racing school in Belgium. He proved to be a quick student and by 1981 had captured an SCCA regional Formula Ford title. In 1982, he followed up Unser's Super Vee championship by winning six races and capturing the title.

In 1983, he won the Formula Mondial championship, a forerunner of the Atlantic series that enjoys popularity in the U.S. and Canada today. He also got to race with his father for the first time, sharing a Porsche 956 in the 24 Hours of Le Mans and placing third overall. Andretti also made his CART debut that year, driving the final three races of the season for the Kraco team. Mechanical problems sidelined him in his first two races, but he closed out the season with a ninth on the mile tri-oval at Phoenix.

In his first two full seasons, Andretti impressed, qualifying well, leading races and scoring a number of podium finishes. By 1986, he was ready to challenge for the title. At Long Beach, Andretti captured his first CART victory. At Milwaukee, he claimed his first CART pole position. At the end of the season, having added race wins at Milwaukee and Phoenix plus a couple more pole positions to his tally, he led the series in laps led (699 out of a possible 2,434) and was runner-up to Bobby Rahal in the championship. Andretti had also proved he was as versatile as any driver in the series, despite his heavy background in road racing.

It was only a matter of time before CART would have its first second-generation champion. The question was which famous son would be first?

Near the midway point of the 1990 season, it appeared that Michael Andretti might be that man. However, things do not always happen the way we expect.

Throughout the early portion of their Champ Car careers, Andretti had always been behind Unser. It was understandable since Unser was a year older. Unser won the Super Vee title in 1981 and Andretti won it in 1982, the year Unser won the Can-Am title. While Unser was on his way to finishing seventh overall in the 1983 CART series, Andretti was busy winning the North American Mondial championship. By the end of the year, both were competing in CART.

Unser's first CART win came in his 19th start. Andretti's in his 36th. Both drivers narrowly lost the CART

Opposite: Polesitter Rick Mears (2) brings the field around for the start of the Phoenix 200 and the 1990 season. Mears, the eventual race winner, found himself in fast company with Al Unser Jr. (5), followed by second-row starters Emerson Fittipaldi and Bobby Rahal and the third row of Danny Sullivan and Mario Andretti.

Below: As this 1990 photo at Mid-Ohio indicates, a common sight following a CART event during the early 1990s would be a podium occupied by Al Unser Jr. (left) and Michael Andretti (center). On this occasion, Mario Andretti joined his race-winning son as the runner-up.





Photo: Michael C. Brown

In this spectacular overhead shot taken during the 1990 Detroit GP, Al Unser Jr. guides the Galles-Kraco Lola-Chevrolet around a tight corner on the way to a third-place finish and eventually to a PPG Cup title that had previously eluded him.



Opposite: In 1991, Michael Andretti succeeded Al Unser Jr. as a second-generation CART champion. He did it in grand fashion, too, setting a record for a season by scoring eight race victories.

After spending nine full seasons in Formula One, Eddie Cheever turned his attention to CART and wound up winning Rookie of the Year honors in Chip Ganassi's year-old Penske-Chevrolet.



Art Flores

Overleaf: Michael Andretti crests a brow at Mid-Ohio in a race that pretty much typified his 1991 season. Andretti captured the pole, led all but one lap and scored his seventh victory of the year.

championship in their third season — although at this point, Andretti was beginning to show he was one of the fastest drivers in CART.

By the start of the 1990 season, both drivers had won eight races each. Andretti held an 8—1 advantage in pole positions and a 1,679—957 lead over Unser in laps led.

To make it even more interesting, both would be driving Lola-Chevroleths. Andretti had become his father's teammate at Newman/Haas a year earlier, while Unser had rejoined Galles in 1988 after his spell with the Shierson team. For 1990, he would be joined in the newly merged Galles-Kraco team by former champion Bobby Rahal.

Unser got off to a strong start, winning at Long Beach and Milwaukee and building a lead of 68—23 over Andretti in the point standings after four rounds of the title chase. Rick Mears had taken the season opener at Phoenix for Penske, while Dutchman Arie Luyendyk had scored the first Champ Car victory of his career at Indianapolis aboard Doug Shierson's Lola-Chevrolet.

In the next four races, Andretti made gains. Winning at Detroit, Portland and the Meadowlands (he also won poles at Detroit and the Meadowlands) while Unser DNF'd three times, Andretti forged ahead by an 88—85 count.

The seventh race of the season — at Cleveland, which eventually fell to Danny Sullivan's Penske — had been a near-disaster for Unser and team. When the fueling hose failed to couple during a pit stop, fuel splashed onto the car and was ignited by the red-hot brake rotors. Unser was slightly singed, but four members of his pit crew were hospitalized with burns. The tide appeared to have turned.

However, it took only two races for the team to rebound and they did so in style. First, Unser won at Toronto over Andretti to tie for the points lead. Then he won at Michigan for his first 500-mile race victory.

Next came a victory on the serpentine street circuit at Denver followed by a win at Vancouver. Unser had won four straight races and now led Andretti 168—115 in the points race with four rounds left.

Andretti halted his skid by winning at Mid-Ohio from the pole, but Unser made sure it was a minimal gain by finishing third. Andretti won again at Elkhart Lake, but Unser continued to score points, this time placing fourth. The lead was now 194—157.

He appeared ready to assume the crown and his determined four-race win streak had impressed his predecessor on the throne, Emerson Fittipaldi.

'Al Jr. is driving a beautiful championship,' Fittipaldi told this writer prior to the penultimate round at Nazareth. 'He has won races. He has been the fastest man. He deserves to win the title.'

Ironically, the outcome would be decided in Nazareth, Andretti's hometown. Even more ironic was the fact that Unser clinched the title while being examined in a local hospital. Having qualified fifth (Andretti started eighth), Unser became entangled in a three-way accident and slammed hard into the Turn Three wall. Temporarily knocked out, Unser was taken to a nearby hospital.

With Unser unable to add to his score, Andretti had a wonderful opportunity to make a serious dent in his 37-point deficit. Unfortunately for him, the race belonged to the Penske team with Fittipaldi and Mears scoring a 1—2. Andretti finished fifth and the 27-point margin gave Unser an insurmountable lead with one race to go.

Although assured his driver had the title, team owner Rick Galles, who had owned the cars Unser had driven to titles in Super Vee, Can-Am

and now CART, was subdued in the post-race victory celebration.

'Right now, I'm more concerned about Al, but they tell me he's OK so now we are going to enjoy it.'

Unser had recovered in time for the season finale at Laguna Seca, where he extended his lead in the point standings by finishing second behind Sullivan.

Unser's four-race win streak had been the key to his championship success. Now it was Michael's turn.

There is a personal note to interject here. Prior to the race in Toronto, this writer had gone to dinner with Unser and his crew. The impression he was left with was that the Galles-Kraco team was fully behind their driver. Their camaraderie was also impressive. Owen Snyder and his charges were truly a team.

Andretti's Newman/Haas team was every bit as impressive. However, the 1991 season did not start out like it would be their year.

The championship opened with CART's first race in Australia, held on a street circuit alongside the Pacific Ocean in Surfers Paradise on Queensland's Gold Coast. Victory went to Andretti's cousin John, making it a triumphant return to the series after an absence of eight years for team owner Jim Hall, one of CART's founders back in 1979.

Al Unser Jr. continued his streak at Long Beach in round two and Luyendyk then scored his first Champ Car victory on a short track by winning at Phoenix.

Mears joined A.J. Foyt and Al Unser Sr. as a four-time winner at Indianapolis after regaining the lead from



BELL

Dirt Devil

CORNING



Photo: Michael C. Brown



Opposite: In order to expose Champ Car racing to markets that did not have permanent facilities, CART raced on temporary street circuits, such as Denver, where Raul Boesel can be seen leading Teo Fabi through Turn 11 during the 1990 race.

Opposite: One of the most spectacular new venues for CART was the oceanside circuit set up on the streets of Surfers Paradise, Australia. Added to the schedule in 1991, the race was a milestone in that it was CART's first overseas championship event. In subsequent years, the series would expand to Brazil and Japan and plans are in the works for a race in Europe.

Michael Andretti with a daring pass in Turn One. Mears swept around Andretti on the outside, duplicating Andretti's move on the previous lap, and held on to his advantage to the checkered flag.

Andretti finally opened his entry in the win column by leading his cousin and father home for a 1—2—3 finish for the family at Milwaukee. Although there would be victories for Fittipaldi at Detroit, Rahal at the Meadowlands, Mears in the Michigan 500 and Al Unser Jr. at Denver, Andretti would score wins at Portland, Cleveland, Toronto, Vancouver, Mid-Ohio and Elkhart Lake. After placing third in the penultimate race of the season at Nazareth, which was won by Luyendyk, he was now in position to win the elusive title at the championship finale at Laguna Seca.

And it would be a dream weekend en route to that title.

First, he led from start to finish to win the Marlboro Challenge, the special race held at the end of the season for the top 10 drivers in the series. Next, he captured the pole position. Then he won the race. Andretti knew he had the title once Fittipaldi experienced trouble. In addition to the title, Andretti's race win gave him eight victories for the season, a new record in CART.

What made the post-race celebration even sweeter was the fact that Mario Andretti had finished third and would be on the podium with his championship-winning son.

'I can't tell you how long I prayed for this,' an emotional Michael Andretti said following the race. 'To win the Marlboro Challenge, then the pole, then the race and the title, well, it's unbelievable.'

'At the start, Emerson put a lot of pressure on me. When he went out, I knew I just had to keep it on the road. The car ran perfect. I told the crew, "Let's go for it." It was a perfect day.'

Papa Mario was understandably proud.

'Special is really the way to describe this,' the elder Andretti said. 'There was a tremendous amount of pressure and I've watched Michael claw up the championship ladder. The team rallied behind him. It's a proud moment.'

STREET CIRCUITS BECAME PREVALENT IN CART

With the emergence of the sons of two famous racers indicating a change of the guard in CART, the schedules for the seasons of 1990 and 1991 confirm that the series had also undergone a significant change in the area of venues.

When CART was formed in 1979, Watkins Glen was the only road-course event on the schedule. All the other races were held at oval tracks. CART's intention was to move Championship Car racing into new markets. Initially, though, it had to run multiple races at a handful of tracks in order to have a proper schedule.

In its first season, the CART series comprised 14 races at seven tracks. However, that figure is misleading, as becomes apparent when you remove Indianapolis, Ontario and Watkins Glen from the mix. Those tracks held only one race; the other 11 were staged at just four tracks — Phoenix, Atlanta, Trenton and Michigan.

By 1983, the series would truly diversify with Michigan being the only venue to host more than one race. However, of the 13 races on the schedule, eight were held on ovals and the new race at Las Vegas was considered a modified oval.

The following season featured 16 races — CART's biggest schedule to date and its most diverse as well. Half of the races were on ovals (including Indianapolis where CART awarded full points even though it was still sanctioned by USAC). However, the season opener launched a new era for CART. With the addition of Long Beach to the schedule, CART hosted its first race on the streets of a city.

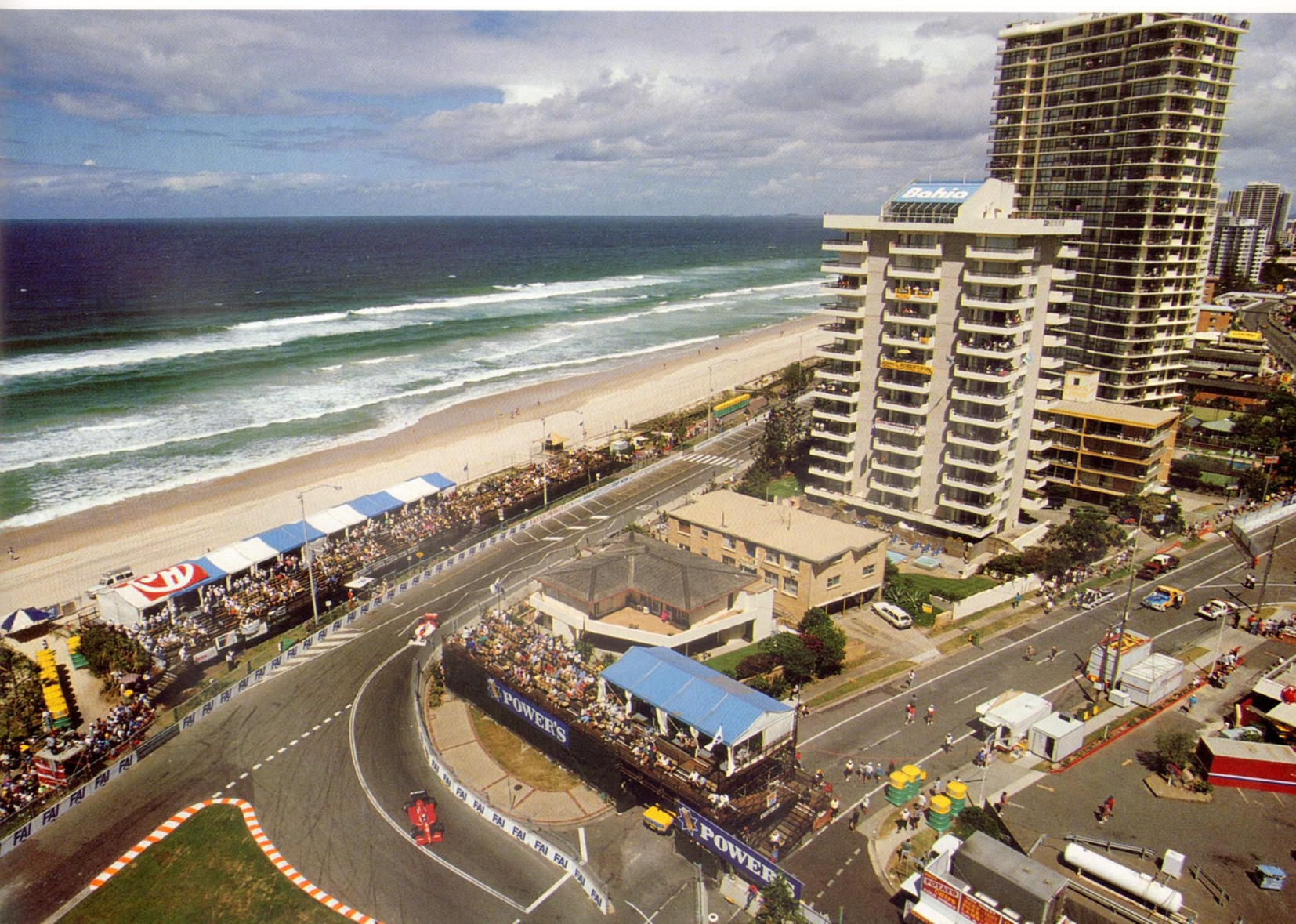
Although Long Beach had been the site of the U.S. Grand Prix West F1 race since 1976, promoter Chris Pook had decided he could no longer afford to pay the heavy sanction fees required by F1 power-broker Bernie Ecclestone. Pook decided to make a deal with CART and the partnership has been a successful one ever since. In addition to the fact that Pook would not have to pay the type of fees to CART he had once paid to Formula One, there was an added attraction.

'The best thing that probably ever happened to the race at Long Beach was Mario Andretti,' Pook told racing writer Robin Miller. 'Mario happened to be in Formula One when the race first came here and he was very popular. When we had our first CART race, he had retired from F1 and he was back. He helped make our races successful.'

Andretti, who had won the 1977 Long Beach GP in thrilling fashion, obviously liked the place as he won the CART debut event there en route to the 1984 title.

The Long Beach race fitted into CART's longterm plans. Without having to wait for a promoter to build a track, CART found it could go to large markets by running on the city streets. In 1984, CART also held a race in the parking lot of the Meadowlands Sports Complex in East Rutherford, New Jersey. In one season, CART had added races in LA and New York City to its schedule. In addition, CART had been holding races on the runways of Cleveland's Burke Lakefront Airport since 1982.

Although street races did not always offer the best competition — many tended to be follow-the-leader affairs — they proved to be popular, with new groups of fans being exposed to the sport for the first time. Long Beach, for example, grew steadily and today it is considered CART's marquee event.



À LA CART

A WORD ABOUT
'LITTLE VUKE'

Art Flores

In 1988, Billy Vukovich III became the first third-generation driver to start in the Indianapolis 500. He drove a steady race and was the highest finishing newcomer — earning the top rookie honors. He also made Champ Car starts at Phoenix, Michigan and Pocono that year with a ninth at Pocono as his best finish.

A graduate of super-modifieds, Vukovich had quite a racing heritage. His grandfather won at Indianapolis in 1953 and '54 and was well on his way to an unprecedented third in a row at Indy when he was killed in an accident on the backstretch. His death was one of many tragedies of 1955 and may have been instrumental in the AAA's pullout at the end of the season.

Bill Vukovich Jr. made his first Champ Car start in 1967 and qualified for the 500 the following year. He would win only once in a Champ car — at Michigan in 1973 — and his second place finish at Indy the same year was his best.

He ran in USAC's championship division in 1979 but made seven CART starts in 1980 and six the following year before retiring as a driver in 1982.

Following the return of the Vukovich name to Champ Car racing in 1988, Billy III ran only at Indianapolis in 1989 and at Indy and Michigan in '90. However, he also served as pace car driver at a number of events and was hoping for a full-time CART ride.

He once remarked to this writer: 'You know, it doesn't matter what I do in racing. I can always say that I got to drive in the Indianapolis 500.'

Billy Vukovich III was killed in a sprint-car race at Mesa Marin Speedway in California in October of 1990. 'Little Vuke' was a good race driver but a terrific person as well.

In 1985, seven of the 15 races on the CART schedule were held on ovals. By 1987, there were only six oval-track races out of a total of 15 events. By 1990, the figure was down to five, with Pocono dropped from the schedule (its deteriorating condition had made it unsuitable for future CART races).

In 1991, that figure remained unchanged, although the scale was tipped the other way with the addition of the street race in Surfers Paradise, Australia to the schedule.

But there was still change in the air.

In 1992, the New Hampshire International Speedway brought Champ Car racing back to New England for the first time since 1915, when a 100-mile dirt race was held in Burlington, Vermont. The new venue was an oval, giving CART six oval-track events, with the USAC-sanctioned Indianapolis 500 still included in the tally.

However, there were also six races on temporary circuits with the recent addition of street races in Surfers Paradise and Vancouver. The remaining four races on the schedule were true road courses.

On the whole, it did give the series a balance. Winning the CART title now meant that a driver had to master a variety of circuits. CART's roster of tracks included superspeedways, short oval tracks, road courses, street circuits, park circuits (like Toronto and the new Belle Isle track at Detroit) and, of course, the airport circuit at Cleveland, which had grown in popularity over the years.

CART's detractors used the prevalence of the temporary circuits as a point of criticism. However, as stated before, it was always CART's intention to go into large markets.

Those six temporary races gave CART showcases in Australia, Los Angeles, Detroit, Cleveland, Toronto and Vancouver. Beyond question, the concept was working, as evidenced by the growing number of fans each year.

The following season, 1993, would see the series get even more exposure as a British newcomer by the name of Nigel Mansell would give the world a look at the competitive nature of CART racing.

AND IT'S 1—2—3 FOR THE ANDRETTIS

In 1990 on the famed Milwaukee Mile at the Wisconsin State Fair Park in the Milwaukee suburb of West Allis, the Andretti family made history in the sport of Championship Car racing. A year later, they would take one step further.

On that day in June, 1990, four members of the Andretti family competed in the Miller 200 CART race. Joining Mario Andretti in the starting field that day would be his two sons, Michael and Jeff. Also driving in the race would be Mario's nephew, John, the middle son of his twin brother, Aldo.

Mario had been racing in Championship cars since 1964 and in 1983, Michael became the first second-generation Andretti to join him in the series. In 1987, John became the third Andretti in CART and finally, in 1990, Jeff qualified for his first CART event.

By Andretti standards, it was a so-so day. Michael had qualified third and shared the second row with Mario while John started 11th and Jeff made a respectable debut by qualifying 16th. When the checkered flag fell 200 miles later, Michael was fifth after running out of fuel with two laps to go while in the lead. John finished seventh while Jeff would end up 17th. Mario had the toughest day, placing 21st. The Milwaukee race would be Jeff's only start that season.

The following year would be different.

In 1991, there would be an Andretti quartet in each of 17 races on the CART schedule. When Jeff joined his family in the starting field at Indianapolis, they would again make history, eclipsing the previous record set in 1982, when three members of the Whittington family — brothers Don, Bill and Dale — qualified for the 500.

But it was at Milwaukee that the Andrettis truly made their mark.

It was destined to be Michael's year, but by Milwaukee — the fifth round of the championship — he had failed to win a race.

As he had the year before, Michael started third. Mario started on the outside of row one while John started fifth and Jeff started 13th. When the green flag dropped, it was apparent that Michael was going to be hard to beat. And unlike a year earlier, Michael would not run out of fuel.

Following the final round of pit stops in the 200-mile contest, John suddenly had the quickest car on the track. He was down a lap, but passed his cousin to unlap himself and drove a torrid pace to the checker that boosted him past his uncle for second place.

So it was an unprecedented 1—2—3 for the Andretti family.

'We weren't going to run out of fuel this time,' a jubilant Michael said. 'To finish 1—2—3 Andretti is unbelievable.'

The only unhappy Andretti seemed to be John, who had scored his first CART victory earlier in the season at Surfers Paradise. When he went by Michael to unlap himself, John had erroneously believed he had passed for the lead and he crossed the line feeling he had won the race.

He soon learned that it was Michael who had come first in the Andretti class. Jeff had a respectable finish as well, placing 11th and scoring a pair of PPG Cup points in the process.

But the happiest person that day had to be Mario. It was a feat that may never be duplicated in CART.



Far left: Jeff Andretti contested the full CART schedule in 1991 but was unable to match the success enjoyed by the three other members of his family racing in the series.

Left: After missing the 1990 season due to injuries suffered in a pre-season test accident, Scott Pruett returned in 1991 to finish 10th in the points and was named CART's 'Most Improved Driver.'

Below: The Andrettis made history at Milwaukee in 1991 as Michael (center) held off his cousin John (left) to win the Miller Genuine Draft 200. Papa Mario made it a family affair by finishing third to complete an all-Andretti podium.



1991 CART CAPSULE

Champion: Michael Andretti

Race Winners: Michael Andretti (8),

Al Unser Jr. (2), Rick Mears (2),

Arie Luyendyk (2), Emerson Fittipaldi (1),

Bobby Rahal (1), John Andretti (1)

Pole Positions: Michael Andretti (8),

Rick Mears (6), Emerson Fittipaldi (2), Bobby

Rahal (1)

Rookie of the Year: Jeff Andretti

Most Improved Driver: Scott Pruett

Indy Lights Champion: Eric Bachelart

New Races: Surfers Paradise

Notable Highlights: Michael Andretti sets

record for most victories in a season; Scott

Pruett becomes first to be voted Most

Improved Driver a second time

À LA CART

TRYING TO DIFFUSE THE PROBLEM

When new rules calling for a smaller underwing tunnel were introduced in 1990, CART sought to 'grandfather' older cars by introducing the diffuser.

The diffuser was an insert placed inside the underwing tunnel of cars built prior to 1990 to decrease the cornering speed of the cars.

The only problem was that the new cars were specifically designed around the new underwing — the older cars were not. Pre-season testing showed the new diffusers might be a problem as 10 different drivers were involved in accidents. Not every accident could be attributed to the diffuser, but there was concern.

And the older cars were not as competitive as the newer models. This was evidenced by the final point standings. The top eight drivers all had 1990 cars. The only non-1990 car in the top 10 was that of Eddie Cheever, who drove the same Penske driven to the CART championship by Emerson Fittipaldi a year earlier.

Opposite: In addition to being a race winner and PPG Cup champion, Al Unser Jr. has shown a phenomenal ability for scoring top-10 finishes throughout his CART career.

AL UNSER: LIKE FATHER, LIKE SON

'My dad taught me everything I know, but he didn't teach me everything he knows,' Al Unser Jr. has often told people. That may be so. The younger Unser has also told people that his father's older brother, Bobby, at times has been a bigger help. That also may be so.

The Unseers can lay claim to being America's first family of auto racing. In the 1920s, brothers Jerry, Louis and Joseph Unser were all racing car drivers with ambitions of running in the big race at Indianapolis, the 500.

The three brothers even had cars built by the Coleman Company and were practicing for the 1929 Indianapolis 500 when tragedy struck. Joseph was killed, the project was scrapped and the surviving brothers each went their own way.

Louis continued to race, and became famous as the winningest driver in the annual Pikes Peak Hillclimb in Colorado. Jerry also did some racing, but after his wife, Mary, bore him three sons, he moved his growing family to Albuquerque in 1936 and opened a successful garage.

Twin sons Jerry and Louis had been born in 1932 and Bobby came along in 1934. In 1939, Al completed the Unser family and by the time the boys were old enough, each began to race.

Bobby was the first to be successful and soon was challenging his uncle for supremacy on the Peak. In 1957, Jerry won the USAC Stock Car Championship and used that success to secure a ride at Indianapolis for 1958. Unser became the first of his family to qualify for the 500, but his race ended in the third turn on the opening lap when he became involved in a 16-car pileup that claimed the life of Pat O'Connor.

Unser actually sailed out of the track, but suffered only a dislocated shoulder. He returned to Indy the following year, but was fatally injured in a fiery practice crash. Unser's accident resulted in a change of rules that mandated drivers wear fireproof driving suits.

In 1963, Bobby became the next brother to race at Indy, although he crashed on the second lap in each of his first two 500s.

In 1965, he was joined in the Indy 500 starting field by younger brother Al and the race was much kinder. Although Bobby retired with an overheated engine, he had run a strong fifth in the famed Novi. Al, who had qualified 32nd in A.J. Foyt's backup Lola-Ford, steadily improved all day and finished ninth.

This race shows an interesting contrast in the two brothers' driving styles. Bobby was always considered the charger. He won races or dropped out while leading them. By the time he retired in 1981, he also had won the third most pole positions in the history of the sport.

By contrast, Al was steady and developed a real knack for bringing the car home, usually with a good finish. When Al Unser had the best car, as he did in 1970, he would win. When it wasn't the best, he could still be counted on to finish and score points — and usually a lot of points.

With his father and uncle as his teachers, is it any wonder Al Unser Jr. would adapt both drivers' styles?

Early in his Champ Car career, Al Jr. did appear to be more like Uncle Bobby than Papa Al. He was fast. He led races. He sometimes crashed. And then he scored his first win. By 1985, in only his third full season in CART, Al Jr. showed he was ready to challenge for the championship. However, he would wind up losing it by one point to his father.

The lost title seemed to haunt the younger Unser. Over the next two seasons, he would win only once. For 1988 he returned to the Galles team after spending three seasons with Shierston Racing and it proved to be a good decision. Al Jr. won four races that year but the following season produced only disappointment. After winning his second straight race at Long Beach, Unser came to Indianapolis as a pre-race favorite.

In the race itself, Emerson Fittipaldi was the dominant driver, leading most of the way until the final round of pit stops. Unser had been able to stay close to Fittipaldi and when the Brazilian was balked in traffic, he swept into the lead.

It looked like Unser would snatch the victory from Fittipaldi and join his father and uncle as an Indy 500 winner. With two laps to go, however, it was Unser's turn to be balked. Coming up behind lapped traffic, Unser slowed and Fittipaldi got a better run off Turn Two as they headed down the backstretch.

As they ran side-by-side in Turn Three, Fittipaldi moved up slightly and made contact with Unser's car, which then slammed the wall. Fittipaldi bobbed but gathered it up and coasted home under the caution flag for his first 500 win.

Unser failed to win again in 1989 and people began to wonder if he would ever be on top again. He most definitely would.

He started out winning two of the first four races of the 1990 CART season, but then Michael Andretti emerged as a title contender by winning three of the next four. Not to be deterred, Unser reeled off a streak of four consecutive race wins and at Nazareth was able to clinch the elusive CART title.

Unser would win only four races over the next three seasons, but would dominate 1994 with eight victories to capture his second CART title. Each of Unser's championships came during the years he had his highest number of victories in a season. But it's his record across his career as a whole that really stands out.

Check out these statistics.

In 17 years, Al Unser Jr. has competed in 256 CART races. He has won 31 of them and is the seventh





winningest driver in the history of the sport. He has scored 28 second-place finishes, 21 third-place finishes and 126 top-five finishes. In all, Unser has recorded 176 top-10 finishes.

And because CART awards points to the top 12 finishers in each race, Unser can also boast of scoring points on 181 occasions. In other words, you can expect Unser to score points an incredible 70.7 percent of the time, score a top-10 finish 68.7 percent of the time, score a top-five finish 49.2 percent of the time and wind up on the podium 31 percent of the time.

By contrast, Unser has won only seven pole positions in CART competition. His success has come as the result of race savvy. And by coincidence, Al Unser Jr.'s penchant for bringing the car home in the points is reminiscent of another driver — Al Unser Sr.

Like son, like father?

It appears that way if you check out the Champ Car record of Al Unser Sr., which spanned 30 years.

In 321 starts, Al Sr. recorded 31 race victories, 31 second-place finishes, 28 third-place finishes, 140 top-five finishes and 185 top-10 finishes. He stands third behind A.J. Foyt and Mario Andretti on the all-time Champ Car victory list.

The elder Unser won two CART titles and a USAC Champ Car title. He won the Indianapolis 500 four times, was the first and only driver to win the 'Triple Crown' of three Champ Car 500-milers in one season and won a total of eight 500-mile Champ Car races (four at Indianapolis, two at Pocono and two at Ontario).

In contrast to his son, Al Sr. won 27 Champ Car pole positions. And because dirt-track races were part of the championship in seven of Unser's 30 seasons, eight of his wins came on dirt.

The diversity factor brings another comparison.

In his Champ Car career, Al Unser Sr. won 25 races on ovals, eight on dirt tracks and five on road courses. Al Sr. also won the 1965 Pikes Peak Hillclimb, which was part of the national championship from 1947 to 1955 and 1965 to 1969. The breakdown of wins by Al Unser Jr. reveals 25 wins on road courses and six on ovals.

Then there are the pole positions. Al Sr. won 15 on paved ovals, eight on road courses and four on dirt-track ovals. Al Jr. has won six poles on road courses with his sole oval-track pole position coming at Indianapolis in 1994, the season he won four pole positions.

Because the two drivers come from different eras, it is slightly difficult to assess which Unser might be considered the best.

Al Unser Sr. retired in 1994 and had made only five starts between 1990 and 1993. But remember that he actually led 20 laps in his final Champ Car start and also has the distinction of giving the Buick V-6 engine its best finish ever at Indy when he placed third in 1992. He was competitive right up to the end of his career.

The elder Unser can also boast that he competed against the likes of A.J. Foyt, Mario Andretti and his brother, Bobby, when all were in their prime. He can also boast that he beat them as well as people like Gordon Johncock, Johnny Rutherford, Tom Sneva and Rick Mears, all likewise in their prime.

Al Unser Jr. is still racing and even though he has not enjoyed an outstanding season since 1994, nobody at Penske Racing has. Unser can boast that he has raced against and beaten the best, too. He can also boast that the competition in his era has tightened to unbelievable proportions.

Can there be a conclusion from this statistical gathering?

Both father and son are what they had in mind when they devised the idea for a place called the hall of fame. But titles and race victories aside, the career records of both Unsers are simply phenomenal.



Opposite: Al Unser Sr. had a knack for bringing his cars home to points-paying finishes, as he confirmed in 1985 (bottom) when he won his second PPG Cup title.

À LA CART

CART'S INTERNATIONAL FLAVOR

Over the years, it has become apparent that the CART series has grown in international stature. During CART's first season, 30 different drivers participated in the 14-race schedule. Of those 30, only Australia's Vern Schuppan held a foreign passport.

In all, some 25 countries have been represented in CART competition in the past 20 years by a total of 260 drivers.

Those countries and the number of drivers representing them are: Argentina (2), Australia (4), Austria (1), Belgium (4), Brazil (12), Canada (11), Chile (1), Colombia (1), Denmark (1), Finland (1), France (4), Germany (2), Great Britain (5), Holland (3), Italy (18), Japan (2), Mexico (9), New Zealand (2), Peru (1), Philippines (1), Scotland (2), South Africa (1), Sweden (2), Switzerland (3) and the United States (167).

But why an increase in foreign-born drivers? There are a few reasons.

For one thing, the schedule has become increasingly diverse and today CART holds races on four continents. One of the side effects of that diversity is that with a schedule featuring eight or nine oval-track races out of 19 or 20 events, the series is more likely to attract drivers with road-racing backgrounds.

Another factor centers on the role of the engine and chassis manufacturers, which predominantly are located in England. Because these companies compete in European racing as well as in CART, they often are exposed to talented young drivers before they happen to race in America.

Yet another reason stems from the higher cost of racing in Europe where an aspiring Formula One driver must attract much more sponsorship than an aspiring CART driver. Promising young drivers have learned that CART's two support series — Indy Lights and Toyota Atlantics — are more affordable than Formula 3000, F1's main support series. There is also the fact that once a driver is ready for F1 or CART, it costs considerably less to get into CART than it does to get into F1.

Regardless of where these drivers come from, though, one thing is evident: Over the years, the competition has become tighter — and better.

DATELINE: CART

1990

January: Chip Ganassi, having completed a buyout of Patrick Racing, announces he has signed former F1 driver Eddie Cheever.

February: CART bans Porsche's new all-carbon fiber chassis built by March.

April: Willy T. Ribbs becomes the first African-American driver to compete in CART and in Champ cars by qualifying for the Long Beach Grand Prix. Hiro Matsushita also qualifies at Long Beach, becoming the first Japanese driver in CART.



WILLY T. RIBBS

May: Arie Luyendyk wins the Indianapolis 500 becoming the first driver since Graham Hill in 1966 to score his first Champ Car win at Indianapolis. Luyendyk's average speed of 185.981 miles per hour makes it the fastest Indy 500 and fastest 500-mile Champ Car race in history.

June: Jeff Andretti qualifies for the Milwaukee 200 to join brother Michael, father Mario and cousin John in the field — the first time in history four members of the same family have started the same race. Bernie Ecclestone reiterates FISA's objection to CART's plan to hold races in Brazil and Australia.

July: Patrick Racing and Alfa Romeo make chassis switch to Lola. Driver Roberto Guerrero responds to change with fifth-place finish in Michigan 500. Founding CART member Jim Hall announces his team will return in 1991.

August: After six-year relationship, Penske Racing announces it will not renew Danny Sullivan's contract.

September: A.J. Foyt, the all-time winningest driver in Champ Car competition with 67 victories, suffers serious foot and leg injuries at Elkhart Lake. Porsche announces it will not return in 1990. FISA rejects CART race in Surfers Paradise, Australia, by 69—1 vote with ACCUS casting sole dissenting vote. CART and Surfers Paradise race organizers continue with ticket sales and plans for the race despite the vote. Al Unser Jr. clinches CART title at Nazareth to become first second-generation CART champion.

November: Firestone announces it will sponsor newly renamed Indy Lights series, formerly known as ARS. New cars will be produced by Lola with engines remaining Buick V-6.

1991

March: John Andretti scores first CART victory by winning at Surfers Paradise, the first-ever Champ Car event in Australia. Scott Pruett debuts new Truesports chassis at Surfers Paradise and finishes fifth. Truesports is first American-built chassis in Champ Car



JOHN ANDRETTI

racing since 1986. Nissan tests a 3.5-liter V-12 engine in a Lola CART chassis, fueling speculation it is considering program in Formula One or CART.

May: Willy T. Ribbs becomes the first African-American to qualify for Indy 500.

June: Reigning Indy Lights champion Paul Tracy is signed to multi-year contract with Penske Racing. Michael, John and Mario Andretti score 1—2—3 finish in Milwaukee 200. Tony George confirms he is looking at a 3.5-liter normally aspirated engine for Indianapolis.

August: Former CART driver Geoff Brabham is seriously injured in a test crash at Elkhart Lake in a Nissan IMSA sports car.

September: Corner worker Jean Patrick Hein is killed during Vancouver CART race. Bobby Rahal and Danny Sullivan announce they will be swapping rides for 1992 with Rahal going to Patrick and Sullivan going to

Galles-Kraco. Mano and Michael Andretti get first test of new Ford-Cosworth engine at Elkhart Lake.

October: Michael Andretti scores record eighth CART win of '91 season by winning at Laguna Seca. Win also clinches CART title for Andretti. Future CART driver Christian Fittipaldi, nephew of Emerson Fittipaldi, clinches F3000 title, edging out future CART champion Alex Zanardi. Former CART driver Teo Fabi wins the FIA World Sports Car Championship for Jaguar.

November: Tony George attends CART's annual year-end meeting and attempts a



HIRO MATSUSHITA

takeover in trying to promote Goodyear Racing director Leo Mehl as CART's new chairman. CART's board of directors vote to reject George's reorganization plan. Al Unser Jr. has first test in the new Galmer.



ARIE LUYENDYK WINS THE 1990 INDY 500

Photo: Michael C. Brown

Three-time CART champion Rick Mears celebrates his fourth victory in the Indianapolis 500 in 1991.





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A CHANGE OF ADDRESS FOR THE CHAMPION

FROM 1992 to 1994, CART crowned three different PPG Cup champions — Bobby Rahal, Nigel Mansell and Al Unser Jr. That each of these men won the title in turn is no surprise. All three were drivers who had made an impact in the sport, thanks to their winning ways.

The trio also has something in common in that each driver had made an address change of sorts prior to his championship season.

For Rahal, 1992 was his first season with a team making its debut in CART. This was no rookie team, however, as Rahal, in addition to being its driver, was also a co-owner. Although he was the reigning World Champion in Formula One when he came to CART in 1993, Nigel Mansell was still considered a rookie. After all, he had never raced a Championship car before. He would show that he was a quick learner and establish a couple of records that may never be broken in the process. For Unser, 1994 was his first season with Penske Racing. It would also end up being the best season of his CART career to date.

Heading into the final race of 1992 at Laguna Seca, Rahal knew he had his work cut out for him. However, he could take comfort in the fact that he had won at Laguna Seca four times. He could take comfort in the fact he was one of the winningest drivers in CART (with 18 race wins in the 1980s, he was second only to Rick Mears with 19 wins during the decade). He could also take comfort in a 12-point lead going into the race. All he needed to do was finish fourth.

The 1992 CART season had been typically competitive. Five drivers won the first six races and Rahal perhaps gave evidence he was in championship mode by being the first to win twice in '92.

Emerson Fittipaldi had opened the season with a win at Surfers Paradise for Penske. Rahal then won at

Opposite: Bobby Rahal found the role of team owner much to his liking as he captured his third PPG Cup in 1992 and became the first owner/driver to win a CART title.

Below: Bobby Rahal (left) gets the jump on polesitter Michael Andretti as the field heads for the start at Phoenix in 1992.



Michael C. Brown



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Phoenix while Danny Sullivan bumped Galles-Kraco teammate Al Unser Jr. out of first place to win at Long Beach. Sullivan also deprived Unser of an unprecedented fifth straight win at Long Beach in the process.

Unser gave the team's home-brewed Galmer chassis its second and final CART win by outlasting Scott Goodyear in an epic Indy 500 finish. The margin of 0.043 of a second is the closest in history and made up for an accident-plagued race influenced by unseasonably cold weather.

Rahal got his second win of the season at Detroit but Michael Andretti, whose Lola was fitted with the new Ford/Cosworth XB engine following the Newman/Haas team's decision to switch from the previously dominant Chevrolet powerplant for 1992, served notice that he would also be a contender for the title by winning at Portland and Milwaukee. Rahal won the next race at the new Loudon track in New Hampshire, but Andretti responded with his second straight victory at Toronto.

Goodyear, who had come so close at Indy, scored his first win by edging out fellow Canadian Paul Tracy in the Michigan 500. The victory was hard-fought and well-deserved. Goodyear missed winning both 500s that year by a fraction of a second.

Although no one knew it at the time, Rick Mears, who finished 16th at Michigan, had driven his final CART event. Mears had broken his wrist in a practice accident at Indianapolis and it continued to give him problems. He sat out the remainder of the season and announced his retirement at the end of the year.

Fittipaldi then went on a run, winning at Cleveland, Elkhart Lake and Mid-Ohio while Andretti was victorious at Vancouver. But Rahal then won at Nazareth and that set the stage for a showdown at Laguna Seca.

In qualifying, Michael Andretti set quick time to capture the pole and the PPG Cup bonus point that accompanied it. The lead was now 11 points, but Rahal still needed a fourth or better to clinch the title. Rahal qualified sixth. If nothing else, fourth was within his grasp — only one row away.

'Obviously, I cannot lay back and cruise,' Rahal said prior to the race. 'But banging wheels won't get us anywhere either. We don't have to win the race. However, you do have to drive pretty hard to finish fourth here.'

As Rahal had scored points in 12 of the first 15 races, Andretti knew his chances were slim. Rahal had been very productive with 10 finishes in the top five.

'I really don't expect him to drop out,' Andretti said while awaiting the 'start engines' command. 'I've just got to win the race and hope for the best.'

And Andretti did exactly what he had to. He led the most laps and won the race for a sweep of the weekend's 22 available PPG Cup points. Rahal also did exactly what he had to do — and then some. Staying out of trouble at the start, he got into fourth place and then moved into third to score 14 points, good enough for a four-point margin in the final standings.

It would be the second closest points finish in the history of CART. Ironically, it marked the third time that Andretti had finished runner-up to Rahal in the PPG Cup race. It was also the fourth time that Andretti had been runner-up in the final standings. (Andretti would also become a bridesmaid in 1996 to CART champion Jimmy Vasser.)

Andretti, hoping to emulate his father and give the U.S. another American Formula One champion, bid

À LA CART

FOND FAREWELL TO NICK

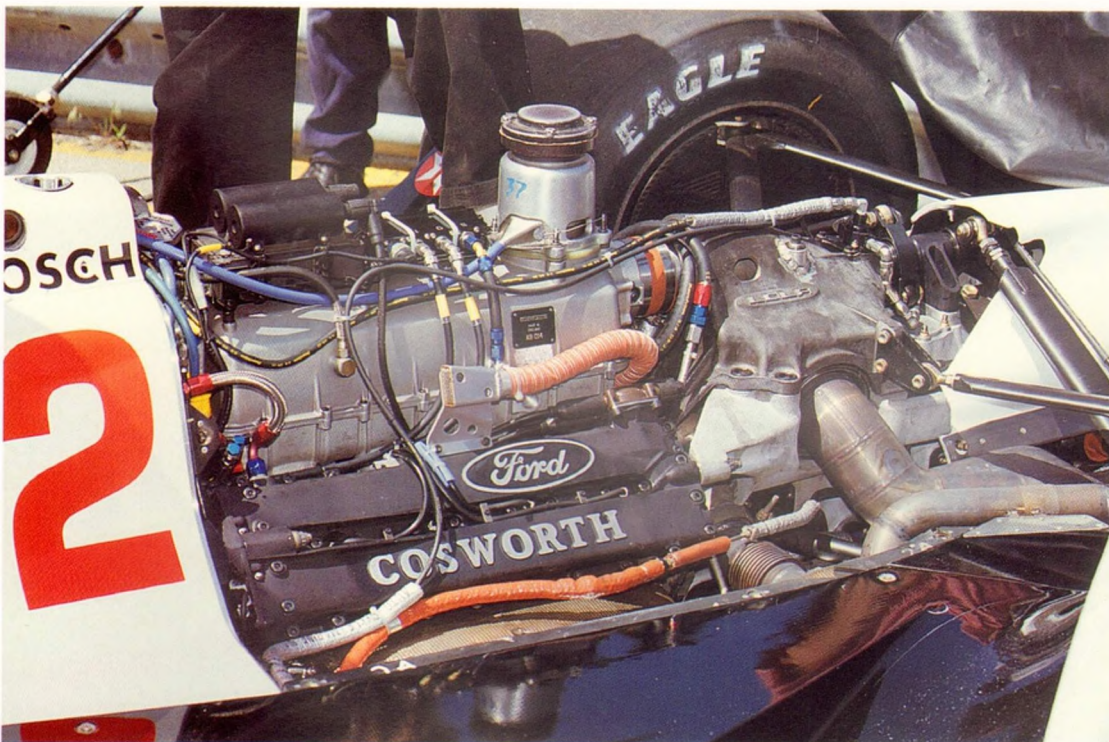
For 14 years, Nick Fomoro held a very important position with CART. In fact, without him, they never could have gotten the races under way.

For, you see, Fomoro was the official starter of every CART race from 1979 to 1992.

Fomoro began his involvement in racing as a driver, competing from 1947 to 1956. In 1950, he was the American Racing Driver's Club midget champion. In 1953, he won NASCAR's midget championship.

He began his career as a starter the following year and was CART's only starter until his retirement at the end of the 1992 season. He was replaced by Jim Swintal, who has retained that position ever since.

Fomoro did return as starter for one important CART event — the 1996 U.S. 500. Even though he was honorary starter for the race, it was a fitting tribute to a man who played a major role in the running of so many of CART's races.



Opposite: Emerson Fittipaldi, shown leading the pack through a series of Surfers Paradise chicanes, got off to a good start by winning the 1992 season opener 'down under' in a Penske-Chevrolet.

Left: Ford and Cosworth collaborated to build the XB engine and made a successful return to Champ Car racing in 1992 with five victories.

Overleaf: Bobby Rahal heads into Laguna Seca's famed Corkscrew in the Rahal-Hogan Lola-Chevrolet on his way to a third-place finish that clinched the 1992 CART championship.





Right: Stefan Johansson scored a pair of podium finishes to take Rookie of the Year honors in 1992 and transformed Tony Bettenhausen's team into a contender in the process.



Below right: Although winning at Laguna Seca from the pole was not enough for Michael Andretti to win the 1992 CART title, he did hope the momentum would carry over into his assault on Formula One in 1993. His stay in Grand Prix racing was to be brief, however, and he would return to CART in 1994.

Bottom right: Carl Hogan (left) and Bobby Rahal teamed up to capture the 1992 PPG Cup. It was Hogan's first CART title and Rahal's third.



1992 CART CAPSULE

- Champion:** Bobby Rahal
- Race Winners:** Michael Andretti (5), Emerson Fittipaldi (4), Bobby Rahal (4), Danny Sullivan (1), Al Unser Jr. (1), Scott Goodyear (1)
- Pole Positions:** Michael Andretti (7), Bobby Rahal (3), Emerson Fittipaldi (2), Roberto Guerrero (1), Al Unser Jr. (1), Mario Andretti (1), Paul Tracy (1)
- Rookie of the Year:** Stefan Johansson
- Most Improved Driver:** Scott Goodyear
- Indy Lights Champion:** Robbie Buhl
- New Races:** New Hampshire
- Notable Highlights:** Bobby Rahal becomes first owner/driver to win CART title



Art Flores

Michael C. Brown

Jon Potiker



Left: Scott Goodyear reflects on losing the 1992 Indy 500 to Al Unser Jr. by a fraction of a second. The Canadian started last and nearly passed Unser at the finish line.

Below: A few weeks later, Goodyear rebounded from the Indianapolis disappointment to capture a hard-fought win in the Michigan 500 over fellow Canadian Paul Tracy.

Overleaf: F1 World Champions past and present find themselves finishing 1—2 at Surfers Paradise as race winner Nigel Mansell (right) shows Emerson Fittipaldi who's No. 1.



Jon Poitler

Michael C. Brown



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Emerson Fittipaldi

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ALEXANDER JULIAN



CART farewell in 1992. Signed by the McLaren team, he seemed likely to succeed. But a change in the rules governing testing severely limited Andretti's track time and the new McLaren was only competitive in the rain when driven by the world's best wet-weather driver, Ayrton Senna.

Nigel Mansell's arrival on the CART scene actually came late in 1992, when he shocked the racing world by announcing that (a) he would not be coming back to defend his newly won FI World Championship and that (b) he would be competing in CART for the Newman/Haas team in 1993.

Championship Car racing had seen a lot of FI World Champions come and go since 1961. Jack Brabham, Graham Hill, Jim Clark, Jackie Stewart, Denis Hulme, John Surtees, Jochen Rindt and Alan Jones — they had all been there, done it. But none of the aforementioned members of this distinguished group made quite the impact that Mansell was able to make.

Perhaps it was due in part to the fact that Brabham, Hill, Clark, Stewart, Hulme, Rindt and Jones never came close to running an entire Champ Car season. Clark and Hill had each won at Indianapolis. Clark also won at Milwaukee and Stewart even won a non-championship event for Champ cars at Mt. Fuji, Japan. But none of these drivers went after the Champ Car title.

Mansell, the first Englishman to win the FI World Championship since James Hunt in 1976, developed an incredible fan and media following when he dominated the 1992 FI season. His emigration to CART would expose millions of new fans to the series, thanks to an expanded global television package.

A process that would repeat itself in CART paddocks would be the necessity to provide a separate press facility to deal with the overflow of journalists who had arrived to cover Mansell.

And Mansell's adaptation to oval-track racing would electrify everyone.

The first order of business for Mansell was a street race, the 1993 season opener at Surfers Paradise. In short order, he won the pole, overcame a stop-and-go penalty and won the race, a first for a CART rookie. But Mansell was no ordinary rookie, as his oval-track performances would ultimately show.

Mansell's victory had additional historic overtones. In addition to being the first CART rookie to win on his CART debut, he also became the first rookie driver to win his first Championship Car race since Graham Hill won the 1966 Indianapolis 500.

'When I came out of the last chicane, it started to miss so I put it in fourth gear and just prayed it would make it around the last comer,' Mansell said after the race. 'I really have to thank my crew. This is fantastic.'

He would have more fantastic moments.

1993 CART CAPSULE

Champion: Nigel Mansell

Race Winners: Nigel Mansell (5), Paul Tracy (5), Emerson Fittipaldi (3), Mario Andretti (1), Danny Sullivan (1), Al Unser Jr. (1)

Pole Positions: Nigel Mansell (7), Paul Tracy (2), Emerson Fittipaldi (2), Scott Goodyear (2), Mario Andretti (1), Raul Boesel (1), Arie Luyendyk (1)

Rookie of the Year: Nigel Mansell

Most Improved Driver: Paul Tracy

Indy Lights Champion: Bryan Herta

New Races: None

Notable Highlights: Nigel Mansell becomes first rookie to win CART title; Mario Andretti becomes oldest man at 53 years, 1 month and 7 days of age to win CART race

As the horde of photographers will testify, the arrival of Nigel Mansell to the CART circuit brought the series unprecedented worldwide attention.



Art Flores

Opposite: Although Nigel Mansell would make an impact in CART in 1993, he found the going rough while practicing for his first oval-track race at Phoenix. The crash forced him to miss the event, won by Newman/Haas teammate Mario Andretti.

Below far right: Nigel Mansell, shown leading Stefan Johansson en route to victory at Surfers Paradise, surprised everyone by quickly adapting to CART's oval tracks.

Below: In addition to five race victories in 1993, Nigel Mansell also won seven pole positions and scored five podium finishes.

On his next outing, at Phoenix, Mansell would experience the only real glitch in his season. After backing into the wall during practice, he was forced to miss the race. He had suffered vertebra fractures and had been temporarily knocked unconscious.

Mansell's setback proved to be a catalyst for his Newman/Haas teammate Mario Andretti, who qualified second and then won what would be his last victory in CART competition. At the age of 53 years, one month and seven days, Andretti was also the oldest man ever to win a CART event. The triumph also gave him the distinction of having won Champ Car events in each of the past four decades.

Mansell rebounded to capture the pole at the next race — the Long Beach Grand Prix — and placed third behind race winner Tracy, who was tackling the full CART schedule for the first time as Mears' replacement in the Penske lineup, and second-place finisher Rahal.

Next came Indianapolis where Mansell again finished third. It was his first oval-track race and he learned a valuable lesson about restarts. He was leading the field late in the race when the event was temporarily slowed by a caution period. When Mansell came down the straightaway for the restart, he misjudged the speed of his pursuers and found himself passed by eventual winner Fittipaldi and Arie Luyendyk. Would he ever learn?

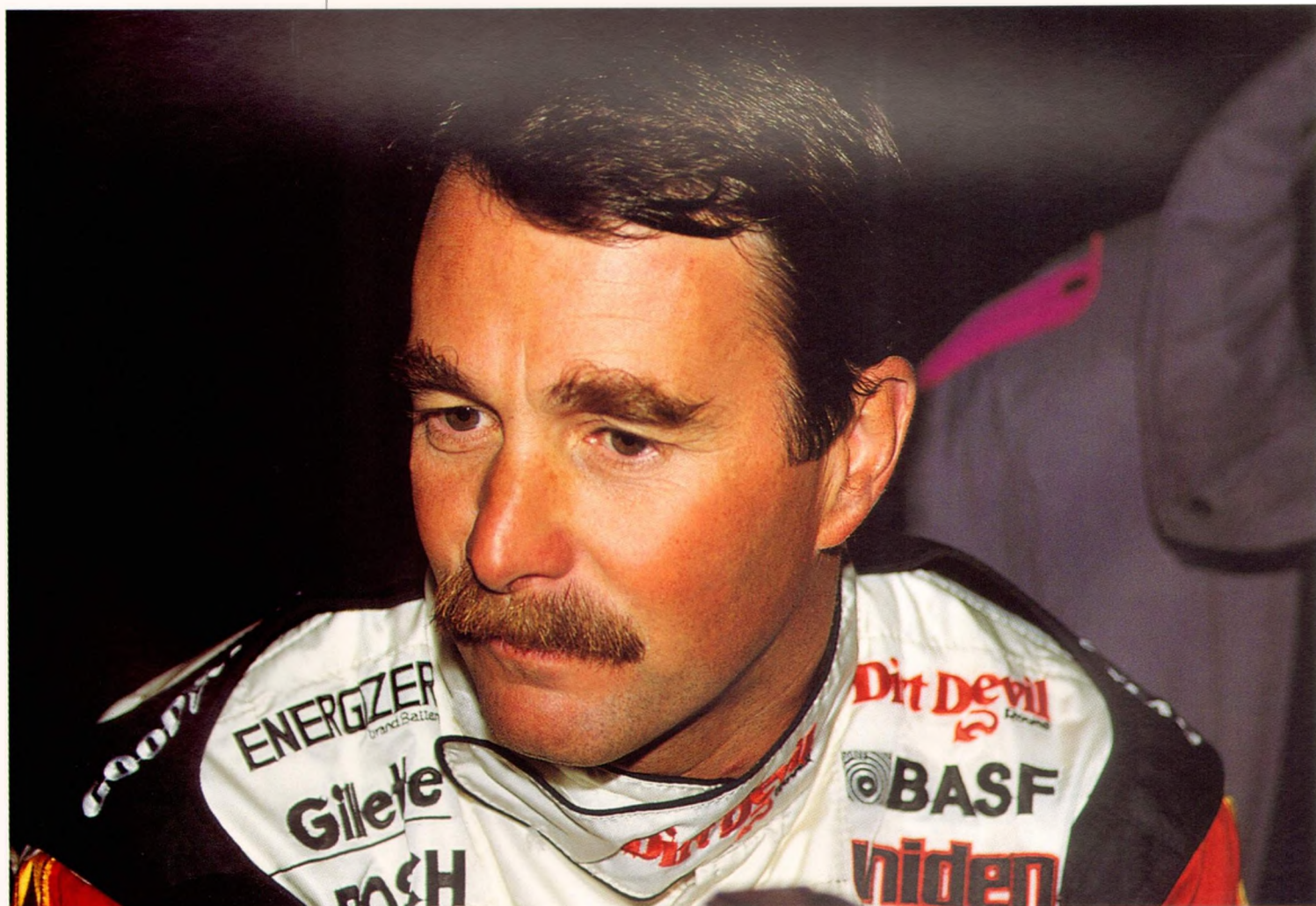
The next race was also at an oval track, albeit a shorter one, the Milwaukee Mile. Mansell not only scored his first victory on an oval, but also seemed humbled when reminded that Jimmy Clark had won his first oval race at Milwaukee 30 years earlier.

John Chuhran, CART's public relations director at the time, recalls Mansell's reaction.

'We had all gathered for the post-race press conference and I pointed out that Jimmy Clark had won here 30 years earlier and that it had been his first win on an oval track, too,' Chuhran said. 'Mansell looked very surprised and I think he felt humbled by the news. He mentioned that it made his win even more special to know that about Clark. I think he was genuinely touched.'

Mansell claimed his third pole of the season in Detroit but retired from the race, which was won by Danny Sullivan. He followed up with podium finishes at Portland (won by Fittipaldi) and Cleveland (won by Tracy). Tracy was the victor once more in Toronto, but Mansell then overcame nausea to win the Michigan 500.

'I lost a lot of readouts on my dash so I relied on my team to tell me if everything was OK,' Mansell said in the winner's circle. 'I don't mind admitting I'm bushed. It's a great track as Mario said. It does beat you







NSYLVANIA IN

INDY CAR WORLD SERIES

ESTED

BOSCH
SPARK PLUG
PRIX

PPG

PPG
INDUSTRIES

BOSCH
SPARK PLUG PRIX

Harrods

TEXAS
Motor

Nigel Mansell

sparco

ALEXANDER JULIAN

down. I have never been in anything like this in my life. The team did a wonderful, wonderful job for me. It's just fantastic.'

Next came a win at New Hampshire after a late-race battle with Penske teammates Tracy and Fittipaldi. After passing Fittipaldi late in the race, he managed to dodge traffic and closed in on the young Canadian. He waited for the right moment and passed Tracy for good on lap 197. It had been an incredible battle and considering it pitted the reigning World Champion against one of CART's most promising newcomers, it said something about the caliber of CART's drivers.

Oh yes, it was also Mansell's 40th birthday.

'All of the credit goes to Paul and Emerson — it was a fantastic race,' Mansell said afterward. 'Traffic just made the difference. I lost the lead in traffic and I got the lead back in traffic. Paul got loose and I got loose. It was fantastic for everybody to watch. I am learning all the time. It was one fabulous race and a great birthday present.'

Mansell's performance was praised by Jim McGee, the team director for Newman/Haas.

'He [Mansell] is amazing,' McGee said. 'He can just pick up the car and carry it when he has to. He did a fantastic job. He was looking forward to the last 50 laps of this race and he certainly gave the fans their money's worth.'

The vanquished Penske teammates also praised Mansell.

'This race is a testament to how competitive [CART] racing is,' Tracy pointed out. 'We were running qualifying time in the last 40 laps of the race. Nigel was inspired and I did all that I could to keep the lead. My team gave me a great car. I just came up short.'

Fittipaldi decided third wasn't all that bad.

'Nigel and Paul drove a beautiful race,' Fittipaldi said. 'It seemed like I kept getting to the lapped traffic at the wrong time. That held me up. Nigel seemed to hit the traffic at the right time. It was a fantastic race.'

The win vaulted Mansell back into the points lead and he scored points-paying finishes in the next three races, which were won by Tracy, Unser and Fittipaldi. He had a 14-point lead over Fittipaldi in the PPG Cup standings when the CART teams arrived at Nazareth for the season's penultimate event.

With a little luck, Mansell could clinch the title at Nazareth. He won the pole. Then he led 155 of the 200 laps to win the race. As Fittipaldi could only manage a fifth-place finish, Mansell had more than enough points to win the title.

He became the first rookie in CART history to win the championship. But because Alain Prost had not yet clinched the FI world title after replacing Mansell at Williams, Mansell found himself in the unique position of holding both titles simultaneously. No one had ever done that before either. And probably no one will.

Nazareth was also notable for a pair of interesting spectators — Michael Andretti and McLaren chief Ron Dennis. Their presence confirmed that Andretti would be returning to CART in 1994 following a lackluster season with the McLaren team in FI.

After a rocky start involving a number of crashes and spins, Andretti had struggled to find a comfort level in Formula One. In reality, he simply did not get a proper chance — even his McLaren teammate Senna said as much. After scoring an impressive third-place finish in the Italian Grand Prix, Andretti and McLaren parted company.

The last race of the 1993 CART season at Laguna Seca was won by Tracy, who took third place in the final PPG Cup standings behind Penske teammate Fittipaldi.

À LA CART

CHANGES MADE CARS SAFER

Following the latest rash of foot and leg injuries during the 1992 season, changes were dictated for all cars for 1993 and indications are that they worked.

Seriously injured in accidents at Indianapolis were Nelson Piquet and Jeff Andretti. Mario Andretti also suffered multiple toe fractures in a crash at Indy that would have been worse had it not occurred on a restart. Had Andretti crashed one lap later when he would have been up to speed, his injuries might have been more serious.

Fortunately, rule changes from CART and USAC provided for a safer car. The new rules dictated an extra bulkhead in front of the driver's feet and for the new cars, the driver was actually moved back.

The extended bulkhead worked as Robbie Buhl and Eric Bachelart each escaped with minor injuries after frontal impact crashes during practice at Indianapolis in 1993.

Opposite: Nigel Mansell hoists the PPG Cup after clinching the 1993 CART championship with a win from the pole at Nazareth.

Below: Eddie Cheever (99) leads Robby Gordon around the hairpin in the 1993 Long Beach GP. Both drivers were penalized following their 'no holds barred' battle.



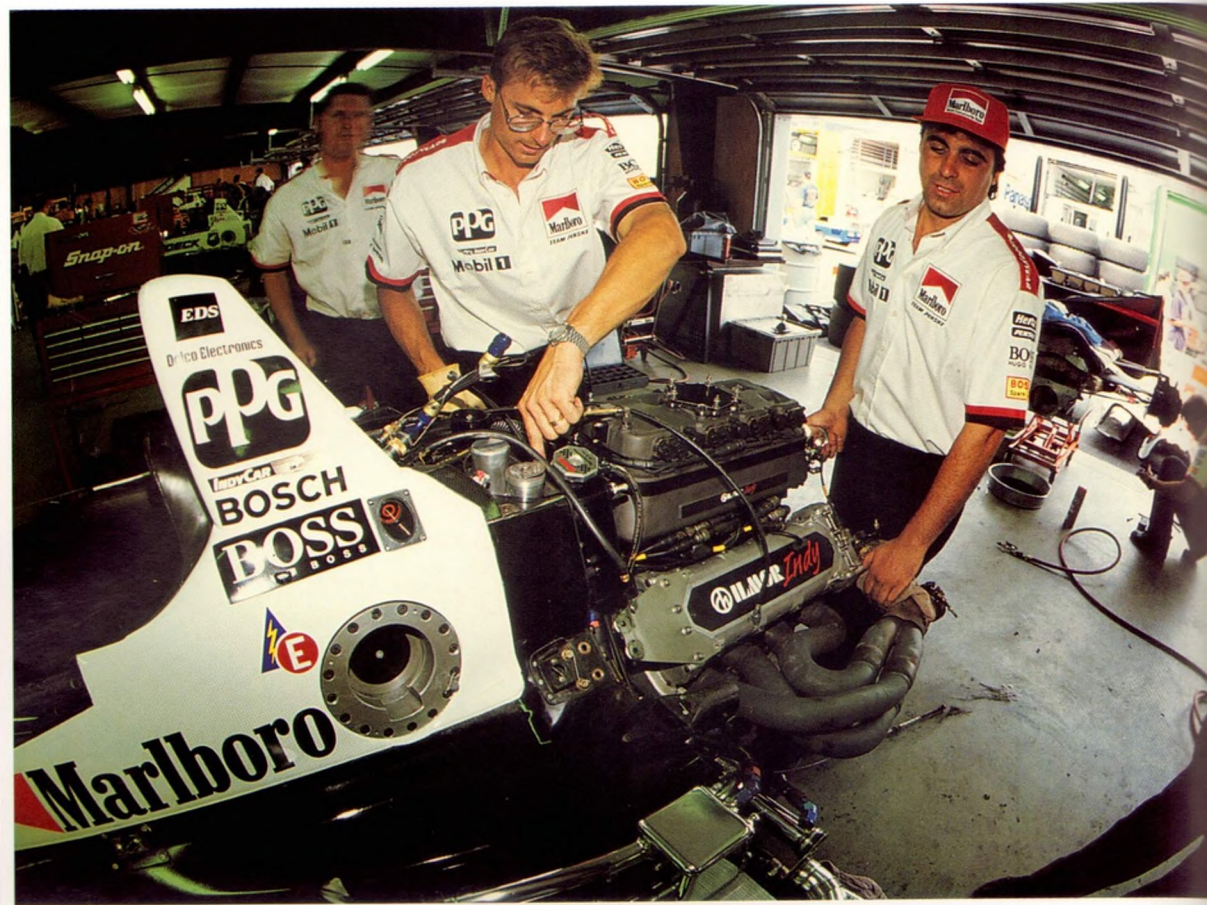
Jon Pothier





Previous spread: Back from a disappointing year in FI, Michael Andretti returned to CART in winning fashion and gave Reynard its first victory in the 1994 season opener at Surfers Paradise.

Right and below: In 1994, the car to beat was the Penske-Ilmor. Meticulous preparation by the Penske Racing crew helped the team's drivers to victory in all but four of the season's 16 races.



Following his successful title bid in 1993, most people expected Mansell to repeat. After all, he had won four of his five races on ovals in what was the first season he had ever raced on ovals. Mansell's championship triumph was also helped by a number of podium finishes that kept him on top. For 1994, it seemed a foregone conclusion that Mansell would reign supreme again.

However, Penske Racing had other ideas. For a start, it had its new PC23 chassis. It also had a stronger lineup with Al Unser Jr. joining Fittipaldi and Tracy in a three-car assault on the CART series.

Unser's arrival made him the third member of his family to join the vaunted Penske organization.

After a couple of disappointing seasons with Galles, he needed rejuvenation. And he found it where his father and uncle had previously — with Penske Racing.

Bobby Unser had driven for Penske from 1979 through '81, winning Indy for a third and final time as well as 10 other races. Al's father drove for Penske from 1983 through '89. Those years produced a pair of CART titles, only three race wins (including a fourth Indy 500 victory) and 13 podium finishes.

It was Al Unser Jr.'s turn to drive for Roger Penske.

Fittipaldi was starting his fifth season with Penske. Tracy had joined the team in 1991, initially as a test driver. The young Canadian was the perfect development driver — he could push a car to the limit and sometimes beyond — and it was he who carried out the lion's share of testing duties.

With the new PC23, the team achieved a dominance never previously seen in CART, or for that matter in the entire history of Championship Car racing in the United States. Unser wound up winning his second CART title with eight race victories while Tracy scored three race wins and Fittipaldi one.

That computed to 12 victories out of 16 races. But of those 12 wins, five featured 1—2—3 finishes by the Penske trio. In addition to winning 10 poles, they also qualified 1—2—3 on seven occasions. The final PPG Cup standings also reflected the team's superiority, with Fittipaldi finishing second behind Unser and Tracy third. The three drivers scored a combined total of 555 PPG Cup points and led a combined 1,584 laps out of a total of 2,083.

Michael Andretti, who had signed for Chip Ganassi's ambitious team, made his return to CART racing a happy one, giving the new Reynard chassis a win on its CART debut at Surfers Paradise.

Fittipaldi won at Phoenix, but Unser took the next three races — at Long Beach, Indianapolis and Milwaukee. After Tracy punted Unser into the tire barrier and went on to win at Detroit, Unser responded with wins

Paul Tracy leads Penske teammate Emerson Fittipaldi into daylight at Vancouver. This day would belong to Penske teammate Al Unser Jr., who scored his eighth win of 1994.



1994 CART CAPSULE

Champion: Al Unser Jr.

Race Winners: Al Unser Jr. (8), Paul Tracy (3), Michael Andretti (2), Emerson Fittipaldi (1), Scott Goodyear (1), Jacques Villeneuve (1)

Pole Positions: Al Unser Jr. (4), Paul Tracy (4), Nigel Mansell (3), Robby Gordon (2), Emerson Fittipaldi (2), Raul Boesel (1)

Rookie of the Year: Jacques Villeneuve

Most Improved Driver: Robby Gordon

Indy Lights Champion: Steve Robertson

New Races: None

Notable Highlights: Al Unser Jr. ties Michael Andretti for most wins in a season with eight; Penske Racing scores five 1—2—3 finishes and also finishes in top three positions in final point standings

Nazareth marked the fifth time in 1994 that Penske Racing scored a 1—2—3 finish. On this day, it was Paul Tracy's turn to win as Al Unser Jr. (right) finished second and Emerson Fittipaldi placed third.

at Portland and Cleveland. Andretti gave the Reynard its second win of the season at Toronto and Scott Goodyear persevered to win a second Michigan 500.

Then Unser took over once more, winning at Mid-Ohio, Loudon and Vancouver. He was ready to win his second title at Elkhart Lake, with two rounds of the championship to spare.

What's more Unser was able to enjoy the manner in which he clinched the '94 title. Instead of being in a hospital after being knocked unconscious as he had been at Nazareth in 1990, he earned a trip to the podium by finishing second.

At a restart on lap 36 of the 50-lap race, Unser, Tracy and rookie Jacques Villeneuve, who had qualified second fastest at the wheel of Forsythe-Green Racing's Reynard, became involved in a spectacular battle for the lead. Unser decided that it might be wise to watch the proceedings from third and remain in the race as the other two combatants got exceptionally close. Tracy would ultimately retire and Unser moved into second and stayed there to clinch the title.

'We got out there today and did our best to stay out of trouble,' Unser said. 'I tried hard to win and we had a great race. Going into Turn One on the restart, it got a little too crowded for me and Paul and Jacques. I wanted to win, but I didn't want to end up on the outside of Turn One so I just let them go.'

'I always knew Roger Penske set the standard ever since I started racing. My uncle Bobby drove for him and my dad drove for him and they always said if he called, to jump at it.'

'Our whole goal is for this. It's been a long time since Penske won the title and the guys on the team have been telling me that. This one is for them.'

For Villeneuve, the victory was something of a milestone, even though he was only 22 at the time. It was his first CART win and also his first major auto racing victory. Although a rookie in CART, he displayed a maturity and showed he had mastered the rolling start.

Villeneuve's pass of Tracy on the lap 36 restart was the key to the race.

'Paul started too early and got too close to the pace car so he had to slow down and I got a great tow from him on the restart,' Villeneuve explained. 'I have to credit my crew. On my two stops, I made big mistakes. The first time, I did not get it in first gear and I stalled it on the second stop. But the crew got me out and didn't let me down.'

With two races to go (Nazareth and Laguna Seca), it simply became a matter of which Penske driver would finish second to Unser and which would be third. Tracy would win both races, but Fittipaldi would place third at Nazareth and fourth at Laguna Seca to finish second in the final standings.

The 1—2—3 for Penske Racing was an incredible feat in itself and quite unprecedented.





David Hutson

CLASS ACT WAS THE BEST WAY TO DESCRIBE MEARS

They called him the 'Rocket Man.' They called him 'Rapid Rick.' They simply called him 'Rick.' They could have called him 'Champ' although it somehow seemed a bit pretentious for someone so humble and down to earth.

But in evaluating the career of Rick Mears, the words 'class act' come to mind.

Ever-cheerful, friendly to fans, gracious to the media, pleasant to anyone who crossed his path, Mears was easily CART's most popular champion. Everybody liked him. Everybody still likes him. Rick Mears is a very nice person.

He was also one of CART's most successful drivers, winning three of the first four CART titles and 19 CART races during the 1980s. By 1992, he was still capable of winning races even though in that final season of his career, he was only able to reach the podium once.

Mears had entered the Championship Car fray driving for a man named Art Sugai. Sugai was the owner of one of the smaller teams in USAC. But Mears' performances in Sugai's older Eagles caught the eye of Roger Penske.

Penske was looking for a promising young driver, much like the pleasant young man who had taken his team to the heights in its formative years — Mark Donohue. Like Donohue, Mears had a boyish look and an ever-present smile.

Like Donohue, he also had exceptional talent. Following a meeting at the Colorado 500 motorcycle ride organized annually by Wally Dallenbach, Penske offered Mears the chance of a racing lifetime — a ride with the best team in the business. OK, it was actually an offer for part of the 1978 season: all three 500 mile races and at least six others. Mears naturally jumped at the chance.

'I felt as soon as I got in the cars that we'd be capable of winning races,' Mears said in an *Indy Car Racing* magazine interview. 'The first time I did testing in the car, I was driving it pretty much the same as the others and we were in the hunt. I didn't know we'd win that soon, but I thought we could win races.'

In the seventh race of the season at Milwaukee, Mears got his first Championship Car win. By the end of the season, Mears had won two other races and he finished ninth in the final standings.

The next assignment for Mears was the new CART championship as a majority of top Championship Car team owners decided to break away from USAC. Ever the loyal employee, Mears did what he was hired to do — win races and championships.

In addition to winning three of the first four CART titles, Rick Mears was the winningest CART driver of the 1980s with 20 race victories.

Opposite: Although serious leg injuries suffered in 1984 hampered him on road courses, Rick Mears was able to win at Laguna Seca in 1989 in convincing fashion.



Michael C. Brown

Above: Retirement may have taken Rick Mears out of the cockpit, but it did not take him out of racing as he stayed with the Penske team in an advisory role to developing talent Paul Tracy.

In the first four seasons of the CART series, Mears won 14 races and the championships of 1979, 1981 and 1982. After struggling with the Penske chassis during the 1983 season, he was able to benefit from his team's switch to March in 1984. He responded to the change by winning his second Indianapolis 500.

Then disaster struck. Practicing for the new race at Sanair in Canada, Mears attempted to pass Corrado Fabi and spun into the inside guardrail along the front straightaway. He suffered serious foot and leg injuries and was sidelined for the remainder of the season. He returned to the cockpit the following season and scored a win at Pocono, but made a total of just five starts as he continued his recuperation.

After his Sanair accident, Mears was still able to run with the best on the ovals, but no longer was a force on the road courses, even though he was able to win at Laguna Seca in 1989. Initially, Mears believed the level of competition had more to do with his drought on the road courses than his injuries.

'People forget that most of those years after my accident, I had Danny Sullivan as a teammate and he was one of the best road racers out there,' Mears often said.

In time, Mears discovered something he had not considered.

'I finally realized one day that the movement in my right foot was slow,' Mears said in an *Indy Car Racing* magazine interview. 'I'd always been using my foot and leg to work the throttle because I didn't have enough movement in my foot to work it alone.

'One time [my wife] Chris and I were at home in the pool and I stuck my feet up and wanted to splash her, but I could only cause a ripple. So I got to thinking that that had to be hurting me a little bit. I started working on that and I couldn't speed the foot up, but I started treating it as a turbo lag.

'So I started thinking of it ahead of time, started anticipating. It made me conscious of trying to work the throttle ahead of time before I wanted it. That started helping. But it was affecting me to a point, but not as much, I felt, as other people thought.'

Mears went winless in 1986 and the 1987 season was lost trying to develop the new Penske chassis and the Chevy Indy V-8 engine simultaneously. Mears did win at Pocono, but the team was really looking ahead to 1988 at that point.

In the next four seasons, Mears continued to win races and never finished lower than fourth in the point standings. In 1989, he narrowly missed winning his fourth CART title.

Battling Emerson Fittipaldi down to the penultimate round at Nazareth, Mears made a rare mistake and left the pits too early, taking the top of the vent hose with him. That brought out the black flag and Mears returned to the pits. Fittipaldi won the race and clinched the title while Mears finished second.

He rounded off the season with that victory at Laguna Seca, where he started from the pole. It was Mears' first win on a road course since 1982 when he triumphed at Riverside.

'Laguna was a great win for us,' Mears said in the same *Indy Car Racing* article. 'I remember in the press conference afterward that everyone was asking if this would finally get the monkey off my back, if now everyone would call me a road racer. I told them no, that the only way that would ever happen is if I sit on the pole at the next six or eight road races in a row, lead every lap and win every one. Then maybe they'd call me a road racer.'

'I understood, though, and that's why it never bothered me. I knew what was going on. People can write and say what they like.'

Three years later, Mears would be injured in a race car once more. This time, the accident occurred during practice for the 1992 Indy 500. Heading into Turn Two, Mears' car began to spew fluid, causing him to slide. It struck the wall and then flipped. He suffered a broken wrist in the accident but was actually able to run in the race.

Unfortunately, he got caught up in someone else's accident and crashed again. He raced only four more times that season, with a fourth-place finish at Loudon as his best result.

At the annual Penske Christmas party, he announced his retirement.

'I knew it was right when I said it,' Mears said of the surprise announcement. 'When I said it, by the time I sat back down at the table, there was a big weight lifted off my shoulders. It had actually been working on me more than I probably realized.'

Retirement from driving did not mean retirement from racing. Mears has continued his involvement with Penske Racing and more recently has been involved in an Indy Lights program with his son Clint and nephew Casey.

The tally shows Rick Mears scored 29 Champ Car wins (including four at Indianapolis), 40 pole positions and three CART championships. He also won the affection of millions of race fans.



PENNZOIL

PENNZOIL

MONROE

MONROE

PENNZOIL

BOSCH

4

GOODYEAR

GOODYEAR

MONROE

Hertz

PENNZOIL

PENNZOIL

GOODYEAR



AJFoyt
COPENHAGEN
RACING

AJFoyt
COPENHAGEN
RACING

A.J. LEFT HIS MARK AS ONE OF THE GREATEST

He is undoubtedly one of the greatest racing car drivers of all time. He won in virtually every series he raced in. His name is synonymous with the sport — the mere mention of A.J. makes one think of auto racing.

When Anthony Joseph Foyt decided to retire as a driver prior to the start of qualifying for the 1993 Indianapolis 500, the announcement was unexpected and it was predictably an emotional moment for all who were present at the track.

Indianapolis Speedway track announcer Tom Camegie, who had seen every one of Foyt's 35 Indy 500s, startled the crowd by alerting them to a ceremonial lap that was not on the schedule during the lull before qualifying.

The lap was unscheduled because A.J. Foyt had decided the time to retire had come shortly after a practice session accident involving Robby Gordon, who was driving for him. Foyt had actually been fourth fastest in the session. But he also realized it was time to quit.

So Foyt went round on his ceremonial lap to a standing ovation. Then he took the microphone to address the crowd. 'It's a hard decision,' Foyt said, trying to hold back the tears. 'There comes a time. I hate to get emotional like this, but I've been here 35 years. I finally decided it was time. I can't worry about my other car and worry about myself.'

And so A.J. Foyt finally retired. In his stellar career, he won 67 Championship Car races and 53 Champ Car pole positions. He ranks second only to Mario Andretti in laps led, 7,587 to 6,621, and also made 369 Champ Car starts in 36 seasons.

He became the first man to win Indy four times. He won in the midgets, sprint and dirt cars that have been the mainstay of American racing. He won in stock cars, with the Daytona 500 in 1970 as a high point. He also won on road courses, capturing the 1967 24 Hours of Le Mans one week after winning his third Indy 500. He won other sports car races.

But while his racing career was very successful, Foyt could be very controversial. For example when CART was formed, Foyt initially supported the move. Then he went back to USAC and won five Champ Car events in 1979 against meager fields. (With so many teams going to CART, USAC had to resort to filling fields with dirt cars.)

In each of the next two seasons, Foyt made only two Champ Car starts. He appeared to be phasing out his career but in 1982, he drove in six events. By 1986, he was up to eight. In 1988, he ran in 14 of 15 CART events and the following season he started 12 races.

In 1990, he was nearing the end of a full season when he suffered perhaps his most serious accident. As he was battling with backmarkers at Elkhart Lake, Foyt's brakes failed as he entered the first corner. His car struck an earthen barrier that tore open the front of his car.

The accident caused serious injury to his legs and feet. At one point, there was fear he would lose one or both legs. Fortunately for Foyt, his surgeon was Dr. Terry Trammel, who had successfully operated on a number of drivers with similar injuries.

Foyt was able to return to Houston where he began an extensive rehabilitation program that would allow him to return to the cockpit and qualify for Indianapolis in 1991. That was to have been Foyt's farewell race, but after debris from an early accident eliminated him, he decided for one more try and competed in six of the seven CART events that followed. He then had Mike Groff take over so that he could continue recuperating.

The following year, Foyt finished ninth at Indy but would run no more. He then practiced for Indy in 1993 before retiring for good.

Sadly, Foyt's career was starting to decline when CART was formed. Although Foyt had won twice — at Texas and Silverstone — during the 1978 USAC season and recorded those five wins in 1979 after the CART—USAC split, he would never win a CART event.

As an owner, he did get some promising results from people like Robby Gordon, who gave him two podium finishes and led three races in 1993. Perhaps the change was going to work.

Unfortunately, Gordon's performances would represent the zenith of Foyt's CART career as a team owner. Gordon left the team at the end of the season and was replaced the following year by promising rookie Bryan Herta. Herta, the reigning Indy Lights champion, had some respectable performances, but his season was cut short by a serious accident at Toronto.

For 1995, Foyt's final season in the CART series, Eddie Cheever was signed. Cheever's younger brother Ross had driven for Foyt in 1992. Although Cheever would place fourth at Long Beach and fifth at Nazareth, those would be the best results. Nazareth was particularly frustrating as Cheever led most of the second half of the race only to run out of fuel with two laps to go. A gamble on two pit stops for the 200-mile race failed.

In retrospect, A.J. Foyt had a great career. Unfortunately, the greatness had started to wear off by the time he got to CART. But don't judge him by his final years because there is enough to applaud in the early years to make you forget the rest.

À LA CART

TWO OTHER GREAT CART CHAMPIONS CALL IT QUITS

Two of CART's earliest champions — Al Unser Sr. and Johnny Rutherford — announced they were retiring as drivers during practice for the 1994 Indianapolis 500.

After being unable to reach a competitive speed, Unser announced he was retiring on May 17. He had raced at Indianapolis since 1965 and had won there four times. He was also CART champion in 1983 and 1985, beating his son and namesake by one point in the latter year.

Unser had finished third at Indy in 1992 and had led 20 laps in the 1993 race, but he no longer could attract a top nde in the sport. He was only 12 days short of his 55th birthday when he said he would stop driving.

'I've decided to pull back and retire,' Unser told the gathered media. 'It's something that is very hard to do. The other day, when I watched my boy qualify and sit on the pole, I realized it was harder for me to get in the race car. I decided then I better start thinking about it.'

Four days later, Rutherford joined Unser on the sidelines after taking a ceremonial final lap in one of A.J. Foyt's cars. Rutherford's last successful qualifying run at Indianapolis had come in 1988.

'I've been agonizing with the decision for two years,' Rutherford said. 'I knew physically and mentally I was capable of doing the job, but it just wasn't going to happen.'

Rutherford had won three times in 24 tries at Indy and was CART's champion in 1980. His last CART start came in 1989 at Pocono.

Opposite: When he retired as a driver in 1993, racing legend A.J. Foyt was the winningest driver in Champ Car racing with 67 victories.

À LA CART

**WELCOME TO CART,
MATE**

People often wondered about the relationship between the two former F1 World Champions who drove for Newman/Haas in 1993 — Mario Andretti and Nigel Mansell. That is subject to debate and there were some on-track incidents between the drivers during their two seasons together.

Mansell barely mentioned Andretti in his autobiography. Initially, there was harmony, if you can believe what you see on television. Early in 1993, team sponsor Texaco ran an entertaining TV ad featuring Andretti and Mansell at a test session.

The commercial closed with Mansell saying: 'Perhaps I should follow you, then.' To which Andretti replies: 'Not a bad idea, Nigel.'

The only problem was, Mansell did very little following during his championship season of 1993.

YEAR 1994 WAS 'ARRIVEDERCI' FOR MARIO

It was a classic story of the immigrant who comes to America with dreams that eventually come true. America, the land of opportunity, was exactly that for a young Italian named Mario Andretti, who found himself in a faraway place known as Nazareth, Pennsylvania.

A relative had been able to find work for Mario's father Gigi, and the family left their native Trieste region that now would become part of communist Yugoslavia. The Andretti family had owned land and had prospered before two world wars changed everything.

Initially, Pennsylvania was alien to Mario as he struggled to learn English. However, he and twin brother Aldo found that racing was rampant in their new home. Of course, it was the short-track, dirt surface variety that would introduce them to racing American style as opposed to the road racing of Italy they had once observed.

As a youngster, Andretti had memories of watching the Mille Miglia. He remembered idolizing Alberto Ascari. Now, thrust into a new life in a new country, he rediscovered his passion in life — auto racing. The first move for the brothers Andretti was to raise enough money to buy an old Hudson Homet to run at the local dirt track at Nazareth.

From American jalopies, Mario graduated to midgets, then sprint cars and finally he was in his first Champ Car race in 1964. The car was ancient, but it didn't matter — he was racing in the big leagues. The following year, he was a full-time campaigner on USAC's Champ Car circuit driving for Al Dean, the moving company magnate who had enjoyed considerable success over the years with drivers like Jimmy Bryan and A.J. Foyt.

In his first race of 1965 at Phoenix, Andretti led the most laps and had it not been for a spin to avoid another driver (Johnny Rutherford), he would have won. By the way, Andretti drove a front-engined Offenhauser-powered roadster in this race.

At Indianapolis, he would have something more state-of-the-art. Chief mechanic Clint Brawner had copied the Brabham built for Indy by Jack Brabham the previous year and mated it to the latest Ford twin-cam racing engine. Although the race would belong to Jimmy Clark, Andretti acquitted himself well and finished an impressive third.

He would continue to score points and even won at Indianapolis Raceway Park, USAC's first-ever Champ Car road race and the first road course event in Championship Car racing since the 1937 Vanderbilt Cup.

By the end of the year, Andretti had amassed enough points to win the title.

The following year, he won eight races to repeat as champion.

In 1967, he added some variety to his fame by winning the Daytona 500 stock car race and the 12 Hours of Sebring. A year later, he was on the pole for his first-ever Formula One race. He also narrowly missed the USAC Champ Car titles in each of those two years.

In addition to winning races, Andretti had become such a celebrity that the mere mention of his first name was enough to make one think of auto racing. It was an incredible climb.

In 1969, Andretti was honored by his adopted hometown of Nazareth. He had recently won the Indy 500 and they named his street Victory Lane. Naturally, he responded by winning the USAC Champ Car race at Nazareth Speedway and went on to win his third USAC national title.

However, the next few years were not as productive. He won, but not always and in some cases, he didn't have the best equipment — an advantage he had enjoyed in each of his championship seasons.

There were bright spots — in 1971, he won the South African Grand Prix, his first GP win. By 1976, he was ready to forsake Championship cars for a full-time shot at the world title. His timing could not have been better, for Lotus chief Colin Chapman, who had given Andretti his first F1 ride in 1968, was in the process of developing the first successful ground-effects car for Grand Prix racing.

In 1977, Andretti won four races, but failed to outpoint Niki Lauda for the title. The following year would be different as Andretti won seven races to capture the elusive world crown. In doing so, he became only the second American — and the first since Phil Hill in 1961 — to win the F1 world title.

After struggling with uncompetitive F1 cars for the next few seasons, Andretti returned to Champ Car racing and by 1983, he was fully committed to the CART circuit.

In 1984, he dominated once more to win the CART title.

Ten years later, he made the difficult decision to retire. But in typical Mario Andretti fashion, he did it in style with the Arrivederci Mario Tour.

Only a year before, Andretti had shown he could still win as he came home first in the 1993 season opener at Phoenix. In his final year, he was still competitive.

A year later, he was back in a Champ car, doing the bulk of the in-car filming for the special IMAX feature entitled 'Superspeedway.'

Although the documentary was supposed to be about CART racing, it really became more of a behind-the-scenes look at the Andrettis. The film concludes with Mario driving away in a beautifully restored Offy roadster he had nearly won with at Phoenix more than 30 years earlier.

It was a nice touch for the film and a fitting tribute to one of the all-time greats in the sport.

Opposite: In a tribute befitting a champion of his stature, Mario Andretti's final year of racing in 1994 became a farewell tour where he was honored at each CART venue.



Dirt Devil

CORNING
BASF

PPG

Ford

CROWTHER

Take Care.

Mason

Ford

Moffatt

ANDERSEN
CONSULTING

INDYCAR
INTERNATIONAL

Dirt Devil

A WORD ABOUT THE ROOKIES

One of the nicer awards that is presented at the annual CART Banquet is the one for the top rookie of the season.

The award was established in 1979 and owner/driver Bill Alsup was the first recipient. Alsup finished 15th in the points, but was the highest ranked newcomer, thereby capturing the award.

In 1987, a group known as the Friends of Jim Trueman sponsored the award, which became the Jim Trueman Rookie of the Year award. The new name honored the CART team owner who had died 12 days after seeing Bobby Rahal drive his car to victory in the Indianapolis 500 in 1986. Along with the award, the recipient receives a cash prize of \$50,000.

The list of CART rookies of the year reads like a 'Who's Who' of racing. Award winners over the years have included Bobby Rahal (1982), Teo Fabi (1983), Arie Luyendyk (1985), Eddie Cheever (1990), Nigel Mansell (1993), Jacques Villeneuve (1994) and Alex Zanardi (1996), who would win the CART titles in 1997 and '98. Mansell has the distinction of being the only top rookie to win the CART title in the same year.

Since 1992, the list of winners also indicates the caliber of drivers attracted to the CART series. That year's award went to Stefan Johansson, the former Ferrari and McLaren F1 driver who would win the 24 Hours of Le Mans in 1997. After Nigel Mansell came Jacques Villeneuve, who would win the CART title in 1995 and the F1 world title in 1997.

Next came Gil de Ferran, a leading Formula 3000 competitor now considered one of CART's top drivers. He was followed by Patrick Carpentier, the Toyota Atlantic champion in 1996. This past season's recipient was Tony Kanaan, the Indy Lights champion in 1997.

Also of interest are the drivers who over the years did not win the award.

For example, the rookie class of 1982 also had future CART champion Danny Sullivan. The rookie class of 1983 produced Al Unser Jr., a future two-time CART champion. It also had in its ranks John Paul Jr., who actually won that year's Michigan 500. The class of 1984 had future champions Emerson Fittipaldi and Michael Andretti. But Roberto Guerrero had a better year that season and won the award.

Anyway, you get the picture and the nice thing is that the award is devoid of politics.

To be eligible for the award, a driver must be one who has not competed in more than two CART races in a season or five CART races in his career.

Canadian sensation Jacques Villeneuve duplicated his uncle's 1985 victory at Elkhart Lake by scoring his first CART win at the Road America circuit in the Forsythe-Green Reynard-Ford in 1994.



DATELINE: CART

1992

January: CART announces it has adopted 'IndyCar' as a new brand name for the sport while retaining Championship Auto Racing Teams as its corporate name. Ford Motor Company returns to Champ Car racing for first time in 21 years with new engine built by Cosworth. Bobby Rahal and St. Louis trucking magnate Carl Hogan form CART team after Patrick Racing was forced to disband. Patrick had been unable to obtain Chevy Indy V-8 engines.

March: Future CART champion Jimmy Vasser makes first CART start at Surfers Paradise. A.J. Foyt becomes oldest man to start CART race at age 59 years, 2 months, 6 days after qualifying at Surfers Paradise.

April: Three-time F1 World Champion Nelson Piquet announces he will be driving for John Menard at Indianapolis.

May: Nelson Piquet suffers serious foot and ankle injuries following practice crash at Indianapolis. Jovy Marcello is killed in practice crash at Indianapolis. He becomes first Champ Car fatality since Jim Hickman, who was killed in August of '82 at Milwaukee. Al Unser Jr. becomes third member of his family to win Indy 500. FISA president Max Mosley visits Indy 500 to make plea for common formula to allow F1 cars to run at Indianapolis. Truesports announces plans to abandon Truesports chassis project and run Lolas in 1993.



STEFAN JOHANSSON

June: Stefan Johansson finishes third at Detroit to tie Danny Sullivan for best CART debut. Nelson Piquet has second thoughts about retirement and announces plan to recover in time for 1993 Indy 500. Future CART race winner Mark Blundell co-drives Peugeot to win in 24 Hours of Le Mans. Rick Mears decides to sit out remainder of season

after reinjuring wrist that had been fractured in Indy practice accident.

July: During visit to England, Al Unser Jr. does seat fitting at Benetton with intention of doing a test in September. Honda acquires a Lola chassis, fueling speculation that it will return to CART in 1994.

August: Future CART race winner Gil de Ferran clinches British F3 title.

September: Nigel Mansell stuns the racing world by announcing that he will drive in CART for Newman/Haas and will not defend his F1 world title. McLaren announces it has signed Michael Andretti. Jim Hall has tryout at Mid-Ohio for Derek Warwick. Hall seeks replacement for John Andretti although Warwick's best time is slower than Andretti's qualifying time at recently held Mid-Ohio race.

October: Bobby Rahal becomes first driver/owner to win the CART title. Nigel Mansell pays a visit to the Laguna Seca paddock to check out CART scene. Longtime CART starter Nick Fomoro retires following the season finale at Laguna Seca. Jim Swintal, who had served as Indy Lights starter, is named to replace Fomoro.

December: At the invitation of Emerson Fittipaldi, Ayrton Senna tests a Penske CART car at Firebird Raceway near Phoenix. Rick Mears makes surprise retirement announcement at Penske Christmas party.

1993

March: Nigel Mansell establishes a new record for a CART debut by winning at the season opener at Surfers Paradise. Michael Andretti's F1 career gets off to rocky start as he spins early in his first race, the South African GP.

April: Mario Andretti wins at Phoenix and at age 52 becomes the oldest man to win a CART race. The win also ends a five-year drought for Andretti. Bobby Rahal has first test with a Honda engine.

May: Bobby Rahal becomes the first reigning CART champion to fail to qualify at Indianapolis. All-time winning Champ Car driver A.J. Foyt retires as a driver.

June: Nigel Mansell scores his first oval-track victory by winning at Milwaukee. Former CART driver Geoff Brabham co-drives a Peugeot to victory in 24 Hours of Le Mans. Reynard announces plans to build CART car for 1994 with Chip Ganassi as distributor. Reynard also announces it has signed former Lola engineer/designer Bruce Ashmore.

July: Roger Penske threatens to quit CART after it is suggested his cars are using illegal traction control device. Accusation proves to be unfounded.

August: Future CART champion Alex



GANASSI AND ANDRETTI WIN FIRST TIME OUT WITH REYNARD

Zanardi is seriously injured in a Lotus in a crash during practice for the Belgian Grand Prix.

September: Nigel Mansell wins Nazareth to clinch CART title. With F1 world title yet to be decided, Mansell becomes first in history to hold both CART and F1 titles simultaneously. Michael Andretti spins but recovers to finish third in Italian Grand Prix, his first F1 podium finish. Andretti then announces it would be his last F1 race. New PacWest team gets first CART start as Dominic Dobson qualifies at Vancouver.

October: Firestone announces it will return to Champ Car racing in 1995 following year of testing with Scott Pruett and Patrick Racing. Chevrolet announces it will withdraw from CART racing and is expected to sell its interest in Ilmor Engineering to Mercedes-Benz.

November: Ilmor is chosen to build new Mercedes-Benz F1 engine. Michael Andretti gives Reynard 94i its first test.



ROGER PENSKE

1994

March: Michael Andretti makes successful return to CART and gives Reynard its first CART victory at Surfers Paradise. Future CART champion Jacques Villeneuve makes first CART start. Chevy Indy V-8 renamed the Ilmor D.

April: Mercedes-Benz reveals it has pushrod engine for Penske Racing at Indianapolis. Toyota announces it will run CART program with All American Racers in 1996. Penskes become first Champ cars to sprout tail fins since the front-engined roadsters of the late 1950s and early 1960s.

May: Former CART champions Al Unser Sr. and Johnny Rutherford announce their retirement as drivers during practice at Indianapolis. Al Unser Jr. wins Indy 500 for second time giving Mercedes first 500 win since 1915 and first Champ Car win since 1916.

August: Tony George announces engine rules for new Indy Racing League. Rahal-Hogan and Honda announce a parting of the ways for 1995.

September: Al Unser Jr. wins at Vancouver to tie Michael Andretti for most victories in a season with eight. The following week, Unser clinches his second CART title as Jacques Villeneuve wins at Elkhart Lake.

October: Mario Andretti retires as a driver following CART season finale at Laguna Seca and year-long 'Amvederci Mario' tour. Outgoing CART champion Nigel Mansell also drives his final CART race. Paul Tracy named to replace Mansell at Newman/Haas with intention of returning to Penske Racing in 1996.

November: Former CART champion Nigel Mansell wins 1994 F1 season finale in Australia.



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PLAYERS
Racing Team

ONWARD AND UPWARD

OVER the past four seasons, as CART has moved toward the 20th anniversary of its formation, global has become the byword of the series. A healthy shot of worldwide television and media exposure accompanied Nigel Mansell during his two-year sojourn in CART. As a result, the series has seen some major changes and developed a lot of international respect.

One person who witnessed the Mansell mania firsthand was Michael Knight, a former CART PR director who was the PR rep for Newman/Haas during Mansell's stay.

'I could tell you a million stories about Mansell, but there are a couple that stand out that show how much he meant to the series,' Knight said. 'Because he had such worldwide appeal, I would get calls from all over the world at all hours of the day wanting information on him.'

'I would liken this to what they refer to as the 24-hour news cycle. I think Mansell was the only person who was able to generate that kind of interest. Prior to his first CART race at Surfers Paradise in 1993, I had 200 interview requests.'

'I remember after he won the pole and the race and in doing so became the first man to win the pole and race on his first outing, he had a problem with the circulation in his foot. It was simply a matter of positioning, but after the race, he had no feeling so the CART doctors wanted him to go to the medical tent before the post-race press conference.'

'The distance between the medical tent and the press tent was about three minutes. But because such a crowd had gathered, we got a golf cart and eight Australian soldiers to run interference. It still took us 15 minutes to make the trip. I got to thinking that it must have been like this when Elvis was king!'

'Later that season, Mansell had to delay taking his rookie test at Indianapolis because of his back surgery [following his crash at Phoenix]. He had his first press conference that day and I found out later on that there were more journalists for that conference than there were at the press conference for Emerson Fittipaldi after he won that year's race. The guy's popularity was phenomenal.'

With Mansell opting for a return to Formula One at the end of 1994, it was time for CART to move on. Besides, there would be a couple of exciting young drivers who would make a considerable impact themselves.

During the seasons of 1995 to 1998, the competition tightened considerably. Check the qualifying times. Qualifying one second off the pole position time in 1995 would have gotten a driver a pretty good starting position. One second off the pole time in 1998 meant you might have to start on the back row.

During those same seasons, CART witnessed the rise to stardom of Canadian driver Jacques Villeneuve, as well as his departure to Formula One, where he would immediately challenge for the championship.

In addition to the heated competition on the tracks, it also witnessed heated rivalries between engine manufacturers, chassis manufacturers and tire makers. It witnessed expansion onto two more continents and a resurgence of oval tracks that has given the series more balance.

It witnessed the arrival of several new teams as well as the newfound dominance of Chip Ganassi Racing.

And it witnessed life without Indianapolis.

First there was the young French-Canadian, Jacques Villeneuve. The son of Ferrari Formula One legend Gilles Villeneuve, he actually became the second member of his family to compete in CART and would impress everyone during his two seasons in the series.

His uncle, for whom he was named, had enjoyed limited success during his three seasons of CART competition. In 1984, he won the pole for the fall Phoenix race. The following year, he scored his first and only Champ Car victory on a rainy Elkhart Lake track and scored enough points elsewhere to finish eighth in the championship. That would be the zenith of his CART career and after a lackluster season in 1986, he recorded only two more starts.

The younger Villeneuve would make more of an impact, but after he had crashed in the first three races of his rookie season in 1994, it appeared that his impact would most likely be against the concrete. Villeneuve's spectacular T-boning of Hiro Matsushita at Phoenix looked horrific but fortunately both drivers emerged from their wrecked cars unhurt.

Villeneuve came to CART as a graduate of Formula Atlantic, where he had driven in 1993 for the Forsythe-Green team, which was heavily funded by Player's. Villeneuve either won or crashed that season and placed third in the final standings behind his teammate Claude Bourbonnais and the champion, David Empringham. He was apparently just biding his time in anticipation of competing in CART with Forsythe-Green and Player's.

1995 CART CAPSULE

Champion: Jacques Villeneuve

Race Winners: Al Unser Jr. (4),

Jacques Villeneuve (4), Robby Gordon (2),

Paul Tracy (2), Emerson Fittipaldi (1),

Michael Andretti (1), Scott Pruett (1),

Andre Ribeiro (1), Gil de Ferran (1)

Pole Positions: Jacques Villeneuve (6),

Michael Andretti (3), Robby Gordon (2),

Teo Fabi (1), Bryan Herta (1), Andre Ribeiro

(1), Gil de Ferran (1), Scott Brayton (1),

Parker Johnstone (1)

Rookie of the Year: Gil de Ferran

Most Improved Driver: Jimmy Vasser

Indy Lights Champion: Greg Moore

New Races: Miami (rejoins schedule after seven-year hiatus)

Nation's Cup Winner: United States

Manufacturer's Championship: Ford-Cosworth

Constructor's Championship: Reynard

Notable Highlights: Scott Pruett's victory at Michigan is first for Firestone since Al Unser Sr. at Michigan in 1974

Opposite: A jubilant Jacques Villeneuve punches his fist into the air after winning at Cleveland, his fourth victory of 1995 that gave him a healthy lead in the standings.

Below: Brazil's Andre Ribeiro celebrates his first CART victory at New Hampshire in 1995. It was also the first win for Tasman Motorsports and Honda.

Despite the rocky start, it came together for Villeneuve at Indianapolis, where he was the only driver who seemed to be able to stay with the powerful Penske-Mercedes of Emerson Fittipaldi and Al Unser Jr. Villeneuve even led for a time and ultimately finished second to Unser. Following Indianapolis, he scored five straight top-10 finishes and then captured his first victory.

By coincidence, it came at Elkhart Lake where his uncle had been victorious nine years earlier. The young Canadian rounded out the season with a seventh and a third to secure sixth in the final standings. The following year, he would be the man to beat.

He opened the season with a victory in Miami and scored top-five finishes in two of the next four races to rank second in the points table when the CART teams traveled to Indianapolis for the 500. Paul Tracy, on a sabbatical from Penske Racing, had switched to Newman/Haas, where he was joined by Michael Andretti, who had driven for the team from 1989 to 1992. Tracy gave his new employers a timely filip by winning at Surfers Paradise. Robby Gordon then scored the first CART victory of his career at Phoenix aboard Derrick Walker's Reynard-Ford. Al Unser Jr. continued to win at Long Beach (his sixth victory in the last eight races there) and Emerson Fittipaldi scored what would prove to be his final CART victory at Nazareth.

At Indianapolis, Villeneuve benefited from Scott Goodyear's controversial pass of the pace car during a late-race restart to cruise to his second victory of the year.

Although Villeneuve would build a healthy lead in the point standings with victories at Elkhart Lake and Cleveland, a pair of thirds and six pole positions, the destination of the championship would not be settled until the season finale at Laguna Seca.

Following Indianapolis, there were wins for Tracy at Milwaukee and Gordon at Detroit, while Unser was victorious at Portland, only to be disqualified. Jimmy Vasser, who had joined Chip Ganassi's team during the off-season, was awarded his first CART victory.

Sandwiched by Villeneuve's summer wins was a victory for Michael Andretti at Toronto. Following the Cleveland race, Scott Pruett edged Unser to win the Michigan 500 at the wheel of Pat Patrick's Firestone-shod Lola-Ford. Unser returned to Victory Circle at Mid-Ohio and Andre Ribeiro became the fourth first-time





Left: Jacques Villeneuve huddles with Team Green engineer Tony Cicalo (center) and Reynard's Bruce Ashmore (right) following a practice session.

Below: Jacques Villeneuve's mix of outright speed and aggressive driving, as evidenced by curbing-hopping his Reynard-Ford at Surfers Paradise, proved to be a winning combination in 1995.

Overleaf: It's a game of 'Follow the Leader' and Jacques Villeneuve sets the pace on lap one at Portland ahead of Jimmy Vasser, Al Unser Jr., Mauricio Gugelmin, Christian Fittipaldi, Gil de Ferran, Paul Tracy and the rest of the field.

Art Flores









winner of the season when he took the honors at Loudon, the Brazilian opening the account for both Honda and Steve Home's Tasman team in the process.

Then Unser won at Vancouver, tightening the points race — sort of. Because Penske Racing had filed an appeal over his disqualification at Portland, he still had a mathematical chance of winning the title, but only if the appeal succeeded. With one race to go, Villeneuve's lead stood at 38 points. The Portland victory represented 21 points for Unser. If things went his way in the final race of the season and his Portland points were subsequently restored, the title would be his. However, the outcome of the appeal was to make no difference in the end.

At Laguna Seca, Unser, who needed to win, could only finish sixth. Rookie Gil de Ferran scored his first CART win aboard Jim Hall's Reynard-Mercedes and Villeneuve finished 11th after winning the pole. The three PPG Cup points were more than enough even though Unser ultimately was reinstated as Portland winner.

The title now belonged to Villeneuve, who at the age of 24 became CART's youngest champion ever.

'It means a lot,' Villeneuve said. 'It's my first championship in any series so it is very special. It's great to win so we don't have to wait for [the Unser] appeal. If they had told us in a week or two, it wouldn't mean as much. We'd take it, but it wouldn't be the same.'

Because his victory at Indianapolis had earned him several offers to do Formula One, he was faced with a serious career decision. After testing for Williams, he made the decision to follow in his father's footsteps.

'It was difficult to leave Team Green, my [CART] team,' Villeneuve would explain in his book, *Villeneuve: My First Season in Formula One*. 'The three years we spent together had been great. We worked well as a team, had our share of success and there was a great deal of friendship among us. But everybody has to move on. You have to make your own life and take the better opportunities as they come along.'

In the same book, Villeneuve also gave an interesting comparison between CART cars and Formula One cars.

'After signing with Williams in the fall of 1995, I did over 8,000 kilometers of testing to get ready for the 1996 season,' Villeneuve pointed out. 'In the beginning, I had to become accustomed to the differences between [a CART] car and an F1 car.'

Opposite: After coming close earlier, Gil de Ferran closed out the 1995 season by winning at Laguna Seca in Jim Hall's Reynard-Mercedes and capturing Rookie of the Year honors as well.

Below left: Scott Pruett's full season of tire testing for Patrick Racing and Firestone throughout 1994 was rewarded with a well-deserved win in the 1995 Michigan 500 in a Lola-Ford.

Below: Robby Gordon became a first-time winner in 1995 at Phoenix and is shown here following up with a second victory at Detroit in Derrick Walker's Reynard-Ford.





WOLSON... Knorr

DKMEN

Castrol

TEXACO

Budweiser

Budweiser

BRAUN

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BOSCH

WIPAC

SEWST



'An F1 car is slower on the straights but much quicker in the corners. The engine has less horsepower but the power comes on quicker, and because an F1 car is lighter and more responsive, it reacts faster to the driver's input and the braking is much better.

'The electronic gear changing makes your life easier because you don't have to take your hand off the wheel and you can concentrate more on driving. F1 engines are another thing you don't have to worry about as much as in [a CART] car, where you have to deal with the delayed response of the turbocharged engines.

'Because of its extra weight, [a CART] car is a bit more physical to drive. It slides more easily and it's harder work to hold it. An F1 car is more twitchy and when it slides, you have to react faster to catch it. It has higher limits, but I find this enjoyable.'

Indeed he did, for 12 months after winning the PPG Cup, Jacques Villeneuve nearly won the Formula One World Championship.

Meanwhile back in CART, the story of the 1996 season should have been the emergence of Jimmy Vasser. In his second season with Target/Chip Ganassi Racing, Vasser won four races and four pole positions and finished in the points in 15 out of 16 races to capture the championship.

On the competition side, things could not have been better, with Vasser facing stiff opposition from Andretti and Unser in the title battle and new teammate Alex Zanardi establishing himself as a regular front-runner.

In addition to the driver contest, a real equipment war had broken out. The key to success in 1996 centered not only on drivers and teams, but also on their selection of engine, chassis and tires. The combination to have was a Reynard-Honda with Firestone tires. Vasser and Zanardi used that winning combination to record seven race victories and 10 pole positions between them.

Having pointed that out, though, it is important to note that the series runner-up, Andretti, drove a Lola-Ford-Cosworth with Goodyear tires and scored the most victories of any driver with five.

The Lola chassis also figured in wins by Tasman teammates Adrian Fernandez and Andre Ribeiro, although their cars were powered by Honda engines and shod with Firestones.

To further confuse the issue, the only other winner in 1996 was Gil de Ferran, who drove a Reynard-Honda with Goodyear tires. Shut out were the Penske chassis and the Mercedes-Benz engine, although Unser did finish fourth in the championship for Penske and most certainly would have won at Elkhart Lake had his engine not expired less than a mile from the finish line.

Another highlight of 1996 was the rise to prominence of several recently formed teams. The wins by Fernandez and Ribeiro showed that Steve Home's Tasman Motorsports team was becoming a force not unlike

Opposite: Although Michael Andretti's five 1996 victories were more than anyone else, Andretti was unable to overcome the reliability of Jimmy Vasser in the title chase.

Below: One surprise for 1996 was the strong performance of the Tasman Motorsports Lola-Hondas as Adrian Fernandez (front) and Andre Ribeiro combined for three wins.



Eventual champion Jimmy Vasser, shown here in his Ganassi Reynard-Honda during a pit stop at Homestead, began the 1996 season in fine fashion by scoring his first CART victory.







the Truesports team Home had run in the early '80s. Bruce McCaw's PacWest team, which had first joined the series in 1993, also continued to improve and Canadian rookie Greg Moore had an impressive first season with the new Player's/Forsythe team.

However, even if the competition was good, things could not have been worse on the political side.

For a number of years, trouble had been brewing between CART and USAC, which sanctioned the Indianapolis 500. Despite CART's break from USAC in 1979, CART teams and drivers had always run at Indianapolis and, apart from a two-year hiatus in 1981 and 1982, CART had always awarded points for the event.

CART had tried appeasement by naming Indianapolis Motor Speedway President Tony George to its realigned board of directors in 1992. But George resigned from the board in 1993 and began talking about starting his own USAC-backed oval-track series.

Late in 1995, George announced the formation of the Indy Racing League and encouraged CART teams to participate in the IRL season opener at Walt Disney World in January of 1996 or face the consequences. George dropped another bomb by announcing that 25 of the 33 starting positions for the Indianapolis 500 would be reserved for IRL teams that had participated in the two events preceding Indianapolis.

CART's disgust with the revised Indy qualifying format was understandable. With 28 to 30 car-and-driver combinations showing up at CART events, the prospect of going for only eight spots at Indianapolis was unreasonable and downright unfair. It was also a departure from the norm, as drivers had been required to qualify since 1916.

George had decided to gamble on the premise that the major corporate sponsors backing CART teams would force them to run at Indianapolis, the world's biggest race. However, the power play only served to solidify the CART owners. Only two teams — Walker and Galles — announced they would enter cars at Indianapolis and Walker wound up withdrawing his entry.

The CART owners also decided to try a power play of their own. Upon learning of the 25—8 qualifying rule for Indianapolis at a board meeting in January, they decided to run a 500-mile race at Michigan on the same day as Indy.

In less than four months, CART was able to secure live television coverage from ESPN, 20 corporate sponsors for the race and a little tradition by reviving the Vanderbilt Cup. The race was called the U.S. 500 and a considerable effort on the part of promoter Rena Shanaman and her staff resulted in a full house when the green flag dropped.

Although the race was marred by a multi-car pileup at the start, the CART rule allowing teams to substitute cars gave the fans a full field and the race that ensued was hotly contested. Vasser, the series points leader, was able to prevail over Ribeiro and Zanardi to take victory.

À LA CART

CART RUNNETH OVER WITH CUPS

New for 1995 were a series of awards established by CART — the Constructor's Cup, the Manufacturer's Cup and the Nation's Cup. In the first year, Reynard won the Constructor's Cup, Ford won the Manufacturer's Cup and the United States won the Nation's Cup.

Speaking of cups, the establishment of the U.S. 500 in 1996 marked the return of the Vanderbilt Cup. The trophy, awarded to the U.S. 500 winner, was patterned after the original Vanderbilt Cup, commissioned by W.K. Vanderbilt for a series of races he staged on Long Island early in the century.

Opposite: Jimmy Vasser survived a first-lap accident to capture the inaugural 1996 U.S. 500 and the Vanderbilt Trophy.

Below: The 1996 U.S. 500 got off to a rocky start with a multi-car crash on the opening lap. Fortunately, teams were allowed to substitute cars and fans were treated to an outstanding race.



1996 CART CAPSULE

Champion: Jimmy Vasser

Race Winners: Michael Andretti (5),
Jimmy Vasser (4), Alex Zanardi (3),
Andre Ribeiro (2), Gil de Ferran (1),
Adrian Fernandez (1)

Pole Positions: Alex Zanardi (6),
Jimmy Vasser (4), Paul Tracy (2),
Gil de Ferran (1), Scott Pruett (1),
Andre Ribeiro (1)

Rookie of the Year: Alex Zanardi

Most Improved Driver: Bryan Herta

Indy Lights Champion: David Empringham

New Races: Homestead (new track near
Miami replaces street race in Miami),
U.S. 500 (held at Michigan), Rio de Janeiro

Nation's Cup: United States

Manufacturer's Championship: Honda

Constructor's Championship: Reynard

Notable Highlights: Season marks first
time in CART history that CART teams and
drivers have not participated in Indy 500

À LA CART

AN UNTIMELY EXIT FOR EMERSON

Former F1 and CART champion Emerson Fittipaldi was seriously injured in an opening lap crash in the 1996 Marlboro 500 at Michigan. Fittipaldi suffered a broken vertebra in the accident and although no one knew it at the time, it would prove to be his last race as a driver even though he would fully recover.

Fittipaldi's injury opened up an opportunity for Jan Magnussen, who became the first Danish driver in CART competition. Magnussen drove in the final four races of 1996 before signing a contract with the new Stewart Grand Prix team in Formula One.

In the meantime, Fittipaldi was considering a comeback. However, he crashed an ultra-light aircraft into a swamp in Brazil and was injured even more seriously than he had been at Michigan. After several surgeries and a lengthy recuperation period, Fittipaldi has recovered.

But don't expect him back in the cockpit. He is retired as a driver and very busy these days running his businesses, promoting the CART race in Rio and managing the career of future CART star Helio Castro-Neves.

Opposite: Sometimes the only place a driver can find privacy is in his car as Alessandro Zanardi may have discovered during a shower that interrupted practice.

Perhaps more important, though, was the fact that the U.S. 500 had resulted in the lowest viewer ratings for the Indianapolis 500 in years. Indianapolis, by contrast, had a field full of older Reynards and Lolas and the most rookies (17) since the inaugural 500 in 1911. Several of the rookies were driving in their first Champ Car race. Not lost on the CART delegation was the fact that most of the former CART drivers now in the IRL had never distinguished themselves in CART competition. In fact, Arie Luyendyk and Roberto Guerrero were the only drivers in the 1996 Indianapolis 500 who had won a race in CART.

The war was now in full swing.

The 1996 season also saw the beginning of a new dynasty in the CART series. Chip Ganassi Racing was on the threshold of a period of spectacular domination, although it had taken Ganassi a number of years to lay the foundations of a team capable of winning races and challenging for the PPG Cup.

Ganassi had raced in CART from 1982 through 1984. For a number of years, he held the mark at Indianapolis for the fastest qualifying speed for a rookie and in 1983, he finished third at Las Vegas for his best CART result. Then he suffered a serious accident at Michigan in 1984 but he recovered to race in selected events the following two seasons before retiring as a driver.

In 1989, he began a buyout of Patrick Racing to begin a new career as a team owner. With Patrick Racing dominating that year's proceedings it appeared to be a sound business decision, although the following season would not be as productive.

For 1990, the team belonged entirely to Ganassi. The only problem was that Fittipaldi and Marlboro had transferred to Penske Racing and Ganassi was left with year-old equipment. However, he was able to attract sponsorship from Target and signed rookie Eddie Cheever as driver. Aided by a mid-season switch to a Lola T90/00, Cheever scored a number of points-paying finishes and ended up ninth in the standings.

Although six years would pass before Ganassi would revisit the winner's circle, he continually built up the program. The team was using new equipment for 1991 and for 1993 it expanded to two cars with the signing of Arie Luyendyk.

Luyendyk gave the team its best moment by taking pole position at Indianapolis and finishing second. Luyendyk ended up eighth in the final standings while Cheever finished a lackluster 17th. By year's end, both drivers were released. Ganassi had a big change in mind for 1994.

Europe was about to send Ganassi a pair of contenders. One came in the form of a car that would be new to CART, the Reynard. The other came in the form of an ex-CART champion who had become a refugee from Formula One. His name was Michael Andretti.

Ganassi had scored a coup by announcing at Portland that he would be the new distributor for Reynard. The British company could boast that it had won the initial race of each series it had entered and it was planning to continue its streak in CART.

With Penske and Lola firmly entrenched in the series, such a claim might have been scorned. What suddenly gave it credibility, however, was the defection of brilliant design engineer Bruce Ashmore from Lola to Reynard.

Andretti, after his ill-fated attempt at Formula One in 1993, opted to hook up with Ganassi and the new Reynard project. He would not disappoint.

Although he would remain with Ganassi for only one season, he kept Reynard's streak intact by winning the '94 CART season opener at Surfers Paradise. Sending him a congratulatory telegram was his former F1 teammate, Ayrton Senna.

The remainder of the season would belong to Penske Racing, but Andretti was competitive and placed fourth in the final standings behind the Penske trio. Then he went home to Newman/Haas after Mansell's return to F1 had made his old position available again.

Encouraged by a good season, Ganassi returned to a two-car format and signed a promising pair of young American drivers, Jimmy Vasser and Bryan Herta. Although 1995 would be a year of transition, Vasser began to flourish after mid-season and finished eighth in the championship.

The dynasty was about to begin.

Ganassi made three major changes that would have a profound effect on the next three seasons. In the driver department, he retained Vasser but announced he would not be re-signing Herta. Now a free agent for 1996, Herta was promptly snapped up by Bobby Rahal. Following a test after the season ended, Ganassi recruited ex-F1 driver Alessandro Zanardi as Herta's replacement.

Zanardi was considered an unknown quantity when he joined the CART series. Although he had driven for teams like Lotus and Jordan, Zanardi's claim to fame seemed to be a near-fatal accident in 1993 at Spa's infamous Eau Rouge corner. Zanardi would fully recover and came highly recommended by Reynard. If nothing else, the faith Reynard had in the Italian driver earned him a test with Ganassi.

'When Chip told me we were testing an Italian driver, I didn't know what to think,' team engineer Mo Nunn would tell a number of journalists. 'But Alex was very consistent and very smooth. He wasn't what I had expected at all.'

With his driver lineup set, Ganassi made two other changes that would enhance their performance. First, he switched from the Ford-Cosworth to the Honda engine. Then he switched from Goodyear to Firestone. All of Ganassi's changes would prove to be good moves.



 **TARGET**



Photos: Michael C. Brown

Above: Adrian Fernandez joined the Tasman team for the 1996 season and scored the first win of his CART career in Toronto.

For Vasser, the immediate priority was to achieve that elusive first victory after coming so close in 1995. It came in the opening race of the season at the new Homestead track. Starting third, he took the lead on lap 102 and held it to the checkered flag. This one meant more than the Portland win could ever have done had he been permitted to keep it.

'I was never happy about the circumstances of the "win" at Portland so there was no emotion in losing it,' Vasser said afterward. 'Today was exciting because I had the opportunity to bring the Target/Chip Ganassi car across the line first — and as I put my fist in the air, I glanced over at my team and they were jumping up and down off the wall. It was a great feeling.'

And for Jimmy Vasser, it would not be his last.

The next event was at another new venue — the Emerson Fittipaldi Speedway in Rio de Janeiro — and it was here that CART followers would first see the promise of Vasser's new teammate, Zanardi. Starting from the pole, the Italian led 64 laps. Unfortunately, a late pit stop dropped him to 10th although he had worked his way back to fourth by the end of the race. Brazil's Andre Ribeiro took the lead in the closing stages and went on to score an immensely popular victory. Vasser had a quiet day, but came home eighth.

He swept the points at Surfers Paradise, winning the pole and the race and leading the most laps, and then inherited a win at Long Beach after race leader Gil de Ferran lost the turbo on his car four laps from the finish. The Brazilian had led 100 of the race's 105 laps.

After finishing seventh at Nazareth, Vasser headed for the new U.S. 500 race with a 20-point lead over Unser. Vasser captured the pole in the historic event only to see his car heavily damaged in the starting line pileup. Thanks to CART's substitution rule, Ganassi was able to replace Vasser's damaged car and let him restart the race from the pole.

In an event marked by heavy attrition, Vasser drove a conservative race and even fell a lap behind at one point. With 10 laps to go, however, he swept past race leader Ribeiro, whose car was suffering from a fuel pickup problem, and he held on to score his first win in a 500-mile race.

'That's the thing about this business,' Vasser said in the winner's circle. 'You just never give up.'

The hard luck award had to go to Zanardi, who had led 134 laps before being sidelined with engine problems on lap 175. His day would come.

Vasser now led Unser by 36 points, but by mid-season, after round eight at Detroit, Unser had cut the lead to 23 points. Zanardi would score his first win at Portland while Vasser finished out of the points in 13th. At Cleveland, Zanardi finished second to de Ferran while Unser was fourth and Vasser was 10th. He now led by only three points.

At a tragedy-marred Toronto race, Zanardi would finish second to Adrian Fernandez, who captured his first CART victory. Vasser put a little distance between himself and Unser by finishing eighth, but the day would be remembered more for a fatal accident.

On lap 92, Jeff Krosnoff ran over the back of Stefan Johansson's car and flipped into a light post and then a tree. The impact caused Krosnoff's car to disintegrate and the young Californian became CART's second driver fatality. Also killed in the accident was a corner worker named Gary Avrin.

At Michigan, the cloud that had darkened Toronto appeared to return. On the opening lap, Emerson Fittipaldi attempted to pass Greg Moore. Fittipaldi did not clear Moore's car and clipped his rear wheel. The contact sent the Brazilian into the wall backwards. The immediate concern was for his life and then whether or not he would be paralyzed. Fortunately, he would recover.

The CART community took a deep breath and let out a sigh of relief. It then witnessed an entertaining race that would be won by Ribeiro, who had run so well at Michigan the year before. Unser tightened the point battle by finishing fourth to Vasser's ninth. Vasser had won the pole and continued to add points with each race.

In the next event at Mid-Ohio, Vasser followed Zanardi home to give Ganassi his first 1—2 finish. Vasser also came away with a healthy points lead in the process. Unser had tangled with Parker Johnstone two laps from the finish and wound up 13th.

It would get worse for Unser at Elkhart Lake. After he had taken the white flag while in the lead, Unser's engine expired halfway around. Instead of scoring a victory, he finished 10th. Vasser extended his lead by placing sixth. Zanardi returned to the podium after finishing third and he now found himself third in the standings as well.

But Vasser now had someone else to worry about. After a slow start to the season, Michael Andretti had come alive and won three races by mid-season with victories at Nazareth, Milwaukee and Detroit. After finishing third at Mid-Ohio, he recorded back-to-back victories at Elkhart Lake and Vancouver and trailed Vasser by only 14 points with one race to go. Unser also had a mathematical chance, trailing Vasser by 17 points. It would be decided at Laguna Seca.

Early on, Andretti and Unser experienced problems and now Vasser needed only to finish the race to clinch the title. But he moved up to third until a blistered left front tire cost him a spot. The fourth place was more than enough for the PPG Cup.

Zanardi made it a total Ganassi weekend by winning the pole and then making a banzai pass of race leader Bryan Herta on the last lap. Heading into the Corkscrew, Zanardi bobbed and weaved and then went across the curb and into the sand only to pull right back on the track to pass the startled Herta.

The victory tied Zanardi with Andretti in the final standings, but Andretti was declared the series runner-up since he had won more races. Zanardi also captured the Rookie of the Year trophy and if that wasn't enough, Vasser won the Mercedes-Benz E420 presented by Marlboro as part of its pole award program. Each pole winner throughout the season got a key representing a chance to start the car. Vasser had four keys for each of his poles and among them was the proper key.

Oh yes, as PPG Cup champion, Vasser also won a \$1 million bonus. Not a bad weekend or, for that matter, a bad year.

Opposite: Alex Zanardi emerges from the Laguna Seca Corkscrew in the Ganassi Reynard-Honda during the 1996 season finale. The Italian's wild, last-lap pass of Bryan Herta gave him his third win of '96.



The eye-catching graphic made everyone notice that Dan Gurney's Eagle had returned. Unfortunately, the car did not live up to expectations, but the team learned many valuable lessons from a testing season.



'It's a wonderful feeling,' Vasser told the media in the post-race press conference. 'I have a little bit of relief and I'm going to have a little bit of a party — actually a lot of party!

'We had a goal at the beginning of the season and it's great to finally achieve that goal. We go out to do the best we can do. I'm very proud to be champion but you know, I actually have more warmth for my guys than I do pride for myself. I owe a lot to the Target/Chip Ganassi team. They've made this possible for me.'

There would be more to come from the Ganassi pair, but in 1997 it would be Zanardi's turn to chase the PPG Cup. Unlike Vasser, though, Zanardi would have his win streak in the second half of the season. And unlike Vasser, he wouldn't even need to drive in the final race to clinch the title.

Zanardi would start the 1997 season as the man to beat and he backed up that confidence by winning the poles at Homestead and Surfers Paradise. A victory at Long Beach put Zanardi near the top of the standings, but an even stronger start to the year by Scott Pruett kept him out of the overall lead.

Following his win at Long Beach, Zanardi gave the fans a look at what would become his trademark following a victory — a donut. Overjoyed by his success, Zanardi would stop at the start—finish line on his cool-down lap and then peel away in a whirl of tire smoke while girding his car. As the season progressed, there would be more donuts.

Pruett had placed fifth at Homestead, where Michael Andretti took the Newman/Haas team's new American-built Swift chassis to victory on its debut, won at Surfers Paradise while on his honeymoon and joined Zanardi on the podium at Long Beach by finishing third. That gave him a 44—41 edge in the standings.

The championship battle would take on a new look, however, when Paul Tracy capitalized on some good fortune to win three straight races for Penske at Nazareth, Rio and Gateway International Raceway in Illinois, which was staging its first CART event. Those first places gave Tracy an 85—67 lead over Zanardi, who would score only two PPG Cup points in the next three races.

Those races saw Greg Moore score back-to-back wins at Milwaukee and Detroit and Englishman Mark Blundell record the PacWest team's first victory at Portland. The Milwaukee victory was historic in that Moore, at the age of 22 years, one month and 10 days, became the youngest man to win a CART race.

The Portland result was also historic on two counts. Blundell snatched victory by passing Gil de Ferran at the line with Raul Boesel alongside in third. Blundell's victory margin of 0.027 seconds was the closest in

Opposite: Many thought Chip Ganassi (left) took a major gamble when he signed Alex Zanardi. The Italian's rapid progress soon made believers out of everyone.

Below: Paul Tracy and members of his crew celebrate the Canadian's victory at Nazareth. For Tracy & Co., it was the start of a three-race win streak in 1997.

Overleaf: Although he was fifth in the standings at the midway point of the 1997 season, Alex Zanardi saved his best for last, winning four of the next five races and clinching the title at Laguna Seca.









Greg Moore, shown leading Parker Johnstone, Jimmy Vasser and Scott Pruett, made history as CART's youngest winner with his 1997 victory at Milwaukee.

Championship Car racing history and the gap of 0.055 seconds separating the top three was also a record. In the point standings, Tracy led Moore by five points. But more importantly, he now held a 31-point lead over Zanardi, who was mired in fifth. It was time for a wakeup call. Actually, Zanardi was the one making the call as his CART competitors would soon find.

First, there was a win from the pole at Cleveland. Next, it was a second place behind Blundell at Toronto. Then there were three straight victories — at Michigan, Mid-Ohio and Elkhart Lake. Suddenly, Zanardi was leading the standings by a healthy margin.

Vancouver gave Zanardi another point for the pole as well as 12 points for fourth, although victory went to Mauricio Gugelmin in the second PacWest Reynard-Mercedes. When he arrived at Laguna Seca, Zanardi was in a position to clinch the title. And as things turned out, it was good that he had such a cushion.

Teammate Vasser, who had a quiet season in defense of his 1996 title, took his first win of the year at Laguna Seca. But it was Zanardi who stole the show by placing third and winning the PPG Cup. He also showed a remarkable display of good sportsmanship in the process.

'I think if I could choose how to finish this race, I personally would have picked this order,' Zanardi said in reference to winning the title while watching his teammate win the race. 'I'm so happy for Jimmy because the boy's been through so many misfortunes and it's about time he got some luck and finally won a race. I'm absolutely delighted.'

Zanardi did not even need to run in the season finale at Roger Penske's spectacular California Speedway at Fontana. In fact, it would turn out that he would be sidelined from that race.

On Friday during practice, Zanardi had the misfortune of running through debris from an accident in Turn Four involving Patrick Carpentier. Zanardi lost a wheel and went into the wall hard. He was unhurt and was out in his backup car later in the day.

This time, he lost control all by himself and clouted the wall hard again. Seemingly unhurt, Zanardi emerged from the wreckage having totaled his car for the second time in a matter of a few hours.

But Zanardi's weekend came to a halt later on while he rode a bicycle through the paddock. The Italian got dizzy and nearly collapsed. He had indeed suffered a mild concussion and was deemed unfit to drive by CART's medical staff.

The race was won by Blundell, but the results made no difference in the standings. Zanardi was the champion and remained at the track to celebrate the presentation of the PPG Cup.

He would be back even stronger for 1998.

1997 CART CAPSULE

Champion: Alex Zanardi
Race Winners: Alex Zanardi (5), Paul Tracy (3), Mark Blundell (3), Greg Moore (2), Scott Pruett (1), Jimmy Vasser (1), Michael Andretti (1), Gil de Ferran (1), Adrian Fernandez (1)
Pole Positions: Alex Zanardi (4), Mauricio Gugelmin (3), Paul Tracy (2), Gil de Ferran (2), Bryan Herta (2), Scott Pruett (2), Dario Franchitti (1), Raul Boesel (1)
Rookie of the Year: Patrick Carpentier
Most Improved Driver: Michel Jourdain Jr.
Indy Lights Champion: Tony Kanaan
New Races: Madison, Ill.; Fontana, Calif.
Nation's Cup: United States
Manufacturer's Championship: Mercedes-Benz
Constructor's Championship: Reynard
Notable Highlights: Portland race has closest three-way finish in CART history; Michael Andretti's win at Homestead marks second time he has driven a new chassis to victory on its CART debut — Reynard at Surfers Paradise in 1994 and Swift at Homestead in 1997



One of the few teams capable of beating the Ganassi pairing in 1997 was PacWest, whose driver, Mauricio Gugelmin (above left), scored a popular victory at Vancouver in a Reynard-Mercedes.

Left: Gugelmin's teammate, Mark Blundell, became a force on the circuit in '97, scoring wins at Portland, Toronto and Fontana.

Photos: Michael C. Brown

If it's wide and flat, it must be Cleveland as the Burke Lakefront Airport provides the most unique venue on the CART circuit. Ganassi teammates Alex Zanardi and Jimmy Vasser lead a sometimes five-abreast formation into Turn One at the start of the 1998 race.



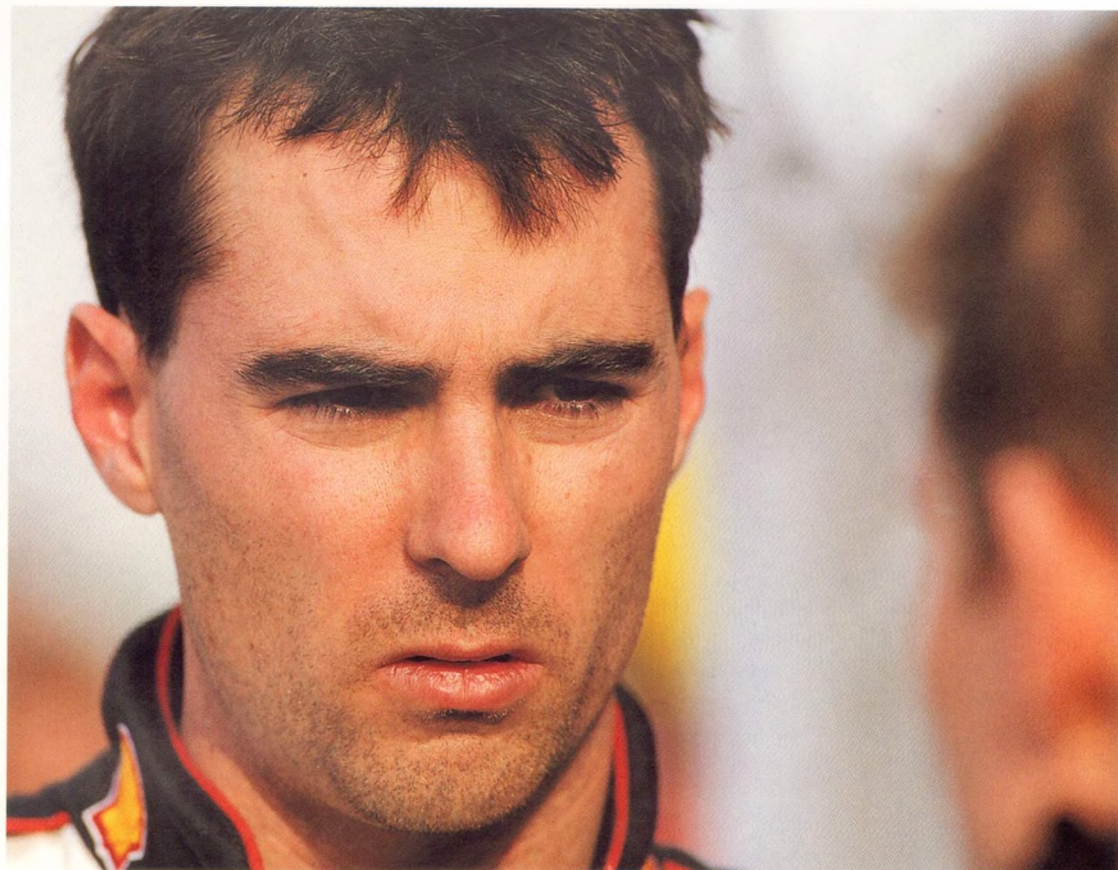


Photo: Michael C. Brown

Right: After so many near misses, Bryan Herta finally got his wish: he won his first CART race at Laguna Seca in 1998 after a thrilling, last-lap battle with Alex Zanardi.

Opposite: One of the highlights of the rainswept Houston race in 1998 was the battle between the Team KOOL Green Reynard-Hondas of Dario Franchitti (in front) and Paul Tracy.

Below far right: Although he opened the season with a victory at Homestead for the second straight year in the Newman/Haas Swift-Ford, Michael Andretti failed to score another win in 1998.



1998 CART CAPSULE

Champion: Alex Zanardi

Race Winners: Alex Zanardi (7), Jimmy Vasser (3), Dario Franchitti (3), Adrian Fernandez (2), Greg Moore (2), Michael Andretti (1), Bryan Herta (1)

Pole Positions: Dario Franchitti (5), Greg Moore (4), Bryan Herta (3), Jimmy Vasser (2), Patrick Carpentier (2), Michael Andretti (1), Scott Pruett (1), Adrian Fernandez (1)

Rookie of the Year: Tony Kanaan

Most Improved Driver: Dario Franchitti

Indy Lights Champion:

Cristiano Da Matta

New Races: Motegi, Houston

Nation's Cup: United States

Manufacturer's Championship: Honda

Constructor's Championship: Reynard

Notable Highlights: CART series renamed FedEx Championship Series; 19-race schedule is biggest in CART history

Overleaf: Dario Franchitti's mood was sunny after his wet-weather win at Houston. Joining the celebration were runner-up Alex Zanardi (right) and third-place finisher Tony Kanaan.

Michael Knight, who had joined Chip Ganassi Racing as its PR director for 1996, saw a lot of similarities between Zanardi and Nigel Mansell.

'I think Alex also had a lot to do with the worldwide acceptance of CART and the growth in its popularity,' Knight pointed out. 'When Alex first came to CART, only the ardent Formula One followers knew who he was.'

'But he became a fan favorite not only because he won races and did the donuts afterward. People could see his passion for racing in the way he drove the car. You know people today often complain that with the way the driver is covered up, you can't really see much. Somehow, Zanardi was able to drive in a way that people could see his passion.'

And in 1998 they would also see him have an unbelievable season.

In many ways, it was a mirror of 1997. However, 1998 also had a touch of nostalgia to it as Bobby Rahal announced it would be his last season. The three-time CART champion embarked on what was called the 'Rahal's Last Ride' tour.

There was also a change of identity as FedEx was named as the new title sponsor of the series. It was now called the FedEx Championship Series. Longtime sponsor PPG remained involved with the series through its pace car program and its sponsorship of the PPG Cup.

As he had in 1997, Zanardi started out with some reasonable results, but he did not score a victory until the third race of the season — at Long Beach. Michael Andretti gave the Swift its second straight win at Homestead while Adrian Fernandez, now driving for Patrick Racing, scored his first CART oval-track victory at the gleaming new Twin Ring Motegi track in Japan. Zanardi had finished third at Homestead but crashed out of the race at Motegi.

Consecutive runner-up finishes at Nazareth (behind teammate Vasser) and Rio kept the Italian in striking distance of series leader Greg Moore, who cut his way past Zanardi en route to victory at Rio.

Zanardi got back in the win column at Gateway and took over the series lead as well. In fact, Zanardi would not lose the points lead for the remainder of the season.

After an eighth-place finish at Milwaukee, he won the next four races — at Detroit, Portland, Cleveland and Toronto. At this point, he was an incredible 69 points ahead of Vasser, who had won at Milwaukee.

However, Zanardi's domination of the CART series was being closely monitored by various Formula One team owners. The offers began to roll in and rumors emerged regarding Zanardi's plans for 1999. He was not talking.

A third in the U.S. 500 at Michigan and a second at Elkhart Lake gave the Italian such a lead that it was possible he would clinch the title earlier than anyone ever had in the history of CART, even though he had failed to add to his points total in the intervening race at Mid-Ohio.







Photo: Michael C. Brown

Below: Alex Zanardi and Chip Ganassi celebrate their team's third straight PPG Cup after Zanardi finished fourth at Vancouver. It was also title No. 2 for Zanardi, who hurried back to Italy to witness the birth of his first child.

But Zanardi's championship bid was not necessarily the biggest news in CART at the time. His third at Michigan had come as his engine expired at the finish line. He followed Greg Moore and Jimmy Vasser to the checker.

It will be remembered by those who were there as perhaps the greatest race in history. The official total of 62 lead changes gives only a hint of the ferocity of the competition for the entire 500 miles. The figure refers only to the lead changes at the start—finish line. In reality, there may have been as many as three times 62, as most laps featured more than one pass for the lead.

The reason for the tight competition was the Handford Device, a special rear wing designed by Mark Handford of Swift designed to cut the incredible speeds being recorded on the superspeedways.

With qualifying speeds over 240 miles per hour being recorded, CART had seen fit to aim for a reduction. The Handford Device featured an inverted wicker bill that produced more drag. The new wing was also noticeably larger than its superspeedway predecessor.

Although practice speeds allowed drivers to top 230 miles per hour, those speeds were the result of a tow down the straightaways. Adrian Fernandez won the pole with a lap of 229.519 miles per hour.

A side-effect of the wing was that it allowed drivers to run in draft packs. The result was a race-long battle for the lead that culminated on the final lap when Moore passed Vasser for the victory.

Unfortunately, the race will also be remembered for an accident in which three spectators were killed. After Fernandez hit the wall on lap 175, a front wheel came off his car and went into the Turn Four grandstand, killing the luckless spectators.

It marked the first time since 1987 that a spectator had been killed at a Championship Car race. As a safety measure, Michigan Speedway officials had higher catch fences erected.

Fernandez scored his second win of the year at Mid-Ohio, while at Elkhart Lake Scotsman Dario Franchitti, who had led for much of the race at Toronto before spinning out, finally recorded his first CART victory. Franchitti had joined Team Green for 1998 after beginning his Champ Car career with Carl Hogan's team, and would end his first season in his new colors with three wins and five pole positions to his credit.

Franchitti won again in Vancouver, where Zanardi was fourth while Vasser failed to score a point. It was all the Italian needed. With four races to go, he now led Vasser by 92 points. A maximum of 88 points was all that was available. Title number two was in Zanardi's hands and he became CART's first repeat champion since Bobby Rahal captured back-to-back titles in 1986 and '87.

'I had a slight feeling about clinching the championship, but Chip Ganassi waited until there were three or four laps to go to tell me,' Zanardi said. 'This is a great feeling and it actually comes at a beautiful period of my





Photos: Michael C. Brown

life. My wife is expecting and I want to dedicate this one to my kid, who maybe in the next few days will be starting the race of life.'

The baby, a boy named Nicola, was born on September 8. Zanardi was able to fly home to Italy in time for the birth.

At first there was speculation the Italian would skip the final races to be with his wife and son. But there was another goal — the points record. With 218 points following Vancouver and four races to go, it was conceivable he would be able to smash Michael Andretti's record of 234 points in a season. (Johnny Rutherford's tally of 4,723 points in 1980 had been achieved under a scoring system that was replaced in 1983.)

Zanardi remained focused.

'The important thing for me is to finish the season well and once things have been decided, it will be up to my employer to decide the strategy of how that will be announced,' Zanardi said.

What Zanardi did not say was who his employer was. It was strongly suggested that he would be returning to F1 with Williams, whose top driver Jacques Villeneuve had earlier announced he would be joining the new British American Racing team for 1999.

The CART tour's next stop was Laguna Seca and the race would almost see a repeat of the exciting 1996 finish, when Zanardi's banzai pass at the Corkscrew had deprived Bryan Herta of a certain victory. This time, however, Herta managed to hold Zanardi off and finally scored his first CART win.

Next on the schedule was the new street circuit at Houston, where Zanardi was on the podium once more after finishing second to Franchitti in an event marred by heavy rain. He followed up with a victory at Surfers Paradise, his seventh of the season. With one race remaining — the Marlboro 500 at the Fontana superspeedway — he had the opportunity to tie Michael Andretti and Al Unser Jr. for most victories in a season with eight.

He would come close — he finished 1.117 seconds behind race winner Vasser and Moore after another breathtaking drafting battle. Zanardi may not have scored the victory he was seeking, but he did emerge with a record for most points scored in a season with 285. Zanardi had actually tied Andretti after Laguna Seca and moved ahead following Houston.

It had been an incredible season for an incredible driver. Zanardi was now ready to return to Formula One, the series that had forgotten him several years earlier. One thing is certain: Alessandro Zanardi will never be forgotten in CART.



Canada's Greg Moore (top) enjoyed the best season of his CART career to date in 1998 when he placed fifth in the points in the Player's/Forsythe Reynard-Mercedes, won two races and almost collected a \$1 million bonus offered to the victor at Fontana. Team owner Gerald Forsythe (above) has seen his faith in the youngster richly rewarded.

Below: The battle for superiority between tire giants Firestone and Goodyear has added an extra dimension to the CART series since 1995.

CART 'TIRE WAR' HAS BEEN BOOST FOR THE SERIES

In terms of the 20-year history of Championship Auto Racing Teams, competition between tire manufacturers has been fierce. It has added a dimension to the equation for success as a team has had to choose the right tire to accompany the best engine, chassis and driver combination.

Interestingly enough, though, this competition has only been around for four years. From 1979 through 1994, Goodyear could boast that it won every CART race and had shod 16 straight CART champions.

That situation began to change when Firestone returned to Champ Car racing after a hiatus of 20 years. Firestone had been the dominant tire in American racing from the 1920s through the 1970s. At the end of 1974, however, the company announced it was pulling out of racing entirely.

In 1990, Bridgestone of Japan purchased Firestone, which, like Goodyear, was headquartered in Akron, Ohio. One of Bridgestone's first decisions was to promote the Firestone brand through a high-visibility auto racing series like CART.

In order to implement that plan, Bridgestone-Firestone first announced it would sponsor the Indy Lights series for 1991. In 1994, Bridgestone-Firestone conducted a year of testing with Patrick Racing and driver Scott Pruett in anticipation of a return to Champ Car racing in 1995.

As the record shows, the heavy regimen of testing paid off, although Goodyear still dominated with 15 victories and 15 poles in 17 races and the driver's title for Jacques Villeneuve. However, those statistics are a little

deceiving as Firestone-shod cars had been competitive throughout the season.

Firestone also failed to land any of the top teams from the 1994 season. For '95, it relied on smaller CART teams like Payton/Coyne, rejuvenated teams like Patrick Racing and Arciero-Wells and new teams like Tasman Motorsports and Comptech.

At Indianapolis, it was apparent that Firestone had done its homework. Late in the race, the Tasman Reynard-Honda of Scott Goodyear inadvertently passed the pace car and was penalized, giving the victory to fellow Canadian Villeneuve.

For Firestone, the elusive first victory would come in July in the Michigan 500. Comptech's Parker Johnstone took the pole in a Reynard-Honda and he and Tasman's Andre Ribeiro dominated the first half of the event. After mechanical

problems sidelined both drivers, it became a race between Pruett and Al Unser Jr. The pair swapped the lead twice on the final lap with Pruett winning by 0.056 seconds.

It was Firestone's first Champ Car victory since September of 1974 when Al Unser Sr. had won the Michigan 200.

'You cannot imagine the pride and excitement when the checkered flag came down at Michigan,' said Bridgestone-Firestone's motorsports manager Al Speyer in the *Autocourse CART Yearbook* for 1995. 'For the people directly involved with our [Champ Car] program, it was a testament to their hard work and dedication.'

Ribeiro would give Firestone its second victory of 1995 as he captured the pole and the race at Loudon, New Hampshire.

Interestingly, Firestone's return to Champ Car racing may have been portrayed as a 'war,' but it was more of a friendly competition between two tire-manufacturing giants. For one thing, Firestone's arrival in CART was welcome news for team owners, who had been paying \$1,200 for each set of racing tires and would now get them for free.

There had been a number of concerns, most notably that of spiraling costs. Another concern was that if one company held a distinct advantage over the other, it would upset the balance of CART's already tight competition. There was an additional concern over the safety of 'trick' qualifying tires.



Michael C. Brown

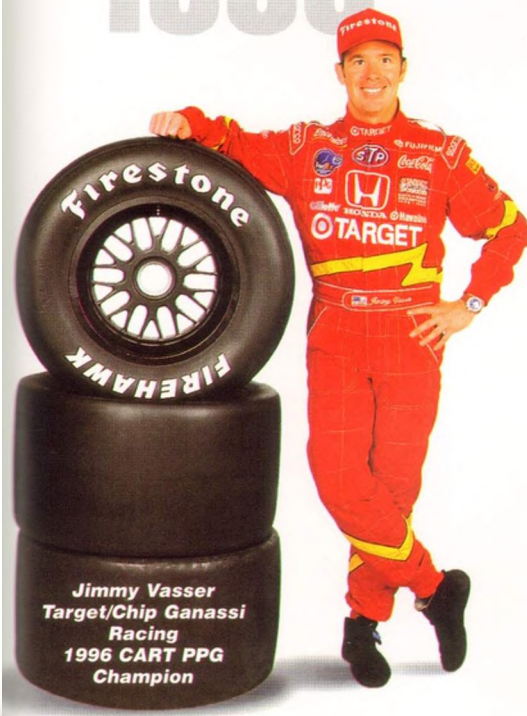
Firestone.

The Choice Of Champions.

1996

1997

1998



Jimmy Vasser
Target/Chip Ganassi
Racing
1996 CART PPG
Champion



Alex Zanardi
Target/Chip Ganassi
Racing
1997 CART PPG
Champion



Alex Zanardi
Target/Chip Ganassi
Racing
1998 CART FedEx
Champion

THE LESSONS WE LEARN ON RACE DAY ARE IN THE TIRES YOU COUNT ON EVERY DAY.

The Challenging Spirit

Firestone returned to CART in 1995 because we knew the challenges of competition would bring out the best in our people and our tires. Since that time, more and more drivers have selected Firestone tires each year. In fact, in terms of drivers, the Firestone Racing Team has gone from 5 to 21 in just four years. That's a statistic we're proud to declare.

This year, an exceptional group of 21 drivers have chosen to race on Firestone Firehawk®

tires in the 1998 CART FedEx Championship Series. The 1998 Firestone Racing Team represents the majority of drivers this season, with at least 19 competing in every race.

The Championship Spirit

We're also honored to say that drivers on Firestone tires have dominated CART racing for the last three years, winning over 75% of the races. What's more, the winning combination of Firestone Firehawk racing tires and

Target/Chip Ganassi racing has captured three consecutive CART Championships. Driver Jimmy Vasser earned the title in 1996, while Alex Zanardi has chalked up impressive back-to-back championships for two years running—including 1998! We look forward to 1999 and the prospect of capturing another CART FedEx Championship.



Race-Winning Firestone Firehawk®
Indy Racing Slick &
Firestone Firehawk SS10™ Street Tire



www.firestone-usa.com



Race-Winning Firestone Firehawk®
Indy Racing Rain Tire &
Firestone Firehawk SZ50™ With UNI-T™
Ultra-High Performance Street Tire



Below: Firestone has accumulated an impressive tally of victories since entering the CART series in 1995 but Goodyear remains determined to overturn its rival's recent dominance.

Fortunately, both companies met with CART officials to come up with regulations agreeable to both sides. 'When we were in competition 20 years ago, there were no rules,' added Leo Mehl, at that time Goodyear's director of racing. '[CART] watched what happened in NASCAR and developed some good rules.'

The Goodyear—Firestone tire war referenced by Mehl had indeed been a war. Although Goodyear had competed in American championship racing in its earliest years, it had been absent from the scene from 1920 until 1963, when the company conducted a year of testing.

The 1964 Champ Car season opened with A.J. Foyt winning at Phoenix in a Goodyear-shod car. Although Foyt used Firestones to win that year's Indy 500, he did fuel the fire a bit by wearing a Goodyear driving suit in the race.

The following year, Goodyear was in the mix and drivers became the biggest beneficiaries as both sides engaged in a bidding war for the top names in the sport.

However, auto racing in general benefited as the companies not only came up with improved tires year after year, but also employed their expertise in the area of safety. Following a number of tragic, fiery accidents during the 1964 season, both companies developed rubber fuel cells to cut back the incidence of fire. By the 1980s, improvements in both car design and fuel cell design had all but eliminated the threat of fire.

However, by that time, Goodyear was the sole provider of tires for CART. It did not rest on its laurels, though, as it continually provided competitors with tires capable of keeping up with design innovations that resulted in faster racing cars.

One of Goodyear's most important contributions to CART came in 1985 when it first introduced radial tires, which became standard equipment on the circuit by 1987.

If nothing else, Firestone's domination of the 1996, '97 and '98 CART seasons shows the cyclical nature of the sport. Firestone-shod cars captured 10 of 16 races in 1996 and the driver's championship for Jimmy Vasser, 13 of 17 race wins and the driver's championship for Alex Zanardi in 1997 and 18 of 19 race wins and a repeat title for Zanardi in 1998. It is important to note here that a majority of these victories came with the Reynard-Honda combination.

For the future, the scales could either be evened or tipped in Goodyear's favor. After all, Goodyear announced that it would be pulling out of Formula One racing at the end of 1998 and concentrating its efforts on the CART series for 1999.

It appears the 'tire war' is just getting warmed up.





RAHAL WAS THE THINKING MAN'S CHAMPION

Perhaps it was the glasses, which gave him a scholarly look. Or perhaps it was the articulate manner in which he spoke.

But regardless of what it was, one always had the impression that Bobby Rahal was one of the smartest drivers who ever competed in the sport.

When he finished 11th in the season-ending Marlboro 500 in 1998, Rahal had driven his last race. Prior to the 1998 season, he had announced that it would be his final season as a driver.

Predictably, he was honored at each of the 19 tracks that hosted CART races that season. For Bobby Rahal was a very special driver in the annals of CART history.

There were three PPG Cup championships in his career. There were 24 CART race victories, 37 second-place finishes and 27 third-place finishes for a total of 88 trips to the podium in 264 races. There were also 18 pole positions.

Were it not for the fact that Rahal was so articulate, he might be remembered only in terms of races and championships won. But Rahal was always the thinker — on and off the track.

He had that knack of making the right decision.

A good example came in 1988 when he surprised the racing world by announcing he was leaving TrueSports for Kraco in 1989. Rahal wanted a Chevy engine while team owner Steve Home had opted for the Judd. Rahal got the Chevy and even though he won only two races over the next three seasons, he was competitive everywhere and definitely scored better results than his old team did.

In 1992, he became a team owner with partner Carl Hogan. Rahal recorded four race wins that year and captured the PPG Cup for the third time. In doing so, he became the first driver/owner to win the championship. No one has achieved that feat since.

Rahal's only bad decision in CART racing came in signing up with the Honda program. It was probably more a case of bad timing as the Rahal team did all of the development before abandoning the Honda at the end of 1994.

The following year showed the engine was going to be a force but Rahal's sponsorship support from Miller Brewing had been at stake. He simply could not risk being a back-marker and, in his defense, the Honda engine won only one race in 1995.

By 1996, he was looking to the future and was able to sign the promising Bryan Herta. After a number of near-misses, Herta rewarded Rahal by winning a thriller at Laguna Seca in 1998.

With Rahal ready to retire, it certainly gave the team a boost for the future. Rahal also signed the highly regarded Italian Max Papis as his replacement before the end of the 1998 season. Papis has turned in a number of respectable performances with the underpowered Toyota engine and 1999 will allow the CART community to see what he can accomplish with more competitive equipment.

As for Rahal, he will devote his energies to running his team. It is certain he will show the racing world he is also the thinking man's owner.

À LA CART

DIFFICULT TIMES OVER AT LOLA

For Lola, the racing car manufacturer founded in 1958 by Eric Broadley, 1997 started out with much promise. Over the years, it had been one of the most prolific producers of customer racing cars in the world. Where CART was concerned, the 1997 season should have been a profitable one for Lola with the introduction of its new purpose-built T97/20 Indy Lights car and a number of teams using the latest T97/00 CART car.

Where it all went wrong for Lola was with its return to Formula One. The company had built its first F1 car in 1962 for the Bowmaker team and John Surtees placed fourth in that season's World Championship with it.

Prior to 1997, Lola had produced a variety of F1 cars. These projects included associations with Graham Hill's Embassy Racing team in the mid-1970s, Carl Haas's Beatrice team in the mid-1980s, the Lola-Larrousse team in the late 1980s and the Scuderia Italia team in 1993. None of these cars enjoyed the success of the 1962 design.

For 1997, Lola went its own way with the Ford-powered T97/30, sponsorship from MasterCard and Vincenzo Sospiri and Ricardo Rosset as drivers. However, the MasterCard sponsorship package went awry and Lola was suddenly saddled with a huge debt for the costly program. The team withdrew after failing to qualify for the first race.

Before the season was over, Lola filed for the British equivalent of Chapter 11 (bankruptcy). The business was taken over by Martin Birrane and Keith Wiggins was recruited to head the technical team.

In 1998, Gerald Davis Racing was the only CART team using a Lola chassis. However, the company is endeavoring to increase its presence in the FedEx Championship Series fields. In the meantime, Indy Lights enjoyed another highly competitive season with the year-old T97/20 design.

In its history of Championship Car involvement, Lola chassis have won 105 races, 74 pole positions and six constructor's championships. The last victory for a Lola chassis came in 1996 when Andre Ribeiro won the Michigan 500.

Odds are strong that Lola will return to the victory podium.

At every stop on the CART circuit in 1998, race organizers took time out to pay tribute to Bobby Rahal, the three-time champion who retired after the '98 season. Rahal waves to the fans shortly before the start of the U.S. 500.





LOOKING TO THE FUTURE

Following the breach with Indianapolis Motor Speedway President Tony George in 1996, CART's only recourse was to continue its growth and plan for the possibility of a future without Indianapolis. That future involved expansion, and replacing Indianapolis, Phoenix and New Hampshire (the latter two tracks had severed their ties with CART and become IRL venues) were three new oval-track events — races at Homestead and Rio and the U.S. 500.

Homestead was actually the new 1.5-mile Metro-Dade Homestead Motorsports Complex near Miami that promoter Ralph Sanchez had built to replace the street race in downtown Miami he had promoted the year before. Rio marked CART's first venture into South America and the promoters constructed an oval-type track using part of the Jacarepagua circuit that had been the site of the Brazilian Grand Prix FI race in the 1980s.

And while the inaugural U.S. 500 would be the first of two 500-milers at Michigan Speedway in 1996, Roger Penske was well on the way to constructing his California Speedway in the Los Angeles suburb of Fontana. Penske's plan was to hold the U.S. 500 at Michigan in late July and move the Marlboro 500 to Fontana as CART's season finale.

CART's expansion did not end here. In 1997, the new Gateway International Raceway opened in Madison, Illinois, near St. Louis. The race was the first Championship Car event in Illinois since 1970 when a 100-mile dirt-track race at DuQuoin was still part of USAC's championship series.

The following year, it added another continent. With the involvement of such major Japanese companies as Honda, Toyota, Bridgestone-Firestone and Panasonic, a race in Japan was inevitable. Honda spent an estimated \$400 million to construct the state-of-the-art Twin Ring Motegi, located two hours north of Tokyo. For 1998, CART held its first race in Asia, the Budweiser 300 at Motegi.

Also added to the 1998 schedule was a street race in Houston. CART had hoped for a race in the Texas market for a number of years and had even held its annual year-end banquet in Houston in 1991.

In 1996, CART had been offered a date by the newly completed Texas Speedway in Fort Worth, but an inspection by chief steward Wally Dallenbach revealed that the track was unsuitable. The problem was in the transition between the apron and the track itself — it was too extreme for the low-riding CART racing cars.

CART respectfully declined, the IRL accepted the offer it subsequently received and then taunted CART over its refusal. The track then hosted a NASCAR Winston Cup event, and after the NASCAR drivers, teams and officials also complained about the transition, the owners decided to make appropriate changes.

Thanks to Texaco's presence in Houston and its support of CART as sponsor of the Newman/Haas team and no fewer than three CART races, Houston was able to land a date on the 1998 calendar. With no suitable purpose-built racing facility available, Houston would have to be a street race, but it became the first new street race since 1991 when Surfers Paradise was included in the championship for the first time.

In fairness to CART, the Houston street race gave the series more balance — the series now had two superspeedways that hosted 500-mile races, five short-track oval races, five street races, four road-course races and one airport race.

It also was consistent with CART's original intention of exposing large markets to the sport, even those without permanent racing facilities. And Houston was definitely a large market, having recently emerged as the fourth largest city in the U.S.



Above: CART raced in Texas for the first time in 1998 with the addition of a street circuit in Houston to the schedule. Tony Kanaan heads for third place in the Tasman Reynard-Honda.

Right: After the refurbishment of Nazareth and Michigan speedways, people wondered what Roger Penske could do with a clean sheet of paper. They found out when he opened the impressive California Speedway at Fontana.



CART'S STARS OF TOMORROW

On paper, it was a great idea. The problem was, it took several shaky years for the idea to develop into what it was intended to be.

In 1986, CART founder U.E. 'Pat' Patrick announced the launching of the American Racing Series, a championship for 'spec' racing cars to develop future talent for CART. The cars were 1985 March F3000 chassis with Buick V-6 engines. They were to be affordable vehicles that could help develop a farm system of young drivers. Patrick himself owned several of the cars.

'I thought a development series was what we needed,' Patrick said in an interview with Ned Wicker of *Indy Car & Championship Racing* magazine. 'CART was growing and you couldn't get drivers or trained mechanics. The drivers were coming from Formula One. I have no problem with that, but I'd rather see them come from our own development program. Then they're racing each week before our own team owners.'

Unfortunately for Patrick, the idea didn't catch on immediately and most of the races in the early years of the series had fields of 12 cars or fewer. The first race was held at Phoenix and won by Steve Millen of New Zealand. Italy's Fabrizio Barbazza ended up as the first ARS champion.

One of the incentives for winning the ARS championship was to be a March chassis with a turbocharged Buick engine for the following CART season. It wasn't necessarily a full-time ride, but it certainly would prove helpful to a young driver trying to attract a team with something in addition to his talent.

Ironically, the incentive was not required for Barbazza, the inaugural champion. Barbazza had driven for Frank Arciero's ARS team and simply moved up to Arciero's CART team following his ARS championship season.

Not every ARS champion was as fortunate, but over the years, a number of other ARS graduates did make it to CART, most notably its 1990 champion, Paul Tracy. Heading into his ninth CART season, Tracy has won 13 races and 12 pole positions and has been a contender for the championship most of those years.

Although the ARS had groomed Tracy for future stardom, the series itself seemed to be in jeopardy. However, it received a major boost with the arrival of Firestone and new chassis from Lola. It also gained a new name as the ARS became the Firestone Indy Lights Series. Almost overnight, the skimpy fields increased and the quality of competition improved considerably. Whereas an ARS champion might have trouble finding a ride in CART, it was now possible for other drivers in the series to find employment as well.

Of 34 drivers who participated in CART's 1998 season, nine were graduates of Indy Lights. Four of those drivers — Adrian Fernandez, Greg Moore, Bryan Herta and Tony Kanaan — finished in the top 10 in the 1998 PPG Cup standings. Of those nine former Lights drivers in CART in 1998, only four had been champions.

In fact, of 13 Indy Lights champions, only two — Steve Robertson and David Empringham — have been unable to secure CART rides.

The series also returned to superspeedways in 1996 and at the season finale in 1997, the participants put on what many felt was the greatest race of all time. For nearly 50 laps, a 12-to-15-car pack battled for the lead. It was only when three of the leaders got together in the final laps that the caution came out and the race was over.

The 1997 season was the first for a car purposely built for Indy Lights by Lola, the T97/20. Lola built more than 40 of the chassis and sold each one. The previous 11 years of Indy Lights had been contested by cars that were actually designed for Formula 3000, which was losing favor in Europe.

As a result, a number of top foreign drivers found Indy Lights a more viable prospect for moving up in the sport. That made the competition closer and better, and provided fans with great races everywhere.

The series also had another name change for 1998 when it became the PPG-Dayton Indy Lights Championship. The series was billed as the championship that features CART's stars of tomorrow.

By the way, the 1998 Indy Lights champion was Cristiano Da Matta. For 1999, Da Matta will be a CART driver.



The return of Indy Lights to superspeedways in 1997 and '98 produced some of the best racing ever seen in open-wheel competition. From the top, Jorge Goeters, Guy Smith, Ayrton Dare and Didier Andre go four abreast at Michigan Speedway in 1998.



Art Flores

CART's Safety Team (below) has been a fixture on the circuit since 1984. Talented orthopedic surgeon Dr. Terry Trammell (above) has been instrumental in helping a number of injured drivers return to the sport.

CART SAFETY TEAM A MATTER OF NECESSITY

The idea of a full-time safety team to travel to races is not new. After all, BRM boss Louis Stanley came up with the idea of the Grand Prix Medical Unit following the injury of his driver Jackie Stewart in Belgium in 1966.

Instead of relying on sometimes primitive local medical facilities for the treatment of injured drivers, Stanley's rolling surgical ward was state-of-the-art and fully equipped.

A serious pit fire and an accident involving A.J. Foyt at the inaugural Michigan 500 in 1981 convinced Wally Dallenbach and Carl Horton to form a full-time safety team for CART.

Horton, whose company was a leading manufacturer of emergency rescue and safety vehicles, brought state-of-the-art rescue and medical services to CART. Since the first Horton Safety Team, there has been considerable expansion.

CART assumed responsibility for the team in 1990 and today it includes 29 professionals and six specially equipped vehicles. In 1997, the CART Mobile Medical Facility was unveiled. The \$1 million unit is capable of treating several patients simultaneously while providing patients, families and team members with a more private environment than the previous unit.

Overseeing the team is Dennis Swan, vice president of logistics for CART. Dr. Steve Olvey, CART's director of medical affairs, oversees the drug-testing program, ambulances, medical helicopters and local medical staff.

Dr. Terry Trammell, the physician credited with saving the injured limbs and feet of a number of drivers, serves as CART's chief orthopedic consultant. Lon Bromley, CART's director of safety, is responsible for the organization and rescue efforts of the team. Other CART Safety Team members include: Dr. Joe Baele, Dr. Nick Bonfilio, Dr. Jay Phelan, Dr. Chris Pinderski, Dr. Richard Timms and Dr. Trevor Gillmore.



Michael C. Brown

DATELINE: CART

1995

January: Ex-Formula One driver Christian Fittipaldi named to drive for Derrick Walker.

March: CART returns to Miami for first time since 1988.

April: Ilmor D engine is now called Mercedes-Benz 1081C. Robby Gordon scores first CART win at Phoenix. Paul Stewart, son of three-time F1 World Champion Jackie Stewart and director of Paul Stewart Racing, visits paddock at Long Beach to check possibility of future CART program.

May: Al Unser Jr. and Emerson Fittipaldi fail to qualify at Indianapolis. Unser becomes the second reigning CART champion to miss Indy. Penske team misses Indy for first time since 1969. Jacques Villeneuve wins final pre-IRL 500 at Indianapolis.

June: Indianapolis 500 left off 1996 CART schedule published in Detroit. Jimmy Vasser handed first CART victory at Portland after apparent race winner Al Unser Jr. is disqualified. Penske appeals decision. Future CART driver JJ Lehto wins 24 Hours of Le Mans.

July: Robby Gordon announces he will leave CART to run full NASCAR program in 1996 as well as IRL Indy 500. Scott Pruett slips past Al Unser Jr. on final lap to score first-ever CART win in Michigan 500. Win also marks first Championship Car victory for Firestone since Al Unser Sr. won at Michigan in September of 1974.

August: Jacques Villeneuve announces he will drive for Williams in F1 in 1996. Andre Ribeiro scores first CART win at New Hampshire.

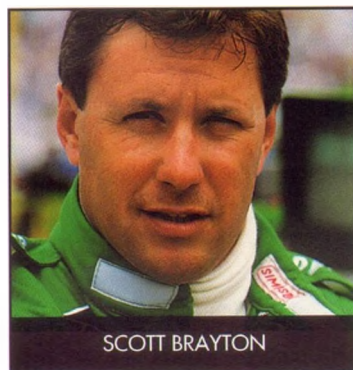
September: Jacques Villeneuve clinches CART title at Laguna Seca. Gil de Ferran takes first CART win in same race to clinch CART honors for top rookie. Al Unser Jr. has win at Portland reinstated but still finishes second in points to Villeneuve despite gain of 21 points. Christian Fittipaldi announces he will join Newman/Haas, replacing Paul Tracy who will rejoin Penske Racing.

October: Former PPG Cup champion Emerson Fittipaldi announced as driver for newly formed Hogan-Penske team.

November: Alex Zanardi named to drive for Chip Ganassi Racing.

1996

January: CART announces it will schedule the U.S. 500 at Michigan Speedway to go head-to-head with Indianapolis 500 in light of announcement reserving 25 of 33 starting spots at Indy for IRL participants. Mark Blundell named as teammate to Mauricio Gugelmin at PacWest.



SCOTT BRAYTON



JEFF KROSNOFF

February: CART hosts first-ever Spring Training at new Metro-Dade Homestead Motorsports Complex. First new Eagle chassis design since 1986 makes appearance at Homestead.

March: Jimmy Vasser scores first CART victory in season opener at Homestead. CART holds its first event in South America with a race on an oval track at the jacarepagua circuit in Rio de Janeiro, Brazil. The race, won by Brazilian Andre Ribeiro, is first Championship Car event in South America since USAC race in Rafaela, Argentina, in 1971. Reigning CART champion Jacques Villeneuve captures pole for first F1 race, the Australian Grand Prix.

April: Jacques Villeneuve scores first F1 victory at the Nurburgring.

May: Jimmy Vasser wins inaugural U.S. 500 before a sellout crowd of 100,000. Despite fact U.S. 500 was telecast on ESPN cable network, TV ratings released afterward showed a drop in figures for the Indy 500. Former CART driver Scott Brayton is killed in practice accident at Indianapolis. Brayton, who made 148 CART starts, recorded his top finish in Championship Car competition when he placed third at Milwaukee in 1992. Brayton had also won the pole position at Indianapolis in 1995 and 1996.

June: Alex Zanardi scores first CART victory at Portland.

July: Jeff Krosnoff is killed along with turn marshal Gary Avrin during final laps of Toronto CART race. Krosnoff becomes the second driver fatality in CART history. Adrian Fernandez scores first CART win in the accident-shortened Toronto race. Emerson Fittipaldi is seriously injured in a crash at the start of the Michigan 500. Denmark's Jan Magnussen is named to replace Fittipaldi.

September: Bobby Rahal announces his team will use Ford engines for 1997. Jim Hall reveals he will retire at the end of the season. Stefan Johansson announces plans to start Indy Lights team for 1997.

October: Jim Chapman, former director of racing for PPG, dies following a lengthy illness. Carl Hogan announces he will have own team for 1997. Former CART team owner Gino Gagliano dies in an industrial accident in Detroit.



GIL DE FERRAN PUTS PAUL TRACY IN THE SHADE AS HE CELEBRATES HIS FIRST CART WIN AT LAGUNA SECA IN 1995

DATELINE: CART



DEBUT VICTORY FOR THE SWIFT AT HOMESTEAD IN 1997

1997

January: CART and Indianapolis Motor Speedway reach an agreement in which CART will no longer refer to itself as IndyCar. Championship will now be called PPG CART World Series.

March: Michael Andretti wins season-opening Homestead race to record first win for the American-built Swift chassis.

May: Paul Tracy wins inaugural CART event at Madison, Ill., near St. Louis. Race is first Champ Car event in Illinois since DuQuoin in 1970 season.

June: Greg Moore wins at Milwaukee for first CART victory. Moore also becomes youngest CART race winner in history at age 22 years, one month and 10 days. Mark Blundell edges out Gil de Ferran and Raul Boesel at Portland to record closest two-way and three-way finish in CART history. Race win is first in CART for Blundell. Former CART driver Stefan Johansson wins 24 Hours of Le Mans.

July: The U.S. 500 title is moved to July date at Michigan previously occupied by Marlboro 500. Marlboro race is moved to season finale at new California Speedway in Fontana. Emerson Fittipaldi visits Germany and hints he might try GT racing.

September: Alex Zanardi clinches title at Laguna Seca. Following announcement that rookie Dario Franchitti will join Team Green in 1998, Franchitti's team owner Carl Hogan

announces he will replace Franchitti with Robby Gordon for season finale at Fontana. Mauricio Gugelmin establishes a world closed-course record in Fontana qualifying with a speed of 240.942 miles per hour. Teammate Mark Blundell goes on to win at Fontana, first Championship Car 500-miler in California since 1980 California 500 at Ontario.

October: Penske Racing releases Paul Tracy from contract. Tracy signs deal with Team Green. Penske Racing announces signing of Andre Ribeiro. Former CART champion Jacques Villeneuve clinches F1 title, and becomes first Canadian to win the World Championship.

1998

February: FedEx confirms it will become new title sponsor of CART. CART series will now be called FedEx Championship Series.

March: CART holds its first race in Japan at new Twin Ring Motegi track. Adrian Fernandez wins Motegi race. CART becomes a publicly traded company with a listing on the New York Stock Exchange and the ticker symbol of MPH. With capital raised from the initial stock offering, CART is able to purchase both the PPG-Dayton Indy Lights series and the KOOL/Toyota Atlantic Championship.

April: F1 boss Bernie Ecclestone makes surprise visit to paddock of Long Beach GP. Ecclestone is guest of race promoter Chris Pook, who is bidding to bring back U.S. Grand Prix to site rumored to be near San Francisco.

July: Handford Device makes debut in U.S. 500. The new rear wing results in better racing as lead changes hands an incredible 62 times during the race. Greg Moore wins the U.S. 500 with last-lap pass of Jimmy Vasser. Race marred when wheel from Adrian Fernandez's car lands in stands. Three fans — Sheryl Ann Laster, Michael Tautkus and Kenneth Fox — are killed and six others are injured. Alex Zanardi rumored to be in talks with Williams for possible return to F1 in 1999. Ford confirms purchase of Cosworth racing division.

August: Dan Gurney's latest Eagle, the 987, makes its return to CART competition at Mid-Ohio. Eagle joins Reynard, Penske, Swift and Lola to give CART five separate chassis. Tally is most since 1979 when nine chassis — Penske, McLaren, Eagle, Lola, Chaparral, Parnelli, Lightning, Kingfish and Wildcat — competed in the initial CART season. Max Papis named to replace Bobby Rahal on Rahal's team for 1999 season. Scott Pruett named to drive for Arciero-Wells team in 1999.

September: Alex Zanardi finishes fourth at Vancouver to clinch second straight CART title. Zanardi becomes fifth multiple CART champion joining Rick Mears, Al Unser Sr., Bobby Rahal and Al Unser Jr. Future CART driver Juan Pablo Montoya clinches F3000 title.

October: CART holds its first race in Texas with inaugural Texaco Grand Prix of Houston. Alex Zanardi confirms he will drive for Williams in 1999. Juan Pablo Montoya is confirmed as Zanardi's replacement.

November: Jimmy Vasser wins season finale at Fontana to collect \$1 million bonus. It marked the second \$1 million bonus for Vasser, who also received that prize for winning the inaugural U.S. 500 in 1996. Reigning CART champion Alex Zanardi finishes third at Fontana to establish CART record of 15 podium finishes in a season as well as record for most PPG Cup points in a season with 285. Three-time CART champion Bobby Rahal retires after finishing 11th in the season-ending Marlboro 500 at Fontana. Rahal is honored prior to the start of the race with a lap of honor.



VASSER AND ZANARDI CELEBRATE A GANASSI 1—2 AT NAZARETH IN '98

CART RESULTS: 1979-1998



1979

Position	Driver	Team	Car	Tires	Phoenix	Atlanta 1	Atlanta 2	Indianapolis	Trenton 1	Trenton 2	Michigan 1	Michigan 2	Watkins Glen	Trenton	Ontario	Michigan	Atlanta	Phoenix	Points total
1	Rick Mears	Penske/Gould Charge	Penske PC7-Cosworth	G	2	5	2	-	-	-	4	5	2	1	*2	3	1	3	4,060
		Penske/Gould Charge	Penske PC6-Cosworth	G	-	-	-	*1	5	7	-	-	-	-	-	-	-	-	
2	Bobby Unser	Penske/Norton Spirit	Penske PC7-Cosworth	G	*5	7	4	5	1	*1	*19	1	1	*2	1	*1	*3	*2	3,780
3	Gordon Johncock	Patrick/North American Van Lines	Penske PC6-Cosworth	G	1	4	9	6	*3	5	1	*4	3	16	15	13	2	4	2,211
4	Johnny Rutherford	McLaren/Budweiser	McLaren M24B-Cosworth	G	3	*1	*1	18	15	3	3	11	15	5	4	4	11	6	2,163
5	Al Unser	Chaparral/Pennzoil	Lola T500-Cosworth	G	4	6	3	-	-	-	-	-	-	6	-	-	-	-	2,085
		Chaparral/Pennzoil	Chaparral 2K-Cosworth	G	-	-	-	22	2	12	13	3	*5	-	5	10	5	1	
6	Danny Ongais	Interscope/Panasonic	Parnelli VPJ6B-Cosworth	G	15	14	6	4	7	6	18	12	4	13	6	-	15	17	1,443
7	Tom Sneva	O'Connell/Sugarpe Prune	McLaren M24-Cosworth	G	17	3	5	15	6	15	21	2	10	3	17	2	8	5	1,360
8	Tom Bagley	Longhorn/Kent Oil/Dairy Queen	Penske PC6-Cosworth	G	8	8	7	9	8	4	6	6	6	7	32	5	-	9	1,208
9	Wally Dallenbach	Patrick/Foreman Industries	Wildcat Mk.III-Cosworth	G	7	-	-	-	-	-	-	-	-	-	-	-	-	-	1,149
		Patrick/Foreman Industries	Penske PC6-Cosworth	G	-	11	8	27	4	2	5	10	14	4	24	6	4	12	
10	Mike Mosley	AAR/Theodore Racing	Eagle-Cosworth	G	6	17	17	3	13	-	2	20	12	14	34	-	14	10	1,121
11	Mario Andretti	Penske/Gould Charge	Penske PC7-Cosworth	G	-	-	-	-	-	-	-	-	-	-	3	-	-	-	700
12	Lee Kunzman	Hamm/Conqueste/Windjammer	Parnelli VPJ6C-Cosworth	G	9	2	18	30	14	-	14	17	-	-	9	-	-	-	485
13	Pancho Carter	Morales/Alex XLNT Foods	Lightning-Offy	G	20	9	11	20	10	8	7	14	16	-	28	8	13	7	452
14	Vern Schuppan	Wysard Motor Co.	Wildcat-Offy	G	21	12	12	21	-	-	16	-	7	-	7	DNS	-	14	449
15	Bill Alsup	WASP Racing/Inslay/Claremont	McLaren M16-Offy	G	11	16	15	-	12	9	9	13	9	10	22	9	10	11	400
16	Joe Saldana	Hoffman/Snyder Ind.	Eagle-Offy	G	13	-	-	16	-	-	-	-	13	8	-	-	6	18	367
		Hoffman/Snyder Ind.	Lightning-Offy	G	-	13	13	-	17	16	10	8	-	-	30	-	-	-	
17	Spike Gehlhausen	Gehlhausen/Sta On Car Glaze	Eagle-Offy	G	18	18	16	-	18	13	22	21	17	11	-	-	-	-	342
		Patrick/Foreman Industries	Wildcat Mk.III-Cosworth	G	-	-	-	10	-	-	-	-	-	-	-	-	-	-	
		Fletcher/Frosty Acres/Winton	Lightning-Cosworth	G	-	-	-	-	-	-	-	-	-	-	25	11	16	8	
18	Salt Walther	Dayton-Walther	McLaren M24-Cosworth	G	12	-	-	-	-	-	-	-	-	-	-	-	-	-	309
		Dayton-Walther	Penske PC6-Cosworth	G	-	10	10	12	-	-	8	7	-	-	20	12	-	-	
19	Steve Krisloff	Fletcher/Frosty Acres/Winton	Lightning-Cosworth	G	16	15	-	11	9	14	17	18	18	-	-	-	-	-	279
		Longhorn/Kent Oil/Dairy Queen	Penske PC6-Cosworth	G	-	-	-	-	-	-	-	-	-	-	23	7	-	-	
20	Tom Frantz	Frantz/Kent Oil	Wildcat-Offy	G	14	-	-	-	-	-	11	16	11	9	11	14	-	-	236
21	Jerry Sneva	National Engineering	Spirit-AMC	G	-	-	-	31	-	-	-	-	-	-	-	-	-	-	150
		Hodgdon Racing	McLaren M24-Cosworth	G	-	-	-	-	-	-	-	-	-	-	10	-	-	-	
22	Tim Richmond	Robert J. Schultz	Eagle-Offy	G	-	-	-	-	-	-	23	-	-	-	-	-	-	-	108
		Robert J. Schultz/S&M Electric	Lightning-Offy	G	-	-	-	-	-	-	-	-	8	12	26	-	-	15	
23	Larry Rice	S&M Electric	Lightning-Offy	G	10	-	14	19	16	10	-	-	-	-	-	-	-	-	105
24	Herm Johnson	Mergard 20th Century	Eagle-Offy	G	-	-	-	-	-	-	-	-	-	-	-	-	7	13	98
25	Al Loquasto	Gehlhausen/Biane Winery	Eagle-Offy	G	-	-	-	-	-	-	20	9	-	-	21	-	-	-	75
26	John Mahler	Sport Magazine	Bear-Offy	G	19	-	-	-	11	11	12	15	-	-	-	-	-	-	74
		Sport Magazine	Eagle-Offy	G	-	-	-	25	-	-	-	-	-	-	-	-	-	-	
27	Larry Cannon	Cannon Racing	Wildcat-Offy	G	-	-	-	-	-	-	-	-	-	15	14	DNS	12	16	56
28	Dick Ferguson	Aero Electronics	Spyder-Offy	G	-	-	-	-	-	-	15	19	-	-	-	-	-	-	35
		Aero Electronics	Penske-Cosworth	G	-	-	-	-	-	-	-	-	-	-	16	-	-	-	
29	Billy Scott	Wheel Center	Eagle-Offy	G	-	-	-	-	-	-	-	-	-	-	19	-	-	-	20
30	Phil Caliva	Sta-On	Eagle-Offy	G	-	-	-	-	-	-	-	-	-	-	27	-	-	-	10

1980

Position	Driver	Team	Car	Tires	Ontario	Indianapolis	Milwaukee	Pocono	Mid-Ohio	Michigan	Watkins Glen	Milwaukee	Ontario	Michigan	Mexico City	Phoenix	Points total
1	Johnny Rutherford	Chaparral/Pennzoil	Chaparral 2K-Cosworth	G	*1	*1	2	2	1	1	5	*1	2	4	10	13	4,723
2	Bobby Unser	Penske/Norton Spint	Penske PC9-Cosworth	G	23	19	1	*1	15	*2	1	3	*1	2	*2	-	3,714
3	Tom Sneva	O'Connell/Sugarpe Prune	McLaren M24-Cosworth (*Phoenix-Cos)	G	2	2	6	3	11	6	4	*16	26	*6	4	*1	2,930
4	Rick Mears	Penske/Gould Charge	Penske PC9-Cosworth (*PC7)	G	*21	5	5	12	9	4	2	2	3	3	1	7	2,866
5	Pancho Carter	Morales/Alex XLNT Foods	Penske PC7-Cosworth (*Lightning-Cos)	G	18	6	4	*6	7	3	7	22	7	7	22	19	1,855
6	Gordon Johncock	Patnck/N. American Van Lines	Phoenix-Cos (*Wildcat Mk.IV/†Penske PC6)	G	*3	†4	*3	-	2	*5	21	23	23	24	19	24	1,572
7	Bill Alsup	Alsup Racing	Penske PC7-Cosworth	G	7	-	9	4	3	10	8	21	16	10	16	21	1,214
8	Al Unser	Longhorn Racing	Longhorn LR01-Cosworth	G	16	27	20	24	*13	7	*19	13	4	5	3	15	1,153
9	Gary Bettenhausen	Armstrong Mould	Wildcat-Offy (*Orbitor-Cosworth)	G	-	3	12	33	20	9	11	-	31	19	-	*3	1,057
10	Vern Schuppan	Wysard Motor Co.	Wildcat-Offy (*McLaren-M24B-Cosworth)	G	-	-	-	5	5	-	18	-	*10	-	-	-	806
11	Tom Bagley	Patrick/Kent Oil	Phoenix-Cos (*Wildcat Mk.IV/†Penske PC6)	G	†5	*28	23	*29	-	*8	6	4	*15	*8	18	16	794
12	Dennis Firestone	Scientific Drilling	Penske PC6-Cosworth	G	-	16	-	30	-	14	-	-	6	26	5	5	743
13	Sheldon Kinser	Leader Cards/Genesee	Watson-Cos (*Watson-Offy)	G	*13	-	11	7	*24	16	*20	*17	12	14	7	4	697
14	Tom Gloy	Penske/Lane Sports	Penske PC7-Cosworth (*PC9)	G	-	-	-	-	6	-	-	-	*5	*9	-	-	680
15	Danny Ongais	Interscope/P'asonic (*Armstrong)	Parnelli VPJ6B-Cosworth (*Orbitor-Cos)	G	-	7	24	18	21	21	3	-	19	*11	24	-	601
16	Mano Andretti	Penske/Essex (*A.B. Dick)	Penske PC9-Cosworth	G	-	20	-	17	-	-	-	-	-	*1	-	*2	580
17	Spike Gelhausen	Fletcher/Winton (*O'Hanlon)	Penske PC7-Cos (*McLaren M24-Cos)	G	4	29	-	-	-	12	-	5	33	-	*25	-	473
18	Roger Rager	Advance Clean Sweep	Wildcat Mk.III-Chevrolet	G	-	23	-	26	8	24	-	8	11	-	11	10	381
19	Rick Muther	Pacific Coast Racing	Penske PC6-Cosworth (*PC7)	G	24	-	18	-	10	*25	*10	-	*8	-	-	-	356
20	Bill Tempero	Wood Power	Eagle-Chevrolet (*Eagle-Offy)	G	17	-	16	-	17	17	15	6	18	*16	8	11	331
21	Dick Ferguson	Gilles/Aero Electric	Penske PC6-Cos (*McLaren-Chev/†Cos)	G	8	31	-	-	-	*13	-	-	†9	-	-	-	315
22	Howdy Holmes	Armstrong Mould	Orbitor-Cosworth (*Lola T500-Cosworth)	G	-	-	15	*8	14	*11	13	-	-	-	-	-	314
23	Lary Cannon	Kraco Car Stereo	Wildcat-Offy	G	-	33	-	9	-	20	-	-	24	22	9	18	299
24	Roger Mears	King/Del Ray Manne (*Hodgon)	King-Chevrolet (*McLaren M24-Cosworth)	G	*9	-	-	-	4	-	16	26	-	-	-	-	272
	Herm Johnson	Menard/Cashway	Lightning-Offy	G	14	-	17	11	-	-	-	11	13	13	14	8	272
26	Tom Bigelow	Armstrong/Jiffy Mix	Lola T500-Cosworth	G	-	8	-	-	-	-	-	14	-	-	-	-	260
27	Billy Engelhart	Beaudoin/Master Lock	McLaren M24-Cosworth	G	-	11	10	13	-	-	-	10	28	-	-	17	246
28	Jim McElreath	McElreath Racing	Eagle-Offy (*Penske PC6-Cos/†King-Chev)	G	-	*24	-	†27	-	-	12	9	-	-	6	-	240
29	Jerry Karl	Tonco Trailer	Karl-Chevrolet (*McLaren M16-Chevrolet)	G	-	*21	14	15	18	15	9	24	27	-	12	9	215
30	Tim Richmond	Richmond/Uno/Q-95 Starcruiser	Penske PC7-Cosworth	G	-	9	-	-	22	26	-	-	-	-	-	-	209
31	Dick Simon	Vermont American/Silhouette	Vollstedt-Offy	G	-	22	13	21	-	18	17	7	37	-	23	25	185
32	Greg Leffler	Armstrong/Starcraft RV	Lola T500-Cosworth	G	-	10	-	-	-	-	-	-	20	15	-	20	184
33	Gordon Smiley	Patnck/Valvoline (†Fletcher)	Penske PC6-Cos (†PC7/*Phoenix-Cos)	G	6	*25	-	-	-	-	-	-	-	†20	-	-	176
34	Lee Kunzman	O'Hanlon	McLaren M24-Cosworth	G	-	-	-	10	-	-	-	-	-	-	-	-	150
35	Jery Sneva	Armstrong (†O'Hanlon)	Lola T500-Cos (*Orbitor-Cos/†McLaren-Cos)	G	-	17	*8	14	-	-	-	†25	*36	†12	-	†23	149
36	Pete Halsmer	Wysard/Autocraft	Wildcat-Offy (*McLaren M24-Cosworth)	G	20	-	-	-	-	-	-	-	-	-	-	*6	128
37	Bill Vukovich Jr.	Leader Cards	Watson-Offy (*Watson-Cos/†Eagle-Offy)	G	-	12	21	28	-	-	-	*19	34	25	-	†12	96
38	Cliff Hucul	O'Hanlon	McLaren M24-Cosworth	G	-	-	7	-	-	-	-	-	-	-	-	-	90
39	Phil Caliva	Alsup Racing	McLaren-Offy	G	15	-	-	16	12	-	-	-	21	-	21	-	70
40	Jan Sneva	1st National Bank of Peru	Antares-Offy	G	10	-	-	-	-	-	-	-	-	-	-	-	60
41	John Martin	J&J Enterprises	Wildcat-Offy	G	-	-	-	20	16	19	-	15	25	-	-	-	56
	Mike Mosley	AAR/Theodore (†Richmond)	Eagle-Chevrolet (*Cos/†Penske PC7-Cos)	G	*19	32	-	23	-	-	-	†20	17	-	-	-	56
43	Joe Saldana	Hoffman Racing	Lightning-Offy (*Penske PC7-Cosworth)	G	*25	-	-	22	-	23	-	12	-	21	-	-	50
44	A.J. Foyt	Foyt/Gilmore Racing	Parnelli VPJ6C-Cosworth	G	-	14	-	19	-	-	-	-	-	-	-	-	45
45	Ron Shuman	Stanton	Penske PC6-Cosworth	G	11	-	-	-	-	-	-	-	-	-	-	-	40
46	Johnny Parsons Jr.	Hopkins/Wynn's	Lightning-Offy (*Chevrolet/†Cosworth)	G	-	26	-	-	-	*22	-	†22	*23	-	-	-	36
47	John Mahler	Parts Washer	Penske PC6-Offy	G	-	-	-	-	19	-	14	18	30	-	13	-	35
48	Mike Chandler	National Engineering	McLaren M24-Cosworth	G	-	-	-	-	-	-	-	-	14	-	-	-	25
	Don Whittington	Sun Systems	Penske PC7-Cosworth	G	-	13	-	-	-	-	-	-	-	-	-	-	25
	George Snider	Foyt/Gilmore Racing	Parnelli VPJ6C-Cosworth	G	-	15	-	-	-	-	-	-	-	-	-	-	25
	John Wood	Mergard-Bose Hi-Fi	Eagle-Offy	G	12	-	-	-	23	-	-	-	-	-	-	-	25
52	Hurley Haywood	Guarantee/Sta On Car Glaze	Lightning-Chevrolet	G	-	18	-	-	-	-	-	-	-	-	-	-	20
53	Phil Threshie	Machinists Union	IAM-001-Chevrolet	G	-	-	22	25	-	-	-	-	-	-	-	-	15
54	Larry Dickson	Machinists Union	IAM-001-Chevrolet	G	-	-	-	-	-	-	-	-	35	-	-	22	10
55	Daniel Muniz	Pronosticos Deportivos	Penske PC6-Cosworth	G	-	-	-	-	-	-	-	-	-	-	15	-	8
	Jerry Miller	King/Del Ray Marine	King-Chevrolet	G	-	-	-	-	-	-	-	-	-	-	-	14	8
57	Ross Davis	The Enterprise	Wildcat-Offy	G	22	-	-	-	-	-	-	-	-	-	-	-	6
	Billie Harvey	King/Del Ray Marine	King-Chevrolet	G	-	-	19	-	-	-	-	-	-	-	-	-	6
	Salt Walther	Walmotor	Penske PC6-Cosworth	G	-	-	-	-	-	-	-	-	-	18	-	-	6
	Bob Frey	Hoffman Racing	Eagle-Offy	G	-	-	-	-	-	-	-	-	-	17	-	-	6
	Juan Carlos Bolanos	Ovaciones	Eagle-Offy	G	-	-	-	-	-	-	-	-	-	-	17	-	6
	Michel Jourdan	Shade Tree Racing	Eagle-Offy	G	-	-	-	-	-	-	-	-	-	-	20	-	6
63	Bill Whittington	Sun Systems	Parnelli VPJ6C-Cosworth	G	-	30	-	-	-	-	-	-	-	-	-	-	5
	Al Loquasto	Pacific Coast Racing	Lightning-Offy	G	-	-	-	31	-	-	-	-	-	-	-	-	5
	Tony Bettenhausen	Medlin Racing	Eagle-Offy	G	-	-	-	32	-	-	-	-	-	-	-	-	5
	Jeff Heywood	Pacific Coast Racing	Lightning-Offy	G	-	-	-	-	-	-	-	32	-	-	-	-	5
	Chip Mead	Parts Washer Service	Eagle-Offy	G	-	-	-	-	-	-	-	-	29	-	-	-	5

1981

Position	Driver	Team	Car	Tires	Phoenix	Milwaukee	Atlanta 1	Atlanta 2	Michigan	Riverside	Milwaukee	Michigan	Watkins Glen	Mexico City	Phoenix	Points total
1	Rick Mears	Penske/Gould Charge	Penske PC9B-Cosworth	G	4	—	1	*1	3	1	2	*1	1	1	8	304
2	Bill Alsup	Alsup Racing Penske/AB. Dick Pacemaker Penske/AB. Dick Pacemaker	Penske PC7-Cosworth Penske PC9B-Cosworth Penske PC7-Cosworth	G G G	5 — —	— — —	8 — —	8 — —	4 — —	3 — —	11 — —	4 — —	— — —	5 — —	— — 18	177
3	Pancho Carter	Morales/Alex XLNT Foods Morales/Alex XLNT Foods	Penske PC7-Cosworth Lightning-Cosworth	G G	7 —	20 —	5 —	5 —	1 —	10 —	10 —	18 —	— 15	6 —	5 —	168
4	Gordon Johncock	Patrick/STP Oil Treatment	Wildcat Mk.VIII-Cosworth	G	6	*16	4	4	36	2	6	5	10	3	3	142
5	Johnny Rutherford	Chaparral/Pennzoil	Chaparral 2K-Cosworth	G	1	6	*2	3	22	21	*4	20	2	26	21	120
6	Tony Bettenhausen	Bettenhausen/Provimi Veal Bettenhausen/Provimi Veal Bettenhausen/Provimi Veal	McLaren M24B-Cosworth Longhorn LR01-Cosworth Phoenix-Cosworth	G G G	— — —	12 — —	7 — —	11 — —	2 — —	— — —	14 — —	— — 10	— — 8	— — 11	— — 19	107
7	Bobby Unser	Penske/Norton Spirit	Penske PC9B-Cosworth	G	*2	21	13	6	16	9	3	7	17	*15	*2	99
8	Tom Sneva	Bignotti-Cotter/Sugaripe Bignotti-Cotter/*Texaco Star	Phoenix-Cosworth March 81C-Cosworth	G G	3 —	4 —	— —	— —	— *23	— 24	— 1	— *19	— *21	— *20	— *1	96
9	Bob Lazier	Fletcher/Montgomery Ward AC Fletcher/Montgomery Ward AC	Penske PC7-Cosworth March 81C-Cosworth	G G	12 —	13 —	17 —	9 —	10 —	5 —	— 16	— 13	4 —	4 —	— 13	92
10	Al Unser	Longhorn Racing Longhorn Racing	Longhorn LR02-Cosworth Eagle 81-Cosworth	G G	17 —	5 —	6 —	7 —	11 —	14 —	5 —	— 3	14 —	2 —	22 —	90
11	Mario Andretti	Patrick/STP Oil Treatment	Wildcat Mk.VIII-Cosworth	G	11	3	3	2	—	—	—	2	*16	—	4	81
12	Tom Bigelow	Genesee Beer	Penske PC7-Chevrolet	G	—	9	—	—	5	—	24	9	—	—	11	60
13	Scott Brayton	Brayton Racing Brayton/Forsythe	Penske PC6-Cosworth Penske PC7-Cosworth	G G	15 —	— 11	— 9	— 10	— 7	— 8	— 21	— 24	— 20	— 23	— —	57
14	Larry Dickson	Machinists Union	Penske PC7-Cosworth	G	—	10	10	12	9	16	12	8	7	22	—	49
15	Gary Bettenhausen	Rhoades Racing	Wildcat Mk.VIII-Cosworth	G	—	—	—	—	6	—	19	—	—	—	—	42
16	Dick Simon	Leader Cards/Vermont American Leader Cards/Vermont American	Watson-Cosworth Watson-Offy	G G	10 —	7 —	— —	— —	31 —	6 —	— 22	— 25	11 —	25 —	20 —	38
17	Herm Johnson	Menard/Cashway Kraco Car Stereos Menard/Cashway	Lightning-Chevrolet Wildcat-Offy Eagle-Chevrolet	G G G	— — —	22 — —	22 — —	— 17 —	33 — —	7 — —	13 — —	— — —	— — 9	— — 8	— — 9	38
18	Mike Chandler	Warner Hodgdon/Nat. Eng.	Penske PC7-Cosworth	G	—	—	—	—	27	4	—	—	—	16	—	37
19	Mike Mosley	AAR/Pepsi Challenger Brayton/Forsythe	Eagle-Chevrolet Penske PC6-Cosworth	G G	— —	1 —	— —	— —	18 —	— —	— —	26 —	— —	— 7	24 —	32
20	Steve Chassey	Jet Engineering Morales/Alex Foods	Eagle-Chevrolet Lightning-Cosworth	G G	— —	24 —	23 —	— 22	20 —	15 —	15 —	12 —	5 —	— —	— —	31
21	Josele Garza	Garza Racing Garza Racing	Penske PC7-Cosworth Penske PC9-Cosworth	G G	21 —	14 —	— 12	— 18	— 19	— 12	— 8	— 23	— 24	— 18	— 6	30
22	Phil Caliva	CHC-Intersec/Polaroid Time Zero	McLaren M16-Chevrolet	G	—	—	19	15	8	—	—	—	—	—	—	27
23	Kevin Cogan	O'Connell Racing	Phoenix-Cosworth	G	—	2	16	—	28	11	23	—	—	—	—	23
24	Dick Ferguson	Kraco Car Stereo Kraco Car Stereo	Wildcat-Offy Penske PC7-Cosworth	G G	— —	— —	— —	— —	30 —	— 18	— —	— 6	— —	— 10	— 7	20
25	Steve Krisloff	Patrick/STP Oil Treatment Ohio Racing Associates	Wildcat Mk.VIII-Cosworth Longhorn LR02-Cosworth	G G	— —	— —	— —	— —	17 —	— 7	— —	— 17	— —	— —	— —	18
26	Rocky Moran	AAR/Pepsi Challenger	Eagle-Chevrolet	G	—	—	—	—	—	—	—	—	6	—	16	
27	Geoff Brabham	Kraco Car Stereo AAR/Pepsi Challenger	Penske PC7-Cosworth Eagle-Chevrolet	G G	9 —	— —	— —	— —	— —	— *19	— —	— —	— —	— 9	— —	14
28	Billy Engelhart	Beaudoin Racing	McLaren M24-Cosworth	G	—	8	—	—	35	—	9	—	—	—	—	13
	Jerry Karl	Tonco Trailer	Karl-Chevrolet	G	8	23	21	21	14	22	25	—	19	19	—	13
30	Larry Cannon	Kraco Car Stereo Kraco Car Stereo	Wildcat-Offy Penske PC7-Cosworth	G G	20 —	— 15	— 11	— 20	— 12	— —	— —	— —	— —	— —	— —	10
	Roger Rager	Seymour Enterprises	Wildcat-Chevrolet	G	—	—	—	—	13	13	18	21	—	—	—	10
32	Bill Tempero	Zamboni Electric	McLaren M16-Chevrolet	G	18	—	15	14	34	28	17	15	23	12	—	7
33	Bill Vukovich Jr.	Steve Vukovich Racing/*Rattlesnake Steve Vukovich Racing	Watson-Offy Eagle-Offy	G G	— —	— —	— —	— —	15 —	— —	— —	— 14	— —	*27 —	— —	6
	Phil Krueger	Joe Hunt Magnetos	Eagle-Chevrolet	G	14	—	—	—	—	20	—	—	—	14	16	6
35	Gordon Smiley	Intermedics	Wildcat Mk.VIII-Cosworth	G	—	—	—	—	—	25	—	—	18	—	10	5
36	Jim McElreath	McElreath Racing	Eagle-Offy	G	19	—	—	—	—	—	—	11	—	13	—	4
	Jim Buick	Buick Racing/4B Racing	Eagle-Chevrolet	G	16	19	20	16	—	—	—	—	—	—	—	4
	Ross Davis	Davis Racing	Wildcat-Offy	G	—	—	—	19	—	—	—	16	13	—	—	4
	Vern Schuppan	Thomas W. Barrett III/Red Roof Inns Thomas W. Barrett III	McLaren M24-Cosworth March 81C-Cosworth	G G	— —	— —	— —	— —	24 —	— 17	— —	— —	— —	21 —	15 —	4
40	Hurley Haywood	Wysard Motor Co.	Eagle-Cosworth	G	—	—	—	—	—	26	—	—	12	17	—	3
41	Bob Frey	Crossroads Inn	Eagle-Offy	G	13	17	—	—	—	—	—	—	—	—	—	2
	Spike Gehlhausen	Dealer Cards/Vermont American	Watson-Cosworth	G	—	—	14	13	—	—	—	—	—	—	—	2
	John Mahler	Duke Racing	Penske-Offy	G	—	25	—	—	—	27	20	—	—	—	—	2
44	Phil Threshie	Hamilton-Avnet-Motorola	McLaren M24-Chevrolet	G	—	18	—	—	—	—	—	—	—	—	—	1
	Dennis Firestone	Rhoades Racing	Wildcat Mk.VIII-Cosworth	G	—	—	18	—	—	—	—	—	—	—	—	1
	Chip Mead	Space Racing	Eagle-Cosworth	G	—	—	—	—	29	—	—	—	—	—	14	1
	Jerry Sneva	Leader Cards	Vollstedt-Offy	G	—	—	—	—	—	—	—	—	—	—	12	1
	Johnny Parsons Jr.	Wysard Motor Co.	Eagle-Cosworth	G	—	—	—	—	—	—	—	—	—	—	17	1

1982

Position	Driver	Team	Car	Tires	Phoenix	Atlanta	Milwaukee	Cleveland	Michigan	Milwaukee	Pocono	Riverside	Elkhart Lake	Michigan	Phoenix	Points total
1	Rick Mears	Penske/Gould Charge	Penske PC10-Cosworth	G	*1	*1	3	4	*15	*12	*1	1	*5	*25	*2	294
2	Bobby Rahal	Truesports/Red Roof Inns	March 82C-Cosworth	G	18	--	20	1	3	2	3	15	3	1	5	242
3	Mano Andretti	Patrick/STP/Intermedics	Wildcat Mk.VIII-B-Cosworth	G	2	11	9	2	2	3	14	23	14	2	3	188
4	Gordon Johncock	Patrick/STP/Oil Treatment	Wildcat Mk.VIII-B-Cosworth	G	5	2	*1	5	1	11	6	26	22	15	23	186
5	Tom Sneva	Bignotti-Cotter/Texaco Star	March 81C-Cosworth	G	7	17	--	--	--	--	--	--	--	--	--	144
		Bignotti-Cotter/Texaco Star	March 82C-Cosworth	G	--	--	4	20	32	1	19	2	9	19	1	
6	Kevin Cogan	Penske/Norton Spirit	Penske PC10-Cosworth	G	3	18	5	*10	14	5	2	*10	25	22	4	136
7	Al Unser Sr.	Longhorn Racing	Longhorn LR03-Cosworth (*03B)	G	21	8	17	3	*4	--	*23	*17	*2	*18	--	125
8	Geoff Brabham	Bignotti-Cotter/Pentax Super	March 81C-Cosworth	G	15	15	--	--	--	--	--	--	--	--	--	110
		Bignotti-Cotter/Pentax Super	March 82C-Cosworth	G	--	--	7	6	7	10	4	28	15	3	20	
9	Roger Mears	Machinists Union	Penske PC9B-Cosworth	G	8	4	22	21	--	--	--	--	--	--	--	103
		Machinists Union	Penske PC7-Cosworth	G	--	--	--	--	17	14	9	4	8	8	--	
		Machinists Union	Penske PC10-Cosworth	G	--	--	--	--	--	--	--	--	--	--	7	
10	Tony Bettenhausen	Bettenhausen/Provimi Veal	March 82C-Cosworth	G	12	19	--	--	10	20	5	18	7	4	6	80
		Bettenhausen/Provimi Veal	Phoenix 80-Cosworth	G	--	--	12	--	--	--	--	--	--	--	--	
11	Bill Alsup	A.B. Dick Pacemaker	Penske PC9C-Cosworth	G	11	5	16	12	13	9	13	--	16	6	8	70
		A.B. Dick Pacemaker	Penske PC7-Cosworth	G	--	--	--	--	--	--	--	8	--	--	--	
12	Johnny Rutherford	Chaparral/Pennzoil	Chaparral 2K-Cosworth	G	4	--	15	23	--	--	--	--	--	--	--	62
		Chaparral/Pennzoil	March 82C-Cosworth	G	--	--	--	--	28	17	12	3	12	--	21	
13	Josele Garza	Schlitz Gusto	March 82C-Cosworth	G	13	--	--	--	--	--	--	--	--	--	--	56
		Schlitz Gusto	March 81C-Cosworth	G	--	16	8	--	22	8	--	--	--	--	--	
		Schlitz Gusto	Penske PC9-Cosworth	G	--	--	--	14	--	--	15	13	4	9	18	
14	Howdy Holmes	Shierson/Domino's Pizza	March 82C-Cosworth	G	16	--	10	16	12	4	27	16	10	5	10	56
15	Hector Rebaque	Forsythe/Carta Blanca/Newsweek	March 82C-Cosworth	G	--	13	--	18	25	--	--	20	1	--	--	48
16	Gary Bettenhausen	Genesee Beer Wagon	Penske PC7-Chevrolet	G	--	--	--	--	6	--	8	--	20	17	--	48
		Bettenhausen/Provimi Veal	March 82C-Cosworth	G	--	--	--	--	--	13	--	--	--	--	9	
17	Pancho Carter	Morales/Alex Foods	March 82C-Cosworth	G	6	10	13	19	18	6	28	19	11	12	11	47
18	Johnny Parsons Jr.	Wysard Motor Co.	March 82C-Cosworth	G	--	--	6	--	16	--	7	25	--	DNS	--	41
		Wysard Motor Co.	Eagle-Cosworth	G	--	--	--	9	--	--	--	--	--	--	--	
19	Mike Mosley	Kraco Racing	March 82C-Cosworth	G	--	--	--	--	8	7	16	--	--	7	12	37
20	Tom Bigelow	HBK Racing	Eagle 81-Chevrolet	G	--	--	18	--	5	22	25	--	--	20	--	32
21	Al Unser Jr.	Forsythe Racing	March 82C-Cosworth	G	--	--	--	--	--	--	--	5	--	--	--	30
22	Danny Sullivan	Forsythe/Brown	March 82C-Cosworth	G	--	3	21	--	--	--	--	--	--	--	--	28
23	Greg Leffler	Jet Engineering	Eagle 81-Chevrolet	G	--	--	--	--	--	21	--	6	13	24	13	27
	Phil Krueger	Crysen Corp.	Eagle 74-Chevrolet	G	--	12	--	--	--	--	--	--	--	--	--	27
		Luxury Racers	Kingfish-Chevrolet	G	--	--	--	--	30	--	11	--	6	11	17	
25	Dick Simon	Leader Cards/Vermont American	Watson-Cosworth	G	--	--	19	17	21	15	22	7	--	13	19	26
26	Jim Hickman	Rattlesnake/Stroh's	March 81C-Cosworth	G	--	7	--	24	--	--	--	--	--	--	--	24
		Rattlesnake/Stroh's	March 82C-Cosworth	G	--	--	--	--	9	--	--	--	--	--	--	
	Hem Johnson	Menard/Cashway Lumber	Eagle-Chevrolet	G	19	6	23	13	34	16	--	22	17	--	--	24
28	A.J. Foyt	Foyt/Valvoline-Gilmore	March 82C-Cosworth	G	--	--	2	22	20	--	20	--	--	23	--	22
	Bill Tempero	High Performance Center	Longhorn LR01-Chevrolet	G	--	--	--	8	--	19	--	14	18	--	--	22
30	Vern Schuppan	Kraco Car Stereo	Penske PC9B-Cosworth	G	--	--	--	7	--	--	--	--	--	--	--	18
		Kraco Car Stereo	March 82C-Cosworth	G	--	--	--	--	--	--	--	27	24	--	--	
31	Jerry Karl	McCray Plastering	Penske PC7-Cosworth	G	--	--	--	15	24	18	10	12	--	--	--	17
32	Mike Chandler	AAR/Freeman Racing (*Hodgdon)	Eagle 82-Chevrolet	G	--	--	--	--	--	--	--	9	--	--	*16	13
33	Scott Brayton	Brayton/Escort/Dreisbach	Wildcat Mk.VIII-Cosworth	G	--	--	14	--	--	--	24	--	--	10	--	11
		Brayton/Dreisbach	Penske PC7-Cosworth	G	--	--	--	--	11	--	--	--	--	--	--	
34	Chip Ganassi	Rhoades/First Commercial Corp.	Wildcat Mk.VIII-B-Cosworth	G	22	--	--	11	31	--	17	--	--	16	--	10
35	Gordon Smiley	Fletcher/Intermedics Innovator	March 81C-Cosworth	G	--	9	--	--	--	--	--	--	--	--	--	8
36	Chris Kneifel	Metamatrix	Eagle 82-Cosworth	G	--	--	--	--	--	--	--	11	23	--	--	6
37	Chip Mead	Sky Harbor Parking	Eagle 81-Cosworth	G	9	--	--	--	--	--	--	--	--	--	--	4
38	Hurley Haywood	Wysard Racing	March 82C-Cosworth	G	10	--	--	--	--	--	--	--	--	--	--	3
	George Snider	Fletcher/Cobre Tire	March 82C-Cosworth	G	--	--	--	--	19	--	21	--	--	--	--	3
	Jim McElreath	McElreath	Eagle-Offy	G	--	--	--	--	--	--	18	--	--	--	--	3
41	Pat Bedard	Escort Radar Detector	Penske PC7-Cosworth	G	--	--	--	--	--	--	--	--	--	--	--	2
		Escort Radar Detector	Wildcat Mk.VIII-Cosworth	G	--	14	--	--	29	--	--	--	--	--	--	
	Bill Vukovich Jr.	Kraco Car Stereo	Penske PC9B-Cosworth	G	--	--	11	--	--	--	--	--	--	--	--	2
		Leader Cards/Vermont American	Watson-Cosworth	G	--	--	--	--	--	--	29	--	--	--	--	
	Pete Halsmer	Arciero Racing	Eagle 82-Chevrolet	G	--	--	--	--	--	--	--	24	19	--	24	2
44	Dennis Firestone	BCV Racing	Eagle 82-Chevrolet	G	20	--	--	--	--	--	--	--	--	--	--	1
	Dick Ferguson	Kraco Car Stereo	Penske PC9B-Cosworth	G	17	--	--	--	--	--	--	--	--	--	--	1
		Crysen Corp.	Eagle 74-Chevrolet	G	--	--	--	--	--	--	--	21	--	--	--	
		Rattlesnake Racing	Rattlesnake-Cosworth	G	--	--	--	--	--	--	--	--	--	21	22	
	Jerry Sneva	Hoffman Enterprises	March-Cosworth	G	--	--	--	--	--	--	--	--	--	14	--	1
	Chet Fillip	Circle Bar Truck Corral	Wildcat Mk.VIII-Cosworth	G	--	--	--	--	--	--	--	--	--	--	15	1
	Jacques Villeneuve	Metamatrix	Eagle 81-Cosworth	G	--	--	--	--	--	--	--	--	--	--	14	1

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Position	Driver	Team	Car	Tires	Atlanta	Indianapolis	Milwaukee	Cleveland	Michigan	Elkhart Lake	Pocono	Riverside	Mid-Ohio	Michigan	Las Vegas	Laguna Seca	Phoenix	Points total	
1	Al Unser Sr.	Penske/Hertz Penske/Hertz	Penske PC11-Cosworth Penske PC10B-Cosworth	G G	2 -	2 -	2 -	1 -	2 -	3 -	11 -	11 -	- 4	- 5	- 4	- 11	- 4	151	
2	Teo Fabi	Forsythe/Skoal Bandit	March 83C-Cosworth	G	20	*26	*4	3	*15	15	1	*2	1	3	25	*1	*1	146	
3	Mario Andretti	Newman/Haas/Budweiser	Lola T700-Cosworth	G	5	23	18	*15	3	*1	7	16	2	4	1	2	2	133	
4	Tom Sneva	Bignotti-Cotter/Texaco Star Bignotti-Cotter/Texaco Star	March 83C-Cosworth Theodore-Cosworth	G G	14	1	1	5	25	-	*12	5	7	21	15	18	3	96	
5	Bobby Rahal	Truesports/Red Roof Inns Truesports/Red Roof Inns	March 83C-Cosworth March 83C-Chevrolet	G G	21	20	6	19	5	10	5	1	-	*2	-	-	-	94	
6	Rick Mears	Penske/Pennzoil Penske/Pennzoil	Penske PC11-Cosworth Penske PC10B-Cosworth	G G	*8	3	3	7	4	17	-	-	-	-	-	-	-	92	
7	Al Unser Jr.	Galles/Coors Light Silver Bullet Galles/Coors Light Silver Bullet Galles/Coors Light Silver Bullet Galles/Coors Light Silver Bullet	Eagle 82-Cosworth Eagle 83-Cosworth March 82C-Cosworth March 83C-Cosworth	G G G G	6 - - -	- 10 - -	- - 13 -	- 9 - -	- 7 - -	- 2 - -	- - - 2	- - - -	- 4 - -	- 18 - -	- 10 - -	- 10 - -	- 4 - -	- 8 - -	89
8	John Paul Jr.	Team VDS	Penske PC10-Cosworth	G	3	-	-	21	1	5	29	3	20	7	*2	26	11	84	
9	Chip Ganassi	Patrick/Old Milwaukee (*STP)	Wildcat Mk.IX-Cosworth (*IXB)	G	-	8	-	13	8	21	26	-	25	*6	*3	*3	*5	56	
10	Pancho Carter	Morales/Alex Foods Pinata	March 82C-Cosworth	G	16	7	14	8	6	7	6	7	10	15	6	25	10	53	
11	Pete Halsmer	Arciero Racing	Penske PC10-Cosworth	G	4	-	9	2	33	14	14	27	24	14	5	20	7	48	
12	Roger Mears	Machinists Union	Penske PC10-Cosworth	G	7	28	8	6	-	8	16	9	12	16	7	6	16	43	
13	Howdy Holmes	Shierson/Domino's Pizza	March 83C-Cosworth	G	9	6	7	12	32	16	13	13	8	8	17	5	21	39	
14	Mike Mosley	Kraco Racing Kraco Racing	March 83C-Cosworth March 82C-Cosworth	G G	13	13	-	4	17	25	4	24	-	11	-	-	24	36	
15	Kevin Cogan	Bignotti-Cotter/Master Mechanic Bignotti-Cotter/Master Mechanic	March 83C-Cosworth Theodore-Cosworth	G G	15	5	20	25	27	-	15	21	-	20	16	22	6	26	
16	Gordon Johncock	Patrick/STP Oil Treatment Patrick/STP Oil Treatment	Wildcat Mk.IX-Cosworth March 83C-Cosworth	G G	1	14	-	-	-	-	-	-	-	-	-	-	-	20	
17	Tony Bettenhausen	Provimi Veal	March 83C-Cosworth	G	10	17	10	18	18	12	10	8	14	9	21	14	18	19	
	Chris Kneifel	Primus	Primus-Cosworth	G	-	12	-	27	9	26	8	22	13	24	8	9	15	19	
19	Steve Chassey	Gohr/Genesee Beer Wagon	Eagle 82-Chevrolet	G	17	11	19	22	10	6	25	17	-	-	12	10	19	17	
20	Danny Ongais	Interscope Racing Patrick/Sea Ray Boats Patrick/Sea Ray Boats (*STP)	March 83C-Cosworth Wildcat Mk.IX-Cosworth March 83C-Cosworth	G G G	-	21	-	-	-	-	-	-	-	-	-	-	-	14	
21	Geoff Brabham	VDS/UNO/British Sterling Wysard Motor Co. Kraco Car Stereo	Penske PC10-Cosworth March 83C-Cosworth March 83C-Cosworth	G G G	-	4	-	-	-	-	-	-	-	-	-	-	-	13	
22	Josele Garza	Machinists/21st Century Health Spa	Penske PC10-Cosworth	G	-	25	-	17	19	11	9	20	23	17	11	12	-	9	
23	Tom Klausler	Lowest Mercedes Benz Leasing	Schkee DB-6 Chevrolet	G	-	-	-	-	-	22	-	6	-	-	-	-	-	8	
24	Scott Brayton	SME Cement/Dreisbach	March 83C-Cosworth	G	-	9	-	24	12	-	28	-	-	13	26	-	-	5	
	Jeff Wood	Landmark Oil Landmark Oil	Eagle 82-Chevrolet Eagle 83-Chevrolet	G G	-	-	-	-	-	-	-	-	-	-	22	-	-	5	
26	Derek Daly	Wysard Motor Co. Wysard Motor Co. Provimi Veal	March 82C-Cosworth March 83C-Cosworth March 83C-Cosworth	G G G	22	-	-	-	-	-	-	-	-	-	-	-	-	4	
	Michael Andretti	Kraco/Electrolux	March 83C-Cosworth	G	-	-	-	-	-	-	-	-	-	-	19	24	9	4	
28	Desire Wilson	Wysard/Kreepy Krauly Wysard/Kreepy Krauly	March 83C-Cosworth March 82C-Cosworth	G G	-	-	-	10	-	20	31	-	16	-	23	19	13	3	
29	Dick Simon	Simon/Vermont American Simon/Vermont American	March 83C-Cosworth Eagle-Cosworth	G G	-	15	11	-	14	-	-	25	15	19	14	-	23	2	
	Phil Krueger	Refuse Fuels Momis Pontiac/Refuse Fuels Momis Pontiac/Refuse Fuels	Penske PC7-Cosworth Penske PC9-Cosworth Eagle 82-Chevrolet	G G G	-	-	17	-	-	-	-	-	-	-	-	-	-	2	
	Jim McElreath	McElreath Racing	McElreath-Cosworth	G	11	-	-	-	13	-	23	-	-	-	-	-	-	2	
	Dick Ferguson	Hoffman Racing Rattlesnake Racing	March 81C-Cosworth March 81C-Cosworth	G G	-	-	-	-	11	-	-	-	-	-	-	-	-	2	
	Greg Leffler	Jet Engineering	Eagle-Chevrolet	G	-	-	-	-	-	24	-	15	11	-	-	-	-	2	
34	Doug Heveron	Rhoades Racing	Wildcat Mk.VIII-Cosworth	G	12	-	-	-	-	-	-	-	-	-	-	-	-	1	
	Jerry Karl	Rhoades/Renaissance Rhoades/Renaissance Refuse Fuels	Wildcat Mk.VIII-Cosworth Wildcat Mk.IX-Cosworth Penske PC9-Cosworth	G G G	-	-	16	-	-	-	-	-	-	-	-	-	-	1	
	Gary Bettenhausen	H&R Provimi Veal	Spirit-Chevrolet March 82C-Cosworth	G G	-	-	22	-	-	-	27	-	-	-	-	-	12	1	

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Position	Driver	Team	Car	Tires	Long Beach	Phoenix	Indianapolis	Milwaukee	Portland	Meadowlands	Cleveland	Michigan	Elkhart Lake	Pocono	Mid-Ohio	Sanair	Michigan	Phoenix	Laguna Seca	Las Vegas	Points total
1	Mario Andretti	Newman/Haas/Budweiser	Lola T800-Cosworth	G	*1	20	17	8	*26	*1	*21	*1	*1	19	*1	7	1	12	*2	2	176
2	Tom Sneva	Mayer/Texaco Star	March 84C-Cosworth	G	3	*1	*16	1	5	6	19	2	20	4	7	20	2	4	10	1	163
3	Bobby Rahal	Truesports/7-Eleven/Red Roof Inns	March 84C-Cosworth	G	14	7	7	14	14	11	14	18	2	3	2	*2	5	1	1	7	137
4	Danny Sullivan	Shierson/Domino's Pizza Shierson/Domino's Pizza	Shierson DSR-1-Cosworth Lola T800-Cosworth	G G	24	6	—	16	—	—	—	—	—	—	—	—	—	—	—	—	110
5	Rick Mears	Penske/Pennzoil Penske/Pennzoil	Penske PC12-Cosworth March 84C-Cosworth	G G	21	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	110
6	Al Unser Jr.	Galles/Coors Light Silver Bullet	March 84C-Cosworth	G	17	25	21	3	1	4	24	26	13	21	19	6	6	2	4	4	103
7	Michael Andretti	Kraco/Electrolux	March 84C-Cosworth	G	10	3	5	4	12	13	3	20	16	23	16	3	7	3	3	24	102
8	Geoff Brabham	Kraco Racing	March 84C-Cosworth	G	2	16	33	17	2	3	8	9	5	14	21	15	11	16	5	5	87
9	Al Unser Sr.	Penske/Miller High Life Penske/Miller High Life	Penske PC12-Cosworth March 84C-Cosworth	G G	22	21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	76
10	Danny Ongais	Interscope	March 84C-Cosworth	G	—	5	9	10	11	18	28	24	—	5	—	23	3	5	21	17	53
11	Roberto Guerrero	Bignotti-Cotter/Master Mechanic	March 84C-Cosworth	G	26	24	2	21	19	25	5	5	11	31	15	25	23	24	7	6	52
12	Howdy Holmes	Mayer/Jiffy Mixes	March 84C-Cosworth	G	13	2	13	7	17	17	12	21	14	9	6	9	8	19	20	16	44
13	Josele Garza	Machinists/Schaefer Machinists/Schaefer	Penske PC10-Cosworth March 84C-Cosworth	G G	23	DNS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	42
14	Gordon Johncock	Patrick/STP Oil Treatment Patrick/STP Oil Treatment	Wildcat MkX-Cosworth March 84C-Cosworth	G G	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	39
15	Emerson Fittipaldi	WIT Racing Promotions California Cooler Patrick/Old Milwaukee	March 83C-Cosworth March 84C-Cosworth March 84C-Cosworth	G G G	5	12	32	—	—	—	—	—	—	—	—	—	—	—	—	—	30
16	Jacques Villeneuve	Canadian Tire Canadian Tire	March 83C-Cosworth March 84C-Cosworth	G G	6	13	—	—	6	—	—	—	—	—	—	—	—	—	—	—	30
17	John Paul Jr.	VDS/Circle Bar Truck Corral Patrick/Old Milwaukee Primus/Living Well California Cooler Provimi Veal	Penske PC10-Cosworth March 84C-Cosworth Primus 84-Cosworth March 84C-Cosworth March 84C-Cosworth	G G G G G	20	DNS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28
18	Al Holbert	Morales/CRC/Red Roof Inns	March 84C-Cosworth	G	15	23	4	20	24	5	7	19	22	29	17	—	13	22	22	—	28
19	Derek Daly	Provimi Veal	March 84C-Cosworth	G	7	15	27	—	4	19	6	17	18	—	18	21	21	—	—	—	26
20	Chip Ganassi	Patrick/Old Milwaukee Patrick/Old Milwaukee Patrick/Old Milwaukee	Wildcat MkX-Cosworth Wildcat MkIXB-Cosworth March 84C-Cosworth	G G G	25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24
21	Pancho Carter	American Dream Galles/Simoniz Patrick/Old Milwaukee	March 84C-Cosworth March 84C-Cosworth March 84C-Cosworth	G G G	—	—	19	—	—	—	—	—	—	—	—	—	—	—	—	—	22
22	Johnny Rutherford	Foyt/Gilmore/Greer Penske/Pennzoil	March 84C-Cosworth March 84C-Cosworth	G G	—	—	22	—	—	—	—	7	—	28	—	—	—	—	—	—	20
23	Scott Brayton	Brayton/Buick Dealers of America Brayton/Buick Dealers of America	March 84C-Buick March 84C-Cosworth	G G	—	—	18	22	25	—	—	—	12	—	—	—	—	—	—	—	19
24	Kevin Cogan	Curb/Dubonnet Curb/Dubonnet Forsythe/Skoal Bandit	Ligier-Cosworth Eagle 84-Pontiac March 84C-Cosworth	G G G	28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17
25	Teo Fabi	Forsythe/Skoal Bandit	March 84C-Cosworth	G	18	19	24	12	3	27	13	—	—	—	—	—	—	—	—	—	15
26	Dick Simon	Simon/Break Free	March 84C-Cosworth	G	19	4	23	13	20	24	DNS	12	15	12	24	12	15	21	14	—	15
27	Jim Crawford	United Breweries Int. H&R Racing	Theodore-Cosworth March 82C-Cosworth	G G	4	—	—	—	—	21	—	—	—	—	—	—	—	—	—	—	12
28	Corrado Fabi	Forsythe/Skoal Bandit	Lola T800-Cosworth	G	—	—	—	—	—	—	—	—	—	—	25	10	—	6	—	25	11
29	Pete Halsmer	Arciero/Mola Development Arciero/Levi Curb/Dubonnet	Penske PC10B-Cosworth March 84C-Cosworth Eagle 84-Pontiac	G G G	8	14	—	—	—	—	—	—	—	—	—	—	—	—	—	9	9
30	Chris Kneifel	Primus/Spaerobics	Primus 84-Cosworth	G	DNS	9	15	23	8	DNS	15	DNS	25	—	—	—	—	—	—	—	9
31	A.J. Foyt	Foyt/Gilmore	March 84C-Cosworth	G	—	—	6	—	—	—	—	22	—	27	—	—	—	14	—	22	8
32	Herm Johnson	Menard/3M/Cashway/Ray-O-Vac Pace Electronics Jet Engineering	March 84C-Cosworth March 83C-Cosworth March 83C-Chevrolet	G G G	—	—	8	18	—	—	—	—	—	—	—	23	—	—	—	—	5
33	Bruno Giacomelli	Theodore Racing Patrick/Old Milwaukee	Theodore 84-Cosworth March 84C-Cosworth	G G	27	—	—	—	—	—	—	—	—	—	—	—	—	—	8	—	5
34	Arie Luyendyk	Provimi Veal	March 84C-Cosworth	G	—	—	—	—	—	—	—	—	8	—	—	—	—	—	—	—	5
35	John Morton	Center Line Wheels Jet Engineering	Eagle-Chevrolet March 83C-Chevrolet	G G	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5
36	Ed Pimm	Jet Engineering	March 83C-Chevrolet	G	12	—	—	19	16	22	DNS	33	26	13	22	22	19	10	12	19	5
37	Gary Bettenhausen	California Cooler Pabst Racing	March 84C-Cosworth March 83C-Cosworth	G G	—	—	—	15	13	—	—	23	—	10	—	—	—	—	—	—	3
38	George Snider	Foyt/Calumet Farms	March 84C-Cosworth	G	—	—	11	—	—	—	—	—	—	—	—	—	—	—	—	—	2
39	Dennis Firestone	Hoosier Transportation Pace Electronics	March 83C-Cosworth March 83C-Cosworth	G G	—	—	12	—	—	—	—	—	—	—	—	—	—	—	—	—	1

1985

Position	Driver	Team	Car	Tires	Long Beach	Indianapolis	Milwaukee	Portland	Meadowlands	Cleveland	Michigan	Elkhart Lake	Pocono	Mid-Ohio	Sanair	Michigan	Laguna Seca	Phoenix	Miami	Points total
1	Al Unser Sr.	Penske/Pennzoil (*Hertz/†Gould)	March 85C-Cosworth	G	5	*4	—	4	3	3	*2	7	*3	27	13	†12	2	*1	4	151
2	Al Unser Jr.	Shierson/Domino's Pizza	Lola T900-Cosworth	G	9	25	24	2	1	1	15	17	2	4	3	23	3	2	3	150
3	Bobby Rahal	Truesports/Budweiser	March 85C-Cosworth	G	27	27	9	20	25	*28	6	4	4	*1	*10	*1	*1	6	*2	134
4	Danny Sullivan	Penske/Miller American	March 85C-Cosworth	G	3	1	4	*27	18	27	14	*13	5	2	5	8	8	4	1	126
5	Mario Andretti	Newman/Haas/Beatrice	Lola T900-Cosworth	G	*1	2	*1	1	*26	14	10	—	6	7	15	21	11	3	27	114
6	Emerson Fittipaldi	Patrick/7-Eleven/STP	March 85C-Cosworth	G	2	13	8	3	2	8	1	5	7	8	25	13	24	8	26	104
7	Tom Sneva	Gurney-Curb/Skoal Bandit	Eagle 85GC-Cosworth	G	8	20	2	—	6	11	3	21	8	15	—	5	—	—	21	66
		Gurney-Curb/Skoal Bandit	Lola T900-Cosworth	G	—	—	—	24	—	—	—	—	—	—	7	—	19	19	—	
8	Jacques Villeneuve	Canadian Tire	March 85C-Cosworth	G	7	—	22	23	21	4	—	1	—	3	11	—	25	13	17	54
9	Michael Andretti	Kraco/Electrolux	March 85C-Cosworth	G	19	8	19	28	4	7	27	2	13	14	19	25	9	5	25	53
10	Rick Mears	Penske/Pennzoil	March 85C-Cosworth	G	—	21	3	—	—	—	*30	—	*1	—	—	2	—	—	—	51
11	Johnny Rutherford	Morales/Vermont American	March 85C-Cosworth	G	10	6	23	9	14	15	4	DNS	14	22	1	9	21	26	19	51
12	Josele Garza	Machinists/Schaefer	March 85C-Cosworth	G	28	31	7	12	27	6	19	18	26	11	6	6	7	10	9	46
13	Ed Pimm	Gurney-Curb/Skoal Bandit	Eagle 85GC-Cosworth	G	12	9	—	19	DNS	—	5	11	20	9	8	3	14	9	12	45
		Gurney-Curb/Skoal Bandit	Lola T900-Cosworth	G	—	—	21	—	—	—	—	—	—	—	—	—	—	—	—	
14	Kevin Cogan	Kraco/Wolff Systems	March 85C-Cosworth	G	23	11	16	5	7	9	7	25	17	21	9	4	17	22	24	44
15	Geoff Brabham	Galles/Coors Light Silver Bullet	March 85C-Cosworth	G	6	19	12	14	24	2	29	15	19	13	4	16	10	12	22	41
16	Pancho Carter	Galles/Valvoline	March 85C-Buick	G	13	*33	—	—	—	—	—	—	—	—	—	—	—	—	—	37
		Galles/Valvoline	March 85C-Cosworth	G	—	—	5	13	—	16	16	—	12	—	2	10	—	7	—	
17	Roberto Guerrero	Cotter/True Value/Master Mechanic	March 85C-Cosworth	G	26	3	6	15	DNS	19	13	19	18	18	23	24	4	21	28	34
18	Arie Luyendyk	Provimi Veal	Lola T900-Cosworth	G	17	7	17	21	10	5	DNS	6	—	DNS	18	15	22	25	7	33
19	Bruno Giacomelli	Patrick/STP Oil Treatment	March 85C-Cosworth	G	18	—	—	10	5	10	—	22	—	6	16	—	6	—	14	32
20	Jim Crawford	Wysard Racing	Lola T900-Cosworth	G	4	16	—	—	9	13	—	—	—	—	—	—	—	—	—	16
		Canadian Tire	March 85C-Cosworth	G	—	—	—	—	—	—	—	—	—	—	20	—	—	—	—	
		Pace Electronics	Lola T900-Cosworth	G	—	—	—	—	—	—	—	—	—	—	—	—	—	15	16	
21	Bill Whittington	Arciero Racing	Lola T900-Cosworth	G	16	—	DNS	26	16	24	—	24	—	—	—	—	DNS	—	—	15
		Arciero Racing	March 85C-Cosworth	G	—	14	—	—	—	—	—	—	—	5	—	17	—	—	8	
22	Scott Brayton	Brayton/Dreisbach & Sons	March 85C-Cosworth	G	11	—	—	6	15	25	8	—	16	—	—	22	—	—	—	15
		Brayton/Hardee's	March 85C-Buick	G	—	30	DNS	—	—	—	—	—	—	—	—	—	—	—	—	
		Hemelgam/Living Well/Jolly Rancher	Lola T900-Cosworth	G	—	—	—	—	—	—	—	—	—	—	—	—	26	18	—	
23	Alan Jones	Newman/Haas/Beatrice	Lola T900-Cosworth	G	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—	14
24	Danny Ongais	Interscope Racing	March 85C-Cosworth	G	DNS	17	—	—	—	—	20	—	22	—	—	7	—	14	6	14
25	Howdy Holmes	Forsythe/Jiffy Mixes	Lola T900-Cosworth	G	14	10	11	17	13	22	9	10	21	16	21	18	DNS	—	—	12
26	Jan Lammers	STS Communications	March 85C-Cosworth	G	—	—	—	16	12	—	—	—	—	—	—	—	—	—	—	11
		Forsythe/STS Communications	Lola T900-Cosworth	G	—	—	—	—	—	—	—	—	—	—	—	—	5	20	13	
27	Michael Roe	Hemelgam/Spaeroerobics/Living Well	Lola T900-Cosworth	G	21	—	—	7	8	26	—	—	—	—	—	—	—	—	—	11
28	Roberto Moreno	Galles/Valvoline	March 85C-Cosworth	G	—	—	—	—	28	—	—	16	—	25	—	—	16	—	5	10
29	Johnny Parsons Jr.	Canadian Tire	March 85C-Cosworth	G	—	5	—	—	—	—	—	—	—	—	—	—	—	—	—	10
30	Raul Boesel	Simon/Break Free Special	March 85C-Cosworth	G	20	18	—	11	11	12	—	8	—	23	—	—	20	—	23	10
		Simon/Break Free Special	March 84C-Cosworth	G	—	—	—	—	—	—	28	—	—	—	—	—	—	—	—	
31	Enrique Mansilla	Hemelgam/Spaeroerobics/Living Well	Lola T900-Cosworth	G	—	—	—	—	—	—	—	9	—	10	12	—	—	—	—	8
32	Pete Halsmer	Machinists/Scot Lad Foods	March 85C-Cosworth	G	—	—	15	8	19	—	—	—	—	—	—	11	—	—	—	7
33	Steve Chassey	Genesee Beer Wagon	March 85C-Chevrolet	G	—	—	DNS	DNS	20	DNS	12	26	11	12	—	14	15	11	DNS	6
34	Dennis Firestone	Pace Electronics	March 84C-Cosworth	G	22	—	20	18	—	21	—	—	—	—	—	—	—	—	—	5
		Pace Electronics	Lola T900-Cosworth	G	—	—	—	—	—	—	11	20	9	17	14	DNS	23	—	—	
35	Rupert Keegan	Machinists/Copenhagen	March 85C-Cosworth	G	—	—	—	—	—	—	—	—	—	19	—	—	12	—	10	4
36	Dick Simon	Simon/Break Free	March 85C-Cosworth	G	—	26	13	—	—	—	25	—	10	—	17	19	—	DNS	—	3
		Simon/Break Free	March 84C-Cosworth	G	—	—	—	—	17	—	—	—	—	—	—	—	—	—	—	
37	Chet Filip	Circle Bar Truck Corral	Lola T900-Cosworth	G	—	—	10	—	—	18	17	—	—	—	—	—	—	—	—	3
38	Dominic Dobson	Leader Cards/GS Mortgage	March 85C-Cosworth	G	—	—	—	—	DNS	—	—	—	—	—	—	—	18	—	11	2
39	Helm Johnson	Leader Cards/Menard	March 85C-Cosworth	G	—	—	—	—	—	—	—	12	—	24	—	—	—	—	—	1
40	Derek Daly	Daly/Kapsreiter Bier	Lola T900-Cosworth	G	—	12	—	—	—	—	—	—	—	—	—	—	—	—	—	1

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Position	Driver	Team	Car	Tires	Phoenix	Long Beach	Indianapolis	Milwaukee	Portland	Meadowlands	Cleveland	Toronto	Michigan	Pocono	Mid-Ohio	Sanair	Michigan	Elkhart Lake	Laguna Seca	Phoenix	Miami	Points total
1	Bobby Rahal	Truesports/Budweiser	March 86C-Cosworth	G	16	18	1	6	20	3	15	1	10	14	1	1	1	*5	1	*3	8	179
2	Michael Andretti	Kraco/STP/Lean Machine	March 86C-Cosworth	G	15	1	6	*1	2	*20	2	19	11	*11	10	6	2	2	3	1	18	171
3	Danny Sullivan	Penske/Miller American Penske/Miller American	March 86C-Cosworth Penske PC15-Chevrolet	G G	4	*11	9	11	11	1	*1	2	25	16	3	5	12	6	2	2	26	147
4	Al Unser Jr.	Shierson/Domino's Pizza	Lola T86/00-Cosworth	G	12	2	5	8	3	9	8	4	8	6	5	2	21	11	23	6	1	137
5	Mario Andretti	Newman/Haas/Hanna	Lola T86/00-Cosworth	G	*7	5	32	5	1	24	3	3	21	1	*24	8	10	9	*4	4	11	136
6	Kevin Cogan	Patrick/7-Eleven	March 86C-Cosworth	G	1	17	2	12	14	21	23	5	22	2	4	4	4	20	9	14	4	115
7	Emerson Fittipaldi	Patrick/Marlboro	March 86C-Cosworth	G	3	16	7	24	*12	2	13	*17	20	19	21	3	3	1	7	5	20	103
8	Rick Mears	Penske/Pennzoil Penske/Pennzoil Penske/Pennzoil	March 86C-Cosworth Penske PC15-Chevrolet March 86C-Chevrolet	G G G	19	—	*3	3	16	—	4	8	*12	8	—	—	—	—	—	—	—	89
9	Roberto Guerrero	Cotter/True Value/Emerson	March 86C-Cosworth	G	8	24	4	18	13	4	17	20	24	21	2	17	22	4	5	12	*2	87
10	Tom Sneva	Curb/Skoal Bandit	March 86C-Cosworth	G	2	4	33	2	4	17	5	9	18	15	12	13	5	12	22	18	22	87
11	Johnny Rutherford	Morales/Vermont American	March 86C-Cosworth	G	5	9	8	4	15	7	10	10	1	18	8	16	9	14	12	9	12	78
12	Geoff Brabham	Galles/Valvoline Galles/Valvoline	Lola T86/00-Cosworth Lola T86/00-Honda	G G	10	3	12	21	—	—	—	—	—	—	—	11	11	—	6	8	5	64
13	Raul Boesel	Simon/Duracell	Lola T86/00-Cosworth	G	13	19	13	14	8	23	6	7	5	5	7	9	15	8	14	13	19	54
14	Josele Garza	Machinists/Schaefer Machinists/Schaefer	March 86C-Cosworth March 85C-Cosworth	G G	23	—	18	7	17	8	7	23	2	7	14	—	—	—	—	—	24	45
15	Jacques Villeneuve	Hemelgam/Living Well	March 86C-Cosworth	G	—	8	20	15	5	5	19	24	—	—	11	19	—	10	19	16	6	38
16	Roberto Moreno	Galles/Five Star (*Valvoline)	Lola T86/00-Cosworth	G	20	6	*19	*13	*18	18	25	18	6	10	16	—	6	16	20	10	17	30
17	Arie Luyendyk	Provimi Veal/Race for Life Provimi Veal/Race for Life	Lola T86/00-Cosworth March 86C-Cosworth	G G	6	15	15	9	—	—	—	—	—	—	—	—	13	—	—	—	—	29
18	Ed Pimm	Curb/Skoal Longcut	March 86C-Cosworth	G	22	22	17	10	6	12	DNS	—	15	24	—	—	7	—	11	7	10	29
19	Pancho Carter	Galles/Coors Light	Lola T86/00-Cosworth	G	—	—	16	—	—	—	—	—	3	3	—	15	—	—	—	—	—	28
20	Randy Lanier	Arciero Racing	March 86C-Cosworth	G	11	13	10	20	9	6	9	21	19	—	—	—	—	—	—	—	—	21
21	A.J. Foyt	Foyt/Copenhagen/Gilmore	March 86C-Cosworth	G	17	—	24	19	—	—	—	—	9	4	—	—	16	—	—	22	23	16
22	Jan Lammers	AAR/Skoal (*Machinists/Schaefer)	Eagle GC86-Cosworth	G	9	14	—	—	—	—	—	—	—	—	—	—	—	—	8	*23	*9	13
23	Derek Daly	Curb/Skoal/Dairy Marts/Can. Tire	March 86C-Cosworth	G	—	—	—	—	—	—	—	—	—	—	6	10	—	13	—	—	—	11
24	Randy Lewis	Pace Electronics/Raychem/Raynor	Lola T86/00-Cosworth	G	—	10	—	—	—	10	20	11	—	—	15	—	—	24	18	—	14	8
25	Johnny Parsons Jr.	Machinists/Pizza Hut/Schaefer	March 86C-Cosworth	G	—	—	27	22	—	—	21	—	16	29	—	7	23	—	11	—	—	8
26	Spike Gehlhausen	Mountain Computer	Lola T900-Cosworth	G	—	—	—	—	—	—	—	—	7	22	—	—	18	—	—	—	—	6
27	Chip Robinson	Simon/Duracell/Carteret	Lola T86/00-Cosworth	G	—	—	—	—	—	14	—	—	—	—	—	—	—	—	—	—	7	6
28	Ian Ashley	Simon/Duracell	Lola T86/00-Cosworth	G	—	—	—	—	—	—	—	15	—	—	9	—	—	23	—	—	—	4
29	Sammy Swindell	Foyt/Copenhagen/Gilmore	March 86C-Cosworth	G	—	—	—	—	—	—	—	—	—	9	—	—	—	—	—	—	—	4
30	Dominic Dobson	Leader Cards Leader Cards	March 85C-Cosworth March 86C-Cosworth	G G	—	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
31	Mike Nish	Machinists/Schaefer	March 85C-Cosworth	G	—	—	—	—	10	25	—	22	—	—	—	—	—	—	—	—	—	3
32	Dale Coyne	Coyne	Coyne DC1-Chevrolet	G	—	23	—	—	21	DNS	12	DNS	DNS	26	23	12	DNS	17	DNS	DNS	25	2
33	Gary Bettenhausen	Leader Cards Leader Cards	March 85C-Cosworth March 86C-Cosworth	G G	21	—	—	—	—	—	—	—	—	—	—	20	—	—	—	—	—	2
34	Rick Miaskiewicz	Machinists/Schaefer/RCV Corp. Machinists/Schaefer/RCV Corp.	March 85C-Cosworth March 86C-Cosworth	G G	—	21	—	16	—	—	11	13	—	—	—	—	—	DNS	—	—	—	2
35	John Morton	Genesee Beer Wagon	March 86C-Buick	G	—	—	—	—	—	—	—	12	—	—	—	—	—	—	—	—	—	1

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Position	Driver	Team	Car	Tires	Long Beach	Phoenix	Indianapolis	Milwaukee	Portland	Meadowlands	Cleveland	Toronto	Michigan	Pocono	Elkhart Lake	Mid-Ohio	Nazareth	Laguna Seca	Miami	Points total
1	Bobby Rahal	Truesports/Budweiser	Lola T87/00-Cosworth	G	24	2	26	2	1	1	2	*3	3	5	23	2	2	1	7	188
2	Michael Andretti	Kraco/STP	March 87C-Cosworth	G	4	4	29	1	2	5	6	5	*1	8	16	13	*1	22	1	158
3	Al Unser Jr.	Shierson/Domino's Pizza	March 87C-Cosworth	G	2	14	4	5	20	8	3	20	18	23	3	23	6	4	2	107
4	Roberto Guerrero	Granatelli/True Value/STP	March 87C-Cosworth	G	12	1	2	*16	*19	19	*5	4	14	3	7	*1	-	-	-	106
5	Rick Mears	Penske/Pennzoil	Penske PC16-Chevrolet	G	9	20	-	-	3	17	7	10	-	-	-	-	-	-	-	102
		Penske/Pennzoil	March 86C-Chevrolet	G	-	-	23	21	-	-	-	-	21	1	9	4	3	3	5	
6	Mario Andretti	Newman/Haas/Hanna Auto Wash	Lola T87/00-Chevrolet	G	*1	*5	*9	17	10	*2	10	15	19	*19	*1	17	19	*17	*4	100
7	Ane Luyendyk	Hemelgarn/Living Well/Provimi Veal	March 87C-Cosworth	G	14	3	18	4	16	6	19	7	5	4	4	11	4	6	11	98
8	Geoff Brabham	Galles/Valvoline	March 87C-Honda	G	16	8	24	12	9	4	22	24	8	2	2	7	12	5	3	90
9	Danny Sullivan	Penske/Miller American	Penske PC16-Chevrolet	G	22	11	-	-	11	20	-	-	-	-	-	-	-	-	-	87
		Penske/Miller American	March 86C-Chevrolet	G	-	-	13	11	-	-	4	2	4	17	5	3	22	2	12	
10	Emerson Fittipaldi	Patnck/Marlboro	March 87C-Chevrolet	G	19	18	16	7	14	3	1	1	7	18	18	6	21	20	10	78
11	Josele Garza	Machinists/Schaefer	March 87C-Cosworth	G	5	6	17	22	6	24	16	17	12	11	11	8	8	8	18	46
12	Fabrizio Barbazza	Arciero Wines	March 87C-Cosworth	G	17	12	3	14	4	16	24	11	6	14	8	24	13	-	28	42
13	Al Unser Sr.	Penske/Cummins/Holset Turbo	March 86C-Cosworth	G	-	-	1	-	-	-	-	-	2	15	-	-	-	-	-	39
		Granatelli/True Value/STP	March 87C-Cosworth	G	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	
		Porsche/Quaker State	Porsche 2708	G	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	
14	Tom Sneva	Curb/Skoal Bandit	March 87C-Cosworth	G	3	17	-	13	21	7	8	6	30	-	-	-	-	-	-	38
		Curb/Skoal Bandit	March 86C-Buick	G	-	-	14	-	-	-	-	-	-	-	-	-	-	-	-	
		Group 44/Carteret Savings	March 86C-Cosworth	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	
15	Derek Daly	Pace/Scheid Tire	March 87C-Buick	G	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-	27
		Raynor Garage Door	Lola T87/00-Cosworth	G	-	-	3	15	9	11	16	24	10	26	9	16	14	22	-	
16	Kevin Cogan	Patrick>(*Marlboro)	March 87C-Chevrolet	G	*18	*21	*31	*18	-	*12	*21	13	*27	9	19	5	5	18	*21	25
17	John Andretti	Curb/Skoal Bandit	March 87C-Cosworth	G	-	-	-	-	-	-	-	-	-	-	6	10	11	7	9	23
18	Johnny Rutherford	Morales/Vermont American	March 87C-Cosworth	G	23	9	11	9	7	11	9	21	28	26	24	12	20	15	16	23
19	Jeff MacPherson	Galles/MacHoward Leasing	Lola T86/00-Honda	G	10	-	-	-	-	-	-	-	-	-	25	21	-	-	-	21
		Galles/MacHoward Leasing	March 87C-Honda	G	-	13	8	8	13	21	17	22	23	20	-	-	-	-	-	
		Galles/MacHoward Leasing	March 87C-Cosworth	G	-	-	-	-	-	-	-	-	-	-	-	-	9	9	24	
20	Dick Simon	Simon/Soundesign	Lola T87/00-Cosworth	G	21	10	6	20	18	14	23	23	9	21	-	-	18	-	-	15
21	Randy Lewis	Leader Cards/Toshiba/Altos/Oracle	March 87C-Cosworth	G	8	-	32	-	8	23	12	9	15	16	13	22	DNS	19	19	15
		Leader Cards/Toshiba/Altos/Oracle	March 86C-Cosworth	G	-	19	-	19	-	-	-	-	-	-	-	-	-	-	-	
22	Scott Brayton	Hemelgarn/Amway/Autostyle	March 87C-Cosworth	G	-	-	12	-	5	10	-	-	22	25	-	-	-	-	-	14
23	A.J. Foyt	Foyt/Copenhagen/Gilmore	Lola T87/00-Cosworth	G	-	-	19	6	-	-	-	-	26	7	-	-	7	-	25	14
24	Gary Bettenhausen	Gohr/Genesee Beer Wagon	March 86C-Cosworth	G	-	16	5	15	-	-	-	-	13	13	-	-	-	-	10	
25	Pancho Carter	Machinists/Hardee's	March 87C-Cosworth	G	-	-	27	-	-	-	-	-	20	6	14	14	17	12	14	9
26	Chip Robinson	Group 44/Carteret Savings	March 86C-Cosworth	G	6	-	-	-	-	25	-	-	-	-	-	-	15	-	-	8
27	Raul Boesel	Granatelli/True Value/STP	March 87C-Cosworth	G	-	-	-	-	-	-	-	-	-	-	-	-	-	16	6	8
28	Scott Goodyear	Gohr/Genesee/Rothmans	March 87C-Cosworth	G	-	-	-	-	-	22	-	8	-	-	20	18	-	11	15	7
		Gohr/Genesee Beer Wagon	March 86C-Cosworth	G	-	-	-	-	-	15	-	-	-	-	-	-	-	-	-	
29	Tony Bettenhausen	Bettenhausen/United Oil	March 86C-Cosworth	G	11	15	10	DNS	-	13	20	-	11	22	15	25	-	-	-	7
30	Didier Theys	Teamworks/Newman	Lola T86/00-Cosworth	G	7	-	-	-	-	-	-	-	-	-	22	-	-	-	-	6
		Truesports/Budweiser	Lola T87/00-Cosworth	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	
31	Dennis Firestone	Raynor	Lola T87/00-Cosworth	G	20	7	-	-	-	-	-	-	-	-	-	-	-	-	-	6
32	Stan Fox	Foyt/Kerker/Skoal Classic	March 86C-Cosworth	G	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	6
33	Jeff Wood	Spirit of Wichita	Lola T87/00-Cosworth	G	-	-	-	-	-	-	-	-	-	-	10	15	DNS	10	-	6
		Simon/Soundesign	Lola T87/00-Cosworth	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	
34	Ludwig Heimrath Jr.	Simon/Mackenzie Financial	Lola T87/00-Cosworth	G	15	22	30	10	12	18	18	19	25	12	-	26	-	-	-	5
		Arciero Wines	March 87C-Cosworth	G	-	-	-	-	-	-	-	-	-	-	-	-	-	23	-	
35	Davy Jones	Foyt/Skoal Classic	March 86C-Cosworth	G	-	-	28	-	-	-	-	-	10	-	-	-	14	-	13	3
		GFE/Pepsi/Gargoyle's	Lola T86/00-Cosworth	G	-	-	-	-	-	-	-	-	-	-	19	-	-	-	-	
36	Rick Miskiewicz	Machinists/Schaefer	March 87C-Cosworth	G	-	-	-	-	22	-	14	-	-	-	-	-	-	-	-	1
		Machinists/Schaefer	March 86C-Cosworth	G	-	-	-	-	-	-	-	12	-	-	-	16	-	-	-	
37	Wally Dallenbach Jr.	Menard's	Lola T87/00-Cosworth	G	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	1

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Position	Driver	Team	Car	Tires	Phoenix	Long Beach	Indianapolis	Milwaukee	Portland	Cleveland	Toronto	Meadowlands	Michigan	Pocono	Mid-Ohio	Elkhart Lake	Nazareth	Laguna Seca	Miami	Points total
1	Danny Sullivan	Penske/Miller High Life	Penske PC17-Chevrolet	G	23	*13	23	2	*1	*3	*2	4	1	18	*5	*4	*1	*1	*5	182
2	Al Unser Jr.	Galles/Valvoline	March 88C-Chevrolet	G	18	1	13	20	4	4	1	1	21	2	4	7	19	6	1	149
3	Bobby Rahal	Truesports/Budweiser	Lola T88/00-Judd	G	16	2	5	6	12	2	5	5	2	1	18	2	12	4	18	136
4	Rick Mears	Penske/Pennzoil	Penske PC17-Chevrolet	G	*22	8	*1	1	6	23	6	3	*13	*23	3	12	7	5	2	129
5	Mano Andretti	Newman/Haas/Amoco/Kmart	Lola T88/00-Chevrolet	G	1	15	—	17	5	1	25	2	12	17	2	3	3	3	15	126
		Newman/Haas/Amoco/Kmart	Lola T87/00-Chevrolet	G	—	—	20	—	—	—	—	—	—	—	—	—	—	—	—	
6	Michael Andretti	Kraco Racing	March 88C-Cosworth	G	3	7	4	*7	11	14	3	6	—	—	—	—	—	—	—	119
		Kraco Racing	Lola T88/00-Cosworth	G	—	—	—	—	—	—	—	—	3	25	26	5	2	2	17	
7	Emerson Fittipaldi	Patrick/Marlboro	March 88C-Chevrolet	G	21	16	2	3	3	—	—	—	—	—	—	—	—	—	—	105
		Patrick/Marlboro	Lola T88/00-Chevrolet	G	—	—	—	—	—	19	4	—	—	—	—	—	—	—	—	
		Patrick/Marlboro	Lola T87/00-Chevrolet	G	—	—	—	—	—	—	—	*14	19	21	1	1	8	16	20	
8	Raul Boesel	Shierson/Domino's Pizza	March 88C-Cosworth	G	5	4	—	4	26	—	—	—	—	—	—	—	—	—	—	89
		Shierson/Domino's Pizza	Lola T87/00-Cosworth	G	—	—	7	—	—	—	—	—	—	—	—	—	—	—	—	
		Shierson/Domino's Pizza	Lola T88/00-Cosworth	G	—	—	—	—	—	5	8	9	11	5	6	14	5	21	22	
9	Derek Daly	Raynor Garage Door	Lola T88/00-Cosworth	G	13	5	29	11	19	6	23	24	16	4	9	6	10	7	23	53
10	Teo Fabi	Porsche/Quaker State	March 88C-Porsche	G	7	24	28	9	7	24	10	18	25	24	8	8	4	10	21	44
11	John Jones	Arciero/Labatt's	March 88C-Cosworth	G	20	12	—	14	8	7	7	7	8	8	7	13	11	11	16	44
12	Roberto Guerrero	Granatelli/STP/Dianetics	Lola T88/00-Cosworth	G	2	19	32	DNS	—	20	—	—	20	3	11	—	—	—	26	40
		Granatelli/STP/Dianetics	March 87C-Cosworth	G	—	—	—	—	14	—	—	—	—	—	—	22	6	14	—	
13	Kevin Cogan	Machinists/Schaefer/Playboy	March 87C-Cosworth	G	8	3	—	22	—	—	—	—	—	—	—	—	—	—	—	40
		Machinists/Schaefer/Playboy	March 88C-Cosworth	G	—	—	11	—	20	10	24	—	—	—	—	24	15	9	4	
14	Arie Luyendyk	Simon/Provimi Veal	Lola T88/00-Cosworth	G	9	10	10	15	2	18	20	—	28	26	25	19	9	22	14	31
		Simon/Provimi Veal	Lola T87/00-Cosworth	G	—	—	—	—	—	—	—	20	—	—	—	—	—	—	—	
15	Didier Theys	Rainier/Uniden/GFE	Lola T87/00-Cosworth	G	—	—	—	—	10	—	—	—	—	—	—	—	—	—	—	29
		Rainier/Uniden/GFE	Lola T88/00-Cosworth	G	—	—	—	—	—	9	18	21	—	—	10	23	—	8	3	
16	AJ. Foyt	Foyt/Copenhagen/Gilmore	Lola T88/00-Cosworth	G	4	11	—	5	15	11	15	17	—	16	22	10	17	24	25	29
		Foyt/Copenhagen/Gilmore	Lola T87/00-Cosworth	G	—	—	26	—	—	—	—	—	—	—	—	—	—	—	—	
17	Tony Bettenhausen	Bettenhausen/Yugo/Scot Lad	Lola T87/00-Cosworth	G	6	DNS	33	—	—	15	—	—	4	15	16	13	26	—	25	
		Bettenhausen/Roundy's/Sony	March 86C-Cosworth	G	—	—	—	19	—	—	17	8	—	—	—	—	—	—	—	
18	Howdy Holmes	Morales/Jiffy Mix	March 88C-Cosworth	G	10	17	12	8	16	13	11	23	23	7	14	11	14	23	8	24
19	Al Unser Sr.	Penske/Hertz (*Detroit Diesel)	Penske PC17-Chevrolet	G	—	—	3	—	—	—	—	—	*9	*13	—	—	—	—	—	23
		Granatelli/STP	Lola T88/00-Cosworth	G	—	—	—	—	—	9	—	—	—	—	—	—	—	—	—	
		Granatelli/STP	March 87C-Cosworth	G	—	—	—	—	—	—	—	19	—	—	—	—	—	—	—	
20	Scott Atchison	Machinists/Otter Pops	March 86C-Cosworth	G	12	9	—	16	25	12	13	10	10	12	15	20	DNS	—	9	17
		Machinists/Otter Pops	March 87C-Cosworth	G	—	—	—	—	—	—	—	—	—	—	—	—	—	25	—	
21	Gordon Johncock	STP/Supra Wear Control	Lola T88/00-Cosworth	G	—	—	—	—	—	—	—	—	6	6	—	—	—	—	—	16
22	Phil Krueger	CNC System Sales (*U.S. Eng)	March 86C-Cosworth	G	—	—	8	—	—	*17	—	—	*5	*22	—	—	—	—	—	15
23	Scott Brayton	Hemelgam/Amway/Lifecycle	Lola T88/00-Judd	G	15	23	—	10	9	16	14	11	26	10	—	—	18	—	24	12
		Hemelgam/Amway/Lifecycle	Lola T88/00-Buick	G	—	—	31	—	—	—	—	—	—	—	—	—	—	—	—	
24	Dick Simon	Simon/Uniden/Soundesign	Lola T87/00-Cosworth	G	19	—	—	—	—	—	—	—	—	19	—	—	—	—	—	11
		Simon/Uniden/Soundesign	Lola T88/00-Cosworth	G	—	—	9	12	—	—	—	—	7	—	—	20	—	—	—	
25	Rocky Moran	Genesee Beer Wagon	March 87C-Cosworth	G	—	6	—	—	—	—	12	15	—	—	—	17	—	—	—	9
		Foyt/Skoal Classic	March 86C-Cosworth	G	—	—	16	—	—	—	—	—	—	—	—	—	—	—	—	
		Genesee Beer Wagon	March 88C-Cosworth	G	—	—	—	—	13	22	—	—	—	—	13	—	—	28	13	
26	Bernard Jourdain	Monarch Sports Systems	March 86C-Cosworth	G	—	—	—	—	—	—	—	—	—	—	—	—	—	20	6	8
27	Jim Crawford	Bernstein/Mac Tools/Prototab	Lola T87/00-Buick	G	—	—	8	—	—	—	—	—	—	—	—	—	—	—	—	8
28	Ludwig Heimrath Jr.	Hemelgam/Mackenzie Financial	Lola T88/00-Cosworth	G	—	14	25	—	23	26	19	12	—	—	—	—	—	—	7	7
		Hemelgam/Mackenzie Financial	Lola T88/00-Judd	G	—	—	—	—	—	—	—	—	—	19	21	—	—	—	—	
29	Randy Lewis	Leader Cards/Toshiba/Oracle/Altos	Lola T88/00-Cosworth	G	17	21	15	21	22	21	21	13	14	20	21	9	—	15	10	7
30	Billy Vukovich III	Gohr/Genesee Beer Wagon	March 87C-Cosworth	G	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6
		Gohr/Genesee Beer Wagon	March 88C-Cosworth	G	—	—	14	—	—	—	—	—	17	9	—	—	—	—	—	
31	John Andretti	Curb/Skoal Bandit	Lola T88/00-Cosworth	G	14	20	21	18	17	8	22	25	24	14	—	—	16	—	—	5
32	Rich Vogler	Machinists/Byrd's/Pepsi (*Schaefer)	March 87C-Cosworth	G	—	—	17	—	—	—	—	—	*15	*11	—	—	—	—	—	2
33	Dennis Vitolo	Bettenhausen/Yugo America	Lola T87/00-Cosworth	G	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11	2
34	Dale Coyne	Dale Coyne Racing	March 86C-Chevrolet	G	DNS	—	—	13	24	25	16	22	27	DNS	24	DNS	DNS	27	12	1
35	Ed Pimm	Gary Trout Motorsports	March 87C-Cosworth	G	—	—	—	—	—	—	—	—	—	—	12	15	—	—	—	1
36	Ken Johnson	Hemelgam/Rain-X	Lola T88/00-Cosworth	G	—	—	—	—	—	—	—	—	—	—	—	—	—	12	—	1

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Position	Driver	Team	Car	Tires															Points: total			
					Phoenix	Long Beach	Indianapolis	Milwaukee	Detroit	Portland	Cleveland	Meadwell/Indy	Toronto	Michigan	Pocono	Mid-Ohio	Elkhart Lake	Nazareth		Laguna Seca		
1	Emerson Fittipaldi	Patnck/Marlboro	Penske PC17-Chevrolet	G	5	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	196	
			Patnck/Marlboro	Penske PC18-Chevrolet	G	-	-	1	16	1	1	1	*2	*2	*14	*19	4	5	1	5	-	-
2	Rick Mears	Penske/Pennzoil	Penske PC18-Chevrolet	G	*1	5	*23	*1	5	8	5	4	5	7	2	6	3	*2	*1	-	186	
3	Michael Andretti	Newman/Haas/Kmart/Texaco	Lola T89/00-Chevrolet	G	4	2	17	2	*13	6	*18	18	1	1	3	3	6	5	7	-	150	
4	Teo Fabi	Porsche/Quaker State	March 89P-Porsche	G	6	27	30	3	4	*4	4	9	4	2	4	*1	2	16	19	-	141	
5	Al Unser Jr.	Galles/Valvoline	Lola T89/00-Chevrolet	G	2	*1	2	8	21	10	7	5	20	4	9	2	20	4	3	-	136	
6	Mario Andretti	Newman/Haas/Kmart/Texaco	Lola T89/00-Chevrolet	G	8	18	4	7	3	25	2	20	26	3	5	7	7	8	2	-	110	
7	Danny Sullivan	Penske/Miller High Life	Penske PC18-Chevrolet	G	3	8	28	10	24	-	-	8	3	23	1	5	*1	3	14	-	107	
8	Scott Pruett	Truesports/Budweiser	Lola T89/00-Judd	G	11	DNS	10	5	2	5	6	3	6	17	8	19	8	6	4	-	101	
9	Bobby Rahal	Kraco Racing	Lola T89/00-Cosworth	G	18	4	26	13	18	2	3	1	19	9	6	22	28	7	6	-	88	
10	Arie Luyendyk	Simon/Provimi Veal/Dutch Boy	Lola T89/00-Cosworth	G	17	7	21	6	6	3	9	7	24	6	23	8	4	13	9	-	75	
11	Raul Boesel	Shierson/Domino's Pizza	Lola T89/00-Judd	G	14	6	3	4	28	7	8	6	7	20	20	23	9	11	10	-	68	
12	Derek Daly	Raynor Garage Door	Lola T89/00-Judd	G	12	9	15	21	25	11	22	25	16	5	24	9	27	9	18	-	25	
13	Pancho Carter	Leader Cards/Hardee's	Lola T89/00-Cosworth	G	7	17	22	9	10	9	14	13	27	26	12	28	19	18	24	-	18	
14	Kevin Cogan	Machinists/Schaefer/Playboy	March 88C-Cosworth	G	10	26	32	19	17	24	11	12	9	25	22	10	18	-	8	-	18	
			Lola T89/00-Buick	G	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Scott Brayton	Simon/Amway	Lola T89/00-Cosworth	G	15	12	-	18	-	13	28	10	14	11	14	15	13	10	20	-	17	
			Lola T89/00-Buick	G	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	Al Unser Sr.	Penske/Marlboro (*Miller High Life)	Penske PC18-Chevrolet	G	-	-	24	-	-	-	*10	-	-	8	7	-	-	-	-	-	14	
17	John Jones	Protofab/Labatt's	Lola T89/00-Cosworth	G	16	20	11	11	11	19	25	11	18	16	10	13	10	-	22	-	14	
18	A.J. Foyt	Foyt/Copenhagen/Gilmore	Lola T89/00-Cosworth	G	22	25	5	20	26	DNS	-	23	17	18	21	21	22	14	-	-	10	
19	Dominic Dobson	Bayside/Texaco Havoline Star	Lola T88/00-Cosworth	G	23	19	18	-	7	18	-	17	11	-	-	-	-	-	11	-	10	
20	Bernard Jourdain	Andale Racing/Corona/Monarch	Lola T89/00-Cosworth	G	19	13	9	12	15	22	19	19	-	19	11	27	-	15	23	-	10	
			Lola T88/00-Cosworth	G	-	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-
21	Didier Theys	Arciero/MacPherson	Penske PC17-Cosworth	G	20	23	20	17	-	-	-	-	-	-	-	-	-	-	-	-	9	
			Hemelgam/Mackenzie Financial	Lola T88/00-Judd	G	-	-	-	-	9	20	12	26	-	-	-	-	-	-	-	-	-
			Granatelli/STP/Tuneup Masters	Lola T88/00-Buick	G	-	-	-	-	-	-	-	-	-	-	-	11	11	21	17	-	-
22	Davy Jones	Euromotorsport	Lola T88/00-Cosworth	G	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	6	
23	Roberto Guerrero	Alex Morales Autosports	March 89CE-Alfa Romeo	G	-	-	-	-	8	23	13	22	28	22	16	12	21	20	25	-	6	
24	Fabrizio Barbazza	Arciero/MacPherson	Penske PC17-Cosworth	G	-	-	-	-	20	21	26	24	8	-	-	20	12	-	21	-	6	
25	Rich Vogler	Machinists/Jonathan Byrd/Byrant	March 88C-Cosworth	G	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	5	
			Arciero/MacPherson	Penske PC17-Cosworth	G	-	-	-	-	-	-	-	-	-	-	28	-	-	-	-	-	-
26	Ludwig Heimrath Jr.	Hemelgam/Mackenzie Financial	Lola T89/00-Judd	G	9	24	-	DNS	-	-	-	-	22	DNS	-	25	17	17	DNS	-	4	
			Hemelgam/Mackenzie Financial	Lola T88/00-Judd	G	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	Johnny Rutherford	Stoops Freightliner	Lola T88/00-Cosworth	G	-	-	-	-	-	-	-	-	-	10	13	-	-	-	-	-	3	
			Machinists/Schaefer/Playboy	March 88C-Cosworth	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DNS	-	-
28	Tom Sneva	Granatelli/STP	Lola T88/00-Buick	G	DNS	-	27	22	23	-	-	27	-	-	-	-	-	-	-	-	3	
			Granatelli/STP	March 86C-Buick	G	-	10	-	-	-	26	20	-	-	-	-	-	-	-	-	-	-
29	Guido Dacco	Coyle/Sector/De Longhi	Lola T88/00-Cosworth	G	24	22	-	14	12	12	21	DNS	21	13	-	26	26	12	26	-	3	
30	James Weaver	Dyson Racing	Lola T88/00-Cosworth	G	-	11	-	-	22	-	24	-	-	-	-	-	-	-	-	-	2	
31	Steve Saleen	Saleen Auto Express	March 88C-Cosworth	G	-	14	-	-	14	-	17	-	12	-	-	14	25	-	13	-	1	
32	Jeff Wood	Spirit of Wichita (*Gohr/Genesee)	Lola T88/00-Cosworth	G	-	-	-	-	-	-	15	15	DNS	12	-	16	*15	DNS	DNS	-	1	
33	John Andretti	Granatelli/Buick (*STP/Tuneup)	Lola T88/00-Buick	G	-	-	25	-	-	-	-	-	*25	*24	*17	-	-	*19	*12	-	1	
34	Billy Vukovich III	Hemelgam/Consani	Lola T88/00-Judd	G	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	1	

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Position	Driver	Team	Car	Tires	Phoenix	Long Beach	Indianapolis	Milwaukee	Detroit	Portland	Cleveland	Meadowlands	Toronto	Michigan	Denver	Vancouver	Mid-Ohio	Elkhart Lake	Nazareth	Laguna Seca	Points total
1	Al Unser Jr.	Galles-Kraco/Valvoline	Lola T90/00-Chevrolet	G	3	*1	4	1	27	3	15	11	1	1	1	1	3	4	16	2	210
2	Michael Andretti	Newman/Haas/Kmart/Texaco	Lola T90/00-Chevrolet	G	20	4	20	5	*1	1	25	*1	2	15	5	*20	*1	1	5	3	181
3	Rick Mears	Penske/Pennzoil	Penske PC19-Chevrolet	G	*1	6	5	*2	4	5	*8	2	12	14	7	4	7	3	2	4	168
4	Bobby Rahal	Galles-Kraco/STP/Kraco	Lola T90/00-Chevrolet	G	2	12	2	4	2	11	2	25	22	2	3	8	6	7	*3	5	153
5	Emerson Fittipaldi	Penske/Marlboro	Penske PC19-Chevrolet	G	5	2	*3	3	7	9	3	6	20	*17	18	6	12	2	1	6	144
6	Danny Sullivan	Penske/Marlboro	Penske PC19-Chevrolet	G	6	3	32	8	14	*4	1	14	*4	21	2	2	5	*16	18	*1	139
7	Mario Andretti	Newman/Haas/Kmart/Texaco	Lola T90/00-Chevrolet	G	4	5	27	21	25	2	4	24	6	3	4	3	2	5	4	26	136
8	Arie Luyendyk	Shierson/Domino's Pizza	Lola T90/00-Chevrolet	G	9	7	1	19	5	6	6	4	5	19	13	26	21	6	17	9	90
9	Eddie Cheever	Ganassi/Target Ganassi/Target	Penske PC18-Chevrolet Lola T90/00-Chevrolet	G G	7	13	8	11	3	19	-	-	-	4	-	-	-	-	-	-	80
10	John Andretti	Porsche/Quaker State Porsche/Foster's/Quaker State	March 89P-Porsche March 90P-Porsche	G G	17	21	-	-	-	-	16	21	3	-	20	14	4	9	6	10	80
11	A.J. Foyt	Foyt/Copenhagen	Lola T90/00-Chevrolet	G	22	24	6	9	17	10	7	5	16	6	10	13	15	20	-	-	42
12	Raul Boesel	Truesports/Budweiser	Lola T89/00-Judd	G	18	8	28	6	6	18	20	13	10	9	28	19	9	10	8	11	42
13	Scott Goodyear	Shierson/Mackenzie Financial	Lola T89/00-Judd	G	10	17	10	10	8	22	18	17	9	10	8	7	22	12	10	14	36
14	Teo Fabi	Porsche/Quaker State Porsche/Foster's/Quaker State	March 89P-Porsche March 90P-Porsche	G G	24	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33
15	Scott Brayton	Simon/Amway/Speedway	Lola T90/00-Cosworth	G	13	9	7	20	10	25	22	9	14	16	12	9	8	13	12	24	28
16	Roberto Guerrero	Patrick/Miller Genuine Draft Patrick/Miller Genuine Draft	March 90A-Alfa Lola T90/00-Alfa	G G	16	14	23	18	21	8	19	15	-	-	5	17	24	26	8	9	24
17	Mike Groff	Euromotorsport Euromotorsport Euromotorsport	Lola T88/00-Cosworth Lola T89/00-Cosworth Lola T90/00-Cosworth	G G G	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	17
18	Didier Theys	Granatelli/Tuneup Masters Granatelli/Tuneup Masters Granatelli/Tuneup Masters Foyt/Copenhagen	Lola T88/00-Buick Lola T89/00-Buick Penske PC18-Buick Lola T90/00-Chevrolet	G G G G	14	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
19	Dominic Dobson	Bayside/Texaco Havoline Star	Lola T90/00-Cosworth	G	23	15	22	-	26	24	-	8	8	-	25	11	-	19	-	20	12
20	Pancho Carter	Leader Cards/Hardee's Machinists/Hardee's Leader Cards/Hardee's	Lola T89/00-Cosworth Lola T90/00-Cosworth Lola T88/00-Cosworth	G G G	8	-	-	9	-	14	-	-	18	18	-	-	-	-	-	-	9
21	Jon Beekhuis	P.I.G. Enterprises Gohr/Genesee P.I.G. Enterprises	Lola T88/00-Judd Lola T89/00-Judd Lola T88/00-Judd	G G G	-	16	-	-	18	-	-	-	25	-	-	-	-	-	-	-	7
22	Jeff Wood	U.S. Engineering U.S. Engineering	Lola T88/00-Cosworth Lola T89/00-Cosworth	G G	11	-	-	-	11	-	10	-	-	-	-	-	-	-	-	-	7
23	Kevin Cogan	Granatelli/Tuneup Masters Stoops/Conseco	Penske PC18-Buick Lola T90/00-Cosworth	G G	-	-	9	-	-	-	-	-	-	-	-	20	-	-	-	-	4
24	Tony Bettenhausen	Bettenhausen/AMAX Bettenhausen/AMAX	Lola T89/00-Buick Lola T89/00-Cosworth	G G	-	-	26	13	16	17	12	10	26	22	24	-	20	DNS	-	-	4
25	Dean Hall	Coyne Racing/Insight Coyne Racing/Insight	Lola T88/00-Cosworth Lola T90/00-Cosworth	G G	15	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
26	Willy T. Ribbs	Raynor Garage Doors/Cosby	Lola T89/00-Judd	G	-	20	-	-	20	-	-	23	27	-	26	10	27	-	-	13	3
27	Wally Dallenbach Jr.	Machinists Union	Lola T90/00-Cosworth	G	-	-	-	-	-	-	-	-	-	-	11	-	18	-	-	25	2
28	Randy Lewis	Arciero/AMP/Samsung	Penske PC17-Buick	G	21	22	14	14	12	16	21	22	17	12	16	17	28	21	20	22	2
29	Guido Dacco	Euromotorsport Bettenhausen Nu-Tech/De Longhi	Lola T88/00-Cosworth Lola T89/00-Cosworth Lola T88/00-Cosworth	G G G	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
30	Buddy Lazier	Hemelgam Racing Arciero Hemelgam Racing	Lola T90/00-Buick Penske PC17-Cosworth Lola T88/00-Cosworth	G G G	-	-	-	-	-	13	24	-	DNS	-	DNS	12	23	-	14	-	1
31	Hiro Matsushita	Simon/Panasonic	Lola T89/00-Cosworth	G	DNQ	19	-	-	19	12	-	16	-	-	15	23	17	18	21	23	1
32	Michael Greenfield	Greenfield	Lola T87/00-Cosworth	G	-	-	-	-	-	17	12	21	-	21	-	25	24	15	-	-	1
33	Tero Palmroth	Simon/Hoeschst/Celanese Simon/Hoeschst/Celanese	Lola T90/00-Cosworth Lola T89/00-Cosworth	G G	-	-	12	-	-	-	-	-	-	DNS	-	-	-	-	-	-	1

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Position	Driver	Team	Car	Tires	Surfers Paradise	Long Beach	Phoenix	Indianapolis	Milwaukee	Detroit	Portland	Cleveland	Meadowlands	Toronto	Michigan	Denver	Vancouver	Mid-Ohio	Elkhart Lake	Nazareth	Laguna Seca	Points total
1	Michael Andretti	Newman/Haas/Kmart/Texaco	Lola T91/00-Chevrolet	G	*14	*16	4	2	1	*19	1	1	16	*1	14	*3	*1	*1	1	3	*1	234
2	Bobby Rahal	Galles-Kraco/STP/Kraco	Lola T91/00-Chevrolet	G	2	2	2	19	4	2	3	3	1	3	11	20	2	3	*4	2	24	200
3	Al Unser Jr.	Galles-Kraco/Valvoline	Lola T91/00-Chevrolet	G	16	1	6	4	19	4	4	4	2	23	3	1	3	5	2	4	2	197
4	Rick Mears	Penske/Marlboro	Penske PC20-Chevrolet	G	3	4	*5	*1	*15	5	6	17	*3	20	*1	8	6	6	15	*15	5	144
5	Emerson Fittipaldi	Penske/Marlboro	Penske PC20-Chevrolet	G	19	17	3	11	8	1	*2	*2	7	21	20	2	17	2	6	8	4	140
6	Arie Luyendyk	Granatelli/UNO	Lola T91/00-Chevrolet	G	9	5	1	3	17	3	7	5	18	19	2	22	19	9	5	1	8	134
7	Mano Andretti	Newman/Haas/Kmart/Texaco	Lola T91/00-Chevrolet	G	17	19	9	7	3	7	5	6	15	2	4	15	4	7	3	5	3	132
8	John Andretti	Hall/VDS/Pennzoil	Lola T91/00-Chevrolet	G	1	18	11	5	2	6	19	15	4	5	6	7	7	10	19	9	19	105
9	Eddie Cheever	Ganassi/Target/Scotch	Lola T91/00-Chevrolet	G	15	3	8	31	7	12	9	8	5	17	7	4	12	8	7	6	6	91
10	Scott Pruett	Truesports/Budweiser	Truesports 91C-Judd	G	5	24	12	12	13	17	8	23	17	4	13	5	5	4	17	18	7	67
11	Danny Sullivan	Patrick/Miller Genuine Draft	Lola T91/00-Alfa Romeo	G	4	11	7	10	5	10	21	9	6	14	18	18	9	17	16	20	9	56
12	Scott Brayton	Simon/Amway/Hoechst/Celanese	Lola T91/00-Chevrolet	G	6	8	13	17	6	9	15	7	9	6	9	16	10	13	11	19	27	52
13	Scott Goodyear	Mackenzie Financial/UNO	Lola T91/00-Judd	G	23	7	21	27	9	8	10	19	8	7	15	24	8	11	9	21	11	42
14	Tony Bettenhausen	Bettenhausen/AMAX	Penske PC19-Chevrolet	G	10	12	18	9	12	13	13	13	21	11	5	10	18	18	13	10	16	27
15	Jeff Andretti	Bayside/Texaco Havoline	Lola T91/00-Cosworth	G	7	9	10	15	11	16	12	16	23	9	12	12	11	22	18	11	13	26
16	Mike Groff	Euro motorsport/Hawaiian Tropic	Lola T91/00-Cosworth	G	8	23	16	24	18	22	11	10	11	-	-	-	-	-	-	-	-	22
		Foyt/Copenhagen	Lola T91/00-Chevrolet	G	-	-	-	-	-	-	-	-	-	8	-	DNS	-	20	8	-	15	-
17	Willy T. Ribbs	Walker/McDonalds/Cosby	Lola T90/00-Buick	G	-	-	-	32	-	-	-	-	-	-	-	-	-	-	-	-	-	17
		Walker/Quaker State/Snap-On	Lola T90/00-Cosworth	G	-	-	-	-	-	11	-	22	10	-	-	6	21	-	10	17	12	-
18	John Jones	Arciero	Lola T89/00-Buick	G	-	-	-	-	-	-	-	21	19	10	8	11	15	21	21	13	21	10
19	Ted Prappas	P.I.G./Say No To Drugs	Lola T89/00-Judd	G	22	6	-	-	-	25	-	-	-	-	-	-	-	-	-	-	-	9
		P.I.G./Say No To Drugs	Lola T91/00-Judd	G	-	-	-	-	-	-	17	18	22	16	-	21	14	12	23	-	23	-
20	Gordon Johncock	Hemelgam/Jack's Tool/Bryant	Lola T90/00-Cosworth	G	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	8
21	Paul Tracy	Dale Coyne Racing	Lola T89/00-Cosworth	G	-	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
		Penske/Mobil 1	Penske PC19-Chevrolet	G	-	-	-	-	-	-	-	-	-	-	21	-	-	-	-	7	25	-
22	Buddy Lazier	Dale Coyne Racing	Lola T88/00-Cosworth	G	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
		Coyne/Childhelp/IOF	Lola T89/00-Cosworth	G	-	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Hemelgam/Byrd	Lola T90/00-Buick	G	-	-	-	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Dale Coyne Racing (*Hemelgam)	Lola T90/00-Cosworth	G	-	-	-	-	-	18	-	11	-	22	-	9	-	-	*24	-	22	-
		Walker/Hemelgam	Lola T90/00-Cosworth	G	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-	-	-
23	Hiro Matsushita	Simon/Panasonic	Lola T90/00-Cosworth	G	21	13	14	-	10	14	-	-	-	-	-	-	-	-	-	-	-	6
		Simon/Panasonic	Lola T91/00-Buick	G	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Simon/Panasonic	Lola T91/00-Cosworth	G	-	-	-	-	-	-	14	14	12	15	19	14	16	14	12	12	-	-
		Simon/Panasonic	Lola T91/00-Chevrolet	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-
24	Stan Fox	Hemelgam/Byrd's Cafeteria/Bryant	Lola T91/00-Buick	G	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	5
25	Didier Theys	Leader Cards Racing	Lola T90/00-Cosworth	G	-	10	-	-	-	DNS	22	12	20	13	-	23	-	23	25	-	14	4
26	Pancho Carter	Arciero/Alfa-Laval/Doc's	Lola T89/00-Buick	G	-	-	-	21	-	-	-	-	-	-	-	-	-	-	-	-	-	3
		Arciero	Penske PC17-Buick	G	-	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-
		Leader Cards Racing	Lola T90/00-Cosworth	G	-	-	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-
27	Cor Euser	Coyne/Bettenhausen	Penske PC19-Chevrolet	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	3
28	Franco Scapini	Euro motorsport/Italy & Italy	Lola T91/00-Cosworth	G	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
29	Randy Lewis	Coyne/AMP-Orbit	Lola T90/00-Cosworth	G	13	15	19	14	-	-	-	-	14	12	16	17	-	15	22	-	26	1
30	Dean Hall	Leader Cards Racing	Lola T90/00-Cosworth	G	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
31	Gary Bettenhausen	Menard/Glidden Paints	Lola T91/00-Buick	G	-	-	-	22	-	-	-	-	-	-	-	-	-	-	-	-	-	1

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Position	Driver	Team	Car	Tires	Surfers Paradise	Phoenix	Long Beach	Indianapolis	Detroit	Portland	Milwaukee	Loudon	Toronto	Michigan	Cleveland	Elkhart Lake	Vancouver	Mid-Ohio	Nazareth	Laguna Seca	Points total
1	Bobby Rahal	Rahal-Hogan/Miller Genuine Draft	Lola T92/00-Chevrolet	G	3	1	2	6	1	14	*2	*1	*2	11	4	3	22	24	1	3	196
2	Michael Andretti	Newman/Haas/Kmart/Texaco	Lola T91/00-Ford	G	17	*10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	192
		Newman/Haas/Kmart/Texaco	Lola T92/00-Ford	G	-	-	*16	13	*4	1	1	2	1	18	2	4	*1	*21	*2	*1	
3	Al Unser Jr.	Galles-Kraco/Valvoline	Galmer G92-Chevrolet	G	*4	5	4	1	9	3	7	8	7	4	3	2	2	3	11	9	169
4	Emerson Fittipaldi	Penske/Marlboro	Penske PC21-Chevrolet	G	1	3	3	24	8	*2	4	21	19	13	*1	1	19	1	7	19	151
5	Scott Goodyear	Walker/Mackenzie Financial	Lola T91/00-Chevrolet	G	9	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	108
		Walker/Mackenzie Financial	Lola T92/00-Chevrolet	G	-	18	5	2	22	8	8	3	6	1	10	20	-	16	4	26	
6	Mario Andretti	Newman/Haas/Kmart/Texaco	Lola T91/00-Ford	G	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	105
		Newman/Haas/Kmart/Texaco	Lola T92/00-Ford	G	-	17	23	23	-	6	6	7	4	*15	5	5	6	5	5	2	
7	Danny Sullivan	Galles-Kraco/Molson/Kraco/STP	Galmer G92-Chevrolet	G	5	12	1	5	5	12	12	9	3	8	20	7	7	8	17	7	99
8	John Andretti	Hall/VDS/Pennzoil	Lola T92/00-Chevrolet	G	6	6	20	8	21	5	9	5	5	6	12	6	15	4	18	5	94
9	Raul Boesel	Simon/Panasonic/Sega/Cofap/Mobil 1	Lola T92/00-Chevrolet	G	-	-	-	7	2	9	10	18	22	3	6	8	11	7	6	6	80
10	Eddie Cheever	Ganassi/Target/Scotch Video	Lola T91/00-Ford	G	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80
		Ganassi/Target/Scotch Video	Lola T92/00-Ford	G	-	2	22	4	11	4	5	16	9	20	11	23	16	12	9	4	
11	Scott Pruett	Truesports/Budweiser	Truesports 92C-Chevrolet	G	18	7	9	30	19	10	11	6	25	5	7	9	4	9	10	14	62
12	Paul Tracy	Penske/Mobil 1	Penske PC20-Chevrolet	G	-	4	-	20	-	-	-	-	-	-	-	-	-	-	-	-	59
		Penske/Marlboro (*Mobil 1)	Penske PC21-Chevrolet	G	-	-	-	16	-	-	-	-	21	*2	19	*17	23	*2	*3	16	
13	Rick Mears	Penske/Marlboro	Penske PC21-Chevrolet	G	2	8	6	26	-	7	16	4	-	16	-	-	-	-	-	-	47
14	Stefan Johansson	Bettenhausen/AMAX	Penske PC20-Chevrolet	G	-	-	-	3	-	-	10	11	-	9	19	3	6	21	11		47
15	Scott Brayton	Simon/Amway	Lola T92/00-Chevrolet	G	20	9	17	-	12	22	3	17	17	10	21	12	8	10	8	10	39
		Simon/Amway	Lola T92/00-Buick	G	-	-	-	22	-	-	-	-	-	-	-	-	-	-	-	-	
16	Al Unser Sr.	Menard/Conseco	Lola T92/00-Buick	G	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	15
		Penske/Marlboro	Penske PC21-Chevrolet	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	
17	Ted Prappas	P.I.G./Say No To Drugs	Lola T91/00-Chevrolet	G	10	-	14	16	14	15	15	20	23	-	13	10	9	11	19	18	12
18	Eric Bachelhart	Coyne/Mi-Jack	Lola T90/00-Cosworth	G	22	13	8	-	7	16	13	-	24	22	17	21	DNS	-	DNS	23	11
		Coyne/Royal Oak Charcoal	Lola T90/00-Buick	G	-	-	-	32	-	-	-	-	-	-	-	-	-	-	-	-	
		Coyne/Mi-Jack	Lola T91/00-Cosworth	G	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	
19	Buddy Lazier	Leader Cards Racing	Lola T90/00-Buick	G	16	14	12	-	24	24	17	-	-	-	-	-	-	-	-	-	10
		Leader Cards Racing	Lola T91/00-Buick	G	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-	-	
		Hemelgarn/Super Fitness/Viper	Lola T91/00-Buick	G	-	-	-	-	-	-	-	15	-	-	-	-	-	-	15	-	
		Hemelgarn/Super Fitness/Viper	Lola T91/00-Chevrolet	G	-	-	-	-	-	-	-	-	-	7	23	13	10	22	-	21	
20	Robby Gordon	Chip Ganassi Racing	Lola T92/00-Ford	G	-	-	-	17	-	-	-	-	-	-	-	-	-	-	-	-	10
		Ganassi/Ford/Target/Scotch Video	Lola T91/00-Ford	G	-	-	-	-	13	21	-	8	-	8	18	17	-	-	-	-	
21	Teo Fabi	Newman/Haas/Kmart/Texaco	Lola T92/00-Ford	G	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-	8
22	Jimmy Vasser	Hayhoe-Cole/Kodalux/STP	Lola T91/00-Chevrolet	G	15	15	7	21	-	23	-	-	12	-	14	-	18	25	DNS	12	8
23	Brian Till	RAL Group/RobcoTR	Truesports 91C-Judd	G	-	-	11	-	23	20	-	12	10	-	15	11	-	14	-	27	8
24	Tony Bettenhausen	Bettenhausen/AMAX	Penske PC20-Chevrolet	G	13	11	15	-	21	18	-	-	9	-	-	-	-	-	-	-	6
25	Mike Groff	Walker Motorsport	Lola T91/00-Chevrolet	G	-	-	-	-	DNS	-	-	-	-	-	24	-	-	-	-	-	5
		Euro motorsport/AGIP/Fendi	Lola T91/00-Cosworth	G	-	-	-	-	-	14	13	-	-	-	-	-	-	-	-	-	
		Foyt/Copenhagen	Lola T91/00-Chevrolet	G	-	-	-	-	-	-	-	-	-	-	-	-	-	15	16	8	
26	AJ Foyt	Walker Motorsport	Lola T90/00-Cosworth	G	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
		Foyt/Copenhagen	Lola T92/00-Chevrolet	G	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	
27	Hiro Matsushita	Simon/Panasonic/Sega	Lola T92/00-Chevrolet	G	DNS	16	10	-	-	-	-	-	-	-	24	14	13	18	14	15	3
28	Brian Bonner	Coyne/Applebee's/Danka	Lola T91/00-Buick	G	-	-	-	19	-	-	-	-	-	-	-	-	-	-	-	-	3
		Foyt/Copenhagen	Lola T92/00-Chevrolet	G	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	
		Coyne/Applebee's	Lola T90/00-Cosworth	G	-	-	-	-	-	DNS	DNS	-	-	-	-	-	-	17	-	-	
29	John Paul Jr.	D.B. Mann Development	Lola T90/00-Buick	G	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	3
30	Ross Bentley	Coyne/Spirit of Canada	Lola T90/00-Cosworth	G	11	-	DNS	-	20	17	-	-	14	23	18	-	14	-	-	-	2
31	Pancho Carter	Foyt/Copenhagen	Lola T91/00-Chevrolet	G	-	-	-	-	-	-	-	11	-	17	-	-	-	-	-	-	2
32	Ross Cheever	Foyt/Copenhagen	Lola T91/00-Chevrolet	G	-	-	-	-	11	20	-	-	-	-	25	25	DNS	-	-	-	2
33	Lyn St. James	Simon/Agency/JC Penney	Lola T91/00-Chevrolet	G	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-	2
34	Jeff Wood	Arciero Racing Teams	Lola T91/00-Buick	G	-	-	-	13	19	19	15	13	12	-	-	-	-	-	-	-	1
		Euro motorsport/Diemme	Lola T90/00-Cosworth	G	-	-	-	-	-	-	-	-	-	-	-	-	-	13	-	-	
35	Fabrizio Barbazza	Arciero Racing Teams	Lola T90/00-Buick	G	12	20	21	-	-	-	-	-	-	-	-	-	-	-	-	-	1
36	John Jones	Team Losi/Alfa-Laval	Lola T91/00-Buick	G	-	-	-	-	-	-	-	-	-	-	-	-	12	23	22	-	1
37	Dominic Dobson	Burns Racing/Tobacco Free	Lola T91/00-Chevrolet	G	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-	1
38	Roberto Guerrero	King/Quaker State	Lola T92/00-Buick	G	-	-	-	*33	-	-	-	-	-	-	-	-	-	-	-	-	1

1993

Position	Driver	Team	Car	Tires	Surfers Paradise	Phoenix	Long Beach	Indianapolis	Milwaukee	Detroit	Portland	Cleveland	Toronto	Michigan	Loudon	Elkhart Lake	Vancouver	Mid-Ohio	Nazareth	Laguna Seca	Points total
1	Nigel Mansell	Newman/Haas/Kmart/Texaco	Lola T93/00-Ford	G	*1	—	*3	3	1	*15	*2	3	20	1	*1	2	6	*12	*1	23	191
2	Emerson Fittipaldi	Marlboro Team Penske	Penske PC22-Chevrolet	G	2	14	13	1	3	23	1	2	*2	13	3	5	7	1	5	*2	183
3	Paul Tracy	Marlboro Team Penske	Penske PC22-Chevrolet	G	21	16	1	30	20	9	3	*1	1	19	2	*1	13	25	3	1	157
4	Bobby Rahal	Rahal-Hogan/Miller Genuine Draft	Rahal-Hogan 001-Chevrolet	G	6	22	2	DNQ	—	—	—	—	—	—	—	—	—	—	—	—	133
		Rahal-Hogan/Miller Genuine Draft	Lola T93/00-Chevrolet	G	—	—	—	—	4	5	4	28	4	9	7	3	2	6	6	7	
5	Raul Boesel	Simon/Duracell/Mobil1	Lola T93/00-Ford	G	8	2	12	4	*2	2	7	7	7	4	21	4	9	4	9	11	132
6	Mario Andretti	Newman/Haas/Kmart/Texaco	Lola T93/00-Ford	G	4	1	18	5	18	3	6	5	8	*2	20	15	5	7	13	9	117
7	Al Unser Jr.	Galles/Valvoline	Lola T93/00-Chevrolet	G	15	4	21	8	5	6	5	19	5	8	8	25	1	8	25	5	100
8	Arie Luyendyk	Ganassi/Target/Scotch Video	Lola T93/00-Ford	G	5	6	11	*2	22	17	10	10	22	3	25	9	25	5	8	3	90
9	Scott Goodyear	Walker/Mackenzie	Lola T93/00-Ford	G	10	*20	16	7	23	10	12	20	9	5	19	10	*4	3	2	4	86
10	Robby Gordon	Foyt/Copenhagen Racing	Lola T92/00-Ford	G	3	18	—	—	—	—	—	—	—	15	—	—	23	—	—	10	84
		Foyt/Copenhagen Racing	Lola T93/00-Ford	G	—	—	DSQ	27	10	8	8	6	6	—	5	20	—	2	4	—	
11	Teo Fabi	Hall/VDS/Pennzoil	Lola T93/00-Chevrolet	G	9	5	4	9	9	22	25	8	14	6	16	8	8	24	11	8	64
12	Danny Sullivan	Galles/Molson	Lola T93/00-Chevrolet	G	13	23	8	33	16	1	14	14	3	—	22	26	10	27	20	27	43
13	Stefan Johansson	Bettenhausen/AMAX	Penske PC22-Chevrolet	G	12	21	—	11	25	20	26	4	24	23	14	21	3	26	7	6	43
14	Roberto Guerrero	Budweiser King Racing	Lola T93/00-Chevrolet	G	19	15	5	28	7	26	24	29	10	7	4	23	11	—	—	—	39
15	Scott Brayton	Simon/Amway/Northwest Air	Lola T93/00-Ford	G	16	25	24	6	6	—	17	18	19	11	6	7	24	9	15	24	36
		Simon/Amway/Northwest Air	Lola T92/00-Ford	G	—	—	—	—	—	14	—	—	—	—	—	—	—	—	—	—	
16	Jimmy Vasser	Hayhoe/Kodalux Process/STP	Lola T92/00-Chevrolet	G	24	3	22	—	8	16	11	—	—	—	—	—	—	—	—	—	30
		Hayhoe/Kodalux Process/STP	Lola T92/00-Ford	G	—	—	—	13	—	—	—	—	11	—	9	—	18	10	—	21	
17	Eddie Cheever	Turley/Say No To Drugs	Penske PC21-Chevrolet	G	7	24	9	—	—	21	—	—	—	—	—	—	—	—	—	—	21
		Menard/Glidden	Lola T92/00-Menard	G	—	—	—	16	—	—	—	—	—	—	—	—	—	—	—	—	
		Simon/Menard/Immobliser	Lola T93/00-Ford	G	—	—	—	—	—	—	—	—	—	—	—	6	—	—	—	—	
		Budweiser King Racing	Lola T93/00-Chevrolet	G	—	—	—	—	—	—	—	—	—	—	—	—	—	28	10	14	
18	Andrea Montermini	Euro motorsport/Andrea Moda	Lola T92/00-Chevrolet	G	25	—	—	—	—	4	—	—	27	—	—	—	19	—	—	—	12
19	Scott Pruett	ProFormance/Tobacco Free America	Lola T91/00-Chevrolet	G	—	7	7	DNQ	—	25	—	—	26	—	—	—	—	15	—	25	12
20	Willy T. Ribbs	Walker/Cosby/Service Merchandise	Lola T92/00-Ford	G	—	—	—	21	11	12	16	27	18	10	15	12	16	11	19	28	9
21	Robbie Buhl	Coyne/Mi-Jack	Lola T92/00-Chevrolet	G	23	19	6	—	—	28	—	24	—	—	—	19	—	14	17	16	8
		Coyne/Mi-Jack	Lola T92/00-Buick	G	—	—	—	DNQ	—	—	—	—	—	—	—	—	—	—	—	—	
		Coyne/Mi-Jack	Lola T91/00-Chevrolet	G	—	—	—	—	17	—	—	—	—	—	—	—	—	—	—	—	
22	Mark Smith	Arciero/Craftsman	Penske PC21-Chevrolet	G	18	9	10	—	—	27	29	15	23	—	—	24	22	19	12	17	8
23	Mike Groff	Rahal-Hogan/Miller Genuine Draft Lt	Rahal-Hogan 001-Chevrolet	G	—	—	—	—	19	11	9	—	—	—	11	—	—	—	—	—	8
		Rahal-Hogan/Miller Genuine Draft Lt	Lola T93/00-Chevrolet	G	—	—	—	—	—	—	—	—	—	—	—	18	—	22	—	—	
24	Adrian Fernandez	Galles/Tecate/Amway Mexico	Lola T93/00-Chevrolet	G	—	—	23	—	21	7	—	—	—	—	—	29	—	—	—	12	7
25	Brian Till	Turley/Say No To Drugs	Penske PC21-Chevrolet	G	—	—	—	—	—	22	9	13	—	10	22	—	17	16	29	7	
26	Hiro Matsushita	Walker/Panasonic	Lola T93/00-Ford	G	11	10	14	18	13	13	21	12	16	14	13	13	12	13	21	19	7
27	David Kudrave	Euro motorsport/Andrea Moda/AGIP	Lola T92/00-Chevrolet	G	—	8	—	—	24	—	23	—	—	12	23	—	—	23	14	—	6
28	Olivier Grouillard	Indy Regency/Euro sport/Marlboro	Lola T92/00-Chevrolet	G	—	—	—	—	12	24	13	11	—	17	12	16	26	16	18	20	4
29	John Andretti	Foyt/Copenhagen	Lola T92/00-Ford	G	—	—	—	10	—	—	—	—	—	—	—	—	—	—	—	—	3
30	Marco Greco	Sovereign/Alfa Laval/Team Losi	Lola T92/00-Chevrolet	G	22	11	25	—	DNQ	19	19	22	21	18	17	28	20	18	23	—	2
31	Christian Danner	Euro motorsport/Andrea Moda/AGIP	Lola T92/00-Chevrolet	G	—	—	—	—	—	—	—	25	—	—	—	11	—	—	—	26	2
32	Ross Bentley	Coyne/AGFA/Rain-X	Lola T92/00-Chevrolet	G	17	12	15	—	14	DNQ	15	16	25	16	DNQ	17	17	—	22	—	1
		Coyne/AGFA/Rain-X	Lola T92/00-Buick	G	—	—	—	DNQ	—	—	—	—	—	—	—	—	—	—	—	—	
33	Al Unser Sr.	Budweiser King Racing	Lola T93/00-Chevrolet	G	—	—	—	12	—	—	—	—	—	—	—	—	—	—	—	—	1
34	Bertrand Gachot	Simon/CAPA	Lola T93/00-Ford	G	—	—	—	—	—	—	—	—	12	—	—	—	—	—	—	—	1

1994

Position	Driver	Team	Car	Tires	Surfers Paradise	Phoenix	Long Beach	Indianapolis	Milwaukee	Detroit	Portland	Cleveland	Toronto	Michigan	Mid-Ohio	Loudon	Vancouver	Elkhart Lake	Nazareth	Laguna Seca	Points total
1	Al Unser Jr.	Marlboro Team Penske	Penske PC23-Ilmor	G	14	2	1	-	1	10	*1	*1	29	8	*1	1	1	2	2	20	225
		Marlboro Team Penske	Penske PC23-Mercedes	G	-	-	-	*1	-	-	-	-	-	-	-	-	-	-	-	-	
2	Emerson Fittipaldi	Marlboro Team Penske	Penske PC23-Ilmor	G	2	1	21	-	2	2	2	20	3	10	3	*3	9	3	*3	4	178
		Marlboro Team Penske	Penske PC23-Mercedes	G	-	-	-	17	-	-	-	-	-	-	-	-	-	-	-	-	
3	Paul Tracy	Marlboro Team Penske	Penske PC23-Ilmor	G	16	*23	*20	-	3	1	3	3	5	16	2	2	20	*18	1	*1	152
		Marlboro Team Penske	Penske PC23-Mercedes	G	-	-	-	23	-	-	-	-	-	-	-	-	-	-	-	-	
4	Michael Andretti	Ganassi/Target/Scotch Video	Reynard 941-Ford	G	1	20	6	6	4	5	31	18	1	22	5	5	3	17	9	28	118
5	Robby Gordon	Walker/Valvoline/Cummins	Lola T94/00-Ford	G	23	7	3	5	6	3	4	11	*6	13	4	13	*2	25	23	13	104
6	Jacques Villeneuve	Forsythe-Green/Player's Ltd.	Reynard 941-Ford	G	17	25	15	2	9	7	6	4	9	20	9	DNS	24	1	7	3	94
7	Raul Boesel	Simon/Duracell/Fuji Film	Lola T94/00-Ford	G	27	8	4	21	*8	28	23	6	12	9	8	4	23	6	4	2	90
8	Nigel Mansell	Newman/Haas/Kmart/Texaco	Lola T94/00-Ford	G	*9	3	2	22	5	*21	5	2	23	*26	7	18	10	13	22	8	88
9	Teo Fabi	Hall/Pennzoil	Reynard 941-Ilmor	G	7	26	9	7	17	4	26	9	8	4	21	20	18	4	6	5	79
10	Bobby Rahal	Rahal-Hogan/Miller Genuine Draft	Lola T94/00-Honda	G	26	14	30	W	7	6	12	28	2	28	27	9	7	9	14	29	59
		Rahal-Hogan/Miller Genuine Draft	Penske PC22-Ilmor	G	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	
11	Stefan Johansson	Bettenhausen/Alumax Aluminum	Penske PC22-Ilmor	G	5	4	10	15	26	22	8	5	14	14	12	23	26	8	5	12	57
12	Scott Goodyear	Budweiser King Racing	Lola T94/00-Ford	G	10	11	19	30	22	11	28	14	10	1	22	11	4	7	8	27	55
13	Adrian Fernandez	Galles/Tecate/Quaker State	Reynard 941-Ilmor	G	13	10	8	28	16	23	10	7	13	23	6	8	22	5	21	7	46
14	Mano Andretti	Newman/Haas/Kmart/Texaco	Lola T94/00-Ford	G	3	21	5	32	14	18	9	27	4	18	10	19	11	16	25	19	45
15	Jimmy Vasser	Hayhoe/Conseco/STP	Reynard 941-Ford	G	4	5	24	4	11	20	32	31	25	25	14	7	15	28	13	26	42
16	Mauricio Gugelmin	Ganassi/Hollywood	Reynard 941-Ford	G	6	15	7	11	15	8	30	8	20	15	25	14	5	19	10	22	39
17	Arie Luyendyk	Indy Regency/Eurosport	Lola T94/00-Ilmor	G	25	22	11	18	21	19	14	21	31	2	13	DNS	6	22	26	6	34
18	Dominic Dobson	PacWest Racing Group	Lola T94/00-Ford	G	12	24	17	29	13	25	17	25	11	3	15	6	19	11	19	10	30
19	Mark Smith	Walker/Craftsman Tools	Lola T94/00-Ford	G	21	DNS	25	-	24	14	16	22	-	5	20	12	8	26	12	14	17
		Walker/Craftsman Tools	Lola T93/00-Ford	G	-	-	-	-	-	-	-	-	30	-	-	-	-	-	-	-	
20	Mike Groff	Rahal-Hogan/Motorola	Lola T93/00-Honda	G	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
		Rahal-Hogan/Motorola	Lola T94/00-Honda	G	-	6	27	W	19	27	11	19	22	27	26	25	14	20	11	15	
		Rahal-Hogan/Motorola	Penske PC22-Ilmor	G	-	-	-	31	-	-	-	-	-	-	-	-	-	-	-	-	
21	Scott Sharp	PacWest Racing Group	Lola T94/00-Ford	G	11	9	28	16	12	13	18	24	16	12	11	24	12	10	15	21	14
22	Willy T. Ribbs	Walker/Service Merchandise	Lola T93/00-Ford	G	18	28	18	-	-	-	-	-	-	-	-	-	-	-	-	-	12
		Walker/Service Merchandise	Lola T94/00-Ford	G	-	-	-	DNQ	25	16	25	12	21	7	28	10	25	24	18	11	
23	Bryan Herta	Foyt/Copenhagen Racing	Lola T94/00-Ford	G	-	-	-	9	10	9	27	13	-	-	-	-	-	-	-	-	11
24	Andrea Montermini	Budweiser King Racing	Lola T94/00-Ford	G	-	-	-	-	-	-	-	16	7	-	-	-	-	-	-	-	10
		Project Indy	Lola T93/00-Ford	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
25	Alessandro Zampedri	Euromotorsport/AGIP/Dinema	Lola T93/00-Ilmor	G	22	-	22	-	-	-	-	-	-	-	-	-	-	-	-	-	9
		Coyne/Mi-Jack	Lola T93/00-Ford	G	-	-	-	-	-	26	7	10	17	DNS	-	-	28	23	20	16	
26	Hiro Matsushita	Simon/Panasonic/Duskin	Lola T94/00-Ford	G	15	27	DNQ	14	23	DNQ	21	15	18	6	18	17	DNQ	14	16	23	8
27	Eddie Cheever	Menard/Quaker State	Lola T93/00-Menard	G	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	5
		Foyt/Copenhagen Racing	Lola T94/00-Ford	G	-	-	-	-	-	-	-	-	-	21	17	21	17	27	24	25	
28	John Andretti	Foyt/Jonathan Byrd's	Lola T94/00-Ford	G	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	3
29	Marco Greco	Simon/Arciero/Int. Sports	Lola T94/00-Ford	G	DNS	16	23	27	20	24	20	26	15	11	DNS	16	16	21	17	24	2
30	Christian Danner	Project Indy/Marcelo/Anvil	Lola T93/00-Ford	G	-	-	-	-	-	12	-	-	-	-	-	-	-	12	-	-	2
31	Davy Jones	Foyt/Copenhagen Racing	Lola T92/00-Ford	G	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
		Foyt/Copenhagen Racing	Lola T93/00-Ford	G	-	12	14	-	-	-	-	-	-	-	-	-	-	-	-	-	
32	Franck Freon	Project Indy/Marcelo Group	Lola T93/00-Ford	G	-	-	12	-	-	-	15	-	-	-	-	-	-	-	-	-	1
		Euromotorsport/AGIP/Hawaiian Tropic	Lola T92/00-Ilmor	G	-	-	-	-	-	-	-	-	-	-	-	-	DNQ	29	-	-	
		Indy Regency/Autosports	Lola T94/00-Ilmor	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
33	Brian Till	Coyne/Mi-Jack	Lola T93/00-Ford	G	-	19	-	12	-	-	-	-	-	-	-	-	-	-	-	-	1

1995

Position	Driver	Team	Car	Tires	Surfers Paradise																	Points total
					Miami	Phoenix	Long Beach	Nazareth	Indianapolis	Milwaukee	Detroit	Portland	Elkhart Lake	Toronto	Cleveland	Michigan	Mid-Ohio	Loudon	Vancouver	Laguna Seca		
1	Jacques Villeneuve	Team Green/Player's Ltd.	Reynard 951-Ford	G	1	20	5	25	2	1	6	9	*20	11	*3	1	10	*3	4	*12	*11	172
2	Al Unser Jr.	Marlboro/Team Penske	Penske PC24-Mercedes	G	15	6	8	1	13	W	2	5	1	28	26	18	2	1	3	1	6	161
		Marlboro/Team Penske	Lola T95/00-Mercedes	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Bobby Rahal	Rahal-Hogan/Miller Genuine Draft	Lola T95/00-Mercedes	G	3	2	21	21	6	3	13	24	3	5	2	4	8	26	10	5	7	128
4	Michael Andretti	Newman/Haas/Kmart/Texaco	Lola T95/00-Ford	G	*20	*9	2	*9	22	25	3	4	4	27	1	7	25	19	2	21	4	123
5	Robby Gordon	Walker/Valvoline/Cummins	Reynard 951-Ford	G	13	14	1	22	*4	5	5	*1	8	26	5	6	W	8	9	3	15	121
6	Paul Tracy	Newman/Haas/Kmart/Budweiser	Lola T95/00-Ford	G	27	1	4	28	26	24	1	8	18	2	8	26	23	2	23	8	2	115
7	Scott Pruett	Patrick Racing/Firestone	Lola T95/00-Ford	F	4	3	9	2	8	19	12	3	13	7	25	16	1	11	24	6	5	112
8	Jimmy Vasser	Ganassi/Target/STP	Reynard 951-Ford	G	8	24	23	23	24	22	9	2	2	*3	17	3	7	9	6	27	8	92
9	Teo Fabi	Forsythe/Combustion Eng./Indeck	Reynard 951-Ford	G	16	13	7	3	7	8	*4	7	23	9	4	19	4	17	12	19	9	83
10	Mauricio Gugelmin	PacWest Racing/Hollywood	Reynard 951-Ford	G	2	4	13	5	17	6	14	15	7	24	12	23	11	6	11	20	3	80
11	Emerson Fittipaldi	Marlboro Team Penske	Penske PC24-Mercedes	G	24	18	3	20	1	W	23	10	21	15	10	25	5	21	5	7	16	67
		Marlboro Team Penske	Lola T95/00-Mercedes	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Adrian Fernandez	Galles/Tecate/Quaker State	Lola T95/00-Mercedes	G	11	26	12	18	9	21	10	6	9	6	7	12	3	4	26	22	10	66
13	Stefan Johansson	Bettenhausen/Alumax Aluminum	Penske PC23-Mercedes	G	22	17	24	6	3	-	-	11	6	10	14	8	6	23	25	4	14	60
		Bettenhausen/Alumax Aluminum	Reynard 941-Ford	G	-	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-
		Bettenhausen/Alumax Aluminum	Penske PC22-Mercedes	G	-	-	-	-	-	-	21	-	-	-	-	-	-	-	-	-	-	-
14	Gil de Ferran	Hall Racing/Pennzoil	Reynard 951-Mercedes	G	25	16	11	27	19	29	8	16	10	21	16	*14	12	24	7	2	1	56
15	Christian Fittipaldi	Walker/Marlboro/Chapeco	Reynard 951-Ford	G	5	25	10	14	20	2	7	17	12	8	9	24	9	25	8	24	24	54
16	Raul Boesel	Rahal-Hogan/Duracell	Lola T95/00-Mercedes	G	6	8	6	16	10	20	11	DNS	5	22	6	20	24	20	18	10	12	48
17	Andre Ribeiro	Tasman/LCI	Reynard 951-Honda	F	21	23	26	12	11	18	25	18	14	4	13	27	21	27	*1	23	26	38
18	Eddie Cheever	Foyt/Copenhagen Racing	Lola T95/00-Ford	G	14	7	14	4	5	31	-	25	25	17	11	22	19	10	17	-	-	33
		Foyt/Copenhagen Racing	Lola T94/00-Ford	G	-	-	-	-	-	-	26	-	-	-	-	-	-	-	-	-	-	-
19	Danny Sullivan	PacWest/VISA	Reynard 951-Ford	G	9	5	27	10	18	9	17	12	22	25	18	5	16	-	-	-	-	32
20	Bryan Herta	Ganassi/Target/Scotch Video	Reynard 951-Ford	G	10	-	*20	26	23	13	-	27	26	14	27	2	15	5	19	16	25	30
		Ganassi/Target/Scotch Video	Reynard 941-Ford	G	-	15	-	-	-	-	24	-	-	-	-	-	-	-	-	-	-	-
21	Eliseo Salazar	Simon/Cristal/Mobil 1/Copec	Lola T95/00-Ford	G	17	10	15	-	12	4	16	20	15	18	21	10	18	13	13	13	DNQ	19
		Simon/Cristal/Mobil 1/Copec	Lola T94/00-Ford	G	-	-	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	Alessandro Zampedri	Payton/Coyne/Mi-Jack	Lola T94/00-Ford	F	23	19	19	8	15	11	22	26	16	20	23	9	13	14	14	9	20	15
23	Eric Bachelart	Payton/Coyne/AGFA	Lola T94/00-Ford	F	19	22	18	7	-	28	-	23	19	11	22	21	-	16	-	-	-	8
24	Juan Fangio II	PacWest/VISA	Reynard 951-Ford	G	-	-	-	-	-	-	-	-	-	-	-	-	-	7	15	28	13	6
25	Christian Danner	Project Indy/No Touch/Van Dyne	Reynard 941-Ford	G	W	-	-	-	-	-	-	22	-	-	-	-	-	-	-	-	-	6
		Project Indy/No Touch/Van Dyne	Lola T93/00-Ford	G	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	Arie Luyendyk	Simon/Marlboro/WavePhore	Lola T95/00-Ford	G	-	-	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
		Menard/Glidden/Quaker State	Lola T95/00-Menard	G	-	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-
27	Parker Johnstone	Comptech/Motorola Cellular	Reynard 951-Honda	F	-	-	-	-	-	-	-	19	-	12	-	11	*22	28	-	11	17	6
28	Hiro Matsushita	Arciero-Wells/Panasonic/Duskin	Reynard 941-Ford	F	26	11	22	19	DNQ	-	-	-	-	-	-	-	-	-	-	-	-	5
		Arciero-Wells/Panasonic/Duskin	Reynard 951-Ford	F	-	-	-	-	-	10	19	14	17	13	19	13	20	15	22	17	22	-
29	Marco Greco	Galles/Brastemp	Lola T95/00-Mercedes	G	-	-	-	13	21	DNQ	-	13	-	-	20	15	-	22	20	25	23	2
		Simon/Brastemp	Lola T95/00-Ford	G	-	-	-	-	-	-	-	11	23	-	-	-	-	-	-	-	-	-
30	Carlos Guerrero	Simon/Herdez/Viva Mexico!	Lola T95/00-Ford	G	-	-	-	11	-	33	15	-	24	-	24	17	26	18	16	15	18	2
		Simon/Herdez/Viva Mexico!	Lola T94/00-Ford	G	-	-	-	-	14	-	-	21	-	19	-	-	-	-	-	-	-	-
31	Dean Hall	Simon/Subway	Lola T95/00-Ford	G	12	12	17	17	16	-	-	-	-	-	-	-	-	-	-	-	-	2
32	Scott Goodyear	Tasman/LCI/Motorola/CNN	Reynard 951-Honda	F	-	-	-	-	-	14	-	-	-	-	-	-	-	12	-	14	-	1
33	Roberto Guerrero	Pagan/Upper Deck/Gen. Comprts	Reynard 941-Mercedes	G	-	-	16	-	-	12	-	-	-	-	-	-	-	-	-	-	-	1
34	Scott Brayton	Menard/Quaker State/Glidden	Lola T95/00-Menard	G	-	-	-	-	-	*17	-	-	-	-	-	-	-	-	-	-	-	1

1996

Position	Driver	Team	Car	Tires	Homestead	Rio	Surfers Paradise	Long Beach	Nazareth	U.S. 500	Milwaukee	Detroit	Portland	Cleveland	Toronto	Michigan	Mid-Ohio	Elkhart Lake	Vancouver	Laguna Seca	Points total	
1	Jimmy Vasser	Target/Chip Ganassi Racing	Reynard 961-Honda	F	1	8	*1	1	7	*1	10	12	13	*10	8	*9	2	6	7	4	154	
2	Michael Andretti	Newman/Haas/Kmart/Texaco	Lola T96/00-Ford	G	9	22	19	7	1	23	1	1	11	19	22	22	3	1	1	9	132	
3	Alex Zanardi	Target/Chip Ganassi Racing	Reynard 961-Honda	F	24	*4	21	24	13	17	13	11	*1	2	2	21	*1	*3	*26	*1	132	
4	Al Unser Jr.	Marlboro Team Penske	Penske PC25-Mercedes	G	8	2	9	3	3	8	2	22	4	4	13	4	13	10	5	16	125	
5	Christian Fittipaldi	Newman/Haas/Kmart/Budweiser	Lola T96/00-Ford	G	6	5	5	21	9	12	6	2	3	7	7	10	7	16	3	10	110	
6	Gil de Ferran	Hall Racing/Pennzoil	Reynard 961-Honda	G	2	10	11	*5	23	9	9	3	2	1	18	19	17	25	4	25	104	
7	Bobby Rahal	Team Rahal/Miller	Reynard 961-Mercedes	G	5	6	20	14	6	19	7	21	6	15	3	24	5	2	2	7	102	
8	Bryan Herta	Team Rahal/Shell	Reynard 961-Mercedes	G	10	13	17	12	11	15	14	13	26	5	6	2	4	5	6	2	86	
9	Greg Moore	Forsythe/Player's Ltd./Indeck	Reynard 961-Mercedes	F	7	18	3	22	2	13	5	20	25	3	4	17	9	23	25	6	84	
10	Scott Pruett	Patrick Racing/Firestone	Lola T96/00-Ford	F	4	3	2	11	8	26	12	*10	23	8	10	13	21	7	20	3	82	
11	Andre Ribeiro	Tasman/LCI International	Lola T96/00-Honda	F	16	1	8	27	12	4	8	24	7	20	*21	1	8	19	21	19	76	
12	Adrian Fernandez	Tasman/Tecate/Quaker State	Lola T96/00-Honda	F	11	14	23	6	10	DNS	11	4	12	6	1	20	6	13	8	11	71	
13	Paul Tracy	Marlboro Team Penske	Penske PC25-Mercedes	G	*23	19	22	4	*5	7	*3	17	27	9	5	DNS	-	12	18	29	60	
14	Mauricio Gugelmin	PacWest/Hollywood	Reynard 961-Ford	G	26	25	4	15	15	2	15	16	16	21	12	3	26	21	24	5	53	
15	Stefan Johansson	Bettenhausen/Alumax Aluminum	Reynard 961-Mercedes	G	19	23	6	19	19	16	27	7	9	12	17	5	11	4	17	21	43	
16	Mark Blundell	PacWest/Hollywood/VISA	Reynard 961-Ford	G	17	27	-	-	-	5	22	5	8	11	11	6	10	20	12	24	41	
17	Parker Johnstone	Brix Comptech/Motorola	Reynard 961-Honda	F	DNS	16	24	2	20	11	16	14	5	25	26	18	12	11	11	13	33	
18	Robby Gordon	Walker/Valvoline/Craftsman	Reynard 961-Ford	G	3	15	16	13	22	20	17	26	10	18	9	8	18	17	10	15	29	
19	Emerson Fittipaldi	Hogan Penske/Marlboro Latin America	Penske PC25-Mercedes	G	13	11	25	20	4	10	4	25	20	22	14	25	-	-	-	-	29	
20	Eddie Lawson	Galles/Delco Electronics	Lola T96/00-Mercedes	G	15	21	7	9	17	6	20	6	15	24	15	-	-	-	-	-	26	
21	Roberto Moreno	Payton/Coyne/Data Control/Mi-Jack	Lola T96/00-Ford	F	DNS	9	12	8	24	3	25	23	19	14	23	23	23	22	27	12	25	
22	Raul Boesel	Brahma Sports Team	Reynard 961-Ford	G	14	7	13	16	21	24	26	8	28	26	24	7	22	14	23	20	17	
23	Juan Fangio II	All American Racers/Castrol	Eagle MkV-Toyota	G	21	17	15	25	25	22	19	18	14	13	28	14	20	8	19	28	5	
24	Jan Magnussen	Marlboro Team Penske Hogan Penske/Marlboro Latin America	Penske PC25-Mercedes Penske PC25-Mercedes	G G	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	14 -	- -	- 26	- 22	- 8	5
25	Scott Goodyear	Walker/Valvoline/DuraBlend	Reynard 961-Ford	G	12	DNS	-	-	-	-	-	-	-	-	19	-	-	-	9	18	5	
26	P.J. Jones	All American Racers/Castrol	Eagle MkV-Toyota	G	-	-	-	-	-	-	24	9	24	23	20	16	25	18	13	27	4	
27	Max Papis	Arciero-Wells/MCI	Reynard 961-Toyota	F	-	-	-	-	-	-	-	-	-	-	-	-	24	9	-	22	4	
28	Hiro Matsushita	Payton/Coyne/Panasonic/Duskin	Lola T96/00-Ford	F	18	24	10	28	26	14	28	19	21	17	27	15	19	15	15	23	3	
29	Richie Hearn	Della Penna/Ralphs/Food 4 Less	Reynard 951-Ford	G	-	-	-	10	-	-	-	-	-	-	25	-	-	-	-	17	3	
30	Eliseo Salazar	Team Scandia/Cristal/Copec/Mobil 1	Lola T96/00-Ford	G	-	-	-	-	-	-	21	-	18	-	-	11	15	-	-	-	2	
31	Davy Jones	Galles/Delco Electronics	Lola T96/00-Mercedes	G	-	-	-	-	-	-	-	-	-	-	-	12	16	24	14	14	1	
32	Marco Greco	Scandia-Simon/Int. Sports/Perry Ellis	Lola T96/00-Ford	G	25	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	

1997

Position	Driver	Team	Car	Tires	Homestead	Surfers Paradise	Long Beach	Nazareth	Rio	Gateway	Milwaukee	Detroit	Portland	Cleveland	Toronto	Michigan	Mid-Ohio	Elkhart Lake	Vancouver	Laguna Seca	Fontana	Points total
1	Alex Zanardi	Target/Chip Ganassi Racing	Reynard 971-Honda	F	*7	*4	1	11	4	4	13	26	11	*1	2	1	1	1	*4	3	DNS	195
2	Gil de Ferran	Walker/Valvoline/Cummins	Reynard 971-Honda	G	22	5	*21	4	11	3	7	*3	2	2	25	3	6	3	3	5	6	162
3	Jimmy Vasser	Target/Chip Ganassi Racing	Reynard 971-Honda	F	3	12	9	5	9	5	3	4	19	13	7	24	5	8	2	1	2	144
4	Mauricio Gugelmin	PacWest/Hollywood	Reynard 971-Mercedes	F	6	17	2	9	*22	6	5	16	6	15	6	6	7	*2	1	9	*4	132
5	Paul Tracy	Marlboro Team Penske	Penske PC26-Mercedes	G	2	19	7	*1	1	*6	DNS	7	7	10	4	27	28	28	26	26	121	
6	Mark Blundell	PacWest/Motorola	Reynard 971-Mercedes	F	14	8	13	19	8	24	12	17	1	9	1	2	26	16	7	2	1	115
7	Greg Moore	Forsythe/Player's Ltd./Indeck	Reynard 961-Mercedes	F	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	111
		Forsythe/Player's Ltd./Indeck	Reynard 971-Mercedes	F	-	2	23	16	2	13	1	1	5	24	23	27	2	18	17	24	13	
8	Michael Andretti	Newman/Haas/Kmart/Texaco	Swift 007i-Ford	G	1	3	22	2	21	11	2	2	8	23	4	21	8	26	16	27	19	108
9	Scott Pruett	Patrick/Brahma Sports Team	Reynard 971-Ford	F	5	1	3	10	3	19	9	24	*17	8	5	*14	9	5	18	16	7	102
10	Raul Boesel	Patrick/Brahma Sports Team	Reynard 971-Ford	F	17	7	8	8	5	*14	4	6	3	16	8	18	4	21	6	8	20	91
11	Bryan Herta	Team Rahal/Shell	Reynard 971-Ford	G	10	22	6	7	6	22	15	7	21	3	17	5	*24	11	8	*6	21	72
12	Bobby Rahal	Team Rahal/Miller Lite	Reynard 971-Ford	G	16	10	10	6	10	20	11	9	24	5	9	17	3	6	24	19	5	70
13	Al Unser Jr.	Marlboro Team Penske	Penske PC26-Mercedes	G	27	27	4	3	7	18	20	8	25	4	20	20	22	7	5	11	22	67
14	Andre Ribeiro	Tasman/LCI/Marlboro	Lola T97/00-Honda	F	12	6	14	26	15	10	26	25	13	-	-	-	-	-	-	-	-	45
		Tasman/LCI/Marlboro	Reynard 971-Honda	F	-	-	-	-	-	-	-	-	-	14	3	23	10	22	10	4	17	
15	Christian Fittipaldi	Newman/Haas/Kmart/Budweiser	Swift 007i-Ford	G	26	DNS	-	-	-	-	-	-	4	6	11	16	21	4	9	21	9	42
16	Parker Johnstone	Team KOOL Green	Reynard 971-Honda	F	8	21	5	17	12	7	25	20	9	10	12	25	12	23	11	12	11	36
17	Patrick Carpentier	Bettenhausen/Alumax Aluminum	Reynard 971-Mercedes	G	9	15	15	12	28	2	8	15	16	12	16	15	15	27	-	-	DNS	27
18	Adrian Fernandez	Tasman/Tecate/Quaker State	Lola T97/00-Honda	F	13	11	11	23	26	8	24	27	10	17	14	26	23	12	19	23	3	27
19	Roberto Moreno	Payton/Coyne/Data Control	Lola T97/00-Ford	F	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
		Newman/Haas/Kmart/Budweiser	Swift 007i-Ford	G	-	-	24	14	18	25	10	5	-	-	-	-	-	-	-	-	-	
		Bettenhausen/Alumax Aluminum	Reynard 971-Mercedes	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	10	-	
20	Gualter Salles	Davis/Marlboro/Valvoline	Reynard 961-Ford	G	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
		Davis/Marlboro/Valvoline	Reynard 971-Ford	G	-	24	18	24	19	12	22	21	23	19	18	10	20	13	26	7	14	
21	Richie Hearn	Della Penna/Ralphs Food 4 Less	Lola T97/00-Ford	G	11	13	27	18	14	9	23	23	14	28	27	22	13	9	22	25	15	10
22	Dario Franchitti	Hogan Racing LLC	Reynard 971-Mercedes	F	25	9	12	13	27	17	16	13	26	11	*26	19	11	25	13	13	-	10
23	Juan Fangio II	All American Racers/Castrol/Jockey	Reynard 961-Toyota	G	20	20	26	15	-	-	-	-	-	-	-	-	-	-	-	-	-	9
		All American Racers/Castrol/Jockey	Reynard 971-Toyota	G	-	-	-	-	20	23	21	10	22	21	19	11	25	10	12	15	27	
24	Max Papis	Arciero-Wells/MCI	Reynard 971-Toyota	F	19	14	25	22	13	26	19	11	28	27	15	8	14	15	20	14	12	8
25	Dennis Vitolo	Project Indy/SmithKline Beecham	Lola T97/00-Ford	G	23	-	DNS	DNQ	-	-	-	-	-	-	-	-	-	-	27	20	-	6
		Payton/Coyne Racing	Lola T97/00-Ford	F	-	-	-	-	-	-	-	-	-	-	28	7	-	-	-	-	-	
		Payton/Coyne/SmithKline Beecham	Reynard 971-Ford	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
26	Robby Gordon	Hogan Racing LLC	Reynard 971-Mercedes	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
27	Hiro Matsushita	Arciero-Wells/Panasonic/Duskin	Reynard 961-Toyota	F	21	25	20	25	23	-	-	-	-	-	-	-	-	-	-	-	-	4
		Arciero-Wells/Panasonic/Duskin	Reynard 971-Toyota	F	-	-	-	-	-	15	17	19	15	20	22	9	19	24	14	28	23	
28	P.J. Jones	All American Racers/Castrol/Jockey	Reynard 961-Toyota	G	28	26	16	21	-	-	-	-	-	-	-	-	-	-	-	-	-	3
		All American Racers/Castrol/Jockey	Reynard 971-Toyota	G	-	-	-	-	16	21	14	14	20	25	21	28	17	14	25	17	10	
29	Michel Jourdain Jr.	Payton/Coyne/Herdez/Viva Mexico!	Lola T97/00-Ford	F	18	18	17	20	17	16	27	-	-	-	-	-	-	-	-	-	-	1
		Payton/Coyne/Herdez/Viva Mexico!	Lola T96/00-Ford	F	-	-	-	-	-	-	-	22	-	-	-	-	-	-	-	-	-	
		Payton/Coyne/Herdez/Viva Mexico!	Reynard 971-Ford	F	-	-	-	-	-	-	-	-	12	18	13	13	18	20	21	22	18	
30	Amd Meier	Hasseroder/Marcelo/Hawaiian Tropic	Lola T97/00-Ford	G	-	16	-	-	25	DNS	-	18	18	22	24	12	16	19	-	-	25	1
31	Christian Danner	Payton/Coyne	Lola T97/00-Ford	F	-	-	-	-	-	-	-	12	27	-	-	-	-	-	-	-	-	1
		Payton/Coyne	Reynard 971-Ford	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	-	-	

1998

Position	Driver	Team	Car	Tires	Homestead	Motegi	Long Beach	Nazareth	Rio de Janeiro	Gateway	Milwaukee	Detroit	Portland	Cleveland	Toronto	Michigan	Mid-Ohio	Elkhart Lake	Vancouver	Laguna Seca	Houston	Surfers Paradise	Fontana	Points total
1	Alex Zanardi	Target/Chip Ganassi Racing	Reynard 981-Honda	F	3	23	1	2	2	1	8	1	1	1	1	3	12*	2	4	2	2	1	3	285
2	Jimmy Vasser	Target/Chip Ganassi Racing	Reynard 981-Honda	F	16	*7	8	1	6	4	1	6	8	*7	3	2	27	9	26	5	4	24	1	169
3	Dario Franchitti	Team KOOL Green	Reynard 981-Honda	F	9	8	2	21	*19	27	4	4	21	3	*20	21	*26	1	*1	4	1	*2	22	160
4	Adrian Fernandez	Patrick/Tecate/Quaker State	Reynard 981-Ford	F	6	1	—	26	—	18	9	—	—	5	9	—	1	5	—	7	6	6	4	154
		Patrick/Tecate/Quaker State	Reynard 971-Ford	F	—	—	4	—	3	—	—	2	24	—	—	*23	—	—	15	—	—	—	—	
5	Greg Moore	Forsythe/Player's Ltd./Indeck	Reynard 981-Mercedes	F	*2	4	6	3	1	*3	13	*5	27	25	11	1	22	21	20	21	*26	8	2	140
6	Scott Pruett	Patrick/Visteon	Reynard 981-Ford	F	5	21	—	—	18	5	—	9	2	—	—	4	2	—	—	—	—	—	—	121
		Patrick/Visteon	Reynard 971-Ford	F	—	—	12	22	—	—	10	—	—	4	6	—	—	20	3	18	11	4	*20	
7	Michael Andretti	Newman/Haas/Kmart/Texaco	Swift 009.c-Ford	G	1	14	21	18	5	2	26	10	17	2	2	6	21	*15	2	10	28	20	18	112
8	Bryan Herta	Team Rahal/Shell	Reynard 981-Ford	F	8	28	*3	8	4	23	11	21	*3	13	5	10	25	23	22	*1	8	10	15	97
9	Tony Kanaan	Tasman/LCI	Reynard 981-Honda	F	29	6	5	9	27	24	17	8	4	14	22	11	8	4	18	3	3	7	19	92
10	Bobby Rahal	Team Rahal/Miller Lite	Reynard 981-Ford	F	19	17	17	—	8	—	—	—	—	8	4	—	—	8	—	—	—	—	—	82
		Team Rahal/Miller Lite	Reynard 971-Ford	F	—	—	—	6	—	8	5	11	6	—	—	7	3	—	25	16	23	25	11	
11	Al Unser Jr.	Marlboro Team Penske	Penske PC27-Mercedes	G	22	2	29	—	16	19	3	24	5	17	17	22	6	27	5	6	7	22	27	72
		Marlboro Team Penske	Penske PC26-Mercedes	G	—	—	—	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
12	Gil de Ferran	Walker/Valvoline/Cummins	Reynard 981-Honda	G	7	3	20	4	26	6	22	3	20	6	27	16	9	16	13	19	21	14	17	67
13	Paul Tracy	Team KOOL Green	Reynard 981-Honda	F	27	5	25	5	25	26	7	7	28	19	14	9	5	6	11	8	20	23	14	61
14	Christian Fittipaldi	Newman/Haas/Kmart	Swift 009.c-Ford	G	4	25	26	11	21	11	DNS	17	26	11	16	25	13	3	14	9	27	3	7	56
15	Mauricio Gugelmin	PacWest/Hollywood	Reynard 971-Mercedes	F	10	20	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	49
		PacWest/Hollywood	Reynard 981-Mercedes	F	—	—	—	17	9	16	21	19	7	20	12	13	4	19	6	27	18	12	5	
16	Richie Hearn	Della Penna/Budweiser/Ralphs	Swift 009.c-Ford	F	13	27	23	10	7	28	6	23	10	18	7	5	24	13	16	11	9	18	8	47
17	Helio Castro-Neves	Bettenhausen/Alumax Aluminum	Reynard 971-Mercedes	G	24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	36
		Bettenhausen/Alumax Aluminum	Reynard 981-Mercedes	G	—	11	9	23	23	7	2	12	13	27	10	12	17	26	24	22	24	21	10	
18	Mark Blundell	PacWest/Motorola	Reynard 971-Mercedes	F	12	10	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	36
		PacWest/Motorola	Reynard 981-Mercedes	F	—	—	—	20	11	10	12	22	22	10	26	17	19	7	12	25	14	11	6	
19	Patrick Carpentier	Forsythe/Player's Ltd./Indeck	Reynard 981-Mercedes	F	11	19	28	*13	17	15	*25	15	9	9	25	8	7	28	27	17	22	9	26	27
20	J.J. Lehto	Hogan Motor Leasing	Reynard 981-Mercedes	F	14	29	18	16	10	9	19	26	25	28	24	20	15	18	8	28	10	5	21	25
21	Max Papis	Arciero-Wells/MCI	Reynard 981-Toyota	F	26	13	24	14	28	22	16	18	11	12	8	19	14	11	9	12	5	17	16	25
22	Andre Ribeiro	Marlboro Team Penske	Penske PC27-Mercedes	G	17	9	22	DNQ	22	20	18	16	15	22	23	28	10	25	7	14	17	13	28	13
23	Robby Gordon	Arciero-Wells/Panasonic/Duskin	Reynard 981-Toyota	F	—	—	—	7	—	13	20	—	23	23	13	27	11	12	—	—	13	16	9	13
		Arciero-Wells/Panasonic/Duskin	Reynard 971-Toyota	F	—	—	—	—	—	—	—	14	—	—	—	—	—	—	23	13	—	—	—	
24	Michel Jourdain Jr.	Payton/Coyne/Herdez/Viva Mexico!	Reynard 971-Ford	F	28	22	27	—	24	—	—	—	19	26	18	—	—	14	10	24	25	26	12	5
		Payton/Coyne/Herdez/Viva Mexico!	Reynard 981-Ford	F	—	—	—	12	—	17	15	13	—	—	—	18	28	—	—	—	—	—	—	
25	Arnd Meier	Davis/Baan Business Software/TotalTel	Lola T97/00-Ford	G	21	—	15	—	14	—	23	—	—	—	—	—	18	—	—	15	16	27	24	4
		Davis/Baan Business Software/TotalTel	Lola T98/00-Ford	G	—	15	—	24	—	21	—	27	12	16	15	14	—	10	28	—	—	—	—	
26	P.J. Jones	All American Racers/Castrol/Degree	Reynard 981-Toyota	G	20	30	11	—	13	—	14	25	16	—	—	—	20	22	21	—	—	—	—	3
		All American Racers/Castrol/Degree	Reynard 971-Toyota	G	—	—	—	19	—	12	—	—	—	21	19	24	—	—	—	—	—	—	—	
27	Alex Barron	All American Racers/Castrol/Degree	Reynard 971-Toyota	G	18	24	14	DNQ	12	—	—	—	15	28	—	—	—	—	—	—	—	—	—	2
		All American Racers/Castrol/Degree	Reynard 981-Toyota	G	—	—	—	—	—	14	DNQ	20	14	—	—	15	—	—	—	—	—	—	—	
		All American Racers/Castrol/Degree	Eagle 987-Toyota	G	—	—	—	—	—	—	—	—	—	—	—	—	16	24	19	20	12	19	13	
28	Gualter Salles	Payton/Coyne/SmithKline Beecham	Reynard 971-Ford	F	—	12	13	—	20	—	—	—	—	—	—	21	—	23	17	—	—	—	—	1

* Zanardi not awarded championship point for 12th place

G — Goodyear
 F — Firestone
 DNS — Did not start
 DNQ — Did not qualify
 W — Withdrew
 DSQ — Disqualified
 p — Pole position

Drivers are ranked in accordance with the final points table for the season; the figures indicate their placings in each race. Only drivers who scored championship points are shown.