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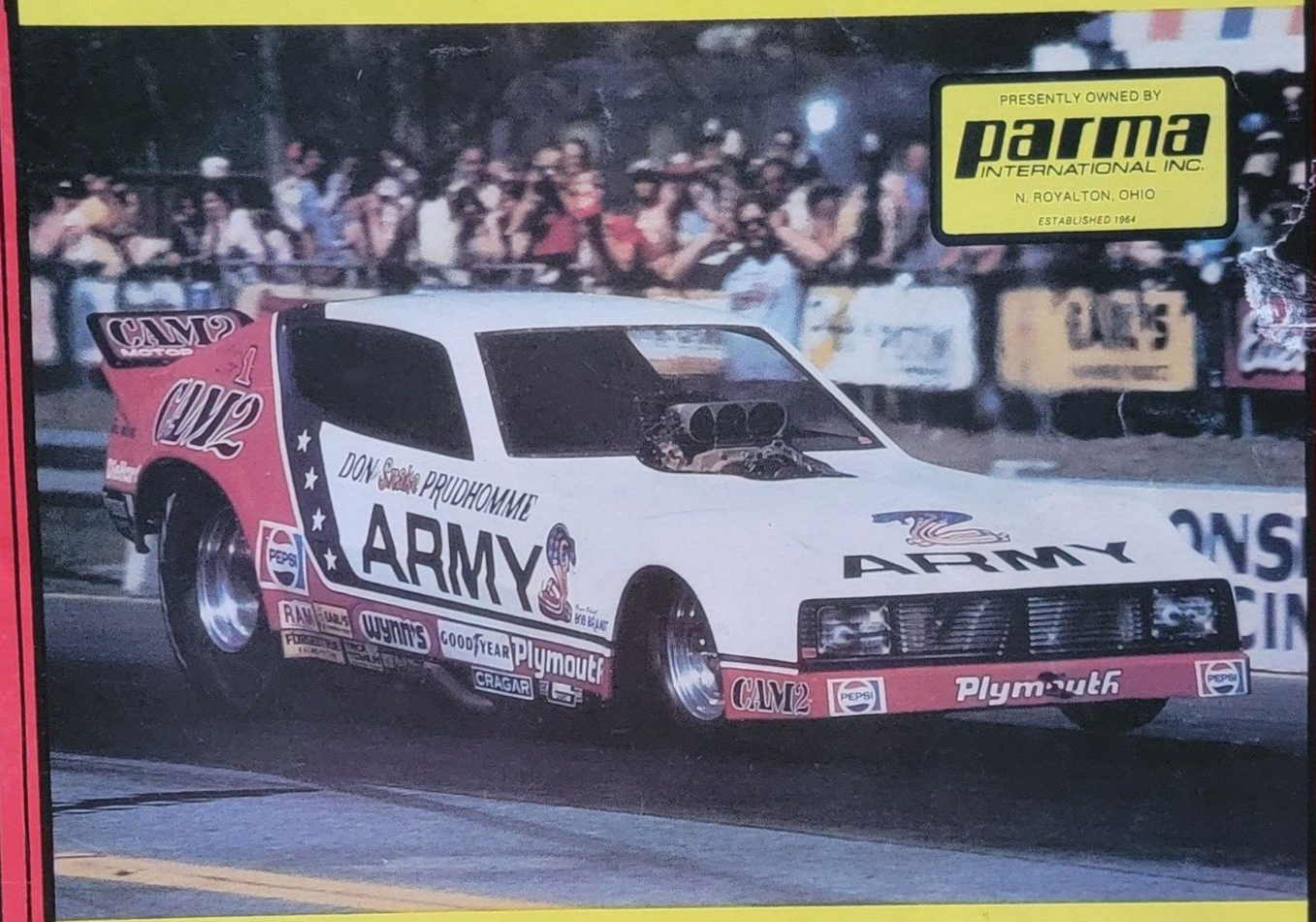


CHICAGO 500 RESULTS

1st ANNUAL SLOT CAR DRAG NATIONALS RESULTS

COMPLETE HOPRA HISTORY • NEW ZEALAND NATIONALS
USRA REPORTS • TECH SHEETS • CARTOONS • AND MORE

History of H.O.P.R.A.

By Mark Rosenwinkel and Bob Dame

The H.O. Professional Racing Association was created in 1969 to provide a forum for H.O. racers to participate in, and enjoy the benefits of organized racing. Since that first race in 1969, hundreds of additional races have been sanctioned and run by HOPRA with thousands of racers partaking in these events throughout the years. HOPRA has always been at the forefront of organized H.O. racing and because of this, the history of HOPRA is the best method for tracing the history of H.O. racing.

The H.O. Professional Racing Association evolved from the old H.O. Competition Club International (HOCCI) that was formed in association with Car Model Magazine. The concept of HOPRA was for an organization governed more by the racers and for the racers, than the HOCCI had proven to be. Carl Dreher, who was the founding father of HOPRA, won the HOCCI championship in 1968 and the Indiana HOPRA championship in 1969 and 1970. 1969 also saw the inception of the Michigan HOPRA series. The East Coast began HOPRA racing in 1971 with Jocelyn Severin copping the drivers championship.

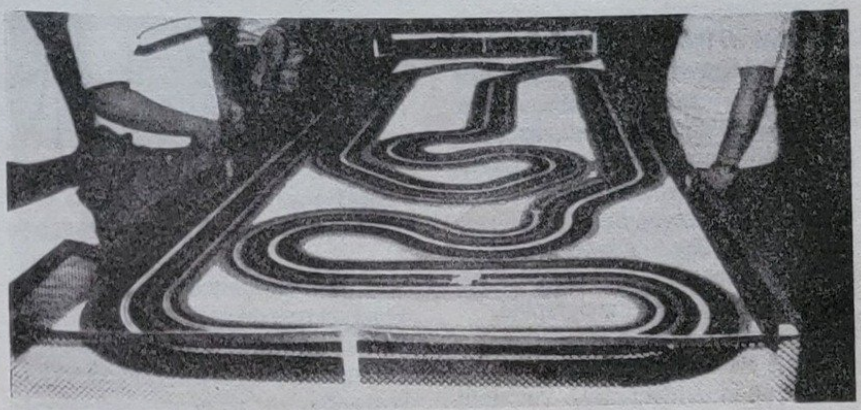
The cars originally raced from mid 1968 through 1971 were heavily modified Aurora T-Jets. Racers ran heavy scratchbuilt pans, home rewinds and braid. The cars appeared crude but they were evenly matched and reasonably fast. Carl Dreher of Gary, IN and Gary Rider of Muskegon, MI were the first hotshoes in organized H.O. racing.

Mid 1971 saw the can engine cars come to the fore of HOPRA competition. These cars were built much cleaner than the previous T-Jet pan cars with less room for error. The can cars had the motors mounted in-line with many more chassis rails and floating pan sections then had previously been run. Most cars had Riggen front flags and rear ends.

With the release of the Aurora A/FX, the days of the in-line cars were numbered. The return to the pancake engine cars was marked by the cars getting heavy once again and by less and less pan movement being incorporated into the chassis. Randy Kemp emerged a top armature man as more racers were going to custom winds rather than their own. Kemp won the 1972 Indiana series after winning seven of ten races. TCP, under Tom Coyne of Flint, MI, burst on the H.O. market with threaded rear wheels and a quality front wheel set that is still in use today (now under the BSRT label). The cars featured solid heavy pans made of brass, copper or steel. The bodies were mounted on floating plumber rails on each side of the chassis. Brush tubes and phosphorous bronze wipers were seen on most cars. Al Miltich from Michigan won the 1973 Midwest inter-state series with this style of car.

By 1973 the biggest race of the season was the annual Michigan vs. Indiana race, first held in 1971. Gary Rider won the inaugural race with Herb Henson of Flora, IL winning in 1972 and Randy Kemp of IN coming home first in 1973. Attempts were made at a National race in 1971, '72 and '73. The first two tries were in Indianapolis and the third in Cleveland. Unfortunately, the races in Indianapolis were not attended by a true National crowd. The Cleveland race had 100 entries including the fastest in the Midwest and East. This included Tony Porcelli, an East Coast racer who had the full backing of Aurora as their factory driver. This gathering was won by Gary Rider and was really the closest thing yet to a National Race.

The cars being run were suddenly changed one day in 1973 when an unknown from Minnesota named Tom Bowman destroyed the best pro's at a Midwest HOPRA race with a car that was based on magnetic attraction to the steel track rails. Bowman glued extra magnets to the bottom of a basically stock car and ran a rewind. H.O. racing was revolutionized overnight. Track records that had been increasing at a snails pace each season were now being shattered by huge amounts. Eventually, the rules were changed to permit only the cars armature magnets to be used for track magnetism. Then one top pro won a race with an Aurora four gear



The 1982 H.O. Nationals were set up in the Cherryvale Mall in Rockford, Illinois. This was the track that was used.

Winding layouts were popular back in the '60's & '70's. This tri-level track was built in 1971.

History of H.O.P.R.A. (CONTINUED)

specialty chassis featuring four and a half armature magnets crammed into it. The rules were then worded to allow only two magnets to be used in the car.

In any event, the cars now being run had a full heavy pan as before but with the material under the magnets removed to lower the magnets closer to the track. It took awhile, but soon it became apparent that having all the weight of the pan was not necessary. The magnets now did all the handling work. Pans began to shrink to what was then called "perimeter pan" cars. These cars just had an aluminum pan around the outside edges of the chassis with the magnets sunk through the plastic. In the summer of 1974, a new racer unveiled a car that was to show the way for the next two and a half years, the "no-pan" car.

With the advent of this new car, a fresh rush of technology came to H.O. racing. The first seven years of HOPRA were very successful in terms of competition, geographic variety and number of racers (the HOPRA attendance record is over 100 for an individual race). But, until 1974 the cars seemed to lag behind a bit in technology. Soon though, racers were truing arms and comms on jeweler's lathes and adjusting everything on the cars with micrometers. With the newfound magnetism and lightness, new harder tire compounds had to be discovered. Racers were now having rear wheels made in machine shops by the hundreds. The old screw on wheels were proving not to be in round enough anymore and wouldn't work with piano wire axles, which were now needed as the increased speed of the cars began tweaking axles not made of piano wire.

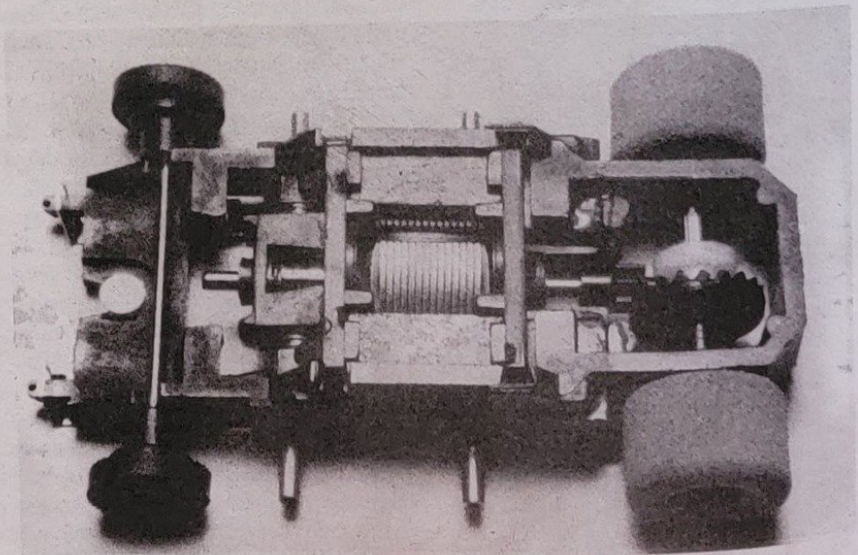
H.O. continued in it's heyday. In 1975 Indiana, Michigan, Illinois and New York all were running unlimited HOPRA series. There were strong clubs in individual cities such as Los Angeles, Kansas City, St. Louis, Cleveland and Montreal. This excitement in racing culminated in the first-ever true H.O. Nationals in Kansas City. This inaugural race was won by Steve Brown of Flint, MI. Brown had a pair of custom samarium cobalt magnets made for this race. Samarium cobalt magnets were later banned from 1976-1978 until 1978 when they became commercially available.

This Coors Thunderbird won 1st place in Super Stock Concours at the 1985 H.O. Nationals. The car belongs to Steve Marek.

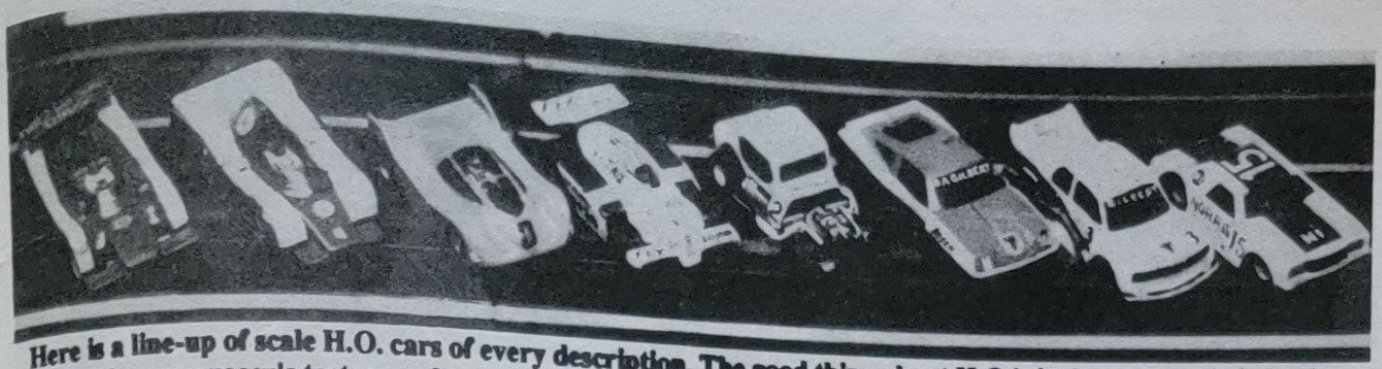
These unlimited ceramic Magna-Traction no-pan cars were raced and refined all the way up until the end of the summer of 1976. Two and a half years of racing these cars had raised them to a level of building technology that few had the time or knowledge for. Joel Pennington of Oak Park, IL won the Nationals and the Illinois driving championship that year, which was to be the last for unlimited racing in HOPRA.

The later half of 1976 saw race attendance drop from over fifty at most races in 1975 to about twenty. Only the hard core racers were traveling to out of state races. The number of competitive pro's building their own cars dwindled. It became obvious that the speed and the difficult construction of the cars was creating an unhealthy atmosphere for growth.

Soon, the first restricted car class was introduced in HOPRA for the fall of 1976. The cars in this class were Aurora Magna-Traction with the restricting rule being the requirement of using the stock electrical system.



This is a close up of a modern day Pro H.O. race car.



Here is a line-up of scale H.O. cars of every description. The good thing about H.O.'s is the very realistic bodies. Virtually every racer's tastes can be matched all the way from Indy cars to hot rods.

The restrictions however, excluded springs, brushes and armatures. This new class went over very well and once again attendance figures were on the rise and the competition evened out.

The next advancement to upset the balance of H.O. racing was the release of samarium cobalt magnets on a commercial basis. Previously, the only racers who owned these magnets had to have them specially produced at a price as high as $200.00 per pair. By allowing only commercially available magnets, the use of these custom rare earth magnets were illegal. This rule was adopted in 1976. Now, cobalt magnets were readily available over the counter for the G+ car at the price of around $10.00. HOPRA allowed these magnets to run starting with the 1978 season. This brought the in-line car to the top of competition once more and made the ceramic magnet pancake car obsolete.

Mark Jones of Colorado won the 1978 Nationals with a samarium cobalt G+ car. This was the first major win for the new rare earth cars. As had been the case since 1976, the stock electrical system rule, with a few exceptions including the armature, was retained for these new cars as well. this really meant that wipers weren't allowed but didn't imply that over the counter replacement parts were not permissible.

Thom Hitchcox and Rick Davis of Detroit (the same Davis of 1/24th and renowned R/C fame) developed the cobalt G+ car to it's highest pinnacle of the time. These two introduced the idea of getting the bottom, outside edge of the magnet directly over the track rail. This was done by tilting the magnets and radiusing them slightly to accommodate the armature. Hitchcox and Davis also had two hundred pair of the best yet rear wheels made. These wheels closely resembled 1/24th scale rims as they used set screws and had a high profile. This higher profile allowed for greater experimentation with rubber compounds, as previously soft sponge was now usable again due to the increased diameter of the wheel. Also showing up now were hand wound brush springs of various wire types made necessary by the lack of quality replacement springs available that could stand up to the heat generated by the cobalt cars.

The 1979 Nationals were held in Detroit, MI on a 98'6" track with twelve (!) inside 6" radius turns. The track was on three 4' x 8' boards constructed in a "T" fashion. As is the HOPRA standard, there were eighteen volts of battery power. Thom Hitchcox of MI was high qualifier with a single lap best of 4.61 seconds. The run was the fastest any car had done in HOPRA qualifying to that date. While 1282 feet per minute is fast, you had to have seen the track it was done on to really appreciate the true speed of the car. Kim Bartholomew from Canada wound up the surprise winner that day when Hitchcox stripped his gears in the main event.

Once again though, the cars had gotten too fast and difficult to race with at the HOPRA level. While the top pros weren't having any trouble construction and racing the cars, new racers were getting scared off upon the sight of the cobalt monsters. With the price of the magnets doubling, HOPRA once again decided to slow itself down at the expense of the speed of the top pro's and for the good of the rest of the participants of the sport. A pattern was emerging, when the cars were becoming too expensive and difficult for the average racers to be competitive with, the race attendance always seemed to drop. Thus over the years, HOPRA has continually been adjusting the principle car rules and keeping a distance from an all-out builders class and trying to have enough restrictions in the rules to keep the building aspect at a reasonable level. There is still enough room for the serious builders to be satisfied, and indeed a top notch building effort is still a definite ingredient in any winning car.

History of H.O.P.R.A.
(continued)

Beautiful layouts such as this one are common around the country. This 56 foot four lane AFX track is powered by 18 volts battery power, and belongs to Doug Gilbert in Loves Park, Illinois.

This task of slowing the cars down was accomplished by outlawing the use of cobalt magnets and requiring stock ceramic magnets to be used in the G-Plus cars starting with the 1979-80 racing season. The shims and flux collectors were left unrestricted and this was now the area that many racers concentrated on when building these new ceramic based cars. The idea of 'angling' the outer edge of the magnet was carried over from the cobalt cars as racers did this to the ceramic G-Plus' as well. Many racers also experimented with the flux collectors and ran 'sandwich' shims of varying magnetic and non-magnetic metals behind the magnets. Other racers began the concept of running a basically stock flux collector but of using some form of 'shim cover' on the bottom of the flux collector. The shim cover allowed the cars to run lower than an uncovered shim car since the covering prevented the car from sticking and bogging out on the track rails. Kim Bartholomew of Canada won the 1980 Nationals held in Indianapolis, IN with a covered shim car while Mark Rosenwinkle of Oak Par, IL was second with an angled magnet 'sandwich' shim car. Craig Reynolds from the Indianapolis area was crowned the amateur champ that year.

1981 ushered in the era of the 'Restricted Open' car class. The shims were now required to be stock with no additional ferrous materials allowed around the stock magnets and the magnets themselves were required to be straight up and down. (non-angled). However, flux collector coverings were permitted. The original intent of this class was based on a formula derived around the popular G-Plus car to make a car easier to build than a competitive Magna-Traction car. At the time, it was thought that the ceramic magnet G-Plus could never be as fast as the state-of-the-art Magna-Traction cars but this myth was quickly dispelled as racers became more familiar with the in-line type of cars. The 1981 Nats held in Jackson, MI used these rules and was run on Alan Miltich's revised TCP six-lane course. Thom Hitchcox of Detroit won the National Crown last year.

As the racers adapted themselves to this car class, many new innovations and parts were created for the G-Plus cars. Leading the way in this development were Joel Pennington and Thom Hitchcox who along with Rick Kniffle had garnered a sponsorship deal with Aurora and were at the time known as 'Team Aurora'. While they were given a wealth of stock parts from the factory, all of the new and superior hi-tech parts were innovated by the racers themselves. Precision, light-weight parts such as delrin wheels, aluminum brush barrels, titanium axles, steel pinions, nylon motor bearings and aluminum body pins came about in the next year. The chassis sported a much harder and longer wearing hard chrome plated shim covering which permitted the cars to run lower without the worry of wearing through the covering and the rear axle was moved forward to shorten the wheelbase. Short-stack armatures came into use and controllers now were modified with 'boxes' and other attachments to help control the car. Team Aurora was almost dominant during this period, with Thom Hitchcox winning the MI HOPRA series and a 1-2 sweep at the warm-up race for the 1982 Nationals. By the actual National race however, a few others had a grasp on these new technologies and had started to bridge the gap to Pennington and Hitchcox.

The 1982 Nationals were held at the beautiful Cherry-Vale mall in Rockford, IL and had many new faces present. The East Coast had become involved with HOPRA again led by T.D. Martin and the SOMMR organization. Bob Lincoln from PA was present with a couple of drivers and backing from the AmRac car manufacturer. Joel Pennington T.Q.'d but was closely followed by two-time champ Kim Bartholomew. The main boiled down to a battle between these two until Joel spun a pinion while trying to hold onto the lead. Kim went on to win with a closing Al Thurman from Indiana second.

The 1983 Nationals took HOPRA back to the scene of the very first ever National H.O. Race, Independence, MO. This race was again held at a spectacular mall, the Independence Mall and was hosted by the MoKan racing group. The most racers at a Nationals race to date turned out with racers attending from coast to coast including Gary Beedle leading a contingent of racers from

CA. Joel Pennington showed that in addition to being National Director, he could still build a fast car and qualified an awesome .25 seconds clear of the field. In the race however, Rick DeRosa of IL charged past the field to claim his first Nationals victory followed by Kim Bartholomew, Joel Pennington and local racer Craig Braga rounding out the four-man main.

Tyco had now introduced the Magnum 440 and while the car was catching a strong following, in it's present form it was not competitive with the G-Plus cars in the Restricted open class. Only one car entered at the 1983 Nats was a Tyco, although a separate race just for Tyco's was included at the National event.

During the next year, the Tyco car caught favor among many racers and with the advent of the 440 X-2, the HOPRA rules were changed to allow angled motor magnets in the Tyco and also permitted turning the traction magnets upside down and lengthwise. This transformed the Tyco 440 X-2 into a race car capable of winning. Nowhere was this more evident than at the 1984 Nationals in Detroit, MI. While Rick Davis was top-qualifier on his own incredible six-lane track in a G-Plus, second qualifier Scott Terry was using a graphite-pan, almost scratchbuilt Tyco. The Super-Semis had an even split of car types, 6 were G-Plus and 6 were Tyco. In the end, it was the Tyco's of Mike Wilson, of MO and Tony Porcelli of CA, that finished ahead of the leading G-Plus of Rick Davis. Later on however, it was rumored that Wilson's car had illegally altered magnets, but all the same, the handwriting was on the wall for the G-Plus cars.

In the next year, most all of the top racers were now switching to Tyco. The Tyco cars proved more consistent but not quite as fast as a G-Plus while the G-Plus cars were quicker for a given lap, but couldn't match the consistency of the Tyco. This had the intriguing result of many qualifying records still belonging to G-Plus cars, but races were being won with Tyco.

The 1985 Nationals in Bollingbrook, IL proved how much the Tyco had taken over. Only a few G-Plus cars could even be found. But the easiest one to find was Al Thurman's since he had put a G-Plus on the pole! Al had his bad luck at the Nats continue and ran into problems for the third straight year and this set the stage for the first ever all Tyco main at a National race. Controversy was added to the Nationals this year, as the first and second finishing cars of Kim Bartholomew and Bob Lincoln were both disqualified after the race for failing to allow a post-race technical inspection of their cars when questions arose over the legality of their magnets. Tom Shepherd from IL then became the winner with Rick DeRosa second.

The Super Stock car class had been added to the HOPRA National Rules the previous year and this class was used to reintroduce an amateur National Champion. Ken Myle from PA was the winner with top-qualifier Tom Thompson from IL second, Mark Pfiefer of IN third and Tony Mourkas of PA fourth.

The next year saw the rules for the Super Stock and Restricted Open class being further refined with few major changes taking place. The Tyco 440 X-2 now was clearly the car to go with in either class. With this rule stability, the car building stabilized a bit with most racers concentrating on fine tuning of the cars for any added advantage they could get. This brought about much close racing with new winners at many races. With the Super Stock class catching on very strongly, HOPRA now had two solid car classes set.

While the Super Stock class was defined to be a very restricted class to keep building advantages to a minimum and thus make it easier for newcomers to take part in the racing, the Restricted Open class, while not totally an unlimited class, still at times is difficult for the less experienced racer to compete in when they are against the top racers in the country. A new class, the Modified class, was conceived to fill this void as an intermediate class between the Super Stock and Restricted Open classes and to give a place for those racers who wanted to move up from and out of the Super Stock class but were not yet ready to take on the top pros in the Restricted Open class a place to run in. This class allowed for open motors and additional chassis cutting and replacement parts usage than the Super Stock class.However, the magnets had to be in the stock location and could not be moved around and this made for a simpler car to build than the angled magnet Restricted Open cars. This class was tried in many parts of the country but seemed to catch on best out East.

The 1986 Nationals, held in the spacious Optimist Sports Arena in Jackson, MI added the new Modified class to be run at the Nationals along with the Super Stock and Restricted Open classes. For the first time, three classes and three National Champions would be crowned. The Modified class had an interesting mixture of amateur, semi-pro and pro drivers. Bob Stockman of MN won that race to become the first ever winner of the HOPRA

Modified National Championship. Jamie Hershberger of PA took the honors in the Super Stock class with Rick DeRosa of IL winning his second National title in the Restricted Open class.

The 1986-87 season saw the addition of two new classes to the HOPRA rule book. This was done to further cover the gambit of skill and experience levels to open up first-class H.O. racing to even more participants. For the very beginner, a Box Stock class was created and for those who wanted to race the ultimate H.O. slot cars, the Unlimited class was defined. Both classes are what the class names insinuate they are. The Box Stock class is for over the counter cars with only minor tuning permitted. The Unlimited class covers the other end of the spectrum with the only limitations being dimensionally (width and length) and that the car must have at least 4 wheels and only one guide pin. With the addition of these classes, HOPRA now had a place for everyone to race at no matter what their level of skill, experience, knowledge or budget may be.

The established classes of Super Stock, Restricted Open and Modified were still the classes raced most often, but the newly created classes, especially the Unlimited class, offered a well ruled alternative for those wishing to race these types of machines. The MI Open, a $500 guaranteed purse race, came about to let those racers that wanted to compete with the new unlimited cars a chance to do so. Bob Colleran of WI won that race and proved throughout the year that he was the one to beat in the Unlimited class. Bob pioneered the use of 'neodymium' as a magnet material instead of the cobalt that was popular for these cars up to that time (neodymium runs almost twice as strong as cobalt).

The old cobalt cars of the past were soon outdated by the new unlimited creations. Rather than rely on the motor magnets for attraction to the track rails, the newer unlimited machines now leave the majority of the track magnetism to additional magnets set in the car specifically for that purpose. With this in mind, the angled motor magnet set-up was abandoned for the standard set-up in the new unlimited cars to give a better magnetic field to the armature. So much downforce was now generated by the neodymium magnets that racers were forced to use ultra-firm compound tires, with some using stock hard-rubber tires. Chassis in these new cars differed vastly, from almost stock to scratchbuilt ones made from graphite or even steel.

HOPRA moved forward with the promotion of H.O. scale auto racing and reached out to many new racers during this time as well. In the biggest promotional event for slot car racing in a long time, HOPRA was present at the 1987 'Indy Motorsports Expo' held in conjunction with pre-race activities for the Indy 500 in Indianapolis, IN. Tens of thousands of racing fans were exposed to H.O. scale auto action at the Hoosier Dome where the event was staged. Al Thurman won the special oval race that was co-promoted by HOPRA and the MARA racing group and used the popular HOPRA Super Stock class rules.

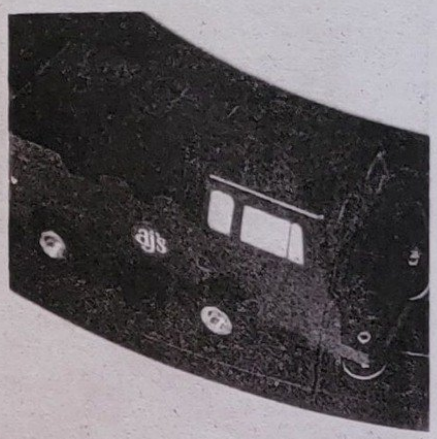
With the Nationals back at the Optimist Sports Arena in Jackson, MI again in 1987, this meant that for the first time ever, the Nationals were held in the same location on successive years. The results turned out to be extraordinary. Nine tracks including an oval and a drag strip in addition to the other HOPRA spec road courses, two of which were brought down from MN, were placed in the sports arena. The attendance record at a National Championship event was again broken, with 114 participants traveling from MA to CO and all points in between to attend the race. The rules stability of the past few years led to close racing in all the classes. In the end, LeRoy Thompson of IL won in Super Stock, while Steve Medanic of MI took the laurels in both the Modified and Restricted Open classes. The 1987 Nationals also took the re-creation of the Unlimited class into consideration and had a 'bucks' Unlimited class race as part of the event. Steve Engler from MN won the cash in this race after pre-race favorite Bob Colleran broke while leading.

The future trend in HOPRA still seems to lie with the more restricted classes since these are more assessable for the masses to be competitive in. The current cars are very competitive and fast enough to keep everyone happy. If HOPRA ran the fastest possible class (Unlimited) as the primary class, the speeds (and expense) of the cars would probably improve vastly, but due to past experiences, HOPRA has learned that the sport would most likely deteriorate as many new racers would not be able to be competitive in the Unlimited class and quickly become disheartened with the racing. Thus, HOPRA has over the years learned to opt for more restricted car classes with enough building left to satisfy the top pros. The Unlimited class will still see use, for those racers and races that want to see the ultimate H.O. speed machines, but for the majority of racing, the ceramic classes will undoubtedly still be used.

In the years to come, look for even better racing as HOPRA continues it's quest for the advancement and promotion of H.O. scale auto racing.

To become a part of the bright future of HOPRA H.O. racing, write:

Bob Dame, HOPRA National Director, 1355 Calhoun St., Kalamazoo, MI 49007-2118
or
Tom Arthur, HOPRA Public Relations Director, 923 Chelsea Ct., New Lenox, IL 60451.



No history of HO would be complete without a photo of Oscar the track cleaner.