

## World Championships

"The art of psyching and Kent Clouts them"

ANAHEIM, the home of Disneyland was to be the location of the very first World Championship event for 1/12th electric racing cars. Yes, California the land of dreams where the sun always shines and nobody loses was to provide a Mickey Mouse world of fun and entertainment for 120 drivers. These competitors from most corners of the world would also find out that you can have fun, but when it comes to winning the USA knows all the punches.

The International Federation of Model Auto Racing (IFMAR) is made up of the American sector (ROAR), the Japanese sector (JMRCA) and the European sector (EFRA). These sectors are allowed to allocate 40 drivers each to take part in the World Championship which alternates each year between the 1/8th and 1/12th scales. This year, 1982, it was to be the first turn of the 1/12th electric and it was accepted that ROAR would arrange it in California. Note, that it has been proposed that the 1984 event will be held in the European sector, and so you will not have to save a fortune to witness this spectacle next time as it may even be in England. Well, for those of you who spectated at the European Championship and thought that was competitive, then the World

Championship was really big business, with very little of the amateur friendliness of the Eurochamps.

The event was held outside on asphalt, with 8 minute races and this meant that a lot of competitors including the British were going to start with a handicap, since racing is mostly indoors and often on silicone tyres in those countries where the weather is not so sunny.

Report and Photographs by Nick Adams

Two separate classes were to be run side by side; these were stock (standard) and modified. The only difference being that in stock class each entrant would draw a motor from an identical box of motors, so that all competitors would have an equal chance; whereas in modified class the motors could be modified according to the rules.

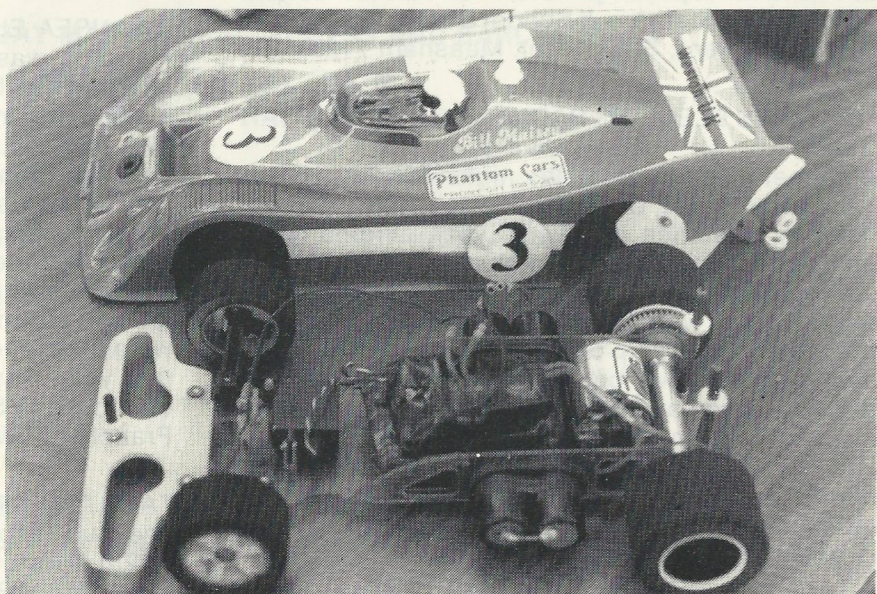
The stock motor chosen by the organisers, at an unannounced draw,



World Championship Track



Ralph Burch, fresh from winning the American Nationals, is boy wonder from TEXAS driving for JOMAC.



The PHANTOM was the highest placed LEXAN monocoque car with Neal Francis driving harder than anyone to achieve 7th place in qualifying for modified class. Note the use of servo mounting posts. Front to rear strengthening rods were tried in practice, but were discarded.



The British Team



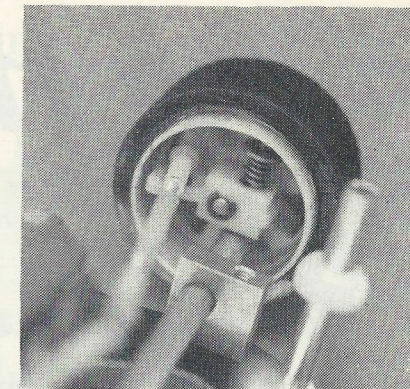
The DELTA team looking very relaxed after it was all over. Kevin Orton, Arturo Carbonell, Roman Hlasensky, and the governor Bill Campbell.

was the brand new Yokomo 05. Samples were made available to competitors in advance, although the ones at the event were an updated version with smaller brushes. However, as all motors were guaranteed to be within 5% it would not be important what specification the motor was, since 4 days of practice would soon sort out the gear ratio.

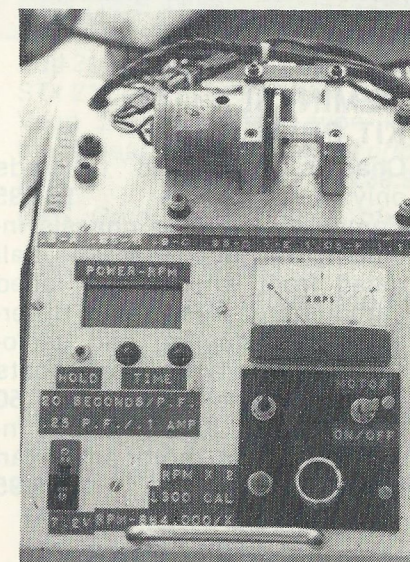
What we did not appreciate, naively, was that the Yokomo 05 listed in the rules under modified motors was in fact quite a different factory motor and not an invitation to modify the stock motor. This even caught out the American manufacturers who had not taken the initiative, unlike Associated, and contacted the Japanese factory for a supply.

The American manufacturers appear to indulge very much in trying to out-psych each other and the fact that everyone, including the British fell for the Yokomo psych-out was not unbelievable to anyone who had seen the illusionists at work in Disneyland.

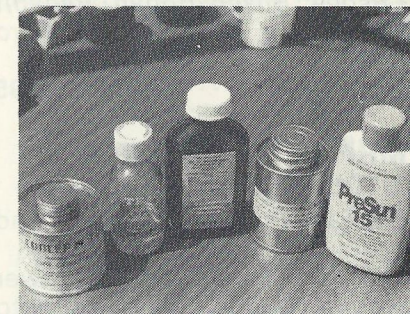
Now that was psych number 1, but psych number 2 was so excellent that I am not sure whether I ever left the gates of Mickey Land. I refer, of course, to the tyre cleaner known as Copper Tone Factor 15. Well, the foreign drivers were pretty red raw after standing in that Californian sun on the first day and the British realised that knotted handkerchiefs were not as effective here as on Blackpool beach and that all those suntan bottles laying in the American pit tables must be the answer to their golden tans. However the fact that they kept squeezing it on to the tyres was probably just a joke to amuse the natives. Also they seemed to suffer badly with muscle disorders according to all the Wintergreen oil laying around. Probably the result of too much surfing or playing the incredible hulk with the valley girls. Well the psyching was kept up to the end and we were lead like lambs to the chemist to buy the right Factor 15 and the Wintergreen, and even if we didnt get any grip we sure got a



Detail of winning Delta steering assembly. Showing simple springing, and adjustable castor, although it was raced with 0 degrees and the original Associated stub axle assembly.



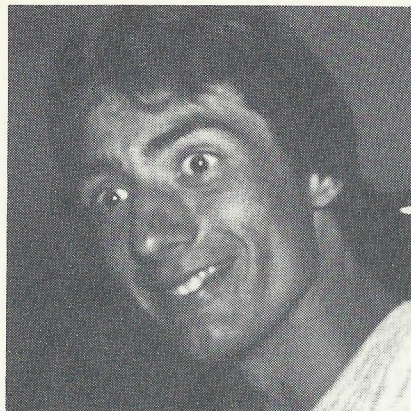
Delta meant business from the beginning and brought their own motor tuning dyno.



Tyre cleaners flowed like wine. This collection was just a few: Concept 2, TEAC, Wintergreen, Neutech, and Factor 15.

nice smooth skin.

Now for the grand slam, psych number 3. We assumed that three maybe four sets of nicads would last the event and that the only problem would be obtaining a coolbox of ice to keep the nicads out of the sun. Being British we thought that sitting out in the midday



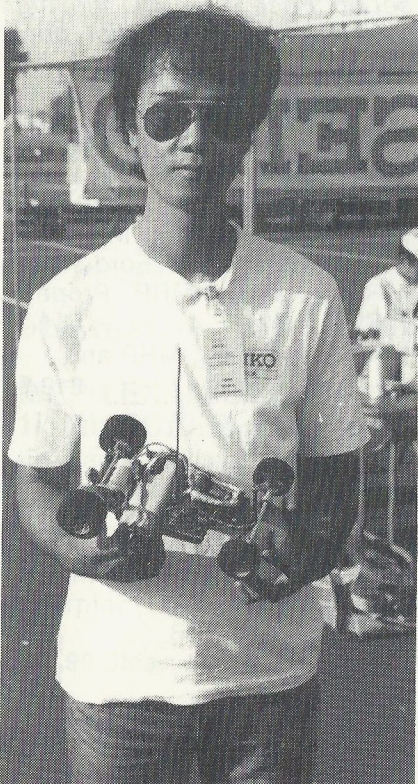
Dave Withall "I've heard of big psych-outs but thats the biggest!"



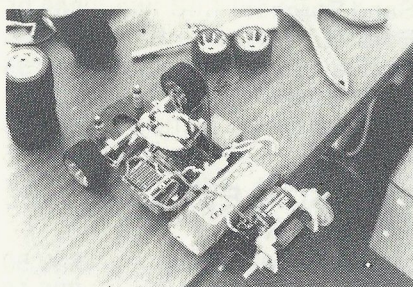
The opposition was tough



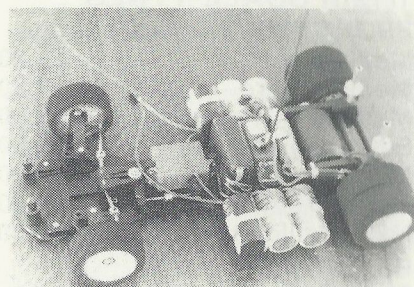
The Japanese had all the right equipment, but they confessed that back home they race 10 lap sprint races of 2 to 3 minutes. They could not find the secret of charging for 8 minutes and often went flat.



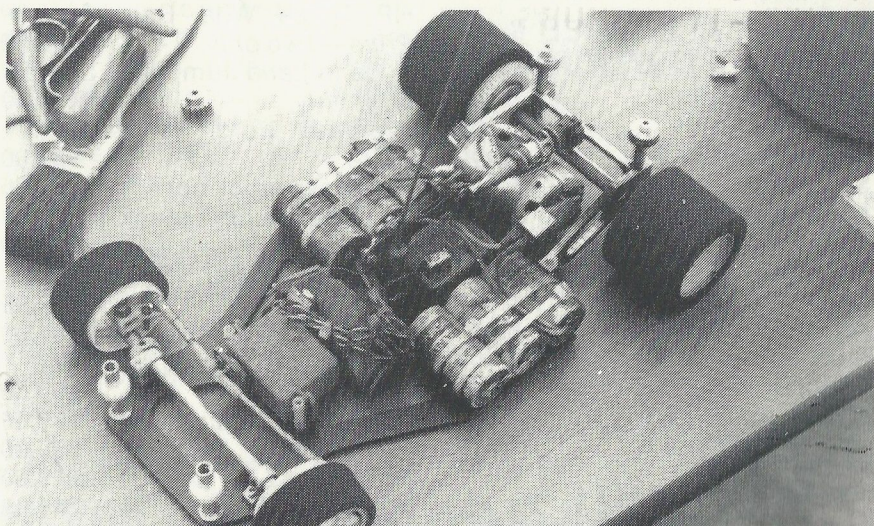
Kunsei Takeda qualifying 20th was the highest placed Japanese, who failed to live up to the rumours about their skills. Here he exhibits the AYK car.



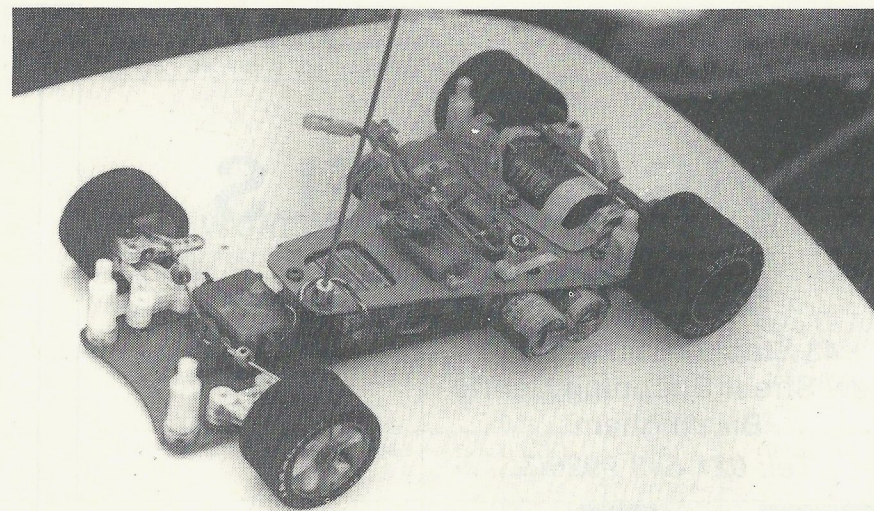
AYK car featuring their new GZ480 motor, centre differential, and strange speed control with adjustable brake. Thirteen Japanese made this the second most popular car.



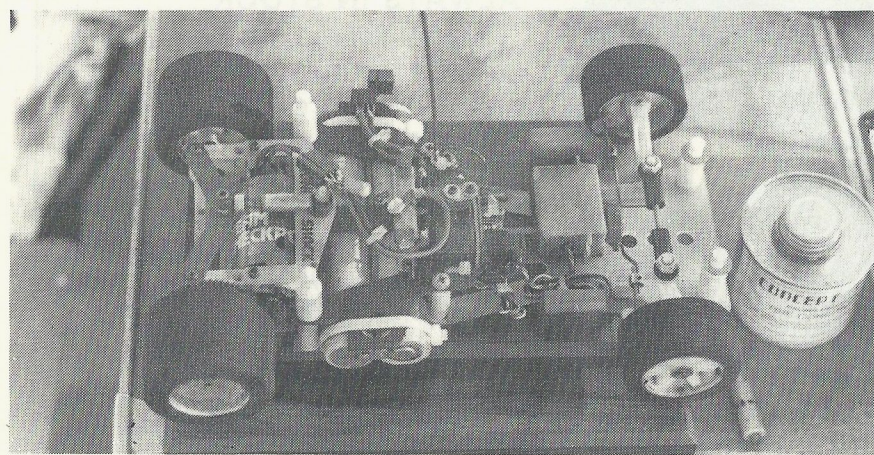
The MRP GP12 qualified 12th in the stock class by Joel Johnson of the USA. Of all plastic construction it was driven by 10 of the entrants.



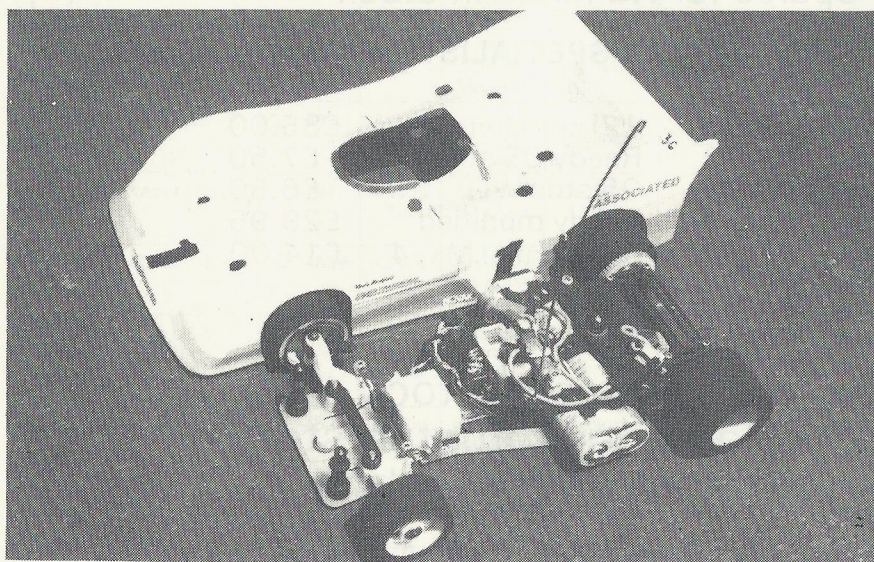
Arturo's Delta Super Phaser Prototype as it came off the track after winning the World Championship modified class. Note the amount of tyre dust thrown up from the track. The rear shock assembly is seen above the Delta motor. The front steering, set to 0 degrees castor, has the latest Associated stub axle blocks.



Bob Rule of BoLink was very entertaining with his yo-yo at the banquet and he also showed off the BoLink Challenger. The rear pod has the mandatory floating fixing to the shaker plate.



The modified Associated 12i of Frank Killum was very impressive. Note the shock above the checkpoint motor. The shaker plate had extra front posts, as did many of the Associated cars. The Concept 2 tyre conditioner was painted on with a brush.



The winning World Champion, Stock class, car of Kent Clausen. Extensively lightened with holes and hollowed out wheels. Note the lack of servo saver and the way the steering arms are taken from the bottom of the servo to prevent bump steer. The centre spine was of fibre glass unlike the Kydex kit item, and was bolted at each end, but not glued. A central post was used at the front of the shaker plate.

sun may cause a little insanity (more in the case of Wayne) but, even so, something was playing tricks with our hearing. People were talking of huge piles of nicads, and new sets, being discarded after just one run. And there was more: charging direct from 12 volts and monitoring cell temperatures up to 120 degrees centigrade. Of course we never fell for that one, but then again we also did not have \$27 to spend, per set of nicads at the Ranch Shop.

By now all the other psychs were small fry and we would only stoop low enough to investigate them when we were passed by another car in the fair and equal stock class.

By now all the other psychs were small fry and we would only stoop low enough to investigate them when we were passed by another car in the fair and equal stock class. Unfortunately we soon all looked like hunchbacks from Notre Dame as we searched for any excuse why our Lexan cars would not turn or grip when even the white gloved (Mickey Mouse?) Japanese with their AYK cars (which had been the butt of many a cruel joke at the British 24 hour race) swooped round the track like starions.

Psych-out excuses flowed like Bigboy Hamburger Relish:

"It's their steerwheel transmitters", "...no, their special Rubalex 431 tyres", "they always true their tyres to 2.025 inches", "their Sanyos have ME on them", "TOJ bodies are it man", "you must mount the steering servo upside down", "ball joints are balls", "theirs flex backwards and forwards", "they're zapping their motors before every run", "you must cool your nicads to 40 degrees centigrade at night", "soak your tyres by your bed at night", "increase your body wing by 1/2 degree", "decrease the castor", "wear sunglasses", "get a huge beer gut".

Unfortunately the latter suggestion was the only one to sink in as we sunk more and more Buds (Budweiser) in the female oil wrestling joint, and later sunk lower and lower into the motel pool hoping to drown our sorrows, and like Gollum find the clue to that precious IFMAR gold ring.

Hope springs eternal they say and Jimmy Davis for Britain followed that light in the sky to the Associated pit and proceeded to show that with the right car (12i) we can drive as well as any, no matter how many psych-outs they throw at us. Unfortunately too many Buds had drained the resources of the other British drivers and with some pride they carried their Lexan torch to the bitter end perhaps believing in their own minds that "if only we had had those special kit tyres then it would have been different".

The photographs, results and statistics tell the history of the event, but without doubt Arturo Carbonell is an outstanding driver and well deserved to win the modified class event. Similarly, Kent Clausen won with exceptional driving and yet he contrasted the open quiet Arturo by being supercool, unforthcoming and almost bored by the

lack of competition. Being one step ahead is the name of the game, but being one psych behind is the name of losing.

### IFMAR WORLD CHAMPIONSHIP—1/12TH ELECTRIC STANDARD RESULTS

Pos & Name	LapTime	Make	Chassis	Diff	Control	Front	Rear	Nicad
1 Kent Clausen USA	33 489.3	Assoc 12i	Kit glass fibre	kit Assoc carbon	Assoc 0.8ohm lt wt	Assoc Sk 1.76"	Assoc soft 2.025"	Sanyo ME
2 Repete Fusco USA	33 492.1	Assoc 12i	kit glassfibre	kit Assoc carbon	1ohm lt wt	Assoc Sk 1.76"	Assoc soft 2.06"	Sanyo ME 4A ch.
3 Frank Killam USA	32 486.5	Assoc 12i	kit glassfibre	kit Assoc carbon	1ohm lt wt	Assoc kit soft 1.76"	Assoc kit soft 2.01"	Sanyo ME
4 Jimmy Davis GB	32 487.6	Assoc 12i	kit glassfibre	kit Assoc carbon	Demon IC Electronic	Assoc kit soft 2.0"	Assoc kit soft 2.08"	Sanyo ME 4A ch
5 Mike Lavacot USA	32 489.9	Assoc 12i	kit glassfibre	kit Assoc carbon	.8ohm lt wt	Assoc Sk 1.76"	Assoc kit soft 2.06"	Sanyo ME
6 Bud Bartos USA	31 484.0	Parma Panther	Lexan Lt wt	Assoc carbon	1ohm lt wt	Parma firm 1 1/8"	Parma medium 2 1/8"	Sanyo Red letter ME
7 Ralph Burch USA	31 484.6	Jomac 2000	Lexan Lt wt	Jomac carbon	0.8ohm lt wt	Jomac R431 C 1.80"	Jomac 8515 D 2.05"	Sanyo Letter MC 4A ch.
8 Mike Toland USA	31 491.3	Assoc 12i	kit glassfibre	Assoc kit carbon	1ohm lt wt	Super soft narrow 2.0"	Assoc kit soft 2.06"	Sanyo ME
9 Bruce Hickman USA	30 480.5	Assoc 12i	kit glassfibre	Assoc kit carbon	1ohm lt wt	Super soft 1.76"	Assoc kit soft 2.06"	Sanyo ME peakout
10 Arturo Carbonell USA	24 420.4	Delta Super Phaser	Flat carbon Prototype	Assoc carbon	0.8ohm Parma lt wt	Delta 1240 B 1.85"	Delta 1248 B 2.06"	

### IFMAR WORLD CHAMPIONSHIP—1/12TH ELECTRIC MODIFIED RESULTS

Pos & Name	LapTime	Make	Chassis	Motor	Diff	Control	Front Tyres	Rear Tyres	Nicad
1 Arturo Carbonell USA	33 483.1	Delta Super Phaser Proto	Flat pan Carbon with Damper	Delta IG No. 84	Assoc. Graphite	Parma 0.8ohm BoLink Wiper	Delta 1240 B 1.85"	Delta 1248 A 2.06"	Sanyo Letter 3.5A ch
2 Frank Killam USA	33 488.4	Assoc 12i	Fibre Glass Modified	Checkp't Sagami	Assoc carbon	Parma 1ohm	Assoc kit Soft	Assoc kit Soft	Sanyo ME
3 Jimmy Davis GB	33 489.1	Assoc 12i	St'd kit glass fibre	Yokomo mod'	Assoc carbon	Demon IC electronic	Assoc kit soft 2"	Assoc kit soft 2.08"	Sanyo ME 4A ch.
4 Mike Lavacot USA	33 492.1	Assoc 12i	Standard kit glass fibre	Yokomo mod'	Assoc carbon	Parma 0.8ohm	Assoc Sk 1.76"	Assoc kit soft 2.06"	Sanyo ME
5 Repete Fusco USA	32 480.8	Assoc 12i	Standard kit glass fibre	Yokomo mod'		Parma 1ohm	Assoc Sk 1.76"	Assoc kit soft 2.06"	Sanyo ME 4A ch.
6 Kevin Orton USA	32 491.0	Delta Phaser Proto	Flat pan carbon with damper	Delta IG	Assoc carbon	Parma 0.8ohm	Delta 1240 B 1.85"	Delta 1248 A 2.06"	Sanyo Red letter 3.5A ch.
7 Mike Hickman USA	31 480.7	Assoc 12i	Standard kit glass fibre	Yokomo mod'	Assoc carbon	Parma 0.8ohm	Assoc Sk 1.76"	Assoc soft 2.06"	Sanyo ME
8 Butch Berney USA	31 484.7	Assoc 12i	Kit glassfibre ext posts	Yokomo mod'	Assoc carbon	Parma 0.8ohm	Assoc Sk 1.76"	Assoc kit 2.06"	Sanyo ME
9 Ralph Burch USA	29 478.6	Jomac 2000 2350	Jomac Lexan chassis	Trinity	Jomac carbon	Parma 0.8ohm	Jomac R431 C 1.80"	Jomac 8515 D 2.05"	Sanyo lettered MC 4A ch.
10 Kent Clausen USA	22 349.2	Assoc 12i	Standard kit glass fibre	Yokomo mod'	Assoc carbon	Parma 0.8ohm	Assoc Sk 1.76"	Assoc soft 2.025"	Sanyo ME

# IFMAR

# IFMAR INTERNATS

1982 WORLD CHAMPIONSHIPS FOR RADIO CONTROL CARS

# World Championships

## REVISITED

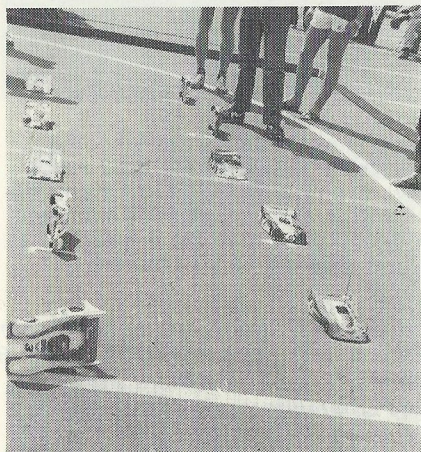
The Secrets of the Winners and Losers revealed by Nick Adams

*BEHIND the World Championship there is more than meets the eye at first glance, and here are further exciting pictures to give you an eyefull.*

*Even the Phantom Flan Flinger would have hesitated at the task of getting close to some of the American heavyweights to expose their coveted secrets, but I braved the mountain of "Big Boy Burgers for men" and snapped a few of their tricks.*

*This was the very first World Championship for 1/12 scale electric, radio controlled, model cars, and was held in the corner of one of the huge car parks in Los Angeles USA. Being in the corner of a car park in California with the other things you find in corners makes you realise that this sport does not quite compete with Disneyland, just across the road, and yet it does not require people to put on funny masks and hats to get a laugh.*

*After a few days of practice it soon became obvious that the Americans know how to 'get the show on the road' and many of the foreign competitors were already*



**Stock Class—Main Final Grid.** The cars are turned on their sides to prevent the track from heating their batteries, since the sun was so fierce that the track was too hot to touch. Eventual winner, Kent Clausen is on his side in the second row. The pole man (3) Repete Fusco came second. Eight of the bodies were Associated TOJ. No 2 is the JoMac Schkee, with open roof.

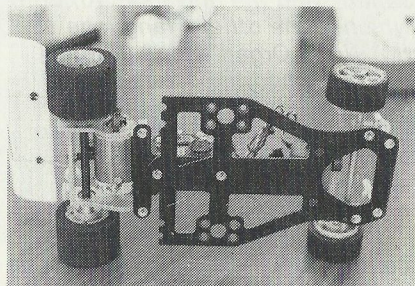


Arturo Carbonell Frank Killam Jimmy Davis

Arturo displayed exceptional driving skill and professionalism to secure him the Modified Championship. Frank was overall Champion if you added his two results together. Jimmy, the only non-American in the final had the performance but not the luck as he was spun out at both starts, and yet managed to make up several places.

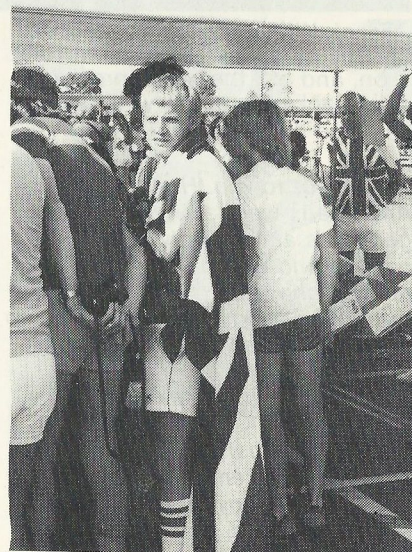
*wishing that they had been wearing their Mickey Mouse disguise so that they would never be identified when they returned home. Luckily the qualifying heats were organised into morning or afternoon sessions, which allowed a lot of competitors to slope off and drown their sorrows in a gallon of fudgana ice cream and then have it all come back to them as they enjoyed the zero gravity fall and double corkscrew at the amusement park.*

*It was not surprising to find the Associated car setting the pace,*



Delta prototype showing flat chassis and rear pod detail. The small pod chassis is fixed over the main chassis with two gromet flex points.

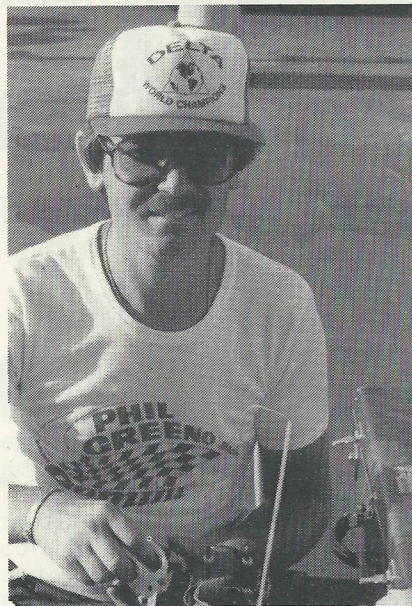
*since 45 of the 111 competitors were proving that the American Dream can be achieved by overwhelming the opposition by throwing everything you've got at the problem and sooner or later*



Wayne Davis and Fred Hatfield, patriotic to the end, as Tony Wells tries to find out where he went wrong.



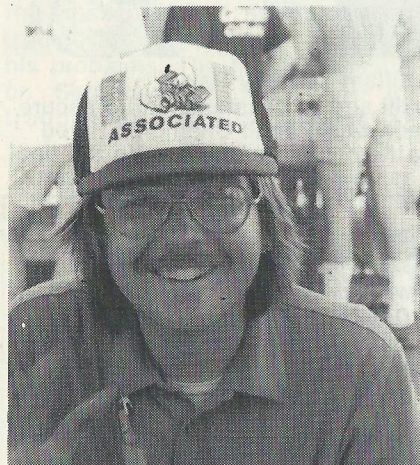
Repete Fusco from New York, a hot dog tipped to win, was forced to smile for this photo. Notice the back of the body cut out and the small wing.



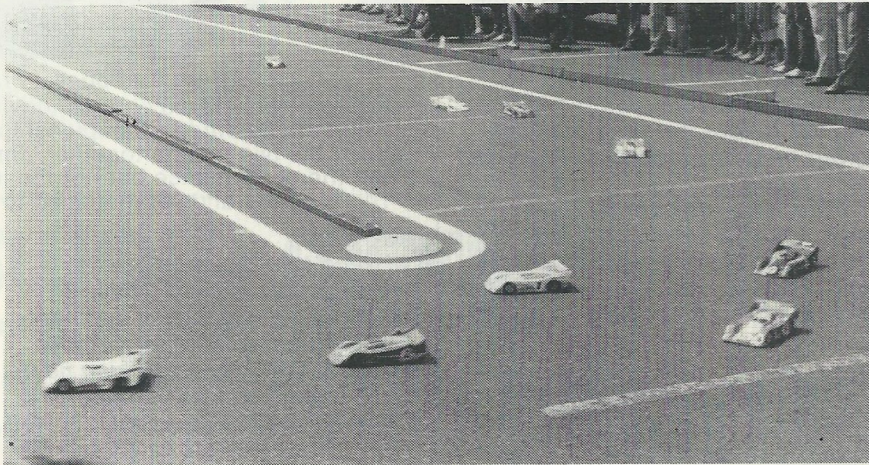
Phil Greeno, never a loser, had secured the British import of the new Delta car before it had even won.



Bud Bartos, the Parma Panther team leader dialled the car up to 11th place in Stock Class. A little weight saving may have helped some of the competitors.



Frank Killam – with his modified Associated was in excellent form on, and off, the track, providing laid back commentary to much of the racing.



Stock Class—Main Final Start

From a grid start at the first corner, pole man No 3 Repete Fusco has taken a wide line to avoid being shunted from behind, while No 2 Ralph Burch also is clear from the front row. Eventual winner, No 1 Kent Clausen has a superb line at the hairpin with 4 and 7 of Frank Killam and Mike Toland well up at the corner. Second row man No 6 Arturo Carbonell is already in trouble with a steering servo problem.

*you've got to win. However the Americans were extremely generous and friendly towards the natives and would hand out tyres, nicads, chassis etc, instead of the outmoded candy and cigarettes, to make sure everyone was happy.*

*A look at the statistics chart would make you think that the Japanese AYK car faired well at the Championship; but for several reasons they remained off the pace. One annoying problem with the Japanese in particular is the extreme difficulty in communicating with them since very few of them know a single word of English (except 'Made in*

*Japan' and the universal 'Ah So'!) which is the official language of the World Organisation (IFMAR). Also, you had to be very careful not to annoy them, as they have been observed to chop their cars neatly in half with a single blow and snatch a coveted Yokomo motor from an outstretched palm.*

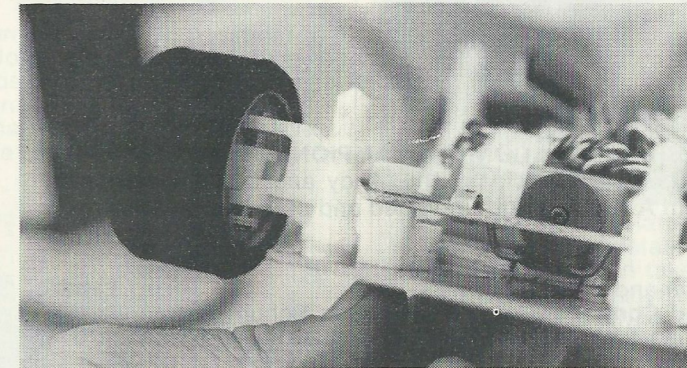
*It has been said that all the competitors were in with a chance of making the semi finals, but in a competition of this calibre if you were not on the same lap as the top qualifiers you were not getting it together. In Standard Class*

*qualifying, after 6 attempts, Repete Fusco was fastest with 33 laps in 8 mins 13 secs, and there were then 34 competitors within 1 lap of this time, while the slowest qualifier managed only 27 laps.*

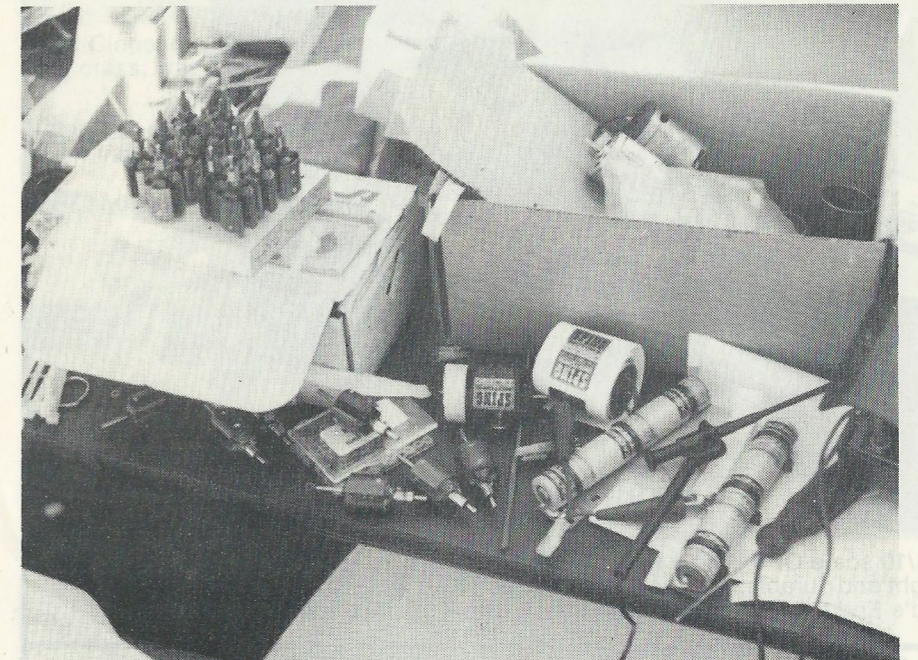
*Modified class, naturally managed to squeeze slightly faster times, although it always remains a surprise to many that the Modified cars appear to be flying around the track at stunning speeds, but only manage to make 1 extra lap in 8 minutes, representing only a 3% increase in performance. One must conclude*



Jimmy Davis was the only finalist to use a 'stick' type transmitter. Mike Hickman is using the old type Futaba steering wheel. Virtually all the non British drivers used steering wheels.



Detail of experimental Associated sprung front steering arm. Note the lack of servo saver, and steering arms from the bottom of the servo.



Mr SPING – Olle Soderholm of Sweden decided that he did not have the right wind for the circuit, and Neal Francis and Bill Maisey were forced to use an 'acquired' Yokomo motor.



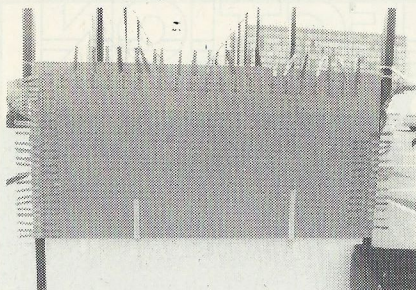
The Yokomo modified motor which caught everyone napping except Associated. They were not for sale although one or two went missing.



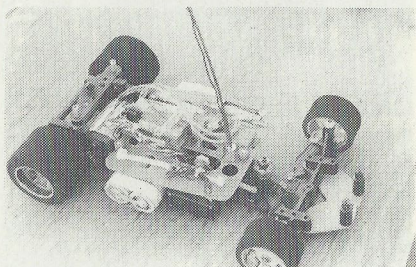
Arturo Carbonell, a fantastic driver in typical shy pose, with Delta prototype car.



The Novak servo and radio receiver was used by almost every American driver. The centre Kydex spine was bolted and glued. This driver would have won concours if there had been one.



Frequencies are not a problem in the USA although most Americans use 27mHz AM.

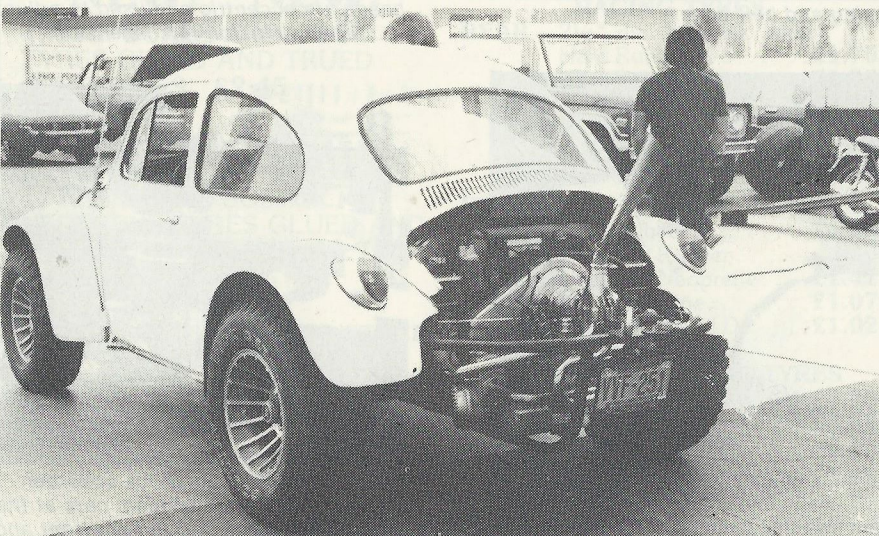


The Parma Panther, very similar to the JoMac, but with stick type nicads and Parma wheels also featured the Kydex chassis. On both cars it is important to leave the shaker plate floating.

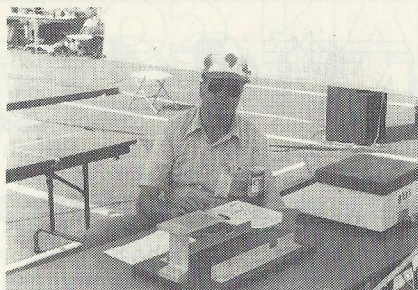


Kent Clausen, winner of the stock class, was always hiding something.

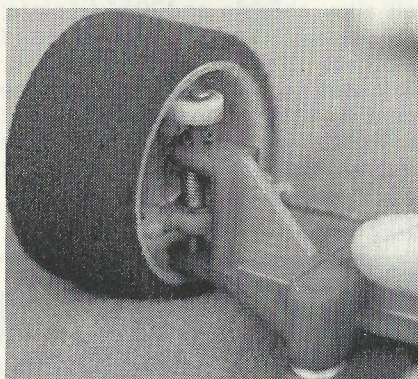
*that either the cars are being driven inefficiently, or that other*



Street cars were much more fun!



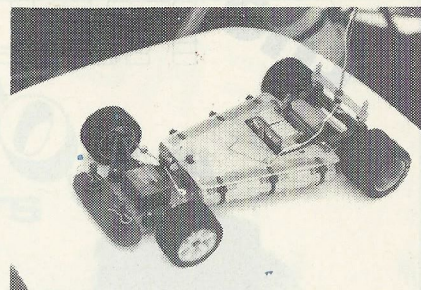
Chuck Kimbrough, of servo saver fame, gets ready for tech inspection. The electronic scales read in hundredths of a pound which made the weight limit a confusing 1.93 lb.



The JoMac 2000 of Ralph Burch showing front end detail. The 'C' clip on the king pin takes out chassis tweak. A washer under the front of the steering block increased the castor.

*factors such as handling or battery power limit the overall performance of the cars.*

*The results of the main finals are interesting since the modified race was won in a time of 33 laps in 8 minutes 3.1 seconds, which was only just faster than the Standard class result of 33 laps in 8 minutes 9.3 seconds, i.e: a*



The Mirage T from Sweden, driven by Eivind Pettersen still exhibited the same turn-in problem it had at the Euro Champs.



Mike Lavacutt – everyone expected a big performance but the performance was sidetracked.

*difference of only 6 seconds. Furthermore, in both races only 4 others out of the 10 managed to keep on the same lap which suggests that some of the drivers rely on a lot of luck and 'hope it works' philosophy even at the top level of the sport. I am, off, course ruling out the 'nerves' problem, since all of those drivers have been in many top finals, and leave their nerves at the starting line, and their trousers at the launderette.*

*One problem which affects all 1/12 races is the start line crashes, and even the finals had some coming together which resulted in unlucky cars being spun to the back of the field. If this happens the likelihood of catching the leader is very remote since the cars and their duration, limit the performance in 1/12 racing, much more than the drivers skill. It has been suggested that the finals be held over 3 races, with the best 2 results to count, and this would certainly offer some compensation for the start line accidents.*

*Anyway at the end of the event two happy drivers and two happy manufacturers squirted the champagne into the faces of the losers just to show that they are generous and friendly to the last, whilst the losers squirted the last drops of Factor 15 onto their burnt noses and wondered whether a Big Boy Burger would be easier to swallow.*