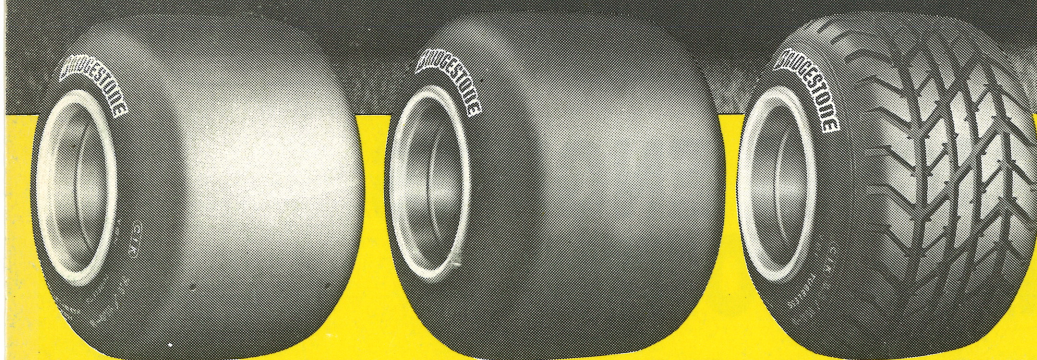


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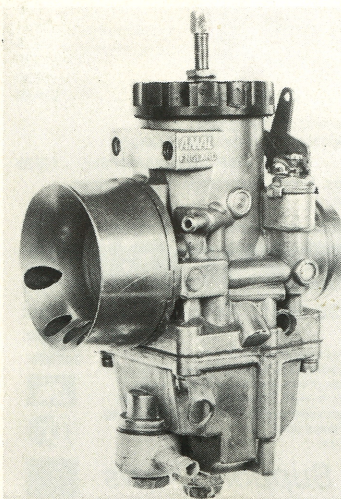
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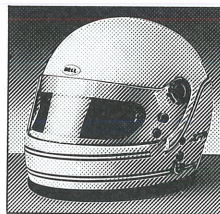
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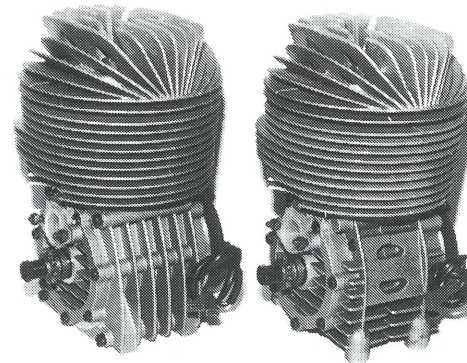
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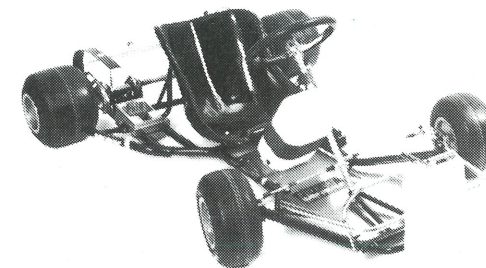
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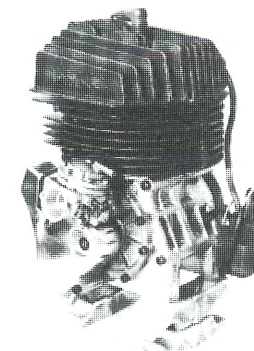


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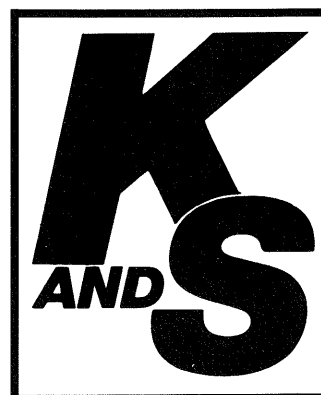
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MONTHLY

FRONT COVER:

The 1986 Junior Britain British Champion, Simon Redman, leading during the final round of the Super One at Rye House.

(Pic: Rodger Calvert)

No. 95



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NEXT MONTH'S FEATURES INCLUDE:- CADWELL PARK, DONINGTON PARK BRITISH CHAMPS 1; 100cc ENDURANCE SEASON PREVIEW, PLUS MORE. (These items correct at time of going to press).

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WHERE AND WHEN

15th MARCH

Nuthampstead — (1½ miles east of Barkway, off B1368 Cambridge — Ware road).
Three Sisters — (Bryn Road, Ashton-in-Makerfield, Lancs).
Crial — (9 miles South East of St. Andrews, Fife, Scotland).
Shenington — (8 miles from Banbury, off A422 Banbury-Stratford road) — 210 Challenge

22nd MARCH

Clay Pigeon — (Midway Yeovil and Dorchester on A37) — Super One Round 1. Practice Saturday 21st.
Pembrey — (8 miles from Llanelli on A484, Dyfed, South Wales).
Jurby — (Isle of Man).

29th MARCH

Lydden Hill — (7 miles South East of Canterbury, Kent).
Chasewater — (Pleasure Park, approx 1 mile from Brownhills, Staffs).
Dunkeswell — (5 miles from Honiton, Devon).
Snetterton — (approx 15 miles from Norwich, on A11, alongside Car Racing Circuit).

4th APRIL (Saturday)

Nutts Corner — (4 miles from Crumlin, Co Antrim, Northern Ireland).

5th APRIL

Little Rissington — (RAF Station, South of Stow-On-The-Wold, Glos).
Rye House — (Kart Raceway, Rye House Stadium, Rye Park, Hoddesdon, Herts).
Felton — (7 miles from Morpeth, on A1, Northumberland).
Summerlee — (Merryton Road, Larkhall, Hamilton, Strathclyde, Scotland).

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Ed Says

Mention was made in the December issue about the RAC's decision to restructure 125 Super National on long circuits, dividing the class into 125 Super National and standard National category, the drivers being graded according to specific criteria, the criteria being — first 20 finishers at Silverstone and in the British Championship, and the first 15 in both the Cadwell Championship and the 'UK' 'cup. The RAC also stated there would be no equipment regulation changes in 1987 for 125 Super, the category would adhere to National regulations currently in operation, although water-cooled engines might be admissible for 1988.

However there have been no other directives from the RAC as to how the new system is to be managed, thus the whole issue has been thrown open to conjecture and speculation. The idea has met with mixed feeling, the criticisms vary — from affrontary of those not graded, to acceptance as inevitable progression, particularly from the Super graded drivers, some condone it as a step in the right direction, as far as safety is concerned. There is also a school of thought amongst the remainder of 125 National who see it as probably a retrogressive act, that by inference the categorisation is a demeaning one and, as has been said before, there exists fear of being regarded as 'also rans'. Some vehemently state if they can't pit their skills against the 'top brass' then they are not prepared to continue in the class.

The proposal was not a half-hearted affair, it was first suggested when the working group examined the idea and tabled it to the Kart Committee back in 1985 before the 'Green Paper' was published. The Kart Committee subsequently ratified the proposals therein for the creation of 125 Super, but it is the mechanics of the idea that seem a bit half-hearted, which have put fears in peoples minds, that stability of a highly successful class has been put in jeopardy, viz., 'there will be a 125 Super category commencing 1st January 1987, these are the criteria for eligibility — now get on with it'. So we have many intangibles blotting what otherwise could be perfectly stable landscape. The main question bugging most people, including the graded drivers, is — does the RAC intend creating two separate classes where each will race for equal status, relatively speaking, in individual British Championships and separate Grands Prix at Silverstone, for that it seems is what must happen. What about the 'UK cup'? Are we going to see two 125 UK cups and two sets of 'O' number plates, which is unlikely, or in that instance will the grading be dropped and everyone collectively race for the long circuit 'O' plate? If that is the proposal then the whole idea of two separate entities falls apart at the seams. So, it poses interesting speculation and the ramifications are great when no definitives are forthcoming from the governing body.

If the plan is to succeed then legislation has to be comprehensive and administration effective otherwise it will be another case of 'the tail wagging the dog'. The safety aspect of the class division was mentioned earlier and is an integral part of the plan to categorise. The argument in favour of smaller grid numbers making for safer racing has its valid points. By having a 125 Super class it removes the chance of a driver with very limited long circuit experience being forced into

a situation where he or she could be taxed beyond the limit of their ability. As has been seen in the past such situations have proved catastrophic, both for the inexperienced and experienced in terms of expense and injury.

However, be it Super or National, there will still be some displays of tactics leaving a lot to be desired — in every society there exists a 'lunatic fringe'.

Racing in a 'class of your own', in this case National, has a lot going for it, it is no way demeaning, provided there is reward for effort at the end of the day — i.e., British No. 1, 'GP' plates and so on; so by the end of the season we arrive at a table of candidates who have earned promotion. Let's face it, in 125 National the potential talent is far greater than in 125 Super, because in 125 Super the talent is proven, in 90% of cases anyway.

In 125 Super the driver parity is so much more equal and though everyone will be out to win, winning will not come without extensive research and development into the engine field. Ability is no good without effective mechanics to back it up. Having conferred with many Super graded drivers the general consensus would seem to be — if a Super driver fails to perform, for one reason or another, then he should expect and accept relegation into 125 National, even if he is a top name. Having been relegated the personal pressures will be even greater on such a driver to ensure his re-promotion takes as short a time as possible, but should not be made at the expense of other National drivers who might be putting in more effort than our erstwhile Super man. Therefore what is being said is that anybody in 125 Super by default should be riddled out after a year.

There are many aspects to examine — is it fair to classify — A and B? If so, what means of classification should be used? A cohesive system is needed and the most logical one would be a points table. Given that there are two independent classes and we apply the selection process propounded by the RAC, a points system common to both classes would seem the most sensible, thus at the end of a given period, some drivers will go up, others down, that way you still inspire reward for effort.

It has been suggested the decision to race in Super or National should be left to the individual — if you can afford to compete in Super you do, if not you compete in National, but such a suggestion would mean a two tier price structure. Given that to be the case the hint that 125 Super could be water-cooled in 1988, with 125 National remaining restricted to air-cooled rotary valve engines, it would be justified to leave the option open to the individual, though strict price limits on water-cooling would have to be laid down, otherwise the fear of 125 Super pricing itself out of the market would be a very real one, particularly if the class was brought into line with CIK Intercontinental C and Formula C where engine prices are well beyond the pocket of the man in the street.

To reiterate in brief — when a new category is created which enforces segregation upon drivers then there must be equal or relative opportunity and motivation to continue competing. To issue a loosely defined directive only creates dissention and doubt about motives, wisdom and foresight. Everyone in competitive sport deserves *and* is entitled to reward for effort. No matter what sphere of sporting activity there must be a pinnacle to aim for.

This topic will be examined in a little more detail next month, by which time a couple of meetings will be over and a clearer evaluation of the success, or lack of success of the idea, can be given.

We shall also be looking into escalating circuit hire costs, among other things...

Ed McCormick

CIK NEWS

Augusto Ribas — International Court of Appeal

The judgement of the International Court of Appeal established on January 21st 1987 on the appeal lodged by the CBA on behalf of its licence holder, Augusto Ribas, Brazil, against the decision handed down by the National Court of Appeal of the United States (ACCUS) with respect to the 1986 Formula K World Championship race in Jacksonville, Florida, on 21st September 1986.

The judgement is as follows:-

As to the form — Declares and rules the appeal admissible.

In respect of the substance — Quashes the decision handed down by the Court of Appeal. Declares and rules that because of the overtaking by Mr. Kroeger was irregular and not allowed, the classification of the 1986 Formula K World Championship race held in Jacksonville on 21st September 1986 be re-established as follows:-

1st Augusto Ribas

2nd Ken Kroeger

The International Court of Appeal declares and rules that the costs be borne by the respondent.

'CIK Working Group' Meeting — Engine and Chassis Manufacturers, 23rd-24th January in Geneva.

The meeting was very successful and the following manufacturers were represented:-

Alpha-Karting (France)	RKD (France)
Birel (Italy)	Rotax (Austria)
DAP (Italy)	Swiss-Hutless (CH)
EME (GB)	Tabon (France)
Gillard (GB)	Tal-Ko (GB)
Hetschel (Germany)	Vega (Italy)
IAME (Italy)	Zip Kart (GB)
Polyester-Accessoires (France)	

Representing the Asn's were:-

CSAI (Italy)	RAC (GB)
FSK (CH)	SBF (Sweden)
GNK (France)	

The decision to introduce the FORMULA SUPER HUNDRED as from 1st January 1988, as well as the philosophy for this category, was well accepted by all the manufacturers and ASN's.

The Sporting and Technical Regulations are the same as for Formula K, except the cylinder capacity of the engine which is 100cc.

The CIK Championship for Formual K and FORMULA SUPER HUNDRED are also the same — 5 Grands Prix counting for the European Championship title and one event for the World Championship title.

In the Technical Regulations the engine of FORMULA SUPER HUNDRED must be one of those homologated for Intercontinental A. There will be no special homologation for FORMULA SUPER HUNDRED engines.

The minimum weight of FORMULA SUPER HUNDRED has yet to be fixed. An inquiry will be made on Intercontinental A during 1987.

It has been agreed to write FORMULA SUPER HUNDRED, Formule Super-Cent, Formel Super-Hundert, Formula Super-Cento, etc., all in full and not use the figures '100' in place of the word 'Hundred'.

At the chassis manufacturer's meeting, the modifications concerning chassis homologation for 1988-90 were discussed and the manufacturers unanimously made proposals to the CIK.

The last point on the agenda of the meeting was the 'The manufacturers' turn to speak, proposals to the CIK and criticism to the CIK. On the point of criticism, the floor was open to everybody but nobody came forward, there-

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Stevenson Sprint TKM — £285

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2 Sets Bridgestone Wets on Rims — £50 per set.

Phone 041-887 6838 anytime

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NOTE: NO VAT TO BE ADDED

CLUB SCENE

William Hewland fourth. Lap 8 and we had Booth — Collard — Hewland and that's how they stayed to the end of lap 12.

Michael Pallett

JUNIOR BRITAIN A — 12 Laps

1st No 91 Sven Gibson Superdart/Dap

JUNIOR BRITAIN B — 12 Laps

1st No 9 Paul Rees Zip/Parilla
2nd No 11 Peter Olsson Superdart/Arrow
3rd No 29 Bobby Game Lane/EME

SENIOR BRITAIN — 12 Laps

1st No 24 Craig Booth Superdart/TKM
2nd No 25 Martin Verity Wright/Arrow
3rd No 40 Anthony Geraty Superdart/TKM

250/210 — 10 Laps

1st No 65 Melvin Spree Samurai/Honda

125 NATIONAL — 12 Laps

1st Les Saunders ZIP/Rotax
2nd Calvin Hurley SOLAR/Rotax
3rd Steven Bird ZIP/Rotax
4th ZIP/Rotax

100 NATIONAL RESTRICTED — 12 Laps

1st Tere Faulkner Wright/Parilla
2nd Nicholas Tillotson Sprint/Minarelli

100 NATIONAL — 12 Laps

1st Craig Booth Superdart/TKM
2nd Martin Collard Superdart/Parilla

Plymouth ANNUAL REVIEW 1986

Well, 1986 has come and gone and it's time for the annual review of the Plymouth KC. Although averaging only 50 entries per meeting, the excellent shape of the 760 yard track allowed four genuine overtaking places which meant that few races were processional, and ensured media coverage far in excess warranted by just 50 entries. It also meant that spectators kept coming back for more!

As the site is a car-park in daily use, the club was beset by problems; 13 TONS (!) of tyres, markers, fencing, control hut etc to be moved into and out of position every race day — not to mention the hire of a tractor and brush to clean the track before each meeting. Half the area was sold mid season, which meant a long period of uncertainty, while the bumpy nature of the track and lack of proper toilet facilities was another. As the season wore on, NOISE complaints were received from a small — but vocal — group on the nearby housing estate (just 300 yards away).

The club tried strict noise control measures, but even newly purchased silencers couldn't get down to Blue Book limits. This makes one wonder if, in fact, any silencer on sale is 'suitable for the use intended' under the Shops Act! Might make an interesting test case.

Despite the problems, the club finished the season well 'in the black' and even contributed £200 to the local newspapers Cavitron

Leukaemia Fund from its October Enduro event.

The 50 drivers covered a racing distance of 777 competitor/miles per meeting; or 4662 comp/miles over the season. The winning team in the Enduro covered 138.6 miles, while the field as a whole covered 3240 comp/miles — proving that you get a lot more racing miles for your money from just one Enduro than nearly a season of sprint meetings!

On the equipment front the Zip chassis dominated both 210 and 125. Every 125 race was won by a Zip/Rotax outfit, although in 210 the one and only locally owned Star did take several race wins.

The 100cc classes were dominated by Jeta chassis and DAP engines; so much so that at the June event 75% of Britain were on Jeta/DAP and 50% of National! This can be put down mainly to the excellent promotion of the local agent, who has encouraged many newcomers into the sport.

1986 CLUB RESULTS:

JUNIORS

1st Collinson
2nd A. Coles
3rd N. Baker

100 NATIONAL

1st A. Pallister
2nd R. Shone
3rd N. Baker

125 NATIONAL

1st P. Edgecombe
2nd T. Burt

100 BRITAIN

1st L. Mulliner
2nd D. Lloyd
3rd M. Bradley

210 NATIONAL

1st A. Timson
2nd D. Butson
3rd J. Ellicott

Sadly, 1987 will see the club having to run a very curtailed season. The small noise lobby very nearly finished Riverside Raceway for good, only the dual facts that we get so many spectators and the good publicity from our £200 cheque to charity saved the club at all — others be warned!

The dates for 1987 will be May 17th, July 19th, and Sept 20th. The Chase-Webb Enduro will again take place, this time on October 18th.

There will be no increases in any of the clubs prices; adult membership remains at £6. Juniors at £3. Race entries for non-members will be £10, and for members £8.

Spectator

NORTHERN IRELAND FOCUS

While racing was continued for the hardy English at some of the short circuits we here in Northern Ireland have been resting from such vigorous activities, substituted by club Dinner Dances where drivers and mechanics appear in their 'Sunday Suits' totally unrecognisable.

That will change on 4th April at Nutts Corner when The Ulster Karting Club host the first meeting of 1987. This meeting will be followed

by a two day event at the same venue on Saturday 18th and Monday 20th, followed on Tuesday 21st by a long circuit meeting at Kirkistown. On Saturday 25th the Londonderry Club will promote the first Road Race of 1987.

In previous years, Racing commenced during March, however, despite a later 1987 start to the season, as can be seen, there are four different race days during Easter week. Any Cross-Channel drivers wishing to participate, contact: **Mrs Cairns on Lisburn 81530** for further information. All racing in Northern Ireland is subject to Blue Book Regulations.

One definite English visitor for the Easter meetings will be Dale Couzens driving 250 National. Dale will be accompanied by his complete family and dog. I have invited Couzens to stay at my home, but Alan Wallace can have the famous dog!

Dale is no stranger to Northern Ireland; he came here along with his mechanic Terry last June where he finished third at the Ulster Karting Club Gran Prix and almost won the Newtownards Road Race. He also has close ties with several N.I. 250 National drivers by providing and maintaining K.T.M. Engines.

Another welcome driver is Paul Molloy, 125 National, again he made his first appearance last June by finishing fourth in his class. Over the years many Class One drivers, famous in England, have appeared. You are all welcome.

IMPORTANT NEWS FROM THE NORFOLK & SUFFOLK KART CLUB

The Committee of the Norfolk & Suffolk Kart Club wishes to dispel the totally unfounded rumours circulating that the Club is about the close down and also about to lose its track at Snetterton. The persons circulating these rumours are to say the least 'not very well informed'.

The Club will be opening at Snetterton Kartway for its season opener on March 29th. Extensive improvements have been carried out over the closed season at the track and a full season is planned.

It has been an 'open secret' for a long time that the owners of the present Kart Track plan to redevelop the site and this is expected to be the last season the Club will operate on its current venue. However, the Club's 14 strong committee is a very active one and are at present considering a number of venues which are available to them for a new track and it is hoped to get construction under way quite soon, so that the transition of venue will be smooth and with the minimum of disruption.

The Committee wishes to clarify that the Club's track licence has not been withdrawn as may have been advised by certain sources but application by the Club delayed whilst track improvements have been carried out.

In conclusion we can advise that membership of the Club is healthy and growing with newcomers to the sport and a series of very attractive sponsorship deals for the Club's 1987 Championships have already been concluded.

1987 Meeting dates are as follows: March 29th; April 26th; May 31st; June 28th; July 26th; August 30th; September 27th; October 25th; November 22nd.

Membership Secretary: Mrs Sandra Baker — Tel. Norwich 810725.

Competition Secretary: Mrs Anne Caswell — Tel. Bunwell 629.

Norfolk & Suffolk Kart Club Committee

fore it was construed that no one harboured criticisms.

CIK — Executive Committee Meeting — Friday January 30th, in Paris.

The following decisions were taken:-

1. The unanimous proposals from the 'CIK-Working Group' meeting with engines and chassis manufacturers in Geneva have been approved.

2. *Treatment of Results by Computer*
For 1987 and 1988 the system CIK/Schneitler treatment of the results by computer has been introduced for non-gearbox classes for CIK Championships in Europe.

3. *European Championship — Intercontinental B 1988*

As a result of the small number of entries it has been decided — 'The minimum number of entries is fixed at 30, if less than 30 entries are received there will be no Championship event'. This regulation will be introduced as from 1988.

4. *CIK-International Drivers Licences*
As from 1988 the CIK-International Drivers Licence will be introduced. The regulations will be established according to the rules defined in the FIA-International Sporting Code, Appendix L. The regulations will be published in agreement with the ASN's at the end of April 1987.

The foregoing was issued by Ernest C. Buser, President CIK-FIA, dated 4th February 1987.

* Formual E Zip and Silverstone driver, Ian Shaw, has announced he has secured continued backing from Morson International, the Manchester-based professional staff recruitment agency. This valuable sponsorship comes in the form of financial assistance in respect of race entry fees, travelling expenses, etc.

JUNIOR CADET DRIVERS' REGISTER

Martin Hines of Zip Kart is compiling a Register of Junior Cadet drivers in order to have at hand a quick reference guide of drivers in the class who may be called upon for televised events and promotional activities, and also for forwarding details of Junior Cadet Championship series.

To help in compilation, all Cadet drivers are asked to forward their names, addresses and telephone numbers as soon as possible to:-

**M. A. Hines, Esq.,
Zip Kart,
Pindar Road,
Hoddesdon,
Herts.,
EN11 0DE.**

SILVERSTONE AWARDS

Silverstone Circuits have launched a progressive 'Silverstone Awards' to help discover 'Tomorrow's Champions'. It will take a young winning kart driver into Formula Ford racing, using the expertise of the Silverstone Racing School and equally important take Formula Ford drivers with a success story into the Lucas Formula 3 Championship.

Also in the 'Silverstone Awards' is support for a leading young driver to race in the elite karting category, 250 International Formula E, including an appearance at the British Kart Grand Prix held at the Northants circuit over the weekend August 8th-9th.

Recognising that kart racing has been the initial training ground of many of today's leading Formula 1 drivers, the 'Silverstone Awards' will give the leading young British driver in the 125cc National category, aged 21 or under and with less than three years karting experience in that class, a scholarship with the highly respected Silverstone Racing School. This will entail a complete course of instruction, using one of the School's fleet of Van Diemen RF83 cars, followed by a race at a Silverstone Racing Club meeting.

It is also with this in mind that the Silverstone Kart Team, with Ian Shaw of Manchester at the wheel this year, has been formed. This will operate under the auspices of British Formula E Champion Martin Hines and will pitch the driver, who will have the latest Zip 250 Formula E kart, into action against the world's best.

Shaw is a talented driver — he made his Formula E debut at last year's British Grand Prix, in the Silverstone kart, leading the race for some time in difficult, wet conditions. He will have a season of competition which it is intended will help develop his racing career.

These 'Silverstone Awards', it is intended, will bring forward British racing talent and help them attain their ambitions of being 'Tomorrow's Champions'. The awards will be administered by Silverstone Circuits Limited and the British Racing Drivers' Club Limited whose decisions will be binding in all matters.

EME VICTORY

Junior Britain driver Bobby Game took his EME Mosquito to victory over all comers recently at Blackbushe, marking a first win for this new British engine.

* Formual E Zip and Silverstone driver, Ian Shaw, has announced he has secured continued backing from Morson International, the Manchester-based professional staff recruitment agency. This valuable sponsorship comes in the form of financial assistance in respect of race entry fees, travelling expenses, etc.

Come Along You Juniors

Hunts Kart Club invite all 8 to 10 year olds who will be entering the new RAC junior class on 1st April to take their karts along to Kimbolton on Sunday 8th March to promote the class to the general public.

If there are sufficient numbers these juniors will be given their own race for which trophies will be awarded. A nominal entry fee will be charged. If the response isn't sufficient to stage an actual race, then a demonstration will be given by the juniors who turn up and there will be no entry fee charged. Whatever, there will be something for them all at the end of the day.

For further information, contact:

Stuart Perry,
Competition Secretary,
Hunts Kart Racing Club,
104 Hamble Road,
Brickhill,
Bedford.
MK41 7XW.
Tel: (0234) 68844

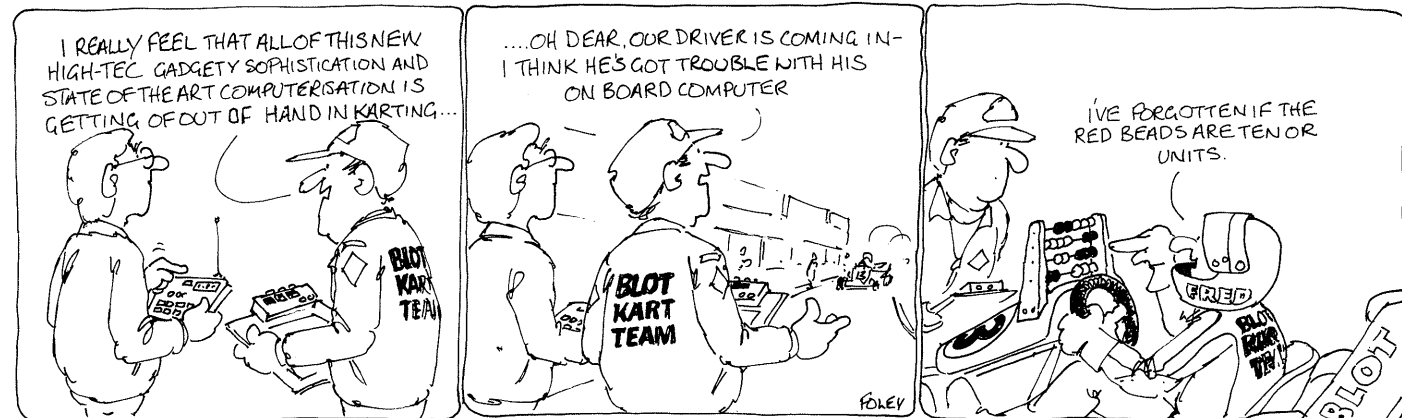
DEREK RODGERS PACKS UP

Yes, it's true, we heard a couple of weeks ago from the man himself. After three years running under the Leaside banner, the last two of which saw his return to Formula E and a shattering of Buttigeig's lap record for the Cadwell Club circuit, Derek's leathers are in the closet. The reason? Funding, or lack of it. It was on the cards last year that the Leaside deal would terminate at the end of the season. Rated fifth by Mike Smith in his top ten Superkart drivers' list this month, Derek enjoyed a good first half season in '86, capping it with a fine victory at Knockhill. After that the 'gremlins' set in and the rest of the year wasn't quite so successful.

Derek has been around karting for many years, he is liked and respected by his fellow competitors and is a very capable and experienced driver. In times when grid numbers are falling Formula E needs a man of his value.

Derek toyed with the idea of returning to 250 National, but with the uncertainty over engines in the class, decided against such a move. He feels his rightful place is in Formual E and he is a driver who will give any sponsor value for money, but unless such a sponsor or sponsors is forthcoming, it is feared those leathers will remain in the closet for good — and such a thing cannot be allowed to happen.

* On March 28th Lennart Bohlin and Monica Strath will be in England for a few days to collect their 1987 equipment.





SECOND CASTROL CREATE A KART COMPETITION FOR SCHOOLS ANNOUNCED

Castrol announce a second 'Create A Kart' Competition, to run from Easter '87 to Easter '88. Aimed at schools and young people's organisations throughout the country, Castrol wish to encourage the development of basic mechanical and driving skills in as many youngsters of school age as possible and have asked the National Schools Karting Association to run the competition as before. The previous competition ran from Easter '84 to Autumn '85. The new event will be called 'Create A Kart '88'.

There will be three classes of entrant. The first will construct racing karts built to Nat.S.K.A. specifications, the second will design and make much simpler 'playground' karts for those who have never built a kart before and, finally, there will be mini projects, where entrants can develop their own ideas in respect of any part of a kart or its running, such as brakes, suspension, noise control, team organisation, safety etc.

Entries to the previous competition were ample.

CHAI LYN RACING

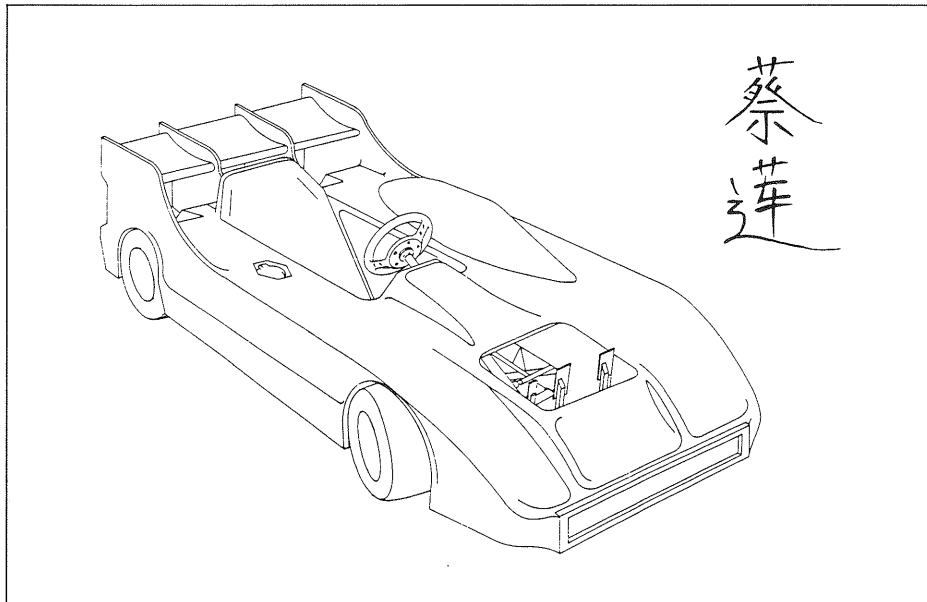
Lyn Chai, a Malaysian entrepreneur, this year is planning a racing campaign, commencing with 250 National and looking towards the British Championship. Driving on her behalf will be Ian Cramp, a project engineer at Piper Cams, last seen at Donington in October 1986 on Yamaha power. Quite an aggressive driver, Ian attributes his attitude to his former boxing days when he was Cambridge University Lightweight Champion.

Chai Lyn Racing, as the team will be known, will run a works chassis from KAT who, although underfunded, have developed some interesting designs on the chassis front. The power unit comes from KTM.

The project is backed enthusiastically by Philip Daft, an electronics consultant who is soon to launch a range of automotive accessories, from rev-counters to engine management systems.

The 1987 KAT chassis is already bristling with innovations, including engine and chassis monitoring systems. The driver and pit crew will be constantly informed of parameters, from fuel mixture to chassis flex.

The sketch gives an idea what the outfit will look like ...



However, some who started to build a Nat.S.K.A. style kart found the task too daunting. The Playground Kart concept is simpler and allows school groups new to karting to achieve powered motion with less skill and in less time.

Testing of the playground and racing classes will be aimed at proving mobility, not speed. These will take place at the Competition finals, a festival of karting fun held over the weekend of April 9 & 10th, 1988, to be held once again at the Donington Park Racing Circuit, near Nottingham. Regional heats will be arranged if sufficient entries materialise.

Entrants are expected for the playground kart and mini project classes from other academic streams besides craft, design and technology. The mini project class may prove suitable for inclusion in G.C.S.E. practicals in the coming year. In 'Create A Kart '88', mini-projects will be ranked in order of event, regardless of subject.

Existing Nat.S.K.A. member schools will be expected to provide the majority of entries for the racing class and Nat.S.K.A. will again hold a race meeting as an attraction to the finals.

Nat.S.K.A. aim to support the competition with a series of demonstrations at suitable points around the country, starting in March, 1987. These will provide encouragement and practical examples of how a schools karting group can be started. A list of Nat.S.K.A. representatives who will provide practical help and advice throughout the competition will be circulated to all entrants.

Castrol researched entrants' reactions to the first Castrol 'Create A Kart' Competition in some depth before considering, with Nat.S.K.A., the structure of the present one. Whilst the drawing power to young people of driving something they have had a hand in making round a Grand Prix circuit is irresistible, many constructive suggestions were made, and will be incorporated in the workings of the competition.

School notice board posters advertising the competition will be distributed to all applicants in advance to help recruitment. Groups must be entered by an adult, such as a teacher, who must remain responsible for the conduct of entrant groups throughout. Interested school age groups can apply for entry forms (to be distributed just before Easter '87) by writing to Castrol London Press Office, 10 Doughty Street, London, WC1N 2PL.

Practical guidance on all matters karting will be provided, as before, by the Nat.S.K.A. Guide to Karts & Karting, published by Castrol at £3.00. Extra chapters are being added to this document to help beginners with their playground karts. The new Guide and a supplement for existing users, will be available early this year. Groups should apply then to Castrol Educational Division, Athena Avenue, Swindon, Wilts SN2 6EQ for an order form for these publications.

At the inaugural meeting for 'Create A Kart '88', Nat.S.K.A. Organiser Brian Lord said, "We are determined to do all we can to help entrants to this competition get even more satisfaction and fun out of it than we did last time. Students at my school in Yorkshire are still talking about it."

Paul Farrell, Marketing Manager of Burmah-Castrol (UK) Ltd. added "You cannot learn about roadcraft early enough these days. We are delighted to be able to again offer such a chance to British youngsters in line with the work of Nat.S.K.A. The gusto youngsters put into the last final told us that we had made the start of their motoring careers a very rewarding one."

1987 BORDER CHAMPIONSHIP

The Border Championship Committee advise us that this year's series has been scheduled to take place as follows:

Round 1 Rowrah April 12th
Round 2 Felton June 21st
Round 3 Larkhall August 23rd

All drivers must compete in **all 3 rounds** of the series to be eligible for championship points.

Entry Fees for each venue:

Rowrah £10.00
Felton £10.00
Larkhall £12.00

Entries should be submitted to the Competition Secretaries of the respective clubs, (Cumbria, Northumberland, West of Scotland), addresses in 1987 RAC Blue Book.

Points will be as the 1984 Kart and Superkart series.

*Richard Boston returns to the 250 National ranks this year with the aid of Dale Couzen KTM's and ex-Superkart pilot Steve Stylin's spannering techniques. The trio takes to the Irish mainland during the Easter holiday for a brace of meetings at Nutts Corner, (Saturday and Monday 18th and 20th April) and a Long Circuit event at Kirkistown on Tuesday 21st. It is understood good prize money will be up for grabs.

CLUB SCENE

Graham romping off into the distance leaving Mattinson to follow on as best he could. Where have all the Inters gone? Come on lads, challenge our best and see if you can handle the mountain.

Iain Blair

JUNIOR CADET

1st Steve Wilson Dino/Parilla
2nd Gary Robertshaw Zip/GEP DAP

JUNIOR BRITAIN

1st David Coulthard Wright/Parilla
2nd Graeme Melville Wright/Parilla
3rd Vicky Starkey Fullerton/White Parilla
4th Dario Franchitti Wright/Parilla
5th Lee Livingstone Din/Arrow
6th Martyn Price Wright/PCR

100 BRITAIN

1st David Greig Wright/BTR DAP
2nd Lloyd Ross Zip/Grice TKM
3rd Colin Shanks Sprint/Arrow

100 NATIONAL

1st Ian Williams DAP/DAP
2nd Louis di Resta Sprint/Parilla
3rd Stu Davison TKM/TKM
4th Robert Crossley Gillard/PCR
5th Chris Armstrong DAP/DAP
6th Barry Hill Fullerton/PCR

125 NATIONAL

1st Brian Winder Nevada/Rotax
2nd Brian Bird Phoenix/Minarelli
3rd Barry Mellor Phoenix/Rotax
4th Mark Thompson Stratos/Rotax
5th Chris Bell Phoenix/Rotax
6th Tim Randall Motiv/Rotax

210 NATIONAL

1st Geoff Preston Barlotti/Villiers
2nd Tom Earl Barlotti/Villiers
3rd Terry Percival Zip/Villiers

250 NATIONAL

1st Wesley Cairns Barlotti/KTM
2nd Brian Crickett Zip/Yamaha
3rd Andrew Lee Lynx/KTM

FORMULA E

1st Brian Graham Zip/RL Rotax
2nd Steve Mattinson Zip/Rotax

CLUB CHAMPIONS 1986

Junior Britain
Vicky Starkey

100 Britain
Lloyd Ross

100 National
Ian Williams

125 National
Brian Winder

210 National
Geoff Preston

250 National
Stuart Innes-Smith

Formula E
Brian Graham



"If you won't marry me, at least do me an engine!"

CUMBRIA KRC DINNER DANCE

Nearly 200 gathered once more for our annual binge at the Shepherds Inn, Carlisle and once again the Management and Staff of that establishment are to be congratulated for their culinary excellence.

The Competition Secretary, Mrs Christine Ballantyne gave away the silverware to the richly deserving recipients, before we had a couple of fun awards. These were presented by myself, and the first one went to the club's resident chef and Chairman from Eric Tooley on behalf of Mackeson to Bob Ballantyne. The second went to a man who has taken flak from me all year and hasn't got me back yet. As a mark of respect for the man, I was pleased to present a special award to Ralph Starkey.

Then the fun really started, with the dancing for both young and old and a Poseur of the Year contest. Despite wearing the obligatory medallion, I still didn't win! The award of a two week cruise on Silloth Docks went to the coiffure King, Nicky Stamper.

A good time was had by all and next years effort is eagerly anticipated.

Iain Blair

AWARD WINNERS

Junior Britain	Vicky Starkey
100 Britain	Lloyd Ross
100 National	Ian Williams
125 National	Brian Winder
125 P&R	Andy Harvey
210 National	Geoff Preston
250 National	Stuart Innes-Smith
Formula E	Brian Graham
Champion of Champions	Lloyd Ross
Junior Tryer	Kevin Barton
Senior Tryer	Andrew (250) Laws
Poseur of the year	Nicky Stamper

Contributors are reminded that copy for inclusion in the magazine must reach the Editorial Office not later than the 15th of each month.

Blackbushe

SUNDAY, 25th JANUARY

It started off cold and windy, the track was very slippery through the heats, then it dried out for the Finals.

JUNIOR BRITAIN A — run at the rear of the B's.

Heat 1 — Carl Lemmer — Nathan Cousins — Sven Gibson.

Heat 2 — Carl Lemmer — Sven Gibson — Nathan Cousins.

JUNIOR BRITAIN B's

Heat 1 — Paul Rees — Paul Evans — Peter Olsson.

Heat 2 — Paul Rees — Bobby Game — Peter Olsson.

The Final — Paul Rees took the lead and he kept it to the end to score a convincing win, second all the way Peter Olsson, and third was Bobby Game. Junior A winner Sven Gibson.

SENIOR BRITAIN

Heat 1 — Craig Booth — Martin Verity — Derek Watts.

Heat 2 — Craig Booth — Nunzio Fazzone — Richard Wallington.

The Final — Craig Booth took the lead with Martin Verity second, Nunzio Fazzone third. Next lap Craig Booth — Martin Verity — Anthony Geraty took Nunzio Fazzone for third place and it stayed like that to the end.

210/250

Heat 1 — Melvin Spree — Bruce Carpentiere — John Ottrey.

Heat 2 — Melvin Spree — John Ottrey — David Ede.

The Final — 5 started with Melvin Spree taking the lead and making winning look easy with John Ottrey second, David Ede third.

125 GEARBOX

Heat 1 — Steven Bird — Les Saunders — Russell Powell.

Heat 2 — Russell Caldwell — Les Saunders — Calvin Hurley.

The Final — Saw Les Saunders take the lead from Russell Caldwell. Calvin Hurley lap 5 with Saunders still in the lead, Caldwell second, Dave Ellis take third from Hurley, later on lap 8 — Saunders leading, Hurley second, Steven Bird third, and Keith Chennell fourth, and they all stayed the same until the end.

100 NATIONAL RESTRICTED

Heat 1 — Tere Faulkner — Nicholas Tillotson — Gary Young.

Heat 2 — R. Kinch — Michael Bradbury — Nicholas Tillotson.

The Final — Tere Faulkner took the lead on lap 1 never to lose it, Michael Bradbury was second until lap 10 then lost it to Nicholas Tillotson and that was how they finished.

100 NATIONAL — This was a low entry only 7 came to the start.

Heat 1 — Craig Both — Martin Collard — I think the only two to finish that heat.

Heat 2 — Craig Booth — Berni Scott — Martin Collard.

In the Final only 7 came to the start and it was Craig Booth — Berni Scott second, Mike Whitehouse third — Martin Collard fourth. Lap 6 and we had Booth — Collard — Scott and ▶

Rowrah

SUNDAY, 14th DECEMBER

Dry but very cold conditions greeted an excellent entry for the pre-Christmas bash where the winners literally got the bird. Frozen turkeys were the prizes with those not winning going away with an Xmas pud.

We were to have had the return of the Manxmen for this meeting but a ferry dispute scuppered their chances of making it. Better luck next time chaps.

There were some famous names entered, David Coulthard and Dario Franchitti taking on reigning champ Vicky Starkey in the Juniors, Louis di Resta, Ian Williams and Jim Forsyth in 100 Nat, some famous outfits in 125 and Ralph Starkey in the pits.

During the lunch interval, we had a demonstration of the new Comer powered Cadet class by Dario Franchitti's younger brother whom I believe is called Marino (please correct me if I'm wrong), it looked good and seems to be what the old Cadet should have been.

However, back to the racing. Only two heats due to the short day and the Juniors were flung on first.

JUNIOR CADET & BRITAIN

A win and a 2nd each to Steven Wilson and Gary Robertshaw with pole going to Wilson as he won first. Andrew Parker was the only other driver in the class and his heats netted him 3rd and a DNF.

The traffic proved too much for Robertshaw in the final as Wilson pulled steadily away for his first ever win. Didn't I always say Rowrah was first?

Pole in Junior Britain went to ex-Cadet Scottish Champ, Graeme Melville with a win and 2nd. David Coulthard was next best with the other win coupled to a 3rd placing him on the outside of the front row. Row two consisted of Barry Forsyth and Lee Livingstone all the way from Inverurie in Grampian. Martyn Price and champion-elect, Vicky Starkey were the occupants of the third row with another twelve drivers behind them for the final.

Although this was very keenly contested, the first three places were settled as early as the first lap with Coulthard in the lead from Melville and Starkey. Jason Yeomans held 4th on the first lap but lost that next time round to Dario Franchitti, with Livingstone getting in on the act soon afterwards. Martyn Price and Alex Jack were to increase Jason's misery before the end of the race as they, too, deposed him. So the final ended in a win for David Coulthard from Graeme Melville, Vicky Starkey, Dario Franchitti, Lee Livingstone and Martyn Price.

My warmest congratulations to all Cadet and Britain drivers for some excellent racing in a no-grip situation. Well done.

100 BRITAIN

Pole to David Greig with two fine heat wins, he was accompanied on the front row by David Allen who finished second in his heats. Row two was headed by champion elect Lloyd Ross with two 3rds and also contained Colin Shanks with two 4ths. The rest of the heat placings were fairly evenly divided among the remaining drivers.

From the flag, Greig leapt into a lead he was destined never to lose. Allen appeared at the back of the field at the end of lap one,

presumably after a spin. Second now until the end was Lloyd Ross, driving without his usual sparkle as he was giving his gear a check over before selling up to go 100 Nat. Colin Shanks was safe in third ahead of Denise Ford and the unfortunate Allen.

100 NATIONAL

Again, no doubt over the pole man; Ian Williams took both his heats to book himself the premier place. Hoping to upset the Wylam lad's fortunes was Louis di Resta, taking a brace of seconds. Gracing the second row were Stu Davison and Jim Forsyth, the latter not entirely happy with his handling. Row three was the property of David Topley and Robert Crossley, both hoping for success in the final.

Williams got the jump at the flag and led the field round at the end of the first lap. Behind him were the very determined Louis di Resta, Stu Davison, Robert Crossley and David Tooley. Chris Armstrong improved his standing at the expense of Tooley a lap later as Barry Hill also brought pressure to bear upon the hapless Tooley. At half distance, a new threat was looming from K&S runner-up, Ian Fairless. He briefly held on to 6th before Hill resumed what he regarded as his rightful place. The last lap board beckoned and whether Williams eased up or di Resta put in a banzai last gasp is uncertain but the gap decreased dramatically and out of the last corner, Louis was within striking distance. All to no avail, though, as Ian held off the challenge to win his Christmas dinner from Louis di Resta, Stu Davison, Robert Crossley, Chris Armstrong and Barry Hill.

125 NATIONAL

Pole to reigning champion, Brian Winder, after a pair of heat wins. Joining him on the front row were Brian Bird with two 2nds and Barry Mellor with two 4ths. Tony Rees and Chris Bell formed the second row with some famous outfits towards the rear of the grid. We had an ex-Chris Stoney Stratos/Rotax in the hands of Mark Thompson, an ex-Derek Price Phoenix with Simon Crompton at the helm and a brand new Motiv being delivered by Bob Clowes to Tim Randall.

Brian Winder repeated his heat form in the final and simply ran away with it. A superb scrap was going on behind however as Brian Bird fought off the attentions of Barry Mellor and Chris Bell until the third lap when he lost his place to Thompson and was unable to regain it.

So the final was won convincingly by Brian Winder with Brian Bird just getting the nod from Barry Mellor. Fourth was Mark Thompson from Chris Bell, Tim Randall and Malcolm Campbell.

210 NATIONAL

The gremlins had a field day in this class with only two drivers finishing any heats at all. Geoff Preston won both and was thus on pole for the final. Ian Taylor was the only other driver to finish a heat and he was alongside Preston in the final.

Preston was the dominant force in the final with nothing really in the way of positional changes during the course of the race. The winner was Geoff Preston from Tom Earl, Terry Percival, Ian Taylor and N. Massey.

250 NATIONAL

Pole to Stuart Innes-Smith, having obtained Mark Websters Championship winning kart. When the man on the telly said "Go get a Bandit my friend" he forgot to mention that you look silly driving a chocolate biscuit! Heat winning honours were even between Mike Aspey and Tony Brown with both also recording a non finish. Tony is now seated in Stuart's EDR and has also reversed the barrel of his Maico and fitted an exclusive Merlin pipe. The transformation appeared amazing.

Unfortunately, Tony didn't make the final as a bolt worked loose in a clutch and the tool necessary to dismantle the clutch to fix it wasn't readily to hand.

Wesley Cairns, a visitor from Ulster, shot through from the third row to take up a lead which he wasn't to lose in the gathering gloom. Brian Crickett found himself in a strong second place ahead of a close group consisting of Andrew Lee, Stuart Innes-Smith and Mike Wright. Stuart needed to finish ahead of John Leah to secure the Club Championship, this he managed to do and put a driver between himself and John into the bargain. So the final win of the year went to Wesley Cairns from Brain Crickett, Andrew Lee, Stuart Innes-Smith, Mike Wright and John Leah.

FORMULA E

No trouble again for Brian Graham as he took both heats with consummate ease. The only other entry, Steve Mattinson, non-finished the first heat and was second to Brian in the last.

The final went completely to form with

EDITOR:

Jan. 26, 1987

Since there have been a number of stories written about the Formula K World Championship race in Jacksonville, Fla., U.S.A., which do not bring out all of the facts, I as the father of one driver and friend of the other drivers who refused to race on a track which they felt was unsafe would like to have you and your readers hear from someone from the other side.

I'm an ex-trustee and treasurer of W.K.A. and these are my personal opinions (along with some letters to back up statements I have made) to explain what I feel happened.

The newly installed chicane was too fast entering and too narrow to make for safe racing therefore the drivers did the only thing they knew to do by collectively signing a petition to race with the second chicane in lieu of the newly installed one. To my knowledge no steward or stewards (3) even asked a driver how they would like the chicane. They just removed (Friday night) part of the chicane and made it even faster, entering it. Now to follow-up, Carl Overton (Steward of the Course) did ask Lynn Haddock, Mike Wilson, Weatherly and Tod to try to improve on the first chicane. They did move pylons in different arrangements and came up with a slower approach to the chicane. At this point a European and American driver were going to test the chicane. Weatherly the European and Treadar the American. At this time the drivers, mostly Europeans, decided that the first chicane was still too narrow, too fast and entirely too dangerous. Weatherly went back to Mr. Overton and told him he would not test this new approach to the chicane and Mr. Overton then walked away in disgust.

There really was not enough land to make a chicane or turn in this area. The chicane was backed-up by a fence less than one foot away.

For this reason the drivers, approximately (66) of them, agreed in writing Friday night that they would race the second chicane only, and delivered this request to the Stewards on Saturday morning. WHY THE SECOND CHICANE? Because it had more runoff if you missed the turn to enter the chicane. (And yes, a driver did miss the chicane during the race). He either missed the chicane or broke his motor just before entering the chicane and ended up going down the straight away. In addition, the second chicane was a lot wider all the way through it, where as the first one was very narrow in the middle. The stewards said no to the second chicane because of the 12" steel pole on the left side of the track at the exit of the chicane and because of accidents which happened shortly after the track was built some 15 years ago. The pole could have been haybaled or cut down and reinstalled after the event (the city of Jacksonville had spent \$45,000.00 to put on this event. I'm sure we could have come up with the money to remove and reinstall the pole). As for the accidents years before in the second chicane, we did not have the soft (trick) compound tyres which make the karts more controllable in the turns. The drivers knew that going to the second chicane exceeded the length required, but they had the gears to get there and they wanted to race safely. All of the drivers like the idea of the second chicane because it was wider and had more runoff if you did miss the chicane. The runoff at the second chicane was at least twice as long as the first.

Why could the drivers not agree on running the full straight away? Only a couple of drivers would of had the gearing to do this and it would not have been fair. Some drivers did not like the idea because the tyres they use are sticky when



We welcome your letters on any topic related to karting and they should be posted to: Kart & Superkart (Letters), Pindar Road, Hoddesdon, Herts. They should have the name and address of sender, whether or not this is to be published. Opinions expressed are not necessarily those of the Editor or staff.

they are hot and going down the long straight away they would cool off and not work properly when you needed them for the turn at the end of the straight. If you saw the race you should remember there was an accident at the end of the straight 3 or 4 laps from the end of the finals which could have been caused by this since the straight was being run due to the accident in the first chicane.

For reasons not known to me the three stewards would not agree to let the drivers run the second chicane. Three non driving stewards said the second chicane was not safe and approximately 66 drivers said it was safe. And three non driving stewards said the first chicane was safe and approximately 66 drivers said it was not safe. I still say that the drivers would have raced had the stewards let them run the second chicane.

The following notice was posted Friday:-

"Having given serious consideration to the request of the drivers, it has been agreed that the facing kerb (sic) at the exit from the chicane will be removed so as to provide a clearer run-out and greatly reduce the chance of the chicane being blocked.

"However, the risk cannot be completely removed and should the chicane become blocked, the yellow flag will be waved at the approach to the chicane and the karts will continue straight through without using the chicane. The yellow flag situation, meaning that no overtaking will be allowed, will continue until you are shown a waved green flag.

"At any other time, should a driver go straight through and avoid the chicane, this will be noted by a Judge of Fact and the driver will be penalised (10) places in the results of the race."

This also proves my point that there was a risk in racing the first chicane when the stewards posted this information.

After the race I realised that the American steward and the European stewards had a different meaning of a yellow flag situation. It seems to me the American steward should have read his international rule book.

When practicing at Jacksonville prior to the event we always had the chicane as slow as possible. We tested with the chicane lengthened out but this made it faster and more on the edge of having an accident because you were entering much too fast.

In May of 1986, at a race in Ohio, Tod talked to Mr. Kugler, President of W.K.A. and expressed his feeling of the chicane that Mr. Kugler had tentatively laid out for the race. Tod told him that it was too fast for the World Championship and that it needed to be slower entering it. I believe Mr. Kugler said "We are going to make it fast for the Americans". To my knowledge, no driver was ever asked their opinion on what should be done at the chicane. Tod had run more laps, both practice and race, than any one. Myself and other karting friends put on a race with our chicane on May 31, 1986, and had 6 drivers present to race and work together. Our chicane was made of tyres and was very tight so it made the drivers slow down before entering it, and we even had a few accidents. All the drivers that attended that race and who came back on July 18, 19, and 20, to practice said they liked the way the chicane was laid out. No. C.I.K./W.K.A. officials other than Kent Nigro the scrutineer for W.K.A., had watched a lap be run at a practice session or at the race on May 31, 1986.

Tod was at Parma, Italy (World Championship 85) and practiced with the Europeans. Tod raced and finished 11th at Las Vegas against the Europeans and it was our belief that they would want the chicane to be very slow. This is the way we practiced, but with tyres outlining the turn. Curbing makes a big difference.

The first thing Mr. Buser did when he and his associates walked the track on the morning of Sept. 13, 1986, was to tell Mr. Nolting to remove a portion of curbing about 4 to 5 feet long on the right side of the entrance to the chicane. This showed he was concerned with the chicane being safe even before any kart had been driven through it.

Some other comments which I feel directly or indirectly led to what happened at Jacksonville, Fla.

(1) C.I.K. approved a track which they never saw a lap, practice session, or a race run on because of their haste in having a race outside of Europe and in America they chose to waiver rules as to the running of a world class race on the track prior to the holding of the World Championship. This all happened because Canada was to host the 1986 race and had several problems and the race was shifted to the U.S.A. W.K.A. accepted the race on April 18, 1985, and the North Fla Kart Club was officially informed that they were to host the race. But it was not final as to the direction that the track would be run or to the design of the chicane until a meeting was held on March 7 & 8, 1986, attended by Mrs. Buser, Kugler, Langford, Overton, and Buffomante at the W.K.A. office in Canton, Ohio. To my knowledge no drawings as to how the chicane was to be constructed either in length, width, curbing configuration etc. was ever given to the N.F.K.C. The alterations to the track were not started before Aug. 1, 1986, and when Mr. Buser visited the facility on about Aug. 13, 1986, the work had not been started or it had just begun so he never saw the track in its completed form until Sept. 13, 1986, when he arrived at the track for the race.

(2) In watching the event it was not clear as to who was the starter, G. Riva or Jacksonville's George Pavliska. At times I looked toward the starters stand and saw Riva flagging on the straight with Pauliska running back and forth to the other side of the track.

(3) I question the creditability of the American track steward. What credentials are required to hold this position? He has only seen (1) race in Europe and (1) true American/European race in the U.S.A. How can this person make decisions as to what is safe and what is not safe when he is not qualified to do so. His statement that the race is in the U.S.A., and that's who's rules we are going by now, is a reflection that he did not understand that the rules in which the race was to be run under were the international rules.

(4) W.K.A. and the North Fla. Kart Club did everything as an organisation to make the race happen and I feel that if these organisations would have been in sole command the race would have been run using the second chicane.

(5) I am unaware of a rule in W.K.A. or C.I.K. that states that a driver upon entering an event must participate in that event. Tod paid his own entry fee and feel it was his decision as to race or not if he felt the track was not safe. I think it is going to far when the governing body can try to force participation by threatening the drivers with suspension.

(6) Let the blame fall where it should. With the organisations that waived rules to meet their needs, but would not do the same for the sake and safety of the race. The drivers and karting in general lost because of the politics of a few officials.

Tod has been suspended by W.K.A. as of Oct. 1, 1986, for the violation of rule 4 and 15 which are as follows: Rule 4. It shall be the duty of every W.K.A. member to conduct himself while representing the Association in a manner that shall not be prejudicial to the Association, nor bring unnecessary criticism on the organisation. Number 15 explains how the suspension works. Tod appealed his suspension on Nov. 7, 1986, and on Nov. 14, 1986, I was informed his suspension was upheld for a period of one years from Oct. 1, 1986. For the records Tod or no one

else that I'm aware of talked against W.K.A., C.I.K., or N.F.K.C. at any time before, during or after this event.

One other thing to remember is that the new configuration of the Jacksonville track could not have been homologated by the regulations of the Commission Internationale De Karting, page 105, 11. homologations and obligatory inspections, article 48: homologation criteria, since it was only finished on Thursday or Friday and practice was to begin for the race on Saturday, yet the stewarts keep saying they could not change the track because only that track was homologated and it would take only one driver to protest the race and they would have to allow the protest. If your confused join the crowd. It seems to me that the rules are made and broken by the same people, the officers of the governing bodyies, whoever they might be.

After reading the last edition of *Kart and Superkart* magazine of England and that the reason for the suspensions of the drivers was because they signed the request for the track to be changed and refused to race if it was not, then I feel that all drivers who signed that request should be suspended, not just the ones that did not race and so I am enclosing a copy of that list so every one can be aware of who did in fact sign it. To my knowledge the American drivers who signed but ran were Scot Myhr, Ken Kroeger, Sean Smith, (South America) Pablo Brickenbach, Mauricip Gonzalez, (France), ran so he could protest Jacques Saint Guirons, (Canada), Pradip Jayewardene, Russ Dindwall, David Campbell, Keith Miller, David Clow, (Brazil) Guga Ribas.

There are also some drivers from the U.S.A. that did not sign but also did not run, Tommy Noltin, Danny Stewart (went home sick) and Ryan Negri.

Being no one on the outside knows for sure which drivers have been suspended by F.I.A., I only have to assume as to who really was. By now everyone knows which drivers W.K.A. has suspended and the ones listed above were not, you tell me why?

I thank you for hearing my side of the story.

Bil Spaude
2650 Gandy Blvd.
St. Petersburg, Fla. 33702

Dear Sir,

First may I, throught the medium of your pages, thank Martin Frost for his very complimentary letter in the October issue of *K&S*. We, the 210 drivers that is, do not feel that we did anything out of the ordinary in doing our best to entertain a party of kart racing guests, visiting our Island. We are, however, very glad that he, his family and his spanner man, Jim Curry, appreciated our efforts.

As a club we do like to see as many visiting drivers as possible. If the thought of the expenses of getting here puts you off, we are in a better position to tell you how to keep the cost down than any travel agent (we don't think in terms of commission!). Driving down the road to your local circuit would be cheaper, of course, but if you like a bit of social life thrown in with your racing then a weekend in the company of the ISLE OF MAN RACING ASSOCIATION may be just what you are looking for.

Facilities at the circuit include separate P.A. systems for commentator and paddock, toilets, burger and drinks stand and a facility I find missing at many circuits, namely somewhere to start and run your kart without going on to the track. After racing we retire home for tea and then gather again for a disco and presentation

at a Douglas hotel, at which a bright, breezy evening is normally assured.

For those of you who don't like camping in a tent and don't want the expense of a hotel I am quite sure that many of our members would welcome you to their homes in return for the same facilities when they visit your area.

This includes the highlight of our year, the Peel Mini Monaco for gearbox classes in late June.

If this has whetted your appetite for a visit contact one of the following people for further advice. I give their classes, purely as a guide, and even if the person of your choice is not available any of these lads will be quite willing to help as class discrimination is unheard of over here. STD Code 0624.

250	Malcolm Stoddart	74442
125 Nat	Richard Messenger	29971
100 Nat	Richard Messenger	29971
100 Brit	Ian Gaynor	26759
125 P&R	Allan Colvin	843609
210	Brian Murphy	833687
Club Sec.	Martin Griffin	823884

A phone call won't cost much and the trip may not be as expensive as you expect.

I have written a leaflet of suggestions and advice to make your trip as cheap as possible in the hope that as many of you will visit, what many of our guests have described, as the friendliest country.

With best wishes for 1987.

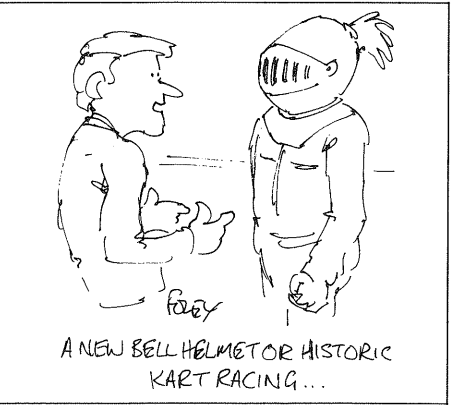
Yours truly,
Brian Murphy

SHENINGTON

A few months ago the accident unit at Banbury Hospital, which has provided care for drivers involved in the inevitable incidents which occur from time to time at the Shenington circuit, announced it was facing closure. This of course meant that in the event of a Karting accident at Shenington the injured person would have to be diverted to another casualty centre, in all probability a greater distance away.

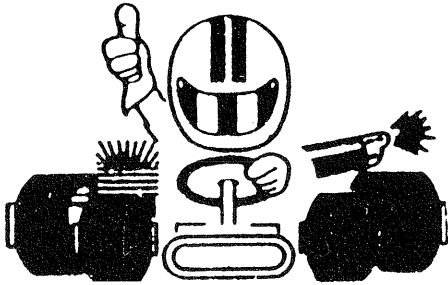
When the Shenington KC members learned of the impending closure they banded together to begin fund collecting, involving raffles, collecting on club race days etc. So keen were they that people had to donate money both on entering the circuit and leaving! Nigel Mansell, who frequently used to race at Shenington during his karting days, donated an autographed print of his F1 Williams-Honda win at Brands Hatch which netted £256 towards the cause. In the first collecting session £600 was handed over to the Banbury accident unit. Spurred on by that success the drivers collected another £525; £125 for the Katherine House Hospice and another £125 to the accident unit.

Money begats money, so they say — off they went again, this time for the Shenington Village School Fund when the whipround came to over £200. Busy lot that Shenington gang — they deserve a very big pat on the back.



WEST OF SCOTLAND KART CLUB

SUMMERLEE RACEWAY, MERRYTON ROAD, LARKHALL, STRATHCLYDE



1987 RACE DATES

March 1st Club Championship Round 2
April 5th Alan Brown Memorial Trophy (100 Nat Rose Bowl)
May 3rd Alastair Mathie Memorial Trophy (210 Nat Cup + £100)
May 23rd SUPER ONE ROUND 4 PRACTICE
May 24th SUPER ONE ROUND 4
June 6th & 7th Scottish Open Championship
July 5th Ford Trophy 125 National (25 laps)
Scritineers Cup 210 National (25 laps)

August 1st (Practice) BRITISH CHAMPIONSHIP (JUNIOR BRITAIN A & B)

August 2nd BRITISH CHAMPIONSHIP (JUNIOR BRITAIN A & B)

August 23rd BORDER CHAMPIONSHIP FINAL ROUND

September 6th Club Championship Round 8

October 4th Summerlee Open Championship

November 1st Club Championship Round 10

TRACK DETAILS

Length: 852 Metres — Width: 7 Metres — Surface: Asphalt — Racing Direction: Clockwise — Corners: 9 — Gearing: 78t — 82t — Lap Times: 40.5 (approx)

HOW TO GET THERE

FROM THE SOUTH: M6 — Carlisle
A74-M74 Junction 8, Follow signs to Larkhall Town (B7078) track is approximately 3 miles from motorway and will be sign posted from junction 8 Slip.
WE ARE ONLY 72 MILES FROM ENGLAND.

RACE ENTRIES CLOSE TUESDAY PRIOR TO CLUB MEETING

For further information please contact:-

ROSS MILLER Comp. Secretary, 57G Chapel Street, Airdrie ML6 6LE, Strathclyde.
Tel: 0236 55642 (After 6pm)

SHENINGTON

THE LONGER SHORT CIRCUIT

FIRST MEETING SUNDAY MARCH 15th

(Test Days — Saturdays 7th and 21st March)

ALL RAC CLASSES PLUS FIRST ROUND 210 CHALLENGE

Sign-on & Scrutineering 9.00am, Practice 10.00am, Racing 11.00am.

Entries — £10.00 Members, £12.00 Non-Members

MORE FACTS:- Completely Re-surfaced — Undercover Scrutineering
Test Days twice a month — 200 + Tarmac Pit Spaces.
Free Calendar Of Season's race events & Test Days.

SHENINGTON THE LONGER SHORT CIRCUIT

Entries, Enquiries & Free Event Calendar write to:

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(APRIL MEETING SUNDAY 19th)

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£750 and £1200

either contact Tony Birch
(Lynton) 061-223 8211, or
Martin Hines at Zip Kart
(0992) 463371

ROWRAH REVIEW 1986

by Iain Blair

Another fabulous year for the Cumbria Club. It began with the unveiling of the new scales and their purpose-built home and ended with some excellent entries in the Junior classes.

Only one meeting was lost due to the weather; November all but drowned most people and there were many wasted journeys, mine included as I had a 700 mile plus round trip just to attend. Taking the season as a whole, I intend to expand upon the club performances to include Championship results as well.

Viewing the sport as a whole, there were some good and bad aspects to 1986. The good included the scrapping of the old Cadet class, and the proposed new Cadet class. Also good news (I hope) is the 125 Super class on Long Circuits. Time and again, experienced drivers have had heart-stopping "moments" whilst up against newcomers to the class. This may alleviate that situation. It is hoped that the new category is administered so the non-graded drivers don't feel left out.

On the bad side, the 100 Supers stand well clear of anything else. For sheer idiocy, bad and undisciplined driving, ill manners and up yours attitude, it couldn't be beaten. The much maligned 100 International elite were all gentlemen compared to this unruly mob. Your time is coming, boys. Be warned!

JUNIOR CADET

In terms of wins, Graeme Melville and Darren Manning were the most successful with two wins apiece whilst Andrew Parker was first on sheer consistency, failing to score twice in eight meetings. This finishing record included a win in October. Other winners were Dario Franchitti in his last Cadet meeting before opting for Junior Britain, Peter Dumbreck and Steve Wilson at the Turkey Trot. Gary Robertshaw was a frequent visitor to the track and finished in points on four occasions, although without a win to his credit. Our maximum club entry was 6 and 1, for one won't mourn its passing.

Wright supplied three winning chassis with Superdart getting two. Sprint, Premier and Zip all took one win each. On the engine front, Arrow took five from DAP with two and PCR with one.

JUNIOR BRITAIN

Again it was Vicky Starkey's year, lifting the club championship for the second successive year to emulate her predecessor, David Coulthard in '83 and '84. Only four points finishes this year as a mid-term hospitalisation put her out of action for a time. However, three wins and a 3rd are not to be sneezed at and her professional approach and impeccable track manners will be missed in the Junior ranks. We don't lose her altogether, though, as she starts the new campaign with an AllKart/Parilla combo in the hurly-burly of 100 National. Despite the leg-pulling, Ralph and Duncan have done a terrific job on her gear enabling her to use the rapidly maturing talent to good effect.

Martyn Price is the next best finisher, although without a win to his name. After his scintillating debut at the end of '85, he settled down to learning how to race. He has a lot of natural talent, of that there is no doubt, but time-wasting

spins accounted for many placings lower than he deserved. Very much a lad to watch.

Alex Jack improved with each outing despite his declining placings until the win in October. He survived an association with Ralph unscathed and probably won in October to ensure the relationship wasn't renewed. (It worked 'cos Ralph was by this time acting as tyre technician for the Canon Williams team.)

Scott Armstrong features next and was always very close to breaking his Rowrah duck but, like Price, suffered the odd misfortune. Another who will improve to a much better than average club driver.

Adrian Fletcher raced consistently over the season without much visual signs to show for it. However, his approach and preparation improved all the time and results will surely follow.

A tip for the top from a very reliable source is Jason Yeomans. Only two points finishes but getting better in the chassis used by both Dario Franchitti and Vicky Starkey. Remember this name.

The other race winners over the year were, Alistair McDougall who has since moved on to National; Desson McDonald, indecently quick but needing to race against top opposition to smooth off some rough edges; Guy Linton, only seen at the August meeting so unable to make a real assessment; and David Coulthard who is a quite superb driver and was desperately unlucky at Kim. Wright won the chassis stakes taking four wins from Fullerton with three and Sprints lone victory. TKM had four wins to Parilla's (whatever type...) and PCR's one on the engine front.

SENIOR BRITAIN

Lloyd Ross's domination of this class was virtually absolute. Five wins from six starts is pretty good going and with Britain grids being good this year, he also lifted the champion of champions title too. Lloyd relied on Grice TKM and PCR power over the year mounted on a Zip chassis. He now intends to return to the National as he has little in the way of any competition. If rumour control is correct, he should be seen on a PCR kart. Motive power has yet to be confirmed but it will likely be of Italian manufacture.

Steve Ogden graced us with his presence and sportsmanship on three occasions and eventually won in October, his Rowrah swansong. There was much talk of retirement then and indeed it seems he may well have hung up his helmet. If this is so, his impeccable track manners and sense of fair play will be sadly missed on the circuits.

David Greig raced at the final two meetings and went away with 1st and 2nd from the finals. Very rapid and aggressive driver (not intended to be disparaging) but does need to exercise more courtesy to his fellow and slower competitors to remain on good terms with the C of C.

John Coupe netted a good couple of 2nds in the early part of the year whilst David Allen produced some decent results throughout the season. The rest (and there were 10 other points scorers) were reduced to playing second fiddle to the Ross steamroller for most of the season. Zip won five meetings from Wright and Jeta with one each. TKM took three wins narrowly beating PCR and DAP with two each in engines.

100 NATIONAL

1986 was the year of Ian Williams. He scored in every meeting he attended except May, when he and Allan McNish clashed. That included three wins and shows just how well he did over the season. No-one else really came close to his points score although his season was slow to get going until May. The British Champs in July was also marred with a DNF. Lying well up in the final and moving along nicely thank you, Ian was forced to retire with chassis damage after encountering a spinning driver. Thereafter he was pretty well in a class of his own although Louis di Resta nearly caused an upset in December and Jim Forsyth beat him at the first August, showing that Williams wasn't invincible.

The next most prolific driver was Allan McNish. Wins at the two opening meetings looked certain to be followed by another in May until his and Williams' downfall. After that he concentrated on 100 Super and came away with the British Champs, first at Wombwell then in the tribunal room at Belgrave Square. For 1987, kartings loss would appear to be FF1600's gain, possibly with Ecurie Ecosse backing?

In a world dominated by yuppies, Allan is definitely upwardly mobile. Stu Davison failed to score only twice but the nature of his scores bore no relation to the results we know he is capable of. This may be due to him being unable to tune in the 32mm TKM to the Rowrah circuit. As a measure of this man's love for the sport, he travelled all the way from Berwick to take part in the "Get Fresh" programme. Better luck in 1987, Stu.

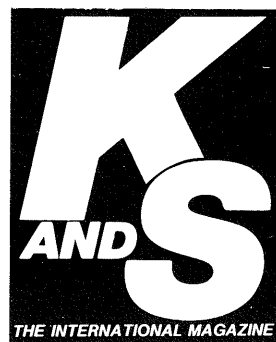
Reigning champ, John Docker, started the season with much promise. A change of camp to Redhill power was reaping rewards with some steady high placings before the British Champs. However, lack of testing time on a new Sprint and the late arrival of his hired Deavin Parilla's put him at a disadvantage. Qualifying via the B final, John retired to the pits after being involved in someone else's accident. That was nothing compared to August when his one meeting old Sprint was reduced to scrap metal and again it wasn't his fault. He didn't appear again and in 1987, John may be kept away from the track by business commitments.

Chris Needham raced in only one clubbie and won it whilst still a novice quite easily. He also starred on the front row at the British and finished 5th despite a misfire. Maybe Chris will visit us more often in '87, I hope so!

Jim Forsyth was generally quick but inconsistent. He initially did very well at the Hesketh Trophy and followed that with a fine 3rd at the Border Champs before non-finishing at the British. A win at the first August was the seasons highlight for Jim, who is another to have encountered the technical skills of Starkey Sr!!

Louis di Resta and Willie Turner had identical results although at different times of the year. Louis combined 125 racing with his National exploits this year, taking the Border Champs in the gearbox category. Silverstone, too, was an excellent meeting for him as he rapidly learned how different Long Circuit racing is.

Willia had a different problem; you see he was driving this camel and it was giving him the hump (ohh!!!). He won a heat at the British but showed only twice in the points at clubbies. One of the few drivers still using Yamahas, they proved that they could be as quick as the most



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exotic Parilla motors when necessary.

The other race winner was Lloyd Ross, victor in October when certain of the Britain crown. Despite the absence of Williams, Lloyd still beat out of sight a number of very good drivers.

Best of the rest? Without a doubt on sheer driving talent, it would have to be Mark Windle, 2nd at the British although placed only once at club events. I'm afraid his attitude to other drivers and/or race officials has not improved with the marches of time and this is all that prevents him from real excellence.

Most improved driver was Kevin McBride, coming on in leaps and bounds after the purchase of the ex-Docker Sprint (unbent '85 version). His season was cruelly aborted by a road accident which impaired the use of one arm. He hopes to be fit in the early part of the new year.

Rob Gardiner went much better after wrecking the 32mm TKM and reverting to the old 30mm design. Maybe they do need pods to make them work.

Andrew Laws tried to kill me in April but failed (no-one has succeeded yet) and then made Maradona look like a refugee from "Crossroads" on acting ability. He got 5.9 for artistic impression. David Tooley had magnificent finals all year but they were offset by heat mishaps pushing him down the grid. If he started further up, he'd be edging very close to the leaders.

Equipment wise, DAP chassis won three times, Fullerton and Zip twice each and AllKart once. Parilla scooped the motors taking five victories over DAP (2) and PCR (1).

125 NATIONAL

For the second consecutive year, the title went to Brian Winder. Early season engine bothers meant he failed to score until August but two wins and two seconds clinched the title for him in December. Again campaigning the self-built Nevada, Brian goes well round Rowrah and with entries into the teens late in the year, that is really going some.

Barry Mellor had an excellent season despite not winning any races. In the Championship hunt for most of the season, Barry missed out on points in mid season which badly affected him later on. Weight tends to be Barry's biggest enemy as lighter outfits got off the line better, meaning Barry had a lot of extra work to do. Winder and Mellor were the only two drivers to attain 4 points finishes.

Although again taking no wins, Brian Bird had three top 3 placings putting him marginally ahead of compatriot and March winner, Chris Bell. The driving skill of both these pilots is coming along nicely and 1987 should be good to them.

Winner in April in his annual outing at Rowrah was Mike Ballantyne. Piloting Andy Fairless' 1985 AllKart, Mike lapped all other runners in what was an engine sorting session. Elsewhere, Mike had 3rd at the Hesketh Trophy 4th at the Gearbox champs and drove fantastically at the GP until dinged off by Dave Clark's errant Stratos.

With a pair of Rotaxes breathed on by Roger Goff, 1987 should be interesting....

Berni Stoney won in May with a hubby tuned Rotax. Hubby himself won in June, an ominous warning for the Gearbox Champs later that month. Second to Stoney in June was Gordon Brown and he duly won the first August after Willie Grieve and A.N. Other had a disagreement and fell off. Willie made up for it on day 2 though and blitzed the opposition. He had early season niggly problems but was very quick and soon settled into 125 racing. Nevada, Zip and Stratos managed a brace of wins each with the balance being made up by Phoenix and AllKart. Rotax was unopposed in the engine stakes.

125 P&R

This sub-division is now sadly lacking in available engines as only the TM, dubbed as horribly expensive, seems readily available. Some of those who complain of cost may go a little quiet when asked of the preparation costs of Mugen Hondas.

Things may improve with the advent of water cooling. However, the best P&R grid was, as usual, at the two day meeting and was won not once but twice by David Peers!

John Brolley had two early wins but didn't attend again until October. Nicky Robson won the season opener with an indecently quick Kwacker, but then laid his hands on a Rotax outfit and P&R'd no more.

Andrew Harvey lifted the club champs with some good results and also found time to play at Long Circuit racing in both P&R and 250 Nat and was spotted on the telly at the GP.

Aside from that, P&R rarely got its own grid. There surely cannot be that few outfits about, and I'd like to see more of them. TM's included.

210

Despite repeated threats from the RAC, the old dog soldiers on and refuses to die. 19 drivers were recorded as finishing in the top six which is pretty damned good.

Only four of these scored wins. The first was Ashley Winter, to took the first two meetings in 1986 before selling up and retiring. The recent addition of a female prototype to the Winter stable may have played a part in his decision.

Geoff Preston took over what Ashley had started and had taken four wins and the club championships by the season's close. A good record for one unfamiliar with Rowrah at the start of the year.

Andy Martin used June as a testing session for his gearbox title retention and won easily. He also took the long circuit title and the GP proving reverse barrels work.

Kevin Bleasdale tried his own reversing technology in what was a learning year and was rewarded with October's win.

Terry Percival was very consistent without actually winning anything whilst most promising newcomer was Mike Stephenson who had strung together some decent results before forsaking the class for 125 Rotax power.

John Brewis, Tom Earl and Gordon Addie all came so close to winning some races but were all dogged by ill luck. Addie in particular must have been looking forward to repeating his Larkhall success only for Andy Martin to enter at Rowrah and spoil the party.

Barlotti chassis took five wins with Aero two and Stratos one, power came from Villiers.

250 NATIONAL

The championship went all the way to the wire this year with Stuart Innes-Smith just easing steady John Leah out of the winners enclosure at the final round in December.

Stuart's results were infrequent, probably due to Long Circuit engagements but he always scored well and the EDR handled like a dream. Leah, however, scored at all 8 rounds and showed that consistency is as important as outright speed.

Brian Crickett won the wet April meeting on the nimble Lynx before treating himself to a tidy Zip/Yam combination which won in October and finished second in December.

Mike Aspey had a brace of good results including the May win and swapped his old number at 3 Sisters by finishing an excellent 4th.

Andy Martin won August 1 but suffered cooling bothers in August 2 and Tony Brown took the honours. Having now transferred to the EDR marque, Tony had also reversed the barrel on his Maico in an attempt to increase piston life and performance. Tony has also the distinction

of being the first person to score a British Championship point with a watercooled Maico.

Wes Cairns travelled from Ulster for his Xmas lunch and took away the bird from an unfavourable grid position.

Other points scorers were somewhat infrequent although August was brightened up by the annual Cheshire K.C. holiday/booze-up/whatever. Its all good clean fun and is essentially what karting is all about. If you've no idea what I'm talking about, come up in August and find out.

Zip and Phoenix took two wins each with EDR, Lynx, Stratos and Barlotti with one apiece. Watercooled KTM's had three wins over Maico and Yam with two and the aircooled KTM with one.

FORMULA E

Again Brian Graham was the dominant force, beaten only once in August 2 by John Ashe after retiring from August 1 with piston troubles. Brian won the other six meetings with no trouble at all and unfortunately has now retired from the sport. His outfit has gone to a hillclimber in the Midlands who intends to run the Rotax on alcohol/nitro. That should be really something.

Brian's high spot of the season was his 5th at the British after having an excellent dice with Ian Shaw (who?) for over half the race before Ian's retirement. A quick pirouette on the marbles caused a brief heartstopping moment but gathered it up to win a cherished number.

Bazzer Tolson seems set to return in '87 and promises to be better than before. Watch this space.

Only Steve Mattinson competed on a regular basis but had more than his fair share of mechanical mayhem, which limited him to only two points finishes. Maybe 1987 will be his year.

At this time last year, I asked for an upswing in 250 Nat entries. Well, it happened, but apparently to the detriment of the ultimate class. Please can we have some more Superkarts, they are the showpiece of the sport and deserve better.

Zip/Rotax was totally dominant, taking all 8 meetings and not even being challenged.

Once again, its time to close what may be my last Rowrah Review. Sadly, work schedules seem likely to keep me from some meetings. I shall attend as many as possible, though.

To karters everywhere and my fan, have a safe and successful 1987.

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IN PROFILE ...
WILLIAM BATMALLE



William Batmalle was unknown to UK Karting audiences until the early months of 1985 when, among others, he represented his country at Le Mans on the Bugatti circuit. His roots in French Motor Sport, however, go back a long way, relatively speaking.

He was born in Paris in 1947 and on completion of his education, although still studying, became active in Motor Racing. His competition days starting at the age of 18 in National Car Racing and 'Courses De Côte' between 1965 and 1968, the car was an NSU 1000 TTS — R8 Gordini, with a little bit of backing from Castrol Oils. William opened the 1969 Racing season with the R8 Gordini, later progressing to a Ford Escort Twin-Cam outfit, finally a 3 litre Capri. He raced in the 1977 Gordini Cup and did a lot of testing in the Mono-place Formula Renault, racing many times on the Bugatti.

a finalist in the French 125cc Championship, four times finisher in the top ten and twice in the first five. For 3 years William was a member of the French 125cc Team, his previous experience in cars being a great asset. The latter half of the 1984 season saw a shift to Formula E 250 and, with experience of the extra power of the Rotax twin, William was ready for a taste of Formula E at World level, on a circuit well known to him, the Bugatti at Le Mans in April. Pitted against the top names in the world William finished seventeenth from a grid of 54. Then it was onto Hockenheim for the second round but mechanical gremlins and tyre problems, shared by many others, helped to conclude a wasted trip, although the experience gained was invaluable. Then at Silverstone in August during the final round William finished sixteenth after a poor qualifying time, so all in all not a bad first season on Formula E. On the home front he fared much better in the French 250 Championship, finishing second to Nissag man Eric Gassin. Last year Le Mans in April netted him

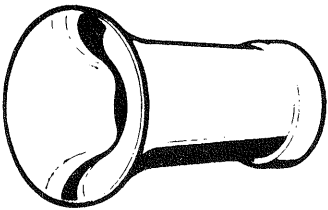
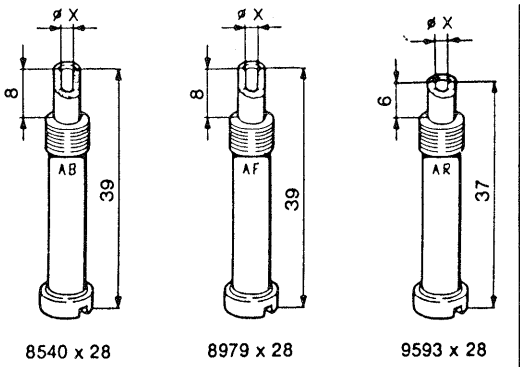
fifteenth place whilst quite a horrific-looking accident at Silverstone left William with a wrecked Kart and torn shoulder ligaments. That legacy he carried to the rain drenched Nürburgring a couple of weeks later but it didn't prevent him finishing a creditable tenth and sixteenth overall in the World Series. He rounded off the 1986 season with another second overall in the French Series, sharing equal points with Jean-Claude Kallen who was awarded the '86 Championship by virtue the highest number of top finishes. Now, with over 20 Formula E races under his belt William looks forward to the 1987 International seasons, both French and British as he has been granted a British licence and hopes to compete on a regular basis in this country. His aspirations are to finish in the European and World top ten and maybe to be the French Champion. He has come very close two years running, perhaps in 1987 he will pull it off. William is married to Sylvie and has two lovely young daughters and works as an Aluminium Contractor. During the Nurburgring meeting last year an impromptu birthday party was held for him in the kart paddock where he demonstrated his resilience to the powers of Calvados; some, it should be noted, were not quite as resilient to the effects as this very affable Frenchman.

FRENCH NEWS

Last year the French Formula E Championship ran concurrently with NOSCART, a commercial society which stages production car racing, and thus reduced the costs of regular competition for Formula E drivers. In France, as in this country circuit hire charges are very high. Another benefit of combining karting with car racing is that it exposes karting to a greater public audience but, more importantly, promotion. Last year NOSCART was able to attract such big names as Coca-Cola and the society assures the promotion and further development of French Motor Sport. The 1987 calendar for the the French Formula E Championship, held under the auspices of the GNK and NOSCART is well under way. The series is run over 8 rounds, 7 from 8 to count and the venues and dates are:- 2nd-3rd May — Nogaro (with M/Cycle Championship) 9th-10th May — Dijon Prenois 23rd-24th May — Paul Ricard 18th-19th July — Croix-en-Ternois 5th-6th Sept — La Chatre 19th-20th Sept — Magny-Cours 3rd-4th Oct — Iedenon 24th-25th Oct — Pau-Arnos

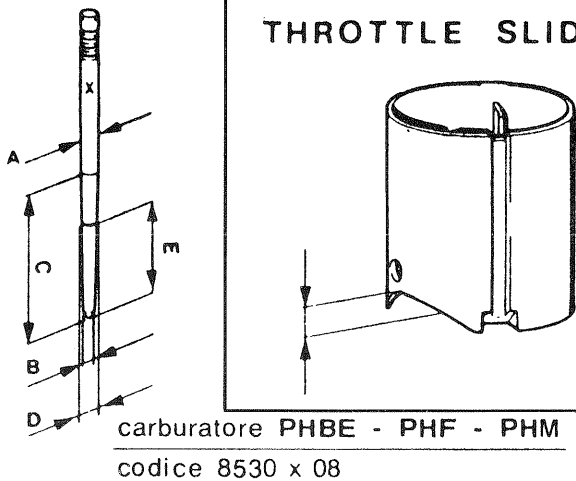
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code No.	type	x value measured in hundredths of a mm.
8540 x 28	AB	260-262-265-268-270
	ABi	272-275
8979 x 28	AF	330-340-350-360
9593 x 28	AR	260-262-265-270
10174	BN	264-266-268-270-272-274
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In general most carburettor spares can be bought from the normal pit spares vans that are at every meeting — Zip Kart, Tom Thacker, Goff Racing, Car & Karting Centre, Motivation and SRS Racing. I would like to take this opportunity to dispell a rumour, I am not the John Burns who draws 'JANE' in the nude in the Daily Mirror, so I will not be needing any of the hundreds of assistants who have volunteered to help the models! JOHN BURNS (Photos — courtesy Allan Williamson, Saddleworth, and John Burns)



carburettor	code No.	x value measured in tenths of a mm.
PHBG	9475 x 64	30-40-50-60
PHBL	9645 x 64	30-40-50-60
PHBH	9374 x 64	30-40-50-60-70
PHBE	9309 x 64	40-50-60-70

tipo	valore di X	(caratteristiche espres. in mm.)				
		ø A	ø B	C	ø D	E
K1	1	2,45	1,75	37	-	-
K2	2	2,45	1,75	42	-	-
K3	3	2,50	1,50	39	-	-
K4	4	2,45	1,50	39	-	-
K5	5	2,45	1,50	37	-	-
K6	6	2,45	1,75	39	-	-
K7	7	2,45	1,25	39	-	-
K8	8	2,50	1,50	37	-	-
K9	9	2,45	1,50	42	-	-
K11	11	2,50	1,25	39	-	-
K12	12	2,48	1,75	32	-	-
K13	13	2,45	1,25	38	-	-
K14	14	2,48	1,75	33	-	-
K15	15	2,50	0,60	36	-	-
K16	16	2,50	1,75	39	-	-
K17	17	2,42	1,75	40	-	-
K18	18	2,50	1,40	38	-	-
K19	19	2,50	1,40	40	-	-
K20	20	2,50	1,40	42	-	-
K21	21	2,50	1,80	38	-	-
K22	22	2,50	1,80	40	-	-
K23	23	2,50	1,80	42	-	-
K24	24	2,50	1,20	38	2,13	18
K25	25	2,50	1,00	36	2,15	18
K27	27	2,50	1,80	44	-	-
K28	28	2,50	1,80	41	-	-
K29	29	2,45	1,25	42	-	-
K30	30	2,50	1,40	36	2,15	18

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Jim Luby the well known Phoenix Kart manufacturer, has some different but very successful ideas on carburettor tuning. He makes a point that the jets can be affected by the float level. Jim starts the tuning of his 35mm Mikuni with mainly standard parts, a 1.5 slide, a 6DH4 needle, a 159 PO needle jet and a 2.0 float valve. He uses a vacuum pump and near as possible 3/8" petrol level in the float bowl. His aim is to use a 460 main jet, but a high fuel level could reduce the jet to 320, whilst a low level would see a 490 jet all giving the same reading.

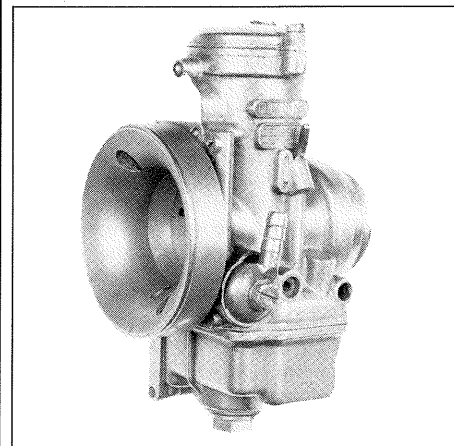
MIKUNI NEEDLES

The needle is stamped with a number/letter series such as 4D3, 4E1, etc. The first number, in this case a 4, designates the overall length of the needle. A number 3 would be a shorter needle and the number 5 a longer needle. The letter indicates a scale of richness and needle taper i.e., an "E" needle will have more taper and thus provide a richer mid-range fuel/air mixture than a "D" needle will, and so on up the alphabetical scale. The last number indicates materials and finish used.

The needle jet works in direct conjunction with the Jet Needle in controlling the mid-range fuel/air mixture. Needle jets come in various orifice sizes, the orifices are the same diameter the entire length of the jet and do not taper as the needle does. A change in the needle jet will have a far greater effect on the mid-range mixture than a step change in the jet needle.

The Needle Jets are stamped with a letter followed by a number, such as N8, O1, P3, etc. Each letter has a ten digit increment, i.e., N0, N1, N2, N3, N4, N5, N6, N7, N8, N9, O0, O1, O2, etc. The letter designates orifice size and a "0" needle jet will provide a richer mixture than a "N" needle jet. The number also relates to the orifice size, only in finer calibrations, the larger the number the richer the jet.

DELLORTO CARBURETTOR



This is the carb used by most of the 250 International drivers and it seems to be creeping into every other class. It is a very well engineered carb which gives very little trouble, but just in case a Dellorto service van is usually at the big meetings to provide spares and friendly advice. Not to mention the free cup of tea if you spend more than £200.

Main jets, slides and pilot jets follow the now familiar pattern. The float valves start at 1.5mm, rising in .5mm to 4.5mm. A very large variety

Jet Needle Code

Example: 4D3 — First digit indicates overall length from shortest (2) thru 3, 4, 5, 6, 7, 8, 9, to longest (1).

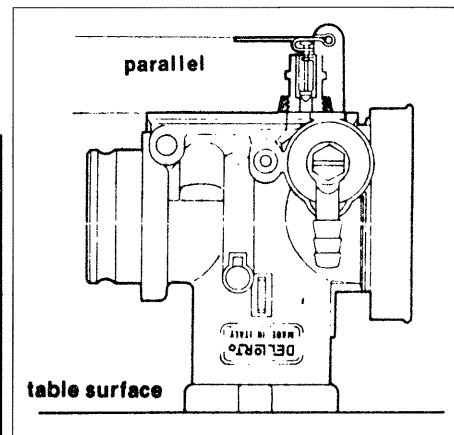
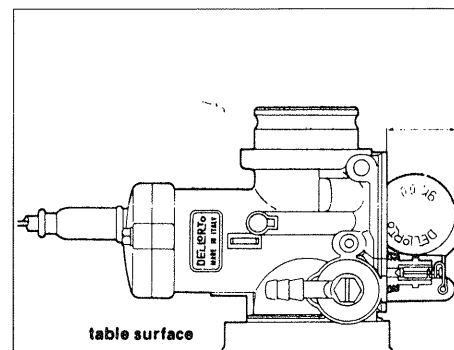
Letter indicates amount of taper.

A. Smallest amount of taper.

Z. Largest amount of taper.

Second digit indicates various materials and finish used.

of needle jets are available, (too many to list), to suit every possible engine, but in general most karters use the A.B range from 260 to 275. There is also a large number of throttle needles, the "X" range usually favoured by karters runs from X1 to X30, and most lengths and thicknesses are included.



Check the correct float level position as follows:-

— for connected floats, hold the carburettor body in the position shown and check that the float is at the correct distance from the carburettor body face, as specified in the table below.

— for floats with independent parts, hold the carburettor upside down, as shown, and check that the float arm is parallel to the carburettor face. Whenever the float or float arm position does not correspond to the proper specified level setting, or is not parallel to the float chamber face, bend the float arms carefully to set the correct position.

carburettor	float position m/m
PHBG	16,5 ÷ 15,5
PHBL	24,5 ÷ 23,5
PHBH	24,5 ÷ 23,5
PHBE	18,5 ÷ 17,5
PHF	18,5 ÷ 17,5
PHM	18,5 ÷ 17,5

Carburation is an important part of winning races and nobody is more aware of this than past World Champion Martin Hines, who probably spends more time than anyone setting up his equipment and in particular his carburettors. The results speak for themselves.

Anyone interested in becoming the next World Champion could do no better than start with these settings:-

Main Jet — 185
Emulsion Tube — 170 (BN270)
Slide — 20(c)
Needle — U10
Pilot Jet — 65
Float Valve Jet — 3.0 (Axle Pump)

The events will also combine productions cars and French F3. Formula E drivers will take part in timed qualifying to determine the grid order before competing in two heats, the finishing order from the heats deciding the grid positions for the final, which will run over a distance of 40 to 45 Km.

In prize money the final round of the series attracts 50,000 F, to be divided as follows:-

20,000F for the French Champion
15,000F for 2nd Place.
10,000F for 3rd Place.

Additionally the highest placed driver using a single-cylinder engine will receive 5000F.

Last year, at Circuit Carole near Paris, Keith Bisp competed with his 250 National KTM to give a demonstration of how competitive the class can be and it is now understood 250 National has become quite a popular category in France, utilising KTM and Rotary value Rotax engines.

U.K. drivers may compete in the French Championships and may claim prize money but do not earn any Championship points.

When the dates for the series are finalised they will be notified; it is anticipated many British drivers may wish to compete in France.



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NGK b-9/10EGV...£3.71
Nippondenso B27/31EN...£2.20
Nippondenso B27/31ES ZU...£2.48
Motocraft AG403...£3.00
Rubber plug cap...£65p

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PMP Villiers 210...£80.00
PMP Rotax 256...£160.00



Axle pump arm type...£7.65
Axle pump plunger type...£7.65
Mikuni round pulse pump...£22.50
Volvo Penta pulse pump...£22.50
Pressure regulator...£14.38
Pressure regulator florite...£10.00
Pressure regulator filter king...£13.16



Galactica full face fibreglass...£69.00
Grand Prix full face fibreglass...£63.00
1.5mm visors for above...£5.50
I.L.C. Vari Clear...£2.20



DID 428 chain 76 link box...£8.50
DID spring link...£85p
EK 428H chain 100 link box...£7.71
EK spring link...£42p

MONO WHEELS

KART COMPONENT
Front 125mm one piece...£15.24
Rear 185mm one piece...£17.81
Rear 210mm one piece...£17.81
Set of 4 wheels...£58.73
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Rear one piece...£17.50
Set of 4 wheels...£65.00

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45mm inner half...£4.49
60mm inner/outer half...£4.74
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100mm inner/outer half...£5.22
110mm out half...£5.43
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Complete set of valves,
'O' rings nuts and bolts...£39.00

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2" (50mm) inner half...£5.05
3" (75mm) inner/outer half...£5.05
4" (100mm) inner/outer half...£5.32
'O' ring...£38p
Rims drilled and tapped for
bead retainer extra per rim...£75p
Complete set with valves,
'O' ring nuts and bolts, bead
retainer fittings and studs...£50.00

OUR STOCK INCLUDES IN ADDITION TO ABOVE:- Castrol, Shell, Filtrate and PJI lubricants, Hermetite and Loctite products, *1987 catalogue, available mid March — £2.00 inc p&p,* Amal, Mikuni, Del'orto carbs and spares, Brembo brake pads and spares, Motoplat ignitions and rev counters, Rotax, Minarelli, KTM and Villiers engine sprockets, Ozus clips, Fibreglass fairings, bubbles etc, Lightweight petrol tanks, Tank tape, Aluminium front and rear hubs, disc and sprocket carriers, Axles hollow and solid, Temp gauges, etc, etc.



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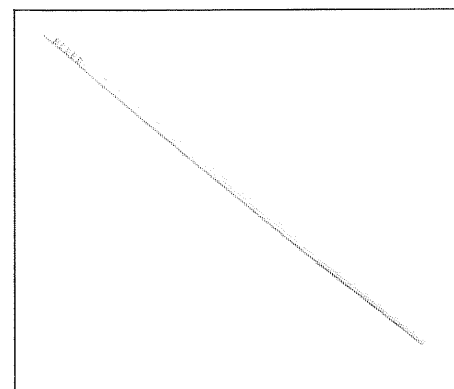
RICHARD WALLIS MOTORSPORT

RWM

By using the slide and needle jet, the carburettor can provide a stable fuel/air mixture over the whole engine rev range up to full throttle.

Unfortunately the engine does not have the fuel/air mixture ratio requirements through all running conditions.

NEEDLE AND NEEDLE JET



These two parts and their relation to each other control a wide range of the throttle operations (1/4 to 3/4 open). The needle can be set in one of five different positions by moving the needle clip to one of the different grooves on the needle end. For tuning purposes the grooves are numbered from the TOP down as: 1,2,3,4, and 5 with the number 1 groove the leanest needle setting and the number 5 groove the richest. If proper mixture is obtainable only by using the number 1 or number 5 groove, other adjustments to the needle jet are indicated.

The method for tuning the mid-range is similar to that used for the main jet, ie, use richer needle positions, needle and/or needle jets until the "four-stroking" running heavily, etc., indicates a too rich mixture, then back up to next leaner setting to provide correct fuel/air mixture.

All of these adjustments will over-ride into the next range to some degree. To provide smooth acceleration the pilot jet, slide cut-away, jet needle, and main jet must overlap to make the proper transition. A rule of thumb is that a major change (such as a different size main jet) will have a 10% effect on the mid-range operation. One notch jet needle change with effect main jet by 10%. It is apparent at this point that several different combinations of pilot jet, slide, needle, needle jet and main jet can be used to produce the same end result. The test here is to relate the various parts, the sizes and the effect that can be expected when making an adjustment to one or other of the carburettor tuning ranges.

The Emulsion Tube also has two other facets of operation, i.e., during part throttle operation, air is bled into the fuel passing through the jet to help atomise the large "droplets" which could settle out in the crankcase if not vaporised properly. Secondly, this 'air correction' system helps to overcome the problem of high speed lean out caused by the non-linear relationship between airflow and throttle bore vacuum.

RICH OR WEAK

There is a chemically correct fuel/air ratio, known as the stoichiometric ratio which gives total combustion. At this ratio all the hydrogen and all the carbon in the petrol should combine with all the oxygen in the air when ignited. This occurs when the mixture contains one part of petrol to fifteen parts of air by weight.

However, mixture with fuel/air ratios of anything from 1:8 to 1:18 will burn if the conditions are right. Although the stoichiometric ratio is chemically right, in practice a perfect 1:15 ratio does not give the required performance under all conditions.

Since a weaker mixture than 1:15 can be

burned, it is possible to run the engine on much less petrol by increasing the ratio to perhaps 1:17. A weaker mixture though, will produce less power since although the mixture burns, less of it produces power. This is because there will not be enough petrol to combine with all the oxygen, so some oxygen is 'wasted'. A weakening of the mixture by about 12% will cause a reduction in power of about 7%.

If, however, the driver desires more power, then the strength of the mixture may be increased. Since the power of the engine is limited basically by how much oxygen can be burnt, the idea behind enrichment is to make sure that all the oxygen in the cylinder is burnt. This is done by providing the mixture with so much petrol that there is no possibility of any oxygen being 'wasted'. Of course this means that there is bound to be petrol left over. A 1:12 mixture may give maximum power and torque.

Power can only be increased by enriching the mixture to a limited extent anyway. An enrichment of the mixture from 1:15 to 1:12 (an increase of 25%) may only result in an increase in power of 4%.

An over-rich mixture can actually inhibit burning for reasons that are complex but stem partly from the way the excess petrol prevents mixture from reaching combustion temperature as quickly.

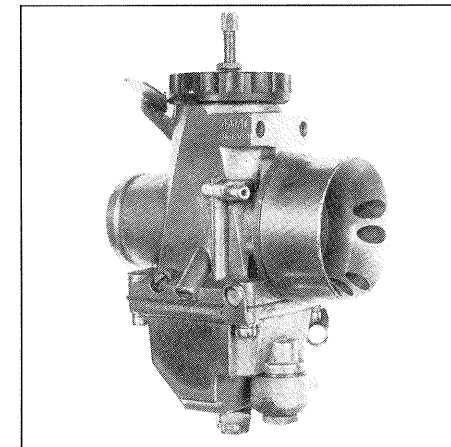
Firstly, the extra petrol has an insulating effect. Normally the flame front fans out through the combustion chamber from the spark plug, heating the mixture in front to combustion temperatures so that it ignites rapidly. In this way the flame spreads through the mixture with ever increasing speed. The excess petrol molecules, however, slow down the rate at which the flame front can heat the unburnt mixture and so reduce the rate at which it spreads.

Secondly a mixture which is richer in petrol tends to have a cooling effect anyway because of the greater evaporation of petrol droplets. This cooler mixture does not burn as easily.

Finally, of course, the fact that there is more petrol in the mixture must mean there is less air. Less air means less oxygen to burn and so a weaker power stroke.

It is important to bear in mind however that the value of fuel as an engine coolant is very considerable. In fact the vaporisation of fuel plays a very important part in keeping the engine at the desired temperature. The value of a rich mixture is therefore not only to give extra power but also to cool the engine and increase its working life.

AMAL CARBURETTOR



The majority of drivers in the 210 National Villiers class use the standard Amal carb, usual sizes are 34mm, 35mm, or 36mm. This has been standard wear for some years, although other carbs have been tried almost all the top drivers use Amal carbs. This seems hard to understand as all other classes have moved to Dellorto or

Mikuni. But I did once read where all different types of carbs were tried on one engine and the Amal carb gave more B.H.P. at the top end. As the Villiers engine has plenty of built-in torque it may be the answer for extra top speed.

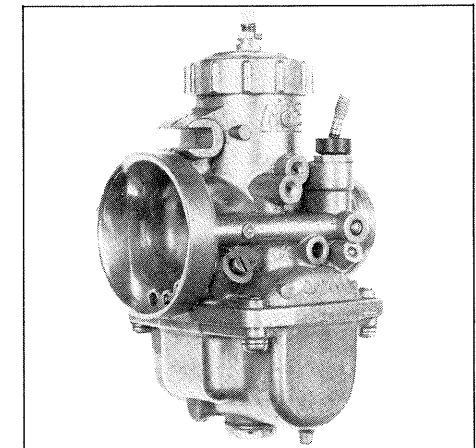
Amal, Mikuni, Dellorto, all use a similar system for numbering the main jets, pilot jets and slides, as explained previously.

For the Amal carb, sizes of needle jet are available, starting at 105 these increase one number at a time 105-106-107- up to 115. But take care, the needle jet for the Mk.1 and the Mk. 2 appear to be the same and are stamped with the same number, but the Mk.2 is longer. There are also similarly numbered jets for the four-strokes, drilled with an additional horizontal hole.

Amal carbs do not have separate float valves but it is possible to buy float bowls with four different sizes of inlet, 1.6mm-2.6mm-3.2mm and 4.0mm. These are used as with other makes of carb to regulate the flow of fuel. The 2.5 is intended for a normal road motorcycle, whilst the 4.0mm is for a racing motorcycle, each of these fed by gravity feed. The 1.6mm was designed to be used by the higher pressure pump feed, but in some cases it is necessary to use one of the larger float valve bowls even when a pump is used.

Andy Martin has provided us with this list of settings which he won last year's Grand Prix at Silverstone. Main jet 340, needle jet 108, pilot jet 25, a 1.6mm float bowl, and 34" of height from the regulator and to use his words: "as much bl..... fuel from the pump as we can get".

MIKUNI CARBURETTOR



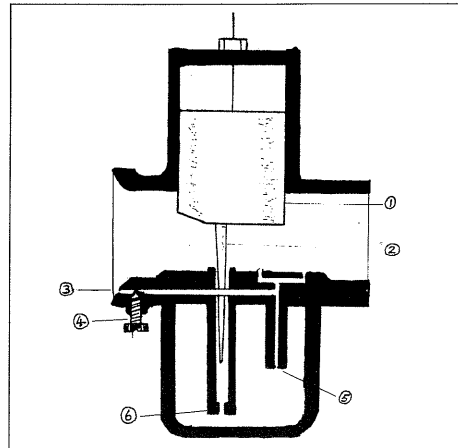
Mikuni has been popular on racing motorcycles and karts for several years and when set right it is extremely smooth on the pick-up, although some drivers complain it is a little short on top-end. The choke sizes vary from 32mm to 38mm and there is a large variety of jets to meet tuning needs.

As with all carburettors the jets can vary by a large amount when the engine is tuned. Alan Cheetham who is the 'Peak Revs' engine tuner supplied us with these variations for the 250 National single cylinder Yamaha. He uses the 38mm Mikuni power jet and removes the power jet, (this enables him to use a carb with remote floats). The 320 standard main jet would be changed for a 750, the needle jet is changed from a Q0 to a Q4, the needle stays the same at F13, pilot jet and slide remain at 70 and 2.5mm respectively, whilst the float needle valve is changed from a 3.3mm to a 2.5mm. He also gives the useful information of petrol pump set at 3.5lbs. and regulator to 28ins.

As you can see the main jet has the largest change from 320 to 750, but this is not quite as bad as it seems because the equivalent standard carb would also have a 100 power jet giving the equivalent of a 420 main jet when added together.

CHECK THE PROPER FLOAT LEVEL SETTING

With float needle, etc., in place, turn carburettor upside down and allow float to rest on the spring mounted float needle. With float bowl gasket removed, measure from the flat gasket surface to the edge of the float. Check your data sheet



The Carburettor, showing the Main, Needle and Pilot Jet System — 1) Slide, 2) Needle, 3) Pilot Air Supply, 4) Pilot Air Screw, 5) Pilot Jet, 6) Main Jet.

for correct measurement. A good rule of thumb says that the float should lie horizontal, when the carb is upside down.

When adjusting float level, bend only the needle actuating tab; be careful not to bend or twist floats.

MAIN JET. THROTTLE ¾ TO FULLY OPEN

The engine should 'two stroke' perfectly at full throttle in top gear, a tendency to 'four stroke' and run heavily indicates that the main jet is too large, causing the mixture to be rich.

Insert the next smaller size jet and repeat this process until the engine runs clean at full throttle. If the engine runs crisp and clean at full throttle to begin with, BEWARE, mixture may be too lean. Insert two sizes larger jet and recheck, repeat until heavy running or four stroking is encountered at full throttle, then use next lower main jet size. Main jets are numbers from 0-up (usually in steps of 10, as: 100, 110, 120). The larger the number, the larger the jet orifice, which in turn provides a richer fuel/air mixture.

If there is a lack of power and closing the throttle or the choke slightly or sticking finger into the Bellmouth, seems to improve the running, the main jet is too small. When the correct jet size has been determined there will be a tendency for the engine to 'four stroke' intermittently when running lightly loaded in second or third gear, but with a two stroke engine this is normal.

When the machine is being tested the main jet must be large enough to provide a mixture rich enough to keep the engine at a safe working temperature. To check this, take a full-throttle run, stop the engine quickly by closing the throttle or switching off and declutch. Examine the sparking plug, cylinder head and piston, the face of which should be coated with dark carbon and the central electrode should be brown with no loose carbon deposits. Weak mixture will be indicated by whitish or light-grey deposits and the rich mixture by wet oily and black appearance.

THE IDLING SYSTEM. UP TO ⅓ THROTTLE

In the fixed jet carburettor using a throttle slide, the need for a separate idling circuit is relatively

straightforward. Since the throttle is virtually closed at idling speeds, the suction from the engine is almost cut off. The vacuum in the carburettor bore across the slide is so weak that insufficient mixture is drawn into the engine.

To combat this, the idling sytem is brought into play when the throttle is closed or nearly closed. With the throttle closed, the vacuum in the bore between the slide and the engine is quite strong. This vacuum can be used to draw air in through a small hole at the open end of the carburettor bore. The air is piped through the carburettor to pass over an idle or 'pilot' jet and provides fuel only for the idle or pilot system.

The system delivers the fuel/air mixture from the pilot jet and air passage through a small hole in the carburettor bore just behind the nearly closed throttle slide. Because of the small size of this hole the idle system only works when the vacuum in the carburettor is strong enough with the throttle virtually closed.

PILOT JET. THROTTLE UP TO ⅓ OPEN

With throttle slide resting against idle speed adjusting screw, slacken throttle cable adjustments at accelerator pedal and carburettor top. Turn the idle speed screw in until the engine begins to idle faster, then back the screw out slowly until the engine runs slower and begins to falter, now adjust pilot air screw, in or out, until engine runs smoothly. Turning the pilot air screw in richens the mixture, turning it out leans the mixture. Slowly screw idle speed adjusting screw out again until engines slows and begins to falter, repeat pilot air screw adjustment. This procedure can be repeated until the proper engine idle speed is attained. After you have attained the desired idle speed, gently screw the pilot air screw in and count the number of turns required to seat it (use caution not to force, damage to pilot seat may result). The pilot air screw adjustment should range between ½ and 3 turns out from a fully seated position. If it takes ½ turn or less, the pilot jet is too small and the next larger size should be used. If more than 3 turns are required, the pilot jet is too large and the next smaller size should be installed. The machine may idle smoothly without being in the ½ to 2 turn range of adjustment but it will cause problems in smooth transition to the mid-range of throttle operation. Pilot jets are numbered 20-25-30 etc. The larger number the larger the jet orifice, which causes a richer mixture.

THROTTLE CUT-AWAY. THROTTLE ⅓ to ¼ OPEN

The atmospheric side of the throttle slide is cut-away to influence the depression on the main fuel supply, the amount of the cut-away being indicated by a number stamped on the slide, e.g., a number 3 cut-away (indicates 3mm cut from slide); the higher the number the weaker the mixture provided.

Slides are stamped with a number such as 1.5, 2.0, 2.5 etc. The larger the number indicates a greater amount of slide cut-away which provides a leaner fuel/air mixture.

If, on moving away from idling, there is a spitting back through the carburettor, try to overcome it by very slightly richening the pilot mixture, but as this is ineffective return the pilot air-adjusting screw to its former position and fit a throttle slide with a smaller cut-away. If at throttle openings governed by the cut-away the engine jerks under load, try a slide with a larger cut-away. If this is unsuccessful it may mean that the jet needle is too high.

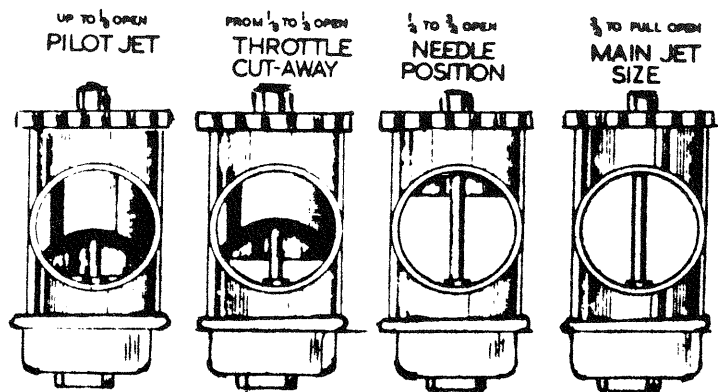
THE NEEDLE

The sizes and shape of the needles are usually carefully determined by tests by the manufacturer. The size is important because a needle too small will allow too much petrol through the needle jet, and a needle too large will allow too little. The shape is important also. An engine may falter at ¾ throttle because it is too weak, yet suffer from over rich mixture at ¼ throttle. This is because the taper of the needle is wrong, being too wide at the bottom and too narrow at the top.

THE NEEDLE JET. (EMULSION TUBE) ¼ to ¾ OPEN

The flow of petrol must be metered so that it reaches full flow only at full throttle. The solution to this is the use of a needle jet. This is a tapered needle which slides inside a secondary jet above the main jet. By moving the needle in and out of the jet the area of the jet can be varied and the flow of petrol can be precisely controlled.

The needle projects from the bottom of the venturi slide. This means that when the venturi is wide open at large throttle openings, the needle is lifted high in the jet allowing the maximum fuel flow. When the venturi is narrow at small throttle openings, the needle is deep in the jet and restricts flow.



Sequence of Carburettor Tuning

Main Jet — Starts at 50cc to 700cc, increases in 10cc. Small jets weaker.

Pilot Jet — Usually starts at 15cc (weak) and increases in 5cc, to 100cc (rich).

Throttle Slide — Start at 1.5mm cutaway (rich) and increase in 0.5mm to 5mm (weak).

Needle Jet — Choice of four for Amal, with a wider range for Dellorto or Mikuni. The smaller the number, the weakest.

Needle — With needle clip in high position — weak. With needle clip in low position — rich.

1986 LONG CIRCUIT REVIEW

by

Mike Smith

I suppose someone had to put their head on the block and come up with a 1986 Top Ten, so sit back and prepare to fume at the following.

In looking back at 1986 I am only considering British drivers ... not that I have anything against the likes of Lennart Bohlin, Wade Nelson and Poul Petersen ... but apart from Silverstone and the Donington Euro round the visitors made up a small percentage of the entry.

The season overall produced some memorable moment ... entries were fairly steady with one or two exceptions brought about by date clashes ... and some excellent individual performances were seen during the year.

So let's kick off with the big banger class ... the 250 Formula E ... and in premier spot, would you believe....

in one of those 250 beasts! He very quickly felt at ease in the bigger class and enjoyed every minute of it. George Hazard must be delighted with his choice of driver. I'm sure Ian would agree that a few years ago ... in the 125's ... he would have been quite happy with a reasonable finish ... financial restraints often dictating his racing pace. Since Martin offered that 125 drive he has had some of the financial burden removed and it has showed in his driving. He is a much more determined character out there on the track and that controlled aggression is bringing results. He will, I'm sure be a force to be reckoned with in 1987.

3. PHIL GLENCROSS

Since moving to the Superkart class from 250 National, Phil has shown bags of ability. He made the move nice and smoothly ... no heroics ... and

September Cadwell. It has often been said that Derek grows horns once he gets behind the wheel. He is a very determined character but I suspect that towards the end of last season he was just beginning to lose a little of that 'drive'. It was in some ways becoming a bit of a chore. Let's hope the winter has fired him up again; Superkarting needs characters like Derek.

6. ROGER GOFF

Roger had a very mixed year ... his ability to win is well known. He is extremely competitive and very experienced but he only found winning form on a couple of occasions ... Snetterton in March and that Euro Round on the Saturday at Silverstone. His drive to fifth place on Sunday at Silverstone was first class but that lean spell in the middle of the year just took the edge off his season.

7. TIM PARROTT

Tim won't like me for this low placing but the facts are that in home events he finished in the top half dozen on just three occasions. Two of those were WINS at Cadwell in July and September but for much of the season the gremlins were well settled in the PARROTT camp and better things were hard to find.

He did of course excel on the Short Circuits winning both the Hesketh Trophy and the RAC Title and did have a good World Series but whilst the potential was always there it was never fully realised.

8. STEVE GILL

Like Tim Parrott Steve had a year in which he never really got it all together consistently. He collected two wins ... February Cadwell and May Snetterton but was then out of the frame until the September Cadwell when he had a good fourth spot with the Ed Duckett EDR. Again finance ... or lack of it ... is what prevents Steve competing at the top on a regular basis but word is that 1987 could see him back in a supported drive. The ability is there, let's hope the back-up is.

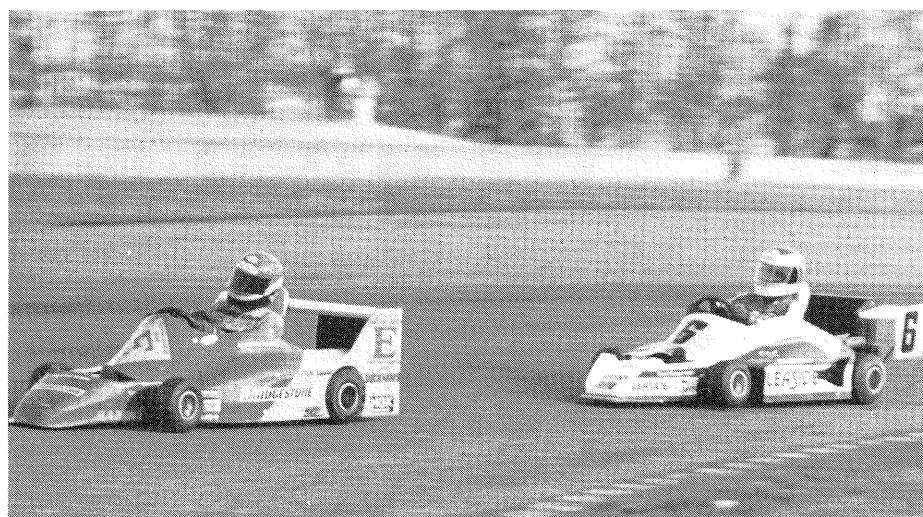
9. REG GANGE

Reggie must be in the top ten if only for the fact that he has so much potential to take the Superkart scene by storm. He has done it so many times in the past ... British, European, Grand Prix and World Cup Titles have all been Reggie's way ... but in 1986 he certainly appeared to have somewhat lost his way. He and the EDR never seemed to really gel and but for that Easter win in the wet at Cadwell he had nothing to show for his efforts. Come back Reg ... all is forgiven.

10. JAMIE VALE

With so few others putting together a decent string of results it wasn't easy to find ten names. However on results alone Jamie featured more often than anyone else and the potential is there.

So pick the bones out of that little lot ... I bet you have different ideas. What else was there in the Superkart year? Wade Nelson caught everyone napping at the Grand Prix didn't he? Lennart Bohlin showed them all the way round Donington in May whilst Poul Petersen put in a couple of good drives at Donington and ►



Rated tops again, Hines with the 'E' leads Glencross at the last Donington. (Pic: Doug Rees)

1. MARTIN HINES.

Yes, the 'old' man has done it again ... British Champion for the fourth year running and European Champion for good measure. Say what you will ... and a lot of people do ... Martin does consistently come up with the goods out there on the tarmac. In ten starts at home events he scored three wins ... four seconds ... two thirds and a fourth. Add his fifth spot in the final Euro round, a valiant effort in the World Series together with that Daytona win from 59th spot on the grid and that adds up to a pretty good season. I can hear you muttering now ... so he should ... he has the best of everything. Wouldn't you if you were in his position? And even given the best of equipment and allowing for the time he is able to spend testing there just has to be some ability there in order to achieve such a high level of consistency. I've no doubt he will still be the man to beat in 1987. Prove me wrong someone!!!!

2. IAN SHAW.

This one will raise some eyebrows! However, after just five outings in a Superkart, Ian had left his mark on the class and secured second overall in the British Championships. His drive in the wet at Silverstone was superb. It was only after he had reached Copse ... in the lead ... that he remembered that was his first wet weather drive

gradually established himself as one of the front runners. He didn't manage a win at home events last year but he was consistently inside the top half dozen. With Russell Anderson's excellent preparation and the support of teammate Derek Rodgers, Phil firmly established the Leaside Tyres Team in the top bracket.

4. RICHARD DEAN

The only thing Richard has ever been short of is ... you've guessed ... money. O.K., so lots of others are maybe in the same boat but over the years Richard has regularly run at the front on a very limited budget. He scored nine top six finishes last season including four second places and if only that tremendous family back-up could be topped up with a bit of outside assistance Richard would surely be putting a few wins behind him. He did enough to finish third overall in the RAC British Championship, sandwiched between Ian Shaw and Phil Glencross so that well known No 32 will be replaced by No 3 for the first time since he won the World Cup Zero in 1983.

5. DEREK RODGERS

On results Derek just pips Roger Goff for this post. He won at Knockhill in July after a good first half of the season but after that little went right and he managed just a second place at the



Molloy's brilliant drive at Silverstone was rewarded with the 'GP' plates. (Pic: Doug Rees)

Silverstone. Torgjer Kleppe took time off from his Group C efforts to take sixth spot at Silverstone.

A couple of the highlights during the season for me were Ian Shaw's performance at Silverstone and Richard Dean's drive to second place at Knockhill in July. Again ... if you know different....

What can we look forward to in 1987 then? Well, according to the grapevine one or two interesting things are likely to happen in the Superkart class. Former Grand Prix winner and British Champ, Paul Elmore, is about to make a determined comeback ... Duncan White is said to be entering the fray again ... both Mark Allen and Mark Webster are looking to the Superkart class for 1987 though Webster lacks the backing and will probably leave it another year, and of course Reg Gange is hoping to be back ... with a bang! Having lost the likes of Steve Stylin and Richard Boston from the class and there being a big question mark over the likely appearance of Butty and John Ball, those just mentioned should make the class a little bit more interesting and competitive. Time will tell.

125 NATIONAL

The best supported Long Circuit class is about to undergo changes with the formation of a 125 Super category. How it will all work out is still open to much debate ... only time will tell. However, in looking back on the 1986 season the class once again provided some excellent entertainment and a variety of winners.

Twenty five different drivers scored top six finishes during last season but one man proved



Stoney(0) clinched the 125 'UK' Cup and the British No.1 to make it a highly successful year for the Pontepract driver. (Pic: Doug Rees)

consistently to be the man to beat and he heads my list of the top ten 125 drivers.

1. CHRIS STONEY.

Who else but the Castleford ace could fill the No 1 spot. Seven wins and three second places to his credit at the end of the Long Circuit year gave him a twenty point advantage over Ian Shaw in the RAC Championships. Chris also took the new 125 U.K. Cup and the Short Circuit Title for good measure. All that was achieved with the self prepared Stratos/Rotax combination and whilst he will be aboard a Zip for 1987 I can see no reason why he shouldn't still be the No 1 in the coming season.

How he manages to run his Castleford Hire Centre in view of the time spent on karting only he knows... his preparation is first class and with Berni to keep an eye on things more success is almost certainly assured.

2. IAN SHAW

Yes, that Salford man again... second in the RAC Champs yet again! So often the bridesmaid... never the bride so the saying goes. Ian managed just five top six finishes... a superb win at Donington in April, a couple of seconds, a fourth and a sixth yet he so often appeared to be the driver most likely to seriously challenge the flying Chris Stoney. With his move up to the Superkart ranks the 125's have lost a real asset.

3. PAUL MALLOY

Remember the Molloy/Wooldridge pairing which dominated the 125 scene a few years ago? Well one half of that duo is back. Paul scored a third at the opening Cadwell in February then had a very lean spell until he won the Knockhill round

in July after Chris Stoney was forced into retirement. The Stratos man then hit it big with that tremendous performance at Silverstone in beating Uncle Tom Cobby and all to the line to take the coveted GP plates.

A couple of second places at Snetterton and Cadwell followed and he was forced to miss the last Donington on medical advice. However, he put Derek Price aboard the Stratos/Minarelli and the Bolton driver duly obliged with a victory to show that Paul's work on the Minarelli had not been in vain.

1987 should bring More Molloy and perhaps a Price Rise with Derek continuing to pilot a Stratos... we shall see.

4. STEPHEN COWARD

Always a battler Stephen had perhaps more than his share of mechanical problems last year but still collected seven finishes in the top three. A win eluded him and he dropped to fifth in the RAC points table but rest assured that he will be trying as hard as ever during 1987.

5. ADRIAN WILCOX

Adrian collected a win at the June Cadwell and had five more top six results. Always competitive and very experienced Adrian will surely figure in the top frame regularly.

6. DEREK PRICE

Just three top six places after a very up and down season but that win at Donington in October underlined the fact that given good reliable equipment Derek will win races. Vastly experienced at all levels of karting Derek should... having teamed up with Paul Molloy... produce more of those winning ways. He certainly deserves so.

7. IAN WESTWOOD

Ian can usually be relied upon to run well... certainly in the top ten and on five occasions last year inside the top six. Again mechanical gremlins prevented a better sequence of results but the name Westwood will be around the top frame in 1987.

8. RICHARD CRUMP

Again a good sequence of high finishes proved elusive to Richard but when things were going well he was always up with the leaders. He started the year well with a sixth spot at Cadwell whilst his best results were a couple of third places at successive meetings... June Cadwell and July Knockhill.

9. BOYD BARRINGTON

Staying faithful to the Rushforth Spyda chassis Boyd collected just four top six finishes but the potential is certainly there to do much better and a change of luck would be very welcome in the Barrington camp.

10. PETER McCALLUM

Peter started the year very well with a win at the February Cadwell and followed that with a second place at the same venue on Easter Sunday. In a nut shell that was Peter's season for he failed to score another top six finish, those dreaded mechanical gremlins almost taking over completely. What '87 will hold... who knows... the ability is there... that has been shown in the past... but Lady Luck seems to have deserted the Scot. It can only get better!

So there you have it... just ten names from the top of the 125 masses. I'm sure you will have different ideas but at least it might give you something to talk about.

HEAVY BREATHING

Unfortunately not the kind of love to hear down the 'phone. This is the type to help you get more out of your kart, not your girlfriend!

As we all know carburettors have two principal functions — to supply an air-petrol mixture to the engine and provide the driver with a means of controlling the speed of the kart. Whilst we can assist you in setting-up the carburettor, we leave the pressing of the 'GO' pedal strictly to you.

By itself petrol will not burn. It needs oxygen, hence the need to mix the fuel with air on the way to the engine. That is the carburettor's function — to deliver fuel mixed with air in the correct proportions as and when needed by the engine. As different engine speeds and working loads demand a variation in the proportion of the fuel-air mixture, it is the job of the carburettor to provide that variation. The ratio is affected by temperature, humidity, altitude, driver weight, terrain, compression ratio, ignition timing, etc., and for that reason it is not possible to set the carburettor correctly in the workshop. It is therefore important that the driver/mechanic is able to set or reset the carburettor at the track, according to conditions.

It is a well known fact, to control engine speed we simply regulate the amount of fuel-air mixture delivered into the engine. The more fuel the carburettor supplies, the faster the engine runs. The system depends on the depression created by the induction stroke of the piston to draw the fuel-air mixture into the crankcase. In fact the whole carburation process relies on the suction supplied by the engine.

As soon as the inlet port is opened with pressure in the crankcase below atmospheric air is drawn through the carburettor bore and passes over the top of an emulsion tube or needle jet. The bottom of the tube is submerged in a reservoir of petrol maintained at atmospheric pressure. Providing that the pressure in the bore is lower than the pressure in the reservoir, the petrol will be sucked through the jet and into the air stream as a fine spray.

Proper carburation, then, depends on the pressure drop between the petrol reservoir and the carburettor bore. The degree of this pressure drop has a crucial influence on the strength of the mixture that goes into the engine. If the pressure drop is large, suction through the jet will be strong, resulting in a rich mixture. If it is small, little petrol will be drawn through and the mixture may be too weak.

Unfortunately by itself the depression created in the engine is rarely sufficient to provide a large enough pressure drop across the carburettor to vaporize the petrol properly, except at high revs. To provide this drop, therefore, the carburettor has to emphasise the depression. It does this by making use of a phenomenon known as the 'venturi effect'.

If a certain mass of air enters the venturi at a given speed and the same mass leaves it at the same speed, then the flow will be faster through the constriction, flow must speed up in order to pass the same quantity through a narrower passage. The first effect of the venturi, then, is to accelerate the flow of air through the carburettor at this point.

The venturi does not simply alter the velocity of the air flow, however, it also changes the air pressure. The point to remember is that the acceleration of the air flow requires energy. This



energy is found by converting air pressure into air speed. The rise in speed therefore causes a drop in air pressure. The second effect of the venturi, then, is to create a region of low pressure. This is its real value.

The petrol jet can be placed in the venturi of the carburettor and the extra depression will then be sufficient to draw petrol into the air stream.

It has to be borne in mind that the mixture right at full-throttle will not be right at mid-throttle. At mid-throttle the mixture can be nearer the ideal — 1:15.

For full-throttle and acceleration the mixture must be richer. It is important at these times to get a maximum power and yet there is less time for proper filling and combustion to take place. This means that it is essential all the oxygen burns. So the mixture must err on the over-rich side.

When accelerating, the carburettor, in fact, has to emphasise the richness even more than the actual fuel/air ratio in the cylinder might suggest. This is mainly because of the petrol's inertia. It takes a certain time for the petrol to travel up the jet and vaporize, but of course on sudden acceleration or full throttle, the engine requires a lot of petrol in a short space of time. To compensate for the inertia, the mixture should be enriched.

At idling speeds, however, the movement of gases in and out of the cylinder are sluggish. When the exhaust opens, the burnt gases only move out slowly and the cylinder is scavenged less efficiently. The inlet/exhaust overlap is also longer at low revs so there is more time for mixing of new mixture and burnt gas, as a result the mixture in the cylinder contains a high proportion of exhaust products. To give even idling, therefore, the mixture has to be enriched to make sure that the oxygen can find some petrol to combine with. Because of this and because the main carburettor behaves abnormally at very small throttle openings, nearly every carburettor incorporates an entirely separate carburation system to provide the engine with fuel/air mixture at idling speeds.

THE FLOAT CHAMBER

It is most convenient to keep the petrol reservoir at atmospheric pressure; firstly because this is relatively stable and secondly because it is

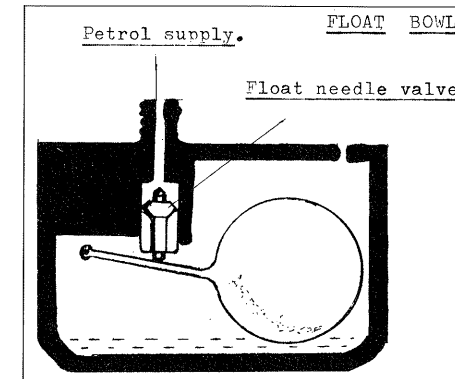
important that any variations in atmospheric pressure which affect the air flowing through the carburettor should have an equal effect on the pressure of petrol in the reservoir. To maintain the reservoir at atmospheric pressure, then, there must be a vent through the top to the outside air.

The vent alone, however, is insufficient because, as anyone who has been diving will know, the pressure in a liquid varies considerably with depth. If the fuel level in the reservoir is allowed to drop, the 'head' of pressure at the jet will drop with it and the engine may be starved of fuel; if the level rises, so will the head, and the mixture supplied to the engine may be over-rich. The depth of petrol in the reservoir must therefore be kept relatively constant. This is done by means of a float valve.

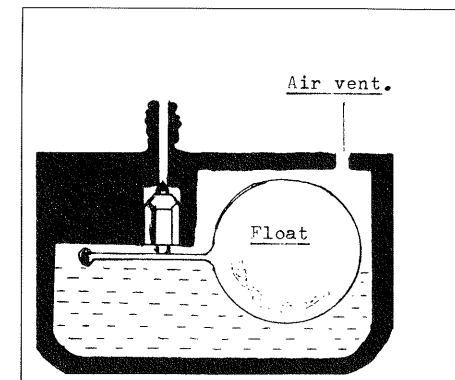
The reservoir is supplied with fuel by a axle/pump feed from the petrol tank and the float valve either cuts off or admits this supply according to the level in the reservoir.

As petrol is drawn into the engine, the level in the reservoir falls. The float, falling with the level of the petrol, allows a needle valve to drop away from its seat and fuel can enter. When the fuel reaches the required level in the reservoir, the float, rising again on top of the fuel pushes the needle valve back up into its seat, cutting off the supply.

This means that even though the rate at which the engine draws fuel from the reservoir may vary, the level, and so the pressure, it kept stable



At low petrol level the float drops and the needle valve is in the 'open' position.



When float bowl is full, the float will rise and shut the float valve, stopping the supply of petrol.

by the action of the float. For this reason the reservoir is usually referred to as the 'float chamber' or 'bowl'!

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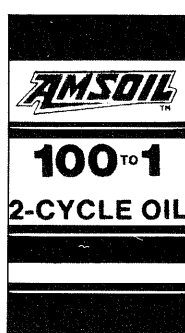
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250 NATIONAL

1. MARK WEBSTER

No doubt in my mind that Mark was the No 1 in the 250 National stakes during 1986. The simple facts are that with one exception... Snetterton in August... when he finished he won... and he did that seven times. Add the Short Circuit Title and the Ormskirk driver didn't have a bad season. He did have that hiccup just before, during and immediately after the Grand Prix but once he got back to winning ways at Cadwell in September it all gelled together again. He had to wait until the last round at Donington in October before clinching the RAC British Championship... but I bet he enjoyed his holiday!

2. MARK ALLEN

The one man who always stood between Mark Webster and the British No 1, the Lightning Windows driver picked up three wins during the year and certainly did not give up either the No 1 or the GP plates without a fight. If both he and Webbie moved into the Superkart ranks then the Nationals would have lost a couple of first class drivers... but watch out for Mark in the top class... the Superkart establishment will have to be on top form.

3. MIKE DOBLE

Mike stuck with the air-cooled Yamaha whilst all around him were tempted by the water cooled KTM yet he scored eight top six finishes... in fact all within the top four. His driving ability and vast experience no doubt carried him through and he is sure to be around the top spot once more in '87.



Mike Doble continued to pilot the Yam to clinch a third rating in National. (Pic: Doug Rees)

4. ROB HIPKIN

Rob started the year well... three second places from the opening three meetings but then had to wait until June and July before picking up a further four top six placings.

5. KEITH BISP

Keith gets a tremendous amount of enjoyment from his karting and can always be relied upon to give his best. A win at the February Cadwell set him up for a good year but the gremlins got in more often than he wished and although he scored three seconds and a couple of fourths he never really found the necessary consistency. Rumour has it that Keith might also try Superkart power in 1987... that should be interesting.

From the half way position of a top ten it becomes difficult to separate a number of drivers who featured well at various stages of the season. Steve Matthews and Rob Johnstone must come into the reckoning somewhere by virtue of their respective victories at Cadwell in June and

Silverstone in August. For Rob that was his only success of the season... coming back into the fray after a long lay off though made that win even more creditable. No doubt geared up for a full season the Berwick driver will feature more strongly in the top frame. Steve Matthews took his win at Cadwell when running the Cheetham prepared KTM for the first time and later added a fourth spot at Silverstone, together with a sixth place at the final Donington. Russell Powell, Tony Brown, and Neil Bolton all ran well at some stage of the year but like so many others were unable to string together a lasting sequence of good results. Both Colin Fletcher and Colin Breeze showed well towards the end of the season with a couple of top six finishes each, whilst Arthur Thompson collected four finishes in the top half dozen, his best being a second at the June Cadwell. Barry Tomlinson also secured four top six results... his best performance being third at Snetterton in March and again in May.

So who knows, if those top names do move up to Superkarts, there will be room at the top for someone else... or will it be Mike Doble to once again take charge of the single cylinder brigade.

210 NATIONAL

1. ANDY MARTIN

The Car and Karting Centre driver was certainly dominant in the Villiers category during 1986 taking both Long and Short Circuit RAC titles and retaining the Grand Prix plates. On long circuits the records show just five finishes in the top six... but there were all victories... and from those five he collected maximum points in four RAC rounds giving a 17 point margin at the end of the season. He also ran in the 250 National class from time to time and threatened to add the 125 National scene to his repertoire in 1987..

2. PHIL FEATHERSTONE

Aboard the Kobra outfit Phil scored a couple of wins... Donington in May and Snetterton in August... to add to his four other top six places. He did enough in the British Champs to finish second overall to Andy Martin and should have another good season in '87.

3. GEORGE BETT

The Scot didn't have a very good year by his standards ... just one win at the final Donington meeting ... a second at Cadwell in July and a fourth at the Grand Prix ... but he did still manage to gather enough points to take third place in the British Champs. Obviously from past performances George is capable of much better ... if the mechanical gremlins stay away long enough expect him to be pushing for honours in '87.

4. JOHN NEWTON

John's switch to the Stratos outfit didn't bring the former Champion immediate success but towards the end of the year he was beginning to put together some decent results and did enough to take fourth spot in the RAC points table.

Once he gets the equipment fully to his liking he will no doubt be back at the top where he has, in the past, proved he belongs.

5. SIMON QUANCE

The former Superkart pilot started '86 with a win at Cadwell and then went on to score more top finishes than anyone on the Villiers class ... eight in all. Will always be around the top

provided his equipment stays together ... where have we heard that one before!

6. GRAHAM SYKES

Graham races karts purely for the fun of it ... and manages to do it quite successfully too. He scored a couple of wins ... Snetterton and Cadwell ... and finished inside the top half dozen on five other occasions.

7. MARK LOCKLEY

Mark had a good run at the beginning of the year and up to June was running well in the top frame but then the results dried up ... although he did end on a high note with a win at Cadwell in June.

8. ALAN OGDEN

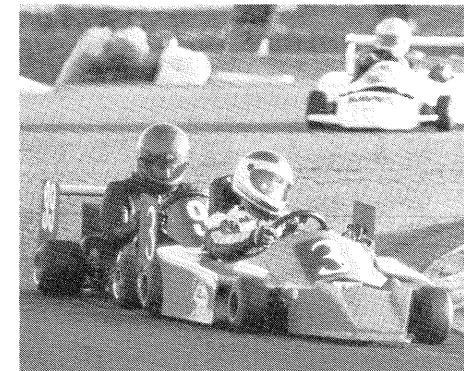
After an early flourish at Snetterton in March, Alan had to wait until June for his next high spot ... a third at Cadwell. He ran well to take third at Silverstone and then finished the year well with a fourth, a third and a second from the last three events. As with so many of the Villiers lads consistency seems to be very difficult to find.

9. STEVE YOUNG

It was the second half of the season before Steve got a decent result and then he had to wait until the last three events before he was able to get another good result ... with Donington proving to be his best ... a third in October.

10. JOHN WAGGETT/JOHN BRENNAN

Both Johns are capable of better than the results



Both Ogden(3) and Young(9) finished in the top ten ratings, 8th and 9th respectively, whilst Featherstone (background) fared better, second to Andy Martin and won the Long Circuit Challenge.

show for 1986 but once more it was the old reliability question. John B. deserves better for the amount of travelling he puts in during a racing season ... maybe '87 will prove to be a brighter year for both of them.

Well that's all four RAC classes covered and if nothing else I hope I've given you something to talk about. By the time this is published ... IF it is ... the season of 1987 will have got under way and possibly some of my views will have been well and truly squashed anyway. The one certainty is that nothing is certain in motor racing ... maybe by the end of the year we shall be toasting four totally new Champions ... and Joe Bloggs might be wearing the World No 1.

To everybody in karting best of luck for 1987 ... enjoy it won't you.



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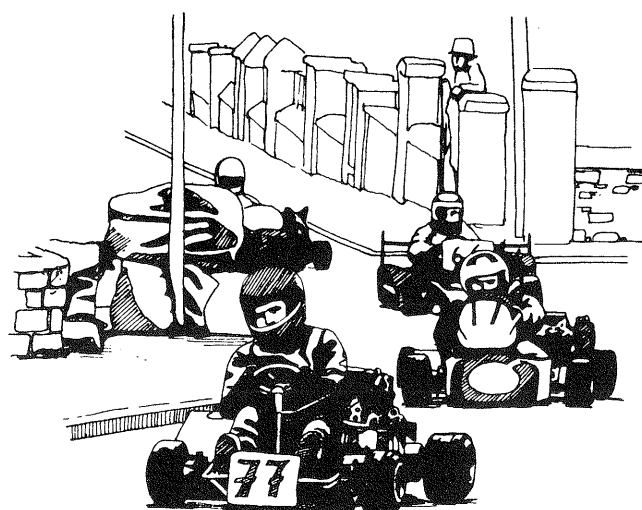
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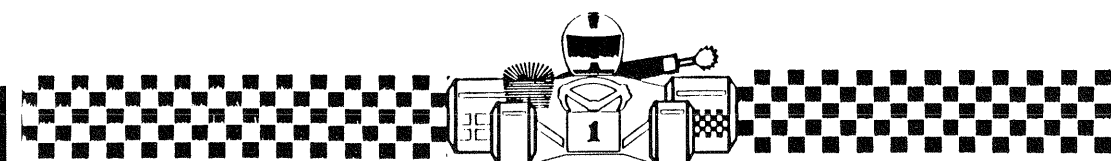
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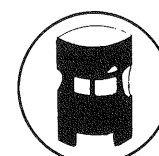
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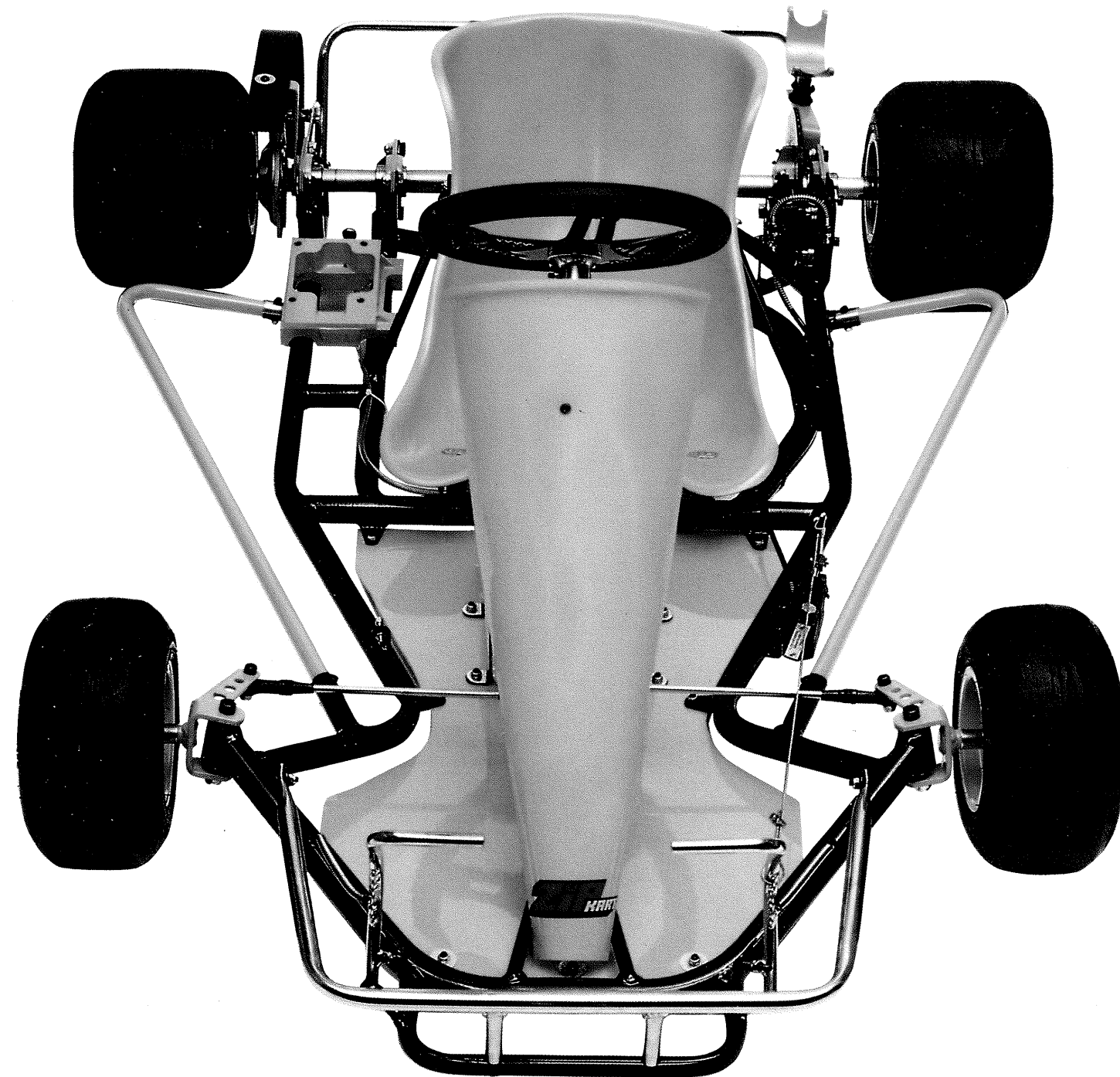


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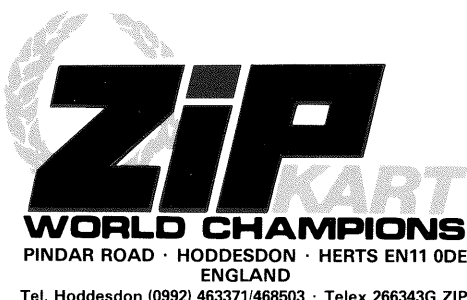
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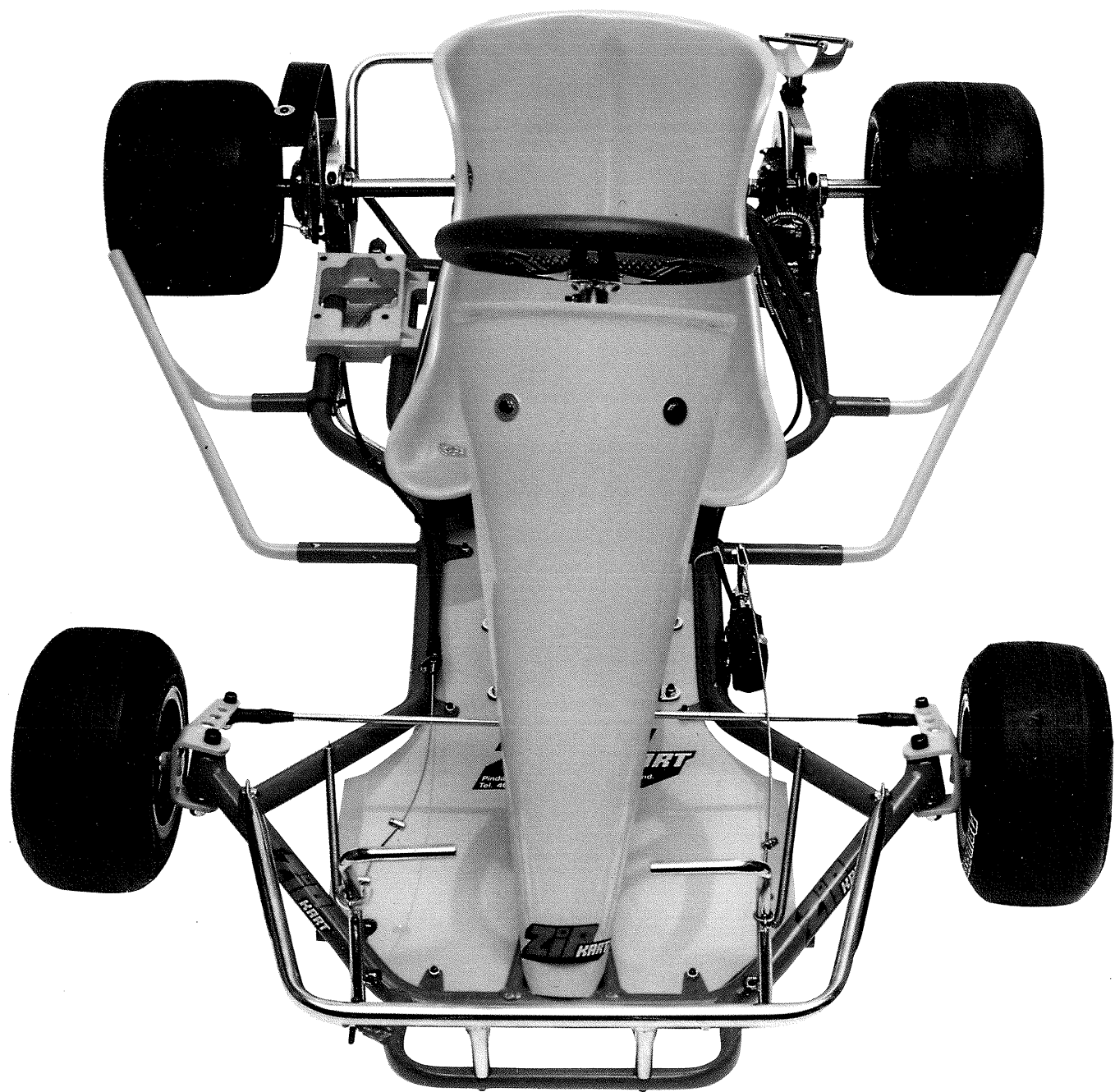
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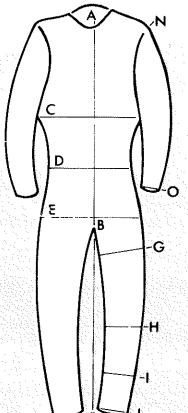
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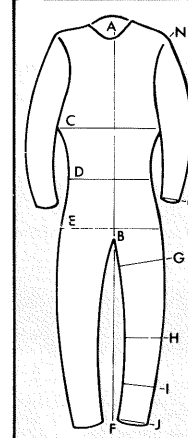
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	JM	21	27-28
	JL	22	28-29
	ADULTS		
	S	23	29-30
	SM	23	31-32
	M	24	33-34
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