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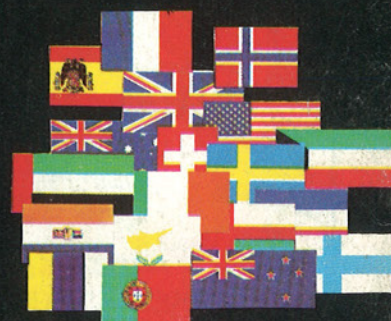
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65p  
March 1981



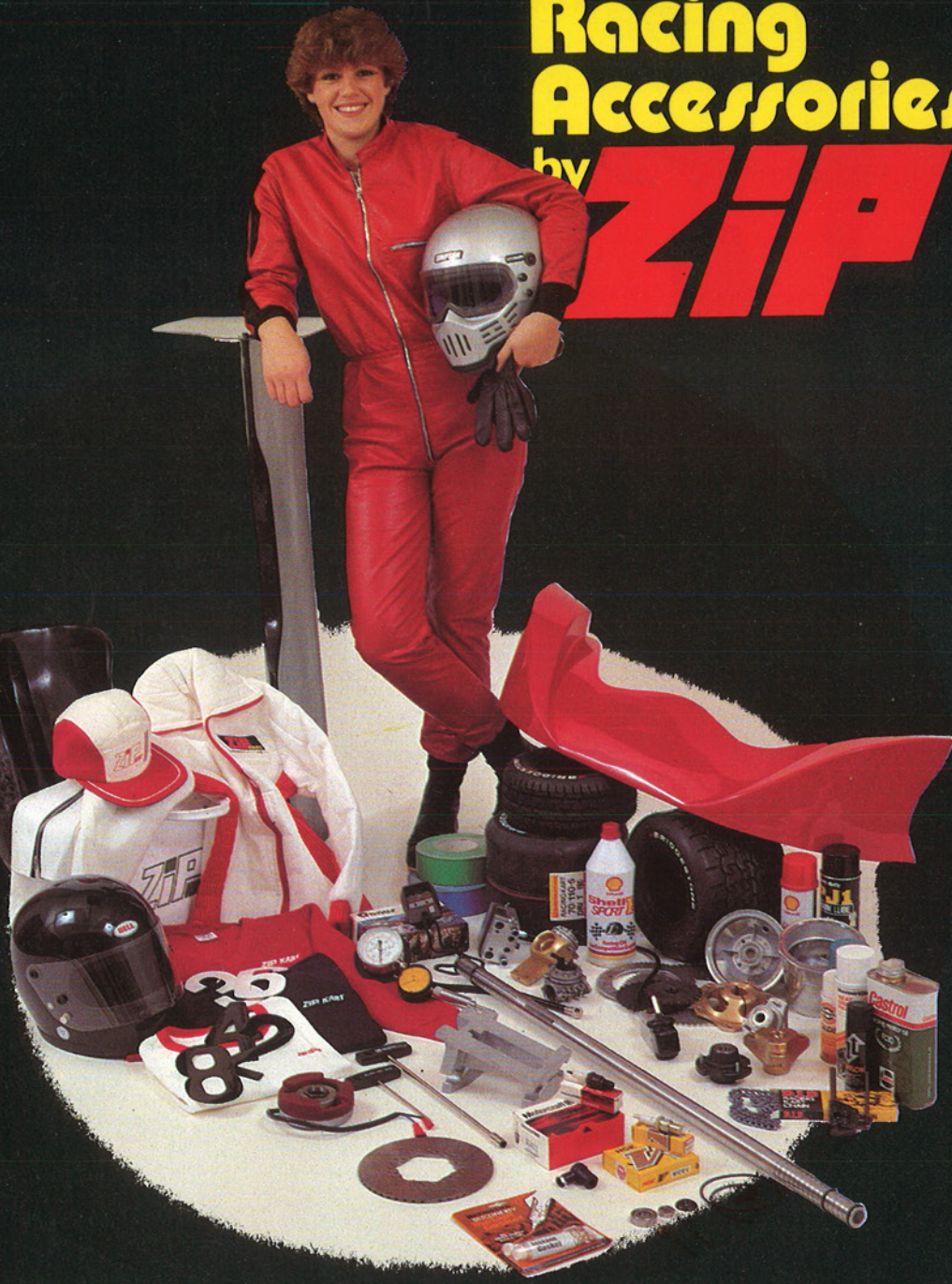
## Interview: Reg Gange

- Karting Photography
- 100cc Engine Strip
- 100 National Review
- South Africa

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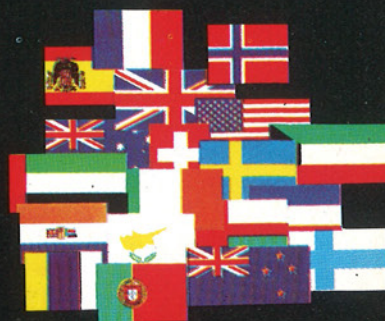


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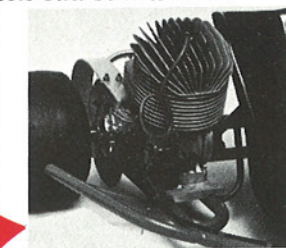
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The 135cc engine saga bumbles on, looking more and more like the Christmas present that nobody really wants!

Right from the start there has been general dislike of and objection to the idea of a new international formula. The 100cc category has become very settled, and this has encouraged manufacturers from several new countries to become involved - a very healthy state of affairs. They have become very competitive - and here lies the reason for it all. Not so many years ago, the Italian IAME factory completely dominated world karting - hardly an engine was used, never mind won with, that did not emanate from Zingonia. How different the situation has been in the last few years, with firstly the emergence of DAP as a serious contender, followed more recently by several others.

Although not on the international governing body (the CIK) himself, Mr. Grana, owner of IAME, is a very eloquent, persuasive man. It was he who initiated and pushed through this odd-sized formula (for which he just *happened* to have two engines already in production for the American market - a market which was fast drying up . . .). Even so, it is hard to understand how a group of supposedly intelligent people should be party to such an obvious con.

Opposition to the formula is widespread. The Irish Team Manager, Alan Johnson, initiated a document against the introduction of the class that was signed by nearly 80% of the competitors at the last World Championship. The Nordic countries combined to ask the CIK to reconsider - the subject was not even brought up at the next meeting . . .

Jesolo, in 12 weeks time, is the first scheduled event under the new formula. Most of the karting world must hope that it is a flop, and that the formula "fizzles" there and then, returning to Zingonia whence it came!

CHRIS LAMBDEN

## FRONT COVER:

Former British 100 National Champion Neil Hann leads K&S Champion Paul Carr down the hill at Rowrah during the 1980 RAC Championships. Both will be leading challengers to defending Champion Mark Tredwell in 1981. Our review of the 1980 100 National year begins on page 11.  
(Photo: Dennis Callingham)

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# KART AND SUPERKART

Monthly

027

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## NEXT MONTH\*

Cadwell Superkarts  
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Technical and personal features

ON SALE 1st APRIL

\* These items were correct at time of going to press





## K&S 1981

Despite the last minute change of date forced upon us, the 1981 K & S 100 National Championship gets under way in a few weeks. The regulations follow:

● Of the eight rounds, a driver may count his best five performances in assessing his final position.

● The points system will be as in 1981 i.e.: Heats: 1st 30, 2nd 29, 3rd 28... 15th 16 pts. All other finishers, 15 pts.

B Final: First four join 'A' final. 5th 20, 6th 19, 7th 18, 8th 17, 9th 16, 10th 15 pts. All other starters, 10 pts.

A Final: 1st 50, 2nd 47, 3rd 45, 4th 44... 20th 28 pts. All other starters, 25 pts.

● To resolve ties after the heats, a competitor's best heat result will be used, then the second and third best. Any remaining tie will be decided on the toss of a coin.

● To keep the series to regular National Class drivers, competitors who compete in any Green Man International round, will not be eligible to enter the K & S series.

● The series will run strictly to RAC competition regulations, including the restricted tyre list.

Current K&S Champion Paul Carr begins the defence of his title at Fulbeck on March 22nd. (Photo: D. Callingham)

## Championship Date Changes

A series of objections has forced date changes to three Championship events this year. The events affected are: Round One of the K & S series (Fulbeck), now shifted from 5th April to 22nd March; Green Man (Wombwell), shifted from 28th to 21st July; and RAC 100 International/Junior Championships (Rye House) shifted from 23rd to 2nd August.

Full K & S and Green Man dates are:

### K & S (and SAM) Championship:—

Fulbeck	22nd	March
Rissington	24th	May
Clay Pigeon	14th	June
Wombwell	19th	July
Kimbolton	30th	August
Tilbury	13th	September

### Green Man (and Junior) Championships

Three Sisters	19th	April
Dunkeswell	17th	May
Felton	7th	June
Wombwell	21st	June
Clay Pigeon	9th	August
Rowrah	31st	August
Temple Manor	27th	September

## PRIZE LIST

The prize list is still being completed, but already contains the following:

Zip 981 National chassis — courtesy Zip Kart. Cobra National chassis — courtesy Sisley Karting.

Dino National chassis — courtesy A K Racing. Hewland National engine — courtesy Hewland Engineering.

Complete engine tune — courtesy (Mick) Fullerton Racing.

Complete engine tune — courtesy Terry Fullerton Karts.

£100 JM goods voucher — courtesy John Mills. £100 cash — courtesy Redhill Racing.

Golden Helmet + £100 — courtesy Pudney & Sims Vinyl suit — courtesy Mistral Racing.

Helmet and 5 helmet bags — courtesy Startline Motors.

Premier Trophy — courtesy Wilson Racing Engines.

Mechanical brake system — courtesy CSK Products.

This list already totals over £2,000 worth of goods and prizes, with hopefully more to come. A full announcement of the prize list will be made as soon as possible.

## Round One Entry Information

● Entry fee £8. Entries close: Tuesday 17th March and should be sent to:

Miss T. Wilson, 77 Moor Lane, North Hykeham, Lincoln. Telephone 0522 681606.

(Late entries will be accepted, but these will start from the back of all heats)

Race day schedule: Scrutineering, from 8 a.m.; Practice, 10 a.m.; First race, 11.30. Remember, this is the first day of British Summer Time and the clocks will have been put forward one hour. Don't be late!

● Saturday practice is available (£3 members, £5 non-members) and camping facilities Friday and Saturday nights (£2 per night).

● Heats 8 laps, B Final 15 laps, A Final 25 laps.



## Letters

Dear Sir,  
Camberley Kart Club:

Many of our members and entrants will be aware that we are having problems with our track at Blackbushe. We are concerned over the rumours that are drifting around, and would like to dispel them.

Our absence from the 'Blue Book' had nothing to do with our present problem. This was an oversight on our behalf.

Our Annual planning application was submitted for approval in November, 1980. The application was rejected at a Planning Committee meeting in December, "the noise being detrimental to the environment" being the reason for the rejection.

On investigation we decided to fight it, uncovering one or two doubtful arrangements during the process. Following legal advice a High Court injunction was obtained to stop the signing of an agreement which would have ended karting at Blackbushe for good.

Round one to us, but the battle is not over yet. We have still to obtain planning permission, which this time should not pose much of a problem. Our next meeting is planned for

Sunday, 22nd March, 1981. A good entry would help to restore our depleted funds, and show appreciation for the tireless efforts put in by certain members of the Club Committee.

M. F. Attwood  
on behalf of Camberley Kart Club

Dear Sir,  
Re Junior British Championships 1981.

Whilst I realise there are many things to be taken into consideration when deciding on the dates and locations of such a large event as the Junior Britain British Championships, I would like to point out that the first round on May 2/3rd at Felton falls in the middle of the G.C.E. and C.S.E. examination period. Surely the RAC could take this into consideration when fixing the date as many Junior drivers are in their last year at school.

Also, as there are two rounds this year, I would have thought that if it was to be fair for everybody, there should be one round in the North and one in the South so that no one has to travel the length of England twice.

I hope that the RAC will take these points into consideration when deciding on the dates and locations next year.

Joanne Jacobs  
Southampton

FULLERTON RACING OFFERS THE following used equipment. Choice of two Birel Le Mans chassis complete with Mick Fullerton modified K80 motors used this year at K & S rounds and British Championships by Mark Tredwell. This equipment is currently the fastest available anywhere for National racing. Both chassis carefully set up with new Goodyears — both K80 motors rebuilt and set up as for British Championships. Offers over £900.00 each outfit. Sirio National chassis, never raced, used 3 hours only for testing. Complete with new Komet K88 motor. Outfit includes new Goodyears and is ready to go £550.00. BM chassis complete with new Komet K88 motor, Mick Fullerton prepared engine run 2 hours only, new Goodyears. Ready to go, £500.00. Contact: Mick Fullerton. Tel: 01-749 0979.

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BM Europa, green £220.00  
BM Europa, red £220.00  
Eagle/K88TT £300.00  
Sprint 3 bearing/SS20TT, 48.4, £400.00  
Sprint 2 bearing, 1980, £200.00  
Sprint 3 bearing/DAP T70TT £400  
Sprint/TG14 LB Britain, £250.00  
Zip TKM, Britain £350.00  
Taifun/K88TT £350.00  
Lane Aerospace/SS20TT, 48.0, £380.00  
Cobra 79 3 bearing £225.00  
Sprint/K80TT £500.00

### ENGINES

2 BM JB's complete with accessories  
£85.00 each (ideal for schools)  
4 K80TT ex works motors c/wall accessories  
from £200.00  
1 K88TT 50.6 piston, new liner £250.00  
1 TT22 Deavin tuned, 48.4, £250.00  
1 K88TT 51.1, £150.00  
1 K88TT 51.2, £120.00

SISLEY KARTING LTD., 6 Manse Parade,  
London Road, Swanley, Kent.  
Tel: Swanley (0322) 67121/60571  
Telex 8955203 SISLEY G

125 BARLOTTI HONDA. "BLACK" CR motor. Spare MT long circuit barrel, 34mm Mikuni, Motiv 2 pipe, rev counter, aeroquipped, Zip lay down & upright seats. New slicks, spare wheels & slicks, complete set of wets. All possible sprockets, jets, pistons etc. Very smart. Many placings. Stand & cover. Immediate Honda spares available after sale. Bodywork and new purpose built all enclosed box trailer available. Must go Formula Ford hence £750. Tel: J. Sharp — Day 061 445 0414 — Night Wilmslow 520985.

DEAVINSON SPRINT 104, 2 BEARING and Sirio ST51. Complete with Lockheed brake system, some spares £350. Tel: Rayleigh 774469.

THIS LOT MUST GO, OWNER EMIGRATING, 125 National, Zip GP, 5 meetings old, TVM Yamaha £800. 250 National, Zip Bultaco £250. Plus spares for both outfits, trailer, leathers, wets, helmet etc. Will split. No sensible offers refused. Tel: Derby 811500.

## RICARD ENGINES

TUNING AND RACE PREPARATION SERVICE

for all makes of 100cc engine.

Crankshaft and rebore service

IAME parts in stock

Enquire: JOHN WELLSTED — 01-524 6688

## SALE S/H ENGINES

2 SS20TT's — £220.00 each  
2 T70TT's — £195.00 each  
K88 50.6 bore — £200.00  
2 K88's, less ignition — £140.00 each  
T70 Britain — £140.00  
Manx Britain — £155.00  
Manx National — £160.00  
T70 Britain — £85.00  
Hewland Britain, 50.9, ex Steve Gill  
£235.00  
Hewland National ex Richard Dean — £300  
TEL: 0977 559032

SPRINT K88TT FULLERTON TUNED, maintained to highest standard regardless of cost. Trophy winner, many spares. Bargain at £350. Tel: Stanford Le Hope 3140.

SET OF GERMAN CODED GOODYEARS. Very little wear £30. Set of wets, half worn £25. All mounted with tubes. Front fairing, Barlotti type, £10. Seat £4. Wing £15. Tel: Elton (Nr. Peterborough) 457.

BIREL/KOMET K88, engine completely overhauled, Motoplat electronic ignition, sprockets, stand, full set of wets. Offers around £300. Phone Wheldrake 301 (York area).

LANE KART — DUNLOP TYRES — modified K78TT, 50.8 bore, Motoplat, bored and tuned carb., stand, spare chain, assorted rear cogs etc. Ready to race £300 o.n.o. Tel: Limpley Stoke 2535 (Wiltshire).

LE SPECTRA BRAND NEW, never rolled £365 spares. Mamba 781 immaculate, 4 meetings £295. Spares. Parilla SS20TT, 48.3, fully tuned complete £255. Parilla SS20, brand new, complete £230. All types of spares and equipment for sale. Marina Van 1973, rigged for karting, immaculate. Retiring, all must go, or swap for car etc. Tel: Dunstable 608483.

## SPORTAC

RACEWEAR

THE CHOICE OF THE CHAMPIONS

BUCKINGHAM ROAD, GILLINGHAM,  
DORSET. TEL: 074-76 2568.

ZIP 210 KART LESS ENGINE AND TYRES. Circa '77, good condition £125 o.n.o. Tel: Southampton 444428.

210 ROLLING CHASSIS, BARLOTTI discs, front fairing, engine plates, straight and tidy, coded Goodyears, £95 o.n.o. Tel: Hinckley 610053 after six.

LYNX SUPERKART, YEAR OLD CHASSIS with fairing, side tank, Bridgestones, 30mm axle, excellent condition. Yamaha fitted T2 rods, DX ratios, TD3 cylinders, Del Orto's, £875 o.n.o. Tel: Borough Green (0732) 84272. Meopham (0474) 812050 (daytime).

ZIP SHADOW 80 THREE BEARING, absolutely immaculate £295. Complete rolling chassis. Tel: Swindon 812327.

WANTED 1979 GBRD TD3 PIPES. Good price paid. Tel: 0782 542621.

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Announcing the arrival of

### TEAM PEARY POWER BOX

Revolutionises kart ignition — lighter than Motoplat — rechargeable — increases performance on all Classes of engine. £120.00 fitted, plus instruction sheet

GUARANTEED 6 MONTHS

Further details ring Barrie on:

BARNSELY (0226) 386563

9 a.m. to 9 p.m.

16 BLACKER ROAD, MAPPLEWELL,  
BARNSELY.

BARLOTTI BULTACO PLUS SPARES, for 250 National. Suit beginner £295. Tel: Oakhill 840692 after 6 p.m.

ZIP K77, MOTOPLAT. SUIT BEGINNER. £200 o.n.o. 3 hp engine off Sisley Fun Kart, very reliable £40. Wanted: 5 hp engine for Formula 6. Phone Phillip on Medway 367375.

SUPERKART FOR SALE — ZIP Shadow, full bodywork, 250 Yamaha engine, fully tuned, Bridgestones. Spares and trailer. Offers — Tel: Hemel Hempstead 40597.

BRAND NEW BM EUROPA KART, complete less tyres £260. New BM K96/3 TT engine complete. Still in box £240. Tel: 0935 822645.

WANTED 250 NATIONAL BULTACO Mk 12 and/or suitable chassis. One needing repair not objected to. Details — Tel: Anstey 2003 Leicester.

BLOW MONTESA, COMPLETELY REBUILT for next season, fairing, requires running in — £230.00 o.n.o. Tel: Belmont Autos, Burton on Trent 214265.

## ESLICK HELMET DESIGN

HAVE A CUSTOM DESIGN HELMET FOR 1981

SEND S.A.E. FOR DETAILS TO:—

BIKE & KART,  
2 MALVERN ROAD,  
LIVERPOOL 6.

FOR SALE — 100cc PARILLA ENGINE Lynx frame, very light, ideal for beginner. Good condition £170 o.n.o. Tel: Derby 810536.

BIREL NATIONAL T7 ROLLING CHASSIS 1980, immaculate condition. Full set of German Goodyears. Two magnesium engine mounts £225 o.n.o. Phone 812143 Stevenage.

## HEJIRA RACING DEV.

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Available as from January 1981

LARGE EASILY READ SCALE. WORKS BY INDUCED CURRENT — CANNOT DAMAGE THE IGNITION ELECTRONICS NOW IN A SEPARATE BOX

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8 — 18,000

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STONY STRATFORD

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(S.A.E. FOR SPEC. SHEET)

210cc STAR ELIMINATOR, discs, Motoplat, tools, spares, wets, Trophy winner, fast, very reliable. University forces sale £290 o.n.o. Tel: Atherton 891932 (Nr. Manchester) evenings.

BARLOTTI 210 NATIONAL rolling chassis, drum brakes, many new parts. Good condition, ideal for newcomer £120. Large assortment new Amal Mk I carb spares, slides, floats, needles £20. Two kart trailer, good condition, tows well £100 o.n.o. Telephone Normandy (Surrey) 2582.

DAP ROLLING CHASSIS 100cc NAT./INT. all mag. parts incl. wheels also spare alloy wheels. Kart in exceptional condition, never crashed or bent. New kart cover, stand, Zip suit (med.), boots (9), sprockets, chains etc. Quick sale required so best offer buys. Tel: Orpington 29858.

SCOTLAND ZIP 210 NATIONAL, good condition. Drums, new big end. Ideal first outfit. Ready to race £190 o.n.o. Tel: Mike Westkill-bride 823686 day.

## COBRA 80

SIMON WRIGHT BM, 4 meetings only. Immaculate. Sponsorship arrangement forces sale £310.00.

TEL: MIKE ON 0272 422709 day

## WALES KARTING & MOTORCYCLE CENTRE

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Pembroke Dock,

DYFED SA72 6XH

Tel: Pembroke (06463) 3838 or 3090.



continued . . .

the 125's. Two wins and a second in the heats were the result of fine driving by Richard Boston with Bill Longden taking the third heat. In the final however, Longden had to retire on the first lap which left Boston to storm away with the race — no-one being able to get anywhere near him. Novice Paul Grumett had an excellent race to finish a very creditable second with Brian Finn in third. The 125 final was won by Paul Bowland who was the only one to finish.

Thanks to all the officials and marshalls for their invaluable help in running this first class meeting. Entries were up in most classes, but where are all the 210's and 125's? Come on lads, shake the cobwebs off, before we lose these classes. Trophies were of a very high standard.

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J. Marshall

Results:—

#### Junior National

1st	Kerry Thorpe	UFO/Arrow
2nd	Miles Hall	Zip 981/Parilla
3rd	Simon Blessed	Premier/TKM

#### Junior Britain

1st	Scott Banks	UFO/Arrow
2nd	Patrick Walsh	Premier/Arrow
3rd	Graham Kershaw	Odin/TKM

#### Senior Britain

1st	Stephen Gill	UFO/Arrow
2nd	Victor Vaughan	Premier/Arrow
3rd	David Smith	Premier/Arrow

#### 100 National

1st	Derek Higgins	Dino/DAP
2nd	Stephen Sykes	Premier/Parilla
3rd	Andrew Cursley	Premier/Parilla

#### 210 National

1st	Richard Boston	Barlotti/Upton
2nd	Paul Grumett	Zip/Upton
3rd	Brian Finn	Barlotti/Upton

#### 125 National

1st	Paul Bowland	Zip/Rotax
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## Kalendar

### MARCH

**8** TILBURY (Dunlop Road)

ROWRAH (nr. Frizington, Cumbria)

CHASEWATER (Pleasure Park, Brownhills, off A5)

WOMBWELL (Dorothy Hyman Stadium, nr. Barnsley)

KIMBOLTON (10 miles s.w. of Huntingdon)

**15** DONINGTON (Off Junction 23, M1) Long circuit meeting. All classes.

NUTHAMPSTEAD (1¼ miles east of Barkway, off B1368 Cambridge-Ware Road)

**22** FULBECK (8 miles from Newark) First Round, Kart & Superkart and SAM series.

LLANDOW (Off A48, 4 miles s.w. of Cambridge)

**28** SURBITON (Worcester Park)

**29** SHENINGTON (8 miles from Banbury, off A422 Banbury-Stratford Road)

DUNKESWELL (5 miles from Honiton, Devon)

ELLOUGH (2 miles south of Beccles, Suffolk)

### APRIL

**4** SNETTERTON (nr. Norwich) Round 3, Zip Champion of Champions Superkart series, plus all long circuit classes.

**5** SNETTERTON — Short circuit event.

LITTLE RISSINGTON (Air Force base nr. Stow)

FELTON (8 miles north of Morpeth, on A1)

**12** ROWRAH (nr. Frizington, Cumbria)

CHASEWATER (Pleasure Park, Brownhills, off A5)

WOMBWELL (Dorothy Hyman Stadium, nr. Barnsley)

TILBURY (Dunlop Road)

KIMBOLTON (10 miles s.w. of Huntingdon)

CLAY PIGEON (Midway Yeovil/Dorchester)

**17** ELLOUGH (2 miles south of Beccles, Suffolk)

**19** CADWELL PARK (on A153 between Horncastle and Louth). Superkart Championship round two, plus all other long circuit classes.

3 SISTERS (Off Junction 25, M6) Round one, Green Man and Junior Championships.

SHENINGTON (8 miles from Banbury)

NUTHAMPSTEAD (1¼ miles east of Barkway, off B1368)

**20** SURBITON (Worcester Park)

**26** DUNKESWELL (5 miles from Honiton, Devon) Round 1, RAC 100 National Championship.

FULBECK (8 miles from Newark)

CRAIL — Team meeting.

### APPLE KARTS

N.W. AGENTS FOR  
HEWLAND ENGINES  
LANE KARTS  
SAME DAY MAIL ORDER SERVICE  
148, HOSPITAL STREET,  
NANTWICH,  
CHESHIRE.  
TELEPHONE: (0270) 64293

PARILLA SS20TT RECONDITIONED engine, very fast, just been run in. Bored carb and ignition £200. Tel: Harbury 613667 between 6 p.m. and 7 p.m. (and ask for Allan).

YAMAHA RD250 DX — TD3 MOTORS, with Femsa ignition. Choice of two £395.00 each o.n.o. Phone Worcester 422920 after 6 p.m.

### FURBURGER RACING

STAR KAWASAKI £900  
SPRINT ROTAX £825  
KAWASAKI REBUILT MOTOR £285  
KAWASAKI A5 MOTOR £325  
KOMET K88TT £200  
CLASS 1 MAIN BEARINGS £1.60  
PJ1 CHAIN LUBE (Large) £2.75  
PJ1 GOLD FIRE PREMIX £2.20  
CASTROL A30 £1.90  
ANYTHING SENT C.O.D.  
RING REG CHILD ON 0772/796276  
PRESTON, LANCS.

B.P.H. TUNED K80TT BARREL STANDARD bore (fits any Komet) £50. Gas welding gear complete £30. B.P.H. 27mm carb £10. German Goodyears on rims £18 pair. SS20 barrel — needs liner £10. Tel: 0474 873336.

BRITAIN, DEAVINSON/MANX CHASSIS, 4 meetings only. Engine rebuilt and fitted new tuned liner. As new condition £350 o.n.o. Tel: Yateley 872416 (Hants.)

ZIP/MANX, Class 1, 50.9 bore, Goodyears. Good clean outfit £200 o.n.o. Leicester. Sap-cote 2220.

WANTED — 210 NATIONAL OUTFIT around £200.00. For Novice. Tel: 0455 613503.

### In a Word . . .

●The National Schools Karting Championships are to be held at Rye House on 11th/12th July. A.S.R.'s are now available from Mr. K. R. Breach, The John Warner School, Stanstead Road, Hoddesdon, Herts.

Entries definitely close on 12th June. Accommodation requests must be in by 27th March.

●Derek Price, former International 100cc driver, 125 driver, and pedaller of the ubiquitous HPM "double" last year, is now to drive for the Wigan Kart Centre in the 125 class. Derek will run a Zip GP/Rotax, prepared by Wigan Kart Centre.

Also driving a 125 for Wigan Kart Centre will be Chas. Walker, while Tony Draper will represent them in 250 National, with YZ Yamaha power.

●Mark 1 Racing now offer a 125 Rotax gear linkage assembly for £15, with all rods, levers, spacers, bushes etc.

●Northumbrian Kart Club's new Competition Secretary is Mrs L. Lynch, 12 Portland Gardens, Cramlington, Northumberland NE23 9QD.

●Bromsgrove Kart Club officials are now:  
Club Secretary: Miss S. Tomkins, 88 Hollymount, Tunnel Hill, Worcester. Tel: Worcester 22752. Membership Secretary: Mr. Paul Ogden, 17 Elm Grove Road, Hucclecote, Gloucester. Tel: Gloucester 60534. Comp. Secretary: Mrs S. T. Wits, "Oakley", Holloway Hill, Pershore, Worcestershire. Tel: Pershore 2512 (before 9 p.m. please!)

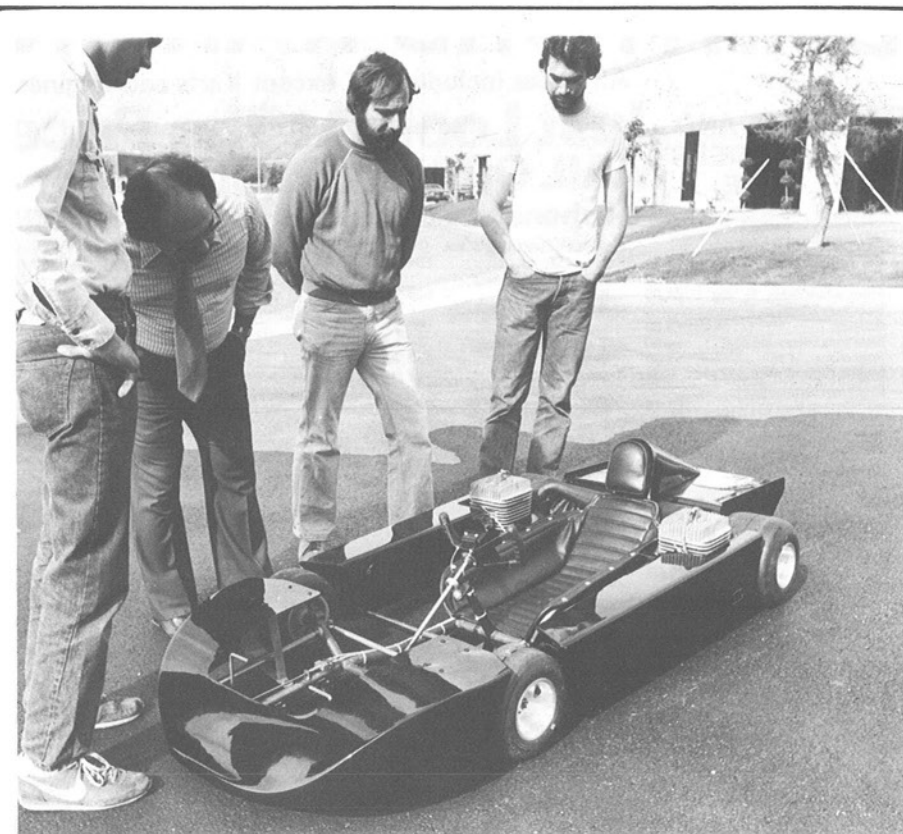
●Wombwell have three National permit events this year and wish to advise entry information:

9/10 May — Round 3 RAC 100 National Champs. Practice from 11.00 a.m. 9th May £5. Entry Fee: £12. Entries close: Friday 24th April.

20/21 June — Round 4 Green Man. Practice from 11.00 a.m., 20th June £5. Entry Fee: £10. Entries close: Tuesday 16th June.

18/19 July — Round 4 K & S and SAM series. Practice from 11.00 a.m., 18th July £5. Entry Fee: £10. Entries close: Tuesday 14th July. Please send s.a.e. with all entries.

●Retford 100 National campaigner Nigel Edwards recently travelled to Ahmadi with John and Roger Mills, and came home with a solid gold-handled trophy and the Middle East title. Roger finished second, completing a worthwhile trip for the DAP JM team. We hope for full coverage next month.



33 machines similar to this new Van K twin 100 stock (Yamaha KT100 reed) engined challenger will take part in the 10,000 dollar Bridgestone Pro Kart Race at noon on March 15th at Long Beach. Formula 1 followers will realise that this time and place means the race takes place only one hour before the USA Grand Prix West — in front of 175,000 people! Our American counterparts sure have their publicity machine going well!

The 200 Stock class is catching on in the States, even though the two 100cc engines manage only 40 bhp between them. Imagine a field of Superkarts, with over 60 bhp on tap!

## RAC News

The full list of 1981 Kart Committee members is now available:

The Committee will be Chaired by Mr. M. Southcombe, with Mr. A. Hesketh as Vice-Chairman. The balance of the Committee is made up of Messrs. A. Burgess, R. Deavin, C. Fenwick, A. Foster, K. Guest, M. Hines, D. Hockey, L. Jones and A. Temple.

Committee meetings are set down for March 18th, May 20th, June 17th, August 12th (the "Open Day"), October 21st and December 2nd. Anyone wishing to have items on the agenda for these meetings must submit these at least 2 weeks prior to these dates — longer if possible.

### STOP PRESS

#### CADWELL PARK SUPERKART SEASON OPENER

1st	Dave Buttigieg	Hermetite Zip/Yamaha
2nd	Nigel Smith	Stocksigns Zip/Yamaha
3rd	John Ball	Zip/Yamaha

First two home are watercooled. Hines was pole with Rotax power, but goes off at first corner.

Class wins:		
125 Nat.	Roy Wooldridge	Zip/Merlin Rotax
210 Nat.	Bill Longden	Barlotti/Villiers
250 Nat.	Eddie Cortijo	Lynx/Honda

## Mini Ads

Sell (or buy) equipment, spares, or whatever with a Mini-Ad. All Mini-Ads must be prepaid and will be inserted in the first possible issue after receipt.

Rates: 10p per word (£1 minimum charge).

Please send your Mini-Ad, clearly typed or printed to: Kart & Superkart (Mini-Ads), Pinder Road, Hoddesdon, Herts.

Mini Display Ads (boxed) are also available at £8 per column inch. Copy to same address.

100 NATIONAL 1980 SIRIO 4 STAR KART. All magnesium accessories, immaculate and complete £300. Mahx 100 TT, 50.8 bore, used for testing only £175 complete. Much more secondhand equipment available at — Pegasus Karting. Phone daytime — Leighton Buzzard 381220, evenings 374203.

125 ROTAX REBUILT, new piston, rod, crankcases £450 o.n.o. Tel: 01-904 9276.

BRIAN HILLS IMMACULATE WORKS 125 Aero Panther/Rotax. Complete with side pods, nosecone, Aeroquip brake lines, Kelgate axle. Engine rebuilt up to new spec. Spares & engine data. Further details tel: Rochdale 42281/Heywood 60257.

## FRIGIT

SO YOU WENT TESTING AT CADWELL, HOW DID YOUR 'TEA POT' CONVERSION GO?



...IT WENT LIKE A ROCKET—I PASSED A XATOR AS IF IT WAS STANDING STILL.



A XATOR?—THAT'S A ROTAX GOING BACKWARDS!



BY BARRY FOLEY



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All Prices include VAT except Karts and Engines

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DARTFORD, KENT, G.B.  
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ALL PRICES INCLUDE VAT!

ADD POSTAGE

£1 — £10 = £1

£10 — £20 = £2

Over £20 = £2.50

## ALUMINIUM KART COMPONENTS

Front wheel boss, 15mm bg. £4.50  
Front wheel boss, 3/4" bg. £6.00  
Rear hub 25mm or 1" die cast £3.80  
Rear hub 30mm die cast £4.50  
Engine mount 15" £7.50  
Engine mount, sliding £10.00  
Engine mount bottom clamps, each £1.25  
Carb. spacer with studs £1.20  
Disc carrier 25mm or 1" £3.50  
Disc carrier 30mm £3.50  
Sprocket carrier 25mm or 1" die cast £4.00  
Sprocket carrier 30mm £4.00  
Alu finger guard univ. £2.00  
30mm bearing housing 1 pc. £1.90

## AXLES

25mm or 1" HT 1m x 6m £9.00  
30mm axle solid RT 1m x 6mm £10.00  
30mm axle hollow 1m x 6mm £15.00  
Axle key per 1 ft. £0.75

## BEARINGS

Axle bearing 25mm or 1" With 3 holes fixing plate £2.30  
Axle bearing bare 30mm £2.50  
Hub bearing 15 or 17mm £1.25  
Hub bearing 3/4" £1.50  
Engine main bearing 6204 £1.50  
C3 £1.50  
Engine main bearing 6204 £4.00  
C4, nylon half cage £4.80  
Super big end cage/rollers £1.50  
Super Rose end 8mm female £2.00  
RH and LH thread £1.50  
Rose end 8mm male £0.80  
Small end rollers (25) £0.80

## BRACKETS

Chain guard bracket univ. £1.25  
Coil brackets univ. £1.50  
Throttle bracket univ. £1.75

## BRAKING SYSTEMS

KP hydraulic system £46.00 less disc  
KP pads, per pair £4.50  
Zip pads, per pair £4.00  
Airheart pads, per pair £4.00  
Brake pipe KP per ft. £0.10  
A/heart repair kit m/cyl. £2.80  
Brake disc cast iron £8.50  
Brake disc steel £7.50

## T.K.M. ENGINE SPARES

Cylinder Complete 3P £64.70  
Cylinder Complete 99TT £79.92  
Cylinder Complete L90 £107.99  
Iron Liner 3P £35.89  
Iron Liner 99TT £40.39  
Iron Liner L90 £52.23  
Head 3P £34.09  
Head 99TT £34.09  
Head L90 £39.10  
Piston Complete £11.50  
Piston Bare £5.80  
Ring Set (SUPER) £4.00  
Silencer £14.00  
Crankcase Complete 3P £58.44  
Crankcase Complete 99TT £72.36  
Crankcase Complete L90 £88.27  
Main Bearing (SKF) £2.25  
Main Bearing (FAG) £6.00  
Valve Cover (Sloping) 3P £10.43  
Valve Cover (Sloping) 99TT £10.43  
Valve Cover (Sloping) L90 £12.72  
Crankcase Complete 3P £75.90  
Crankcase Complete 99TT £82.23  
Crankcase Complete L90 £100.63  
Half Crankshaft (Sprocket Side) 3P £27.83  
Half Crankshaft (Sprocket Side) 99TT £27.83

Half Crankshaft (Sprocket Side) L90 £34.50  
Half Crankshaft (Mag. Side) 3P £25.30  
Half Crankshaft (Mag. Side) 99TT £25.30  
Half Crankshaft (Mag. Side) L90 £32.20  
Crank Pin £2.66  
Cage & Rollers (Steel/Silver Plated) £5.00  
Connecting Rod Bare £15.18  
Valve Locator £5.75  
Rotary Valve £2.88  
Sprocket £4.49  
Tillotson Carburettor (HL 317A) £10.00  
Regina Chain (Standard) £6.00  
TKM 210 Pistons NEW TYPE £12.00  
JWIS chain (Standard) £5.00  
Dial Gauge & Extension £12.00  
Dartford Karting T-Shirts. All sizes £1.50  
30mm Axle Bearings and Accessories in stock NOW.

Triflon bearing & chain lubricant £2.25  
O.K.O. tyre sealant £2.75  
Reynolds link extractor £17.50  
DAP Rods £9.00  
210 Motoplate & coil £40.00  
Hydraulic Brakes (Less disc) £49.00  
Dunlops 049 in stock £80.00  
New Compound Brigstone £80.00

## CARBS AND ACCESSORIES

Tillotson std. HL317A £10.00  
Tillotson body, std. £6.20  
Tillotson body bored 25mm £8.80  
Tilly bored and tuned 25mm £16.00  
DAP Rods £9.00  
210 Motoplate & coil £40.00  
Hydraulic Brakes (Less disc) £49.00  
Dunlops 049 in stock £80.00  
New Compound Brigstone £80.00

## ZIP DIE CAST ALLOY WHEELS

Complete set for 100cc karts with 13-15 or 17mm bearings in front wheels. Available all widths to suit requirements. With 'O' rings and valves.  
Less rear bosses £30.00  
As above less 'O' rings and valves £27.50  
Complete set for 125cc, 210cc, 250cc, without rear or front bosses. With 'O' rings and valves. £27.00  
As above less 'O' rings and valves £24.50  
Special tyre securing kit for Superkarts, set of 4 £15.00  
'O' rings for above £25p  
Valves for above (short or long) £50p

## GENERAL COMPONENTS

Rotary Valve Cover Sloping K88 K77 £7.50  
Class 1 Axle Sprocket £3.00  
Kart Boots £10.00  
Hydraulic Brakes (Less discs) KP £49.00

## GOODYEAR RAIN TYRES

11-3.50 x 5 £13.00  
11-4.50 x 5 RAC £14.00  
11-6.00 x 5 CODED £14.50

## EXHAUSTS

Vevey exhaust £11.00  
Flex per 8" length £1.80

## FIBRE GLASS

Seat, wraparound £10.00  
Floor tank 100cc £10.50

## GAUGES

Carb. pressure gauge £12.50  
Masta tyre gauge £10.00  
Tyre temperature gauge £70.00

## IGNITIONS

Motoplat, Class 1 £35.00  
Motoplat coil £11.50  
Dial gauge £7.50  
Extension £2.00

## KART COVER AND TOOLS

Kart cover 100cc £12.00  
Seat cover, universal £8.50  
Kart stand, unsprayed £10.50  
3, 4, 5, 6, 8mm T bar Allen key £1.50  
10mm T bar socket £3.00  
13mm T bar socket £5.00  
Sprocket puller £5.20  
Motoplat puller £2.50  
Motoplat holder £1.75

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*continued . . .*

to enjoy a first position, with a win in Junior National with Harry McAuley finishing in second place. 100 National proved to be an exciting race with Kenny Fitzpatrick taking the honours followed by Alan Vance who had his first taste of senior racing. Third place went to Ian Graham.

210 National served up some very exciting racing with Dessie Graham pipping his rival

## Wombwell

February 8th 1981 at Wombwell, was a surprisingly mild day, if a little damp underfoot, but a heavy drizzle had set in by the time the finals were run which sent everyone diving for wets.

### Junior National

Out of a small field of only seven drivers, Simon Howarth won two of his three heats, with Miles Hall winning the other. In the final there were only five starters and Kerry Thorpe was soon into the lead and maintained this position throughout the race with Hall finishing second and Simon Blessed third.

### Junior Britain

A good entry for Junior Britain saw Jason Plato win all three heats in fine style, while Scott Banks also drove well. All was set for a cracking final when Jason Plato, who must qualify for the hard luck story of the meeting, packed up on the rolling lap, restarting a long way behind the others and then spinning out at the hairpin, obviously trying too hard. Banks took the lead followed by Patrick Walsh and Neil Richardson. The latter retired late in the race and his third place was taken by Graham Kershaw. Banks and Walsh held their own private duel with Banks just holding first place on the line, Walsh and Kershaw following.

### Senior Britain

Heat wins for Ray Chadderton, Victor Vaughan and Andrew Wood, with Chris Burns and Stephen Gill also having good drives. In the final Gill went into an immediate lead followed by Eric Smith and Vaughan who were left to battle it out for second place. David Smith took third place when Eric Smith retired leaving Gill to coast home in first position after an excellent drive in slippery conditions followed by Vaughan and David Smith.

### 100 National

Stephen Sykes was certainly the man to note, winning all his three heats in fine style, Lew Marsden and young Derek Higgins (only recently up-graded from the Junior ranks) also doing well. The final was run in the wet with Sykes straight into the lead followed by Higgins, Marsden and Tony Bell being dropped after spinning off the track. Andrew Cursley went into third leaving Pete Elliott and Nicky Fletcher battling for fourth. On lap nine Higgins took over the lead from Sykes and managed to hold him off to take the chequered flag. Third place went to Cursley with Karl Murphy coming from nowhere to take fourth, Pete Elliott 5th and Nicky Fletcher 6th. A thoroughly entertaining race in difficult conditions.

### 210 and 125 National

These races were run together as there were only three entries (and all Novices at that!) for

## CLUB SCENE

Derek Taylor, to the line. Ballymena flyer Dessie Robb sealed his first position in 250 National with three tremendous drives, winning all of them. Brian Kennedy was second and Paul De Hann third. The 125 National had the largest grid of the day with eighteen karts beginning the first race. First man home at the end of the day was Trevor McAuley followed by Forde Fitzsimmons. Third was Terry Wilkin-

son. The 250 International was the final race of the day and what an impressive sight it was to see so many of these Superkarts contesting. R.J. Elliot, turning out on his new machine,

christened it with a win. Paul Sambrook was the second man over the line with ex motor cyclist Courtney Junk in third place. Jim Flemming took fourth place. Out of luck driver Dessie Graham who seemed to be coasting to an easy win in the first race, when engine problems put him out of the day's racing.

I could not finish without saying how interesting it was to see Johnny Cupples, who is the Northern Ireland 'Driver of the Year', competing in the 250 International. May I wish Johnny the very best of luck for the 1981 season.

P. Graham



Top: start of the 100 National final. Middle: Chris Burns (9) leads Dave Smith (69) and Steve Gill (10) in 100 Britain. Bottom: trouble for Bill Longden (56) at the start of the 210 final (Photos: D. Croft)



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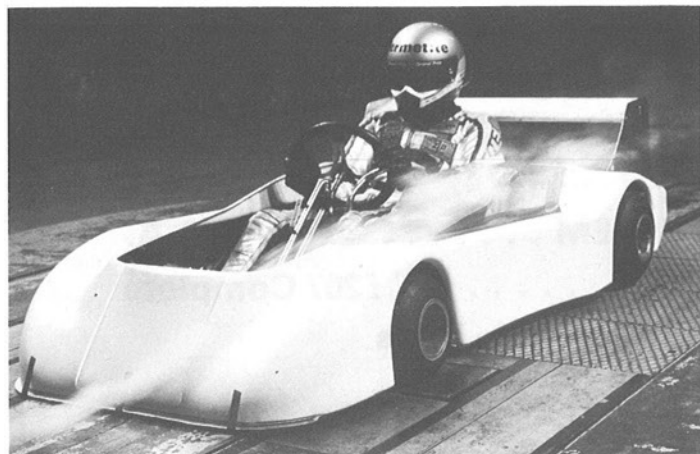
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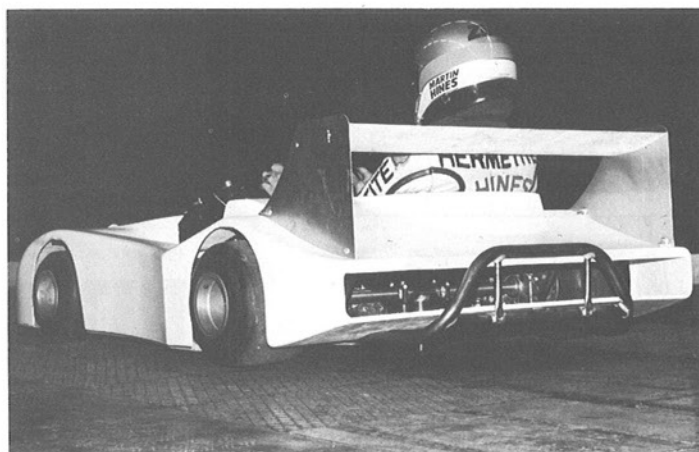
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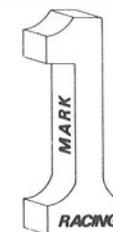
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Andy Stapley took the fast-growing Senior Britain event (top), while Junior National went to Gary Moynihan (bottom) (Photos: Dennis Callingham)

continued...

for a bit of adhesion. Heat two, with everyone now on wets, was rather more orderly, Gary Prior leading them in this time with Chris Callingham second. A re-run of the third heat was required when it was found that a mistake had been made in the grid, and after a delay while two stray dogs were captured, John Herbert led the way followed by Dean Chandler. Mark Tredwell's spectacular departure from heat four in a pit bend shunt made a change from his usual flawless drives, while up front Gary Prior took his second win of the day from Gary Till.

**A Final:** With Steve Tillet, Tim Harvey, Bob Newson and Ian Palmer making it through from the B final, the grid lined up with the two Garys, Prior and Till on the front row. Prior's usual flying start put him safely away with nothing to worry about beyond keeping his motor going. Back in the pack though, there was plenty of excitement brought to a head

when Mick Beauchamp catapulted off the track and although soon on his feet was deemed to require an ambulance ride. With Gary Prior still well clear, the order was rearranged in the minor places when John Aitkenhead and John Herbert both rounded Gary Till, and then changed places to finish with John Herbert in second place and John Aitkenhead in third.

With the last round of the series providing a great climax, I think we can say that our sponsors were given a good run for their money. I hope that they enjoyed their first involvement in our sport and that at this time next year I can once again thank them for their most welcome support.

Results:-

<b>100 Britain</b>		
1st	Andrew Stapley	Kestrel/BPH Arrow
2nd	David Germaine	Kestrel/BPH Arrow
3rd	B. Baxter	Remrod/MW Arrow

<b>Junior Britain</b>		
1st	Steve Brogan	Lane/Arrow
2nd	Mark Handyside	Lane/Arrow
3rd	Jamie Chitty	Colt/TKM

<b>Junior National</b>		
1st	Gary Moynihan	Dart/TKM
2nd	Nick Crabtree	ART 80/Arrow
3rd	David Chitty	Birel/Komet

<b>National Novice</b>		
1st	Quinton Searle	Cobra/Parilla
2nd	T. Searle	Mamba/K&S
3rd	J. Thompson	Cobra/K80

<b>210 National</b>		
1st	Colin Ling	Barlotti/Upton
2nd	Trevor Gowers	Star Gemini/Gowers 9F
3rd	Derek Randall	Barlotti/DGR Upton

<b>250 National</b>		
1st	Frank Roberts	Zip/TVM Yamaha
2nd	Keith Allen	Zip/BS Honda

<b>250 International</b>		
1st	P. Wall	Barlotti/Yamaha

<b>125 National</b>		
1st	Vaughan McNealy	Zip/TVM Yamaha

<b>100 National</b>		
1st	Gary Prior	Cobra/Arrow
2nd	John Herbert	Cobra '81/BPH Arrow
3rd	John Aitkenhead	Dart/SS20

Overall Series Results

<b>100 National</b>		
1st	Gary Prior	
2nd	Gary Till	
3rd	John Herbert	

<b>Junior Britain</b>		
1st	Mark Handyside	
2nd	Kevin Keith	
3rd	Steve Dart	

<b>210 National</b>		
1st	Jim Paffett	



Reader Martin Aspland's reaction to Drew Liddle's water cooling conversion article (last month)...

## IRELAND

### Boxing Day Racing at Ballymena Showgrounds

Wintry conditions at Ballymena Showgrounds did not prevent karters turning out in large numbers to serve up some very good racing. The Mid Antrim Kart Club promoted the race and the day's activities began with Junior Britain. David Allen stole the show, closely followed by Frank Stewart and young Desmond Graham. Hugh Dunn was the next driver



Reg Gange won a classic World Cup victory in 1973, but his defence in 1974 (above) ended, as he puts it, "upside down!"

## 'Reggie'

Talk to any of Superkarting's leading drivers, and you will find that they all rate him, even fear him. Observers on the peaceful side of the Armco will assure you that his style is fiercesome, too. For sure he's talented, and without doubt he's a fighter. Yet over the last couple of seasons, the compliments have but flattered to deceive. Reg Gange, shrouding his competitive aggression in a quiet modesty, agreed...

Phillip Bingham reports

Not so long ago, Superkarting looked set for a boom. The racing had suddenly become colourful, the racers' attitudes professional, and even the hardened motor racing purists were beginning to recognise the sport. Leading Superkart drivers even became recognised names amongst the motor racing fraternity!

Most colourful and professional of them all, predictably, was Martin Hines' works Zip Equipe. Included in that team at the time of the boom was one Reg Gange. He had been a visitor to the winner's circle for many years, particularly in the 210cc Villiers class, but now he looked ready for that final push to the karting Big Time. Alongside team leader Hines and Dave Buttigieg, Gange had established himself as one of the sport's envied Big Three. What was more, the equipment was at his disposal to let him keep it that way.

But the down-to-earth Londoner didn't want that. The quick and highly respected motor mechanic astounded his rivals by shunning the bright works colours. Muttering some vague explanations about "personal reasons", he returned to the less affluent roots from which he had sprung. A strange, possibly even stupid decision in many people's eyes, but Gange had — and still has — the courage of his convictions.

"Actually, even the works Zip team wasn't all that professional then," he points out, "because it was the first year as a big works team and there were lessons to be learnt. But yes, it was the best team. Butty and myself were basically recruited by Martin, and we looked after ourselves, just asking for the bits and pieces we needed. But I left for simple personal reasons — because of my friendship with Jack Barlow. Quite simply, I just wanted to carry on racing with him."

Barlow, of course, is the man behind the Barlotti marque, and it was to this that Gange returned. "Jack was always the person that helped me out; the person I went to when I couldn't find a chassis to run," explains Gange, without actually stating in black and white that his surprising team move was essentially one of selfless gratitude.

With Barlow "a good friend of the family", and Reg Gange Snr. "not very keen about me being in the Zip team because he likes to be an individual, and saw Superkarting in the old fashioned way rather than wanting the new glamour bit", Gange Jnr. had shunned the works life once and for all. "The only reason I'll be running a kart other than a Barlotti this year is because I've got the sponsorship to do so," he points out.

That well-meaning decision was made five years ago. Since, as the hardened realists predicted, his track record has suffered. Reg reluctantly admits that "obviously the Barlotti is inferior to the Zip on long circuits," understating magnificently that "it hops a little!", but he prefers to blame himself for the last year's drought. Results have been all too rare, and Gange dismisses it casually as "complacency; I haven't been putting enough into it, to be honest."

Yet that is as difficult to believe as his own frustrations must be hard to swallow. A flick back through the history books reveals a track record of Mr. Gange's that has been positively sparkling. At just nine he was circulating the Surbiton track, "just messing around and learning," he laughs, and by eleven he was racing in 100's. Yes, that's right, *eleven!* Laughing with positive delight, he explains, "I started racing illegally, with a forged birth certificate!"

From there on, Gange Jnr. and success were synonymous. Numerous convincing 210cc Villiers titles fell his way, including several British Championships, and in 1973 he took a storming, classic victory at the prestigious World Cup. Eleven years after starting out in racing, Reg Gange Jnr. was now indisputably recognised.



continued . . .

That World Cup charge is remembered as one of the most devastating ever seen at the tight Morecambe circuit, and a green pennant bearing the legendary 'O' stares proudly out of a frame on the winner's dining room wall. Ask him to talk about it, however, and Reg is characteristically self-effacing. Told that the win was spectacular, he pauses before laughing "so they say! I suppose it was *quite* good, from the middle of the grid, yeah. The best part was that it was a bit like a Fairy Tale, because I blew my only engine and had to borrow one for the final. I wasn't too keen to borrow one, but somebody else talked me into it and actually fitted it, and luckily it all clicked together."

Over recent years, alas, that "clicking together" of man and machine has been conspicuously infrequent. Few would dispute that the talent, indeed the traditional fight-all-the-way aggression, are still there, but success has not become any easier as the truly professional teams continually grow ever-more professional.

"I'm quite happy where I am," says Reg, "but I do realise that all the time we have less and less chance of beating the works teams. Do you know, I even pulled into the pits and gave up at Cadwell not so long ago because I got fed up with flogging a dead horse!! Now that's not the approach I used to have. . ."

Indeed it's not, and although he really is reluctant to complain about his sport, Reg confesses that "leaving the works team was silly in some ways — but a lot of the reason I haven't been winning is my own fault."

"You know, there's always been team rivalry at Zips, but perhaps people just don't realise how lucky they are there. There were times when Dave and I accused Martin of not getting the proper equipment, and one thing and another. I personally felt that I should get exactly the same as Martin, when I was in the team. But looking back now, and listening to the comments of other drivers who have been in the team since, I think we're all wrong. Martin is team leader, and so Number One driver, and so it's only natural that he should get the best. Put yourself in his position: anybody who says they wouldn't give themselves the best is a bloody liar! Thinking of it now, second best to him is better than anything else." Chuckling almost wickedly he adds, "I think Calvin (Fish) and Paul (Elmore) will find that out!"

This time last year, it seemed as if Gange might at last be rescued from the non-works wilderness, and justice at last be given to his talents. Amidst a black and orange fanfare, two beautiful Dinos were wheeled out of the back of a truck that proclaimed itself belonging to Tony Smith Racing with Team Gola. It looked good but it didn't last.

A young Reg (foreground) and "the old man" (94) at Camberley in 1963



Reg — who admits "I did once try to get back into the works Zip team!" — found himself a privateer once more by the middle of the 1980 season.

"I only heard the rumours behind it all like everybody else," Reg smiles wryly, "but basically Tony Smith ran into financial problems, Gola heard of it, and pulled out. When we went to the demonstration at Le Mans, John Ball and I realised that things weren't quite right, and when we got back to England it all folded up."

The deal had been for Ball — who Reg sees as "very quick and under-rated" — and Gange to run Dinos with Smith's neat interpretation of the fibreglass ground effects fad, with full sponsorship.

"All we had to do was arrive and drive, which seemed too good to be true! To be fair to Tony, he upheld that arrangement right to the time that it fell apart."

Yet despite all this, the Londoner remains surprisingly single-minded about Superkarting. True to his record of team allegiances, he is also confidently individual. He *doesn't* believe that Superkarting is quite yet ripe for massive public exposure: "What's 10,000 people at Silverstone? The same as a Formula Three meeting, maybe. But I once went to see a Formula Three race and it wasn't worth the effort."

He *does* think, however, that "the faster, the better. Yes, there are arguments for keeping the costs of 250's down, but I believe karting's got to a point now where you've got to let the Superkart class go on its own. Make or break, one way or the other. If it makes, say perhaps alongside bikes, all well and good. If it breaks, well let's all go back to 125's or something, and enjoy it for what it is."

Surprising words for one whose talents have been so obscured on occasions by equipment limitations. Perhaps it's because, rightly or wrongly, Reg genuinely believes his recent mediocrity has simply been *his* fault. In one breath he'll quip "if I had to make do with second-rate motors and so on like some of these guys do, I'd just give up"; in the next, "yeah, maybe I could have won more often if I'd stayed with a big team."

Maybe Gange really doesn't take his racing quite seriously enough anymore. "I think that, since I've left the Zip team, karting has 'grown-up', if that's the word. Now, you've got to put a lot more time and effort in, and I haven't. I've been complacent, partly because of my business demands. But now hopefully we've got our business set up in such a way that I can put more time into karting."

1971 200cc Villiers British Champion.



## Junior National

1st Brian Ewing  
2nd Mandy Rowe  
3rd Lindsay Dalkin

## 100 Britain

1st Richard Mills

## 100 National

1st Ian Williams  
2nd Brian Parias  
3rd Mike Ballantyne

## 100 International

1st Roy Dickson  
2nd Nigel Davison

## 125 National

1st Brian Smith

## 250 National

1st Duncan Pearcy

## 250 International

1st Robert Johnston

## 210 National

1st Bill Cole  
2nd Frazer Barber  
3rd Keith Ferguson

## Novice Award (Jun. Nat.)

Chris Williamson

## 125/250 Nat./250 Int.

With the colourful fairings and Frank Robert's and Vaughan McNealy's new silver leathers brightening the scene, the usual confusion over who was in what class didn't seem to matter, but our efficient lap scorers managed to sort it all out and award wins to the aforementioned Frank Roberts 250 Nat., Vaughan McNealy 125 and P. Wall 250 International.

## Junior Britain

Little fellows with big hearts seem to abound in this class, Mark Handyside being a prime example. A win from Martin Prior in heat one was eclipsed in heat two when he came through from the back to take second place behind Jamie Chitty. This was good enough to give him pole position for the final alongside Martin Prior who made the better start to lead from Mark and Steve Brogan. A tense few laps followed as all three circulated together and just as it seemed that Martin had done enough to get clear, his motor seized to put an end to a magnificent drive. At about the same time, Steve managed to pass Mark and they finished in that order with Jamie Chitty catching up in third place.

## Junior National

Gary Moynihan's day without a doubt. A first place in heat one and a second in heat two, set the scene for a great drive in the final, when although he had a flag to flag win, he was pressed all the way by Nick Crabtree.

## 100 National

A brief shower just as heat one went out, gave Mark Tredwell's delicate touch the chance to take a win from the other drivers vainly looking

## Tilbury

### BBN Products Winter Series Final Round — Tilbury February 8th

Another lucky break with a dry and warm (for February) day, encouraged the competitors to arrive early for the last and double points meeting of our Winter Series.

## 100 Britain

Gerrard Cox became the first winner of the day with an untroubled drive from the front. Andrew Stapley after coming through from the back was second. Tony Cruttenden made up for a non finish in heat one by leading heat two all the way from David Germaine. Andrew Stapley's consistency had earned him pole position for the final and a flying start soon put him

clear of the opposition led by David Germaine. A possible challenge from Tony Cruttenden came to nought when he was involved in a tangle with Gerrard Cox. B. Baxter therefore stayed in third place as they crossed the line.

## National Novice

More consistency here as Quinton and T. Searle took first and second place in both heats and the final, J. Thompson taking third.

## 210 National

All the old favourites present in this group as heat one gave a win to Derek Randall in front of Colin Ling and Jim Paffett, but the usual order was restored in heat two with Jim and Colin leading the way from M. Austin. Jim's luck ran out for the final as his engine refused to start, leaving Colin to take the honours from a fast finishing Trevor Gowers.



F.R.E.D. Bear 1 made its first outing driven by Pete Elliott at Wombwell, South Yorkshire on December 14th in a 100 National class when it came in first.

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continued . . .

**OSEL CHAMPIONSHIP WINNERS — Overall**  
 1st Nigel Wigg 100 NATIONAL  
 2nd Boyd Barrington 125 NATIONAL  
 3rd Trevor Woodhouse 100 NATIONAL

**Classes**  
**JUNIORS** Gary Beaumont  
 100 NATIONAL Nigel Wigg  
 125 NATIONAL Boyd Barrington  
 210 NATIONAL Chris Prue

**BEST NOVICE** Chris Prue  
**ENDEVOUR TROPHY** Alex Cable

Andrew Hale

## Felton

February 1st

The Northumbrian Club opened its '81 programme in the face of a biting cold wind and an angry sky. Indeed we were lucky to have a meeting at all as only days before, the track had been covered in a deep layer of snow. Nevertheless, in spite of the cold, we can report that conditions remained dry and provided for some very good racing. In a pre-race briefing, RAC Steward Mr. Jack Angus offered very good advice to certain new Club Members, who in their desire to participate in the day's racing, had overlooked certain licence procedures. They were left in little doubt in respect of future race meetings if these were not seen to. Our thanks to Mr. Angus in this matter.

Entries were slightly down on normal but this may have been due in part to the uncertainty of the weather and the fact that a good few drivers were present in 'civies' with the poor excuse that they had not completed their winter rebuild! However, whilst down in number we lacked nothing in quality and were very pleased to have visitors from as far afield as London and Stranraer. Nice to see you lads, be sure you come back.

The intention to make good at the first meeting of the season was more than apparent from the start of practice. Indeed Clerk of the Course, Bill Brewis, called in all drivers, pushers and mechanics alike to issue severe warnings to steady up, following which, the racing got under way in earnest.

**100 Britain**

An immaculate performance by young Jason

### BROMSGROVE KART CLUB DATES FOR '81

April	5th	Restricted
May	3rd	R.A.C. British Short Circuit Championship
May	24th	K&S & SAM Championships
June	7th	Restricted
July	5th	R.A.C. 100 Britain Championships
		Pelican Trophy for 100 National
Sept.	6th	The Midland Championship
Oct	4th	National Meeting

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Plato who took every heat and then proceeded to dominate the final. Patrick Walsh and David Kirk just about shared spoils in the heats but in the final Patrick claimed second spot followed home by David Hillcroft who got it together just when it mattered.

#### Junior National

Again this class was very closely contested. First heat saw three different leaders before Simon Blessed got in front of Mandy Rowe who in turn led Brian Ewing. The second and third heats saw Brian stamp his authority on the event to win both then follow on with a win in the final in front of Mandy and Lindsay Dalkin.

#### 100 International

Alas very poorly supported. Roy Dickson and Nigel Davison held first and second berths through the heats and final. Inter drivers come back soon!

#### 100 National

A grid of 25 drivers provided the spectators with the excitement they were waiting for. The cold track was proving very tricky and drivers were obliged to concentrate every inch of the way. In the first heat, Brian Parias and Mike Ballantyne set the pace, but on the last lap, Mike was in trouble and first George Turner then Ian Williams got past him. Ian had in fact pushed his way through from 13th place on the first lap. The second heat again saw Ian leave himself with a lot of work. For the first two laps, Paul Browning led from George Price. Then George expired and Ian moved through to take over from Brian Parias and Ian Davison

while Paul dropped back with problems. The third heat was Williams all the way, at first followed by Gordon Wilson who hit problems on the fifth lap, giving way to Parias then Davison.

In the final, Williams made no mistake and again led from start to finish. Likewise, Parias had no intention of giving up second slot and he held this throughout. Mike Ballantyne holding third could see George Price coming through the field and just managed to resist the challenge.

#### 210 Nationals

Ten karters for this one which included two very fast visitors, Frazer Barber and Keith Ferguson. In the first heat, Keith showed just how well a Villiers can go when he took first place from Frazer and Cole. In the second, Bill reversed the order right up to the last lap when he spun and let Keith through but still managed to keep in front of Frazer. The third heat saw Frazer really flying, until Keith pegged him back on the 9th lap, with current Club Champ Des Davison moving up to take third.

For the final, Bill Cole decided he had been far too nice to the visitors and proceeded to show them round Felton. The finishing order being Cole, Barber, Ferguson with Davison suffering engine seizure on the 8th lap.

T. Ramshaw

#### Results:—

##### Junior Britain

1st	Jason Plato
2nd	Pat Walsh
3rd	David Hillcoat



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Reg has always remained loyal to Jack Barlow's Barlotti marque. Reg and Jack (right), Jyllands Ringen, 1975.

While the sport 'grows-up', too, the Gange traditionalism simply offers stronger resistance to the tides of publicity and 'glamour'.

"Yes, it is less fun now," he agrees, "partly because the sportsmanship has gone out of it. True, the competition is more of a challenge because it's stronger, but sometimes I think it's got a little bit too serious. There's more and more back-stabbing."

Neither does he have much time for the fibreglass fad. It has assisted the sport's image enormously, yes, "but I personally think a lot of people talk a lot of rubbish about it. I don't like full bodywork on karts, although if it's necessary I'll have one. As far as the look goes, I don't really like it, because to my mind a kart now looks like a Scalextric car. Nine out of ten of those undertrays are nonsense too. The only one I think ever worked was John Ball's first one, which had a proper skirt system just like a racing car. But all these others. . .

Reg's first experience of big team sponsorship was with the short-lived Gola Team . . .



if you're going for suction, to my mind it can't work without suspension. Every time you hit a bump in a kart, you're breaking the air seal."

"Perhaps now that there's actually been a body tested in a wind tunnel, they'll be worthwhile — but it'll be the first one that has."

Of course this no-nonsense approach to the sport is not new to Reg Gange. His entire history echoes to straightforward individuality and a liking of karting that has remained just that, rather than becoming all-consuming. Illustrating this attitude, he reflects on the missed possibility to race single seaters as thus:

"I do have a few regrets about not going into cars, but I only have myself to blame. I could have gone into them years ago. My father offered me the chance, but at the time I didn't take it. I was offered a Formula Ford — or a deposit on a house. I took the deposit on the house, and I don't regret it that much, but perhaps I would have liked both!"

That's not to say that once he had accepted the domestic life Reg was prepared to shut motor racing out though. A couple of seasons later, his mind was very much on the single seater scene, but, he shrugs, "one or two people we've known unfortunately got killed in cars, and so father went right off the idea even though I hadn't. Without his backing I didn't have much chance, and I just let it go."

It was an incident typical of the man's racing history, and Reg knows it. Happily, he also accepts it smiling.

"Let's face it, we're only doing it as a sport, not a living," he emphasises. "To be sponsored in this game isn't anybody's right — you're just bloody lucky if you are."

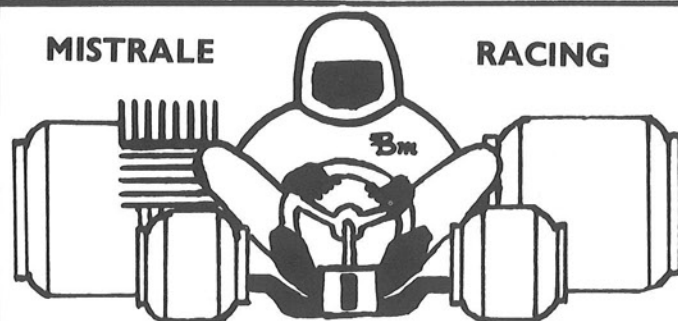
He pauses to mull over this thought, before adding energetically "you're out there to enjoy it, but of course winning helps you enjoy it that much more! I'm looking forward to this season, with the new Zip/Rotax. (Reg will be running as part of Martin Merritt's "Vingt-Trois" team.) I've got into the frame of mind where I'm either going to go quicker, or I'm not gonna race at all. I hope to put the last couple of year's wrongs right. And that's fighting talk!"

Those words might have been accompanied by a modest laugh, but the cold record — unjust though it might be — does at least show that there is a fighter beneath that happy-go-lucky veneer. If Reg Gange Jnr. has anything to do with it, 1981 will be "go lucky."



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## CLUB SCENE

*continued . . .*

After winning all three heats, Stephen Gill had pole position for the 100 Britain final in front of Malcolm Ellwood, Eric Smith and Victor Vaughan, making his Fulbeck debut with the err. . . Big Boys, after a highly successful career in the Juniors.

As they came past me after two corners, Vaughan was tucked in behind leader Gill, ahead of Ellwood and Smith. He didn't survive the lap, however, and had to walk home. His place was adopted by Ellwood who also had to walk home when he expired on lap four. By this time Gill had a lead of 8½ seconds over the new second place man Eric Smith. That's how it stayed with Gill increasing his lead all the time. On lap 10 Bill Baxter retired and his third place was taken by Phillip Hogg. Whether it was a sign of trouble or just plain relaxing with an assured win in sight, I'm not sure, but Stephen Gill's 11.9 second lead was reduced to 8.2 on the penultimate lap. It would have been interesting to see three more laps.

David Bunn was the best placed Novice, finishing fifth behind Chris Noonan.

### 100 Britain

1st	Stephen Gill	UFO/Arrow
2nd	Eric Smith	UFO/Brad Arrow
3rd	Phillip Hogg	Barlotti/Arrow

As usual the 100 National class was best subscribed with thirty entrants. The heats showed no one favourite and in fact only twelve drivers managed to finish all three heats. Peter Elliot was having trouble setting up his new FRED Bear for the dry conditions. After the second heat he realised that his steering wheel was about 30 degrees out compared to last year's UFO. Having got it straightened out he went and won the next heat — mind you it was anybody's at one point. A nudge among the leaders on the very first corner put thirteen karts out in one go. Most managed to restart but Lew Marsden had to retire with a broken track rod.

The grid for the final was Nigel Edwards, Nicky Fletcher, Derek Buckton (see last month's prophecy) and Peter Elliot. Nicky got away first and came past me leading Edwards and Peter Giddings who had made a staggering start from tenth place. At the end of the first lap Edwards had taken the lead and Elliot had taken third with Derek Higgins behind him. Giddings dropped back to fifth in front of Marsden and Adrian Wood. One lap later Higgins took third place from Elliot and Giddings lost fifth to Marsden only to get it back again when the latter came spinning into the second hairpin with what looked like a disconnected steering column. Buckton had had a very bad start and had got himself bogged down in the midfield and was unable to improve on seventh place. As the race went on Nicky started dropping back losing her place to Higgins and then a lap later to team mate Elliot. On the seventh circuit as the leaders started mixing with the tail enders, Edwards got caught off line and lost three places. After that there was no more movement among the leaders but the dicing was as close as it's ever likely to be.

### 100 National

1st	Derek Higgins	Dino/DAP JM
2nd	Peter Elliot	FRED Bear/FRED Parilla
3rd	Nicky Fletcher	FRED Bear/FRED Parilla



Glen George (15) powers past 250 National driver David Miles (Photo: D. Thomas)

The heats for the 125 Nationals were run with the 250's and this produced some interesting comparisons. Each of the three heats had a different class as winner. Rotax powered Brian Borwell had a second place to an International, a win over the same International and a fourth place earning himself pole position. Gary Hill, with two third places was behind him.

At the second corner Adrian Wilcox was leading from Brian Borwell, Novice Stan Harvey and Gary Hill. Two circuits later Borwell had passed Wilcox and Hill had passed Harvey. The racing remained very close with only one second covering the leaders until lap six when Hill got past Borwell. Borwell seemed to be getting slower all the time and on lap nine he retired.

### 125 Nationals

1st	Gary Hill	Zip/Chat. Yamaha
2nd	Adrian Wilcox	Barlotti/Rotax
3rd	Barry Barthorpe	Star/Rotax

The 250 National/International final was one of those races where Lady Luck was shining on one driver only. Barrie Borwell and Glen George made good starts and set the pace through the first three corners followed by John Dixon, Bill Tinkler and David Miles. For five laps it was a straight chase until Borwell developed a misfire and started slowing down. By the seventh both George and Dixon had got past and it looked as though Borwell was going to have to be content with third. (He was still well clear of the pack) but two laps later George and Dixon had a coming together (Evening All!) leaving a one cylindered Borwell with

a totally unexpected win over Bill Tinkler and Stuart Eason who were the only drivers still on the same lap.

### 250 National

1st	Bill Tinkler	Minstral/Bultaco
2nd	Stuart Eason	Zip/Yamaha

### 250 International

1st	Barrie Borwell	Sprint/SFR Yamaha
-----	----------------	-------------------

The final race of the day (and a fine sunny day it was too) was for the 210 Nationals.

Richard Boston was awarded pole position after one win and two seconds to Bill Longden who had not managed to finish in the other heat and was consequently lowly placed on the grid. After two corners Boston was leading from Vince Mundy, Robbie Kellett and Bill Longden. With each lap Longden moved up a place until he had a lead that was completely unchallengeable.

Neil Wheat was the best placed Novice in seventh place.

### 210 National

1st	Bill Longden	Barlotti/Villiers
2nd	Vince Mundy	Barlotti/Upton
3rd	Richard Butler	Barlotti/Upton

And that was it. All finished and the sun still shining. Now I've got to meet the wife in Enfield at 6.30, I wonder if I'll get there in time.

D.A. Thomas

## Beccles

140 people arrived at Hedley House, near Lowestoft, on Saturday 29th of November for Beccles and District Kart Club's Annual Dinner Dance/Prize Presentation night. Things were well under way by 7.30 p.m., with Dinner being served a short while after. Starters was a delightful egg mayonnaise. This was followed by a main course of beef and "accessories", which left a very pleasant gateaux to round off the meal. . .

Next up was the prize presentation. A short, but sweet, introduction was given by John Osborne. John thanked all the Club's helpers who have done so much this season, the Committee Members and in particular Don Briggs, Peter Carter and the Barrington family. The trophy presentation was then held with the prizes being presented by an as ever youthful Monica

Beaumont; to whom, and for what, is listed later.

The floor was then cleared, the band struck up and the fun started. One of the highlights of the evening must have been the "Okey Cokey". This was thanks to the smashing, or should that be flashing, ladies who took part and also to our very own rubber lipped "Nancy Boys". Great fun.

Finally on behalf of everybody present, I would like to thank Monica Beaumont who organised the evening, which was a great success and enjoyed by all. THANK YOU.

### CLUB CHAMPIONS

<b>JUNIORS</b>	Andrew Pogson
<b>100 NATIONAL</b>	Gordon Chenery
<b>125 NATIONAL</b>	Boyd Barrington
<b>210 NATIONAL</b>	Chris Prue

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100 National has always been the largest class numerically, in British karting and with the advent two years ago of the Kart & Superkart Championship, the class is now going from strength to strength. 1980 was a very good year for 100 National, producing an incredibly close finish to the Kart & Superkart Championship plus an undisputed British Champion. As the class "grows up", so it breeds its own stars and known winners. We look at the year and in particular the faces that made up that year.

Whenever you reflect on a particular class and Championship series, the people involved seem to break themselves down into three rather distinct categories, which more often than not are reflected in final Championship standings. Firstly, there is what we might call the consistent winner — the driver who the remainder of the field constantly watch to see what the "pace" is, and what standards they need to achieve to become a winner. This category of driver obviously doesn't win everything — 100 National is such a competitive class, that this is an impossibility — but when he doesn't win, he is usually somewhere in the placings having perhaps been forced to come from the back. The second category would seem to be made up of those who on their day can be brilliant. On other days they can be terrible. Over a Championship, their final position is likely to be made up of one or two very high scores, but an ominous list of failures. Thirdly, there is "Mr. Consistency". He perhaps hasn't got the outright pace to consider himself a winner, but he's always there in the 'A' final, rarely non-finishing, and as a result, quite handily placed when points are added together.

Two people stand out from the rest and quite naturally seem to fall into our first category — the fairly consistent winner. And naturally enough, these two occupied the two top spots in the 1980 K & S Championship fight. Mark Tredwell is the undisputed King of 100 National racing in Britain today. His record of consistency as well as outright wins cannot be argued with. At one stage, it seemed as though

Carr (at the back) let them get on with it at the final K&S round, accumulating enough points to snatch the title. Lew Marsden (83) led at this stage, from Neil Hann and a fast-closing Tredwell (1). (Photo: K.W. Gibson)

# National Pride

his lead in the K & S Championship was unapproachable — and really it was almost unjust that the Championship should be taken away from him amidst such dramatic occurrences as the last couple of rounds. Although he let this slip, there was no mistake at the RAC Championships at Rowrah. Right from the beginning of practice, there was simply nobody capable of living with him. This latter event, best illustrated the most outstanding feature of Tredwell's team. Along with Mick Fullerton and his other regular team personnel Tredwell had the ability to set up his equipment very quickly at a new circuit. Even if practice time was limited, the heats were often utilised to compare engines etc. That sort of approach requires full confidence on the part of both the driver and the team, and they certainly had that. Mark is the closest person one has in 100 National to a professional. At the end of the season, he switched to Dartford Karting's stable, and if performances during his off-season build-up are anything to go by he is still very much the man to beat this year. He races virtually every weekend and with the back-up he receives, will be very much on form when the 1981 K & S Championship trail begins.

Although overshadowed by Tredwell for most of the year, Paul Carr actually slipped in to snatch the K & S Title right in the very, very last moments of the series. His was a somewhat turbulent year, starting with the promising joining up with TKM to represent them in the class. Apart from an utterly convincing win at the Kimbolton second round, the early rounds were fraught with difficulties — mechanical and otherwise. This resulted in the sudden announcement that the Little Rissington round, the fourth, would be his last as a member of the TKM team. The next few weeks saw Carr on a works supplied Zip, but then the mysterious sea-saw year changed yet again with an astounding return to TKM — somebody had done their sums and figured out that with only two rounds to go, he was virtually the only person mathematically capable of catching the series leader Tredwell. So, despite the rather unhappy nature of their parting, at which time both parties hinted that the mechanical problems were the responsibility of the other, Paul Carr and TKM were back together. That Paul made the most of the re-uniting is now history. The determination with which he approached the

last two rounds, combined with a turning of the luck tables against Tredwell, resulted in an incredible climax to the Championship, at the final event. With just the last final to go, Carr knew exactly what was necessary to sneak a points win. His drive in the final was very calculating, avoiding trouble and just doing what was necessary. The Kart & Superkart title was indeed just reward for sheer tenacity.

Under less tension, Carr's natural instincts are those of a charger. His ability to push his way through a crowded field is unquestioned, although he has acquired a slight reputation for being a trifle hard on his equipment. The initial experiences of the pressures of full works backing during the last year have had an effect on Paul Carr, and the, at times, necessary curbing of his naturally flamboyant style will probably do much more good than harm in 1981. He remains with the TKM team and it will be a very, very good man who takes his title away.

One driver who falls very naturally into our second category — the charger — is Gary Prior. Gary's personality is an interesting mixture, for he is very popular amongst his fellow drivers yet at times he can be the most aggressive one of them all. Very definitely a charger, Gary was one of those who had a couple of excellent Championship rounds, but with rather lean results at the rest. He started the year under the Mistral banner, but after three Championship rounds with somewhat minimal success, he and Mistral parted on fairly amicable terms, as Gary was about to commence employment with, and driving for, Dartford Karting. His first couple of rounds were Gary at his best and the rest of the series looked rosy. But one or two problems at Felton and Fulbeck kept Gary down to tenth overall in the end. Gary is not really a comprehensive tester of equipment, but give him an old bag of bolts and he will drive it as quick as the damn thing can go. Prior is another to change camp at the end of the season, moving a few miles across country to take up the Sisley Karting banner for whom he will drive in 1981.

Such is the depth of 100 National talent, that there must be a good dozen or so other drivers capable of winning a Championship round on their day. A fair proportion of these manage to combine perhaps one outstanding







continued . . .

performance with a fair measure of consistency through the rest and there is quite a bunch of this calibre occupying the rest of the K & S Top Ten. Undoubtedly the surprise of the year was Kenny Churchill. Making a return to racing after a break of a couple of years, and running with Wycombe Racing equipment, Kenny showed form right from the start. His opening three rounds were all good strong consistent highly placed stuff. At this stage, and lying second only to Tredwell in the Championship, he had the confidence to miss the fourth round and go on holiday. He returned at Clay Pigeon for his best result of the series. The last three rounds saw him slip slightly, especially at Fulbeck, allowing Tredwell and Carr to consolidate their advantage. However he had already done enough to be virtually certain of third overall in the Championship and this in itself was a very noteworthy achievement. Churchill seems set to remain with Wycombe Racing for 1981.

Ian Williams missed the first K & S round and therefore did not feature in the points totals until later on, bursting into notice after a superb win at his home round at Felton, beating Tredwell after a fairly dour tussle. For some reason, Williams remains rather inconspicuous on the circuit, but more often than not is putting together a consistently high points scoring effort. This sort of high placed consistency earned him fourth equal in the 1980 K & S series.

Sharing this fourth spot with Williams was Neil Hann. The man from Mistrale Racing had a positively disastrous start to the Championship, "bombing out" at both of the opening rounds. Under the constant pressure of not being able to drop more than one more round, his remaining season was pretty good. Neil is perhaps fated to be the Stirling Moss of 100 National karting, so many times has he come so close to winning a Championship round outright. Neil made pole position at Little Rissington only to be eased out by his recently departed team mate, Gary Prior. Again, at the final round, Neil was right there leading for a great portion of the distance, but then succumbing to the late charge of Ian Ross-Johnson, enjoying a one out-of-the-blue performance. When Neil finally does win a Championship round, and he's determined that it will happen this year, it will be a very popular and certainly hard-earned win.

In contrast Peter Christo's early season performances, with the exception of an uncharacteristically bad Kimbolton round, were top

yet certain. Roger is a stubborn chap, and some of his drives from the depths of the 'C' or even 'D' final were remarkable.

The final remaining member of our K & S "Top Ten" is Dickson Karting's Brian Parias. Ninth overall was perhaps not quite a true reflection of his overall ability and pace. Parias seemed to suffer slightly more than his share of bad luck, but then again you can make your own luck to a certain extent. Parias came on strong in mid season with two very good results at Clay Pigeon and Felton, but just when a consolidation of points seemed on, things went wrong again over the last two rounds.

If there was ever an example to illustrate the depth of talent and the closeness of 100 National throughout Britain, it is the fact that three of the eight Championship round winners didn't even make the top ten. Chris Stoney sprang a totally unexpected home track win at Three Sisters, and then promptly disappeared from the rest of the series. Pete Elliot's win at Fulbeck was not so much a case of another home track specialist win, but more an illustration that he should really have done better over the rest of the series. Pete is a thinking driver, whose equipment is always well prepared, but apart from Fulbeck and a great charge at Wombwell (unfortunately ending with a collision with Lew Marsden when in a strong challenging position), his season was a series of problems. The final, and perhaps most spectacular win, was that of Ian Ross-Johnson, at that spectacular final Wombwell round. Starting from the middle of the 'B' final, on equipment - chassis and engines - borrowed from Doug Spencer, Ian qualified easily for the main final, and then simply drove his way through the field to emerge almost from nowhere to finally slip by Neil Hann with a couple of laps to go. His non appearance in the final Championship standings is due solely to the fact that he only competed in two other rounds. But the obvious ability and potential shown during this win has earned him a position in the two kart 1981 TKM challenge. Watch Ian Ross-Johnson very closely in 1981 - he will be somewhere pretty near the front! The 1981 K & S series has been formulated (see Just Heard. . .) and reverts to the 1979 format with six rounds, four to count. Judging by performances last year and the obvious depth of talent now on the 100 National scene, it's more than likely that new winners will emerge.

On the equipment front, the class is wide open - last year's eight rounds were won by no less than seven different chassis and five different makes of engine. With the continued basic stability of the National tyre situation there is no reason why the 1981 Kart and Superkart Championship shouldn't match the 1980 series in spectacle and excitement.

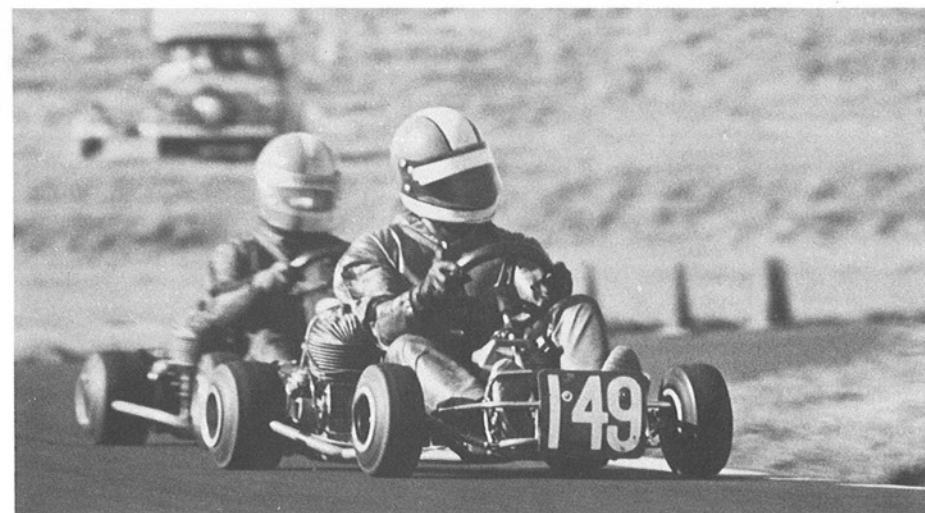
The press-on style of Gary Prior (Photo: D. Callingham)

class. In fact after only six of the eight rounds, Peter seemed poised to take a very high overall placing. However, in trying to better his best five performances, the last two rounds went somewhat astray, and in the end he had to be satisfied with sixth place overall. Definitely somebody who could be very, very near the top this year.

Northerner Georgie Price also started the season with a bang - three very good scores on the trot before disastrously writing off his kart in the opening heat at the Little Rissington fourth round. He missed the next round and to the outside world his chances of overall points now seemed pretty small, but two more meaty performances in the last three rounds, including a storming drive at Fulbeck pulled him right up to seventh in the overall standings.

Roger Moth is a bit of an enigma, even to himself. For the last two years he has won the opening K & S round, both at Tilbury, to mark himself as an obvious candidate for the others to watch during the rest of the series. But in 1980, as in the year before, the rest of his season just didn't live up to this initial promise. It was only due to some very dour drives in the latter stages of the series that Roger was able to pull himself back up into a top ten finishing position - eighth in fact. Roger has run under the Sisley banner with works supported Hewland engines, but with Hewland's scaling down of their works support his 1981 plans are not

George Price did exceptionally well from only 6 K&S rounds.



## Tilbury

### BBN Products Winter Series - January 11th

Thick frost on the track later dispersed under the influence of the sunshine and salt supplied by The Almighty and the L.K.C. respectively, so that we could get round three of the series underway.

#### 100 Britain

Tony Cruttenden did well to lead heat one after starting at the back of the grid. He was followed home by David Germaine and Andrew Stapley who had come off and restarted. Starting from pole made Tony's second heat win even easier, this time Andrew Stapley was second and David third. The final was a virtual rerun of heat two with Tony winning easily from Andrew and David.

#### National Novices

If it is possible to be a leading Novice, this title should go to David Beams and Quinton Searle, who both do well at Tilbury and kept the sequence going with first and second place in front of John Thompson.

#### 210 National

Trevor Gowers interrupted the Colin Ling/Jim Paffett running battle by finishing between them in heat one and winning heat two. However he disappeared in the final leaving Colin to take first place in front of Jim and Novice J. Hesse who finished a very good third.

#### 250 National/250 International & 125 Nat.

The class winners made sure of it by winning both heats as well. Keith Allen, Roger White and Vaughan McNealy were the trophy winners.

#### Junior Britain

Pole man Kevin Keith made sure of heat one with a clear win from Steve Brogan and Martin Prior. Heat two gave another pole man the chance of an uninterrupted run home, this time it was A. Colson who finished first in front of Darren Beasley and Jamie Chitty. The final saw Steve Brogan all set for a win until his engine gave out. Jamie Chitty, now in the lead, drove coolly home followed by Steve Dart, who took second place from Tony Davis after a smart move at the hairpin resolved a contest that had been going on for several laps.

#### Junior National

Gary Moynihan's win from Lee Cranmer in heat one was reversed in heat two, but in the final it was David Chitty who took the initiative on lap eight to overtake Lee. At the same time Gary also slipped through and at the flag it was victory for David with Gary second.

#### 100 National

Four heats for this group with wins for Terry White, Roger Moth, Wayne Homer and Mark Tredwell.

The B Final was quite a race, as a lot of the good 'uns had dropped a heat and found themselves fighting for a place in the A final. Kevin Warner led this race home followed by Robbie Childs, R. Jennings and Tim Harvey. In the A final Mark Tredwell's pole position gave him the edge over Wayne Homer at the start but the two stayed pretty close for two laps until Mark seemed to find more grip and pull away. Further back an interesting contest was taking place between Roger Moth and John Herbert finally

## CLUB SCENE

resolved when John found room to squeeze through on the hairpin to take the third place from Roger. Well there we are, three rounds completed and the Grand Finale to come in February with double points at stake. It should be quite a day!

#### RESULTS:-

##### 100 Britain

1st	Tony Cruttenden	Dart/TKM
2nd	Andrew Stapley	Kestrel/BPH Arrow

##### National Novices

1st	David Beams	Cobra/K80
2nd	Quinton Searle	Mamba/K88
3rd	John Thompson	Cobra/K80

##### 210 National

1st	Colin Ling	Barlotti/CL Upton
2nd	Jim Paffett	Barlotti/Upton
3rd	J. Hesse	Zip/Upton

##### 250 National

1st	Keith Allen	Zip/Honda
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##### 250 International

1st	Roger White	Zip/Yamaha
-----	-------------	------------

##### 125 National

1st	Vaughan McNealy	Zip/Asco Yamaha
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##### Junior Britain

1st	James Chitty	Colt/TKM
2nd	Steve Dart	Kestrel Sisley/Arrow
3rd	Tony Davis	Dart/Arrow

##### Junior National

1st	David Chitty	Colt/Parilla
2nd	Gary Moynihan	Dart/TKM

##### 100 National

1st	Mark Tredwell	Dart/TKM
2nd	Wayne Homer	Gillard/K80
3rd	John Herbert	Cobra BPH/Arrow

## Fulbeck

### 25th January

What disasters can befall me this time? That was the question I asked myself as I pulled out from the filling Station at Apex Corner on my way to Fulbeck. There had been no phone call to warn me of bad weather in Lincolnshire and the forecast had been remarkably optimistic so I was looking forward to a sunny January day in a field.

The man on the gate complained to me about never having a warm day for the karting. "It's always cold when I'm stood here," he said. Just having ridden 116 miles at neck straining speed, I hadn't noticed that it was. Not until I got off the bike that is! He was absolutely right. My shutter finger almost froze to the camera. Am I glad I didn't want to go to the fibreglass hut!

Younger brother had come back from Tunisia for the first meeting of the new season and was looking forward to finishing a heat or two, Nicky Fletcher and Peter Elliot were both giving their new Fred Bear chassis their first dry weather contests and looking forward to a victory or two and Glen George was dazzling everyone as the sun glinted on his silver and blue leathers with matching kart trim and looking forward to being on the cover of Vogue.

What about the racing? Well there's nothing new there, they still go round and round, some crash, some break things, some spin off, the same people keep on winning. No that's not true. There are quite a few new names among the trophy winners this month and to find out who they are. . . read on.

Over the last few meetings the Junior Nationals have been very poorly supported, but never as poorly as this - only three entrants. Consequently the Junior final was a bit one-sided with the three Nationals placed at the front of the grid. Simon Blessed was unable to start so his third place was taken by Adam Moody. Graham Kershaw had an impressive lead by the end of lap one with Jamie Kavanagh on the leading Britain in an equally impressive second.

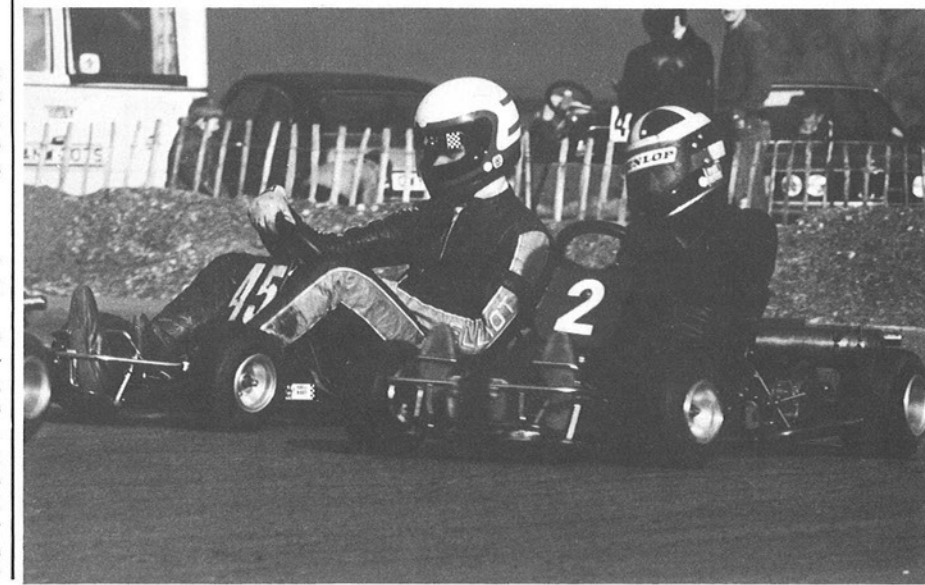
#### Junior Britain

1st	Jamie Kavanagh	Mamba/SS20
2nd	Patrick Walsh	Premier/Arrow
3rd	Adam Moody	Zip/Hood Hewland

#### Junior National

1st	Graham Kershaw	Dino/Peary TKM
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The FRED team - Pete Elliot (45) and Nicola Fletcher (2) - touched en route to second and third in 100 National (Photo: D. Thomas)





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Crankshaft 1/2" sprock. side komet £25.00  
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By the time you read this, the first Cadwell meeting will be over, and maybe many of the questions about Yamaha vs. Rotax and air-cooling vs. watercooling will have been answered. My prediction, for what it is worth, is that the Rotax will be slightly quicker than the Yam., especially out of the hairpin and up the hill. The watercooled TZ Yamaha could have a slight edge over the aircooled units — once again out of the hairpin mainly — although I don't expect much lap time difference between the TZ and a good aircooled Yamaha.

The stumbling block for watercooled unit users will be overheating, due to incorrect water pumps or radiators, (or more likely, air in the system) as people try out and set up various systems.

It will be interesting to see how "Ed" — Chris Lambden — goes at Cadwell, with it being his first Superkart outing in the UK. He will be using a Rotax on a "right-hand" Zip GP — in fact the chassis I did all the original testing on and found that I could not get used to with the engine on the right — perhaps I'm too old in the tooth for change now! ...

By the way, it has just been officially confirmed by the CIK and the RAC that the Rotax 256 is indeed eligible for 250 International, meeting all the CIK requirements.

The testing we have done with the Rotax has shown it to be incredibly reliable — in fact in the equivalent of 4 meetings running we haven't even changed a carburettor jet! On inspecting the pistons, they seem as good as new, so I would expect to get 7 or 8 meetings, maybe more, from a set — at £37.00 each (as against £10.85 for Yamaha ones) they do need to last a bit longer! ...

My experience with Yamahas is that you need to fit new pistons each meeting to retain maximum power. So on that basis, the Rotax should, in the long run, save me money on pistons. The reason for the better piston wear is twofold: firstly, the Rotax, being a rotary valve engine, has smaller ports generally and no large induction port for the piston to "fall down" — this port on the TZ "G" is incredibly large. Secondly, the piston itself in the Rotax is an excellent forged Mahle product, and this, coupled with the Nikasil coated cylinders, gives a very low wear rate.

We found one weakness, which if not checked could cause the clutch to lock up or

even break up. The clutch drum is splined onto the shaft and retained by three 5mm cap screws. These have a habit of coming loose if not fitted with Hermetite Torqseal (plug!). However, once a retaining fluid is used, there seems to be no problem — it is only a 5 minute job to check them anyway.

In the early models, there were problems with the main bearings being retained in a nylon sleeve. After a time, this would wear, and give play in the cranks, causing drive gear problems etc. This was changed some months ago, with alloy sleeves being fitted instead. All the motors I have seen, and all the motors we have, are now fitted with this as standard.

Well, now I've claimed such reliability from the engine, it will probably blow to bits at Cadwell! It always happens. ... A word or two to outline the points system for the Zip Champion of Champions series would seem in order, as well as an explanation of the prize money distribution.

From the eight rounds listed, the best 6 results will count, but this 6 must include 1 result each from Cadwell, Donington, Snetterton, and the Thruxton meeting. The other two may come from any of the four remaining meetings.

The points system will be: 1st 40, 2nd 37, 3rd 35, 4th 33, 5th 31, and so on down to 20th where 1 point will be scored. Only the top 20 finishers in the final at each round will gain points towards the Championship. The final round will be at Donington in September, and this is where the prize-giving will be — after the meeting in the Red Lodge.

The £5,000 fund will be split as follows: £4,000 overall prize money, £425 to the 1st, 2nd, & 3rd aircooled units (in addition to whatever they may win in overall money), with the balance of £575 making up trophies etc.

Anyone unable to change to watercooling could thus win the money to do it in '82! To be eligible for the aircooled awards, you must use an aircooled engine in the 6 events that count towards your total — if you have used a watercooled in one of these then you would not be eligible.

Well I hope that is clear, because the next bit may be a little difficult to explain! The prize money will be split up slightly differently from the norm, but in a method that you will agree is fair to all.

Let's take the total fund of £4,000, and assume that the total points scored in the series by the top 20 drivers will be 2,000 (this won't be far out). Dividing this into 4,000 gives exactly £2 per point, so the top 20 will each win £2 per point scored.

If for example the top three have only 10 points between them at the end, they will win approximately the same amount which seems pretty fair to me. As Bruce Forsyth says, "Points make Prizes!" — and even the 20th place man looks like taking home £100+.

If you finish, say 10th in each meeting, that makes 21 points, which would equal £42 per meeting — not a bad bonus, and something that

#### Zip Champion of Champions Series

Cadwell Park	22nd	February
Donington	15th	March
Snetterton	4th	April
Cadwell Park	19th	April
Snetterton	9th	May
Donington	14th	June
Thruxton	5th	July
Donington	6th	September

has not happened before. I can not see the total points exceeding 2,000 — in fact it should be less, so the £2 per point could well be £2.50 or more. ...

If you've got any thoughts on this system (or you see a stumbling block I've missed!) let me know.

I must apologise for an error in last month's column, where I referred to American John Gibson driving a Hermetite Zip at the GP this year. It should of course have read Homelite Zip. As much as I would like him in the Hermetite team, I'm sure Homelite would never release him, and besides, they've probably got more money than me. ...

Back in the UK, Martin Merritt has formed his Vingt Trois Bullion Team (for the uninitiated, that's "23" in French, which is his number in Hatton Garden where he deals in gold & jewellery. End of plug.) with himself and Reg Gange as drivers. Both will campaign new Zip GP's with Rotaxes from Donington onwards. I am not sure whether it is the jewellery connection or the nearby ballet that is influencing Reg's appearance, but the sketch (shown) is an artist's impression (Reg's cousin) of Reg in his new 1981 Spring outfit! I'm beginning to worry about those two! ...



Northern Irelander Raymond Lyons will be back on the scene shortly with a Zip GP/Rotax set-up and is threatening to appear at Snetterton on 4th April. If you are coming Raymond, bring some of your mates — there's a great bar there. ...

*Martin*

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Ever fancied yourself as an action photographer? Karting provides an interesting challenge to those who prefer to capture the thrills through a lens rather than from behind a steering wheel.

With the assistance of three regular K&S contributors, we examine how to go about it, the equipment to use, and take a look at some good - and bad - results.

**Dave Smith's** livelihood comes from photography. His involvement in karting is confined to long circuit racing - in itself a fairly specialised and demanding branch to photograph. Dave outlines the basics for hopeful Superkart snappers...

They're about 5ft. long, 3ft. wide and 3ft. high, move at anything from 40mph to 140mph, and are liable to make right-angled turns without warning at any point of their journey. As a species they are only rarely found singly, preferring to run together in packs which may number up to 60 (when all are in healthy condition!). Selecting one from the group whilst it is in motion and preferably engaged in some interesting manoeuvre and then shooting it, isn't quite as difficult as it may seem if you go about it in the right way. In this short article, I hope to outline a few points which may help those of you who have tried it in the past and failed.

The quarry of course, are Superkarts in action, and to shoot one we will be using a camera not a rifle. Here lies the first truth - it should be obvious that you can't use a home movie outfit to make a "Star Wars", and the same rule applies at the track-side. If you own a pocket Instamatic or similar camera, you'll be wasting time, film and money trying to use it for a purpose for which it wasn't designed. There are thousands of photographs to be found in and around the paddock area, and here the cheapest and simplest camera is just as good as any other, so don't let your lack of specialist equipment stop you from using your camera, even if it isn't quite up to David Bailey's standard!

Let's assume then that you have the basic tool for the job - a good quality 35mm SLR - and are wondering what materials and equipment to use. Despite what you may see around the circuits, it is not essential to spend a high percentage of the G.N.P. on lenses and motor-drives and then spend the whole day staggering



# Zoom In



Top: perfect example of "panning" at high speed. Bottom: same venue, same subject, but exiting a tight hairpin - this sort of shot is easiest for the beginner (Photos: Dave Smith)

about festooned with half a ton of metal and glass on your back! If you've never really tried photographing high speed subjects before but would like to have a go, I'd suggest you go for the cheapest and most readily available of all telephoto lenses, a 135mm. It's not ideal, but is cheap enough that even if you find you lose interest in Superkart photography, you won't have thrown away a fortune. An ideal first lens though, would be a 200mm which gives you that little extra range, but will cost a bit more.

For your first attempts, choose the slowest corner on the circuit, and position yourself if possible on the exit side. This gives you a couple of advantages - the karts are at their slowest, making it easier for you to keep them in frame; as they leave a slow corner they put down plenty of power which gives a good interesting shot as the tail slides out; and usually you get "bunching" as they try to pass one another going through the corner.

You've found the right place, so now let's look at the right way to get the shots you're after. The subject being what it is, you've got to use a high-speed film. Black and white and colour films are both available at 400 ASA rating, my own choice being Kodak Tri-X and Kodacolor 400 respectively, with Ektacolor 200 for slides on occasions. Set the shutter speed as high as possible in the available light -

with a 200mm lens 1/250 sec. is about as slow as you should go until your technique is first class.

Use a few laps of practice to try out the essential art of "panning" with the machine. All that this entails, is following the kart you wish to photograph through the viewfinder from a point well before the corner to a point beyond where you will have pressed the release. Sounds easy? It is, but it has to be done perfectly smoothly every time to get results, with no "wandering" from side to side as you follow the kart. Make a note of that part of the track where the kart forms a good picture and focus the lens to that distance - don't try to focus on a kart you are following whilst it is moving, the chances of you getting it in focus at the same time as it passes the ideal position, and firing the shutter whilst in the middle of a perfect piece of panning are pretty remote at this stage! Once you've pre-focused on a piece of track, all you have to do is follow the kart through all the way, pressing the release just as it reaches your selected area.

Remember also, that a subject moving directly towards you has no sideways movement at all and so panning doesn't come into the procedure, although here your timing is more critical as a kart moving at speed will be in and out of focus very quickly indeed.





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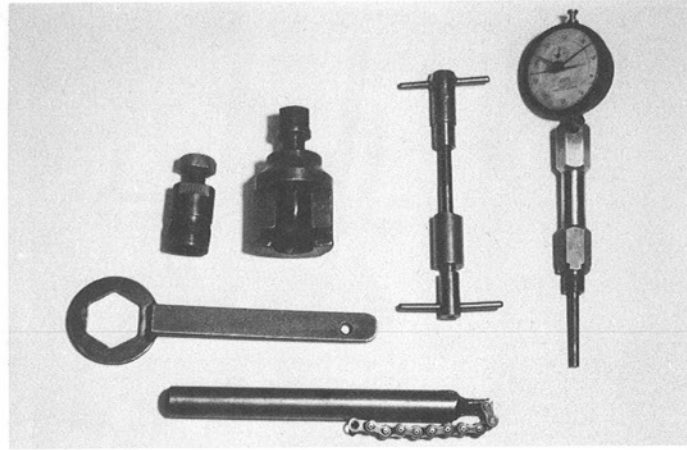
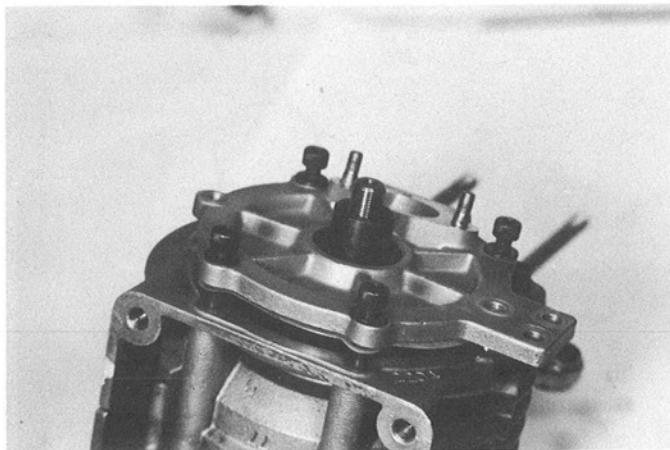
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National karts will be here soon.







hours (6 meetings). At this stage, he bores and hones the barrel to the next over-size and fits a new piston at the correct bore clearance. As a rule, Mark doesn't fit another piston of the same size, as on most 100cc engines, the exhaust bridge especially wears quite badly even during this period of running.

As a rule, small end assemblies — needle rollers and spacer washers — give very little trouble, but as most parts are replaced after six hours, many people replace these at the same time. However one or two models of 100cc engine had a noticeably weak small end washer assembly recently, and it may pay to check with your Dealer on this. If so, this will obviously require more frequent replacement of the little end washers.

## Reassembly

Using a new gasket, the crankshaft is fitted within the two crankcase halves, using at this stage just one bolt in each corner of the crankcases. This is to enable checking of the crankshaft end float i.e. the side to side movement of the crankshaft within the bearings. Mark checks this with the aid of a dial gauge. A side float should ideally be between four and six thou. Any greater amount must be reduced with the use of purpose made shims which fit behind the main bearings, and will thus mean that these will need to be removed again. Once upon a time there were shims available which fitted on the crankshaft itself, but these invariably chewed themselves up and were thus pretty undesirable.

With the side float correctly set the crankcases can be undone again briefly for fitting of the ignition side oil seal. As mentioned during the strip process, the modern rubberised casing on oil seals means that they can be fitted by hand pressure, ideally using a flat ended shaft of diameter slightly less than the seal itself. The drive side seal can be fitted to the rotary valve cover at the same time.

The crankcases can now be assembled for the final time. Lightly oil the insides of the oil seals during assembly as this will help them slide over the crankshaft and reduce the likelihood of damage. Trim the crankcase gasket so that it is flush with the barrel mating the surface. Incidentally, no gasket cement is necessary during assembly for 100cc engines.

The rotary valve collar and its retaining circlip can now be refitted followed by the rotary valve itself — in the correct position of course — and the rotary valve cover. Mark utilises a neat little seal guide to help slide the valve cover oil seal over the crankshaft shoulder. This ensures that the seal does not twist and in fact sometimes flick out its internal spring.

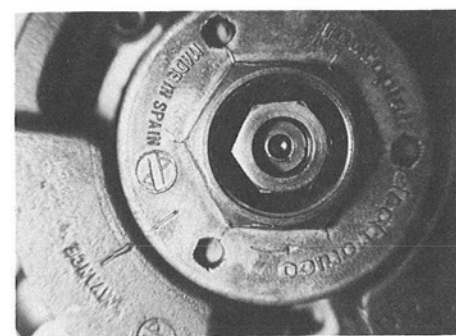
The piston assembly is now fitted. Check that the piston has at least 10 thou side play on

the con rod. In most cases this will be quite okay, but some recent batches of pistons have been a little tight. If so, this will need careful relieving with a small file. For assembly, the small end needle rollers are held in place with liberally applied grease and the dummy gudgeon pin is fitted along with the small end washers. The piston is then dropped on, the gudgeon manually pushed through, and finally piston circlips fitted. With the double "eared" circlips, a tradition has grown up whereby the ears are either left exactly at the top or bottom of the groove in the piston. No-one has proof that this makes any difference to reliability or such like, but psychologically it seems to help!

The barrel and head can now be refitted. If the size of the old base gasket is unknown, it must be checked as base gasket size is critical in arriving at the correct "squish" clearance between the top of the piston and the head. As this needs a micrometer gauge to do the job accurately, you may need to ask your local Dealer or whatever, to assist you in measuring this. Replace these gaskets with new ones of the same thickness. Trim the gaskets if necessary so that they do not protrude out into the ports of the engine, then slide the barrel back onto the piston and down onto the crankcases. Of course the barrel will never go on if the piston rings are not in the correct position so that the gap aligns itself with the pin in the piston — a simple thing, but one which has caught out many, many novice engine rebuilders in its time.

The cylinder head is, according to Mark, about the only part of the engine which really does need torquing down. He does this to 50ft./lbs. The squish gap should really be checked at this stage. A piece of solder wire is pushed down through the spark plug hole, with a suitable bend so that the tip will come to rest against the side of the bore. The engine is then turned over manually so that the piston passes over top dead centre, thus squashing the tip of the solder down, enabling measurement of the squish gap. Incidentally, this is best done with the solder above either end of the gudgeon pin as in other positions the piston may rock backwards and forwards slightly and affect measurement. The thickness of the solder is accordingly measured with a micrometer gauge and should prove to be a minimum of 27 thou. Mark likes to adjust the squish to between 27 and 32 thou, and this is done by addition or subtraction of cylinder base gaskets, which are available in varied thicknesses.

The ignition system is now refitted. On the TT23 this represents no problem as a rotor key is used to fit the rotor in approximately the correct position, the final adjustment being made by rotating the stator. However, on the SS20 and TT22 models, the keyway in the crankshaft is not in quite the correct position,



Top left: a seal guide protects the seal during assembly. Right: handy tools — top (l to r), Motoplat puller, sprocket puller, gudgeon puller, dial gauge and adaptor; bottom, Motoplat holder and chain wrench. Above: the timing marks on Motoplat ignition.

and therefore the rotor is fitted without the key but in approximately the correct position so that final adjustment can again be made by moving the stator. The correct position is where the timing marks (one on the stator, and one on the rotor) are aligned and the piston is between 2.4 and 2.5mm before top dead centre. This is of course measured using a dial gauge and one of the special adaptors to enable it to be screwed into the spark plug hole. Note that the two ignition wires connected to the Motoplat coil are of different sizes — one hefty mechanic spent quite some time once fitting the smaller clip to the larger fitting! And of course the engine didn't run anyway!

The drive sprocket can now be put on again, plus the exhaust bend, That's it — your engine back in one piece, and ready for a good few hours running. Running in on a rebuilt engine — especially when a new piston has been fitted after a rebore — should take at least one hour. The first 10 — 15 minutes should be very slow, and with no more than one third throttle at any one time. From then on the speed can be very gradually built up until at the end of an hour or so maximum speeds and throttle openings should prove okay. There is a popular misconception that running in involves crawling around for an hour then going flat out. This will most probably result in spectacular seizures! The purpose of running in a piston is to heat it up gradually, which also expands it, so that it can gradually bed in, in the bore.

After 40 minutes or so of the running in process, it pays to stop, cool the engine down, remove the head and barrel, and examine the piston for "high spots". These will show up as shiny streaks up and down the piston, which should be lightly rubbed with a fine file. Don't forget to use some clean rag to stop the filings dropping into the crankcases! . . .



Pit shots can be interesting! Try thinking of a smallest possible aperture to give some depth of focus. (Photo: D. Smith)

## continued . . .

Once the basics above have been mastered, you can then move on to higher things! Extra long lenses (from 200mm to 500 or 600mm) increase the number of vantage points open to you, whilst a zoom lens will enable you to vary the amount of area photographed without having to move yourself. A motor-drive, if your camera takes one, lets you take shots as fast as it will pull the film through the camera, but they are expensive and tend to use a lot of film in a short space of time! A power-winder is *not* a motor-drive but is really a convenience item, saving you the trouble and effort of having to waggle that little piece of metal on top of the camera!

All the above, and quite a few other bits and pieces I could mention, are only tools to help you do a job. Even if you were given a couple of thousand pounds worth of the best equipment, it would still boil down to how well you can use it. I've seen people arrive at the circuit loaded down with expensive goodies and then spend half the meeting fiddling with knobs, switches and dials while trying to get the damn thing to work! The main thing you need for good results isn't in the camera case, it's your own skill and timing in using what equipment you've got, to the best advantage. Use the right tools, the right materials (film) and the right technique and you'll get the right results. Just don't do it too well though, or you'll be putting people like myself out of a job! . . .

**Dennis Callingham** enjoys karting photography as a hobby, combining it with "spannering" for son Chris. Dennis thus covers mainly short-circuit meetings and his methods are thus orientated to this particular type of picture:

### Equipment Used:

Camera: Olympus OM1 & OM2 with power-wind.  
Lenses: Vivitar Series 1 70 — 210mm zoom.  
Vivitar TX 300mm telephoto.

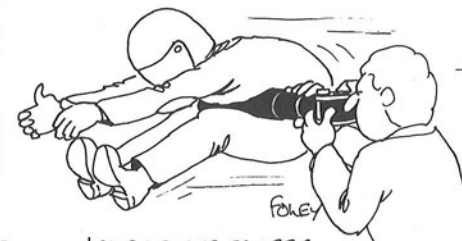
The basic problems of photographing karts are that they are small, fast — and they bounce! To overcome these problems you must use a telephoto lens (anything longer than 300mm tends to become unwieldy), the fastest possible shutter speed (never less than 1/500ths) and the



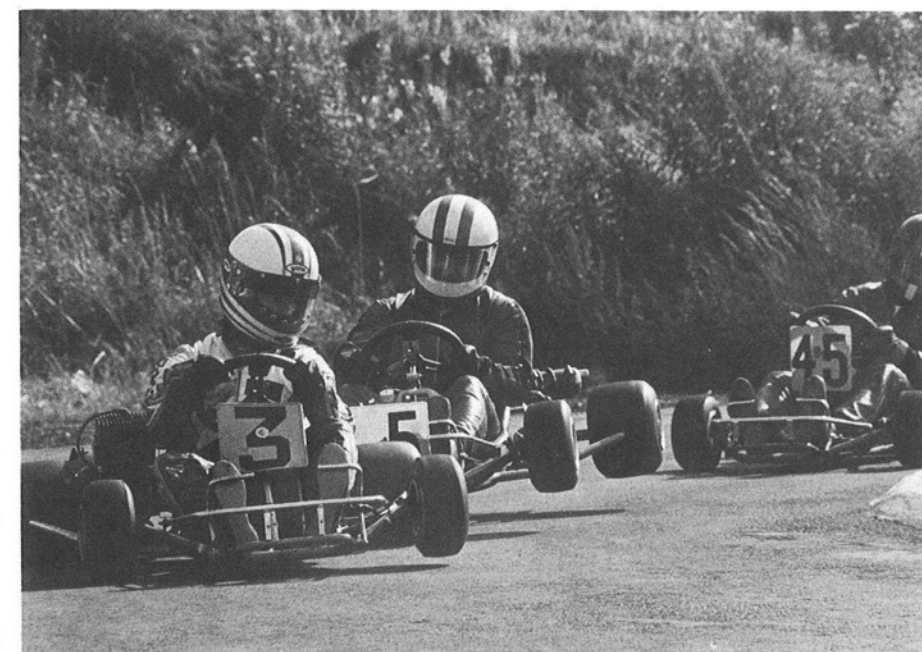
This crisp Dennis Callingham shot even shows the concentration on Mark Tredwell's face.

**John Pudney** is Managing Director of a successful Fiat agency, a regular K & S columnist, and keen amateur photographer, covering both long and short circuit meetings. With limited photographic knowledge, J.P. uses one of the modern, fully automatic cameras to produce his action photos. . .

It is flattering that so many of my photographs should be published in K & S, because when it comes to photography, I really am a cheat! With the quality of cameras and lenses available today, frankly anyone can, with a bit of thought, take good karting photographs. ►



Pick your spot and you can get intriguing shots like this . . . (Photo: D. Croft)







Top: high magnification makes it more difficult to get the subject in focus — in this case, a fraction of a second's delay would have made the difference. Bottom: Less magnification gives a greater depth of focus (Photos: J. Pudney)

### continued...

Today virtually all the thinking is done for you, because of the "automatic" mode which is available on most good quality cameras, which means you literally point, focus, and shoot. I must admit that on the camera I use — a Canon A1, which is reckoned to be one of the best 35mm models available — there are 5 modes, 4 of which I totally ignore all the time! Yes, I use my camera solely on automatic. With the A1 this means that having set the film speed, and lens to auto, when you look through the viewfinder, L.E.D.'s read out what the meter in the camera measures the light to be, and literally tells you if you are over or under exposing your shot. There is a facility on the A1, indeed on most cameras, where you can force the exposure on or back to compensate if there is too much light or indeed if it is too dark. In other words, with a little bit of practice anyone can get used to the average automatic 35mm camera.

As far as I am concerned, the most important factors in karting photography are the lenses available, and correct positioning for the shot. I carry four lenses — 1 fixed focal length and 3

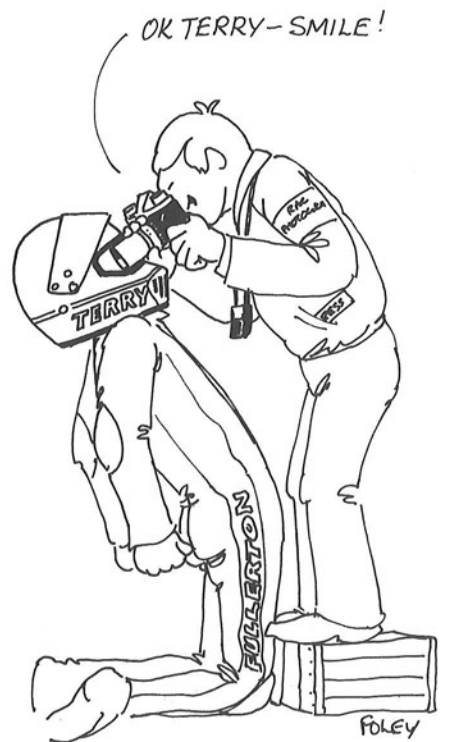
telephoto zoom — and all are made by Tamron, a proprietary lens manufacturer. Here I must digress to say that with few exceptions, one must use a 35mm camera for karting photography — any other format simply will not give you the availability of lenses to get close enough to the action, unless you go for the large format, unwieldy and generally hugely expensive Hasselblad type of camera.

When you have obtained your camera, the choice of available lenses is quite dazzling. As a rule of thumb I would advise you to buy just the camera body, without lens, the choice of body really being what suits your pocket and what feels right. Olympus, Canon, Pentax — it doesn't really matter, they are all good. When it comes to the lens, most cameras are supplied with a 35 or 50mm general lens which is good for snap shots, but generally pretty useless for karting. As the camera manufacturers own lenses, although usually optically very good are generally more expensive than proprietary lenses, starting with a zoom from a proprietary manufacturer like Tamron, Vivitar or Hoya. My own lenses range from a 28mm wide angle lens (not very useful), a 35 — 75mm zoom (very useful for pit and short range work), an 85 — 250mm zoom (my most useful lens for race work) and finally a huge, heavy and very impressive looking 300 — 500mm zoom, which is really only good for long circuit and big distance work in good weather conditions. A 75 — 250mm zoom lens is probably the most useful lens for karting. Optically, any zoom lens will never be as perfect as a "fixed" lens, but we are not talking about high quality studio work so in most cases a zoom will give fine results.

The other accessory I find most useful is the motor drive. This simply avoids time consuming winding on — just keep your finger on the shutter button and the motor winder does it for you. I virtually never use the motor drive to its full effect because at maximum speed it can consume up to 5 frames per second and that doesn't half get through film quick!!... but if you can afford it, a motor drive or power winder is a useful accessory.

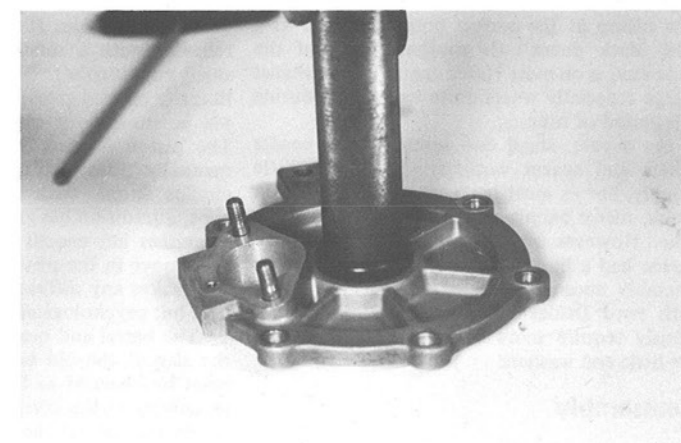
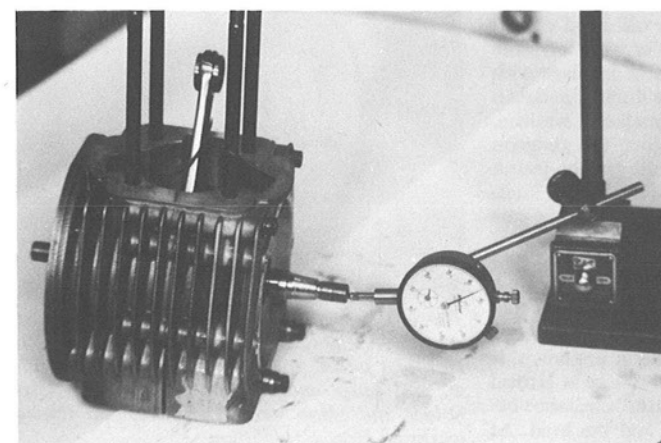
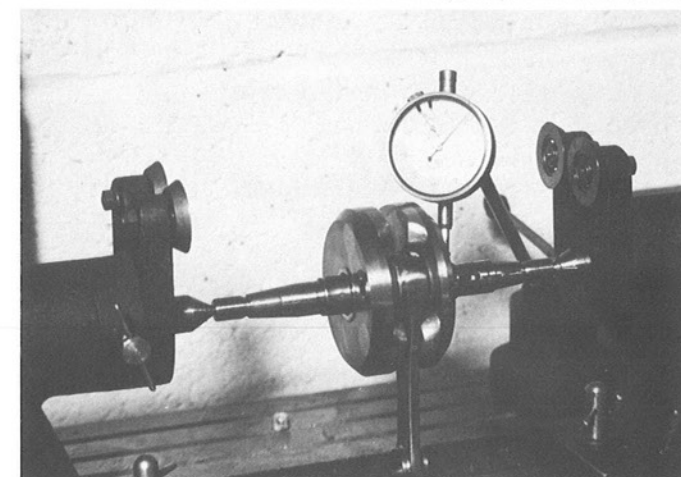
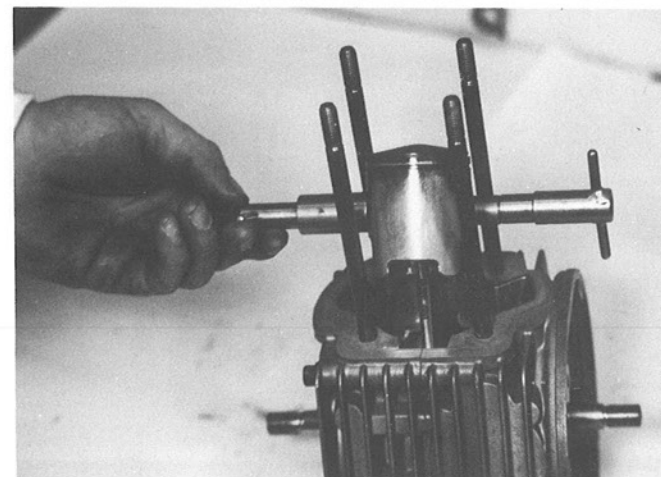
When it comes to the actual photography, I reckon that's all down to common sense. Whenever I arrive at a track I look for parts that will produce some interesting shots. Is there a bump where people get airborne?, a corner which chucks people onto two wheels?, a corner which encourages "tail out" braking, or any facet of the track which is unusual or spectacular — that's the place to take your shots. Try to avoid repeating the same shots you or someone else took at the previous meeting and remember, by moving only a few feet you can change the whole aspect of a particular corner. I try to make my photos interesting and unusual, and I would always advocate that the ability to obtain good interesting shots is much more satisfying and useful than obtaining optically perfect boring shots.

Good pictures tell a story!...



"A GOOD CLOSE UP CAN BE EFFECTIVE"

## TECHNICAL



Top left: a gudgeon puller is a very useful tool. Right: checking of crankshaft alignment is best left to the experts. Bottom left: checking crankshaft end float. Right: the correct way to fit an oil seal.

### continued...

are best used for removing the rotor from the crankshaft. A Motoplat holder allows the retaining nut to be undone, and then, again, a Motoplat puller will remove the rotor.

The top end of the motor is now stripped. The head/barrel retaining nuts are undone, the cylinder head lifted off, followed by the barrel itself. It is best to hold the piston as the barrel is removed to stop any likelihood of damage to it when the barrel comes completely off. Piston rings are carefully and evenly removed using both hands, and a pair of fine-nosed pliers enables the removal of both gudgeon pin circlips. The gudgeon pin itself is best removed with a proper gudgeon pin puller (commercial plug — Redhill Racing can supply these). The puller usually also incorporates a small dummy gudgeon pin which is left in the small end assembly after the gudgeon itself has been removed. This allows the piston to be slid off, without small end washers and needle rollers going everywhere. Once the piston has been removed, the small end washers and needle rollers can be themselves removed and put in one of your plastic containers.

At this stage the engine mount must be removed and all that remains is the splitting of the crankcases. Undo the retaining bolts, and in most cases the crankcase halves will come apart by hand, especially if the engine has been run for some time. If the crankshaft is tight in the main bearings, the end of the crankshaft should be lightly tapped with a copper hammer, the crankshaft nut having been refitted to protect

the thread. The main bearings remain inside their respective crankcase halves. These should only be removed if it is planned to change them during the rebuild. This is done by heating the cases either in an oven or with a gas torch until the bearing drops out.

Oil seals are generally always replaced as they are a relatively cheap item and worn ones can impair performance considerably, the new breed of rubberised outer circumferences on seals means that these can be quite easily levered out very gently.

Before going any further all the parts should be carefully cleaned for inspection, and then re-assembly, or replacement.

### What parts should be replaced?

Every time an engine is stripped, the oil seals, gaskets, piston circlips, and possibly piston rings, should be replaced. The oil seals, if a suitable sized round bar is not available, can be refitted using only hand pressure with a suitable sized socket which pushes evenly around the outer edge of the seal.

Although as stated above, piston rings are replaced during a major rebuild, it is not absolutely necessary to replace them after every meeting — although the top drivers generally do, for that little edge of performance. If fitting new piston rings, they should be "gapped" — push them one at a time approximately an inch down the bore and measure the gap between the ends with a feeler gauge — this should be a minimum of 3 thou, but in any case not more than 12 thou for optimum performance. Any adjustment if necessary can be made by very carefully filing the ends of the ring with either a very fine file or a stone.

Main bearings should do a good ten hours (10 meetings) running — especially the ones with a fibre cage. The bronzed or other caged bearings may need to be changed a little before that. Either type may need to be changed before this time, this can be gauged by whether the bearing still turns perfectly freely or not. Any sign of grittiness and restriction to turning should result in the bearing being replaced. This is especially the case after the engine has been used in wet weather racing — water is very hard on the engine, especially on the bearings and quite often they will need to be changed after use in the wet.

The same could be said of the big end assembly. Normally Mark would change this on heavily worked engines every three hours (3 meetings) of running, although many Club level drivers run quite happily up to six hours. The stripping of the engine above did not include splitting of the actual crankshaft as this is very much a specialist job and should really be done by someone with the correct press etc., for the job. Whilst you have the crank out of the engine, even if the big end is not being replaced, it is a good idea to have the crankshaft checked for trueness. The con rod itself should always do a good six hours running (6 meetings) although again some people seem to leave them in quite a bit longer.

Perhaps the most critical part to be examined during the strip down is the piston itself. Check for blow-by (burnt carbon down the side of the piston due to gases blowing by the piston rings) and cracks in the skirt. A magnifying glass is a handy thing to assist this latter check. Unless the engine has been run in the wet, Mark will leave a piston in an engine, assuming there are no cracks or serious blow-by, for up to six



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One thing that you must always remember is that kart racing is dangerous and that watching the racing through a camera lens does distort what is actually happening, making you feel remote from the danger. Obviously, to get good shots, one has to get to places on a track not normally open to spectators, but do always remember to try to get away from obvious danger spots — the areas into which karts may be thrown if they get involved in an accident on a given corner. Many is the time I have put down my camera only to find a kart upside down literally at my feet — and I haven't even noticed the incident as I was concentrating on focussing on something else! So do be careful.

Something else you must always do if you want to go wandering around the infield is to seek the permission of the Clerk of the Course and always sign the indemnity sheet. If you take the trouble to cover these basic courtesies you will find yourself welcome back — not otherwise.

When it comes to film I use a lot of black and white for the inside contents of the magazine and colour slide for front cover attempts. I don't attempt to develop my own film, although I would like to, but have them made up into contact sheets i.e. small rough photos the same size as the film on one sheet of paper, from which you can pick out the best shots for enlargement. If you are taking photos for your own pleasure, stick to colour print, but if you fancy getting your photos published, black and white is easier. Incidentally, you can always tell those photographers who develop their own film rather than going through a general development tank, like mine, with hundreds of others — just look at the quality of Dennis Callingham's or Dave Smith's photos compared with mine!

As most karting photographs are of fast moving machines it is logical to assume that you use a "fast" film, 400ASA being the norm.



*The atmosphere of the start can be captured without the benefit of a zoom lens.*

As a rule of thumb the faster the film the "grainier" the print, but film quality is improving all the time and a 400ASA film will give you perfectly adequate results, although if you can get away with "slower" 200ASA film, your shots will have more "depth". This is for colour film. With black and white, the speed is not so critical as development is easier and more flexible.

Well you can't learn all about photography just by reading articles and books — you've got to get out there and have a go, learning by your mistakes. One thing's for sure — you are certain to get a lot of pleasure out of your camera, given practice and perseverance. Good shooting!!

**Editor's note:** Photographic contributions, especially of National status events are always welcome, as soon as possible after the event, for possible inclusion in articles. We even pay a small reproduction fee for those used!...

Black and white prints can be submitted in virtually any size and shape, although 7" x 5" are preferred. The best colour transparencies, for front cover use, are taken in "poster" fashion — with the camera held so that the horizontal border of the frame is shorter than the vertical.

Contributors who wish their prints returned should enclose a stamped, addressed envelope.

Good clickin'...

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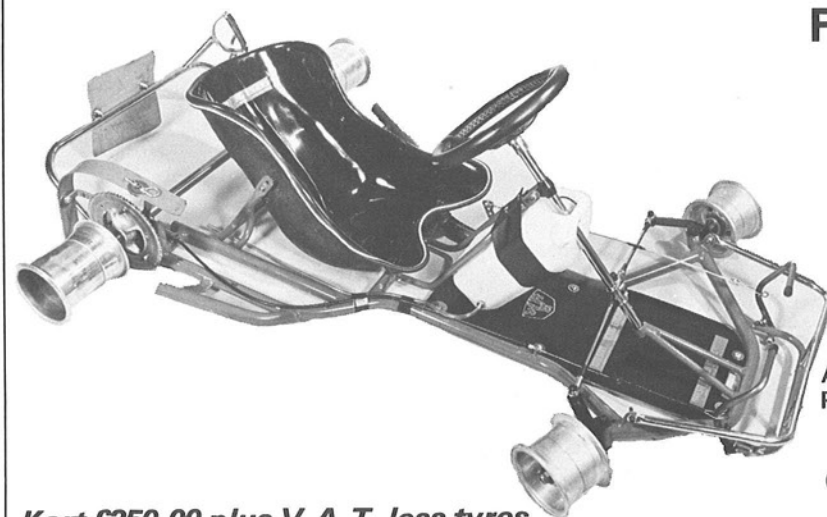
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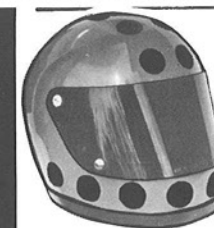
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7" rear inner, outer	3.50	Joining links	0.20
8" rear inner, outer	3.50	<b>KART TOOLS</b>	
9" rear inner, outer	3.50	Chain breaker	8.75
10" rear inner, outer	3.50	1" Bar wrench 3,4,5,6,8mm	2.35
11" rear inner, outer	3.50	1" Bar socket 10mm	4.50
12" rear inner, outer	3.50	1" Bar socket 13mm	5.90
13" rear inner, outer	3.50	Sprocket puller	6.55
14" rear inner, outer	3.50	Sprocket holder	1.75
15" rear inner, outer	3.50	Motoplat puller	2.95
16" rear inner, outer	3.50	Motoplat holder	2.95
17" rear inner, outer	3.50	CEU puller	2.80
18" rear inner, outer	3.50	11.55 CEU holder	1.75
19" rear inner, outer	3.50	Oil sieve	2.10
20" rear inner, outer	3.50	Masta tyre pressure gauge	13.90
21" rear inner, outer	3.50	P.O.A. Dial gauge & extension	13.30
22" rear inner, outer	3.50	<b>TYRES</b>	
23" rear inner, outer	3.50	German Goodyears	11.85
24" rear inner, outer	3.50	350 Slick	12.25
25" rear inner, outer	3.50	450 Slick	14.95
26" rear inner, outer	3.50	600 Slick	12.90
27" rear inner, outer	3.50	350 Wet	5.90
28" rear inner, outer	3.50	450 Wet	15.90
29" rear inner, outer	3.50	600 Wet	10.35
30" rear inner, outer	3.50	350 Slick	10.85
31" rear inner, outer	3.50	450 Slick	13.25
32" rear inner, outer	3.50	600 Slick	11.55
33" rear inner, outer	3.50	350 Wet	11.85
34" rear inner, outer	3.50	450 Wet	13.95
35" rear inner, outer	3.50	600 Wet	11.50
36" rear inner, outer	3.50	Dunlop & Bridgestone	3.95
37" rear inner, outer	3.50	<b>FRONT INC BEARINGS</b>	
38" rear inner, outer	3.50	"O" Rings	4.20
39" rear inner, outer	3.50	Valves short, long	0.50
40" rear inner, outer	3.50	Nuts and bolts/wheel	0.50
41" rear inner, outer	3.50	<b>FRONT INC BEARINGS</b>	
42" rear inner, outer	3.50	2.95 inner outer	4.20
43" rear inner, outer	3.50	"O" Rings	0.25
44" rear inner, outer	3.50	Engine Hewland	6.55
45" rear inner, outer	3.50	Engine IAME	0.25
46" rear inner, outer	3.50	Engine other	3.75
47" rear inner, outer	3.50	DID HT	7.95
48" rear inner, outer	3.50	KEC HTM	7.25
49" rear inner, outer	3.50	Joining links	0.20
50" rear inner, outer	3.50	<b>KART TOOLS</b>	
51" rear inner, outer	3.50	Chain breaker	8.75
52" rear inner, outer	3.50	1" Bar wrench 3,4,5,6,8mm	2.35
53" rear inner, outer	3.50	1" Bar socket 10mm	4.50
54" rear inner, outer	3.50	1" Bar socket 13mm	5.90
55" rear inner, outer	3.50	Sprocket puller	6.55
56" rear inner, outer	3.50	Sprocket holder	1.75
57" rear inner, outer	3.50	Motoplat puller	2.95
58" rear inner, outer	3.50	Motoplat holder	2.95
59" rear inner, outer	3.50	CEU puller	2.80
60" rear inner, outer	3.50	11.55 CEU holder	1.75
61" rear inner, outer	3.50	Oil sieve	2.10
62" rear inner, outer	3.50	Masta tyre pressure gauge	13.90
63" rear inner, outer	3.50	P.O.A. Dial gauge & extension	13.30
64" rear inner, outer	3.50	<b>TYRES</b>	
65" rear inner, outer	3.50	German Goodyears	11.85
66" rear inner, outer	3.50	350 Slick	12.25
67" rear inner, outer	3.50	450 Slick	14.95
68" rear inner, outer	3.50	600 Slick	12.90
69" rear inner, outer	3.50	350 Wet	5.90
70" rear inner, outer	3.50	450 Wet	15.90
71" rear inner, outer	3.50	600 Wet	10.35
72" rear inner, outer	3.50	350 Slick	10.85
73" rear inner, outer	3.50	450 Slick	13.25
74" rear inner, outer	3.50	600 Slick	11.55
75" rear inner, outer	3.50	350 Wet	11.85
76" rear inner, outer	3.50	450 Wet	13.95
77" rear inner, outer	3.50	600 Wet	11.50
78" rear inner, outer	3.50	Dunlop & Bridgestone	3.95
79" rear inner, outer	3.50	<b>FRONT INC BEARINGS</b>	
80" rear inner, outer	3.50	"O" Rings	4.20
81" rear inner, outer	3.50	Valves short, long	0.50
82" rear inner, outer	3.50	Nuts and bolts/wheel	0.50
83" rear inner, outer	3.50	<b>FRONT INC BEARINGS</b>	
84" rear inner, outer	3.50	2.95 inner outer	4.20
85" rear inner, outer	3.50	"O" Rings	0.25
86" rear inner, outer	3.50	Engine Hewland	6.55
87" rear inner, outer	3.50	Engine IAME	0.25
88" rear inner, outer	3.50	Engine other	3.75
89" rear inner, outer	3.50	DID HT	7.95
90" rear inner, outer	3.50	KEC HTM	7.25
91" rear inner, outer	3.50	Joining links	0.20
92" rear inner, outer	3.50	<b>KART TOOLS</b>	
93" rear inner, outer	3.50	Chain breaker	8.75
94" rear inner, outer	3.50	1" Bar wrench 3,4,5,6,8mm	2.35
95" rear inner, outer	3.50	1" Bar socket 10mm	4.50
96" rear inner, outer	3.50	1" Bar socket 13mm	5.90
97" rear inner, outer	3.50	Sprocket puller	6.55
98" rear inner, outer	3.50	Sprocket holder	1.75
99" rear inner, outer	3.50	Motoplat puller	2.95
100" rear inner, outer	3.50	Motoplat holder	2.95
101" rear inner, outer	3.50	CEU puller	2.80
102" rear inner, outer	3.50	11.55 CEU holder	1.75
103" rear inner, outer	3.50	Oil sieve	2.10
104" rear inner, outer	3.50	Masta tyre pressure gauge	13.90
105" rear inner, outer	3.50	P.O.A. Dial gauge & extension	13.30

All prices include VAT & Postage, C.O.D. 50p extra. Honing 'while-u-wait' £2.50. Full Engine Rebuilding, Precision Honing, Boring, Cranksplitting, Chassis Repairs. Welding at the circuits £0.50 — £1.00.



# THE NEW ZIP 981 KART

THE 981 CHASSIS IS THE SAME FOR JUNIORS OR "BRITAIN" AS IT IS FOR NATIONAL OR INTERNATIONAL. THE 981 WAS USED BY MARTIN SMART TO WIN THE GLOBAL CUP AND SET FASTEST TIME AND A NEW TRACK RECORD AT THE EUROPEAN TEAM CHAMPIONSHIP.

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- \*30 mm high tensile, precision ground, 2 bearing rear axle
- \*NEW 6 mm meonite rear disc to improve braking and greatly reduce pad wear.
- \*NEW improved rear caliper units.
- \*NEW ZIP die-cast components for increased accuracy.
- \*NEW engine mount for improved engine stability.
- \*REDESIGNED stub axles for improved handling in wet or dry.
- \*AVAILABLE as an optional extra on Britain, Junior and National model — Formula 1 type ventilated disc, and High Tensile special tubular axle.



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Complete kart with tyres,

BRITAIN

CLASS: From £305 + VAT  
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CLASS From £450 + VAT

STOP PRESS: Full stocks of  
new Bridgestone YBE/YBF  
tyres now arrived

## TECHNICAL

### Basic 100cc Strip

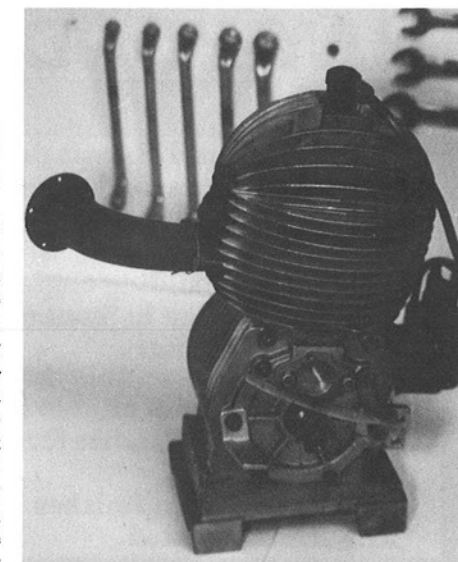
With the new season about to really get under way and many 100cc drivers' thoughts turning to the possible rebuild and renovation of their engines, it seemed like a good idea to compile an article outlining basic stripping, checking and rebuilding of the 100cc engine — all the various makes are pretty well similar, so what follows should apply fairly well to all models. We approached Mark Barnard of Redhill Racing to observe the servicing process on a customer's engine. In this case it was a Parilla TT23.

can be mounted and swivelled easily to work on is available, Mark at this stage leaves the engine mount on as it provides a stable base and keeps the engine upright.

The drive sprocket is now removed and this requires the use of a couple of special tools. A chain wrench is used to hold the crankshaft steady whilst the retaining nut is first undone and then a proprietary sprocket puller is used to remove the sprocket itself. Carefully lever out the sprocket locating key. For those unfamiliar with their engine, it pays to have a number of small plastic containers available to keep the various groupings of parts together. It all makes for easier reassembly in the long run! With the drive sprocket now removed, the rotary valve cover can be taken off. Undo the allen bolts (usually 6 or 7) and carefully pull the valve cover off. The rotary valve itself can now be seen. At this stage it is worth noting carefully the position of the valve, as in some engines it is quite possible to reassemble it in a totally incorrect position. Some people like to lightly mark a point on the inner part of the valve and its drive collar which can then be matched upon reassembly. Those preferring not to mark the valve can note the position on the valve in relation to the piston. For example, when the piston is on its way down and about to uncover the exhaust port, you should find that the valve is about to close over the inlet port. On removing the valve, you will also often find the serial number etched on the inner side.

#### Stripping The Engine

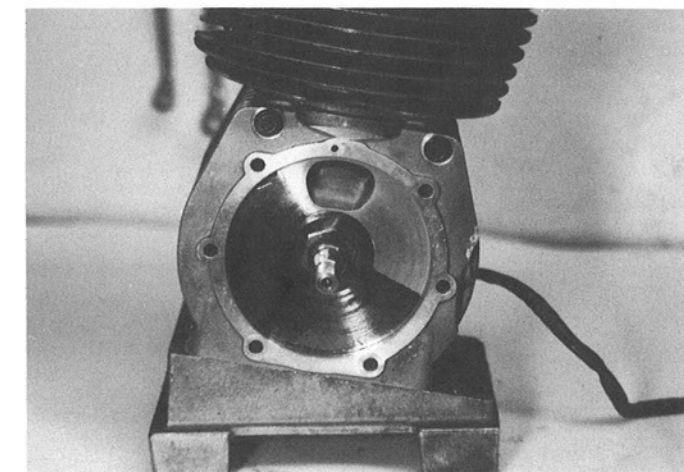
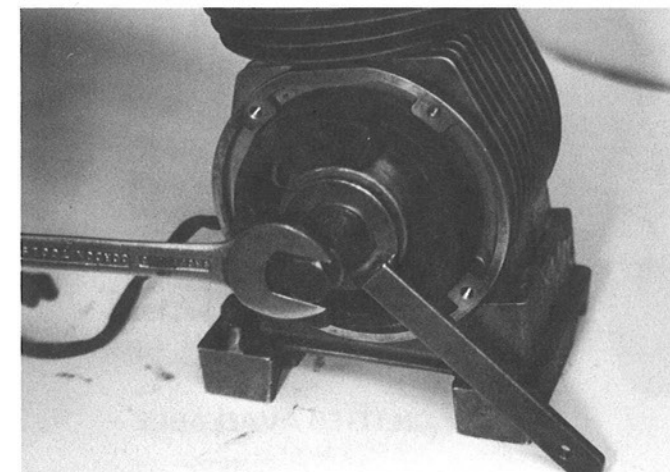
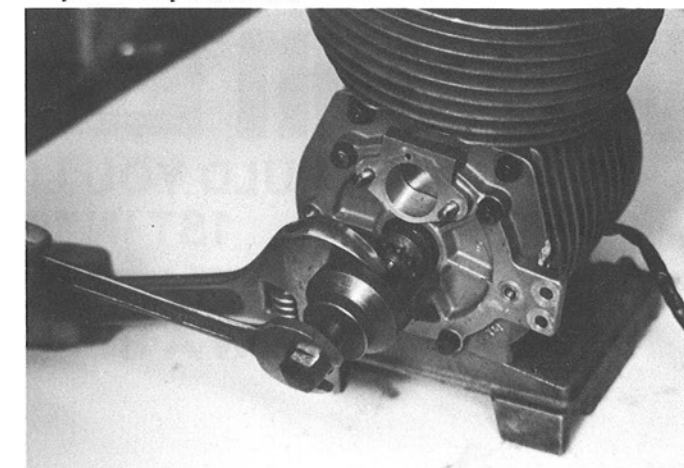
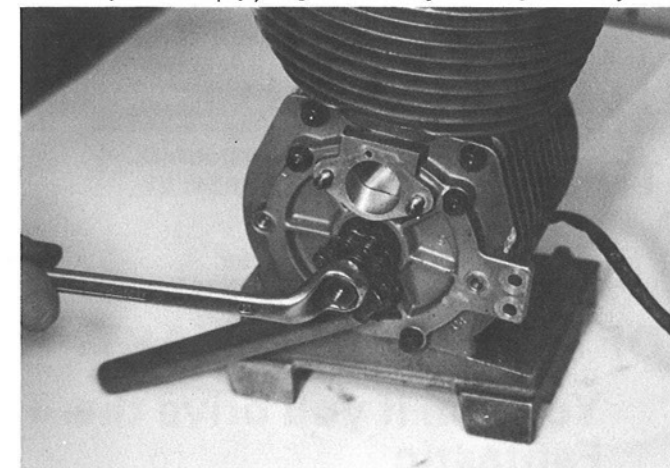
The first stage of the tear down is to remove the accessories from around the engine. This means such basic things as the exhaust elbow, the spark plug from the head, and the coil and its mounting bracket. Quite often the exhaust elbow nuts are fairly difficult to gain access to — Mark prefers to fit the extended elbow nuts which he makes up specially for the job. Unless one of those bench mounts to which an engine



Obviously this helps ensure that the valve is not reassembled round the wrong way. The rotary valve drive collar is usually retained on the crankshaft by a circlip which is removed, allowing the drive collar itself to slide off. Sometimes these can be just a little tight, requiring very gentle leverage to remove it.

We now turn the engine round to the ignition side and remove the ignition system. The stator is the outside section which is bolted to the crankcases. By undoing the three retaining bolts, this can be removed. Again, special tools

Top: use a chain wrench to help undo the sprocket nut (left) and a puller to remove the sprocket (right). Bottom: A Motoplat holder and puller aid removal of the rotor (left). Right: note the position of the rotary valve with the piston at top dead centre.









# All-African CLK Champs

South Africa's first attempt at staging a World Class event proved to be a big success (although one can hardly call the previous three British tours to this country failures). The C.I.K. OPEN ALL AFRICA Championships embraced the two International classes, namely A and E for 100 and 250cc machines. There were 29 entrants in class E — 2 from Sweden including European Champion Lennart Bohlin; 7 drivers from England led by former World Cup Champion, Dave Buttigieg; 3 from Zimbabwe and the rest, 17, from the host country, South Africa. In the Intercontinental A class there were 37 entrants with 3 from Austria led by European Champion Toni Zoserl; 2 from Sweden including Lars Forsman; Cathy Muller from France, Heli Brandhofer from Germany, 1 Portuguese and 2 English drivers. Then closer to home, there were 7 from Zimbabwe and 20 from South Africa.

The Zwartkop Raceway is situated between the two principal cities in S.A., Johannesburg and Pretoria, and is almost 2000m above sea level. The class A circuit is 1073 metres in length and the class E circuit is 984 metres long.

Race days were scheduled for the 16 and 17 of January with practice from the Monday before. Conditions were perfect if you liked heat, as the temperatures averaged 32 degrees C over the period — a great difference from the January cold in Europe with minus temperature readings.

During unofficial practice the lap records took a hiding with Zoserl, Forsman, Muller and Skoghag getting into the low 48 second bracket (the record being 49.19), the leading South Africans being Taylor and Baron. The 250 lap record of 31.80 also fell unofficially with South African Irving in at 31.10 with Bohlin and Rogers also under the record.

The first official day dawned and kicked off with the decibel tests and official lap timing. In the 100 class, Zoserl was out on his own at 48.11 seconds followed by Forsman (48.50), Frederick Skoghag (48.84), Taylor (49.11),

Baron (49.20) and Oates (49.20). Cathy Muller was 7th best at 49.26, Carlheinz Peters 12th at 50.09 and Brandhofer 13th at 50.35. Only one competitor had a penalty time (of 1.6 seconds) added to his lap for exceeding the decibel limit.

The 250 competitors saw South African Springbok, Derick Irving driving his Motorcycle RSA Centurion Taifun/Yamaha to a new lap record of 31.65 followed by Derek Rogers on 31.68, Penney (32.04), Bohlin (32.08), Cape (32.34), Meyer (32.58) and Kamp (32.60). Dave Buttigieg was 12th at 32.98 and Lars Johansson 10th on 32.75. The decibel readings? . . . are another story. . .

So the stage was set for some very good heat racing in the afternoon.

## CLASS "A INTERCONTINENTAL" — 100cc

Heat 1 Zoserl kicked off with a comfortable win in the A vs B group from Forsman and also had the fastest lap at 48.26. They were followed by, initially Baron before he broke a motor and eventually Brandhofer into 3rd place.

Heat 2 The second heat had young Skoghag win easily and also best lap at 49.64 from a cool Taylor, then Peters, Muller, Blankfield and Line who were really mixing it with some great racing.

Heat 3 Forsman and Skoghag made it an easy Swedish 1-2 with Muller third once she had shaken off Blankfield. Best lap to Forsman at 49.06. Then the drama as Skoghag weighed in 1 kilo underweight — he had lost his ballast weight during the race and under the C.I.K. competition rules was disqualified from the event. . .

Heat 4 Again Lars Forsman comfortably from a safe Taylor then a battling Peters, Mills and Oates. Fastest lap to the winner at 48.96.

Heat 5 Toni Zoserl continued his excellent form by opening a big gap on Baron and Brandhofer. Then on lap 6 of the 10 lap race Zoserl's motor went sick and Baron and Brandhofer got through. Zoserl hung on to them and slipped back into the lead on the last lap when Baron and Brandhofer tangled slightly — obviously watching each other too closely and forgetting about Zoserl! Peters was 4th and Zoserl had the best lap time of 48.95.

Heat 6 The final heat of the day again to Toni Zoserl from Muller (a very fine drive), Baron and a

distant Brandhofer — best lap to Zoserl at 48.63.

## CLASS "E INTERCONTINENTAL" — 250cc

Heat 1 South Africa's big hope, Derick Irving, led from pole position for 5 laps before breaking a stud in the motor and letting the pack through. The best drive then came from Derek Rogers, 6th at one time to take the lead on lap 10 of the 12 lap race. He was followed by Meyer, Johansson, Edwards and then a very disappointed Irving. Best lap to Rogers at 32.35.

Heat 2 Our first glimpse of Lennart Bohlin in action. He made no mistake in taking a fine win over the rest led by South Africans Penney, Kamp, Wingels and Robertson. Best lap also to Bohlin at 32.05.

Heat 3 Back to Rogers with a clean win over a hard charging Meyer, Penney, Kamp and Wingels. Best lap also to Rogers at 32.03.

Heat 4 Now the Bohlin/Rogers clash that was really worth watching. It went to the Swede after a race-long struggle. Third was Buttigieg regaining some lost form, then Fink and Edwards from Zimbabwe. Best lap from Bohlin at 32.04.



## Heat 5

All Bohlin for a neat victory over Buttigieg by a big margin. It was in fact Irving who led for 2 laps before his replaced motor seized. Third was Cape then Fink. Fastest lap to Bohlin at 32.47.

## Heat 6

The final heat was dominated by South Africans in the absence of the main European contenders. It was won by Penney from Kamp, Steer (GB) and Smith. Best lap to Penney at 32.61.

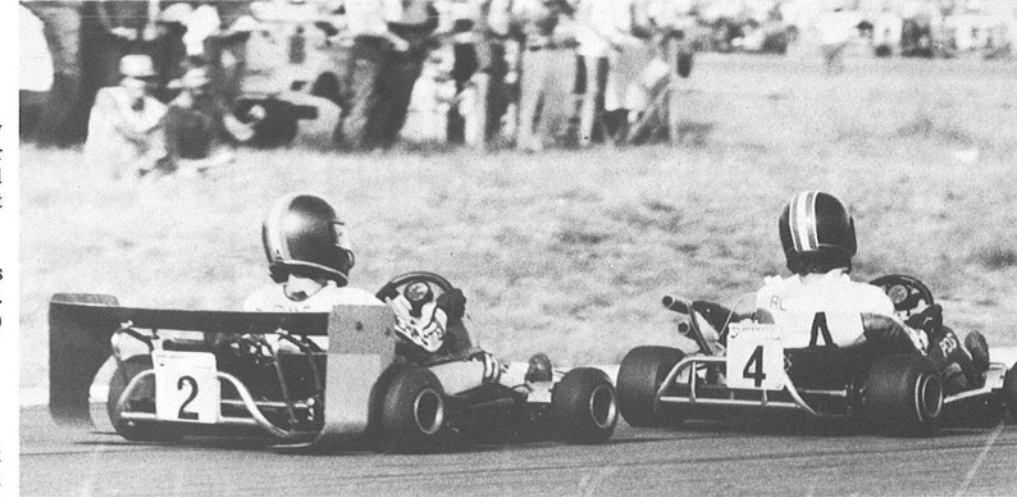
## THE FINALS

The three finals on the Saturday seemed set for exciting racing. Bohlin and Rogers shared the front row of the 250 event followed by 2 rows of South Africans — Penney and Kamp, Meyer and Wingels with Dave Buttigieg uncharacteristically on the 4th row and Irving on the 7th.

The 100 drivers had Zoserl and Forsman in front, from Muller and Peters. The third row contained Brandhofer and Taylor then Baron and Blankfield.

## Class A — 100cc

FIRST FINAL. The first, the second and third finals followed the pattern established in timed practice on the Friday morning in that the first two positions remained intact throughout. Toni Zoserl was quickest — he won all his heats and all the finals. Lars Forsman was next quickest — he won two out of his three heats and placed second in all three finals.



Rogers is pressed hard by Buttigieg.

Looking at the first final over 12 laps however, Zoserl took the lead followed by Forsman. Behind them Taylor and Muller were locked in battle. Still further back a great struggle was in progress between Brandhofer, Peters, Baron and Blankfield. Then entering lap 4, Arthur Oates, Baron and Peters got to the same point on the track at the same time, with all three having to re-start. Baron got going first to eventually finish 7th and Peters 13th. In front however, Zoserl was making no mistake and Forsman could only wait in vain. Cathy Muller found a way round Taylor with 2 laps to go and that was that.

SECOND FINAL. This final did in fact take place in the rain — more like a dampness as a freak grey cloud dumped a bit of cooling liquid on the parched crowd. It made things a little slippery because all drivers stayed on slicks. Forsman actually took the lead from Zoserl but lost it after 2 laps when he left the track after a big slide — he got back safely without stopping and was soon second again and gaining on a "safe" running Zoserl. Then another mistake at the esses put paid to any chance he may have had and Zoserl took the C.I.K. All Africa Class A Title. Behind them it was karts all over the show, on and off the circuit. Third eventually went to Peters.

THIRD FINAL. More of a show race for Zoserl as he stamped his authority on the event. Second again to Forsman with Cathy Muller a creditable third. Muller had to first dispose of a hard driving Taylor before she got third comfortably. Baron hung on to Taylor but had to be content with 5th followed by Line and Peters.

## CLASS E — 250cc

FIRST FINAL. Anthony Ellis, Derick Irving's mechanic, told me to watch Derick in this final. He was starting in 14th place on the 7th row and meant to be in front before half the race was run. Well, in pole sat Lennart Bohlin with Derek Rogers alongside. Behind them, two South Africans in Brian Penney and Theo Kamp.

At the drop of the flag it was Rogers for a moment before Bohlin got ahead. At the com-

pletion of one lap (984 metres) the order was Bohlin, Rogers, and Irving! . . . Ellis actually meant what he had said. At the end of two laps Bohlin and Irving were side by side over the line with the South African taking the lead for a brief moment in the "loop" before his motor seized — a short lived moment of glory that had the 5000 crowd on its feet in excitement.

After Irving's exit, the race settled down into a pattern with Bohlin cruising in from Rogers then Penney, a chasing Dave Buttigieg 4th, Meyer and Cape.

SECOND FINAL. Irving again appeared on the track, this time at the back of the grid. At the flag there was again a jostling for positions before Bohlin emerged as the leader. Rogers was next and then the pack. By the end of two laps Irving was 4th behind Penney, only to again retire at an interesting point. This left the top three secure to the end — Bohlin, Rogers, and Penney again the leading South African. It also gave the C.I.K. Open All Africa Class E Title to the likeable Super-Swede, Lennart Bohlin.

THIRD FINAL. The rain period was so sudden and so short that it only affected a portion of the Class A 2nd final and no other event. The third final for Class E almost ended in tragedy as with one lap to go in the 15 lap event, with Bohlin again in front and in command, an ambulance shot across the circuit (under orders presumably), to attend to a driver who had come off at the loop. This had Bohlin taking emergency action and only his skill avoided a nasty moment. It allowed Rogers to close on to his bumper, but no further. Behind them at the flag Penney was once more third, with Theo Kamp up next.

A fantastic event in glorious weather watched by a large crowd as well as a live television audience. Well managed and professionally executed. BP Petroleum Products and Yamaha were the two names really responsible for making the entire venture a reality and one man, namely the Chairman of The Rand Kart and Motorcycle Club, Piet Meyer, the single motivating factor in making the race one to remember. He and his dedicated band of helpers can take the credit for South Africa's first C.I.K. sanctioned meeting.

Rob Coetzer

Left: the 250 field blasts off for the third final under the scorching sun — Bohlin (OE), Brian Penney (23), Lars Johansson (1), Derek Rogers (4), Tony Cape (26), and Dave Buttigieg (2). Above: Zoserl leads Forsman, Barry Taylor, and Cathy Muller in the 100cc event.

## FINAL RESULTS C.I.K. ALL AFRICAN CHAMPIONSHIPS

Class E (250cc)					Class A (100cc)				
1.	Lennart Bohlin	(S)	Star/Yamaha	0 Pts.	1.	Toni Zoserl	(A)	Birel/Yamaha	0 Pts.
2.	Derek Rogers	(GB)	Zip/Yamaha	4 Pts.	2.	Lars Forsman	(S)	Birel/Parilla	4 Pts.
3.	Brian Penney	(ZA)	Barlotti/Yamaha	6 Pts.	3.	Cathy Muller	(F)	Hutless/Yamaha	6 Pts.
4.	Dave Buttigieg	(GB)	Zip/Yamaha	8 Pts.	4.	Barry Taylor	(ZA)	Hutless/Petry	8 Pts.
5.	Hennie Meyer	(ZA)	Zip/Yamaha	12 Pts.	5.	Carlheinz Peters	(ZA)	Hutless/Yamaha	10 Pts.
6.	Tony Cape	(ZA)	Zip/Yamaha	12 Pts.	6.	Clive Baron	(ZA)	Birel/Petry	12 Pts.
7.	Herbie Edwards	(Zim.)	Deavinson/Yamaha	13 Pts.	7.	Anthony Figueiredo	(Zim.)	Birel/Parilla	12 Pts.
8.	Lars Johansson	(S)	Deavinson/Rotax	14 Pts.	8.	Heli Brandhofer	(G)	Hutless/Petry	13 Pts.
9.	Danny Mulder	(ZA)	Taifun/Yamaha	17 Pts.	9.	Andy Quinn	(Zim.)	Birel/Yamaha	16 Pts.
10.	John Robertson	(ZA)	Star/Yamaha	20 Pts.	10.	Hubert Frisch	(A)	Birel/Parilla	19 Pts.