

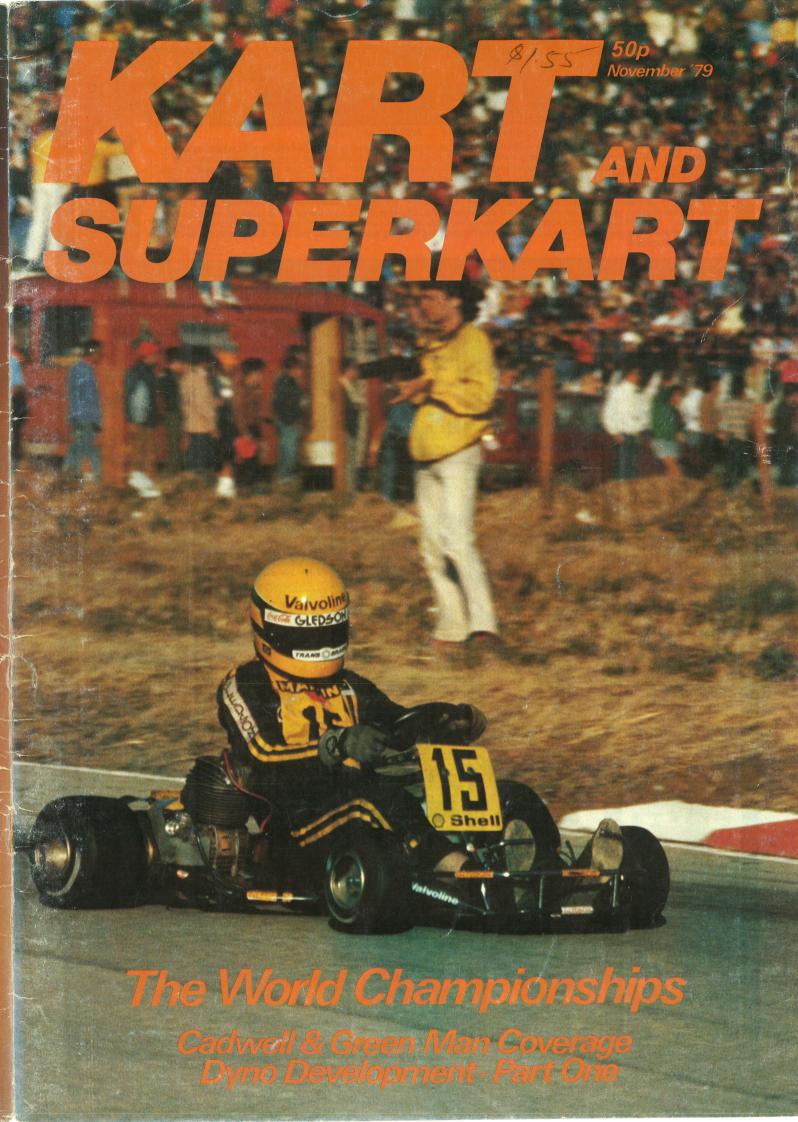
Hermetite Instant Gasket is a rubber gasket material which replaces preformed cork, felt paper, asbestos and rubber gaskets...instantly.
Think of Instant Gasket as the silicone rubber in the middle of a metal sandwich, which is readily available in a tube when you want it! With each pack there is a special nozzle that can be cut to produce the appropriate beadsize of 1/16" to 5/16", when you squeeze the tube. A small investment in a tube of Instant Gasket will help you save expensive repair bills if you do-it-yourself, and pay dividends just when you want it.

SIL CONFRIV Instant Gasket



PRODUCTS WITH A TRACK RECORD

Hermetite Products Ltd West Drayton · Middlesex UB7 7RA Tel: West Drayton 45511





enward Tools

We're KENWARD TOOLS-you may have noticed our advertisements in all the leading motor and motorcycle magazines where we spend over £6000 every month promoting a wide range of quality tools. Naturally all our tools are lifetime guaranteed anything that breaks we'll replace, anything that doesn't fit we'll refund. And quickly! All our tools are of selected quality from names like Hilka, ETC, Draper and Kinzo, tested and approved by us; we reckon you need the same quality as the professionals, and why save pence buying something of inferior quality?

With large back-up stocks we are able to offer a service that beats Santa's! We can take orders over the 'phone with your Barclaycard or Access number, all orders are acknowledged separately with a catalogue, and most received in the morning are dispatched the same day. If you'd like tools guaranteed to last beyond next Christmas but arrive in time for this, we'll be pleased to help. We buy large enough quantities to offer professional quality tools at Christmas stocking prices, but back this up with the service

SOCKET-SETS











SOCKET-SETS







that emergency! TIMING LIGHT
English made, extra-bright tube
full 12 months' guarantee (incl
neon), complete with full inst neon), complete uctions.



UNIVERSAL EXTRA



To Nos End ser & change split des general properties of the control of the contro



PISTOL GRIP TOOLSET
28 piece ETC set with pist of piece set with piece set of p

IMPACT DRIVERS TORQUE WRENCHES



HYDRAULIC CABLE OILER The only way to effectively of those cables, accepts all popul-sizes, and hydraulically forces of through entire length with cab-still in situe. Complete with fu-instructions.

GUDGEON PIN REMOVER
Extract even the most stubborr
in without damage to piston of
concod! Fully universal, fitting
piston diameters 36 - 80mm, with
t universal sizes of screwed head
being screwed onto the handle

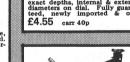
£1.00 carr 30p IVES STRAP WRENCH Takes 1/2" square drive, wi strong strap for undoing ponents without marking.

O, NORBAR OF T

£3.10 carr 80p

13 PIECE
" square rev. drive, 4 cross, at & 4 allan screw high precisions, in metal case with full instances, slashed to only £3.80 carr 80p





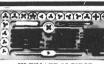


14 TON TROLLEY JACK E38 carr £3 (U.K. only)

CASH & CARRY



TAP & DIE SETS



HOW TO ORDER:



ORDER BY 'PHONE



FREELAND (STD 0993) 882805 ORDER BY POST

ZIPKART, Pindar Road, Hoddesdon, Herts. Tel: Hoddesdon 63371/68503 Telex: 817675G TEL EXP ZIP

THE WORLD'S LEADING KART & COMPONENT MANUFACTURERS

The ultimate for gearbox classes

What can we say, except:

★ British Superkart Championship, Donington

1st Steve Styrin 2nd Rob Kerkhoven 3rd Nigel Smith

ZIP SHADOW ZIP SHADOW **ZIP SHADOW**

210 Championship

ZIP SHADOW 1st John Newton

★ British Kart Grand Prix, **Silverstone**

Every class won by ZIP

Superkart GP 1st Steve Styrin **ZIP SHADOW** 2nd John Rees **ZIP SHADOW ZIP SHADOW** 3rd Dave Buttigieg

ZIP SHADOW 210 GP 1st Brian Heerey **ZIP SHADOW** 2nd Will Hoy 3rd Phil Ansell ZIP SHADOW

OULTON PARK Paul Elmore New track record. 1st Overall after winning the 'B' Final Lydden Hill Martin Hines

New track record 1st overall

ZIP SHADOW + ZIP YAMAHA THE TRACK RECORD IS INCREDIBLE **HOURS OF BUSINESS:**

MON.-FRI. 8 a.m.-5 p.m.

SUNDAY

8 a.m.–3 p.m. CLOSED

ZIP TEAM HATS RED AND WHITE WITH ZIP BADGE £3.50 NOW AVAILABLE.

Send 85p for new 1979 fully illustrated catalogue.

November

LITTLE RISSINGTON (Airfield, near Stow-on-the-Wold).

RYE HOUSE (Rye Road, Hoddesdon). Entries close 27th October.

TIBBENHAM (2 miles from Long Stratton, south of Norwich).

FELTON (7 miles north of Morpeth, on A1).

KIMBOLTON (1½ miles north of Kimbolton, 15 miles north of Bedford).

CLAY PIGEON (Between Yeovil and Dorchester on A37).

CHASEWATER (Pleasure Park, Brownhills, off A5).

NUTHAMPSTEAD (1½ miles east of Barkway off B1368 Cambridge—Ware road).

TILBURY (Dunlop Road, Tilbury)

WOMBWELL (Dorothy Hyman Stadium, 6 miles from Barnsley).

Where and when to see kart racing, from club to International level, in the next few weeks. (Bold type signifies major events).

ROWRAH (4 miles from Frizington, Cumbria)

18 HEMSWELL (6 miles east of Gainsborough). Transferred from 4th November.

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

BLACKBUSHE (Airport, off A30, near Camberley).

25 FULBECK (8 miles from Newark, off A17 at Brant-Broughton cross-roads).

Kalendar

December

PHEMSWELL (6 miles east of Gainsborough).

RYE HOUSE (Rye Road, Hoddesdon). Turkey Trot meeting. Entries close 23rd November.

TIBBENHAM (2 miles from Long Stratton, south of Norwich).

KIMBOLTON (1½ miles north of Kimbolton, 15 miles north of Bedford)

TILBURY (Duniop Road, Tilbury).

ROWRAH (4 miles from Frizington, Cumbria).

CHASEWATER (Pleasure Park, Brownhills, off A5).

WOMBWELL (Dorothy Hyman Stadium, 6 miles from Barnsley).

16 THREE SISTERS (Bryn Road, Ashton-in-Makersfield).

BLACKBUSHE (Airport, off A30, near Camberley).

* LEEDS EXHIBITION * CENTRE * QUEENS HALL Friday 30 November 2-10 pm Saturday 1 December 2-10 pm Sunday 2 December 11-9 pm * MOTORCYCLES * KARTS * CARS * ACCESSORIES * A festival for all motor sport enthusiasts. Not to be missed!

J&F Tools Ltd.

Reclaim your worn out seized tuned barrels. Rechroming service with bores finely ground to precision 000 original specifications. £65.00 per bore.

Hitachi ignition systems checked/reconditioned Price on Application

Contact: Mike Jennison,

J & F Tools Ltd., New Mills, Stockport,

Cheshire.

Telephone: (0663) 43129



as a sign of hope.

(See *Iust Heard*).

How times change!

Published by Kart & Superkart Ltd, Directors M A and M W Hines

Editorial and Advertising Offices:

Distributed by Surridge and Dawson Ltd,

Printed by Shenval Press, South Road, Temple Fields, Harlow, Essex CM20 2BD

not necessarily those of the Editor or staff.

Contributions, including pictures, are welcome. Although every

care will be taken, the magazine assumes no responsibility for the safety of contributions. Opinions expressed in this magazine are

Kart & Superkart Ltd.

Tel: Hoddesdon 44201

Editor: Chris Lambden

New Kent Road, London.

© Kart & Superkart Ltd 1979

November

Pindar Road,

FRONT COVER

probably be remembered for the tie-breaker situation between

the Champion and runner-up, the even more significant

result was the end of an unbroken series of wins for the

IAME engine manufacturing concern, ruled over by Mr. Grana. With this first World Championship win, DAP have shown

that despite the various hurdles put in their path in the past

and the high odds against success, it can, with dedication

and perseverance, be done. For the other even smaller engine

manufacturers, including the English ones, this must come

that the 135 cc formula is very definitely on. This being the case, then next year's event will be the last 100 cc World

Championship, to be superseded by the larger capacity class.

At this time, IAME of course already have two 135 cc motors

in existence. DAP have intimated that they will probably build

one when it becomes clear that the class is irreversibly "in".

But what about the rest? The English manufacturers seem

convinced that the class will never take off and that it will be

totally uneconomic to produce so few engines from scratch.

have at Estoril - he looks like getting his monopoly of

could decide who performed really well are gone, and in fact

"control" of karting at top level has now left Italy completely and resides firmly with the tyre manufacturers in Japan. For proof of this, look no further than Estoril and the elevation of

a Japanese driver to fastest overall in the main timed practice—

with a compound of tyre unavailable to any other competitor!

Brilliant Brazilian, Averton Senna da Silva tied

with Peter Koene for the World Championship and

for a few minutes thought he had won, but the

strange tie-break system gave it to the Dutchman.

Here, da Silva races into the infield section, with a

section of the enormous, packed, open stand in

the background, Photo: John Pudney.

No wonder Mr. Grana was seen flying into Japan recently...

CHRIS LAMBDEN

karting's premier Championship back in 1981 . . .

No wonder Mr. Grana didn't look as unhappy as he might

Or will he? The days when the whim of the IAME factory

Or does it? Latest news from the CIK tends to suggest

KART AND SUPERKART

Monthly

No. 011

contents

Just Heard

The latest in news and opinion from around the world of karting.

Campionato do Mundo!

Kart and Superkart was in Estoril for the 1979 World Championship.

Autumn B

The first Autumn Championship meeting at the beautiful Cadwell circuit.

Ponder with Pudney

On Utopia, the World Championship, the "element of nastiness" and Juniors!

OF Inch by Inch

Part 1 of a series of articles on engine tuning with the aid of a dyno.

Oh Shenington . . .

Round 6 of the Green Man and Road and Racing Racewear Championships.

DA-1-1- DA-11-

What do Emerson Fittipaldi, Nick Brittan's cat, and Merlin's wife have in common!

Kerkhoven's Treble

The Short-Circuit Gearbox Championships from the Dunkeswell circuit.

40 Y

Your Letters

This month's selection of opinion and views from our readers.

45

Hines Quarter

What can we expect next year as Superkart development continues?

47

The Trade Page

New products and general news from the manufacturers and retailers.

49

Club Scene

Recent events from the club circuits, plus Jock Mailer's "Junior Scene".

60

Kalendar

Where and when to see karting in the not too distant future.

NEXT MONTH:

Japan Kart Race

• Final Green Man round

• Danish 250 Grand Prix

ON SALE 29 NOVEMBER

Kart and Superkart

l Superkart

N SALE 29 NOVEMBER



1980 Dates

This is the time of year when next year's programmes are being allocated, and we now have a list of dates covering a certain number of next year's events. Some are currently unconfirmed. and are marked as such. We hope to have the dates for Green Man, Road & Racing, and Kart & Superkart Championships next month.

International Dates

World 100cc Championship - Zolder (Belgium) September 18-21.

European Team Championship — Fulda, June 22. European Individual Championship - Leidelsheim. August 17.

Junior and Ladies Cup - Le Creusot, July 20. European 250 Championship - Jyllands Ringen, August 31.

European 125 Championship -(Czechoslovakia), September 7.

European "140" Heavyweight Championship Skrydstrup (Denmark), September 7.

C.I.K. North American Open Championship Canada, August 3.

C.I.K. Asian Open – Japan, October 12. C.I.K. All African Open, 100 and 250cc Johannesburg, January 17, 1981.

British Dates

RAC 100 International/Junior Championships (unconfirmed) - Clay Pigeon, August 10. RAC 100 National/Britain Championship (unconfirmed) - Rowrah, August 31.

Cadwell Park Long Circuit Dates - February 24, April 6, June 8 (International), August 17, October 5.

Snetterton Long Circuit Dates - March 15 July 12.

British Kart G.P., Silverstone, August 3.

More on 125cc

The C.I.K seem to be pressing on with constituting this class and have just decided how drivers are to be selected or qualify for it.

Details are a little sketchy at present, but it would appear that the following will be eligible:

- Top ten 100cc World Championship placegetters from 1979 on.
- Two highest placegetters from each country outside the top 10.
- Members of the first 3 teams in the Euronean Team event.
- Top ten placegetters from the European, Asian, North American, and All African 100cc Championships.
- Junior World Champion.

In a Word . . .

- The Australian National Road Race Championships were recently run at Sydney's Amaroo Park. Full details are following, but the big class, the 250 Superkarts, was won by Eric Barnes, from Dick Fereday, Steve Bell and Gary Dawson. All from New South Wales, and all on watercooled TZ Yamaha powered Zips. The first two were on Bridgestones, the latter two on Dunlops.
- The Locarno club in Switzerland are promoting an International 100cc event on November 11th. It's very close, but we have entry forms if anyone is interested.
- A pair of Cheshire drivers have landed an interesting sponsor - a discotheque in Knutsford known as "Daddy's Money" is assisting Mark Buxton and Dave Target in 100 National racing, with engines prepared by Wilson Racing.

How about their slogan - "Karting, with Daddy's Money!"

Denmark

The annual pilgrimage to Jyllands Ringen for the Danish Grand Prix is over. A boatload of the 250 "lads" descended upon the country for the last major event of the season.

Apparently the saga of the social side of the trip would fill a whole issue - the bits that could be printed, that is! The meeting itself produced two fabulous races - two finals are run and the race times added together to sort out the overall winner.

Martin Hines took the first by three tenths of a second, from Paul Elmore and Lennart Bohlin who the timekeepers couldn't separate! Dave Buttigieg was only eight-tenths away in

Bohlin got a flyer in the second and led all the way to win by the comparatively enormous margin of 2½ seconds, with Elmore, Buttigieg and Hines covered by 1/2 second.

Overall victory went to Bohlin, from Elmore, Hines and Butty.

Full coverage next month

Homewood's Green Man

The final round of the Green Man series went to Martin Homewood, slicing through from midfield to relieve Roy Austin of the lead. Early leaders John Gravett and Martin Leach both blew engines. Alan Gates also passed Austin to run out second.

The Championship had of course already been won by Mickey Allen, who wasn't present, along with Lane and Fullerton who were in

Series leaders Mark Bailey and Kevin Warner made sure of their respective Junior Road & Racing Racewear Championships, Bailey by winning comfortably, Warner settling for third behind winner Derek Higgins.

Full coverage next month.

Forsmann's Japan

As we go to press, the Japanese Kart Race has been won by Lars Forsmann of Sweden. European entries were of the highest standard vet. with in addition to Forsmann, Cathy Muller from France, Austrian Zoserl and three Englishmen - Wilson, Fullerton and Lane.

For Fullerton it was a traumatic weekend. His chassis was delayed in customs and it was only due to the assistance of Forsmann that he raced at all, with the Swede's spare Birel.

Wilson was apparently on splendid form, being fastest in timed practice and winning all his heats to start from pole, inside Forsmann. Zoserl was on row 2. Lane on row 3 and Fullerton, after a heat disqualification, on row 10.

On race day it absolutely poured with rain rivers of water across the track. Lane was in trouble right from the start with water in the engine and he stopped. Wilson led, but finally had to give best to Forsmann.

Fullerton raced through to 3rd in a short space of time, but then the Motoplat stator fell off his engine! . . .

Sugiyama finally took third, ahead of Zoserl. More next month.

Sugaya's Tyres!

An interesting footnote on the tyres used by Japan's Sugaya at Estoril emerged during the Japan Kart Race, a fortnight later.

At this latter event the "special" tyres supplied by Bridgestone were again marked YAV/YAW, but with a red colour coding. These were said to be exactly identical to either the blue or yellow Estoril compound.

However a much softer (i.e. qualifying) tyre was also supplied which was almost one second a lap faster than the race tyre. The problem was that they had the identical YAV/YAW and red colour coding as the race tyres. Only the Bridgestone technicians were able to tell the difference, with the aid of a tyre durometer.



Yasutoshi Sugaya – a brilliant timed practice aroused suspicion about his tyres.

Getting back to Sugaya's impressive timed laps at Estoril - a very reliable source in Japan confirmed to us that Sugaya indeed had these latter "qualifiers" at that meeting and used them to set his seemingly amazing time in the main timed practice.

In the main racing though, he was on the same race tyres as the majority and was therefore due credit for hanging on near the front to take 5th overall. If nothing else, the story does illustrate the absolute importance of a very good timed practice, to take the driver up out of the midfield ruck . . .

Kart and Superkart

CLUB SCENE

continued . . .

The heats were tremendous with a different winner in every heat, Lewis Marsden taking the first on his new Wilson/TKM, with John Knell (DAP/DAP JM), and Barry Peary (Sprint/TKM) each taking a heat.

Starter Roland Padley sent the pack around twice, but on the third try they were away. As they streamed around paddock, it was already our three heat winners who were making space. followed by D. Preston, N. McGowan and novice D. Butler. For 5 laps our three heat winners produced the best racing of the day, but on lap 6 Peary rounded paddock with Marsden and Knell still fighting two lengths behind. Unfortunately both these lads wanted the same piece of track, which resulted in a marshals' post being demolished! Knell managed to restart but Marsden's race was run. Peary was left to count the laps, being followed home by Preston, McGowan and Knell.

210 NATIONAL

Again a full grid of 210s, which produced some good clean racing. Heat winners being I. East- Junior National wood and C. Anderson with 2 wins. When the flag fell in the final it was the Zip/AKR Upton of Anderson who made it to paddock first Junior Britain closely followed by Phill Jackson (Barlotti/ Dean Upton) and G. Edmands (Barlotti/Upton). This is how the race continued till Edmands disappeared 2 laps from home. 1st novice home was 16 year old Kevin Jones, in only his second

Mini Ads cont.

MERLIN EXHAUSTS

Specialised exhaust systems for all gearbox

classes. Also available from STAR KARTS

and MERLIN DEVELOPMENTS. Trade

enquiries welcome. CHRIS MERLIN,

MOUNTAIN ASH, RAVENGLASS,

YAMAHA YZ 125 'E' Two barrels, two ex-

hausts, spare crank assembly, with rod. Very

competitive motor. £474 ono. Phone Horndean

LANE CHASSIS and Lane tuned SS20TT.

Engine just rebuilt and run in. Never Siezed,

48.4 bore. Many spares including wets, sprockets

etc. £400 no offers. Also Lane tuned SS20TT

PARILLA SS20 Std. bore. Never raced, used as

spare. Engine complete with tranny, carb, ex-

DALE CADET FUN KART, well maintained.

new sprocket etc. Smart £92 ono after 6pm

SPECIAL SS20. One of few made, two piece

crankshaft, 48.54 bore, ex Steve Davis, less motoplat and carb. £95 ono. Worthing 691517.

CHASSIS

B.M. Bluebird. German Goodyears. Helmet

and leathers. 5'10" Sprockets, old. £280.

ROCHDALE 47245

CUMBRIA, Telephone (06577) 244.

594915 evenings.

48.3 £200. Cardiff 691166.

haust, £200, Phone Harlow 33823.

Zip/Parilla 2nd I. Abbey Kestrel/T70 3rd T. Kingswood 210 GOFF MUSTANG rolling chassis. New

since rebuild. Offers, Epping 74498.

1st C. Lumb

1st L Booth

1st C. Stoney

BLOW VILLIERS 210, Race tuned, good novice kart, Spares £140, Blow Villiers 210, race tuned, good novice kart, spares £100. Class 1 Zip Komet K77, Airheart disc brakes, new piston and rings, ready to race. Fast. £160. Telephone Coventry 619479.

frame, seat, steering and lots more. Not used

EX. JACKIE BROWN, two SS20 Parilla's, twice winner British Championship, 01-519 2905.

250 GBRD YAMAHA on 6 meeting old Barlotti, c/w side tank, fairing, wing, Dunlops and spares. Engine rebuilt, TZ crank, GBRD barrels, pipes, heads, 36mm Amals, Femsa etc. Many spares all immaculate, £1250 ono, Tel. Chester field 810287.

ENGINES

Two TKM FF 99TT 1979 works engines. 48.3, 48.34. Complete with carb. and ignition . . . £350 each ..£350 each. **ROCHDALE 47245**

ZIP POWERSTOP BRAKE SYSTEM, complete. Discs, calipers, master cylinders and hoses £60 ono. Ring Gerry at Burton upon Trent on 0283

KESTREL NATIONAL CHASSIS - brand new, less tyres. Genuine reason for sale. Less than new price, £325 ono. Phone 0777 700323 even-

WANTED JUNIOR BRITAIN with spares etc. Why? Cash waiting. Ring John Plant, St. Albans 54538 office hours.

BARLOTTI CLASS 1, Briggs & Stratton motor, suitable for boys six years old and upwards. £100 ong. Phone Hoddesdon 60909

Junior Britain winner Booth leads Junior National Lumb. (Photo: P. Mair).

UFO/Arrow

100 National Sprint/TKM 1st B. Peary DAP/TKM 2nd D. Preston N. McGowan Zip/K88 Sprint/Parilla 3rd 210 National 1st C. Anderson Zip/AKR Upton Zip/Parilla

2nd P. Jackson

3rd I. Eastwood

Barlotti/Patterson C. Anderson

Barlotti/Dean

Upton

Want to start karting?

WHY NOT TRY OUR KART SCHOOL? Use full race 100 cc machines. Theoretical and practical tuiton given. Prices from £20 per day. Courses take place at Tilbury Kartway, Dunlop Road, Tilbury, every Saturday.

For further details send SAE or ring Sisley Kart School, 6 Manse Parade, London Road, Swanley, Kent. Tel: (0322) 67121/60571 Telex: 8955203 SISLEY G

TWO BM INTERNATIONAL/NATIONAL KARTS, One, an Europe BM Chassis, DAP T80, Bridgestones also Goodyears, very quick excellent condition. One, a BM Bluebird chassis, DAP T70, Goodyears. Fast outfit, excellent condition. Stand, suits, spare Tillotsons, gloves, etc. £410 Europe. £520 Bluebird. Southport

210 UPTON ENGINE. Four port, alloy barrel, tuned, with exhaust and carb, and gearbox spares. Won many trophies with this engine £270 ono, Phone 01-399 1010.

WANTED - COMPETITIVE CLASS 1 NAT-IONAL outfit of recent vintage. Zip Shadow GT or Sprint chassis with Parilla SS20TT. Tel. Brent Knoll 631 (Somerset) after 6pm.

ZIP/ASPES 125, good condition, ready to race, very competitive motor. Complete with stand, full set new wet tyres and few spares. £500. Phone Robin 01-890 6682.

ASPES 125 MOTOR, complete with Motoplat, Motiv, £250 ono. Will consider part exchange anything. Mablethorpe 2228.

KARL MURPHY

Mini Ad*r*

atever with a Mini-Ad. All Mini-Ads must be pre-paid, and will be inserted in the first possible issue after receipt. 5p per word, 50p minimum. Send your Mini-Ad, clearly printed or typed to: Kart & Superkart (Mini-Ads), Pindar Road, Hoddesdon, Herts. No responsibility is taken for printer's errors. Mini Display Ads available at £5 per column inch. Copy to same address

RACE

All your karting requirements for all classes in the East. CONTACT IAN RUSHFORTH ON NORWICH 746218 - 9A SUNNY GROVE, NORWICH.

TD3 Engine. Terry Beckett barrels, heads, Mikunis, TD3 pipes, 6 speed g.box, roller clutch, less crank and ignition, £250 ono, Tel, Chesterfield 810287.

SET SUPERKART WETS. New Bridgestone rears, new Dunlop fronts, all on Barlotti rims £100. Tel. Chesterfield 810287.

CLEARANCE SALE of accumulated gear. Alladins cave for new recruits. Yamaha s/hand spares including clutches, TD3 dry clutch casings, TZ pipes, new Goodyears, p/worn Goodvears, Carlisles, rims, Blow Mistral rolling chassis on Goodyears £100. Mistral frame and parts £70. Montesa VR (Gears, clutch, cranks, muff, head), 10 Tillotsons, manifolds, twin leading shoe back brake assy, lots more, everything cheap but all sound. Malc Preskey, Chesterfield 37379 evenings or messages at 79237 during day.

210 NATIONAL

LOOK - BEAT THIS PRICE Powermax pistons £14.50 inc. VAT & Postage. Normal retail £21.10. Send cheques, P.O.s to 73 TALLY-HO ROAD, ASHFORD, PHONE ASHFORD 21926.

ZIP SHADOW 79 SUPERKART rolling chassis complete with rear wing, two fairings, two side tanks, centre tank, YAW Bridgestones on Zip rims, cam and pump. £520. Phone Richard Birch during day, Buckingham 3661 ext. 206.

SPRINT RS 104. 100 National Kart, very good condition, eight meetings only, with recently new fully tuned SS20. Plus two SS20's recently overhauled. Will sell as complete outfit or will separate. (Changing class). Phone Rochdale

STEPHEN BIERRUM

is selling his ultra successful TKM 100 Britain engine - twelve trophies from fourteen starts. (Never lower than 2nd) and a guaranteed flyer. Freshly rebuilt. Serious enquiries only: WATFORD 45371 EVENINGS AND

TD3 YAMAHA 250cc ENGINE. Femsa ignition. Exhaust pipes, Mikuni Carbs, Engine tuned good condition £600. Tel. Hexham 0434/2335

PARILLA TT22 Lane tuned, standard bore, recent overhaul used 4 meetings only £330 ono. Phone 01-949 0082 evenings.

BARRY McNEALS Junior Britain outfit. Ambassador chassis £120 Goff tuned T70 S/B bridge 835787. £140. TKM. S/B £160 two quick motors. Biggleswade 315353.

TT SS20 tuned, trani, plus set Carlisle wets on rims £250 phone Wickford 4459.

SPRINT CARRERA/K88 TT tuned, trani. K88 5 Port, trani, tuned. Stand, cover, plus spare frame and spares too numerous to mention. £450 phone Wickford 4459.

SPRINT 106cm, 2 bearing. 12 months old. German Goodyears. Good condition, £230 ono. Griffin Clubman helmet. Medium size. £15. Phone Robert Owen, 021-744 4324.

ZIP SHADOW CHASSIS-125, Complete with side tank. Immaculate condition, £270 ono. Tel: S. Benfleet 56868.

250 SUPERKART, CHAŤ, ZIP/CHAT, YAMA-HA, Bridgestones, slicks and wets, fairing, wing, front and side tanks, DX motor, Femsa ignition, Mikunis, Motiv pipes, Smith top end. £1,000 or nearest offer. Chatterton's Motors. Phone 0472 56679.

FOR SALE £1050

125 Rotax mounted on a Wolf kart. As used by PAUL MOLLOY to win the 1979 Long Circuit Champs. This outfit is in 100% condition - Genuine reason for sale CONTACT: MERLIN DEVELOPMENTS 01-560 0694 or PAUL MOLLOY 021-747

NATIONAL CHAT. SPRINT/CHAT. YAMAHA. Latest F motor, complete outfit, as raced by Roy Patterson, £1,000. Chatterton's Motors, Phone 0472 56679.

ONE NEW SET OF STAMPED GERMAN GOODYEARS, 11X6.00X5, 11X4.50X5 £40. Two front wets on rims, balanced, £15. Zip kart boots, size 9, £6. Tel: 061-620 5116 even-

ZIP/BULLIT-UPTON COMPLETE 210 OUT-FIT. Ex B. Heerey chassis. Just rebuilt and in superb condition, New German Goodyears fitted. Plus loads of spares, gearboxes, casings, stand etc., £400, Tel: 061-620 5116 evenings.

NOVICES start karting with my old outfit which last finished 3rd at Chasewater, Barlotti Monza rolling chassis plus two dead B.M.J.B. 100cc engines. Must sell to buy new equipment. £85. Tel: 0527 26263 (Redditch).

KART TRAILER-single deck. £39. Tel: 0703

WANTED: 5 inch wheels with cable brakes. R. Hall, Battery Road, Longford, Eire.

ZIP EURO 100 BRITAIN/JUNIOR BRITAIN with tuned T70 or will split £275. Windsor 66620 evenings.

ZIP ESPADA/BULTACO 250cc. Lovely condition. Twin carbs, discs, Femsa. £300 or part exchange Escort van. Tel: Wilmslow (Ches.) 525693

SPRINT 104 2-bearing, complete rolling chassis £250. Phone Royston (Herts.) 60240.

WANTED, K77 with carb, motoplat, exhaust, mountings, good condition, £85 Phone Rogate 695 (W. Sussex).

ASPES 125 fully tuned, 36mm bing, Motiv exhaust, motoplat. Fast reliable. £250 ono. Cam-

SPRINT RS 104 Two bearing, one meeting only £250. Sprint RS 104 three bearing £150. Two Deavinson tuned and maintained \$\$20's £300 each, Phone Keith Fine on Hitchin 57567.

ZIP EURO 78 v.g.c. Two T70 engines both on 48.0 and motoplat. Plus carbs, chains, sprockets, plugs, stand, two small PVC suits and other spares, £450 one phone 0705 817470.

NUTS & BOLTS

BOLTS-ALLEN SCREWS-NYLOC NUTS-ROD ENDS

Rapid mail order service for your fastener requirements. Small or large quantities. Please send stamp only for price list and catalogue:

Diamond Engineering Co., The Opening, Codicote, Herts.

Tel: Stevenage (0438) 820888

ZIP/PARILLA, excellent beginners kart, reliable £135 ono. Tel. Neath 56675.

100 BRITAIN, Mistrale modified Manx (Tranny), Manmaid chassis, new tyres, very quick £300 ono Yeovil 21634.

BARLOTTI 79 210 ROLLING CHASSIS. For sale. Inca disc brakes and German Goodyears. In good condition, £340 no haggling, Fairing and many other spares extra if required. Phone Chris Jarvis between 7pm & 9pm at Dartford

FAST PARILLAS TT22 48.3 £275. SS20TT 48.3 £235. TG14 original bore £225. Paul Fletcher tuned. Motoplats, tuned carbs and exhausts. Tel. Rochdale 48884.

RENAULT 5TS CHALLENGE CAR, 5000 miles blueprinted. £75 sponsorship per meeting. £2850 Tel Bochdale 48884

ZIP SHADOW GT, Very good condition, Complete with Goodyears or Bridgestones £220 or sensible offers. Komet K78TT super. Complete with mount, carb and exhaust. £250 or offers. Redditch 29907

CHASSIS

B.M.F.E. Rolling chassis - little used. German Goodyears. Wet tyres. Small pitch sprockets . . . £350 ono. KARL MURPHY, ROCHDALE 47245.

BARLOTTI ROLLING CHASSIS (100 National). Ready to race, new seat, tray, petrol tank, no cracks or bends. Immaculate £200 ono Phone 01-529 7300

REDHILL RAPIDE. BM JB 48.0 TT ported, repaired barrel. Competitive, clean outfit, points ignition, bored carb. Complete spare bottom end and head. Spare repaired barrel. 4" hand cut wets, £165 ovno, Ferndale 731391 or Tonypandy 436279

TWO UPTON MANX 210 ENGINES very quick trophy winners. One less barrel and head £275. (0522) 683417

BULTACO 250 ENGINES for sale. One at £160, one at £140 ono, Interested? Phone Ralph, day Cambridge 63215, evenings Hitchin

K.R. RACING

24 Rodway Road, Patchway, Bristol Tel: Chipping Sodbury (0454) 318274 Day Bristol (0272) 694496 Evening

We carry extensive stocks of Villiers 210 spares (new and secondhand), Maico 125 and Barlotti spares. Also a full range of general equipment including tyres, tubes, boots, gloves, wheels, steering wheels and much much more

SPECIAL OFFERS ON:

Motorcraft plugs and many Dykes rings phone for details.

Postal service a speciality, money with order

TRADE VAN AT CIRCUITS

In a Word . . .

- To give our staff a hard earned Christmas break, the December issue of Kart & Superkart will be published slightly earlier than usual, and should be on sale on Thursday 29 November.
- Following our report last month of 100 National Champion Mark Tredwell's "fun kart" accident, comes the news that Paul Carr has recently "done his knee in", in a head-on dodgem shunt at his local fairground! Talk about the silly season . . . All we need now is Steve Davis to cartwheel a mini bike.
- This month sees the start of a series of articles on tuning with the aid of a dyno, by Peter Inchley. Peter has spent his entire life since leaving school "mucking about with engines on dynos" at various well known motor bike establishments - B.S.A., Ariel, Norton and is of course a former British Road Racing Champion. All of which seems to qualify him well for the task!

A later article will deal with any queries, or "pet" ideas of yours. Write to Peter, c/o Kart & Superkart, Pindar Road, Hoddesdon, Herts.

• The owners of the fabulous Le Mans kart circuit are hoping to extend the already long track by up to 50%. Apparently the aim is then to apply for the first 135 World Championship in 1981.

They are also planning a 24 hour race, which as they don't have any floodlights could be a problem. No problem - two 12 hour events with the karts impounded overnight!

• Martin Homewood recently tested one of the ART karts at Clay Pigeon, the long term prospect being a "works" drive next year. Homewood is hoping to compete in Hong Kong later this month and may well drive the ART there.

Also showing interest in the ART is Mark Bailey, tooling up for next year, his first in Junior National, with an attack on the Junior World Champs also in mind.

have been held on the Jarama circuit, were put a spanner in the works. cancelled on the first day of practice, after a organisers were given 24 hours to make some have been . . . changes, but they didn't, and so the meeting was cancelled.

another venue.



100 International driver Tim Dayey was recently the subject of one of Esther Rantzen's "Big Time" programmes. The programme takes an amateur sportsman and trains him for an opportunity in the "big time". In Tim's case he was put through courses at the Brands Hatch Racing School and then entered for his first race. He finished third, and is now looking for sponsorship to do a full season next year.

cent caravan site

With unanimous support from the C.P. Committee, a group of three local karters were set to purchase the circuit, which would obviously have guaranteed its future. However, one Committee member since resigned had a late • The Spanish Championships, which were to change of heart and single-handedly apparently

And so the track now belongs to the caravan drivers meeting declared the track too dangerous site owners. Racing will, it seems, continue but to compete on (shades of F.O.C.A.). The the future is nowhere near as sure as it might

• The P.S.A. services have forced the Hems-The Championship will now be allocated to well Club to shift their November meeting back from the 4th to the 18th

• Rumblings down South! The Clay Pigeon • Wombwell could soon be resurfaced! An circuit has been sold to the owners of the adja- approach from the local Council resulted in a meeting with them recently. The outcome is not known yet - but it sounds hopeful.

Cronus Award

To win a Short Circuit Gearbox Championship is an achievement. To win two separate Championships in one day is amazing! This month's award winner did just that - taking both the 210 and 125 titles at Dunkeswell (see coverage elsewhere).

Congratulations go to Mark Allen, along with this month's Kart & Superkart Cronus Award, a Cronus LC20D stopwatch, valued at £74.



BY BARRY FOLEY



58

WEEKENDS

GET INTO TOP GEAR



AUTO CYCLE WHERE YOUR MONEY BUYS MORE ACCESSORIES 1189 BRISTOL ROAD SOUTH (A38), LONGBRIDGE, BIRMINGHAM B31 2

1189 BRISTOL ROAD SOUTH (A38), LONGBRIDGE, BIRMINGHAM B31 2SL.



Available to order Bell Star II, XFLS-TW Bell Star II SW

RAC Accepted



●PHIL READ Europa Lexan, BS2995/77. Lexan, BS299 red, white, OUR PRICE







£38.00 OUR PRICE GRIFFIN CLUBMAN Inte

KANGOL FALCON

fibreglass, BS2495/77, or black, RRP £36.00, OUR PRICE KANGOL KESTREL Integral in Lexan. BS2495/77. White, yellow, red, blue, black. RRP £23.95. DUR PRICE £17.00



Largest stock of 1mm	*8ELL Star
Visors in U.K. available	 BELL Star
for immediate	· BIKE STY
despatch, available in	Bieffe
clear or smoke to fit	BOERI Air
the following helmets	BRITAXS
Price £1.80 each.	BRITAX N
A'GORDO	CABER 10
A'GORDO 2	CENTURE
AGV AgoScrewfitting	CENTURI
AGV Ago Clip fitting	CENTURE
AGV Daytona	CENTURIO
AGV Daytona 2	CENTURE

£3.46

UNIVERSAL RIVET EXTRACTOR

Helmets marked ● we can supply Visor fixing screw kits. Price 80p. Improved Visor life is obtained from the

"CTG" coated hexan Visors ("CTG" helps to resist scratching). Available for all helmets. Price £4.50. Clear only.

For the past five years we have been supplying Motor Cycle customers throughout the country and further afield, with motor cycle equipment. We have always placed great emphasis on service and 99% of orders are despatched the same day. The majority within 4 hours. For urgent orders we also offer Securicor delivery at £2.50 per 25 kg for delivery within 24 hours.

WADDINGTONS EVER DRY II. Full gauntlet with over-mitt. Centre zip.
When not in use, mitts fit into pocket on glove.

OUR PRICE £10.54 SLIMLINE II with back zip. Black hide with contras protectors. Lined with bonded nylon and metal foil. OUR PRICE £8.24

BELSTAFF Waxed cotton OUR PRICE £4.20 OUR PRICE £3.14 ACA BROLLIBOND OUR PRICE \$2.50

SILK Inner gloves OUR PRICE £1.59

MOTOMOD

Lay over suits proofed nylon in black and blue. Our price £14.50

Order in confidence by post





We are also stockists of Belray, OKO, Izumi, Stadium, Sonic and for Motor Cycle customers we stock a full range of leather jackets, tyres, boots, and touring equipment.

SEE OUR SPONSORED DRIVER ANDY CLARKE AROUND THE CIRCUITS

CLUB SCENE

Junior Scene

our big meetings for the year. Herbert had a about the country more. All are potential ball in September, cleaning up the Midland winners, and all they lack is the "fierce" Championship at Rissington and the following competition that we have in the South. So let's Championship at Tilbury - two excellent reason why a Junior from the North cannot win tastic progress this year. "Keep it up mate." results. Simon Sutton put a stop to John's a major Championship next year. winning streak at the Road and Racing Racethe following week at Beccles, coming out on Midlands. top after twenty hair-raising laps with John

be picking up the first pots! Mark Bailey once couple of average club drivers, not really in control, with another first. (He even did it best! Unrecognisable - two of the top in the learning quick son.)

Britains still showing good form, as he has done the little boy he was six months ago. all year. A great little driver is Mike. So also is

The Bundy boys, Andrew and John are A lot of drivers have been talking to me about

races seen this season, as Gary picked up the some incredible performances have been seen! pionship. On the same weekend young Derek capital C. With his weight problem, he really Higgins had no trouble winning at Blackbushe. has had a remarkable season. Paul Dryden and without "four eyes" Davis being there! You're Britain class. Tim Sugden has had a good year, very quick and reliable. William Hewland is now In the North we have Mike Little in the a young man and drives like one – no longer

In the Nationals, I will ignore the usual Terry Stamper – always up the front this driver. familiar names and look at Ian Murphy, a very Richard Burr, Alastair Reed and David Hillcroft under-rated driver. A positive thinker and very are names to watch for next year with some determined, he's had some great drives this to take over £1,000 worth of equipment to a more racing under their belts. In the National year. Andrew Stapley is normally somewhere meeting, pay £5 or £6 entry fee and end up group, Stephen Burr has been getting his fair up the front - all he lacks is a little bit more share of wins — this lad could do very well if he power. With the limited equipment that Andrew put himself about more next year. Also up the has, he has done extremely well. I have a great front in the North are Nigel Davison, David respect for this family. Nigel Mitchell is another Goldsborough and Ken Reader. These three good driver. Has had a bit of bad luck from

time to time, but suffers with the same problem as most of us - "need more power". If he can find it, then in 1980 he could surprise a few

Anyway, I hope my observations haven't upset too many people - I do ramble on a bit, don't I? Yes, ves, ves, Just before I "seize" up. week lifted first pot at the Southern Area see you get off your behinds - there is no young Mark Lovell from Beccles has made fan-

wear Championship at Shenington, with a very really putting it together in the South. I think the standard of trophies that some clubs award convincing win over twenty laps, although I Andrew has tremendous potential, and I am i.e. bits of plastic and bits of wood! I am afraid thought Foster-Jones was going to give him convinced you will see the name Bundy among I cannot comment on the average club meeting trouble. But Gary decided to cut the grass the winners a great deal next year. Young as I am not involved any more with the running instead! Anyway Foster-Jones made up for it Jeremy Cotterill is getting good results in the of a club. I can only comment that, when I was involved with the London Kart Club I believed that the *lowest* placed trophy had to be equal Herbert on his back. Spectators were of the On reflecting over this seasons racing, I have in value to the entry fee! Looking back, I am opinion that it was one of the most exciting noticed many lads maturing very quickly, and convinced that it was the right thing to do, as we used to average 120 karts per meeting. The giant silver trophy for the East Anglian Cham- In Adrian Mills we have consistency with a trophies at the Green Man Championship this year have once again been first class proving Paul Fletcher's logic "you can't beat a good bit So as you can see, all the favourites seem to Lee Cranmer at the start of the year were a of silver" to be correct. Clubs that I have seen that should take a little "bow" are Hoddesdon again put his stamp on the Junior Britains at impressive. Now look at them after six months Kart Club for the Toshiba meeting, Camberley Shenington, completely untroubled and always of travelling the country and driving against the Kart Club for the Kart and Superkart meeting, Clay Pigeon Kart Club for the South West Championship and Beccles Kart Club for the East Anglian Championship. These clubs really "done their piece" in providing superb trophies worthy of the status of the meetings. At both the British 100cc Championships, I thought the Clubs did a first class job with the silverware.

I would agree with the drivers who say that with a bit of plastic is not on! The answer to that is - race at tracks that give value for money!!! See you soon.

Jock Mailer

Hemswell

The weather was again kind to 70 competitors who supported the BORDER K.C. meeting at Hemswell on October 7th. The club has now purchased a signing on caravan, which was placed in the paddock and saved many the experience of walking the straight to sign on. In the twelve months since the club was formed many changes have taken place, on and off the track. Corners have been altered, with drivers' opinions meaning a lot to this enthusiastic club. Still better things are hoped for in 1980.

The racing in all classes was very close, with only minor incidents holding the proceedings

JUNIOR NATIONAL and JUNIOR BRITAIN

J.N. and J.B. kicked off the heats with I. Booth (Zip/Parilla) taking 2 heat wins in Britain and C. Lumb 3 wins in National. The final was reduced to only four, but this did not deter I. Booth who made a good start from Lumb (Sprint/Parilla) who trailed Booth on his flag to flag win.

This class has more competitors every meeting but C. Stoney on his own UFO kart was the victor in every heat, giving him pole for the final. Other good performances being put up by T. Kinsgwood and I. Abbey

As the field hurled down the straight to paddock on the first lap of the final, it was who emerged first, closely followed by Stoney, 12 exciting laps.



Second placed 210, Jackson leads I. Eastwood, (Photo: P. Mair).

Skirwin, and Abbey. On lap 4 it was Stoney 100 NATIONAL pleted, tail enders were encountered but this ton. was the downfall of Kingswood, who was local Borders member Kingswood (Kestrel/T70) passed by Abbey. This is how it finished after

through the chicane first, pursued by Kings- A full grid of Nationals graced the dummy grid, wood with Skirwin dropping out of contention, but local ace and committee member Nigel leaving Abbey to inherit 3rd. With 6 laps com- Edwards was flying the Border flag at Rissing-



TONY SMITH RACING Developments

MOTORCYCLE AND KART CENTRE

80 BRIDGE STREET, PETERBOROUGH, Tel 45924





ROWRAH 1st 27-8-79 **ROWRAH** 1st

26-8-79

2nd 3rd

KIMBOLTON 9-9-79



CAROLYN WINS ROWRAH AND KIMBOLTON, BEATING ALL THE MEN. WHO SAYS SMITH MOTORS DON'T GIVE EQUALITY!

You can have a Tony Smith exhaust system the same as Butty for £90.00 plus V.A.T.

TALASAN

Please send me details of:-

(TICK BOX)

- ☐ KART INSURANCE
- ☐ HIRE PURCHASE FOR KARTS, ETC.
- ☐ MOTOR INSURANCE
- ☐ LIFE ASSURANCE
- ☐ FREE "TALASAN" STICKER
- ☐ OTHER

Name

Address

TO

TALASAN LTD FREEPOST BOURNEMOUTH BH1 2TT TELEPHONE

(LONDON OFFICE) 01-435 3835 (BOURNEMOUTH OFFICE) 0202 294345



(KARTING)

WE SUPPLY ANY MAKE OF NEW OR USED KARTS – ALSO NEW AND USED ENGINES AVAILABLE.

Part exchange taken on most items including cars, motorcycles, tape recorders, cameras, etc.

Class I and Class IV hire karts for racing, are now available.

NEW AND USED MERCEDES VANS FOR IMMEDIATE **DELIVERY - STANDARD OR FULLY CONVERTED.**

198 HORN LANE ACTON LONDON W.3

H/P

continued . . .

The recent 6 Hour Race was held on the same Tilley/Francis. Amongst the 67 starters were 16 the leading French 125, but an hour further

Anglo/French combination of Dormer/Ranchin top speed, but inferior handling, passing one of who were so successful in the Hayes & Harlingthe the 125s proved a headache! ton 6 Hour in June; Coles/Burleton, regular endurance competitors, Mitchell/McKay and ton pair were best placed, some 2 laps down on

After 4 hours the Coles/Burleton Zip/Hewland, here driven by Julian Burleton, led but a seize cost them the lead during the fifth hour.

At the end of the first hour the Coles/Burle- chin, some four laps behind.

circuit that hosted the 1978 World Champion- 125cc gearbox machines, which makes for into the race and they were second, on the "interesting" racing when they are in amongst a same lap as the leaders, Deshayes/Tessier. The Four British teams were entered - the field of 100cc karts. With superior braking and three other English teams had all suffered niggling problems that kept them a few laps down, the best at this stage being Dormer/Ran-

Le Mans Six Hour Race

Coles/Burleton hit the lead during the third hour and went into the fourth a lap clear of Swiss pair Weber/Weber (remember them from Rye). During this hour Deshayes/Tessier unlapped themselves whilst 2 of the 3 other British teams all suddenly seemed to rush up the charts! - Dormer/Ranchin into 5th and Mitchell/McKay to 7th.

The fifth hour saw the final race pattern emerge as leaders Coles/Burleton seized, losing 9 laps before re-joining. Frenchmen Deshayes/ Terrier inherited the lead they were to hold to the finish and over the last hour stretched their lead to 2 laps over second placed Weber/Weber. Coles/Burleton got back to 5th, some 5 laps down while Dormer/Ranchin took the next place, albeit another 6 laps in arrears.

1 st	Deshayes/Terrier(F)	100cc 370 laps
2nd	Weber/Weber (CH)	100cc 368 laps
3rd	Bone/Rondeau (F)	125cc 366 laps
4th	Coles/Burleton (GB)	100cc 365 laps
5th	Dormer/Ranchin(GB/F)	100cc 359 laps
32nd	Mitchell/McKay (GB)	100cc 308 laps
42nd	Tilley/Francis (GB)	100cc 269 laps

An interesting point is that Coles/Burleton (backed by P&O Normandy Ferries, and Talasan) did the whole event on one set of YAV YAW Bridgestones, which only appeared half worn at the finish





November Kart and Superkart

O INTERKART LTD.

P.O. BOX 111, LONDON N6 4QE.

Congratulates JOSÉ BISQUERT (Spain)

on winning the WORLD CHAMPIONSHIP ELIMINATION EVENT on a BIREL/REDHILL PARILLA TT23 and putting up an excellent performance in the finals on a DAP/I.M. DAP T72



Our thanks go to the following companies for their support and encouragement in preparation for the **WORLD CHAMPIONSHIP**: REDHILL RACING, LANE RACING DEVELOPMENTS, JOHN MILLS, FULLERTON RACING, SISLEY KARTING, SPORTAC, TALLERES JAVERA (SPAIN) AND ESPECIALLY OF ITALY

CINTERKART LTD.

now offers for sale the special BIREL LE MANS/PARILLA TT23 kart complete with DUNLOP 049's and exactly as used to win the elimination event at the World Championship also available is the

B.M. Kart with **TT22** as used to set second fastest time at the F.E. European Championships. Complete with tyres and ready to race

SERIOUS ENQUIRIES ONLY SHOULD RING 01-348 3329

SPECIAL OFFERS THIS MONTH ONLY

D.I.D. 219 pitch chain per length	£6.99
Cronus 3T stopwatches	£39.50
48.42 and 48.54 IAME pistons	£6.50
New Bridgestone tyres per set	£79.00

plus a large selection of nearly new **Dunlops** and **Bridgestones** in all sizes and compounds at £5

CLUB SCENE



Junior National winner, John Herbert was pushed all the way by Per Sorensen until he seized on the last lap! (Photo: D. Callingham)

Robbie Childs took 100 Junior Britain, (Photo: D. Callingham)



SO THEY TOWN TO GET HIS FINGER OUT YER . WHAT HAPPENED ? IT BROKE!

November

Tibbenham

This years October meeting of the Norfolk and Suffolk Kart Club at Tibbenham was special for a long while. A new format to this meeting, in third by M. Meadows. with some classes running three heats and a final, and others, notably the gearbox running 210 NATIONAL: T. Gowera won the first heat four heats, all counting towards the final of this class very convincingly from no. 17, Bill Well done gearbox, I knew you could make two McDougal was third. Gowera again dominated grids - now lets try for three! To the racing . .

the first race, the front five battling hard all the three, again from Bill McDougal. Just to keep way. D. Goodge ran out the winner followed things tidy he walked away with the last heat, closely by A. Chenery who lead the chasing about half a lap ahead of G. Willison in second pack. Third was Ray Lincoln. Goodge made it and Bill McDougal in third. look easy in heat two as he stormed away from the field to win comfortably. The pack was this Don't forget folks, our season does not end time led by B. Pettit. There was a big "moment" here - we have still got the "Winter Classic" at the first corner in the last heat which spread series to go, so see you the first Sunday in the remainder of the field out. Again first place November for round two. went to Goodge, with second going to C. Roper. Only three people endured the final, but

Goodge followed his form in the heats to win comfortably from Chenery and Pettit.

NATIONAL NOVICES: Novices. What are they? These guys looked anything but. Heat one was very closely fought. A. Whitmore crossing the line first with G. Elderfield hard on his heels. Third was K. Keeble. Second race saw them really going with wheels regularly straying into the field. Keeble was the winner of this scorcher with Whitmore coming home a good second. Races just don't come closer than the final heat! Elderfield was first past the flag, but before it had dropped Whitmore and Keeble were past it too. The final went to Keeble. Elderfield and Whitmore were second and third respectively.

100 NATIONAL: The large grid were well spread out at the end of heat one with C. Church taking first place and Gordon Chenery second. Tony Campbell was third. Tony, winner of the Osel and Beccles and District Kart Club championships is at the moment looking for sponsors to help him enter Superkart racing seriously next season. The second heat was again won by Church with G. Parker in second just ahead of A. Simpson. Parker fought well to ead all the way in the last heat and win from P. Melhuish. The final was very spaced out after twenty laps when Church did what was expected and crossed the line first. Parker took a very good second ahead of Melhuish and Tony Campbell.

100 BRITAIN: The first grid of Britains I have seen at Tibbenham this season - it was small. but it was a grid. Some great racing in heat one meant that eight lengths covered the whole grid as they crossed the line. First was Charlie Goff. No change in the second race either, Goff taking the honours again with B. Hawkes third just behind C. Hunt. Goff did not find his form in heat three which went to Hawkes with P. Hunt in close attendance. The final was a repeat performance of heat three, Hawkes coming home first and P. Hunt second.

125 NATIONAL: The 125s were to have been joined by a lone 250 National, unfortunately he did not happen. Nine karts appeared for the first heat so it looked like the Barringtons were going to have a little opposition for once - not a lot, but a little! Boyd Barrington won the first heat in customary style with M. Meadows second and Roger Barrington third. Roger had an easy win in heat two from Boyd who kept Charlie Goff well at bay. The last heat saw the first round of the "Winter Classic" series for Boyd Barrington retire before the start with gearbox, the East Anglian Championships for broken stub axles. Their bad luck continuing, the 100s, and it was fine too!! With the season Roger Barrington lost narrowly to M. Meadows. coming to a close I was happily surprised to see The final, and more bad luck for the Barringa larger and more varied entry than I have seen tons as Roger lost to B. Gray closely followed

heat two, while second was Bill McDougal. Gowera had certainly decided to keep up the JUNIOR NATIONAL: Seven made the grid for performance and had another easy win in heat

I. Brooks

GET YOURS FIRST!

Take out a subscription.

(Please note new prices, due to increases in postal

U.K. & Europe£8.50 (U.K. price now includes 1st class postage.) Australia, New Zealand, Japan & Philippines£17.50 Other non-European countries£15.50

NB The two latter prices are inclusive of air postage.

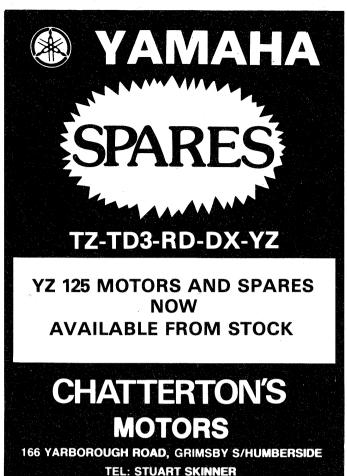
BLOCK CAPITALS PLEASE

NAME _____ ADDRESS _____

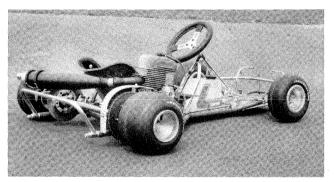
I would like a 12 month subscription beginning with theissue Please find enclosed cheque/PO/International money order for £.....

SIGNATURE

Post to: Kart & Superkart Pindar Road, Hoddesdon, Herts, England



0472-56679.



Fullerton Racing

4 TIMES WORLD CHAMPION

The unique Birel Le Mans kart available from stock in either 103 cm wheelbase for National, or 106 cm for International class as chosen by the majority of the World's top drivers, from the sole concessionaire/distributor - Fullerton Racing.



Sole UK concessionaires/distributors for Komet engines and spares. Range includes latest specification **K88** for National Class and the exciting all new K80 for International Class.

ALSO STOCKIST OF

WELSH CHAMPIONSHIPS – LLANDOW Congratulations to PETER STEPHENS



1st 100 International - Birel/Komet K88, Mick Fullerton Modified 1st 100 National - Birel/Komet K88, Mick Fullerton Modified

*PRECISION engine building & modifying service including all machine work, boring, honing cranksplitting etc.

*FOR EUROPE'S PREMIER TUNING AND PREPARATION SERVICE for every make of Class 1 motor to the highest level of workmanship and performance.

Contact

Mick Fullerton at Fullerton Racing

All enquiries:- Telephone 01-749 0979 Correspondence Address FULLERTON RACING, 11 Viola Square, London W12 0QF

S.A.E. or phone for details. - Trade enquiries welcomed



The second final, and Koene (80) is on his way to the Championship, having just demoted da Silva (hand about to choke carb, as ever) to second Schurman is next, followed by the tenacious Carvalho (17)

Campeonato do Mundo!

Dutchman Peter Koene takes World title on a tie-breaker from Brazilian Ayerton Senna da Silva, Historic 1-2 for DAP, 'Bad boy' Schurman third, Wilson taken off when in a possible winning position, but recovers brilliantly for fourth. Sugaya's incredible timed practice. Other British hopes blow engines. Spencer superb in his first World Championship.

The transporters rumbled towards the western extremity of Europe as the field assembled for the 1979 World Kart Championship. Portugal was the destination and in particular the Estoril car/kart circuit complex, some few kilometres from Lisbon.

Incorporating a part of the car circuit straight in front of two huge grandstands. the 1100 metre circuit winds off into a series of constant radius curves which open out onto a fast, slightly uphill back about this than Mickey Allen, who contrived to struction materials. In practice, with back-tosection. A near 180 degree loop brings the track back, through a quick S-bend, onto the straight. The original track diagram shows a slight kink some 40 metres before the end of this straight, but this is apparently never used, leaving a clear 180 metre stretch which combined with the prevailing tail wind, provides some high

Perhaps due to the domination of the area by the huge, bare, stands, and the elsewhere for the tyre story. lack of full-circuit viewing from ground or pit level, the scene takes on a somewhat spartan atmosphere, and it was in underway.

Reporting from Estoril: Chris Lambden Photographic Coverage: John Pudney

Practice

week beforehand! Especially fortunate were the also talk of new chassis materials. Sprint team, who in stark contrast to their late Martin Smart appeared with the prototype the circuit on Friday and had virtually done all chassis sported a 30mm two bearing axle, their testing by Monday. No-one was happier revised steering geometry, and a change in condamage a finger and some ribs and for whom back testing, Martin reported some four-tenths Tuesday and Wednesday became welcome days of a second improvement over his previous

The remainder of the British team arrived unscathed to make up the total of 79 entries, saw various C.I.K. personnel scurrying down to representing 20 countries. Noticeably absent see, was the provision for a full length floortray, was outgoing Champion Lake Speed, most extending right back to the rear bumper, popular reason being a lack of promised support sloping upwards from the rear crossmember from the I.A.M.E. factory.

speed entries into the right-angled first various teams trying to work out what the the event, the team chose not to run with the others had, what they were using, and how tray in the interests of avoiding possible probpossibly to get them (only to discover they lems with officialdom. didn't exist anyway!). See the separate panel Terry Fullerton was of course on his own chassis

few changes in equipment:

Mickey Allen and Doug Spencer had new Sprint good and strong. this atmosphere that the meeting got chassis, with the main rails some 1" wider apart than normal.

Mike Wilson, lodged in the I.A.M.E. pit at the end of the row, was driving revised Birel chassis. Despite the usual stern notice that the circuit The only difference noticeable by eye was the would remain closed until the start of Tuesday's wider front stub axles, although there could well official practice, drivers were circulating up to a have been steering geometry changes. There was

"customs-inspired" arrival last year, were on 1980 Zip. Finished in a distinctive green, the chassis and was well pleased.

However, what started a buzz, and inevitably back. In testing, the tray made no difference to As ever, tyres were the talking point, with lap times but gave a feeling of more stability. In

and leading the DAP assault on the Championship. On his insistence, the factory had made Amongst the British contingent, there were a some small changes to the engines (see Ponder with Pudney) and he reported that they felt

continued . . .

Martin Homewood was on his two production Birels and Redhill prepared Parillas. The efficient little team had one major problem at this stage which was a total lack of special Bridgestones, and Martin would have to try and put in 50.46 on his second lap. qualify on standard tyres.



Amongst the other likely runners it was interesting to note Zoserl with an unpainted short wheelbase Birel alongside a regular chassis. There was apparently little to choose between

Japan's Sugaya was competing with the aid of a subsidy earned by being the highest Japanese finisher in the previous year's Japan Kart Grand Prix. He was using a chassis of his own design which looked very like a Birel, but which featured front wheel brakes.

Brazilian Averton Senna da Silva, alongside Fullerton in the DAP team, was reputedly putting in some rapid practice lappery, with an "unfashionable" 3-bearing DAP chassis, complete with skinny 25mm axle, stiffened with a magnesium axle-clamp. DAP factory supremo. Angelo Parilla, seemed quietly confident, Unlike previous years, neither the I.A.M.E. nor DAP teams had been to the circuit in the weeks leading up to the event, but considerable testing had taken place at Parma. Da Silva had done most of the DAP testing and according to Angelo, had ended up some half a second quicker than the best I.A.M.E. time. No wonder he was confident! But as we all know, things can change rapidly on the day . . .

Timed Practice 1

Practice had revealed that both new Bridgestone compounds needed a good 2 laps under normal circumstances to warm to the task. With timed practice beginning at the warmest part of the day, 1pm, an early position in the order would be a help. For Great Britain, Fullerton, Wilson and Allen were fortunate enough to be in the first two groups of 16, whilst Homewood and Smart would be much later in the day.

Fullerton was out very early and as every stopwatch in the place tracked his progress, he surprised even himself with a second lap of 50.25 seconds. "The track must be quicker about 50.6, and I lost maybe a tenth of a second or so on that second lap, by missing the

Italian. Stefano Modena and the signs of a disappointing weekend to come were evident in his showing, a bad mistake on the second lap leaving him with a first lap 50.69 as his best.

Da Silva, also on blue Bridgestones, put up 50.38 and moments later Allen, not as concerned about the warm weather on Dunlop qualifiers.

As the afternoon cooled off, these times became more unassailable and in fact the next four on the final list all came from the first group, including a great surprise in the form of Australian Robbie Hunter, 7th best on 50.71.

The best of the later runners were Zoserl and Smart, both on 50.72. Of the remaining English, Wilson was in contention with 50.83, while Spencer learned something very important, slipping slightly at 51.16. In practice he had put up times not a lot slower than Mickey, but for his two laps was using a set of qualifiers that had done one "dummy run". The discovery was that the Dunlop qualifiers could only be used once! Nevertheless, his time was easily within the top 30 which is all that is necessary. to avoid Friday's qualifying heats.

Not so fortunate was Homewood. Late in the day and on standard Bridgestones he made a brave attempt, missing the top 30 by only four hundredths of a second, with 51.36, Still, he would start the qualifying heats from the front row, and valuable lessons can often belearned from the enforced participation in these

Missing from the top 30, some as a result of rather suspect decibel reading penalties, were Nielsen, rapid Brazilian Carvalho, Busslinger, Larssen, and Gysin (whose whole Switzerland-Portugal journey is a story of its own!).

Official Result - First Timed Practice

1	Terry Fullerton	(GB)	50.25
2	Ayerton da Silva	(BR)	50.38
3	Mickey Allen	(GB)	50.46
4	Peter Koene	(NL)	50.64
5	Pierre Defontaines	(F)	50.67
6	Stefano Modena	(I)	50.69
7	Robert Hunter	(AUS)	50.71
8	Tony Zoserl	(A)	50.72
9	Martin Smart	(GB)	50.72
10	Cathy Muller	(F)	50.75
11	Mike Wilson	(GB)	50.83
12	Peter De Bruyn	(NL)	50.91
13	Yasutoshi Sugaya	(J)	50.99
14	Didier Lemaire	(F)	51.03
15	Thomas Glauser	(CH)	51.04
•			
23	Doug Spencer	(GB)	51.16
32	Martin Homewood	(GB)	51.36

Qualifying Heats

For British supporters, these were virtually of academic interest, with Homewood well placed to qualify easily. Relative positions are unimportant as the best 30 points scorers, plus the top 4 from a last chance race only go through to start all over again with the main timed practice on Saturday.

Homewood approached the whole thing very sensibly, refusing to be drawn into first corner scuffles or fruitless place-saving battles. Third, seventh, and fifth places in his respective heats was perfectly adequate and he qualified easily, 6th overall.

Of the rest, Spain's Jose Bisquert came out on top of the chart with some intelligent drives, my best on the same setup this morning was letting an obviously faster Carvalho past in the final heat rather than risk an incident. Bisquert incidentally was having problems with his Birel apex of the first corner badly." And inci- and after qualifying, arranged the loan of a dentally, the time was done on blue coded race spare DAP chassis from the factory team. His rapid improvement in pace during the main

On the track at the same time was leading event bore testament to the DAP's obvious suitability for the circuit.

Whilst some were being sensible, others plainly were not. Van Ommen, the German Champion, was exhibiting some lurid end-ofstraight passing dives, which whilst proving crowd pleasing, placed the onus for his survival completely in the hands of those being passed. It is to their credit that van Ommen remained in one piece to qualify 7th.

Others were just downright unlucky. Hardy Australian Champion, and perennial World Championship visitor (this was his fourth) John Pizarro was twice victim of other people's problems and would have a bit to do, from grid 10 in the last chance race.

Amongst the most pleasant stop-off points during regular pit tours was the Irish pit, where an enthusiastic and friendly team was working for Vivian Daly. Brother of Formula One driver Derek, Vivian represented a true David v. Goliath situation, although a similar famous victory wasn't really on! The team had two Irish built Chariot chassis, and despite obtaining a set of vellow-coded Bridgestones (don't ask how!), their sole decent Sirio was not getting the power through to the ground. Vivian hurled it around with great gusto, but ended up having to run the last chance race, from grid 2.

He had problems though, for behind were several fairly quick pilots, three - Demollin, Pizarro and Gysin - carrying a two point noise penalty and therefore needing to finish in the first two. The tension on the rolling laps was obvious and the field was finally halted and told the facts of life!

Daly was first away, and for several glorious laps held the running. Gysin ended a "perfect" week on lap two as the chain fell off . . . Pizarro was responding to the pressure of the last chance situation, putting in his best drive of the meeting, and carved through to relieve Daly of the lead

Caroli also slipped by, happy to settle for second and on the last lap a desperate Demollin dived through for third. But the Irishman held Max Lauda (no relation!) at bay to claim fourth. and seemingly the last qualifying spot. However Demollin's 2 point penalty tied him with Lauda, but he still qualified, his better timed practice splitting the tie.



MERLIN DEVELOPMENTS



2nd IN THE SILVERSTONE GRAND PRIX Roy Wooldridge in his fabulous new Barlotti/Rotax with full bodywork.

£900.00
£60.00
£2.50 each
£4.00
£12.00
£100.00

WE SPECIALIZE IN RD250. YZ125, 210 VILLIERS AND ROTAX 125. (ROTAX SPARES NOW IN STOCK.) ORDERS NOW BEING TAKEN FOR 125 ROTAX.

If you want your engine overhauled, resurrected or just inspected, you will find our labour rates reasonable and our workmanship second to none. Just phone and speak to Roy Wooldridge with any of your queries.

If you live in the Midlands try contacting our agent PAUL MOLLOY on 021-747 5587 he'll give you personal service that you want and organise the spares that you need.



R/O DUKE OF NORTHUMBERLAND Lower Square, Isleworth, Middlesex Telephone: 01-560 0694





All types of engines now being tuned and maintained for all classes

"NOTHING GOES FASTER THAN A PEAK REVS TUNED ENGINE"

Suppliers of all kart racing equipment

We carry a complete stock of Yamaha spares including barrels, heads, pistons and rings etc. etc.

> Complete racing outfits new and secondhand always in stock.

MAIN AGENTS FOR ZIP, BARLOTTI, STAR ETC.,

"IGNORE THE REST AND COME TO THE BEST"

Trade van at all circuits with a complete range of spares and facilities for boring, honing, welding, etc.

> Mail-Order I.P. arranged on any equipment



- and Peak Revs **Account Card** acceptable.

Monday to Saturday 9.00 a.m. to 5.30 p.m. Tuesday, Wednesday, Thursday Eves. 7.30 p.m. to 9.30 p.m. OLDMOOR ROAD, off ASHTON ROAD, BREDBURY, STOCKPORT SK6 2QE, CHESHIRE. Phone: 061-406 2447

MARK BAILEY

OFFERS HIS JUNIOR BRITAIN CHAMPIONSHIP **EQUIPMENT**

2 Zip Euros complete with Hutless brake

6 Parilla TG14L engines – all Ferrari tuned, fitted with Motoplat. modified carbs.. wheels and tyres. etc.

Winner of

Styfoam Winter Series Rye House Champion of Champions Midland Championships East Anglian Championships 6 Rounds Road and Racewear Championships Overall 1979 Junior Britain Champion

FOR DETAILS PHONE EITHER THETFORD (0842) 62883 0R NORWICH (0603) 401531

Kart and Superkart

GRAND SALE OF WORKS EQUIPMENT

SISLEY KARTING NOW HAVE **AVAILABLE. DUE TO A CHANGE** IN PLANS. THE FOLLOWING **WORK'S PREPARED ENGINES:**

6 KOMET K88 TTs

all on 50.6 bore, all factory selected, most with special high speed main bearings and the best IAME accessories, complete with motoplats and tillotsons + engine mount. Maintained by ourselves regardless of cost

Price £250 each - no offers

1 K78 TT _

as used by BrandHofer at Hagen World Championship a genuine factory motor - 51.0 bore - little used this year.

Price £350

2 K80 TT super IAME motors -51.0 bore, the latest specification, strengthened pistons, special main bearings, latest rods, etc., etc.

Price £300

1 very special K88 TT -

as used by J. Herbert all year and in British Champs. Very special internals

Price £250

- 1 SS20 TT ex Wayne Homer 48.4 TT Price £250
- 1 TT22 as used by Richard Weatherley very quick motor -Price £275

1 TG14 100 Britain engine -

as used by Lee Cranmer and Paul Dryden 48.6 bore - Price £120 PLUS many secondhand Dunlops, Bridgestones, Slide carbs. tyre

PHONE SISLEY KARTING -Swanley (0322) 67121/60571



1979 250 INTERNATIONAL AND 100 NATIONAL **TEAM OUTFITS**

Martin Pooles 250 Superkart chassis with fairing, side tank and

Martin Pooles 250 Superkart chassis with fairing, side tank, rear wing f 460.00.

Tony Shearmans 250 Superkart chassis with fairing, side tank, rear wing and Motiv ground effects device £495.00 + V.A.T.

Both chassis have good Bridgestones and are in as new condition.

TMR Yamaha DX/TD3 250 engine No. 009.79. Qualified front row

'A' final grid of both long and short circuit gearbox championships. Fitted with special Amals, OMC vacuum crankcase pump, needle roller clutch, TZ crankshaft, Femsa, Motiv exhausts and TMR

roller clutch, 1Z crankshaft, Femsa, Motiv exhausts and 1MH regulator header tank, £825.00 + V.A.T.

TMR Yamaha DX 250 bottom end only Eng. No. 005.78, TZ crank, needle roller clutch, £345.00 + V.A.T.

RD Crank 800 road miles, fitted with brand new TZ Con-rods, mains and Lab. seal £115.00 + V.A.T.

Set Merlin Suzuki exhausts, new £60.00 + V.A.T.

1979 ZIP SHADOW 250 fitted with RD/TD3 engine, built by us, complete with fairing, side tank and rear wing, 4 meetings only, immaculate £1,250.00

TMR Fuel regulator header tanks, cures all fuel feed problems.

complete kit with M/brkt. fuel pipe and fitting instructions £28.75 including V.A.T. and post and packing.

Due to Mick Bryant joining the TMR 250 Superkart team in 1980, we wish to sell the following:—

\$\text{S20 TTd}\$, 48.2 bore, bored carb, Moto-Plat £300.00.}

\$\text{S20 TTd}\$, 48.4 bore, Moto-Plat £260.00. Both M. Bryant tuned.}

SS20 11d, 48.4 bore, Moto-Plat £260.00. Both M. Bryant tuned. SS20 Brand new, still in box, £185.00 + V.A.T. Deavinson Sprint RS104 2 bearing, special mods by us to the frame, German Goodyears, Micks own chassis, £215.00 New Deavinson Sprint RS104 less tyres, wheels and seat

New Deavinson Sprint HS104 less tyres, wheels and seat finished in black £240.00 + V.A.T.

Deavinson Sprint RS104, 10 meetings only, just re-sprayed, with wheels but less tyres, £195.00 + V.A.T.

Birel chassis, tidy £120.00

K88 Crankshaft, Brand new £40.00 + V.A.T.

DAP T70 Britain, fitted new liner, piston, rod, etc. Moto-Plat £140.00

INTRODUCE THEIR NEW

HIGH EFFICIENCY

KART BRAKE

FOR FURTHER INFORMATION TEL: 0272-713067/773554 evenings 40 CEMETERY ROAD, KNOWLE, BRISTOL 4



Official Result - Qualifying Heats

1st	Jose Bisquert	(E)	2 pts
2nd	Peter Beule	(D) ·	6 pts
3rd	Roberto Ravaglia	(I)	7 pts
4th	Heinz Sahl	(L)	10 pts
5th	Reine Anderson	(S)	11 pts
6th	Martin Homewood	(GB)	15 pts
7th	Jorg van Ommen	(D)	15 pts
8th	Flemming Neilsen	(DK)	18 pts
9th	Luis Silva	(P)	20 pts
l Oth	Lars Petersen	(DK)	20 pts

Last Chance Race

1st	John Pizarro	(AUS)	0+2 pts.
2nd	Peter Caroli	(S)	2 pts.
3rd	Danny Demollin	(F)	3+2 pts.
4th	Vivian Daly	(IRL)	4 pts.
5th	Max Lauda	(A)	5 pts.

Fastest man on the track was Fullerton, but his Finals day was total disaster, with four engine failures



Martin Homewood just missed the cut-off, and had to do the qualifying races. Here he slips inside German Peter Beule and Italian Paulo Bandinelli.

Timed Practice 2

Sixty four drivers had now qualified for the main event, and the bargaining began in earnest the first timed practice by Dunlop tyre users it as those who still had no special Bridgestones, or not enough of them, talked their heart out . . . Sprint camp trying to swop factory Sirios for

Homewood managed to talk the Bridgestone tyres... man, who obviously had a contingency supply which were seemingly proving so effective. The goodies in a short space of time.

all the talking could be seen as Homewood sent off down the car circuit to do just that. began to circulate at 50.6 (compared with his value of "factory" motors can perhaps be Heads nodded knowledgeably - obviously he gauged by the fact that the team preferred not

to use the one obtained, sticking instead to their own Mark Barnard prepared units.

With the high percentage results obtained in was not surprising to see Mr Grana down in the

into one set of "yellows". Then, with Mick As if by pre-arranged signal the wind now began Fullerton acting as go-between, another two to pick up rapidly and within minutes, Estoril sets, one of each type, were extracted from was in the grip of a gale, if not a hurricane. Birel manufacturer Oscar Sala, along with a set Gritty dust blew in thick clouds across the back of the new wide stub axles. They even talked of the circuit, haybales rolled crazily across the Mr Grana into a factory Parilla and capped it track, and as the wind heightened, sheet metal off by obtaining one of the Swiss slide carbs sections scythed down off the grandstand roof!

But the show goes on. The two lap noise practice session before the timed laps would be checks were cancelled (hooray!) giving a two critical, with the need to evaluate all the hour wait in the hope that the conditions would improve. No way. With no noise check Before the end of the session the worth of to scrub their qualifiers in, the Sprint duo were

Mike Wilson was in the very first foursome first timed practice of 51.36). Incidentally, the to go out. He pulled off on the warm-up lap.

The Tyre Story

As usual, Bridgestone had the bulk of the field on its products, with a liberal spread of Dunlops amongst the various teams.

New from Bridgestone were two compounds, coded blue and yellow, and released with the same YAW/YAV lettering and 7.00/4.60 sizes as the current production tyres. There were no "qualifiers" as such with both the above being race tyres, although the factory did suggest that the yellows might be the best to use for qualifying.

A few sets - notably of Japanese entry Sugaya - were marked YAT, this being the same marking as on a few prototype tyres released some 6 weeks earlier for testing to help decide upon the World Championship compounds. Sugaya himself was subject to close scrutiny after putting up firstly a very good time in the first timed practice, followed by a sensational best time in the second

It was indeed suggested that, coming from the home of Bridgestone, he had managed to dig up some of the 3 lap qualifiers from last year. Through an interpreter he specifically

The vellow YAW/YAVs were apparently of identical compound to the vellow YATs, but the blue YAW/YAVs were brand new and not the same as the prototype blue YATs.

Dunlops were to be found on all the French team karts, plus those of Allen, Spencer, Australian Hunter, Spain's Bisquert and the Dutch Koene brothers.

Mickey of course had his usual range of Dunlops to try and in addition some new qualifiers, reputedly much better than previous ones. Eventual winner Koene on the other hand struck a blow for the privateer by doing the whole meeting on production 049s!

A few continentals were seen on the back of some South African karts, but as the German team were not using them, it would seem that they were ineffective. One driver - Italian Roberto Ravaglia - was on Sirios, which during his attempts near the front of the Friday qualifying heats seemed to go off rapidly after a handful of laps.



Specially developed by **P Lockheed** for Karting. using their vast experience from all forms of top level Motor Racing.

Brake Unit, including Master Cylinder, Caliper, and High Pressure Brake Hose: (chassis mounting) £89.95.

Universal Axle Mounting Kit, including Disc/Carrier, Caliper Mounting. and all necessary Fittings and Instructions, (Available shortly).

\$550 Racing Brake Fluid: £5.13 per Litre.

\$\times M171 Replacement Pad set: £9.07.

VAT and Carriage extra on all items

☼ M78 Replacement Pad set: £4.35.

Sole International Distributors for the **P** Lockheed Kart Braking Systems.



12, HUNTER ROAD, LONDON SW20, ENGLAND. tel: 01-946-7401/01-947-4117

TRADE AND EXPORT

ENQUIRIES INVITED

continued . . .

10

was taking advantage of the 10 minutes allowed to restart, to let a few other karts sweep some of the accumulated sand off the racing line. When asked why he had stopped, Mike said with a glint in his eye, "Carb problem . . .

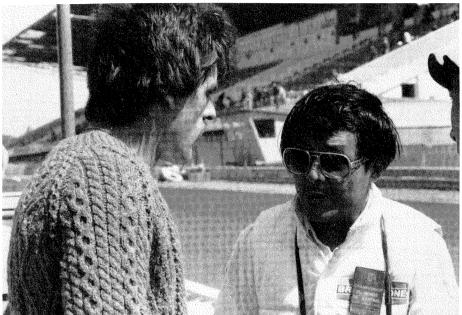
Quite by coincidence (?) the 3 other Birel/ Parilla works drivers pulled the same stunt, all hoping for slightly better conditions 10 minutes later. For Tony Zoserl, they couldn't have been worse – he hit the peak gusts of the storm.

For many it was a nightmare - both Allen and Smart had haybales lurch across the track in front of them – but for some who guessed at differing tyre pressures correctly or struck a timely lull as they turned into the back straight head-on wind, it proved an unexpected bonus!

There were several out-of-the-bag efforts, none more sensational than Sugaya's. Lap one, 50.87 — what would lap two be, when the tyres warmed? We'll never know, as the Japanese driver's Parilla seized solid half way around. But one lap was enough for fastest time! Speculation was immediately rife - did he have special tyres? Was it the front brakes? Was it a freak lap - especially as previously unknown Frenchman Pierre Raphanel was only two-tenths slower, third overall!

Splitting the two - on "blues" again - and only two hundreths slower than Sugaya, was that man Fullerton. Methodical attention to warming the tyres on the warmup lap and a concerted effort to hunch as low as possible into the wind seemed to be the key to his run.

Wilson and Allen put up good times, whilst Smart's attempt to start with pre-warmed tyres failed. All four wheels were put in the front of



Immediately after his last qualifying heat, Homewood speaks to the Bridgestone man who eventually provided a set of "yellow" tyres.

Sugava's kart did not look as stable as some others, and so his fastest time in the main timed practice aroused immediate speculation about his tyres. The front wheel brakes couldn't have been that good



their van, out of the wind and in the glare of the sun, the idea then being a quick bolt-on and rush down to the grid. At that moment, the wind finally knocked over the timing light and by the time everything was re-aligned, the tyres were cold again . . .

Official Result - Second Timed Practice

Yasutoshi Sugaya	(J)	50.87
Terry Fullerton	(GB)	50.89
Pierre Raphanel	(F)	51.07
Ayerton da Silva	(BR)	51.11
Paul Guedel	(CH)	51.14
Mike Wilson	(GB)	51.16
Thomas Glauser	(CH)	51.25
Mickey Allen	(GB)	51.25
9 Peter de Bruyn		51.28
0 Peter Koene		51.41
Roberto Giugni	(I)	51.46
Pierre Defontaines	(F)	51.46
Lars Forsmann	(S)	51.50
Stefano Modena	(I)	51.52
Patrick Dias	(F)	51.53
Martin Smart	(GB)	51.55
Martin Homewood	(GB)	52.01
Doug Spencer	(GB)	52.24
	Terry Fullerton Pierre Raphanel Ayerton da Silva Paul Guedel Mike Wilson Thomas Glauser Mickey Allen Peter de Bruyn Peter Koene Roberto Giugni Pierre Defontaines Lars Forsmann Stefano Modena Patrick Dias Martin Smart Martin Homewood	Terry Fullerton (GB) Pierre Raphanel (F) Ayerton da Silva (BR) Paul Guedel (CH) Mike Wilson (GB) Thomas Glauser (CH) Mickey Allen (GB) Peter de Bruyn (NL) Peter Koene (NL) Roberto Giugni (I) Pierre Defontaines (F) Lars Forsmann (S) Stefano Modena (I) Patrick Dias (F) Martin Smart (GB) Martin Homewood (GB)

Finals Day

With 6 heats, a last chance race, and then the 3 finals, finals day is always a very long, hard day for all drivers and mechanics. After a one hour practice session heat 1 is at 8.30am, and the pressure is virtually non-stop until after the third final, in Estoril's case at 7pm.

As a result of timed practice, the 64 combatants are split into 4 evenly matched groups of 16, each group competing against the other three once.

Heat One - Group A v. Group B

After the weeks of preparation and testing, this is where it all really begins and invariably the tension of the first heat brings drama. The World Championship also seems to attract the worst starters - with rank in the promoting country's governing body usually good enough to qualify. This year was no exception, with the outside row able to take advantage of the outside sweep up to the line on numerous occa-

Heat 1 was no exception and poleman Sugaya was left behind as Fullerton and Wilson poured into the first corner ahead. They powered out of the Control Tower S to be greeted with starting cones still all in place, and the red flag. Sugaya and Fullerton were warned about approaching the start too quickly and the field was sent on its way again.

The two Englishmen again got the jump and after only one lap were pulling well clear of Guedel, Sugaya, Peter Koene and Forsmann. Lap 2, lap 3, the pair raced clear, Wilson quite content to sit a yard behind Fullerton's bumper - certainly a new, more reasoned and mature approach from the flamboyant Yorkshireman. His patience was rewarded only 2 laps later as Fullerton's World Championship hex began to make its appearance. After a week of mechanical bliss, two wisps of rear tyre smoke signalled a big seize and Wilson was left clear.

As he coasted to an easy win, Sugaya briefly re-passed Guedel, only to be demoted again, whilst Forsmann, Modena and Muller all fell by the wayside. Zoserl was showing his class, moving steadily forward to take fourth from Koene. Homewood was in the middle of a furious mid-field scrap and seemed unable to progress, but Spencer was beginning the day of his life with an inspired drive, from 24th to 12th.





KING







Parilla Komet

NEW SUPER AGORDO HELMETS £27

THEINCOMPARABLE B.M. KART:

- FACTORY ASSEMBLED
- ELECTRON MAGNESIUM COMPONENTS
- SUPERB HANDLING
- DETAILED ENGINEERING
- TUBELESS MAGNESIUM WHEELS

New B.M.F. Europe £365 + VAT New "Redbird" International £415 + VAT SELECTED SECOND-HAND OUTFITS IN STOCK

TEST KART AVAILABLE

25 Buchanan Street. Blackpool

Tel: (0253) 28147 Ansaphone Service

PETER INCHLEY **MOTORS**

THRUXTON RACING CIRCUIT ANDOVER, HANTS

Is pleased to announce the availability of an engine dynomometer to assist in setting up your motor for next season.

- PIPES. **★**COMPARE HEADS. CYLINDERS, ETC.
- **★OPTIMISE IGNITION SETTINGS**
- **★**SET FUEL SYSTEM
- **★**OBTAIN BEST CARBURATION
- **★POWER AND TOROUE CURVES**
- **★OPERATOR PROVIDED F.O.C. IF REOUIRED**

"GOT TO BE A GOOD THING"

TELEPHONE PETER ON 026477 2008

AND BOOK YOUR TIME NOW

RAGIR

YOUR MIDLAND CLASS 1 KART RACING SPECIALISTS

- ENGINE TUNING AND PREPARATION OUR **SPECIALITY**
- DYNO TESTING FACILITIES. WHILE YOU WAIT CRANKSHAFT SPLITTING, BORING AND HONING
- ALL YOUR CLASS 1 KARTING NEEDS CATERED FOR
- **A COMPLETE RANGE OF ENGINES AND** SPARES CARRIED EX STOCK
- AGENT FOR ALL ZIP KART EQUIPMENT ■ NEW ZIP AND SPRINT KARTS IN STOCK
- SECONDHAND KARTS AND ENGINES AVAILABLE FROM STOCK
- COD SERVICE. TRADE ENQUIRIES WELCOME

STOP PRESS

Congratulations Martin Homewood on an outstanding winning drive at the final Green Man round and to Rov Austin on an equally fine third. Both on Redhill tuned Parillas of course!

PARILLA **TKM**

COMET





FOR MORE INFORMATION

PLEASE CONTACT MARK BARNARD

Unit 29, South Moons Moat Industrial Estate, Padgetts Lane, Redditch, Worcs, B98 ORD Telephone: (0527) 26263

Subsidiary of M. A. Redhill Developments Ltd

Kart and Superkart November

CLUB SCENE

continued . . .

100 NATIONAL

 1st
 Pete McCallum
 Zip/Arrow

 2nd
 Colin Robson
 Sprint/TKM

 3rd
 Ian Simpson
 Sprint/Arrow

210 NATIONAL

1st Robert Grubb Sprint/PH Upton
2nd Brian Smith Barlotti/GBRD
VIVS
3rd George Bett Barlotti/Bett

VIVS

100 INTERNATIONAL

1stAndrew BuchanZip/Arrow2ndGraeme FoubisterZip/TKM3rdGordon MurrayKestrel

125 NATIONAL

1stGordon PetrieStar/Rotax2ndIan NicholsonZip/TVMYamaha3rdGavin NicholsonZip/TVMYamaha

250 INTERNATIONAL

1st Sandy Dalgarno Lynx/GBRD Yamaha 2nd Sandy Taylor Zip/JKS Yamaha 3rd Granville Grubb Sprint

SCOTTISH CHAMPIONSHIP WINNERS

100 Junior Britain
100 Junior National
100 National
100 National
100 National
100 International
125 National
125 International
126 Pete McCallum
George Bett
Andrew Buchan
Gordon Petrie
Rob Logan

Jenny Taylor

The September Ziperama meeting produced good entries, great racing, great prizes, and a novel interval attraction — radio controlled racing cars!

Junior Britain

1st Robbie Childs
2nd Piers Hunnisett
3rd James Chitty
Novice trophy: Darren Gibbs

Junior National

1st John Herbert 2nd Steve Setterfield Novice trophy: Simon Blaxall

100 National Novice

1st Bill Blackmur 2nd James Dudley

3rd G. Cox 4th R. Butler

5th Conrad Hagan

100 National

1st Wayne Homer 2nd Gary Till 3rd Steve Tillett

4th Mark Sayer 5th Stuart Ashwell

210 National

1st Trevor Gowers 2nd Tony Sinclair

250 National

1st Roger Steer

250 International

1st Dave Clark



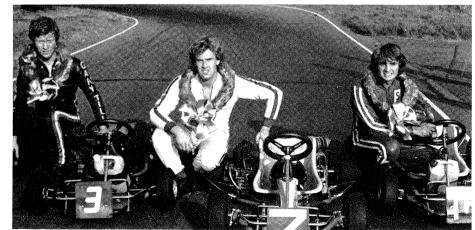
The Champions — left to right: George Brett, Andy Buchan, Bob Knowles, Elaine Buchan, Pete McCallum, Gordon Petrie, Rob Logan.

Tilbury Ziperama



First corner of the 100 National final. Homer leads Till, Denney, Stapley and Tillett. (Photo: D. Callingham)

100 National victors l to r: Gary Till (2nd), Wayne Homer (1st) and Steve Tillett (3rd). (Photo: D. Callingham)



WORLD CHAMPIONS

1 ST



 2_{ND}

ENGINES & KARTS



CONGRATULATIONS ON A SUPERB PERFORMANCE WITH A CLASSIC ONE–TWO

1st PETER KOENE DAP/DAPT72 and 2nd AYERTON SENNA DA SILVA DAP/DAP T70TT

ORDER YOUR 1980 DAP WINNER NOW FROM YOUR LOCAL DAP AGENT OR DIRECT FROM THE SOLE U.K. CONCESSIONAIRE & DISTRIBUTOR

RETAIL, TRADE & EXPORT SUPPLIED

JOHN MILLS (KART SPECIALIST)

90A VALLEY ROAD, WORKSOP, NOTTS., S81 7EJ
PHONE WORKSOP (0909) 474633 CABLES 'JAYEM'
WORKSOP

P.S. DON'T FORGET THE ROAD RACING SHOW, ALEXANDRA PALACE, DECEMBER 7th to 10th

INSPECT THE WORLD CHAMPIONS KART PLUS THE FULL RANGE OF DAP MODELS & MAGNESIUM PARTS. SEE YOU ON STAND 68

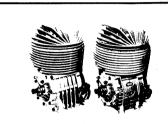
"LAST YEAR THE BRITISH CHAMPIONSHIPS, THIS YEAR THE WORLD CHAMPIONSHIPS!"

WITH A SUPERB 1st & 2nd IN THE WORLDS PREMIER KARTING EVENT, DAP REALLY SHOW HOW IT IS DONE!



MICK WORTH RACING ENGINES 897 UXBRIDGE ROAD HILLINGDON MIDDLESEX TEL. 01-573 1963

Main Agents and Distributors in the South for DAP engines and spares. Large stocks of spares and motors for





MICK WORTH RACING **ENGINES** 897 UXBRIDGE ROAD HILLINGDON **MIDDLESEX** TEL, 01-573 1963

Official Agents for Parilla Motors and genuine IAME spare parts. The choice of many of the World's top drivers and used by 3 out of 5 of the British Class 1 champions.



DAP AND PARILLA ARE INDISPUTABLY THE MOST SUCCESSFUL KART ENGINES MADE TODAY, HAVING BETWEEN THEM WON ALMOST EVERY MAJOR EVENT THROUGHOUT EUROPE. THEY ARE THE OBVIOUS CHOICE OF THE DRIVER WHO REALLY RACES TO WIN. MODELS FOR ALL CLASSES, 100 BRITAIN, 100 NATIONAL AND INTERNATIONAL.

TUNING FOR DAP & PARILLA

TUNING OF DAP AND PARILLA TO THE HIGHEST INTERNATIONAL AND BRITISH CLASS STANDARDS, AS CHOSEN BY MANY TOP DRIVERS IN BOTH EUROPE AND THE U.K. TUNING OF CUSTOMERS OWN MOTORS SUBJECT TO INSPECTION.

PRECISION BORING, HONING, CRANKSPLITTING, MACHINING, MAGNAFLUX CRACK TESTING

WE ONLY SELL THE BEST



TIME & ADVICE **GLADLY GIVEN IF YOU ARE ABOUT** TO START KARTING, OR SIMPLY NEED HELP IN **CHOOSING NEW EOUIPMENT.**

For the finest engines – the finest karts. We are agents for the incomparable Zip Karts, with models for all classes. Chosen by British champions and team drivers. The kart that always sets the standard for the others to follow. Possibly not the cheapest, but positively the

With modern kart racing as competitive as it is, you cannot have anything less than the very best if you want to win. Our policy is to sell only the very best. Whether it is motors, chassis, tyres or accessories, everything we sell is of first quality. We do not cut prices with cheap pattern parts, seconds or rejects. The same standards are applied to our boring, honing and machining services, which, recognised as being second to none, are used by engine tuners and members of the kart trade.



REGINA CHAIN. MOTOCRAFT PLUGS. SHELL & CASTROL RACING OILS. TILLOTSON CARBS. TYRES FOR ALL CLASSES, AND ALL ACCESSORIES.

CLUB SCENE

Club P.R. people are invited to submit coverage of their events for inclusion in Club Scene. Contributions are requested as soon as possible after the event in order to keep us as topical as possible. Photographic support is welcome. Don't forget that you can ring us at any time (Hoddesdon 44201) with any snippets of news.

Boyndie

September's meeting at Boyndie was the final round of the Scottish Championship. Weather conditions were dry and sunny and the pits had an air of excitement and high spirits. Our thanks to all club officials for the excellent way the meeting was run and to Davy Barron who organised the presentation of the trophies. Thanks also to ex-competition Secretary Kath- 210 National leen Taylor for the beautiful laurel wreaths she At the drop of the flag it was Rob Grubb who so painstakingly put together.

Junior Britain

way to take the chequered flag, Craig McWilliam 2nd and Brian Ewing 3rd, almost taking a 2nd McWilliam to hold the lead to the last lap when Docherty 3rd and Brian Ewing 4th, followed by Craig McWilliam and Ali Polson, Brian passed Kevin and closed up behind the first two, and so it was to the flag with Elaine Buchan, Andrew McLean, and Brian Ewing taking the closely fought 1st, 2nd and 3rd.

Junior National

At the drop of the flag in heat 1 Bob Knowles took the lead followed by Gordon Vass, Paul Williamson and John Robertson, Andy Sim nipped past Robertson on Caravan Corner and set his sights on the front man. Vass and Williamson showed us some exciting racing as 1st heat saw current Championship leader they fought for 2nd and 3rd places. Williamson unfortunately spun off at Caravan Corner, so bumper. Heat 2 saw some very exciting racing from the aforementioned drivers. Andy Sim, showing the same determination as his first heat, took 1st place with a terrific battle for 2nd, 3rd 3 saw Andy Sim take the lead. Again Paterson, Vass, Williamson and Knowles battled it out with close exciting racing as previous heats. Knowles came flying round the left hander and spun off and tension mounted as Vass flew into 2nd place and Paterson 3rd, and so it was to the flag. Sim, Vass and Paterson fighting every inch

100 National

November

Pete McCallum took the lead in heat 1 and held it to the flag, with Gordon Murray pushing his way through the field up to second place. Pete Cartwright held on to a good 3rd until he spun off, leaving the way clear for Ian Simpson and until Murray made a determined bid on Caravan Colin Robson. Heat 2 saw Robson take the lead Corner to take the lead. Buchan also made his with McCallum 2nd. Gordon Murray moved up move, slipping through on the inside to take to 3rd, Kenneth Graham 4th and Pete Cartwright 5th. There was a pile up at the hairpin (fortunately no serious injuries) and these superb display of this class at its best. A places were held as the race was stopped. In the delighted Foubister took 1st place with a faultfinal, Donald Sutherland was off the grid and into the lead followed by Stewart Evans, Bryce and Murray.

Whiteford and George Douglas. Pete McCallum moved through the field and took the lead in the 5th lap, with Colin Robson pushing up into 2nd place 4 laps later. Donald Sutherland drove a good race refusing to drop another place and Stewart Evans pursued him to the flag. On the 11th lap, Ian Simpson took George Douglas for 5th place, while Pete McCallum took 1st and Colin Robson 2nd.

took the lead close behind was Brian Smith, George Bett, Bill Stoddart, Fraser Barbour and Roy Gallant. Smith took the lead after 2 laps Drama struck in the first heat as Elaine Buchan's then Grumm took him again with 3 laps to go. kart failed to start. Andrew McLean led all the These 2 were constantly challenged by Bett who finished 3rd. Moir, Gallant and Barbour took the next 3 places respectively. In heat 2 on the finish line! In heat 2, Ewing nipped past Smith went flying into the lead followed by Barbour, Grubb and Gallant, Grubb moved into he came off and left McWilliam to take a first. 1st place again but Smith was hard on his tail to The final heat saw Elaine Buchan (mechanical the flag with Bett, Gallant and Stoddart battling problems sorted out) off the grid and into the out the following places. The final saw Bett flylead, with Andrew McLean close behind, Kevin ing into the lead followed by Grubb, Stoddart and Fyffe. Grubb took Bett coming out of the left hander as Bett dropped back with gearbox problems. While Stoddart, Smith and Gallant closed the gap. Grubb drove a cool race in the lead while Bett again closed upon his tail making frequent challenges. Finally, at the chequered flag, positions were unchanged with Bett pressuring the leader and Smith coming through to a good 3rd, followed by ever consistent Rov Gallant.

100 International

Andrew Buchan take a fine win without any real threat, although Graeme Foubister and Sim tool 3rd place right behind Vass's back Alan Brown fought hard for 2nd place with Graeme coming out on top. Heat 2 and Brown pulled into the lead followed by Buchan, Murray and Foubister. On lap 2 Buchan moved into the lead while Murray made several determined and 4th from Paterson, Vass and Knowles. Heat efforts to relegate Brown further. These 3 were soon joined by Foubister moving through to join leaders in 4th place. Murray eventually squeezed past Brown and set about challenging Buchan for the lead, the 2 leaders pulling out a slight buffer on the 3rd and 4th place men with these positions held to the flag. A tense grid lined up for the final with the Championship still undecided. Foubister made a flyer followed by Murray, Buchan, Donoughue and Brown. The first 3 began to pull away from the field circulating very quickly around the 28 second mark. Murray and Buchan made repeated challenges on Foubister and after 6 laps there was absolutely nothing between the first 3, 2nd place. For the next 7 laps these weaved nose to tail through the back markers, giving a less drive under immense pressure from Buchan

Heat 1 saw the Yamahas of Nicholson, Paul Cook, and Ian Nicholson lead the pack with the current Scottish Champion making a disastrous start in his Rotax. As Gavin Nicholson began to pull out a lead, Petrie charge through the field and by lap 8 had taken 2nd place man Cook but was unable to get on terms with Nicholson who took a flag to flag win. Heat 2 saw Petrie make no mistakes off the line, leading Cook and the Nicholson brothers. Petrie proceeded to pull out a convincing lead with a fine display of smooth driving. The battle for 2nd place was short lived as Cook retired on lap 3 leaving Gavin Nicholson to take a comfortable 2nd from Ian Nicholson. At the drop of the flag Petrie led Cook and Nicholsons into the hairpin to lead the final. Lap 2 saw Ian Nicholson slip past Cook to take 2nd place. Petrie pulled away from the battle for 2nd place as Cook tried to retake Ian Nicholson. The places remained unchanged for the following 5 laps with Cook right on Nicholson's back bumper until a desperately unlucky Cook was taken off by a "swerving" back marker. The Scottish Title once again went to Gordon Petrie.

250 International

A good grid of 250 Internationals lined up on the grid for the first heat. As the smoke settled after the start it was John Ferguson with Sandy Taylor, Sandy Delgarno and Granville Grubb right on his tail. On lap 3 it was Taylor in the lead followed by Dalgarno, Grubb and Logan, the leading pair beginning to pull away from the rest of the field. At the flag it was Taylor with Dalgarno hard on his bumper, with Grubb and Fraser 3rd and 4th. Heat 2 and Dalgarno pulled away instantly from the pack consisting of Ferguson, Wilson, Fraser and Taylor. As Dalgarno pulled out a huge lead, Taylor carved his way through to 2nd place chasing hard after the leader. Ferguson had meanwhile pulled clear of the pack in 3rd spot leaving Logan contesting 4th place with Fraser. A tense grid lined up for the final with Dalgarno on pole and in typical Dalgarno style he claimed the lead as the pack howled into the hairpin for the first time. Current Championship leader Logan slotted into second, followed by Taylor, Ferguson, Grubb and Fraser. Taylor moved through to second on the left hander with Logan now being pushed hard by Ferguson, Fraser and Grubb, Lap 4 and Taylor was hard on Dalgarno's heels with these two clear of Ferguson, Fraser, Logan and Grubb. A fierce struggle between the two Sandys ensured until they both dived into the hairpin side by side, with only Dalgarno reappearing! So it was a jubilant Dalgarno, followed a long way behind by Ferguson, Fraser, Grubb and Logan with Taylor managing 6th, having eventually dislodged himself from

Results

J	UNIOR	BRI	TAL
			4

Zip/T70 JM Andrew McLean Kestrel/BDR Craig McWilliam Manx Sprint/T70 JM 3rd Brian Ewing

JUNIOR NATIONAL

Andrew Sim 1 st Gordon Vass 3rd Bob Knowles Sprint/Sim TKM Zip/Turnev TKM Kestrel/SS20Ace



Kart and Superkart

BM EUROPA/HEWLAND ARROW WINS ROAD & RACING JUN. NAT. SERIES CONGRATULATIONS TO KEVIN WARNER

MISTRALE RACING CONCESSIONAIRES U.K.

OFFER BM Europa Kart, factory assembled, mag fittings, a proven

winner!! EX STOCK at just £325 less tyres. BM FK 99 TT Super engines, complete £375. BM Redbird Inter Kart, less tyres at £425. ALSÓ AS

HEWLAND ARROW MAIN AGENTS S/WEST

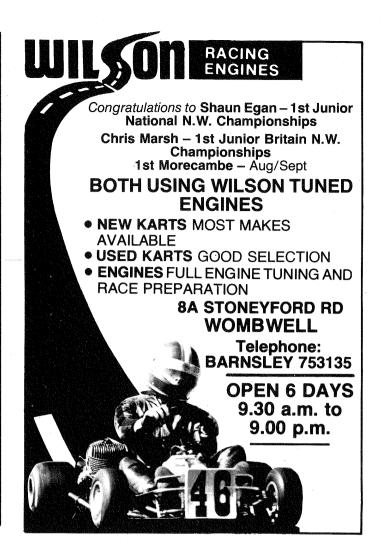
WE OFFER

100 Britain Engines, complete with trany, carb, engine mount and fingerguard £172, or Mistrale Modified as used by British Champion P. Rochford, £194.

100 National Engines from £151 bare, or complete with trany, carb, engine mount and fingerguard, prepared to same spec. as Neil Hanns £257.50. And don't forget the MM/2 purpose built Britain kart at £250 complete.

YOUR LAST CHANCE BEFORE **NEW PRICES!!**

41 Bishopston, Montacute, Tel: 07476 2568 10am-4pm Somerset, England. or 0935 82 2423 7pm-10pm



THE CHINOOK



RECENTLY LAUNCHED

A fun vehicle for two people designed for private and concession use. G.R.P. body and steel chassis. Powered by Honda G200 with automatic clutch. Max speed 20mph

WE ARE NOW LOOKING FOR DEALERS THROUGHOUT THE UK

Contact: G. F. Faulkner (Export and Import) Ltd. 18/20 London Road, Tunbridge Wells.

Tel: 0892-39566 Telex: 957034

continued . . .

3rd	Mike Wilson Paul Guedel Yasutoshi Sugaya Toni Zoserl Peter de Bruyn	Birel/Parilla Speed/Petry Sugaya/Parilla Birel/Parilla Hutless/Parilla
12th 13th	Doug Spencer	Sprint/Sirio Birel/Parilla

30th Terry Fullerton Fullerton/DAP

Heat Two - Group C v. Group D

A rather bewildered Raphanel was beaten away from pole by da Silva and thence dropped rapidly down the field – could his lap time have been a mistake? Mickey Allen took over a secure second, while Smart was charging up from a fourth row start, past Glauser, into 3rd on the third lap. Two more laps and he was hair-raising spin on the fastest part of the back racing.

Glauser reclaimed third only to seize as well, leaving third to Bisquert, racing through on his newly acquired DAP chassis, albeit some distance behind the leading pair.

In the midfield, Busslinger spun and van Ommen, in one of his aforementioned lurid slides, couldn't miss him – catapulting over the top, but still able to restart!

3rd Jose Bisquert DA 4th Maximo Olivieri Bird	int/Sirio P/DAP el/Parilla el/Sirio
--	--

26th Martin Smart Zip/BM

Heat Three - Group C v. Group B

Fullerton and Wilson pulled rapidly clear as Raphanel again fell back, slowly this time, gradually demoted by first Glauser, then Modena, and Harm Schurman, showing real form for the first time.

Poor Martin Homewood got involved in one of those first corner multiple incidents, which saw Osterboch of the Netherlands land heavily upside down. Homewood restarted to push aggressively back through to the midfield. While Spencer reinforced his first heat showing with another sterling drive, Fullerton and Wilson poured away to an easy 1-2.

Bisquert again raced through to 6th, only to go out with a bad misfire.

3rd 4th	Mike Wilson Thomas Glauser Harm Schurman Stefano Modena	Birel/Parilla Hutless/Petry Dino/Parilla Birel/Parilla	poor French supporter heat rolled round to a f yet another outside row Da Silva took an in be headed. Allen seem
	Doug Spencer Martin Homewood	Sprint/Sirio Birel/Parilla	

Fullerton/DAP

Heat Four - Group D v. Group B

Terry Fullerton

A critical race for the British team, with all 6 on the track. Again the outside row had the advantage and da Silva led, from Fullerton, Defontaines, Allen, Wilson, and Smart. The Frenchman was soon in trouble and dropped rapidly away.

Fullerton slipped neatly inside his DAP factory team-mate and the pair pulled slowly away from the British trio scrapping for third -Allen, Wilson and Smart. For 3 more laps the engine seized and da Silva, right on his bumper starting again, a lap down.



gone - a ring locating peg out, a big seize and a Raphanel of France put up an amazing (fluke?) timed practice, but faded away rapidly in the

heavily, the Brazilian winded and shaken. A lap lap, his almost unbelievable reliability record went by before he was able to collect his thoughts and restart, obviously well down.

Allen inherited the lead, and the 3 green- tussle for the minor places. clad figures circulated nose-to-tail, darting from when team manager Alan Johnson nearly had a heart attack!

Smart shadowed Allen over the line some dis- clunking noises. tance ahead of Schurman and Koene.

Spencer had put in his third consecutive blinder to move from 23rd to 11th, but Homewood's race had ended in spectacular style. No brakes at the end of the straight (lining off pad backing) saw him go straight off, unfortunately taking Portuguese Dinis off with him. The crowd, now filling the open stand, were incensed and Martin was severely heckled on the

alk baci	k to the pits!	
1st	Mike Wilson	Birel/Parilla
2nd	Mickey Allen	Sprint/Sirio
3rd	Martin Smart	Zip/BM
4th	Harm Schurman	Dino/Parilla
5th	Peter Koene	DAP/DAP

11th Doug Spencer Sprint/Sirio 29th Martin Homewood Birel/Parilla 30th Terry Fullerton Fullerton/DAP

Heat Five - Group A v. Group D

Whilst the hyper-active pit marshalls ejected a r who had no pass, this false start, a red flag, and w getaway.

immediate lead, never to ned content to go for an

couldn't get out of the way. They crashed equally comfortable second, but on the third

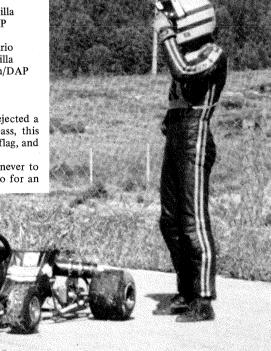
was broken, along with his con rod. De Bruyn took over second, to leave behind a furious

Zoserl seemingly damaged something in side to side, attacking and defending their posi- contact with the rear of Guedel's kart and after tions. Shades of the 1978 European Team event, an early charge, fell back to 8th. Forsmann and Smart moved through as one past Sugaya and closed in on de Bruyn, but were unable to do Wilson finally overcame Mickey's "defensive anything about the wily Dutchman. Zoserl line" to sneak through and lead to the flag. finally stopped with his engine emitting terminal

st	Ayerton da Silva	DAP/DAP
2nd	Peter de Bruyn	Hutless/Parilla
3rd	Lars Forsmann	Birel/Parilla
ŀth	Martin Smart	Zip/BM
th	Yasutoshi Sugaya	Sugaya/Parilla

29th Mickey Allen





situation was static, until tragedy struck the The incident which lost da Silva the tie-breaker. After the crash with Fullerton due to an engine DAP pair. On the fast back section, Fullerton's seize, da Silva has tried unsuccessfully to restart. Still winded, he tries to regain his breath before

Heat Six - Group A v. Group C

Sugaya led initially, as once more Raphanel fell gradually back. The Frenchman spun on lap 4, taking out Zoserl and Larssen, with only the Austrian able to restart.

Up front, the race became a steady, rarely changing queue, no one able to afford an incident at this stage. Cathy Muller put her best heat performance together to push through to fifth.

1st	Paul Guedel	Speed/Petry
2nd	Peter de Bruyn	Hutless/Parilla
3rd	Lars Forsmann	Birel/Parilla
4th	Yasutoshi Sugaya	Sugaya/Parilla
5th	Cathy Muller	Hutless/Parilla

Final Positions After The Heats

1	Mike Wilson	(GB)	2 pts
2	Peter de Bruyn	(NL)	9 pts.
3	Yasutoshi Sugaya	(J)	12 pts
4	Harm Schurman	(NL)	15 pts
5	Peter Koene	(NL)	19 pts.
6	Roberto Giugni	(I)	20 pts
7	Flemming Nielsen	(D)	22 pts
8	Ayerton da Silva	(BR)	24 pts
9	Paul Guedel	(CH)	24 pts
10	Marc Boulineau	(F)	24 pts
17	Mickey Allen	(GB)	33 pts
18	Martin Smart	(GB)	33 pts
20	Doug Spencer	(GB)	36 pts
38	Martin Homewood	(GB)	58 pts
41	Terry Fullerton	(GB)	60 pts

The top 30 go directly to form the major part of the grid for the first final. One last chance race for the remaining 34 allows four more to squeeze in at the back.

Obviously Homewood and Fullerton would have to take part in what is always a dramatic race. For the latter this was nothing new, having been compelled to take part in 3 such races out of the last 4 World Championships! — "I like doing these races. It's better value, as you get more laps for your money" he quipped as an obviously tense grid formed up.

After a minor panic as officials made an issue of someone's exhaust system overhanging the rear bumper by ½ inch, they were on their way. Four final places on offer and with a fairly talented grid — Glauser on 3, Fred Koene (Peter's brother) on 6, Homewood on 8, Pizarro on 10, Fullerton on 11, Defontaines on 14, Leif Larssen on 16, and so on . . . — there was the likelihood of an exciting 14 laps.

For this race anyway, the Gods would smile on Fullerton, and in an enormous first corner melee he was the last of only 8 to emerge onto the infield section intact, albeit with tyre marks on his helmet!

Glauser pushed rapidly through to relieve Andersson of the lead and by the third lap had a small cushion before Koene, Defontaines, and Fullerton streamed through. Homewood's Championship was over, the throttle linkage on his slide carb jammed open. A dejected Homewood's kart had bounced over the rear of Fullerton's kart, before burying itself in the straw.

Lap 6 and Fullerton had cruised into the lead, with much choking of the carburettor. The race seemed settled, with Glauser, Defontaines, Koene, and Husum all circulating separately, but the Dutchman's engine appeared to go sour and he fell back out of contention.

Despite regular choking, Glauser's Petry



The sight that raised British hopes — heat four — Allen, Wilson, and Smart, 1-2-3 after Fullerton's seizure and collision with da Silva.

locked solid,	handing the	e last	spot	on	the	main
grid to Brazil	ian Filho.					

Last Chance Qualifying Race

3rd Karl Husum Dino/Parilla 4th Dionysio Filho Hutless/Parilla 5th Luis Silva Hutless/Parilla	2nd 3rd 4th	Dionysio Filho	Hutless/Parilla
---	-------------------	----------------	-----------------

1st Fin

And so 34 drivers lined up to decide the Championship of the World:

de Bruyn	(NL)	Wilson	(GB)
Schurman	(NL)	Sugaya	(J)
Giugni	(1)	Koene	(NL)
da Silva	(BR)	Nielsen	(DK)
Boulineau	(F)	Guedel	(CH)
Bisquert	(E)	Olivieri	(V)
Haase	(DK)	Carvalho	(BR)
Ravaglia	(1)	Frei	(CH)
Smart	(GB)	Allen	(GB)
Spencer	(GB)	Forsman	(S)
Muller	(F)	Jans	(F)
Raphanel	(F)	Beule	(D)
Hunter	(AUS)	Demollin	(B)
Zoserl	(A)	van Ommen	(D)
Modena	(1)	Neubert	(D)
Defontaine	s(F)	Fullerton	(GB)
Filho	(BR)	Husum	(DK)

Da Silva leads the first final, before a tightening engine pushed him back to fifth. De Bruyn, Sugaya, and Koene follow.



In a Word . . .

• Sisley Karting have introduced an up-dated "fun kart". The new model has 5 inches ground clearance all round and can be supplied with slick or treaded tyres. Price: £285+VAT in kit form, or £300+VAT fully assembled.

The older square tube model has been revamped, with a racing front spoiler and roll-bar, and is available at the same price as the above model.

- Response to Sisley's 100cc Kart School has been encouraging. They are now operating a Scholarship scheme, whereby the winner receives an outing in a works prepared machine at the end of the year.
- Mick Worth is now handling Parilla motors and spares, and currently has the full range in stock. This is in addition to the usual stocks of DAP equipment he carries.
- Dino Kart importers, Burgess Racing, now have the 100cc variant in stock as well as the 250cc model. Richard Wallis reports good orders for both.

Of interest to drivers of all makes of chassis are the Dino nylon wheels. Heavily ribbed to avoid the distortion problems of previous nylon rims, the Dino wheels come at two prices — around £13 for the one piece front or the super wide rear, and £7 for the two intermediate sizes. All are complete with "O" rings and valves, and the fronts are supplied with bearings — sizes to suit most makes of kart.

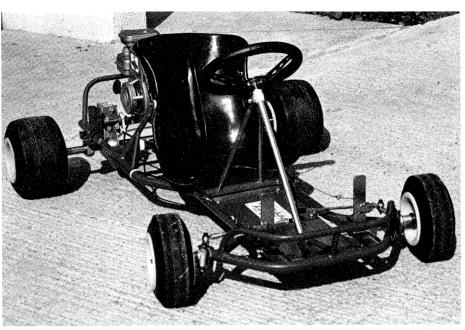
• Zip Kart are in the process of formulating their new models for next year. Two versions of the 250 chassis will be available – see Hines Quarter.

The new 100 International chassis – the 80 SE – should soon be available after its pleasing debut in the hands of Martin Smart at Estoril.

• With demand exceeding rate of supply from his Italian manufacturer, Terry Fullerton hopes to organise manufacture of his Fullerton karts in England shortly.

The Japan Kart Race may have been a disaster, but he did at least come home with an order for 120 karts!

- Coinciding with the World Championship win, John Mills reports that for once supplies of DAP engines from the factory are good and they are now available ex-stock.
- Chris Merlin advises that "Merlin" exhausts, as used by Dave Buttigieg are available from Tony Smith Racing Developments in Peterborough.
- Mick Fullerton has the Komet K80 in stock, the model used to good effect by Australian Hunter at Estoril.
- Merlin Developments hope to have a shipment of 125 Rotax engines in shortly.
- Fletcher's Racing Engine Developments are offering discounts on engine tuning until Christmas.
- Anyone running a sponsor should see Nigel Smith at Team Schemes. They can do a very good deal on T-shirts have you seen the "Kart and Superkart" ones? and screen printing to order.

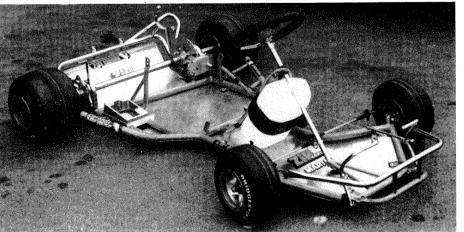


THE TRADE PAGE

Sisley's new "full race" fun kart (above) and (below) the range of Dino nylon wheels.



The new prototype Zip 80 SE, as campaigned by Martin Smart at Estoril, with seat removed to show the full length undertray.



REMROD

2 TRUMPERS WAY. HANWELL, LONDON W72QA

Tel: 01-571 5770



£165

Britain class engine. Three port. Complete with ignition, carburettor, flex and silencer.

£185

National and international class engine. TT ported (standard engine)

£285

National and international class engine. TT ported (factory selected)

A factory selected engine that has been modified and run-in comes complete with carburettor and Motoplat (available on special order only)

McCulloch 91, 92 and 93 spares in stock McCulloch 93 engines £159

REPAIR SERVICE INCLUDING: REBORING - CRANK ALIGNMENT - REBUILDS TUNING - DYNO-TESTING

TKMotors

Trade and Retail

Telephone

01-508 3858



for details of the superb

ROY

Race Prepared Engines

All 100cc Engine Repairs & Tuning Carburettor Repairs

1st East Anglian Championships Beccles RM SS20 1st Guernsey Hill Climb New Track Record RM SS20 1st Jersey Hill Climb RM SS20 4th Green Man Championship Shennington RM SS20

FOR SALE

Tyres Bridgestones, Dunlops, Goodyear, Carlisles on rims Rain Tyres (3 sets) 2 fully tuned TT.SS.20's Roy Mailer's own personal engines.

20 GREENSTED ROAD LOUGHTON **ESSEX**



TEAM! **TEMPEST**

(soon to be Team Tabor)

100 BRITAIN **SPECIALIST**

Clubman racing at its best where driver ability and Kart preparation are of more importance than the depth of your pocket.

S.W. England Distributor for:-

KESTREL Karts & TALASAN insurance (Karts in Kit form or Ready to Race, always in stock)

Agent for **DAP** motors (T70 from stock)

Stockist of Bardahl, Carlisle, Griffin, Motorcraft and Regina, plus all your class requirements (check our prices)

Part Exchange facility - superb deals available Secondhand outfits always in stock

Team Support Vehicle at all S.W. England races (we carry complete spares for Kestrel and DAP)

> 323 Chickerell Road, Weymouth, Dorset Phone (03057) 74074 or 71117



The end of Mike Wilson's Championship aspirations after only one lap of the first final. Schurman is still going straight ahead, and launches Wilson's Birel into the air. Pit talk later put the incident down to "revenge" on Schurman's part for an incident at the Kalmar Team Championship meeting . . . (Photo: Romy)

Wilson, sitting on pole could perhaps glimpse the description belonged to his compatriot, the World Championship, and indeed at this stage he was the red hot favourite. On his performance in the morning, he seemed to have that vital few tenths of a second better lap times than the remainder of the first 3 rows.

The major threat seemed likely to come from the outside of the fourth row, where da Silva sat, his ability to finish the heat after the crash with Fullerton finding him four rows better off than the fast bunch who had each recorded one D.N.F. - Allen, Smart, and Fors-

The start would be critical. If Wilson could get clear, and with a "buffer" group to delay da Silva, he would be half way to taking Britain's second World Championship. First time around, surprisingly, the starter let them go - but once more the outside row had the advantage, and it was the Dutchman de Bruyn who slid into the first right hander in front of Wilson and Schur-

De Bruyn has in the past rather unjustly been labelled a "dirty" driver, but on this day,

Schurman. They whined down the straight to complete lap 1, and as Wilson explored the line inside de Bruyn but pulled back in behind, Schurman hurled his machine inside Wilson. braking impossibly late and slewing head-on into the side of the Englishman's Birel. In an instant, Wilson's title chances were

gone, buried in the straw bales. As Schurman teetered round the outside of the corner. Sugaya and da Silva slipped past to slot in behind de Bruyn.

Around the infield da Silva sliced inside Sugava and the crowd went mad. In the absence of a Portuguese contender, the Brazilian was their man and his every move was cheered thunderously.

Round they came - de Bruyn, da Silva, Sugava, Schurmann, Koene, Giugni. Back in the midfield, Smart was driving his heart out, leading Allen and Spencer in a regular climb up the placings. Even further back, Fullerton was lapping faster than the leaders, insolently picking off kart after kart in another never-say-die

The stands erupted as da Silva burst past de Bruyn, right hand as ever continuously patting

the carburettor intake. He flicked into the endof-straight right hander, seemingly content to hold a marginal gap and nurse his engine as much as possible. Schurman was back in 7th another lunatic lunge, this time at Sugava, having failed. He displaced Nielsen, who promptly seized and joined Guedel in the "dead kart park" at the end of the straight.

Lap 9, half distance, and the leading foursome were nose to tail. Bisquert had briefly held 7th, but joined the now congested "kart park" with a broken rod. Mickey now held that position with Smart in behind and a small gap to Spencer. Out of the bunch behind Spencer burst Fullerton, up to an incredible 10th, with half the race to go!

Speculation stopped immediately though, as a few vards further on the piston in Fullerton's engine disintegrated. Smart hadn't completed the lap - another BM piston pin gone. Could Allen do anything? No - unbeknown to onlookers, a top ring had gone and he struggled. down on power to maintain the gap back to Spencer.

Attention switched back to the front, as de Bruyn slipped neatly past to lead. Koene was now looking to move, and on consecutive laps outbraked Sugaya and then da Silva. The latter's engine appeared to be going off a little (a post race check revealed that the crankshaft stuffer plates had expanded just enough to rub on the crank-cases) and he slipped slowly back.

Schurman nearly took him off as he shouldered his way back past into third, and the Brazilian was finally demoted to fifth by Sugaya. Allen struggled gamely, but could not prevent Carvalho and a late-charging Forsmann from slipping past.

1st	Peter de Bruyn	Hutless/Par
2nd	Peter Koene	DAP/DAP
3rd	Harm Schurmann	Dino/Parilla
4th	Yasutoshi Sugaya	Sugaya/Pari
5th	Ayerton da Silva	DAP/DAP
6th	Roberto Giugni	Birel/Parilla
7th	Mario Carvalho	Hutless/Siri
8th	Lars Forsmann	Birel/Parilla
9th	Mickey Allen	Sprint/Sirio
10th	Doug Spencer	Sprint/Sirio

26th Terry Fullerton 27th Martin Smart

Zip/BM

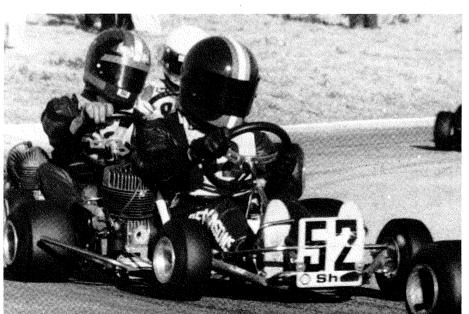
Birel/Parilla

Fullerton/DAP

18th Mike Wilson

Doug Spencer was a revelation. After a bad timed practice, race day produced the best performances of his life - more than answering those who felt he was lucky to be in the team. Behind







Before the second final, the Dutch Manager gave front row pair Koene (left) and de Bruyn a good talking to!

continued...

Second Final

three places as they lined up:

Koene de Bruyn Sugaya Schurman Giugni da Silva Carvalho Forsmann Spencer Allen Muller Boulineau Hunter Demoulin Haase Wilson Raphanel Filho Jans Neubert van Ommer Beule Husum Fullerton Olivieri Bisquert Nielsen Guedel Ravaglia Zoserl Defontaines Modena

As this grid reflects the finishing order of the first final, some interesting performances can be seen. Allen and Spencer were now within reach of the leading bunch. Australian Hunter, already his nation's best performer ever by merely being in the final, sat on the 7th row with his amazing if unfashionable Komet K80.

With only two finals counting, de Bruyn now held the aces - a win here would seal it up, and so predictably he made sure of the start and led determinedly into the first corner. At the rear of the field, Zoserl's diabolical weekend continued as he spun avoiding an inverted Raphanel,

Round they came - de Bruyn, Koene, Schurman, Sugaya, da Silva, Forsmann and Allen. The snake wound its way around twice more before da Silva forged past Sugaya and then surprised Schurman so much that he let Forsmann through as well.

As the Dutchman pushed his way back past Forsmann on the next lap, Allen's chances ended with the kart parked on the straight with the big end gone.

The leading trio - de Bruyn, Koene and da Silva - now had a margin over Schurman and Forsmann, whilst Carvalho was entering the final, but the unlucky Dutchman's chain broke . . .

picture for the first time, passing Sugaya for 6th. But the fastest man on the track was undoubtedly Wilson. Shrugging off the disappointment of the first final, he was running hot, pouring past Spencer into 9th.

Da Silva was now second, which became first as a shattered de Bruvn coasted to halt -What a turnup! - Dutchmen holding the first his drive chain broken. Koene gathered himself and as da Silva braked fractionally late at the end of the straight, struggling for front end grip, he slipped neatly past.

After another determined climb, up to 12th, Fullerton walked away from his fourth seize of the day . . . Spencer's supporters were in raptures as he overcame Giugni to move into 8th what a first-time showing! Smart was steadily plugging away at the bunch, but England's main hope was again Wilson, now in sixth, but having problems with Forsmann. In front of them, little Carvalho was exhibiting similar flair to compatriot da Silva as he fought on for 4th.

And that is how they finished, despite another of Schurman's frightening lunges at da

DAP/DAP

1st Peter Koene

2nd Averton da Silva DAP/DAP 3rd Harm Schurman Dino/Parilla 4th Mario Carvalho Hutless/Sirio Birel/Parilla 5th Lars Forsmann 6th Mike Wilson Birel/Parilla

De Bruyn seemed to be on his way to the title as he led Koene in the early laps of the second

7th Yasutoshi Sugaya Sugaya/Parilla Doug Spencer Sprint/Sirio Roberto Giugni Birel/Parilla 9th 10th Cathy Muller Hutless/Parilla 13th Martin Smart Zip/BM 28th Mickey Allen Sprint/Sirio

Fullerton/DAP

30th Terry Fullerton

So this was to be one of those rare occassions when the title would go the the third final. With a win and a second, Koene obviously held the upper hand, although de Bruyn could win by winning the third final - difficult from the seventh row of the grid, which is made up according to aggregate results of the first two

If da Silva won, then counting two finals he would tie with Koene, and it was here that the confusion started. Most seemed to think that the tie would be split by counting the third final - therefore da Silva could only win if Koene finished below fifth. However the few with complete knowledge of the system knew this to be wrong and that in fact the finishing order of the morning heats would break a tie in Koene's favour.

So in reality, da Silva could not win any way and de Bruyn was the only one who could beat pole man Koene. Koene knew all this, and Angelo Parrilla may well have but certainly da Silva and his crew did not. He lined up still thinking that there was a chance, if he won the remaining final:

Schurman Koene da Silva Sugaya Forsmann Carvalho Spencer Giuani Muller Wilson Hunter Haase de Bruyn Demollin van Ommei Roulineau Smart Filho Neubert Jans Beule Guedel Olivieri Raphanel Husum Bisquert Defontaines Ravaglia Modena Fullerton Zoserl Nielsen

The delay between finals had been interminable and it was in the gloom of oncoming evening that the field rolled round to the start line.

Da Silva had changed carburettors and there was panic as his engine refused to clear on this half lap run around to line up on the main straight. The kart was whisked off the grid for



Here we are at the end of another Superkart season which in many ways has been one of the most memorable yet. Superkarts really seemed part in this

Racing Show for bikes and karts on December allowed and heats and finals will be over some-7th-10th at Alexandra Palace. I am sure this will help to show many more motorcycle fans what karting is all about. At least five kart States. stands will be exhibiting, showing a complete range of equipment from 100cc to Superkarts. On the Zip stand we will also have the latest thing in pit bikes. This is a beautifully made miniature Yamaha racing bike that is small enough to fit in the boot of any car, weighs only about 13 kilos, is automatic and suitable for children from 5-60 years! In fact in Japan after the various race meetings, they then run another race for all the competitors or mechanics who have these "pocket racers" (as they are called) around the same circuit. Could be fun – but I can't imagine the R.A.C. letting us get away with that somehow!

Well, what does 1980 hold for us? It would appear that there could be some really good venues coming up at home and abroad. There are rumours that there are to be race meetings for Superkarts at Zandvoort in Holland, Hockenheim in Germany and definitely Folembray in France. In fact on the 23rd and 24th October, as this issue goes to press, several of our Superkart drivers will be competing in a "demonstration" for French television, which it is hoped will really lift things off the ground in a big way. I would imagine that at these Continental meetings good prize money or even start money could be expected, which will certainly be appreciated by everyone.

NOW AVAILABLE! □ □

KART AND T-SHIRTS

All t-shirts complete with coloured neck and arm trim

(except size 32)

The Daytona meeting is definitely on and the dates are the 27th, 28th, 29th and 30th December. It appears that the meeting will be to come of age. The kart demonstration at the run on a European type system, with heats in Formula 1 Grand Prix obviously played a large the afternoons of 27th, 28th, 29th and a final on the 30th with practice each morning. It also Don't forget we now have the London appears that only normal petrol/oil mix will be thing like 10-15 laps rather than the normal type of one hour enduro events common in the

Now for the bad news. It looks as though ton in 1980, due to an incredible increase in track hire charges. It means the entry fee would normal excellent standard of trophies and cash awards associated with this venue. We will know definitely during the next month whether there are to be any Donington meetings or not. I am trying to get a sponsor for at least one, as this circuit is one of the finest in the country for karts and spectators and it would be a shame to lose it. We will just have to keep our fingers crossed.

back at Snetterton at least twice next year. Previous entries at Snetterton never seemed to reach the same proportions as other circuits, comparable. which I really cannot understand - it is a very fast and demanding circuit with very good facilities as far as restaurant, bar! and toilet are people who used them at Cadwell last month, concerned. The big problem is obviously its myself included, were certainly very impressed geographical position, making it certainly not with the vision available, apart from the mean the easiest circuit to get to. But with Peter psychological advantage it gives you! Carter and Ian Rushforth running it with the support of Beccles and District Kart Club, you After the excellent performances put up by can be assured of a well run meeting with Messrs Ball, Fish and Smith at the Cadwell excellent awards.

Small, Medium, Large in Red

32 (Kids), Small, Medium in Blue

£2.50 + VAT

Send £3 per shirt to include

VAT and postage

What changes are going to be appearing on the equipment front for 1980? There are various new products that will probably be adopted by many during the coming season. I am sure that the ground-effect floor trays will become standard equipment for most people and when things get under way again in February, I think we can expect to see more of the new types of bodywork on offer, similar to that of my own ground-effect kart and the kart currently being run by Butty. With the professional approach in karting always increasing, which results in karts being prepared and equipped to a far higher standard, the kart "trolley" for 250s could also be a common sight in the pits, as many of the long circuits have pits more suited to an army assault course, which often damage floor travs and fairings, not to mention those sharp stones that can stick in the tyres!

On the kart scene, Zip will be producing two 250 models, one being the standard 250 Shadow 1980, the other being a Shadow GP. The latter is aimed at the driver who wants the ultimate in a 250 kart. The basic chassis will be similar to that of the Shadow 250 but the kart will only be supplied complete with fairings, side tank, wing, and ground effect tray and the majority of the components will be produced in highly specialised materials, hand finished and selected. There will also be a few changes on we may well not have any meetings at Doning- rear axle set up. However, it is planned that all the changes and new equipment will also be able to be fitted to the standard model, which have to be something like £25 per driver and we means that if people cannot afford the GP would require a minimum of 280 entries to model they can update their Shadow gradually make it break even if we were to maintain the to the same specification. The aim is to produce two karts with the same handling characteristics to suit the depth of your pocket. The Shadow being the equivalent, for examples sake, to a "Granada" with the shadow GP being equivalent to a "Granada Ghia"!

I am sure we will see other manufacturers taking a similar line. However, karts built to these standards and with the type of standard equipment previously mentioned, are certainly On the brighter side, we will, in fact, be not going to be cheap. But remember, the cost of Superkarting is still only a fraction of any other form of motor sport where lap times are

> It also looks like 1980 may be the year of the "Star Wars" Simpson helmet. The four

> meeting, I have decided not to give any more fine preparation tips this month - it is getting too tough to keep up there at the moment! No, in all seriousness, we will fit in another feature on that subject next month. Besides, I am sure the above mentioned drivers really do not need any tips from me . . .

> I should be back next month hopefully, although I have been invited to a dinner and dance by Banff and Moray Kart Club up there in Aberdeenshire. Last time I was in that neck of the woods at a similar function it took me about three months to recover . . . I am still a bit under the weather, having just returned from another one of those memorable Denmark trips, so ably arranged by Bert Hesketh, but more about that next month!

With the new season now approaching, many people will be trying to obtain sponsorship for next season. This is the time of the year when 1980 budgets are decided, so don't delay, write today!

Martin

Kart and Superkart

November

45

GOFF KARTS

Red Arrow	Fun Kart	£195
Ambassador	Class 1 Britain and Jnr Britain	£215
Corniche	Jnr Nat,100 Nat and Int	£295
Mustang	125, 210 and 250	£365

This superb range of quality racing karts are fully assembled with tyres and tubes.

GOODYEAR - BRIDGESTONE - CARLISLE - BARDAHL - SHELL -CASTROL - AGV - GRIFFIN - BELL - D.I.D. - REGINA -LEATHERS - PVC SUITS - BOOTS - STANDS - TROLLEYS.

Main Agents for Zip, Dap, TKM, Parilla, Manx, Yamaha, McCulloch, Kawasaki, Aspes, Suzuki and Bultaco



New and secondhand engines available. A large selection of kart and engine spares in stock. Roger Goff engine tuning and repair service for success.

> **5 Pear Tree View** Elstow, Bedford Telephone: Bedford 66549



KM FF99 Britain - £165

DUNLOP

Pole Position Karting



GOOD YEAR BRITAIN'S LARGEST STOCKIST OF NEW AND USED KARTS CARLISLE TYRES

037 08 3231 - 8 am-8 pm Mon.-Fri.

PARILLA Tillotson Motoplat

EQUIPMENT

We carry a good selection of bumpers, columns, track rods and stub axles for most

SIRIO

SPRINT

All karts are factory assembled c/w engine mount number plates, chain guard – ex. tyres. Part-exchange welcome.

£340.00 £415.00

Number plates – all colours

"The best from Italy"

104cm National 106cm International

"The best from Britain' 104cm National 106cm International

Available in 2 or 3 bearing.

RYNESS. ESSEX

ENGINES
We offer the following range of engines to suit all classes, as either bare units or complete with motoplat and carb, or as fully tuned motors.

DAP - PARILLA - KOMET - TKM ENGINE

ANCILLARIES	
Fine pitch engine sprocket	£3.50
Motoplat Ignition	38.00
Tillotson HL 317A	14.00
Tillotson HL 317A Bored 25/26/27	18.00
Tillotson HL 317A Bored and runed	24.00
state short or long circuit when orde	ring
Alloy finger guard	3.50
8-9-10 tooth engine sprockets	3.00
Rotary valve cover angled,	
Komet/Parilla	7.50
Rotary valve	3.50
Coil bracket	1.00
Plastic finger/chain guard	2.00
Plastic finger guard	1.25
Tilloteon/Dellorto filtor	1 00

HELMETS AND

Racing suits, simulated leather Racing suits, leather (made to r	neasure)
	£90.00
Gloves, simulated leather £4.50	
Wet suits	£14.00
Griffin Clubman BS 2495	38.00
Balaclava	4.00
ROLLING STOC	K

ROLL	ING STOCK		JA
Key steel 15" Spun Alloy Rims		.50 per half	Ca En
Front 4" dia. Front 5" dia.	2/50 2/50 2½/63	2.00 2.00 2.25	Ba NG Mc
Rear 5" dia.	3/75 2/50 2½/63	2.50 2.00 2.25	Plu T t
Cast alloy rims -	3/75 4/100 - Machined true –	2.50 2.75	T i

52 S I. A	NDREWS	ROAD,	SHOEBUR
extra strong	ins/mm	per half	Sprocket Puller
Front 5" dia.	1≩/45	3.00	Regina Chain per
	21/8/54	3.00	
Rear 5" dia.	2½/54	3.00	
	3/75	3.25	ENGI
	3½/89	3.50	FOR Parilla SS20
	4/100	4.00	TG14 and Komet

FIORES dia.	14/45	3.00	Regina Ch
	21/8/54	3.00	•
Rear 5" dia.	2½/54	3.00	
	3/75	3.25	E
	3½/89	3.50	FOR Parilla
	4/100	4.00	TG14 and
Dunlop Special Nova plastic rims	110mm	4.50	K77
riova plastic fillia	350	2.20	Liners 3 po
	450		Liners TT
	600	2.25	6024 FAG
		2.50	6024 Gern
Front hubs for 4'		plete with	Gudgeon p
bearings 15mm	or *′′		Circlip
Nylon		3.50	Gaskets
Alloy		5.50	Vevey sile
Magnesium elect		6.50	Exhaust be
Hub bearings 15	/17mm	2.50	Exhaust fle
			Crankshaft
Rear Hubs for 5'			Big end ca
6mm or ¼ key .		4.50	Connecting
Magnesium elect	tron	6.50	Connecting
Axle, in high tens	sile steel, precisio	on around	Rotary val
finish at 25mm o	r 1" with 6mm o	ਸ ₹" kev.	Rotary valv
		8.50	Rolfe oil se
Axle, from stock	bar. 40"	6.25	TIONE ON SE
Axle bearings 25			
bolt hangers		3.50	
Axle bearings 30	mm	4.50	
Alloy sprockets i			
tional Caracialistic	ii Ancian andy k	J IIIICITIA-	Alloy sprod

OIL – TOOLS – CHAIN PLUGS	-
JAP HTM 219 per metre	£5.50
Castol R30-R40 1 litre	1.30
Endurol 30 or 40 grade ½ litre	0.66
Bardahl 1 quart	1.50
NGK B8/9/10EV	1.75
Motorcraft AG 603/403	0.75
Plug Holders	0.15
T bar sockets 10mm	3.50
T bar sockets 13mm	5.50
T bar Allen Keys 3/4/5mm	2.50
T bar Allen Keys 6/8mm	2.75
Motoplat Puller	2.20

IAME	
ENGINE SPARES	
FOR Parilla SS20 - TT22 - TT23	
TG14 and Komet K88 - K88TT -	
K77 Linere 2 port	26
Liners 3 port Liners TT	26 29
6024 FAG main bearings	2
6024 German fibre cage	2 7
Gudgeon pin (lightened)	2.
Circlip Gaskets	. 0
Vevey silencer	13
Exhaust bend	
Exhaust flex	6 2 2 3
Crankshaft pin	2
Big end cage and rolers (super) Connecting rod	13
Connecting rod Super	20
Rotary valve (SS20)	3
Rotary valve (TT23)	4
Rolfe oil seals	0
ALLOY AND	
MAGNESIUM	

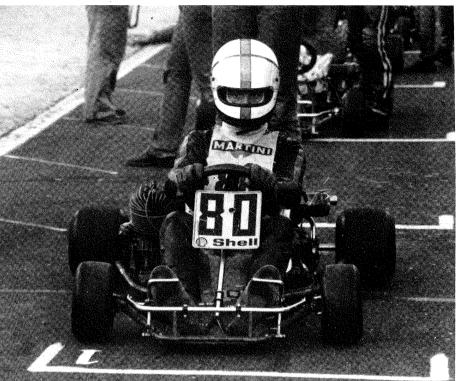
ACCESSORIES



USED KARTS AND ENGINES We have an ever changing selection of secondhand engines and karts, all stripped, rebuilt and guaranteed, inc. coded tyres. E.g. Zip 78 GT Sprint RS (1977) Sirio 104 (July 1978)

£175 00 bored carb.
SS 20, 3p, tuned, 48.0, motoplat and bored £250.00

Mail order immediate service Just phone giving us your Access or Barclaycard **ENGINE TUNING** – No. for same day despatch. **REBUILDING - BORING FACILITIES**



The pressure and concentration shows in Koene's eves as he awaits the start of the third final.



Peter Koene - 1979 World Champion.

a rapid carb change, whilst C.I.K. head Mr

of Forsmann to move into fifth.

the same time.

off the last laps, crossing the line job?!... ion, thinking he had won. Koene for a while there was confusion.

DAP/DAP

Dino/Parilla

Birel/Parilla

Birel/Parilla

DAP/DAP

Sprint/Sirio

Komet K80

Birel/Parilla

Sprint/Sirio

All Kart/Parilla

Sprint/

Zip/BM

Sugaya/Parilla

	WILL	spencer and frunce
	da Silva r	eeled off the last la
	in utter j	ubilation, thinking
40	finished,	both arms raised, fa
	had won,	, and for a while th
	1 st	Ayerton da Silva
4	2nd	Harm Schurman
	3rd	Mike Wilson
	4th	Lars Forsmann
	5th	Yasutoshi Sugaya
	6th	Peter Koene
	7th	Doug Spencer
	8th	Robert Hunter
		,
	9th	Dany Demollin
	10th	Roberto Giugni
000000000000000000000000000000000000000		

26th Mickey Allen

15th Martin Smart

Buser held the field. (Starting in Portugal without the Brazilian would have been akin to going without Goldstein in Belgium, and 12,000 screaming Portuguese could be nasty! . . .) A great cheer rose as da Silva's machine was rushed back to the grid and the rolling lap

Koene had no need to lead and offered no resistance as Schurman and Sugaya, and then da Silva demoted him to fourth on the opening lap. The foursome pressed on, nose-to-tail until lap 3, when simultaneously, as the signal went out to Koene that de Bruyn had stopped on the far side of the track, da Silva burst past Schurman and proceeded to pull away in an extrovert display of instinctive, skilful, ten-tenths motoring. The crowd loved it - da Silva himself must have been able to hear the racket as they cheered themselves hoarse.

Carvalho led the rest, in fifth, ahead of Forsmann and the sensational Spencer. Wilson was again moving through rapidly and after demoting Spencer on lap 7, drove around the outside

Allen meanwhile, was on Spencer's tail, but his engine went a lap or so later. Wilson and ding the da Silva camp must have raised doubts in Koene's mind and it was not until he asked Angelo Parrilla "who is Champion?" that the position was confirmed. No one would have wished the moment on

With night now falling rapidly, the joy surroun-

da Silva when he was told that in fact he had not won - the grief on his Brazilian mechanic's face was sad to see.

For Angelo and Achilla Parrilla, though, it was the realisation of their dreams - a 1-2 World Championship victory, both for their engines and karts, repaying the faith they had in themselves when they started up business in opposition to the might of Mr Grana and

Bits and Pieces

• The Koene family have been contesting the World Championship for several years, but invariably both brothers have become involved in frightening accidents from time to time. But this year's Peter Koene is certainly not so impulsive.

Veteran (?) campaigner Leif Larssen summed it up admirably, when congratulating the new Champion - "... this time you drive round me, not over the top! . . .

- Learning from the incident at Jesolo when Mickey Allen's tyre valves were torn out after contact with another kart, Tim Gillard had prepared all the wheels using ultra-short, all metal tubeless valves.
- Forsmann were now on Koene's tail and the Toni Zoserl's wretched run may have been majority, who were assuming the wrong tie slightly compensated for by the delightful breaker system, went crazy as both slid past at masseuse who "operated" on the Austrian between races. Could his problems have While Spencer and Hunter duelled furiously, stemmed from not having his mind fully on the
 - arms raised, fairly certain that he Irishman Daly, via his brother Derek, via Eddy Cheever, had arranged that a "factory" engine would be available for him. A Parilla was obtained, but it proved a second a lap slower than his own Sirio . . .
 - Guedel's "Speed Kart" appears in fact to be a modified Swiss Hutless.
 - Quote of the meeting? The scene: 8.15am on Saturday morning, on the grid for the first Championship heat. Fullerton lines up on the front row alongside Japanese Sugaya. Says Terry, "I'm not worried about him - he'll probably be blinded by the Rising Sun!! . . . "

NEXT MONTH: "Pudney's Portuguese Pictorial", or John's Holiday Snaps! . . .

Einel Besult 1979 World Championship

Final Result - 19/9 World Championshi				
Place				Points
1st	Peter Koene	(NL)	DAP/DAP	2
2nd	Ayerton da Silva	(BR)	DAP/DAP	2
3rd	Harm Schurman	(NL)	Dino/Parilla	2 5
4th	Mike Wilson	(GB)	Birel/Parilla	9
5th	Yasutoshi Sugaya	(J)	Sugaya/Parilla	9
6th	Lars Forsmann	(S)	Birel/Parilla	9
7th	Mario Carvalho	(BR)	Hutless/Sirio	11
8th	Roberto Giugni	(I)	Birel/Parilla	15
9th	Doug Spencer	(GB)	Sprint/Sirio	15
10th	Robert Hunter	(AUS)	Sprint/K80	20
11th	Cathy Muller	(F)	Hutless/Parilla	21
12th	Danny Demollin	(B)	All Kart/Parilla	- 24
13th	Heinz Frei	(CH)	Hutless/BM	. 25
14th	Jorn Hasse	(DK)	Dino/Parilla	27
15th	Martin Smart	(GB)	Zip/BM	28
20th	Mickey Allen	(GB)	Sprint/Sirio	35
32nd	Terry Fullerton	(GB)	Fullerton/DAP	56
58th	Martin Homewood	(GB)	Birel/Parilla	
1			· ·	



We carry a comprehensive range of spares for YD, RO, DX, TO and TZ model Yamaha engines, and also offer a complete



	tuning and preparation service.		
TD3 barrel £82.41	TZ big-end bearing £ 5.80	RD/DX drive sprocket	
TD3 cylinder head £19.12	RD/DX outer mains £ 3.97	23T £ 5.50	
TZ piston 96, 97 & 98 . £10.06	RD/DX centre mains £ 4.17	Lightened drive	
TD3 pistons 97, 98, 99 £ 7.50	RD/DX labyrinth seal . £ 3.65	sprocket £ 6.75	Clutch conversion kit
TZ piston ring £ 3.79	TZ outer mains £16.18	Right hand gearchange* £ 9.00	modified drum with
	Drive side oil seal £ 1.57	Rev counter mounting	TZ n/r bearing (ex-
TZ small end bearing £ 1.45	Ign side oil seal £ 1.44	for Zip or Barlotti £ 4.00	change) £12.50
Cyl base gasket avail-	Clutch/ignition case	TZ rev counter £27.88	RD or DX clutch case
able 10, 15 or 30 thou . 25p	Allen screw kit £ 1.92	Extra long r/c cable £ 4.00	gasket £ 1.38
TZ carb mount	Femsa ignition £94.00	GBRD exhaust	Latest alloy backed DX
36/38 mm £ 5.85	Femsa mounting (mag) £ 6.75	system £84.00	clutch plates £ 4.37
TZ carb mount 34 mm £ 5.04	Set Femsa mounting	Oil/p kick/s blanking	TZ/DX clutch springs 27p
TZ carb spacer £ 3.32	bolts 50p	plug kit £ 1.00	NEW latest H section
TZ rod assembly £22.24	Ignition cover plate £ 2.00	Exchange crankshaft £77.42	rod kits £26.13
DUDGESS VAMAHA: Speci	fication includes tuned harrels a	nd heads latest TZ rods TZ clu	tch centre bearing. Femsa

ignition on magnesium mounting GBRD exhausts and Amal carbs

210 * * * UPTON AND VILLIERS * * *

NEW:-TKM SINGLE RING DOMED TOP PISTONS COMPLETE

Sizes 59mm, 59.25, 59.50, 59.75, 60mm, 60.25, 60.50, 60.80 complete with rings, etc. - £13.00. Spare ring £2.85

UPTON SUPER MANX 210 £300 SUPER MANX BARREL KIT £85

£85	Renolds racing primary	Spindle £	9.87
	chain £ 3.75	Pawl spring	14p
Crankcase gasket 12p	Intermediate plate 57p	15T final drive sprocket £	
Timing cases £12.50	Back plate £ 2.73		
Clutch side oil seal 65p	Pressure plate £ 1.05	17T final drive sprocket \mathbf{f}	2.65
Ignition side oil seal 65p	Cap nut £ 1.35	18T final drive sprocket f	3.19
Alpha rod assembly £15.95*			
Upton rod assembly £18.50*			
Inner clutch case 11E . £ 2.50	Clutch spring 9 type 10p	Burgess 85 exhaust	
	Gearbox pawls pair 40p	system £2	25.00
Gearbox casing £ 5.00	Ratchet £11.45	* EXCHANGE	
ned 9F type crank cases fitted p	olished stuffers	£3	31.69
	Pulse adaptor	Pulse adaptor	Crankcase gasket

We carry a large stock of Upton and Villiers spares from the smallest nut to a complete engine, we also have many good used spares, our catalogue gives a complete guide to the 210 equipment that we stock.

See our separate advert for details of the superb Dino 250 and 100 Super and Dino International karts.

MIIIM I				TYRE GAUGES
Karts and Spares		TOOLS		Masta tyre gauge as used by leading teams . £10.75
Euro 79	£250	Villiers clutch locking		Lynx tyre temp gauge . £69.00
Shadow 79GT	£380	tool bronze £ 1		TYRES
Shadow 79SE	£415	Villiers 4 prong spanner		Ger Goodyears
Shadow 125	£490	Villiers clutch drum		11-600 × 5, £12.50
Shadow 210	£490	locking/holding tool £ 1	1.45	Ger Goodyears
Shadow 250	£530	¼ drive metric socket		11-450 x 5 £12.20
Shadow 250		set 4-12 mm £ 7	7.50	Bridgestone 11-460 x 5 £20.50
All karts supplied with	turas	T-bar Allen keys 5/6/8. £ 2	2.00	Bridgestone 11-700 x 5 £21.80
A comprehensive range of		T-bar sockets 6&13 mm £ 4	4.50	Tubeless valves
spares from stock.	n Zip	Motoplat puller £ 2	2.00	(ex short) 50p
spares from stock.		Femsa puller £ 2		WHEELS
CARBS AND PUMPS		Dial gauge £12	2.50	Spun alloy 5"x4" £ 3.00
Amal Mk 2 34 mm f	30.39	Dial gauge extension £ :	2.50	Spun alloy 5"x3" £ 2.75
Amal Mk 2 36 mm f		* -		Spun alloy 5"x2½" £ 2.50
Amai wk 2 do min	.00.00	THE PROPERTY OF A		

Villiers 4 prong spanner 75p	
Villiers clutch drum	11-600 × 5, £12.50
locking/holding tool £ 1.45	Ger Goodyears
¼ drive metric socket	11-450 x 5 £ 12.20
set 4-12 mm £ 7.50	Bridgestone 11-460 x 5 £20.50
T-bar Allen keys 5/6/8 . £ 2.00	Bridgestone 11-700 x 5 £21.80
T-bar sockets 6&13 mm £ 4.50	Tubeless valves
Motoplat puller £ 2.00	(ex short) 50p
Femsa puller £ 2.50	WHEELS
Dial gauge £12.50	Spun alloy 5"x4" £ 3.00
Dial gauge extension £ 2.50	Spun alloy 5"x3" £ 2.75
Didi gaago oxtonoion	Spun alloy 5"x2½" £ 2.50
WINGS, FAIRINGS, etc.	Spun alloy 5"x2" £ 2.25
Rear wing £32.00	Zip die cast 5"x4" £ 3.00
Rear wing fitting kit	Zip die cast 5 'x3'' £ 2.75
	Zip die cast 5 'x2'' £ 2.75
(Zip) £27.00	
Side tank £22.00	When ordering wheels state
Side tank carrier £12.50	class 1 or 4 wheels and inner
Front fairing £15.00	or outer rim, also available
Fairing mounting £12.50	the Dino Super rims.

SPECIAL OFFERS

O O	
Motocraft AG403/603	
plugs, box of 10	£6.50
Champion N54R/N57R/	
N60R plugs, box of 10	£7.50
NGK B8EV / B9EV /	
B10EV plugs, box of 4	£6.08
Spark plug cleaner works	o= =0
off 12V car battery	£5.50
Leather kart boots sizes	ee 00
6 and 7 only, per pair Villiers exhaust front	10.UU
bends	£1 E0
Villiers base gaskets, pack	L1.50
of 10	80p
0, 10	OOP
VARIOUS	

VAIIIOOU		
Rubber plug cap		50p
Clutch/brake cable	£	1.10
Throttle cable	£	1.10
Exhaust front springs .		25p
1" stepped axle	£	9.00
25 mm blunt end axle .	£	9.00
Kart stands	£1	2.50
Cotton Balaclavas	£	2.32
Gloves from	£	3.96
II I Doublett attacks	. 1 .	

Our stock includes in addition to above spares for Komet, Parilla, Bultaco, Castrol, Shell and Bardahl oils, axles and bearings, seats and floor trays, steering wheels, alloy and mag hubs and sprocket carriers, etc., etc.

ENGINE TUNING AND PREPARATION

We offer a complete engine preparation service from tuning to barrel boring and crankshaft overhauls, chassis repairs, complete kart and engine preparation.

18

Mikuni 38 mm power

Rear axle cam 1" or

Pressure regulator . . . £12.50

AC axle pump £10.00 AC axle pump fitted

bearing to reduce wear . £12.50

VAT. Securicor next day delivery service £3.00.

*Send 25p for 1979 spares catalogue

BURGESS **RACING** DEVELOPMENTS *ALL PRICES PLUS CARRIAGE AND VAT*

Cash with order, C.O.D. or phone or write your Access or Barclaycard number; all prices are subject to carriage and

*Our trade van will be at all major class 4 meetings.

210 Philip Lane, Tottenham, London N15 4HH Tel: 01-801 7402 Hours Mon.—Fri. 9-6 Sat. 9-4 Late night Thursday 7-9

•24-hour Ansaphone Service

Worldwide Export Service





MARK TREDWELL KARTING LTD.

119, MASONS HILL, BROMLEY, KENT.

Telephone: 01-460 0489

-6.00p.m.

Telex: 896410

Carlisles and German Goodyears available bearing RAC approved code mark where appropriate.

> Zip Agents All parts and accessories

Engines - wheels - tyres -carbs-chains

-boots-helmets-suits - gloves - tools - chain lube

Mail Order C.O.D. Service





MAIN DISTRIBUTORS FOR SHELL RACING OILS



DISTRIBUTORS FOR TKM MOTORS & SPARES

For all your karting needs, consult the people who

know what it takes to win

diate delivery of this excellent motor.

Now available - new TKM pistons for 210 National, single ring, domed top. Eight sizes from 59mm-60.8mm - £13.00 plus VAT. 210 SPECIALIST PETER HAYWOOD

TKM MOTORS EX STOCK *TKM FF99 Sport including carb, and C.E.V. ignition £165
*TKM FF99 Sport including HL310 carb. and motoplat £185
*TKM FF99 Sport including HL317 carb. and motoplat ... £195 Goff Corniche as new
*TKM FF99 Sport miciding RLS17 calls and motoplat ... £195 Goff Corniche as new
*TKM FF99 Sport miciding RLS17 calls and the sport and sport miciding RLS17 calls and the sport motoplate ... £185 Sprint 250 c/w Bridgestones, wing, *TKM FF99TT factory selected less carb. and

Simon Wright modified TKMs

November

Stage 1, 2 and 3 plus team replicas, short delivery. Specialist in tuning, servicing and repairing all Class I

MAIN AGENTS FOR

Spares for DAP, Parilla, Komet, BM and Sirio. Large selection of used motors and karts.

Trade. Export & Retail enquiries invited for imme- James Hoy's Sprint Rotax 125, complete with spare barrel, exhaust and El carb £1000 Sprint RS Class 1 chassis £175 Barlotti 210, drum brake, good condition £160

Join the front runners with PH tuned engines. New motors plus all Upton goodies, Motiv exhaust systems, Omega pistons.
FOR ALL YOUR VILLIERS REQUIREMENTS

RING PETER HAYWOOD. CHASSIS Sprint 250 c/w Bridgestones, wing, fairing, side tank. Immaculate condition £450.00

Sprint RS104, RS106 and RS210 in stock.

Several used workshop prepared Class One motors from £95.00
Two only, used 210 motors From £200.00

Sirio ST5TT standard. Complete £375 (incl. VAT) All prices plus VAT except where mentioned.

Closed all day

SPRINT AND ZIP KARTS late night Thursday (8 pm).

More and more people are turning to Simon Wright TKMs









Kart and Superkart



We welcome your letters on any topic to do with karting. Post to: Kart & Superkart (Letters), Pindar Road, Hoddesdon, Herts. Letters must have name and address of sender, whether or not this is to be published. Opinions expressed in letters are not necessarily those of the Editor.

Dear Sir,

I have today been totally shocked at the apparent change of heart by your columnist Chris Merlin who for many years had criticised those who have broken or bent the rules of our sport to their personal advantage and who now, by his statement that the removal of the third place man from the 250 GP because of a 1/4% discrepancy in being underweight "does seem a little tough", appears to imply that he felt that the occurrence should have been overlooked.

Whether anyone likes or agrees with the current regulations is totally immaterial to the fact that they exist and surely where they are as specific as in the case of weights there can be no excuse for any other action than their rigid application, and indeed I would suggest that if many other sections of the regulations were rigidly enforced by all Clubs everyone would be much the better for it.

An interesting point which I observed Championship meeting at Felton was that when any equipment was found not to comply with the current regulations, restrictors in the Britain classes being an example, the drivers normally accepted the matter in good spirit and set out rectifying the problem, the bulk of the noise and animosity being generated by a collection of associated individuals positioned around the scrutineering bay, in many cases apparently totally disconnected with the entrant or driver.

Let me repeat, we have the regulations so let them be enforced and if competitors feel that changes are warranted, they have the opportunity to either make representations to the RAC directly or through their Club committee, or as an alternative, present their case at the annual Kart Conference in order that change, if merited, can be made in a correct and uniform

> John T. Angus Corbridge

Agreed. I think that Chris Merlin possibly meant the word "tough" to mean "unlucky". Unlike the blatant cheat who may get caught stone had just overlooked checking his weight as he had never been anywhere near it in his life. Just shows what a tough race he must have quicker than this.

Backmarkers. I've got lots of sympathy for

My son Dave Jones had a nasty accident at Oulton Park, in the first 210 heat, resulting in him being unconscious for seven days. He is now making a fine recovery and should be back to normal soon.

However the prime reason for this letter is to thank a lot of people whose names I don't know. On returning to collect my car and equipment (transport being provided by one of the drivers, Chris Anderson, who came to Chester after the racing to see how he could help), all my equipment, tools and kart, had been collected together and neatly packed into my car and caravan ready to drive away.

From what I can gather, just about everyone in the area - drivers and mechanics - all mucked in to help. A fantastic gesture, thanks everyone. A special thanks also to the Red Cross for transporting my son so swiftly and skillfully to the Chester Royal Infirmary. during the scrutineering at the recent British Believe me, that ambulance driver would have put many a 250 driver to shame!!

Frank Jones Sth. Humberside

May I mention one or two matters that have occurred to me during the 1979 series of gearbox National meetings:

1. A big thank you to all organisers, marshalls, scrutineers and those who go to so much trouble to provide us with some great racing.

2. It was certainly a step backwards when after 1974, the British Championships were run over one round. We've got the meetings, so surely it can be run over a season, dropping say one result from four or two from seven, with a decent points margin for a win

3. Accidents. On two occasions this year – the first in one of my races at Oulton and the second I was told about by a leading 250 driver at Cadwell on September 30th - a driver has been dumped in the middle of the track following a major shunt. At Oulton I passed the driver say 20 lb under, the man in question at Silver- on two occasions before the race was stopped and I understand Cadwell was a similar situation. Surely we can get races stopped a bit

ED, slower drivers being lapped - most of us go

through that stage - but I've seen too many near misses and shunts this year through this cause and in fact had such a "moment" at the last Cadwell, when a driver moved over and put me in the air whilst I was leading. About six spins and ten bounces down the track later. I'm still around. It's not so much that I blame the other driver, as the fact that they don't seem to know what to do, especially when being passed by a group. Personally I wish (a) that they would glance over their shoulders a bit more (both sides), (b) get off the racing line, (c) most important, when about to be passed - stick to their line, whatever it is!

5. Lastly, I didn't like the idea of turning the Short Circuit Championship into a kind of Clubmans event, as mentioned in Chris Merlin's column. Contesting all the National meetings only offers two short circuits and doesn't leave much time for club meetings. Surely the short circuit specialist has an advantage anyway, so let the others have a crack - after all it gives them a chance to prove that they can really drive and don't just survive on power!

John Newton Coulsdon

I would like to congratulate you on the quality of your magazine, for I must admit that I was doubtful that the initial standard set could be maintained. But there is just one thing I feel that is letting your otherwise excellent publication down. It is the continued attack on Alan Burgess, especially as he is the Editor of your rival magazine.

I have worked with Alan Burgess on the R.A.C. Kart Committee until this year for very many years and I have had disagreements with him on policy on numerous occasions, but without him karting would not be the stable sport in Britain that it is now and I know that there are many people in karting who will agree with me. Even now the R.A.C. and karting needs Alan Burgess. I honestly believe that you are criticising the wrong man, but maybe for the right reasons.

Thanks for the compliment. One of the functions of a responsible magazine is to provide a platform for independent views and, where necessary, comment on events.

Public figures and politicians in all walks of life accept criticism as part and parcel of their job. I personally have nothing against, in fact I hardly know, the gentleman and for my own sake and that of this magazine, am not interested in any personal arguments etc. However, as Chairman of the sport's governing body, he must be prepared to accept criticism, as I do, and publish, yours.

Further, opinions expressed by independent contributors are published as such, without censorship or editing, and do not necessarily reflect the opinion of myself as Editor.

The fact that Mr Burgess edits another karting magazine is not relevant - save perhaps to speculate that criticism of a body of which he is hairman is unlikely to appear in its pages.

I agree totally with your sentiments concerning the contribution made to the sport by Mr Burgess - indeed you yourself have contributed much as well - but you will agree that that does not confer divine exemption from criticism, if it is necessary.

As far as I am concerned, this magazine will continue, especially through these correspondence pages, to provide a platform for praise or criticism of whatever appears to be right or wrong within the sport - whether it be drivers, officials, administrators or whatever.

The last weekend in September saw the one of his 210 engines to have a go with "the lads". He was also experimenting with the EI slide carb, with the day's result being a possible pointer to the future "way to go".



entries were down somewhat on the usual The 210 heats produced no great surprises as most of the regular names found their way to

> impressive lead in the first, but mysteriously dropped to sixth on lap 7. He then proceeded to claw his way back past everyone to win! Was

a furious scrap between Bill Longden, Gordon until eventually he was forced to stop. Douglas, and eventual second place men, John Hughes – all three holding that position at worsening "cut-outs" as he pulled away from some stage.

Newton led heat 3 for a while, but disappeared, to leave Phil Ansell with his second Pete would be back in front - he must have win. After late-starting in his first heat, Peter had some top end! The problem got better, Haywood was starting to show, and came though, and a very happy Haywood took a jubithrough to second, benefitting from Mike Aven- lant win, with John Newton just pipping Andy ell's mid-race retirement from that place. Phil Clarke and Heerey for second. Next up were Hemes took the other place.

second in the final heat, failing only to pass the

John Ball takes his first major Superkart win after hairpin Auto Cycle Accessories Barlotti of Andy Clarke. John Hughes cruised to third, to ensure a good final grid.

In this and the Superkart category an innovation was the seeding of only the 20 best heat performers straight to the final, all the rest having to endure a qualifying race, the top 30 going on to join the main final. John Newton, with his D.N.F. was in the qualifier, but reached second place fairly easily behind Tony Scottorn, but ahead of Londoner Kevin Jones and Paul Tooms.

And so to the final. After his convincing heats, Phil Ansell disappeared into the distance as Phil Ansell got the Zip/APV away to an expected, leaving Heerey, Clarke, Hughes, and Hemes to thrash out second.

Lap two, and John Newton had joined the battle, shortly followed by Peter Haywood, he playing? Andy Clarke led the rest, with Mike who soon burst into second, lapping quickly Avenall and Neil Linden taking the next major despite occasional hesitation out of the hairpin.

Ansell was well clear, but on lap 8 he slowed Heat 2 was a flag-to-flag job for John New- appreciably and was gobbled up by the pursuing ton, but behind the British Champion there was train. His engine sounded flatter and flatter,

> Meanwhile Haywood was contending with the hairpin. Heerey and Clark would race past, but as they plunged past the finish line each lap, Phil Hemes and Russ Varney.



incident sidelines Nigel Smith. Calvin Fish shines with a

classy drive into second. The regular 'names' go down.

Autumn Ball

Being late in the season, the Cadwell Autumn Championships did not bring anything startlingly new to the fore, although it became apparent that "Monsieur" Fish was confident that Calvin's Dino was now sorted and he was hoping for a result.

first late-season meeting at Cadwell Park.

Coming at the end of a hectic season and

with some preferring to conserve machin-

ery for Denmark the following week,

huge turnout. However the surprisingly

reasonable weather and the demise - in

the Superkart ranks – of the regular front

runners provided a day of considerable

In the pits

Steve Styrin was beaming from ear to ear over the fact that he had two brand spanking new barrels on his GBRD engine – his previous "good" ones having worn through the chrome! His anticipated good day was not to be.

Huntingdon 210 tuner Peter Haywood had removed the 250 Yamaha from his Sprint, chopped the chassis around a bit and bolted on

Grand Prix Champion Brian Heerey made

42

interest.

continued . . .

Peter Haywood John Newton Andy Clarke

Sprint/PH Upton Zip/Upton

Hill & Smith Ltd!

It is a pity that the 125 and 250 National classes have to be run together, but with only fourteen 250s entered, little else can be done. A shame, as it does get a bit confusing to watch.

Heat 1 was never in doubt as Brian Hill swept his Zip/Kawasaki to an easy win. But second place wasn't settled that easily, with Rov Wooldridge finally taking it after the retirement of Steve Elmore, and having passed Roy Patterson's Chatterton Yamaha.

Tony Missin led the 250s throughout, to win from Doug Hall.

The second heat saw the same result as the first, but Hill certainly had to work a lot harder to beat the attractive Barlotti/Rotax of Wooldridge. Steve Elmore embarassingly spun away his chances trying to outbrake Wooldridge into the hairpin – "Well you've got to try, haven't

The 250 win went this time to John Sellars, leading George Smith and Chris Willie home.

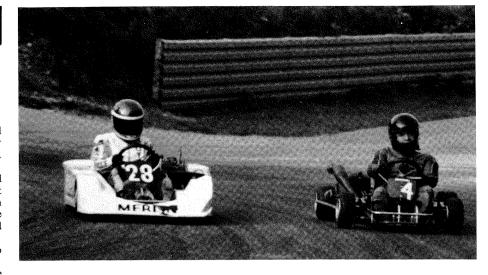
The final was a very tense affair! Although Hill shot away to an early lead. Wooldridge began to gradually ease back the gap as the laps went by. Steve Elmore, from the back, was picking his way through, arriving in third spot with a few laps to go.

Into the last lap and there was very little in it, the second and third men just within slipstream distance of the man in front. As they dropped down towards Mansfield corner, it was a real nose-to-tail situation, but Hill kept his cool, took a good tight line, and any passing move was foiled.

1st	Brian Hill	Zip/Kawasaki
2nd	Roy Wooldridge	Barlotti/Merlin
3rd	Steve Elmore	Rotax Hermetite Zip/ TVM Yamaha

George Smith may not have won either heat, but he made up for that with a fine win in the 250 final. The places went to Doug Hall, Tony Missin, and Chris Willie.

20



Last lap of the 125 final, and Roy Wooldridge (28) noses briefly alongside Brian Hill.

Barlotti/GSM 1st George Smith Bultaco Barlotti/BHR 2nd Douglas Hall Bultaco 3rd Tony Missin Zip/Fyson Bultaco

Having a Ball . . .

The first Superkart heat was stopped after a major incident at the Gooseneck involving novice driver Ralph Ledaman's Barlotti/Suzuki. It ended with the well damaged kart on fire, and the unfortunate driver lying on the track. However, Ledaman was fortunately only badly

The rerun was initially led by Rob Kerkhoven and Dave Buttigieg, but by lap 4, Martin Hines had pushed the Hermetite Zip to the front. He maintained a steady gap back to Kerkhoven to run out the remaining laps comfortably. Team-mate Paul Elmore moved through to relieve Buttigieg of third in the closing stages.

Nigel Smith started the day determined to be "conservative" in his setting up of equipment and it seemed to pay off as he cleared away to win heat 2 easily. Richard Dean looked comfortable as he took an equally cosy second, but Steve Styrin wasn't happy, seizing one of his new barrels comprehensively. John Ball made third.

Martin Poole led heat 3 for five laps, but then had to give best to a flying John Ball, charging very impressively from a bad grid. Poole's motor went off badly, pushing him well down, and leaving second to Calvin Fish another fine drive from the back making up for a first heat seize.

Martin Hines annexed pole for the final with a smooth, easily taken heat 4 win. Second was held at one time by Nigel Jenkins, but the RWB team driver ended a somewhat erratic race in the barrier at the hairpin. Nigel Smith reinforced his earlier win with another storming drive, this time into second, ahead of a close queue consisting of Dean, Elmore, Robert Johnstone, and Carolynn Grant-Sale.

The qualifying race was full of "names", all of whom had suffered at least one D.N.F. -Buttigieg, Styrin, Kerkhoven, Fish, Gange . . . and only Kerkhoven and Fish emerged intact, the latter with a most impressive runaway win.

A Hines benefit seemed on the cards as the final wound away to a clean start on Park Straight. But it was not to be, as a rear tyre rapidly deflated, leaving a disconsolate Hermetite Zip driver wondering when his current run will end . . .

This left Nigel Smith leading a major Superkart race for the first time. With a clear track, he had a small gap over John Ball, Paul Elmore, Martin Poole, and Richard Dean, Elmore only lasted 2 more laps before he was forced out covered in oil, presumably from Ball's gearbox, and totally unable to see!

Peter Haywood returned to 210 racing and powered through to take the win.



Congratulations

TO MARK ALLEN ON RECOMMENCE

DESCRIPTION OF THE PROPERTY OF T TO MARK ALLEN ON BECOMING BRITISH SHORT CIRCUIT CHAMPION 1979 AT DUNKESWELL 16th SEPTEMBER IN **BOTH** 125 AND VILLIERS 210

- □ 125 WON ON THE **NEW DALE WOLF CHASSIS** WITH K.R. MAICO ENGINE
- □ 210 ALSO WON ON DALE CHASSIS WITH K.R. VILLIERS
- MARK ALLEN'S RESULTS TO DATE ON THE DALE CHASSIS -

Winner of the Zip Kartspeed 79 Trophy (most consistent driver in 125 class over 3 Donington long circuit meetings)

-		
	BRITISH LONG CIRCUIT CHAMPIONSHIP DONINGTON	1
	MIDLAND CHAMPIONSHIP	Villio
	RISSINGTON SHORT CIRCUIT CHAMPIONSHIP	Villio
	RISSINGTON SHORT CIRCUIT CHAMPIONSHIP	1
	CADWELL (FEBRUARY)	1
	CARNABY	1
	CLAY PIGEON	1
	CLAY PIGEON	Villi
	SHENNINGTON	Villi

GORDON GROSVENOR DALE KARTS LIMITED DOROTHY ROAD TYSELEY BIRMINGHAM B11 2EE TEL 021 706 5627



MARK BAILEY's PARILLA TG14L for sale SAI 4 Parilla TG14L all Ferrari prepared and in perfect order complete Motoplat and Tilly and engine mount, all bores under 48.3 all engines rebuilt and in perfect condition. Prices on application. Phone Ferrari Racing 01-720 1004 or 01-429 0254. SALE SALE FERRARI prepared engines for sale. Prices on application TG14L just rebuilt complete motoplat and carb. SS/TT relinered standard bore Motoplat and carb. SS/TT 48.3 bore highly modified engine complete SALE Motoplat and carb. Komet K55TT next years national engine ???? complete Motoplat and carb. P.C.R. new and unraced bare or complete factory selected SALE engine. P.C.R. prepared and very interesting engine complete. P.C.R. prepared very quick engine complete second bore. P.C.R. prepared very quick engine complete second bore. P.C.R. prepared very quick engine complete second bore. SPARES available for the above engines. SALE FERRARI prepared and selected engines SS/TT built from selected components new – prepared and ready to to be run in. SALE TG14 built from selected components new - prepared and ready to be run in. NEW Parilla 1980 Nat. engine. NEW standard engines in stock shortly of all types. AND the most complete range of genuine Parilla spares. SALE **FERRARI RACING SERVICES** Fiat H/Top van MoT £500 ono Transit Diesel Custom Cab 120. 6000 miles £3,500 ono OFFICE (ONLY): A106, FRUIT & VEG MARKET NEW COVENT GARDEN LONDON SW8 5EE TEL: 01-720 1004 TLX: 918996 (MAIL ORDER AVAILABLE)

MONTEAGLE **RACING**

TEL: 01-394 0785

Main agents for the

ARROW ENGINE AND EAGLE **CHASSIS**

Junior and 100 Britain Engine£165 3 Port Engines£185 5 Port Engines£195

> **EAGLE CHASSIS FOR 100** NATIONAL AND 100 BRITAIN Agent for Arrow Engines.

Evening sales and service by appointment

Tel: 01-394 0785

Watch for Our Trade Van At Race Meetings

November

continued...

From the flag (green light really) it was Elmore all the way, the TVM Yamaha simply having the legs over everything else. Behind him a great dice for second place was going on; first Allen had it, then Price, then Hoy, then Molloy, then Allen again. Sheer lack of space prevents telling the story of this epic dice, suffice to say that the crowd went wild with excitement as these four raced eveball to eveball with one another until lapping the back markers broke up their duel.

And that's what happened to Elmore – a back marker! He had a hundred vards over the rest, had set fastest lap of 34.0 and was coming up to lap Baker, winner of the "B" final. At four different marshalls posts around the track Baker was shown the blue flag, yet he made no attempt to extend the courtesy of the track to the leader. Then it happened. As Elmore tried to squeeze by at Pit Bend, Baker shut the door in the biggest way possible and the Grand Prix winner suddenly found himself sliding across the grass and thumping into the marshalls post.

So Mark Allen found himself leading another "A" final. And that was it. Allen made it into first place with Molloy in second spot and Price in third. All credit to "Supermark" for running two 30 lap finals in succession – no mean physical feat. Yet the moral victor must certainly have been Steve Elmore.

Most spectacular action in this race was the clash between two mid-field runners that resulted in a spin on the fastest part of the course and a detached fuel tank that burst into flames leaving a ten foot trail of blazing fuel on the surface of the track. Smoke billowed upward and the kart race thundered through it. And it was all captured by BBC's "Spotlight" cameras. The fire started and extinguished itself all in 60 seconds, but it was real Hollywood stuff while it lasted!

1st	M. Allen	Dale/KR Maico
2nd	P. Molloy	Barlotti/Merlin
		Rotax
3rd	D. Price	Sprint/Honda
4th	J. Hoy	Sprint/PH Rotax

McBride's 250 Nat.

Only 24 entries in this class yet there was plenty of action, particularly between John Sellars, defending champion Bob Phair, Grand Prix winner David Griffiths and the forceful Joe McBride.

In the heats Sellars took two wins with Mc-Bride in close company and the two local men had! Pete and Tim Deadmen showing well to the fore. One of the Deadmens was a little too keen and overtook five other competitors under the yellow flag - right in front of the C-of-C and RAC Steward!

The final was a good tussle between Sellars and McBride with not even Phair or Griffiths able to challenge, although just waiting to pounce should the leading pair make a mistake. Eventually this latter pair fell by the wayside and the chase of the leaders was taken over by Ray Steer and Kyle Thomson.

At about three quarters distance Sellars had a go at the outside of McBride at Pit Bend – he didn't make it. Great try though, and the crowd felt for him as he sat in his kart on the grass thumping hell out of the steering wheel in his frustration!

McBride went on to a fine win, with one of had worked hard for his title and interesting to entertains the crowd . . . note that he was able to do the "outside at Pit Bend" bit three or four times, and pull it off. though Buttigieg and Elmore were toward the



Burgess Racing's Dave Clark runs a Dino. Note the 6.00 width front tyres. (Photo: C. Gillespie).

Was his Barlotti different from everybody tail of the field. From the light it was Kerkelse's?

1st	J. McBride	Watt Barlotti/
		Montessa
2nd	R. Steer	Barlotti/Bultaco
3rd	K. Thomson	Watt Barlotti/
•		Montessa
4th	K. Tibbs	Barlotti/Bultaco

Kerkhoven's Cruise

Buttigieg, Elmore, Kerkhoven, Fish, George, Gange, Smith; what a pity Martin Hines and Steve Styrin couldn't come - the club could have billed it as the Race of the Year if they

The heats were very eventful for Paul Elmore (Hermetite Zip/Yamaha) as in his very first race while making a last minute charge for the lead he came by the start/finish line to find the last lap board out on two consecutive laps. plus the chequered flag! Bombing by flat out in sixth gear he found those immediately in front slowing right down - he visited the straw bales to avoid them. In his second race the man in front missed a gear, and POW. Elmore shunted him, locked bumpers and badly bruised his ankle in the process.

While that was happening Kerkhoven, Martin Poole and Michael Jenkins were all scoring wins while Dave Buttigieg and Carolyn Grant-Sale both had various mechanical bothers.

Come "B" final, "Butty" had it all fixed and he stormed to a fine win with Allan Law in second spot and Nigel "Sideways" Smith in only three Montesas in a sea of Bultacos. He third - after his usual eventful race! He sure

All the names were in the main final, al-

hoven (GBRD Yamaha) and Poole, though try as he might Poole couldn't keep in touch with the flying Kerkhoven who was determined to hang on to his Championship.

Behind them, Elmore and Buttigieg had rapidly got by the pack (including an off-form Gange) only to find their way baulked by the Jenkins brothers. Lap after lap Elmore hammered at the rear bumper of which ever Jenkins happened to be in front of him. At Pit Bend it was alongside with smoking tyres, and Buttigieg was alongside him doing the same thing! At one stage David George joined in but Elmore elbowed him right in over the kerbing for his pains. While this battle was going on, Kerkhoven was sitting comfortably and enjoying his Sunday afternoon drive until he had nearly twenty seconds over the third place battle.

Eventually both Elmore and his Buttigieg shadow got by the Jenkins brothers, but too late. Not enough laps remained for them to close on the leader. On the last lap Elmore led Buttigieg across the line only to have his gearbox go, which allowed Butty to out-accelerate him from the Top Hairpin to the flag!

So Rob Kerkhoven joyfully took the flag and retained his Championship in a race that if he were honest - he'd have to admit was easier for him than he expected.

lst	R. Kerkhoven	Zip/GBRD
		Yamaha
2nd	M. Poole	Zip/Yamaha
3rd	D. Buttigieg	Zip/Smith
		Yamaha
1th	P. Elmore	Hermetite Zip
		Yamaha

J. A. Kitson



had a little more conservative start, but was beginning the drive of the day, latching on behind the 4th-7th scrap.

Smith was now encountering back markers, and with a complete lack of blue flags around the circuit, was having his problems. This allowed Ball to close in, and on the twelfth lap he slipped past as the leader was badly baulked. Next time around, an irate Nigel was back in front and charging hard.

Meantime, Calvin Fish had picked off the bunch in style, and then stormed past Kerkhoven into third. The young Norfolk man's Dino was looking very smooth, the only problem being a degree of rear axle tramp under heavy braking for the hairpin.

Lap 14 and the duel for the lead ended in a bizarre fashion. The pair approached the hairpin, about to lap Londoner Glen Kirby. Opinion on what exactly happened varies, from overeagerness on Smith's behalf to gearbox problems on Kirby's part. Either way, Kirby was entering the corner miles slower than the leader, unaware of his presence. The Team Schemes kart hit the escape road as well! Was Calvin Fish, storming down towards the hairpin, going to take a sensational win?

The two leaders executed a rapid U-turn and accelerated up the hill, still in front, and with Smith still leading. But only Ball completed the lap. Nigel's damaged front bodywork had" folded under the chassis and as he turned in to one of the fast corners, the kart went straight on into the bank at high speed.

Ball completed the final lap to take his first major win - and one that had to come pretty soon. Sportingly, his first concern on stopping was for Smith, who was very fortunately uninjured but who had a few words to say about blue flags . . .

Only 2.5 seconds behind Ball, Calvin Fish clocked up the best result of his short career, whilst Richard Dean had fought back to retake third from Kerkhoven.

John Ball Zip/Smith 1st Yamaha Dino/ZipYamaha 2nd Calvin Fish Richard Dean Zip/Dean 3rd Yamaha

Kerkhoven had started well and by lap 6 Out of the hairpin for the first time, and Nigel Smith leads John Ball (88), Martin Poole (21) and was up to third. Co-midfield starter Calvin Fish Paul Elmore (15), whilst poleman Martin Hines is already in trouble with a deflating tyre.



Kirby, spinning him round, and deflecting Smith Simpsonnez-vous? Was it the "Star Wars" helmet that inspired Monsieur Fish, the younger, to his up the escape road. Ball, right behind, went up best ever result, a fine 2nd place? (Photo: Chris Lambden)

Nigel Smith powers out of the hairpin, leading a Superkart final for the first time, until "the incident", with a lap to go, resulted in a high speed exit.





experience in making the world's most reliable

Stonward

Stonward timers, we've now

designed the most convenient, easy to use stopwatch of all. The wrist stopwatch.

Like all Cronus Timers, it's a highly sophisticated digital stopwatch.

It's rugged, reliable, water resistant to three atmospheres (99ft) and easy to read and operate.

And, being quartz controlled, extremely accurate - to 1/100th of a second.













cover all sporting events and leisure activities, whether you're taking part, watching or

responsible for the official timing.

What's more, they can be used with a lanyard when it's more convenient to hand-hold them.

So don't waste time. Get a Cronus.

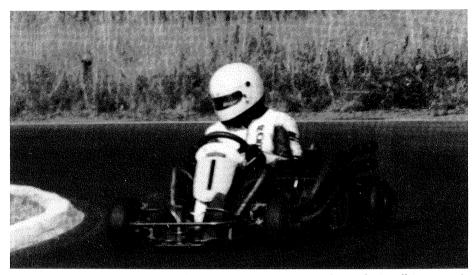
From sports shops and jewellers from f.37.50to £73.95.

For further details of the full range of Cronus Wrist Stopwatches, contact:

Cronus Timing Limited, 6-10 Kirby Street, London EC1N 8TS. Telephone: 01-242 0891.	Distributed and serviced by
Name	WATCHES
Address	

Kerkhoven's Treble

Kerkhoven coasts to easy Short-Circuit title. Mark Allen takes a remarkable 125/210 double. 250 National to McBride. The RAC Short-Circuit Gearbox Championships at Dunkeswell.



Rob Kerkhoven walked away to his third Short Circuit Championship with virtually no opposition. (Photo: C. Gillespie).

Dunkeswell Airfield has a reputation for fickle weather but even its normally clockwork regular 3pm shower failed to appear on the September weekend of the spot behind Hoy. This was more than enough Teign Valley Motors sponsored British to put himself into the "A" final, so driving Short Circuit Championship. Instead, the with his brain he decided to stay there. Come 166 competitors and 5,000 spectators enjoyed a glorious Devon Indian Summer, not to be. Half way round the last lap Ansell with just enough breeze to stop too many lost all drive and coasted to a halt amid groans seizures!

The Dunkeswell Club had resurfaced the track especially for the Championship and to judge by the comments in the pits Messrs. Hoy, Allen, Dean, Jones etc. all battled was one of the smoothest many drivers amongst each other for the places, sometimes had raced on. Visitors soon discovered the three overtaking spots on the track – a late brake at Pit Bend at the end of the main straight, around the outside at the mid-speed Hangar Bend, and an outaccelerate off the Top Hairpin where a heavy foot found many scrambling on the grass at the edge of the track!

Allen One . . .

With the likes of Richard Dean, Grand Prix winner Brian Heerey, Owen Jones and Pete Ansell racing for a Championship title, action was expected, and delivered! In the qualifying heats on Saturday both Heerey and Ansell scored two wins, with Heerey convincingly beating defending champion Richard Dean into second place in one of his heats. Both of Heerey's races were faster than Ansell's, as were his fastest laps albeit by just tenths of a second.

Others showing well in the qualifiers were Will Hoy (PH Upton), Kelvin Bonarski (TRS), Mark Allen (KR) and of course, Owen Jones, who always seemed to be lumbered with having to come through the field to score his points.

November

running three abreast into Pit Bend trying to outbrake one another. On one occasion Gary Hill lead this battle into the corner and came out fourth just fifty yards later! It was that Just after half distance Heerev seized solid

on the main straight, managed to get round the first part of Pit Bend but gently stuffed it into the bales on the exit. Mark Allen found himself in the lead. He poured it on and managed to pull away from defending champion Dean. He went on to score a popular victory, for the spectators were well aware that as he was racing in two classes, he'd done 80 laps that afternoon!

1st	M. Allen	Dale/KR
2nd	R. Dean	Zip/Dean
3rd	I. Hunter	Zip/Villiers
4th	G. Hill	Barlotti/Upton

Allen Two

Thirty-seven 125 outfits warmed the hearts of all the officials and regular Dunkeswell spectators as this is normally a poorly supported class in the South-West. When assembled in this quantity they are very entertaining.

The heats showed the shape of things to come with wins being scored by defending champion Steve Coward (Coward Kawasaki), Grand Prix winner Steve Elmore (TVM Yamaha) Mike Doble (Honda), Paul Molloy (Merlin Rotax) and Mark Allen (KR Maico). What an interesting situation, with five different makes of engine scoring wins. Sure makes a change from the one engine domination of the 250

The "B" final saw a win for Ray Baker (Yamaha) from Rod Western (KR Maico) but the last lap board things looked set for an Ansell/Heerey duel in the "A" final, but it was only after the last lap demise of Steve Coward. This was particularly sad as he was the fastest of the Kawasaki runners.

> The final proved the variety available in this class as the first five grid places contained four different motors; Molloy's Rotax on pole, Elmore's next with his Yamaha, then Allen with the Maico, Hoy's Rotax and Price with the quickest Honda!

A bunch of 125 Nationals (Photo: C. Gillespie)

The "A" Final looked like Heerey's all the

way. He started from pole, shot into the lead

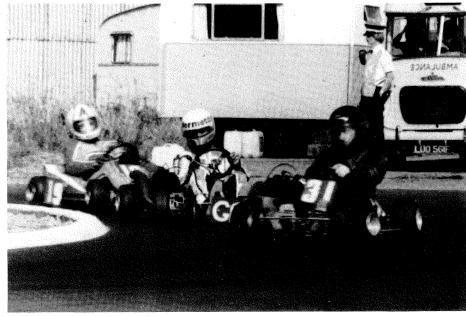
and disappeared into the distance. Behind him

of sympathy from the spectators.

The "B" Final on Sunday would be a race to forget for Ansell. Once the early lap reshuff-

ling had taken place, Ansell found himself

ahead of Jones and Longden but in second



The Lizer-80-Split Kart



Manufactured for /:/:4/ by TEAM SURTEES LIMITED Now in production after an intensive 12 month development programme.

Built to FORMULA ONE fabrication standards.

The NEW chassis configuration allows faster tuning for individual circuits and conditions



High efficiency **PLockheed** KART BRAKE fitted as standard.

EXPORT ENQUIRIES INVITED

Phone or write for our FULLY ILLUSTRATED BROCHURE.

Racing Karts Ltd. 12, HUNTER ROAD, LONDON SW20, ENGLAND. tel: 01-946 7401/01-947 4117

STARTLINE **MOTORS**

Class IV and Class I engine preparation tuning, honing, crankshaft repairs. heli-coiling, linering, rebuilds.

Selection of used karts and engines.

NEW PRODUCTS:

Kart Kaddie – ideal for transporting your kart in the pits. Folds flat £29 + VAT Pusher bar (Class IV only at present) - makes pushing much easier £8 + VAT C.O.D. and postal service.

OPEN TUES.-SAT. 9.30-6.30 CLOSED ALL DAY SUNDAY AND MONDAY

418–420 Katherine Road. Forest Gate, London E78NP 01-5529772

G.B.R.D.

CONGRATULATE STEVE STYRIN

Current British Long Circuit Champion and now 1979 Grand Prix Champion

Another great win on a G.B.R.D. engine TUNED AND PREPARED BY ROB KERKHOVEN – CURRENT BRITISH SHORT CIRCUIT CHAMPION

YET ANOTHER GREAT WINNER

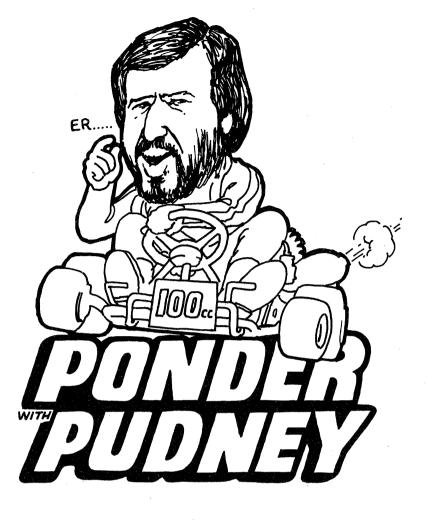
EXHAUST SYSTEM AS USED BY CHAMPIONS STEVE STYRIN, ROB KERKHOVEN, MARTIN HINES, PAUL **ELMORE, DAVÉ BUTTIGIEG** AND MANY **OTHERS**

NEED WE SAY MORE

RING WORCESTER 29902

GOOD STOCK OF KART SPARES. TRADE VAN AT CIRCUITS. GOOD C.O.D. SERVICE. LATE NIGHT THURSDAY 6-9 P.M.

GREEN BELT RACING DEV. SHERRIFF ST.. WORCESTER.



on: The definition of Utopia Behind the scenes at Estoril The Element of Nastiness **About-turn on Juniors!**

it happened . . . Yes, with some small element of journalistic licence, that was Estoril 1979. and there were many aspects of the track and organisation sadly lacking, but it was bliss to wake to the sound of racing kart engines at 7am (well I thought so! - my wife disagrees!!). couple of hundred yards to the circuit is my idea of the good life.

With a 5th position finish in the first final, a then in his worst moment!!!

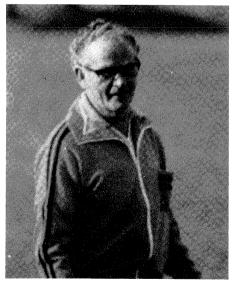
A super hotel, built in a semicircle to catch the 2nd in the second, and a win in the third, da sun, the central attraction of a swimming pool Silva crossed the line the jubilant winner of the and bar with excellent bar service, hot blazing last final, thinking he had won the World Title. sunshine, 200 yards away a superb motor racing Peter Koene had finished with a win, a second circuit with world class kart circuit combined, and a sixth place in his 3 finals - one place and on the week of your visit a gathering of the worse than da Silva. What da Silva didn't realise, very best kart drivers in the world. To a karting but Koene (who also crossed the line amidst fanatic surely the definition of "Utopia"... but great jubilation) did, was that you drop your worst final i.e. 5th in da Silva's case and 6th in Koene's and then in the event of a tie the judges The wind nearly blew the sun out, the service in take your heat positions into account. As Koene the pool bar was good, in the restaurant awful, had better heat results than da Silva, Koene was the champion!

The scenes after the third final were something else. Everyone, including me, was wandering around thinking that da Silva was World Then to walk from the bedroom balcony a Champion and indeed da Silva was ecstatic with joy in his pit, but down the other end of the pits Koene was being kissed and hugged by all and sundry, obviously realising he had made it. The scene changed drastically a few moments "Dergie" Spencer shot down all the pundits later when da Silva had had the situation (myself and our worthy Editor included) who explained to him, and was inconsolably sobbing had said he would be struggling, by finishing a in the back of the DAP pits, where a DAP Mick Fullerton Senior - a reputation for brilliant 9th overall in the finals. Frankly, he mechanic was also in tears - either of joy at a painstaking preparation. deserved better, because he finished all 3 finals DAP win or of sorrow at da Silva's misfortunes! well - 10th, 8th and 7th - but had to drop one Between the two stood Angelo Parilla, not final and then revert to heat placings to decide knowing whether to laugh or cry in his greatest Fullerton is because if I should approach him his overall position on the rather silly scoring moment of triumph. Away in the IAME pits, with a comment or to hear his comments about system. This scoring system also confused the mechanics were busy hiding all sharp instruanything, the answer that comes back from him second placed man, da Silva (my "Man of the ments, ropes, poisonous substances, etc. in case in that gentle unhurried Irish brogue is always a Championship" after Mike Wilson incidentally). Mr Grana should decide to end it all there and

Terry Fullerton, of course, had probably the most disastrous Championship he will ever encounter. (Well they surely can't come any worse!) As will undoubtedly be reported in the coverage elsewhere in these pages, Terry had a virtually trouble-free week of unofficial practice. He then posted fastest time in the first timed practice, and second fastest in Saturday's practice. Then followed the most concentrated series of seizures in one meeting Terry has probably ever known, which totally ruined his Championship chances.

Now I reckon the only way Terry is ever going to get his crown back is to shout for his Dad and get him back preparing his equipment and preferably with Mick his brother too! When Terry won all his Junior crowns and many of his Senior titles, culminating in the World Title in 1973, he had his father Mick preparing his equipment, both engines and chassis. In the latter of those halcyon days they were joined by brother Mick and they made a fantastic team. After his 1973 triumph Terry was of course "noticed" by the Italian factories and as they stepped in so Mr Fullerton found himself more and more redundant, until through no fault of his own or Terry's, Mr Fullerton had virtually nothing to do with the preparation of Terry's equipment.

Now there are many people within karting I respect (there are a few I detest), but Mr Fullerton is THE person within 100cc karting for whom I have the greatest respect and admiration. I can always remember in the early days, when Terry was the Junior champion; if we came back to our campsite at a big event, be it say Morecambe or the British Championships or whatever, after a night out on the town, there would always be one light burning outside a caravan when everybody else was asleep. There would be Mr Fullerton painstakingly checking and double checking Terry's equipment from stem to stern, black sticky double-sided insulation tape being the trademark if I remember rightly. And you know, Terry would always be the quickest - and he never ever seemed to break down. I should know because I used to race against him and the only time I ever beat him was when he broke down, and that was too bloody rarely, such was the quality of the preparation!



The other reason for my admiration of Mr

continued . . .

well thought out, reasonable one, which is about Junior racing and Junior parents, and based on logic and great experience and which especially after recent events many of my invariably makes me go away thinking, "now why didn't. I think of or realise that?"

losing his Dad's sole services, it's just that I My reasons for the turn around in my views are reckon he hasn't done as well as I think he varied. Firstly, we have had the two really could have. As I once mentioned concerning Mike Wilson last year, I just don't trust the Italian mechanics to do a good job. They are too volatile. They get flustered at major events and do silly things (viz. the carb gasket on Terry's DAP at Le Mans). To win major events, I reckon it takes cool analytical preparation, coupled with a particular skill and understanding of every aspect of 100cc engines. Mr Fullerton is the greatest exponent of the art I know. With him and Mick helping Terry, he could be Junior racing – and that is that it's usually on World Champion again . . . DO YOU AGREE?? Incidentally Terry had been on to Angelo Parrilla that he was not happy with one aspect of his DAP motors. Angelo would not be convinced to alter it, so Terry gave one of his motors to his Dad to work the magic on. Dad duly prepared one and it flew, so in fact the tweak was adopted by the factory on all their engines for the Champs and as you know, apart from Sugaya's 'freak' timed practice, Terry was other races are on he is not too interested, he's far and away the quickest at Estoril.

Have you ever stopped to think what the one thing is that all top drivers have in common? I mean the winners, whether they be car racing or kart racing drivers . . . the one factor they all seem to possess in order to win. Most people would say "aggression" or "the will to win . . . at all costs". I call it "The Element of Nastiness". You will have noticed I have often said that so and so is too nice to be a winner. By that I mean that in my opinion he won't take the ultimate risk or chance to win, because he values his reputation and doesn't want to upset the equilibrium. My man with the Element of Nastiness, basically doesn't mind who or what he upsets to win. He'll do it by hook or by crook. The best way of illustrating this is to examine the great winners. Easily the greatest 100cc kart driver ever, Goldstein, was also easily the nastiest. He didn't care a damn what he did to win - knock someone off, no problem: hold up the start, no problem; throw a wobbly to upset the other competitors, no problem! He just didn't care. Arguably the most hated kart driver ever, but the best!

Take Mickey Allen. In British racing he's half way home before he starts the race. Except for a few, he shows total contempt for the average driver and boy do they know it. I've watched lesser drivers just spin it away for no reason when Mickey was behind them, simply because they knew he was there. The virtually permanent scowl, except for rare occasions, adds to the aura. But perhaps the quote that best illustrates my point comes from the time when I asked him if the 1977 World Championships at Patma, when Mickey so nearly won the title, was one of his greatest races. Mickey replied "Of course not, I didn't *** win did I!!" Most people would have been delighted with second spot . . .

As for Terry, he told me before Estoril that if he found himself directly behind Mickey dicing for the title, he would win - any way!! I didn't have the same conversation with Mickey, but had I, he would probably have said exactly the same!

Now for God's sake don't all go out trying to be nasty to win, but have a look at those guys who consistently beat you and I bet you

will find they have some of the rudiments of Junior racing by ringing me up to tell me how the "element of nastiness".

It's fairly common knowledge that I stirred up a bit of a hornet's nest with my comments comments hold good. But I have, as many of you will have noticed, been taking a much more Now Terry hasn't done exactly badly since active interest in Junior racing on the whole. excellent Road and Racing Racewear Championships which have produced, especially in National, some of the very finest (yes I mean it) racing I have ever seen. Secondly, I suddenly became aware that the Juniors of today are the World Champions of tomorrow and in studying the racing I am heartened to see lads who I am sure are talented enough to be driving in the British 4- and 6-man teams in the not too far distant future. There's only one trouble with the same day as an important 100 National or International event which I am reporting, and I want to watch it all and don't get enough time to delve behind the scenes of all the other classes

This raises another interesting point. The average reader of this column, or average karter, is a very insular beast in that if he is racing or mechanicing, he is racing for himself. When the got other things to get on with. As a result he may watch 4 or 6 races out of 20 on the day as basically the others are of no interest to you. So spare a thought then for the likes of myself and Chris who want to, and have to, watch all the racing and understand if we are always in a bit of a hurry or don't actually get to see you during the day.

Just one final note to Junior Dads and Mums - please don't dispel my interest in

good your little Johnny is or why he was brilliant to finish 14th in the C final. I'll have been watching and won't need to be told!!

To reply to Wizard Merlin's question on what do I think of the long circuit 100 mph lappery stuff; well, I think that 250 drivers have got to have a very small brain or be very brave or both!! I'm not trying to be rude, but frankly to watch 250 racing, even on a big circuit, scares me silly and I reckon all the drivers are heroes. I found Silverstone absolutely thrilling, especially the 210 race. Wasn't that something else - 12 drivers battling for first place in a group 4 karts long (no you dummy they weren't on top of each other!).

As I've said before, 100cc is my first love, but whenever a big circuit event doesn't clash with a 100cc event I shall be there. My big regret is that I haven't made it to Cadwell yet but that will come soon I hope. Tell you what though, 250 is going to be the growth class in karting and I shall be keenly watching all developments.

One point though, much as I enjoyed Silverstone I did find it rather aggravating waiting all that time for the leaders to come round again and not being able to follow their progress during the race, when they went out of sight. Perhaps I've been spoilt by the permanent view usually available at smaller circuits.

One last thing I would like to see, in 210, is more attention by the drivers to their personal turnout. Do 210 drivers think it is poofy to wear anything other than black leathers? I don't need to say again that with the potential of so much sponsorship in the future, the drivers must be aware of putting up a good show, both in the racing and presentation.

Next month: Deeper delvings behind the scenes

continued. . .

and lightness. There's nothing new in that - my very first kart, an M.B. Wasp, circa 1960, had this principle of rear axle construction!

A small detail, but a feature I have long admired and am staggered that it hasn't been copied by all those who bemoan the fact that small adjustment of rear axle ratio is impossible with the twins running on single large pitch chain, is the use for some time now on Clowes' old kart and now to be used on the new one, of the fine pitch duplex final drive chain, which he insists is as good as new after a seasons racing. Bob Clowes claims that his new chassis will last three years, barring accidents, enabling a driver to finely tune the kart to his (or her, I had better say these days) own liking, before it starts cracking up just when it feels good which

Something

to sell?

Takea

mini-ad

See page 58



Bob Clowes' new Motiv aerodynamic Superkart chassis

be quite expensive. The price as yet is not fixed early association with Dennis and how much and will finally be determined when the credit will be given to his ex-karting manager demand is assessed.

Yamaha have brought out a new model of boys"). 347cc road bike, watercooled, in a new marketing policy of "let them ride racers!" It will be this great success story? Well, I didn't!, apart known as the RD 350 L.C. The bottom half of from welding up the dry sump conversions the engine appears to largely resemble the RD which Fittipaldi collected from Merlin Develop-250 we use in karting. The bore and stroke are ments on a couple of occasions. (I recall his 64 x 54mm, so it will lend itself as another amazement at the size of the 600 x 6 early bottom end of interest to our ranks. It features Goodyear slicks, compared with the 300 and a wet clutch as you would expect for road use, 350 width tyres he and brother Wilson had used and one would expect it to have slightly beefed-back in Brazil!) My wife, however, in her single up internals compared with the RD "F" type. days, used to look after Nick Brittan's cat, The front mounting point is only a single lug in called appropriately enough "CAT", when Nick contrast to the twin lugs in the 250. I wonder was away from his Ladbroke Grove flat! (I whether it incorporates usable transistor ignition think that was all she did!) There, I bet you for racing purposes? If so we must wait for a didn't know that little gem of information! . . .

Another genuine ex-karter has reached the

few "Rae Davis types" to put a few in the

breakers yard!

epitomy of success in Grand Prix racing: South African Jody Scheckter. When he first came to this country he immediately made his mark in the same Merlyn (no relation) Formula Ford car in which Emerson Fittipaldi and later Colin Vandervell were so successful - a trio of exkarters in fact. The car was set up and the engine prepared by yet another ex-karter, Dennis Rowland, who I used to work with at "Motor Karts" of Kingston on Thames. When Fittipaldi became one of the stars of Formula Ford in this car, he was grabbed by Lotus and raced under the Jim Russell Racing Drivers School banner. driving a works Lotus.

As a result I never felt Dennis Rowland received the credit and recognition he deserved in this instance. I will be interested to see if, in the next Jody Scheckter book, which must so often is the case. Final note though - it will surely be forthcoming, mention is given of this Nick Brittan, who played such a large part in steering Jody to the top (both "good Jewish

And what part you may ask did I play in

J.P. **HAYDOCK PARK**

HONDA DEALERS

140 PENNY LANE. HAYDOCK. MERSEYSIDE

HONDA

Tel: Ashton-in-Makerfield 717385

MOTORCYCLES LTD.

Deal direct with the authorised agents

Orders now being taken for 125 Honda engines. All spares in stock (ask our stores manager).

Honda trained mechanics for all servicing problems.

125 ROTAX engines and spares. **VILLIERS** engines and spares. **PARILLA** engines and spares. 250 YAMAHA engines and spares.

SPRINT - ZIP - STAR KARTS

Finance available with 15% deposit





Late nights until 8.00 p.m. Tues. & Thurs.

Success

Success

Breeds

1979 WORLD CHAMPIONSHIPS AT ESTORIL:

THE FASTEST KART IN THE WORLD!

Fastest in Timed Practice and a devastating new Lap Record

1979 CHAMPIONS CUP OF JESOLO:

First Overall

THE DESIGN THATS RIGHT !!!

100 National STOCKIST OF

D.I.D

racing kart chain



motors spares and precision magnesium components in stock

November

CLASS 1 KART RACING SPECIALISTS Worldwide Export Service 01.205.7480 Contact: Terry Fullerton

ENGINE TUNING AND PREPARATION Trade enquiries welcomed

COD SERVICE, TRACKSIDE VAN, SECURICOR DELIVERY

Kart and Superkart

ENGINE TUNING AND **DEVELOPMENT IS OUR SPECIALITY.**



One of England's leading 100% YAMAHA Distributors

(余)YAMAHA

Sole UK Concessionaires for T.V.M. Tuned Yamaha Engines and Kart Components Engines available direct from us or through your local stockist



Steve Elmore – 125 Grand Prix Champion for the second year in succession with TVM YAMAHA power.

Trade and export enquiries welcome.

TD3, YZ/125 YAMAHA OVERHAULS, TUNING. STOCKISTS OF ALL **ΣΥΛΜΛΗ** SPARES, EXHAUST SYSTEMS. ETC.

We have one of the largest stocks of YZ125 and RD/TD3 250 kart engines and spares in Europe coupled with a first class delivery service.

Teign Valley Motorcycles Ltd.

Ringmore Road, Shaldon, Devon Telephone Shaldon 2428 and 3528



L.D. RACING

3 Bolton Road, Kearsley, Nr. Bolton, Lancs.

Phone (0204) 75267 24 Hour ansaphone service

ZIP - BM - BARLOTTI -MANX - PARILLA -KOMET

MAIN AGENTS FOR THE **ARROW ENGINE**

Full engine preparation, boring, honing, welding, crank rebuilds, etc.

Tuning and preparation of junior Britain engines our speciality

Trade van at all meetings

Motivation

DESIGN & DEVELOPMENT Bagnall, Stoke-on-Trent ST9 9JW Tel: 0782 503908.



CADWELL CLEAN SWEEP 30-9-79

MOTIV EXPANSION CHAMBERS

1st 125 National 1st 210 National 1st 250 International

Cadwell's 1.5 mile club circuit offers the greatest challenge to exhaust system performance of any big circuit. Power is required high up the rev. band for the long uphill top straight, yet low speed torque is required to haul you out of the super tight hairpin. No other expansion chambers available today can give you this spread of power without reducing the maximum horsepower from

Silverstone - 3 heat wins for John Rees 250 International.

The ultimate horsepower test for any machine. 210 exhausts £45.00.

125 exhausts for Aspes, Hiro, Honda, Kawasaki, Maico, Rotax, Yamaha, etc., £47.50. righthand or lefthand

250 Yamahas £96.00 front or rear exit



AGENT FOR THE BLUE Ei carb – 1st MAGNUM CARBURETTOR Cadwell

SPECIAL OFFER TD3/TZ exhaust seals £1.20 Inc. VAT and Postage

Let MOTIV Engineer Your Results Securicor delivery £3.30. All prices subject to V.A.T. Export, Trade & Private enquiries welcome.

KARTING LIMITED

Engine Concessionaires



system K88 3 port as above, plus electronic ignition and carb K80 tt complete with exhaust bend, exhaust but less carb. and

ignition
K80 tt as above, but plus motoplat and tuned tillotson carb. K80 tt super factory tuned and selected complete with motoplat and LAME tuned tillotson carb.

Tuning costs on all Komet engines £115

As used by top 4 drivers in British Championships:
Britain 100cc complete with motoplat, tillotson, engine
mount and aluminium finger guard
international 100cc 3 port tt complete with motoplat,
tillotson engine mount and aluminium finger
paged. HEWLAND ARROW

guard International 10cc 5 port tt as above Tuning costs on Britain engine £75 on International engine £115

£165 £165 £200 **£320** £320 £165 £185

£285 £285

OTHERS

DAP T70 Britain

Upton Britain 100

Upton International TT

BM FK 97

Sirio ST51TT PARILLA

£270 £330

TKM Britain
TKM International TT * DAP T72 * PCR International **KESTREL KARTS**

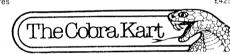
featuring the ultimate in engineering quality and handling characteristics. '79 model has been specifically designed to make full use of the softer compound tyres. Available in kit form or assembled, in a range 0f ★Kestrel Britain 79 complete with tyres

£275 £330 ★Kestrel Britain 79 complete with types

★Kestrel National 79 less tyres

★Kestrel 125S less tyres, complete with mag. accessories and

£425



a completely new kart designed after our many years in European racing specifically to cope with the new Dunlop and Bridgestone tyres, supplied assembled with magnesium accessories

including wheels and a choice of tyres. ★Cobra 106 International complete with magnesium accessories and tyres
★Cobra 106 2 bearing version, as above but with 30mm axle and 2 bearings
★Cobra 104 with magnesium accessories
★Cobra 104 with aluminium accessories

*KESTREL & COBRA KARTS ARE AVAILABLE for Agents below

* ACE KARTS, 185 Station Road, Kelty, Fife, Scotland. Tel: 830264

* BIKE & KART, 2 Malvern Road, Liverpool 6. Tel: 051 263 8528

* DMA, 41a Oxford Street, Church Gresley, Burton-on-Trent. Tel: 214489

* JKS, Marchlands Garage, Lonmay, Fraserburgh, Scotland. Tel: 2554

* JOHN MILLS, 90A Valley Road, Worksop, Notts. Tel: 4633

* L. D. RACING, 3 Botton Road, Kearsley, Lancs. Tel: 0204 73717

* SHOESTRING RACING, Porch House, Bungay Road, Poringland, Norwich, Norfolk. Tel: Prokes 50394

* SHOESTHING PACING, 1 0011 1030, 2019—1. Tel: Brooke 50394
* RON SHONE, 13 Newbury Road, Weymouth, Dorset. Tel: Weymouth 74074/71117
* CHRIS STONEY, 3 Broadmead, Heathfield Road, Castleford, Yorks. Tel: 559032.
* POLE POSITION RACING, 207 London Road, Southend-on-Sea, Essex.
* STARTLINE MOTORS, 418–420 Katherine Road, Forest Gate, London E7.

Tel: 01–552 9772 MARK TREDWELL KARTING, 119 Masons Hill, Bromley, Kent. Tel: 01-460 0489



Tillotson HL317A
Tillotson HL317A bored
Tillotson HL317A bored & tuned
Tillotson HL317A 27mm Special
Angled Carb Cover IAME
Tillotson Carb Body

Enclosed

Catalogue

OPENING See our catalogue for full list CUSTOMER'S ORDER FORM: (for Mail Order Shoppers) 9am--6pm PRICE TOTAL HOW PRICE SIZE DESCRIPTION MON-SAT LATE NIGHT THURSDAY TILL 8pm BARCLAYCARD + VAT @ 15% I wish to pay by Barclaycard/ Access. My number is *postage

6 Manse Parade, London Road, Swanley, Kent, U.K. Phone: Swanley (0322) 67121/60571 Telex 8955203 Sisley G WE HAVE EXPANDED INTO MORE OF OUR PRESENT BUILDING SEE OUR NEW SHOWROOMS.

EXPORT AND MAIL ORDER SPECIALISTS

* TRADE ENQUIRIES WELCOME * SCHOOLS, SCOUT GROUPS, ETC. SUPPLIED

SECONDHAND KARTS AND ENGINES IN STOCK COD SERVICE, TRACKSIDE VAN, SECURICOR DELIVERY

RECENT RESULTS

Midland Championship – 1st Jun. Nat. J. Herbert Kestrel/BPH K88 Golden Steering Wheel Meeting – 1st Jun. Brit. L. Cranmer Kestrel/BPH Hewland 2nd P. Dryden Kestrel/BPH TKM

100 International – 2nd Tim Davey Cobra/BPH K80 Jersey International Meeting – 100 Nat. 1st Bill Sisley Kestrel/BPH K88 100 International 2nd R. Weatherley Cobra/K80

Tilbury Ziparama Meeting – 1st Jun. Nat. J. Herbert Kestrel/BPH K88 3rd Jun. Brit. J. Chitty BPH/TKM

ALL ENGINE WORK CARRIED OUT ON PREMISES While you wait honing and crank shaft replacements.

We have opened our specialised machine shop – SOLELY TO CATER FOR OUR Karting customers. With lathe, milling machine, honer, press and running-in bench we can offer the ultimate in kart and engine preparation to our custome Have your kart and engine prepared to the highest standards. As used by Richard Weatherly, John Herbert, Lee Cranmer, Tim Davey, Paul Dryden and many more

SIZZLER FUN-KART

3 h.p. Engine Automatic Clutch Sturdy chassis with nose cone and roll over bar Disc Brake, Treaded or Slick tyres SEND LEAFLET



SUPER FUN CAR 3 h.p. engine, Disc Brake Treaded or Slick Tyres Wing Mirrors

assembled £395 + VA1 A unique machine — developed by our racing engineeers over the last 2 years. The Super Sizzler is genuine scaled-down racing car. A must for someone

SIZZLER FUN RACING KART

a completely new model; looks like a real 100cc racing kart. Wide racing slick tyres and wheels

3 HP Engine

Automatic Clutch

- Disc Brake
- Adjustable pedals and bucket seat
- ★ High ground clearance £300 assembled + VAT

ALLY WHEELS - HUBS **CLOTHING - HELMETS** £1.50 £2.00 £2.25 £2.50 £2.75 £3.00

Sprocket Carrier 25mm or 1 Engine Mounts 15°

NEW DEMON ACCESSORIES Bareel Slide Carb. Japanese RK 219 super small pitch chain, New make. Per length 10T and 11T small pitch sprocket to suit above (UK) Axle sprocket for above (UK) 74T to 94T £3.50 £70.00 Digiton heat gauge
C3 TB German FAG high speed mains bearing £6.50 £15.00 £15.00 £18.00 IAME degree wheel IAME pack front mag, whee IAME pack rear mag whee £18.00 Whirly visors C4 nylon main bearings £4.50 New Motoplat Holder Motoplat Puller — CEV Puller IAME CEV Holder CEV Puller 9T Sprocket Puller 9T Sprocket Holder Gudgeon Pin Extractor 3.4, 5 mm T-Bar Allen Keys 6.8mm T-Bar Allen Keys 10mm T-Bar Socket 13mm T-Bar Socket

* Dunion 10-710 × 5 049

Dunlop 10-710 \times 5 549 Dunlop wets per set new Dunlop 11 \times 450 \times 5 592 Dunlop 10 \times 400 \times 5 049

Continental $10 \times 350 \times 5$ coded Continental $10 \times 600 \times 5$ coded

SPECIAL TOOLS



TYRES



Tube 11 \times 350 \times 5 Tube 11 \times 600 \times 5 Carlisle wet 350 \times 5 coded

Continental 10 × 600 × 5 coded
 Carlisle 11 × 350 × 5 coded
 Carlisle 11 × 450 × 5 coded
 Carlisle 11 × 600 × 5 coded
 Carlisle 11 × 600 × 5 coded
 German Goodyear 11 × 350 × 5 coded
 German Goodyear 11 × 600 × 5 coded
 German Goodyear 11 × 600 × 5 coded
 USA Goodyear 11 × 600 × 5
 Bridgestone 10 × 460 × 5 YAW
 Bridgestone 10 × 700 × 5 YAW

* Carlisle wet 450 × 5 coded

(Our 1979 catalogue gives a complete guide to all our

services and products. Send 50p)

£3.25 £5.50

£24.00

£82 £15.00 £22.00

£13.50 £9.12 £9.30 £12.01 £11.00 £12.00 £13.00 £9.50 £22.00 £24.00

£11.20 £13.50

Inch by Inch.

A series of articles on tuning and development, with the aid of a dynomometer.

By Peter Inchley

Part 1—Get Your Facts Right!

During the course of the next few issues we shall be taking a look at the working of a Heenan and Froude hydraulic dynamometer, more frequently given the abbreviated title of "Brake" or "Test Bed". We shall investigate its uses and advantages, and ways of converting the information it produces, hopefully, into more horsepower. We shall, by using a 250 Yamaha as a basis, attempt to confirm "What happens when you do what" by running many variations of specification. It is hoped that by changing items such as cylinders, heads, expansion chamber, crankshafts and carburettors etc., we will be able to observe a pattern of behaviour to help the home tuner understand the influence these changes have on engine characteristics. Power output figures will be given and hence it will be shown which mods, give the greatest improvements.

Surely many times the tuner has wondered "what happens if I raise or lower this or that port? What happens if I lengthen the tailpipes or expansion chamber?" We hope to give you some of these answers in later issues.

The ignition system will not be overlooked. We shall demonstrate the effects of overabundance or excessive retard, and why an engine "misses" through a malfunction, and look at the basic requirements for any ignition system.

The fuel system will also come under close scrutiny since it has been everyones' downfall at sometime or other. This will be carried out via the brake, as the way in which it is set up allows us to run the complete pump-regulator arrangement as used on most karts. Fuel pump and regulator pressure will be monitored at different axle speeds to find why sometimes an engine "runs out of fuel" or conversely overfuels. One article at the end of the series will be on a question and answer basis, for I feel sure the points discussed will lead the reader into asking for further information perhaps not covered in the various issues. So write in your query at any time to Kart and Superkart, and we will hopefully answer these in a later issue.

The Heenan & Froude Dynomometer

It is a very simple device really, and absolutely foolproof, providing the operator carries out one or two observations prior to running the engine. The information it gives is easy to read - simply pounds load and r.p.m. - and it needs no B.Sc. to convert this data into Brake Horse Power. Anyone can work the brake after 5 minutes instruction.

In our case, the engine is bolted down to a flat bed, and via a chain, drives a short 1" kart axle mounted on standard axle bearings, carrying a 24 tooth rear sprocket. This size of sprocket conveniently gives exactly a 3 to 1 reduction of engine speed into the brake on a 250 Yamaha i.e. 4000 brake revs will equal 12,000 engine r.p.m. This "countershaft" drives directly into the dyno through a flexible coupling. The mainshaft of the brake transmits the engine power to a rotor revolving inside the main casing, through which water is circulated to provide the hydraulic resistance and carry away the heat

generated in the water. In each face of the rotor are pockets of semi-elliptical cross section, divided from one another by oblique vanes. The internal faces of the rotor casing are provided with liners which have pockets in the same way. These pockets form together elliptical receptacles round which the water flows at high speed. When the rotor is in motion it discharges water at high speed from its periphery into the pockets formed in the rotor casing liners. It is then returned at a reduced speed into the rotor pockets at a point near the shaft.

The resistance offered by the water to motion of the rotor reacts upon the casing, which tends to turn on its supports. This tendency is counteracted by means of a lever arm terminating in a weighing scale which measures the torque reaction.

The engine revs are controlled by a hand wheel which operates sluice gates controlling the flow of water between the pockets formed in the rotor and casing, and as this can be done with the engine running under full power, in a short space of time, a complete power curve can be obtained.

The power output at any given r.p.m. is determined very simply. As we know the torque reaction (from the scale reading) and we know the length of the radius arm of the brake, together with the r.p.m. of the brake, the power output is easily obtained by the following formula:

B.H.P. = $\frac{\text{scale reading (lbs) x Brake r.p.m.}}{\text{constant}}$ Brake Constant

The brake constant varies between different sizes of Heenan and Froude Dynamometers and is merely dependent on the length of the radius arm of the brake and of course remains constant throughout the power curve.

Correction Factor

One other important consideration is to make allowance for changes in atmospheric conditions, mainly temperature and pressure. Previous thorough investigation has produced a Correction Factor which enables the operator to calculate power output under a standard set of conditions. Obviously an engine run on a hot summers day with lower atmospheric pressure will give reduced power compared with the same motor running on a cold day with high atmospheric pressure. Without the Correction Factor chart, direct comparison would not be possible. Some figures are shown in the chart illustrated.

CORRECTION FACTORS						
Pressure (inches	Pressure (inches Temperature (degrees fahrenheit)					
of mercury)	50	55	60	65	70	75
28.0	1.06	1.064	1.07	1.074	1.08	1.085
28.5	1.04	1.045	1.05	1.055	1.06	1.065
29.0	1.022	1.027	1.032	1.035	1.04	1.045
29.5	1.005	1.009	1.014	1.019	1.024	1.029
30.0	0.988	0.993	0.998	1.003	1.008	1.013
30.5	0.972	0.977	0.982	0.987	0.992	0.997

Having read the air temperature and atmospheric pressure, the B.H.P. of the motor is multiplied by the Correction Factor to obtain a corrected B.H.P. figure.

The Readings

The brake gives only two readings - revs per minute of the unit, and torque. Revs we know about, but what is torque? Well, it is the turning strength of the engine really, and has no direct reference to the revs. This torque is a result of the explosion pressure exerted on the piston and transferred through the connecting rod etc. to produce a turning motion. In the U.K., torque is measured in pounds/feet with the metric equivalent being kilograms/centimetres.

How do we decide when an engine is producing good torque? Since a lot is known as to the available energy in petrol, when combined in the correct proportions with air and ignited, it has been possible to arrive at an anticipated max. pressure as a result of that single explosion at a point soon

Kart and Superkart

racers by winning the last meeting at Cadwell. but 5" drums instead, without the long over-For so long the top honours have been shared hang that the early, somewhat agricultural Girbetween six men, Buttigieg, Elmore, Gange, ling disc units necessitated. The actual hard Hines, Kerkhoven and Styrin. Now we have a work of drawing it up was Hines' achievement. seventh - good to see it. I hope we will see The Dino arrangement also had the added more wins from this driver who has been "nearly advantage of variable castor. there" on quite a few occasions this year. It is good for the sport to have new faces emerge. The editorial in the November issue of "Karting" The elusive win is a difficult barrier to penetrate magazine dealt firstly with the tragic accident and should now give this talented Midland from which Paul Salisbury suffered fatal injurdriver the taste for more, and the all important ies at Oulton Park and then went on to record 3 confidence that follows a victory against the other fatal karting accidents that occurred in best. The Cadwell meeting was followed by the 1976, 77 and 78, pointing what appeared to be Danish Grand Prix at Jyllands Ringen (a superb an accusing finger at fast circuit racing, by saycircuit if you have never been there) and was a ing that "long circuit' racing could no longer success for Lennart Bohlin and the Hesketh be treated with the leniency and freedom of emporium. Lennart drives a Star, though the ordinary karting". Whilst I respect the fact that engine is no longer cared for by Heskeths. The this is a very delicate subject, I dislike hysterical secret of course must be in the exhausts!

races are run anti-clockwise and it features one dents did not occur on fast circuits in the of my favourite bends of all the circuits I ever accepted sense of the term - namely, Shenningraced on. It is unique, in that it starts with a ton and Longridge. Secondly, I cannot say that tight left hand hairpin leading into the actual I am aware of any aspect of fast circuit meetbend which is 180°, accelerating all the way ings that I consider to be conducted with any through the gears onto the start and finish degree of "leniency and freedom". Certainly straight. By the time you can see the straight not when compared with any level of motor ahead of you, it comes only just in time as the and motorcycle racing. That is with two exceppit buildings seem to be beckoning to you to tions. Firstly the need for medical certificates, fly off the track with the "g" force that has by eyesight tests etc., for all fast circuit competitors. then built up. It used to be "flat" in the days of This was proposed to the R.A.C. Committee by single cylinder 250s but I don't suppose it is Dave Buttigieg at his first meeting last year and now. Exciting memories.

with its inboard brakes connected via British their knowledge, or lack of it, may be. made universal couplings to the wheel hub. This seemingly extreme departure from the normal set up is to overcome the theoretically uncircuits. This was once organised, some four or desirable long overhang of the wheel from the five years ago, and immediately "cocked-up" kingpin axis (see photo) necessitated by the due to clubs not being fully informed as the the bulk of many disc brake assemblies, when situa- working of the scheme of licence signatures. I ted conventionally. Strangely, both seem to can only hope that no over-hasty action is work. Some of you will remember that the Zip taken to alter anything to the detriment of Espada attempted to achieve this by running karting on motor racing circuits, which this the disc over the kingpin, resulting in a very year has been of such a high order. short kingpin which placed quite a strain on the small dimension of the kingpin and stub axle. After the slight criticism I made last month The first outing of Bob Clowes' new creation

John Ball has now joined the elite in fast circuit adhesion. Liddle was, as he wasn't using discs

reactions to even the most tragic outcome of Jyllands Ringen is an unusual circuit in that any accident. Firstly, two of the four fatal accitotally disregarded. What is the point of asking such an accomplished driver onto the Committee A driver who seems to be getting it all together and then ignoring a very reasonable suggestion, more and more at each meeting is Calvin Fish in universally adopted by any other form of his new Dino kart. Whilst the configuration of motorised competition that takes place on the chassis layout is novel to say the least, the motor racing circuits. The "armchair experts" I standard of engineering and general finish I fear have their own ideas for safety, however illappreciate greatly. Particularly the front end informed and lacking in first hand experience

And secondly, a longer period of apprenticeship before competitors are allowed onto fast

The superb engineering of the Dino kart's inboard braking system.





The Chris Merlin column

pionship at Dunkeswell! Rob Kerkhoven, for the third time, had other ideas however. Three in a row, even in this slightly less prestigious title, is a phenomenal record – well done. At th the beginning of the year, with so many Championships these days, I was unaware that Rob was in fact the Short Circuit Champion, and at the World Cup I asked the easy going "Flying Dutchman" why he had the "1" on his number plates for the Morecambe Classic, "Because I'm the *** Short Circuit Champion - that's why.' How to open your mouth and put your foot in it the Merlin way! Well I know now.

This was dreamt up by Messrs Liddle, Hines and regarding Dave Buttigieg's performances on a was somewhat ignominious as it ended up Merlin at a very wet Aintree meeting when short circuit, I was convinced he would prove against the Armco at Oulton Park. Bad starts Martin wasn't getting too much front end me wrong by winning the Short Circuit Cham- like this are in my experience very often a good omen for things to come! I hope so, as I enjoy seeing ingenious and original thought succeeding. Motivation are going into the chassis business. The new kart is obviously based on the eve appealing design campaigned for the past three seasons by Clowes. It features a full ground-effect concept, with the split nose, and pontoon body section. The tubing is of high tensile aircraft specification, 1½" diameter and of varying gauge. The ground-effect does not include the use of skirts, in anticipation of stronger enforcement of ground clearance regulations next year.

The front end is quite novel in that the front of the chassis consists of two tubes coming forward to each kingpin, but unconnected by tubes. Instead they are linked by a sheet steel underpan to prevent lozenging but not the movement of a sort of suspension. With this in mind, the whole front end pedal arrangement is subassembly, plugging into the main chassis tubes, which also enables replacement in the event of damage. All the brake system is of their own make. The rear axle consists of a centre tubular section of 30mm O.D. and separate 25mm halfshafts, providing great rigidity

35 November

DICKSON karting supplies

YOUR CLASS 1 KART RACING SPECIALISTS TKM MOTORS AND SPARES



EX STOCK

TKM FF 99 Britain class engine. Complete £165.00 TKM FF 99 TT National and International class £195.00 TKM FF 99 TT Factory selected TKM FF 99 TT Factory Selected Super POA TKM FF 99 TT Dickson Tuned



Trade enquiries welcome All prices + VAT

CLASS 1 PREPARATION SERVICES FULL ENGINE TUNING SERVICES



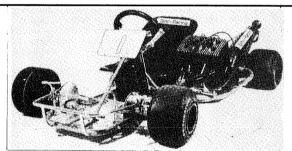


AGENT FOR ALL ZIP KART EQUIPMENT Goodvear Carlisle **Bridgestone** Dunlop



FOR MORE INFORMATION

PLEASE CONTACT ROY DICKSON **HEXHAM ROAD THROCKLEY NEWCASTLE TELEPHONE 673227**



September 30th.

For the 100 National class supplied factory assembled with alloy equipment and finished in hard wearing epoxy paint.

DINO 100 SUPER (less tyres)£415 + VAT **DINO INTERNATIONAL**

For the International class but can also be used in national, supplied as above but with magnesium equipment, adjustable stub axles and front and rear track, special chassis design to allow controlled chassis flex.

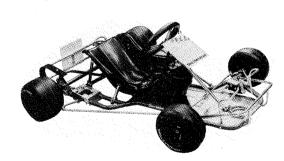
DINO INTERNATIONAL (less tyres)

3rd Harm Schuurman Dino International -Estoril, World Champs, 1979. 2nd Calvin Fish Dino 250 Super - Cadwell,

DINO 250 SUPER

The Dino 250 Super sets new standards and brings fresh thinking in chassis design to the Superkart class, from its adjustable front end geometry to the 30 mm back axle it has been designed to match the power outputs of the latest Yamaha motors and offers superb handling. It is supplied with magnesium hubs and carriers, and supplied factory assembled finished in a hard wearing epoxy paint.

DINO 250 SUPER (less tyres)£699.00 + VAT



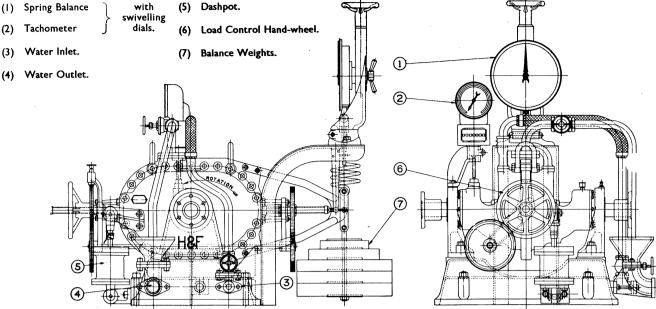
.....£516 + VAT Manufactured in Denmark, the Dino range of karts offer superb handling, and set new standards in manufacturing. If you would like further information of the Dino range of karts please send a S.A.E.

ENTER THE 80's WITH A D Sole UK Concessionaires

BURGESS RACING DEVELOPMENTS

210 Philip Lane Tottenham London N15 4HH Hours: Mon-Fri 9-6. Sat 9-4. Late night Thurs 7-9 Tel: 01-801 7402 (24 hr Ansaphone Service)

TECHNICAL



GENERAL ARRANGEMENT OF FROUDE DYNAMOMETER, TYPE D.P.X.

after ignition occurs. These facts have been proven and demonstrated after many years of engine experimentation. In actual fact the maximum cylinder pressure we can expect from a racing two-stroke is in the order of a 1000 pounds per square inch. This pressure of course falls, through natural decay and with the movement of the piston down the cylinder.

However, it is considerably more convenient to work from an average or mean figure and to this end the development engineer uses the Brake Mean Effective Pressure as his yardstick and continuous reference and measurement of efficiency. In the case of an efficient two-stroke engine working in near 100% volumetric efficiency, 125 B.M.E.P. is considered a very good torque figure.

This figure of pressure can be converted into turning motion or torque very simply as follows:

Torque =
$$\frac{\text{B.M.E.P. x vol. of cylinder in cc's}}{1236}$$

Hence, at 125 B.M.E.P.:

Torque =
$$\frac{125 \times 125}{1246}$$

= 11.91 lb ft for a cylinder of 125cc.

Torque at any given point converts to Brake Horse Power like

B.H.P. =
$$\frac{\text{Torque x r.p.m.}}{5250}$$

It can be seen that for a constant torque figure, if you double the revs you double the B.H.P. i.e., the B.H.P. varies directly with the revs. For a racing engine it should be coming clear that for most power output we are looking for the largest B.M.E.P., combined with the highest possible r.p.m. figure.

What then are the basic limitations? Mechanical problems aside, the engine relies only on atmospheric pressure to "force" the air through the carburettor and cylinder etc. The normal figure of 14.7 pounds per square inch can only move a certain mass of air through an aperture in a given time, and increasing the size of carburettor and inlet ports to accommodate more air is no good if you can't evacuate the exhaust gas efficiently to make room for an increased volume. Correct design of expansion chamber, exhaust and transfer ports is aimed at evacuating the engine, thereby making as much room as can be made available, available to the incoming charge.

As can be clearly seen with a 250 Yamaha, the maximum r.p.m. at which the engine can be efficiently "filled" is approximately 12,000. Over that figure, the time available for air to pass through the engine is reduced to a point where the revs can only be made to increase at the expense of torque, and very soon after, the maximum speed of the vehicle reduces rather than increases. No doubt further research will increase the r.p.m. figure, thereby increasing the available power out-

Why does a 250 single rev less than a 250 twin? Funnily enough, it is not due to a mechanical reason, although we all know the consequences of running a Bultaco at 12,000 r.p.m.!! No. it is back to air flow again. When you double the size of a cylinder from 125cc to 250cc you do not actually double the port sizes (it would be very nice if you did!). The port sizes increase by only 58.5%, thereby placing a natural restriction on the equivalent air flow for a 125. So for a given set of conditions, a 250 single will rev only

$$\frac{125}{250}$$
 x 1.58

as much as a 125. This does not mean, however, that freak exhaust timings and/or short expansion chambers will not make the 250 rev. It may do, but as previously mentioned, it tends to be a law of diminishing returns.

What Power can we expect from a 250 Yamaha twin?

If we maintain a high torque figure, at say 12 ft.lb., then the B.H.P. at different revs will be as follows:

R.P.M.	B.H.
10,000	45.7
10,500	48.0
11,000	50.3
11,500	52.6
12,000	54.8

These figures tie up well with the various factory claims over the years, of 44-54 b.h.p.

We shall see, in later articles, whether these figures stand up or not, and we shall demonstrate the way in which various changes to the motor influence the shape of the torque curve and the resultant power output.



MON.-FRI. 8 a.m.-5 p.m.

SAT. 8 a.m.-3 p.m. SUNDAY CLOSED

AN IDEA FOR CHRISTMAS

CRONUS STOP WATCHES - BELL AND SIMPSON HELMETS - P.V.C. AND LEATHER RACING SUITS - EQUIPMENT BAGS, HELMET BAGS, SEAT COVERS - P.V.C. AND LEATHER RACING BOOTS - KART STANDS - TROLLEY -COVERS - T-SHIRTS - ANORAKS - HATS -GLOVES - FAIRINGS - WINGS - SIDE TANKS -SEATS - BRIDGESTONE - GOODYEAR -CARLISLE TYRES - CHAINS - SPROCKETS -WHEELS - STEERING WHEELS **CARBURETTORS – AMAL – TILLOTSON** STANDARD AND PREPARED - TIMING GAUGES - IGNITION SYSTEMS - MOTOPLAT - FEMSA.

TO NAME BUT A FEW ALL IN STOCK AT ZIPS

NEW FOR 1980 SEASON THE ZIP SHADOW '80' FOR 100 INTERNATIONAL

THIS FABULOUS NEW KART HAS A SPECIAL 2 BEARING 30 MM AXLE AND IS MANUFACTURED IN A SPECIALISED TUBE TO GIVE THE ULTIMATE IN HANDLING FOR 1980.

NEW SUPERKART ACCESSORIES FOR 1980

ZIP 250 cc KART TROLLEY £35.00 + VAT ZIP TYRE LOCKING DEVICE £15.00 PER KIT FOR 4 WHEELS + VAT

ZIP GROUND EFFECT TRAY £25.00 + VAT **NEXT MONTH** WATCH OUT FOR DETAILS OF THE **ZIP SHADOW 'GP'** FOR THE ULTIMATE IN SUPERKARTS FOR 1980 Send 85p for new fully illustrated catalogue

continued...

R & R Juniors

After the rather untypical August conditions at Tilbury, September at Shenington dawned, and stayed, bright and sunny for the whole weekend. Saturday practice was a rather restricted affair with the competitors working overtime to get the maximum amount of track time into only sessions per class. This suited the locals but was a bit restrictive for those drivers finish 7th. from further away whose northern Clubs had looked after us so well earlier in the year. A full day of testing for the Championship contenders really is becoming cretion. essential with the keenness of the competition, and apart from anything else it does seem to get everyone well into the mood of competing in something a bit special – not just another one-day clubbie.

Most of the drivers found the bumps and debris of the Shenington track quite straightforward to learn, but difficult to go really quickly on. The track seems to be a bit like GP Silverstone in that it takes a special effort to put in your first banzai screamer lap - after which it all becomes relatively easy, and it was interesting to see how each driver approached the left hand corner after the start line which seemed to reflect the relative lap times quite accurately. The quicker ones hardly lifting as their karts hopped and bucked over the bumps, barely staying under control to brake for the medium speed right hander that follows.

The Green Man Championship race may have dissolved into chaos as darkness (and the race control hut shutters) descended, but the Road & Racing Racewear Juniors produced their usual brand of excitement, with intense but relatively clean racing in the heats.

SuperMark, apparently now recovered from the thrill of winning the RAC Championships, and with a massive number ONE on his number plates, returned to his usual form. On Saturday his Father couldn't get away until race day, and times. His Mum seems to be working very well Jeremy Cotterill, and with Peter Studer and Neil Douthwaite on row 2.

The first lap was a disaster for Cotterill, the line for the first time, but SuperMark had again. already stormed into an unassailable lead which

cal problems slowed his pace to eventually scraped through and set about Murphy on the finish two laps behind. This left first Adrian same lap that Higgins had moved into third, and Mills (for a lap) and then Nick Crabtree in they continued like this as a group which inclu-

gaining enough points to put him into conten- laps later. tion for the top three. Adrian continued to So this left Higgins getting ever closer to

Zip/Ferrari 1st Mark Bailey Parilla 2nd Neil Douthwaite Lane/Parilla 3rd Nick Crabtree Lane/Hewland

dropped further and further behind as mechani- borrowed Hewland on his ART chassis. Paul ded Jonathan Millward - an impressive debut Nick proceeded to chase Douthwaite for all to a Road & Racing Championship round - and he was worth, closing up all through the rest of Mark Wilson, until Kevin dropped right down the race, but not quite getting close enough to the field with a spin resulting from a demon offer a challenge. At the same time he did sub- outbraking move which didn't quite work! He stantially improve his Championship score, retired with undisclosed problems a couple of

hold down fourth, chased by Nick Harvey who Herbert, while South did everything he could had done very well to charge up the field from think of to solve the problem of Ian Murphy, 12th on the grid. Jon Scott-Banks took sixth who was obviously convinced that the Sheningand Lee Cranmer, fresh from a starring role in ton straights had somehow taken on a sort of three hours, divided up into just four and Lee Cranmer, nesh nom a starting low in the some time by rising from a lucky 13th grid to to go through he was forced to choose between encouraging Ian to join the scenery or being Simon Tring and a subdued William Hew- forced to do so himself. It was to his credit that land followed, while tenth place went to the frustration failed to make him either relax Jeremy Cotterill who had effectively charged his efforts or indulge in more forceful tactics. up through the pack after his first lap indis- From his behaviour Ian seems to fancy himself as a Formula 3 driver, but I can't help thinking that he might be in for a shock if he gets into a Senior category and tries the same thing . . .

With one lap to go Higgins finally caught Herbert and the race for second began. The first hairpin and it was Derek diving for the inside



With Bailey well gone, Neil Douthwaite (17) and Nick Crabtreee (55) fight out the Junior Britain

he was also acting as his own Team Manager as Simon Sutton was obviously determined to only to slide a bit wide and let John through grab the lead in the Junior National Final. This again before the chicane. The first hairpin and very competent he seemed, making constructive he did, diving into the first corner a thickness it was Derek back in front, this time more changes to his kart that logically improved his of paint ahead of Gary Foster-Jones. This was successfully. Back along the start straight the position, with a tight queue of drivers jostl- Herbert was all over him trying to get back, but as a mechanic so Mark has obviously got his ing for advantage, until at the hairpin at the Higgins wasn't having any and scrambled into whole family properly organised . . . For the paddock end of the circuit Gary lost it. This the right hander before the finish line still just "A" Final he sat on pole position flanked by allowed Sutton to open up a bit of a gap as the ahead, taking second by mere inches. An rest of the field all indulged in phenomenal exciting finish to a good race right down the avoidances (all of them successful) but there field. was some shuffling of places as well depending

no one was likely to dispute. Neil Douthwaite at an increasing distance by John Herbert. Initi- at least as fast as the leader. Andrew Stapley followed, making no mistakes after his Tilbury ally third, Ian Murphy got muscled out by a and Richard Dean completed the top ten. disappointment, and for a while Peter Studer Birel mounted Derek Higgins, who then set hung on to third spot until an excursion about catching Herbert. Meanwhile Championdropped him so far down that Bailey had ship Leader Kevin Warner was doing his best to lapped him before he could restart. He then hold off a very determined Paul South, using a

Jonathan Millward completed the race in dropping right down to 22nd as they crossed on how cleanly everyones engines picked up 6th, David Wright 7th, and into an amazing 8th came Gary Foster-Jones having carved his way From then on it was Sutton's race, followed back up the field after his first lap spin, lapping

> Simon Sutton Sprint/Parilla Derek Higgins 2nd Birel/DAP 3rd John Herbert Kestrel/Parilla



LANE RACING

161 Eardley Road, London SW16

• C.O.D.

SERVICE TRADE

ENQUIRIES

EXPORT **ENQUIRIES**

SECONDHAND

Part exchange welcomed

One of the World's leading Kart designers and constructors offer you the Lane Aerospace. A world class kart that does not cost the earth to buy, with spares and backup service to match.

MANUFACTURED FROM THE FINEST MATERIALS AND COMPONENTS TO GIVE THE FINEST PERFORMANCE

- LANE 100 BRITAIN supplied with tyres, no. plates etc. unassembled, less engine £250.00
- LANE AEROSPACE complete with alloy parts, spun alloy wheel rims, unassembled, less tyres £295.00 With German Goodyears£340.00
- LANE AEROSPACE complete with magnesium hubs, carriers etc, assembled, less tyres £350.00 Assembled with Dunlop Super tyres£395.00

ASK ABOUT LANE AEROSPACE "gold"

MOTOR TUNING AND PREPARATION





PARILLA

IMPORTER AND DISTRIBUTOR FOR PARILLA AND KOMET MOTORS

BIKE & KART

CLASS ONE RACING SPECIALISTS

ENGINES





KESTREL KARTS



- *Rebores, Honing, Helicoiling, Welding, Crank work and engine preparation carried out.
- *Stockists of most class 1 equipment.
- *Agents for Talasan Insurance.
 - FINANCE AVAILABLE · C.O.D. SERVICE



much, much more



2 Malvern Road Liverpool 6 051-263 8528 MON-THUR 6pm-9pm SAT 10am-5pm

DMA Racing **Zii** AND BARLOTTI KARTS

We are only 30 miles from most major cities in the Midlands

New and secondhand karts supplied VILLIERS * DAP * YAMAHA * PARILLA * **BULTACO * KOMET * MANX** SPARES AND ACCESSORIES

New Zip helmets £23.00

small, medium,

DMA wet suits 100% waterproof £23.00 | large, XL Any class 1 work undertaken

Griffin, Paddy Hopkirk, Phil Read, Kangol, Bell HELMETS

For most makes of Helmets BOOTS Westover, Zip Leather, Zip P.V.C.

Leather suits, Zip PVC suits, D.M.A. suits, Wet suits, Gloves, RACEWEAR

Inner Helmets, etc

Tyres, Tubes, Wheels, Piston Rings, Chains, Plugs, Pistons, **Clutch and Gearbox Spares**

FIBREGLASS Tanks, Fairings, Seats, Floor Trays

Our postal service is second to none

Karting requirements can be purchased from our Trade Van at most Circuits or our Showroom at:

41a Oxford Street, Church Gresley, **Burton on Trent. Staffs Burton on Trent 214489**

Showroom Hours: Monday to Friday 9.30am - 6.30pm Saturdays 9.00am - 5.00pm



The one certainty at Shenington was that Paul Fletcher was leading when the race was unfortunately stopped (Photo: John Pudney)

Oh Shenington...

Mr. Green Man himself, Paul Fletcher, takes round six. Red flag shambles finally leads to the race being abandoned. Roy Austin leads, but put out by a back-marker — definitely a name to watch. Sutton and Bailey convincing R&R Junior Report and photos: John Pudney winners.

"Oh Dear, what a calamity, the Shening- Paul Knapfield honoured us with his presence ton Green Man ends in dis-unity" . . . his first appearance at a major meeting for some (chorus) . . .

have been so good. The only names miss- the first lap leader usually won, but no one was ing were those who were either in Estoril particularly dominant in the heats. Although or travelling to Portugal for the World Alan Lane looked the fastest all day, the Shen-Champs – namely messrs. Allen, Fullerton, Wilson, Smart, Homewood and Spen- from Juniors, winning a Green Man heat whilst cer. Virtually all the other top drivers the old regulars got nowhere. were out at Shenington for Round 6 of the Green Man on September 16th, all had lasted best in the heats, rather than any of flags, but the organisers had obviously been hoping, no doubt, for a brief moment of the grid. From the "B" final came Paul Jackson, glory in the absence of "Mickey the Maes- Chris Needham, Simon Wright and Jackie tro" in Portugal.

Shenington is a funny old circuit, very bumpy, and not conducive to good viewing, as it's shaped like the letter E, without the top and bottom bits and no whole track. Added to this it's lined with straw bales, so if you fancy yourself as a photographer, you can't get a good backracing and forgot about shortfalls in the track, and the rather dominant organisation.

time - and was going well, actually winning a heat. The next heat he was nowhere . . . it was Such a pity, because it really could that sort of a meeting – everybody was fast, ington circuit flattered by deceit and we had the spectacle of young Gary Ward, fresh up

So when the final came, it was those who the regular favourites who were at the front of Brown, whilst poor Dave Coyne, out of "retirement" in search of Green Man points, was out of luck in fifth position.

The first bend of the opening lap in the main final saw a major incident, centring around a Harris, Gary Ward, Paul Jackson and other Roy Mailer, Roger Mills, Ricky Grice and John

Austin soon passed Knapfield for the lead and indeed started to pull out a gap on the following bunch, only to encounter young Gary Ward. Gary had been delayed in the first corner melee and although motoring rapidly was a lap down on the leaders. Austin was obviously keen to get past quickly to keep his advantage, but young Gary wanted to make a race of it. In a desperate attempt to outbrake Ward, Roy Austin either touched wheels or just plain lost it on braking and went off backwards into a fence post very rapidly, but luckily without injury. His plucky attempt to restart were unsuccessful so young Roy Austin's moment of Green Man glory was over.

The rest of the pack, now led by Paul Fletcher who had got past Knapfield, now encountered Ward, who was still racing so hard that I amongst others wondered if in fact he had been leading all the time! Fletcher's frantic waving eventually brought out a flurry of blue rather unnerved by the first lap incident and Gary Ward's failure to respond to the blue flag, so when Dave Evans knocked second place man Knapfield into a spin and Knapfield was promptly "collected" by the hard-charging pair of John Gravett and Roger Mills, it was all too much for them and the red flag went out!

As the field obediently drew to a halt on the start/finish line, so the arguments started. The matter where you stand you can't see the hard-charging Alan Lane, which succeeded in lap scorers' idea of the leading positions was delaying Lane himself plus Simon Wright, Biff totally different to that of the drivers, so when they tried to line up the grid for a restart in a front runners. This incident caused a flurry of totally different order to that of the positions activity, but no red flag so at my vantage of the leaders on the previous lap, there were ground. Anyway, all this apart it was a position near the hairpin, Paul Knapfield immediate and valid objections from some of glorious day, so everyone got on with the appeared in the lead, closely followed by Roy the drivers. Ricky Grice, who had been stopped Austin, showing a surprising turn of speed all for at least 2 laps before the red flag with his day, then Paul Fletcher, a flying Dave Evans, carburettor inlet broken, was credited with



continued . . .

fifth position on the grid and there were several other anomalies.

Although there were drivers who tried to capitalise on the situation, it was obvious that the lap scoring was incorrect and as the organisers would not admit to their mistakes and the drivers were not going to restart from incorrect positions, an impasse was reached, and at 7pm, in failing light, the meeting was abandoned!

The organisers insisted that there should be a prize-giving for the Green Man drivers, but as there was obviously going to be protests from some aggrieved participants, a meeting of the leading drivers was called and a rough "first 6" agreed at. One thing nobody argued about was that Paul Fletcher was leading at the red flag, and to avoid further argument Dave Evans sportingly agreed to withdraw his protest, accepting third place behind Paul Knapfield. Fourth was unofficially agreed to be Roger Mills, followed by Roy Mailer and in sixth spot Alan Gates. Since then however, an independent and accurate lap chart has been produced, Green Man points.

1st	Paul Fletcher	Sprint/Parilla
2nd	Paul Knapfield	Sprint/Sirio
3rd	Dave Evans	BM/Hewland
4th	Roy Mailer	Sprint/Parilla
5th	Roger Mills	DAP/DAP
6th	John Gravett	Zip/Sirio
7th	Alan Gates	Zip/TKM
8th	Tim Davey	Cobra/Kome
		K80
9th	Peter Elliot	DAP/DAP
10th	Terry Edgar	Sprint/Parilla

It is always difficult from my position to criticise the hard-working, unpaid organisers of any organisation was totally to blame for the fiasco are rare. that occurred. For a start, it is indisputable that the lap scoring was inaccurate. I know it is a BEHIND THE SCENES AT SHENINGTON thankless and grotty job, but it has to be done TYRES didn't seem to make much difference

Dave Evans (11) chalked up his best Green Man result - here he leads a bunch consisting of Simon Wright (77), Biff Harris and John Gravett. (Photo: John Pudney)



Red flag signals stop — then confusion! (Photo: John Pudney)

Secondly, it struck me that there were "too many chiefs and not enough indians", so when showing the following positions, which will be a problem did arise there was not one senior accepted as classified finishing positions for person to sort it out but several, resulting in argument. Thirdly, I think that perhaps the organisers were a little over-awed by the importance of the event and when an incident occurred, over-reacted. Frankly, the red flag need not have gone out for the incident in question - the track wasn't blocked - it was just the straw that broke the camel's back when added to the other incidents during the race.

To the organisers I say this: don't take these criticisms to heart – act on them constructively to improve things for the future. To the drivers; remember that no kart events would run at all, ANYWHERE, without the hard, unpaid, and thankless work of the organisers. We are all quick to criticise and slow to praise, so try to forget about this one bad event. It must happen kart event, but in this instance I do feel that the now and again – thank goodness the occasions

and I feel sure that if any karting event organiser at Shenington - some drivers hating Dunlops is understaffed enough to be unable to lap score and reckoning Bridgestones, others the comaccurately, then the drivers personal lap scorers plete reverse! . . . GARY WARD, the naughty and timers could be asked to help out, a task I boy of meeting, as well as the major surprise, am sure they would carry out more than was on a grotty old set of PRE-WAR Bridge-

happily in the interests of accuracy at such an stones! . . . ALAN GATES, after his performance in the British Champs, is now receiving a

bit more support from T.K.M. and is going to have a real go to get to the WORLD CHAM-PIONSHIPS next year. Alan's chassis has, by the way, been generously loaned to him this year by Bob Banbury, the man who makes quite a few of the cast kart parts . . . ROY AUSTIN was really unfortunate to have got involved with WARD. If he had not done so, he may have been the surprise of the season with a Green Man win. His performance can't have done his morale any harm though . . . MARK CRABTREE is going Formula Ford after Rissington, following in his famous father's footsteps . . . PAUL JACKSON was having his first outing since breaking his wrist and was finding it hard work, virtually driving one handed as his wrist is still very weak . . . ALAN LANE was as quick as ever in the heats and would have been favourite for the final had he not fallen off on the first bend. ALAN was trying to emulate I.A.M.E. with a hired Avis van, the relatively new Lane V.W. van having "done an engine!" . . . STEVE TUTIN had some good heats, proving that a Manx can still go if you want it to . . . DAVE EVANS seems to be going faster every meeting and sported the beautiful Hewland splined rear axle on his BM kart. It surely can't be long before Dave wins a big one ... SIMON WRIGHT was having grave handling difficulties but went well as usual before falling off!! . . . MICK WORTH was on his own very

special "custom-built" 107cm wheelbase Zip . . .



Balaclavas Gloves ROAD & RACING NOMEX lubman - white Clubman - orange or blue LINEA SPORT FPT in stripe - blue, white or red STAND 21 Clubman Nomex A14 as per suit

One piece four layer Firebird system made to s £460.00 STAND 21 SUIT £287.50 As worn by Laffite, Depailler etc. Two piece single laver navy blue Proban £28.75 SIMPSON RACEWEAR AVAILABLE ON REQUEST JAYBRAND MECHANICS OVERALLS £24.73 Underwear FPT LINEA SPORT £57.50

THREE LAYER QUILTED NOMEX
Available in red, yellow, white, royal blue, orange or any combination of these colours

JAVERAND NOMEY SHITS

2-piece single layer - white piece single layer - blue or red

piece double laver - white

LINEA SPORT FPT SUITS

Double layer - blue or grey

HAWKSPORT NOMEX

white piping

white piping

LINEA SPORT FPT

HAWKSPORT NOMEX

£9.78 £12.08

£9.78

£12 08

£13.80

£13.80

£14.38

£28.18 £21.85

£13.80 £17.25

£29.90

£18.37

£40.25

£14.38

£21.85

£14.95 £23.00

£5.46

LINEA SPORT FPT

Short (s,m,l)

Long (s.m.l)

Standard

Eve Hole

NOMEX

Standard

Eye Hole

standard

eyehole

eve-hole

Double layer

Double layer

STAND 21

1-piece single layer - white 1-piece single layer - blue or red

-piece double layer - blue or red

Pin stripe suits - blue, white or red

One piece single layer red or blue with

One piece double layer red or blue with

white panels
One piece triple layer red or blue with

NOMEX STAND 21 One piece or 2-piece Nomex suit £43.70

£67.28 £73.03 £73.03 £79.93 £125.35 £132.75

£253.00

£132.25 £74.75

£84.53

£139.15

£212 75

ROAD & RACING ACCESSORIES (HOLBORN) Ltd

75 Moore Park Road, London, SW6 2HH.

01·736 2881



Opening Hours: 9.30 - 6.00 Saturday: 9.30 - 1.00

Nearest Underground station: Fulham Broadway, Three minutes walk



SPORTAC KART LEATHERS Red with white stripes blue with yellow stripes Green with vellow stripes small, medium, medium/large, large

£123.63 £142.15

WESTOVER DE LUXE KARTING BOOTS

£31.65

£29.28 £52.97 £52.97 £66.55 £74.00 £4.80 £105.95 £95.30 £85.65 £10.38

£86.25 £95.45 £15.47

£56.97 £56.97 £52.92 £53.31

£155.25

£2.60 £6.50 £31.41

TRAILER TIE DOWN STRAPS

TIMING EQUIPMENT Cronus
Olympia single event
3S Split action
3T Taylor action

Carry Case for above models Cronus 1 Cronus 2 Cronus 2D

Carry Case for above models
HEUER

Microsplit 320 Split action Microsplit 325 Taylor action Microsplit 250 Split/Taylor witha

Microsplit 200 Split/Taylor action memory Microsplit 430 Split/Taylor action Microsplit 420/430 Carry Case Microsplit 230 Split action Microsplit 235 Taylor action Microsplit 120 Split action Microsplit 120 Split action Microsplit 400 Single event

MISCELLANEOUS
Linear Sport FPT-covered Corbeau
GT8 seat
Linear Sport FPT Rally Jacket - white &
ski-style, anti-gliss XS, S, M, L, XL
Masta Tyre Pressure Guage
Sperex VHT Exhaust Paint - white, blac
silver, red, yellow, blue, green, orange

silver, red, yellow, blue, green, ora Tank Tape - grey, red, black, blue,

green WD40 - 13½ ozs.

Stainless steel lockwire Wire Twisting Pliers



Star II	£64.95
Star II SW as above, with	
mall window.	£90.00
Star II XFLS - flame retardent lini	na
ind life support manifold	£108.00
Star II XFLS SW as above with	2100.00
mall window	£132.00
	£ 132.00
Star II XFLS TW as above, with	
win windows	£148.00
/lagnum II	£57.95
· ·	
San 1 \$10	

Star I Visors - clear, green, yellow Star II Visors - clear, green, vellow £3.20 Rin-offs - packs of 5 £1 75 2½mm Safety Visor for all Star II range clear only £11.40 Brown or vellow over-visor for Rip-offs for 2½mm visor-pack of 3 £1.15

GRIFFIN griffin Clubman HP (2495:77) Anti-Mist - ILC Vari-Clear, 6oz. Visors - Clubman, clear, brown, Kit to convert Clubman to GP GP tinted strip - brown, yellow

INTERCOM SYSTEMS SONIC 2-way Racing 3-way Racing
Open or Full Face Rally

sections. £24.15 NEW LARGE MODEL

ADIDAS
Blue Nomex with white stripes TO MAIL ORDER SHOPPERS Please be sure to state clearly all rele-£80.50 WESTOVER vant sizes. If ordering Overalls, give Fig. A: 3-layer blue Nomex laminated waist, chest, inside leg and height measurements. Please give full details

Fig D: Ankle boot Available in half sizes from 5 to 11. OVERSHOES for all above

Sizes: XS. S. M. L. XL

LINEA SPORT FPT Single layer - blue or grey Pin stripe - red, blue or white

HAWKSPORT NOMEX

NOMEX

Helmet Bibs

ingle layer - red, white or blue

Double layer - red, white or blue

Quilted - red, white, blue, orange of

boots
Fig. B: leather with Nomex lining
LINEA SPORT FPT £45.80 £41.50 Not illust. Boot with leather/FPT lining £39.10 £26.4

of goods ordered including colour where a choice is available VAT

All prices shown include VAT where applicable and are correct at time o going to press.

POSTAGE On orders up to £10 add 80p On orders up to £25 add £1.25 On orders up to £50 add 1.75





On orders over £50 - carriage free.

