

YOUR LOCAL DEALER NEEDS YOUR SUPPORT

0293

PRESENT THIS JERSEY AT

# MIKES BIKES

13, SOUTHGATE PARADE  
CRAWLEY,  
WEST SUSSEX,  
RH10 6ER

AND RECEIVE

# 10% OFF

ANY PURCHASE BEFORE 25-12-93

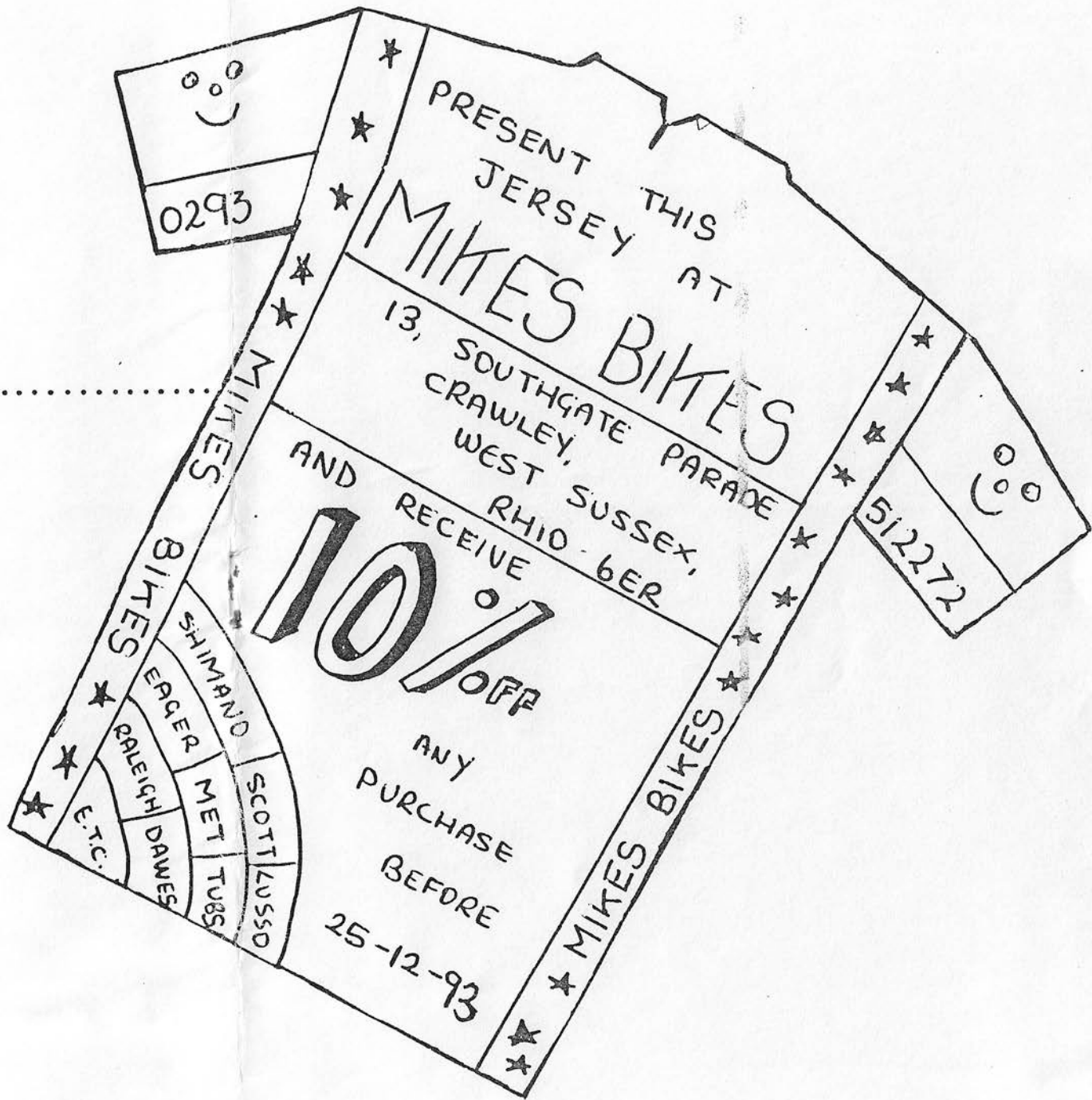
MIKES BIKES

SHIMANO  
EAGER  
RALEIGH  
E.T.C.

MET  
TUBS

SCOTT  
LUSSO

512272



COURSE - G.531, as used in 1992; course record-Eddie Adkins 53 30, 1992  
Start on A24, 0.11 mile north of A24/A272 crossroads and traffic lights,  
Map ref. 165228 at post at northern end of acceleration lane.

Go north on A24, straight on at Southwater south R/B and  
Southwater north R/B  
to Farthings Hill, where left up slip road  
to elevated R/B (A264/A24), straight over  
3rd exit, down slip road to rejoin A24  
northwards. Straight on at next R/B to  
GREAT DAUX R/B, (A24/A264), where RIGHT on A264 (2nd exit)

7.25 miles,  
straight on at Rusper Road R/B to  
ROFFEY R/B, (A264/B2195), where LEFT (1st exit)  
9.23 miles,

still on A264,  
straight on at Faygate R/B &  
Buchan Park R/B  
on to A2220,  
straight on at Breezehurst R/B to  
BROADFIELD R/B, 1st R/B west of A2220/A23 R/B,  
TURN (Map ref. 256353).....13.15 miles.  
RETRACE ON A2220, straight on at Breezehurst R/B &  
Buchan Park R/B

on to A264  
straight on at Faygate R/B to  
ROFFEY R/B, (A264/B2195), where RIGHT (2nd exit)  
still on A264 17.14 miles,  
straight on at Rusper Road R/B to

GREAT DAUX R/B, (A264/A24), where left (1st exit)  
19.12 miles,  
on to A24,

straight on at next R/B  
to Farthings Hill, where left up slip road  
to elevated R/B (A24/A264), straight over  
2nd exit, down slip road to rejoin A24  
southwards,  
straight on at Southwater north R/B  
and Southwater south R/B to

FINISH 0.14 mile south of Southwater south R/B,  
Map ref. 162250.

MARSHALS at: Farthings Hill slip roads and elevated roundabout,  
Great Daux R/B  
Roffey R/B and  
the Turn (2nd R/B after going under footbridge).

NO MARSHALS at straight on R/B's.  
NUMBERS at the start.  
MILEAGE BOARDS at 5, 10, 12½, 15, 20, 21, 22, 23 and 24 miles.  
LONDON SOUTH D.C. REGULATION-Riders not permitted to use the Farthings  
Hill underpass. Anyone so doing will be disqualified (off-course) and  
may be punished under reg. 48 and rule 22(b).  
TIMEKEEPERS-RAY DOUGLASS, Worthing Excelsior CC at the start and  
MIKE KILBY, Lewes Wanderers CC, at the finish.  
EVENT SECRETARY-ROB IN JOHNSON, 7 Gorselands, Billingshurst,  
West Sussex, RH14 9TT,  
0403 783368.

# THE BRIGHTON MITRE CYCLING CLUB

presents its 25th annual 25 miles time trial.

Without exception, all our sponsors have made this a special event  
by donating even more generously than usual.  
We have a £1,515 prize list - almost twice our previous record.  
Please repay them by buying their products.

FISONS plc  
156 tubes of RADIANT-B rub, 168 sachets of RADIANT-B liquid mineral bath,  
and 6 bottles of RADIANT-B liniment value £408.60

EVANS CROYDON  
a selection of cycle accessories including EVANS bottles and cages,  
and 150 EVANS catalogues value £290.60

WARNER-LAMBERT  
60 tubes of EUTHYMOL toothpaste and 60 bottles of LISTERMINT mouthwash  
value £174

BARTHOLOMEW  
15 Road Atlases Britain, 7 Road Atlases Germany, & 1 Road Atlas France  
value £161.77

S. J. CLARK (CABLES) LTD.  
20 CLARK'S cablesets value £115

A. E. WESTWOOD LTD.  
16 WESCO metal and plastic oilers value £104

HENRY SQUIRE & SONS  
3 CP3 Combination Cablelocks value £51.33

RIK'S RECORDS  
3 £10 vouchers.

ENERGY PLUS  
5 MAXIM bottles value £19.75

MOST OF THESE COMPANIES HAVE DONATED EVERY YEAR SINCE 1971.

SUPPORT THE COMPANIES THAT SUPPORT OUR SPORT.....

HEADQUARTERS - COPSALE VILLAGE HALL, COPSALE.  
PARKING - COPSALE VILLAGE HALL GROUNDS  
OPPOSITE PUB NEXT DOOR, BUT NOT IN PUB'S CAR PARK.  
CONCRETE LAY-BY, BETWEEN HQ AND A24.  
THEN DOWN ONE SIDE OF THE LANE.  
NO PARKING EAST OF PUB-VERGES ARE PRIVATELY OWNED. THANK YOU.

CANTEEN IN HQ - DRINKS AND FOOD AVAILABLE.  
PRIZE PRESENTATION IN HQ - PLEASE WAIT TO BE PRESENTED IF  
YOU ARE A PRIZEWINNER.  
THANK YOU

TANDEM "25" and LADIES and JUNIORS' "25":

AWARDED TO ALL STARTERS: A free drink, EVANS Catalogue, value £1.50,  
1 tube of RADIAN-B rub, value £1.35, and  
1 sachet of RADIAN-B liquid mineral bath, value  
£1, both donated by FISON'S plc; total £3.85.

PRIZES - TANDEM "25"

FIRST - EVANS BOTTLE & CAGE, 2 bottles of RADIAN-B LINIMENT and  
BARTHOLOMEW ROAD ATLAS BRITAIN, value £26.99 + £20.

2nd - 2 bottles of RADIAN-B LINIMENT and  
BARTHOLOMEW ROAD ATLAS BRITAIN, value £17.09 + £10.

3rd - 2 bottles of RADIAN-B LINIMENT, value £10.10.

4th - CLARK'S CABLESET, value £5.75.

Fastest Mixed Tandem-BARTHOLOMEW ROAD ATLAS GERMANY, value £6.99.

Fastest Sussex Tandem-RIK'S RECORDS £10 voucher.

PRIZES - LADIES and JUNIORS' "25"

FIRST - SQUIRE CP3 COMBINATION CABLELOCK & BARTHOLOMEW ROAD ATLAS  
BRITAIN, value £24.10 + £10.

2nd - BARTHOLOMEW ROAD ATLAS BRITAIN, value £6.99.

1st Junior - CLARK'S CABLESET, value £5.75.

2nd Junior - MAXIM BOTTLE, value £3.95.

1st Juvenile - EVANS BOTTLE & CAGE, and MAXIM BOTTLE, value £13.85.

1st Lady - BARTHOLOMEW ROAD ATLAS BRITAIN,  
BARTHOLOMEW ROAD ATLAS GERMANY & MAXIM BOTTLE,  
value £17.93 + £15.

2nd Lady - BARTHOLOMEW ROAD ATLAS FRANCE & BARTHOLOMEW  
ROAD ATLAS BRITAIN, value £14.98 + £10.

3rd Lady - BARTHOLOMEW ROAD ATLAS BRITAIN & BARTHOLOMEW  
ROAD ATLAS GERMANY, value £13.98.

4th Lady - BARTHOLOMEW ROAD ATLAS BRITAIN, value £6.99.

5th Lady - CLARK'S CABLESET, value £5.75.

Best Improvement (Line 10) - EVANS BOTTLE & CAGE, BARTHOLOMEW ROAD  
ATLAS BRITAIN,....  
value £16.89.

Fastest Sussex Rider - RIK'S RECORDS £10 voucher.

MEN'S "25":

AWARDED TO ALL STARTERS: A free drink, EVANS catalogue, value £1.50,  
1 tube of RADIAN-B rub, value £1.35,  
1 sachet of RADIAN-B liquid mineral bath, value £1,  
and, either 1 tube of EUTHYMOL toothpaste  
or 1 bottle of LISTERMINT mouthwash,  
each value £1.45; total £5.30.

PRIZES - MEN'S "25"

FIRST - BASTA TWIN PACK OF BATTERY LIGHTS WITH BATTERIES, SQUIRE CP3  
COMBINATION CABLELOCK, BARTHOLOMEW ROAD ATLAS BRITAIN and  
WESCO OILER.....value £50.55 and £30.

2nd - BARBIERI CHAIN CLEANER, BARTHOLOMEW ROAD ATLAS BRITAIN and  
BARTHOLOMEW ROAD ATLAS GERMANY.....value £29.93 and £15.

3rd - BARTHOLOMEW ROAD ATLAS BRITAIN, BARTHOLOMEW ROAD ATLAS  
GERMANY and WESCO OILER.....value £20.48 and £10.

4th - BARTHOLOMEW ROAD ATLAS GERMANY, WESCO OILER and  
CLARK'S CABLESET.....value £19.24 and £5.

5th - BARTHOLOMEW ROAD ATLAS GERMANY, WESCO OILER and  
CLARK'S CABLESET.....value £19.24.

6th - WESCO OILER and CLARK'S CABLESET.....value £12.25.

7th - WESCO OILER.....value £6.50.

8th - CLARK'S CABLESET.....value £5.75.

BEST IMPROVEMENT (Line 10) - SQUIRE CP3 COMBINATION CABLELOCK, WESCO OILER,  
BARTHOLOMEW ROAD ATLAS BRITAIN, CLARK'S  
CABLESET and MAXIM BOTTLE, value £40.30 and £20.

2nd Best Improvement (do.) - BARTHOLOMEW ROAD ATLAS BRITAIN, WESCO OILER,  
and CLARK'S CABLESET,.....value £19.24 and £10.

3rd Best Improvement (do.) - WESCO OILER and CLARK'S CABLESET, £12.25 and £5.

4th Best Improvement (do.) - WESCO OILER and CLARK'S CABLESET, value £12.25.

FASTEST TEAM of three - WESCO OILER and CLARK'S CABLESET, value £12.25 each.  
2nd fastest team - CLARK'S CABLESET, value £5.75 each rider.

1st VETERAN ON STANDARD - BARTHOLOMEW ROAD ATLAS BRITAIN, WESCO OILER,  
CLARK'S CABLESET and MAXIM BOTTLE, value £23.23.

2nd Veteran on Standard - WESCO OILER and CLARK'S CABLESET, value £12.25.

3rd Veteran on Standard - WESCO OILER, value £6.50.

4th Veteran on Standard - CLARK'S CABLESET, value £5.75.

Fastest Sussex Rider - RIK'S RECORDS £10 VOUCHER.

Prizes are being allocated this year to encourage improving riders and  
veterans, the latter usually make up half of any field.

The event secretary requests help from the two above categories at the  
result board to permit a prize presentation soon after the events.

111	Bob Stapley	V	Epsom CC	58	0	9.51	
112	Alf Peyton	V	Willesden CC	59	41	9.52	
113	John Coe	V	Lewes Wanderers CC	1	2	42	9.53
114	Ken Connolly	V	Fareham Wheelers	1	0	8	9.54
115	SHAUN KENNEDY		BEC CC	54	50	9.55	
116	Bob Addy	V	Hemel Hempstead CC	52	6	9.56	
117	Chris Homan		Lewes Wanderers CC	1	1	39	9.57
118	Phil Puttick	V	West Kent RC	1	1	58	9.58
119	Simon Greenland	V	Maidenhead & Dist.CC	57	22	9.59	
120	EDDIE ADKINS	V	LEO RC/SHORTER ROCHFORD	49	39	10.00	
121	Matthew Rabbetts	V	Lewes Wanderers CC	56	35	10.01	
122	John McGill	V	Alton CC	59	46	10.02	
123	John Jenkins	V	West Kent RC	1	0	53	10.03
124	John Percival	V	34th Nomads	1	3	19	10.04
125	PETER ROBERTS		Lewes Wanderers CC	54	29	10.05	
126	Ken Craven	V	Crescent CC	54	7	10.06	
127	Dave Adams	V	Norwood Paragon CC	58	57	10.07	
128	Jim Edwards	V	Middlesex RC	58	14	10.08	
129	Ian Landless	V	Lewes Wanderers CC	1	0	57	10.09
130	STEVE ELMS		EAST GRINSTEAD CC	50	46	10.10	
131	Peter Price	V	Lewes Wanderers CC	59	51	10.11	
132	Tony Deadman	V	Maidenhead & Dist.CC	56	35	10.12	
133	Richard Ellis	V	East Grinstead CC	1	2	2	10.13
134	John Frankland	V	West Kent RC	1	3	21	10.14
135	TOM JAMES		OXFORD UNIVERSITY CC	54	24	10.15	
136	Robin Lenharth		Brighton Excelsior CC	58	58	10.16	
137	Keith Dixon	V	Redhill CC	58	59	10.17	
138	Ian Barnett	V	Morden CRC	57	43	10.18	
139	Ron Purdy	V	Willesden CC	1	2	22	10.19
140	PHIL BARNES		TEAM RAPIDE	53	15	10.20	
141	John Blacker	V	Rockingham CC	53	57	10.21	
142	Andy Seltzer		East Grinstead CC	59	54	10.22	
143	David Barnes	V	Icknield RC/Compomotive W.	1	0	59	10.23
144	Mike Benstead	V	Salisbury RC	54	39	10.24	
145	BOB TAYLOR	V	EAST GRINSTEAD CC	57	57	10.25	
146	Andy Payne		Brighton Excelsior CC/M&J	58	56	10.26	
147	Bob Hargreaves	V	East Grinstead CC	58	55	10.27	
148	Doug Hitchcock	V	North Hampshire RC	1	1	24	10.28
149	Dave Sambells	V	Salisbury RC	57	51	10.29	
150	BOB THORNE		POLYTECHNIC CC/AIR	52	32	10.30	
Reserves:				CANADA CARGO			
151	Peter Harris	V	Reading CC	1	4	30	Event sec. will
152	Malcolm Bainbridge	V	Redhill CC	1	5	33	ring you, use
153	Ron Rogers	V	Lewes Wanderers CC	58	12	your number not	
154	Mike Farla	V	Catford CC	1	5	43	that of the DNS
155	Brian Hall	V	Hampshire RC	1	1	53	rider. Also, you
156	Larry Limpus	V	Lewes Wanderers CC	1	6	23	can, if necessary,
157	Haydn Cobby	V	Hampshire RC	1	2	6	turn up on the day
158	Dave Keeler	V	Vegetarian C & AC	57	11	and wait for a	
159	Tony Palmer	V	Bognor Regis CC	1	7	27	space to start in.
160	Paul Watson	V	Halifax Imperial Whls.	6	3	Entry fee refunded	
							if no ride given.

BRIGHTON MITRE CYCLING CLUB  
presents its 25th annual Gerry Jackson Memorial #25<sup>th</sup>  
on Sunday 24th October 1993, under R. T. T. C. regulations.

Number	Rider	Cat.	Club	Personal	Start		
TANDEM EVENT: ...REMINDER - CLOCKS GO BACK 1 HOUR ON SATURDAY NIGHT.....a.m.							
1	Mick Burgess & Peter Baker		Lewes Wanderers CC		8.01		
2	Gary Beard & Ron Hart		Basildon CC		8.02		
3	Chris Slater & Don McGlashan		South Eastern RC		8.03		
4	James Simmonds & Beverley Simmonds		Tuff Fitty Triathlon Club		8.04		
5	ALAN STEINLE & PAUL WOODMAN		LEO RC/SHORTER ROCHFORD CYCLES		8.05		
6	Kevin Harding & Sarah Lade		Central Sussex CC & Eastbourne Rovers/Phoenix Cycles		8.06		
7	Richard Payn & Clare Salmon		34th Nomads CC		8.07		
8	Trevor Beauchamp & Ron Allen		Antelope CC & Farnham RC		8.08		
9	John Watson & David Watson		Southborough & Dist. Wheelers		8.09		
10	ANDY SMITH & COLIN TOPPIN		BRIGHTON EXCELSIOR CC/M & J CYCLES WORTHING EXCELSIOR CC		8.10		
11	Ray Hughes & Pauline Strong		Clarence Wheelers		8.11		
12	Richard Van Looy & Michelle Van Looy		Racing Team East		8.12		
LADIES & JUNIORS' EVENT:							
13	Peter Watson	Jun	Southborough & Dist.	1	1	57	8.13
14	David Beadling	Jun	Crawley Wheelers	1	4	34	8.14
15	DANIEL RUDD	Jun	DE LAUNE CC		57	40	8.15
16	John Limpus	Juven	Lewes Wanderers CC	1	4	20	8.16
17	Gill Reynolds		Willesden CC		58	38	8.17
18	Nick Palmer	Jun	Bognor Regis CC	1	6	7	8.18
19	Brenda Read		Redhill CC	1	9	15	8.19
20	STEVE LENN	Jun	CRAWLEY WHEELERS		58	39	8.20
21	Martyn Edwards	Jun	Maidenhead & Dist. CC	1	3	0	8.21
22	Alison Alldridge		San Fairy Ann CC	1	1	4	8.22
23	Heather Wimble		Lewes Wanderers CC	1	8	30	8.23
24	Monique Gibson		Bournemouth Arrow/ Fircroft Hotel	1	5	7	8.24
25	PAUL ROWDEN	Jun	ROTHER VALLEY CC	1	0	40	8.25
26	Gail Cheatle		Willesden CC	1	3	11	8.26
27	Jeanette Wright		Farnborough & Camberley	1	5	36	8.27
28	Sharon Bagley		Crawley Wheelers	1	7	50	8.28
29	Shirley Cobby		Hampshire RC	1	4	9	8.29
30	STEVE WOODBRIDGE	Jun	BRIGHTON EXCELSIOR CC/ M & J CYCLES		56	29	8.30

41 ENTRIES RECEIVED FOR ABOVE EVENTS SO PLEASE START.....

Since typing the rest of this start sheet, a donation has been received from MEL BENTLEY of BENTLEY CYCLES, LEEDS.

MEN'S EVENT 142 entries, closed at 1 4 25.

31	Robin Johnson	V	Brighton Mitre CC		59	4	8.31
32	Keith Ward	V	West Kent RC	1	1	52	8.32
33	Tony Preston	V	East Grinstead CC	1	3	7	8.33
34	Derek Harris	V	Hampshire RC	1	3	43	8.34
35	MIKE ASHURST	V	NEW FOREST CC		54	55	8.35
36	John Poland		Worthing Excelsior CC		59	56	8.36
37	Robert Wimble		Lewes Wanderers CC	1	0	36	8.37
38	Nigel Shaw		Brighton Excelsior CC	1	3	27	8.38
39	Tony Workman	V	Willesden CC	1	4	25	8.39
40	IAN HOWARD	V	VC ELAN		53	52	8.40
41	Mark Sinnott		FESTIVAL RC/NICO-LAPAGE/ CORRIDORI SPORT		59	3	8.41
42	Richard Keevil		GS Stella		57	48	8.42
43	Mick Coward	V	Redmon CC		58	43	8.43
44	Peter Baird	V	Worthing Excelsior CC	1	2	28	8.44
45	MICK FAGG	V	WILLESDEN CC		52	32	8.45
46	James Petts		Redhill CC		58	0	8.46
47	Chris Grant		De Laune CC		59	57	8.47
48	Norman Harvey	V	Sotonia CC	1	1	18	8.48
49	Laurie Pither	V	Hampshire RC	1	1	22	8.49
50	PETER COOKSON	V	WILLESDEN CC		52	21	8.50
51	Chris Hill		Lewes Wanderers CC		57	57	8.51
52	Andrew Winkley		East Grinstead CC		59	26	8.52
53	Mark Walker		Regent RC	1	0	37	8.53
54	Bill Prout		ABC Centreville	1	2	33	8.54
55	ALAN STRONG	V	CLARENCE WHEELERS		54	56	8.55
56	Roy Turner	V	South Bucks RC		58	9	8.56
57	Paul Wilson	V	Regent RC	1	2	55	8.57
58	Steve Avely	V	Tooting BC/Hamsey Lodge		58	56	8.58
59	Mike Bloom	V	Crawley Wheelers	1	3	58	8.59
60	JULIAN PEGG		CHARLOTTEVILLE CC		53	8	9.00
61	Dave Shepherd		Bognor Regis CC	1	0	18	9.01
62	Mike Anderson		VC Etoile		57	19	9.02
63	Fred Shepherd	V	Bognor Regis CC	1	0	9	9.03
64	Antony Holder	V	Crawley Wheelers	1	4	1	9.04
65	MIKE MARCHANT		GS STELLA		54	52	9.05
66	Chris Shepherd		Bognor Regis CC		57	18	9.06
67	Graham Frogley		Hampshire RC	1	0	40	9.07
68	Patrick Bryant	V	Middlesex RC		59	7	9.08
69	Norman Attaway	V	Worthing Excelsior CC	1	3	59	9.09
70	MATT WATT	V	VC BAD		52	42	9.10

DNS - Anyone not intending to start, please ring event secretary on Saturday afternoon so he can allocate your start time to one of the ten riders who are reserves. Thank you.

71	Adrian Morris	V	Sussex Nomads CC		58	53	9.11
72	Don Awcock	V	Central Sussex CC		54	30	9.12
73	Paul Ridgers		GS Stella	1	3	6	9.13
74	James Bradden		CC Woking/Ellesley Bldrs.	1	1	16	9.14
75	EDDIE PAGE		RACING TEAM EAST		55	43	9.15
76	Shane Faulkner		Lewes Wanderers CC	1	0	11	9.16
77	Gerry Ashley	V	Cambridge CC		54	21	9.17
78	Dave Prior	V	Bognor Regis CC	1	1	23	9.18
79	John Yates (Trike)	V	Norwood Paragon CC	1	3	40	9.19
80	BOB DONINGTON	V	POLYTECHNIC CC/AIR CANADA CARGO		52	50	9.20
81	Kevin Shaw		Crawley Wheelers		56	19	9.21
82	Anthony Wells		Racing Team East		57	32	9.22
83	John Howell	V	Hounslow & Dist.Whls.	1	0	49	9.23
84	Frank Russell		Brighton Excelsior CC/M&J	1	2	37	9.24
85	CHRIS WORSFOLD	V	LEO RC/SHORTER ROCHFORD		52	4	9.25
86	Richard Finch	V	Swindon Wheelers		56	27	9.26
87	Martin Goggin		CC Woking/GFB Seafoods		58	48	9.27
88	Colin Newell		Addiscombe CC	1	1	26	9.28
89	Paul Fox	V	Gatwick Airport CT/Air.Ltd1		4	3	9.29
90	PETER CROFTS	V	SOUTHBOROUGH WHEELERS		53	9	9.30
91	Mark Gidney		De Laune CC		57	39	9.31
92	Dave Worsfold	V	Festival RC		55	53	9.32
93	Paul Cribb		Bognor Regis CC	1	0	53	9.33
94	Richard Sparkes		Redmon CC	1	3	17	9.34
95	SIMON McCARTHY		EPSOM CC		53	57	9.35
96	John Wager		Maidenhead & Dist. CC	1	0	21	9.36
97	Tim Dolphin	V	Paddington CC		58	28	9.37
98	Martin Moon		Somer Valley CC	1	0	23	9.38
99	Chris Crocker	V	Sotonia CC	1	1	32	9.39
100	PAUL PANAGI		HASTINGS & ST.LEONARDS CC		53	43	9.40
101	Trevor Cox		Polytechnic CC/Air Canada		53	40	9.41
102	Geoff Boore	V	Sussex Nomads CC		59	39	9.42
103	Robert Holder		Crawley Wheelers	1	1	12	9.43
104	Dennis Rolfe	V	Bec CC	1	0	18	9.44
105	MARK HOLDEN		Bedfordshire Road CC		55	31	9.45
106	Phil Saynor	V	Dartford Wheelers		56	54	9.46
107	David Miesner	V	Shaftesbury CC		58	54	9.47
108	Chris Birch		Paddington CC	1	1	34	9.48
109	Don Stagg	V	Bath CC		59	29	9.49
110	MARK JONES		GS STELLA		54	0	9.50

DNS - At the request of the RTTC's National Committee, a reserve system is being tried in the men's event. Definite DNS's, please ring event secretary on Saturday afternoon so your start time may be reallocated to one of the ten reserves. Thank you.

Since printing page 1 and finalising the prize list, further donations have been received from:

DECON LTD. 100 orange highlighter pens,  
value £110  
to be given to the first 100 claimants,

and

COLTRONICS SYSTEMS LTD. 2 dry cell rechargers  
value £79.90

The prize list now totals £1,705.

1st in the men's event is now goods value £70 + £30.

1st in tandem event now goods value £40 + £20.

Increases in other awards.

Coltronics' dry cell recharger is great - ask the event secretary who bought one this year.

The charger is also being marketed by INNOVATIONS.

Buy one - do yourself a favour.....

## Rechargeables on the cheap!

**M**odern British cycle lamps have a great appetite for batteries, which gives the regular night-time cyclist a strong incentive for limiting consumption of these expensive little chunks of chemical waste. Usually this means investing in nicads, but it is a well-kept secret that primary cells - that's the throwaway variety - can, in fact, be recharged.

According to an article by Alan Tong in *Everyday Electronics* (September 1991, for which I thank CTC member Alan Bradley of Belfast) this practice is officially encouraged in Japan, but as we know, the UK consumer is strictly instructed not to do so. Despite the warnings printed upon them, primary batteries do not explode if you attempt to charge them (but may do if you throw them on the fire). And while they might leak, this is only likely to happen during attempts to rejuvenate them in a charger intended for nicads. These push a direct current (dc) through the cell, which works all right on nickel-cadmium chemistry but produces disappointing results with zinc-carbon or alkali-manganese. To return *these* chemicals to their starting points requires a more subtle, two steps forward and one step back approach, in other words a biased alternating (ac) current.

In the article referred to above, Alan Tong actually recommends *five* steps forward: i.e. an ac current biased 5 to 1 in

favour of charging. If this makes sense to you, you will also understand that the desired effect may be produced by connecting the cell in series with a transformer and two resistors, one of which (the larger one) is bypassed in the charging direction via a diode connected in parallel. Do not ask me for the circuit diagram: anyone with the necessary electrical knowledge to operate such a charger safely and efficiently will also know how to make one from these brief details!

But do not despair: thanks to a purpose-made dry cell charger just put on the market by Coltronics Systems Ltd, anyone may cock a snook at Ever-Ready et al. This system costs about four times as much as a simple nicad charger, but is much more sophisticated even than the circuit described above. It comprises a mains transformer unit into which may be plugged any one of four different sizes of battery holder: for paired AA, C, or D sized cells, or one PP3. Optimum charging conditions for each size are provided by 'state-of-the-art' electronics within the holder. With cyclists' needs in mind, Coltronics have produced a splitter lead so that two pairs of cells may be charged simultaneously.

Whereas a nicad is supposed to have 500 lives, you cannot expect to get so many reincarnations from a cell that's designed for a long life and then to rest in

peace. But since they have a higher capacity than nicads, cost less in the first place and would otherwise have been thrown away, *any* amount of re-use must be a bonus. Coltronics claim that good quality alkaline cells can be given 20 to 40 new leases of life (compared to only eight or ten for zinc chloride) at 1½p per time using their charger. Charging times are of the order of three or four days, but as alkalines also last much longer this should not be a problem if you alternate two sets of batteries. (The device also charges nicads in the usual 14 to 16 hours.)

The accountant's 'bottom line' is far from easy to calculate - one has to make a lot of assumptions about actual depth of recharge and discharge conditions. Nicads probably yield similar savings in the long run, with full-capacity (4.0Ah for D size) being substantially more economical than the ordinary (1.2Ah) variety. The main advantage of recharging alkalines is that you get the savings much sooner, do not have to recharge anywhere near so often, and can buy new batteries if you should run out.

The Coltronics dry cell recharger costs £39.95 including postage and one of each size battery holder. Separate prices for mains unit, splitter lead and individual battery holders are also available from Coltronics, 47 Hardwick Industrial Estate, Bury St Edmunds, Suffolk, IP33 2QH. Tel: (0284) 755600. - CJ