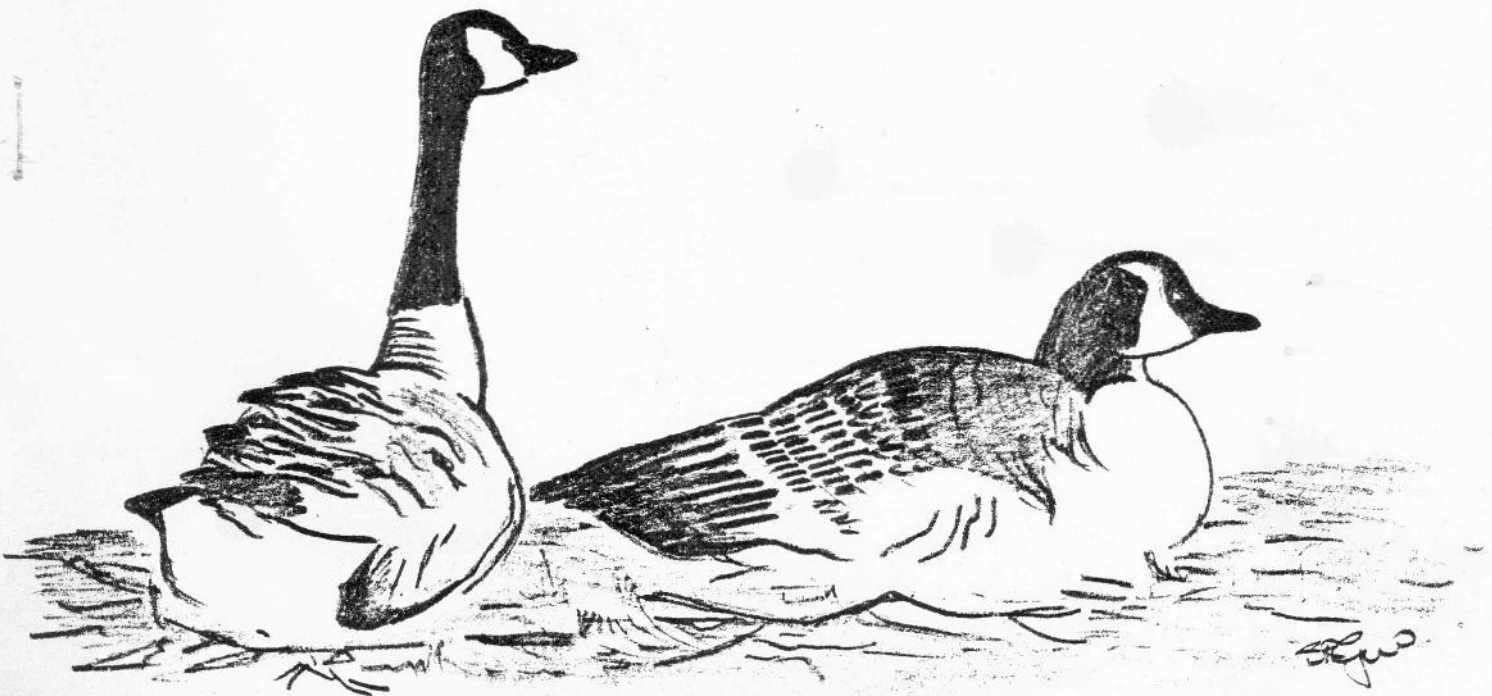
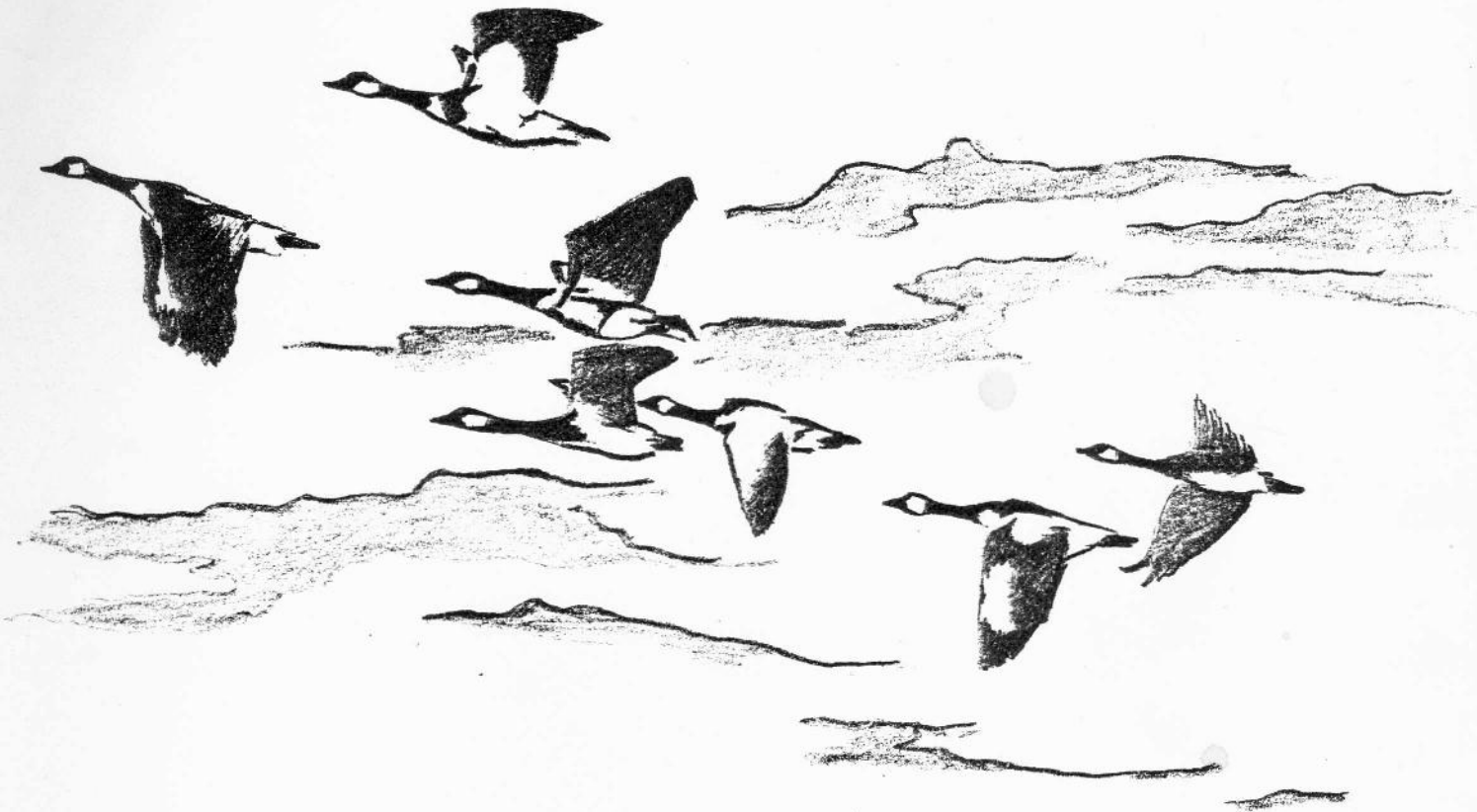


BUSH

sep 1979

TELEGRAPH



BUSH

vol. 21 no. 10

TELEGRAPH

the magazine of **R&EL** wood lane



Cover

Autumn Flight

by

Stephen Grey-Wilson

Editorial Board

David Green
Denis Groombridge
Mike Hagger
Richard Hammond
Geoff Holder
Ann Kirby
Ted Morrison



Whilst it must be obvious to our readers that the turn-over of Staff at Wood Lane has varied from month to month, the overall Staff level appears to remain reasonably constant, if not increasing as proposed by Company policy. However, we are informed that there has been no corresponding increase in the number of new applicants to the Social Club. Thus, it can be inferred that membership is falling, a situation which should be reversed at the earliest opportunity. The well-being of the club is dependent upon the total membership and the active support of members in organising and attending functions. In this situation we feel that a purposeful recruitment campaign by the Executive Council and Section Secretaries could help to resolve this problem. Publicity via regular contributions to the Bush Telegraph from these sources and full use of club notice boards should play a major part in this campaign. In fact, all club members should actively encourage new employees to join the Social Club by directing them to either Pete Walton (Hon. Gen. Sec.) or Denis Groombridge (Membership Sec.) who possess the necessary application forms.

At present the club prospers and we sincerely hope it will continue to do so.

Personnel News

STARTERS

Welcome to:-

Mr. P.R. Adams who joins us as a Student Apprentice in Product Engineering.

Mr. W.R. Scurry who joins us as an Assistant Technical Officer in the Physics Department.

Mr. E.K. Tan who joins us as an Assistant Technical Officer in Product Engineering.

Miss W.A. Jones who joins us as a Technical Assistant in Product Engineering.

Miss S.F. Cowper who joins us as Personnel/Admin Secretary in the Administration Department.

LEAVERS

Farewell to:-

John Ballard of the Physics Department who leaves after 8 months service to do full-time M.Sc. course at UMIST.

Gill Gale of Administration who is moving out of the area.

Paul Thomas of Product Engineering who leaves to take up alternative employment.

Terry Alleyne of Polymers Department who leaves after 6 years to do a B.Sc. at Lancaster University.

George Goodsir of Product Engineering (Alperton) who leaves to take up alternative employment.

Angelo Sanzone of Product Engineering who leaves after 1½ years to take up alternative employment.

Jeremy Arnold of Product Engineering who leaves after 2 years to continue his Further Education on a full-time basis.

Tony Jordan of the Physics Department who leaves after 3 years service to take up alternative employment.

TRANSFERS

Bernard Renwick, on completion of his Student Apprenticeship transfers from Administration to Product Engineering as an Assistant Technical Officer.

RETIREMENTS

Best wishes for a long and happy retirement to George Andrews (Andy) who retires from Works Engineering at the end of the month after 11 years service.

LONG SERVICE AWARDS

Congratulations to:-

Eric Savage of Product Engineering who completes 20 years service on 1st October.

Biccarella

BOTHER THE DEADLINE!
I'M NOT READY.



The History of Electric Wires and Cables

PART 20. PROTECTIVE SYSTEMS

By R.M. Black

Early electric lighting distribution systems seemed to be particularly prone to failure for one reason or another, and reports in the press such as that of the 22nd April, 1882 were quite frequent:-

"Edison lighting was used for the first time at the City Temple, at a popular concert, but the light broke down and the entire building was thrown into darkness" (Electrical Review, 1882, 22nd Apr.)

Fires were responsible for some of the incidents, as in the case of that at the Grosvenor Gallery Station which occurring during the early days of Ferranti's Deptford Main, completely disrupted the supply as did a subsequent fire under the railway arches at Spa Road, Bermondsey.

The Atkinson Split-Conductor Safety Cable

As underground cables developed they became intrinsically more reliable but they could still be subject to outside mechanical damage either from excavation operations in their vicinity or as a result of the conditions of operation to which they were exposed as for example, in collieries. Colliery cables were particularly liable to damage from rock falls and to overcome this Llewelyn B. Atkinson in 1891 developed a cable:-

"with a spirally twisted subsidiary conductor, which may be internal or external, in order to avoid sparking on fracture of the main. When the cable breaks, the spiral allows the two parts of the main conductor to spring apart while it remains intact".

Atkinson's patent of that year (BP No. 1905 of 1891) sets out the principle and claims the combination in electric supply or distributing circuits of mains and subsidiary conductors with a switch in the main circuit controlled by a fuse or cut-out in the subsidiary circuit.

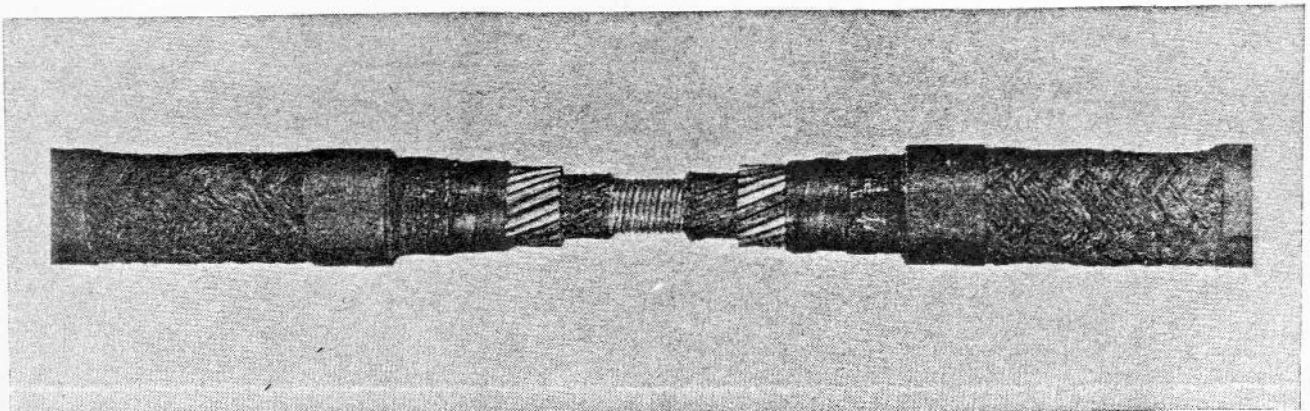


Fig. 1. The Atkinson Split-Conductor Safety Cable

This was the earliest attempt at anything resembling core-balance protection. In the Atkinson split-conductor safety cable, the current was shared between the inner helix of wire and a normally concentric stranded outer conductor lightly insulated from it. In the event of the main outer conductor being damaged to the extent that it became fractured, the inner helix would extend instead of fracturing and the additional diverted current

it would be called upon to carry would activate an overload trip or fuse and open the circuit breakers at the cable terminals.

Early attempts to maintain continuity of supply with mains cables, involved duplication of the feeder cables and the use of excess current relays. But this did not prove as simple in practice as might appear at first sight. The relays often proved an embarrassment as the fault current in the faulty feeder was often sufficient to trip the relays in the non-damaged duplicate feeder before the faulty cable had been completely cut out of circuit. It became increasingly clear that some improved form of automatic protection must be provided for three phase distribution systems on an appreciable scale. The earliest form of protection of this kind was provided by Charles Merz and Bernard Price and became known as the Merz-Price system of mains protection.

The Merz-Price System

In 1904, Charles Merz, founder of the famous firm of Consulting Engineers, Merz and McLellan, had much discussion with Bernard Price the head of his Electrical Dept. about ways of producing a more economical system of high voltage distribution. They realised that the provision of duplicate feeders and excess current relays left much to be desired. Their solution to the problem was revolutionary. A pilot cable was to be laid with each feeder cable which would by means of current transformers at each end of the cable, balance the current input at one end of the feeder with the output at the other. So long as there was no fault, the input would agree with the output and the feeder switches would remain closed, but immediately the feeder developed a fault, there would be more current entering the feeder than leaving it. The current transformer at the input end would produce in its secondary winding more voltage than at the output end. As a consequence, current would flow through the pilot cable, the relays which were provided in series with each current transformer would be tripped and the feeder isolated.

In practice it was found that this arrangement, though sound in principle, occasionally operated when the feeder had not developed a fault but was only under heavy overload. This situation resulted in the generation of a fairly large voltage in the secondary windings of the current transformer, which while still in opposition, gave rise to a capacity current in the insulation of the pilot cable. This problem was overcome by screening each core of the pilot cable so that the capacity current would flow to the screen and thus be diverted from the relay.

The Merz-Hunter System

The Merz-Price system was superseded in 1911 by the Merz-Hunter split conductor system. This was developed by P.V. Hunter, who had succeeded Bernard Price as Head of the Electrical Department of Merz and McLellan when Price went to South Africa and was later to join the Callender Company. P.V. Hunter continued the work on switch-gear and protective circuits. This new system was based on each of the three-phase conductors being divided into two equal sections, each section carrying half of the current. In the event of a fault developing, the inequality of the currents was utilised to open circuit breakers at each end of the feeder. This system gave a more sensitive degree of protection without the necessity for separate pilot cables.

The Callender-Hunter System

The ultimate development of the split-conductor form of protection was the Callender-Hunter four conductor protective system which was much less costly and simpler as regards terminal equipment than was the Merz-Price system. This system, introduced in 1920, relied on only one of the conductors being split. Thus, for a three-phase system, only a four-conductor cable was required. The two unsplit phases were known as 'solid' conductors and were of normal cross section, while the two conductors of the split phase, were known as 'split' conductors. The cross sectional area of each of the

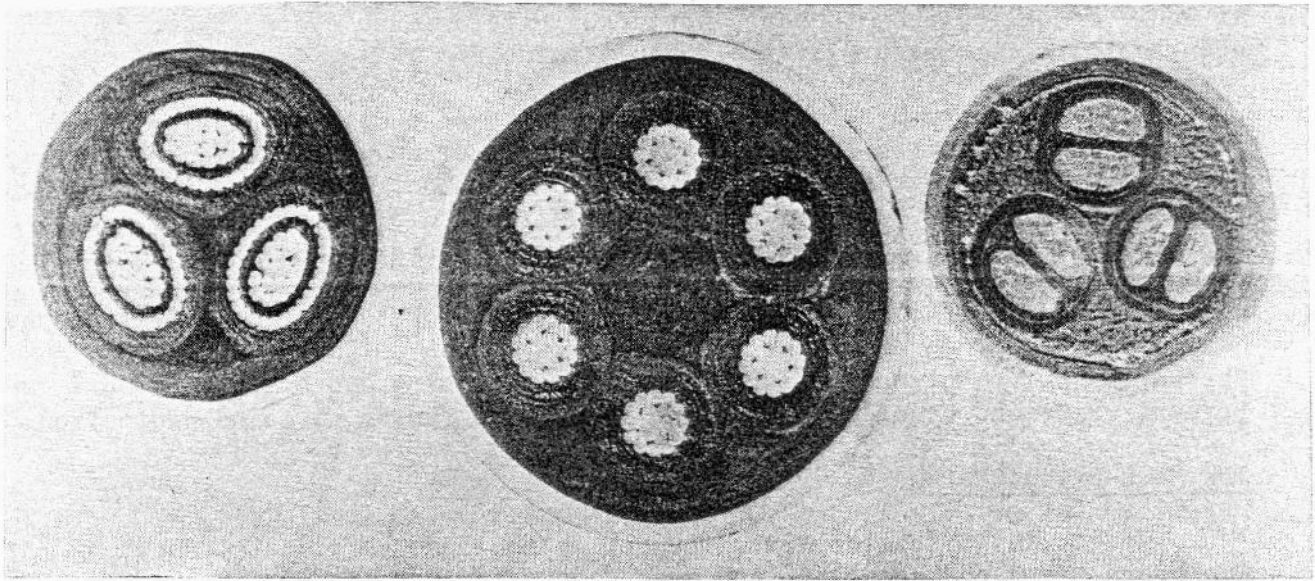


Fig. 2 Merz Hunter System.

latter was half that of the former. The cable was connected at each end to balancing transformers which, in effect, produced an e.m.f. between the split conductors. If the feeder was free from faults these two e.m.f.s were equal at each end of the cable and no circulating current would flow in the loop, any load current being equally shared between the two conductors. In the event of a fault, however, the balance of the e.m.f.s would be destroyed, a current would flow in the split-conductor loop, the relays at either end of the feeder would be energised by means of the current transformers and the circuit breakers would open.

The Ferranti-Field System

A slightly earlier method of feeder protection was that first described by Michael Field in 1901 (*Elec. Eng.*, 1909, 5, 599) this was subsequently taken up by Ferranti Limited and developed as the Ferranti-Field core balancing system.

In its simplest form the system consisted in surrounding a short length of the three-core cable, about 18 in long, with an iron core upon which a secondary winding connected to a relay, which would operate the tripping coil of the main circuit breaker, was wound. If there was no fault in the cable, the algebraic sum of the currents in the three cores would be zero, and no current would be induced in the secondary of the ring transformer. This condition would hold whether the load was balanced or not. In the event of a fault in one core, however, when part of the current through it would return by way of the earth instead of through the other cores, the currents through the three conductors would not neutralise each other in their magnetising effect upon the iron core of the transformers, a current would be induced in the secondary and the breaker would be tripped.

The Ferranti-Waters System

Like the Ferranti-Field system of which it was a development, the Ferranti-Waters system did not require pilot cables or special switchgear at the generator end. The system involved pairs of Ferranti-Field transformers on two three-phase cables having their secondaries connected in opposition through a three-coil relay, while at the sub-station end, separate current transformers were placed in each of the three phases of the cables. These had their secondaries connected through three coil relays, one to each phase. The main coils of the relays were fed from a 3-phase or three single phase transformers so that the coil of each relay was supplied with a voltage in correct phase relationship with the current in the current coil.

Under normal conditions, no current would flow through the centre coil of the relay, but if a fault occurred in either conductor a current would flow and the direction of the power which it conveyed would be dependant upon which cable had developed the fault, and being able to discriminate would operate the appropriate relay to disconnect the feeder. At the sub-station end the operation of the system was slightly different. Under normal conditions no current would flow through the outer coils of the relay but if a fault developed, in either cable, a current would pass through both coils which were made to repel one another and in moving outwards close the circuit of a tripping coil of the corresponding main breaker.

The Callender-Waters System

This system, disclosed in BP 13 933 of 1914, was in vogue around 1915 and necessitated a special design of cable. This consisted of six lightly insulated copper tapes put on to the core with a fairly long lay just under the lead sheath. The insulation between adjacent tapes and between the tapes and the lead sheath was sufficient to withstand 1000 volts. Both sets of three alternate tapes were connected together. One set through a relay to earth at one end of the cable, while the other set ran through a relay to earth at the other end. The relay closed the circuit of the tripping coil of the main breaker.

If an earth fault occurred on a conductor due to any cause, contact would be made between the conductor, both tapes and earth. This would complete a circuit through one set of tapes, the relay and earth. In the case where this might not have been sufficient to activate the relay due to the shunting of the circuit by the direct earth connection to the conductor at the fault position, the relay would be activated by the strong current in the tape running parallel to the conductor which would flow through the circuit comprising tape-relay-earth and back to the tape at the fault position.

In the course of the development of these various protective systems and of others such as the Bowden-Thompson system which also embodied metallic screens, a number of criteria for feeder protection emerged. These were as follows:-

1. The protection must discriminate with absolute certainty, that is, it must be completely effective with faulty cables and must be inoperative with equal certainty on healthy cables.
2. The protection must be universally applicable and be suitable for use on all possible arrangements of cables whether these comprise separate feeders or form inter-connectors on complicated networks or consist of branched feeders without switchgear at the points of junction.
3. The protection must be as instantaneous in isolating a faulty feeder as it is physically possible for any protection to be.
4. The protection must entail the simplest possible apparatus especially in that portion which has to be insulated for full system voltage.
5. The protection must not interfere with complete freedom in laying out, extending and operating the distribution network.

As P.V. Hunter has said:-

"all such devices, however, were intended as safeguards for the supply networks, and did not represent any true advance in the cable making technique. Far from providing a spring board for a new advance, they constituted at the best, a means of retaining a precarious hold on ground already won".

to be continued...

Thanks Folks!!

There are crises and crises, and we are no exception. Last month we walked into the Typing Pool to find Viv (full stop). Later a temp arrived. We walked into the Print Room to find the machine gone, along with Ann. A new machine (not installed at the time) plus Mrs. Denholm were found to have migrated to the Studio. We walked round the Studio to find Rob not there (sick), Doreen just going (holiday) and Bob running round in circles. The magazine was published on the 20th.

We must therefore express our thanks to Christine Finney who helped us with the typing, and Bruce Keen who gave his approval to the arrangement. Also thanks to Bob who operated the Xerox whilst eating his sandwiches, making photographic plates and installing the new printing press, and Ann who de-bugged the press in time to run the photos.

Back to normal this month.

Site News

Replacement of HV Laboratory 500 kV Transformer

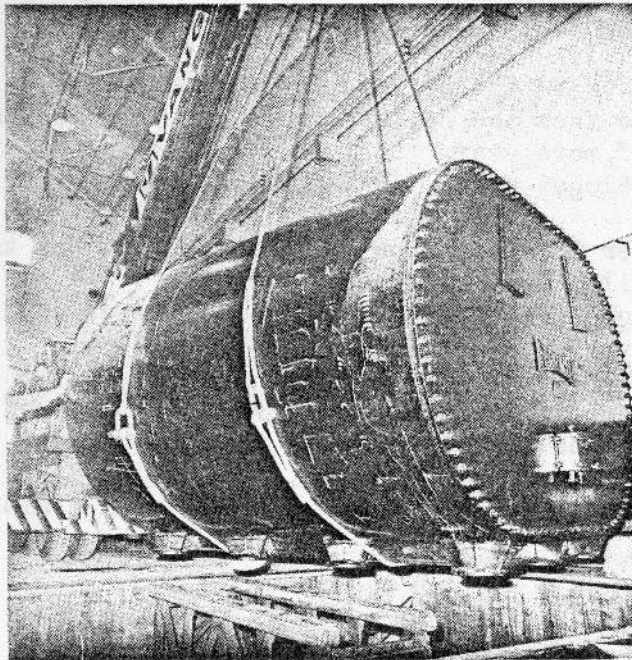
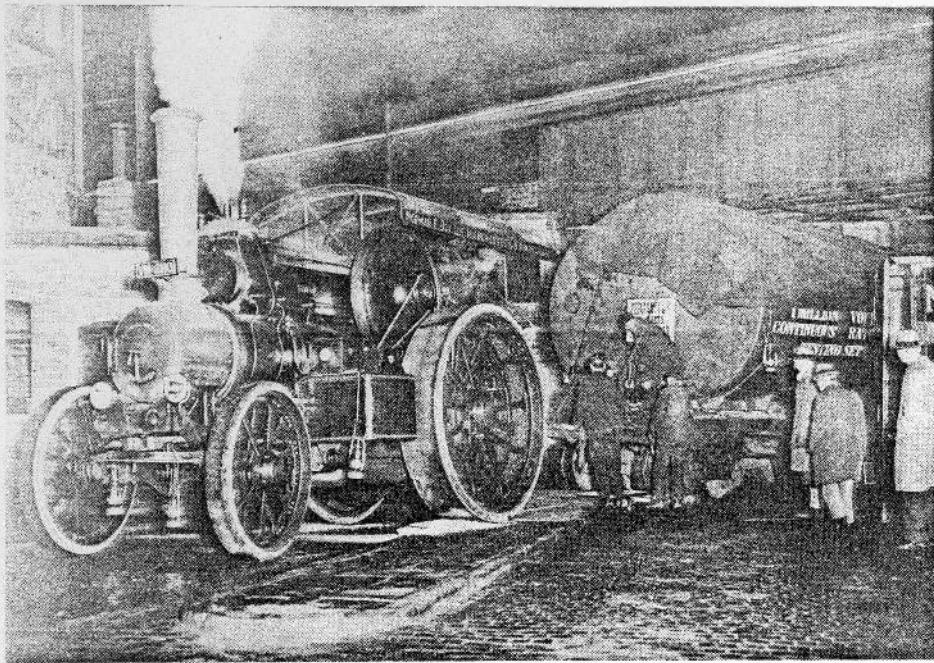
The departure from the Wood Lane site last month of the 500 kV 1 amp test transformer, T2, from the High Voltage Laboratory marked also the end of an era. The Research Laboratories of the old Callender's Cable and Construction Co. Ltd. were built up essentially around the high voltage laboratories and the major item of equipment in those laboratories in the early days of Wood Lane were the two 500 kVA transformers, T1 and T2, which could be used in cascade to give 1 million volts at a load of 1 amp.

Apart from a brief interval during the war (when the two transformers had their bushings removed and were floored over) the transformers were used separately or together for carrying out life tests and breakdown tests on cables up to the highest operating voltages, and also for flashover tests on insulators, until the late nineteen fifties when Power Cables Development transferred to Erith. The new 800 kV transformer at Erith made our 1 MV capability redundant and T1 and its associated synchronous motor/alternator were sold to City University.

T2 was retained as was its associated 1 MVA synchronous motor/alternator (which was also used to power the short circuit fuse testing plant). The early 1970's justified the retention of T2 when CRED, as it then was, received PERSC contracts for the development of plastic paper laminate oil-filled cable. In 1976 the transformer operated continuously at 20% overload throughout the year without apparent problem. However, the duty was too much for the motor/alternator (or rather its cooling fan) and this was replaced by a modern, compact regulator/reactor set.

In recent years the pressure on space in Wood Lane has focussed attention of T2 not because of its age but rather its bulk and lack of flexibility in use. It is now to be replaced by a very modern, modular construction series resonant set, initially comprising two 265 kV units which can be used separately or in cascade. There is an option to purchase at a later stage a third unit to raise our capability to 800 kV. The new transformer will be floor-mounted thus enabling the existing pit to be covered over and greater flexibility to be achieved in the operation of the High Voltage Laboratory.

Alan Arnold



up up

...and away

Ode To T2

One million volts went up the cry in 1931
"That's what we need", said LGB, to Mr. J. Urmston.
"Then you shall have it all, me lad", the revered sage replied
And so began an age which spread the name of Callender wide.

Now LGB soon had installed transformers by the pair;
T1 was almost underground, T2 up in the air.
Each one gave half a million volts at a current of one amp
And gave the capability of theories to revamp.

For nearly 30 years they stood (except for in the war,
When, 'cos they had Italian names, they put them 'neath the floor)
Until one fateful day in March in 1961*
T1 was sold and moved away, which left T2 alone.

What's more, they put her in the pit, no longer in the air
And turned her round to face the north, the way she had to stare
For eighteen and a half more years 'till seven weeks ago
When Physics (or Technology) dealt her the final blow.

At first they sucked her life blood out and emptied out her tank
Of o'er 5000 gals of oil ('twas all she ever drank);
Then ripped her bushing off by force and tore her stress cone out
And left her lying there forlorn, her future in no doubt.

They brought a crane made in Japan to raise her to the ground
Then slid her out on skates and blocks, out through the door they wound.
And then they hoist her on the truck and tied her down with chains
To take her to her rusting place - a scrapyard out near Staines.

Alan Arnold

N.B. The author claims some
poetic licence*

English
National
Opera

Tickets are available for the ENO production of Rossini's Opera

LA CENERENTOLA

(Cinderella)

at the London Coliseum on Saturday 6th October at 7.30 pm. Stalls seats usually priced £6.80 are offered for £4.50. Numbers are limited so phone Richard Grigsby (336) as soon as possible to avoid disappointment.

AUGUST COVER

We apologise for the incorrect caption to last month's cover.
It should of course have been:

Bush Baby

Dysphagian Diary

(the occasional column that's gone on holiday)

BACK NEXT MONTH

PLEASE KEEP SENDING THE FUNNIES

Wanted

What do you do with all those ends of wool which accumulate from your knitting? Don't leave them at the bottom of your cupboard or work-box - do some good with them.

Josie Gage from Bloomsbury Street collects scraps to make toys for sale in aid of the Multiple Schlerosis Society. Her efforts have drained Head Office of every last ounce (or is it 25 g these days?) so she is asking for our help. So, if you have any left-over bits cluttering up a corner please take them to the Typing Pool who have kindly volunteered to act as a Wood Lane collecting point. Any quantity gratefully accepted.

Accommodation needed in the Shepherd's Bush area until the end of February, please contact Simon Rustom - Diffraction (212).

X-word

The BT had one like this last year and we thought it was about time for another. Have a go and send your answers to David Green, Chemistry, by the 8th October. A prize awaits the lucky winner.

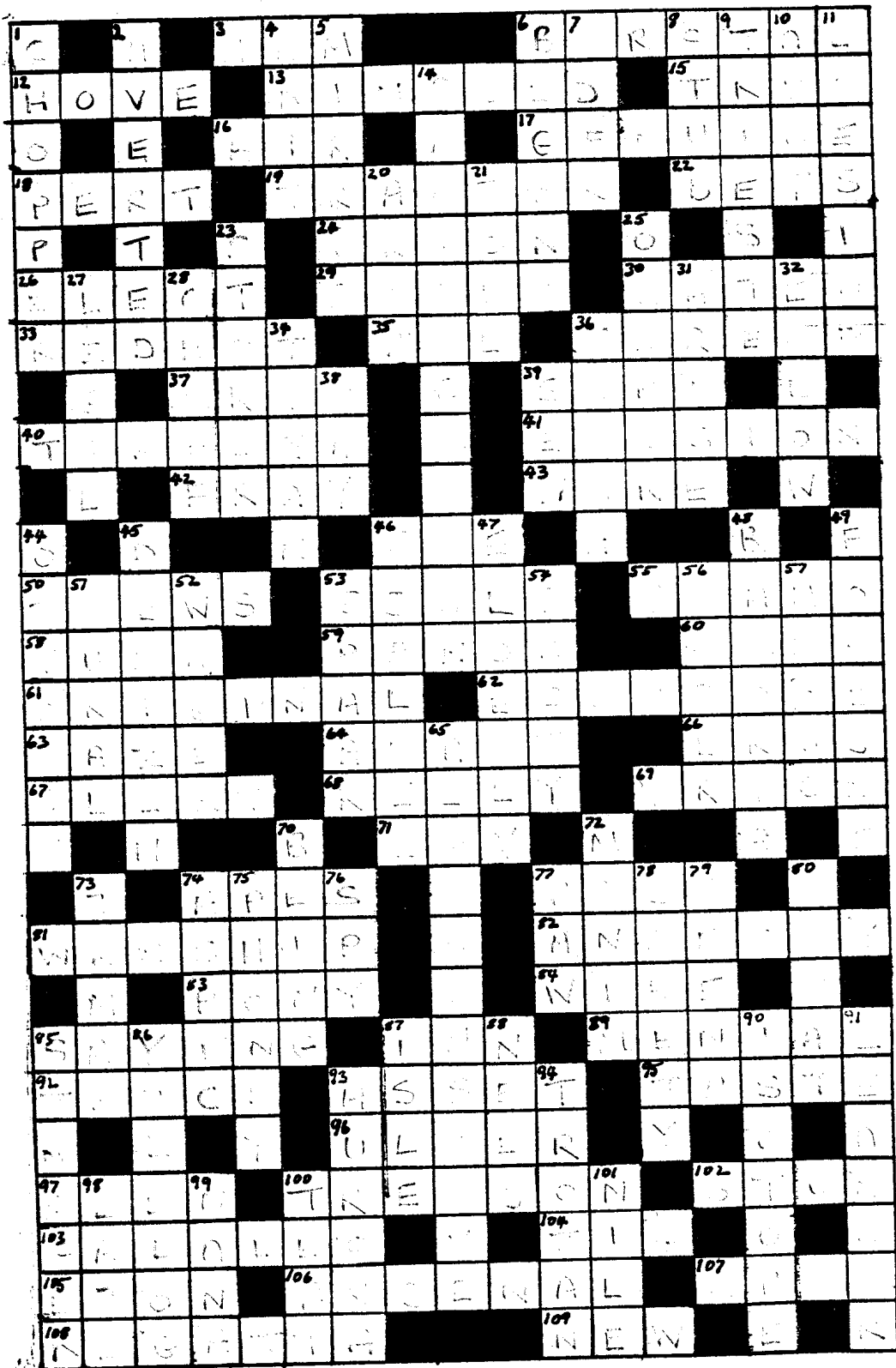
Clues

Across

3. Back of the thigh
6. Prison for young offenders
12. Resort next to Brighton
13. Baby faced?
15. Loyal
16. We need it to live
17. Authentic or sincere
18. Cheeky, like most experts
19. Farm vehicle
22. Wagers
24. Great hunter in the sky
26. Vote into office
29. A gun
30. Expectantly with such breath
33. Glowing with heat (3,3)
35. Be unwell
36. Unruffled
37. Of the same family
39. Indian garment
40. Silk fabric
41. Gradual wearing away
42. Fight and wear away by friction
43. Decrease in size and strength
46. Have vision
50. Tartan trousers
53. Head skin
55. Favour Texas fort
58. A canned fish
59. Himalayan bear
60. Always
61. Not thought of before
62. Adventurous prank
63. Hampton Court has one
64. A little way away
66. Upset arose in Piccadilly Circus
67. On the lookout
68. Ned Australian outlaw
69. It has to be paid
71. Produce (an egg)
74. Big monkeys
77. Italian town
81. A vessel in the R.N.
82. Absence of government
83. Small horse
84. Spouse
85. A proverb, perhaps
87. Hostelry
89. This task might be below one
92. Agreement to stop
93. Tessa gets back to advantage
95. Sample food
96. The businessman's sore
97. Narrow mountain valley
100. Be oppressive with the feet (5,2)
102. Knock silly
103. Famous astronomer
104. Irish dance
105. Famous public school
106. Famous soccer team
107. Part of a church
108. Henley is famous for it
109. Fresh.

Down

1. Helicopter or cutter
2. Stopped
4. Mine entrance
5. Looking glass
6. Depart by order of the Bongee
7. German river
8. Short pencil length
9. Adriatic port
10. Is she a relative of 59A
11. Where to find shelter
- in Leeds that is (3,4)
14. The world's biggest stretch
of water (7,5)
20. Opera song
21. Sound a bell
23. Ship's furnace tender
25. King of the fairies
27. Lawful
28. Tease, banter
31. Get up
32. Bestow money on
34. Person of great strength
36. - - - - Bernhardt
38. Old word for no
39. Do embroidery
44. Turkish sofa?
45. Inhabitant
46. Surgical instrument
47. Getting on in years
48. German state, capital Munich
49. Anticipate
51. Of the countryside
52. Bet that he carries on - war?
53. Famous Belgian statesman and
former PM
54. Meat Pie - Cornish
56. Outcast
57. A tame docile wine is to be found here
65. Pantomime hero's treasure site (8,4)
70. Existence
72. Backwards and forwards note
73. W. country river
74. Savoury jelly
75. Bogus
76. One who came in from the cold
- to snoop
77. The foot of father West
78. Freedom from danger
79. Where gladiators fought
80. Swindler
85. To reel
86. Christmas fuel (4,3)
87. Lies about Wight e.g.
88. Requirement
90. Kind of atom often
associated with
radioactivity
91. Famous rowing club in Chile
and Eritrea
93. - Borealis
94. Old Enemy of the Greeks
whose name is linked with
hard work
98. Behind time
99. She's in an appropriate
hiding place
100. Nipple
101. River of Egypt.



Health and Safety

It is a requirement of the Health and Safety at Work Act of 1974 that Companies publish their policy on health and safety and as an introduction, I believe the following quotations from the BICC Group Health and Safety Policy, signed by the then Chairman of BICC, Mr. W. Fraser, are an indication of the importance of health and safety within BICC.

....."The BICC Board will ensure that the spirit of the Act, as well as the strict legal requirement, will be complied with. Although management, supervision, trade unions and workers all have a part to play, the final responsibility rests with the Board".

....."There will be joint consultation on safety and health matters, with management and trade unions being represented on health and safety committees in accordance with the Act".

....."The health and safety record of a Company will be considered when the performance of management is being assessed".

The BICC R & EL Health and Safety Committee was constituted in 1975 and has the following duties and responsibilities:-

1. To review the working environment with special regard to:-
 - (a) Toxic materials
 - (b) Industrial disease
 - (c) Pollution
 - (d) Storage of inflammable liquids
2. To review the Health and Safety performance
3. To review accidents and prevention methods
4. To review laboratory changes
5. To promote good housekeeping and hazard spotting
6. To advise on safety procedures, instruction and training
7. To promote safe working
8. To inspect the site
9. To involve itself in any other relevant safety matters.

Its present membership is as follows:-

Chairman	Mr. J. Littler
Vice Chairman	Mr. R. Millward (ASTMS rep)
Secretary	Mr. G.F. Holder (EESA rep)
Members	Mr. R.W. Hall
	Mr. G.B. Wills
	Mr. A.J. Moore
	Mr. J. Heggie

The Committee meets four times each year and discusses the full range of topics set out above, plus anything else that it feels impinges on

health and safety. It makes recommendations to management with regard to any of these items via the minutes or written reports if necessary.

Site inspections are carried out at regular intervals and reports are submitted setting out any matters which the safety committee feel need rectifying.

Every person in the Company is responsible for his or her own safety and for the safety of colleagues. If you see something that is unsafe then you should have it put right, by doing it yourself or approaching your Section Leader/Department Head. If this does not bring the required result, that is the time to approach a member of the Health and Safety Committee, any of whom will be glad to assist you. Committees can only help to keep working conditions safe by making recommendations. Only you can ensure your safety and that of your colleagues by following the rules and by acting in a safe and responsible manner.

J. Heggie

Word Square

The Word Square competition in the last issue was an anagram of CABLE DRUM and as one entrant also spotted DREAM CLUB, but this flattery has in no way biased my decision and Malcolm Benn finished in second place with a total of 83 words. Less Marriage's entry totalled 73 after a couple of words which had been duplicated were removed from his list. I'm not sure whether he included them due to an oversight or whether he was seeing double at the time.

The winner with a total of 94 words was Keith Sichel to whom goes the prize of £2.

My thanks go to Ron Hall who did not enter the competition but provided me with a list of 117 words, which when combined with my own efforts, resulted in a grand total of 125.

D.R. Groombridge

Section Reports

CRICKET SECTION

Match Report:- Wood Lane Versus Bloomsbury Street 7.8.79

Prologue ("Oh! for a muse of fire")

"We're playing Bloomsbury Street and you're needed!"

"O.K. Skip where and when?"

"5.45 on the 7th in Regents Part"

"Where in the Park? It's a big place"

"Pitch 13 near the zoo"

"Great!"

"Super!"

The Journey (Proving both that "It is better to travel hopefully than to arrive" and that "Getting there is half the Fun".)

Down the Motorway, on to the Euston Road, left into Lisson Grove, right into St. Johns Wood Road. Oh dear! no right turn. Right into Circus Road, across the lights, right into "Sinjin Bois" High Street, where even the Rolls are double parked. Left into Prince Albert Road, right turn into the Park. Oh dear! no right turn. Left into Avenue Road, sharp right, wrong way round forecourt of plush block of flats, ignore the porter, across Prince Albert Road again and into the Park. Right on to the Outer Circle, there's an entrance. Park!

The Pitch ("Earth has not anything to show more fear".) No sign of anybody else as usual; myself and my companion John Arlott lug cricket bag over to the map. The cricket ground is indicated but is apparently being used by the RAF as a bomber station. Furthermore it is miles away. Grasp bag and head for the pavilion. Trudge, trudge, moan, groan.

In the distance a familiar shape looms, it is "Tiny" Tyson. Call him over and con him into carrying the bag. Find also Botham, Viv Richards, Michelangelo Buonarrotti and Hurricane Higgins. We are then informed that Pitch 13 is in use. Drop bag gratefully.

Both the opposition and the pitch are discovered simultaneously, the pitch being occupied by a courting couple, and actually number 15, further confusion is caused, as one end of the strip is marked 18.

Some more of our number, W.G. Grace and Kallicharan appear from yet another point of the compass. But there is as yet no sign of Severiano Ballesteros or Barry Sheene. These it transpires wait for 45 minutes outside the zoo entrance, however none of their relatives are on parole, so, eventually they join us.

The pitch is inspected, and the heavy roller is called for. Viv Richards loses the toss, and they put us in to bat. The Stage is set and all is in readiness for a classic battle on England's green and pleasant turf.

The Match ("On s'engage et puis on voit")

Queensbury rules are agreed upon. If a batsman scores 30 he retires to Mornington Crescent, Widdershins.

Of our number W.G. and Botham score 30 and retire. Kalli a creditable 19 and Viv distinguishes himself by being caught off a deceptive ball from Rachel Heyhoe-Flint for 13. "Tiny's" fan club is much in evidence. Our total is 129 for 5.

Our star bowlers Michelangelo and Smoky Joe open our attack. Both get creditable wickets, Smoky Joe distinguishing himself by having the same gentleman L.B.W. twice.

Sevvy gets two valuable wickets, one due to a catch, which Viv's double back somersault fails to make look hard. Sevvy is unlucky to miss a hard catch off his own bowling for a third wicket.

John turns in a creditable wicket maiden and Barry Sheene is lucky with a caught behind that almost goes for 6 or more, but is rescued by Kalli's immaculate stumping.

Hurricane and W.G. are unlucky, could the cause be anything to do with Barry missing two slip catches?

Botham gets Rachels wicket but a no ball is called, his other wicket results from a beautifully controlled delivery of superb accuracy.

"Tiny" is the beneficiary of a beautiful catch by Hurricane who is nearly trampled by Sevvy and Michelangelo .

"Tiny" himself takes a lovely catch just off the floor.

Hurricane also takes another spectacular catch, so that the opposition's account closes at 65 for 9 after the completion of the allowed 20 overs.

It should be mentioned that at times Viv, our captain, set what can only be described as a somewhat attacking field. With four slips and a gully, backward short leg, third man, and a very very very silly mid-off.

Thus leaving John Arlott at mid-wicket, actually in charge of a territory incorporating the better part of Regents Park. It may be said that when called upon he imitated the action of the tiger like a greyhound out of the slips and in retrieving the ball the range and accuracy of Schlanke Bertha.

On the debit side, Sevvy who had trouble with the lay of the blades of grass, and the wind direction, and was thus slightly erratic in direction, had to be warned for appealing before the ball hit the stumps. It is hoped that such reprehensible behaviour which can only tend to bring the good name of BICCCC (Wood Lane) into disrepute will not recur.

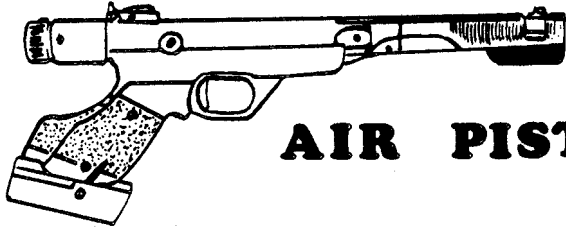
The result however was a resounding and glorious victory for Wood Lane.

Epilogue ("Quantum est il cane in fenestra")

The participants scatter again to all points of the Compass. We, as agreed were at the Spread Eagle on Young's. You were apparently at the Victory on Watney's. Hard Luck!!

Finally we must record our thanks to a so often unsung band of officials without whom our match would have been impossible. G.L.C. Parks, M. Nature, L. Mower and H. Rain the ground staff. I. Newton the scorer and T.A. Gabriel and K. Solomon the Umpires.

M.K.J.S. Bleary



AIR PISTOL SHOOTING



Member of

SHOOTING AVERAGES AS ON 9TH SEPT. 1979

Name	Highest Score	Average	Position
D. Groombridge	50	42.5	1
S. Verne	48	41.4	2
R.G. Maidlow	48	39.0	3
P. Donovan	44	33.0	4
J. Walters	44	27.6	5
P. Walters	46	23.8	6

Shooting evenings were (relatively) quiet during the past month, a result of holidays (we hope). Attendance averaged 4 during August, rising to the more usual figure of 6 early in September.

Comparison of shooting averages with those given in last months BT reveals a number of changes. Denis Groombridge has returned to resume his (almost separate) competition with Stefan Verne for the leadership, and came out top this month. Stefan's lower average was possibly a result of using a number of different pistols during the month. Bob Maidlow seems to have survived Janet Walter's challenge for third spot, his average increasing slightly, while Janet's dropped from 34 to 27. As a result of Janet's slight loss of form, moves to reduce her score by a factor of 2 (her pregnancy being considered to give her an unfair advantage over her male counterparts) have been dropped, for the time being.

Wine Tasting

SPECIAL ANNOUNCEMENT

The Annual Wine Tasting is coming.

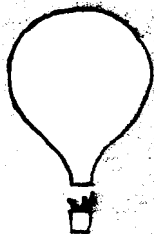
WHEN? Friday October 26th.

WHERE? Main Hall, 5th Floor, McFadzean Building.

WHAT TIME? 8.00 pm

HOW MUCH? To be announced.

Tickets will be available from David Goff, Denis Groombridge, Viv Shepherd and others, nearer the date.



JOHN PLAYER BRITISH BALLOON CHAMPIONSHIPS

For the second year in succession Chris Kirby flew Gabrielle at the British National Balloon Championships, which this year were sponsored by John Player. As John Player are based at Nottingham, that is where the event was centred. The form of the competition was the same as last year involving early mornings (0430 hrs) and late nights (2300 hrs or later) with plenty to eat and drink, but at rather odd times. The weather was much kinder than last year and a full quota of eight tasks were flown and we still had two mornings to lie-in until 0930.

The tasks themselves are designed to show how well the pilots can navigate and steer their balloons; the ultimate aim being to drop a small weighted marker nearer to a predetermined goal (e.g. minor crossroads) than any other pilot. A team of observers are used and it is their job to measure the positions of the markers and also to look out for any rule infringements. Each balloon crew had to supply an observer who was then appointed to a different pilot for each task. The time table for the week is shown below, together with Chris' placing.

Day	Briefing Time	Task Number	Event	Placing
Saturday	1200		Monster Briefing	
Sunday	0500	1	Hesitation Waltz	8th
	1600		Cancelled	
Monday	0500	2	Hare & Hounds	1st
	1600	3	Pilot Declared Goal	2nd
Tuesday			Lie-in	-
	1600	4	Elbow	8th
Wednesay	0500	5	Race for a Line	12th
	1600	6	Hesitation Waltz	2nd
Thursday			Lie-in	-
	1530	7	Fly In-Fly On	19th
Friday	0500	8	Gordon Bennett	1st
	1600		Fun Flight	
Saturday	1800		John Player Presentations	
	1930		Competition 'Dinner/Disco	
			OVERALL PLACING	4th

The rather low placing on Task 7 was due to the loss of the markers (two in this case) and only a poor estimate for their positions was permitted. If an average score had been achieved on this task Chris would have finished in 2nd place close behind the winner Crispin Williams, so it was rather bad luck. In fact Chris was the only pilot to win two tasks during the Championships.

It would be difficult to fully describe what is involved in each task but I will try briefly. The Hesitation Waltz is essentially two or more judge declared goals from which the pilot chooses one as his target after he has taken off. This enables him to more accurately determine the wind directions at different heights before committing himself to the final goal.

The Hare and Hounds involves a non-competing balloon (the hare) taking off six minutes before the competing balloons (the hounds) which give chase. The hare flies a fairly erratic course and then lands and deflates, while the hounds try to get their markers as near as possible to a target placed at the crown of the deflated hare balloon.

A Pilot Declared Goal is, as the name suggests, where the pilot chooses a goal after he has been given the local wind speeds and directions at different heights.

The Elbow requires the pilot to drop two markers such that the greatest angular deviation from a straight line is achieved starting from the launch point to the 1st marker and then on to the 2nd marker.

The Race for the Line event just required the pilot to make the best use of the wind speed to reach a designated line (straight railway track) in as short a time as possible from take-off.

Another task involving two markers is the Fly In-Fly On. The first part of the task is a judge declared goal and it is up to the pilot to find a launch site in a suitable area. The second part is a pilot declared goal which the pilot nominates by writing a map reference on the 1st marker.

The interesting name of the last task, the Gordon Bennett, may have been derived from the exclamation given by the pilots as the rules were described, 'Oh! Gordon Bennett!' The idea here is to drop a marker as far as possible from the launch site but within an irregularly shaped goal area designated by the judges. Thus the best point would be at the extreme edge of the goal area from the launch site but any markers going outside the area would automatically score zero. It required a cool nerve to hang on to the marker right up to the edge and Chris certainly had that to win this task.

The six crew members Yvonne Ferrier, Dave Green, Joe Lou, Graham Taylor, Nick Thearle and myself Denis Groombridge had a thoroughly enjoyable week and would like to thank Chris Kirby for putting up with us. We wish him better luck next year although we think that 4th out of 22 is a very creditable performance.

Our final success of the week was when Yvonne won the T-Shirt slogan contest at the Disco. She was well out in front with the slogan 'If you like my T-shirt put your hand up'.

The Film Column

FILM SECTION'S 26TH SEASON

The new season of film shows at Wood Lane starts next month. The feature films were all selected from the top of the Film Poll, and we start with the Poll winner 2001: A SPACE ODYSSEY, which we have booked at great expense. That showing is followed by our annual Soirée, so we hope to see you all there. The full season is as follows: make a note of the dates now!

31st Oct.	2001: A SPACE ODYSSEY and afterwards - a Soirée
21st Nov.	CHINATOWN
12th Dec.	PICNIC AT HANGING ROCK
16th Jan.	AVANTI!
6th Feb.	HITLER - THE LAST TEN DAYS
5th Mar.	SUGARLAND EXPRESS

All (except the first show) accompanied by a Full Supporting Programme of Shorts.

NATIONAL FILM THEATRE

Directors featured in the October/November NFT programme are Preston Sturges, Stanley Kubrick, and John Ford, with documentaries from Michael Grigsby and Joris Ivens (continuing the season of his films). But the major emphasis is on TV, with presentations of American TV series, films made initially for TV (including Stephen Spielberg's superb DUEL), among other events. And then there are films from Turkey and from Macedonia (where, apparently, they have been making films since at least 1908).

With NFT1, NFT2, BICC Film Society (see above) and the Scala (see below), London should provide enough variety to suit any film buff!

VIEWING SESSIONS

The London Regional Group of the Federation of Film Societies hold regular Viewing Sessions of films on Sundays: forthcoming dates are September 30th, October 21st and November 18th. If you would like to be kept informed of details, contact Tom Ruben (212).

RECOMMENDATION

Rather than simply recommending a film, this month we recommend a cinema - The Scala, 25 Tottenham Street, W.1. (just behind Goodge St. underground). There is a different double - feature programme (£1.90)

Practically every day, with a late show on Fridays at 11.15 and all night shows every Saturday (£2.50). A wide variety of films are shown from earlier comedies - e.g. the Marx Bros THE BIG STORE and A NIGHT AT THE OPERA on Oct. 3rd - to the latest shockers - e.g. ERASERHEAD and PINK FLAMINGOES on Oct. 4th and 5th. For uncertificated programmes such as this latter, membership (20p a year, immediate entry) is required. In some months, one day in each week is devoted to a theme e.g. every Wednesday in July and August consisted of Bogart double features and every Tuesday in October there is a jazz film. All night shows in October are: 7th 5 Jack Nicholson films; 13th 5 comedies; 20th 4 horror films; 27th 5 Clint Eastwood films. As if all this were not enough, there is a cafe/bar where you may obtain lunches, teas, suppers and late eats. For further details see the noticeboard in the Cafeteria.

Diary of Events

DATE	EVENT	FOR INFORMATION
Fri 21st Sept	Disco 8pm - 1am	Yvonne Ferrier
Mon 8th Oct	Last day for BT Contributions	Editorial Board
Mon 22nd Oct	Publication day for BT	Editorial Board
Weds 31st Oct	Film show (2001) with Soiree	Ted Morrison
Fri 16th Nov	Fishing - Littlehampton	Andy Platt
	<u>Regular Events</u>	
Tues & Thurs	Badminton	Vic Banks
Thursdays	Air Pistol Shooting	Peter Walters Denis Groombridge
Weekends	Hot-Air Ballooning	Roger Millward

