SELECTIVE SEARCH
The COMPUTER CHESS News Sheet

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CONTENTS, Issue 63

■**SELECTIVE SEARCH** is produced by ***ERIC HALLSWORTH***. CORRESPONDENCE and SUBSCRIPTIONS to Eric please @ **The Red House, 46 High Street, Wilburton, Cambs CB6 3RA**. Or e-mail: eric@elhchess.demon.co.uk
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[2] Computer BEST BUYS - Editor's Choice

The RATINGS for the computers and programs which follow can be found on pages 27 and 28. I have not tried to include every current machine here - this is my own 'short list' of what I consider to be the current 'BEST BUYS' at various price points and playing strengths, also bearing in mind features and quality etc. Further info. is given in Catalogues available from the distributor as shown on the front page, or from my 'Best Buy Guide' issued with 'Selective Search 61'. It is always worth ringing to check the extra cost for a mains transformer where applicable, but post and packing are normally included free. The list is updated in each Issue of the Magazine.

PORTABLE COMPUTERS

Kasparov
ADVANCED TRAINER £79
TRAVEL CHAMPION £99
TRAVEL CHAMP 2100 £139 - great value, 4½"x4½" plug-in board + display
Novag
JADE2 £99
SAPPHIRE £199 - calculator style, strong

TABLE-TOP PRESS-SENSORIES

Fidelity
CHESSTER £159 - voice model, 160 BCF
Kasparov
GK-2100 £169 - top quality Morsch program, recommended
Novag
ZIRCON2 £139
DIAMOND £249 - very strong, clever playing style, good value
Mephisto
NIGEL SHORT £199 - laptop lid, Staunton + disc pieces, graphic display - great!
MONTREUX £449 - very strong, dynamic
BERLIN PRO 68020 £595 - top strength and excellent features, esp. analysis

WOOD AUTO-SENSORIES

Kasparov
PRESIDENT £299 - best value wood board... ever! - display, good features
RENAISSANCE BRUTE FORCE £579
Mephisto
EXCLUSIVE RISC2 £945 - very strong! (ring re 2nd. hand Modules for the upgradeable Exclusive boards!)
Tasc
R30-1995 £1249 - beautiful piece recognition board, very strong + dynamic

PC PROGRAMS

HIARCS4.0 £89 - super playing style
GENIUS4 for Windows £89 - Lang's best
MChess PRO5 £89 - big opening book
REBEL7 £79 - Ed Schroder's best yet!
FRITZ3 £79
FRITZ4 (CD ROM) **£89**

Also for Apple MAC
HIARCS4 £89 - best by far for the MAC

PC DATABASES

ChessBASE for Windows
'Basic' package 235,000 games **£225**
'Prof' package 300,000 games+ **£325**
'Mega' package 450,000 games+ **£449**
Analysis modules to use within CBase
FRITZ **£45**
HIARCS3.7 **£45**

BOOKUP for Windows **£139**
BOOKUP for MS-DOS **£119**

PC WOOD AUTO BOARDS: plug one into your PC and play against your favourite program on a proper wood, auto-sensory board!

Tasc **SMARTBOARD £399** - the superb R30 board, 64 leds - piece recognition!
Mephisto/Kasparov **AUTOBOARD £299** - superb quality, lovely wood and pieces.
Chess **232 BOARD £229** - a cheaper board, but works well.

Auto **232 TESTER £89** (for linking PC's and playing two programs against each other automatically!)

This Issue, and most news relating to both Chess and Computers, has been largely dominated by the clash of giants - **Gary KASPAROV v Deep BLUE**.

So readers will find 3 pages covering some of the background stories, after-Match conclusions, and initial views on whether one of our favourite PC progs on fastest-possible Pentium might have given GK as good as or better run for his money ($400,000)! Plus 9 full pages giving all of the games with analysis and comments at key points. Hopefully we will see this clash repeated in 2 to 3 years, assuming Kasparov remains World Champion!... I am not sure too many of the other leading G.M's will be as keen to take DB on, even though Kasparov came out well on top in the end!

Nigel Short plays MCPro5

Not to be outdone **Nigel Short** (the player, not Mephisto's interestingly named SUPER MILANO version!), recently played 2 games against the World Micro-Computer Champion, **MChess Pro5**.

Having been sponsored by Compaq for a trip to Ecuador, he found himself 'encouraged' to play 2 games at 'all in 60' and, though the program was running on one of Compaq's fast 133MHz Pentiums, Nigel won both games quite easily.

The first, in which Nigel played the Trompowsky Attack, was over after just 31 moves!

Nigel Short - MCPro5 Pentium
Game 1.
1.d4 Nf6 2.c3!? e6 3.Bg5 c5 4.e3 b6 5.Nd2 d5 6.Bd3 Be7 7.f4 0-0 8.Ngf3 Ba6! 9.Bxa6 Nxa6 10.0-0 Nc7?! 11.Ne5 Qd6?! 12.Qf3 Rfe8?! 13.Rae1 Rac8 14.Kh1 a6 15.g4 Rb8? {15...Nd7 reacts better to the impending troubles!] **16.Bxf6 Bxf6 17.g5 Be7 18.Qh5 g6 19.Qh6 Bf8 20.Qh4 Re7** [It should be noted that MCP5 showed itself slightly ahead here, though White has a devastating attack brewing] **21.Rf3 cxd4 22.exd4 Rc8 23.Rh3 Bg7 24.Qxh7+ Kf8 25.Ndf3 Nb5 26.Nh4 Rec7 27.Nhxg6+ fxg6 28.Nxg6+ Kf7 29.f5 exf5 30.Ne5+ Ke8 31.Nc4+**, and Black resigned. 1-0.

Both games with some notes will appear in SS64.

Computer-Human Tourny in Finland

Plenty of other things have been happening while GK and DB 'got it on'. For example a **Computer-Humans** Tournament was held recently in Finland, which followed a similar format and the G/25 time control of the U.S.A's Harvard Cup, but with I.M's rather than G.M's.

MChess Pro5 and Genius4 did okay, but Fritz4, Rebel7 and The King fared less well! Full scores, ratings and most games will be in SS64.

ChessMaster 5000, further delay

The latest news for this product, first 'announced' last August/September, is that it will not be available until June 1996.

Rebel Decade, free Internet Software

Some folk have written re the free REBEL DECADE 'trial' program, obtained via the Internet. I think I have replied to everyone personally, but there has been some concern that the relative weakness of the Decade program could indicate that the 'real' **REBEL7** might not be as strong as it's cracked up to be!

In fact programmer Ed Schroder has himself run a full test, resulting in a 35-14 score for Rebel7 over Rebel Decade. This represents approx. 180 Elo (22 BCF) and, noting also Rebel7's position on our Rating List, I can assure folk that the 'real thing' is very much stronger!

In fact regular 'results provider' **Frank Holt** has REBEL7 ahead of GENIUS2/3/4

in Matches he is playing on Pentium/133 machines right now. The lead for Rebel7 is small in each case, but Frank's results confirm its high strength. I should add that overall results from ALL sources do put Genius3+4 just ahead on the Rating List.

Chess on the Internet

We recently referred briefly to another **'Man v Machine'** Match, this time involving Israeli G.M HARZVI. These games were played at G/30 through the Internet Chess Club.

Harzvi's results were:
HARZVI 2-0 W CHESS Pentium
HARZVI 1-1 FRITZ3 Pentium

Following this G.M Boris GULKO was persuaded to play FERRET, after it had become the World Micro Amateur Champion in the 1995 WMCC, when it scored 7½/11 and tied =3 overall, an excellent performance.

The score of this Match was:
GULKO 0-2 FERRET Pentium.

Boris Gulko - Ferret Pentium
Game 1.
1.c4 Nf6 2.Nc3 g6 3.e4 d6 4.d4 Bg7 5.Nf3 0-0 6.Be2 e5 7.0-0 Nc6 8.d5 Ne7 9.b4 Nh5 10.Re1 f5 11.Ng5 Nf4 12.Bxf4 exf4 13.Rc1 h6 14.Ne6 Bxe6 15.dxe6 fxe4 16.Nxe4 Nc6 17.b5 Nd4 18.Bf3 Re8 19.Nc3 c6 20.b5xc6 bxc6 21.Qd3 Qf6 22.Re4 Rxe6 23.Rxd4 Qxd4 24.Qxd4 Bxd4 25.Bxc6 Rb8 26.Bd5 Bxc3 27.Bxe6+ Kg7 28.Kf1 Ba5 29.Rc2 Rb1+ and White resigned, 0-1.

It would be rather nice to see Ferret 'going commercial', and I think it would get nearer to the leading programs on the Rating List than has GANDALF. The latter scored a creditable 6½/11 in the WMCC, but its commercial arrival has been greeted with an inital rating of only 2150 after 100 games, even though on a Pentium.

There will soon be another chance to consider Ferret's potential, however, as it is set to meet SuperGM Alexei SHIROV in the Internet's next 'MAN v MACHINE challenge. Shirov is currently rated 9th. in the World and, though G/30 favours Computers, will expect to win I should think.

CS tal release date

Quite a few readers, impressed by the SS62 game against Genius, have enquired if the latest Chris Whittington version is about to be released. Chris recently e-mailed me to say that a CD-ROM version could be out in June/July. There MAY be a disk version. The price should be either £39 or £49 - Chris is waiting to see how close final testing puts it to 'the others'!

British Readers Results, or: 'Where are you!?'

There has been something of a fall-off in the number of results coming to me from my faithful British readership in the last 6 months. Can I gently encourage everyone that ALL scores are of great value, however small the sample might seem to the individual. The reason for this is that the Rating List is made up of the accumulation of all the big/medium/small score samples sent in, and its value and accuracy is determined by the total number of games played by each computer or program. The only requirement is that the time control must not be less than G/60. Other popular time controls are G/120, 60/60, 40/60, 60/120 and, of course, 40/120.

Keith KITSON once regular results have been noticeable for their absence recently, but he had a good excuse with additions to his family! However he's back into the swing of things again now, and has just sent me the following (all at G/60):

Genius2 68030 1-3 Hiarcs4 Pent
Genius2 68030 ½-3½ MChessPro5 Pent
Meph RISC2 2-1 MChessPro5 Pent
Tasc R30-1995 ½-3½ MChessPro5 Pent

I also received Tasc R30 results from

A.N.Onymous (?!). The scores from a series of 40/40 games were:

BerlinPro 12½-17½ Tasc R30-1993
Genius4 Pent 2½-½ Tasc R30-1993

My thanks to the sender, who omitted his name but kindly sent me copies of all the games as well. Please let me know who you are, especially if you send more!

Frank HOLT is still an appreciated and hard-working regular. Frank has invested in the Auto232 tester, linking his Pentiums to provide PC v PC results. We shall miss his massive Tasc R30 comparisons, but results will come through more frequently than ever with the Auto-tester, of course.

Frank's current personal favourite is **REBEL7** and he has played this using all of its different playing style settings and at a variety of time controls against Genius2/3/4. Two finished results are now in, and the total scores are:

Rebel7 Pent 33-27 Genius3 Pent
Rebel7 Pent 32½-27½ Genius2 Pent

Frank's scores show REBEL7's combined scores on its different playing styles against both Genius progs as:

Active	16-8
Normal	13-11
Solid	11-13
and the two 'extremes':	
Aggressive style	15-9
Defensive	10½-13½

Of course I have separated the results on REBEL7's standard settings and only they have gone into the Rating calculations.

Alastair SCOTT has sent me quite a few games of his own against early Computers, such as Boris Diplomat, Chess Challenger 7, Fritz1 and the like. I'll try to make room for a couple next time!

Finally here are 3 positions for readers to test themselves/their machines on!

Test 63/1. Can you or your Computer win this... White to move. And the winning move is NOT **Kxb6**.

Test 63/2. White to move: how does he **draw**? If his Rook starts picking Pawns off, Black's Rook goes to h2 and wins.

Test 63/3. For Computers only! Black to move.. what's the evaluation? Should be 0!

Chess Challenge: The HARVARD CUP, Dec 1995

The Sixth Harvard Cup: Human v Computer Challenge

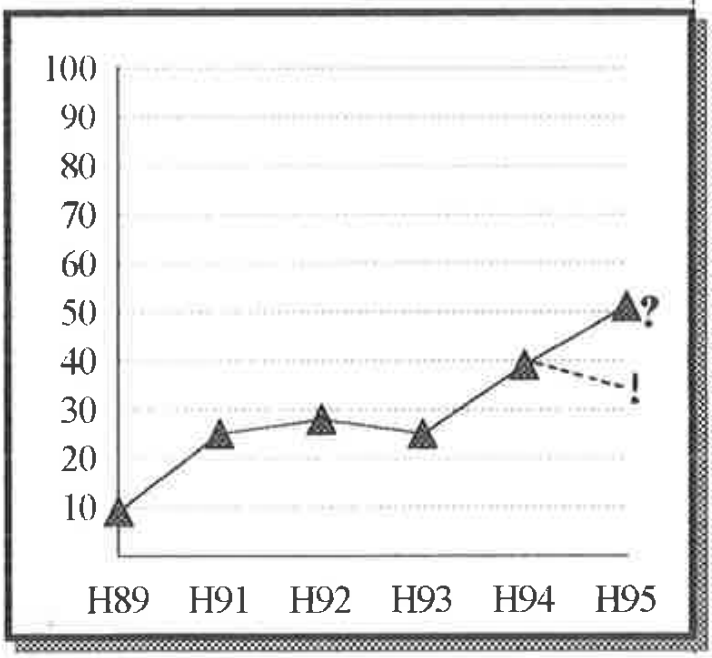
Held at the Manhattan Conference Centre in New York between 26-29 December, a short preview match at Game in 10 was held between Chessmaster 4000 for Windows 95 and U.S. Champion Patrick Wolff. Mindscape had entered this new Chessmaster 4000 for Windows 95 in the Harvard Cup tournament instead of Chessmaster 5000 as originally planned, as the latter will not now be forthcoming until (approx) June 1996.

The Intel Corporation provided 133 MHz Pentium Pro processor computer systems for all of the programs.

Causes for Optimism

The **Preview Match** was won by the program 3-1=0 and, though G/10 is better for the Computers than the main Tournament's G/25, this result appeared to auger well for the programs.

After an abysmal start to the Event in 1989 when the Computers lost 1½-14½ (a miserable 9%), the improved dedicated Computers in 1991/2 and then PC programs on Pentium 60 and 90 machines had surely and steadily improved year by year.



The Playing Schedule

With 6 G.M's and 6 Programs competing, the schedule was that just 4 games would be played in each Round, thus ensuring that the G.M's got something of a break from time-to-time. In fact they would each play either 3 or 4 G/25 games per day, well within a G.M's scope.

It seemed a pity that the PC entrants didn't include such as Genius, Hiarcs or Rebel, but they were still fielding a pretty strong 'team' and, with the programs now on the Pentium/133 machines (with 32MB RAM) there was a feeling the computers might even win this time... thus our little graph! However it also needs to be borne in mind that the G.M's had all had the opportunity to train against their Computer opponents, so not everyone felt totally confident, in spite of memories of WChess and its wonderful 5/6 in 1994.

In the event, they made a very positive start!

Round 1:
Socrates 95 ½-½ Patrick Wolff
WChess ½-½ Boris Gulko
Ilya Gurevich 0-1 Cmaster 4000 Win95
Gregory Kaidanov 0-1 M-Chess Pro5

Computers 3-1 Players!

I hope readers will appreciate that we have so MUCH important material requiring coverage this Issue, we can only find room for a **selection** of games, and then without notes.

Ilya Gurevich - Cmaster 4000 Win95
1.e4 c5 2.Nf3 Nc6 3.Nc3 g6 4.Bb5 Bg7 5.0-0 Nf6 6.e5 Ng4 7.Bxc6 dxc6 8.Re1 0-0 9.d3 Qb6 10.h3 Nh6 11.b3 Nf5 12.Na4 Qb5 13.c4 Qa5 14.Bb2 b6 15.g4 Nd4 16.Nxd4 cxd4 17.Bxd4 c5 18.Bb2 Bd7

19.Nc3 Bc6 20.Qe2 Rad8 21.f4 Rd7 22.f5 Kh8 23.Kf2 e6 24.f6 Bh6 25.Kg3 Rfd8 26.Rad1 b5 27.Ba1 bxc4 28.bxc4 Rd4 29.Ne4 Rxd3+ 30.Rxd3 Rxd3+ 0-1

The **Kaidanov - M-Chess Pro5** game was a 109 move affair, so I've left it out even though it was 0-1! A fine start, but the euphoria was not to last for very long!

Round 2:
Socrates 95 0-1 Ilya Gurevich
Junior 0-1 Gregory Kaidanov
WChess 0-1 Michael Rohde
Joel Benjamin 0-1 Cmaster 4000 Win95

So we're quickly back to even, at 4-4.

WChess - Michael Rohde
1.e4 e6 2.d4 d5 3.Nd2 Be7 4.c3 Nf6 5.e5 Nfd7 6.Ngf3 c5 7.Bb5 Nc6 8.Qa4 Nb6 9.Qc2 Bd7 10.dxc5 Bxc5 11.Nb3 Be7 12.Bd3 Rc8 13.Qe2 0-0 14.0-0 f6 15.exf6 Bxf6 16.Nc5 e5 17.Nd2 e4 18.Bb5 Bf5 19.Nxb7 Qe7 20.Bxc6 Rxc6 21.Na5 Re6 22.Ndb3 Qf7 23.Bf4 Qg6 24.Nc5 Ree8 25.Qb5 h5 26.Nc6 h4 27.Kh1 h3 28.g3 Qh5 29.f3 exf3 30.Rf2 Re2 31.Raf1 Rfe8 32.Nd3 Bxd3 33.Qxd3 Rxf2 34.Ne7+ Rxe7 35.Rg1 Ree2 36.g4 Qg5 37.Qf5 Qxf5 38.gxf5 Be5 39.Bxe5 Rxe5 40.f6 Rg2 41.f7+ Kxf7 42.Rf1 f2 43.Rxf2+ Rxf2 0-1

Round 3:
Gregory Kaidanov 0-1 WChess
Patrick Wolff 1-0 Junior
Boris Gulko 0-1 Virtual Chess
M-Chess Pro5 0-1 Ilya Gurevich

Gregory Kaidanov - WChess
1.e4 e5 2.Nf3 Nf6 3.Nxe5 d6 4.Nf3 Nxe4 5.d3 Nf6 6.d4 d5 7.Bg5 Be7 8.Bd3 0-0 9.0-0 h6 10.Bh4 Re8 11.Re1 Bg4 12.Nbd2 Nbd7 13.c3 c5 14.Qc2 c4 15.Bf5 Bxf5 16.Qxf5 Qc7 17.Ne5 Bd6 18.Bg3 Re6 19.Nxf7 Rxe1+ 20.Rxe1 Bxg3 21.Nxh6+ Kh8 22.Nf7+ Kg8 23.Nh6+ Kh8 24.hxg3 gxh6 25.Qg6 Ng8 26.Qf7 Qc6 27.Re6 Rf8 28.Qg6 Qa4 29.Qb1 Ndf6 30.Nf3 Ne4 31.a3 Qd7 32.Re5 Ne7 33.Qc1 Kg7 34.Rh5 Rf6 35.Rh4 Qe6 36.Rf4 Ng6 37.Rxf6 Qxf6 38.Qe3 h5 39.Qe2 Qf5 40.Qe3 Qg4 41.Qc1 h4 42.Nxh4 Qe2 43.Qe3 Qxb2 44.Nf5+ Kf6 45.g4 Nxc3 46.Qe8 Qc1+ 47.Kh2 Qf4+ 48.Kh3 Qc7 49.g3 Ne4 50.f3 Ng5+ 51.Kg2 Qa5 52.f4 Qd2+ 53.Kf1 Qd1+ 54.Kg2 Nxf4+ 55.gxf4 Qf3+ 56.Kh2 Qh3+ 57.Kg1 Qxg4+ 58.Kh1 Qf3+ 59.Kh2 Qxf4+ 60.Ng3 Qf2+ 61.Kh1 Qxg3 62.Qd8+ Kg6 63.Qg8+ Kf5 64.Qc8+ Ke4 65.Qxb7 Qh3+ 66.Kg1 Nf3+ 67.Kf2 Qh2+ 68.Kf1 Qg1+ 0-1

Patrick Wolff - Junior
1.c4 e6 2.d3 Nc6 3.g3 d5 4.Nd2 Ke7 5.Bg2 Nf6 6.exd5 cxd5 7.Ngf3 Bg4 8.0-0 Kd7 9.h3 Be6 10.Nb3 Kc8 11.a4 Bd6 12.a5 a6 13.Nfd4 Re8 14.Nxc6 bxc6 15.Be3 Qd7 16.Kh2 h5 17.Nc5 Bxc5 18.Bxc5 h4 19.g4 Qd8 20.Bd4 Rb8 21.Qd2 Qd6+ 22.f4 Qd8 23.f5 Bd7 24.Kh1 Rh8 25.b4 Re8 26.Rac1 Kb7 27.Qf2 Ka8 28.c3 Rh8 29.Qf4 Kb7 30.Re2 Ka8 31.Rfe1 Kb7 32.Bc5 Qc8 33.Re7 Qg8 34.Kg1 Re8 35.b5 axb5 36.a6+ Kc8 37.Qd4 Qh7 38.Bb4 Kb8 39.Bd6 Ka8 40.Bxc7 Rb8 41.Bxb8 Rxb8 1-0

Boris Gulko - Virtual Chess
1.d4 d5 2.Bf4 Nf6 3.e3 e6 4.Nd2 c5 5.c3 Bd6 6.Bxd6 Qxd6 7.Bd3 Nc6 8.f4 cxd4 9.cxd4 Nb4 10.Bb1 0-0 11.a3 Nc6 12.Ngf3 b6 13.Bd3 a5 14.Qe2 Bb7 15.0-0 Ne7 16.Rac1 Nf5 17.Ne5 Rfc8 18.Qf3 Rc7 19.g4 Nh4 20.Qh3 Ng6 21.Ndf3 Rac8 22.Rxc7 Rxc7 23.Nxg6 hxg6 24.Ng5 Bc6 25.Qh4 Ba4 26.Rf3 Rc1+ 27.Kg2 Rd1 28.Rh3 Kf8 29.Qh8+ Ke7 30.Qxg7 Rd2+ 31.Kg3 Rxd3 32.Qxf7+ Kd8 33.Qxf6+ Kc8 34.Rh8+ Kb7 35.Qf7+ Bd7 36.Rd8 Kc7 37.Nxe6+ Qxe6 38.Qxe6 Bxe6 39.Rf8 Rxe3+ 40.Kh4 Bd7 41.Rf6 Re4 42.Kg5 Rxd4 43.Rxg6 Rd2 44.h4 Rxb2 45.h5 d4 46.h6 Rh2 47.f5 d3 48.f6 d2 49.f7 d1Q 50.f8Q Qxg4+ 51.Kf6 Qd4+ 0-1

M - Chess Pro5-Ilya Gurevich
1.e4 c5 2.Nf3 e6 3.d4 cxd4 4.Nxd4 a6 5.Bd3 Qb6 6.c3 Qc7 7.0-0 Nf6 8.Be3 Be7 9.Nd2 0-0 10.N2b3 d6 11.Bc2 b6 12.f3 Bb7 13.Bf2 Nbd7 14.Qe2 Rfe8 15.Rad1 g6 16.Qd2 Rad8 17.Qh6 Ne5 18.Nd2 Bf8 19.Qh4 Be7 20.Qf4 Ned7 21.Ne2 b5 22.a4

e5 23.Qh6 Nc5 24.axb5 axb5 25.b4 Ne6 26.Bd3 Bc6 27.Bb1 Ra8 28.Rfe1 Ra3 29.Nf1 d5 30.Nfg3 dxe4 31.Bxe4 Bxe4 32.Nxe4 Nxe4 33.fxe4 Qc4 34.Rd7 Bg5 35.Qh3 Qxe4 36.Nd4 Qxe1+ 37.Bxe1 cxd4 38.Qg3 Bf4 39.Qd3 Ra1 40.Kf2 Be3+ 41.Kf1 Nf4 42.Qxb5 Bd2 43.Kf2 Raxe1 44.Rxd4 R8e2+ 45.Qxe2 Rxe2+ 46.Kf3 Bxc3 47.Rxf4 Rb2 48.Rc4 Bxb4 49.Rd4 Kg7 50.Rd7 Bc3 51.Re7 h5 52.Re3 0-1

Holding level at 6-6, with 2 more rounds to be played on the first day, the Computer programmers and supporters are now, understandably, in high spirits.

Round 4:
Ilya Gurevich 0-1 Junior
Virtual Chess ½-½ Gregory Kaidanov
Socrates 95 0-1 Joel Benjamin
Cmaster 4000 Win95 0-1 Michael Rohde

Ilya Gurevich - Junior
1.e4 c5 2.Nf3 Nc6 3.Nc3 Nf6 4.d4 cxd4 5.Nxd4 e5 6.Ndb5 d6 7.Bg5 a6 8.Na3 b5 9.Nd5 Be7 10.Bxf6 Bxf6 11.c3 Bb7 12.Nc2 Nb8 13.g3 Nd7 14.Bg2 Nc5 15.h4 0-0 16.Nce3 a5 17.a3 Ba6 18.b4 Na4 19.0-0 Bb7 20.Qd3 Bc6 21.Qd2 Bxd5 22.Nxd5 Nb6 23.Rfd1 Nc4 24.Qc2 a4 25.Bf1 Rc8 26.Bxc4 Rxc4 27.Ne3 Rc6 28.Qd3 Qb8 29.Rac1 Rfc8 30.c4 Qc7 31.Rc3 bxc4 32.Qd5 Be7 33.Rdc1 Qa7 34.Rxc4 Rxc4 35.Rxc4 Rb8 36.Rc6 Bf8 37.Qc4 Qd4 38.Qxd4 exd4 39.Nf5 d3 40.Kf1 Re8 41.Rc4 d5 42.Rd4 dxe4 43.Ke1 g6 44.Ne3 f5 45.Rd7 Rc8 46.Kd2 Bh6 47.f4 Bg7 48.b5 Rc5 49.b6 Bc3+ 50.Kd1 Rb5 51.Kc1 Rxb6 52.Nd5 Rb2 0-1

The Socrates defeat was a long, 85 move, affair, but Chessmaster 4000 Win95 lost its 100% record as follows:-

Cmaster 4000 Win95 - Michael Rohde
1.Nf3 Nf6 2.d4 e6 3.c4 b6 4.g3 Bb7 5.Bg2 Bb4+ 6.Bd2 Be7 7.Nc3 0-0 8.0-0 Na6 9.Ne5 Qb8 10.d5 Bd6 11.f4 exd5 12.cxd5 Re8 13.Rc1 b5 14.Qb3 b4 15.Nd1 Nc5 16.Qc4 a5 17.Re1 Ba6 18.Qd4 Qb6 19.Be3 Na4 20.Qd2 Bc5 21.Bf2 d6 22.Nd3 Bxd3 23.exd3 Rxe1+ 24.Qxe1 Ng4 25.Rc2 Nxf2 26.Nxf2 b3 27.axb3 Qxb3 28.Re2 g6 29.Qc1 Qxd3 30.Rd2 Qe3 31.Qd1 Rb8 32.Re2 Qd4 33.Rd2 Qe3 34.Re2 Nxb2 35.Rxe3 Nxd1 36.Nxd1 Rb1 37.Kf2 Bxe3+ 38.Nxe3 a4 39.Nc4 Rb3 40.g4 a3 41.Nxa3 Rxa3 42.h4 h6 43.Bf3 Kg7 44.Ke2 Kf6 45.Kf2 Ke7 46.Kg3 Kd7 47.Kf2 Rc3 48.g5 h5 49.Kg2 c6 50.dxc6+ Rxc6 51.Bxc6+ Kxc6 52.Kf3 d5 53.Ke3 Kc5 54.Kd3 d4 55.Ke2 Kc4 56.Kd2 d3 57.Kd1 Kd4 58.Kd2 Ke4 59.Kd1 0-1

And then came round 5! If the Computer operators were hoping (and they were!) to get a good 'last round of the day' score, thinking that the G.M's might be tiring just a little by now, they were in for a very rude awakening.

Round 5:
Michael Rohde 1-0 Socrates 95
Joel Benjamin 1-0 M-Chess Pro5
WChess 0-1 Patrick Wolff
Cmaster 4000 Win95 0-1 Boris Gulko

4-0 to the G.M's, and day 1 finished with the Players suddenly comfortably ahead by 12½-7½.

Three of the defeats were also quite short affairs:-

Michael Rohde - Socrates 95
1.Nf3 d5 2.c4 c6 3.e3 Nf6 4.Nc3 e6 5.d4 Nbd7 6.Qc2 Bd6 7.Bd3 e5 8.cxd5 cxd5 9.e4 dxe4 10.Nxe4 Nxe4 11.Bxe4 exd4 12.0-0 Nf6 13.Bg5 h6 14.Bh4 g5 15.Bg3 0-0 16.Rad1 Bxg3 17.hxg3 Qb6 18.Nxd4 Nxe4 19.Qxe4 Qxb2 20.f4 Qxa2 21.fxg5 hxg5 22.Qe5 f6 23.Rxf6 Rxf6 24.Qxf6 Qf7 25.Qxg5+ Qg7 26.Qd8+ Qf8 27.Qd5+ Qf7 28.Qe5 Bd7 29.Rf1 Qg6 30.Qd5+ Kh8 31.Qxd7 b6 32.Rf4 Qxg3 33.Nf5 Qe1+ 34.Kh2 Qe5 35.Kh3 Qf6 36.Rh4+ Qxh4+ 37.Kxh4 Rg8 38.g4 a5 39.Qd4+ Kh7 40.Qxb6 Rg6 41.Qa7+ Kg8 42.Ne7+ Kh7 1-0

Joel Benjamin - M-Chess Pro5
1.d4 Nf6 2.Bg5 Ne4 3.Bf4 c5 4.f3 Qa5+ 5.c3 Nf6 6.d5 d6 7.e4 g6 8.Qd2 Bg7 9.Na3

0-0 10.Nc4 Qd8 11.a4 Nbd7 12.Nh3 Nb6 13.Nf2 Nxc4 14.Bxc4 Qc7 15.0-0 Bd7 16.Rfe1 Rfe8 17.h3 a6 18.a5 Bb5 19.Bb3 Nh5 20.Be3 Be5 21.g4 Ng3 22.c4 Bd7 23.Kg2 h5 24.f4 Nxe4 25.Nxe4 Bg7 26.gxh5 gxh5 27.Kh2 b5 28.Rg1 Bf5 29.Qg2 Bg6 30.f5 e6 31.fxg6 f5 32.Ng5 bxc4 33.Bxc4 e5 34.Qf3 Rab8 35.Qxh5 Rxb2+ 36.Kh1 f4 37.Raf1 Bh6 38.Nf7 Bg7 39.Bxf4 exf4 40.Rxf4 Re4 1-0

WChess - Patrick Wolff

1.e4 d5 2.exd5 Qxd5 3.Nc3 Qa5 4.d4 c6 5.Nf3 Nf6 6.Ne5 Be6 7.Bc4 Bxc4 8.Nxc4 Qa6 9.Qe2 e6 10.0-0 Nd5 11.Ne4 Nd7 12.Ncd6+ Bxd6 13.Nxd6+ Ke7 14.Qxa6 bxa6 15.Ne4 N5f6 16.Nxf6 Nxf6 17.c4 Rhd8 18.Rd1 c5 19.Be3 Ng4 20.dxc5 Nxe3 21.fxe3 Rxd1+ 22.Rxd1 a5 23.c6 Rd8 24.Rxd8 Kxd8 25.Kf2 Kc7 26.Ke2 Kxc6 27.Kd2 Kc5 28.Kd3 a4 29.e4 f6 30.Kc3 g6 31.g4 a6 32.Kd3 a5 33.Kc3 h5 34.gxh5 gxh5 35.h4 a3 36.bxa3 a4 37.Kd3 f5 38.e5 f4 39.Kc3 f3 40.Kd3 f2 41.Ke2 Kxc4 42.Kxf2 Kd4 43.Kf3 Kxe5 44.Ke3 Kf5 45.Kf3 e5 46.Ke3 Kg4 47.Kc4 Kxh4 48.Kxe5 Kg3 49.Kd4 h4 50.Kc5 h3 51.Kb5 h2 52.Kxa4 0-1

Tim Mirabile, who operated last year's fallen hero WChess in all of its Dec.1995 games, as well as Virtual Chess in 2 rounds commented: *"I was not too impressed with their play, nor that of the other computer programs. In most cases the humans were able to get very good positions out of the openings, and they were being careful to choose openings which the machines were unable to play well in.*

"In the only WChess win Kaidanov sacrificed a piece, and then passed up a draw by repetition in order to try and win. He later admitted his relative inexperience in the methods of playing against computers.

"In the game with Wolff, WChess got an excellent position after Wolff misplayed the opening, but the machine played the ending horribly, allowing Wolff firstly to equalise and then, after further mistakes by WChess, Wolff actually won!

"Several other machines appeared to have serious holes in their opening books. For example MChess Pro5 played a Benko Gambit and was out of book on move 4 or 5 in a very popular (and sharp) line. And Junior topped the lot with the novelty of 3...Ke7 in a French Defence! They certainly don't seem to have the advantage at G/25 over G/5's yet".

And, apart from the first round of the second day, the remainder of the Match tended to confirm that view.

Round 6:
Michael Rohde 0-1 Virtual Chess
Junior 0-1 Boris Gulko
Joel Benjamin 1-0 WChess
M-Chess Pro5 1-0 Patrick Wolff

Michael Rohde - Virtual Chess

1.Nf3 Nf6 2.c4 c6 3.Nc3 d5 4.e3 e6 5.d4 Bd6 6.Bd3 0-0 7.0-0 Nbd7 8.e4 dxe4 9.Nxe4 Nxe4 10.Bxe4 h6 11.Bc2 b6 12.Re1 Ba6 13.Qd3 Nf6 14.Ne5 Rc8 15.Bf4 Re8 16.Rad1 Qc7 17.Bg3 Red8 18.b3 c5 19.d5 Kf8- 20.Nxf7 Bxg3 21.Nxd8 Bxh2+ 22.Kh1 Rxd8 23.Qh3 Be5 24.dxe6 Rxd1 25.Bxd1 Bd6 26.Bf3 b5 27.cxb5 Bxb5 28.Qf5 Kg8 29.Rd1 Be5 30.Re1 Bc3 31.Rc1 Bd4 32.b4 Bxf2 33.bxc5 Be3 34.Rb1 Bc4 35.c6 Qd6 36.Rd1 Qe7 37.Re1 Bf2 38.Rc1 Bxe6 39.Qe5 Ne8 40.c7 Qh4+ 41.Qh2 Qd4 42.Rd1 Qc4 43.Qe5 Qh4+ 44.Qh2 Nxc7 45.Qxh4 Bxh4 46.Rb1 Bg3 47.Rb7 a6 48.a3 Bc4 49.Kg1 Nb5 50.a4 Nc3 51.a5 Kf8 52.Ra7 Ne2+ 53.Kh1 Nf4 54.Bb7 Bf2 55.Ra8+ Kf7 56.Kh2 Bf1 57.g3 Ne2 58.Bxa6 Bxg3+ 59.Kh1 Be5 60.Bc4+ Ke7 61.Ra7+ Kd6 62.Ra6+ Kc5 63.Re6 Bg2+ 64.Kxg2 Nf4+ 65.Kf3 Nxe6 0-1

Junior - Boris Gulko

1.d4 d6 2.e4 Nf6 3.Nc3 g6 4.f4 Bg7 5.Nf3 0-0 6.Be3 b6 7.e5 Ne8 8.Kf2 f6 9.Bc4+ e6 10.d5 fxe5 11.dxe6 Kh8 12.Qd2 Nf6 13.fxe5 Ng4+ 14.Kg1 Rxf3 15.gxf3 Nxe5 16.Qd5 Nbc6 17.Bb3 Bb7 18.Qe4 Na5 19.Nd5 c6 20.Nc3 d5 21.Qf4 Nxb3 22.axb3 d4 23.Rd1 c5 24.Ne4 Qc7 25.Bxd4 cxd4 26.Rf1 Rf8 27.Qg3 Nxf3+

28.Rxf3 Bxe4 29.Rxf8+ Qxf8 30.e7 Qxe7 31.h4 Bxh1 32.Qb8+ Qf8 33.Qxf8+ Bxf8 34.Kxh1 Be7 35.Kg2 Bxh4 36.Kf3 h5 37.Ke4 Bf6 38.b4 Kg7 39.Kf3 g5 40.Kg2 g4 41.b5 0-1

Joel Benjamin - WChess
1.d4 d5 2.Bg5 Nf6 3.Bxf6 gxf6 4.e3 e6 5.Nc2 c5 6.c3 Nc6 7.Nd2 Rg8 8.Nf3 Bd7 9.Ng3 f5 10.Nh5 cxd4 11.exd4 Bh6 12.g3 f6 13.Be2 Qe7 14.0-0 0-0-0 15.b4 Qf7 16.Ne1 Kb8 17.Nd3 Rc8 18.a4 Ka8 19.a5 Be8 20.Nc5 f4 21.Kh1 Ne7 22.Nxf4 Bxf4 23.gxf4 h5 24.Rg1 Rxg1+ 25.Qxg1 Bc6 26.Qg3 Nf5 27.Qf3 Ng7 28.b5 Be8 29.b6 a6 30.Rg1 Bc6 31.Bd3 Rg8 32.Qg3 f5 33.Qg6 Qxg6 34.Rxg6 Be8 35.Rg5 Bf7 36.Nd7 Ne8 37.Ne5 Rxg5 38.fxg5 Bg8 39.Kg2 Kb8 40.Kg3 Kc8 41.Kh4 Ng7 42.g6 Kd8 43.Kg5 h4 44.Kxh4 Ne8 45.Kg5 Nd6 46.h4 Ke7 47.h5 Ne8 48.h6 Nf6 49.f3 Bh7 50.gxh7 Nxh7+ 51.Kg6 Nf8+ 52.Kg7 f4 53.Ng6+ 1-0

MChess Pro5-Patrick Wolff
1.e4 d5 2.exd5 Qxd5 3.Nc3 Qa5 4.d4 c6 5.Nf3 Nf6 6.Bc4 Bf5 7.Bd2 e6 8.Qe2 Bb4 9.Ne5 Nbd7 10.Nxd7 Kxd7 11.a3 Nd5 12.Qf3 Bxc3 13.bxc3 Nb6 14.Bd3 Qd5 15.Qg3 Rhg8 16.0-0 Rad8 17.Rfe1 f6 18.Bf4 Ke7 19.Bc7 Rd7 20.Bxb6 axb6 21.c4 Qa5 22.d5 Bxd3 23.Qg4 Kd8 24.dxe6 Re7 25.cxd3 Qg5 26.Qd4+ Kc7 27.Rab1 Qc5 28.Qf4+ Kc8 29.Qe4 h6 30.a4 Rd8 31.Rc3 Kc7 32.Qg4 Qg5 33.Qf3 Rd4 34.Qd1 Qc5 35.h3 Qf5 36.Qb3 Qa5 37.Rbe1 Qc5 38.Qb2 Rd6 39.Kh2 Qd4 40.Qe2 Qf4+ 41.Kg1 Qf5 42.Re4 Qc5 43.Qc2 Qf5 44.R1e3 h5 45.Qe2 Qa5 46.Qd1 Qf5 47.Qe1 Qa5 48.Qa1 Qf5 49.Rf3 Qa5 50.Rg3 Qf5 51.Qe1 Kc8 52.Rge3 Qa5 53.Qd1 Kc7 54.Re1 Qf5 55.Qe2 Qa5 56.Qe3 Qxa4 57.c5 1-0

Round 7:
Boris Gulko ½-½ Socrates 95
Virtual Chess ½-½ Ilya Gurevich
Cmaster 40000 Win95 0-1 G Kaidanov
Michael Rohde 1-0 Junior

Another poor round for the Computers, which sealed their fate as far as any remaining hopes of winning the Event were concerned.

Cmaster 4000 Win95-Gregory Kaidanov
1.d4 Nf6 2.Nf3 g6 3.c4 Bg7 4.Nc3 0-0 5.e4 d6 6.Be2 Nbd7 7.0-0 e5 8.Qc2 c6 9.Rd1 Qe7 10.d5 c5 11.g3 Ne8 12.Nh4 Kh8 13.Bd2 Ndf6 14.Bf1 Nh5 15.Nf3 f5 16.Bg5 Qf7 17.Bg2 f4 18.Nh4 h6 19.Be7 Rg8 20.Bf3 Kh7 21.Bxh5 gxh5 22.Nf5 Bxf5 23.exf5 Bf6 24.Bxf6 Nxf6 25.Qd3 h4 26.Rac1 Rg5 27.Ne2 Qh5 28.Rc3 hxg3 29.fxg3 Qh3 30.Rd2 Rh5 31.Qf3 Qxh2+ 32.Kf1 Rg8 33.Rb3 Qh3+ 34.Ke1 Qh1+ 35.Qf1 b6 36.Ra3 a5 37.Rdd3 e4 38.Rd1 Qxf1+ 39.Kxf1 f3 40.Kg1 fxe2 41.Re1 Rxf5 42.Rxe2 h5 43.Rb3 h4 44.Rh2 Rh5 45.Rh3 hxg3 46.Rhxg3 Rxg3+ 47.Rxg3 Rf5 48.Rb3 Kg6 49.Re3 Kg5 50.Kg2 Rf4 51.Re2 Ng4 52.b3 e3 53.Kg1 Rd4 54.Re1 Rd2 55.Rf1 0-1

Michael Rohde - Junior
1.Nf3 d5 2.c4 dxc4 3.e3 Be6 4.Na3 c5 5.Nxc4 Nc6 6.b3 Nf6 7.Bb2 g6 8.Rc1 Rc8 9.d4 cxd4 10.Nxd4 Bg7 11.Nxe6 fxe6 12.Be2 0-0 13.0-0 Qe8 14.Bf3 Rd8 15.Qe2 Nd5 16.Rfd1 Qf7 17.h3 Bxb2 18.Qxb2 Qf6 19.Bg4 e5 20.Bf3 e6 21.Nd2 Qe7 22.Ne4 a5 23.Be2 h6 24.Bb5 Na7 25.Bd3 Nc6 26.Nc5 Ndb4 27.Qe2 Nxd3 28.Rxd3 Rd5 29.Rdc3 Nd8 30.Rc4 Qf7 31.a3 Qe7 32.b4 axb4 33.axb4 Kh7 34.h4 Nc6 35.h5 Rf6 36.Nxb7 Nxb4 37.Nc5 gxh5 38.Ne4 Rf8 39.Qxh5 Rf5 40.Qe2 Rd8 41.Ng3 Rf7 42.Qg4 Nd3 43.Rf1 Qf6 44.Qe4+ Kh8 45.Rc2 Rfd7 46.Qg4 Rf8 47.Rd2 Rfd8 48.Ne4 Qf5 49.Qh4 Qg6 50.Ra2 Rb8 51.Ra6 Rg8 1-0

As if that wasn't bad enough, it was followed by another enormous 4-0 thrashing!

Round 8:
Patrick Wolff 1-0 Virtual Chess
Boris Gulko 1-0 M-Chess Pro5
Junior 0-1 Joel Benjamin
Ilya Gurevich 1-0 WChess

Patrick Wolff - Virtual Chess
1.e4 d5 2.exd5 Nf6 3.d4 Bg4 4.Nf3 Qxd5

5.Be2 Nc6 6.h3 Bf5 7.0-0 0-0-0 8.c4 Qa5 9.Nc3 e6 10.Be3 Qb4 11.Qc1 h6 12.a3 Qb3 13.Rd1 Be7 14.Rd2 Bg6 15.Bd1 Qxc4 16.b3 Qa6 17.Be2 Qa5 18.b4 Qh5 19.Ne5 Qh4 20.Nb5 Be4 21.f3 a6 22.Nc3 Nxe5 23.dxe5 Rxd2 24.Qxd2 Rd8 25.Qc1 Bd3 26.exf6 Bxf6 27.Bxd3 Rxd3 28.Bf2 Rxc3 29.Bxh4 Rxc1+ 30.Rxc1 Bxh4 31.Kf1 Bg3 32.Ke2 e5 33.Kd3 f5 34.a4 h5 35.b5 axb5 36.axb5 h4 37.Ra1 Kb8 38.Kc4 c6 39.Ra2 Bf4 40.Kc5 cxb5 41.Kxb5 Be3 42.Kc4 f4 43.Kd5 Bd4 44.Rc2 g6 45.Rc1 Bb2 46.Rb1 Bd4 47.Ke6 Kc7 48.Rc1+ Kd8 49.Kf7 g5 50.Kg6 g4 51.hxg4 b5 52.Rb1 Kd7 53.Rxb5 Kc6 54.Rb8 Kc7 55.Rf8 Kd7 56.Kf5 Ke7 57.Rh8 Kf7 58.Rxh4 Kg7 59.Rh5 Kf8 60.g5 Kg7 61.g6 Kg8 62.Rh7 Bb2 63.Re7 Bc3 64.Rxe5 Bxe5 1-0

Boris Gulko - M-Chess Pro5

1.d4 Nf6 2.Bf4 e6 3.e3 d5 4.Nd2 c5 5.c3 Nc6 6.Bd3 Bd6 7.Bxd6 Qxd6 8.f4 Bd7 9.Ngf3 cxd4 10.cxd4 Nb4 11.Bb1 Bb5 12.Ne5 0-0 13.a3 Nc6 14.b4 Rac8 15.a4 Bc4 16.Ndxc4 dxc4 17.Nxc6 Rxc6 18.b5 Rc7 19.0-0 Rfc8 20.Bc2 a5 21.bxa6 Qxa6 22.Rb1 Nd5 23.Qe1 Qd6 24.Rf3 f5 25.h3 Kh8 26.Kh1 Ra8 27.g4 fxg4 28.hxg4 Qa3 29.Qh4 h6 30.g5 Qa2 31.Bg6 Ne7 32.Qh5 Nxg6 33.Qxg6 Qxa4 34.gxh6 Qe8 35.hxg7+ Rxg7 36.Rh3+ Kg8 37.Qe4 Qd7 38.Rh5 c3 39.Rg1 Qc6 40.Qxc6 bxc6 41.Rc5 Ra3 42.Rxg7+ Kxg7 43.Kg2 Kf6 44.Kf3 Ke7 45.Rxc6 Kd7 46.Rc5 Kd6 47.Ke4 Kd7 48.Kd3 c2+ 49.Kd2 Rb3 50.Rxc2 Kd6 51.Rc5 Rb2+ 52.Kd3 Rf2 53.Ke4 Re2 54.f5 exf5+ 55.Rxf5 Rh2 56.Ra5 Rh4+ 57.Kd3 Rh3 58.Rf5 Rg3 59.Ke4 Rh3 60.Rf6+ Ke7 61.Ra6 Rh1 62.d5 Kd7 63.Kd4 Rh5 64.e4 Rh4 65.Rf6 Ke7 66.Rg6 Kd7 67.Ke5 Rh5+ 68.Kf4 Rh1 69.Kf5 Rf1+ 70.Ke5 Re1 71.Rg7+ Ke8 72.d6 Re2 73.Kd5 Rh2 74.e5 Rh5 75.Ke6 Rh6+ 76.Kf5 Rh5+ 77.Kf6 Rh6+ 78.Rg6 Rh1 79.Rg8+ Kd7 80.Rg7+ Ke8 81.e6 Rf1+ 1-0

Ilya Gurevich - WChess

1.e4 e5 2.Nf3 Nf6 3.Nxe5 d6 4.Nf3 Nxe4 5.c4 Be7 6.Be2 Bf6 7.0-0 0-0 8.d3 Nc5 9.d4 Ne6 10.Nc3 Re8 11.Be3 Nd7 12.Qd2 b6 13.Rad1 Bb7 14.h3 a5 15.Nh2 Bg5 16.f4 Bh4 17.Bf3 c6 18.d5 cxd5 19.Bxd5 Nec5 20.Bxb7 Nxb7 21.Nf3 Bg3 22.Ne2 Bh4 23.Nxh4 Qxh4 24.Bf2 Qd8 25.Nc3 Rc8 26.b3 Ndc5 27.Nb5 Ne4 28.Qd5 Nxf2 29.Rxf2 Qe7 30.f5 Rc5 31.Qd4 Qe5 32.Nxd6 Nxd6 33.Qxd6 Qe3 34.Qd4 Qxd4 35.Rxd4 h6 36.g4 Rce5 37.Kg2 h5 38.Rd6 hxg4 39.hxg4 b5 40.cxb5 Rxb5 41.Rfd2 Rbe5 42.Rd8 Kf8 43.Rxe8+ Kxe8 44.Kf3 Ke7 45.Re2 Kf6 46.Rxe5 Kxe5 47.Ke3 Kd5 48.a3 Ke5 49.Kd3 g6 50.fxg6 fxg6 51.b4 axb4 52.axb4 g5 53.Kc4 Kd6 54.Kb5 1-0

Round 9:

Gregory Kaidanov 1-0 Socrates 95
M-Chess Pro5 ½-½ Michael Rohde
Virtual Chess ½-½ Joel Benjamin
Patrick Wolff 0-1 Cmaster 4000 Win95

It should be mentioned that the MCPro5 and Virtual Chess were not easy 'GM' draws at the end of a tournament, but both went beyond 60 moves. The Socrates defeat was a long affair, so we end for our last game, with what had become, by now, a rather rare computer win!

Patrick Wolff - Cmaster 4000 Win95

1.e4 c5 2.Nf3 Nc6 3.Bb5 e6 4.Bxc6 dxc6 5.0-0 Ne7 6.Re1 Ng6 7.e5 Be7 8.d3 0-0 9.Nc3 b6 10.Qe2 Bd7 11.Qe4 f5 12.Qe2 b5 13.b3 Qa5 14.Bd2 Qc7 15.g3 f4 16.Kg2 Rf5 17.g4 Rf7 18.h3 b4 19.Nd1 c4 20.dxc4 c5 21.Nb2 Bc6 22.Kg1 Qb7 23.Nh2 Nh4 24.Nd3 Bf3 25.Nxf3 Nxf3+ 26.Kf1 Rd8 27.Rad1 Nxd2+ 0-1

Final Scores + PC performance ratings:

Joel Benjamin (2570)	**4½/6**		
Michael Rohde (2540)	**4½**		**team**
Boris Gulko (2615)	**4**		**total**
Gregory Kaidanov (2605)	**3½**		**23½**
Patrick Wolff (2565)	**3½**		
Ilya Gurevich (2575)	**3½**		

Virtual Chess	**3½/6**	=2644	
Cmaster 4000 Win95	**3**	=2578	**team**
MChess Pro5	**2½**	=2512	**total**
WChess	**1½**	=2378	**12½**
Socrates 95	**1**	=2311	
Junior	**1**	=2311	

Kasparov v DEEP BLUE or a PC PENTIUM program?!... and other issues!

Question 1: Which is STRONGER?

- DEEP BLUE, or
- A Pentium 166 with GENIUS, MCPRO, HIARCS or REBEL loaded up.

Question 2: Which has the better chance against KASPAROV?

Four or five years ago Kasparov 'destroyed' DEEP THOUGHT (the Deep BLUE predecessor). Within the last 12 months or so, FRITZ has headed a Blitz Tournament alongside the human World Champion, and GENIUS stands at 3-3 with him in Active Chess meetings.

Most people certainly believe that a Computer playing Kasparov at 40/2 is a lot different to playing him at G/25 and, noting GK's obvious opportunities to prepare specifically for any Genius/MCP/Hiarcs/Rebel match, there was little doubt who people expected would win if a PC program was entered! Therefore DEEP BLUE was thought by the majority to have the best chance, though the discussion continued right up to the start of the great event. After the first game, of course, most PC supporters changed their minds and just about everyone was in agreement that DB was 'it'. Later, after games 5 and 6, lots of folks changed their minds back again!

The General View (pre-Match)

'DEEP BLUE's strength comes mainly from its awesome calculating power, but when we consider chess knowledge, it is not up with the best PC programs'. This is a popular view, and the 1995 WCC was quoted as 'proof' for this, recalling FRITZ's win over Deep Blue in round 5, and the W CHESS draw in round 4.

'Knowledge is more important than speed', is another opinion, strongly held my many of us who feel that, whilst massive extra speed might usually win the day in Computer v Computer (because short term tactical battles are often the order of the day), knowledge is the critically important factor against strong human opposition, as the skillful player will aim for quieter, positional struggles involving long-term weaknesses.

What is a 'positional' struggle? A weak pawn is, in essence, a tactical issue - it is 'positionally' weak because it will be lost in, say, 50 moves, or 'saving' it will induce other weaknesses. This type of tactical factor is often well beyond a Computer's vision, and it needs positional knowledge concerning pawn structure etc. to *see* the point without having to *do* analysis.

Thus quite a few people felt that one of the top 'knowledgeable' PC programs on the fastest available hardware might be the best Computer representative. The success of Pentium GENIUS against Kasparov in the Intel Tournament provided good support for this opinion.

The Other View

Not that everyone agreed! Robert Hyatt has always insisted that the FRITZ win was something of a 'fluke', a 'one-off', in that it was heavily against the odds. He has told us that his own main-frame machine CRAY BLITZ used to get around 80% against the top PC programs a couple of years ago, and that Hsu claimed that DEEP THOUGHT was getting 90% in matches against Genius, MCP, Fritz etc. only last year. The speed difference was quite massive then, but the new DEEP BLUE hardware takes it beyond Deep Thought and into a depth of search the PC programmers can as yet only dream about.

The Deep Blue hardware

DB is located at the J Watson Research Centre in New York, weighs 12 cwt, has 32 processors working in parallel and can analyse up to 100 million chess positions per second. The PC programs on something like a 100MHz Pentium achieve around 20-25,000 nodes per second (it varies according to the search method used), so DB is some 4,000 times faster!! Its middle game brute force search in the match would probably average at 14 plies each move, before extensions for critical variations, captures, checks etc. Programmer Hsu says that DB's 100 million is 200 times faster than even 1989's DT!

Hyatt also assures us that much extra knowledge has been programmed into DEEP BLUE in recent times, (G.M help, possibly from Seirawan and others), and that it is much more than 'a number cruncher' nowadays. In other words he believes that it is not only vastly superior Computer v Computer, but was also the best representative for the Match with Kasparov.

After game 1, we all agreed with him! - and began to wonder just what was inside the super-computer.

IBM's Tan has stated that DB's SP-2 system measures around 7' x 4½' x 3½', which led some wags after this game to ask after the whereabouts of Fischer, Karpov and co. They were nowhere to be found (as usual in Fischer's case) and memories of The Turk and slim operators squeezed into cramped quarters came to mind. Did it really play that well?

And did Kasparov play his best? The short answer is 'No!'. In fact he appeared to have played so 'poorly' at times that there were even some suggestions that he had 'thrown' the game to make the Match more exciting!

More likely were later suggestions that he had allowed various weaknesses into his position to test DEEP BLUE's responses, not necessarily expecting to lose, but aiming to learn where its strengths and weaknesses lay for the later games. Kasparov did refer to this later, and said that his own understanding of chess had developed during the match as he had sought to play the best 'v Deep Blue' moves on the basis of its responses to various positions game-by-game. Pity the next in line after Short and Anand!

Others felt that the risky 'v Computer' moves in game 1 were a sign of Kasparov's frequently seen and sometimes consuming passion for the dramatic, to hit the headlines, to beat the world's fastest ever computer in a tactical game 'just like that'!

Whatever, it didn't work! The many Internet forecasts of a 6-0 or 5½-½ result were down the drain already. New forecasts favouring the Computer poured in, as people feared it was going to be just too fast at seeing everything for anyone. Others remained convinced that Kasparov's knowledge/genius would win the day.

At the bookies the price on a Machine becoming World Chess Champion by the year 2000 had gone from close to evens to 4-1 on! The newspapers were full of it, and game 1 probably got more press than the Kasparov v Anand true World Championship ever came near to receiving!

Rounds 2-4

The dailies were still covering the Match very actively the next day, as Kasparov struck *'a great/saving blow for the human race'* in defeating yesterday's invincible man-eater (Terminator 3!). Apparently the human race was as thankful as was the chess world!

Deep Blue did not seem to have played

quite as well - or had Kasparov played much better? - or was Deep Blue upset that its team of operators, programmers and advisors had gone out to celebrate after game 1, and left him behind?!

Coverage dropped off a little after that, though there were still reasonable snippets of news each day, especially in the 'quality' papers (in Britain the Telegraph, Times, Guardian and Independent). Games 3 and 4 were interesting draws - Kasparov had had an edge at times, but seemed unable to convert it into a full point. The Computer was now a *'clearly worthy challenger'*. Tied at 2-2, could Kasparov possibly win the Match, or was he now having to take such care to play safe, almost perfect, chess that he would have to be satisfied with 2 more draws? Some felt he was showing signs of tiring! Could he hang on? Was DEEP BLUE grinding him down? *'Thank goodness it was only a 6 game Match, if it had been 10, 16 or 20 then [almost] certainly the Computer would win!'* Not because it was better at chess, but because the dreaded machine would keep going for ever.

'The Machine' was actually getting plenty of bad press by now, especially from within parts of the chess world itself. At the very least it was endangering chess... at worst it was apparently putting the whole of mankind at long term risk.

Surely computers are of human manufacture, and chess programs are the result of human programming ingenuity. 'The Terminator' films, full of cinematic effects and visual carnage, are based on a (jolly good) piece of fiction in which machines evolve to take over the world (monkeys and apes are supposed to have been selecting themselves to do the same, according to other theories - though presumably in the past, as they don't seem able to do it now we have our scientific instruments trained on them to record the evolving). Computers are actually man's invention/discovery/creation and, if/when they do beat the human World Champion at chess, it will be as much a victory for human chess and computer programming teams as it will be one defeat for the human chessplayer. When it happens!

Rounds 5 and 6

Just as suddenly the worm had turned. The computer's *'stark inadequacy'* was revealed: the Goliath machine which yesterday would ruin the game suddenly didn't have *'a clue'* how to play properly when faced with a few *'simple'* strategies, developed and slung after only a couple of days of study by soon-to-be-king David. And Gary Kasparov was, of course, a hero!

	1	2	3	4	5	6	
Kasparov	0	1	½	½	1	1	= 4
Deep Blue	1	0	½	½	0	0	= 2

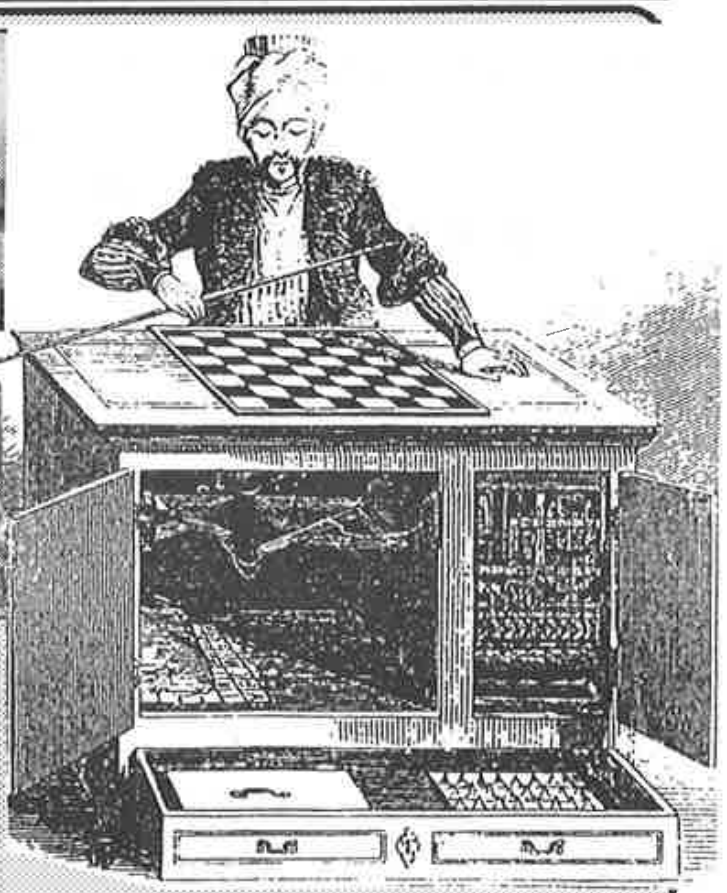
"The humans still rule!", someone commented. But another then asked: *"How many humans still rule?!"* Mmm.

Deep Blue's Elo rating?

The straightforward calculation from this one (very small sample) 4-2 result indicates around 2650 Elo.

The general view of the Match commentators, a panel of G.Ms and I.Ms, having estimated it at 2750 when the Match was tied 2-2, dropped their figure to 2550 at the end, basing their figure on the chess they had seen, rather than the rating as calculated above by mathematical means. Yasser Seirawan, a key advisor to the Deep Blue team, gave his own estimate at 2600, also based on the chess played over the 6 games. I couldn't help wondering what rating would have been given to Nigel Short or Vishy Anand, using as the basis the chess they played as they struggled to their WC defeats against King Gary?!

Gary Kasparov v Deep Blue
THE GAMES!



The World Heavyweight Chess Championship, 1996

Gary KASPAROV
v
Deep BLUE

In analysing these games I am very conscious that this is Eric Hallsworth commenting on Gary Kasparov's chess!... and Deep Blue's for that matter, both somewhat stronger players at 40/2 than I am at 1 or 2 per day probably! Therefore I have made use of three PC programs to check the analysis and note their evaluations from time to time, so that some of any blame due might also fall on them! The programs are HIARCS4 (H4 in the notes), REBEL7 (R7) and FRITZ3 (F3).

Deep Blue – Kasparov, Gary (2800)
[B22]ACM Challenge Match, Philadelphia, PA USA, 1996. **Game 1**

1.e4 c5 2.c3

[If we were surprised by Kasparov's willingness to start off as Black with a Sicilian, it was perhaps unexpected that DB should prefer c3 to the sharper lines resulting from ♘f3. In fact, however, 2.c3 and a Sicilian Alapin was the 1st. game in 1989 Deep Thought v Kasparov!]

2...d5 3.exd5 ♕xd5 4.d4 ♘f6 5.♘f3 ♗g4 6.♗e2 e6 7.h3 ♗h5 8.0–0 ♘c6 9.♗e3 cxd4 10.cxd4

[So we reach an Isolated Queen's Pawn position in which Black should aim to blockade it and prove it a weakness]

10...♗b4!?

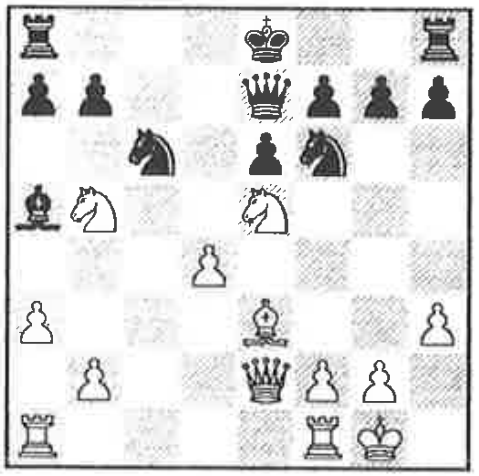
[We would probably have put ?! except for the fact that Kasparov was willing to repeat this move in game 3. More usual is 10...♗e7 (the bishop does look to belong there) after which the PC progs would stay in Book. Chris Whittington tells me that CS_tal still has these moves up to 12.♘c3, where it would play 12.b4 with a note that G.M games from there have produced 2 draws]

11.a3 ♗a5 12.♘c3 ♕d6

[Not 12...♗xc3 13.bxc3 0–0 14.♖b1! when Black's queenside begins to look a little weak. However Kasparov is getting himself into the sort of tactical situation best avoided against any of the top

computers, never mind DB! Therefore I would have preferred the quiet ♕d8 and looked for time to regroup]

13.♘b5 ♕e7 14.♘e5 ♗xe2 15.♕xe2



[DB appears to already have an initiative here. Black cannot take the ♘ on e5 as dxe5 would leave the Computer with an excellent outpost on d6 for his other ♘. Also the a5♗ still looks poorly placed. PC evals: H4 +16, F3 –16, R7 –3]

15...0–0 16.♖ac1 ♖ac8 17.♗g5!

[Emphasising the fact that Black has the 'wrong' piece on the e7 square]

17...♗b6 18.♗xf6 gxf6

[18...♕xf6? 19.♘d7]

19.♘c4! ♖fd8

[White's move hid a clever little tactic. If 19...♘xd4 20.♘xd4 ♗xd4 21.♕g4+]

20.♘xb6

[Disfiguring Kasparov's pawn structure even more. Evals: H4 +99, F3 +47, R7 +50]

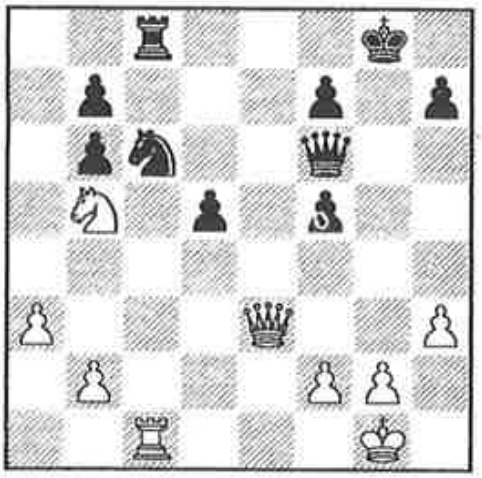
20...axb6 21.♖fd1 f5 22.♕e3!

[Eyeing the weak b6♙, controlling the c1–h6 diagonal and offering the opportunity of a quick transfer to the g–file]

22...♕f6 23.d5!

[A nice sac – especially coming from a computer! – increasing the positional advantages. Pleasingly, both H4 and R7 also found this!]

23...♖xd5 24.♖xd5 exd5



[Has any previous World Champion ever had such a sad array of doubled and isolated pawns?! The fact that he is a pawn ahead is immaterial, and one could well have believed that Kasparov was White and the Machine Black!]

25.b3 ♔h8 26.♕xb6 ♖g8

[Kasparov's best chance is to drum up some sort of attack against the White ♔. Humans could panic in such situations against the World Champion, but DB coolly finds the best reply]

27.♕c5!

[27.♕xb7?? ♕g5! White must respond to the mate threat and loses his c1♖]

27...d4 28.♘d6 f4 29.♘xb7 ♘e5

[The immediate 29...f3 has been suggested, though I note H4 and R7 both go for Kasparov's choice. If 29...f3, then 30.♕xc6 was analysed by some (though the simpler 30.g3 looks best to me). After 30.♕xc6 we have 30...♖xg2+ 31.♔f1 *(31.♔h1?? ♕f4* and mate follows 0–1*)* 31...♖g1+ 32.♔xg1 ♕g5+ 33.♔f1 ♕g2+ 34.♔e1 ♕g1+ 35.♔d2 ♕xf2+ 36.♔d3 ♕e3+ 37.♔c2 and White has escaped! However 31...♕g5 might have been a different matter, thus my preference for 30.g3!]

30.♕d5 f3 31.g3 ♘d3

[Kasparov, with men closing in on the enemy ♔, starts to glare at his opponent, but how do you intimidate a Computer?

Soon GK will threaten mate in 1, but DB has it all under control]

32.♖c7 ♖e8?

[The PC progs. were unanimous in preferring 32...♘f4 here. H4 −254, F3 −122, R7 −130]

33.♘d6 ♖e1+ 34.♔h2 ♘xf2

[Threatening ♖h1 mate]

35.♘xf7+ ♔g7?

[The PC progs. all preferred 35...♕xf7, with R7 showing only −267 so still giving Kasparov slim 'chances'. However H4 and F3 were both around −500]

36.♘g5+ ♔h6 37.♖xh7+

[After 37...♔g6 38.♕g8+ ♔f5 39.♘xf3 ♖h1+ 40.♔g2 Black's resistance is over]
1–0

"Is the game up for Kasparov?", was David Norwood's sober question in his WEEKEND TELEGRAPH article. *"The significance of Kasparov's defeat was not that he lost the game, not even that he didn't play like a champion, but that it was played at the standard 40/2". "Computer BLUES for Kasparov"*, was another headline I liked.

Kasparov, Gary (2800) – Deep Blue
[E04]ACM Challenge Match, Philadelphia, PA USA, 1996. **Game 2**

1.♘f3 d5 2.d4 e6 3.g3 c5 4.♗g2 ♘c6 5.0–0 ♘f6 6.c4 dxc4 7.♘e5 ♗d7 8.♘a3 cxd4 9.♘axc4

[From a Reti, to a Queen's Pawn, to a Reti (Barcza) and now to a Catalan. I thought DB may have come out of Book around move 7 or 8, but the operators told us after the game that the Computer's Book had failed and that it was *'on its own'* from move 1!? Whatever, a fianchetto system is a good idea for Kasparov to get his point back quickly, as I have never been convinced that computer programs understand what a ♗ is really doing on g2 or g7. Kasparov has played his 9th. move at least twice before, in games against Ulf Andersson]

9...♗c5 10.♕b3 0–0 11.♕xb7 ♘xe5 12.♘xe5

[Already Kasparov has a very secure ♔ and a distant ♙–majority – useful ingredients for long–term winning possibilities, especially against a computer]

12...♖b8 13.♕f3 ♗d6 14.♘c6 ♗xc6 15.♕xc6 e5 16.♖b1 ♖b6 17.♕a4 ♕b8 18.♗g5 ♗e7

[Tempting DB to play 18...♖xb2, which was recommended by the PC progs. However it leads to 19.♖xb2 ♕xb2 20.♗xf6 gxf6 and here our PC allies all recognised that Kasparov would have 21.♕d7 with a more than useful advantage]

19.b4!

[Of course neither DB nor our PC 'assistants' can resist taking this. David Levy considered that Kasparov had a major advantage after this, though Black's 21st. may not have been the best continuation 'we' think!]

19...♗xb4 20.♗xf6 gxf6 21.♕d7 ♕c8?!

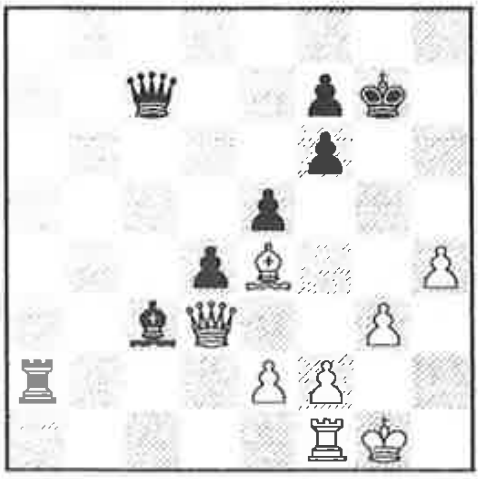
[21...♖d8 looks better. F3 has Black +53 with this, R7 showed +37, and H4 a nominal +7. Kasparov would probably play 22.♕g4+ ♔h8 and then 23.♗e4 or ♕h5 which looks to be only slightly advantageous!? Now, however, he recovers his distant passed–♙ advantage and is soon clearly winning]

22.♕xa7 ♖b8 23.♕a4 ♗c3 24.♖xb8 ♕xb8 25.♗e4 ♕c7 26.♕a6 ♔g7 27.♕d3 ♖b8 28.♗xh7!?

[A fascinating choice by Kasparov. The computers would have safe–guarded their current passed ♙ advantage (on the a–file) by playing ♖b1 or ♕f3. But Kasparov prefers to swap this plus for another one, which he considers even more dangerous!]

28...♖b2 29.♗e4 ♖xa2 30.h4!

[See diagram at the top of the next page to consider the alternative paased–pawn weapon which Kasparov has created. It makes its presence felt by immediately beginning to march up the board]



30...♕c8 31.♕f3 ♖a1?

[Despite the opposite coloured ♗'s factor, Black should certainly keep ♖'s on the board to assist in halting the very dangerous h–file ♙. All of the PC progs. preferred ♗d2 and they all evaluated that at around –80]

32.♖xa1 ♗xa1 33.♕h5 ♕h8 34.♕g4+ ♔f8 35.♕c8+ ♔g7 36.♕g4+ ♔f8 37.♗d5

[Kasparov is eyeing the vulnerable f7–♙ of course]

37...♔e7 38.♗c6 ♔f8 39.♗d5 ♔e7 40.♕f3 ♗c3 41.♗c4 ♕c8 42.♕d5 ♕e6 43.♕b5 ♕d7 44.♕c5+

[Kasparov will have various opportunities to exchange ♕'s and win the f7–♙, but knows of course that the opposite coloured ♗'s which remain should ensure it ends a draw. Of the 3 PC progs. under 'test', H4 and R7 were also aware of this, but F3 wrongly wanted to make the exchange and 'win' the ♙ with 44.♕xd7+? ♔xd7 45.♗xf7]

44...♕d6 45.♕a7+!

[Cleverly manouvering the ♕ so that it gets behind the ♗. DB now needs to station its own ♕ on e8–f8–g8 in order to keep the ♙, though this would be unpleasantly passive]

45...♕d7 46.♕a8 ♕c7?

[Presenting Kasparov with the opportunity he awaited! None of the PC progs. would have 'fallen' for this, indicating they have more knowledge than DB here!]

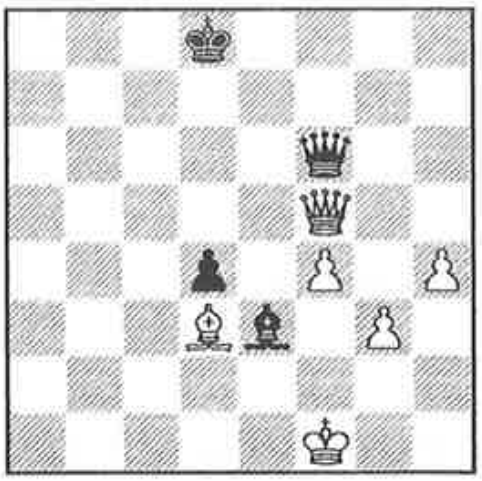
47.♕a3+ ♕d6 48.♕a2 f5 49.♗xf7

[Winning the ♙ and keeping ♕'s on the board!]

49...e4?!

[Only R7 went along with this, showing –146. H4 and F3 preferred 49...♔f6 , in H4's case with a –153 figure which would jump to –221 after Kasparov's response to e4; and for F3 –120 which changed only nominally to –128]

50.♗h5 ♕f6 51.♕a3+ ♔d7 52.♕a7+ ♔d8 53.♕b8+ ♔d7 54.♗e8+ ♔e7 55.♗b5 ♗d2 56.♕c7+ ♔f8 57.♗c4 ♗c3 58.♔g2 ♗e1 59.♔f1 ♗c3 60.f4 exf3 61.exf3 ♗d2 62.f4 ♔e8 63.♕c8+ ♔e7 64.♕c5+ ♔d8 65.♗d3 ♗e3 66.♕xf5



66...♕c6

[An interesting moment to again compare our PC progs! All of the evals. have dropped to –300 or so, but H4 now wanted to exchange ♕'s and, with –189 showing, clearly thought there were still some chances in the opposite–coloured ♗'s finish. Play might have continued: 66...♕xf5 67.♗xf5 ♗d2 68.♔e2 ♗b4 69.h5 ♔e8 *(69...♗f8?! 70.♔d3 ♗g7 71.g4* which H4 confirmed was lost by here*)* 70.h6 ♔f8 71.g4 ♗d6 72.♔f3 ♔g8 73.g5 according to H4 analysis, but this move also concludes the matter in White's favour!]

67.♕f8+ ♔c7 68.♕e7+ ♔c8 69.♗f5+ ♔b8 70.♕d8+

[The PC progs. believed Kasparov had misses the more deadly 70.♔e4! here. But after 70...♕b5+ 71.♔g2 ♔c8 it doesn't seem that much if any better to me]

70...♔b7 71.♕d7+ ♕xd7 72.♔xd7 ♔c7 73.♔b5 1–0

"The battle with the Machines is just beginning", was the new cry.

Deep Blue – Kasparov, Gary (2800)
[B22]ACM Challenge Match, Philadelphia, PA USA, 1996. **Game 3**

1.e4 c5!?

[Surprisingly (?) taking DB on in another Sicilian. Most commentators had expected Kasparov to play e5 this time]

2.c3 d5 3.exd5 ♕xd5 4.d4 ♘f6 5.♘f3 ♔g4 6.♔e2 e6 7.0–0

[Interestingly the computer varies first from game 1, when it played 7.h3. No doubt the programmers feared walking into new prpearation by Kasparov!]

7...♘c6 8.♔e3 cxd4 9.cxd4 9...♔b4

[Cheerfully repeating the 'dubious' move of game 1. If Kasparov repeats an idea, then it can no doubt be taken seriously and added to our databases!]

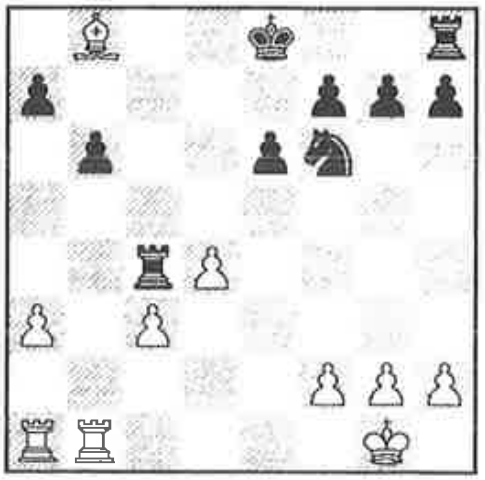
10.a3 ♔a5 11.♘c3 ♕d6 12.♘e5?!

[Apart from White's h3 and Black's response ♔h4, the position is still exactly the same as in game 1. It was at this point then that DB had played ♘b5 pushing Kasparov's ♕ back to e7 (where the ♔ 'should' be). After that the pin with ♔g5 forced the first of Black's weak ♙ problems. This doesn't happen in game 2 with the continuation played. If 12.♘b5 ♕e7 13.♘e5 ♔xc2 14.♕xc2 0–0 15.♖ac1 ♖ac8 16.♔g5 would have obtained a repeat of game 1's move 17 position exactly except for the h2–♙ which was then on h3!]

12...♔xe2 13.♕xe2 ♔xc3 14.bxc3 ♘xe5 15.♔f4 ♘f3+

[15...♕c6 was the move preferred by two of the PC progs. here. H4 +27 and F3 –3. R7 went with Kasparov's move and showed +11. After ♕c6 16.♔xe5 ♕xc3 17.d5! however looks rather good for White, so we must agree that Kasparov got it exactly right!]

16.♕xf3 ♕d5 17.♕d3 ♖c8 18.♖fc1 ♕c4 19.♕xc4 ♖xc4 20.♖cb1 b6 21.♔b8



21...♖a4?!

[Kasparov's ♖ will get trapped on the a–file after this... the sort of things some computers have been known to allow! In fact in this case our PC progs. preferred 21...a5 22.♖xb6 0–0 23.♔e5 ♘d5 and Black wins his ♙ back when he captures on c3, with a small plus we think]

22.♖b4! ♖a5 23.♖c4

[23.c4 was the PC progs. choice with H4 +57 (a bit high?), R7 +11, F3 +28. The forward analysis was 23...♔e7 24.♔e5]

23...0–0 24.♔d6 ♖a8 25.♖c6 b5 26.♔f1 ♖a4 27.♖b1 a6 28.♔e2 h5 29.♔d3 ♖d8 30.♔e7 ♖d7 31.♔xf6 gxf6 32.♖b3 ♔g7 33.♔e3 e5 34.g3 exd4+ 35.cxd4 ♖e7+ 36.♔f3 ♖d7?!

[36...♖e6 is better – and I'm 100% sure Kasparov was fully aware of that. In fact he was getting somewhat impatient that a draw offer had been refused, so seemed to deliberately play a 'weak' move to emphasise the point and prove that the draw was inevitable!]

37.♖d3 ♖axd4 38.♖xd4 ♖xd4 39.♖xa6 and the ½–½ was now agreed.

Kasparov, Gary (2800) – Deep Blue
[D45]ACM Challenge Match, Philadelphia, PA USA, 1996. **Game 4**

1.♘f3 d5 2.d4 c6
[DB played 2...e6 in game 2. However I gather the computer team had done quite a lot of work on the Slav, and were keen to play it. As it happened Kasparov's move order managed to put it out of book around move 5 anyway, though it came back into book again briefly later as they transpose into a Semi-Slav by move 10]

3.c4 e6 4.♘bd2 ♘f6 5.e3 ♘bd7 6.♗d3 ♗d6 7.e4 dxe4 8.♘xe4 ♘xe4 9.♗xe4 0–0 10.0–0 h6 11.♗c2 e5 12.♖e1 exd4 13.♕xd4
[Book in H4 here is ♘xd4, but R7 (+45) and F3 (+31), out of book like DB, would choose Kasparov's move]

13...♗c5 14.♕c3 a5 15.a3 ♘f6 16.♗e3 ♗xe3 17.♖xe3 ♗g4 18.♘e5 ♖e8 19.♖ae1 ♗e6 20.f4 ♕c8 21.h3 b5 22.f5
[F3 chooses this, but R7 and H4 both prefer 22.b3. There is then disagreement on whether the reply will be c5, bxc or a4]

22...♗xc4 23.♘xc4 bxc4 24.♖xe8+ ♘xe8 25.♖e4 ♘f6 26.♖xc4
[Material is level, but White has ♗ for ♘ and Black's c6-♙ is obviously vulnerable. So Kasparov has an edge]

26...♘d5 27.♕e5 ♕d7 28.♖g4 f6 29.♕d4 ♔h7 30.♖e4 ♖d8 31.♔h1 ♕c7 32.♕f2 ♕b8 33.♗a4

33...c5!?
[A most unexpected, but clever, move as DB decides to shed its weak ♙ on, possibly, positional grounds. Or maybe it saw a way of getting at Kasparov's a and b-♙'s in its tactical search? We don't know!]

34.♗c6
[Not the immediate 34.♕xc5? ♕xb2! of course]

34...c4!? 35.♖xc4
[So Kasparov finally goes a ♙ up, but in this tricky position he is falling quite short of time and the material balance soon switches!]

35...♘b4! 36.♗f3
[36.axb4?? ♖d1+ 37.♕g1 ♖xg1+ 38.♔xg1 axb4–+]

36...♘d3 37.♕h4 ♕xb2 38.♕g3 ♕xa3
[And now DB is a ♙ ahead again!... though only briefly]

39.♖c7! ♕f8 40.♖a7
[Kasparov only had a few moments on his clock to play this move, but it clearly gets his ♙ back and ensures the draw. With the time control safely reached Kasparov asked for the draw with his next move, and was quite vexed that the DB team refused it. The computer showed a small '+' and their team, with chess adviser Yasser Seirawan, declined the offer]

40...♘e5 41.♖xa5 ♕f7 42.♖xe5!?
[The only move in the game given a '??' by the R7 analysis. It suggested ♗e2 −5; H4 had the same and showed −10; F3preferred ♕f4(?) −34 (it allows ♘xf3). After Kasparov's ♖xe5 the progs. jump to >100 and, of course, DB also showed a big '+', but Kasparov quickly demonstrates his fortress is secure, and was getting quite annoyed when a second draw offer at move 47 was also refused]

42...fxe5 43.♕xe5 ♖e8 44.♕f4 ♕f6 45.♗h5 ♖f8 46.♗g6+ ♔h8 47.♕c7
[Pretty well tying Black's ♖ to the 8th. rank to defend against mate]

47...♕d4 48.♔h2 ♖a8 49.♗h5 ♕f6 50.♗g6 ♖g8

[If the DB team had been hoping the computer would find a way to progress between moves 40–50, it now becomes clear that it has run out of ideas, and the draw was finally agreed] ½–½

At this point in the Match Kasparov was quoted as saying that DEEP BLUE *'could be rated among the world's top 10 players'*. The feeling of the G.M's commenting on the games was that it should be rated at around 2750 Elo! Amongst even the experts there was a general nervousness that Kasparov might not beat it after all.

Deep Blue – Kasparov, Gary (2800)
[C47]ACM Challenge Match, Philadelphia, PA USA, 1996. **Game 5**

1.e4 e5

[I think this immediately indicates that Kasparov means business and would like to even win with Black, but the computer heads for a fairly passive Four Knights, Scotch]

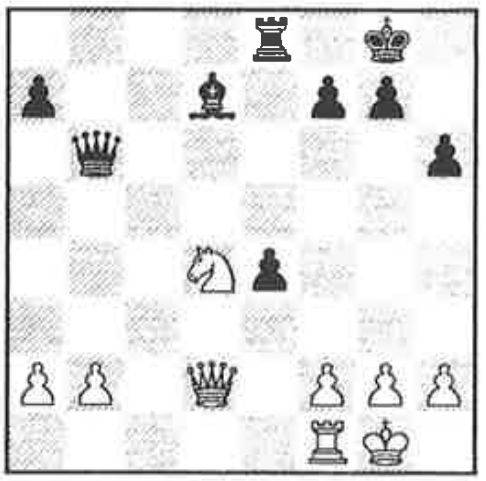
2.♘f3 ♘f6 3.♘c3 ♘c6 4.d4 exd4 5.♘xd4 ♗b4 6.♘xc6 bxc6 7.♗d3 d5 8.exd5 cxd5 9.0–0 0–0 10.♗g5 c6 11.♕f3 ♗e7 12.♖ae1 ♖e8

[The PC progs come to the end of their books here, and the position looks very equal and tactically 'quieter' than games 1 and 3, so offering Kasparov chances to demonstrate the art of creating and using long–term advanages, which he proceeds to do with great effect. It begins to look as if he has worked out how to play 'no risk chess' against the machine, provoking small weaknesses without getting embroiled in much tactical mayhem]

13.♘e2 h6 14.♗f4 ♗d6 15.♘d4 ♗g4 16.♕g3 ♗xf4 17.♕xf4 ♕b6 18.c4 ♗d7 19.cxd5 cxd5 20.♖xe8+?!

[20.b3 is preferred by H4 and F3; R7 would play ♘b3. Kasparov gets some good play on the e–file after the exchange]

20...♖xe8 21.♕d2 ♘e4 22.♗xe4 dxe4



[In this still equal position and for the third game in a row, Kasparov offered an early draw – and once again the DB team refused his first offer. They weren't to get another and, this time, they paid the price]

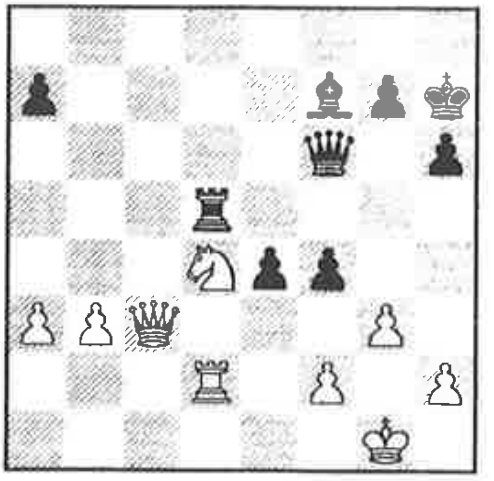
23.b3 ♖d8! 24.♕c3! f5!

[Though Kasparov has ♗ v ♘, his opponent has the distant ♙ majority, so it is important to get the Black ♙'s moving]

25.♖d1 ♗e6 26.♕e3 ♗f7 27.♕c3?

[Kasparov apparently still thought a draw was likely until DB played this, which encourages Black to march the ♙'s forward. Leaving the ♕ on e3 stops the immediate f4 advance, and better was something like 27.♖d2 which was preferred by both H4 and R7, showing –24 >♖d5, and –24 >♖d6 respectively]

27...f4! 28.♖d2 ♕f6 29.g3 ♖d5 30.a3 ♔h7



[It is worth having the Diagram to see how strongly the Black pieces and ♔–side pawns are co–ordinating]

31.♔g2 ♕e5 32.f3?

[32.gxf4 is the choice of all the PC progs. – and earns an R7 !! which indicates how awful it considers DB's f3?? choice. H4 also has an eval. variation of –80 for the move! The expected continuation from 32.gxf4 goes ♕xf4 33.♕e3 ♖g5+ and I think it is clear that Kasparov is winning whether the ♔ goes to f1 or h1, but he would not be quite home and dry, as in the actual game]

32...e3! 33.♖d3 e2

[33...fxg3! 34.♘e2 *(34.hxg3? e2!* and if *35.♕e1 ♖xd4*, or *35.♖e3 ♕xd4!)* 34...gxh2 was the H4 and F3 way – acceptable/maybe better! – of getting to the win. R7 preferred Kasparov's e2]

34.gxf4 e1♕ 35.fxe5 ♕xc3 36.♖xc3 ♖xd4 37.b4

[37.♖c7 was suggested instead of the rather belated ♙–push. But 37...♗xb3 38.♖xa7 ♔g6 still looks totally conclusive]

37...♗c4 38.♔f2 g5 39.♖e3 ♗e6 40.♖c3 ♗c4 41.♖e3 ♖d2+ 42.♔e1 ♖d3!

[Kasparov is not interested in any possible complications arising from 42...♖xh2 43.e6!]

43.♔f2 ♔g6! 44.♖xd3

[Now 44.e6? ♖xe3 45.♔xe3 ♗xe6]

44...♗xd3 45.♔e3 ♗c2 46.♔d4

[46.f4!? might have made the finish that bit more of a fight, though Kasparov's demeanor already showed that he was already awaiting DB's resignation!]

46...♔f5 47.♔d5 h5 0–1

Kasparov, Gary (2800) – Deep Blue
[D30]ACM Challenge Match, Philadelphia, PA USA, 1996. **Game 6**

1.♘f3 d5 2.d4 c6 3.c4 e6 4.♘bd2 ♘f6 5.e3 c5

[5...♘bd7 was played by DB in game 4, but the move played is well–known theory despite the fact that Black has now moved the c–♙ twice in 4 moves]

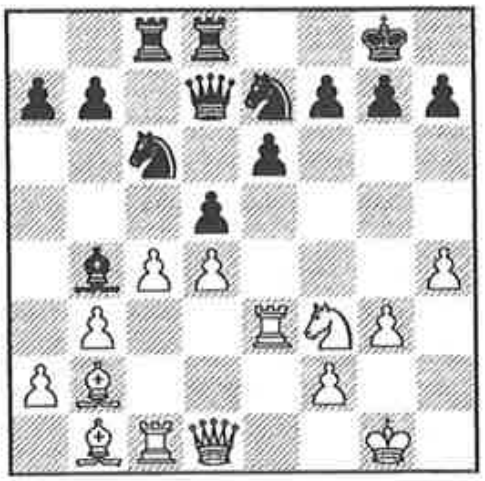
6.b3 ♘c6 7.♗b2 cxd4 8.exd4 ♗e7 9.♖c1 0–0 10.♗d3 ♗d7 11.0–0

[This looks to be a good opening to play against a computer, as White has some extra space, pressure along b1–h7... and there isn't too much happening which is hard work for the Billion Dollar machine]

11...♘h5 12.♖e1 ♘f4 13.♗b1 ♗d6 14.g3 ♘g6 15.♘e5 ♖c8 16.♘xd7 ♕xd7 17.♘f3 ♗b4?!

[A fairly pointless move achieving little or nothing. In fact Kasparov will kick it around the board whilst gaining more ♕–side space and momentum for his ♙'s]

18.♖e3 ♖fd8 19.h4 ♘ge7



20.a3

[20.♗xh7+!? was CS_tal's choice,says its programmer Chris Whittington. I was also told F3 went for it... but not my F3 which showed 20.c5?! After 20.♗xh7+ 20...♔xh7 21.♘g5+ ♔g8 22.♕h5 ♕e8 (right here anything else seems to be clearly losing. E.g. *(22...♘f5?* looks best, but... *23.cxd5 ♘xe3 24.dxe6!+–)* 23.♕h7+ ♔f8 24.♕h8+ ♘g8 25.♘xe6+ ♕xe6 *(25...fxe6? 26.♖f3+ ♕f7 27.♖xf7+ ♔xf7 28.♕h5+±)* 26.♖xe6 fxe6 27.c5± (or ♖c2 heading for e2). For the record H4 had Kasparov's

20.a3 showing +26, and R7 chose 20.h5 (?!) at +14. One can well understand Kasparov avoiding massive tactical complexities after his game 1 experiences! Also he only needs a draw to win the $400,000. The same comment applies when the question arises again in another couple of moves!]

20...♗a5

[The computer spent 20 mins deciding to retreat to here rather than d6. In the event the latter would probably have been better]

21.b4 ♗c7 22.c5

[22.♗xh7+!? was this time proposed by H4 programmer Mark Uniacke. Again the inevitable complexities which can arise make it understandable that Kasparov preferred 22.c5, which was also H4's own choice! However, given ♗xh7+ by its programmer H4 considered that, after 22...♔xh7 23.♘g5+ ♔g8 24.♕h5 ♕e8 (again best as *24...♘f5? 25.cxd5 ♘xe3 26.dxe6+–*) 25.♕h7+ ♔f8 26.♕h8+ ♘g8 27.b5 ♘a5 28.♘xe6+ pretty much as above]

22...♖e8 23.♕d3 g6 24.♖e2 ♘f5 25.♗c3 h5 26.b5 ♘ce7 27.♗d2 ♔g7 28.a4 ♖a8 29.a5 a6??

[This, coupled with Black's next, are the main two reasons why everyone knocked at least 100 Elo off their DB rating estimates! Leaving itself effectively a ♖ and ♗ down in this way was quite inexplicable. Thankfully H4 chose ♘g8 reading −88 (Black's position is already grim!), but R7 also chose a6 here (−50) though it would have played 30...♗d8. F3 preferred ♖h8 and had −50]

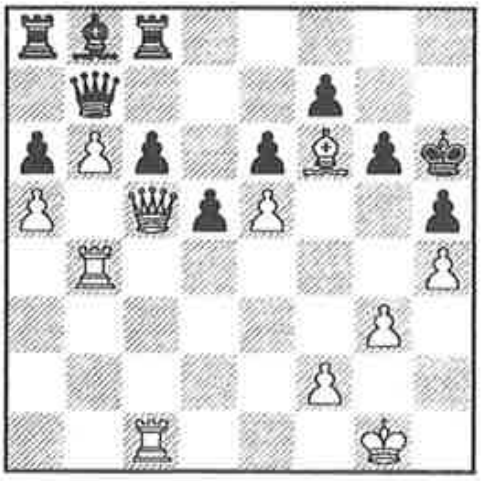
30.b6 ♗b8 31.♗c2 ♘c6 32.♗a4 ♖e7 33.♗c3 ♘e5?

[Chosen not only by DB, but also my three PC progs. 'on test'. It says everything we need to know. Okay, Black gets some freedom following the exchange of pieces, but by fixing a White ♙ on e5 (with others already secure on the black squares c5 and b6) the b8–♗ (and therefore the a8–♖) are doomed. Thus, though they evaluate as if it's around −50, it's a lot, lot more! Therefore 33...♘b4 34.♕d1 ♘c6 was better]

34.dxe5 ♕xa4 35.♘d4 ♘xd4 36.♕xd4

[Incredibly F3 shows Black (yes, not a misprint), Black at +31 here?? MChess Pro5 thinks its equal − and still does at the final position!? H4 shows White +81 (it can be more even than that, of course) and R7 has White +57. Let's watch Kasparov easily finish the game]

36...♕d7 37.♗d2 ♖e8 38.♗g5 ♖c8 39.♗f6+ ♔h7 40.c6 bxc6 41.♕c5 ♔h6 42.♖b2 ♕b7 43.♖b4



[An abysmal picture − a BLACK day for Deep BLUE! It might be a ♙ ahead, but not only are the a8–♖ and b8–♗ immobilised, so is the c8–♖ (tied to defending the c6–♙), AND so is the ♕! (if she moves then b7! wins more than easily). If G.M Joel Benjamin hadn't intervened with DB's resignation, the game might have finished 43...♔h7 44.g4! leaving Black with only bad moves! DB's best reply would be to surrender the c–♙ with 44...♖g8 *(44...hxg4 45.♖xg4 ♖g8 46.♕xc6 ♕xc6 47.♖xc6+–; 44...♔g8? 45.gxh5 gxh5 46.♔h1* m/6) 45.g5! ♕d7 46.♕xc6 ♕xc6 47.♖xc6. Once more Black finds himself with only bad moves! 47...♖e8 48.b7 ♖a7 49.♖c8 ♖g8. Anything else allows an early mate (in 4 or 5). 50.♖b6! Once more Black is left with only bad moves, and whatever he does loses material in a big way!] **1–0**. *"There's still a lot of work to do!"*

Bill REID considers: 'Do de KONING programs have a colour complex?'

Eric's intro:

It has never been a secret that there are various ways in which players can improve their chances against a chess computer by playing 'anti-computer' chess - i.e chess in a style specific to the purpose of beating computer programs.

Some of these include:

[1] Massive attacks on the castled king, usually involving a piece-sac to remove the g and/or h-pawns followed by the planting of queen and rook/s on the h (or sometimes g) file;

[2] Something almost the opposite, i.e concentration on quiet, slow, positional chess, waiting for the computer to misplace its pieces or try unsound pawn-charges. As David Levy used to say: *'Do nothing well!'* The computers are still short of long-term planning ability even if they exhibit some sort of awareness for correct positional piece placements or pawn structure;

[3] By-pass the middle game by exchanging down into an equal endgame where computers are weaker. Though no longer as true as it once was, it certainly still does work some of the time. Computers are particularly unaware of the matter of the distant passed pawn, and will often allow an opponent to create this advantage in the middle game and then serenely approach the endgame unaware of their disadvantage. Often a passed pawn can be created and start 'running' long before the computer realises the danger.

The last one [3] is an accepted chess strategy in its own right, of course, but one which works particularly well against computers. The others are two of the specific anti-computer methods we know of. One of our readers has offered to write an article entitled *"How to Beat your Computer"* and, depending if this works out, it may be something for readers to look forward to in the future.

In the meantime Bill has sent me the following article in which he uses another theme (black and white square complexes) to undo his RISC 2500.

I have Michael Stean's excellent little book called *'Simple Chess'* in which this theme as a part of long-term campaigns is discussed, and it is as interesting today as it was when I first read it, to consider how much (or sometimes, little!) of this factor the computers understand. Thus, whilst Bill's article concerns the de Koning programs and his RISC 2500 in particular - make no mistake about it, the others generally fare no better!

Is KRIS prone to Black Square Weakness?
by Bill Reid

KRIS (Kasparov RISC 2500) is a 'hard to beat' chess computer. First of all, because it is tactically very sharp. But, and perhaps more important, its evaluation function is extremely accurate. Its appreciation of the factors influencing most positions is superior to that of human players below I.M level.

From the point of view of getting the better of it (or providing suggestions for how it could become even stronger), the two considerations are linked. Can we create positions where,

[a] a computer's evaluation function does not operate with its usual efficiency, and

[b] its tactical skill will also be found wanting. There is a kind of tactical skill which consists of being able to **see** that tactics exist, rather than having to calculate them out in full detail.

[It is a certain fact that strong players can take a brief look at a position, recognise its character and themes, and know instinctively the type of opportunity it presents and the moves which will need to be played, whereas a computer (once out of book – and before it reaches any built–in endgame database!) ***always*** *has to calculate everything afresh. Thus, even with the ever faster processors now available, the horizon effect remains! Eric]*

Johan de Koning computers/programs

Computer/Program	Rating
Tasc R30-1995	2442
Tasc R30-1993	2385
Mephisto Montreux	2275
Kasparov RISC 2500	2272
The King2.0-PC (ChessMachine)	2392
ChessMaster 4000 486-PC	2355
The King1.0-PC (ChessMachine)	2240

So where might these blind spots be found?

One example could well be in the area of positions in which the squares of one particular colour are weak – a condition which Alekhine referred to as 'melanopia'.

For example on its 'normal' style setting, after:

1.e4 c5 2.Nf3 e6 3.d4 cxd 4.Nxd4 Nc6 5.Nc3 a6 6.g3 (which puts KRIS out of Book) **Bb4 7.Bg2**, the computer answers with **7...Bxc3**, rather casually giving up the black squares.

The following is a 20 minute game from the above opening in which, as White, I planted my pieces where they dominated the black squares. During this I allowed the computer to mop up my queen side pawns, which of course encouraged it to believe that it was well ahead. However the purpose is to reach a point in the game where Black is materially powerless to protect the weak <u>black</u> squares close to its king and, as long as this happens before black's pawn majority asserts itself, I will win.

<u>W A Reid – RISC 2500 (2270)</u> [B46]
G/20. Game notes by Bill Reid, with supplementary comments by *ELH in italics.*

1.e4 c5 2.♘f3 e6 3.d4 cxd4 4.♘xd4 ♘c6 5.♘c3 a6 6.g3 ♗b4

[The computer's first move out of Book – in this Classical System Sicilian one usually sees ♕c7 here]

7.♗g2

7...♗xc3+?!

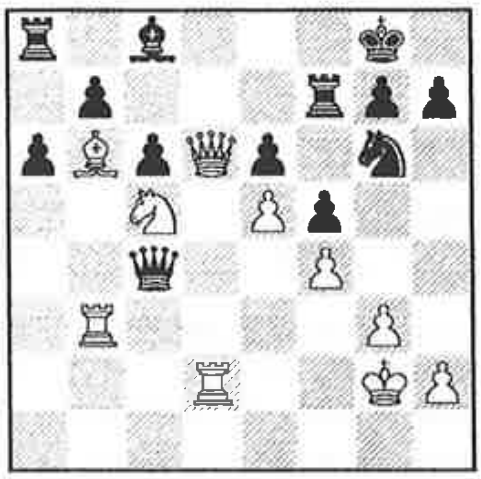
['Rather casually giving up the black squares. Interestingly on offensive mode the move played is ♘xd4 and it's a different game!']

8.bxc3 ♕a5 9.0–0 ♕xc3 10.♗e3 ♘ge7 11.♘e2 ♕c4 12.♘f4 0–0 13.♕d6 ♕xc2 14.♖fc1 ♕b2 15.♘d3 ♕e2?!

[*15...♕f6 looks more secure*]

16.♗b6 ♘g6 17.f4 f5 18.e5 ♖f7 19.♖ab1 ♕xa2 20.♖b2 ♕a4 21.♗xc6 dxc6 22.♘c5 ♕a3 23.♖cb1 ♕e3+ 24.♖f2 ♕c3 25.♖b3 ♕c1+ 26.♔g2 ♕c4 27.♖d2

['My pieces now dominate the black squares, though my opponent is quite happy, having mopped up all my ♕–side pawns']



27...♖d7?

['This looks at first sight like another of KRIS's nasty tactical coups – but there's a big flaw in it, as we shall see. However I re–checked KRIS on this position after the game and, even after 5 mins, it was still showing Rd7 and a +70 evaluation. On offensive I noted it changed a little sooner to 27...Nf8.

What I had expected was 27...♗d7! when I thought I might have to settle for a draw after 28.♖d4 ♕e2+ 29.♔g1 though the computer would still be playing for a win, of course!']

28.♘xd7! ♕xb3 29.♘f6+! gxf6

[*Black has no choice but to take the ♘; if 29...♔f7? 30.♕d8 is m/7*]

30.♕c7?!

['It should also be noted that 30.♕d8+ was spotted by KRIS here, and is an even stronger continuation, which I missed.

I used KRIS to analyse this after the game and, for two minutes it shows 30.♕d8+ as = before a sudden switch to −572 as it had found a fine 32nd. move for white in this continuation: 30...♔g7 31.♕xf6+ ♔h6 32.♗c5! In fact this isn't immediately terminal as, after 32...♗d7 33.♖xd7 Black has 33...♕d5+. Naturally the computer's evaluation of −572, cheered up no end when it saw my ♕c7 and soared to +349!'

Despite its recovered optimisim, the computer is still virtually certain to perish on the black squares – let's see how']

30...♕b4 31.♖d8+ ♘f8 32.exf6

[*The computer had expected all this once Bill had played his 'inferior' ♕c7, and had calculated how to win back what would otherwise have been a deadly pawn now on f6! It was this 'saving' tactic no doubt which persuaded KRIS that it was still winning!*']

32...♕b2+ 33.♔h3 ♕xf6 34.♗c5! a5 35.♕d6

['Only now does the computer realise again that it DOES still have a serious problem']

35...♔g7 36.♖xf8 ♕h6+ 37.♔g2 ♔g6

[*37...♕g6? 38.♖g8+ is m/5*]

38.♖g8+ ♔f7 39.♖g5 ♕xg5 40.♕f8+ ♔g6 41.♕g8+ ♔f6 42.♕xg5+

[*42.fxg5+ was missed here, and is actually m/3. However that is not the point at issue – Bill has indeed constantly embarrassed the computer by finding black squares for his pieces whilst KRIS has looked helplessly on with the bare consolation of a few queen checks*]

42...♔f7 43.♕e7+ ♔g6 44.♗d4 e5 45.♗xe5 a4 46.♕g7+ ♔h5 47.♕g5# 1–0

Conclusion

Perhaps here we have found one way of putting a ?! against the RISC 2500 grading on 2270?! Encourage the computer into a position where it will trade the black squared bishop for a knight, work for black–squared superiority, and trust that a situation will arise where the human eye of modest skill can 'see' the tactics emerging which will over–run the capabilities of the computer. Not easy, but possible.

My reservation is that I have yet to heed Eric's suggestion that this de Koning program performs more strongly on its 'active' or even 'offensive' style setting. Most of my experiments so far have been on 'normal', but after–game analysis on this occasion, as mentioned in my notes to the game, did indicate that our editor might well be right.

Robert SAVAGE beats his BERLIN 68000 (at last!)

Many of our regular readers quite often remind me of myself! I'm sure some have noticed that, being in the Computer Chess business, I do just tend to print more of its good news and games than the bad and the ugly, though I still try for a reasonable balance.

Readers are the same! **They** have a tendency to send in their games mostly when **they've** won! And why not! When **Rob Savage** beat his BERLIN 68000 recently, he admitted that *'the impossible had happened!'*

R Savage – BERLIN 68000 (2195) [C60]
40/2, 1996 *[Notes by* ELH *with Rob Savage's own comments in italics]*

1.e4 e5 2.♘f3 ♘c6 3.♗b5 a6 4.♗c4!?
[Designed to put the Computer out of Book!... unsuccessfully at this point as it happens]

4...♘f6 5.d3
[This, however, does leave Black to rely on its own resources. 5.♘c3 ♗c5 6.d3 is in the Lang Books]

5...♗c5 6.♗g5 d6 7.h3 ♘a5 8.♗b3 0–0 9.♘bd2 ♗d7 10.c3 ♘xb3 11.axb3 h6
[If the Computer was hoping for ♗xf6 it was about to be disappointed. As Rob says: *'It's important that I keep this ♗ as I certainly can't afford to let my opponent have 2x♗ against 2x♘'*]

12.♗h4 ♕e7 13.b4 ♗a7 14.0–0 ♗b5 15.c4 ♗c6 16.♕b3 ♗b6 17.♖a2 ♖fe8 18.♖fa1 ♖ac8?! 19.b5 axb5 20.cxb5 ♗d7
[The queenside thrust has worked quite well for White but, having reached something like the position he had hoped for a few moves ago, Robert now noticed he had given the Berlin the threat of 21...♗e6! He comments here that he is also keen to keep his b–pawn]

21.♘c4! g5 22.♘xb6?!
[22.♗g3 ♗e6 23.♕c2 was the continuation expected by the Computer, and certainly looks more secure]

22...cxb6
[Rob reports: *'Here I began to think I had blown it again! The point is that I must move my h4–♗ or else go a piece down! Yet if I move 23.♗g3 the Computer plays ♗e6 completing the fork I mentioned above. Then, out of the blue, I tried...'*]

23.♘xg5!?
[23.♗g3 ♗e6 24.♕d1 ♗xa2 25.♖xa2 ♕d7–+]

23...hxg5 24.♗xg5 ♗e6
[Getting the fork anyway!]

25.♕d1 ♗xa2 26.♕f3!

[The point! Black's ♔–safety is brought into question]

26...♕e6??
[I am sure 26...♔g7 would have been better here as, if White exchanges on f6, he simply ends up material down with little or no compensation. Equally if 27.♖xa2 ♖a8 28.♖a3 ♖xa3 29.bxa3 ♕e6 then Black has his ♖ for 2 pawns and should win comfortably enough. Now, however, White can take on f6]

27.♗xf6 ♔f8
[*'Virtually forced due to the threat of ♕g3+ and Qg7 mate'*. 27...♖ed8 also avoids the mate, but 28.♖xa2 wins as, if

28...♕xa2?? 29.♕h5! and mate soon]

28.♖xa2 ♖c1+
[28...♕xa2?? 29.♕h5 is m/6]

29.♔h2 ♖c5 30.h4 d5 31.h5! dxe4
[No doubt the Berlin thought it was back in the game after seeing the two h–pawn advances, but the advantage certainly remains with White]

32.dxe4 ♕d6 33.h6 ♕d2!
['*A good move by the Berlin*', Rob comments. '*He's threatening to play ♕xh6+ as well as ♕f4+. Thus I would be forced to exchange queens, leaving his with 2 ♖'s roaming the board – which I don't like at all! So first of all...*']

34.♗g7+ ♔g8

['*And right then I came up with the move of my life!*']

35.b4!! ♕f4+
[This is the best there is, though of course it loses material.
[a] 35...♕xa2?? trying to win a rook still cannot be played: 36.♗f6 ♖ec8 37.♕g4+ ♔f8 38.h7 m/2;
[b] 35...♖c2 trying to save the rook also fails as 36.♖xc2 ♕xc2 37.♗f6 is m/4 as in the above line]

36.♕xf4 exf4 37.bxc5 bxc5
['*At this point, finally realising I was actually material up, I remember thinking to myself, 'Now play it nice and easy – you've got this game won! You can't put up a performance like this and throw it all away... can you!?*']

38.f3 ♖e6 39.♖a7 ♖b6 40.♖a5
[Some players may have preferred [40.♔h3 ♖xb5 41.♔g4 , but Rob didn't fancy giving up his b–♙ and allowing the computer any possibility of counterplay with 2 passed pawns, so played '*the simple move*']

40...♔h7 41.♔h3 ♖g6 42.♔h2?!
[42.♖a8 ♖b6 43.♔g4 also looked good]

42...♖b6 43.e5!
[Another move with which Rob was pleased: '*Putting my ♙ on the ♗s diagonal and also severely threatening the Black f6–♙ which can no longer receive protection from ♖f6*']

43...♔g6 44.♔g1 ♔h7 45.♔f2 ♔g6 46.♔e2
[Black is completely helpless to resist this change of approach by the ♔]

46...♔h7 47.♔d3 ♖g6 48.♖a2
[The other possibility was 48.♖a7 , but Rob thought this might allow Black's ♖ to roam after 48...♖xg2 49.♖xb7 ♖f2 so again preferred to '*play it safe*' and make sure the impossible really happened!]

48...b6 49.♔c4 ♖g5 50.♔d5 ♔g8 51.♔c6 ♖g6+ 52.♗f6! ♖xh6 53.♖a8+!
[Again simplifying towards the win]

53...♔h7 54.♖h8+ ♔g6 55.♖xh6+ ♔xh6 56.♔xb6 c4 57.e6 fxe6 58.♔c5 ♔g6 59.♔xc4
[A '*flash finish*' says Rob, as 59...♔xf6 60.b6!] **1–0**

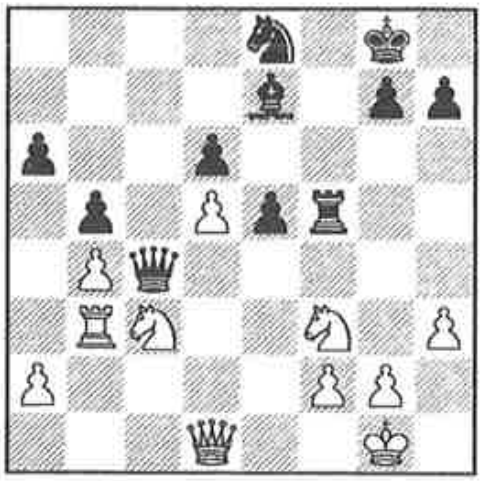
READERS GAMES for consideration are always welcome, especially if they are accompanied by some notes, as in Rob's case. Of course if I now get inundated (chance would be a fine thing!) I can't promise to include them all – but I would like to have one or two games in every Issue between readers and their computers. If you can indicate an approximate/official Elo/BCF grade when sending your effort, it also puts an article into perspective.

Correspondence Chess No. 25
MEPH(isto) VANCOUVER 68020

For new readers: **'MEPH'**, under the watchful eye of **Phil Gosling**, continues its successful BCCS campaign. It is entered as a Computer, so all of its opponents know exactly who/what they are playing. Currently MEPH stands in 11th. place in the BCCS Ratings, with 2446 Elo.

BCCS 2494 (2490) – Vancouver 020
[B00]Corr.20, 1994

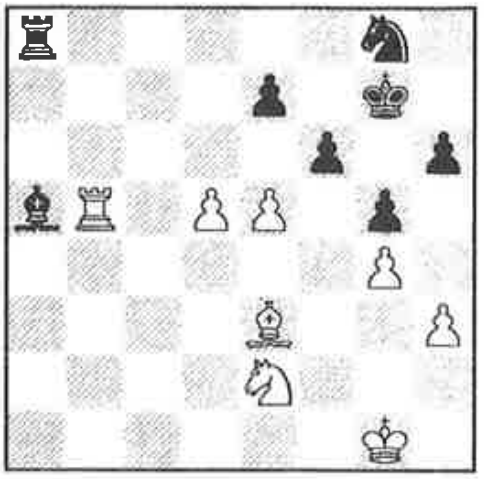
29.♖b3 b5



[SS62 eval +27 >♕e2, though Phil and I thought our opponent may prefer 30.♘d2] **30.♘d2! ♕d4 31.♘f3 ♕b6** [SS63 eval +6 >Qd3. MEPH has 'chickened out' of the ♕ exchange. The forward analysis is interesting/hopeful/clever – take your pick – 31...♕b6 32.♕d3 ♖f4 33.♘e2 ♖c4 34.♘d2 ♖c7 What's the idea?!] =

Roy Thomas, BCCS 2448 – Vancouver 020 [B09]Corr 29, 1995

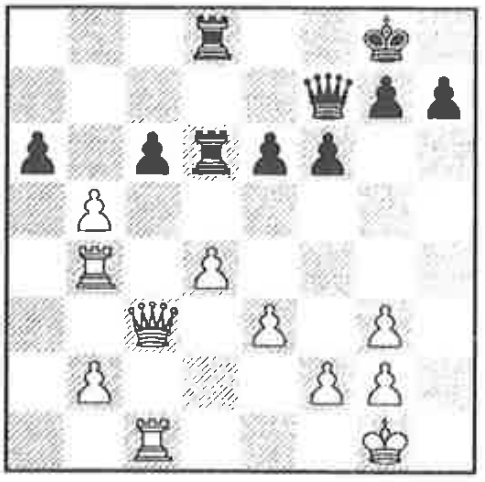
40.d5 f6 [DIAGRAM top of next col. SS62 eval −42 >e6. Roy (a long−time SS reader and Chess Computer afficionado) is certainly on top now, though the eval. has been going up and down like a yo−yo at times] **41.e6 ♗c7 42.♘d4 ♔g6 43.♘f5 ♖a1+?!** [MEPH reads −54 with this. I am never too happy when a computer centralises its opponents ♔ for him at this stage of a game. How about 43...h5!?]



44.♔f2 ♖a2+ 45.♔f3 ♖a3 46.♖c5 ♗b6 47.♖c8 ♔h7 48.♖f8! ♗xe3 [MEPH has dropped to −103 playing this move – rather astonishingly the Fritz3 eval. running under ChessBase was =??!] **49.♖f7+ ♔h8** [Not 49...♔g6?? 50.♖g7#] **50.♘xe3 ♖a6** [MEPH is now −193 >♘f5, and F3 has −94 for the same move. Phil reminds me that we were +84 at move 20!] **51.♘c4** [51.♘f5! ♖a3+ (Not much else this time! If 51...♖a7 for example, d6!) 52.♔e4 ♖a4+ 53.♘d4±] **51...h5** [SS63 eval −130 >d6. It's not looking so good, despite the fact that Roy's 51st. may not have been his best] ±

Vancouver 020 – Roy Thomas, BCCS 2448 [D03]Corr 30, 1995

34.axb5?!



[SS62 eval −3 >axb5. The '?!' was because I thought 34.♖a1 would have been better for MEPH, and because of the expectation >axb5? It will surely be cxb5!] **34...cxb5! 35.♕c2 e5 36.♕c3 ♕e6 37.♖a1 ♖c8 38.♕d3 ♔h8?!** [Is Roy overdoing his wait for MEPH to go wrong in this one? Having won the c−file he might have tried to take advantage with 38...♖dc6 39.d5 ♕d7. However 40.♖h4 and White has something of an attack, though 40...f5 *(40...h6 41.e4; 40...g6 41.e4)* 41.e4 ♖c2 is at least equal] **39.♕e4?!** [39.♖d1 looks better] **39...h6** [39...♖dc6 still looked worth trying, perhaps more so this time... it was also anticipated by MEPH. I'd expect 40.d5 ♖c1+ 41.♖xc1 ♖xc1+ 42.♔h2 ♕f7 with perhaps a small plus] **40.♕f3 ♖cd8 41.♕e4 ♕d7 42.dxe5 ♖d1+ 43.♖xd1 ♕xd1+ 44.♔h2 ♕h5+ 45.♕h4 ♕xh4+** [45...♕xe5 46.♖d4!=] **46.gxh4 fxe5 47.♖e4** [SS63 eval −6 >♖d2. The unbalanced ♙ structure could yet lead us into some interesting endgame play!] =

Roy has recently used GANDALF's opening trap from its WMCC game against HIARCS, SS61, to even greater effect, beating a Corr. opponent in just 11 moves!

BCCS 2352 (2350) − Vancouver 020
[A44]Corr 31, 1995

20.♖xc1 ♖f7

[SS62 eval +115 >Ng2. No doubt the eval is due to the weaknesses around White's ♔, but isn't MEPH being just a little optimistic? Phil wondered if our opponent was leading us on to some forthcoming embarrassment!] **21.♘e3 ♔h3 22.♕d3 ♘f8!** [The start of a pleasing relocation of the ♘, as MEPH builds his attack impressively] **23.♖cc2 ♕g5 24.♘1g2 ♘g6 25.♕e4 ♖af8 26.♖ce2 h5! 27.♖e1 h4 28.gxh4 ♕h5** [SS63 eval +166 > ♖ef1, after which MEPH intends ♘f4. However the mail reached Phil as he was posting these game to me, and the move played is 29.♘f1 accompanied by the comment, *"the end is in sight"*. How would SS readers 'polish' our opponent off?] ∓

MEPH is 'signed up' for 2 more games against another SS reader, Denis Humphrys! These are usually the hardest!

Vancouver 020 − Denis Humphrys (BCCS 2400) [A00]Corr 33, 1996

1.g3 d5 2.♔h3? [Phil's threatened 'innovation' for poor MEPH − 'the Becket Opening'... see SS62! *"Why do you choose a 2400 player to try this against?"*, Richard Lang and I would like to know!] **2...♔xh3 3.♘xh3 e5 4.d3 ♘f6 5.0−0** [Castling is hardly putting our ♔ into safety in this opening, and MEPH already shows −66!] **5...♔c5 6.♘c3 ♘bd7 7.e4 dxe4 8.dxe4 0−0 9.♕e2 c6 10.♘a4 ♔e7 11.♖d1 ♕a5 12.b3 ♖fd8 13.♘g5** [SS63 eval. −21 >h6. *"I am always pleased to play unusual openings"*, says our opponent, *"and often try to get out of the book as soon as possible"*. You won't have to try when you're playing us, Denis, we'll do it for you!] ∓

In the return MEPH, playing its first Correspondence game with the Slav, has made a quiet, equal start. We'll look at it in a later Issue if it 'hots' up. A new one:−

BCCS 2459 (2460) − Vancouver 020
[A29, English, Four Knights, Carls Bremen] Corr 35, 1996

1.c4 e5 2.♘c3 ♘f6 3.g3 d5 4.cxd5 ♘xd5 5.♔g2 ♘b6 6.♘f3 ♘c6 7.0−0 [This move marks the end of MEPH's book] **7...♔e6 8.d3 f6 9.a3 ♔e7 10.b4 0−0 11.♖b1 ♘d4** [SS63 eval −3 >♔b2] =

A brief guide to the purpose of each of the HEADINGS should prove helpful for everybody.

BCF. These are British Chess Federation ratings. They can be calculated from Elo figures by (Elo - 600) /8, or from USCF figures by (USCF - 720) /8.

£'00. The cost in Britain. [1] = £100; [10] = £1,000.

a '+' after the price means it can cost more, usually as there is a choice of boards for the program.

a '-' after the price indicates that it is probably an out-of-date model or version. The price is its original cost - you may be able to buy it second-hand and cheaper now, depending if you can find one! If '-' is shown for an upgradeable program (e.g Mephisto Rebell, Portorose, Lyon, or Kasparov Maestro, Analyst), owners may well be able to buy an upgrade module.

Elo. This is the Rating figure which is in popular use Worldwide. The BCF and Elo figures shown in SELECTIVE SEARCH are calculated by combining each Computer's results v computers with its results v humans. This determines the ranking order and, we believe, makes our Rating List the most accurate available anywhere for computers and programs.

+/-. The maximum likely future rating movement, up or down, for that particular machine. The figure is determined from the number of games played and calculated on precise standard deviation principles.

Games. The total number of Games on which the computer or program's rating is based.

Human/Games. The Rating obtained and the total no. of Games played in Tournaments v rated humans.

A guide to PC Gradings:

386-PC represents the program running on an 80386 at approx. 33MHz with 4MB RAM.

486-PC represents the program running on an 80486 at between 50-66MHz with 4-8MB RAM.

Pent-PC represents the program running on a Pentium at approx. 90-100MHz, with 8-16MB RAM.

Users will get slightly more (or less!) in each case, if the speed of their PC is significantly different. A doubling or halving in **MHz speed** = approx. **60** Elo, a doubling or halving in **MB RAM** = approx. **10** Elo.

ARTICLES, RESULTS, GAMES etc are welcome and should always be sent direct to Eric, please!

RATING LIST (c) Eric Hallsworth, PC PROGS 5563 Apr 1996

BCF	£'00	Computer	Elo	+/-	Games	Pos	Human/Games
240	[1]	M CHESS PROS PENT-PC	2527	19	591	1	2446 13
240	[1]	CHESS GENIUS3 PENT-PC	2521	18	602	2	2662 6
239	[1]	CHESS GENIUS4 PENT-PC	2516	17	612	3	2457 5
238	[1]	REBEL7 PENT-PC	2509	17	566	4	2217 5
237	[1]	HIARCS4 PENT-PC	2501	20	497	5	
237	[1]	REBEL6 PENT-PC	2498	22	446	6	
235	[1]	HIARCS3 PENT-PC	2486	21	458	7	
233	[1]	CHESS GENIUS4 486-PC	2481	32	208	8	
232	[1]	M CHESS PRO4 PENT-PC	2466	21	424	9	
231	[1]	M CHESS PRO5 486-PC	2458	23	389	10	
231	[1]	FRITZ3 PENT-PC	2455	20	508	11	
230	[1]	CHESS GENIUS3 486-PC	2451	23	1156	12	
228	[1]	REBEL7 486-PC	2447	22	428	13	
228	[1]	CHESSMASTER 4000 PENT-PC	2431	59	62	14	
226	[1]	CHACHINE 6IDEON3.1/30-PC	2411	12	1473	15	
225	[1]	MEPH GENIUS2 486-PC	2404	21	475	16	
224	[1]	M CHESS PENT-PC	2401	13	1105	17	
223	[1]	HIARCS3 486-PC	2396	15	959	18	
223	[1]	M CHESS PRO4 486-PC	2390	17	640	19	
222	[1]	REBEL6 486-PC	2389	12	1340	20	
220	[1]	CHACHINE 6IDEON3.1/30-PC	2387	12	688	21	
220	[1]	CHACHINE THE KING2/30-PC	2386	10	1067	22	
219	[1]	CHESSMASTER 4000 486-PC	2385	14	1182	23	
219	[1]	FRITZ3 486-PC	2382	13	1067	24	
218	[1]	M CHESS PRO3.5 486-PC	2381	14	1067	25	
217	[1]	CHESS GENIUS1 486-PC	2380	17	718	26	
216	[1]	MEPH GIDEON PRO 486-PC	2375	20	532	27	
214	[1]	CHACHINE 6IDEON3.0/30-PC	2368	12	1322	28	
214	[1]	M CHESS PRO3.1 486-PC	2365	12	1322	29	
212	[1]	HIARCS2.1 486-PC	2362	25	550	30	
212	[1]	CHESS GENIUS1 386-PC	2359	25	523	31	
211	[1]	KALLISTO 486-PC	2356	25	523	32	
209	[1]	CHACHINE 6IDEON2/15-PC	2354	16	1217	33	
209	[2+]	M CHESS 486-PC	2346	13	1253	34	
206	[1]	FRITZ2 486-PC	2344	48	228	35	
205	[1]	HIARCS2.1 386-PC	2338	14	1095	36	
205	[2+]	CHACHINE THE KING1/15-PC	2336	20	523	37	
204	[1]	ZARKOV2 486-PC	2335	25	327	38	
199	[1]	SOCRATES3 486-PC	2334	32	206	39	
196	[1]	M CHESS PRO3.1 386-PC	2319	44	112	40	
196	[1]	SARGON5 486-PC	2317	58	64	41	
195	[1]	PSION2 486-PC	2316	38	145	42	
194	[1]	REX 486-PC	2314	30	226	43	
193	[1]	HIARCS1 486-PC	2312	26	111	44	
193	[1]	GANDALF2.1 PENT-PC	2310	44	45	45	
192	[1]	FRITZ1 486-PC	2307	42	45	46	
190	[1]	ZARKOV3 486-PC	2305	23	45	47	
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189	[1]	SARGON4 486-PC	2301	21	45	49	
189	[1]	PSION1 486-PC	2299	21	45	50	
188	[1]	REX 386-PC	2297	21	45	51	
187	[1]	HIARCS1 386-PC	2295	21	45	52	
186	[1]	GANDALF2.1 386-PC	2293	21	45	53	
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3	[1]		1927	21	45	236	
2	[1]		1925	21	45	237	
1	[1]		1923	21	45	238	

RATING LIST (c) Eric Hallsworth. 5563 Apr 1996

BCF	£'00	Computer	Elo	+/-	Games	Pos	Human	Games
229	[13]	TASC R30-1995	2436	21	470	1	2249	6
223	[14]	MEPH GENIUS2 68030	2384	20	534	2	2342	17
222	[13-]	TASC R30-1993	2382	12	1319	3	2322	56
219	[10]	MEPH RISC2 1MB	2355	28	261	4	2237	6
217	[45-]	MEPH LYON 68030	2340	20	528	5	2392	51
216	[6-]	KASP RISC 2500-512K	2329	27	293	6	2384	10
215	[6]	MEPH BERLIN PRO	2324	14	1028	7	2225	17
214	[45-]	MEPH PORTOROSE 68030	2319	20	525	8	2340	82
214	[45-]	MEPH VANCOUVER 68030	2317	18	656	9	2347	54
213	[7]	MEPH RISC1 1MB	2305	9	2269	10	2264	55
213	[20-]	MEPH LYON/VANC 68020/20	2305	33	196	11	2327	10
211	[8]	KASPAROV SPARC/20	2292	15	849	12	2200	18
208	[5]	MEPH MONTREUX	2271	22	445	13	2288	54
208	[4]	KASP RISC 2500-128K	2269	9	2373	14	2270	67
204	[10-]	MEPH VANCOUVER 68020/12	2236	9	2285	15	2121	33
203	[50-]	FID ELITE 68040-V10	2225	53	75	16	2215	21
203	[10-]	MEPH LYON 68020/12	2224	8	3154	17	2250	80
199	[10-]	MEPH PORTOROSE 68020	2194	10	1865	18	2240	188
199	[4]	MEPH BERLIN 68000	2193	13	1194	19	2221	25
198	[30-]	FID ELITE 68030-V9	2188	16	770	20	2169	13
197	[8-]	MEPH VANCOUVER 68000	2181	13	1241	21	2126	23
197	[8-]	MEPH LYON 68000	2181	11	1682	22	2083	33
196	[2]	NOVAG SAPPHIRE/DIAMOND	2168	14	977	23	2186	59
195	[10-]	MEPH ALMERIA 68020	2167	14	1053	24	2172	215
192	[8-]	MEPH PORTOROSE 68000	2142	11	1683	25	2111	25
192	[9-]	FID MACH4/2325 68020-V7	2141	10	1983	26	2179	130
188	[15-]	FID ELITE 2*68000-V5	2106	27	290	27	1888	2
186	[6]	KASPAROV BRUTE FORCE	2094	14	1068	28	2179	36
186	[7-]	MEPH POLGAR/10	2092	17	698	29	2080	54
186	[10-]	MEPH ROMA 68020	2091	14	1083	30	2041	64
184	[10-]	MEPH DALLAS 68020	2078	14	996	31	2069	197
184	[8-]	MEPH ALMERIA 68000	2076	14	1025	32	2093	31
184	[3+]	NOV SCORPIO/DIABLO	2072	10	2004	33	2132	129
180	[2+]	KASP PRESIDENT/TC+GK2100	2046	18	617	34	2072	65
180	[1+]	NOVAG JADE2/ZIRCON2	2046	45	104	35	2032	48
180	[4-]	FID MACH3/2265 68000-V2	2040	6	5736	36	2105	230
179	[2]	MEPH NIGEL SHORT	2039	40	131	37	2136	5
179	[5]	MEPH MM5/5	2034	11	1671	38	1902	11
178	[8-]	MEPH DALLAS 68000	2028	11	1580	39	1988	50
178	[6]	MEPH POLGAR/5	2027	8	2743	40	2076	17
178	[2]	MEPH MILANO	2026	13	1123	41	2063	13
178	[3-]	NOV SUPER FORTE-EXP C/6	2024	8	2967	42	2000	24
176	[3]	MEPH MONDIAL 68000XL	2014	15	862	43	2049	77
176	[4]	MEPH MONTREAL/ROMA 68000	2010	9	2481	44	1968	56
174	[4]	MEPH ACADEMY/5	1999	9	2361	45	2024	109
173	[10-]	MEPH AMSTERDAM	1990	9	2373	46	2054	182
172	[3-]	NOV SUPER FORTE-EXP B/6	1981	12	1430	47	2017	84
172	[2]	MEPH MEGA4/5	1979	8	2694	48	2029	169
172	[2]	KASP GK2000/TURB ADV IR	1979	15	847	49		
171	[5-]	KASPAROV MAESTRO D/10	1975	12	1319	50	1956	109
171	[3-]	FID MACH2C	1973	8	2706	51	2059	127
171	[3-]	FID MACH2B	1971	26	302	52	1960	25
170	[2]	MEPH MODENA	1964	16	756	53		
170	[1]	FID TRAVELMASTER	1963	18	628	54	1968	63
169	[4-]	MEPH MM4/5	1957	8	2928	55	2006	97
169	[1]	KASP TRAVEL CHAMPION	1954	30	237	56	1864	2
168	[2]	NOVAG RUBY/EMERALD	1946	17	724	57	1981	48
167	[2+]	MEPH SUPERMOND2/MCARLO4	1941	27	287	58	2074	8
167	[3-]	NOV SUPER FORTE-EXP A/6	1941	12	1453	59	2021	176
166	[5-]	KASPAROV MAESTRO C/8	1931	26	313	60	1999	98
166	[2]	MEPH MONTE CARLO	1931	28	262	61	2046	10
165	[2]	CXG SPHINX/4	1924	9	2396	62	1943	155
165	[4-]	CONCH PLY-VICTORIA/5.5	1923	16	814	63	1870	15
164	[3-]	FID MACH2A	1918	25	338	64	1912	35
164	[2]	KASP TURBOKING2	1918	14	1055	65		
162	[5-]	NOV EXPERT/6	1902	31	222	66	2026	22
161	[3-]	NOV SUPER FORTE-EXP A/5	1893	11	1548	67	1825	29
161	[3-]	FID CLUB B	1891	12	1459	68	1827	18
160	[4-]	NOV EXPERT/5	1883	26	316	69	2012	68
159	[3-]	NOV FORTE B	1878	10	1917	70	1965	208
159	[4-]	MEPH REBELL	1877	9	2333	71	1940	69
159	[2+]	FID PAR E/ELITE+DES2100	1877	9	2619	72	1916	220
159	[5-]	FID AVANT GARDE/5	1875	11	1738	73	1852	80
158	[2]	KASP STRATOS-CORONA	1870	9	2186	74	1890	48
158	[3-]	NOV FORTE A	1869	9	2251	75	1921	134
157	[2-]	MEPH SUPERMONDIAL1	1863	11	1611	76	1990	6
157	[3-]	FID CLUB A	1859	29	242	77	1767	6
157	[4-]	KASPAROV MAESTRO A/6	1858	14	990	78	1863	123
157	[4-]	CONCH PLYMATE/5.5	1856	9	2353	79	1923	55
156	[2-]	KASP TURBOKING1	1855	24	364	80	1900	61
156	[2]	KASP SIMULTANO	1854	13	1149	81	1824	36
156	[4-]	CONCHESS/6	1848	45	106	82	2017	8
155	[1]	NOVAG JADE1/ZIRCON1	1845	106	19	83		
155	[2-]	FID EXCELLENCE/4	1841	11	1756	84		
155	[3-]	NOV EXPERT/4	1841	14	1059	85	1960	43
153	[2-]	SCI TURBO KASP/4	1830	20	524	86	1933	64
153	[3-]	CONCH PLYMATE/4	1830	24	372	87	2007	6
153	[6-]	FIDELITY ELITE C	1825	34	182	88	1869	11
151	[4-]	FID ELEGANCE	1814	17	702	89	1852	40
151	[2-]	SCI TURBOSTAR 432	1810	12	1407	90	1872	67
151	[4-]	MEPHISTO MM2	1810	16	791	91	1776	8
150	[2]	FID EXCELLENCE/DES2000	1805	11	1654	92	1852	52
150	[4-]	KASPAROV MAESTRO A/4	1800	74	39	93	1884	8
148	[2]	KASP PRISMA/BLITZ	1791	25	338	94	1782	59
148	[3-]	CONCHESS/4	1787	20	515	95	1875	28
147	[3-]	NOV SUPER CONST	1783	7	3736	96	1833	284
147	[2-]	NOV SUPER NOVA	1778	22	411	97		
146	[4-]	MEPH BLITZ	1768	27	278	98	1892	7