Computer Chess NEWS SHEET 46
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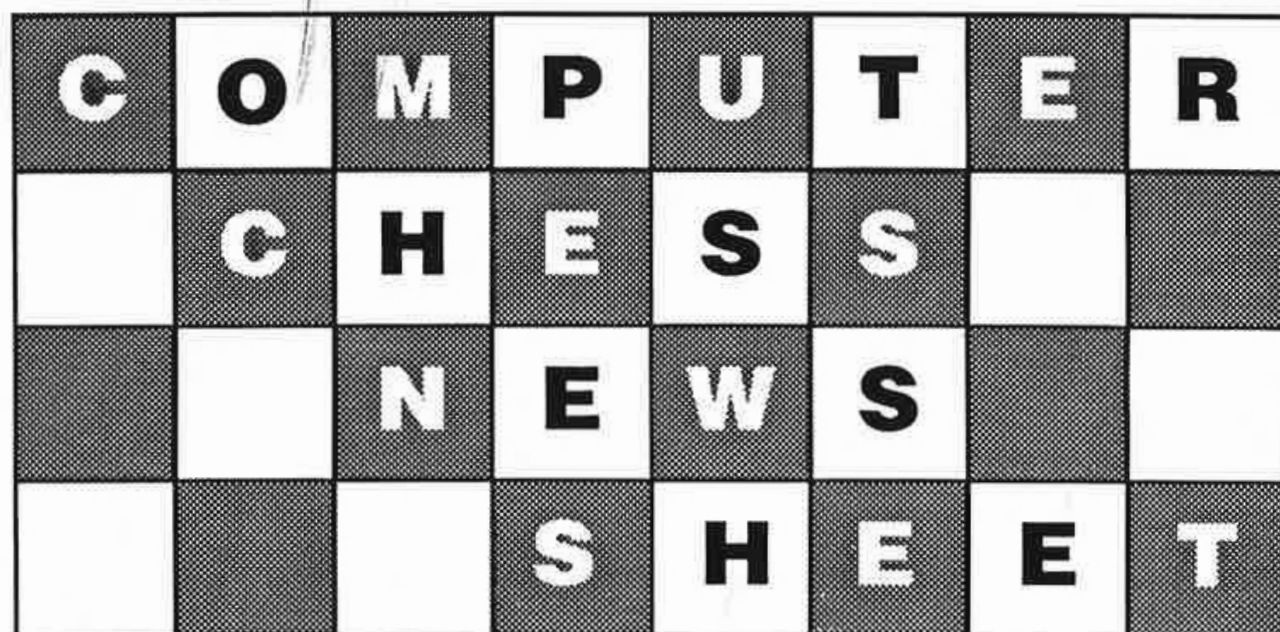
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EDITORIAL NOTE *from Eric Hallsworth: The purpose of the* **NEWS SHEET**, *established by me in 1985, and produced continuously by me since then, has always been to survey the CHESS COMPUTER scene, with special emphasis on reliable assessments of the PLAYING STRENGTHS of the many machines and programs now available.*

PUBLICATION DATES: *Early Feb, Apr, Jun, Aug, Oct, Dec (Each year one of these issues will incorporate our Chess Computer ANNUAL).*

A REMINDER LABEL *or INSERT will be included when you are sent the LAST ISSUE covered by your current sub. You will then need to send your RENEWAL, payable to* **Eric Hallsworth,** *in order to receive the next issue.*

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ARTICLES, REVIEWS, GAMES *sent in by Readers, Distributors, Programmers etc. are always welcome, and will receive fair consideration for publication.*

CONTENTS

The Red House, 46 High Street, Wilburton, Cambs CB6 3RA
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Just as we go to print with NEWS SHEET 46, a couple of particularly interesting results have reached me!

MISSING GAMES, MISSING PROGRAMS

First, however, an apology - a STOP PRESS INSERT with NS/45 told of the brilliant results obtained by **Chess GENIUS 486** and **Kasparov RISC 2500** at AUBERSVILLE, France. Don't worry - they are genuine enough!... both scored 11/12 to come 1 = with 5 others in a massive field of 884 players in this popular ACTIVE Tournament. GENIUS, on a 486, graded at 2530, while KRIS got 2535. Disappointingly I still have only managed to obtain a couple of the GENIUS games, but I will try to get some more so these two performances can get credit next time.

Secondly my apologies that neither the RISC 2500 UPGRADE, nor the SPRACKLEN SPARC program for the Kasparov RENAISSANCE boards have made their appearances yet. I have no official 'release dates' at the time of writing, but will contact personally all those who have shown interest as soon as I hear something definite!

MAGAZINE CHANGE

The oft-referred to *MODUL Magazine* from Austria has changed its name to *PC SCHACH*. This reflects the fact that their emphasis for some time has been on PC PROGRAMS. DEDICATED machines will still receive some coverage, mainly where the two come into direct contact!

Satisfyingly, in their *1/93 Issue* there is an overview of all FOREIGN LANGUAGE PUBLICATIONS on chess computers, and our NEWS SHEET is rated *'the most interesting Magazine of the whole bunch!'* With my permission they also use part of the NS RATING LIST in each Issue.

LATE RESULTS: here are outline details - just in. I have TOURNAMENT TABLES and most games from both so they will get proper coverage in the next Issue - well worth looking forward to.

WELSER 1993

This Tournament normally entertains just about every computer program worth its salt! Last year there were no less than 40 entrants for the 9 round Event, which I dubbed the UNOFFICIAL WORLD CHAMPIONSHIP, and the results and many games were given in Issue 40 of my Magazine. For those who've forgotten the

VANCOUVER 020 came top with 8/9 ahead of VANCOUVER 030, which was a point behind! M CHESS 486 came 3rd. followed by ChessMachine GIDEON2, ChessMachine KING1, VANCOUVER 000 and ROMA 020/28 all paced 4 = .

This year the TOURNAMENT was organised to involve the 'TOP TEN' only in an ALL-PLAY-ALL Event at 40/2 then 20/1 then 1 min per move. The Final Table will raise a few eyebrows!

1. **ChessMachine KING2/30** _ 7
2. **FRITZ2 486** _ 6
3 = VANCOUVER 030, Chess GENIUS 486 _ 5
5 = M CHESS PRO 486, Meph RISC _ 4½
7. ChessMachine GIEDON3.1/30 _ 4
8. Fid ELITE v9 68030 _ 3½
9. ZARKOV 2.6/486 _ 3
10. Kasp RISC 2500 _ 2½

So, the World Champion GIDEON3.1 program by Ed Schroeder adds to its poor ACM result with a low placing here. Meantime the KING2 result suggests that de Koning is now the no.1 programmer... yet RISC 2500 comes last?! Note also FRITZ2 coming out top of the PC SOFTWARE programs, a point above C/GENIUS!

AEGON 1993

The famous Annual TOURNAMENT pitting 32 Chess Computers against a range of G.Ms, I.Ms, Masters and Club players has been won, for the first time, by the COMPUTERS this year!

Top humans were David BRONSTEIN and John NUNN with 5½/6. Top Computer was **ChessMachine KING2/30 Aegon** with 5/6 (incl. draws with Nunn and Bronstein!). The KING2 was entered twice, but with different Books - the other entrant got 4/6. Still with de Koning, RISC 2500 scored 3, but the expensive TASC R30 was bottom computer with a miserable 1½!

ChessMachine GIDEON/30 scored 3; here the dedicated Meph RISC version scored higher with 4. The SPRACKLEN SPARC was 2nd best computer with 4½! Of the PC progs C/GENIUS, FRITZ2 and M CHESS PRO all scored 4/6.

CHESS GENIUS OWNERS

If you have MS-DOS 6 it is possible to get 384K for Hash Tables - I imagine it will work on MS-DOS 5 too. Send a BOOK OF STAMPS for typed copies of the AUTOEXEC and CONFIG files that achieve this. Send a 3½" disk as well, and I'll put copies of my BOOT files on that.

The SK MUNSTER 32 TOURNAMENT

The SK MUNSTER 32 Tournament took place a little while ago, and I am late getting this report into NS. However both the **Kasparov RISC 2500** and Kasparov **BRUTE FORCE** were amongst the 140 entries - the actual grading results were entered into the RATING LIST shortly after the event (just before NS/44).

The **RISC 2500** was drawn against GM FARAGO (2510 Elo) in Round 2, but failed to make the headlines with a win! In fact a poor start had it at 2/5 until it won 4 games on the run to end in 16= place with a score of 6/9.

With average opposition of (German) 2000 Elo, it thus graded at **2134** (German) Elo, lower than previous good results against humans.

BRUTE FORCE made a better start with 3½/5, stumbled against a couple of highly graded opponents, but won its last 2 to also end at 16= with 6/9. Its average opposition was (German) 2029 Elo, so the grade was actually higher than the RISCS's at **2163**.

NATIONAL RATING LEVELS

Just as we always deduct 100 Elo from USCF figures, we also make some additions to results from human Tournaments in one or two European countries. Thus the repeated refs. to (German) Elo in the figures.

I have no explanation for the variations. There aren't supposed to be ANY! and you would expect that reasonably frequent meetings between leading players from different countries would slowly start to erode the differences. However independent calculations by Larry Kaufman in the USA, Thoralf Karlsson and Goran Grottling in Sweden, and myself, have ALL concluded that there IS variation.

Encouragingly our independent findings were also very close for the actual difference between the relevant countries where variation seems to occur, although each of us had basically only been looking at the problem from the perspective of our own lists!

We all believe that Swedish human gradings are 100 Elo lower than those of equivalent British players (in fact the most recent figure I saw from Sweden was 124, but I have stayed with adding only 100). The Swedish calculations indicate that German figures are another 60 Elo lower than their own! - thus putting them a massive 184 below ours! - and 261 below those in the USA! Indeed, if you add 184 to the RISC 2500 result in Munster, it is still very slightly below the NEWS SHEET grading - thus, if you like, confirming the calculations for necessary additions which we have all done!

THE FIGURES USED FOR NS RATINGS

Despite the cold facts, I have always found the size of the calculated additions a bit hard to accept. So I add the figure of 100 instead of 124 to Swedish results, and 120 instead of 184 to those from Germany. At least, if we err, it is on the side of caution. That is how the Munster results for RISC 2500 and BRUTE FORCE here, and those for Mephisto machines (quite often entered in the German Tournaments), have all been treated.

In the States, Larry adds 100 to our figures and 200 to those from Sweden to create his USCF equivalents, so he and I are also keeping in-step on this one.

GAMES FROM THE MAIN TOURNAMENT

After the serious discussion, a game by each Computer from the Event seems in order!

RISC 2500 (2350) - **C SCHO** (2245)
Munster (9), 1993. Sicilian Alapin, B22.

1.e4 c5 2.c3 d5 3.exd5 Qxd5 4.d4 Nf6 5.Nf3 Bg4 6.Be2 e6 7.h3 Bh5 8.Na3 Nc6 9.Be3 cxd4 10.Nb5 Rc8 11.Nbxd4
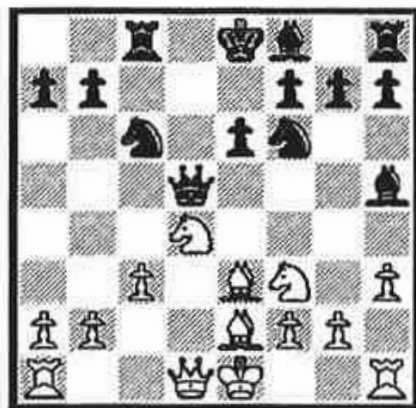
11...Bc5?! 12.Nxe6! Qxe6?!

[12...fxe6 13.Qxd5 Nxd5 14.Bxc5 Nf4 leaves Black minus a Pawn but better than in the game.

12...Bxe3? is no good! 13.Nxg7+! Kf8 14.Qxd5 Nxd5 15.Nxh5 leaves White 2 Pawns up and an easy liquidation route through Rd1 and c4.

12...Bxf3 looks as good as anything, though 13.Qxd5 Bxd5 14.Nxc5 b6 15.Nb7?! still has White a Pawn ahead though, after (15.Nd3 Bxg2 16.Rg1 Bxh3 17.Nf4 Bf5 18.Rxg7 might be slightly better for White) Ke7 16.Bf4 (to stop Rc7!) 16...Bxg2 17.Rg1 Bxh3 18.Rxg7 material would be equal]

13.Bxc5 Bxf3 14.gxf3 Nd7 15.Be3 0-0 16.Qb3 Qe7

[Allowing the Computer to win another Pawn, though the Queen exchange would certainly not have suited Black here. 16...Qxb3 17.axb3 a6 18.b4 and the 2 Bishops with the extra Pawn should guarantee the win]

17.Qxb7 Na5 18.Qxa7 Ra8 19.Qc7 Rfc8 20.Qg3 Nb3! 21.Rd1 Rxa2 22.Qg4 Rd8 23.Qe4!

[Smoothly denying Black any hope of compensation for the 2 Pawns. So Black gave up] *1-0*

BRUTE FORCE (2200) - **M MORLO** (2160)
Munster (5), 1993. Queens Pawn, D02

1.d4 d5 2.g3 Nf6 3.Nf3 c6 4.Bg2 Bg4 5.c3?! Nbd7 6.Qb3 Qb6 7.Qxb6 axb6 8.0-0 e6 9.Bf4 h6 10.a4?! g5 11.Bc1 b5 12.b3 bxa4 13.Rxa4 Rxa4 14.bxa4 Nb6

[Now Black is winning a Pawn following White's somewhat extravagant opening Q-side Pawn play]

15.a5 Nc4 16.Nbd2 Nxa5 17.Bb2 Bd6 18.Ra1 b6 19.c4!?

[19.c4!? (or ?!) was a dangerous move to play. Fortunately the tension in the position gets to Black, who fails to find the best reply!]

19...dxc4?

[19...Bxf3 20.Bxf3 g4 21.Bg2 Bb4 maintains the Pawn advantage and a sound position]

20.d5! Be7

[20...Ke7 looks better 21.Nxc4! Nxc4 22.Ra7+ Nd7 23.Bxh8 cxd5 and I'm not sure who's winning!]

21.d6 Bd8 22.d7+!

[What a remarkable march! Undefended yet, at every step forward, the capture would cost Black a piece]

22...Ke7

[22...Kxd7? 23.Ne5+ of course]

23.Ne5 Bxe2?

[23...c3 24.Bxc3 Bxe2 is the correct move order: 25.Rxa5 bxa5 and there is no check on the a3-f8 diagonal!]

24.Rxa5!! Nd5

[24...bxa5?? 25.Ba3+ is m/2!]

25.Ra7 c3

[Two moves late unfortunately!]

26.Nxc6+! Kd6 27.Ne4+ Kxc6 28.Nxc3 Bf6 29.Nxd5 Bxb2

[29...exd5?? 30.Bxf6! protecting the Queening square d8]

30.Nf4+ Kd6 31.Nxe2 Bf6 32.Rb7 Rd8 33.Rxb6+ Kxd7

[Black is right to play on - though he's a Knight for a Pawn down, the Bishops are opposite coloured... and he's playing a Computer so hopes for some weaker endgame play and drawing chances]

34.Rb7+ Ke8 35.Bc6+ Kf8 36.Kg2 Rd2 37.Bf3 Be7 38.Bh5 Rd5 39.Nc3 Rc5 40.Ne4 Rc2 41.Nf6! Rd2 42.Nd7+ Kg7 43.Ne5 Kf8 44.Nc6 Bc5 45.Rxf7+ Kg8 46.Bg6 Re2 47.Ne7+ Bxe7 48.Rxe7

[If there was a real obstacle to the win, the exchange has removed it and White wins easily, now a full Bishop ahead]

48...e5 49.Kf3 Re1 50.h3 Kf8 51.Rf7+ Kg8 52.Kg4 Re2 53.Kh5 Rd2 54.Kxh6 g4 55.hxg4

[And Black resigned] *1-0*

SK MUNSTER ACTIVE CHESS TOURNAMENT

A 30 min ACTIVE CHESS Tournament was also run as part of the MUNSTER Event - and a test-version of the forthcoming **Kasparov SPRACKLEN SPARC** computer was entered! SCHACH + SPIELE quotes a figure of 2487 (German) Elo for the Rating, but I don't have the final score which obtained this for the SPARC.

Here, however, are 2 games:-

M BRINKMANN - Kasp SPARC (2400)
Sicilian, Sozin [B86]. Munster G/30, 1993

1.e4 c5 2.Nf3 d6 3.d4 cxd4 4.Nxd4 Nf6 5.Nc3 a6 6.Bc4 e6 7.Bg5?!

[The Sozin, employing castling K-side, was a favourite of Bobby Fischer - but this Bishop tended to go to e3. So 7.Be3, Bb3 or 0-0 are more normal moves here]

7...b5 8.Be2?

[Bb3 would seem logical within the Sozin set-up - even Bd3 looks a little better]
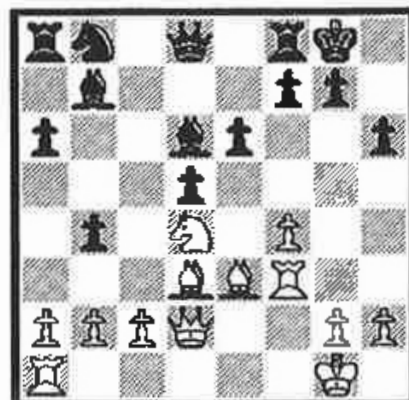
8...h6 9.Be3?!

[The Bishop ends up on its usual square, but this represents a loss in time - Bh4 or Bxf6 would have been more consistent at this point]

9...b4!

[To win the e4 Pawn. But this also emphasises White's lack of space and scope]

10.Nb1 Nxe4 11.Nd2 Bb7 12.0-0 Nxd2 13.Qxd2 d5 14.Bd3 Bd6 15.f4 0-0 16.Rf3

[The beginning, by BRINKMANN, of a typical anti-Computer attack... of the sort which often succeeds!]

16...Nd7 17.f5 e5!

[It is encouraging to see the new Spracklen program defending precisely and playing sensible chess in also preparing future options of its own at the same time]

18.Bxh6 Qb6!

[The type of move often criticised in this sort of position as, at b6, the Queen would neglect vital defensive duties. But SPARC is not planning to leave her here and she will have time to get fully into the action - on this occasion, then, it's a good move!

Note: 18...exd4? 19.Bxg7 Re8 (19...Kxg7 20.f6+! Qxf6 (A King move allows m/2; Nxf6 allows m/3) 21.Rxf6 Kxf6 and I'd rather be White!) 20.Qh6 f6 21.Rh3! winning]

19.Qg5

[Threatening Qxg7 mate]

19...Qxd4+ 20.Kh1 e4! 21.f6 g6 22.Bg7 exf3 23.Qh6

[I hope you have this on a board! White again threatens immediate mate, this time with Qh8++... but SPARC has everything under control!]

23...fxg2+ 24.Kxg2 Qg4+ 25.Kf2 Bc5+

[Announcing m/7!]

26.Ke1 Rfe8+ 27.Kd2 Qg2+ 28.Kd1 Qf3+

[and *0-1*]

Kasp SPARC (2400) - **C LINGNAU** (2340)
Grunfeld, [D85]. Munster G/30, 1993

1.d4 Nf6 2.c4 g6 3.Nc3 d5 4.cxd5 Nxd5 5.e4 Nxc3 6.bxc3 Bg7 7.Bb5+!?

[7.Bc4 0-0 8.Ne2 is usual]

7...c6 8.Ba4 b5 9.Bb3 b4 10.Ne2 bxc3 11.Be3 Nd7

[11...e5 looks better to me. Then perhaps 12.dxe5 Qxd1+ 13.Rxd1 Bxe5 14.f4 Bg7 15.Rc1 and the position will be about equal after the Pawn drops]

12.Rc1 Ba6 13.e5 e6

[The lover 13...c5! attacking the Pawn chain base is another good possibility]

14.f4 Nb6 15.0-0!

[Leaving tension in the position and forcing his opponent to spend time on each move]

15...0-0 16.Rf3 Bxe2 17.Qxe2 Nd5 18.Bf2 Qb6 19.Bxd5 cxd5 20.Rfxc3

[SPARC finally regains the Pawn, but we now see with only a very minimal advantage. Therefore I think it may have missed the best move somewhere en route, though it's not obvious where to me. Maybe as far back as 14.f4?!]

20...Rab8 21.Be3 h5 22.Rc5 Rfd8 23.Qd3 Bf8 24.Rc6 Qb5 25.Qd1 Ba3 26.R1c2 Qb1 27.Bc1 Bxc1 28.Rxc1 Qe4 29.Qd2 Rb1 30.Rxb1 Qxb1+ 31.Rc1 Qb6
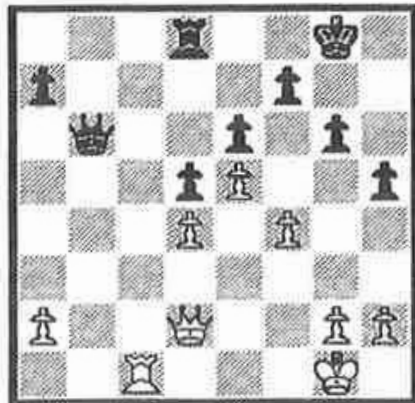
[Black has simplified somewhat and reached an apparently equal endgame - which is quite obviously what he has been looking for.

But at G/30 the Computer operators are not yet interested in a draw, with a Spracklen endgame program at work! In their Fidelity heyday, this was an area of leading Computer play in Dan and Kathe's programs]

32.Qc3 Rb8 33.a3 Kg7 34.h3 Qb2

[Looks perfectly okay, but the SPARC finds a clever Pawn offer that gives Black a tricky choice]

35.f5! gxf5

[Probably the best, though Black fails to follow it up with the same exactness.

35...exf5 looks a slightly inferior choice. Play might continue: 36.Qxb2 Rxb2 37.Rc5! giving White some chances.

35...Qxc3 would be the other possibility. Then 36.f6+ Kh6 37.Rxc3 Rb7 (to defend the 7th. rank) 38.Rc8 (aiming for e8 and e7!... though maybe simply 38.h4 leaving Black to play a few moves with the more restricted Rook and King would also work well) Kg5 39.Re8 Kf5 40.Re7 Rb1+ 41.Kh2 Ke4 42.Rxf7 Kxd4 43.Rxa7 Kxe5 44.f7 Rb8 45.a4! and - but don't quote me! - I think White is winning]

36.Qe3 Kh7?!

[The Tournament BULLETIN suggested 36...Kg6! would give Black the best possibility of maybe even profitting from White's Pawn-sac'. But perhaps 37.h4 would have forced the King back to h7 with a small gain in tempo for White]

37.Rc7 Qa1+

[37...Rb3 looks a worthwhile idea: 38.Qf2 Qxf2+ (38...Qb1+ 39.Kh2 Rb7 40.Qh4 leads to perpetual check) 39.Kxf2 Rxa3 40.Rxf7+ Kg8 41.Re7 Rd3 42.Rxe6 Rxd4 43.Rg6+ Kf7 44.Rf6+ Ke7 45.Rxf5 h4, and it should be a draw.

After 37...Rb3, White could have tried 38.Qf4, but that might be even more complicated, so I haven't pursued it!]

38.Kh2 Rb1?

[Trying for too much! Even the draw is no longer secure, never mind trying for a win.

Best was: 38...Rf8 and though 39.Rxa7 regains the Pawn with an advantage, Black may just be able to scramble the draw]

39.Rxf7+ Kg8 40.Rf6!

[Excellent, and much sharper than the small advantage gained with Rxa7. The move played will settle the game in a few moments!

NB. In fact 40.Rf6! is the only winning move, and an excellent find and choice at the G/30 time control!

A second run-through checking this ending showed that 40.Rxa7 DEFINITELY only draws, as Black plays 40...f4!! If now 41.Qxf4?? Rh1+! 42.Kg3 Qe1+ 43.Qf2 (a King move allows mate) h4+! winning White's Queen. So White must take perpetual check with 41.Ra8+

Interestingly, after 41.Ra8+, if BLACK now tries to avoid the checks by moving his King to the 6th. rank, HE gets mated!]

40...Rh1+

[Now 40...f4+ can be answered by 41.Rxf4. Though Black obviously no longer wins the Queen this way, I think it might have kept some small practical threats available to him, though his chances would be pretty slim]

41.Kg3 Qe1+ 42.Qxe1 Rxe1 43.Kh4!

[Very precise and lovely endgame technique]

43...Re4+ 44.Kxh5 Rxd4 45.Rxe6 f4 46.Kg4 Ra4 47.Rd6

[The full value of 40.Rf6 is becoming clear]

47...Rxa3 48.Kxf4 Rd3 49.Rd8+ Kf7 50.Rd7+ Ke6 51.Rd6+ Ke7 52.Ra6 Rd4+

[But Black resigned as he played this - though there is nothing particularly 'wrong' with it.

However White plays 53.Kf5 and will win easily from here. LINGNAU obviously decided he had seen enough of SPARC's standard of endgame play to know that he would get no more chances] *1-0*

NEWS and RESULTS

READERS will know there is some catching up to do from last time, as the RESULTS coverage was squeezed out of NS/45, let's get straight on with it:-

From **BOB CLARKE**, all at 60/60.

	v. LYON 020	MACH3
CGENIUS 486/25	4 -2	2 -0
HIARCS 486/25	1 -6	2½- ½
M CHESS PRO 486/25	1 -2	x
FRITZ1 486/25	0 -2	x
FRITZ2 486/25	3 -2	x
ZARKOV 2.6 486/25	0 -2	x

A good result for FRITZ2 against the LYON. Chess GENIUS continues to confirm its high strength.

The HIARCS result against LYON was disappointing, and Bob feels that I (or the computer-produced Rating List) may have got fortunate early results giving a temporary over-rating on this one. As HIARCS doesn't use Extended Memory it will also make a lesser improvement moving from 286->386->486 than some of the other PC programs.

From **MICHAEL GILLION**, all at 60/60.

C'MASTER 2100 386/25-Meph MM2 6½-3½
C'MASTER 2100 386/25-Meph POLGAR 2-8

I always find it impressive to compare scores like this, which show so clearly how much progress has been made in a 3/4 year period in the programming standards. In this case going from MM2 to POLGAR, with the latter winning 6 and drawing 4 in a rather one-sided Match. Michael decided to see how the POLGAR would fare against a PC program known to be somewhat stronger!

M CHESS 386/25-Meph POLGAR 5½-4½

Next Michael decided to get really serious, and a 10 game Match was played at 40/2:

M CHESS 386/25-Meph POLGAR 8-2

This was a bigger win than expected and at this point Michael remembered there had been much discussion on different SELECTIVE choices for the POLGAR. So he now played 9 (NINE) 10 game Matches at 40/60, one Match at each of POLGAR's selective settings!

POLSelect:	0	1	2	3	4	5	6	7	8
M CHESS 386/25	8	6½	5½	6½	5½	7½	6	7½	7
Meph POLGAR	2	3½	4½	3½	4½	2½	4	2½	3

In this test, the EVEN-numbered selective search choices have come out best (2, 4, 6 and 8 scored 16 points; 1, 3, 5 and 7 managed 12), with 2, 4 and 6 all doing BETTER than the default setting. Interesting but - as Michael is the first to admit - it needs around 50 games in each Match before we jump up and down too much! Even so, a major effort, for which many thanks.

Here is a short game from the 40/2 Match:-

White **M CHESS 386/25 - Meph POLGAR**

1.e4 c5 2.Nf3 e6 3.d4 cxd4 4.Nxd4 Nf6 5.Nc3 d6 6.Be2 a6 7.0-0 Be7 8.f4 0-0 9.Qe1 b5
The programs emerge from their Books
10.Bf3 e5 11.fxe5 dxe5 12.Nf5 Nbd7 13.Qg3 Bc5+ 14.Kh1 g6
Evals: M CHESS (always optimistic) +80, POLGAR -4
15.Nd5 Nxd5 16.exd5 Bb7 17.Bd2 Rfe8 18.a4 Nf6 19.Nh6+ Kf8
Evals: M CHESS +135, POLGAR +7 (!)
20.Bg5 bxa4 21.Be4 Be7
Evals: MCHESS +405, POLGAR -217
22.Qxe5 Rb8 23.Qd4 Kg7 24.Ng4 Kf8 25.Nxf6 Bxf6 26.Rxf6 Qc7 27.Rxg6 Re5
Evals: M CHESS +1347, POLGAR resigns.
1-0.

From **PAUL WALSH**

Paul had previously reported his 32½-7½

Kasparov RISC 2500 victory over Fid MACH3...
a result which included 9 draws.

I asked Paul if there was any chance of finding time to replay the draws, but using the OFFENSIVE setting on the RISC - and he's in the process of doing just that with a current 6-1 score for KRIS on the draw replays. This is another impressive scoreline supporting the KRIS Aggressive settings theory, and a big improvement is already guaranteed from the 4½-4½ on Normal for these particular 9 games. Readers will remember reference in NS/45 to the gathering support for RISC 2500's Active and Offensive settings to obtain an extra 20 or 30 Elo points.

COMPUSERVE BULLETIN BOARD

This useful source for general Chess News occasionally throws up interesting Computer snippets. RALPH STEPHAN showed the following early results with M CHESS PRO v3.10 on a 486/50.

	CMACH KING/15	CMACH GID2/15	CMACH GID3/15
Blitz 60/5			
MCHESS 486/50	2½-7½	7 -3	x
MCHESS PRO 486/50	14 -6	15 -5	6 -4
C/GENIUS 486/50	x	x	9 -1 (!)
Tournament 40/2			
MCHESS PRO 486/50	x	6½-3½	6 -4
C/GENIUS 486/50	x	x	4 -5

Note the amazing turnaround in the CGENIUS-GIDEON3 match when moving from Blitz to Tournament levels!

Meanwhile, staying with M CHESS PRO, a very strange thing happened in Sweden! At the end of March its results, prepared for the *SSDF RATING LIST*, on a 486/33 were BETTER than for the same program on a 486/50! Better, in fact, by 48 points!?

M CHESS PRO 486/50	2233 Swedish
M CHESS PRO 486/33	2281 "
Chess GENIUS 486/50	2301 "
Chess GENIUS 486/33	2278 "

As *PLY* Magazine had decided recently only to include gradings in their Rating List when a program has played 100 games or more (it was

set at 40 previously, but they believe that figure allows too much margin for error), what readers saw in their RATING LIST seemed slightly unfair on Richard Lang to me, as it showed:

| M CHESS PRO 486/33 | 2281 133 games |
| Chess GENIUS 486/33 | 2276 120 games |

..... thus indicating that M CHESS PRO is the stronger of the two. 'Poor' Chess GENIUS having "only" played 99 games on the 486/50 did not get its better result included; and M CHESS PRO with 83 games on the 486/50 equally avoided its worse result! Combining or averaging the figures would have put Chess GENIUS ahead.

As with FRITZ2, the jump for M CHESS PRO between its play on a 386 and a 486 is proving more than I had expected. Almost certainly the cause of this is that the pair both use Extended Memory for Hash Tables! On my 386 (and with 4MB RAM for Hash which MCP and F2 both do use) Chess GENIUS is noticeably stronger than M CHESS PRO - but the gap certainly seems much smaller, in fact negligible, when they are on 486 processors.

Interestingly a British distributor advertises that M CHESS PRO has been optimized for 386 machines, but this is not what Marty Hirsch (the programmer!) is saying. His comment is that a 386 machine, even with its Extended Memory Hash, will run M CHESS PRO only slightly faster than the original M CHESS. The real gain for Extended Memory in his new program is fully apparent when it's on a 486. This clearly explains the biggish jump from 386 to 486 for the M CHESS PRO Gradings, and others programmed to use Extended Memory in a PC.

STOP PRESS
The April *PLY* Ratings are now out... if they presented it wrongly in March, maybe they actually got it right!

	March	April/games
M CHESS PRO 486/50	2233	2285/175
M CHESS PRO 486/33	2281	2277/147
Chess GENIUS 486/50	2301	2276/117
Chess GENIUS 486/33	2276	2268/126

So then, M CHESS PRO is very good indeed on a 486! Here is its quickest win against CMach GIDEON2 from the 60/5 Match reported

on *COMPUSERVE.*

White **GIDEON2/15-M CHESS PRO 486/50**
1.e4 c5 2.f4 g6 3.Nf3 Bg7 4.d4 cxd4 5.Nxd4 Qb6
6.Nb3 Nf6 7.Nc3 d6 8.a4 0-0 9.a5 Qd8 10.Be3
Ng4 11.Bd2 Nc6 12.Bc4 Bd7 13.h3 Nf6 14.a6
bxa6 15.Bxa6 Qb6 16.Bc4 Rfc8 17.Ra6 Qb7
18.Ra3 Nb4 19.Na5 Qb6 20.Bc1 e6 21.Bd3 d5
22.e5 Nh5 23.Qf3 Bf8 24.Ra1 d4 25.Ne2 Nxd3+
26.Qxd3 Bb5 27.Qf3 Rxc2 28.Qxa8 Rxe2+
29.Kd1 d3 30.b3 Qf2 31.Qc8 Qxg2 (announcing
m/5. *0-1*)

O N GOODSPEED has just finished a 10 game
Match at 60/2 between Fidelity's ELITE v2 (the
MACH3) and his **TRAVEL CHAMPION**. An earlier
result from Charlie GOLD had been quite close,
but O.N's result was 7-3 (5-1=4).

Along with the result he sent the ELITE's best win
- a game in which it thought it was slightly behind
until the last few moves!

White **Kasp TRAVEL CHAMPION - Fid
ELITE 2265 v.2**

**1.d4 Nf6 2.c4 e6 3.Nf3 b6 4.a3 Bb7
5.Nc3 d5 6.e3 Be7 7.cxd5 exd5**
Both Computers are now out of Book - TC
came out at move 5 in fact.
8.Bb5+ Nd7 9.Ne5 0-0
ELITE reads -114 playing this, and will drop a
Pawn in 5 moves.
**10.Bc6 Bxc6 11.Nxc6 Qe8 12.Qf3 Bd6
13.Nxd5 Nxd5 14.Qxd5 Nf6 15.Qc4
Qe4 16.0-0 Re8**
ELITE reaches its lowest eval. point in the
game at -126; TC shows +90.
**17.h3 a5 18.Bd2 Qh4 19.Rad1 Re4
20.Bc3 Rae8 21.b4 axb4 22.axb4 Rg4
23.Kh1 Ne4 24.Na7 Re6+**
Having read -69 at move 23, ELITE jumps to
+175.
25.Nc6 Rh6
Announcing m/6
**26.Ne7+ Kh8 27.Ng6+ hxg6 28.Kg1
Qxh3 29.g3 Qh2** mate, *0-1*.

The beautifully German-produced **COMPUTER
SCHACH + SPIELE** always makes me wish I had
paid more attention to my German 'O' and 'A'
level lessons. Various recent results and reports
from there follow:-

30 min ACTIVE Chess Tournament

		LN	ML	MC	ZR	FR	NB	
1	Meph LYON 000	-	1	2	1½	1½	2	8
2=	Meph MILANO	1	-	1	1½	1	1½	6
2=	M CHESS 386	0	1	-	2	2	1	6
4	ZARKOV 2.5 386	½	½	0	-	1½	2	4½
5	FRITZ1 386	½	1	0	½	-	1	3
6	Nov SUP-EXP B/6	0	½	1	0	1	-	2½

The **ZARKOV 2.6** PC PROGRAM

I referred in NS/45 to the fact that I hadn't found
ZARKOV 2.6 much (if any) of an improvement
over Version 2.5. Figures in SCHACH + SPIELE
confirm this but a second set shows some
TIMINGS on a series of TACTICAL TESTS with
2.6 using each of its 3 different playing styles.
Once again the results appear to go against the
default setting preferred by the programmer!

To demonstrate the results in a meaningful way, I
have converted the timings into ESTIMATED Elo
gradings:-

ZARKOV 2.6 on......	386-40	486-33	486-50
Normal	2068	2110	2136
Aggressive	2090	2137	2163
Cautious	2124	2171	2198

The strange suggestion is thus that both Cautious
and Aggressive out-perform Normal!?

NEU-ISENBURG Tournament

In NS/45, whilst discussing the excellent
SOCRATES victory in the big 1993 ACM
TOURNAMENT, I commented on what a big
reversal this result was compared to its
performance at Neu-Isenburg. However I omitted
to give you the score-table from that
Double-Round Event, so here it is with apologies.

Please note that the Time Control was *Game in
30*:

	MC	F2	MR	MV	SC	FM	
MCHESS PRO 486/50	-	1½	1½	1	1½	2	7½
FRITZ2 486/50	½	-	½	2	2	1½	6½
Meph RISC 1MB	½	1½	-	1	1½	1½	6
Meph VANC'VER 020	1	0	1	-	1	1½	4½
SOCRATES	½	0	½	1	-	1½	3½
Fid MACH IV	0	½	½	½	½	-	2

Remember that the ACM TOURNY was played at

both a different Time Control and a couple of months AFTER that at Neu-Isenburg. Therefore Larry Kaufman and Dan Dailey may have made improvements to the SOCRATES program between the Events, thus giving us part of the reason for the big swing in fortunes. The Time Control difference (and small sample: only 5 games each in the ACMI) are equally possible as the explanations!

The new TASC R30

A small number of results have crept through from abroad for this new machine, though general information and advertising material has so far been notable mainly for its absence. Nor have any reached Britain at the time of writing, as far as I know.

Some outline details were given in NS/45:

Board size 16" x 16" auto sensory - with piece recognition I believe, similar to the Mephisto BAVARIA systems of a year or two ago.

The Display is built-into a separate Keyboard Unit if I interpret the photo I've seen correctly... thus the actual playing area measures about 13" or 14" square.

The Program is by Johan de Koning - but whether it's his Version1 or 2, or somewhere in-between is still not 100% clear, though it's most likely his Version2.

Processor is the ARM61 for 30MHz, with 256K ROM and 512K RAM, and apparently a 200,000 position Opening Book!?

It therefore ought to be just about equal to the program CMACHINE THE KING2/30-PC on the Rating List, though first results at G/15 show a slightly unfavourable comparison.

TASC R30 v M CHESS PRO 486/33 4-6
[CMachine KING2/30 won 7-3 in the equivalent Match here!]
TASC R30 v Chess GENIUS 486/33 5-5
[CMachine KING2/30 won narrowly 5½-4½]
TASC R30 - CMachine GIDEON 3.1/16 7½-2½
TASC R30 - FRITZ2 486/33 8-2

NOVAG RUBY

This new machine has just arrived in the Country as I write this; the table-top EMERALD came out 3/4 weeks ago. One or two more results are already available from abroad.

I duly completed the G/60 Match against ZARKOV 2.6 386, which ended at 4-4 - as I have Zarkov at 2107 in NS/45 this further confirmed the estimated Grading I had for the RUBY.

However in Germany their early tests have not been quite as good: against the Kasparov GK-2000 it lost 7½-3½.

This is a reversal of my result against TRAVEL CHAMPION, which is the same GK-2000 program running 30% slower, for RUBY had won that Match by 5-3. (The German air must suit the GK-2000 as it also beat the Novag SUPER FORTE C by 9-5 in a 40/2 Match there, whereas Sweden played a 20 game 40/2 Match between the same two, and got a 13-7 score for the Novag!).

A second Match played in Germany saw FRITZ2 286/20 beat the RUBY by 6-4. The three additional results leave RUBY/EMERALD hovering closer to 180 BCF (2040 Elo) than my earlier more optimistic expectations, but this is still much better than its predecessor, the SUPER VIP, so fans of its appearance and style will certainly find it worthwhile if they change to the new machine. Although I don't have JOHN LILL's detailed scores in yet, he has already 'phoned to say that the RUBY is 'much better' than the SUPER VIP, having gone for the swap himself.

COMPUTERS versus G.M's!

A certain amount of noise has been made in some quarters recently relating to a Blitz "Match" victory by FRITZ2 on a 486/33 over.... **Garry KASPAROV**! The score was 26-11 (24-9 = 4), which is fairly staggering. However to what degree this was a "Match" or a casual series of friendly off-the-cuff games is not clear.

Kasparov of course is a user and advertiser for the ChessBase and Fritz team, but was apparently quite angry when he found that the score had been released, though he quietened down afterwards.

Indeed, as some of the games have appeared in print they must obviously have been 'saved' on the PC, and Kasparov can hardly have been unaware of that as it requires various Computer and/or Mouse keys to be specifically pressed before the 'New Game' button is used!

10

Even if the "Match" was played in Frederic Friedel's home, and Garry was trying a few ideas out whilst devouring a couple of beers, it's still a result no-one else has managed to achieve since the World Champion got out of his diapers! Afterwards Kasparov stated that he considers FRITZ2 486 to be around 2650 at Blitz! However, I would have to say that seems somewhat generous to me!

The NEWS SHEET Rating List, when re-calculated at the end of April, showed 2272 (+/- 32 for margin of error based on 208 games played) ... well, let's give it all 32 = 2304. Then we'll add 200 for a Blitz improvement allowance = 2504 maximum!

The likelihood of FRITZ2 on a 486 being 2650 at Blitz is shown to be even more dubious by Sweden's *PLY* Magazine which quotes a victory by **Chess GENIUS 486** over **FRITZ2 486**, *at Blitz*, by 72½-27½. That would make the GENIUS close to 2850 at Blitz, a suggestion which would make even Richard Lang smile!

As far as **FRITZ2** 486 goes, FREDERIC FRIEDEL tells me that it has also won its 'Matches' against 'super G.M's' SHIROV and ANAND in lengthy Blitz confrontations, so its sharp style and tactical speed is obviously to be reckoned with at fast chess.

NEWS SHEET space seems to fill up with great rapidity each Issue, but if there's room I'll include a couple of the FRITZ2-KASPAROV games I've seen next time!

In MADRID **Nigel SHORT** found himself, as part of a 55 game Simul., playing against a **Mephisto RISC 1MB.** The following position arose, with the Computer (Black) to play:

Nigel SHORT - Meph RISC 1MB. Move 50 (Black to play)

50...Bh7!
    The winning move, blocking the Pawn with a sort of zugzwang effect.
51.Kf3
    The immediate 51.Bc1 meets Kc3! then 52.Kg5 d3 53.Kf6 Bg6 54.Kg7 d2 55.Bxd2+ Kxd2 56.Kf6 Kc3 etc. In a few moves White's King will be unable to stop the Pawn marches on both flanks.
51...d3 52.Ke3
    This and his next leave the White Bishop with nowhere to go. But if 52.Kf2? d2 53.Ke2 Kb3 54.Kxd2 Kxb2 and the end arrives even more abruptly.
52...Kb3! 53.Bc1 Kc2 54.Bd2 b5
    Completing the Zugzwang and forcing...
55.Be1 f5!
    And Short resigned, remarking that 'At least it would please the sponsor!' If 56.Bd2 f4+ wins. If 56.Kf3 d2 wins. If 56.Kf4 d2 again wins.

A very nicely played finish by the Mephisto Computer - and credit is also due to it for getting to the position at move 50, a Pawn up v. SHORT, albeit in a Simultaneous game..

Two final brief items:

The new **MS-DOS 6** includes two programs of interest to CHESS PROGRAM PC USERS-

[1] A MEMORY MANAGER: this will enable everyone to get the fullest possible Hash Tables in CONVENTIONAL memory for HIARCS and Chess GENIUS, and the best Hash possibilities from EXTENDED memory for others.
[2] A clever CONFIG.SYS and AUTOEXEC.BAT COMPILER which allows users to set-up a range of these, each specifically designed to maximise the Hash potential for anyf particular program, and then compile them into ONE Config.Sys and Autoexec.Bat which will then give a MENU - CHOICE for each at Boot-Up.

PRIZE LETTER received recently was from a customer I had sold a RISC 2500 to. The sale had gone through COMPETENCE on the 28 day HOME TRIAL, and the purchaser was returning it for a refund (which was given him). The reason? It 'only' beat his Mephisto MONDIAL DALLAS 68000XL by 8-2. You win some, you lose some!

Kasparov RISC 2500 gets 2376 grade in CROATIA

NEWS SHEET reader and KRIS owner **LEONARDO LJUBICIC** had his Computer in a recent Double-Round Event in Split, Croatia - part of a series of games it has played against a wide range of human opponents.

Leonardo's other computers are the **SciSys TURBOSTAR 432** and the **Kasparov SIMULTANO**. A 40/2 Match which he ran between this pair resulted in a 27-23 win for the SIMULTANO. Next Leonardo started a KRIS-SIMULTANO Match, but that has gone quickly to 5-0, thus the new emphasis on finding human oppostion!

Subsequently in 21 *Blitz* (5 min and 10 min), and *Active* (30 min) games, the RISC 2500 has graded at 2466 Elo. No 'Elo additions' due, in my view, as the Croatians are possibly not fully 'Chess Computer conscious' yet and so largely treat Computers like any other opponent.

I use the word 'possibly' as Leonardo and another NS reader, Darko Golo, are hard at work putting the inexperience factor right as they seek to establish the value of Chess Computers to Croatian Club players! You will remember the report in NS/44 in which M CHESS on a 386/33 played a total of 47 Active Chess games during the CROATIAN OPEN CHAMPIONSHIPS for an Active Chess Grading of 2304.

Of greater interest to us for RATING purposes is the Double-Round Event in which Leonardo entered KRIS. This was a *Game in 60 mins* Time Control - KRIS being on all its default settings (i.e Normal style rather than my preferred Active or Offensive). Here were its results:-

v. Ivo POPOVIC (2190 Elo)	½ 1
v. Rolando MIMICA (2118)	1 1
v. Mate RADELJIC (2001)	1 0
v. Kresimir PESIC (2084)	½ 1
v. Ivica ARMANDA (2285)	1 1

Final Score 8/10 against Opposition averaging

2135.6 = 2375.6 Elo! Leonardo kindly sent me two of the best games: in one a typically furious KRIS attack; the other a very exciting game in which the top- rated opponent (ARMANDA) fought back ingeniously only to falter at the last moment and succumb to a mate in 9 announcement!

RISC 2500 (2350) - **R MIMICA** (2115)
Split G/60, 1993.
Classical Reti.

1.Nf3 Nf6
2.d4 g6
3.c4 c5
4.d5 d6
5.Nc3 Bg7
6.e4
[The Computer exits its Book. Eval. is +34]
6...0-0
7.Bd3 e5
8.0-0 Ng4
9.Qb3 f5!?
10.exf5
[KRIS opens the K-side without hesitation, despite the position of its Queen. Eval. +110]
10...gxf5
11.Bg5 Qe8
12.Rae1 Na6
[12...e4 looks tempting, but:13.h3 Qg6 (13...Nf6 14.Bxf6 Rxf6 15.Bxe4!? fxe4 16.Nxe4 and White has a useful attack) 14.Nxe4! fxe4 15.Bxe4 with an obvious advantage]
13.Nb5 Qd7
14.Nh4 e4
15.f3!?

12

15...h6

[15...Nxh2? doesn't work: 16.Kxh2 Be5+ 17.f4 Qg7 looks dangerous, but 18.Bc2 Qxg5 19.g3! and White is ahead.

Also to be avoided is 15...exd3?? because of 16.Re7! winning the Queen]

16.fxg4!

[KRIS now shows +148]

16...hxg5
17.Nxf5 exd3
18.Ne7+ Kh8

[Best. If 18...Kh7? 19.Qxd3+! and Black must lose his Queen or be mated: e.g 19...Kh8 (19...Rf5 will also stave off the mate, but the material losses end up even greater: 20.Qh3+ Bh6 21.Nxf5 and mates or wins the Queen) 20.Qh3+ mating]

19.Ng6+

[With eval. +322]

19...Kg8
20.Nxf8 Bxf8
21.Qxd3 Qg7

[Best]

22.Rxf8+! Kxf8
23.Qf3+ Bf5

[Other alternatives are:

[1] 23...Qf7 24.Re8+! Kg7 (24...Kxe8 25.Nxd6+!) 25.Qc3+ Kg6 26.Nxd6 winning impressively.

[2] 23...Kg8 24.Re8+ Kh7 25.Qd3+! Kh6 (25...Qg6 26.Re7+ m/3) 26.Qh3+! Kg6 27.Qh5+ Kf6 28.Nxd6 and the threat of Ne4 mate wins the game comprehensively]

24.Qxf5+ Kg8
25.Nxd6 Rf8
26.Qe6+ Kh7
27.Re3 Qd4
28.Nf5

[Eval. is up to +836]

28...Qd1+
29.Re1

[And Black resigned] **1-0.** Clock times: KRIS 19m. MIMICA 51m.

RISC 2500 (2350) - **I ARMANDA** (2285)
Split G/60, 1993
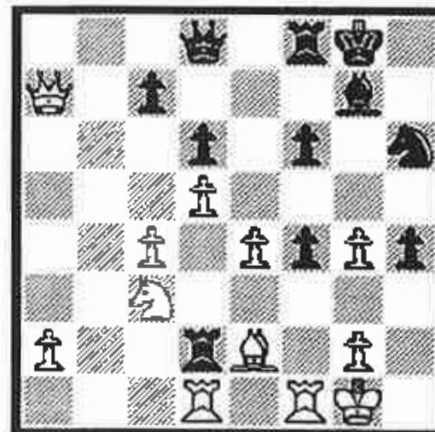Kings Indian

    1.d4 Nf6
    2.Nf3 g6
    3.c4 Bg7
    4.Nc3 0-0
    5.e4 d6
    6.Be2 e5

    7.Be3 Ng4
    8.Bg5

[Out of Book, eval. +23]

    8...f6
    9.Bh4 Nc6
    10.d5 Ne7
    11.Qb3 h5
    12.h3 Nh6
    13.0-0

[KRIS shows a rather optimistic +101 here, but Black's forthcoming K-side advance drops it to +77 at move 17]

    13...g5
    14.Bg3 h4
    15.Bh2 g4
    16.hxg4 Ng6
    17.Nd2 Bxg4
    18.Qxb7 Rb8
    19.Qxa7 Rxb2
    20.f3 Rxd2
    21.fxg4 Nf4
    22.Bxf4 exf4
    23.Rad1

There follows a surprising counter-attack by Black. At first it seems to have little chance - indeed the KRIS eval. rises to +186 straight away and to +269 at move 28, before starting a sharp decline towards equality]

    23...f5!
    24.Rxd2 Bxc3
    25.Rc2 Bb4
    26.c5 fxg4

[The trio on the 4th. rank now look dangerous indeed, despite White's material advantage]

    27.cxd6 Bxd6

[27...cxd6 looks more natural to me, but young ARMANDA's recovery in a few moves vindicates his choice]
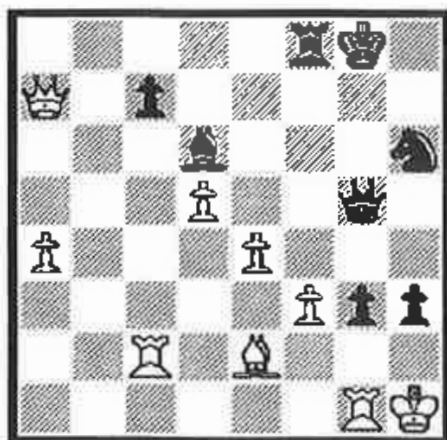
    28.a4 Qg5
    29.Kh1 f3

30.gxf3 g3!
31.Rg1!

[Best in a position becoming sharper by the moment]

31...h3

[Must be worth a Diagram!]

32.Qf2! g2 +
33.Rxg2 hxg2 +
34.Qxg2 Bg3

[34...Qxg2 + 35.Kxg2 might have resulted in an interesting endgame, though favouring the Computer. However the RISC 2500 is also a long way ahead on the clock, so Black opts to stay with tactics in the hope of an creating an earlier solution]

35.Rxc7 Rf4
36.Rc8 + Kg7
37.Kg1 Rh4
38.Kf1 Rh2
39.Qg1

[The KRIS eval. actually goes to -65 here!]
39...Ng4??

[Black is down to his last 3 or 4 mins and misses his way - KRIS still has 30 on the clock!

[1] 39...Rf2 + was okay, forcing 40.Qxf2 Bxf2 41.Kxf2 and giving us another fascinating endgame situation, though Black's horrendous time shortage would probably determine the outcome.

However [2] 39...Nf7!! was expected by KRIS, and looks to win!

E.g [a] 40.a5 Qh4! 41.Qd4 + Kh7, and White must sac' the Rook on h8 to continue a series of checks before the inevitable mate via Black's Rh1 + .

[b] 40.Bd3 (to create an escape square for the King at e2), then even better than Qh4 is:
40...Ra2! 41.Bb1 Rd2 42.Rc1 (to stop Rd1, but...) 42...Qh4 is m/5. Can anyone find a saving line for White?

[3] 39...Qh4 played immediately would not have been as good, being met by 40.Qd4 + Kg6 41.Rc6 + and 41...Kh7 to get a perpetual check draw]

40.Qa7 +!

[And an eval. jump to +999!]
40...Kf6
41.Rf8 +

[Played quickly, with mate in 9 announcement!]
41...Ke5
42.Qc7 + Kd4
43.Qb6 + Ke5

[Of course Black doesn't want to resign - he doesn't know that the Computer has announced mate and, hoping he can yet escape the checks, still has Rh1 + etc himself!]
44.Qb2 + Kd6
45.Qb8 + Kc5
46.Rc8 + Kd4
47.Qb2 + Ke3
48.Qc1 +

[But now he sees that it's down to m/1, so resigns after a very exciting game!] *1-0*. Clock times: KRIS 29m. ARMANDA 57m.

LEONARDO is quite good at the game himself! - 2150 Elo. Here are a couple of his own 'shorties'!

L LJUBICIC-TURBOSTAR 432. 40/2
1.d4 Nf6 2.Nf3 d5 3.Bf4 e6 4.e3 Bd6
5.Bg3 0-0 6.Nbd2 Bxg3 7.hxg3 Bd7
8.Bd3 h6 9.Ne5 Bc6 10.Qf3 Nfd7
11.Qg4 Nxe5 12.dxe5 Kh8 13.0-0-0
Nd7 14.Rxh6 +
[Announcing m/5!]
14...gxh6 15.Rh1 Qf6 16.exf6 Nxf6
17.Rxh6 + Nh7 18.Rxh7 mate. 1-0.
Clock times: LJUBICIC 16m. TURBOSTAR 32m.

L LJUBICIC-SIMULTANO. 40/2.
White Blindfold!
1.c4 e5 2.Nc3 Nf6 3.g3 d5 4.cxd5
Nxd5 5.Bg2 Nb6 6.d3 Bc5 7.Nf3 Nc6
8.0-0 Be6 9.Ng5 Qd7 10.Nxe6 Qxe6
11.Nb5 0-0-0 12.Qc2 Nd7 13.Be3 Bxe3
14.fxe3 a6 15.Bxc6 bxc6 16.Nc3 Nc5
17.b4 Nd7 18.Qa4 Kb7 19.Ne4 Rhf8
20.Rab1 Qd5 21.Nc5 + Nxc5 22.bxc5 +
Ka7 23.Qa5 Rc8 24.Rb3 Qxb3 25.axb3
Kb7 26.Qb4 + Ka8 27.Ra1 Ka7 28.Qc4
Kb8 29.Qxa6 e4 30.Qa8 mate. 1-0.
Clock times: LJUBICIC 48m. SIMULTANO 1h 34m.

An INTERVIEW with MARK UNIACKE

The name MARK UNIACKE will have become familiar in recent months to NEWS SHEET readers as Mark programs the chess-playing part of the HIARCS PC program.

The finished HIARCS is a product of Applied Computer Concepts Ltd which comprises Clive Thomson, David Hatchett and, of course, Mark himself. The program itself has found particular recognition in the past 12 months following its victory in the 1991 World Amateur Microcomputer Chess Championship, and becoming 1992 World Computer Olympiad Gold Medalist. The program works on any 8086/80286/386/486 based IBM or Compatible PC.

ERIC: *When and how did you and HIARCS get started?*

MARK: It all started in 1979 when my father bought me a Chess Challenger 10. I was a reasonably strong junior at the time and interested in computer science. My impression of the machine was "I can do better!" So as part of my computer studies course at school I wrote a program to play the ending of King and Rook against King.

The book CHESS SKILL IN MAN AND MACHINE (in particular the article on Chess 4.5) encouraged me to write a full chess program which played random legal moves. Later as part of my O-level project I expanded the program to do some limited (2 ply) lookahead and evaluation. HIARCS has since been the subject of my computer science projects from A-level through to Honours Degree level.

ERIC: *What is your own chess playing standard?*

MARK: I was rated near 2000 Elo when I stopped competing in Tournaments at about 17. I would expect to be a similar standard now because what I've lost in sharpness I have probably gained in knowledge and experience - through programming HIARCS!

ERIC. *How many hours each week are you working on HIARCS?*

MARK: I program HIARCS in my "spare time" so I "only" manage to put in between 10 and 20 hours a week, depending on my full time job as a Software Engineer.

ERIC: *Which do you consider more important for your work: a strong chess ability and knowledge, or an ace computer programmer!?*

MARK: I think both are equally important. You can make up for some lack of chess knowledge by involving chess players and using chess books. But often the chess knowledge is rather vague, making it difficult to implement, so having a solid chess understanding is a great advantage.

Without a doubt you need to be a very good programmer in order to implement the chess heuristics as efficiently as possible.

For me a great love of the game is also required to sustain the kind of effort needed over many years to produce a really strong chess program.

"Mark has a fine knowledge of both the chess and programming work!"

ERIC: *I know there are various different programming languages; which is HIARCS written in?*

MARK: Unlike almost all other leading PC chess programs HIARCS is not written in assembly language, but in a language called C. This has the significant disadvantage of making the

program run 2-4 times slower than an equivalent program written in assembly language. However it also has advantages, in that chess knowledge is easier to encapsulate in the program, bugs are less common and easier to find. Perhaps most importantly the program is very "portable": in fact there are versions of HIARCS running on Sun Sparcstations, HP workstations, DEC minicomputers and even Amigas!

This portability gives HIARCS the flexibility to run on new processors as they become available without the need for the processor to be compatible with previous models. This is not the case with such programs as Chess Genius, M Chess, Fritz and the ChessMachine versions which are all, to some extent, tied to their respective microprocessors because they are written in assembler.

ERIC: *I know that others are involved in the programming with you. Can you tell us what their area of work is?*

MARK: Dave Hatchett is involved implementing the user interface code, and has done an excellent job for the forthcoming 2nd. version. Clive Thomson is involved writing the copy protection code and low level PC specific routines.
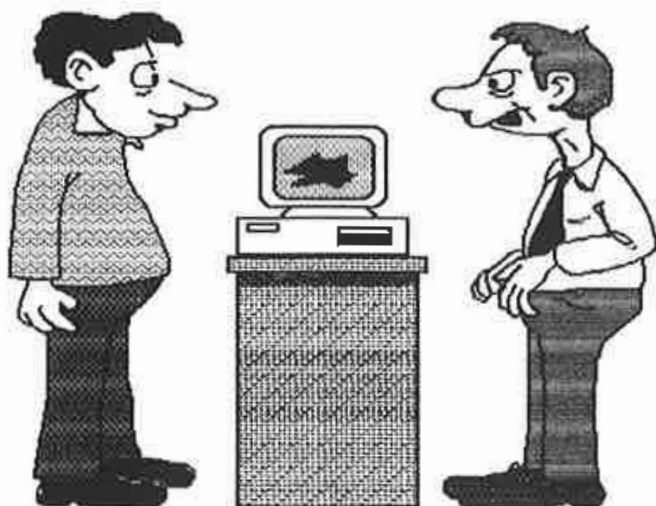
"Members of the HIARCS team discuss a recent setback"

ERIC: *Do you have any aims for HIARCS, or is it just a question of working day-to-day and seeing what happens?*

MARK: My goal is to write the strongest chess program in the world and for it to be recognised

as such. I also get a great feeling seeing something I have created playing chess. In truth I get more nervous at chess Computer Tournaments watching my program play than if I were playing myself!

ERIC: *I am glad to know you have a long-term vision which is aiming high! How strong is HIARCS now in your assessment?*

MARK: With my latest improvements the program seems to be playing to around Elo 2400 on a 486/50. I stress this is only estimated from its performances on test positions and a few Matches against Mephisto RISC and some human players.

ERIC: *Did you design any particular style of play into HIARCS?*

MARK: HIARCS predominantly displays a more positional style than most chess programs. From day one I knew that HIARCS was going to be at a speed disadvantage, because it is not written in assembler, so I tried to make sure its positional ability compensates for any tactical weaknesses by allowing it to understand, at least in part, which tactical situations are dangerous and should be avoided. In turn this also encourages it to create good positions where tactics should flow; "Tactics flow from a good position" - R J Fischer.

I did also include some special tactical knowledge to fill the tactical gaps which might be left by slower search speed calulations. This knowledge particularly on fast hardware such as a 486/50 allows HIARCS to compete very well in tactical positions. E.g it scores 339" for Larry Kaufman's 20 Tactical Test Positions. I was also pleasantly surprised to find in testing that this tactical knowledge gives HIARCS a boost on a 286 based machine. I am keen to see if, in fact, results in play on fast 486/50 machines show my anticipated improvement in full.

ERIC: *Readers will not all know what 339" represents in the Larry Kaufman Test. For comparison a sample of other Computer timings follow, with an Elo-estimate in brackets based on Larry Kaufman's USCF method of calculation:-*

Kasparov RISC 2500 168" (2380), CMachine KING/15 290" (2359), Mephisto RISC 362" (2335),

M CHESS 486/50 443" (2313), M CHESS PRO 486/33 493" (2302), ZARKOV 2.6 486/50 501" (2300), Mephisto VANCOUVER 68020 530" (2294), CMachine GIDEON2/15 553" (2289), Mephisto BERLIN 859" (2242), Fidelity MACH3 3341" (2094), Novag SUPER EXPERT C/6 3964" (2075).

Back to the matter in hand! What improvements are you working on now, or do you have in mind?

MARK: Great improvements have been made in endgame ability, particularly King and Pawn endgames, and endgame liquidation knowledge. Tactical ability has been improved through new search techniques, and the positional knowledge has also been enhanced. I am especially pleased with the improvements in tactical sharpness which is enabling HIARCS to perform much better against strong tactical opponents like Mephisto RISC.

When the program is as good as I can get it, I will convert the most CPU intensive routines into assembler to give a good speed-up for a future release.

"Mark Uniacke reacts to HIARCSv17 victory over Chess GENIUSv15 in the 2008 World Computer Championships Final"
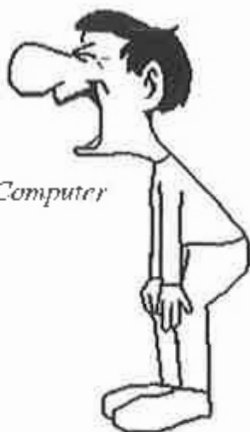
ERIC: How do you think you would do on DEEP THOUGHT/DEEP BLUE hardware?

MARK: There is often a misconception here; the Deep Thought hardware is very specialised to brute force searching with little knowledge. So it is like comparing apples with oranges. The hardware could be used in conjunction with a PC program like HIARCS to add 3-4 ply of brute force searching on to the end of the current search, improving tactical performance greatly. So in a tactical sense it could add 500 Elo to the strength, but in a positional/strategic sense the hardware would be of little advantage to PC chess programs like HIARCS.

ERIC: What can you tell us about the future of chess computing? - future models and processors? - their effect on running speeds? - the likely amount of improvement over the next 2-3/next 10 years? And how does this affect your planning and work?

MARK: As a rough guide, technology advancement in the micro processor industry seems to provide a speed doubling every two years. There will soon be another speed up from the new Intel chip, the "Pentium", which could give a doubling in processor speed over the 486DX2/66MHz. This will give something like an extra 60-70 Elo points to most PC programs. There are new processors which could become available in desktop machines over the next year based on DEC's ALPHA, Sun's SuperSparc and HP's PA-RISC processors, some promising over twice the speed of the "Pentium" - but at a significant cost!

ERIC: When will a chess computer beat the World Champion in a Match?

MARK: This is a very difficult question to answer even though great strides have been made in computer chess over the last 10 years. However we have probably the strongest human World Champion ever-to-play the game to beat. I also believe Kasparov can raise his game to around 3000 Elo when playing chess machines by analysing their inherent weaknesses. So in conclusion I don't think a machine will win a Match against Kasparov (or whoever might depose him!) before the end of this Century.

ERIC: Finally, can you recommend any further reading for anyone interested in the programming side of things?

MARK: I found the following books both interesting and very useful: "Chess Skill in Man and Machine", "Computers, Chess and Cognition", and the "Advances in Computer Chess" series. Various past issues of the ICCA Journal are also useful for the budding chess programmer.

ERIC: Thanks, Mark, for taking us behind the scenes a little. NEWS SHEET wishes you and the Applied Computer Concepts team "good luck" with HIARCS as it progresses to Version 2, and beyond, in the future! And thanks for letting me print the cartoons!

TIME CONTROLS, LEVELS and RATINGS

Some scores I received recently from GLEN BAKER turned my thoughts to an old NS theme! - *"What is a doubling of speed worth?"* - *"What is the difference in a computer's strength at its various time controls?"*

These questions are still asked by NS Readers from time-to-time, and are sometimes raised by customers contemplating a purchase.

Setting the discussion off again, Glen supplied some interesting figures from auto-test Matches played by his **Novag SUPER FORTE C/6**.

Time Control	Time Control	Match Result
3 sec	v. 5 sec	1 -9
5 sec	v. 7½ sec	3½-6½
7½ sec	v. 15 sec	5 -5
15 sec	v. 30 sec	0 -10 (!)
30 sec	v. 45 sec	4 -6
30 sec	v. 1 min	2½-7½
1 min	v. 2 min	5½-4½
2 min	v. 3 min	4 -6

15 sec p.m doesn't look too brilliant! It only draws with 7½ sec p.m, and loses badly to 30 sec. However 30 sec loses quite heavily to 1 min which, in turn, defeats 2 mins - and that shouldn't happen, of course, so is almost certainly a small sample effect. Even so, I think we could conclude so far that, in a Novag SUPER FORTE/EXPERT C, 7½ secs p.m gives excellent strength for speed at Blitz, and 1 min p.m is almost as good as 3 mins, which makes it, too, an excellent choice.

SPEED/STRENGTH BACKGROUND!

The theory behind statements such as *"An extra Ply = 250 Elo"*, or *"A doubling in Speed = 80 Elo"* goes back originally to test results shown in the *ICCA JOURNAL* in 1986. Prior to this the "popular" speed-doubling figure was held to be 100 Elo.

Probably 100 still applies to the really old, very early 1980 models, or where VERY fast speeds (1 to 5 secs per move) are in use on a medium speed modern machine.

You see it isn't that the original figures were wrong, but the further away the ANALYSIS gets from the ROOT (or current BOARD) position - which is exactly what FASTER SPEEDS enable the Computer to do - the LESS likely it is that a MAJOR improvement will be found.

So, on OLD, SLOW machines - or newer ones playing BLITZ - where the Search is ending at perhaps 2 or 3 Ply, there are frequent and often vital changes made, and any EXTRA SPEED is of tremendous importance.

But, on NEW, FAST machines playing at 40/2, the advancing of a Search from, say, 7 Ply to 8 Ply every 4th. move through that extra speed, is NEVER going to make the same difference.

So, as more work has been done checking the ever-faster processors, the tendency has been to reduce the speed-doubling figure of 80 to 75, 70 or, even, 60 for the latest, strongest machines. Different people have their own viewpoints, but I believe that *a figure of 60 for Speed-Doubling may well be more appropriate in 1993.*

There is another question we must ask...

WHAT DOES A "LEVEL" MEAN?

If we are able to say with moderate confidence (!) that a doubling in Processor Speed applied to a particular program gives 60 (or 70, or 80) Elo, then we should also be able to answer the question, *"If COMPUTER X is 2200 Elo at 3 mins a move, what is it at 1½ mins a move?"*

Unfortunately that's not the right question! What we are really assessing when we compare actual TIME CONTROLS (usually erroneously called 'Levels'), is NOT an ACTUAL GRADE at such-and-such a speed! Basically, everyone's Grade is CONSTANT throughout the Time Controls, unless a player proves himself particularly good at, say, Blitz! Thus one occasionally sees an ACTIVE Grading List, or a BLITZ Grading List. Note that a particularly good BLITZ player, 'normally' graded at, say, 2600, does NOT show at 2400 for Blitz, but

perhaps 2650! Is his Blitz CHESS therefore better than his play at 40/2? No! His MOVES are WORSE, but in comparison with his opponents he achieves BETTER RESULTS in wins, draws and losses!

So, a Grading ISN'T an assessment of MOVE QUALITY at all - it's the result of a formula which compares RESULTS between players who oppose each other at EQUAL time controls!

If a Computer is the equal of a 2100 player when BOTH are playing at 40/2, it should also be EQUAL to that opponent when both are on 60/60, 60/5 or Game in 30. That's what the 2100 is supposed to mean. In the same way Garry Kasparov isn't 2800 Elo 'normally' but 'only' 2400 at Blitz! If anyone thinks he is, I certainly shouldn't mention it to him!

In fact, for COMPUTERS, it is virtually proven from their results in Tournaments that they get higher grades at Active and Blitz Chess than at Tournament 40/2. So our 2100 Computer may rate at 2200 in Active Chess tournaments, or even 2300 in Blitz events! Again this doesn't mean it plays better chess! What it probably means is that its error or blunder quota does not increase with the same enthusiasm as that of some humans!

When we change a Computer's 'LEVEL', we change its SPEED OF PLAY - and THAT may affect its MOVE CHOICE QUALITY, but does not directly alter its grading. So perhaps, rather than say that 'the SUPER FORTE (rated at 2053) plays to an 1853 level at 30 secs per move', what we should really say is that... '_if we transferred its move selections made at 60/30 into a game being played at 40/2, it would grade at 1853_'.

Well, we've got back to the Super FORTE C/6 which, with respect, no longer has one of the top processors around. So our calculations here will use the "old" figure of 80 Elo/10 BCF, and work on the basis of our known Rating of 2053 Elo/181 BCF for the Super FORTE C/6 at 3 mins per move, as shown in NS/45.

With this in mind, we will shortly extend the initial Table in a way which I hope Readers will find of interest. Quite a few folk ask before

buying "_What grade will my Computer have at, say, 30secs per move?_", so this should especially interest them. Note that the Estimated Gradings at 3 secs and 5 secs p.m MAY be a touch optimistic, as the "really old!" 100 Elo for a Doubling figure quite probably still applies there... some would argue for 120!

On with the Second TABLE, to which two later Results are added, from Matches played by Glen to try and resolve a couple of the confusing results in the first set. For this Table I have added a THEORETICAL Grade according to the Doubling Speed = 80 Elo figure, and an expected result, using Elo calculations:-

Time Control Theory Grade	Time Control Theory Grade	Expctd Result	Actual Result
3 sec 1593	v 5 sec 1653	4 -6	1 -9
5 sec 1653	v 7½ sec 1693	4½-5½	3½-6½
7½ sec 1693	v 15 sec 1773	4 -6	5 -5
15 sec 1773	v 30 sec 1853	4 -6	0 -10
30 sec 1853	v 45 sec 1893	4½-5½	4 -6
30 sec 1853	v 1 min 1933	4 -6	2½-7½
1 min 1933	v 2 min 2013	4 -6	5½-4½
2 min 2013	v 3 min 2053	4½-5½	4 -6
1 min 1933	v 3 min 2053	3½-6½	5 -5 (!)
1½ min 1973	v 3 min 2053	4 -6	2 -8 (!)

The 3 sec v 5 sec result confirms that, at really fast Time Controls (which allow only a low Search Depth to be reached), the Doubling is worth definitely more than 80 Elo - apparently more than 100 in fact, as 3 secs performed particularly grimly and should be below 1500!

Of the two extra results, the 1 min v. 3 min score confirms another conclusion - that 1 min per move is highly suited to the Super FORTE/EXPERT C/6. The second is decidedly out-of-step, and reminds us that we must NOT go overboard in drawing too many conclusions from 10 game Matches. Glen has done valuable and interesting work for us, but the sad news is that we need 50 game Matches before we can really start drawing lots of conclusions.

Another thing to remember is this: IF Glen did do a series of 50 game Matches for us, AND IF they actually ended up confirming the above figures, then _the relationships between the 'Levels'_ which we would then feel able to assess with more confidence WOULD APPLY SPECIFICALLY to the Novag Super

FORTE/EXPERT C/6 machine only, and would NOT necessarily hold EXACTLY good for ANY OTHER machine!

This is an important point to make. MOST Computers DO show clear improvement beyond the 1 min p.m Time Control. Equally, though the RATE of progress certainly slows down, most still show useful tactical improvement beyond 3 mins per move - if they didn't, there would be little point in trying to find faster and faster Processors to run them on!

Something we still DON'T KNOW is where and when the leading Programs ARE going to "top out". I.e. IF we said that the Super FORTE C/6 seems to nearly "top out" at 1 min p.m (because its rate of improvement slows down at that point), WHERE do others "top out"?

In a nutshell: *When - at what speeds - will the value of Doubling drop too low to have a worthwhile effect on playing strength?*

If we knew the answer to that, we'd know when (and IF!) a Computer will be an equal opponent for Garry Kasparov, or whoever follows him.

Let's put it another way. We have reduced our estimate of the value of Speed Doubling from 100 to 80 to 60 in the past few years. It is going to keep on reducing as processor speeds increase! At what future points will it drop to 40, 20, 10 and finally nil? Look at DEEP THOUGHT (now Deep BLUE in its latest version). We boggle at the nodes per second it calculates, but the latest multiplications in its speed have produced little chess improvement it would seem from its result v. Bent LARSEN - see elsewhere in this Issue.

CONCLUSION

Despite making a number of 'small sample' qualifying remarks, we've covered lots of ground as a result of Glen's very useful contribution.

If his Matches were extended to 50 games each, we might well be able to establish the likely value of doubling quite accurately for pre-1990 machines. I.e we might be able to settle more confidently on a 60, 70, 75, or 80 Doubling figure. And that might help us to *"generalise more accurately"* on the Move-Quality standards of different Time Controls for all Chess Computers!

You know, I quite like that phrase - *"generalise more accurately"* - I think it sums up many of our efforts rather nicely!

But we will keep trying our best! I believe most of us are alike in our love of drawing lots of FACTS from a few FIGURES! So I fed the EXPECTED Gradings of the different Time Controls for Super FORTE C/6 into my RATING Program, and added Glen's RESULTS so it could produce a RATING LIST giving EQUAL weight to the THEORETICAL figures (i.e Doubling = 80 to produce the *Theory Grades* on page 2) and the PRACTICAL ones (the *Actual results*), using as a BASE the 3 mins p.m Grade FIXED at its known 2053.

The **Novag SUPER FORTE C/6**: Various Time Controls RATING LIST		
	RATING	
	RESULT	EXPC'TD
Super FORTE C/6 3m	2053	2053
Super FORTE C/6 1m	2020	1933
Super FORTE C/6 2m	1993	2013
Super FORTE C/6 45s	1925	1893
Super FORTE C/6 1½m	1899	1973
Super FORTE C/6 30s	1898	1853
Super FORTE C/6 7½s	1713	1693
Super FORTE C/6 5s	1684	1653
Super FORTE C/6 15s	1661	1773
Super FORTE C/6 3s	1484	1593

New PC PROGS from OXFORD SOFTWORKS

There is only room for a brief mention of new products from Chris Whittington and Co.
[1] *The COMPLETE CHESS SYSTEM* - the chess playing program is an upgrade of Chess CHAMPION 2175 with 300,000 position Opening Book. Plus MANY new features incl. a database of over 15,000 G.M games to replay and explore, with 'add your own analysis' option. £34.99.
[2] *TEN INTELLIGENT STRATEGY GAMES* - versions of many old favourites incl. Chess, Draughts, Chinese Chess, Othello, Go, Bridge and Backgammon. £34.99. The Draughts and Othello were not quite as strong as the PC SOLUTION versions (NS/45), but the Bridge looks good, and it's excellent variety with 10 games!
[3] *OMAR SHARIF'S BRIDGE* - I haven't seen this, but the Bridge in the 10-game set suggests that the full version should be well worthwhile at £39.99. *ALL + £2 p/p from me/Competence.*

DEEP BLUE v Bent LARSEN

Most of you will have read my report on DEEP THOUGHT's strong BLITZ win over David BRONSTEIN in a Training Match (see NS/43B). Actually, Alastair CARGILL has taken me to task slightly (but nicely) on it, pointing out that Bronstein used it very much as a TRAINING Match, and played some strange openings, partly to test Deep Thought, and partly to practise his own acts of escapology.

Even so, Alastair agrees it was "a good result" - (14-3, when all's said and done), against a GM who reckoned no Computer could beat him. Surely a measure of pride must have played some part in the early games!

Anyway, whatever the real merits of the win, I looked forward greatly to news of the 40/2 (50,000 kroner) Challenge Match in its upgraded guise of DEEP BLUE against Danish G.M Bent LARSEN.

Why the new name? Against Bronstein it had been simply called Deep Thought [II], being only a small part of the way in planned speed increase towards its days as the purposed vanquisher of KASPAROV (?!). However as part of its first "official" outing against Larsen (the Bronstein Match was supposed to be private, but news got out and it drew media attention throughout), it was to play both a Speed Match and a Tournament Match against 4 DANISH I.M's. Thus, I suppose, DEEP (Danish) BLUE?!

Alternatively they may just have fancied wearing the initials DB to remind everyone of the result in that previous Match!?

However a 2½-1½ defeat in the Speed Match did not augur so well. It did beat the I.M's 2½-1½ in the Tournament Match, but this only represented around a 2500 performance. "Only" 2500 is relative, of course, but there were claims for Deep Thought [I] being close to 2600 a couple of years ago. Certainly it can't have been the sort of result to give Gary any sleepless nights! So, on to the main games:-

B LARSEN (2650) - **DEEP BLUE** (2550)
Copenhagen (GAME 1), 1993

1.e4 e5 2.Nf3 Nc6 3.Nc3 Nf6 4.Bb5 Bb4 5.0-0 0-0 6.Bxc6 dxc6 7.d3 Qe7
[7...Bg4, or Bxc3 are considered better]
8.Ne2 Bg4 9.Ng3 Nh5 10.h3 Nxg3 11.fxg3 Bc5+ 12.Kh2 Bc8
[This seems a rather negative choice]
13.g4 Be6 14.Qe2 f6 15.Be3 Bxe3 16.Qxe3 h6 17.a4 Qb4 18.b3 b6 19.Rf2 c5
[This hardly seems fair to his Queen, whose scope is now reduced to a couple of unappetising squares]
20.Kg3 Qa5 21.h4 Qc3 22.Raf1 Rad8 23.g5
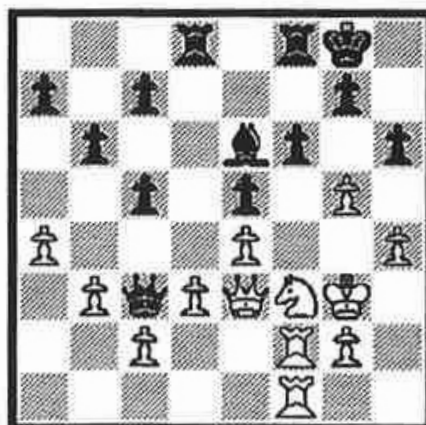
23...Bxb3?!
[The sort of move which, coming from the mighty tactician Deep Thought, would frighten most mortals. You think, 'Oh, goodness, what's it found here?!'

Indeed 23...hxg5 24.hxg5 f5 looks more 'normal', but the opening up of the king-side with DB's Queen left out of the action would be likely to suit White.]
24.cxb3 Rxd3 25.Qe2 hxg5 26.hxg5 fxg5 27.Rd1 Re3 28.Qb2 Qxb3
[28...Qxb2 29.Rxb2 Rf4 30.Rd5 g4 31.Rxe5 Rfxe4 32.Rxe4 Rxe4 33.Ng5 looks no better for Deep Blue with Pawns ripe for plucking]
29.Qxb3+ Rxb3 30.Rd5 Ra3?!
[30...Re3 31.Rxe5 Rf4 might have been better]
31.Rxe5 g4?!
[31...Rxa4 looks better, with Pawn exchanges to follow maintaining some drawing chances: 32.Re7 a5 33.Nxg5 Ra3+ 34.Rf3 Raxf3+ 35.gxf3 Rc8. Okay, it doesn't look too good now we are here, but maybe the Q-side Pawns can

save the game?!]

32.Kxg4 c4 33.Rd2 Rxa4 34.Rd7 Rc8 35.Ng5

[35.Ree7! also looks particularly devastating! Kh8 (35...g6?? 36.Ne5 is m/4) 36.Ne5! wins with ease]

35...Ra2 36.Rxc7 Ra8 37.g3 Rf2 38.Ree7 Kh8 39.Rxg7 Rh2 40.e5 Rd8 41.Rh7+ Rxh7 42.Nxh7 Rg8+ 43.Ng5

[And the Deep Blue team resigned. Not a very inspiring start] *1-0*

DEEP BLUE (2550) - **B LARSEN** (2600)
Copenhagen (GAME 2), 1993

1.e4 c5 2.Nf3 g6 3.c4 Bg7 4.d4 cxd4 5.Nxd4 Nc6 6.Be3 Nf6 7.Nc3 0-0 8.Be2 d6 9.0-0 Bd7 10.Qd2 Nxd4 11.Bxd4 Bc6 12.f3 a5 13.b3 Nd7 14.Be3 Nc5 15.Rab1 Qb6 16.Rfc1 Rfc8 17.Rc2

[A bit slow. The immediate 17.Nd5 would be better]

17...h5 18.Nd5 Bxd5 19.cxd5 Qb4 20.Qxb4

[Deep Blue is happy to double Black's Pawns - Larsen is content to exchange! With a win to his credit, draws all the way would give him an easy 50,000 kroner]

20...axb4 21.Bd2 Na6 22.Rbc1 Bd4+ 23.Kf1 Rxc2 24.Rxc2 Bc5

[Though a Computer's evaluation will show around +50 or more, Larsen knows he can hold this position quite easily]

25.Bd3 Kf8 26.Bb5 Nc7 27.Bh6+ Kg8 28.Bd3 Ne8 29.Bd2 Nf6 30.Ke2 Kg7 31.Bb5 h4 32.h3 Rd8 33.Bg5 Rh8 34.Kd3 Rh5 35.Bf4 e5 36.dxe6 fxe6 37.Ba4 b6 38.Bc6 Kf7 39.Bd2 d5 40.exd5 exd5

[As you can see Deep Blue is getting nowhere at all. The game was agreed drawn at move 59] *½-½*

Most of the work in recent months has been to improve DB's knowledge, rather than push it forward on speed (that is headed for an almost unimagineable 1,000 million nodes per second, I believe). However so far its middle-game character has seemed less challenging and chess-like than the commercial RISC programs produce. Let's see what the next game brings:

B LARSEN (2650) - **DEEP BLUE** (2550)
Copenhagen (GAME 3), 1993

1.e4 d5

[Deep Blue needs to play for a win, of course - but surely this would help any strong player with White who's looking for a route to easy development and a draw? A new opening programmer needed?]

2.exd5 Qxd5 3.Nc3 Qa5 4.Nf3 Nf6 5.d4 Bf5 6.Be2 e6 7.0-0 Nbd7 8.a3 0-0-0?

[Allowing Larsen to take a strong initiative]

9.Bf4 Qb6 10.Nb5 Nd5 11.Bg3 a6 12.c4 axb5 13.cxd5 Bd6

[A strange choice, I thought at first. 13...exd5 looks sound enough, as 14.Qb3 c6 15.Rac1 Re8 16.Qxd5 leaves it looking fairly even. However Larsen has a move most Computers wont spot in, after 13...exd5? 14.Bxc7. Now 14...Qxc7 15.Rc1 Nc5 16.dxc5; or 14...Kxc7 15.Qc1+ Kb8 (or d6) 16.Qf4+ winning the Bishop]

14.Qb3?!

[I would have expected most people to play 14.Bxd6 Qxd6 (14...cxd6?! 15.Ng5! Rhf8 16.g4! Bg6 17.dxe6 fxe6 18.Nxe6!) 15.dxe6 Bxe6 16.Bxb5, which leaves White a Pawn up. However the attack is ended and, at the moment, Larsen is looking for more than a draw!]

14...Bxg3 15.hxg3 Nf8 16.a4 Rxd5 17.axb5 Kd7 18.Bc4 Rd6 19.d5 Ke7 20.Rfe1 Nd7 21.Qc3 Nf6 22.Nh4 Bg4 23.Re3 Rhd8 24.dxe6 fxe6 25.Rae1 Rd1 26.Qe5 Rxe1+ 27.Rxe1 Rd2 28.Nf5+

28...Bxf5

[The alternative 28...Kf8!? should also be considered:

A) 29.Ne3 is the most obvious reply, but Bf5

and now...

A1) Nxf5? Qxf2 m/2)

A2) 30.Re2 Rd4! and it's getting complicated. I think it might go 31.Nxf5 Rxc4 32.Ne3 (32.Qxe6?? Rc1+ 33.Kh2 Ng4+ 34.Kh3 Nxf2+ 35.Kh4 Qxe6 36.Rxe6 Rc4+ 37.Kh5 g6+! wins) Rc5! 33.Qf4 Qxb5 and good winning chances.

Or A3) 30.Be2 (to stop 30...Ng4!) Qd6 31.Qxd6+ (31.Qc3 Ne4 32.Qa5 might be better for White) cxd6 32.Nxf5 (or 32.g4!? Bg6 33.g5 Ne4 34.Nc4 Rd4 35.Na5 Rb4 36.Nxb7 Rxb2 37.Bd3, giving chances to both side) exf5 33.b3, with a small advantage to Black.

Thus far the analysis supports 28...Kf8 as a better choice for DB than the move played. However...

An alternative at move 29 is B) 29.Qf4! after which Rxf2 30.Qxf2 Qxf2+ 31.Kxf2 exf5 and I think it is White who is probably ahead]
29.Qxf5 Rd1 30.Qe5 Rxe1+ 31.Qxe1 Qd6 32.Qe2 h6 33.b3 Qd7 34.Qf3 c6 35.Qe2 Kf7 36.g4 Qd6

[As in game 2, Deep Blue seems to be very slightly ahead, but the position is again very quiet, requiring the nurturing of small advantages. This is rarely a Computer's "forte" of course, and DB appears to have few ideas for posing questions, allowing Larsen to coast to the draw]
37.g3 Nd5 38.Kg2 Kf6 39.Qf3+ Ke7 40.Qe4 Nf6 41.Qg6 Kf8 42.g5 hxg5 43.Qxg5 Qd4 44.Qc1 Ke7 45.Qg5 Kf7 46.Qc1 Qe5 47.Qd2 Ke7 48.Qb4+ Kd7 49.Qd2+ Nd5 50.Qd3 g5 51.Qf3 Ke7

[As readers can see, the GM is holding the position with ease. The draw was agreed at move 62] ½-½ - leaving LARSEN 2-1 ahead, with just one to play.

Game 4
DEEP BLUE (2550) - **B LARSEN** (2650)
Copenhagen (4), 1993

1.e4 c5
[A fearless response from Black!]
2.Nf3 d6 3.d4 cxd4 4.Nxd4 Nf6 5.Nc3 a6 6.a4 g6 7.Be2 Bg7 8.0-0 0-0 9.f4 Nc6 10.Be3 Bd7 11.Nb3 Be6 12.Ra3

[The chess knowledge currently in Deep Blue again shows a high evaluation against doubled Pawns. They are apparently more to be avoided than a mis-placed Rook]
12...Rc8 13.Kh1?! Re8 14.f5 Bxb3 15.Rxb3 Qd7 16.fxg6 hxg6 17.Nd5 Nxd5 18.exd5 Ne5 19.a5 Bf6 20.c3

Kg7 21.Rb4 Rh8 22.Qb3 Rc7 23.Bb6 Rcc8 24.Kg1 Rh4 25.Bd4 Rc7 26.Bxe5 dxe5 27.Rxh4 Bxh4 28.Rxf7+ Kxf7 29.d6+ Kg7 30.dxc7 Qxc7

[And yet once more we reach a place of quiet manouvering for small advantages, with Deep Blue starting off with his better Pawn structure. Unfortunately opposite coloured Bishops almost ensure the drift to a draw this time, however well (or otherwise) DB handles the endgame]
31.Qb4 Bg5 32.Bf3 b5 33.axb6 Be3+ 34.Kh1? Bxb6 35.Qe4 Qc5 36.Qb1 a5 37.Be4 g5 38.Bh7 Kh8 39.Bf5 Qf2 40.Bg6 Kg7

[After which Deep Blue made a long series of Bishop moves, showing no signs or hopes of inspiration, and the draw was agreed at move 52] ½-½

I found DEEP BLUE's performance and play quite disappointing. It seems to me that SPEED alone, however many '000's' there are in the figure of nodes per second, is NEVER going to beat Kasparov!

Indeed I would even go so far as to say I don't think DEEP BLUE will be the first to do it! Here I take into account the possibility of changing names again, this time from DANISH BLUE to GERMAN KASE (get your German dictionaries out!) to give it the magical chess initials of GK! In the meantime I would suggest that one of Koning, Lang, Schroeder, Hirsch or Spracklen is more likely to be the successful programmer, using their much higher quality of chess knowledge and style on a commercial Dedicated or PC processor of the future, where speeds will, in time, approach that of Deep Blue today.

Many of the experts' "early 1990's" forecasts for a Computer Match win over Gary have already gone by the board. From the standard of play in this short Match, DT/DB appears to have progressed less than I had thought in the past 2 or 3 years, and I would be pessimistic if I had forecast the victory for THIS CENTURY! Fortunately my date, given under pressure, is 2010 (unless Nigel beats Gary, or FIDE run out of willing Final contenders and allow Hallsworth to play Knight for the Title... then it could be much sooner!).

What do others think?
[Oh. yes, "kase" is German for cheese!]

Philip GOSLING and **MEPH** had reached the excellent score of 7-0 = 2 for a provisional 2435 BCCS grade at the end of NS/45.

Only one game from the initial TEN GAME TOURNAMENT now remains (against the top-rated BCCS player at 2445!), but new ones are being added all the time as MEPH enters its 2nd. Tournament!

For the many new NS readers , gladly being added all the time, I should again mention that all MEPH's BCCS opponenets know that they are playing a Computer.

BCCS 2445 (2445) - Vancouver 020 (2275) Corr.6, 1992

15...Nf5 [NS45, Eval + 60 -> 0-0-0]
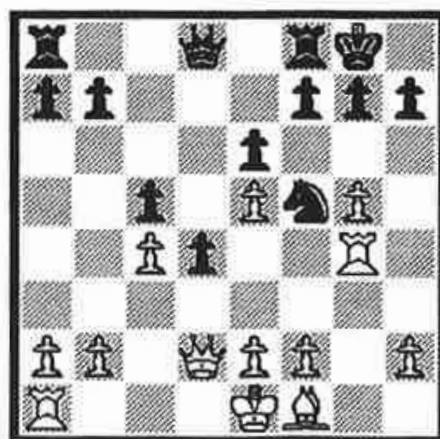
[We noted in NS/45 that White has two other good-looking moves, in addition to MEPH's expectation, in Bg2 and h4. At 2445 our Iranian opponent is a desirable scalp, but will it happen that way?]

16.Bg2

[The card from Iran says, 'If Qc7 then 17.f4'(?!). What is he up to? Trying to persuade MEPH to take 2 Pawns with the Knight?

Some forward analysis undertaken by Phil on MEPH shows that it will only take the first, so we accept the conditional moves!]

**16...Qc7 17.f4 Ne3**

[With an eval. of + 133]

18.Rg3 Nxc4 19.Qd3 Ne3

[A second Pawn was on offer at b2, and our BCCS 2445 opponent may have been hoping that materialistic instincts would persuade the program to grab it. 'Not if it's smothered with tomato sauce!' says Phil of MEPH's view of the poisoned item. MEPH shows the extent of the indigestion:-

19...Nxb2?? 20.Qc2! Qa5 + 21.Kf1 [Or 21.Kf2 in Phil's analysis] 21...Na4 22.Ra3 b5 23.Bxa8 Rxa8 24.Qxc5 Nxc5 (24...Rd8 25.Rd1! Rd5 26.Qe7! g6 27.Rc1 Qd8 28.Qxa7) 25.Rxa5 a6 [Phil's analysis is much the same except that, with White's King on f2, Black can play 25...Ne4 + here]. Either way MEPH is losing!

After 19...Ne3 its NS46, Eval + 145 -> Be4]

Vancouver 020 (2275) - A Mrugala (2415) Corr.11, 1992

**24.a5** [NS45, Eval + 78 -> Bc7]
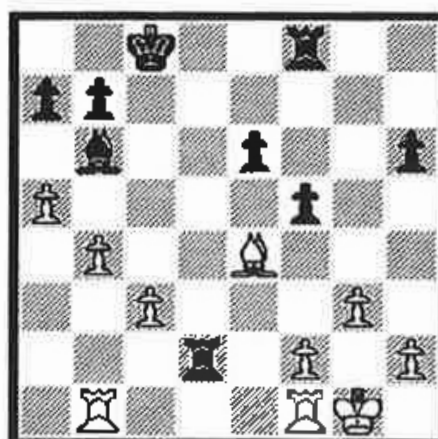
[MEPH had played a nice little counter-move. If 24...Bc7 it planned 25.Bg2, and Phil particularly was quite cheerful.

Sadly MRUGALA has withdrawn from all his games due to pressure of work. It's an inevitability in CORRESPONDENCE CHESS from time-to-time, but gladly doesn't happen too often. As Phil says, the remedy is patience and plenty of spare games!] 1-0

Vancouver 020 (2275) - BCCS 2445 (2445) Corr.12, 1993
(MEPH's #2 'return' game v our Iranian BCCS 2445 friend).

16.Rxb7 [NS45. Eval + 87 -> Na5]
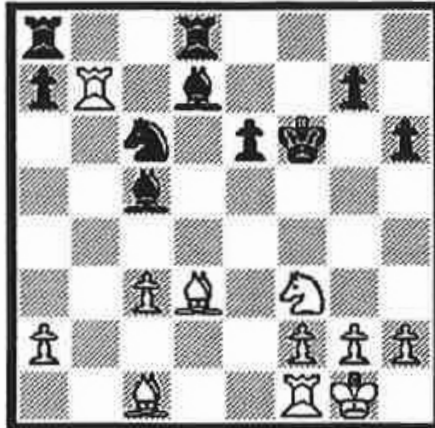
[We are particularly keen to do well in this one as our illustrious opponent had the audacity to criticise an early 'out of Book' move by MEPH: 1.Nf3 Nf6 2.c4 e6 3.d4 d5 4.Nc3 c5 5.cxd5 Nxd5 6.dxc5?! Actually the Computer has both e3 and e4 in its Book, but Phil always likes MEPH to choose something different of its own if it can find a variation which looks interesting. 6.dxc5 was it!]

16...Bc8 17.Rb5 Bf8?!

[We cheekily now query our opponent's play! MEPH had + 112 -> 17...Bb6, and strongly disapproves of Black's plan - as our next note shows]

18.Be4

[NS46. Eval +196 -> Ba6. What is he up to? MEPH thinks he intends Ba6 to pin the two Rooks but, if so, the Computer believes 19.Bxc6 Bxb5 20.Bxb5 leaves a material situation which is entirely favourable to 'us'!

Is there a better plan for Black that MEPH is overlooking?]

Vancouver 020 (2275) - BCCS 2324 (2320) Corr.13, 1993

25.Qg4 [NS45. Eval +27 -> Be3 +]

[This game, which opened unusually with 1.e4 c5 2.f4 Nc6?! is also an interesting test of the 'Rooks = 110% theory' for Richard Lang programs.

The diagram shows the imbalance of White's Rook + Pawn against Black's Bishop + Knight, brought about by MEPH at move 17. At that time Phil pointed out that, on 'Rooks = Normal', the Computer would have avoided the exchange which caused this}

25...Be3 + 26.Kh1 Qe7 27.Rf1 + Kg7 28.Qc8!? Ne5 29.g3

[NS46, eval 000 -> a5] In his remarks to the game Phil sounds unusually subdued this time. Firstly he has gone off the 'Rooks = 110%' idea somewhat, due to an unhappy experience in a Computer v Computer Correspondence Game.Secondly he feels himself that Black has the edge here, and that the 2 pieces could be mobilised to start winning Pawns.

On the other hand there is the consolation, says Phil, of White getting his Queen onto the back rank where it exerts latent power. Readers will note a strange !? against the 28.Qc8 however, as I just wonder if it might be needed elsewhere. What do readers think?

BCCS 2000 (2000) - Vancouver 020 (2275) Corr.14, 1993

18...Qb6 [NS45. Eval = -> Reb1]

[The game, which one would 'expect' MEPH to win against a 2000 grade, has become both interesting and unclear. Unfortunately we've not heard from our opponent for a while. Though a point is always very welcome, we hope this game will continue ... our opponent's 'official' BCCS grade might be 2000, but he did play for Mauritia in the Manila Olympiad. When Phil closed his March report at move 18 he

commented 'I haven't the foggiest idea what is going to happen next'. Anything but nothing, I should think!

Of the latest games, another has opened with the interesting **1.d4 Nc6 2.e4 e5** (MEPH is Black), and we'll have a look at that in NS47.

As a matter of interest, have any NS Readers, playing 1.d4 over-the-board, found themselves faced with Nc6? What did you do?... or what would you do now?!

Another new one for MEPH is of particular interest!

BCCS 2357 (2355) - Vancouver 020 (2275) Corr.15, 1993

1.d4 Nf6 2.Nc3 d5 3.e4 dxe4 4.f3 exf3 5.Nxf3

[All these are agreed moves, at the request of Roy Thomas - both a BCCS player and NEWS SHEET reader!

Roy uses the Blackmar Diemer Gambit quite often in his games - in fact he's something of an expert at it, so our analytical comments will be brief to avoid putting our feet right into it, as it really can be quite a minefield!]

5...g6 6.Bc4 Bg7 7.0-0 0-0

[MEPH's book has ended. Eval +39 -> Ne5]
8.Qe1 Nc6 9.Qh4 Bf5 10.Bh6

[MEPH had expected 10.Bb3 to protect the Pawn and the +112 eval. now leaps to +157]
10...Bxc2

[10...Bxh6 11.Qxh6 Nxd4 must also have tempted MEPH!]
11.d5!

[The Blackmar Diemer expert surprises MEPH with his clever move-order again, and the eval. sinks to +57!]
11...Na5 12.Ng5 Bf5!

[12...Bxh6? 13.Qxh6 Qd6 may look natural enough, but represents just one of many traps in this opening: 14.Rxf6 Qc5+ 15.Kh1 and Black can only delay inevitable mate by 15...Qg1+ 16.Rxg1 Rfd8 17.Qxh7+ Kf8 18.Qxf7+ mate!]
13.Bxg7 Kxg7 14.Bd3 h6

[14...Bxd3?? 15.Rxf6!]
15.Bxf5 hxg5 16.Qxg5 Qd6 17.Rae1 Nc4 18.Rf2 Rh8 19.Bh3 Rh5

[NS46. Eval +115 ->Qf4. So far, so good, it seems! A Pawn up MEPH seeks to exchange Queens and/or Rooks to reduce all or most of the pressure and enter an advantageous endgame. So yes, it looks good, and White's Queen only has c1 to avoid the first exchange!]

LARRY KAUFMAN's 'Rate your own Computer' TEST. FIVE ADDITIONAL <u>KNOWLEDGE</u> POSITIONS

LARRY's carefully researched TACTICAL TEST for Chess Computers was mentioned in NS/43B... and Larry knows what he's doing, of course, being firstly an I.M in his own right, then long-time Editor of the USA's CHESS COMPUTER REPORTS, and (in his spare time I suppose?!) co-programmer with DAN DAILEY of the soon- to-be-released SOCRATES PC program which won the 1993 ACM TOURNAMENT.

There are various sets of Tactical and Endgame Positions around, most of which are interesting and can sometimes be quite useful. Larry's are unique in that you run the 20 POSITIONS on PLY DEPTH LEVELS, starting at Py 1. If your Computer/Program has the correct MOVE at the END of the Ply then it scores the TIME taken to reach the END of that Ply, as shown in the Display. If the correct move is not there at the end of Ply 1, increase the Level to Ply Depth 2 and try again... etc etc. Larry's test also demands that, at whatever Ply Depth the solution is found, the NEXT 3 Ply Depths are also tested to make sure the Computer STAYS with the correct move to earn its fastest time! However once a Ply search has taken over 5 minutes, there is no need to go further, as we conclude this is what it would PLAY in practice. Finally the WORST 5 of the 20 TIMES are DISCARDED, so each Computer is actually graded on its BEST 15 results!

A fascinating formula accompanies the test to produce an estimated USCF Grade... and it seems to work quite well in most cases.

However the 'fault' in Larry's set is the same as

applies in all the others... there are almost no positions where KNOWLEDGE wins the day! Thus fast tactical programs like FRITZ2 tend to get an over-rated 'grade', and high knowledge programs like Mephisto VANCOUVER and Chess GENIUS score below expectation.

There is a real need to include positions requiring chess KNOWLEDGE, to validify these tests... just what Larry is doing. We now have 25 TEST POSITIONS so, after removing the worst 5 timings, the finished result is based on the BEST 20. I personally hope that Larry can add more - perhaps to include subjects like Correct central Pawn configurations, Piece mobility, Weak squares of one colour - and others which no doubt spring to anyyone's mind if we've seen our own Computer blunder in an area of its POSITIONAL play! A set of 20 OF EACH would give an excellent balance!

So it is good that a start has been made - here are the FIVE new KNOWLEDGE POSITIONS. If YOUR Computer does ALL of these - and with speed and ease - DON'T think it means that they are much too simple! They ARE simple to a Club player, and SHOULD be to a Computer. If it 'understands' the position, it may 'know' the right move almost immediately; If it doesn't, it could search for a VERY long time!
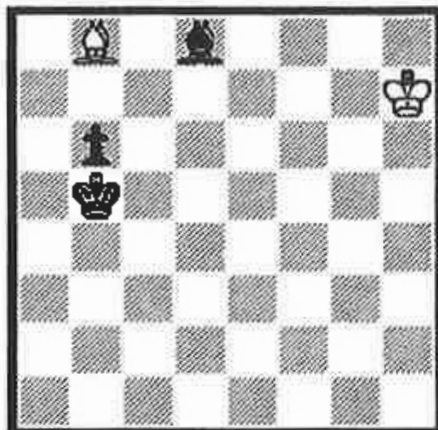
21. White to move.

Solution 1.Kxb5! and White should draw due to Bishops of opposite colour.
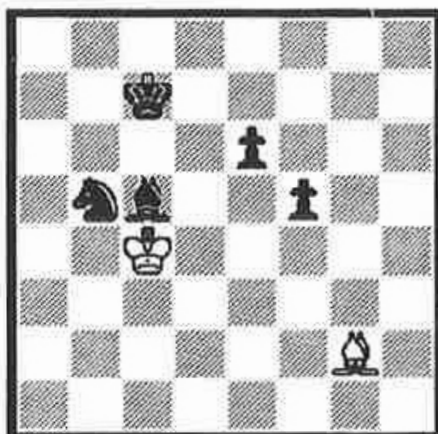
22. White to move.

Solution 1.Ba7! to secure a draw by Bxb6 next. If White fails to do this, he should lose.

23. Black to move.

Solution 1...Ba6! Black should not miss this chance to trade his bad Bishop for a good one.
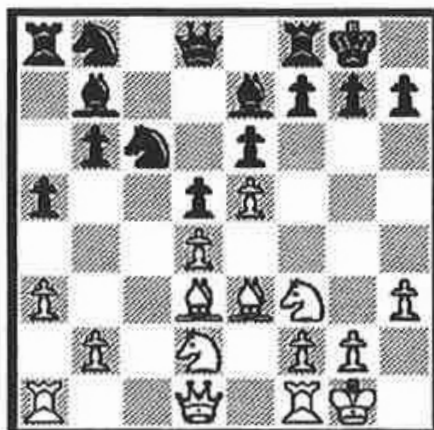
24. White to move.

Solution 1.Bxc6! which not only gives Black doubled isolated Pawns, but also cripples his valuable Pawn majority. After this White should win.
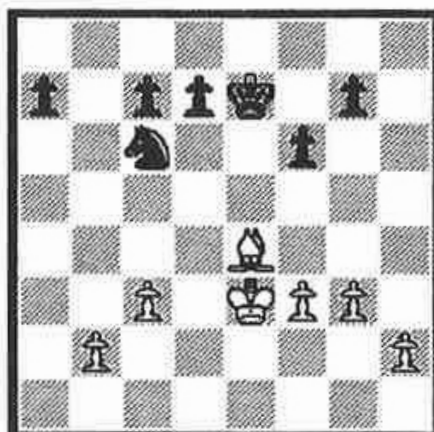
No. 24 is the easiest in the set - every Computer really SHOULD solve it on every level - but one or two DON'T... I hope one isn't yours!?

25.White to move.

Solution 1.Bxd7! - simplify when ahead, in this case obtaining a won Pawn endgame. This is obvious to most human players - indeed, without the piece exchange it should be a draw. BUT many Computers are so convinced of the superiority of Bishop over Knight and their weighting for that is much greater than the one for 'simplify when ahead' that they refuse to do it!
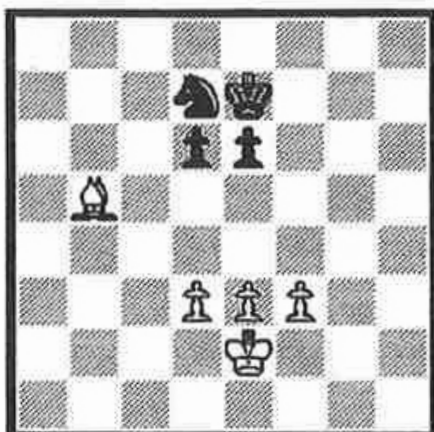
BCF	Computer	Elo	+/-	Games	Pos	Human	Games
219	MEPH LYON 68030	2356	24	372	1	2407	51
218	MEPH VANCOUVER 68030	2345	20	515	2	2394	37
218	MEPHISTO RISC 1MB	2344	12	1431	3	2272	43
217	MEPH PORTOROSE 68030	2341	21	460	4	2354	82
216	KASP RISC 2500	2332	14	1026	5	2322	46
214	MEPH LYON 68020/20	2313	48	92	6	2327	10
208	MEPH VANCOUVER 68020/12	2264	10	1823	7	2139	32
206	MEPH LYON 68020/12	2253	8	2724	8	2258	80
206	FID ELITE 68040-V10	2249	53	75	9	2230	21
205	MEPHISTO BERLIN	2241	17	709	10	2256	21
203	FID ELITE 68030-V9	2225	18	628	11	2180	13
202	MEPH PORTOROSE 68020	2221	10	1809	12	2253	186
202	MEPH VANCOUVER 68000	2220	16	822	13	2120	12
201	MEPH LYON 68000	2209	12	1369	14	2090	33
199	MEPH ALMERIA 68020	2195	14	1003	15	2188	215
196	MEPH PORTOROSE 68000	2169	12	1486	16	2127	25
195	FID MACH4+2325 68020-V7	2163	11	1524	17	2199	130
193	KASP BRUTE FORCE/10	2151	32	201	18	2289	18
191	FID ELITE 2*68000-V5	2131	28	258	19	1888	2
189	MEPH ROMA 68020	2116	14	1068	20	2052	64
189	KASP POLGAR/10	2115	17	678	21	2085	54
187	NOV DIABLO/SCORPIO 68000	2102	12	1474	22	2142	129
187	MEPH ALMERIA 68000	2101	14	1025	23	2104	31
187	MEPH DALLAS 68020	2099	14	996	24	2080	197
183	FID MACH3+2265 68000-V2	2067	6	5269	25	2117	229
182	MEPH POLGAR/5	2057	9	2328	26	2142	11
182	MEPH MM5/5	2057	12	1367	27	1902	11
181	MEPH DALLAS 68000	2053	11	1508	28	2000	50
181	NOV SUPER FORTE-EXP C/6	2051	9	2660	29	2005	24
180	MEPH MILANO	2045	15	856	30	2062	11
180	MEPH MONDIAL 68000XL	2041	15	857	31	2060	77
179	NOVAG RUBY/EMERALD	2034	69	45	32		
179	MEPH ROMA 68000	2033	9	2311	33	1975	54
178	MEPH ACADEMY/5	2026	10	2022	34	2032	109
176	MEPH AMSTERDAM	2013	9	2373	35	2068	182
175	NOV SUPER FORTE-EXP B/6	2007	12	1373	36	2020	82
175	MEPH MEGA 4/5	2005	9	2488	37	2041	169
175	KASP GK-2000	2002	24	367	38		
174	FID MACH 2C 68000	1999	9	2644	39	2066	127
174	KASP TRAVEL CHAMPION	1999	36	166	40		
174	KASP GAL-REN D/10	1997	13	1214	41	1967	109
174	FID MACH 2B 68000	1992	26	302	42	1968	25
173	FID TRAVELMASTER	1991	19	576	43	1983	63
173	MEPH SUPMOND 2-MCARLO 4	1984	31	224	44	2074	8
172	MEPH MM4/5	1980	8	2904	45	2016	97
172	MEPH MODENA	1976	22	432	46		
171	NOV SUPER FORTE-EXP A/6	1970	13	1185	47	2040	176
169	MEPH MONTE CARLO	1954	28	262	48	2046	10
169	KASP GAL-REN C/8	1953	26	313	49	2016	98
168	CONCH PLY-VICTORIA/5.5	1950	16	791	50	1890	15
168	CXG SPHINX/4	1947	10	2106	51	1956	155
168	KASP TURBO KING 2	1944	15	915	52		
167	FID MACH 2A 68000	1940	25	338	53	1918	35
165	NOV EXPERT/6	1923	31	222	54	2036	22
164	NOV SUPER FORTE-EXP A/5	1919	12	1440	55	1836	29
164	FID CLUB B 68000	1916	12	1459	56	1827	18
163	NOV EXPERT/5	1906	26	310	57	2052	62
162	NOV FORTE B	1900	10	1917	58	1975	208
162	NOVAG JADE/ZIRCON	1900	106	19	59		
162	MEPH REBELL	1900	10	2141	60	1948	69
162	FID PAR E-ELITE-DES2100	1898	9	2565	61	1927	220
162	FID AVANT GARDE/5	1898	11	1721	62	1862	80
161	KASP STRATOS-CORONA	1894	10	2090	63		
161	NOV FORTE A	1891	9	2206	64	1930	134
160	MEPH SUPERMONDIAL 1	1884	12	1481	65	1990	6
160	FID CLUB A 68000	1882	29	242	66	1767	6
160	KASP SIMULTANO	1881	14	1083	67	1830	36
159	CONCH PLYMATE/5.5	1879	9	2213	68	1939	55
159	KASP GAL-REN B/6	1878	14	976	69	1873	123
159	KASP TURBO KING 1	1878	24	364	70	1910	61
158	CONCHESS/6	1870	44	107	71	2037	8
158	FID EXCELLENCE/4	1866	11	1752	72		
158	NOV EXPERT/4	1865	14	1022	73	1975	43
156	CONCH PLYMATE/4	1854	24	372	74	2027	6
156	SCI TURBO KASP/4	1852	20	512	75	1959	52
155	CXG SPHINX 40	1847	86	29	76		
155	FID ELITE C	1843	34	182	77	1869	11
154	FID ELEGANCE	1837	17	685	78	1872	40

BCF	Computer	Elo	+/-	Games	Pos
154	SCI TURBOSTAR 432	1836	12	1390	79
154	MEPHISTO MM2	1833	16	791	80
153	KASP GAL-REN B/4	1831	76	37	81
153	FID EXCELLENCE-DES2000	1828	11	1646	82
152	KASP PRISMA-BLITZ	1817	26	306	83
151	CONCHESS/4	1811	20	509	84
150	NOV SUPER CONST	1806	7	3695	85
150	NOV SUPER NOVA	1803	22	411	86
149	MEPH BLITZ	1792	27	277	87
147	NOV SUPREMO	1776	75	38	88
146	NOV SUPER VIP	1768	24	373	89
145	FID ELITE A	1764	39	141	90
145	FID PRESTIGE	1762	17	715	91
144	MEPH EXCL S/12	1753	31	213	92
144	FID SENSORY 12	1753	12	1360	93
143	MEPH EUROPA-MARCO POLO	1745	30	240	94
142	SCI SUPERSTAR 36K	1739	14	1007	95
142	CONCHESS/2	1738	14	1096	96
140	NOV CONST/3.6	1725	16	825	97
140	NOV QUATTRO	1724	19	585	98
140	NOV PRIMO-VIP	1722	24	354	99
139	MEPH MONDIAL 2	1716	83	31	100
138	FID ELITE 8	1707	47	97	101
135	FID ELITE ORIG	1683	39	139	102
134	MEPH MONDIAL 1	1675	29	247	103
132	NOV CONST/2	1663	12	1289	104
131	SUPER ENT-ADV STAR	1649	15	922	105
126	CHESS 3000	1613	112	17	106
124	FID SENSORY 9	1598	13	1114	107
124	KASP ASTRAL-CONQ-CAVL	1593	59	61	108
120	NOV MENTOR 16-AMIGO	1565	99	22	109
120	GGM + STEINITZ	1562	27	297	110
119	CHESS 2001	1555	50	84	111
118	MEPHISTO 3	1546	18	633	112

BCF	Computer	Elo	+/-	Games	Pos
231	CMACHINE THE KING2/30-PC	2455	30	226	1
225	CHESS GENIUS 486-PC	2405	19	558	2
224	CMACHINE GIDEON3.1/30-PC	2394	37	156	3
223	CMACHINE GIDEON3.0/30-PC	2389	36	161	4
222	M CHESS PRO 486-PC	2382	20	505	5
218	CHESS GENIUS 386-PC	2350	50	86	6
214	CMACHINE GIDEON2/15~PC	2314	14	997	7
210	M CHESS 486-PC	2286	17	697	8
210	CMACHINE THE KING1/15-PC	2285	16	792	9
208	FRITZ2 486-PC	2270	26	306	10
203	ZARKOV 486-PC	2227	31	213	11
203	PSION 2 486-PC	2225	54	72	12
201	M CHESS PRO 386-PC	2211	34	185	13
200	M CHESS 386-PC	2205	13	1233	14
200	SARGON 5 486-PC	2202	58	64	15
196	FRITZ1 486-PC	2173	27	294	16
196	REX 486-PC	2169	32	206	17
192	FRITZ2 386-PC	2143	37	150	18
191	CHESSMASTER 3000 486-PC	2131	36	166	19
191	M CHESS 286-PC	2128	19	598	20
189	SARGON 5 386-PC	2113	70	44	21
188	ZARKOV 386-PC	2106	19	592	22
187	C-CHAMPION 2175 486-PC	2103	44	109	23
187	FRITZ2 286-PC	2096	82	32	24
185	HIARCS 386-PC	2087	48	91	25
185	PSION 2 386-PC	2086	31	213	26
184	FRITZ1 386-PC	2073	26	300	27
182	HIARCS 286-PC	2062	60	60	28
181	REX 386-PC	2054	19	557	29
179	ZARKOV 286-PC	2037	33	190	30
177	FRITZ1 286-PC	2018	34	182	31
176	PSION 2 286-PC	2010	42	119	32
175	SARGON 5 286-PC	2002	84	30	33
173	C-C SYSTEM 386-PC	1991	99	22	34
173	CHESSMASTER 3000 386-PC	1989	36	165	35
171	REX 286-PC	1974	40	133	36
169	C-CHAMPION 2175 386-PC	1957	62	56	37
168	PSION 2-PC	1950	9	2163	38
166	CHESSMASTER 3000 286-PC	1928	52	79	39
163	COLOSSUS X 386-PC	1906	94	24	40