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We have a number of interesting results for this Issue.

Pete Blandford has been hard at work with his Mephisto MONTREUX. All games played at 40/2....

Montreux 7½-2½ Fid Elite 68030v9
Montreux 5-5 Meph RISC2
Montreux 3-7 Meph Genius 68030
Montreux 4½-5½ Kasp RISC 2500-512k
Montreux 3-5 Meph Vancouver 68020/20

Here is a result from Welser which has managed to evade me, though it was played a few months ago... even now I don't have the individual scores, only the final order:

Welser 1996
1= Fritz3
  Quest3
  Rebel7
4 MChess Pro4
5= Genius2
  Genius3
  Hiarcs4
  Kallisto1.98
  WChess1.03
10 MChess Pro5
11= Diogenes
  Gandalf2.1
  Hiarcs3
  Rebel6

Three things need to be clarified:
[1] the programs were all running on Pentium/100's,
[2] the Time Control was 60/2hrs.
But mainly readers need to know, especially in view of the strange finishing order of MChess Pro4 and 5, and new discussions relating to 'cooked' books...
[3] that the opening books were all switched off!

Mike Cummings has completed a 28 game match at G/60, which finished...

Novag DIABLO 15½
Meph NIGEL SHORT 12½

Rather amazingly the Novag won 5, lost 2 and there were 21 draws. Of the wins Mike has sent the following pair which, very strangely, were not only both for the side playing Black, but also involved queen sacs and almost identical endgames involving R, N + B vs lone Q!

Mephisto NIGEL SHORT (2040)
Novag DIABLO (2060)
[A34] Mike Cummings G/60, 1996 [ELH]
1.c4 c5 2.Qc3 Qf6 3.Qf3 d5 4.exd5 Qxd5
5.e3 Qxc3 6.bxc3 g6 7.Qb5+ Qd7 8.0-0
Qg7 9.Qa3 b6 10.d4 0-0 11.Ba4 Qc7
12.Bc6 Bb8 13.c4 Bd8 14.Qb1 e6 15.Qfd1
exd4 16.exd4 Qb7 17.Qxb7 Qxb7 18.Qb5
Qdb8 19.Qg5 Qf6 20.d5 exd5 21.cxd5

Mike (and NS) both thought White had the advantage here, due to the passed pawn 21...h6 22.Qf3 Qe4 23.Qbc1 Qc3 24.Qd3
Ec8 25.Qb4?!!
25.d6 Qd7 26.Qd2 was probably better
25...exd1! 26.Qxc7 Qxc7 27.Qe1

42 So that the queen can now take the knight. If 27.Qxd1? Qc1 of course. Another move worth considering was, perhaps, ;
27.d6
27...Qc1 28.Qd2 Qb2 29.Qh3 Qe8! 30.Qf1
30.Qxc1?? Qxe1#?
30...Qd1 31.Qd7 Qe5 32.f4?
32.Qc3 was needed. Then 32...Qxd5
33.Qe8+ Qh7 34.Qe2 Qc4 is probably Black's best, giving him good winning chances
32...Qe4 33.Qxa7 Qxd2 34.Qf3 Qd3 35.g3
Qf2+ 36.Qg1 Qd4 37.Qa8+ Qg7 38.a3
Qxf3+

Announcing mate in 6
39.\f62+ 40.\h3 \xf4+ 41.\gxf4 \e3+ 42.\g4 f5+ 43.\h4 \xh2# 0–1

Novag DIABLO (2060)
Mephisto NIGEL SHORT (2040)
[C43] Mike Cummings G/60, 1996 [ELH]

1.e4 e5 2.\f3 \f6 3.d4 \xe4 4.\d3 d5 5.\xe5 \d6 6.0–0 0–0 7.c4 \xe5 8.dxe5 \c6 9.\f4 \e6 10.\h5 f5 11.\d1 \d4
12.\c3?!
12.\c3 was a better choice 12...g6
13.\h6 dxc4 14.\xe4+ 12...g6! 13.\h6 dxc4

14.\c2??
Certainly not 14.\xe4?? as in the note to White's 12th., as 14...\c2+ is mate in 2.
But 14.\f1 would keep White in the game even though 14...\f3+ 15.\xf3 \xd1 16.fxe4 fxe4 would leave Black with some advantage in a rather complicated position!
14...\xc2 15.\xd8 \xd8 16.\a3 \xa1
17.\f1 c3! 18.b3
18.bxc3? \xd1+! 19.\e2 \xc3+ is very nasty!
18...c2 19.f4 20.\xf4 \xf4 21.\xc2 \xc2 22.a3
Anyone tempted by 22.\xf4 should note 22...\xd1+ 23.\e2 \e1+ 24.\d3 \b4+ 25.\d4 c5!!
22...\xd1+ 23.\e2 \d2+ 24.\f1 \e3+ 25.\e1 \xg2+ 26.\f1 \xf3+ 27.\g1 \d1+ 28.\xg2 \f2# 0–1

One of our newer readers, Mr. F. Fouldvary, upgraded his Genius 68030 to the new London version recently, and sends the following result:

Rebel7 486/75 3½–4½ London 68030

A small 10 secs per move Tournament by Union Telco in the States ended as follows:

<table>
<thead>
<tr>
<th>Tournament, 10 secs per move</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Fritz4–P/90</td>
</tr>
<tr>
<td>MChessPro5–P/90</td>
</tr>
<tr>
<td>Rebel8–P/90</td>
</tr>
<tr>
<td>ChessMaster5000–P/90</td>
</tr>
<tr>
<td>Berlin Pro 68020</td>
</tr>
</tbody>
</table>

Freddy Wang’s 1996 'SUPER TOURNAMENT' over 5 rounds involved 14 computers and 2 humans. The report appears in the latest Issue of 'PLY' Magazine, and I think they may have used an unusual time control... "og betenkningen har vært 5 min. for maskinene, mens menneskene har fatt 12 min". Or maybe the whole thing was played in an afternoon. Game in 5 mins with 12 mins between rounds?!

The 2 humans were Joran Jansson and Robert Fleming, but I don't have details of their gradings, so the final results table which follows is not as helpful as it might be!

SUPER LYNTURNERING 1996

1= Fritz4 4/5
3= Chessica 4
5= Flemming 3 1/2
6= Genius3 3 1/2
6= Nimzo 3 1/2
8= Hiarc 4
8= MChess Pro 5 3
8= Genius 4 2 1/4
11= Gideon Pro 2 1/4
11= Rebel 2 1/4
12= Jansson 1 1/4
12= Kallisto 1 1/4
12= Tasc R30 1 1/4
15= Fritz 3 1
16= ChessMaster 5000 1/2

Of the 2 humans, Flemming beat the Lyon 68020 and the R30, drew with Kallisto, Fritz4, Gideon Pro, and lost none, while Jansson beat CM5000, drew with Nimzo3, and lost to Gideon Pro, Rebel7 and MCP5.
1996 World Micro Computer Championships

As anticipated in SS/66, the 1996 WMCC was duly held in Jakarta (Indonesia) during October. As also forecast, few of the major commercial programs turned up for the event, somewhat devaluing its importance.

Withdrawal Symptoms

There were various reasons for the non-participation of the leading programs - some never entered at all, and others withdrew during discussions relating to Indonesia and various unsavoury political aspects.

1. The distance was too far, and the expense too great. Readers will, by now, not be surprised to know that probably only one or two of even the leading programmers actually manage to make a living out of computer chess programming.

   The cost of attending at Jakarta has been estimated at $1,000/£700 entry fee plus over £1,500 air fare (both ways!), another likely £1,000 expenses, and the added difficulty of getting your Pentium Pro there and back.

2. The inherent danger of attending! Attention was drawn to detailed reports from Amnesty International and other human rights movements on the subject of frequent occurrences of riots, torture, arrests of foreigners and even local officials, and various actions purported to have been taken by the military there.

3. The moral implications of supporting the event, in view of its current politics and anti human right's activities. At least two programmers refused to participate or withdrew after initially entering "as a political protest against the regime".

4. The problem relating to the entry of the Israeli program Junior, whose programmers were apparently unable to enter Indonesia for political reasons (anti-Semitism). It was suggested by the ICCA that they could have found a way to get visas, but both the UN and the US State Dept advised the team against trying to attend. Thus Junior was forced out (though the ICCA denied this, and later claimed to have found a way for them to participate via the Internet). With Junior 'unable to attend', at least one other programmer now withdrew as a further protest against the selected venue.

A final reason was not associated with the 'debatable' choice of venue:

5. Dissatisfaction with the general state of Computer v Computer events, mainly relating to the specialised opening book preparation which the amateur programmers are able to do by purchasing their commercial counterparts, whilst the commercial programmers cannot reciprocate!

I am a rank beginner in the field of politics, and found that all sides in the moral argument had erudite representatives able to put forward convincing and dogmatic cases for their own view. The argument raged long, loud and, sometimes, unpleasantly over the Internet, and I do not want SS to become a forum for such a war.

Therefore I will leave it that each of the non-participants had at least one reason in the above list for not playing. I do not believe that any criticism should attach to any non-participant - not being there means you cannot win, and has to have some negative commercial effect.

So to make a moral decision not to play has a price, and to that extent the decision should be applauded even if you or I might disagree with the reasoning. People can scoff and belittle those who choose to take 'the moral high ground', as if that makes them somehow slightly strange - I think the world would be a better place if folk lived and acted on the basis of decent principles.

Those who played know whether they did so with a clear conscience - and obviously they felt they could afford it despite the travel and (for the commercial programs) entry costs.

Finally it needs to be said that the ICCA, in making their defence, stated that Jakarta was the only venue which made a bid to host the Championships, and they were unable to envisage an alternative format.
The commercial programmers that entered perhaps just wanted to go anyway, or maybe felt they could not afford not to attend, especially as the greatly reduced entry list at the top end gave them their 'best chance' yet of winning the WMCC Title, with all the associated advertising potential. They were all going to be disappointed!

The Main Participants

The 28 entrants were ranked by the ICCA before the event, so I list them in that order and have CAPITALISED the commercial programs.

1. **FRITZ**  Holland, Franz Morsch
2. **Ferret**  USA, Bruce Moreland
3. **NIMZO3**  Austria, C Donninger
4. **VIRTUA2**  France
5. **Dark Thought**  Germany
6. **Crafty**  USA, Bob Hyatt
7. **Junior**  Israel
8. **GANDALF**  Denmark, Bob Hyatt
9. **Schach3**  Germany
10. **Shredder**  Germany, S Meyer-Kahlen
11. **Gundam1**  Indonesia

Ferret earned 2nd. place due to its 3rd position last year, and an excellent reputation from its play over the Internet in the States.

I have ended the list so as to include Gundam because there was immediate consternation relating to this.

Let's step back one pace. Bob Hyatt's program Crafty is permanently available via the Internet for downloading and converting, by those with the appropriate software, for use in MS-DOS. The resulting code is all visible, accessible, and thoroughly annotated, so that other potential programmers can examine and even adjust it if they wish.

Perhaps you've guessed it - Gundam was a conversion of a Crafty version, done and entered by an Indonesian programmer. Now the agreement pre-Championship seemed to be that only the actual programmer could enter his effort, and that only 1 of each program could play. So what was Gundam doing there? And who allowed it?

Perversely the organisers then matched Crafty with Gundam in the first round, so Bob Hyatt found himself playing his own program at the very start of his first ever quest for the Championship!

There were also 2 programs from England (the entries would normally also have included Richard Lang's Genius, Mark Uniacke's Hiarc, and Chris Whittington's CS_tall)...

24 Francesca operated by Tom King, which I know nothing at all about, and 26 Woodpusher, by my good friend John Hamlen.

That has set the scene, so here we go!

The 1996 World Micro-Computer Championship
11 rounds, October 1996

The Main Results, Round-by-Round

**Round 1:**
FRITZ 0-1 GANDALF
... what a start for the 1995 WCC Champion!
Schach3 ½-½ Ferret
NIMZO3 ½-½ Schredder
Centaur 0-1 VIRTUA2
Dark Thought 1-0 Isischess
Gundam 1-0 Crafty
... needless to say, Bob Hyatt was gutted... especially when it transpired that the Crafty operator had messed up its time controls which resulted in it being forced into playing Blitz after a mere 10 moves!
Woodpusher 1-0 The Turk
Junior 0-1 Eugen (default)

The ICCA continued to publish Junior's 'defeats' throughout the Tournament, aiming for consistency with their claim that the program could have been there if they'd really wanted.

**Round 2:**
VIRTUA2 1-0 Dark Thought
GANDALF 0-1 Gundam
Ferret 1-0 NIMZO
... an early warning from Ferret!
Schredder 1-0 Schach3
Crafty 1-0 FRITZ
... amazing - the winner of 1995's WCC and destroyer of Deep Thought starts with 0/2!
XXXX 0-1 Woodpusher (2/2!)

Ferret – Nimzo
1.e4 c5 2.±f3 d6 3.d4 exd4 4.±xd4 ±f6 5.±e3
a6 6.±e2 e6 7.0–0 ±e7 8.f4 0–0 9.±h1 ±c7
Round 3:
Gunda 0-1 VIRTUA2
Comet ½-½ Ferret
Schredder 1-0 Eugen
Dark Thought 1-0 GANDALF
Centaur 0-1 Crafty
Schach ½-½ NIMZO3
FRITZ 1-0 Isischess
Pandix 0-1 Woodpusher

It was great to see my friend John Hamlen on 3/3 with Woodpusher. Sad to say, it wouldn't last. Meanwhile Ananse scored its first ever point in a World Championship contest by winning 1-0 over Junior in the bye!

Round 4:
Woodpusher 0-1 VIRTUA2
Zeus 0-1 Shredder
Ferret 1-0 Breakthrough
Nightmare 0-1 Dark Thought
Crafty 1-0 Comet
Interchess 0-1 Gundam
Ananse 0-1 FRITZ
NIMZO3 1-0 Centaur
GANDALF 1-0 Schach 3

Zeus – Shredder
1.e4 e5 2.Šc3 Šb4 3.Šb3 Šc6 4.e3 Šf6 5.Šf3 a5
6.Še2 0–0 7.0–0 Še8 8.d3 d6 9.a3 Šc5 10.Šd1 Še7 11.d4 exd4 12.exd4 Šb6 13.Šg5 Šg4
14.Še3 Še3 15.Šxf3 Šxd4 16.Šxd4 Šxd4
17.Šb5 Šc5 18.Šxb7 Šd4 19.Šxa8 Šh4 20.h3 Šxf2+ 21.Šh1 Še3 22.Šf3 Šf2+ 23.Šh2 Šf4+
24.Šg1 Šxh3+ 25.Šxh3 Šxh3 26.Šc6 Še3+
27.Šxe3 0–1

Crafty – Comet A.30
1.e4 e5 2.Šf3 Šc6 3.Šb5 a6 4.Šc4 Še5 5.c3 Šf6
6.d4 exd4 7.e5 d5 8.exf6 dxc4 9.fxg7 Še7+
10.Šf1 Šg8 11.exd4 Šb6 12.d5 Ša5 13.Šg5 f6
14.Šh6 Šf5 15.Šc3 0–0–0 16.Šc1 Šd6 17.Šg1 Šxe8 18.Šd2 Šc5 19.g3 Šg4 20.Šg2 Šb8
21.Še1 Šd8 22.Še4 Šd7 23.Šf4 Šh3+ 24.Šh1 Šf5 25.Šd4 Šg6 26.Šxf6 Še7 27.Še6 Šb8
28.Šf3 Šf5 29.Še5 Šd6 30.Še3 Šf7 31.Šd4 Šh3
32.Še6 Šd7 33.Še4 b6 34.Šc3 Še7 35.Šf3 Šg6
36.Šf6 1–0

Leaders after Round 4:
4 VIRTUA2
3½ Shredder
3 Ferret, Dark Thought, Crafty, Gundam, Zeus, Woodpusher
2½ Heureka

The pre-Event 1st. and 3rd. ranked programs, FRITZ and NIMZO3, were both on 2/4.

Round 5:
VIRTUA2 0-1 Shredder
... and a little warning from Shredder!
Gundam 0-1 Ferret
Dark Thought 1-0 Zeus
Woodpusher 0-1 Crafty
FRITZ 1-0 Heureka
Breakthrough ½-½ NIMZO3
Francesca 0-1 GANDALF
Pandix ½-½ Schach 3

Round 6:
Shredder 1-0 Dark Thought
Ferret ½-½ VIRTUA2
Crafty 1-0 Eugen
Comet 0-1 FRITZ
GANDALF 1-0 Woodpusher
Zeus ½-½ Gundam
NIMZO3 1-0 Heureka

Shredder – Dark Thought
1.d4 d5 2.c4 e6 3.Šc3 c5 4.cxd5 exd5 5.Šf3 Šc6 6.g3 c4 7.Šg2 Šb4 8.0–0 Šge7 9.a3 Ša5
10.e4 dxe4 11.Šxe4 0–0 12.Še2 b5 13.Šd1 Šf5
14.d5 Šxd5 15.Šh4 Še6 16.Šg5 Šd7 17.Šh5 h6
18.Šxe6 Šxe6 19.Šxd5 exd5 20.Šxd5+ Šf7
21.Šxh6 Šd8 22.Šxg7 Šxg7 23.Šg5+ Šf8
24.Šg6+ Še8 25.Šxc6 Šxc6 26.Še3+ Šd7
27.Šxe5+ Šc7 28.Šxc6 Šb6 29.Še5+ Šd6 30.Šd1 Šff6 31.Šxd6 Šxf2+ 32.Šg2 Šxd6 1–0

Comet – A.30_Fritz
1.e4 e5 2.Šf3 Šf6 3.Šxe5 d6 4.Šf3 Šxe4 5.d4
Crafty – Eugen

1.d4 2f6 2.c4 e6 3.2c3 2b4 4.2f3 c5 5.g3 exd4
6.2xd4 2xe4 7.2xd3 2a5 8.2b3 2xe3 9.2d2 2e4
10.2xe4 2xd2+ 11.2xd2 2c6 12.2g2 2d6 13.2e3
f5 14.2c2 2b4 15.2c3 2a4 16.0 2xa2 17.2d4
2e8 18.2f1 d5 19.2h3 e5 20.2xd5+ 1–0

Fritz – Ferret

1.e4 e5 2.2f3 2c6 3.2c4 2c5 4.2e4 5.d4
exd4 6.exd4 2b4+ 7.2d2 2xd2+ 8.2xd2 2d5
9.2xd5 2xd5 10.2b3 2c7 11.0 2e5 0.2e5
2e6 13.2c4 2b6 14.2ad1 f6 15.2d3 2xb3
16.2xb3 2d8 17.2f4 2f8 18.2xd5 2xd5 19.2xe1
2f5 20.2c5 b6 21.2e6+ 2xe6 22.2xe6 2ac8
23.2a4 2e7 24.2c2 2f7 25.2xh7 2f7 26.2xe1
2g6 27.2xe7+ 2xe7 28.2xg6+ 2f8 29.2xe7 2xe7
30.2h4 2d8 31.2h5 2x4 32.2h6 2f8 33.2b3 2d1+
34.2h2 2d2 35.2e4 2f7 36.2a3 2xf2 37.2g1 2e2
38.2d3 2e3 39.2c2 2f8 40.2f2 2c3 41.2e4
2xb3 42.2xc6 2xa3 0–1

The FRITZ defeat meant that, with only 4 rounds now left, the only commercial programs with title-winning chances were VIRTUAL2 and NIMZO3. Fortunately the relentless pace being set by Shredder in particular, and also Ferret, was about to come to some sort of end due to their meeting in round 8!

Round 8:

Ferret 1-0 Shredder

Crafty 0-1 VIRTUAL2

NIMZO3 0-1 Gundam

Zeus 0-1 FRITZ

Eugen ½-½ Dark Thought

GANDALF 0-1 Comet

Ferret – Shredder

1.e4 c6 2.2c3 d5 3.d4 2xe4 4.2xe4 2d7 5.2g5
2g6 6.2d3 2e7 7.2f3 2e7 8.0 2h3 2f7 9.2d2 2a6
10.2xe4 2f6 11.2d3 0–0 12.2c4 2b6 13.2f4 2g7
14.2e5 2d8 15.2xc5 2xc5 16.2ad1 2d8 17.a5
18.2e5 2ad8 19.2d2 2d4 20.2e3 2h4 21.g3
22.2f1 2e8 23.2g4 2xe3 24.2f3 2g6
25.2xf6+ 2xf6 26.2f1 2xf1+ 27.2xf1 2h5
28.2d8 2f8 29.2xh8+ 2xh8 30.2xe6 2a4 31.2xb6
2e4 32.2a6 2c2 33.2g2 2e5 34.2c6+ 2f8
35.2b5 2e8 36.2a7 2b8 37.2d2 2b3 38.2e2
2d8 39.2c5 2d5 40.2c6 2xb5 41.2a8+ 2g7 42.2c7
2c5 43.2c8 2e8 44.2a8 2f8 45.2d3 2d5
46.2d4 2f6 47.2h8+ 2g7 48.2d8 2f6 49.2xd5
50.2xd5 2g5 51.2d4 2f6 52.2b5 2e5
53.2xa4 2g5 54.2d6 55.2a5 1–0

It was a disastrous round for the most of
the commercial programs, and Ferret's wins in its last 2 games means the top of the table has changed somewhat, as we can see.

Leaders after Round 8:
6½ Ferret, Shredder
6 Crafty
5½ Gundam, VIRTUA2
5 Comet, FRITZ
4½ Isichess, Dark Thought, Zeus, NIMZ03, Heureka, Eugen

Round 9:
Crafty ½-½ Ferret
Gundam ½-½ Shredder
VIRTUA2 ½-½ FRITZ
Comet 0-1 Zeus
Isichess 0-1 NIMZ03
Dark Thought 1-0 Heureka
GANDALF 1-0 Eugen

So no real change at the top with most of the leaders drawing. The following game is included, not for the chess content, but to '??? the early draw agreement!

Virtual Chess – FRITZ
1.e4 e5 2.d3 f3 d6 3.d4 cxd4 4.cxd4 f6 5.e5 c5 d6
6.0-0 0-0 7.h3 b5 8.g6 e5 9.a3 d5 10.e3
f8 11.e2 e8 12.g6 e8 13.g5 e8 14.f3 e8 15.e2 e8 16.e2 e8

Round 10:
Ferret ½-½ Dark Thought
Shredder 1-0 GANDALF
NIMZ03 1-0 Crafty
Zeus ½-½ VIRTUA2
FRITZ 1-0 Gundam

Nimzo (2400) – 3. Crafty
1.e4 e5 2.d3 c6 3.d4 cxd4 4.cxd4 f6 5.e5 c5
b4 6.e5 c5 7.d2 c3 8.hxg6 c7 9.g4 b6
10.h4 d6 11.exd6 cxd6 12.h5 a5 13.g5 a5
14.c4 b4 15.c5 c7 16.h6 b6 17.a2 a2
18.0-0 0-0 19.hxg5 hxg5 20.hxg5 c3
21.f6 h8 22.e3 d7 23.e3 c3
24.exd7 exd7 25.h8+ c7 26.h7+c6
27.g8 c4 28.e1 c3 29.e3 d3 30.d8 b5
31.b8 32.d4 33.g2 c1+ 34.g1
35.g3 g1+ 36.g2 c1 37.g5+ c6
38.b6 c5 39.b4 40.axb4 cxb4 41.b4 a7
32.g4 43.f4 44.b5 45.c3+ 46.h5
47.e7 48.h8 1-0

Leaders after Round 10:
8 Shredder
7½ Ferret
7
6½ FRITZ, NIMZ03, VIRTUA2, Crafty
6 Dark Thought, Gundam, Zeus, Francesca
5½ Eugen

The pairings for the final round were about to give FRITZ a last chance to redeem itself. Although it could no longer win the Championship, it was given White against the Tournament leader for the final round!

Round 11:
FRITZ – Shredder
1.e4 c5 2.d3 f3 d6 3.d4 cxd4 4.cxd4 f6 5.e5 c5
d4 6.e5 b5 7.d7 8.xd4 c5 9.g6 c5 10.d5 c5
f5 11.g5 c5 12.g5 dxf5 13.g5 g7
14.e5 c5 15.fxe5 c5 16.g5 e5 17.g5 c5
18.dxc6 bxc6 19.xc6 bxc6 20.xc6 c5
21.gxf7 e7 22.gxf7 e7 23.gxf7 e7
24.exd7 exd7 25.h8+ c7 26.h7+c6
27.g8 c4 28.e1 c3 29.e3 d3 30.d8 b5
31.b8 32.d4 33.g2 c1+ 34.g1
35.g3 g1+ 36.g2 c1 37.g5+ c6
38.b6 c5 39.b4 40.axb4 cxb4 41.b4 a7
32.g4 43.f4 44.b5 45.c3+ 46.h5
47.e7 48.h8 1-0

FRITZ 0-1 Shredder
Zeus 0-1 Ferret
VIRTUA2 0-1 NIMZ03
Dark Thought ½-½ Crafty
Gundam 1-0 Francesca
Eugen ½-½ Isichess

Virtual Chess – Nimzo 3
1.d4 2.f3 g6 3.g5 4.f3 g7 5.e5 c5
c6 6.e5 b6 7.f3 c6 8.e2 c4 9.b4 axb6
10.c4 e5 11.d5 e6 12.e5 c7 13.0-0 c7
14.b3 b5 15.bxc4 cxc4 16.bxf1 a3 17.a7
f5 18.d1 g5 19.h5 20.a4 g4 20.b6
22.e6 c6 22.b5 a5 23.hxg4 hxg4 24.e1 a0
25.e1 f3 26.e2 f3 27.b4 a4 28.g4
29.d1 f6 30.g1 fxe5 31.dxe5 b4 32.g3
g5 33.e3 f3 34.h2 f5 35.xh1 e7 36.b5
37.e1 e5 38.c6 39.b5 h5
40.e5 e5 41.e1 fxe5 42.e3 e1+ 43.b2
44.fxe4 f4 45.b4 d2 45.e2 c3
e2 48.g2 b6 49.h4 a4 b1 50.e2 e3
51.\textit{Exd2} Qxd2 52.\textit{Qe4} Qe1 53.\textit{Exd2} Qe2+ 0–1

So the Title went to Shredder, with a fierce 9/11. Ferret was a very close runner-up.

**Final Scores and Positions:**

<table>
<thead>
<tr>
<th>Position</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shredder</td>
</tr>
<tr>
<td>2</td>
<td>Ferret</td>
</tr>
<tr>
<td>3</td>
<td>Nimzo3</td>
</tr>
<tr>
<td>4</td>
<td>Crafty, Gundam</td>
</tr>
<tr>
<td>5</td>
<td>Dark Thought, FRITZ, VIRTUA2</td>
</tr>
<tr>
<td>6</td>
<td>Zeus, Francesca, Eugen, GANDALF, Centaur, Comet</td>
</tr>
<tr>
<td>7</td>
<td>Schach3, Isichess, Woodpusher, Interchess</td>
</tr>
<tr>
<td>8</td>
<td>Breakthrough, Pandix, Heureka</td>
</tr>
<tr>
<td>9</td>
<td>Diogenes3, Patzer, The Turk</td>
</tr>
<tr>
<td>10</td>
<td>XXXX2, Nightmare</td>
</tr>
</tbody>
</table>

PhD thesis, but will consider making Shredder available when that work is out of the way.

It would be quite wrong to belittle the Shredder and Ferret performances, but one has to put them into context somehow. Hopefully the following Table, listing the leaders alongside the main non-participating 'contenders', with last year's scores and the Aegon scores and performance ratings, will help.

This time the CAPITALISED programs are those which played THIS year, so that their various results can hopefully be compared more easily.

<table>
<thead>
<tr>
<th>1995WMC/11</th>
<th>1996Aegon '96WMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1= 8</td>
<td>Genius3</td>
</tr>
<tr>
<td>1= 8</td>
<td>MCPrc5</td>
</tr>
<tr>
<td>3= 7½</td>
<td>FERRRT</td>
</tr>
<tr>
<td>4= 7½</td>
<td>Nimzo3</td>
</tr>
<tr>
<td>5= 7½</td>
<td>VIRTUA</td>
</tr>
<tr>
<td>6= 7</td>
<td>DARK THOUGHT</td>
</tr>
<tr>
<td>6= 7</td>
<td>Hiarc4</td>
</tr>
<tr>
<td>6= 7</td>
<td>The King</td>
</tr>
<tr>
<td>6= 7</td>
<td>FRITZ</td>
</tr>
<tr>
<td>10= 6½</td>
<td>GANDALF</td>
</tr>
<tr>
<td>11= 6½</td>
<td>Junior</td>
</tr>
<tr>
<td>12= 6½</td>
<td>Kallisto</td>
</tr>
<tr>
<td>13= 6</td>
<td>SHREDDER</td>
</tr>
<tr>
<td>13= 6</td>
<td>XXXX</td>
</tr>
<tr>
<td>16= 5½</td>
<td>ISICHESS</td>
</tr>
<tr>
<td>16= 5½</td>
<td>SCHACH3</td>
</tr>
<tr>
<td>19= 5</td>
<td>CENTAUR</td>
</tr>
<tr>
<td>19= 5</td>
<td>COMET</td>
</tr>
<tr>
<td>26= 4½</td>
<td>ZEUS</td>
</tr>
<tr>
<td>31= 3½</td>
<td>NIGHTMARE</td>
</tr>
<tr>
<td>31= 3½</td>
<td>BREAKTHROUGH</td>
</tr>
<tr>
<td>33= 3</td>
<td>FRANCESCA</td>
</tr>
</tbody>
</table>

If you wonder where Rebel was, the answer is that it is no longer entered in Computer v Computer events. Rebel7 graded at 2263 and Rebel Aegon(7.5?) 2525 at Aegon.

In closing, a 9 Round Blitz Tournament was played after the main Championship.

**The leading Blitz scores were:**

1. Ferret 9/9 (!)
2. Fritz 7½
3. Dark Thought, Virtua2, Isichess 5½
Early GAMES: Mephisto MILANO PRO

The new Mephisto MILANO PRO arrived just a few days before SS was due at the printers, and gave me a little time to play a few quick games against what I anticipate will be its main opposition!

The first thing I noticed was that the box says it's a 50,000 move Opening Book - we'd been led to expect 36,000.

It was a question of playing a couple at 60/60, or getting a few more in by using G/15 and, whilst they won't count for rating purposes, I thought the latter would provide more of immediate interest.

**Match 1**

Mephisto MILANO PRO 0  0  ½ = ½
Mephisto MILANO PRO 1  1  ½ = 3½

**Match 2**

Novag DIAMOND ½  0  0  ½ = 1¼
Mephisto MILANO PRO ½  1  0  0  2¼

The first game had the DIAMOND a pawn up in a rook + pawn endgame, but the MPRO exchanged pawns and left the Novag with its final pawn on the h-file to force a near draw. Here are the 3 decisive games from the Match.

**MILANO PRO (2200) - DIAMOND (2150)**

[Page 10] G2 @ G/15.

1.e4 c5 2.e3 d6 3.d4 c6 4.d4 cxd4 5.exd4 c5 6.d5 e6 7.c4 e5 8.exd5 cxd5 9.dxc6 bxc6 10.dxc6 dxc6 11.e4 d6 12.dxe6 ND goes out of Book. 12...dxe6 13.dxe6 c8 MP goes out of Book. 14.d4 15.h6 16.hxg5 h4 17.hxg6 hxg6 18.f3 fxg3 19.f3 g8 20.e4 d8 21.e2 e4 22.h4 a5? 22...e5 was better.

23.bxa5 b5 24.a6 bxa5 25.b4 a3 26.d2 a7 27.a3 e5 28.a4 e4 29.a1 e4 30.d4 e6 31.Fh1 e4 32.d2 d8 33.e1 e3 34.e1 e5 35.d5 e7 36.a5 e5 37.d8! e5? After getting back into the game, and close to equalising, ND chooses a wrong plan. 37...e6 is best. 38.e1 g7 39.d2 g7? 40.f4! 41.d4 e4 g4 42.f3 fxe4 43.d3 e3+ 43...b4 44.b1! 44.exd3 exd3 45.f1 a6 46.e5 d5 47.e4 d7 48.gh4+ g8 49.gh5+ h7 50.exd5 exd5 51.gh5 d5+ 52.gh4 d5 53.g5+ h7 54.e4+ ghx7 55.e5 d3 56.e4 d4 57.d4 d6 58.d5 c5 59.gh6 e3 60.e4 d1! Now MP has the e7 out of the way, he finishes the game with ease. 61.e7 gh6 62.f6 h7 63.gh7+ gh6 64.g4 1-0

**DIAMOND (2150) - MILANO PRO (2200)**


1.d4 d6 2.c4 e5 3.d3 d5 4.c3 e7 5.g5 0-0 6.c3 b6 7.a6 c6 8.d3 dxe4 9.xc4 d5 10.e7 xxe7 11.e4 MP out of Book. 11...e5 12.dxe5 xex5 13.xex5 xex5 ND out of Book. 14.e3 xex6 15.b3 In retrospect, better was 15.xd5 xd5 16.xd5 xed8 17.0-0 xed5= 15...x4f1 16.0-0 xed3 17.xex6 xcx1 18.xxf7+ xxf7 19.xxf7 xed8 20.xd1 xdi+ 21.xd1 h6 22.xd8+ xh7 23.xd3+ g6 24.h3 xeg7 25.xf1 b5? 26.b4 c5 27.xbc5 xec5 28.xbc5 29.xe2 28.e4 xec4 29.xe2 is preferred. 28...xel+ 29.xe2 xel+ a6 31.4d4 xxa2 32.xe1 xeb7! 33.xe2 xeb2 34.xd7+ There now follows a long series of moves in which the question is whether ND can manage to force perpetual check. 34...xg8 35.xd8+ xh7 36.xd7+ xg8 37.xe5+ xel 38.xf7+ xg8 39.xf8+ xh7 40.xe7 xeh6 41.xd6+ xel 42.xe7+ xh8? I thought this allowed the draw, and that xh8 was correct. 43.xd8+ xh7 44.xe7+ xh8 45.xe5+ xg8 46.xg8? Surely 46.xg8+ was right! 46...xh7 47.xd1 xeb6 48.xh5 xxe5 49.xd5 xg2 50.xe4 xh6+ 51.xe3 xg6+ 52.xd3 xah6+ 53.xc4 xxc4 54.xc4 xxc7 55.xd3 xed7 56.xd3 xeh7 57.xf3 xeh7! 58.xe4! Now we can see that we are in for some excitement, though ND really should have stayed with the apparently forced draw at move 46! 58...xh7 59.xe5 a3 60.xb3 a2 61.xb2 xh7 62.f3 xh4 63.xf4 g6 64.b3 xah6 win. 63...xeh6?! Why not 63...xh4 64.xa2 xe4+ 65.xe4 xf6 66.xf6 65.xf5 xe5 66.xe6 xe6 67.xe6 xe6 68.xa4? Looks tricky, but 68.xe6+ xxe6 69.xa2 xeh5 70.xb3 gave the better chance. 68...xe4+ 69.xe4 xax4+ 70.xb1 xah8 and ND resigned a few moves later. 0-1

**MILANO PRO (2200) - DIAMOND (2150)**


1.e4 e5 2.xf3 c6 3.c5 a6 4.xc6 dxc6 5.d4 exd4 6.xd4 xxd4 7.xd4 g6 7.8.c3 0-0 0-0 9.xe3 c8 Both Computers now leave their Books. 10.f3 xh4 11.xe2 xh4 12.0-0 xh8 13.xd2 f5 14.xh1 fxe4 15.xxe4 xh8 16.d4 xg4 17.xh4 xxc3?! 17...xh4 18.xh4 xxd1 19.xd1 xxc3 20.bxc3 xeh8 18.xf3 xxe2 19.xe2 xxd1+ 20.xd1 MP now has an advantage, which it quickly builds on. 20...xh1+ 21.xd2 g5 22.xe3 xal 23.xf6 xel 24.xg5
New MILANO PRO - some early Games.

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\[ \text{Exa2} 25.\text{b3 c5} 26.\text{Exf2 c6} 27.\text{g3 d4} 28.\text{Exf7+ c6} 29.\text{d8?! ND defends against this easily, and it seems to be a wasted move. Better was 29.c3 c6 30.\text{Exf6} 29.\text{Exe6} 30.c6 Exe2} \]

The evals., once showing White at +80, are now down to +40/50. 31.\text{Exh7 Ec1} 32.\text{Exe7} 32.\text{Exf2?!} 32.\text{Exe1+!} 33.\text{Exd3} 34.\text{Exd6} c7 35.\text{Exc4} 36.\text{Exd2} \text{Exe4} ND has played extremely well since White's tempo loss at move 29, and now has an edge ready for this very sharp ending. 37.\text{Exd8 Ed7} 38.\text{c5+ c6} 39.\text{Exg7 a5!} 40.\text{Exh6+? Maybe MP could have started his own forces rolling with g4?!} 40.\text{Exxc5 Exc7} 41.\text{a4} 42.\text{Exd3 Exd4+ 43.\text{Exe3 Exe4+ 44.\text{Exd3?!} 44.\text{b2 looks right.} 44.b5! 45.\text{Exf4} 45.\text{Exa6 b4 46.\text{Exd6+ b3 may be no better.} 45.b4! 46.\text{Exd2 c5 47.\text{Exh7 a3 48.\text{Exa7 h3 49.\text{Exe5 a2 50.\text{Exa5 Exe4+ 51.\text{Exe3 Exc3 52.\text{Exd3 b4! Impressively persistent, and the game is as good as over. We'll just play through a few more moves.} 53.\text{Exa8 Exc6 54.g4 \textbf{b2 55.h4 a1W 56.\text{Exa1 \textbf{xa1 57.\text{h3 b3 58.\text{Exc3+ Xxc3+ 59.\text{Xxe3 b2 60.\text{Exd4 60.h6 b1W 61.\text{Exd4 \textbf{b6+wins even more easily.} 60.b1W and ND is well able to stop White's A's from here. A good win. 0–1} Match 3 Meph MONTREUX 0 ½ 1/2 1 = 2 Meph MILANO PRO 1 ½ 1/2 0 = 2 Here are the 2 decisive games: MONTREUX (2260) – MILANO PRO (2200) [D42] G1 @ G/15. 1.e4 c6 2.e4 Unusual, but quite legitimate. 2...d5 3.exd5 cxd5 4.d4 \textbf{f6 5.\text{c3 e6 6.d3 \textbf{e7 7.cxd5 Exd5 8.\text{Exe6 c6 9.0–0 0–0 10.\text{Exf6 \textbf{E6o}} Both Computers exit their Books now. 11.\text{Exxd5?!} 11.\text{Exxe4 looks the sound choice.} 11...\text{Exxd5 12.\text{Exc2 \textbf{g4} 13.\text{Exd3 g6 14.\text{Exd3 \textbf{g3}} 15.\text{Exg3 \textbf{hxg3 16.\text{Exxd5?!} 16.\text{Exg3 \textbf{hxg3 17.\text{Exb3 leaves White the isolated A down, but offers better chances than the move played.} 16.\text{Exxd5 17.\text{Exxd5 c2 18.\text{Exe3 \textbf{f6 19.\text{Exg7 \textbf{bab8 20.\text{Exf3 a6 21.\text{Exc2 a5 22.\text{Eab1 \textbf{Exe1 23.\text{Exe1 \textbf{Exb2 24.\text{Exc4 \textbf{c3 25.\text{Exd1 \textbf{Ec2 26.\text{Ed1 \textbf{Ed1 27.\text{Ed3 \textbf{Ed3 28.\text{Ec3 \textbf{c4 29.\text{Exa3 \textbf{b3 30.\text{Exd3 \textbf{b2 31.\text{Exc1? 31.Exd6 is best.} 31...\text{Exc1 32.\text{Exa4 If 32.\text{Ec1?! then exb3 is deadly.} 32...\text{Ed2 33.\text{Eg7 34.\text{Exh3 \textbf{f6 35.\text{Exg4 \textbf{h4 36.\text{Exh4 \textbf{g5 37.\text{Exf2 \textbf{g4 38.\text{Exg1 \textbf{f4 39.\text{Exf1 \textbf{a5 40.\text{Exa1 \textbf{f1 41.\text{Exh1 \textbf{Eh1 42.\text{Exh1 \textbf{f3 43.\text{Exg1 f5 44.\text{Exf1 f4 45.\text{Exg1 g5 46.\text{Exf1 g4 47.\text{Exg1 g3 48.\text{Exf1 g2+ 49.\text{Exg1 \textbf{b6 50.\text{Exh2 \textbf{xf2 and it's mate in another couple of moves. A great win by MP, though White's early \textbf{xd5 seemed suspect. 0–1} MILANO PRO (2200) – MONTREUX (2260) [B22] G4 @ G/15. 1.e4 c5 2.e3 e5 Another unusual opening for a Computer – for nearly anyone! – but a surprise that it puts MP out of Book and at an immediate disadvantage. 3.\text{Exf3 \textbf{c6 4.\text{Exe4 \textbf{c7 5.0–0 \textbf{Exf6 6.\text{Exg5 \textbf{d8 7.\text{Exb3 \textbf{c6 8.\text{Exe6 Only now does the Montreux leave Book – MP (evaluating at +100... slightly optimistic?!) has done exception-}}}


In a major Article in SS/62 (Feb-Mar 1996) we opened a discussion on specially prepared 'anti-'computer' or 'killer' Books, under the sub-heading "How to top the Computer Chess RATING LISTS without playing chess".

The cause of the concern was not the sudden arrival MChess PRO5 at the top of ours and the Swedish (SSDF) Rating Lists, but Thoralf Karlsson's slightly ominous note, which we quoted in full at the time and contained the following sentence: "It seems that the Opening Book has contributed significantly to the rating increase of MChess PRO5 - sometimes the outcome of the game is already decided when it starts to think!"

I decided to add my own voice to the debate when I received two MCP5 v Genius030 games in which MCP totally outbooked the Lang program, and contained 'book' for a further 22 Genius 'thinking' moves in one game, with MCP5 only starting to 'think' when the game was totally won. In the other MCP5 came out of book 13 moves after Genius with an immediate mate in 7 announcement!!

I have repeated the above outline of the SS/62 Article for the benefit of those who were not subscribers at the time. It raised very little comment, so I left it there!

Ed Schroder's view

On October 1, 1996 a comment by the MCP programmer Marty Hirsch appeared on the Internet: "Opening preparation against commercial opponents matters somewhat, but not as much as one might expect, because an SSDF rating is based on hundreds of games against at least twenty opponents". (bold is mine).

Ed Schroder (Rebel's programmer) replied that "It matters AT LEAST 100 ELO points on SSDF". (CAPS are Ed's).

Ed went on to support this claim by 'posting' 43 games between MCP5 and Genius3, Rebel6 and Hiarc3, clearly showing an extreme result in each case, and with the games listings containing many duplicates, as MCP5 appeared to endeavour to repeat a winning game as often as possible by playing down the same line again and again unless its opponent varied.

Thus, for example, in 19 games against Hiarc3, only 4 distinct games were played as Hiarc3 found itself playing and losing the same games over and over again. Then, in 14 games against Rebel6, one game (in which MCP5 comes out of book announcing mate in 8!) was played a total of 5 times.

The Purpose of an Opening Book

Originally (Fidelity Sensory9, Novag Constellation, ConchessA0, SciSys MarkV etc) the opening book had two main purposes:

1. Create variety, so that the user wouldn't be playing the same game over and over.

2. Ensure main lines were played, at least for the first few moves, to facilitate proper practice.

Those were the days of low-memory chips, where there just wasn't computing room to put in more than a few hundred positions - a Book approaching 10,000 was a major breakthrough bordering on the sensational!

Today memory size is just no problem at all, and there is almost no limit - especially with the advent of the CD-ROM - to the potential size of Opening Books.

Thus the opening coverage has got bigger and bigger, but not everyone is filling the books with 'theory'! I definitely don't want to see the day when every Computer Book line goes to the end of the game! Nor do I want to see massive concentration on specialised 'killer lines', actually putting us back to the pre opening Book days when we ended up playing the same few games over and over.

How the 'Killer Book' operates

'Killer Books' are easy enough to recognise - if one program stays in Book for more than 3 or 4 moves beyond its opponent, and then comes out reading +300, mate in x, or similar... it's a cooked line!

One main so-called killer line in MCP5 is 1.e4 e5 2.Bc4. If normal theory following this was added, say from BCO2 or MCO, and maybe a couple of specialist books, that would be fine.

Maybe the programmer finds one or two new ideas which suit the program, or perhaps
the program itself might come up with the occasional new move that's worth a try. Why not! Perfectly fair. Add a new variation here and there, for surprise purposes, and see how it works out!

Bob Hyatt's Crafty was playing 1.e4 e5 2.Nf3 Nc6 3.Bb5 a6 4.Bc4!? in the recent World Championships - but it wasn't a cooked line by any means... the line isn't all that good, in fact. But Bob had just added 2 or 3 variations for a couple more moves, and thus made small time gains whilst avoiding any especially prepared opposition Opening Book. It worked well.

Let's be right about this - Opening Book preparation, for any player as well as any computer program, is very important - no-one is going to get too far if they only know the Ruy Lopez and Giuoco Piano!

But when it seems that every reply favoured, in 'thinking' mode, by a range of the main computer opposition has had responses built in for move after move after move, until MCP cannot be beaten, then a 'killer' book has been prepared, and MCP isn't playing chess.

It might even say something about MCP! Presumably the Books have to go as deep as they do, against all tested replies by its opponents, because MCP can NOT find the right replies itself! - i.e. the extra book is needed to conceal playing weaknesses?!

Because most of these extended lines contain little or nothing of current theory, but nearly all come from computer-produced play, it seems almost certain that this is the modus operandum - specific anti-Computer book being added until it is found that MCP can finally be safely left to its own thinking (mate in 7, +750 or whatever).

Here is a game to support the view:

White MChess Pro 5 Black Genius3
1.e4 e5 2.Bc4 Nf6 3.d4 exd4 4.Nf3 Nxe4
5.Qxd4 Nf6 6.Bg5 Be7 7.Ne3 c6 8.0-0 0 d5
9.Qh4 Be6 10.Rhe1 h6 11.Bd3 0-0?

We stop for a moment here. Genius3 is out of book and has played an apparently non-theory move. It is also not a good move. We expect a theoretically well-prepared human opponent also to leave his/her book here, because known theory has ended. Maybe someone who has seen this prepares a move or two to take advantage of the mistake, in case it is seen again. Perhaps an opening book programmer puts a couple of short variations in, to help his program. But MCP stays in book for a further 9 moves, apparently 'knowing' every reply from Genius3, even though we go further and further away from theory and Genius3's moves are not always the very best!

19.Qh5 Nxa2+

MCP has now come out of book and announced mate!

20.Kb1 Nc3+ 21.bxc3 Qb6+ 22.Kc1 Qb2+
23.Kxb2 Bxc3+ 24.Kb3 Nd7 25.Bxf8+ Kg8
26.Qf7+ Kh8 27.Qh7#

Almost the same game was played 5 times in Ed's MChess vs Hiarc3s match. H3 chose 11...Rg8 and MCP apparently needed more help against this as it stayed in book against everything H3 chose until move 25, where it finally exited showing +853.

Someone might rightly object that if, for example, Kasparov were to beat Karpov with a new line in the next World Championship, and Karpov allows the same thing to happen and the same game to be played in subsequent rounds, that's his own fault and he should have done something about it. Certainly there's no way Karpov can ask for the games not to be counted!

The difference is that Karpov can prepare something different for subsequent games. Hiarc3/Genius3/Rebel6 can't - their chess engines and Opening Books are fixed and unchangeable. The programmers will have a chance to do something about it when their new versions come out, but the fact that Hiarc5, Genius5 and Rebel8 can have improvements does NOT help the previous versions, off which the MCP series just get free points.

Before we consider some implications of all of this, I want to say something about MChess Pro! I think it is a great shame that the opening book programming has developed as it has, bringing criticism from so many because of the apparent intent behind it all. The original MChess was the first program apart from Richard Lang's Psion2 to play good, strong chess on our old 286 machines! And, though I don't personally think the current MCP playing engine is the strongest, it is certainly active and exciting in its style, and amongst the leaders.

Issues Raised

[1] What does the Customer want?!

Perhaps this is the most important question of all. One answer would be the truth, and here I am thinking of the fact that 'killer books' hide
the truth of the relative strengths of the chess engines. In Sweden, Goran Grotting took out
the MCP5 results against old Genius, Rebel and Hiarc versions, and it immediately dropped
from 2nd. to 9th. place, losing 32 Elo points!

I believe the customer's first preference is for a strong chess engine. Agreed people want to
know about playing style (aggressive, solid, tactical, positional etc), strengths and weaknesses,
features, printing capabilities, analytical functions, database potential, and (yes) opening
book size and scope. But I still think it's the chess engine which most are concerned about,
for general play, analysis, and testing positions.

Now most purchasers do not want to buy 5 or 6
programs and play hundreds of games to find
out which is this year's strongest! They want to
buy and use the one that gives them what they
want. And if the 'want' at the top of the list is the
strongest player, perhaps with a few other crite-
ion to help them settle between close contenda-
ers, then the best solution is to check the
Selective Search or Ply's SSDF Rating Lists.

However the Rating Lists may no longer be
reflecting top engine strength alone, as programs
using 'killer books' are able to gain points on the
Lists without heating up the chess engine at all!!

Readers can be 100% certain that both myself
and the Swedish testers are striving to pro-
duce Lists which are as accurate and honest as
we can make them. But it seems our Lists are
not able to be as accurate as we really want, and
the commercial spin-off is that our Lists do have
a monetary effect - being top of the SS or SSDF
List definitely gains a few sales, though how
many we obviously don't know.

Thus the Lists are being affected to some degree
by who has the sharpest or most diligent I.M or
G.M preparing the 'v computer' lines the pro-
gram will play... or even which programming
team has most money to pay for such services!
Human preparation wins the day, with the com-
puters just pushing a few pawns at the end!


The Swedish testing system allows duplica-
ting games - so all of MCP5's duplicate wins go
towards its rating. E.g. the unique games score
against Rebel6 was 3-1, but would enter as 13-1
for Rating purposes, as the 3 winning games by
MCP get played over and over. In other words
the program gains not only from the 'killer lines',
but also its built-in 'learning factor' designed to
encourage it to persist with the winning lines
and refuse to play again those in which it loses.

[3] Possible Solutions

a. Disallow duplicate games; make the programs
keep playing until they have played 20 unique
games.

b. Choose 10 openings before a Match, and
make each side play both the black and white
pieces in that opening. The openings could go,
say, 5 moves deep before handing over to the
programs, so that they still have the opportunity
to use their own books, but they cannot force in-
cessant repeats of just one or two of their own
preferred openings from move 1.

The argument then is that the programmers
would soon know which openings are being
used, and could start preparing specifically for
them. But that can perhaps be overcome by
choosing randomly from the ECO coded
A00-E99 opening books?!

A similar idea is, whatever opening is played
when ProgramA has White, is replayed to the
end of the Books with ProgramB as White.
Games 3 and 4 would have ProgramB playing
first as White, then ProgramA has White, again
with the same opening being used in reverse!

However it occurs to me that, using this
method, an over-cooked Book will result in lots
of 1-1 scores. 'Serve it right', we might say... but
we'd be no nearer learning the truth about the
relative playing strengths.

c. Make the programs play on their Wide books,
forcing them into variety.

Of course it may not be long before some
programs would have Tournament, Normal and
Wide books all very similar to each other (i.e.
'Wide' in name only) which would further dis-
appoint the poor purchasing user!

d. Put a 'learning' function into the opening book
so that, just as MCP tries to repeat its wins, so
too the opposition tries to repeat its wins and
avoid its losses!

Problem1. This could extend massively
the number of games which must be played to
create 20 unique games.

Problem2. Programs released in the past re-
main defenceless - they cannot have their books
re-written, or a learning factor added.

For example, when we (the Hiarc team) real-
ised what MCP4, to a small degree, and MCP5
were apparently doing, we put a nominal 'learn-
ing' factor into Hiarc4 to encourage it to try
different variations, where possible, when attempts were made to repeat a game we'd lost.

N.B. This is actually a good feature for the purchaser/user as well - he will get the definite feeling that his Computer opponent is learning how to play against him, and will find himself faced with the challenge of new variations where the computer starts responding and adjusting to its past defeats.

Back to computer-v-computer: Hiarc3 and MCP4 came out at the same time, so Hiarc3 was and is defenseless against the tactic... and that is fair enough against MCP4 - the pair came out together, and Marty Hirsch caught us with a feature we didn't then have, and out-prepared us by 'virtue' of a 'killer Book'. Its 'learning' and 'killer Book' hand-in-hand make for a powerful weapon indeed!

Anyway, we added many new lines for Hiarc4 and also put a nominal 'learning' system in it. Also, in 1995, MCP5 came out a couple of weeks before Hiarc4, so we were able to play some games between the pair and add a few new moves and variations, mainly to minimise the effect of MCP5's 1.e4 e5 2.Bc4 plan, the opening it likes to play all the time. We did NOT put any killer lines into Hiarc4, however, as its purpose is to play (hopefully!) good chess against humans and be of value to its purchaser as an opponent and analyser. Restricting the Book, avoiding popular openings etc., is NOT beneficial to a human user!

So, the Hiarc4 result against MCP4 and 5 is much better. But MCP5 still gives Hiarc3 a totally, nearly impossible, time, as it does Rebel6 and Genius3 with their older books - and I guess that successors to MCP5 will retain all these killer openings so the successors will also continue to get 2600+ performances against the older programs.

Maybe a Rating List solution could be:

- Only play new programs against this year's and last year's new products, and leave out all older (passive victim) versions.

What is to be our new Playing Strength Agenda?

So now we are all competing by updating our opening books, and that's fair enough. Kasparov and Karpov will do that game-by-game when they meet in the World Championship decider.

But the problem is that MCP5/6/7 etc will be able to come out and win game after duplicate game against the old Hiarc, Genius and Rebel versions... and others such as Fritz/WChess etc for all I know, but I haven't time to test them all!

At the moment Ed Schroeder, Mark Uniacke and Richard Lang have preferred to defend themselves against the specific preparation against their books, by providing a wider response range making duplicates less likely. But of course none of them wishes to thereby leave their programs playing down known weaker lines! For example, there is a limit to the practicable range of responses to 1.e4 e5 2.Bc4... it is no good playing a daft 2...a6 or something, just to get MCP out of Book!

Another alternative is NOT to play 1...e5 at all! - stop the program from ever entering a potentially prepared losing line to MCP5. That's another defence, and it could work... but would you, the USER, like that in your program!? The final choice is to be aggressive, and spend the next few months preparing long anti-MCP, anti-Rebel, anti-Genius, and anti-everyone else's computer lines in our Hiarc program - Ed's team will try and do the same to us, so will Richard's... blow the playing engine, forget the user, let's just play computer-killer openings!

Then Hiarc5 can kill MCP3/3.5/4 and 5, Rebel6 and 7, Genius2/3/4 etc. We'll get enough points from those games against the old, defenseless opening books, that our results against MCP6, Genius5 and Rebel8 won't matter so much. But we'll check the openings in their 1996 versions so that Hiarc6 will try to kill them as well in due season.

Of course the others will do the same. And all our old versions will go sliding down the rating lists, whilst new versions will hit 2600... 2625...2650... who knows?! They'll may be no better!... but they'll all have incredible winning anti-computer opening books!

Ed Schroeder says "Is this the future of computer chess? Spending months of our time on cooked books to get a good rating on SSDF and SS? Should all the programmers do the same? I obviously prefer to spend my time improving the chess engine of Rebel rather than spending it looking for weak points in other computer chess programs, just adding totally won lines to the Rebel opening book! But I wonder if I have any choice left!"

Do any of our Readers have ideas how testing might best be done, so that both the SS and SSDF Rating Lists can still be produced for greatest accuracy and benefit?
Dear Mr. Davies,

I read with interest your leaflet about your chess services and I enclose five games for an M.O.T. service. The games are from a recent match I played against Roy Quinn who ran me on a mere 486/66 and even had the cheek to consult an openings book, BCO2 (by Messrs Keene and Kasparov) during the games. Nevertheless I emerged triumphant!

I am keen to know how I can improve my game as I would like to wreak a terrible revenge on these exploitative humanoids, present company excepted. Of course a Pentium processor would be nice but I am interested in any other pointers you might be able to give me, especially as regards that strange humanoid ability to find good moves without calculating any variations ..... I think the term is “luck”. Whilst my evaluation function may be superior to other programs in this respect I feel that I could improve in this particular area.

Yours sincerely,
HIARCS 5

November 15, 1996

Dear Mr. Hiarc5,

Thankyou for your order, please find enclosed your M.O.T..
Tactically you are brilliant but as you mention I do think that your positional game could do with some improvement if you would like to dethrone the human World Champion. Have you thought of playing through some of Kaspov's games with a view to looking at how he handles Pawn structures and places his pieces in harmony with them?

Yours sincerely,

Nigel Davies
(International Grandmaster)

CHECKER-WISE
M.O.T. - Mr. Hiarc5
by Grandmaster Nigel Davies

Games

1. QuinRR-Hiarc5
Match 1996

5.Nc3 a6 6.Bc4 e6 7.Bb3 b5 8.00 b4?!

I'm not sure that I personally would go hunting such a Pawn. Still, you seem to get away with it in this game.

9.Na4 Nxe4 10.Re1
DIAGRAM opposite.

After this White never seems to have enough compensation. It looks far more natural to play 10.f4 with the idea of 11.f5, prising open the a2-g8 diagonal.

10...d5 11.Qf3
Bb7 12.Bf4
Bd6 13.Bxd6
Qxd6 14.Rad1 00 15.c4

White's attack looks rather desperate to
me and you manage to repulse it with no particular difficulty.


2. QuinnR - Hiarc5
Match 1996


It needs a really remarkable memory to play sharp variations such as the Sicilian Najdorf and this Dilworth Variation of the Open Spanish. But you seem to know them quite well and the sharp positions certainly suit your style.


I don't like this move by White as it allows you to activate your Queenside Pawns and the exchange of Rooks probably favours Black. As White I would consider moves like 23.a4 or 23.b4.


DIAGRAM

30.Nf5
White is close to losing already, his Bishop is tied down to the defence of b2 and his Knight will be ineffective against Black's passed Pawns.

30...Ra1 31.h4
Giving Black another passed Pawn on a plate. White should try to activate his Bishop with 31.Bc5.


3. Hiarc5 - QuinnR
Match 1996


Another razor-sharp Najdorf in which Nunn's book mentions 21.Qe1 (intending 22.h4) Bh4 22.Qc3 which is rather similar. I wouldn't be surprized if the text hasn't also been played.

21.Rf8 22.Qd4 Bf6
Hereabouts I don't like the way that Black played it. Perhaps 22...Rc8 is better.
23. Be2 Kg8 24. Rdf1 Bg7 25. Rxf8+ Kxf8!?
25...Qxf8 26. Nc7 Rc8 27. Nxa6 Nc4 28. Qd5+ Kh8 looks like a better try for Black.

26. Rf1+ Kg8 27. Nc7!
Neatly winning a Pawn. Presumably this took Black by surprise.

27...Rc8 28. Qd5+ Kh8 29. Nxa6 Nc4 30. Bxc4 bc 31. Qb7?!

Having won material, you decentralize the Queen after which you start to experience some trouble with your King. I prefer 31...e3, creating a support square for your Knight on b4.

31...Qg8 32. h4 Rf8 33. Rxf8 Qxf8 34. a4 c3 35. b4 Qf1+ 36. Ka2 h5 37. Qb8+ Kh7 38. Qxd6 Qc1 39. Kb3 Qb1+ 40. Ke4 Qxc2 41. Ne5 Qa2+ 42. Kb5 c2 43. Nd3 Qb1 44. a5 c1Q 45. Nxc1 Qxc1 46. a6 Qf1+ 47. Ka5 Qa1+ 48. Kb6 Qd4+ 49. Qxd4 Bxd4+ 50. Kc7 g5! 51. hg h4 52. b5 h3 53. b6 h2 54. a7 Be5+ 55. Kd7 h1Q 56. a8Q Qh3+ 57. Ke7 Qh4 58. Ke6 Qxg5 59. Qf8Bg3 60. Qf7+ Kh8 61. Qf6+ Qxf6+ 62. Kxf6 Bb8 63. Kf7 Be5 64. Ke6 Bb8 65. Kf7 Be5 66. Ke6 Bb8 67. Kd7 Kg7 68. Ke7 Be5 69. b7 Bb8 70. Ke6 Kf6 71. Kd7 Kf7 72. Ke6 1-0
Presumably on time. It should be a draw after 72...Ke6.

5. Quinn R - Hiarc5
Match 1996

I am beginning to wonder if there are any openings you don't play. But judging from the course of the game I'm not quite sure that this one suits your style.

5. Bd3 Nf6 6.00 d6 7. c4 Be7
The modern interpretation of this position is to put the Bishop on g7.

8. Nc3 00 9. Qe2 Bd7?
And this is definitely wrong, the Bishop isn't good on d7. Black should play either...Nd7, an immediate 9...Nc6 or a semi-waiting move with 9...Re8.

10. f4 Nc6 11. Nf3 Qa5

DIAGRAM

Another superficially active move which should leave you in serious trouble.

12. Bd2
12. e5!
looks very strong as after 12...de 13. fe Ng4 you have 14. Bxh7+ Kxh7 15. Qe4+ etc..

12...Nb4 13. Bb1 Ng4 14. h3
14. e5 looks strong here too.

14...Qb6+ 15. Kh1 Nf6 16. a3 Nh5 17. Kh2 Nc6 18. Be3?!
Missing his last chance to stick the boot in. 18. e5 looks good after 18... Qxb2 19. Bxh7+ Kxh7 20. Qe4+ Kg8 21. Rf1 for example.

18...Qc7 19. g4 Nf6 20. g5
White could also play 20. Bf2 intending 21. e5. Again I think he would obtain a very strong attack.

20...Nh5 21. Nh4 g6 22. Qf2 f6 23. Nd5?
The wrong time to go "all in". As usually you handle the defence brilliantly.

23...ed 24. ed Nd8 25. Qc2 fg!
Very cold-blooded. Most players would play 25...f5.

26. Bb6
After 26. Nxd8 I guess you intended 26...Bf5.

26...Qxb6 27. Nxe7 Rf7 28. Nxe7+ Rxe7 29. fg Qe3 0-1

6. Fritz 4 - Hiarc5
Match 1996 (G/30 on two Pentium/166)

5.\text{Nc}3 \text{e}6 \text{6.Be}2 \text{a}6 \text{7.00 Be}7 \text{8.a}4 \text{00 9.f}4 \text{Qe}7 \text{10.Bf}3 \text{e}5 \text{11.Nb}3 \text{Nc}6 \text{12.Nd}5?!

The sequel suggests that this is premature.

12...\text{Nx}d5 \text{13.ed Nb}4! \text{14.e}3 \text{Bf}5! \text{15.cb Be}2 \text{16.Qd}2 \text{Bxb}3 \text{17.Ra}3 \text{Bc}2 \text{18.Kh}1

You had of course seen in advance that 18.Rc3 is met by 18...Qb6+. Your tactical control is very impressive.

18...Bg6 19.fe de 20.Re3 Bd6 21.b3 Qe7 22.b5 ab 23.ab e4

White's Pawn structure has been completely wrecked, the doubled b-Pawns leaving him a essentially a Pawn down and his passed d-Pawn being firmly blockaded. You win the game nicely by advancing your e and f-Pawns.


\section*{Assessment}

\section*{Style, Strengths and Weaknesses:}

Your style seems very "concrete" in that you think very much in terms of variations. Actually you do seem to be quite brilliant at this, calculating with great accuracy.

Amongst human players your style reminds me of that of John Nunn or one of my former pupils, the 1992 World U14 Champion Ronen Har-Zvi.

Your manner of play is really quite natural for a computer. Without having an organic intuitive brain I suspect that anyone would tend towards "out-calculating" the opposition. But I do think that you could make a considerable overall improvement in your chess by improving your technical and positional skills so that many positions are a question of turning on the "autopilot".

I did think that you had little feeling for the harmony in some positions and I saw several examples of you putting your pieces on suspicious squares. In game 4 I felt that 31.Qb7 started to let things slip and in game 5 your 9...Bd7 would be unthinkable for a human specialist in these lines.

In view of these tendencies I think that in the opening you should steer the game towards positions in which you can use your tactical powers and place relatively little demand on your long-range positional skills. Certainly the sharpest lines of the Sicilian Najdorf are in keeping with this policy but in game 3 I wondered about the extent of your opening book because of your choice of the inferior 16.Qh4.

You might consider openings such as the Scandinavian Defence (1.e4 d5!? 2.ed Qxd5) and some sort of pawn-grabbing Slav Defence lines against 1.d4. The Belorussian Grandmaster Kupreichik might be an interesting player for you to follow as he invariably generates wild tactical positions in which you excell. I think that you can take on objectively risky lines as long as they are sharp enough.

\section*{Recommendations:}

If you are unable to acquire some sort of organic implant you might well have to rely on faster and faster processors. This in itself should be enough to put paid to the vast majority of humanoid opposition, especially at the faster time limits.

You might also want to develop a more cunning opening repertoire which will lead you into the type of position in which you clearly excell. Please contact me if you would like my help in this matter.

\begin{table}
\begin{tabular}{|c|c|}
\hline
\textbf{CHECKER-WISE} & \\
M.O.T's by Grandmaster Nigel Davies & \\
Write to 9 Greenfield, Wrexham LL1 2NR & \\
or ring 01978 366911 for details & \\
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\end{table}
Ross Withy has now completed his second 16 game 'Top Portable' Match, this time at 40/90. We leave the result to the end, to keep readers on tenterhooks! Actually it was very 'up-and-down' and quite unclear who was going to win until the last few games!

Ross mentions in his letter that he found the chess more interesting this time than in the 40/120 Match which he conducted between the pair a few months ago, and which also included 10½ - 5½ for the Sapphire. In SS/65 we reported his comment that "they seem to see each other's tactics coming, and keep freezing each other out". He did also mention that they played quite differently and rather enterprisingly against him!

Unfortunately we didn't have room for any games from the first Match, but 4 were particularly good this time, and these follow with light notes and info on the computers' respective evaluations at various interesting moments.

Sapphire had gone 1½ - ¾ ahead before our first game in the Match itself.

1.e4 c5 2.ªf3 d6 3.d4 cxd4 4.ªxd4 ªc6 5.ªb5 6.ªd7 6.ªa4
Both programs are now out of Book.
The Sapphire had expected 6.ªxc6.
6...ªf6 7.ªe3 a6 8.0-0 8.a7?!
8...ªb8 was presumably better
9.ªxc6 8.ªxc6 10.ªd4 8.a8 11.e5 dxe5
12.ªxe5 8.d6
Black is determined to swap-off the queens.
13.ªf4 c7 14.ªd1 b5 15.a4!
Showing +60 expecting b4. 15...ªe6
Reading +200! The Novag changed from b4 in the last few seconds. Why? 15...ªb4?
16.ªx5! and if 16...ªxe2 17.ªd4 with an enormous attack.
16.axb5 8.d6 17.b6 8.c5
17...ªxb6 18.ªa4+! followed by 19.ªe4.
18.ªa4+ 8.f8 19.ªe4 8.c5 20.ªd6 8.e2
21.ªg5 8.d7 22.ªd4!
Much better than the 22.b7 expected
by Black.
22...ªh5
Reading -534.
23.b7
And Black resigned this amazingly short and decisive game by TC2100.
23...ªb8 24.ªa7 8.xb7 (24...ªe7? 25.ªe8+!?) 25.ªa8+ 8.e8 26.ªxb7 was the winner's forward analysis. 1-0

The next 2 games saw a draw, and then TC won again, so the Sapphire was 3-2 down as we came to game 6.

SAPPHIRE (2150) - T/CHAMP 2100 (2040) [C57]
Game 6, 40/90, 1996/ELH]
1.e4 e5 2.ªf3 8.c6 3.ªb5 8.f6 4.0-0 8.xe4
5.d4 8.e7 6.ªe2 8.d6 7.ªxc6 bxc6 8.dxe5
ªb7 9.ªc3 0-0 10.ªe1
TC goes out of Book.
10...ªc5 11.ªe3 8.b8
Sapphire also goes out, reading +7, with TC as Black showing +50.
12.ªxc5 8.xc5 13.ªa4 8.b4 14.c3 8.e7
15.ªa1 8.e8 16.ªd4 8.b7 17.ªf5
The Sapphire jumps optimistically to +73 here!
17...ªg5 18.ªc4 g6 19.h4?!
which indicates a pretty sophisticated awareness of how this attack works!

21...\texttt{e}c8 22.\texttt{e}d3! \texttt{e}a6?

After a long think. It had been intending 22...\texttt{e}c6 which may well have been better.

23.\texttt{h}3!

Hands up those who thought only humans played this type of attack!

23.\texttt{e}b5 24.\texttt{h}4

Sapphire's evaluation... +761.

24...\texttt{e}xa4

TC is not too alarmed... -110... yet!

25.\texttt{e}xh7+

Announcing mate in 8.

25...\texttt{e}f8 26.\texttt{h}8+ \texttt{e}e7 27.\texttt{f}6+ \texttt{d}7

TC also sees the mate here, but we'll play through to the end anyway.

28.\texttt{x}f7+ \texttt{e}e7 29.\texttt{x}f5+ \texttt{e}e6 30.\texttt{h}7+ \texttt{d}8

31.\texttt{f}8+ \texttt{e}e8 32.\texttt{f}6+ \texttt{e}e7 33.\texttt{e}x\texttt{e}7# 1–0

With the Match level again, the next game was drawn and then TC won once more, so leads 4½–3½ coming to game 9.

\textbf{T/CHAMP 2100 (2040) – SAPPHIRE (2150) [A30]}

Game 9, 40/90, 1996/ELH

1.\texttt{f}f3 \texttt{f}f6 2.\texttt{c}c4 \texttt{c}c5 3.g3 \texttt{b}b6 4.\texttt{g}2 \texttt{b}7 5.0–0

\texttt{g}6 6.\texttt{b}3 \texttt{g}7 7.\texttt{b}2 0–0 8.\texttt{c}c3

Both programs leave their Books after this.

8...\texttt{d}6

Sapphire evaluates itself +50 here, and seems quite often to over-estimate its opening advantage.

9.e3

Ross mentions that BCO2 has 9.d4.

9...\texttt{e}c6 10.d4 \texttt{c}xd4 11.exd4 \texttt{d}7 12.d5 \texttt{d}8

13.\texttt{e}e1

13...e5?

13...\texttt{e}6 14.\texttt{a}3 \texttt{e}d5 15.\texttt{e}d5 (15.exd5?? \texttt{e}x\texttt{e}3) 15...exd5 16.\texttt{e}c1 and White has only a small advantage.

14.\texttt{a}3 \texttt{e}e8 15.\texttt{b}5 \texttt{f}8 16.\texttt{g}5 \texttt{c}8

17.\texttt{h}3!

White's play over the last few moves has been quite excellent. The TC evaluation is +180.

17...\texttt{b}7 18.\texttt{x}e8 \texttt{x}e8 19.\texttt{f}3 \texttt{a}6 20.\texttt{d}x\texttt{d}6

\texttt{e}d6 21.\texttt{h}7+ \texttt{d}7 22.\texttt{g}4! \texttt{f}6 23.\texttt{e}4 \texttt{g}7

24.\texttt{a}3 \texttt{f}f7 25.\texttt{a}a1 \texttt{h}6 26.\texttt{f}3 \texttt{a}5 27.\texttt{e}d1

a4 28.\texttt{b}2 \texttt{g}5!?

28...\texttt{h}x\texttt{b}3 29.\texttt{a}x\texttt{b}3 \texttt{e}e8 was an alternative try.

29.\texttt{x}g5 \texttt{x}g5 30.\texttt{f}3 \texttt{d}2 b5 31.\texttt{c}c2 \texttt{e}c5

32.\texttt{c}x\texttt{b}5 \texttt{a}xb3

White's advantage seems to be waning – TC has dropped slightly to +150, and the Sapphire now shows only -96.

33.\texttt{a}xb3 \texttt{e}b5 34.\texttt{d}c1! \texttt{b}4

34...\texttt{e}c7 is met by 35.\texttt{a}3!

35.\texttt{e}c4

Suddenly it is clear that Black is in trouble.

35...\texttt{d}2 36.\texttt{c}1 \texttt{e}1+ 37.\texttt{g}2 \texttt{b}1 38.\texttt{e}e2

Both programs now have White at around +350/400.

38.\texttt{f}b8 39.\texttt{x}c5 \texttt{x}b3 40.\texttt{c}7+ \texttt{h}6

41.\texttt{h}7 \texttt{f}e\texttt{b}8 42.\texttt{e}x\texttt{e}5!

A nice way to finish.

42...\texttt{f}xe5? 43.\texttt{x}e5 \texttt{g}8 44.\texttt{f}f7!

43.\texttt{f}f7

And Black resigned. 1–0

So the T/C 2100 lead has been extended to 5½–3½, and the Sapphire urgently needs to start winning some games. Thus we move on to game 10.

\textbf{SAPPHIRE (2150) – T/CHAMP 2100 (2040) [E12]}

Game 10, 40/90, 1996/ELH

1.d4 \texttt{e}6 2.\texttt{c}c4 \texttt{f}f6 3.\texttt{f}f3 \texttt{b}b6 4.a3 \texttt{d}5 5.exd5

This puts TC out of Book. To its credit, it finds correct moves for quite a while!

5...\texttt{e}xd5 6.\texttt{e}c3 \texttt{d}6 7.\texttt{g}5 \texttt{c}6 8.e3 0–0

9.\texttt{e}d3 \texttt{e}e8 10.0–0 \texttt{g}4

Only now does the Sapphire go out of Book – the position is equal, but the Novag machine has a time advantage now, of course.

11.h3 \texttt{h}5 12.\texttt{f}f5 \texttt{h}6 13.\texttt{h}4 \texttt{g}5!?

Or should that be '?'?

14.\texttt{g}3
If 14.g4 gxh4 15.gxh5 \( \text{Q} \)xh5 then 16.\( \text{Q} \)h1 \( \text{Q} \)g7 17.\( \text{Q} \)g1 is certainly interesting!
14...\( \text{Q} \)xg3 15.fxg3 \( g \)

15...\( \text{Q} \)e7 16.\( \text{Q} \)e1 (16.\( \text{Q} \)d2?! \( \text{Q} \)xe3+ 17.\( \text{Q} \)xe3 \( \text{Q} \)xe3 18.g4 \( \text{Q} \)g6=) 16.\( \text{Q} \)d6 17.g4 \( \text{Q} \)g6 18.\( \text{Q} \)xg6 fxg6=
16.\( \text{Q} \)e5 gxh3 17.\( \text{Q} \)d3

Another incidence of a fascinating evaluation by the Novag computer, which reads +53. I think readers will find that most programs put Black ahead as indicated, does the Travel Champ!

17 hxg2 18.\( \text{Q} \)xg2 \( \text{Q} \)e7
T/C2100 has +40 for itself here.

19.\( \text{Q} \)h3!

Played by the Sapphire now showing +107 figure.

19...\( \text{Q} \)a8??

The enterprising 19...\( \text{Q} \)xe5 was expected by Sapphire which is exactly what it would play itself here and Ross was disappointed not to see it.

Whilst inputting the moves in ChessBase however, and with Fritz3 running in the background, I noted that it also preferred TC's \( \text{Q} \)f8.

Therefore I analysed the next few moves after 19...\( \text{Q} \)xe5?! and Fritz3 showed 20.\( \text{Q} \)xe5 \( \text{Q} \)xe5 21.g4 \( \text{Q} \)xg4+ 22.\( \text{Q} \)xg4 \( \text{Q} \)xg4 23.\( \text{Q} \)xg4 after which White looks to be doing enough to win in this simplified position. So I sided with the 'dull' move (\( \text{Q} \)f8) on this occasion that's until I saw what the Sapphire came up with on its 24th and 25th!
20.\( \text{Q} \)ac1 \( \text{Q} \)e7 21.g4 \( \text{Q} \)g6 22.\( \text{Q} \)xg6 fxg6
23.\( \text{Q} \)xg6+

The forward analysis playing this is 23...\( \text{Q} \)g7 24.\( \text{Q} \)e2.
23...\( \text{Q} \)g7
The T/Camp 2100 also expects the same 24.\( \text{Q} \)e2.

24.\( \text{Q} \)xd5!! cxd5 25.\( \text{Q} \)xf6!!

Quite excellent, and reading +330.

25...\( \text{Q} \)xf6

If 25...\( \text{Q} \)a6 the Sapphire's defensive recommendation 26.\( \text{Q} \)xg7+ \( \text{Q} \)xg7 27.\( \text{Q} \)g6+ \( \text{Q} \)h7 28.\( \text{Q} \)c6 is decisive.
26.\( \text{Q} \)c8+ \( \text{Q} \)f8 27.\( \text{Q} \)e6+ \( \text{Q} \)h7 28.\( \text{Q} \)xf8 \( \text{Q} \)xf8
29.\( \text{Q} \)g6+ \( \text{Q} \)h8 30.\( \text{Q} \)f7+ \( \text{Q} \)xh7 31.\( \text{Q} \)xh7 \( \text{Q} \)a6

At this point both programs are in total agreement and read +540 for White.
32.\( \text{Q} \)h4 \( \text{Q} \)g8 33.\( \text{Q} \)xa7 \( \text{Q} \)b8 34.\( \text{Q} \)h5 \( \text{Q} \)g7

The knight can't be saved. E.g 34...\( \text{Q} \)c6
35.\( \text{Q} \)c7.
35.\( \text{Q} \)xb8+ \( \text{Q} \)h7 36.\( \text{Q} \)xb6 \( \text{Q} \)g5+ 37.\( \text{Q} \)h4 \( \text{Q} \)g7
38.a4 \( \text{Q} \)h7 39.a5 \( \text{Q} \)g6 40.\( \text{Q} \)xg6+

Obvious, but still a nice way to finish the game!
40...\( \text{Q} \)xg6 41.a6 1-0

Having got back to 4½-5½ with this fine performance, the Sapphire suddenly you'd think it knew! - started to take things seriously, and won a couple of rather long and 'dry' games to take the Match. Nevertheless it had been a close call!

\begin{center}
\begin{tabular}{|l|}
\hline
\textbf{Final Score-Table} \\
\hline
\textbf{Sapphire} & \%100\%100\%100\%100\%100\% 9 \\
\textbf{T/C 2100} & \%01\%10\%10\%01\%01\%01\% 7 \\
\hline
\end{tabular}
\end{center}

Whilst one would have expected a slightly bigger winning margin for the Novag machine on the basis of current ratings, I suspect most purchasers of a portable will buy one or the other more on the basis of whether they prefer
- the keyboard (Sapphire) or
- the plug-in (TC2100) style. Either way, these two top their respective classes, and Ross's Matches have confirmed the Sapphire's small 'top portable' strength edge.
A GUIDE TO CHOOSING A CHESS COMPUTER

WELCOME to my 1997 BUYERS GUIDE of Chess Computers, Chess PC Programs and Databases... plus other material which will be of reference value during the year. What are the most important considerations when choosing a Chess Computer? I suggest:

- PRICE
- STRENGTH
- TYPE and QUALITY of BOARD
- RANGE of FEATURES
- EASE of USE
- RELIABILITY
- VALUE for MONEY

Not necessarily in that order!... individual purchasers will have their own ideas!

- PRICE. Self explanatory! The Recommended Retail Prices are shown for each of the listed products in this GUIDE.

- STRENGTH. The most important matter for most people. I give Elo ratings, taken from the RATING LIST featured in every Issue of the bimonthly MAGAZINE, for every Computer reviewed. A guide to the rating methods used can also be found later in this Section of the mag.

Purchasers should aim to buy a Computer or Program which can play to between 100 and 200 Elo above their own standard. This is for your own benefit - you have something to improve up to and your Computer will be a welcome opponent and help for much longer! A Computer that is simply not good enough for you can be left on for an hour a move... and will still not be good enough most of the time!

Whilst most owners will have their eye on maximum strength, the Computers may also be used by someone else in the family who is much weaker or just beginning. A poor Computer cannot play well, but a good Computer can almost always be set to play below its best! All of the Computers in this GUIDE can 'play down' - i.e. be set to deliberately play weaker moves, often called 'Easy' mode. Additionally some have special teaching or training features, and I have indicated this where appropriate.

- Type of BOARD. These and how they work are described in the next Column.

- Range of FEATURES. All the Computers I have reviewed have an excellent range of features. The key details (e.g. number of levels, size and display) are shown. ALL can play fast (from 3 or 5 secs per move) and only make legal moves. Forget the early 1980's!

- EASE of Use. With every Computer reviewed the purchaser can unwrap it, switch on, put the pieces in their places, and immediately start playing as White. Setting levels, getting hints, taking moves back, and turning the board etc are all almost as easy. Where there are more features, of course, there is more to get used to, but the Manuals are generally helpful and the Computers, especially those with a display, can usually be mastered pretty quickly.

- RELIABILITY. I have not recommended any Computer where I have any concerns over reliability. All have a 1 year guarantee... which you are not normally likely to need!

- VALUE for MONEY. This is usually in the eye of the beholder - sometimes it is a simple question of Strength/Price. In a previous GUIDE I categorised the Computers and then chose my own best three in each group. I now think that was too subjective (it also raised the hackles of some distributors!). Now the Categories are the Manufacturers themselves, and I have listed my favourite products from each one. I believe that every Computer or Program earning a place in this GUIDE is good value for money.

BOARD TYPES

1. Portable Peg Sensory.
The pieces each have 'pegs' on the end which are gently pressed into the 'from' and 'to' holes in a plastic playing surface, to register the user's moves. When the Computer makes its move, it signifies the reply by lighting LEDs along the co-ordinates. The user presses the appropriate piece into the 'from' and 'to' holes, thus the Computer knows the piece has been moved correctly. Computers with a display will also show the moves in algebraic notation there. Playing area size will vary from 3"x3" to 4½"x4½".

2. Portable Calculator.
The user enters the algebraic notation of their chosen move into the calculator-style keyboard, and also moves the appropriate piece on the board being used. This may be an integral or separate magnetic set provided for portable use, or the users favourite wood board at home - or you might be playing 'blindfold' of course! When the Computer makes its move it will signify the reply using algebraic notation in the display window, and again the user manually completes that move on the board they are using.

3. Table-top Press Sensory.
These normally have a plastic playing surface,
with plastic playing pieces. To make the moves the user gently presses the 'from' and 'to' squares - using either their finger tip or the playing piece itself. The Computer signifies its moves by lighting the appropriate co-ordinate LEDs. The user presses the 'from' and 'to' squares when moving the piece, thus the Computer knows it has been done correctly. Computers with a display will also show the moves in algebraic notation there. The playing area is usually 8"x8".

4. Table-top Auto Sensory.
These are wood boards and larger than the Press-Sensory type, also using wood felted pieces. To make a move the user simply lifts up the appropriate piece and places it onto its new square! Most Auto Sensory boards have a discreet but clear LED in the corner of each square. Thus when the Computer makes its move it will signify first the 'from' square and then, when the user has lifted up the appropriate piece, the 'to' square. Once the piece has been placed at its destination, the LEDs will go out and it's the users turn to move! Computers with a display will also show the moves in algebraic notation. Playing area size for wood boards varies - normally from 10"x10" right up to 16"x16"!

DEDICATED COMPUTER REVIEW

KASPAROV MODELS

CHAMPION ADVANCED TRAINER
(Morsch).
Portable - peg sensory - 64 levels - saves game - 34 ply take back - simple position evaluation - very nice design - special electronic training and coaching features incl. study 8 Master games and 64 selected positions with 190 page book 'Step-by-Step Program to Chess Mastery' - batteries only - board size 3½"x3½" - 1950 Elo - £79.

TRAVEL CHAMPION
(Morsch)
Portable - peg sensory - 64 levels - saves game - 30 ply take back - display - position evaluation - recommended line of play - clocks - selectable playing and opening book styles - storage compartment for pieces - clip on perspex lid - it might be last year's model but TC is still, deservedly, very popular - batteries only - 7¼"x4½" with 3½" board size - 1975 Elo - £99.

TRAVEL CHAMPION 2100
(Morsch)
Portable - large peg sensory - 64 levels - saves game - selectable playing styles - display - position evaluation - clocks - recommended line of play - 50 ply take back - 35,000 move opening library - selectable book opening styles - electronic coaching features - extended playing range to help beginners - hand held version of GK-2100 and President - batteries only - board size 4½"x4½"! - great to play on - the best peg sensory ever! - 2050 Elo - £129.

EXECUTIVE
(Morsch)
Table-top press sensory - 64 levels - saves game - 30 ply take back - display - position evaluation - recommended line of play - clocks - selectable playing & opening book styles - coaching features - neat, slim design + piece storage compartment and clip-on lid cover - mains or battery - 11"x9" - 1975 Elo - £99.

GK-2000
(Morsch)
Table-top press sensory - 64 levels - saves game - 30 ply take back - display - position evaluation - recommended line of play - clocks - selectable playing and opening book styles - good design with storage compartment for pieces - mains or battery - 16"x11" - 1975 Elo - £139.

GK-2100
(Morsch)
Table-top press sensory - 64 levels - saves game - selectable playing styles - display - position evaluation - clocks - recommended line of play - 50 ply take back - 35,000 move opening library - selectable book opening styles - electronic coaching features - extended playing range to help beginners - good design with storage compartment for pieces - mains or battery - 16"x11" - 2050 Elo - £159.

PRESIDENT
(Morsch)
Wood auto sensory - wood, felted pieces - 64 levels - saves game - selectable playing styles - display - position evaluation - clocks - recommended line of play - 50 ply take back - 35,000 move opening library - selectable book opening styles - electronic coaching features - a lovely board to play on, remarkable value and quality... with strength! - mains or battery - 14"x14" - 2050 Elo - £299.

MEPHISTO MODELS

CHESS SCHOOL
Table-top press sensory - good program - 50 levels - saves game - 5 move take-back - very helpful chess Instructor - mains or battery - 11½"x9" - includes Training Course book and exercises which relate to the School computer - complete with attractive leatherette case - an excellent all-round machine for the keen beginner/hobby player - 1740 Elo - £119.

NIGEL SHORT
(Schroder).
Table-top press sensory - unlimited playing levels - saves game - full game take back and
replay - excellent 2 line graphic display - position evaluations - recommended line of play - clocks - 27,500 position opening book - many fine training features - can be set to a specific grading in range from 1000 Elo upwards - will display all of its opening lines for book learning! - clip-on lid for journeys etc - one set of Staunton playing pieces and one magnetic disc set for travel - a fine all-round computer and deservedly a top seller - mains or battery - 13½"x10" - 2050 Elo - £199.

MILANO PRO (Morsch)
Table-top press sensory - 64 levels - 32 bit RISC processor at 16MHz - game memory save - 200 ply take back and replay - graphic display - position evaluation - recommended line of play - 50,000 unique positions opening book - electronic coaching features - a new machine with Morsch's latest program, and must be a top seller - 13½"x10" - clip-on lid for journeys etc - mains or battery - 2220 Elo - £269

ATLANTA (Morsch)
Table-top press sensory - available March 1997 - 64 levels - 32 bit RISC processor at 16MHz + 512K hash tables - game memory save - 200 ply take back - graphic display - position evaluation - recommended line of play - 50,000 unique positions opening book - electronic coaching features - an even faster version of the Milano Pro, and expected to be very strong - 13½"x10"- clip-on lid for journeys etc - mains or battery - 2300+ Elo expected - £499

LONDON PRO (Lang).
Table-top press sensory - the Genius3 program which beat Kasparov in the Intel Grand Prix - unlimited playing levels - 68020 processor running at 24MHz + hash tables! - saves up to 50 games - full game take back and replay - graphic 2 line display - position evaluation - recommended line of play - clocks - analyses in monitor/player-player mode for playing through games - 47,000 Genius4 unique position opening book - one set of Staunton playing pieces and one magnetic disc set for travel - laptop clip-on lid for journeys - mains only - a genuinely brilliant machine and the top strength press sensory computer - 2365 Elo - £649.

Mephisto EXCLUSIVE Board with a range of INTERCHANGEABLE, UPGRADEABLE programs.
EXCLUSIVE board: high quality wood auto sensory, with wood, felted pieces - mains only - 16"x16" - good choice of modules for varying playing strengths and features - swap between modules for the difference in cost - all prices include board, playing module and display.

[1] with MM6 (Morsch).
A later version of the Kasparov PRESIDENT program, but paying the extra £50 gets a bigger board and 'buys into' an upgradeable future! - 32 bit H8 RISC at 10MHz - graphic display - 64 levels - 35,000 opening book EXCLUSIVE + MM6 2080 Elo - £449

RISC1 was basically the Polgar but with a 14MHz RISC processor + hash tables, making it 5 or 6 times faster - the RISC2 is an upgrade program which gives extra strength for those aiming really high! - same graphic display evaluations - forward analysis - clocks - view opening book - unlimited levels etc EXCLUSIVE + RISC2 2335 Elo - £845.

[3] with BOSTON (Morsch)
The Milano Pro program in fine wood board - and running at 20MHz! - all other features as Milano Pro, except mains only. Available March 1997. EXCLUSIVE + BOSTON est. 2230+ Elo - £549.

[4] with NEW YORK (Morsch)
The Atlanta program in the wood, auto-sensory format - running at 20MHz! - all other features, incl 512K hash tables, as per the Atlanta, except mains only. Available March 1997. EXCLUSIVE + NEW YORK est. 2325+ Elo - £669.

The renowned Genius3 program which beat Kasparov in the Intel Grand Prix - 68030 processor at 33MHz + hash! - saves up to 50 games - full game take back and replay - graphic 2 line display - position evaluation - recommended line of play - 3 playing styles - clocks - analyses in monitor/player-player mode for playing through games - 47,000 Genius4 unique position opening book (user extendable) - mains only EXCLUSIVE + LONDON 2420 Elo - £1395.

SECOND-HAND modules are sometimes available and offer a small saving (you can hardly tell if a module is second-hand, it's the board which reveals that!). My ratings for some of the best buys for readers who may get the chance to purchase one are:- MMS/POLGAR 2025 Elo LYON/VANCOUVER 68000 2170 Elo LYON/VANCOUVER 68020 2220 Elo LONDON 68000 2240 Elo LONDON 68020/12 2300 Elo
NOVAG MODELS

JADE2 (Kittinger).
Portable - peg sensory - 56 levels - saves game - 74 move take back - twin display - position evaluation - recommended line of play - clocks - mains or battery - a well-designed and compact 4”x6” - board 3” square may be slightly small for some fingers and eyes, but good strength for price value - H8 processor - 2045 Elo - £99.

SAPPHIRE (Kittinger).
Portable - keypad entry - 6” square playing board with magnetic disc pieces - unlimited levels - 64 game storage - full take back - 36,000 position opening library - 4-digit display with scrolling option - position evaluation - recommended line of play - clocks - mains or battery - the strongest portable so far! - 26MHz H8 processor - small hash table system - quite tricky playing style - vinyl carry bag - 2155 Elo - £199.

The keyboard design of the Super VIP to Sapphire range is unique for 1600+ Elo computers. I note here my ratings for its pre-decessors should a reader get the chance to buy one second-hand!

RUBY 1950 Elo
SUPER VIP 1760 Elo

ZIRCON2 (Kittinger).
Table-top press sensory - JADE2 program - 56 levels - saves game - 70 move take back - twin display - position evaluation - recommended line of play - clocks - mains or battery - attractive ’clean’ board - 11”x11” - H8 processor - 2045 Elo - £139.

EMERALD CLASSIC (Kittinger)
Table-top press sensory - Novag 'dropped' the Emerald when the Zircon->Zircon2 upgrade came out, but have now applied the same developments to the Emerald to produce the 'Classic' - 56 levels - saves game - 70 move take-back - display - mains or battery - 15”x11” - H8 processor - 13,000 position opening book - est. 2070 Elo - £149.

DIAMOND (Kittinger).
Table-top press sensory SAPPHIRE program - unlimited levels - 64 game storage - full take back - 36,000 position opening library - 4-digit display with scrolling option - position evaluation - recommended line of play - clocks - 26MHz H8 processor - mains only - small hash table system - 2155 Elo - £249.

AUTO 'UNIVERSAL' BOARD
Novag's very nice, 81 LED wood AutoBoard will work plugged in to many of their own models, plus PC connection when running Dave Kittinger's WCHESS. Particularly nice for playing the SAPPHIRE at home! - £299.

TV INTERFACE
For use with Sapphire and Diamond to enable connection to a TV for large and colour screen display of board etc. As a result of a price increase during 1996 I would recommend folk look at the Universal Board option! - £149.

OTHER MODELS

TASC R30-1995 version
Wood auto sensory, with piece recognition - a really beautiful board and easy to use in every way - wood felted pieces - unlimited levels - saves game - select from 5 playing styles - big screen display housed in separate unit - position evaluations - clocks - display of board position - recommended line of play - full take-back and replay - 200,000 move opening book - mains only - 16”x16” main board - RISC processor at 30MHz - the 1995 upgrade is on 2410 Elo - £1249.

TASC R30-1993 version rates at 2360 Elo.

The TASC board was temporarily unavailable during much of 1996. A new design, scheduled for December 1996, will offer the standard 64 LED system at the above price, or an 81 LED system for £50 extra.

Fidelity CHESTSTER.
Table-top press sensory - an extended voice model which is both serious and fun with 345 phrases to coach, teach... and amuse - don't blunder a piece while anyone else is within listening distance! - a serious machine on its normal levels as it uses the Par Excellence/2100 program - ideal also for visually handicapped players who will hear the computer moves given in algebraic notation! - 1880 Elo - £169

TIGER
Portable key-in - the Fidelity Travelmaster 'converted' to an easy-to-use calculator style! - 64 levels - game save - display - position evaluations - clocks - recommended line of play - program almost identical to Travel Champion - 1960 Elo - £69

The TIGER, which can be used on its own as a portable with disc pieces provided, can be supplied with a nice wood BOARD, making this a multi-purpose combination. Board and pieces are made in a rich wood 15½”x15½” - pieces are felted (3” king) - board contains drawer which can house the Tiger computer and pieces. Use...
the board for your own games, or when playing against the computer! Board and Tiger together £93; Board on own £34.

PC SOFTWARE

Comparing chess computer programs is NOT an easy task -

1. there are so many.
2. they tend to get almost annual upgrades so that what is always intended to be 'latest' information sometimes doesn't last long!
3. just as each of us has our own favourite players and preferences for playing styles (e.g. Tal or Petrosian, Kasparov or Karpov), we can also have strong opinions on the various programs and their styles. Some will prefer the sound, solid feel of the knowledgeable Genius program; others the combative and sometimes very tricky play of HIARCS, still others would go for the fast tactical abilities of Fritz, or the all-round character and strong play of Rebel!

All of the software in this review is for IBM compatible PCs, the minimum requirement is a 386, but a 486 or Pentium is recommended. Some are Windows or CD-ROM only, as noted.

The software we review is for serious use! meaning that the main quality is not related to flashy graphics, a 3D board or crazy sound effects etc. All of the programs do have good, clear, easy to see chess boards and analysis detail, of course. But top of the agenda for these programs has been maximising strength and ensuring that the specific analytical features wanted by the more serious chess players have been provided, all running under easy to use feature systems, so that the chess takes priority.

After discussing our favourite programs the article concludes with two CHARTS. The first shows the ratings on Pentium/100 machines for each program. Where I believe a new version is imminent, but user-testing has not yet or only just started, I have shown the known rating for the current version and signified uncertainty over the 'new version' rating by inserting 'est'.

My second CHART compares the difference the various PC PROCESSORS are likely to make to a program's rating!

GENIUS by Richard Lang. Current: v4, due out: v5.0. Acknowledged as the one the rest have to catch and beat (until recently a Genius version had topped every PC Rating List in our Magazine for over 2 years). The Windows Genius5 will have on-line help; multiple, moveable and re-sizeable windows for boards (2D and 3D), analysis etc; choice of piece sets; user can add personal game comments; ChessBase and PGN files fully supported. The news on the opening book size is 'much bigger'. Richard's ally, Ossi Weiner, gives a rating expectation at 40-50. The CD-ROM will contain Genius3 for Windows, Genius5 for DOS, Genius3 for DOS and an 80,000 game Database. The DOS playing program will miss out on the Windows graphics quality and printing features, but enables maximum hash. A cut-down disk version containing just Genius5 for Windows will follow, almost certainly pre-Christmas 1996. £89.

HIARCS by Mark Uniacke. Current: v4, due out: v5.0. Acclaimed for its enjoyable and human-like style of play. H5 uses high res. VGA and Super VGA graphics. HIARCS is an MS-DOS program for maximum hash and speed, but with PIF and Icon files provided for Windows; EPD and PGN file support; new 130,000 opening book; analysis features incl. automatic 2nd and 3rd best moves evaluated simultaneously on request. Will import & export ChessBase files. Learning feature. Can set up board positions and play 'shuffle' chess! I do most of the opening book for HIARCS (so am biased!)... but this means I get to test 'latest versions'... improved hash tables and move ordering method have resulted in a good speed increase in all types of search, even though HIarc5 contains more chess knowledge than ever! Expect a worthwhile improvement of 50 Elo; on disk. £89.

M CHESS PRO by Marty Hirsch. Current: v5, due out: v6.0. Another with a very competitive playing style (occasionally too much sol) and a very large opening book (approx. 300,000 positions claimed) in which the Tournament book seems heavily geared for play against other programs. I'm not happy about this - MCP seems to be aimed for playing other computers rather than for use by the folk who buy it, such as you and me! However MCPpro5 won the WMC Champs and topped my ratings briefly during 1996... until other programmers re-acted to the specialised opening traps, since when it has slipped a little. £89.

REBEL by Ed Schroder. New version just out - v8.0 - has a good, positive feel and style, and early results indicate that Schroder has made a good strength jump upward! Feature improvements include: VESA support graphics (for more speed); PGN, ChessBase and NICBase file support; 5 playing styles; 135,000 position opening book; can convert and use Genius and Fritz books, and also can create User Books from game databases; extra 'specialist' books available; user can add own comments to games. New 'War Room' feature for multiple line
analysis; graphic overview aids after-game analysis. 5,000 Grandmaster-games database included. Can play 4 games Simultaneously. Runs under DOS, Win3.1 and Win95; no installation limitations; on disk. £89.

**FRITZ** by Franz Morsch. Current: v4.0. A brilliant tactical program, Fritz is frequently the fastest to sort out the most complicated combinations and find any deadly tactical chances which are present in a position. Chess knowledge and endgame play have been greatly improved since v1. Coming from the ChessBase stable, Fritz is still (just) "no.1" for adding notes and variations, game storage, game and quality diagram printing. Fritz, with a special opening book, beat Deep Blue, Star Socrates (and the rest!) to the 1995 WCC title. It always feels and plays 'above its rating' if you let it get into an open game, but actually it is not quite up with the leaders all round. Windows and CD-ROM only. £89

**W CHESS** by Dave Kittinger. Current: v1.03 or 1.06. A strong tactical program, full of tricks and subtleties. Has had some good results against humans, notably in a pre-launch version in the Harvard Cup against American G.M's, but has fared less well since. £79.

- A new CD-ROM version by Kittinger, under the name **POWER CHESS**, is just out, running under Win95 only. Beta testers on the Internet have reported good impressions on strength, but disappointment at the 'sparse' range of features and hints of 'faults' needing to be sorted out.

**VIRTUA CHESS** by M F Baudot, available on CD-ROM. Virtua has not caught on at all, either in Sweden or Britain, so is largely untested. On a Pentium its grades in Aegon suggest it may not be up with the best, and its showing amongst mainly amateur programs in the 1996 WMCC was a disappointment. £79.

**SHREDDER** and **FERRET**, despite coming 1st and 2nd in the 1996 World Micro Computer Championships, remain amateur and non-commercial programs. The value of their success must be put into perspective: Genius, Hiarc4, MChess Pro, Rebel, ChessMaster, W Chess and Kallisto were non-participants!

**CRAFTY**, by Robert Hyatt, is also a non-commercial program. It can be downloaded privately via the Internet for decoding and running under MS-DOS. It has a good Blitz record on the 'net against American players, and did well in the 1996 WMCC.

**NIMZO3** is a strong, tactically fast program, which has now appeared on our rating lists. On CD-ROM only, it appears to be a little behind the market leaders, and that before the latter's 1996 upgrades all emerge! £89.

**CHESSMASTER 5000** by Johan de Koning gives me a real problem about how to report on it! Yes, it's pretty strong and possibly very close to the top 1995 versions. It's also quite cheap at around £39 or £49 - depends which shop you get it from. However there are admitted time control, evaluation, PGN and other 'bugs' in the program, and though a promised correction 'patch' has just been released, some have reported that it still doesn't work properly?! I'd recommend serious users spend a bit more and stick with the known quality products.

**ALL the TOP PROGRAM RATINGS**

The 'standard' is now probably a Pentium at 100MHz with 8 or even 16MB MB RAM. Therefore the gradings are based on this configuration. A second Chart will consider what differences other processing power set-ups are likely to make.

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<thead>
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<th>Program</th>
<th>Pentium/100 rating</th>
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<tbody>
<tr>
<td>Rebel8</td>
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<td>Hiarc5</td>
<td>2535 est</td>
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<td>Genius5</td>
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<td>Gandalf2.1</td>
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PC's and PROCESSORS compared

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<th>PC and Processor</th>
<th>Add/Subtract</th>
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<tr>
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<td>386DX-5X/33</td>
<td>-200</td>
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</table>

What if your Computer is... faster :-) or slower :-( ? What difference does that make to the estimated grading? The Table alongside will guide you nicely on that!

Databases for PC

CHESSBASE FOR WINDOWS
During the past few years ChessBase has steadily developed into an outstanding DataBase system for storing, studying, comparing and... enjoying chess games. Massive collections of great games, both historical and contemporary, are included at the time of purchase, and there are constant Tournament additions on both disk and CD-ROM.

The latest release, ChessBase for Windows v1.2, has reached new standards for completeness and genuine ease-of-use throughout a massive range of features and operations. Beautiful, high quality graphics ease the strain of working in front of the screen - simple icons for fast swapping between activities - powerful ECO openings classification - search multiple databases simultaneously for openings, themes or material - establish standard positioning of pieces in each opening - read and generate PGN format files - merge databases - two or more board windows can be viewed side-by-side or kept in filing card fashion - moves, variations and annotations displayed in full alongside board window - send games to printer in figurine notation with commentary symbols and high quality diagrams - or save file to a Desktop Publisher and prepare to create a personalised layout out of your own Magazine!

- Basic Package with 235,000 games, 1,000 annotated. CD or disks £225.
- Professional package with 300,000 games, 20,000 annotated. CD or disks £325.
- Mega package with 450,000 games, 20,000 annotated, Alpha Utility, Endgame CD's. On CD only £449.

- Extras: FRITZ analysis module. The perfect companion (a must for most of us!) to use within ChessBase - obtain high powered analysis and evaluation of current position as you play through or enter a game - this special FRITZ for

ChessBase module can show top-ranked, top two, top three etc move recommendations.

FRITZ3 for ChessBase analysis module £45.

- N.B the Fritz analysis module 'only' analyses... it won't play as an opponent. However the CD playing program FRITZ4 will work within ChessBase in the same way, as well as being a playing program, so that may be the better way to go for most folk.

BOOKUP for Windows
Whilst BOOKUP can be used as a DataBase for games storage, it is not really intended to be a competitor to ChessBase as its main purpose is for the close study and learning of openings.

'Books' (on disk) are available for training and studying of specific openings, and the play-frequency of all theory moves are shown alongside the board position. Each disk-book has copious notes discussing main line theory, strategical concepts, traps etc. In addition users can create and build their own books or load-in PGN files of games in specific openings. At every point the owner can add his own notes and ideas, so personalising the whole process.

It now comes with the ZARKOV analysis module built-in, for on-screen analysis and evaluations. Files can also be exported to Zarkov as well as HIARCS, REBEL8 and GENIUS, and any of these strong programs can prepare overnight, at any chosen time control, their valuable analysis and evaluations for the specified positions, and the results can be imported back into the BOOKUP file to create a permanent record.

And now to back-solving which is a particularly priceless part of BOOKUP! For complete games with 1-0, ½-½, 0-1 scores (e.g from a PGN file) or from positions evaluated by HIARCS or GENIUS, BOOKUP can 'back-solve' the end evaluations to value each line at the start of its variation, thus enabling the user to assess at their root positions which lines are winning/equal/losing for either side! Therefore which lines are best for playing and which may need further research seeking possible improvements, TN's etc for use in actual play. The result of all this research can be kept on file as part of the 'book' as well as being sent to a printer for output in ECO-type format.

- BOOKUP for Windows £159 (on disk, and includes one free BookUp 'Book on disk').

PC AUTOBOARDS

Play your chess on a beautiful wood auto-sensory BOARD whilst still harnessing the full power and features of your PC and chess SOFTWARE. A PC BOARD can be connected to the serial port of any IBM PC. Game moves are then made on the auto-sensory PC Board. The advantages of playing etc on a 'proper' board are obvious - for the sheer pleasure of it, reducing eye-strain and, for club/tournament players, avoiding swapping from a screen used during preparation to a full-sized board in real play.

Tasc SMARTBOARD

The board is exactly the same as that of the R30 so users get piece recognition as well as an auto-sensory system. 16"x16" board. £399.

- The SMARTBOARD was temporarily unavailable during much of 1996. A new one is scheduled for December 1996, with a choice of 64 or 81 LED's (the latter costs an extra £50).

Mephisto/Kasparov AUTO BOARD

A real beauty. Fast, automatic access direct from within Rebel and Genius programs! Size 15"x15". £299.

- Please tell us which PC playing program/s you will be using with your PC Board so that we can advise which Board you will need to ensure compatibility (At present I believe that Genius, HIARCS, Rebel, MChess Pro, Fritz, Chessica, W Chess, and Kallisto are all catered for by at least one of the boards).

GRADING CHESS PLAYERS AND COMPUTERS

What is a GRADING ?!

The British Chess Federation (BCF hereafter) measures a player's ability by comparing their results against other rated players in official Tournaments and Matches. An average but regular Club player will have a grade of between perhaps 130 and 150 BCF.

To complicate matters the rest of Europe and most other countries use the Elo scale (invented by Professor Arpad Elo, and also used to grade table tennis players incidentally). There is a simple mathematical formula to convert a BCF Grade to Elo, and vice versa:-

\[ \text{(BCF x } 8\text{)} + 600 = \text{Elo.} \]
\[ \text{E.g } 175 \text{ BCF } = (175 \times 8) + 600 = 2000 \text{ Elo} \]

\[ \text{(Elo-600)/} 8 = \text{BCF.} \]
\[ \text{E.g } 2000 \text{ Elo } = 2000-600=1400/8 = 175 \text{ BCF} \]

There is another complication! In America they use a calculation method very similar to the Elo system, but all their internal gradings of Computer results in Tournaments and Tests seem to come out 120 higher than our BCF/Elo figures!

So purchasers have to check twice what they read on an advert or the computer's box. If it says 'graded 2400 in official USA test' or mentions USCF, deduct 120 straight away. If it mentions Blitz or Active chess there's more to deduct.... read on!

The Grading Guide classifies various playing standards with a range of Gradings for the British and Elo.

### Grading Guide

<table>
<thead>
<tr>
<th>Player 'Standard'</th>
<th>BCF</th>
<th>Elo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner</td>
<td>25-45</td>
<td>800-960</td>
</tr>
<tr>
<td>Occasional player</td>
<td>50-70</td>
<td>1000-1160</td>
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<tr>
<td>Good Hobby</td>
<td>75-95</td>
<td>1200-1360</td>
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<tr>
<td>Club</td>
<td>100-120</td>
<td>1400-1560</td>
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<td>Club Team</td>
<td>125-170</td>
<td>1600-1960</td>
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<tr>
<td>County Team</td>
<td>175-205</td>
<td>2000-2240</td>
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<tr>
<td>Master</td>
<td>210+</td>
<td>2280+</td>
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<tr>
<td>I.M.</td>
<td>225+</td>
<td>2400+</td>
</tr>
<tr>
<td>G.M.</td>
<td>245+</td>
<td>2550+</td>
</tr>
<tr>
<td>Gary Kasparov</td>
<td>275</td>
<td>2800</td>
</tr>
</tbody>
</table>

Who will win? - by how much?!

The BCF system is particularly easy to follow when we try to forecast the likely result of, say, a 10 game Match between 2 players. Our Chart alongside shows these expectancies.

After a Match (or even 1 game!) has been played, if the result is different to that expected, the respective players' BCF Gradings will be adjusted up or down accordingly.

Computer Gradings

The gradings shown for the Computers in this Guide are all taken from the Rating List in our regular Magazine, and represent each program's results at accepted and popular time control settings from Game in 60 mins to 40 moves in 2 hours.

Our team of readers, and Countrywide Computers where I work most afternoons, not only do and organise many Computer vs Computer Matches, we also enter Computers into official
Tournaments with live human players (!), and collate all these and other results from around the world to maintain a COMPUTER RATING LIST of reliability and accuracy.

**Fast Chess!**

The ratings we give in our Magazine are for 'Tournament' chess from G/60 through to 40/2, but a Computer playing against humans in an Active Tournament (Game in 30 mins) or a Blitz Tournament (Game in 5 or 10 mins) should always grade higher, as shown in the next Table. Although the standard of the chess played usually drops a little at fast chess, the Computers nearly always get higher gradings! Why? We believe that the Computers are less prone both to blunders through time pressure, and mental exhaustion through playing many consecutive games, compared with their human opponents.

<table>
<thead>
<tr>
<th>COMPUTER IMPROVEMENTS @ Fast Chess</th>
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<tbody>
<tr>
<td><strong>Time Control</strong></td>
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<tr>
<td>Tournament Chess</td>
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<tr>
<td>Speed/Active Chess (G/30)</td>
</tr>
<tr>
<td>Blitz Chess (G/5 or 10)</td>
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</tbody>
</table>

Therefore if you see 'claimed gradings' based on Blitz or Speed Chess, remember to make an appropriate deduction (just like the -120 from USCF) to reach a truer Elo figure for your prospective purchase!

**MEET THE PROGRAMMERS**

**M F Baudot & Jean Christophe Weill** (France). PC program VIRTUA chess.

- 3rd = @ WMCC 1995. 6 = @ WMCC 1996.

**Don Dailey/Larry Kaufman** (US). PC programs REX and SOCRATES.

- 1st ACM Tourn. 1993. 1st @ Harvard Cup 1994. 2 @ WCC 1995.

**Chirilly Donninger** (Austria). PC program NIMZO; also the CHESS232 PC Board and AUTO232 system.

- 3rd = @ WMCC 1993. 3rd = @ WMCC 1995. 3 @ WMCC 1996.

**Marty Hirsch** (USA). PC programs M CHESS and M CHESS PRO.

- 3rd @ Harvard Cup 1994. 3rd @ Aegon 1995. 1st = @ WMCC 1995.

**Feng Hsing Hsu**. Main-frame program DEEP THOUGHT/DEEP BLUE.

- 3 = WCC 1995. Lost 4-2 to Gary Kasparov in Match 1995. Despite these reverses is almost certainly 10 BCF/80 Elo above any PC program, even on a Pentium Pro.

**Bob Hyatt** (USA). Main-frame program CRAY BLITZ; PC program CRAFTY (non-commercial).

- 3 = @ WMCC 1996.

**Julio Kaplan**. Kasparov SIMULTANO and many Saitek models, e.g TURBOSTAR.

**Dave Kittinger** (USA). All Novag models for many years, incl. current JADE2, ZIRCON2, SAPPHIRE and DIAMOND. PC program WCHESS (and Power Chess?).

- 1st @ Harvard Cup 1994. 1st @ Uniform Platform 1994. 5th @ Aegon 1995.

**Johan de Koning** (Holland). Saitek RISC 2500, Mephisto MONTREUX, Tasc R30. PC programs THE KING, CHESSMASTER 4000/5000.

- 1st @ Aegon 1993. 1st @ Welser 1993. 2nd @ WMCC 1993. 2nd @ Harvard Cup 1994. 6th = @ WMCC 1995.

**Richard Lang** (England). Mephisto MONTREAL, BERLIN/BERLIN PRO, VANCOUVER, GENIUS and LONDON. PC programs PSION and GENIUS.

- World Champion 1st or 1st = @ every WMCC 1985-1995! Also famed for 1½-½ victory over Gary Kasparov in Intel Active Tournament, London 1994.

**Stefan Meyer-Kahles** (Germany). PC program, Amateur status, SHREDDER.

- 1 @ WMCC 1996.

**Bruce Moreland** (USA). PC program, Amateur status, FERRET.

- 3 = @ WMCC 1995. 2 @ WMCC 1996.

**Franz Morsch** (Holland). Kasparov GK2000/2100, TRAVEL CHAMPION and PRESIDENT, Kasparov BRUTE FORCE, and new Mephisto models MILANO PRO, ATLANTA, BOSTON and NEW YORK. PC programs QUEST and FRTIZ.

- 1st @ WCC 1995. 6 @ WMCC 1995. Shot to fame in 1994 when FRTIZ tied 1 = with Gary Kasparov in major International Blitz Tournament. 6 = @ WMCC 1996.

**Ed Schroder** (Holland). Mephisto MM5, POLGAR, MILANO, NIGEL SHORT, RISC 1MB. PC programs GIDEON and REBEL.

- 1st @ WCC 1992. 3rd @ Welser 1993.

**Dan & Kathe Spracklen** (USA). Most Fidelity models incl. PAR EXCELLENCE, MACH2/3/4. Also Kasparov SPARC.


**John Stanbeck**. PC program ZARKOV.

**Mark Uniacke** (England). PC program HIARCS (also available on MAC).

- World Amtr Champ '92, World Software Champ '93. 1st @ Uniform Platform 1993. 1st @ Aegon 1995. 6 @ WMCC 1995.

Note: WCC = World Computer Championships

WMCC = World Micro-Computer Champs
(Nearly) All-time RATING LIST!

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