Rybka Stripped Of All World Titles

Vasik Rajlich Banned For Life
By The ICGA

IN THIS ISSUE!

2 ADVERTISING

3 NEWS, RESULTS, INFO, REPORTS + NEW PRODUCTS
FROM AROUND THE WORLD, INCL.
- ICGA'S RYBKA JUDGMENT - ECF WINNERS - PAYING YOUR SUBS! - FRANK HOLT, A LESSON FOR ALL - NEW PRODUCTS: RESULTS FROM TCEC TOURNYS, FRANK HOLT, CHESSWAR 16 ETC.

8 DAVID LEVY’S ICGA REPORT IN FULL ON THE RYBKA AFFAIR

11 NEW SOFTWARE & UCI UPDATE

12 GEBRUIKERS 22!
- ROB VAN SONG’S REPORT AND PHOTOS, ERIC’S GAME ANALYSIS OF ANOTHER GREAT GEBRUIKERS EVENT!

26 MARK UNIACKE ON THE CONTINUING DEVELOPMENT OF Hiarcs

28 DAVE WIEKRYKAS IS BACK!!
- STOCKFISH HUMBLED - HIS LATEST GREAT GAME ANALYSED

30 BILL REID’S TOUGH POSITIONS
- WE CATCH UP WITH BILL’S LATEST WONDERFUL TEASERS, AND EMBARRASS SOME OF OUR TOP PC ENGINES!

32 EXCELLENT NEW BOOK REVIEWED:
- BEYOND DEEP BLUE!!

35 LATEST SELECTIVE SEARCH, CCRL & CEGT DEDICATED & PC RATINGS

SUBSCRIBE NOW to get REGULAR COPIES of the LATEST ISSUE and RATING LISTS mailed to you as soon as they come out!

£24 per YEAR for 6 ISSUES by mail in UK, EUROPE addresses £30, elsewhere £34. Send Cheque, Cash or use PayPal from my website!

FOREIGN PAYMENTS, CHEQUES must be in POUNDS STERLING. If you send CASH it should be registered, best to use PayPal.


ARTICLES, REVIEWS, or GAMES sent in by Readers, Distributors, and Programmers etc. are always welcome.

SELECTIVE SEARCH is produced by ERIC HALLSWORTH

All CORRESPONDENCE and SUBSCRIPTIONS please to:

Eric Hallsworth, 45 Streatham Road, Wilburton, Cambs CB6 3RX.
Or **NEW** E-MAIL address: erichallsworth@gmail.com

The SELECTIVE SEARCH website: www.elhchess.demon.co.uk
CHESS SOFTWARE FROM
COUNTRYWIDE COMPUTERS

Chess software from ChessBase is now even stronger and faster than before, whilst retaining the same cool features – plus many enhancements – that have made their software the most sought-after chess programs for players of all strengths and abilities.

Whether you are a beginner, club player or professional – these programs have everything you could want including: automatically adjusting playing strength, coaching functions, explanation of positions, extensive analysis features and a database of well over 1.5 million games.

The completely redesigned interface of the current generation of programs gives you instant access to all the most important functions. This means quicker and more intuitive navigation through the software’s features.

Those with high specification machines will be glad to see improved engine management. 64-bit UCI engines can also now use more than 4GB RAM.

Multi-processor versions of the software, those with the prefix "Deep", allow you to run the software on a PC with multiple processors/cores, harnessing your additional hardware to speed up its calculations. This is particularly useful when analysing large numbers of positions, researching new moves in an opening variation, or analysing a single position in detail with a number of candidate moves. "Deep" versions of ChessBase software are roughly 75-120 Elo points stronger than the regular versions running on the same hardware.

Junior 12
3007 Elo
Aggressive and dynamic style of play

Hiarc 13
3013 Elo
HIARCS is famous for its human-like playing style

Fritz 12
2988 Elo
Solid style with good positional understanding

Rybacka 4
3116 Elo
Strongest commercial playing engine

Shredder 12
3007 Elo
Active style - much more positional than tactical

All chess programs (single-processor versions) on this page just £40 (RRP £44.95).

All "Deep" chess programs (for multi-core PCs) just £80 (RRP £89.95).

Postage to UK addresses £2.50 (overseas enquire).

Ratings source: CCRL based on: 40 moves in 40 minutes on Athlon 64 X2 4600+ (2.4 GHz).

To order call 01353 740 323 or order online - www.countrywidecomputers.com
Welcome to another issue of Selective Search... no. 155. If your sub. is due for renewal, please subscribe again! There will be at least 6 more issues of the magazine!

The label on your envelope shows the number of the last issue you will receive of your current subscription, so it's easy to check that, as well as make sure it's been updated after you've made a renewal payment!

I cannot take credit card renewals now, but I have organised a PayPal account for myself (erichallsworth@gmail.com). You can access it at my website and renew your sub. quite easily.

CHESS: NEWS SECTION

THE ICGA'S RAJLICH & RYBKA JUDGEMENT

We have to start here as other comments in the magazine may not make much sense otherwise.

Readers will be well aware of the events of the last few months, and the accusations made against Vasik Rajlich and Rybka by many competing programmers, all culminating in a tribunal held by the ICGA (International Computer Games Association) headed up by David Levy.

The result of the tribunal was a unanimous finding that Rybka is a clone of Crafty and Fruit, and that Rajlich is guilty of plagiarism. A full copy of the statement by the ICGA follows this News section, and some of the ICGA rules, which members must agree and adhere to, are shown making clear the reasons for the decision.

Rybka is stripped of all its World Championship titles which are now awarded to whichever programs would have won without Rybka's presence, and Rajlich is banned from all ICGA events for life.

SELECTIVE SEARCH

As I said in my notes in the last 2 issues about the future of the magazine, for the moment nothing changes, keep subscribing!

Indeed a sincere thanks to everyone who took up on the idea to subscribe through to issue 160! I now intend to keep the magazine going until issue 161 at least, but then before then will make up my mind whether to go for longer, once I see if I lose too many subscribers through not having a credit card access.

PAYING YOUR SUBSCRIPTION

For the moment all subscriptions will have to be paid either...

- by cheque!
- or you can send cash through the post but you must register it, or do whatever alternative your country requires for sending cash if you are not in the UK. I know that cheques can be quite difficult for my readers abroad as you have to add an amount of around £10 to include the Bank charges in the UK which apply to foreign cheques even when made out in £ sterling!

- by PayPal. If you have a PayPal account you can use it to send your subscription to [erichallsworth@gmail.com] or, even easier, go to my website [www.elchess.demon.co.uk] and click on Pay Subscription by PayPal in a central box near the top, read the instructions there and then click on the 'Donate' button!

ECF WINNERS

Luke McShane, who regularly used computers and chess engines in his early days, in fact I sat next to him when he was still in short pants when I was operating a Nigel Short, and we were in opposition to GM Ian Rogers in a Blindfold Simul... the Nigel Short and Luke both lost.

Anyway I've always followed his progress with interest and he has just won the prestigious ECF Player of the Year award for 2011. Luke is currently England's 3rd ranked player with a 2667 rating, behind Michael Adams and the real Nigel Short, after finishing 1= with Anand and Carlsen in the brilliant London Chess Classic, and also winning the B Group Wijk an Zee tournament. Well done Luke!
Frank Holt - A Salutary Lesson for Us All!

Frank, as I've reported before, does seem to have some unique problems with his various chess programs! Interfaces that work one day won't work next day, engines will work under some ChessBase Interfaces but not others, often his display wont show analysis during engine-engine matches.

A recent e-mail opened, "Dear Eric, an unusual occurrence has happened that I would like to tell you about! 'Not another one I hear you cry'"

Frank went on to say that his whole PC had closed down during one computer chess session - yes, the Computer had just turned itself off. Frank restarted the computer and the analysis he was doing, but it switched off again. After a bit of a think about this Frank switched on again and rebooted into a different Fritz version, restarted his work and everything went okay. So he sent me the details of which Fritz versions and Interfaces were working okay, and which one was causing his PC to switch itself off. I was considering printing this in the magazine in case anyone else had ever had a similar problem.

But on 20th June while I was still preparing to do this, another e-mail arrived.

"Although I said previously 'Everything is okay now: It's happened again, the Computer has turned off once again??'"

"I decided to put the quad in it's case and take it back to the Supplier. Knowing you have a Quad now, I thought you would be interested in my story

'Part 2'. Whilst trying to push the quad into the case, I noticed it was all white on the outside of the case. So I thought I would investigate this whiteness and put the quad back onto the table. As luck would have it, it was now upside down.

I thought at first there was white cocoons all over the three fan grills, covering up the small mesh holes. But no! it was the accumulated dust that had been drawn in during its lifetime.

So it's three cheers for the PC's 'Fail-safe system', trying to tell me it was overheating each time it turned itself off. No wonder I had a job to restart it again. So it's not the Fritz Interface after all.

How do I know it's okay now? I have just played an Engine-Engine game all guns blazing ,Deep Rybka 4 -Houdini 1.5a, Ponder on, Tournament Level 40/2 hours 20/1 hour G/30 minutes.

'Adage': always vacuum the Top and the Bottom of computer."

Bravo Frank for "coming clean" on the real cause of this problem!!

Actually the game he sent was interesting too, the Rybka evaluations show much higher than Houdini's from around move 30, by 35 the difference is becoming silly, at 40 it's crazy, and at 42.... you should play through this, I've left some of the key evaluations and times in.

Deep Rybka 4 x64 - Houdini 1.5a x64
Opening D11. PC Quad 17 2.66Ghz.
Time control 120/40+60/20+30

1.d4 d5 2.c4 c6 3.Nf3 Nf6 4.e3 Bg4 5.Nc3 e6 6.h3 Bh5 7.g4 Bg6 8.Ne5 Nbd7 9.Nxg6 hxg6 Both last book move 10.g5 0.24/21 3:39...Ng8 0.02/23 8:11 11.cxd5 cxd5 (exd5) 12.e4 dxe4 13.d5 (Bg2) 13...Qb6 14.dxe6 Qxe6 15.Qa4 Ne7 16.Be3 (Bc4) 16...Re8 17.Bxa7 (0-0-0) 17...Nc6 18.0-0-0 Bd4 (Ra8) 19.h4 f5 20.Bd4 (gx6) 0.68/18 3:19...0-0 0.34/22 5:12 21.Kb1 Re8 22.h5 gxh5 23.Rhx5 Nxd4 (Nf8) 24.Rxd4 Bxc3 (g6) 25.Rxd7 Be5 (Bb4) 26.b3 f4 27.Rh1 (Qb5) e3 28.fxe3 fxe3 29.Bd3 g6

30.Rxb7 (Be4) 2.08/21 0 30...Rf8 0.89/22 1:33 31.Be4 Rxe4 32.Qxe4 Qxe4 33.bxc4 e2 34.Kc2 Bg3 35.Rbb1 2.78/25 0 35...Re8 0.65/29 1:41 36.Rbe1 (Rhe1)
36...Kf7 (Bxe1) 37.Kd3 3.88/23 2:30
37...Bxe1 (Rd8+) 0.71/30 0 38.Rxe1 Rd8+
39.Kxe2 Rd4 40.Rc1 5.25/28 0 40...Ke7
0.92/27 1:42 41.c5 (Kf3) 41...Rg4 (Rd5)
42.c6 #43/22 54 42...Kd8 1.61/28 0 43.c7+
Kc8 44.Rc5 Ra4 (Rg2+) 1.81/32 3:28
45.Rc6 (Kf3) #36/27 9:50 45...Ra3
(Rxa2+) 2.04/29 4:29 46.Kf2 Ra8 47.Rxg6
Kxh7 2.95/33 12:18 48.Rf6 #33/1 0
48...Rxh2+ Houdini gets it at last: #32/1 0.
Now that both engines see mate the remaining
moves are rattled off instantaneously
49.Kf3 Ra1 50.Kf4 Rf1+ 51.Kg4 Rg1+
52.Kh5 Kd8 53.Kh6 Ke7 54.Rf2 Rh1+
55.Kg7 Ke6 56.Rg2 Kd5 57.g6 Rc1 58.Kg8
Rd1 59.Rf2 Ke6 60.g7 Ke7 61.Rh2 Rg1
62.Kh8 Kf7 63.Rh7 Ke6 64.g8Q+ Rxg8+
68.Rh4 Ke5 69.Kf7 Kd5 70.Kf6 Kc6
71.Kc5 Kc5 72.Kc6 Kb6 73.Kd6 Kb5
74.Rg4 Kb6 75.Rb4+ Ka5 76.Kc5 Ka6
77.Kc6 Ka7 78.Ra4+ Kb8 79.Ra3 Kc8
80.Ra8# 1-0

Of course the question might well be asked, "Should I be printing games between the likes of Rybka and Houdini" - one condemned as a clone and banned from all Events under ICCA/ICGA regulations, the other probably a clone... at least Vasik Rajlich says it is, for whatever that's worth.

I have always noted with interest the engines that don't enter official tournaments - Internet 'user' tournaments are in a different category to programmer tournaments. I've always assumed - and that's what it is, an assumption - that most of them don't enter because they are clones of Rybka, or clones of various other engines probably including Rybka. And I've guessed that they wouldn't enter because inspection of their code would have revealed this, so they'd have just been excluded. Now that Rybka itself has been revealed as a clone the position of the others for tournament purposes becomes even more unrealisable. So should all mention be banned in Selective Search?

It's a difficult question, and for now I'm ducking it and leaving things as they are. If an athlete fails a drug test he can't enter any official competition, but he/she would be allowed to run up and down the road, maybe to catch a bus or just to show the neighbours how fast they are!

Of course the Rybka affair is not the same, as taking its World Titles off it cannot change the fact that it has 'stolen' lots of sales and opportunities off genuine programmers, and that can never be recovered. Lots of folk have a Rybka or a Houdini on their PC so we can't go back 5 years and pretend they don't exist... and because they are undeniably strong it is, I suppose, inevitable that comparisons will continue to be made between them and the legitimate engines.

There is plenty of reaction from all over the computer chess world, especially on the Internet, and people have greatly differing opinions even though most fully understand the verdict and support the ban. I am open to readers' thoughts on this and will be happy to report from and print some - though rude words and offensive remarks will be deleted! - and receiving your views might help me decide what I will do.

NEW PRODUCT SELECTION

I don't know about other readers, but I am quite a big fan of the FritzMedia dvds - you see at Countywide I was both a seller and a buyer!

I know that lots of Selective Search readers are a bit like me, we love the game but don't pretend to be anywhere near IM standard, in fact many are very happy to be hobby players. So a new series by UK's Andrew Martin aimed 'at players below 2200' looks to be just right. The one I am looking at right now is called 'First Steps in Attack' in which Andrew treats the viewer to a selection of classic attacking games and lays out a foundation course in the art of attack. It's designed to be as easy to understand as possible... I like that! £17.95 plus p+p.

I also noticed Maurice Ashley, another who's presentation I like, has 2 new dvds out with a running time of nearly 8 hours! I haven't seen these but they're titled 'What Grandmasters Don't See'. Vol. 1 covers Protected
Squares, vol. 2 is about Discovered Attack. The price is £26.95 each plus p+p. It will be a 3 part series, but you can buy the first 2 together at a reduced price of £48.90 plus p+p.

Countrywide is still the place for these - the advert on the inside front cover tells you that - it's just that they are based in London with Chess & Bridge, and that I'm not there. But the phone no. is the same and they'll be glad to help you... mention Selective Search and ring 01353 740323 if you want to buy!

**HIARCS 13 AVAILABLE FOR THE REVELATION AND RESURRECTION BOARDS**

Ruud Martin of Phoenix Chess Systems has announced that he has completed work on converting the Hiarc 13 engine for use in his boards. I don't think he is making the boards anymore - which is a shame! - so it's only for the fortunate folk who already have one. But for them this is definitely worth getting!

His web address is [www.phoenixcs.nl](http://www.phoenixcs.nl) and you can organise an upgrade by e-mail from there and maybe ask him if there's still any way of getting hold of one of these.

The modules for the Revelation board run at 500MHz and it is very interesting to note how engines compare on these where it certainly seems that engines that are Chess programmed do better than those which are Speed programmed, the reverse of what has been happening during the past 3 or 4 years of ever faster PC set-ups! A match between Hiarc and Rybka in Ruud's Revelation boards has Hiarc nicely ahead as the match draws to a close. I'll probably have a look at this in the next issue!

---

**CHESS: RESULTS SECTION**

**TCEC - THORESEN CHESS ENGINE COMPETITIONS**

I've shown results at Martin Thoresen's site where he runs Matches and Tournaments at long time controls, 40 moves/100 mins, on a fast 6-core Intel i7 computer. Ponder is off so the engines use all 6 cores on their moves.

His latest Tournaments (this time 40/2½hrs + G/30) seems at the moment to have been stopped with a few rounds still to go. I believe this is because Martin is wondering whether to remove Rybka and others from this and all future TCEC events.

Anyway, here are the scores as far as they've gone:

<table>
<thead>
<tr>
<th>Pos</th>
<th>Engine</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RYBKA 4.1</td>
<td>8½/11</td>
</tr>
<tr>
<td>2</td>
<td>STOCKFISH 2.1</td>
<td>8/11</td>
</tr>
<tr>
<td>3</td>
<td>JUNIOR 12.5</td>
<td>6½/11</td>
</tr>
<tr>
<td>4</td>
<td>NAUM 4.2</td>
<td>5/11</td>
</tr>
<tr>
<td></td>
<td>SJENG 2010</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>SPARK 1.0</td>
<td>5/12</td>
</tr>
<tr>
<td>6</td>
<td>CRITTER 1.01</td>
<td>4½/11</td>
</tr>
<tr>
<td>7</td>
<td>GULL 3683</td>
<td>2½/12</td>
</tr>
</tbody>
</table>

**FRANK HOLT**

You'll have already seen Frank's little warning/confession on the previous page.

He also sent me his latest result. You will quickly see that, if I am to ban mention of proven and probable clones from Selective Search then probably only Stockfish would survive for inclusion!
Frank Holt Tournament

<table>
<thead>
<tr>
<th>Pos</th>
<th>Engine</th>
<th>Score/20</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Houdini 1.5A</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>Rybka 4</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>Firebird 1.1</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Ivanhoe 63MOD5a7</td>
<td>9½</td>
</tr>
<tr>
<td>5</td>
<td>Stockfish 2.10</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Rybka 3</td>
<td>8</td>
</tr>
</tbody>
</table>

Frank remarks interestingly: "The programs are getting closer, there were 60 games and 45 were draws!" Of course there is another explanation, and that would be that draws are going to be more likely where the engines are very similar.

ChessWar 16

The latest ChessWar tournament, played at 40/40 has finished, with Stockfish and Houdini coming out joint 1st, a comfortable 1½ pts ahead of a group coming 3=. Caro-Kann and Houdini come out as the 2nd best engine pair.

<table>
<thead>
<tr>
<th>Pos</th>
<th>Engine</th>
<th>Score/15</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Stockfish 2.1.1, Houdini 1.5A</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>Naum4.2, Komodo 1.3, Sjeng 2010, Critter 1.01</td>
<td>9½</td>
</tr>
<tr>
<td>7</td>
<td>Rybka 4.1</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>Spide1.4, Junior 12.5</td>
<td>8½</td>
</tr>
<tr>
<td>10</td>
<td>Hiarc13.2, Protector 1.4.0, Fritz 12</td>
<td>8</td>
</tr>
<tr>
<td>13</td>
<td>Thinker 5.4, DInert, Onno 1.2.7, Equinox 0.96, Spark 1.0, Bison 9.11</td>
<td>7½</td>
</tr>
<tr>
<td>18</td>
<td>Gull 1.2, Shredder 12, Fruit 090705, Loop 2007, Twisted LOGIC 20100131</td>
<td>7</td>
</tr>
<tr>
<td>23</td>
<td>Crafty 23.4, UMKO 1.1, ZapMEXico 2</td>
<td>6½</td>
</tr>
<tr>
<td>26</td>
<td>Chess Tiger 2007.1, Bright 0.5C, Cipollino 3.25</td>
<td>5½</td>
</tr>
<tr>
<td>29</td>
<td>Pharaoh 3.5.1</td>
<td>4</td>
</tr>
<tr>
<td>30</td>
<td>Now 2.3E</td>
<td>2½</td>
</tr>
</tbody>
</table>

Houdini v Rybka

Let me return once more to the subject of 'dubious' engines, as the Westport Chess Club, Kansas City, USA ran a 100 game Match between Houdini 1.5a x64 and Rybka 4.1 SSE42x64.

The match was played on an AMD Phenom Quad core and at the 40/2hrs time control. Rybka used the standard Nalimov tablebases, and Houdini the Gaviota tablebases. I don't know if that's what made the difference, I never used tablebases with Houdini, and with them in this match it actually lost narrowly:

Houdini 1.5 - Rybka 4.1 49-51

NEW HIARCS 13f OPENING BOOK

Mark Uniacke has just announced that the latest update of the Hiarcs opening book is available. Existing subscribers will have already been notified by e-mail, but if you don't use this resource and have an interest in keeping up-to-date on Opening Theory, then let me recommend this initiative to you!

You can get all the information you need from the Hiarcs website [www.hiarcs.com]. The reason I really like this resource is that, once you've subscribed and downloaded your initial opening book - and new subscribers will immediately get the current 13f version - you will then also get a notification for free updates as soon as they are available.

Mark has brought these out very regularly and reliably, each one being significantly larger as well as stronger! In tests against other opening books 13f has shown itself to be 30 Elo stronger than 13e was, and it beat all the other commercial opening books. As an example the original 13a Book was virtually level with the Rybka4 book, but the 13f Book scored 61.88% which indicates a +84 Elo improvement!

The new book contains 3,879,189 positions, 442,650 variations and statistics shown from 1,363,537 top quality games, which Mark collects as they are played. He then gets his very fast PC to analyse the openings and results, adds all the best lines and important variations including refutations, and gets the book fully re-sorted to show what's good, what's bad, what's ugly, and what's new and interesting ready for use. It's a bit like buying Powerbooks except that instead of only getting an update once a year, you get regular updates with all the work done for you!
RYBKA DISQUALIFIED AND BANNED BY ICGA FROM WORLD COMPUTER CHESS CHAMPIONSHIPS. LIFETIME BAN FOR VASIK RAJLICH

There was a long and quiet 5 year gap between suggestions in Selective Search 122, page 13, in 2005, that Rybka might be related to Fruit and the emergence of new accusations in 2010, culminating in an open letter of complaint written to the ICGA Board and signed by 16 top, respected programmers.

This news was covered in our issues 153, where David Levy was waiting for a response from Rybka programmer Vasik Rajlich, and then in 154 where we updated the evidence against Rajlich, but as there had been no response from him the ICGA was now conducting their investigation.

This has been completed, Vasik Rajlich has still not responded, and the following letter was issued by David Levy, the ICGA President, at the end of June 2011.

RYBKA DISQUALIFIED AND BANNED FROM WORLD COMPUTER CHESS CHAMPIONSHIPS

June 28th 2011

The International Computer Games Association (ICGA) has been conducting an investigation into allegations that, in the chess program Rybka, the programmer Vasik Rajlich plagiarized two other programs: Crafty and Fruit. The ICGA has considered and evaluated the evidence presented to the investigation panel and the report prepared by the panel’s Secretariat. (The report and evidence files were attached to the original e-mail file sent over the Internet.) We would like to thank those members of the panel who contributed to this investigation and the Secretariat for the enormous amount of conscientious work they have put in to this matter.

By a unanimous 5-0 decision of executive members of the ICGA we find ourselves in agreement with the verdict of the Secretariat’s report. We are convinced that the evidence against Vasik Rajlich is both overwhelming in its volume and beyond reasonable question in its nature. Vasik Rajlich is guilty of plagiarizing the programs Crafty and Fruit, and has violated the ICGA’s tournament rules with respect to the World Computer Chess Championships in the years 2006, 2007, 2008, 2009 and 2010. Specifically, Vasik Rajlich, on all five occasions, violated Tournament Rule 2 which requires that:

Each program must be the original work of the entering developers. Programming teams whose code is derived from or including game-playing code written by others must name all other authors, or the source of such code, in their submission details. Programs which are discovered to be close derivatives of others (e.g., by playing nearly all moves the same), may be declared invalid by the Tournament Director after seeking expert advice. For this purpose a listing of all game-related code running on the system must be available on demand to the Tournament Director.
By claiming other programmers’ work as his own, and failing to comply with the abovementioned rule, Vasik Rajlich has unfairly been awarded one shared 2nd-3rd place (in 2006) and four World Computer Chess Championship titles (in 2007, 2008, 2009 and 2010). Furthermore, it seems to the ICGA that Vasik Rajlich clearly knew that he was in the wrong in doing so, since he has repeatedly denied plagiarizing the work of other programmers.

The ICGA regards Vasik Rajlich’s violation of the abovementioned rule as the most serious offence that a chess programmer and ICGA member can commit with respect to his peers and to the ICGA. During the course of the investigation and upon presentation of the Secretariat’s report Vasik Rajlich did not offer, despite repeated invitations from the ICGA to do so, any kind of defence to the allegations, or to the evidence, or to the Secretariat’s report, other than to claim in an e-mail to myself on May 13th 2011 that:

Rybka has does not "include game-playing code written by others", aside from standard exceptions which wouldn't count as 'game-playing'.

The vague phrase "derived from game-playing code written by others" also does not in my view apply to Rybka.

The ICGA is of the view that such a serious offence deserves to be met with correspondingly serious sanctions against the perpetrator. In deciding on appropriate sanctions the ICGA has borne in mind the approach of the International Olympic Committee for dealing with the most serious cases of the violations of its rules.

The ICGA has therefore decided as follows:


[2] The 2nd-3rd place awarded to the program called “Rajlich” in the 2006 WCCC is hereby annulled, sole 2nd place is awarded to the program Shredder, and 3rd place in that event is awarded to the program Zappa.

[3] The 1st places and World Computer Chess Champion titles awarded to the program Rybka in the 2007, 2008, 2009 and 2010 WCCCCs are hereby annulled, and all the other programs that competed in those events are moved up in the final tournament standings by one place. Thus the revised tournament standings and titles for those events will now be as follows.

2007
1st  Zappa (World Champion)
2nd  Loop
=3rd  GridChess, Shredder

2008
1st  Hiarc (World Champion)
2nd Junior
3rd Cluster Toga

2009
=1st Junior (Joint World Champion)
=1st Shredder (Joint World Champion)
=1st Deep Sjeng (Joint World Champion)

2010
=1st Rondo (Joint World Champion)
=1st Thinker (Joint World Champion)
3rd Shredder

[4] In due course those programmers whose programs have been elevated to World Champion (or joint World Champion) status will receive from the ICGA replicas of the Shannon trophy for the appropriate years.

[5] The plaques on the Shannon trophy that currently bear the name Rybka (for the years 2007-2010) will be removed from the trophy and new plaques will be engraved with the names of the revised winners of the title.

[6] Similarly, the titles of World Computer Speed (Blitz) Chess Champion that were awarded to Rybka in 2009 and 2010 are hereby annulled. The revised winners of the speed chess title for those years are therefore:

2009
Shredder

2010
Jonny and Shredder (joint champions)

[7] Vasik Rajlich is banned for life from competing in the World Computer Chess Championship or any other event organized by or sanctioned by the ICGA.

[8] The ICGA demands that Vasik Rajlich return to the ICGA the four replicas of the Shannon Trophy presented at the World Computer Chess Championships in 2007, 2008, 2009 and 2010, and to return to the ICGA all prize money awarded for Rybka’s performances in those events.

David Levy [President - ICGA]
June 28th 2011

I can e-mail the evidence files if anyone wishes to wade through them. The recent issues of Selective Search have tried to cover most of the main facts, but certainly not all of them, nor all of the specific detail relating to programming code comparisons. Just e-mail me at erichallsworth@gmail.com with your request for the file, which in archived form is just over 1MB, and I will send it to you.
Chess ENGINE News

Oh how I miss Chris Goulven and his UCI and WinBoard PC Engine pages! Nevertheless I will try and keep you informed from time to time on the latest arrivals and upgrades.

Stockfish is now up to version 2.1.1. It continues to move up in the ratings but I have been disappointed about the way they are achieving this. When I have put the recent Stockfish releases since 1.9 through their paces on Test Sets I find that they score less each time! This implies that the programmers are concentrating on making the search faster and deeper at the expense of chess knowledge. This can result in success against other chess engines, and obviously the evaluation must be improving, but faster and deeper number crunching almost always results in negativity. If you're the programmer you'd pick up on Nimzovitsch and call it prophylaxis! - but basically it is searching to avoid mistakes, reduce the opponent's options, play very safe, wait for the opponent to make a mistake, overreach, 'try' something... and then the engine jumps on the weakness or mistake. Lots of engines do this now, so their chess play is very similar. So they are of less value in my opinion for the chess player who is looking for an opponent that will play like his opponent's do at the chess club or week-end tournament, or an engine that will produce active ideas for use in openings, or analytical help when playing over games that will show up tactical possibilities or winning moves that perhaps got missed.

Critter has been coming out with quite regular and positive upgrades and 1.2 is their newest version. This one seems in my tests to be up with Rybka4 and Stockfish2.1.1 and is also doing well in the Test Sets, so I like it!

Komodo's latest is 2.03 but, whilst it is certainly strong and available in 32-bit and 64-bit, as are Stockfish and Critter, it is still SP (single processor) only. So while it's worth getting if you've got older hardware, it falls behind if you've got a dual or quad core, or faster MP.

The CCRL folk, whose ratings we quote in Selective Search endpages, are trying to categorise the engines. There are many 'Controversial' engines they have always avoided testing because they knew they were dubious, but they have (like most of us) innocently tested some engines which are now viewed as dubious. Here are the categories they have put them in:

<table>
<thead>
<tr>
<th>Blue- Commercial</th>
<th>Green- Free</th>
<th>Orange- Open Source</th>
<th>Grey- Controversial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naum 4.2</td>
<td>Critter 1.2</td>
<td>Stockfish 2.1.1</td>
<td>Houdini 1.5</td>
</tr>
<tr>
<td>Shredder 12</td>
<td>Spike 1.4 Leiden</td>
<td>Protector 1.4</td>
<td>Rybka 4.1</td>
</tr>
<tr>
<td>Junior 12.5</td>
<td>Komodo 2.03</td>
<td>Gull 1.2</td>
<td>Rybka 3</td>
</tr>
<tr>
<td>Hiarcs 13.2</td>
<td>Spark 1.0</td>
<td>Toga II 1.4.1se</td>
<td>Rybka 2.3</td>
</tr>
<tr>
<td>Fritz 12</td>
<td>Komodo 1.2</td>
<td>Glaurung 2.2</td>
<td>Rybka 1.0</td>
</tr>
<tr>
<td>Zappa Mexico II</td>
<td>Thinker 5.4c</td>
<td>Grapefruit 1.0</td>
<td></td>
</tr>
<tr>
<td>Naum 3.1</td>
<td>Bright 0.5c</td>
<td>Cyclone 3.4</td>
<td></td>
</tr>
<tr>
<td>Sjeng 2010</td>
<td>Doch 1.3.4</td>
<td>Booot 5.1.0</td>
<td></td>
</tr>
<tr>
<td>Onno 1.2.7</td>
<td>Hannibal 1.1</td>
<td>Umko 1.2</td>
<td></td>
</tr>
<tr>
<td>Loop M1-T</td>
<td>Jonny 4.0</td>
<td>Crafty 23.0</td>
<td></td>
</tr>
<tr>
<td>Bright 0.4a</td>
<td>Loop 13.6/2007</td>
<td>Scorpio 2.7</td>
<td></td>
</tr>
<tr>
<td>Fruit 2.2</td>
<td>Fruit 2.3.1</td>
<td>Delfi 5.4</td>
<td></td>
</tr>
<tr>
<td>SmarThink 1.2</td>
<td>Twisted Logic 2010</td>
<td>Fruit 2.1</td>
<td></td>
</tr>
<tr>
<td>Ktulu 9</td>
<td>Tornado 4.4</td>
<td>Bison 9.11</td>
<td></td>
</tr>
</tbody>
</table>
Medium Strong Oldies Shine at the 22nd CSVN Gebruikers Tournament, by Rob van Son!

Saturday, June 11 it all happened again! The participants of the 22nd gebruikers (‘gebruikers’ means ‘users’) were rushing to be in time at the ‘denksportcentrum’ (‘mind games center’) in Leiden. They arrived heavily loaded and were very curious to see how their electronic wonder machines would perform in this tournament. Well, were they only looking? No, they would have to work as operators of their own chess computers as well!

By almost half past ten, the nine human participants are very busy undoing the ten machines from their protective clothing in the form of boxes, bubble wrap, blankets and some more of this type of material. You should understand that the real enthusiastic antique chess computer lover almost considers his oldie as a child of flesh and blood.

And indeed, the finest computers emerge, some of them shining even more than others! There is one limitation: “Only chess computers with an Elo rating below 2100 are allowed to take part in the tournament.” Despite this, there is still plenty to choose from the numerous models which have appeared on the market in former decades.

The clock time is to be 30 minutes per colour for the game, but because the annual meeting lasted much longer than planned, there unfortunately was not enough time to play six rounds, so we just played five, but it was still very exciting.

During the games I had a chance to speak with the enthusiastic participants. I will give you a brief impression of these conversations. There were two new entrants in the tournament: Henk van Weersel and Peter van Grijfland. Both have been members of the CSVN for several years.

Henk had brought his laptop and operated the Mephisto Dallas 32-bit with a mouse.

You are probably thinking: "There were still only dedicated chess computers involved?" If you think so, you are right, because Henk left his real Mephisto Dallas at home! Using an EPROM reader and some software, he copied the data of the Mephisto Dallas EPROM into his PC and used another program to emulate the data. Such emulation programs can be found on the Internet, says Henk. On his laptop he even has a complete graphical representation of the Mephisto Dallas, with all the control buttons, which are also at the same place on the real computer! The simulated Mephisto Dallas program from programmer Richard Lang also runs at the same speed as the dedicated version: 14 MHz!

The other CSVN member who was a first time participant was Peter Grijfland. He took the Excalibur Grandmaster along to the tournament. Peter bought this chess computer a few weeks ago through the Internet. He is not only very satisfied with the size of the board and the pieces, but also very happy with the human play of the computer. However, Peter turned this computer into a turbo version. The Grand Master runs on a H8 processor at 12 MHz, but Peter had the
crystal in the computer replaced by one that can run at 22 MHz! Because of this, the Grandmaster plays 100 Elo points stronger than the standard version. His Elo has increased now to 1945. Do the other components in the computer function normally on the higher speed? Peter: “I have investigated this on the Internet and read that it would not cause any interference. After I had replaced the crystal, I left the computer open for a while to see if certain parts would become too hot. This was not the case. There are even people who use a 36 MHz crystal. The clock and all the other components run faster in the computer. When choosing the level, I have to keep that in my mind. If I select a 30 minutes rapid level (L79) with the standard hardware, it plays with the same speed at the 55 minutes level (L84) with the faster crystal. Therefore I use a conversion table. I am already satisfied with the three draws, because I assumed that I could go home with zero points.”

Ruud Martin was obviously not participating with his strong creations Revelation and Resurrection. He did come with a dedicated chess computer to Leiden, the Mephisto Polgar 10 MHz with a program by Ed Schröder. The Polgar module calculates much faster than its predecessor, which ran at 5 MHz. This module fits easily into a Mephisto Exclusive board, but appearances can be deceptive! In the manual there is a pamphlet from the German manufacturer Hegener + Glaser which indicate that the module runs 100% faster, but to make this possible the power supply of the Exclusive board has been adjusted accordingly. This board can only be used with the Polgar 10 MHz module. Furthermore, the manufacturer warns that no other Mephisto modules should be connected to this board due to danger of malfunction. Ruud: “Not very smart of the manufacturer to do so in a loose pamphlet. If 10 years from now, someone puts another module in this board, because the pamphlet was lost years ago, it will cost the user a new module. I think they should mention it somewhere on the board instead of a pamphlet. I noticed this myself when some time ago I put the Polgar module in another Exclusive board. Nothing happened! At first I thought the module was defective, but when I measured the two Exclusive boards I saw that the board, exclusively for the Polgar 10 MHz, was fed with 6 volts and the other with 5 volts.” Unfortunately, the extra speed did not help the Polgar in this tournament! Ruud finished at the bottom of the league with two draws.

Hein Veldhuis participated with the SaiTeK Renaissance Brute Force 10 MHz which is a program of Franch Morsch. Hein: “This Brute Force module will only fit into the SaiTeK boards. The first one was the Leonardo, which appeared in 1986, the second unit, the Galileo, came in 1988 on the market and in 1989, the Renaissance board was available. The special feature of the
Renaissance is actually that it contains two chess computers in one. You can also play chess without using a chess module. Inside the board there is in fact a standard SciSys Turbo S-24K program. I bought this beautiful board at the end of the last century from computer pioneer Jan Louwman. At the time Jan was able to buy up some of these boards in Germany, so in this way I came into possession of the Renaissance board."

Our all-time tournament leader Ries van Leeuwen had frequent bad luck with his Saitek Centurion. This model, like the Saitek Cougar operated by Peter Schimmelpennink, was known for its sensitivity to static electricity. Your author took the Cougar and the Fidelity Avant Garde Prestige 2 back to Leiden and I had learned my lesson in a previous tournament in which the Cougar participated. Now I let my computer play on batteries, so that should solve the problem. With proper time settings, the Cougar and Peter won the third place in the rankings. Poor Ries lost three games with the Centurion by giving away a queen and two rooks. Ries: "There is a fun level present in the Centurion, but it also seems to work on other levels. I reset the computer several times, but that did not help. The next time, I won’t let it participate anymore."

Luuk Hofman was present with the Novag Obsidian, a program by Dave Kittinger. Luuk: "The Obsidian played passive chess and I really expected him to play much better." Still Luuk reached the fifth place with three points, which is certainly a good result.

Our super-operator Hans van Mierlo was present again with two chess computers, the Novag Emerald Classic Plus and the Saitek Galileo Analyst D +. Hans: "The Emerald Classic Plus with a program by Dave Kittinger runs on a fast washing machine processor, the H8 chip on 26.6 MHz. I am pleasantly surprised by the lively play of this computer. I prefer seeing a chess computer playing chess that controls the opening very well and plays an active middle game. The computer losing such a game is not as bad as it winning a long boring one. I replaced the EPROM in The Galileo Analyst module (programmed by Julio Kaplan) with the experimental 16 MHz D + + program. It never appeared on the market. Through my contacts on the Internet I managed to get hold of it. This module also works well in the Leonardo and the Renaissance boards. The program plays particularly lively on the level ‘three minutes per move.’ Because it calculates more selectively and with less brute force, it is possible that the program overlooks something and unnecessarily loses a game." Hans was very pleased with the results of his computers. They both scored 3½ points and gained the first and second place!

Your author operated his Fidelity Avant Garde Prestige version 2.

This former magnificent flagship of manufacturer Fidelity Electronics (Miami, USA) kept up very well with the other electronic participants. Two wins, two draws and
one loss brought the Prestige to fourth place on the list. The first game the Prestige won with black in a thunderous attack against the Saitek Brute Force of Hein Veldhuis. On the 19th move black checkmated the white king. Hein comments after the game: "I probably used the wrong settings." The Fidelity Prestige comes from the estate of the late Jan Louwman. There were no original, but only small pieces to play chess with. During the game I bought Hein’s beautiful large new chess pieces for a good price. Luckily he had another set with him! The new pieces look perfect on the Prestige and the computer responds even more directly by the powerful magnets in these pieces. You will understand then that really I won my prize long before the end of the tournament, whatever the outcome would be!

Rob van Son, July 2011

Following now are the games with analysis by Eric, interspersed as always with some more of the photos I took of the players and their computers during the gebruikers 22 event!

Round 1

We are going to start with the astonishing demolition by Rob’s Prestige against what should have been the mighty Brute Force!

It’s an amazing miniature after a serious blunder by a computer with a decent enough reputation for Club level play.

**SAITEK BRUTE FORCE**

**FIDELITY PRESTIGE AG 2**

C35: King's Gambit Accepted: 3 Nf3 Be7

1.e4 e5 2.f4 exf4 3.d3 e7 4.c4 d6 5.e5
g4 6.0-0 c6?!

Although this threatens to win the e5 pawn, White just needs to reply with 7.d4 to maintain an equal position. So really 6...d6 or 6...d5, or even 6...0-0, were better for Black. However this puts White out of book!

7.e5?!

There are over 50 games in my database and they all go 7.d4. Now 7...d5 is almost always played and then 8.exd6 Qxd6 and now 9.e1+ Qe7 10.Qxe7+ 11.Qg5 seems to be best, after 11...0-0 12.Qxf4 Qf5 the game is equal

7...e5+! 8.d4

The pawn is protected twice so it seems the Brute Force thought it was safe and has missed Black's 9th move.

In the event 8.f1 was slightly better, but of course 8...d4 9.Qxd4 (or 9.c3 Qxf3 10.Qxf3 Qh4 11.Qe2 Qh2+ 12.Qxh2 Qxh2 0-1) 9...Qh4 and now 10.Qxg4 Qxg4 is pretty much forced to avoid an early mate

8...Qd4!

Game over!

9.Qxd4 Qh4!

My guess is that the Brute Force only saw 9...d4+? in its analysis when playing 7.e1, and of course after this White itself is ahead with 10.Qxd4 Qh4 11.Qd2 as

11...Qxh2+ 12.f1 Qh1+ comes to nothing after 13.Qg1

10.Qxf7+?

Complete capitulation!

10.Qxf4 was the only hope, but still no good after 10...Qf2+ 11.Qh1 Qxf4 12.g3

Qxd4 13.Qxd4 Qxd4 leaving the Prestige +A ahead

10...Qf7 11.e6+ dxe6 12.Qd2 Qxd4+

13.f1

Not of course 13.Qd4?? Qxe1#

13...e3+ 14.Qf2 Qg4+ 15.Qd3 Qd8
16.\textit{c}3

16.\textit{x}e3 would only delay mate for a little while: 16...\textit{f}xe3 17.c3 e5 18.h3 exd2 19.\textit{d}xd2 \textit{f}5+ 20.\textit{e}c4 b5+ 21.\textit{x}xb5 \textit{d}d5+ 22.\textit{b}b4 \textit{b}b8+ 23.\textit{a}a4 \textit{xc}3+ 24.\textit{e}e4 \textit{a}a5\#

16...\textit{e}5+ 17.\textit{d}d4 \textit{g}6+ 18.\textit{e}e2 \textit{xe}2+ 19.\textit{d}d3 \textit{xc}2#

Although the Saitek machine gifted Black the game with its 7th move, the Fidelity played superbly when given its chance 0–1

\textbf{Round 1 results:}

Centurion – Cougar 0–1
Brute Force – Prestige 0–1
Polgar – Obsidian 0–1
Emerald – Dallas \(\frac{1}{2}–\frac{1}{2}\)
Grandmaster – Galileo \(\frac{1}{2}–\frac{1}{2}\)

\textbf{Round 2}

Here's another Brute Force game - let's see if it can do better against the popular Saitek Centurion.

\textbf{SAITEK CENTURION}

\textbf{SAITEK BRUTE FORCE}

C09: French Tarrasch: 3...e5 4 \textit{ex}d5 \textit{ex}d5 5 Ngf3 Nc6

1.e4 e6 2.d4 d5 3.\textit{d}d2 c5 4.\textit{ex}d5 \textit{ex}d5 5.\textit{gf}3 \textit{c}6 6.\textit{xc}5 \textit{xc}5 7.\textit{b}b3 \textit{b}b6 8.\textit{b}b5 \textit{e}7+ 9.\textit{e}2

9.\textit{e}2!? \textit{xe}2+ 10.\textit{xe}2 \textit{f}6 11.0–0 seems a bit drawish of course, but my database shows it as scoring a useful 2–0=2 and I think it's a better way to play the position at move 9

9...\textit{f}6 10.0–0 0–0 11.\textit{g}5

11...\textit{g}4N

11...\textit{e}8 (which I like) and 11...\textit{e}5 have been played here, but the Brute Force choice is probably as good!

12.\textit{e}1 \textit{xf}2+!

This is best, and I think it's quite a good find by the Brute Force program as it needs to search deeply enough to see why it works!

13.\textit{xf}2 \textit{e}4+ 14.\textit{f}1?!

14.\textit{g}1 has to be a safer square for the \textit{g} and also vacates a square for the rook or bishop if needed

14...\textit{x}g5 15.\textit{xd}5?!

Aggressive! Perhaps 15.\textit{x}g5 \textit{xc}2+ 16.\textit{xc}2 \textit{xc}5 17.\textit{g}1 was better

15...\textit{xf}3

Better still was 15...\textit{xf}3! 16.\textit{xf}3 \textit{f}6+ 16.\textit{xf}3 \textit{f}6 17.\textit{c}3 \textit{ad}8 18.\textit{e}4 \textit{xf}3
19.gxf3?!  
19...\textit{xf3} 20.gxf3 would be equal. Black's pawn structure is better but White has the distant passed pawn, so a draw would be most likely with best play  
19...\textit{ed7} 20.\textit{e5}  
Another ambitious move by the Centurion when a more secure move like 20.\textit{g2} would be preferable  
20...\textit{e7} 21.\textit{d5} \textit{d8} 22.\textit{h5}??  
A bad mistake. I expect the Centurion had big negative positional evaluations showing for the self-pin 22.\textit{d7} but after 22...\textit{exe1+ 23.\textit{xexe1} it is not so easy for Black to take advantage of it. E.g. 23...\textit{h4} 24.\textit{exe2} \textit{h3}+ 25.\textit{g1} and Black cannot take the knight because of \textit{e8}+ and the back rank mate problem!  
Unfortunately for White the Brute Force now has a winning tactic  
22...\textit{exe5}! 23.\textit{xe5} \textit{exe5}  
23...\textit{exe5}?? would have been a big mistake: 24.\textit{exe5} \textit{exe5} 25.\textit{xb7}+  
24.\textit{exe1}??  
Oh dear, this just makes things worse! How often older computers are like average humans, doubling up on their mistakes!?  
With 24.\textit{exe4} \textit{f4} 25.\textit{g2} would still have a fighting chance, though 25...\textit{d3}! 26.\textit{h3} f5 is very strong  
24...\textit{xf3} 25.\textit{xe2}?  
If 25.\textit{d7} then \textit{f4} 26.\textit{e7} g6 27.\textit{d5} \textit{g7} would still be heading for an early 0-1  
25...\textit{g6}  
Wins easily enough, but 25...\textit{d2}+ would have been an even quicker route to mate: 26.\textit{g2} g6 27.\textit{g4} h5 m/10  
26.\textit{xf3}  
White resigns with this as 26...\textit{xf3}+ 27.\textit{e1} \textit{h1}+ m/11. 0-1  

Round 2 results:  
Cougar – Galileo ½–½  
Dallas – Grandmaster ½–½  
Obsidian – Emerald ½–½  
Prestige – Polgar 1–0  
Centurion – Brute Force 0–1
Round 3

Round 3 results:
- Cougar - Prestige ½-½
- Brute Force - Obsidian 1-0
- Emerald - Grandmaster 1-0
- Galileo - Dallas ½-½
- Polgar - Centurion 0-1

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2½</td>
<td>1</td>
<td>½</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2=</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2=</td>
<td>2</td>
<td></td>
<td>½</td>
<td>½</td>
<td></td>
</tr>
<tr>
<td>2=</td>
<td>2</td>
<td></td>
<td>½</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5=</td>
<td>1</td>
<td></td>
<td>½</td>
<td>½</td>
<td>1½</td>
</tr>
<tr>
<td>5=</td>
<td>1</td>
<td></td>
<td>½</td>
<td>0</td>
<td>1¼</td>
</tr>
<tr>
<td>8=</td>
<td>1</td>
<td></td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>8=</td>
<td>1</td>
<td></td>
<td>½</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

The game is even here, but now White starts to go wrong.
23.e6?!

The pawn will be harder to protect here. Therefore 23.åf3 was better and sound.
23...çc6 24.åf7 åf6 25.åb3?

It seems a good idea to protect the b-pawn, but in fact if 25.a5 (which is better)
25...åxc3 26.åe2 åfe8 27.åd6 åxd6
28.åb6! åc8 29.åxd6 and the game is equal.
25...åfe8 26.åb1?

The c-pawn had to be protected, and this counter-threat against f5 comes to nothing.
26.åe2 was the best chance and if
26...åxa4 27.åbb1. Then Black can try to maintain a slight advantage with 27...åa3
but 28.åa1 åxf4 29.åxa4 is probably equal as the Prestige should win either the pawn/a6
or f5
26...åxe6 27.åxe6 åxe6 28.åg5 åxg5
29.åxg5 åe8 30.h4 åe5

The exchanges have left the Novag computer with its extra pawn and White has little or no compensation now.
31.åc1 h6 32.åf4 åe1+ 33.åxe1 åxe1+
34.åh2 åf7 35.åf3 åf6 36.åb8 g5 37.hxg5+ hxg5
38.\texttt{\textcolor{red}{\texttt{\textbf{g}8+}}}?

This seems like a decent idea, but the follow-up \texttt{\textcolor{blue}{\texttt{exf5}}} isn't as good as it looks.

White's best chance was 38.\texttt{\textcolor{blue}{\texttt{c7}}}
and after
38...d4 39.cxd4 exd4 40.\texttt{\textcolor{red}{\texttt{g}8+}} now works well, forcing 40...\texttt{\textcolor{blue}{\texttt{g}6}}
and then 41.\texttt{\textcolor{blue}{\texttt{d}8}}
makes life more difficult for the dangerous passed pawn. Black still has decent winning chances, but it wouldn't be over yet

38...\texttt{\textcolor{blue}{\texttt{g}7}} 39.\texttt{\textcolor{blue}{\texttt{g}3}}

If 39.\texttt{\textcolor{red}{\texttt{exf5}}}
then 39...\texttt{\textcolor{blue}{\texttt{gxf4}}} 40.\texttt{\textcolor{blue}{\texttt{exd5}}} 41.\texttt{\textcolor{blue}{\texttt{exd5}}}
42.\texttt{\textcolor{blue}{\texttt{g}6}}+ 43.\texttt{\textcolor{blue}{\texttt{f}6}} 43.\texttt{\textcolor{blue}{\texttt{g}8}} 44.\texttt{\textcolor{blue}{\texttt{g}7}} (looking for repetition), but 44...\texttt{\textcolor{blue}{\texttt{e}2}}
45.a5 \texttt{\textcolor{blue}{\texttt{f}6}} 46.\texttt{\textcolor{blue}{\texttt{e}8}} 46.\texttt{\textcolor{blue}{\texttt{xa}5}}+-

39...\texttt{\textcolor{red}{\texttt{xf8}}} 40.\texttt{\textcolor{blue}{\texttt{xe1}}} d4?!

The pawns were best while connected, it will be easier for White to attack the pawn when isolated. 40...\texttt{\textcolor{blue}{\texttt{e}7}} was correct

41.cxd4 cxd4 42.\texttt{\textcolor{blue}{\texttt{g}1}} d3 43.\texttt{\textcolor{blue}{\texttt{b}4}}+ \texttt{\textcolor{blue}{\texttt{f}7}}
44.\texttt{\textcolor{red}{\texttt{f}1}} \texttt{\textcolor{blue}{\texttt{e}6}} 45.\texttt{\textcolor{blue}{\texttt{g}3}}

But just when The Prestige has a good chance to save the game, it gives Black another winning opportunity

50.\texttt{\textcolor{blue}{\texttt{a}5}}?

Correct was 50.\texttt{\textcolor{blue}{\texttt{c}1}} \texttt{\textcolor{blue}{\texttt{c}5}} 51.\texttt{\textcolor{blue}{\texttt{d}2}} \texttt{\textcolor{blue}{\texttt{c}4}}
52.\texttt{\textcolor{blue}{\texttt{b}2}} which might well draw

50...\texttt{\textcolor{red}{\texttt{c}5}} 51.\texttt{\textcolor{blue}{\texttt{c}1}} \texttt{\textcolor{blue}{\texttt{e}4}} 52.\texttt{\textcolor{blue}{\texttt{d}2}} \texttt{\textcolor{blue}{\texttt{e}7}}?

Now Black again misses the best move:
52...\texttt{\textcolor{blue}{\texttt{e}3}} 53.\texttt{\textcolor{blue}{\texttt{b}2}} \texttt{\textcolor{blue}{\texttt{f}1}}+ 54.\texttt{\textcolor{blue}{\texttt{c}1}} \texttt{\textcolor{blue}{\texttt{b}4}} should be 0-1

53.\texttt{\textcolor{blue}{\texttt{d}1}} \texttt{\textcolor{blue}{\texttt{g}6}} 54.\texttt{\textcolor{blue}{\texttt{c}1}}??

The Prestige needed to keep Black's king out of c3 with 54.\texttt{\textcolor{blue}{\texttt{b}2}} \texttt{\textcolor{blue}{\texttt{h}4}} 55.\texttt{\textcolor{blue}{\texttt{e}5}} \texttt{\textcolor{blue}{\texttt{f}3}}
56.\texttt{\textcolor{blue}{\texttt{xf}4}} \texttt{\textcolor{blue}{\texttt{d}4}} 57.\texttt{\textcolor{blue}{\texttt{g}3}} \texttt{\textcolor{blue}{\texttt{b}3}} 58.\texttt{\textcolor{blue}{\texttt{c}1}} \texttt{\textcolor{blue}{\texttt{b}5}}
59.\texttt{\textcolor{blue}{\texttt{c}3}} might well draw as 59...\texttt{\textcolor{blue}{\texttt{xa}5}}
60.\texttt{\textcolor{blue}{\texttt{d}2}} definitely is a draw

54...\texttt{\textcolor{red}{\texttt{c}3}}?

What a topsy turvy endgame of mistakes! 54...\texttt{\textcolor{blue}{\texttt{h}4}} was the way to keep trying for the full point. Then 55.\texttt{\textcolor{blue}{\texttt{d}1}} \texttt{\textcolor{blue}{\texttt{g}2}}! 56.\texttt{\textcolor{blue}{\texttt{d}2}} \texttt{\textcolor{blue}{\texttt{c}3}}
57.\texttt{\textcolor{blue}{\texttt{b}2}} \texttt{\textcolor{blue}{\texttt{f}1}}+ 58.\texttt{\textcolor{blue}{\texttt{c}1}} \texttt{\textcolor{blue}{\texttt{b}4}} 59.\texttt{\textcolor{blue}{\texttt{g}7}} \texttt{\textcolor{blue}{\texttt{xa}5}}
60.\texttt{\textcolor{blue}{\texttt{h}6}} \texttt{\textcolor{blue}{\texttt{b}4}} 61.\texttt{\textcolor{blue}{\texttt{xf}4}} \texttt{\textcolor{blue}{\texttt{c}3}} 62.\texttt{\textcolor{blue}{\texttt{f}1}}...\texttt{\textcolor{blue}{\texttt{b}3}}
62.\texttt{\textcolor{blue}{\texttt{d}2}}? \texttt{\textcolor{blue}{\texttt{xf}2}} 63.\texttt{\textcolor{blue}{\texttt{xd}3}} 64.\texttt{\textcolor{blue}{\texttt{xf}4}}\texttt{\textcolor{blue}{\texttt{d}4}} 65.\texttt{\textcolor{blue}{\texttt{c}1}} \texttt{\textcolor{blue}{\texttt{c}4}} 59.\texttt{\textcolor{blue}{\texttt{d}2}} \texttt{\textcolor{blue}{\texttt{b}2}} \texttt{\textcolor{blue}{\texttt{g}5}} is 0-1

55.\texttt{\textcolor{blue}{\texttt{d}1}} \texttt{\textcolor{blue}{\texttt{e}5}} 56.\texttt{\textcolor{blue}{\texttt{d}2}}+ \texttt{\textcolor{blue}{\texttt{d}4}} 57.\texttt{\textcolor{blue}{\texttt{xf}4}} \texttt{\textcolor{blue}{\texttt{f}3}}
58.\texttt{\textcolor{blue}{\texttt{e}1}} \texttt{\textcolor{blue}{\texttt{c}4}} 59.\texttt{\textcolor{blue}{\texttt{d}3}} \texttt{\textcolor{blue}{\texttt{d}4}}?

Allowing the minor piece exchange makes it a draw. Black could have made its opponent work for a bit longer with 59...\texttt{\textcolor{blue}{\texttt{c}3}}
but a draw was still probable.

60.\texttt{\textcolor{red}{\texttt{xf}4}}

Believe it or not some PC engines without tablebases will play \texttt{\textcolor{blue}{\texttt{xf}2}} here, leaving Black with a reason to play on for a little
longer! I'll leave you to find out which!!

60...\textit{\#xd4}

A draw was probably a fair result after so many ups and downs! ½-½

\textbf{Round 4 results:}

Prestige – Emerald ½-½
Brute Force – Cougar ½-½
Dallas – Obsidian 0-1
Galileo – Centurion 1-0
Grandmaster – Polgar ½-½

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prestige</td>
<td>1</td>
<td>1</td>
<td>½</td>
<td>1</td>
</tr>
<tr>
<td>2=</td>
<td>Brute Force</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>½</td>
</tr>
<tr>
<td>2=</td>
<td>Cougar</td>
<td>1</td>
<td>½</td>
<td>½</td>
<td>½</td>
</tr>
<tr>
<td>2=</td>
<td>Emerald</td>
<td>½</td>
<td>½</td>
<td>1</td>
<td>½</td>
</tr>
<tr>
<td>2=</td>
<td>Galileo</td>
<td>½</td>
<td>½</td>
<td>½</td>
<td>1</td>
</tr>
<tr>
<td>2=</td>
<td>Obsidian</td>
<td>1</td>
<td>½</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>7=</td>
<td>Dallas32</td>
<td>½</td>
<td>½</td>
<td>½</td>
<td>0</td>
</tr>
<tr>
<td>7=</td>
<td>Grandmaster</td>
<td>½</td>
<td>½</td>
<td>0</td>
<td>½</td>
</tr>
<tr>
<td>9</td>
<td>Centurion</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>Polgar</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>½</td>
</tr>
</tbody>
</table>

This is not greatly in line with \textit{SelSearch} ratings as we had them in issue 154. According to that the leaders would be:

2036 \textit{Mephisto Polgar/10}
2023 \textit{Saiitek Brute Force}
2022 \textit{Cougar}
1976 \textit{Mephisto Dallas 32-bit}
1960 \textit{Obsidian}
1951 \textit{Emerald Classic}

So let's see what happens in the final round!

\textbf{Round 5}

The big Grandmaster auto–sensory board is a delight to play on – it is a great shame that Excalibur have folded – but we don't often get to see its chess games as it is felt to be just below the top chess computer standards.

\textbf{\textit{SAITETK CENTURION}}

\textbf{EXCALIBUR GRANDMASTER}

B12: Caro-Kann: Advance Variation

1.e4 c6 2.d4 d5 3.e5 \textit{\#f5} 4.e2 e6 5.\textit{\#g3 \#g6} 6.h4!

This could have been played on the previous move where it was theory. But here it poses the out of book Grandmaster a tricky problem. 6...f5 has been tried, though I'm not so keen myself. Better is 6...f6 which is also known, and there is the untried 6...\textit{\#e7}?

6...h5 would have stopped White's reply, or the alternative 6...f6 would have given the bishop somewhere decent to go!

7.h5! \textit{\#e4}!!

Black had an unpleasant choice, but best was 7...\textit{\#f5} and now White could try f6, though the Centurion would probably play 8.\textit{\#xf5 exf5} and, if it followed up with 9.\textit{\#d3, \#d3} or g4 it would be nicely on top!
8.\(\text{dxe4} \text{dxe4} 9.\text{g4} \text{f8} 10.\text{xe4} \text{d7}\)

One can't really see Black surviving for too long from this position.

11.\text{c3 f5} 12.\text{exf6} \text{xf6}

The only choice. Recapturing with gxf6, \(\text{dxf6}\) or \(\text{gxf6}\) allows 13.\text{xe6+}.

13.\text{c4 e7?}

I can understand the Grandmaster choosing this as it's the only move that physically protects the e-pawn. But better, though probably outside the Excalibur machine's tactical know-how, was 13...0-0-0 14.\text{f4} (not 14.\text{xe6?? e8! oops!}) 14...\text{e8} getting some sort of defence together.

14.\text{f4}

14.\text{h3!} would have been even stronger and very hard to answer. Perhaps 14...\text{f5} but after 15.\text{e2! gxf6} 16.\text{xe6} and Black's survival time is reducing every move.

14...\text{b6} 15.\text{d2 d5} 16.\text{e5 f7}

17.0-0-0! \text{b5} 18.\text{b3 g6} 19.\text{e2 d8}

20.\text{de1}

20...\text{b4}

The idea is okay – see my suggested line which includes this – but here it is played too soon as White has a very strong reply.

But really there wasn't much that Black could have tried. It needs to find a way to get both rooks moving... but how?! I think

20...\text{h6} was possibly best, then if 21.\text{xf6+ dxf6} 22.\text{xe6 b7} in the hope of some counterplay from c5, or b4 hoping to exchange the b-pawn and then \text{b8} and now mate threats down the b-file. Very optimistic but best to try something.

21.\text{c4! e7} 22.\text{f3 g8?!}

22...\text{h6} was the last chance, then if 23.\text{c5 cd5}

23.\text{g5! e8} 24.\text{d6 d8} 25.\text{c5 fd5}

26.\text{xe6 d7}

27.\text{xd5! cxd5} 28.\text{b5!}

Excellent play by the Centurion.

28...\text{g6}

28...\text{xe6} would only delay mate by a couple of moves: 29.\text{xe6 a6 30.\text{c6 g6}}

31.\text{xe7+ dxe7} 32.\text{e1 f7} 33.\text{xd7 e8}

34.\text{xe7+ f6} 35.\text{e5+ g5} 36.f4+ \text{xe5}

37.\text{h3#}

29.\text{c7+}

PC engines announce mate in 7, I wonder if the Centurion did?!

29...\text{f7} 30.\text{xd7 f6} 31.\text{xe7+ dxe7}

32.\text{xe7+ f5} 33.\text{e5+ f4} 34.\text{h4#}

A comprehensive win and well-played game by the Centurion. 1-0

In the following game we have another rarely seen engine, the D++ module produced for the SaiTeK Galileo and Renaissance boards. Black holds an advantage throughout most of this game, but White gets its chances to come back into it.

**FIDELITY PRESTIGE AG 2**

**SAITEK GALILEO D++**

D37: Queen's Gambit Declined: 5 Bf4

1.d4 d5 2.\text{f3 f6} 3.c4 e6 4.\text{c3 e7} 5.\text{f4}

0-0 6.e3 c5 7.\text{dxc5 xc5} 8.\text{cxd5 xd5}
9. \( \text{hxd5 exd5} \) 10.a3 \( \text{c6} \) 11.d3 \( \text{b6} \)
12.\( \text{c2} \) h6 13.0-0 \( \text{g4} \) 14.\( \text{h7} + \) \( \text{h8} \) 15.\( \text{f5} \)
\( \text{xf3} \) 16.\( \text{gxf3} \) d4 17.\( \text{ad1} \) \( \text{f6} \) 18.\( \text{fe1} \) dxe3

19. \( \text{xe3} \)

Note that 19.\( \text{xe3} \)?? is a bad mistake:
19.\( \text{c4} \) 20.\( \text{c3} \) \( \text{h6} \) and Black wins!
19.\( \text{c4} \) 20.\( \text{xd4} \) \( \text{xd4} \) 21.\( \text{e2} \) \( \text{xb2} \)
22.\( \text{xb2} \) \( \text{xf5} \) 23.\( \text{xb7} \) \( \text{ab8} \) 24.\( \text{xa7} \)
\( \text{xf3} \) 25.\( \text{e3} \) \( \text{g4} + \) 26.\( \text{h1} \) \( \text{a4} \) 27.\( \text{g1} \)
\( \text{b3} \)

Black is going to win the a3 pawn
28.\( \text{e5} \) \( \text{g8} \) 29.\( \text{d5} \) \( \text{xa3} \)

30.\( \text{ge1} \)

The f7 pawn is a 'no no': 30.\( \text{xf7} \)??
\( \text{a8} + \) 31.\( \text{f3} \) \( \text{xf3} \) 32.\( \text{g6} \) \( \text{f2} + \) winning easily
30...\( \text{xf3} \) 31.\( \text{g2} \) \( \text{f6} \) 32.\( \text{e7} \) \( \text{f8} \) 33.\( \text{e1} \)
\( \text{xb2} \)

The computers now swap mistakes, so Black's advantage remains the same
34.\( \text{e2} ? \)

Correct was 34.\( \text{f3} \) \( \text{xf3} \) 35.\( \text{xf3} \) \( \text{c2} \)
36.\( \text{g3} \)
34...\( \text{c1} ? \)

The reply it needed to find to take advantage of White's mistake was 34...\( \text{g6} + \)!
Then 35.\( \text{h3} \) \( \text{c1} \) 36.\( \text{e1} \) \( \text{c8} + \) 37.\( \text{d7} \) \( \text{e2} \)
forces 38.\( \text{e3} \) (38.\( \text{f1} ? \) \( \text{e2} \) wins the rook as White has to defend against \( \text{g4} \) mate

with 39.\( \text{f5} \) 38...\( \text{xf2} \) winning a second pawn, and well on the way to winning the game as well!
35.\( \text{e1} \) \( \text{f4} \) 36.\( \text{f3} \) \( \text{h4} \) 37.\( \text{c5} \) \( \text{g6} + \) 38.\( \text{h1} \)
\( \text{h3} \) 39.\( \text{f2} \) \( \text{g8} \) 40.\( \text{f4} \) \( \text{a8} \)

41.\( \text{f1} ?! \)

It is a mistake to allow the exchange of queens, but the Saitek lets White off and keeps them on the board?!
41.\( \text{e3} \) was best
41...\( \text{h5} ? \)
41...\( \text{xf1} + \) 42.\( \text{xf1} \) \( \text{a2} \) 43.\( \text{c1} \) \( \text{g4} \)!
42.f5 \( \text{g4} \) 43.\( \text{e8} + \) \( \text{xe8} \) 44.\( \text{xe8} + \) \( \text{h7} \)
45.\( \text{d3} \) \( \text{g5} \)

Why not 45...\( \text{f4} \)? and if 46.\( \text{e7} \) \( \text{f3} \)
47.\( \text{b1} \) \( \text{xf5} + \)
46.\( \text{c1} \) \( \text{f6} \) 47.\( \text{c1} \) \( \text{g5} \)

Again 47...\( \text{f4} \) was best
48.\( \text{f1} \) \( \text{h8} \) 49.\( \text{xf3} \) \( \text{h5} \) 50.\( \text{a8} + \) \( \text{h7} \)
51.\( \text{e4} \) \( \text{h6} \) 52.\( \text{f4} \) \( \text{c6} + \) 53.\( \text{f3} \) \( \text{xf3} + \)
54.\( \text{xf3} \) \( \text{g4} \) 55.\( \text{h3} \) \( \text{d4} \) 56.\( \text{f2} \) \( \text{g5} \) 57.\( \text{h2} \)
\( \text{d5} \)
58.f6?!
Much too optimistic, and this time Black finds the right reply
58.h4+?? ♗f6 (58...♕xh4? 59.♖g2 and White might still salvage a draw) 59.♖g3
♕xf5 60.♖a2. White can’t save the game against best play, but you never know what
might happen!
58...♗g6!
Better than 58...gxh6 59.♖g2+ ♗h4
60.♖g7 with drawing chances. Black should win from here
59.♗g2 ♘d7 60.♗f1 ♘d2+ 61.♖h1 ♘b2
62.♖f3 ♘c2 63.♖g1 ♘a2 64.♖f2??
This just shortens the misery for White.
If 64.♗f1 or 64.♖d3 Black still wins with
64...♖h4, but while rooks are still on the
board Black may yet go wrong although, in
fairness, its last few moves have been pretty
good!
64...♕xf2
PC engines with tablebases announce
m/17 with this!
65.♗xf2 ♘xf6 66.♖g2
The finish could go: 66...♖g5 67.♖g3 ♘f5
68.♗f3 ♗e5 69.♖g3 f5, and mate in due
course. 0–1

Both the Dallas and the Polgar/10 have had
poor tournaments. Let’s see how they can do
against each other in the last round!

**Mephisto Polgar 10MHz**

**Mephisto Dallas 32 Emulate**

D31: Queen’s Gambit Declined: Semi-Slav with
out ...♘f6 (+ Marshall Gambit and Noteboom) and
Exchange Variation lines without ...♘f6
1.d4 e6 2.c4 d5 3.♗c3 c6 4.♕f3 dxc4 5.a4
♗b4 6.e3 b5 7.♗d2 ♘b6 8.♗e5 ♗f6

I found that Black doesn’t have a particu-
larly good record with this move.
8...♖d7 9.axb5 ♘xe5 10.dxe5 cxb5
11.♗e4 ♘b7 12.axb4 ♘xe4 might be a better
line, or at least worth looking at
9.axb5 cxb5 10.b3 0–0 11.bxc4 bxc4
12.♖xc4

The computers are still in a theory line,
but now 12...♕c7 was tried in a game in
1990 when the position was quite unbal-
anced and seemed to favour White, but
Black got the draw
12...♗b7N 13.♖a5 ♘xa5 14.♘xa5 ♘d7
15.♘e2 ♗c6
Not 15...♗xe2?? when White will surely
win after 16.♗f3! ♘b3 17.♘xa8 ♘c6
18.♘xc6 ♘xc6 19.♘g1 and if 19...♗xh2
20.♗ag5++
16.♗b6 17.♖a4 ♘b7 18.♖c5 ♘b2 19.0–0
♗bd7

20.♖a4?
Not best, and now Black can try to
recover with 20.♖d1 ♗b8 21.♗b4 and the
Dallas would have been under a lot of pres-
sure. Even if 21...♗b7 22.e4 is looking good
for White
20...♘xa4 21.♗xa4

Well, now the Polgar has the 2 bishops
and should be able to keep a decent initiative
21...\textit{\textbf{f}}c8 22.\textit{\textbf{d}}3

22.\textit{\textbf{a}}6! was certainly worth playing,
Black must move the c8\textit{\textbf{a}}\textit{\textbf{a}} and now 23.\textit{\textbf{f}}2
threatening the Dallas queen would be good for White

22...\textit{\textbf{b}}b6 23.\textit{\textbf{b}}b4 \textit{\textbf{a}}a2 24.e4 \textit{\textbf{c}}c6 25.\textit{\textbf{b}}b5

This doesn't look to achieve very much.
25.\textit{\textbf{f}}2! would have kept the Polgar on top
25...\textit{\textbf{a}}a8 26.\textit{\textbf{b}}1+
25...\textit{\textbf{e}}ac8 26.\textit{\textbf{f}}2 \textit{\textbf{a}}a3 27.\textit{\textbf{b}}b3 \textit{\textbf{e}}7 28.\textit{\textbf{a}}a6
\textit{\textbf{g}}d8

29.\textit{\textbf{g}}5?!

The bishop pair should be asserting some
authority for White, but it was better to
achieve this here with the other bishop:
29.\textit{\textbf{b}}b5 \textit{\textbf{c}}c8 and now bring the Black
squared \textit{\textbf{a}} into play with 30.\textit{\textbf{b}}4. Best now
seems 30...\textit{\textbf{c}}7 but 31.\textit{\textbf{c}}c3 would keep the
White ahead

29...\textit{\textbf{h}}6 30.\textit{\textbf{h}}4 \textit{\textbf{e}}5!

Well played by the Dallas, this nearly
equalises and makes it hard for the Polgar to
win

31.\textit{\textbf{d}}d3 exd4 32.\textit{\textbf{e}}xd4

White could have maintained a little
pressure with 32.\textit{\textbf{a}}a2 then 32...\textit{\textbf{c}}c4 33.\textit{\textbf{e}}xd4
\textit{\textbf{e}}xd4 34.\textit{\textbf{e}}xd4 \textit{\textbf{b}}b4 35.\textit{\textbf{a}}a1, but it would
need a mistake by Black for White to reach a
winning chance.

After 32...\textit{\textbf{e}}xd4 33.\textit{\textbf{e}}xd4 \textit{\textbf{g}}5 34.\textit{\textbf{g}}3 \textit{\textbf{h}}5
35.\textit{\textbf{d}}2 \textit{\textbf{x}}g3 36.hxg3 it would be drawn and
the operators agreed this, even though it had
been a disappointing tournament for them
both. \textit{\textbf{\mid\textbf{i}}}-\textit{\textbf{\mid\textbf{i}}}

Round 5 results:
Prestige – Galileo 0–1
Obsidian – Cougar \textit{\textbf{\mid\textbf{i}}–\textit{\textbf{\mid\textbf{i}}}}
Emerald – Brute Force 1–0
Centurion – Grandmaster 1–0
Polgar – Dallas \textit{\textbf{\mid\textbf{i}}–\textit{\textbf{\mid\textbf{i}}}}
Here is the **FINAL TABLE:**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1=</td>
<td>Emerald</td>
<td>½</td>
<td>½</td>
<td>1</td>
<td>½</td>
</tr>
<tr>
<td>1=</td>
<td>Galileo</td>
<td>½</td>
<td>½</td>
<td>½</td>
<td>1</td>
</tr>
<tr>
<td>3=</td>
<td>Cougar</td>
<td>1</td>
<td>½</td>
<td>½</td>
<td>½</td>
</tr>
<tr>
<td>3=</td>
<td>Obsidian</td>
<td>1</td>
<td>½</td>
<td>0</td>
<td>½</td>
</tr>
<tr>
<td>3=</td>
<td>Prestige</td>
<td>1</td>
<td>1</td>
<td>½</td>
<td>½</td>
</tr>
<tr>
<td>6</td>
<td>Brute Force</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>½</td>
</tr>
<tr>
<td>7</td>
<td>Centurion</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>Dallas32</td>
<td>½</td>
<td>½</td>
<td>½</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>Grandmaster</td>
<td>½</td>
<td>½</td>
<td>0</td>
<td>½</td>
</tr>
<tr>
<td>10</td>
<td>Polgar</td>
<td>0</td>
<td>0</td>
<td>½</td>
<td>½</td>
</tr>
</tbody>
</table>

Sargon 2.0 which also scored 3.

As O'Connell reports, 'En route to victory, Chess Challenger had quite a lot of good fortune, being hopelessly lost in no less than 3 games'. Yet it scored 5/5!!

**Viktor - Chess Challenger**

O'Connell says of this: Instead of 33...Ec1? as played, White could have won with 33...h1! for then there is nothing Black can do about the threat of 34.Eg1+!

If (a) 33...f7 (Actually 34.h7+! e8 35.d6# is even quicker) 34.Ee6+ g7 35.Eg1+ h7 36.g6+ h8 37.h5#

(b) 33...f6 34.Eg1+ f7 (34...g4 drags it out briefly: 35.Exg4+ g5 36.Exg5+ f7 37.d6#)

Although White still has some advantage after the move played, Challenger won in the end.

**Sargon 2.0 - Chess Challenger**

O'Connell says of this: Here Sargon played 24...h6+?. Any strong human would have played instantly 24...fxe6! If 24...xe2 then 25.h6+ g8 26.g7#. Other defensive tries also fail: 24...e7 allows 25.h8#; while 24...e6 25.xd8+ and White wins a whole rook.

After 24...e7 the game was equal, but again Black won in the end. It got away with everything!

---

**All the way back to the 1980 WCCC!**

Mark Uniacke recently sent me some articles from the early 1980's which he had found in PCW magazine! So we'll look at some of these in future issues! The first is from their coverage by Kevin O'Connell of the 1980 World Championship, under the heading of "Micro Chess"!

The title was won by Fidelity's Chess Challenger, a Dan & Kathe Spracklen program, with 5/5. Boris Experimental came 2nd. with 4/5. There was a British entrant Mike by Mike Johnson and Dave Wilson which scored 3/5, and other Spracklen entries such as...
Eric asked me to give some information about the HIARCS development and how it is progressing.

For HIARCS 14 we have been investigating and experimenting in many different areas to try to improve the overall chess strength against both computers and humans. It is important to point out that quite different approaches are needed depending on whether the opponent is human or computer.

The approach which seems to have become common place in modern programs is safety first, deep search with a low branching factor backed by an extremely fast nodes per second rate. In this approach the engine searches moves it intends to play more deeply so it is much less likely to make errors, however this can lead to a quiet, dry playing style which we have always wanted to avoid in HIARCS. That is not to say the evaluation is not important, but even with a weaker evaluation a deep search is able to compensate in many practical ways for a lack of chess knowledge. A deeper search (with less chess knowledge) is able to appear more knowledgeable than a shallower search with more chess knowledge. As a result a deeper search is often a deciding factor in the majority of engine-engine games although at the incredible depths reached by today's programs this can be difficult to see since the games are not usually resolved by tactical mistakes but rather by subtle positional concessions made by the shallower searching program as it avoids a deep tactic it "suddenly" discovered later than it's deeper searching opponent!

In contrast against strong human players a more active playing style with good chess knowledge is more effective and more pleasing on the eye. This playing style and approach is the preferred one we have pursued with HIARCS for many years even at the expense of the search speed and depth for engine-engine play. This approach has been very successful for HIARCS on lesser hardware, for example on Palm and Pocket PDAs where HIARCS has been able to score super-GM like (2900 Elo) performances against IMs and GMs in human tournaments. These performances have been well ahead of any other chess program and rival performances achieved by very much faster PC hardware.

Over the years we have had the pleasure of working with the world's strongest chess players like world champion Garry Kasparov and Vishy Anand and helping their preparations and analysis with the use of HIARCS chess engines. Through these experiences we have become acutely aware how important it is for chess players to have genuine original and diverse ideas presented to them. It is worth noting that the safety-first deep search engines can only offer a one-dimensional solution here and so it is important that HIARCS maintains its unique approach and offers an important extra dimension for chess analysis.

As you can see there are contrasting requirements on HIARCS 14, to compete strongly in engine-engine games while maintaining and improving HIARCS performance for human players. In HIARCS 14 we are progressing the HIARCS paradigm to try to meet these requirements.
To achieve this we have been pursuing many interesting ideas including machine learning, better utilisation of chess knowledge in search, search tree shape etc. So far this has resulted in clear improvements over the HIARCS 13 series, but more work is still required to fully utilise the chess knowledge being produced.

Complementary to this work is our work on the HIARCS opening book which is now available on a book subscription basis. The HIARCS book has been shown to be the strongest commercial openings book available for more than a year.

In addition in the last year our opening book has increased in strength by an incredible 80 Elo above what was then the strongest opening book. In addition we keep our book right up to date with the latest human and computer theory so that each quarterly release is bang up to date with the current trends and latest theory. These attributes explain why we have so many chess players (including top level players) using the HIARCS book as part of their preparations.

All this development is backed up by almost continuous testing on many machines over many thousands of games to ensure we understand the relative strengths of the versions being produced."

Best wishes, Mark Uniacke
DAVE WIEKRYKAS STRIKES AGAIN!
STOCKFISH TOPPLED!!

Readers who have been getting our magazine over the years will have seen games from Dave Wiekrykas before! But as the PC engines have got stronger and our hardware faster, they've become a little bit rare. He bought the latest versions of Fritz, Hiarcs and Rybka off me when I was at Countrywide, and downloaded Junior from the Hiarcs site... but no games came, just regular letters we swap, chatting about chess and life in general.

Then just a few weeks ago his latest letter, and with a game, dropped through my letterbox. It was played on a Dual2Core 64-bit 2.25GHz laptop with a G/60 time control.

Smile and enjoy!!

Dave Wiekrykas - Stockfish 2.1
B23: Closed Sicilian: Lines without g3

1.e4 c5 2.Qc3 e6 3.f4 Qe7
Although 4.Qf3 is now played almost 100% here, Qc4, e5 and d3 have also been tried. Dave's move definitely hasn't!

4.Qh3
Dave mostly lets the engines use the Hiarcs book when he plays, as he knows that Mark and I have spent some time putting in a few variations to try and stop these efforts to get us out of book early in positions encouraging the program to block the centre. And Dave likes the challenge so used the book that is on the Hiarcs13 dvd for this game - but we've never considered this move! So Stockfish is on its own... and plays the strangest of moves!

4...Qec6?
I don't know that any other engine would play this! Hiarcs13 certainly doesn't, it has the other (and obvious) b8/knight moving to c6, with 4...d5 as its second choice. I think most engines would play 4...Qbc6.

Well of course Dave, who hasn't had a win to send us for quite some time, immediately senses that this unexpected choice gives him a chance to contribute to Selective Search again!

5.Qf2! d5 6.d3 Qe7 7.g3 d4
Of course this half-blocks the centre and also pushes Dave's knight to where he wants it to go anyway!

Perhaps 7...Qa6 8.Qg2 d4 9.Qb1=

8.Qe2 0-0 9.Qg1

This is a critical moment, against Dave the computer must NOT play e5

9...e5?!
Cutter came up with 9...f6!? It would be interesting for readers to check their favourite engines and see what they do. Another engine suggested 9...Qd7 10.Qf3 Wa5+ 11.Qd2 Wb6.

10.Qf5!
An analysis engine comment for this is 'White wins space'. True, but Dave has also blocked the centre and made it difficult for the Black pieces to operate on the kingside. He will have been feeling pretty happy already!

10...Qd7 11.Qf3 Qe8
Two consecutive bishop moves which hardly achieve anything. Already it is clear that Stockfish has few positive choices

12.Qe2 Wb6?!
Dave will have been delighted to see the Black queen wander off onto the wrong side of the board and, because of the blocked centre it will take it at least two moves to get back to where it will need to be!

Better was 12...Qd7

13.g4! h6
Trying to stop Dave playing g5, which is a good idea

14.h4
For the first time the Stockfish evaluation on my laptop was beginning to show a measure of concern, and had White just ahead. Its next move won't help!

14...c4?!

14...\(b4\) seems to be best, then (if we can forecast one of Dave's moves!) 15.\(d1\)
\(d7\), but 16.g5 has White ahead. I imagine g5 was the move Stockfish was trying to put back in its horizon when it chose 14...c4

15.dxc4 \(d8\)

I'd have thought 15...\(b4\) was the logical choice after clearing the way by vacating c5

16.b3 \(d7\) 17.\(d2\) a5 18.a3 \(e7\) 19.\(x3\)

Dave builds up these positions very slowly. Having got this far he knows they will come good eventually.

So whilst 19.g5! is already strong, it can wait for a while!

19.\(c5\) 20.\(f1\) \(e8\) 21.\(e1\) \(d7\)

If 21...f6 22.g5! and neither of the Black pawns can capture this as 23.hxg5 opens the h-file and Black's troubles deepen

22.\(h3\) \(h8\)

Interestingly Stockfish is showing around -2.00 here: "I'm in trouble". Most engines see Black as about -1.00: "Not too bad".

23.g5! g6?

If the evaluation I just mentioned is to

Stockfish's credit, implying it had a better understanding of the dangers than other engines, then this move says it doesn't!

23...\(g8\) was the best, maybe only try. Then 24.gxh6 g6 25.f6 \(d8\) 26.h7 but White is still winning.

24.f6 \(d6\)

Sacrificing the bishop with 24...h5 to stop the pawn advance is no good: 25.\(xh6\) \(xh6\) 26.b4 and Black's position is miserable

25.h5! \(g8\) 26.\(xg6\) \(xg6\) 27.\(e2\)

27.g2! followed by \(h4\) was also very strong

27...\(x3\)

White has no less than 5 ways to recapture, and one is much better than all the others!

28.\(e3\)

28.\(f3\) might go 28...\(g8\) 29.\(h6\) \(h6\) 30.\(g6\) \(h8\) eval estimate w200;

28.\(cxd3\) \(g8\) eval estimate w475;

28.\(fxd3\) \(xh8\) eval estimate w450;

28.\(x3\) \(f8\) eval estimate w250

Now, with White's rooks connected, Black's chances have disappeared.

28...\(e8\) 29.\(h1\) \(f8\) 30.\(c1\) \(c7\)

Trying to get back, but it's much too late

31.f1 \(h8\) 32.\(h1\) \(h3\)

Black resorts to sacrifices to delay the inevitable

33.\(xh3\) \(xh3\) 34.\(xh3\) \(g8\) 35.\(xh6+\)

36.f7+ \(xg7\) 37.\(xh6\) also led to mate, and after this too Stockfish was showing mate announcements against itself - "just like old times!" said Dave, with a smile - :)

After 36...\(g8\) 37.fxe7 \(xg7\) 38.\(h3\) \(e7\)

39.\(g4\) is mate in a few more moves. 1-0

Brilliant Dave, thanks for sharing!
BILL REID'S "TIME FOR ADJUDICATION"
TOUGH POSITIONS FOR COMPUTERS... AND SOMETIMES US!

LAST TIME! Bill's two positions over issues 153 and 154 foxed our engines again, one because of statics and one it seemed because of the horizon effect. Well done again Bill! Here are some further remarks he sent about the second one!

Bill: So that position I put in SelS 154 caused problems not just for my old friend Fritz8 but also for Deep Rybka 4, Stockfish 2, Deep Fritz 12 etc., etc., which all showed huge winning advantages for White. Here it is:

Black to move

The problem for the programs is that they are excellent at measuring up material and positional advantages, but then they fall down on what is a critical question for adjudicators: 'Can the advantage be translated into a win?' Forging out five shillings to have a human eye make that judgement was a good idea. Those old masters could see beyond extra pieces and control over squares and ask what, given best play, the result of the games should be. In this case it has to be a draw because the Black queen can go on forever moving around the board, but gets nowhere and if White plays correctly, she is never going to get the win.

Sometimes, of course, the problem is about spotting whether, in spite of having apparently no material or positional advantage, there is, nevertheless, a win to be obtained. This was the case in that final position which I showed in SelS 154.

Here then was Bill's new one in issue 154. This is how he introduced it.

Bill: Now here is another of those "Time for Adjudication" positions, one which the team did not have to send to the local chess master, along with his fee of five shillings!

White to move

The player of the White pieces was sure he had a win, but his opponent was unwilling to resign. So this time the decision lay with the team captains and they took no time at all to agree it was indeed a win for White.

What was the winning move they had in mind, and can Rybka find it? Or if not, perhaps Stockfish or one of the others will?

I told Bill and my readers that I had only found a couple of engines that can do this one given 4 or 5 minutes on my Dual2Core.

Bill Here, my good old Fritz would play 1.Nxg3 and judge that the game is drawn after 1...Bxe3 2.Nxh5 Bxf2+ 3.Kxf2 Kxh5, =0.00. And that would be a draw!

But those old team captains could see right away that White has a win after 1.f3!

It takes quite a few moves to get there but it's easy to see how because, after 1.f3, the Black king is trapped and only its bishop can move. So, no difficulty for us in seeing that the White king can roam around the board, land on d7, capture the e-pawn, and take over the knight's role by landing on f5.

There's nothing Black can do to stop it!
And now, whatever Black does with the bishop, there is no way of preventing the White knight from delivering mate.

So how did your engines do? I told you last time that I'd tested Critter, Fritz, Hiarcs, Houdini, Junior, Naum, Rybka, Shredder, Stockfish and Zappa on this, for 4 minutes each on my Dual2Core. And that only 2 from this group got it, the others don't.

The successful pair were:

**Houdini**, which took 3mins to show 1.f3 and had a +1.05 evaluation after 4mins, and

**Critter** which took only 51secs and showed +1.83 in just under 2mins – an excellent effort. For the record here is its full line of analysis:

**Critter 1.2 32-bit**: 1.f3 found at 50 secs. the 1.83 eval is under 2 mins. 1...dxe3+ 2.dxe3 f4 3.e3 e2 d6 4.e4 d5 5.e5 f8 6.e5 c6 7.e7 c3 8.e7 d4 9.e7 d5 10.e7 e6 11.e6 e6 12.e6 e6 13.e5 e5 14.e5 e5 15.e5 e5 16.e5 e5 17.e5 e5 18.e5 e5 19.e5 e5 20.e5 e5

I didn't get any reports of other engines and didn't try Glaurung, Sjeng, Komodo, Spike or Spark. Did anybody find out if anything else got the solution?

Back to Bill:

Thanks to Eric's good work on the last position we know that today there are some engines that can see the win. So are they now getting abilities to see beyond material and positional advantages?

Here is a position that might be useful in testing that out:

---

I first published this in *SelS* 79, in 1998! Those old programs then all agreed that this was win for Black, but then threw the win away by playing 1...BxN?? However at that time the top rating was 2775. Now it's 3211. So surely they will do a lot better?

Well my readers - do they? I've found out, and I hope you will take a look as well!

---

**Isle of Lewis Chess Set**

**The History of the Hebrides**

There are several stories of how these Norse figures ended up on a remote beach at Uig, Isle of Lewis. One of the most interesting Isle of Lewis Chess Set Stories is in the Morrison Manuscripts, which tells of murder and greed and the contrasting hospitality shown to some unfortunate sailors. The Isle of Lewis Chess Set was found in 1831 when, after an exceptionally high tide, a crofter took off in pursuit of a cow across a beach near Ardroy in Uig, Lewis.

The crofter discovered that the tide had eroded the sandbanks and had uncovered what appeared to be a small stone-built cairn or chamber. Upon further investigation he discovered that inside the chamber lay seventy eight chessmen carved from Walrus ivory. The crofter sold the chessmen to the British Museum for a princely sum of £80, being a poor crofter he would have found this amount of money a virtual fortune as it would have taken him several years of hard labour to accumulate such funds. Of course the Isle of Lewis Chess Set is priceless being 12th century Norse.

The chessmen depict various figures such as church dignitaries and Norse warriors of the period but sadly the collection came from a total of eight incomplete sets and the "missing" pieces have never been found. The Isle of Lewis Chess Set is now housed in Edinburgh.
BEYOND DEEP BLUE, subtitled 'Chess in the Stratosphere', is a new hardback book on computer chess (!) by Monty Newborn.

Newborn has written about computer chess before, including 'Deep Blue: An Artificial Intelligence Milestone', and I can tell you that this is a good read for any chess computer fan. Note though that after looking at the two Deep Blue v Kasparov matches, it moves immediately on to a chapter called 'The Dawn of the Post-Deep Blue Era' with a photograph of Shredder's Stefan Meyer-Kahlen, and is dedicated to the history of the rise of the PC Engines. I mention this only so that anyone hoping to read about Novag Star Diamonds or Mephisto Londons won't be disappointed, it is about the highest levels of computer chess, which means the PC engines that have ruled since the late 1990's.

It is over 10 years since Deep Blue II stunned the chess world by defeating Garry Kasparov, and Deep Blue was retired almost immediately afterwards. However there has been a succession of better and better chess playing engines on ever faster PC hardware and, as Newborn says, 'Today there is little question that the world's best engines are stronger at the game than the world's best human players'.

This book tells the continuing story of the chess engine and its steady improvement, with 118 analysed games along with a detailed examination of the remarkable technological progress made - and asks questions about which one is best, how good is it, and how much better can it get. There is also an excellent and comprehensive index... so good that you'll even find my name in it!

The back cover synopsis reads:

- Presents a total of 118 games, played by 17 different chess engines, collected together for the first time in a single reference.
- Details the processor speeds, memory sizes, and the number of processors used by each engine.
- Includes games from 10 World Computer Chess Championships, and the three most recent major computer chess tournaments of the Internet Chess Club.
- Describes three historical matches between leading engines: Hydra v Shredder, Junior v Fritz, and Zappa v Rybka.

It's altogether a fascinating read of 287 pages with b & w photos and tournament tables interspersed throughout the book.

The first chapter covers the two Kasparov-Deep Blue matches, with background details, all the games, notes and diagrams.

The notes to games are not of Selective Search detail, but cover critical moments in the games where the result was determined,
and these together with the diagrams make each game interesting. But I was still a little surprised by the notes to the 6th game of the 2nd match. After 1.e4 Kasparov played 1...e6, which was very rare for him, but 'with a special preparation for this game'. There followed 2.d4 d5 3.Nc3 dxe4 4.Nxe4 Nf6 5.Ng5 Nxf6 6.Bd3 e6 7.Nf3 h6. Newborn does not mark this with a '?' or '?!', but just remarks that 'this move was the beginning of Kasparov's attempt to suck Deep Blue into a situation that it wouldn't understand and thus misplay. However Deep Blue played quite accurately.' But my understanding has always been that the Caro Kann was pretty much a new addition to Kasparov's repertoire, and he actually forgot the move order, which should be 1...e6 2.d4 3.Qe2 and only then h6, as in Kamsky-Karpov in 1996. Indeed 7...h6 'has been condemned for years, and is an extremely risky try,' as shown by Ray Keene in the notes in his book of the match. But in fairness Newborn later brings the game to life with Kasparov 'walking to his personal lounge, returning, going back again, evidently exasperated and frustrated'. He resigned at move 19, losing the game and the match!

In chapter 2 I was interested to see the Table listing the SSDF's Elo ratings for their top-rated engines, each with the hardware tested on, running from a Mephisto Amsterdam on 2003 Elo in 1986 to Fritz 6 on 2721 using an AMD K6-450MHz, and then there's an updated table near the end of the book! The first one is followed immediately by coverage of the 9th WCCC in Paderborn, Germany, won by Shredder. This chapter is entitled 'The Dawn of the Post-Deep Blue Era'.

The next chapter, 3, entitled 'Shredder bows to Deep Junior' covers their tie at 1= in the 2002 WCCC, and then the games in which Junior won the play-off.

Chapter 4 is called '2002: Deep Fritz befuddles Kramnik' - a little harsh perhaps as it was close, ending in a 4-4 draw. But a PC engine drawing with Vladimir Kramnik as long ago as 2002 in a proper match was Chess News Headlines indeed!

After this we have '2003: Deep Junior confounds Kasparov', a match which ended 3-3, and then chapters 6 and 7 show how Shredder won the WCCC title back only for Junior to regain it yet again the next year.

Chapter 8 covers the Hydra v Shredder match in 2004, with Hydra, using a Cluster set-up based in Abu Dhabi, hardware which completely overpowered Shredder's 4-core AMD. Newborn tells us all about the Hydra project, the team led by Chrlly Donniger, and Hydra's hardware.

I was sorry that this chapter only included a passing reference noting: 'in the following year Hydra essentially murdered England's GM Michael Adams'. This match, held in London, was a fairly important and prestigious affair, even though very one-sided.

But we do get treated to all the Hydra-Shredder games, with clock times and Shredder's evaluations left in, which definitely add to the interest level playing through them.

I think it is perhaps slightly misleading that, although Newborn shows the power differences between computers both in this match and other places, he largely ignores them in his summations. For example after Hydra v Shredder he concludes that Hydra's win probably makes it the best chess engine in the world, but a power differential of at least 6x is almost always going to win, unless the faster engine is substantially inferior due to poor chess knowledge or programming. Nevertheless as a 'total chess power' I do agree that Cluster Hydra was probably now the best chess player in the world!

In chapter 9 we meet the then almost unknown Zappa as it ran away with the 13th WCCC by 2 clear points from another newcomer called Fruit! Zappa's superb win with 10½/11 contained one real curiosity - it won 10 and only drew 1 game... and it's draw was against a program called Fute which won 0, lost 10 and only drew 1 game... against Zappa! This was a really strong field and Newborn suggests that 'it would be a fair estimate that the world's top humans would have been hard pressed to finish much higher than the middle of the field!' Amazing, this was 2005.
In 2006 the comeback kid Junior won the WCCC again. Newborn's table shows that Fruit didn't reappear, but another newcomer called Rybka came 2= with Shredder, Zappa was 4th.

Chapter 11 is all about the second Fritz v Kramnik match, the bold headline is 'Deep Fritz Clobbers Kramnik, 4-2'. It's 2006 and Newborn's chapter includes all 6 games! He suggests that 'this marked the end of human attempts to outplay their electronic rivals'.

Now we are into 2007, and for chapter 12, we have the big Deep Junior v Deep Fritz match. Newborn proclaims that '2007 marked the beginning of a new era'. It is now 10 years since the second Deep Blue-Kasparov match, and our author declares the new era might be called 'Chess in the Stratosphere'. Classed at the time as 'The Ultimate Computer Chess Challenge', Fritz, which had vanquished Kramnik, was downed by 4-2 in its match against the exciting Junior, which 'now gets the bragging rites (sic) as the best chess engine'.

Pleasingly in detailing the match record Newborn correctly shows us that while Fritz was on an 8-core 2.66MHz setup located in Hamburg, Junior was on a 16-core 3MHz setup located in London... once more, I believe, processor speed has counted in some part towards the result.

The book has all 6 games, and some of these were particularly interesting! Junior sacced or lost 3 pawns in game 2 before drawing, and in game 3 clearly sacrificed 3 pawns (again?) and won! In game 4 it again sacced 2 pawns before winning the exchange and the game. Exciting computer chess had arrived at the top level and at times there was great tension for the operators and spectators!

Well, we've only just passed halfway in the book! Your appetite should be fully whetted! I must cover the rest more briefly, though there is no lessening in quality.

2007 and chapter 13 brings us to the 15th WCCC and the first of Rybka's wins. Of course the book went to the publishers, Springer, before the allegations against Rybka had fully emerged, and therefore before the outcome with the ICGA banning Rybka was announced. So 'the Rybka years' 2007-2010, which include the Rybka - Zappa match, are treated with our author unaware of what has happened in the early months of 2011. But this doesn't mean that Newborn wasn't aware of the rumours going around!

Interestingly in chapter 16 on page 206 Newborn clearly marks Cluster Toga as a derivative of Fruit, but the Toga folk had always been open about this. Then on page 235 on the first page of chapter 19 we read: 'Swirling around in the background for many years has been the controversy over open source engines and free chess engines. It came to the boil in 2010... in the last 5 years or so the source code of Fabien Letouze's Fruit has found its way into other chess engines...'. So although Newborn wrote before the scandal erupted, he was well up-to-date with the allegations. Indeed a few sentences later he discusses the so-called Russian programmers behind Ippolit, and whether they are a derivative of Rybka, and then the claims about the relationship between Fruit, Strelka and Rybka!

In the final very interesting chapters we have the Internet Chess Club tournaments and the 2010 WCCC, and a last chapter 21 called 'And Beyond Rybka' where Newborn extends the SSDF top-rated engines Table I mentioned earlier through to 2010. Also he looks at Processor power, Opening books, Endgame tablebases, and other important matters, e.g. the future of Human v Computer.

And we've still not finished, as there are useful Appendices checking out some Opening theory statistics as they relate to Computer engines, plus other matters and a list of useful website addresses.

You'll have seen a couple of quibbles in my review, but please, these are minor! This is a smashing book! I thoroughly enjoyed my first browse through it, and then a proper read of it. It will be a very welcome resource and record for the future, and I look forward to going through it all again soon, to see what I missed first time!
## THE CCRL AND CEGT RATING LISTS!

The very interesting CCRL & CEGT Website Groups have COMPLETE RATING LISTS for a wide range of PC hardware, and include old, new, interim and free versions, though they don't always both test exactly the SAME engines! I extract from the lists their ratings for engines when they're running on a Single Processors.

### CEGT 40/20 32/64-bit 1 cpu Rating List
- [http://www.husvankempen.de/nunn](http://www.husvankempen.de/nunn)

Helps compare SOME engines at both 32 & 64-bit

<table>
<thead>
<tr>
<th>Pos</th>
<th>Engine</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Houdini 1.5A x64</td>
<td>3208</td>
</tr>
<tr>
<td>2</td>
<td>CRITTER 1.2 x64</td>
<td>3172</td>
</tr>
<tr>
<td>3</td>
<td>Rybka 4.1 x64</td>
<td>3150</td>
</tr>
<tr>
<td>4</td>
<td>Rybka 4 x64</td>
<td>3130</td>
</tr>
<tr>
<td>5</td>
<td>CRITTER 1.2 x32</td>
<td>3129</td>
</tr>
<tr>
<td>6</td>
<td>STOCKFISH 2.1.1 x64</td>
<td>3121</td>
</tr>
<tr>
<td>7</td>
<td>STOCKFISH 2.01 x64</td>
<td>3119</td>
</tr>
<tr>
<td>8</td>
<td>Komodo 2.03 x64</td>
<td>3116</td>
</tr>
<tr>
<td>9</td>
<td>STOCKFISH 1.9.1 x64</td>
<td>3097</td>
</tr>
<tr>
<td>10</td>
<td>Rybka 3 x64</td>
<td>3094</td>
</tr>
<tr>
<td>11</td>
<td>Rybka 4 x32</td>
<td>3094</td>
</tr>
<tr>
<td>12</td>
<td>CRITTER 1.0 x64</td>
<td>3085</td>
</tr>
<tr>
<td>13</td>
<td>Rybka 3 x32</td>
<td>3050</td>
</tr>
<tr>
<td>14</td>
<td>Naum 4.2 x64</td>
<td>3027</td>
</tr>
<tr>
<td>15</td>
<td>Komodo 1.3 x64</td>
<td>3020</td>
</tr>
<tr>
<td>16</td>
<td>Naum 4.2 x32</td>
<td>3003</td>
</tr>
<tr>
<td>17</td>
<td>Komodo 1.2 x64</td>
<td>3000</td>
</tr>
<tr>
<td>18</td>
<td>Rybka 2.3.2A x64</td>
<td>2995</td>
</tr>
<tr>
<td>19</td>
<td>Shredder 12 x64</td>
<td>2981</td>
</tr>
<tr>
<td>20</td>
<td>Naum 4/4.1 x32</td>
<td>2976</td>
</tr>
<tr>
<td>21</td>
<td>SJENG CT 2010 x64</td>
<td>2975</td>
</tr>
<tr>
<td>22</td>
<td>SPIKE 1.4x32</td>
<td>2974</td>
</tr>
<tr>
<td>23</td>
<td>Gull 1.1 x64</td>
<td>2974</td>
</tr>
<tr>
<td>24</td>
<td>Gull 1.2 x64</td>
<td>2971</td>
</tr>
<tr>
<td>25</td>
<td>Hiarcs13.2 x32</td>
<td>2964</td>
</tr>
<tr>
<td>26</td>
<td>Rybka 2.3.2A x32</td>
<td>2960</td>
</tr>
<tr>
<td>27</td>
<td>PROTECTOR 1.4.0 x64</td>
<td>2958</td>
</tr>
<tr>
<td>28</td>
<td>Deep Fritz 12 x32</td>
<td>2956</td>
</tr>
<tr>
<td>29</td>
<td>Spark 1.0 x64</td>
<td>2952</td>
</tr>
<tr>
<td>30</td>
<td>Rybka 1.2F x64</td>
<td>2949</td>
</tr>
<tr>
<td>31</td>
<td>Junior 12.5 x64</td>
<td>2941</td>
</tr>
<tr>
<td>32</td>
<td>Spark 0.5 x64</td>
<td>2940</td>
</tr>
<tr>
<td>33</td>
<td>DoC 1.3.4 x64</td>
<td>2931</td>
</tr>
<tr>
<td>34</td>
<td>Deep Fritz 11 x32</td>
<td>2930</td>
</tr>
<tr>
<td>35</td>
<td>Rybka 1.2F x32</td>
<td>2927</td>
</tr>
<tr>
<td>36</td>
<td>Hannibal 1.1 x64</td>
<td>2927</td>
</tr>
<tr>
<td>37</td>
<td>Hiarcs13/13.1 x32</td>
<td>2922</td>
</tr>
<tr>
<td>38</td>
<td>Fritz 12 x32</td>
<td>2919</td>
</tr>
<tr>
<td>39</td>
<td>Fritz 11 x32</td>
<td>2913</td>
</tr>
<tr>
<td>40</td>
<td>Thinker 5.4d Inert x64</td>
<td>2912</td>
</tr>
<tr>
<td>41</td>
<td>Spark 0.4 x64</td>
<td>2904</td>
</tr>
<tr>
<td>42</td>
<td>Zappa Mexico II x64</td>
<td>2903</td>
</tr>
<tr>
<td>43</td>
<td>Shredder WM (Bonn Edition) x32 2901</td>
<td></td>
</tr>
</tbody>
</table>

### CCRL 40/40 32-bit 1 cpu Rating List
- [http://www.computerchess.org.uk/ccrl](http://www.computerchess.org.uk/ccrl)

An EQUAL, all 32-bit, comparison of the engines

<table>
<thead>
<tr>
<th>Pos</th>
<th>Engine</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CRITTER 1.2</td>
<td>3155</td>
</tr>
<tr>
<td>2</td>
<td>Rybka 4.1</td>
<td>3141</td>
</tr>
<tr>
<td>3</td>
<td>STOCKFISH 2.1.1</td>
<td>3137</td>
</tr>
<tr>
<td>4</td>
<td>CRITTER 1.01</td>
<td>3125</td>
</tr>
<tr>
<td>5</td>
<td>STOCKFISH 2.01</td>
<td>3117</td>
</tr>
<tr>
<td>6</td>
<td>Rybka 4</td>
<td>3116</td>
</tr>
<tr>
<td>7</td>
<td>Komodo 2.03</td>
<td>3113</td>
</tr>
<tr>
<td>8</td>
<td>STOCKFISH 1.9.1</td>
<td>3102</td>
</tr>
<tr>
<td>9</td>
<td>Rybka 3</td>
<td>3096</td>
</tr>
<tr>
<td>10</td>
<td>CRITTER 0.90</td>
<td>3090</td>
</tr>
<tr>
<td>11</td>
<td>Naum 4.2</td>
<td>3057</td>
</tr>
<tr>
<td>12</td>
<td>Naum 4/4.1</td>
<td>3048</td>
</tr>
<tr>
<td>13</td>
<td>SJENG 2010 CT</td>
<td>3044</td>
</tr>
<tr>
<td>14</td>
<td>Shredder 12 OA=OFF</td>
<td>3034</td>
</tr>
<tr>
<td>15</td>
<td>SPIKE 1.4 Leiden</td>
<td>3020</td>
</tr>
<tr>
<td>16</td>
<td>Komodo 1.3</td>
<td>3020</td>
</tr>
<tr>
<td>17</td>
<td>Rybka 2.3.2A</td>
<td>3015</td>
</tr>
<tr>
<td>18</td>
<td>Hiarcs 13.2</td>
<td>3013</td>
</tr>
<tr>
<td>19</td>
<td>Junior 12.5</td>
<td>3007</td>
</tr>
<tr>
<td>20</td>
<td>Komodo 1.2</td>
<td>2999</td>
</tr>
<tr>
<td>21</td>
<td>Fritz 12</td>
<td>2990</td>
</tr>
<tr>
<td>22</td>
<td>PROTECTOR 1.4.0</td>
<td>2981</td>
</tr>
<tr>
<td>23</td>
<td>Hiarcs 13/13.1</td>
<td>2981</td>
</tr>
<tr>
<td>24</td>
<td>Gull 1.1</td>
<td>2980</td>
</tr>
<tr>
<td>25</td>
<td>Rybka 1.2F</td>
<td>2978</td>
</tr>
<tr>
<td>26</td>
<td>Spark 1.0</td>
<td>2972</td>
</tr>
<tr>
<td>27</td>
<td>Hannibal 1.1</td>
<td>2966</td>
</tr>
<tr>
<td>28</td>
<td>Naum 3/3.1</td>
<td>2963</td>
</tr>
<tr>
<td>29</td>
<td>Junior 12</td>
<td>2960</td>
</tr>
<tr>
<td>30</td>
<td>Thinker 5.4d Inert</td>
<td>2959</td>
</tr>
<tr>
<td>31</td>
<td>Fritz 11</td>
<td>2959</td>
</tr>
<tr>
<td>32</td>
<td>DoC 1.3.4</td>
<td>2949</td>
</tr>
<tr>
<td>33</td>
<td>Booot 5.1.0</td>
<td>2946</td>
</tr>
<tr>
<td>34</td>
<td>Shredder 11</td>
<td>2935</td>
</tr>
<tr>
<td>35</td>
<td>Junior 11.1A</td>
<td>2933</td>
</tr>
<tr>
<td>36</td>
<td>Toga II 1.4.1 SE</td>
<td>2929</td>
</tr>
<tr>
<td>37</td>
<td>GRAPEFRUIT 1.0</td>
<td>2929</td>
</tr>
<tr>
<td>38</td>
<td>CYCLONE xTREME FURY</td>
<td>2929</td>
</tr>
<tr>
<td>39</td>
<td>SJENG WC2008</td>
<td>2928</td>
</tr>
<tr>
<td>40</td>
<td>Spark 0.4</td>
<td>2924</td>
</tr>
<tr>
<td>41</td>
<td>Hiarcs 12/12.1</td>
<td>2920</td>
</tr>
<tr>
<td>42</td>
<td>SJENG 3.0</td>
<td>2917</td>
</tr>
<tr>
<td>43</td>
<td>Zappa Mexico 2</td>
<td>2913</td>
</tr>
<tr>
<td>Chess Computer</td>
<td>Rating</td>
<td>Year</td>
</tr>
<tr>
<td>----------------</td>
<td>--------</td>
<td>------</td>
</tr>
<tr>
<td>Tasc R30-1995</td>
<td>2331</td>
<td>1992</td>
</tr>
<tr>
<td>Mephisto London 68030</td>
<td>2301</td>
<td>1991</td>
</tr>
<tr>
<td>Tasc R30-1993</td>
<td>2298</td>
<td>1990</td>
</tr>
<tr>
<td>Mephisto Genius 2 68030</td>
<td>2292</td>
<td>1989</td>
</tr>
<tr>
<td>Mephisto London Pro 68020</td>
<td>2268</td>
<td>1988</td>
</tr>
<tr>
<td>Mephisto Lyon 68030</td>
<td>2265</td>
<td>1987</td>
</tr>
<tr>
<td>Mephisto Portorose 68030</td>
<td>2258</td>
<td>1986</td>
</tr>
<tr>
<td>Mephisto RISC2</td>
<td>2248</td>
<td>1985</td>
</tr>
<tr>
<td>Mephisto Vancouver 68030</td>
<td>2245</td>
<td>1984</td>
</tr>
<tr>
<td>Meph Lyon+Vanc 68020/20</td>
<td>2237</td>
<td>1983</td>
</tr>
<tr>
<td>Mephisto Berlin Pro 68020</td>
<td>2235</td>
<td>1982</td>
</tr>
<tr>
<td>Kasparov RISC 2500-512</td>
<td>2231</td>
<td>1981</td>
</tr>
<tr>
<td>Mep RISC1</td>
<td>2220</td>
<td>1980</td>
</tr>
<tr>
<td>Mephisto Montreux</td>
<td>2210</td>
<td>1979</td>
</tr>
<tr>
<td>Kasparov SPARC20/20</td>
<td>2208</td>
<td>1978</td>
</tr>
<tr>
<td>Mephisto Atlanta+Magellan</td>
<td>2207</td>
<td>1977</td>
</tr>
<tr>
<td>Kasparov RISC 2500-128</td>
<td>2191</td>
<td>1976</td>
</tr>
<tr>
<td>Mephisto London 68020/12</td>
<td>2179</td>
<td>1975</td>
</tr>
<tr>
<td>Novag Star Diamond/Sapphire</td>
<td>2175</td>
<td>1974</td>
</tr>
<tr>
<td>Fidelity Elite 68040v10</td>
<td>2164</td>
<td>1973</td>
</tr>
<tr>
<td>Mephisto Vancouver 66020/12</td>
<td>2156</td>
<td>1972</td>
</tr>
<tr>
<td>Mephisto Lyon 68020/12</td>
<td>2150</td>
<td>1971</td>
</tr>
<tr>
<td>Mephisto Portorose 68020</td>
<td>2136</td>
<td>1970</td>
</tr>
<tr>
<td>Mephisto London 68000</td>
<td>2130</td>
<td>1969</td>
</tr>
<tr>
<td>Novag Sapphire2+Diamond2</td>
<td>2120</td>
<td>1968</td>
</tr>
<tr>
<td>Fidelity Elite 68030v9</td>
<td>2113</td>
<td>1967</td>
</tr>
<tr>
<td>Mephisto Vancouver 68000</td>
<td>2108</td>
<td>1966</td>
</tr>
<tr>
<td>Mephisto Lyon 68000</td>
<td>2107</td>
<td>1965</td>
</tr>
<tr>
<td>Mephisto Berlin 68000</td>
<td>2106</td>
<td>1964</td>
</tr>
<tr>
<td>Meph Master+Senator+MillPro</td>
<td>2104</td>
<td>1963</td>
</tr>
<tr>
<td>Mephisto Almeria 68020</td>
<td>2102</td>
<td>1962</td>
</tr>
<tr>
<td>Novag Sapphire1+Diamond1</td>
<td>2082</td>
<td>1961</td>
</tr>
<tr>
<td>Mephisto MM4/Turbo18</td>
<td>2080</td>
<td>1960</td>
</tr>
<tr>
<td>Mephisto Portorose 68000</td>
<td>2077</td>
<td>1959</td>
</tr>
<tr>
<td>Fid Mach+4+Des2325+68000v7</td>
<td>2070</td>
<td>1958</td>
</tr>
<tr>
<td>Fidelity Elite 2x68000v5</td>
<td>2051</td>
<td>1957</td>
</tr>
<tr>
<td>Mephisto Mega4/Turbo18</td>
<td>2042</td>
<td>1956</td>
</tr>
<tr>
<td>Mephisto Polgar10</td>
<td>2034</td>
<td>1955</td>
</tr>
<tr>
<td>Mephisto Dallas 68020</td>
<td>2033</td>
<td>1954</td>
</tr>
<tr>
<td>Mephisto Roma 68020</td>
<td>2028</td>
<td>1953</td>
</tr>
<tr>
<td>Mephisto MM6+ExplorerPro</td>
<td>2027</td>
<td>1952</td>
</tr>
<tr>
<td>Kasparov GK2100+Cougar</td>
<td>2022</td>
<td>1951</td>
</tr>
<tr>
<td>Kasparov Cosmos+Expert</td>
<td>2021</td>
<td>1950</td>
</tr>
<tr>
<td>Kasparov Brute Force</td>
<td>2020</td>
<td>1949</td>
</tr>
<tr>
<td>Mephisto Almeria 68000</td>
<td>2018</td>
<td>1948</td>
</tr>
<tr>
<td>Novag Citrine</td>
<td>2017</td>
<td>1947</td>
</tr>
<tr>
<td>Novag Scorpio+Diablo</td>
<td>2002</td>
<td>1946</td>
</tr>
<tr>
<td>Kaspar Challenger+President</td>
<td>1994</td>
<td>1945</td>
</tr>
<tr>
<td>Fid Mach+3+Des2265+68000v2</td>
<td>1993</td>
<td>1944</td>
</tr>
<tr>
<td>Mephisto MM4/10</td>
<td>1979</td>
<td>1943</td>
</tr>
<tr>
<td>Meph Dallas 68000</td>
<td>1978</td>
<td>1942</td>
</tr>
<tr>
<td>Mephisto Nigel Short</td>
<td>1977</td>
<td>1941</td>
</tr>
<tr>
<td>Mephisto MM5</td>
<td>1976</td>
<td>1940</td>
</tr>
<tr>
<td>Mephisto Polgar/5</td>
<td>1962</td>
<td>1939</td>
</tr>
<tr>
<td>Novag Obsidian</td>
<td>1961</td>
<td>1938</td>
</tr>
<tr>
<td>Mephisto Mondial 68000XL</td>
<td>1960</td>
<td>1937</td>
</tr>
<tr>
<td>Nov SuperForte+Expert C/6</td>
<td>1957</td>
<td>1936</td>
</tr>
<tr>
<td>Novag EmplClass=Classic+Zircon2</td>
<td>1954</td>
<td>1935</td>
</tr>
<tr>
<td>Novag Star Ruby+Amber+Jade21952</td>
<td>1953</td>
<td>1934</td>
</tr>
<tr>
<td>SciSys TurboStar 432</td>
<td>1762</td>
<td>1933</td>
</tr>
<tr>
<td>Mephisto MM2</td>
<td>1757</td>
<td>1932</td>
</tr>
<tr>
<td>Fidelity Excellence+3+Des2000</td>
<td>1754</td>
<td>1931</td>
</tr>
<tr>
<td>Novag Jade1+Zircon1</td>
<td>1744</td>
<td>1930</td>
</tr>
<tr>
<td>Kasparov A/4 module</td>
<td>1740</td>
<td>1929</td>
</tr>
<tr>
<td>Conchess/4</td>
<td>1734</td>
<td>1928</td>
</tr>
<tr>
<td>Kasparov Renaissance basic</td>
<td>1729</td>
<td>1927</td>
</tr>
<tr>
<td>Kasparov Pirsni+Blitz</td>
<td>1729</td>
<td>1926</td>
</tr>
<tr>
<td>Novag Super Constellation</td>
<td>1728</td>
<td>1925</td>
</tr>
<tr>
<td>Mephisto Blitz module</td>
<td>1716</td>
<td>1924</td>
</tr>
<tr>
<td>Novag Super Nova</td>
<td>1701</td>
<td>1923</td>
</tr>
<tr>
<td>Fidelity Prestige+Elite A</td>
<td>1688</td>
<td>1922</td>
</tr>
<tr>
<td>Novag Supremo+SuperVIP</td>
<td>1684</td>
<td>1921</td>
</tr>
<tr>
<td>Fidelity Sensory 12</td>
<td>1681</td>
<td>1920</td>
</tr>
<tr>
<td>SciSys Superstar 36K</td>
<td>1667</td>
<td>1919</td>
</tr>
<tr>
<td>Mephisto Exclusive S/12</td>
<td>1665</td>
<td>1918</td>
</tr>
<tr>
<td>Meph Chess School+Europa</td>
<td>1664</td>
<td>1917</td>
</tr>
<tr>
<td>Conchess/2</td>
<td>1658</td>
<td>1916</td>
</tr>
<tr>
<td>Novag Quattro</td>
<td>1650</td>
<td>1915</td>
</tr>
<tr>
<td>Novag Constellation/3.6</td>
<td>1646</td>
<td>1914</td>
</tr>
<tr>
<td>Fidelity Elite B</td>
<td>1637</td>
<td>1913</td>
</tr>
<tr>
<td>Novag Primo+VIP</td>
<td>1631</td>
<td>1912</td>
</tr>
<tr>
<td>Mephisto Mondial2</td>
<td>1610</td>
<td>1911</td>
</tr>
<tr>
<td>Fidelity Elite original</td>
<td>1609</td>
<td>1910</td>
</tr>
<tr>
<td>Mephisto Mondial1</td>
<td>1597</td>
<td>1909</td>
</tr>
<tr>
<td>Novag Constellation2</td>
<td>1591</td>
<td>1908</td>
</tr>
<tr>
<td>CXG Super Enterprise</td>
<td>1589</td>
<td>1907</td>
</tr>
<tr>
<td>CXG Advanced Star Chess</td>
<td>1589</td>
<td>1906</td>
</tr>
<tr>
<td>Novag AgatePlus+OptalPlus</td>
<td>1575</td>
<td>1905</td>
</tr>
<tr>
<td>Kasparov Maestro+Cosmic</td>
<td>1550</td>
<td>1904</td>
</tr>
<tr>
<td>Excalibur New York touch</td>
<td>1530</td>
<td>1903</td>
</tr>
<tr>
<td>Fidelity Sensory9</td>
<td>1528</td>
<td>1902</td>
</tr>
<tr>
<td>Kasparov Astral+Conquistador</td>
<td>1520</td>
<td>1901</td>
</tr>
<tr>
<td>Kasparov Cavalier</td>
<td>1520</td>
<td>1900</td>
</tr>
<tr>
<td>Chess 2001</td>
<td>1500</td>
<td>1899</td>
</tr>
<tr>
<td>Novag Mentor16+Amigo</td>
<td>1494</td>
<td>1898</td>
</tr>
<tr>
<td>GGM+Steinitz module</td>
<td>1490</td>
<td>1897</td>
</tr>
<tr>
<td>Excalibur Touch Screen</td>
<td>1485</td>
<td>1896</td>
</tr>
<tr>
<td>Mephisto 3</td>
<td>1479</td>
<td>1895</td>
</tr>
<tr>
<td>Kasparov Turbo 24K</td>
<td>1476</td>
<td>1894</td>
</tr>
<tr>
<td>SciSys Superstar original</td>
<td>1475</td>
<td>1893</td>
</tr>
<tr>
<td>GGM+Morphy module</td>
<td>1472</td>
<td>1892</td>
</tr>
<tr>
<td>Kasparov Turbo 16K+Express</td>
<td>1470</td>
<td>1891</td>
</tr>
<tr>
<td>Mephisto 2</td>
<td>1470</td>
<td>1890</td>
</tr>
<tr>
<td>SciSys C/C Mark6</td>
<td>1428</td>
<td>1889</td>
</tr>
<tr>
<td>Conchess A0</td>
<td>1426</td>
<td>1888</td>
</tr>
<tr>
<td>SciSys C/C Mark5</td>
<td>1419</td>
<td>1887</td>
</tr>
<tr>
<td>Cking Philidor+Counter Gambit</td>
<td>1380</td>
<td>1886</td>
</tr>
<tr>
<td>Morphy Encore+Prodigy</td>
<td>1358</td>
<td>1885</td>
</tr>
<tr>
<td>Sargon Auto Response Board</td>
<td>1320</td>
<td>1884</td>
</tr>
<tr>
<td>Novag Solo</td>
<td>1270</td>
<td>1883</td>
</tr>
<tr>
<td>CXG Enterprise+Star Chess</td>
<td>1260</td>
<td>1882</td>
</tr>
<tr>
<td>Fidelity Chess Challenger Voice</td>
<td>1260</td>
<td>1881</td>
</tr>
<tr>
<td>ChessKing Master</td>
<td>1200</td>
<td>1880</td>
</tr>
<tr>
<td>Fidelity Chess Challenger 10</td>
<td>1175</td>
<td>1879</td>
</tr>
<tr>
<td>Boris Diplomat</td>
<td>1150</td>
<td>1878</td>
</tr>
<tr>
<td>Novag Savant</td>
<td>1100</td>
<td>1877</td>
</tr>
<tr>
<td>Boris 2.5</td>
<td>1060</td>
<td>1876</td>
</tr>
</tbody>
</table>