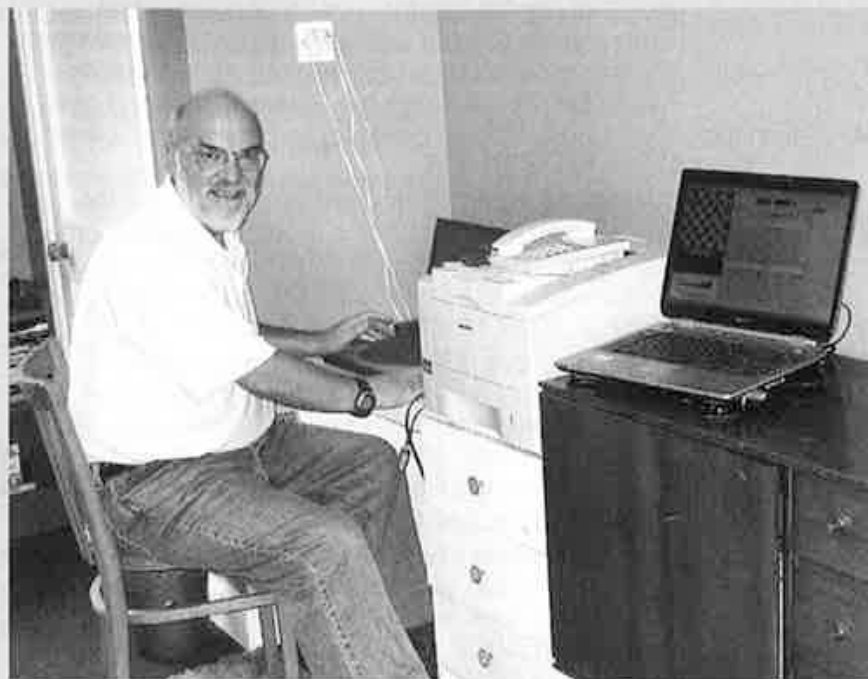


SELECTIVE SEARCH 130

CHESS PLAYED BY COMPUTERS!

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Editor: Eric Hallsworth
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ERIC AT WORK IN PART OF HIS OFFICES AT HOME

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CHESS COMPUTERS AND PC PROGRAMS... THE BEST BUYS!

The **RATINGS** for these computers and PC programs are on the back pages. This is not a complete product listing - they are what I think are the **BEST BUYS** bearing in mind price, playing strength, features and quality.

Further info/photos are on my website and in **Countrywide's** colour CATALOGUE, available **free** if you ring or write to the address/phone no. shown on the front page. Postage: portable £5, table-top £7.50, software £2.

▪ SPECIAL SUBSCRIBER'S OFFER:

10% OFF all **DEDICATED COMPUTERS** on this page and **5% OFF** all **SOFTWARE** prices shown here.

▪ *but please mention 'SS' when you order to remind the salesperson to do the discount for you!*

PORTABLE COMPUTERS [port]

ADVANCED TRAVEL £34.95 - Saitek's smaller Club plug-in set 160 ECF. Scrolling info display. Great value!

MAESTRO touch screen travel £49.95 - fine Saitek product, incl. Leatherette case. Backlight switch on side for easy of use. Decent chess, est'd 130 ECF

EXPERT £99.95 - top value! 4½"x4½" plug-in board, strong Morsch program. Multiple levels, good info display & coach system. From Saitek, 175 ECF

STAR RUBY £69.95 - Novag's 165 ECF program in touch screen style with stylus, and secure screen cover. Batteries only, excellent pocket portable

DE LUXE TOUCH SCREEN £79.95 - Great on-screen board and graphics, easily recognisable pieces, lots of levels and good features in 140 ECF Excalibur program

TABLE-TOP PRESS SENSORY [top]

where you see ** the price includes the adaptor!

EXPLORER £49.95 - excellent value, neat design. Batteries only, with info display and 160 ECF program

CHALLENGER £69.95** - Cougar '2100' program in newly designed board, a v. good value-for-money buy

TALKING CHESS ACADEMY £99.95** - 160 ECF program, packed with features, display + voice option!

MASTER £139.95** - the Mephisto Milano Pro program and features, in attractive 13"x10" board. Strong, with good info display, and incl. plastic carry case.

CARNELIAN 2 £79.95 - lovely Novag unit, with wood pieces - looks really good on the table. Nice 140 ECF program, display for moves, plenty of levels.

OBSIDIAN £125 - 167 ECF with nice carry case! Good Novag board, wood pieces, excellent features/chess

TABLE-TOP AUTO SENSORY [top]

CITRINE £249** - 180 ECF wood auto-sensory with improved, faster Obsidian program, 24,000 opening book. Wood felted pieces, excellent features. **New!!**

GRANDMASTER £199.95 - big 2" squares, 4" king! Green/white vinyl board. Auto-sensory surface. Looks great! 150 ECF. Display at both ends of board

EXCLUSIVE** - beautiful all wood board 15"x15" with finely carved wood, felted pieces. Superb to play on. Good user-selectable info display - *only a very few left!*
 ▪ With 190 ECF **SENATOR** (Master) program **£489.95**
 ▪ For info... **£489.95 less 10% = £440!**

PC PROGRAMS from CHESSBASE on CD

All run **INDEPENDENTLY** + will also analyse within ChessBase8/9. Great graphics, big databases + opening books, analysis, printing, max features.

▪ For info.... **£39.95 less 5% = £37.95!**

▪ and..... **£75 less 5% = £71.25!**

FRITZ 10 dvd £36.95 - by Franz Morsch. 60+ Elo stronger, with extra chess knowledge - a marvellous program! Superb Interface, 'net connection, great Graphics, excellent in analysis and play. Game/diagram printing, good hobby levels, set your own Elo, many helpful features, includes big Games database, Chess Media video training excerpts, and Beginners Course!
DEEP FRITZ 10 £75

JUNIOR 10 dvd £39.95 - new version, this engine WON the 2006 World Championships. Very dangerous and aggressive, the nearest you'll get to Tal on your computer! All the latest superb ChessBase features
DEEP JUNIOR 10 £75 for dual & single PCs!

HIARCS 10 dvd £39.95 - Mark Uniacke's latest version. Simply outstanding: knowledge packed yet searching deeper for high powered tactical play... stronger than ever! All the latest superb ChessBase features + Opening Book by Eric Hallsworth.

SHREDDER 10 £39.95 - Meyer-Kahlen's latest in its great ChessBase Interface. Feature-packed & knowledge-based, playing stylish chess. Plus the usual big Opening Book and Games Database etc.

DEEP SHREDDER 10 £75 - one of the very top programs for single, dual & quad processors.

ZAP! £39.95 - the ChessBase version of the 2005 World Champion program. 2 engines on the CD - Paderborn and Reykjavik - with 32-bit, 64-bit and Multi-processor versions! and its own prepared Opening Book, Games Database and usual ChessBase features

POWERBOOKS DVD £39.95 - turn your ChessBase playing engine into an **openings expert!** 20 million opening positions + 1 million games!!

ENDGAME TURBO DVDs, set 3 still £39.95 - turn your ChessBase playing engine into an **endgame expert** with this 9 dvd Nalimov tablebase set!

new - PC PROGRAM - RYBKA on CD

RYBKA2.2 - uci engine with 'Fritz' opening book only **£29.95**; or Chess Assistant version **engine + analysed opening book** + 8,000 annotations by GM Kalinin **£39.95**. IM Vasik Rajlich's RYBKA tops every Rating List due to remarkable levels of chess understanding

PC DATABASES on CD

CHESSBASE 9.0 DVD for Windows £99.95 !!
 The most popular and best Games Database system, with the top features. 2.8 million games, players encyclopaedia, multimedia presentations, fast search trees, opening reports + statistics, embed notes, engine analysis, superb printing facilities and much more, incl. recent ChessBase CD magazines & a multimedia CD!



NEWS AND RESULTS - KEEPING YOU RIGHT UP-TO-DATE IN THE COMPUTER CHESS WORLD!

Welcome to another new issue of **Selective Search**... 130! If your sub. is due for renewal at this time, can I please encourage you to subscribe again! There will be at least 6 more issues of the magazine, so your money wont be wasted!

The label on your envelope always shows the number of the last issue that you will receive of your current subscription, so it's easy to keep a check on it and also make sure I've updated you correctly after a payment has been made!

*If you renew by credit card, please note that I must have the **security code** (last 3 numbers on the back) as well as the card number and expiry date - thanks!*

NEWS SECTION

POSTAL COSTS

It is pretty annoying to all of us who, in our struggles to earn a living, need to send lots of things out through the mail, but the UK postal charges keep going up.

There have been 3 such increases since the price of *Selective Search* last went up in 2003 - each fairly small, but they add up. In addition I will now be required to fill in Customs Declarations for all my non-British/European outgoing mailings, another of our Government's many unwanted time-consuming paper-wasting exercises.

Anyway I'm making a (very) small increase to the subscription charges just to cover the 3½ years of raised postage costs:

- UK goes from £22 to £22.50
- Europe goes from £26 to £27.50
- Rest of World goes from £30 to £32

It's a chicken-and-egg situation: the magazine doesn't make much money as it is - if I increase prices but then lose subscribers, I make even less; but if I keep standing the increased postal charges myself, it will have taken over £200 off the annual net profit the magazine was making 3½ years ago. I shall be 65 later this year and due for retirement, but can't afford to! So, if I can maintain the current subscription numbers my plan is to keep everything going for at least another year or two, to supplement my pension.

FIDELITY ELITE WANTED!

I have an American reader who is wanting to buy a **Fidelity Elite Avant Garde**. He's interested in any of the following:-

- v5 with 2 x 68000 processor
- v8 with 2 x 68020 processor
- v10 with the 68040 processor!
- Either the **Mephisto Lyon 68020/20(!)** or **Mephisto Vancouver 68020/20(!)** - preferably just the modules from either of these rare 20MHz products



If anyone has one of these in working order and you're interested in selling it, please contact me (Eric) and I will send your details on to my subscriber, to put you in touch with each other!

The same subscriber is after some **old issues of Selective Search** which he is still missing, though a couple of readers were able to help after our request last issue. The copyright at the end of each issue prohibits photocopying etc., (especially for re-sale!), but on this occasion I will agree to it on condition that anyone who can provide either an original or a copy also does a free copy for me, as these are also issues I have not got myself!

If anyone can help please tell me what issues you have and how much you want for doing the photocopying and posting 2 copies of each to me. I will then sort it out with my subscriber when I've collected a decent number of those he wants and will organise for the appropriate payment to come to you!

Many thanks for those we've had! - the issues he is still missing are: 1-5, 7-9, 11-12, 37-8, 40, 75

NOVAG CITRINE AND ARENA 1.99#4

Arena is mainly known as the PC Chess Interface through which UCI and WinBoard engines can be run. Mostly folk use the ChessBase interface, because they have one of the top ChessBase engines and use databases, store/print games, study openings etc. Also you can run uci engines (Rybka, Hiarc11, Toga, Loop etc) through ChessBase but, if you want to use a WinBoard engine then you use Arena.

My attention was drawn in early April to the fact that there is a new 'beta' (not fully tested) **Arena 1.99 #4** version on their website, with the interesting note: "*Support for Novag Citrine*", and I know this must all work because one of my subscribers is already e-mailing me games played between his Citrine and a Novag Super Expert C/6. He saves the games into Arena so that he can send me the pgn files!

I will try to write up a proper article on Arena for this issue, but in case I don't manage that you can obtain the zip file from their **download** section of:

- <http://www.playwitharena.com/directory>

ZAP! - ZAPPA- ANTHONY COZZIE RETIRES!

It is strange to report, after telling readers of the new and definitely improved **Zap Zanzibar** version of Anothony Cozzie's engine, that I now find out he's retired from computer chess programming in order to concentrate on his PhD work.

Following the release of the free Zanzibar upgrade he says on his website (where he describes Zappa as a chess engine that is similar to Deep Blue - only much better!) he now writes: "*if you want to wait for the next version of Zap Chess you will be waiting for a very long time!*"

He makes it sound as if he's enjoyed himself, and I particularly liked the following comment: "*Computer chess tournaments are very different (and much more fun) than regular tournaments; we chat all game while the computers work!*"

It's a shame - on fastest multi-processor hardware his 64-bit Zanzibar version lays genuine claim to being 2nd only to Rybka. We wish him well.

**FIDE to stage \$100,000 Computer Match
DEEP FRITZ V DEEP JUNIOR**

Billed as '**The President's Cup, the Ultimate Computer Chess Challenge**', FIDE are staging a 6 game Match between **Deep Junior** and **Deep Fritz** which will take place during the Candidates Tournament for the (human) World Championship. The exact dates are, I believe, 6th-12th June.

I suppose because Deep Junior won the World Computer Championship in 2006, and Deep Fritz beat the reigning human World Champion Kramnik, some with a narrow and pecuniary vision might feel this can be billed as 'The Ultimate Challenge', and I'm sure the programmers will be delighted that they have been chosen (by FIDE?) once again to do battle in the big money matches.

But if the computer programs had to play in Candidates tournaments to qualify for these finals - as the humans do - then it is more than likely that Rybka, Zappa, Hiarc11, LoopList and Shredder, would have had plenty to say about who would make the 'Ultimate Challenge' final! You could maybe even add the silent Hydra to the list.

The time control is a strange G/75mins + 5secs per move, but that's okay; the Arbiter will be the well known David Levy; and the prize money will be split \$60,000 to the winner and \$40,000 to the lucky loser.

As Vas Rajlich (Rybka) e-mailed me when I mentioned the match and engine choices to him: "*We may have higher engine Elos, but our string-pulling Elos need some improvement!*". I liked that, it's good to be able to retain a sense of humour!

My muttering is over - sorry about that - I'll cover the match in the next issue of course!

STOP PRESS! Rybka 2.2 can now be purchased from **Countrywide** on CD!! The version with uci engine only + a *Fritz-type* Opening Book is **£29.95**, and the Chess Assistant version with their own engine, the uci engine, and a full GM annotated opening book is **£39.95**. Once owners of this have registered it they can upgrade online at the Chess Assistant site to the new 2.3 versions over the Internet.

RYBKA 2.3.2

If you're one of the very few who haven't got Rybka and want it, then go to programmer **Vasik Rajlich's** own website:

■ www.rybkachess.com

There you can keep up-to-date with progress and plans, download the original beta version for free, and find out how to pay for and download other, newer versions, including MP (multi-processor) and 64-bit.

There are also options to download a major Rybka Opening Book done by Jeroen Noomen, though you probably need to have Broadband as this is a big file!

Again please remember that no uci version, Rybka or anything else, comes with ANY interface - it is just an engine, so you will NEED to also have, or buy, either a *Chess-Base* program, Stefan Meyer-Kahlen's *Shredder* 10 with its interface, or download the free *Arena* interface to run and use it!

The latest **Rybka2.3** went through a few versions, including some with special pawn and piece value coding by Larry Kaufman, intended to give it specialist exchange knowledge amongst other things, and improve its performance against GMs. As at 2.3.1 it still had some promotion bugs and appeared to be not quite as strong as **2.2n**, but **2.3.2** is just about out and Vasik has already told me they are very pleased with it and it should definitely be the strongest Rybka yet!

HIARCS 11.1 (SP AND MP) FOR THE MAC!

I'm not sure how many of my readers have a **MAC**, but if you do you should be delighted to know that the impressive **Hiarcs11.1** program is now also available for you! Just visit:

■ www.hiarcs.com

It runs on all Intel and PowerPC Macintosh computers within the improved, high quality **Sigma** chess interface - now with multi-PV mode, engine v engine match capability and many other features including a large Tournament Opening Book containing latest theory, and Sigma Chess GUI PGN game collections and HTML web page export.

PC owners will also find version **11.1 uci** available - this is the same latest and strongest version ever of Hiarcs, and there are both Single and Multi processor engines available. If you've already purchased Hiarcs11 off Mark, you can download the new version for free - it is definitely stronger and appears to have squeezed past Fritz, Shredder and Junior and is now 2nd. only to the Rybka2 versions on most Rating Lists, though MP versions of Zap Zanzibar and List are also in close competition.

I'm sorry - you can't buy the uci Hiarcs versions off me, purchase and download can only be done direct from Mark's own website.

RESULTS & RATINGS SECTION

From my last issue the popular and important **CCRL** and **CEGT** Rating Lists now have their own page. This enables me to make the lists a little longer, include more engines, and also to place them side by side making it easier for everyone to make comparisons!

Before we look at some latest results etc, let's return to...

AN INTERESTING POSITION - "EASY FOR HUMANS"

Someone put this on the Internet... White to play



It was described as an *"interesting position"*, with the comment that it is *"easy for humans to see the winning move, but computers cannot do it!"* But when I booted into Hiarcs11, which had then just been released, it found the *'obvious for humans'* move very quickly.

At first I thought the 'net contributor couldn't have checked properly, but when I decided to see how quickly other programs

found the winning move, I got a surprise!

- * Rybka2.3.1
- * Fritz10
- * Junior10
- * Zap! Zanzibar

Did readers find the winning move okay?

1. ♖xc5! bxc5 [if 1... ♗xc3? 2. ♗d4 ♗xd4
3. ♗xd4 ♖f8 4. ♗c6 g5 5. ♗e1 easy 1-0; or
1...f3? 2.fxc3 bxc5 3. ♗xb8 wins easily 1-0]
2. ♗xb8! [not 2.fxc3? ♗xb1+ 0-1] 2... ♗g5
[if 2... ♗xb8 3.d8♗+ ♗xd8 4. ♗xd8+ ♖h7
5.fxc3 1-0] 3. ♗xd8+ ♗xd8 4. ♗c6 1-0

Peter Grayson sent me a great engines results list - you'll see some amateur programs are very good. His PC is an MP: 2x4800MHz

- ✓ Arasan 9.5 - immediate
- ✓ Aristarch 4.50 - 66 secs
- ✓ Colossus 2007a - immediate
- ✓ Doctor? 3.0 - immediate
- * Deep Junior 10
- * Deep Junior 10.1
- ✓ Crafty 20.14 - 113 secs
- * Fritz 5.32
- * Fritz 8
- * Fritz 9
- ✓ Deep Fritz 10 - immediate
- * Fruit 2.1
- * Genius 7
- * Glaurung 1.2.1
- * Shredder 7
- ✓ Deep Shredder 10.1 - 32 secs + good eval!
- ✓ Hiarcs 10 - immediate
- ✓ Hiarcs 11 and 11.1 - immediate
- ✓ Monster 0.55 - immediate
- ✓ Naum 2.0 - 1 sec
- * Patriot 2006
- ✓ Pharaon 3.5.1 - 11 secs
- * Rybka 1.0
- * Rybka 1.2f
- ✓ Rybka Winfinder 2.2 - 56 secs
- * Rybka 2.2n
- ✓ Spike 1.2 Turin - immediate
- ✓ Toga 1.2beta2a - immediate
- * Zappa 1.1

You probably noted I'd reported that Fritz10 failed, whereas Peter shows that Deep Fritz10 got it immediately. When I re-checked Fritz10, it definitely does fail - even after 10 mins! - but I now have Deep Fritz10 on my Dual2Core/2000 laptop, and Peter's right, that does it immediately. Isn't that strange!

RESULTS FROM SELECTIVE SEARCH READERS

PETE BLANDFORD

Pete has been running his G/60 Tournament on a P4/2100 since 2003, and every new program he buys gets added and plays in Gauntlet mode against the rest! Playing 4 games against every other program, now it's got to so many engines, is a major effort. But now Rybka 1.2f has been added and slips into 2nd. place while also causing some of the other programs to change places as well!

PETE BLANDFORD, 4xALL-PLAY-ALL P4/2100 @ G/60

Pos	Engine	Score/108
1	JUNIOR 10	75½
2	RYBKA 1.2F	74½
3	HIARCS 10	71½
4	JUNIOR 8	63
5	FRITZ 9	61½
6	SHREDDER 10	61
7	SHREDDER 9	60
8	JUNIOR 9	57½
9	SHREDDER 7.04 ACTIVE	57
10	SHREDDER 7.04 DEFAULT	56½
11	FRITZ 8 BILBAO	56
12	HIARCS 9	55½
13	DEEP FRITZ 8	54½
14=	JUNIOR 7 FRITZ 8	54
16	SHREDDER 8 ACTIVE	53½
17	SHREDDER 8 DEFAULT	53
18	FRITZ 7	52½
19	HIARCS 8 BAREEV	52
20	GAMBIT TIGER 2.0	49½
21	CHESS TIGER 14	49
22	CHESS TIGER 15 NORMAL	47
23	HIARCS 7.32	46
24	SHREDDER 7	45½
25	CHESS TIGER 15 AGGRESSIVE	42
26	HIARCS 8	39
27	FRITZ 6	36
28	FRITZ 5.32	35

Pete's other tournament is also played at G/60, but on a Dual Core 4800 PC! The fast processor speed means the programs 'think' much deeper and, being a dual core, also

enables Permanent Brain=ON... even faster! Both **Fritz 10** and the later **Rybka 2.1o** have now been included.

PETE BLANDFORD, 2xALL-PLAY-ALL 2x4800 @ G/60

Pos	Engine	Score/52
1	RYBKA 2.1o	38
2	FRTZ 10	37
3	HIARCS 10	33½
4=	SHREDDER 10 SHREDDER 9	33
6	JUNIOR 10	31
7	JUNIOR 9	30
8	FRTZ 9	29½
9	SHREDDER 7.04	28
10	FRTZ 8 BILBAO	27
11	SHREDDER 8	26½
12=	GAMBIT TIGER 2.0 CHESS TIGER 15	26
14=	DEEP FRTZ 8 JUNIOR 8 FRTZ 7	25½
17=	FRTZ 8 JUNIOR 7	24½
19	HIARCS 9	23
20=	HIARCS 8 BAREEV HIARCS 8	22½
22	SHREDDER 7	21
23	CHESS TIGER 14	20½
24=	FRTZ 6 HIARCS 7.32	19½
26	CRAFTY 19.19	15½
27	FRTZ 5.32	14

BIG DEDICATED GAMES DATABASE!

A new subscriber from Australia, **Cameron Parle**, has very kindly sent me his database of Dedicated Computer games going back to the late 1990's and containing some 1,500 games.

These will be very valuable for our **Rating List**, especially as there are games from computers like the Excalibur Grandmaster, for which I didn't have many results. So at some time in the hopefully not too distant future, we should have some more accurate ratings on the back page for one or two models! However incorporating 1,500 games into my Rating List database is not an overnight job, but I will aim to make a start later in June after a week's holiday, and see how we go.

FRANK HOLT

Frank has been busy doing something different for us this time. Do you remember the massive effort he put into our articles on '**RYBKA: PAWN AND PIECE VALUES**' - see *Select Search 126 pages 22-23*.

You will recall that I had shown in *issue 125* how different the Rybka evaluations were from other main programs, and Frank had built on that to produce a valuable set of comparisons. Frank has now completed an update of the info to include some of the latest programs, including **Fritz10**, **Junior10** and, most importantly, **Rybka2.2**, **2.3** and **2.3LK**. There was just room for it in this issue, and I'm placing it on the next page so you don't have far to search for it!

Secondly he's been running a long match at various time controls between his **Novag Citrine** and **Kasparov Expert**. It is becoming clear that the performances of the Citrine vary greatly depending upon the opponent! Against quieter playing styles - e.g. other Novags, the Stratos/Corona, Excalibur Grandmaster - it does very well and seems to be close to 2100 Elo! But against the more aggressive Saitek (Morsch) programs and Fidelity machines, it drops considerably, and feels to be not much above maybe 1950!

Frank's results and games next issue!

FOR OUR NEXT ISSUE....

I'm still looking at '*the win Kramnik could have had*' in game 1 of his match with **Deep Fritz**. Malcolm Pein assures me I'm wasting my time, with best play Kramnik was guaranteed 1-0. But I've read everyone's analysis and I'm still not convinced they are trying as hard to find all the best saving moves for Fritz as they are winning ones for Kramnik! Maybe I'll be brave.

Clive Munro has sent me the games from matches between his Palm GENIUS and [1] the Mephisto MODENA, and [2] the Kasparov Renaissance with BRUTE FORCE module. They should be interesting, and both matches were quite close! These matches will also help us to close in a little more on the correct ratings for the various Palm units with either HIARCS, GENIUS or TIGER loaded, and I'll aim to also update that table for next time!

A real treat: I have a **Rybka2.2n v Hiarcs11** game, annotated for us by British GM **Tony Kosten**

PAWN and PIECE VALUES: all produced for Selective Search by FRANK HOLT

1 minute each ANALYSIS

Black

White

Black

Program	White																Black										
	Start	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	White Knight	White Bishop	White Pawn	White Rook	White Queen	Black Knight	Black Bishop	Black Pawn	Black Rook	Black Queen	
	a2	b2	c2	d2	e2	f2	g2	h2	a7	b7	c7	d7	e7	f7	g7	h7	B1	C1	A1	D1	B8	C8	A8	D8			
P4/2000	White	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	Pawns	White Knight	White Bishop	White Pawn	White Rook	White Queen	Black Knight	Black Bishop	Black Pawn	Black Rook	Black Queen
RYBKA 2.1c	+0.07	-0.11	-0.25	-0.21	-0.19	-0.40	-0.27	-0.17	+0.28	+0.46	+0.45	+0.36	+0.46	+0.63	+0.39	+0.31	-1.61	-1.69	-2.27	-4.31	+1.74	+1.82	+2.19	+4.31			
RYBKA 1.01	+0.03	-0.11	-0.22	-0.16	-0.11	-0.26	-0.19	-0.08	+0.24	+0.37	+0.28	+0.33	+0.35	+0.40	+0.32	+0.25	-1.37	-1.68	-4.68	-9.00	+1.43	+1.83	+4.67	+8.99			
RYBKA 2.2	+0.07	-0.15	-0.32	-0.25	-0.21	-0.39	-0.29	-0.18	+0.32	+0.53	+0.45	+0.48	+0.48	+0.70	+0.49	+0.31	-1.69	-1.88	-2.70	-5.24	+1.89	+2.01	+2.67	+5.24			
RYBKA 2.3	+0.12	-0.11	-0.49	-0.40	-0.29	-0.32	-0.66	-0.42	+0.37	+0.69	+0.63	+0.70	+0.71	+1.06	+0.62	+0.47	-2.40	-2.52	-3.40	-7.10	+2.77	+2.89	+3.65	+7.36			
RYBKA 2.3.1	+0.10	-0.09	-0.45	-0.32	-0.32	-0.52	-0.42	-0.13	+0.33	+0.68	+0.60	+0.65	+0.66	+0.96	+0.63	+0.46	-1.99	-2.33	-2.91	-4.73	+2.33	+2.43	+3.21	+6.76			
RYBKA 2.3LK	+0.10	-0.07	-0.41	-0.29	-0.32	-0.53	-0.39	-0.11	+0.32	+0.58	+0.60	+0.64	+0.63	+0.78	+0.62	+0.42	-2.10	-2.33	-2.98	-6.57	+2.42	+2.54	+3.29	+6.80			
FRITZ 10	+0.21	-0.37	-0.78	-0.68	-0.45	-0.92	-0.70	-0.37	+0.71	+1.18	+1.26	+0.91	+0.84	+1.61	+1.07	+0.71	-4.64	-2.89	-3.30	-10.76	+5.24	+3.38	+3.86	+11.18			
FRITZ 9	+0.14	-0.27	-0.68	-0.39	-0.86	-0.79	-0.86	-0.79	+0.66	+1.02	+1.21	+0.88	+0.86	+1.48	+1.14	+0.89	-2.80	-3.14	-4.32	-9.79	+3.23	+3.58	+4.88	+10.29			
FRITZ 8	+0.12	-0.54	-0.85	-0.86	-0.63	-1.05	-0.93	-0.68	+0.88	+1.14	+1.26	+1.11	+1.05	+1.71	+1.23	+0.98	-3.38	-3.68	-4.91	-9.57	+3.74	+4.03	+5.25	+10.05			
SHREDDER 10	+0.13	-0.18	-0.67	-0.47	0.42	0.22	-0.99	-0.53	+0.86	+1.43	+1.51	+1.08	+1.00	+2.01	+1.00	+0.92	-3.23	-3.64	-4.99	-11.44	+4.19	+4.31	+5.68	+12.12			
SHREDDER 9	+0.38	-0.43	-0.86	-0.50	-0.45	-1.04	-0.65	-0.39	+1.18	+1.38	+1.51	+0.95	+0.86	+1.81	+1.05	+0.93	-3.36	-3.62	-5.08	-11.55	+4.14	+4.48	+5.76	+12.00			
SHRED 7.04	+0.22	-0.40	-0.82	-0.57	-0.56	-0.97	-0.64	-0.33	+1.07	+1.24	+1.35	+1.12	+0.90	+1.74	+1.01	+0.89	-3.31	-3.75	-5.00	-11.51	+3.89	+4.19	+5.64	+11.97			
JUNIOR 10	+0.03	-0.36	-0.64	-0.44	-0.36	-0.95	-0.84	-0.46	+0.45	+0.68	+0.56	+0.64	+0.60	+1.17	+0.97	+0.57	-2.80	-3.09	-4.02	-8.92	+2.88	+3.18	+4.11	+9.11			
JUNIOR 8	+0.19	-0.11	-0.63	-0.30	-0.09	-0.87	-0.62	-0.27	+0.62	+1.00	+0.66	+0.82	+0.80	+1.61	+1.13	+0.75	-2.81	-3.13	-4.31	-8.89	+3.27	+3.57	+4.73	+9.35			
JUNIOR 7	+0.14	-0.07	-0.36	-0.26	-0.10	-0.08	-0.54	-0.07	+0.32	+0.64	+0.62	+0.47	+0.50	+1.02	+0.91	+0.24	-1.82	-2.07	-2.82	-6.23	+2.24	+2.39	+3.14	+6.71			
HIARCS 10	+0.36	-0.44	-0.74	-0.68	-0.32	-0.84	-0.94	-0.55	+1.05	+1.21	+1.36	+1.12	+0.97	+1.55	+1.41	+0.99	-3.26	-3.52	-5.18	-11.75	+3.84	+3.93	+5.73	+12.06			
HIARCS 9	+0.20	-0.61	-0.84	-0.84	-0.46	-0.95	-1.03	-0.74	+0.98	+1.21	+1.43	+1.09	+1.15	+1.58	+1.41	+1.13	-3.33	-3.48	-5.34	-11.71	+3.84	+3.89	+5.83	+12.18			
TOGA 2.1a	+0.19	-0.20	-0.62	-0.53	-0.38	-0.19	-0.56	-0.60	+0.49	+0.91	+0.99	+0.93	+0.98	+1.27	+0.96	+0.57	-2.75	-3.10	-4.52	-10.02	+3.33	+3.61	+4.92	-10.55			
TOGA 2.1	+0.19	-0.04	-0.51	-0.49	-0.34	-0.20	-0.50	-0.31	+0.40	+0.92	+0.85	+0.82	+0.88	+1.27	+1.00	+0.70	-2.82	-2.82	-4.20	-9.52	+3.19	+3.43	+4.65	+10.03			
FRUIT 2.1	+0.12	-0.30	-0.73	-0.57	-0.55	-0.31	-0.79	-0.38	+0.56	+0.91	+0.81	+1.00	+1.04	+1.58	+1.14	+0.71	-2.96	-3.1	4.60	-10.21	+3.28	+3.50	+4.92	+10.54			
SPIKE 1.1	+0.38	-0.51	-0.84	-0.72	-0.54	-0.88	-1.64	-1.03	+1.10	+1.37	+1.44	+1.11	+1.12	+1.86	+1.88	+1.56	-3.88	-4.31	-5.75	-10.80	+4.65	+4.65	+6.48	+11.57			
LIST 512	+0.28	-0.71	-0.91	-0.87	-0.59	-0.61	-0.96	-1.12	+1.18	+1.32	+1.31	+1.02	+1.15	+1.55	+1.44	+1.24	-3.91	-4.16	-5.88	-10.47	+4.25	+4.60	+6.35	+10.60			
GOLIATH 1.5	+0.26	-0.50	-0.83	-0.65	-0.52	-0.43	-0.67	-0.81	+0.86	+1.10	+1.04	+1.09	+0.79	+1.27	+1.29	+0.98	-3.46	-3.62	-5.91	-11.95	+3.89	+4.15	+6.30	+12.40			
PRO DEO 1.0	+0.18	-0.43	-0.56	-0.57	-0.39	-0.47	-0.74	-0.49	+0.84	+0.97	+1.04	+0.84	+0.80	+1.24	+1.22	+1.06	-2.89	-3.03	-4.55	-9.15	+3.33	+3.46	+4.98	+9.67			
TIGER 15	+0.20	-0.56	-0.76	-0.64	-0.62	-0.60	-0.94	-0.40	+0.90	+1.04	+1.18	+1.02	+0.90	+1.38	+1.24	+0.86	-3.70	-4.06	-5.66	-11.54	+4.00	4.38	+5.96	+11.84			
COLOS 2000d	+0.20	-0.92	-1.34	-1.34	-1.10	-1.22	-1.48	-1.68	+1.34	+1.68	+1.56	+1.48	+1.34	+2.04	+1.94	+1.50	-3.52	-3.54	-5.32	-10.30	+3.84	+3.84	+5.64	+10.60			
RUFFIAN 1.01	+0.07	-0.78	-0.95	-0.93	-0.84	-0.78	-0.89	-0.79	+0.86	+1.08	+1.05	+0.96	+0.99	+1.19	+1.14	+0.99	-4.14	-4.48	-4.98	-9.81	+4.28	+4.52	+5.08	+9.86			

BILL REID: "TIME FOR ADJUDICATION"

So what did the programs think about that position where the player of the Black pieces had been happy to settle for a draw?



White to Play

In the last issue we saw White try for a win with **1.d7**, but our codebreaker had soon spotted **1...♔a8 2.dxc8♙ ♖xe8 3.♗d2** (or **3.e6 fxe6 4.♗e5=**) **3...♖c8 4.♗d8 ♗xb2 5.e6 fxe6 6.♖xc8+ ♗xc8 7.♗d8=**

But almost as an afterthought he'd suddenly wondered if there might be something better for Black!

What if **1...♖e6?!**

Did Black in fact have a winning position? Our codebreaker had checked it out and gone off to the cinema happy that the draw result was a fair one.

Here was the line we proposed last time:

2.♗g5 f6 3.♗xf6 ♖xf6+ 4.exf6 ♗xb2 5.♗e7 ♗xc2+ 6.♔e1! ♗xd3 7.♗xd8+ ♔a7 8.♗e7 ♗g3+



'... and it's still a draw', he pronounced. 'Anyway, no chance of Black winning'

But did he miss anything?

Indeed he had done at first, and the programs know it straight away when they're given this position. Look at how White wins....

9.♔d2 ♗g2+ 10.♗e2 ♗d5+ 11.♗d3 ♗a2+ 12.♔d1 ♗a1+ 13.♔e2 ♗xf6

Not **13...♗b2+? 14.♗d2 ♗e5+??** which allows White to block the check WITH a check! **15.♗e3+!** and now White mates quickly. But White wins anyway.

14.d8♗ 1-0

Nevertheless, the adjudication decision of a draw is correct, as our codebreaker's line, as given in *SelSearch129* and above, deliberately threw in neat trap from White and a 'falling into it' blunder by Black.

Let's go back to the position after **5... ♗xc2+**



6.♔e1!

This was clever! None of the engines appears to understand the idea of setting a trap, and they all play **♔e3** – a shame, as it stops Black from blundering with **♗xd3**. So **♔e1!** is best because it gives Black a trap to fall into – and maybe he would have, you never know!

6... ♗xd3? etc. 1-0

However our codebreaker felt justified in giving Black the benefit of the doubt as, with best play after either **♔e1** or **♔e3** he could have drawn with...

6...♔c7! 7.f7

(Actually 7. ♖d6+ ♔b6 8. ♗e7 is also a draw, but lacks the initial excitement of playing f7!)

7... ♗xd3 8. f8 ♗ ♖b1+ 1/2-1/2

In fact 6... ♗c1+ looks as if it draws as well: 7. ♔e2 ♗c2+ and again 1/2-1/2

'Private's Progress' was very entertaining – but also thought-provoking. Terry-Thomas addressing the lower ranks with expressions like 'You're an absolute shower!' was good for a laugh, but also a reminder of how lucky he had been to spend the war years in Hut 8 at Bletchley Park, where everyone, whatever their rank, worked together for a common purpose on an equal footing. ⁽¹⁾

Sunday was usually a good day for a bit of relaxation, but that did depend on what was happening on the international stage.

Right now, in late October, 1956, things were not going well. There had been trouble between Russia and Poland which looked to be calming down, but, over the last few days, there were indications of a possible anti-Soviet uprising in Hungary. The government would be wanting GCHQ to keep a close ear on the communications networks. Still, let's check out yesterday's post and see if any games for adjudication have come in.

Only one has turned up, so maybe that can be dealt with. But it's from a third division game where all sorts of strange positions can crop up. Let's have a look at it.



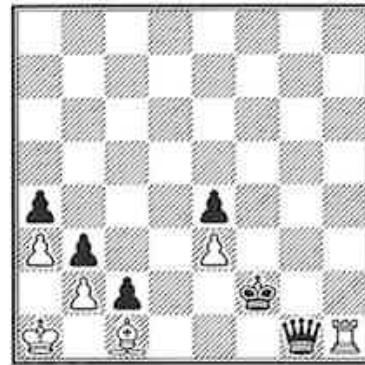
Black to Play

Just what we don't want on a day like this! A possible tactic in this type of position could be to give up the Queen for the Bishop.

Then, with the rook confined to the first rank, the King could pick up a pawn or two and win the game.

But that won't work here because, with such an empty board, the rook could just go on endlessly checking and hold the draw.

So, a bit of backward thinking is called for. Not too hard to imagine a position, where White, to move, must lose.



White to Play

The problem is, how can we show that this position can be forced from the starting one? Looks like a situation where backward thinking isn't any help because it can't be connected to forward thinking? But, just then, the phone rings. Things are hotting up in Budapest and, even on a Sunday, GCHQ has the first claim on thinking skills.

So what do the programs make of this adjudication position? Can they connect up backward and forward thinking? Or maybe, given their processing capacity, it's just a matter of tactics?

⁽¹⁾ "My bosses during the war, Alexander, Turing, and later Newman, were also my friends. They were entirely non-bossy. Turing and Newman both had a dry mathematical wit. As an organiser and topologist, Newman once said 'It's wonderful how many shapes the neck of a bottle can take'. Alexander's humour was more down-to-earth. For example, he once said 'We'll have to wait, thumbing our twiddles'" (Jack Good in B. Jack Copeland et al., *Colossus: The Secrets of Bletchley Park's Codebreaking Computers* (Oxford University Press, 2006), p.205).

HIARCS 0.5 - 1982/3 - NOW WALKING ! - BY MARK UNIACKE

HIARCS 0.5... 1982: NOW WALKING!

Following my 'O' level project in 1980/1 which became the very first HIARCS chess program (see *SelSearch* issue 115), my mind was made up on what my 'A' level (for those outside the UK these are the exams done at age 17/18) Computer Science project was going to be - an upgrade! **HIARCS 5!** Henceforth I will call it **0.5** to avoid confusion with commercial versions which emerged over a decade later!

OVERVIEW

According to the project documentation which I guess is a lot more accurate than my memory, **version 0.5** was started in September 1982 and finished 24th March 1983.

The program was written in the BASIC+ (interpreted) programming language and ran on a PDP 11/70 located in Hatfield Polytechnic campus. This was before University, but I was allowed remote access via teletype to produce the project. Earlier while at school I had worked on a similar system to produce the first HIARCS program so I was familiar with this system. I believe the program was initially submitted through punch cards and later edited online by teletype via modem. Certainly I did this for the previous HIARCS versions in 1980/81.

REPRESENTATION

The board was represented as an array (one dimensional for performance!?) with the square A1 as location 11, A8 as 18, H1 as 81 and H8 as 88. The pieces were represented as Pawn=1, Knight=2, Bishop=3, Rook=4, Queen=5, King=6, positive numbers for computer pieces, negative for player pieces.

An offset method of move generation was used and En passant captures were computed by temporarily inserting a pawn on the En Passant square before move generation began!

SEARCH

The inspiration for the new HIARCS search was sought from the book "*Chess Skill in Man and Machine*" and in particular

the article "*The heuristic search: An alternative to the alpha-beta minimax procedure*" by **Larry Harris** from Dartmouth College. HIARCS was still written in the relatively primitive BASIC programming language and being interpreted it meant the program was rather slow. To compensate for this I developed some heuristics to help guide the search and evaluation in a more targeted way.

The search was based on plausible (mainly tactical) moves generated and searched at plies 1, 2 and 3 with a swap-off evaluation at ply 4 giving some level of tactical security in its play. According to the documentation on its top level searching up to 4 plies HIARCS 0.5 would typically search about 350 positions/moves. Considering the average time spent per move seems to of been about 50 seconds I conclude HIARCS 0.5 was searching a massive 7 nodes (positions/moves) per second - watch out Deep Blue!? ;-)

Ok, so how did it search to such great depths when only searching 350 positions?

HIARCS 0.5 used the following heuristics to decide which moves to search at each ply depth:

- Ply 1: Generated all moves and scored them based on its position evaluation function (more later). The moves were then ordered. Interesting moves such as Checks and Captures were examined earlier than their score might otherwise indicate. It limited the moves selected even at ply 1 based on plausibility! Basically it limited the moves to analyse deeper to 2 positional moves and a selection of high interest tactical moves. If the positional moves proved to be tactically unsound within the 4 ply search horizon, HIARCS was able to reselect another positional move for further analysis.
- Ply 2: Examined all check evasions, checks, captures, forks(!) and pawn promotions.
- Ply 3: Examined all check evasions, captures, forks and pawn promotions.
- Ply 4: Examined all threatened captures to determine swap off values to see if any material was threatened with loss.

TACTICAL EVALUATION**MATERIAL BALANCE**

HIARCS used the following values for the material:

Pawn=100, Knight=335, Bishop=350, Rook=500, Queen=900, King=15000

A material balance exchange adjustment was used which encouraged exchanging pieces when ahead in material and discouraged it when behind.

The exchange function was:

Value of capture
 = ((totalComputerMaterial / totalPlayerMaterial * valuePieceTaken) - valuePieceTaken) * 4 + valuePieceTaken

For example when a Rook up, exchanging Knights would receive a 37 point bonus.

SWAP OFFS

Pieces attacking and guarding other pieces and squares were evaluated for exchanges which might lead to some win of material. This included the ability for HIARCS to see forks without actually searching the moves.

Often the tactical conditions spotted were not guaranteed outcomes so were evaluated lower than actually winning material but enough to make HIARCS aware of tactical issues and play accordingly.

Amazingly HIARCS 0.5 seems to have some code to spot pins and include this information in its tactical analysis. I am actually surprised how sophisticated it was in some respects. Please forgive me, this was a long time ago and my memory is not what it might be and despite being written in BASIC it is nice to see some concepts already included.

CHECK AND MATE!

HIARCS had special subroutines (Gosub - remember that?) that could compute check evasions based on:

- Capture Checking Piece
- Move King
- Try interposing check

HIARCS used this routine to also spot

checkmate much earlier than it could based on its normal search.

POSITION EVALUATION**PAWN**

- Advancing bonus: (rank - 2) * file bonus where file bonus is {1, 0, 4, 6, 7, 3, 0, 0}

Some other limited evaluation but nothing one could call a pawn structure eval!

KNIGHT

- Evaluated for Centre closeness: (8 - abs(4.5 - rank) * 2 - abs(4.5 - file)) * 2

For example a knight move Ng1f3 received a bonus of 10.

- Evaluated for enemy King closeness: 5 - sum of rank and file distance to enemy king

There were further development bonuses for vacating the back rank and a special fork bonus to encourage forking pieces (even if the search could not resolve the outcome).

BISHOP

Bishops were penalised for being on the back rank similar to knights.

Bishop mobility was computed as: number of moves * 2 - 7

ROOK

Rooks received many bonuses and penalties covering:

- Square control/mobility
- Enemy king closeness
- Open and semi-open files

Rook on kings rank -1 bonus - e.g. rook on the 7th

Attack bonus for attacking enemy pawns and pieces

QUEEN

Queens were evaluated for:

- Mobility
- Enemy king closeness
- Attack bonus

KING

The King received rewards for

- Castling
- Closeness to edge or centre or target pawns!

SOURCE CODE!

I am making the full BASIC source code to HIARCS 3 and 5 (i.e. the original 0.3 and 0.5) available on my website in the near future. The listings will be complete and they certainly worked in 1981 and 1983 (although there may of been the odd bug in there of

THE PDP 11/70!

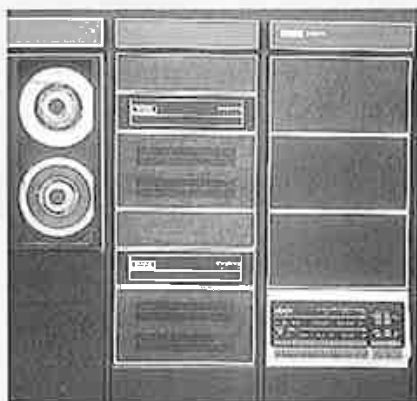
The **PDP 11/70** dates back to 1975 and was a mini computer - that's mini compared to main frame, but still much larger than our desktop PCs today! It was capable of running many different user's programs at once.

Mark's was just one of the educational establishments using the PDP and its performance varied depending on how many people were using it!

Oh, yes, and they cost \$77,000!!

On an Internet '**Computer History**' website it is noted that the 11/70 was the 'high end of PDP-11 architecture', and the first PDP-11 to use cache memory - a whole 2KB!

Mark has never actually seen the one he used! It was based in the Hatfield Polytechnic Campus, and Mark accessed it by Teletype (a computerised typewriter) via a Modem, so time was limited because of school and, later, college telephone costs.



The **processor clock speed** isn't shown anywhere we can find, but Mark found that it had a 0.532 MWIPS rating.

This is a Whetstone rating which used to popular for comparing the various different early processors - in fact very early *Selective Search* readers may remember we used to produce charts for 6302, 6501, 68000, 68020, H8, RISC and other processors, trying to relate their speed value for chess!

A 68020 running at 16.7MHz rated at 2.4 MWIPS. So a Lyon 68020/12 would rate at 1.72 MWIPS and from this we can deduce that the PDP 11/70 would be the equivalent of a Lyon 68020 running at 3.7MHz as long as only one person was using it, and not allowing for delays in using a slow bandwidth which Mark classifies as 'a disaster'!!

If you want to know more, check the PDP range at:

<http://www.psych.usyd.edu.au/pdp-11/models.html>

course) so it should be possible to make them work again on PC. Once we have them working (!) I will then update the code, which used to be about 600 lines long and fit in 16Kb if my memory serves. Don't expect a well structured modular source code, its quite tangled - but does have some comments which is more than can be said for some of my other software! ;-)

GAMES PLAYED IN EARLY 1983

Here are some of the games played by the **HIARCS 0.5** version in early 1983. It was running on a PDP11/70 located in Hatfield Polytechnic while I was operating the program via teletype in Welwyn Garden City College Campus in February/March 1983.

MEPHISTO II - HIARCS 0.5 LEVEL 3

C55: Two Knights: 4 d3, 4 d4 exd4 5 e5 and Max Lange Attack

1.e4 e5 2.♘f3 ♘c6 3.♙c4 ♘f6 4.d3 ♙b4+ 5.c3 ♙c5 6.♙g5 d6 7.♙xf6?N *Giving Black the 2 bishops and energising his queen is not such a good idea!* 7.♘bd2 ♙g4 8.♖b3 0-0 9.♖xb7 is a known line, but White's queen came under pressure after 9...♘a5 0-1 Tyle-Snitil, 2003 7...♖xf6 8.0-0 0-0 9.♘bd2 ♙g4 10.♖b3 ♘a5 11.♖b5 ♘xc4 12.♖xc4 Not 12.♘xc4? ♙xf3 13.gxf3 ♖xf3+ 12...h5?! [12...♙e6!] 13.d4 exd4 14.cxd4 ♙b6 15.e5 dxe5 16.♘xe5 ♖ae8 17.♘xg4 hxg4 18.♘b3 c6 19.♖ae1 ♖xe1 20.♖xe1 ♖d8



Building pressure against ♖/d4 21.♖e5?? 21.♖b4 solves the problem quite well, then if 21...♖d6 22.♖xd6 ♖xd6 23.♙f1 ♙xd4 24.♘xd4 ♖xd4 25.♖e7! ♖b4 26.b3, and White has drawing chances 21...♙xd4! And suddenly there are multiple attacks, for example against e5 and f2 22.♖xd4 22.♘xd4? ♖xe5 with back rank mate threat

22...♖xd4 23.♗xd4 23...♞e8+ makes no real difference: 23...♔h7 24.♗xd4 ♜xd4
23...♞xe5 24.♗b3? 24...♗c2 delays mate, but 24...♞xb2 will win easily 24...♞e1# 0-1

HIARCS 0.5 LEVEL 3 - MEPHISTO II

C17: French: 3 Nc3 Bb4 4 e5 c5 sidelines

1.e4 e6 2.d4 d5 3.♗c3 ♗b4 4.e5 c5 5.♗b5+ ♗d7 6.a4 cxd4 7.♞xd4 ♗xb5 8.♞xb4 ♗a6 9.♗f3 ♗c6



We need a diagram so readers can follow a short series of blunders involving both computers 10.♞c5?! It is clear that 10.♞g4 would have been much better and of some annoyance to Black who would probably have to play 10...♔f8 and now 11.♞f4± 10...♞a5? 10...♗ge7! 11.♗b5 0-0 12.♗g5 ♞c8 is about equal 11.♗e3?? How did HiarcS miss 11.♞xa5! ♗xa5 12.b4 ♗c6 13.b5 and the pawn fork wins a piece 11...♗ge7?? 11...♞xc5 12.♗xc5 ♞c8 would have saved the day, but this gives White a second chance to take on a5 12.♞xa5 And this time it does! 12...♗xa5 13.0-0-0? But it misses the follow-up?! [13.b4! ♗ac6 14.b5 which should be winning! 13...0-0 14.♗g5? Again missing 14.b4! which still gives a big advantage 14...♗f5 15.♗c5 ♞fc8! Now Black has the edge 16.b4 You have to smile, but this is now innocuous 16...♗c4 17.f4 b6! 18.♗f2



18...♗ce3! 19.♗xe3 ♗xe3! The move played

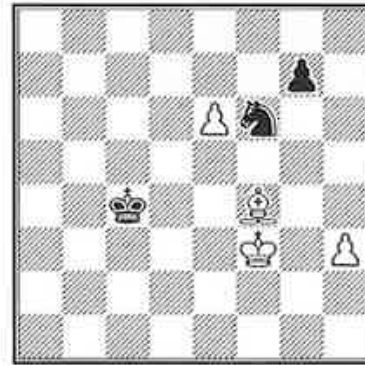
is much better than 19...♞xc3?! when White could spoil things somewhat with 20.♗d2! 20.♔b2 ♗xd1+ 21.♞xd1 ♞c4 22.g3? 22.b5 seems obvious 22...♞xb4+ 23.♔a1 ♞c8 24.♞b1 ♞xb1+ 25.♗xb1 ♞xc2



26.h3 The game is (should be!) lost, but even so 26.♗f3 would make Black work a little harder. 26...♗c4 27.♗bd2 d4 28.♗xc4 ♞xc4 29.♔b2 ♞xa4 Okay, I agree, it's still hopeless 26...d4 We could nit-pick about occasional better moves, but Black now goes on to win easily enough 27.♗a3 ♞c3 28.♔a2 ♞xg3 29.♗b5 h6 30.♗e4 ♞e3 31.♗bd6 ♞xh3 32.♗f2 ♞f3 33.♗g4 33...♞xf4 wins easily 0-1

HIARCS 0.5 - COLLEGE CLUB PLAYER: TIM

41...♔xc4 HiarcS has a win, but...



42.e7?? 42.♗e5 wins easily: 42...♗d5 43.♗xg7 ♔c5 44.♗f8+ ♔c6 45.♔e4 1-0 42...♔d5!! Gets the draw! 43.♔e3 43.♗g5 ♗e8 44.♔f4 ♔e6 45.h4 g6! is also a draw 43...♔e6 44.e8♞+ ♗xe8 45.♔e4 ♗f6+ 46.♔f3 ♔f5 47.♗e3 g5 48.♗d4 ♗e4 49.♔g2 ♗f6 50.♔f3 ♗h5 51.♔g2 ♗f4+ 52.♔h2 ½-½

We'll have the fully working HiarcS 0.3 v Steve Blincoe's Chess Challenger 3 in our next issue. Come on HiarcS!

CHRIS GOULDEN'S UCI/WINBOARD PAGE

In *SelS 129* Chris had a rest from his usual divisions and ran the following tournament:

Pos	ENGINE	/14
1	RYBKA 2.2 UCI 32-BIT	10½
2	HIARCS X54 UCI	8½
3	HIARCS 11 UCI	8
4=	TOGA 1.2.1A UCI FRUIT 2.2.1 UCI	7
6	SPIKE 1.2 TURIN	6½
7	SCORPIO 1.91	5
8	NAUM 2.0	3½

This time we're nearly back to normal, except that the first report I received from Chris in April was followed by another which reached me just before I finalised my pages and layout, so for this issue we get a double dose!

Hi Eric

Please find enclosed the latest results from the divisions.

Firstly can I point out an error of mine in *Sel Search 129* which I would like included as a correction for next issue. On line two of the second paragraph there is an "and" where it shouldn't be. So where I have said that Toga is the best freebee left out there should read:

"Toga is the best freebee left out there if we ignore the free beta version of Rybka".

You were right of cause to put in the 'hmm!' as the published statement is not correct due to a typo - Rybka is out of sight up against other free engines.

REPORT:

Now for the current report for *SelSearch 130*.

Spike 1.2 Turin won the 1st division ahead of **Scorpio** and **Glaurung**. Scorpio was given 2nd on tie-break only because it won more games! Jonny and Pseudo were relegated.

Naum has gone commercial as stated in the last issue, so was not present and **Toga** was taken out having won a few championships



on the bounce and is too strong for this group.

Spike of course has version 1.3 participating at Ridderkerk and is still private.

There is also a new version of **Toga II** called 1.3x4, which I will have tested for the next issue. I think that this should now be stronger than the commercial **Fruit** program on which it is based since the split up of the original authors.

DIVISION 1

Pos	ENGINE	/18
1	SPIKE 1.2 TURIN	13
2=	SCORPIO 1.91 (GIVEN 2ND ON TIE-BREAK) GLAURUNG 1.2.1UCI	11½
4=	SLOWBLITZ WV 2.1 WILDCAT 7	10
6	COLOSSUS 2006F	9½
7	DEEP FRENZEE 3.0	8
8	DEEP PHARAON 3.5.1	7
9	JOHNNY 2.83	5
10	PSEUDO 07.C	4½

Aristarch won the 2nd division on tie-break due to winning the head to head against **Anmon** by 1½-½.

In fact the top four was a close finish as, at the start of the last round, Aristarch had 11½, with Delfi, Anmon and Petir all on 11... and they were all playing each other! But Anmon beat Delfi, while Aristarch drew with Petir. Ufim and Thinker were relegated.

DIVISION 2

Pos	ENGINE	/18
1=	ARISTARCH 4.50 (1ST ON TIE-BREAK) ANMON 5.60	12
3	PETIR 3.99D	11½
4	DELFI 5.1	11
5	L G EVOLUTION	10
6	E.T.CHESS 181005	9
7	THE BARON 1.8.1	7
8=	FRANCESCA MAD 0.13 UFIM 8.02 (RELEGATED HEAD-TO-HEAD)	6
10	THINKER 4.7A	5½

Movei 0.08.403 won the 3rd division with Trace 1.37a coming in 2nd, so we'll see how promotion suits them next time!

RegardsChris.

Hi Eric (again)

Please find enclosed the latest results for the (next) issue. I have not enclosed the grading list as talked about because some of the engines had new versions that were so new that the grades would have been misleading.

HERE IS THE 2ND. REPORT:

This issue is the rest from the usual divisions, and I wanted a look at the recently released HIARCS 11.1 and Toga II 1.3x4.

I have also been concerned recently that my divisions would get weaker if some of the better engines started to become commercial.

Naum has already gone that way recently and I am expecting to lose Spike, Glaurung and Scorpio soon if they get much stronger. We appear to be alright for the next couple of issues anyway.

With the above in mind I was given the idea by your editor to put a few of the old strong engines up against some of the amateur group which now average above 2700 Elo between them so this brought back engines like Ruffian 1.0.1 and List 5.12, and the last freely available version of Naum, which gave a good showing incidentally.

I omitted to use the free version of Rybka thinking that it would run away with

things, but having seen how HIARCS started this may have been an error.

HIARCS11.1 got off to an amazing 10.5 out of 11 before losing with black to Toga, but it was out sight by that time.

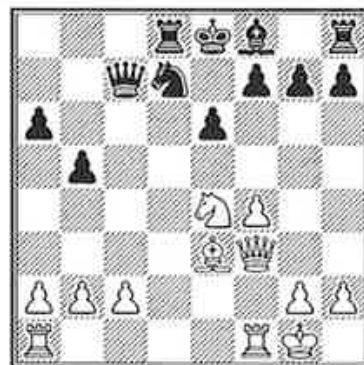
Naum got a respectable 6.5 from 14 bearing in mind the company, and the three former favourites were at the bottom. We have to bear in mind that Ruffian and Pro Deo were between 2680 and 2720 Elo in their day, and this demonstrates how the moderns are doing.

Pos	ENGINE	/14
1	HIARCS 11.1 UCI	11½
2	TOGA II 1.3x4 UCI	9
3=	SPIKE 1.2 TURIN SCORPIO 1.91	7½
5	NAUM 2.0	6½
6	LIST 5.12	5
7=	PRO DEO 1.1 UCI RUFFIAN 1.0.1	4½

Cheers! for nowChris.

HIARCS 11.1 UCI - LIST 5.12

1.e4 c5 2.♘f3 d6 3.d4 cxd4 4.♘xd4 ♘f6
5.♘c3 a6 6.♙e3 e6 7.♙e2 ♘bd7 8.f4 b5
9.♙f3 ♙b7 10.e5 ♙xf3 11.♚xf3 dxe5 12.♘c6
e4 13.♘xe4 ♚c7 14.♘e5 ♚d8 15.♘xd7
♘xd7 16.0-0



16...♚xc2 Poisoned or not? 17.♙d4 f6
18.♚ac1 ♚a4 19.♚fd1 ♙e7 20.♚h5+ ♘f8
21.♚c7! g6 22.♚h6+ ♘e8 23.b3 ♚a5 24.♚b7
♚xa2? Greedy again! 25.♚g7! ♚f8
26.♙xf6! ♚xf6 27.♚bxd7 ♚xd7 28.♘xf6+
♙xf6 29.♚xd7+ ♘f8 30.♚c1 Mate threat
♚c8 30...♚a1 31.♚xa1 ♙xa1 32.♚xe6 With
♚ for ♙ White wins easily 1-0

THE CCRL AND CEGT RATING LISTS!

The **CCRL** and **CEGT Website Groups** each has a **COMPLETE RATING LIST** which includes old versions, new versions, interim versions, free versions - you name it! - and every one on a wide range of hardware. The **RATINGS** and other info on the sites is very interesting. I extract from the lists all the major Single Processor 32 bit ratings, so that the lists shown here can be more easily compared with my "Selective Search" Rating List.

CEGT 40/20 32-bit Rating List

Here is the **CEGT web address** for those who want to visit the site themselves:

- <http://www.husvankempen.de/nunn>

POS	ENGINE	RATING
1	RYBKA 2.3.1	2954
2	RYBKA 2.2N	2936
3	RYBKA 1.2F	2933
4	RYBKA 2.3LK	2921
5	RYBKA 2.1c	2906
6	RYBKA 1.1	2900
7	HIARCS 11.1	2837
8	FRITZ 10	2830
9	LOOP 10.32F	2814
10	SHREDDER 10.1	2813
11	TOGA II 1.3x4	2802
12	ZAP! ZANZIBAR	2796
13	FRITZ 9	2779
14	HIARCS X54 UCI	2778
15	FRUIT 2.2.1	2775
16	SPIKE 1.2 TURIN	2771
17	HIARCS 10	2768
18	NAUM 2.1	2766
19	JUNIOR 10	2764
20	KTULU 8.0	2757
21	SHREDDER 9.1	2750
22	STRELKA 1.0 BETA	2742
23	THINKER 5.0b	2726
24	CHESS TIGER 2007	2725
25	NAUM 2.0	2720
26	FRITZ 8 BILBAO	2712
27	SMARTHINK 1.0	2701
28	JUNIOR 9	2687
29	CHESS TIGER 2004	2685
30	HIARCS 9	2674
31	GLAURUNG 1.2.1	2671
32	CHESS TIGER 15	2667
33=	DELFI 5.1	2666
33=	SCORPIO 1.8	2666
35	GANDALF 6	2659
36	CHESSMASTER 10000	2656
37	RUFFIAN 2.1	2649

CCRL 40/40 32-bit Rating List

Here is the **CCRL web address** for those who want to visit the site themselves:

- <http://www.computerchess.org.uk/ccrl>

POS	ENGINE	RATING
1	RYBKA 2.2	2991
2	RYBKA 1.2	2977
3	RYBKA 2.1	2970
4	RYBKA 1.1	2959
5	HIARCS 11.1	2911
6	LOOP 13.6	2906
7=	RYBKA 1.0	2883
7=	ZAP! ZANZIBAR	2883
9	FRITZ 10	2879
10	SHREDDER 10	2872
11	LOOP 10.32F	2867
12	HIARCS X50 HYPERMODERN UCI	2864
13	TOGA II 1.2.1A	2861
14	LOOP 12.32	2858
15	SPIKE 1.2 TURIN	2850
16	JUNIOR 10	2845
17	NAUM 2.1	2844
18	FRITZ 9	2842
19	HIARCS X54 HYPERMODERN UCI	2840
20	FRUIT 2.2.1	2839
21	HIARCS 10	2836
22	SHREDDER 9	2823
23	JUNIOR 10.1	2813
24	KTULU 8	2803
25=	FRITZ 8 BILBAO	2800
25=	NAUM 2.0	2800
27=	SCORPIO 1.9	2790
27=	CHESS TIGER 2007	2790
29	ZAP! PADERBORN	2781
30	JUNIOR 9	2779
31	ZAP! REYKJAVIK	2766
32	GLAURUNG 1.2.1	2757
33	SMARTHINK 1.0	2755
34	PETIR 4.39	2739
35	CHESS TIGER 15 GAMBIT	2735
36	CHESSMASTER 10000	2734
37	RUFFIAN 2.1	2730

PLAYWITHARENA & THE NOVAG CITRINE !

I have a very nice surprise for you Novag Citrine owners who found a nice PC connection cable packaged in your purchase and wondered how you might ever be able to use it! The PlayWithArena people have made their PC Chess Interface 'Novag compatible'

Arena itself is a FREE Graphical User Interface, programmed by **Martin Blume**, and designed originally and mainly to run UCI and WinBoard chess engines

So basically you might use it to play against your Rybka, Hiarcs11, Shredder10, Toga, Spike, ProDeo or any of the other 200+ engines, many of which are free. You can also play engine-v-engine matches, and use the engines to analyse games which you have, and store them using the popular pgn format.

You can also print games with analysis and any comments you add. The only real drawback is that it can't read or save in the ChessBase 'standard' format, but other than that many key features are there.

Arena is also compatible with Chess960, the DGT electronic chess board and clock, the ICS chess server where you can play

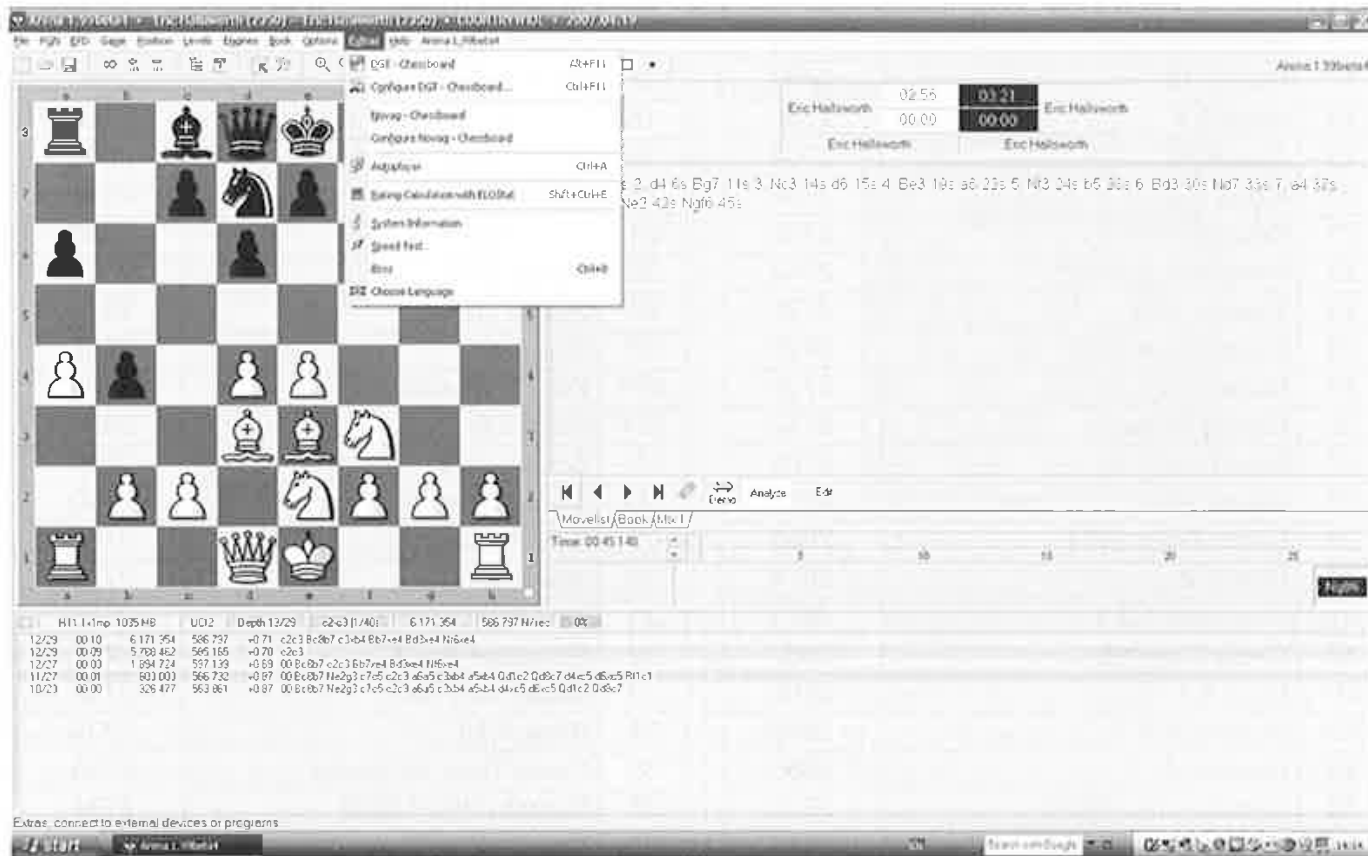
OnLine... and now the **Novag Citrine**, which means you can pgn save, analyse, print and store your Citrine games, and link your Citrine and play on its board against a uci engine loaded in Arena!

My screenshot below shows a game in progress, with Hiarcs11 analysing at the bottom, and I have clicked on the [Extras] option, so the scroll-down shows functions as available and in place for the Citrine. A Canadian reader has sent me games from his Novag Citrine v Novag Super Expert and Mephisto Master matches, saved in pgn format through Arena, and you will find a selection from these elsewhere in this issue!

To get your copy of Arena, go to...

- <http://www.playwitharena.com>

and follow the Link to [Arena Downloads]. There you must make sure to get the latest **Arena 1.99 Beta4** release. Don't worry about the 'beta', that's just while they make sure everything works okay with the Citrine. So far I believe that it does. The download size is about 1.45MB so it doesn't take long to get it and, as already mentioned, it is FREE!



RYBKA v GM JAAN EHLVEST

MAN v MACHINE WITH A DIFFERENCE!



I think we all realise that it is going to become more and more difficult to get even the strongest GMs to play straightforward Man v Machine matches from now on.

Okay, Kramnik made a serious blunder in one of his games against Deep Fritz, and maybe could have won one of the drawn games, but Fritz played extremely well in winning game 6 so, whilst the final score might have flattered the computer engine slightly, this was World Champion Kramnik that went down 4-2!

This doesn't mean that Man v Machine is finished - there's quite a few strong IM and GM players who can show where the engines still go wrong, and types of positions in which they don't play as well as humans - but there's no doubt in my mind that it's getting harder and harder for any player to prove this in a series of games over the board. Any GM, however strong, will have to prepare carefully and properly and specifically for the computer opponent if he wants to win a match against an engine. A change of opening repertoire is the first requisite for most GMs... they have got to get into positions where the computer is out of its depth strategically, where small long term advantages can be recognised by the player and be made to count. I think it's possible, but it's never going to be easy from now on!

But there are other ways: for example time handicaps! But the general feeling at the moment is that this would have to be substantial against all but the best GMs. E.g. 1 hour v 5 mins, but when you remember that the player misses out on thinking in opponent's time (only 5 mins), but the computer analyses during the player's 1 hour! Even so, I'd prefer something like this myself... *'real chess!'*

And then there's the other way - handicap the computer by taking a pawn or a piece off it! And that's what they decided to do for the **Ehlvest** (GM, 2610 Elo) v **Rybka2.3LK** match.

Rybka was running on 4 processors, the

new 2.3 version had just come out and was, additionally, using some extra Larry Kaufman coding to try and help the computer understand exchanges better - when to exchange, when not to exchange.

The time control was G/45mins + 10secs, and Rybka would be White in all the 8 games but would start with a different pawn off the board each time... so Larry created a small opening book for each set-up!

Would it be enough?!

Larry Kaufman thought the computer would win +1/8 and the average forecast was either +1/8 or +2/8. Some expected a bigger margin for Rybka, and I was numbered amongst those as I felt that Ehlvest would find it immediately difficult having strange pawn structures on the board, and having to change normal development practices. I think one advantage the human has over the computer is the ability to recognise patterns and themes as they appear on the board, and know instantly, from experience, the right and wrong ways of playing various positions.

You can show a position to an IM/GM 12 or so moves into any game with a standard opening and, though there are multitudes of course, the IM/GM will immediately know what opening has been played, what each side's strategy should or should not be, what the strong and weak points are in each position etc. At this point his knowledge of the opening's history and his understanding from that will enable him to play the next few moves quite easily. Eventually the game will become unique, one of the players will have played something different which will result in a change to the way the game continues. If Player A believes his opponent has placed a knight on the wrong square, he will immediately start looking for ways of taking advantage of that, for example perhaps attacking a square or a piece that is normally defended by the knight but now isn't. Only at this point do the players enter some new territory and have to really start serious thinking and analysing for the new conditions in their own game.

But in a pawn handicap game, there is no known history of how the opening develops, no immediate recognition of structure, in a sense it all has to be created from scratch, and the patterns, pawn and piece placements will mostly be at least a little different to 'normal' games. Indeed in some games one or two of White's pieces (bishops, rooks and queens) will be immediately dynamically stronger than is usual as they will be able to develop without first moving a pawn.

My feeling was that Ehlvest would find this difficult, whilst Rybka couldn't care less of course. It would treat and analyse its way through these unusual positions in exactly the same way it would deal with normal positions, because the computer doesn't 'recognise' a normal position (*oh I've seen this before, it's best to castle queenside, and you're supposed to put your bishop on the long a1/h8 diagonal, get one or both rooks on the open file, my opponent will try to exchange central pawns but I'll try to block that and prepare an eventual kingside pawn push*), it just analyses it! If you take its opening book away from it, it won't even play 1.d4 or 1.e4 without a long 'think'!

Well, let's have a look at some of the games, to see who was right.

Game 1 has Rybka without its h-pawn, so maybe central pawn development will occur almost normally. But presumably Black won't dare castle kingside?! In fact with that open h-file for its rook I already fancy Rybka!

Rybka 2.3.1LK - Ehlvest Jaan

Game 1



1.d4 *The first comment to make is that Rybka values this position as only -0.13. We*

have seen in a previous issue of SelSearch how small the Rybka pawn values are compared with all the other programs 1...d5 2.c4 e6 3.♘c3 ♘f6 4.♘f3 c6 5.♙d3 ♘bd7 6.cxd5 exd5 6...cxd5 7.♙f4 ♙b4 was expected 7.♙f4 ♙e7 8.0-0-0 Rybka obviously saw the idea of castling long and leaving the ♜ on h1, but where is Ehlvest going to put his ♚ 8...g6 9.e3



9...a5 *After the game Ehlvest suggested 9...♘b6 10.♘e5 ♙f5 11.♙e2 ♘e4 "with a clear advantage". Rybka would play 12.♘xe4 dxe4 13.g4 which it considers equal! 10.♙c2 ♘f8 Ehlvest had been intending 10...a4 but spotted that 11.♘b5! threatening ♙c7 was possible, and ♙f8 would be his only reply as 11...cxb5?! opens the c-file for the White ♙ to protect 12.♙c7. All is not lost as 12...♞a6! 13.♙xd8 ♞c6 14.♙xe7 ♞xc2+ 15.♙xc2 ♙xe7 but White still emerges with ♞ for ♘+♙ and a clear advantage 11.♙d3 ♙e6 12.♙b1 a4!? Giving the handicap pawn back to try and create an attack is an interesting idea. Black's lack of development means he is already struggling and needs to find some sort of counter-initiative, but perhaps a safe move such as 12...♙d7 or ♙g4 would be wiser? 13.♘xa4 ♙a5 14.b3 ♙g4 15.♘c5 ♙a7 16.♞dg1*

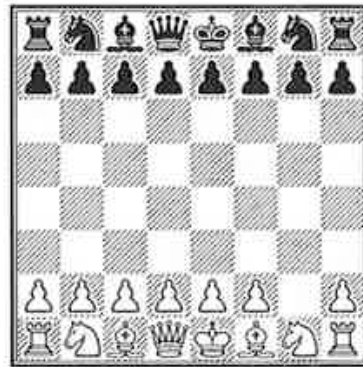


16...♔e6?! "Just another mistake", sighed Ehlvest later. Why not 16...♙xf3 17.gxf3 ♜8d7 18.♜xd7 ♜xd7 "and Black is doing fine". However I note that Rybka has w+0.72 so thinks that getting a draw might still not have been so easy for him. On the other hand Hiarcs11.1 shows w+0.06, so it sides with Ehlvest! 17.♜xe6 ♙xe6 18.♙e5 h6 19.♜g5 ♔d7?! The king has never been safe, and is now even less so, though at least the rooks are connected. But the GM is getting into time trouble. 19...♙c8 was Ehlvest's view of what he should have played, "though I do not trust this". 19...♙d7 is another idea, leaving the ♖/a8 with more scope, though it will stay on a8 anyway as long as that is enough to keep White's queen quiet protecting a2. Either way White will probably come back with f4! 20.♜xe6 ♙xe6 21.g4 Threatening ♙f5+ gxf5 ♖xf5 mate 21...♙d6 22.f4! ♔e7 Or 22...♙xe5 23.fxe5 ♜d7 24.♖f1 and the pressure keeps on mounting 23.♙xf6+ 23.♖f2! with 24.g5 to follow was even more dangerous 23...♙xf6 24.♖xh6



24...♔g7? In fact 24...♖xh6 25.g5+ ♔e7 26.gxh6 ♖h8 27.♖h1 ♖a5! would have given Black a significantly better chance of saving the game... as would 24...♔e7 25.g5 ♔d7 though 26.f5! would be dangerous if found! 25.g5! ♖xh6 26.gxh6+ ♔h8 27.♙xg6! 27...fxg6 28.♖xg6 and now Black could make a series of checks with 28...♖xa2+ 29.♔c1 ♖a1+ 30.♔c2 ♖a2+ but White's king just creeps back to hide on h1 behind the rook, so eventually Black has to play ♖xg1 and then ♖xg1 for White wins easily: 31.♔d1 ♖a1+ 32.♔e2 etc 1-0

Rybka 2.3.1LK - Ehlvest Jaan
Game 2



1.♙g2 Rybka evaluates White's position without the g2 pawn as -0.42 1...g6 2.d4 ♙g7 3.♜f3 d6 After the match Ehlvest concluded that, in his concern to avoid sharp positions and tactics, he had ended up being too cautious, and should have fought for the centre "as everyone is taught in childhood" and played 3...d5 4.♜c3! Rybka recognises that it must castle long 4...c6 5.e4 ♙g4 6.♙e3 d5 7.h3 ♙xf3 8.♖xf3



Already Rybka shows the position as equal, and that only if Black now plays 8...dxe4. After the move actually played Rybka believes White has the advantage!? 8...e6?! 9.0-0-0! Rybka has w+0.28. Clearly Ehlvest's opening strategy cannot be working, to start a pawn up and yet be brought down to level, in the computer's view, so quickly 9...♜d7 10.h4 h5 11.♔b1?! Ehlvest criticised this as negative. He was more afraid of 11.exd5 and interestingly Rybka2.2 might well have played it though, after about a minute, it changed to 11.♖he1. After 11.exd5 he suggested 11...cxd5 12.♜xd5?! but there is no way Rybka would play this move, even if "in a rapid game the computer has the better chances" – Rybka wouldn't think like that and would play

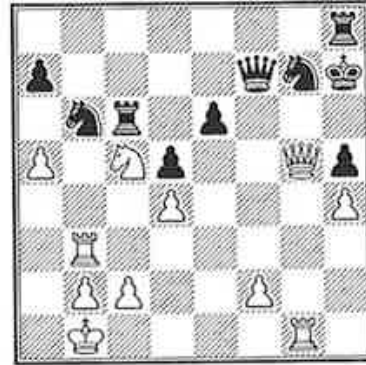
12. ♖b1?! 11... ♛g6 12. ♙g5 ♙h6?! I think 12... ♜b6 was Black's best try to get into the game again 13. exd5! cxd5 No choice, the alternatives are not good: [i] 13... ♙xg5? 14. dxe6 fxe6 15. hxg5 ♜d5 16. ♜xd5 cxd5 17. ♜he1 and Black's king is in trouble; [ii] 13... exd5?? 14. ♙xh6 ♜xh6 15. ♜e3+ ♜e7 16. ♜xh6 1-0 14. ♜b5!



Now the game has become tactics and, although Ehlvest still has his handicap pawn and his position isn't really all that bad, he admits that he already feared the worst 14... ♖f8 15. ♜f4 ♖g7?! 15... ♙xg5! 16. hxg5 ♜h7 doesn't look so bad (but not 16... ♜b6? 17. ♜d6! ♖e7 18. gxf6+ ♜xf6 19. ♜d3! ♜xd6. Black is 2 pawns up, but 20. ♜g5! followed by 21. ♜f3 will soon put an end to that!) 17. ♜c7 e5 18. ♜e6+ ♖g8 19. ♜xd8 exf4 20. ♜xb7. Most of that is pretty much forced and White's advantage looks negligible to me 16. ♜d6 ♜f8 The computer programs would cheerfully prefer 16... ♜e7 here, connecting the rooks... but Ehlvest would worry about the pin on his ♜f6 no doubt and makes a possibly weaker move 17. ♜d3 ♜e8 18. ♜xb7 ♜c8 19. ♜b3 ♖g8 20. ♙f1 ♜b6 21. ♙d3 ♙xg5 22. ♜xg5 ♜c7 23. ♜c5 ♜e7 24. ♜g3 ♜g7 25. ♜e1 ♖h7 26. ♜g1! ♜c6



Rybka doesn't seem to have made much progress, but suddenly spots a sac of ♙ for 2x♜ and breaks through the now short of time GM's resistance 27. ♙xg6+! fxg6 28. ♜xg6+ ♖g8 29. a4! ♜f7 30. ♜g5 ♖h7 31. a5



31... ♜f5?! If the b6/knight moves 31... ♜c8?? then 32. ♜b7! Or 31... ♜d7? 32. ♜xd7 ♜xd7 33. ♜g6+ ♖g8 34. ♜b8+ m/3. I guess 31... ♜xc5 was probably best, but then 32. dxc5 ♜c8 33. c6! ♜f5 34. ♜b7 ♜fe7 35. b4! finishes in pawnpower style 32. axb6 axb6 33. ♜d7 Threatens ♜f6 mate, so there are only 2 replies: [i] 33... e5 so that the ♜/c6 covers f6, but 34. ♜f3! wins easily instead; and [ii] 33... ♜g8 34. ♜xg8+ ♜xg8 35. ♜f6+ ♖h6 36. ♜xg8+ 1-0



Okay, let's have a look at game 3 - as the missing handicap pawn gets nearer the centre, Ehlvest's chances should get better!

Rybka 2.3.1LK - Ehlvest Jaan

Game 3

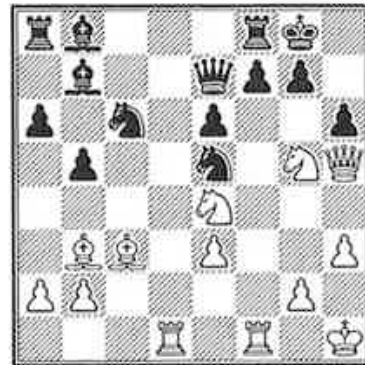


1. $\text{d}f3$ Rybka is definitely less thrilled with this, and has -0.53. Ehlvest also questions the opening move, but if it's debatable that would be by Larry Kaufman's fault, not Rybka's. Ehlvest believes 1.e4 was critical, aiming for a King's Gambit type setup after 1.e4 e5 2.f4 exf4 1...d5! 2.d4 $\text{d}f6$ 3.c4 e6 4. $\text{d}c3$ $\text{e}e7$ 5.e3 0-0 6. $\text{e}d3$ c5! This seems to be going much better for the GM, Rybka has -0.48 here 7.0-0 $\text{d}c6$ 8.dxc5 $\text{e}xc5$ Ehlvest was well aware of 8...dxc4!? 9. $\text{e}xc4$ $\text{w}xd1$ 10. $\text{e}xd1$ $\text{e}xc5$ with an extra pawn into the endgame, but thought this would be easier for Rybka to get a draw, and he wanted to go for a win 9. $\text{e}d2$ a6 10. $\text{w}e2$ $\text{e}a7$ 11. $\text{e}ad1$ $\text{w}e7$ 12. $\text{e}h1$ dxc4 13. $\text{e}xc4$ $\text{d}g4$ 14.h3 $\text{d}ge5$ 15. $\text{e}b3$

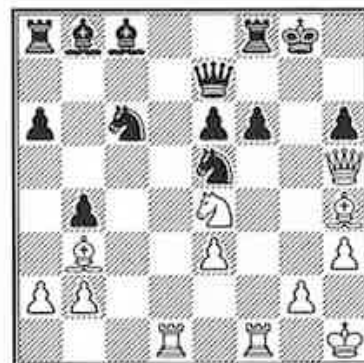


15...b5?! Ehlvest regretted this move, so I've marked it with ?! But Rybka still shows -0.47! "I co-operated with my opponent again", complained the GM, who wished he'd played 15... $\text{e}d7$ (Rybka would play $\text{e}b8$ or $\text{e}d7$!) 16. $\text{d}e4$ $\text{d}xf3$ 17. $\text{w}xf3$ f5, after which Rybka shows 18. $\text{d}f2$ and -0.47. The evaluation is the same, but the excellent organisation of Rybka's attack towards the GM's king which follows over the next few moves shows that Ehlvest truly spotted his

first real mistake in this game 16. $\text{d}e4!$ $\text{e}b7$ 17. $\text{e}c3$ $\text{e}b8$ 18. $\text{d}fg5$ h6 19. $\text{w}h5$



Rybka is piling pieces over to the kingside (even the two bishops are firmly aimed that way!) and Ehlvest reckons the build-up already leaves him without a defence. Yet Rybka itself still has Black just ahead!? 19...b4?! This move played by Ehlvest tends to almost force Rybka to just manoeuvre its dangerous bishop to a different but at least equally excellent attacking square. So perhaps 19... $\text{e}c8$ would have proved better?! 20. $\text{e}e1$ $\text{e}c8$?! I know I said this move would have been best a moment ago, but Black now needs to respond to $\text{e}e1$ and the threat $\text{e}h4$! So I'd suggest 20... $\text{d}d8$. Would that save the day? Then White plays the same 21. $\text{e}h4$ as in the game and then I think it has to be 21... $\text{w}c7$. Now perhaps 22. $\text{e}g3$, which looks strong, 22... $\text{w}e7$ 23. $\text{e}c2$ f5 and now there are some forced moves: 24. $\text{e}xe5$ $\text{e}xe4$ 25. $\text{e}xe4$ hxg5 26. $\text{e}xa8$ $\text{e}xe5$ and I don't think White's advantage is all that big, Black must have good chances of getting a draw 21. $\text{e}h4$! Now White is winning 21...f6! The GM finds the best defence. 21... $\text{w}c7$? was worse as 22. $\text{d}f6+$! gxf6 (22... $\text{e}h8$ 23. $\text{d}e8$! $\text{w}e7$ (23... $\text{e}xe8$? 24. $\text{e}xf7$! 1-0) 24. $\text{d}xe6$! $\text{w}xe8$ 25. $\text{e}f6$! 1-0) 23. $\text{d}e4$ $\text{d}d7$ 24. $\text{e}f4$! 1-0 22. $\text{d}xf6+$! gxf6 23. $\text{d}e4$



23...♖f7 Everything else loses immediately
 24.♗xf6+! ♕g7 25.♗e2 Nothing else will do, Rybka is still material down and must keep its queen to pursue the attack 25...♗c7
 26.♕c2 ♖h8?? Ehlvest was struggling anyway, but this loses outright. [i] 26...♖a7
 27.♕g5! ♗f3! a neat little ♗h2 mate threat (27...hxg5?? 28.♗h5 m/5) 28.♕f4! ♗ce5, and there are complications though I'm sure Rybka would sort its way through them! E.g. 29.♗h5+ ♕h8 30.♖xf3 and Black cannot play 30...♗xf3? because he loses his queen to 31.♕xc7! Another improvement was [ii] 26...b3 27.axb3 a5, threatening ♕a6, but again the unlikely 28.♕g5! wins 28...♗f7 (not 28...hxg5? 29.♗h5 m/5 as in the other line) 29.♗h5+ wins the queen 27.♗h5! ♗f7 27...♗g7 alone delayed mate 28.♗g4 The notes say Black resigned, but Rybka will have announced mate with this move **1-0**

That would be quite discouraging for Ehlvest I would think - he started out in this game optimistically and clearly stayed ahead for quite some time out of the opening. I think Rybka's play after the apparently small mistake by the GM at move 15 was excellent, it made it seem as if 15...b5 was ????

However in the last game of day 1 Ehlvest finally managed a draw, though I have to tell you that it was agreed after only 13 moves, and I think Vas Rajlich and his operator Larry Kaufman must have been showing some sympathy for the tiring GM! Anyway it meant that day 1 ended:

- Rybka 3½ Jaan Ehlvest ½

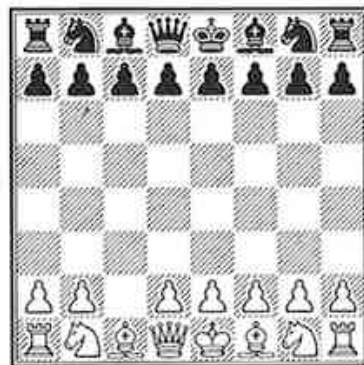


Day 2 started out just like day 1, with a 26 move win for the program, making the score 4½-½ for Rybka and putting the match result out of Ehlvest's reach. But I'm not going to show that. Instead I'm going to move on to game 6 where the Rybka engine must play without its c-pawn, for which it shows a starting evaluation of -0.32.

Incidentally I'll point out here that the Rybka2.3.1 evaluations for pawns and pieces are different to those in previous Rybka versions, from the original 1.0beta through to 2.2. For more information on this please refer back to *SelSearch* issues 125 and 126, especially the latter where Frank Holt built considerably on my initial Rybka findings by producing even more comparison figures for many other engines!

No doubt Larry Kaufman's input has been a major reason for the change in Rybka and, though both the pawn and piece values are still quite a bit lower than the values given to them by all the other programs, the 2.3.1 values are mostly between 15% and 40% (!) higher than they were in Rybka2.2.

Rybka 2.3.1LK - Ehlvest Jaan
 Game 6



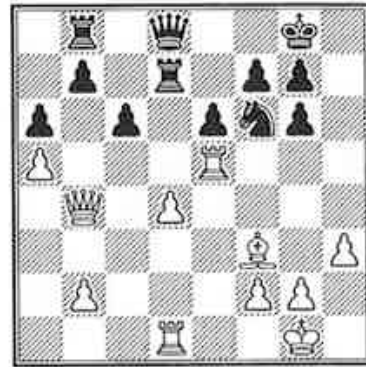
1.♗c3 d5 2.d4 ♗f6 3.♗f3 c6 A Slav set-up with an extra pawn! 4.♕f4 ♕f5 5.♗h4 ♕g6 So the computer has the chance to enjoy the bishop pair but, as Ehlvest says, Black's position is solid with an extra pawn and a closed centre, "a dream against a computer" 6.e3 e6 7.♕e2 ♕e7 8.0-0 0-0 9.♗xg6 hxg6 10.♗b3



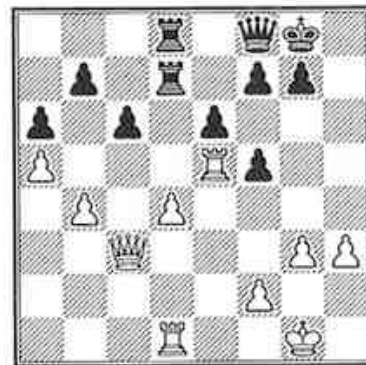
10...♖c8 If you check it out you'll find that most engines in Ehlvest's position would prefer 10...♖b6 expecting a queen exchange on b6. However the GM was concerned that Rybka might play 11.♖c2!? ♜bd7 12.a3 a5 13.♟ab1 intending ♜a4 and b4 with some pressure 11.h3 ♜bd7 12.♟fc1 a6 13.a4 ♟e8 14.a5?! By aiming to block any Black queenside progress, Rybka locks nearly all the pawns up. Ehlvest believes it would have been better to leave the pawn on a4 so as to keep the possibility of a b2-b4-b5 break open 14...♟d8! 15.♟b4 ♟c7 16.♟f3



16...♟b8! Winning a battle for the important long b8-h2 diagonal. 16...♟xf4 17.exf4 ♖c7 was also good 17.♟xc7 ♖xc7 18.♟c2 ♟ab8 19.♟e1 ♖d8 20.e4?! A touch of impatience from Rybka, looking for counterplay even though the exchanges and slight opening of the position in theory should favour Black. But if 20.♟d1 e5! 21.dxe5 ♜xe5 we have to say that Black's position looks strong 20...dxe4 21.♜xe4 ♜xe4 22.♟xe4 ♜f6 23.♟e5 Now the rook has landed on the 4th rank there might be the temptation to get to the h-file and start an attack against the king. But no computer engine would fall for 23.♟h4? ♜d5! or 23...g5! 23...♟e7 24.♟d2 ♟d7 25.♟d1



25...♟f8 Ehlvest awarded this a ! His aim is to reorganise the attack against White's d-pawn and it's quite clear that the GM is winning this game... as long as he can avoid any blunders. As he admits himself, they're easy to make against a computer, they never seem to miss the slightest opportunity, and once made you're usually in trouble 26.♟c3 ♟bd8 27.g3 ♜e8 28.♟e2 ♜d6 29.♟d3 ♜f5 There is only one way to save the pawn 30.♟xf5 gxf5 31.b4

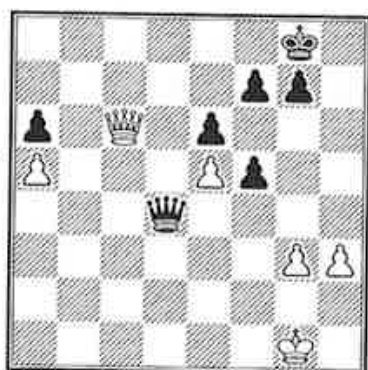


Ehlvest makes the interesting remark here: "Rybka continues with the blockade plan started with 14.a5". Now if I'd ever suggested that a computer was pursuing a plan it started 17 moves ago, I know of at least three readers who would have questioned my understanding of how computers work, or even my sanity. But there you have it from a GM who's played against the tour de force called Rybka! 31...♟d5 Ehlvest reckons a similar position arose in one of the many World Championship games between Korchnoi and Karpov – if any reader has time to research that I'd be interested to check it out myself 32.f4 ♟xe5 The simple option. 32...♟d6!? looks good too 33.fxe5 ♟d5 34.♟d2 ♟b5 35.♟b2 ♟d8 36.♟a2?! Almost a loss in tempo by inviting Black's reply 36...♟d5! and now having to go...

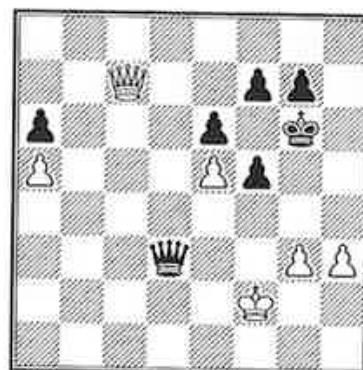
37.♖d2



37...b6! Ehlvest called the computer's response to this 'a bluff', but in fact this is simply a very clever and clarifying move
38.♖xc6 If 38.axb6 ♖xb6 39.♔f1 ♖b5
 40.♖b2 (still trying to save the b-pawn)
 40...♖b7, and now it seems White has to accept some exchanges to avoid queenside pawns marching into his territory: 41.♖c2 ♖xb4 42.♖xc6 ♖xc6 43.♖xc6 ♖xd4 44.♖xa6 ♖d5! and Black will win 38...bxa5 39.bxa5 ♖xd4 40.♖xd4 ♖xd4+



41.♔g2? This is actually a (strange) mistake for a computer to make, as Ehlvest could have forced an exchange of queens and thus entered a totally won pawn endgame. I believe that Vas Rajlich is not convinced about the benefits of tablebases in some situations, so maybe he had them switched off and Rybka made the mistake. Correct was 41.♔f1 and then 41...♖e3 42.♖xa6 ♖f3+ 43.♔e1 ♖xg3+ 44.♔d2 ♖xe5, and although one imagines Black is going to win barring an accident, White can create some problems (light panic!) with careful timing in pushing the passed a-pawn 41...♖d2+?! Note the tablebases tell us that 41...♖d5+! 42.♖xd5 exd5 43.♔f3 g5! 44.♔e3 ♔g7 is a sure 0-1 42.♔f1 ♖d3+ 43.♔f2 ♔h7 44.♖c7 ♔g6



45.♖c1? There are possibly two slightly better ways to make life more difficult for the GM, though he would almost certainly win either way. [1] Hiarc and me: 45.♖b6 ♖c4 46.♔e1 ♖e4+ 47.♔f2 f4 48.gxf4 ♖xf4+ 49.♔g2 and Black still has a bit to do to earn the (inevitable) point. But the longer you make the human think and play, the more chance there is of a small mistake being made, so you must look for the best and most challenging defence; [2] Ehlvest: 45.h4 ♖d4+ 46.♔g2 ♖e4+ 47.♔f2 f4 48.h5+ ♔g5 49.gxf4+ ♖xf4+ 50.♔g2 ♔h5 51.♖a7 and it's still not quite reached the handshake stage, though it's getting very close. Note that in both of these lines the queens are still on the board – Rybka's mistake is in allowing the queens to come off which gives Black an easily won K+P ending 45...♖d4+ Finally forcing the queen exchange White shouldn't want, but otherwise now ♖xe5 will just win another pawn 46.♖e3 ♖xe3+ 47.♔xe3 f6! 48.♔f4 ♔f7 49.h4 g6 50.g4 fxe5+ 51.♔xe5 fxe4 52.♔f4 e5+! 53.♔xg4 ♔f6 etc 0-1

Vasik Rajlich



So I think 'many congratulations' are due to Jaan Ehlevest on this hard fought and well-played game, getting him his first win. In fact he also managed to draw games 7 and 8 (final score **Rybka 5½-2½**), so the interesting question is: is the handicap of losing the queenside pawns harder for White to overcome than losing a kingside pawn, or was Ehlevest beginning to get used to his opponent and the hang of how to play?

Larry Kaufman suggests it's a bit of both, and he's probably right. *"The human player should play classically, occupy the centre, and castle on the side where the computer is not missing a pawn, or kingside if it's a centre pawn. It took Ehlevest a few games to figure this out. When the pawn is missing on the kingside, it's confusing for the human player because there are very few normal openings in which Black castles queenside."*

Therefore, one can also conclude that Ehlevest would have felt 'more at home' able to castle kingside in the last 3 games when the handicap pawn came off the queenside.

Jaan Ehlevest said that his first problem was that he used too much time in the opening in the early rounds. *"Against a human opponent it's not so terrible to have to average 10 seconds a move in the later stages, but against Rybka it was too difficult... I blundered in game 1, but that is the biggest advantage for White if there is no h-pawn; then I blundered again in game 2 because I missed the reply. But when Rybka has an initiative and you are short of time and get frustrated, a blunder follows... if only I could use Rybka in my tournament play!"*

"For the future", suggests Larry, "we should consider keeping the present format, but make the challenge more difficult for Rybka by increasing the increment so that time management will be less difficult for the human. Probably at G/45mins + 30secs the match could have been very close"

I think it's fairest to let **Vasik Rajlich**, an IM in his own right and Rybka's just about all-conquering programmer, to have his say for the final words:

Match Summary by Vasik Rajlich

Rybka has completed her match against Jaan Ehlevest at pawn odds. I'd like to thank IM Larry Kaufman for organising the match and for being the driving force behind the anti-human Rybka version which played in this match. I'd also like to thank Grandmaster Ehlevest for being bold enough to participate in the experiment.

Larry and I will need to analyse a bit more closely what happened. Below are just my first reactions:

1) The format is interesting

A one-pawn advantage while having black in all games is rather mild. It seems that the results are competitive and the games themselves are played along normal chess themes and therefore interesting to watch. A too-big handicap could feature bizarre manoeuvres, but there was no sign of this in these games. The middlegames which were reached were normal chess middlegames which could have been reached from the normal starting position.

2) The story of two halves

Ehlevest started with 0/3 and, judging by those games themselves, he could hardly complain about the score at that point. Each of these three games was settled quickly and decisively, and not due to any special blunders. In fact, in game 3, Ehlevest found several forced moves in a tough position before succumbing.

In the rest of the match, Ehlevest scored 2.5/5 and more than held his ground. His game 6 win was rather convincing. In game 7, he again outplayed Rybka, only to allow the game to slip into drawn territory at the last moment as the clock wound down. In game 8, he used his knowledge of rook endgames to untangle himself. His only loss in this stretch came in game 5, in a long complex game which was balanced for many moves.

Did Ehlevest learn as the match went along? Are the games with queenside pawns missing

somehow friendlier for a human? (There is no indication that this is so in engine vs engine play.) Or is this just normal statistical variance? We'll do our best to come to some sort of a conclusion.

3) From the human point of view

Aside from his dramatic improvement in performance as the match progressed, Ehlvest also deserves credit for avoiding major blunders. For some reason, man vs machine events tend to be marred by at least one such blunder from the human who participates. Thankfully, we did not have any of those here.

4) Takeaways for Rybka development

There were a number of Rybka behaviors which will need some analysis and possible correction. The most obvious were:

a) Early middlegame of game 6 - Rybka should understand that the solid pawn structure of that game allows black to untangle himself at his convenience. Black's advantage is probably already massive once the queenside is locked with a4-a5, since white's remaining central break with e3-e4 is harmless.

b) Endgame of game 6 - Rybka should not offer trades into simple lost king and pawn endings, no matter how bad the alternatives are.

c) Middlegame of game 7 - it's not clear what caused Rybka to play so indecisively there, I haven't seen this before. Perhaps it was the strong incentive for avoiding trades. A position like that requires more forceful and consistent play.

d) Endgame of game 7 - needs more analysis. Rybka may have made some mistakes there.

e) Late middlegame of game 8 - Rybka needs to understand that this pawn-up rook endgame offers minimal chances. White has better prospects in the double-edged QRN vs QRB middlegame.

5) Future handicap matches

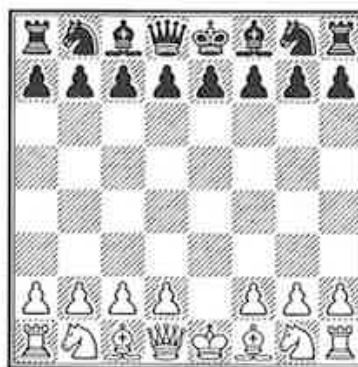
This will need some discussion. I think that some improvements to Rybka are needed before she is ready for a pawn-and-move handicap given to a player such as Ehlvest. A slightly longer time control should also be considered.

Vas

To complete our coverage this time, here are the other games, which will enable readers to follow comments within Vas's article - we may come back to one or two key moments in these games next time.

The short draw:

Rybka 2.3.1LK - Ehlvest Jaan Game 4



1.d4 d5 2.c4 ♘f6 3.♘c3 c6 4.♘f3 g6 5.cxd5
 ♘xd5 6.♙c4 ♙g7 7.0-0 0-0 8.♞e1 ♙g4 9.♙g5
 ♙f6 10.♙h6 ♙g7 11.♙g5 ♙f6 12.♙h6 ♙g7
 13.♙g5 ½-½

Rybka 2.3.1LK - Ehlvest Jaan Game 5



1.e4 e5 2.♘f3 d6 3.♙c4 ♘f6 4.♘g5 d5

5.exd5 h6 6.♘f3 ♕d6 7.♘c3 0-0 8.♙e3 a6
9.0-0 ♜e8 10.h3 ♘bd7 11.♘d2 e4 12.♞e1 b5
13.♙b3 ♙b7 14.a3 ♙e5 15.♘dx4 ♘xe4
16.♘xe4 ♙xb2 17.♞b1 ♙xa3 18.♙d4 ♞h4
19.♞d3 ♙f8 20.♞e2 ♘e5 21.♞c3 ♘c4
22.♞be1 ♞ed8 23.♙f6 ♞h5 24.♙xd8 ♞xd8
25.♙xc4 bxc4 26.♞g3 1-0

Rybka 2.3.1LK - Ehvest Jaan
Game 7



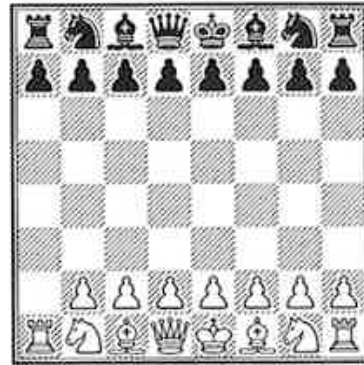
1.♙b2 ♘f6 2.♘f3 e6 3.e3 b6 4.♘c3 ♙b7
5.g3 ♙e7 6.♙g2 0-0 7.0-0 c5 8.♞b1 d5 9.♞e2
♘c6 10.♞fd1 ♞c8 11.d3 ♞e8 12.♞d2 e5
13.♘e2 ♞c7 14.c4 d4 15.e4 ♞b8 16.♘c1
♙c8 17.♘b3 ♙e6 18.♘h4 ♘d7 19.♘f5 ♙f8
20.a4 a6 21.♞e2 b5 22.axb5 axb5 23.♘d2
g6 24.♘h4 bxc4 25.♘xc4 ♙xc4 26.dxc4
♙h6 27.♘f3 ♘b6 28.♞c2 ♘b4 29.♞b3 ♞a8
30.♞a1 ♞eb8 31.♞xa8 ♞xa8 32.♞b1 ♘g7
33.♙f1 ♘d7 34.♙a3 ♘c6 35.♞a1 ♘g8
36.♞b1 ♞a5 37.♙b2 ♘g7 38.h4 ♞xa1
39.♙xa1 ♘b4 40.♙b2 ♘b8



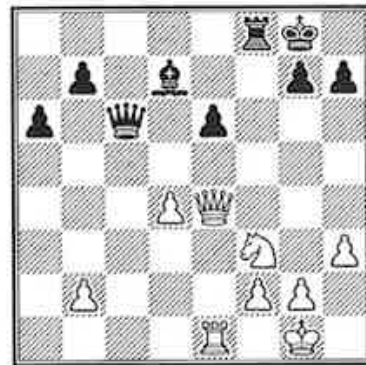
41.♙e2 ♘8c6 42.h5 ♞a5 43.♘f1 f6 44.♘e1
♘f7 45.♘d3 ♙d2 46.♘xb4 ♘xb4 47.♞d1
♙h6 48.♞b3 ♞a2 49.♞xa2 ♘xa2 50.hxg6+
hxg6 51.♙a3 ♙f8 52.♙d1 ♘c6 53.♙c2 ♘d6
54.♘e2 ♙h6 55.♘d3 ♘c3 56.♙b2 ♘a2
57.♙a3 f5 58.f3 ♘c3 59.♙b2 fxe4+ 60.fxe4
♘a2 61.♙a3 ♙e3 62.♙b3 ♘b4+ 63.♙xb4

50.cxb4 64.♘e2 ♘c5 65.g4 ♘d6 66.♙a2 ♙g5
67.♘d3 ♙d8 68.♙b3 ♙b6 69.♙d1 ♘e6
70.♘c2 ♙c5 71.♘b3 d3 72.♘a4 ♘d6
73.♘b5 g5 74.♙a4 d2 75.♙d1 ♙e3 1/2-1/2

Rybka 2.3.1LK - Ehvest Jaan
Game 8



1.e4 e6 2.♘f3 d5 3.♘c3 ♘f6 4.e5 ♘fd7 5.d4
c5 6.♘b5 ♘c6 7.c3 cxd4 8.cxd4 ♙b4+
9.♙d2 ♙xd2+ 10.♞xd2 0-0 11.♙d3 f6
12.exf6 ♘xf6 13.0-0 ♙d7 14.♞fe1 a6 15.♘c3
♞c8 16.♘a4 ♞c7 17.h3 ♞d6 18.♞e3 ♞c7
19.♞ac1 ♘b4 20.♞xc7 ♞xc7 21.♘c5 ♘xd3
22.♞xd3 ♘e4 23.♘xe4 dxe4 24.♞xe4 ♞c6



25.♞e3 ♞d5 26.♘e5 ♙c6 27.♘xc6 ♞xc6
28.♞xe6+ ♞xe6 29.♞xe6 ♞d8 30.♞b6 ♞xd4
31.♞xb7 ♞d1+ 32.♘h2 a5 33.♘g3 a4
34.♘f4 ♞a1 35.g3 a3 36.bxa3 ♞xa3 37.♘g4
♞a5 38.f3 h6 39.f4 h5+ 40.♘h4 ♘h7 41.♞e7
♘h6 42.♞e6+ g6 43.g4 hxg4 44.hxg4 ♘g7
45.♞e5 ♞a7 46.♘g5 ♞b7 47.♞a5 ♞c7 48.♞a4
♞c5+ 49.f5 gxf5 50.♞a7+ ♘f8 51.♘f6 ♞c6+
52.♘xf5 ♘g8 53.g5 ♞b6 54.♘e4 ♞c6 55.♞b7
♞a6 56.♘f5 ♞c6 57.♞d7 ♞a6 58.♞c7 ♞b6
59.♘f4 ♞a6 60.♘g4 ♞b6 61.♘f5 ♞a6 62.♞e7
♞b6 63.♞a7 ♞c6 64.♞b7 ♞a6 1/2-1/2

NOVAG CITRINE v NOVAG SUPER EXPERT C/6

As I've mentioned earlier, in the NEWS section, I am getting quite a few games and results for the Novag CITRINE, and the performance level varies quite a bit, depending on the opposition.

Frank Holt has seen his portable **Saitek Expert** (2014) beat it, and with quite a bit to spare - we'll look at that match next time

And **Bob Clarke** tells me his old wood board **Mephisto Academy** (1950) - what a lovely chess computer that was with the Ed Schroder pre-Polgar program - is level with the Citrine 6-6 at present.

But for the match we are covering in this Issue, the games were e-mailed to me by **Gregory Wong** in pgn format (using the Citrine/Arena connection!) and he had a big score in favour of the **Citrine** over the **Novag Super Expert C/6** (1965 Elo).

The games were played at the full Tournament time control of 40/2, and we'll have a look at three of them before I tell you the final score!

Novag Super Expert C/6 - Novag Citrine

D42: Queen's Gambit
Declined: Semi-Tarrasch: 5
cxd5 Nxd5 6 e3 Nc6 7 Bd3

1.e4 c6 2.d4 d5 3.exd5 cxd5
4.c4 d6 5.d3 e6 6.d3
d7 7.cxd5 dxd5 8.d3
d6 9.0-0 0-0 10.g1 f6
11.a3 d7

Increasing the pressure on the isolated pawn

12.♙e3 h6N

12...♞d6? 13.♗e4 ♞d7 was no good in its only game on my database

I also found 12...g6 13.♙c2 b6 14.♞e2 ♙b7, which looks a better try, but still White won

13.♞c1 ♙d7 14.b4 a6 15.♗e4
♗d5

Good square

16.♗xf6+ ♞xf6 17.♙b1 ♞fc8
18.♞d3



18...♗f8?!

Invites an invasion. Probably ♞f5 was best

19.♞h7! ♗e8 20.♗d2 ♗xe3
21.fxe3

21.♗e4! was also strong, but not 21.♞xe3? ♗xd4 22.♞c1
♙c6

21...♗xd4 22.♗e4 ♗e2+
23.♗h1 ♞h4??

Much too wild!

23...♞e5 was needed, then
24.♞c5 ♞xc5 25.bxc5 ♗c3
26.♞g8+ ♗e7 27.♞xa8 ♗xe4
28.♞xb7 ♗f2+ 29.♗g1 ♗g4
30.g3 ♞xc5, and Black could definitely save this game

24.♞cd1! ♙a4 25.♞f1

Black now has big problems, too many to deal with!



A Novag Super Expert (foreground) here in play against a Fidelity Prestige



Another photo from a recent Gebruikers Event - here the Mephisto Academy (foreground) is playing against a program in a Mephisto Exclusive board



25...♗f4 26.♞xf4 ♞xf4
27.exf4 ♙xd1 28.♗d6+ ♗e7
29.♗xc8+ ♞xc8 30.♞xg7
♙a4 31.♞b2 ♙c6 32.♗g1
♞g8 33.g3 h5 34.♞d4 ♞d8
35.♞c5+ ♞d6 36.♗f2 ♙d5
37.♞c7+ 1-0

Novag Citrine - Novag Super Expert C/6

B14: Caro-Kann: Panov-Botvinnik Attack with 5...e6 and 5...g6

1.e4 c6 2.d4 d5 3.exd5 cxd5 4.c4 ♘f6 5.♗c3 e6 6.♗f3 ♘b4 7.cxd5 exd5 8.♘b5+ ♘d7 9.♘xd7+ ♗bxd7 10.0-0 11.♖b3

The isolani on d5 becomes a target

11...♗a5 12.♘f4N

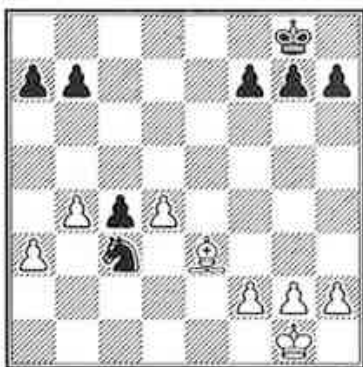
12.♘d2 ♗b6 13.♗e5 was Boric (2445) – Meduna (2480) / Hlohovec 1995. 1/2-1/2 in 37 moves

12...♗ac8 13.♗ac1 ♗b6 14.a3 ♘xc3 15.♗xc3 ♗xc3 16.bxc3 ♗e4 17.♖b4 ♖xb4 18.cxb4 ♗c8 19.♗c1?!

It was not in White's interest to exchange rooks here as it allows a serious knight invasion

19.♗e1 was therefore better

19...♗xc1+ 20.♘xc1 ♗c4! 21.♗e5 ♗c3 22.♗xc4 dxc4 23.♘e3



Up to here the Super Expert has played very well and, despite having knight against bishop with play on both sides of the board, holds a definite advantage due to the passed c/♗

23...♗d5?!

23...♗a2!? would have been

better – it releases the c/♗ to run, and protects the next square the pawn will go to as well as the c1 queening square!

24.♗f1 c3?!

A bit impatient, as the pawn is less easy to defend here if it comes under attack.

24...f5 or 24...b5 might have been better

25.♗e2! g6 26.♗d3 ♗g7 27.f3!

Neat! This allows the ♘ to manoeuvre into position to attack the ♗/c3

27...♗f6 28.g3 h5 29.♘f2 ♗e6 30.♘e1 a6 31.♘xc3



31...♗xc3?

Black needed to keep the minor pieces on. Now White is winning in a ♗+♗ ending

31...b5! was a much better try

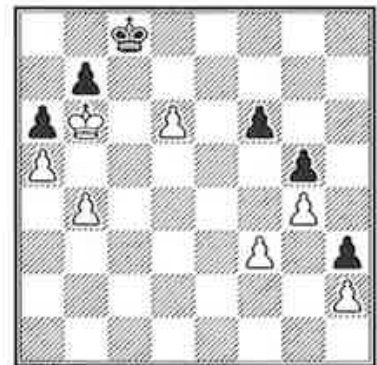
32.♗xc3 ♗d5 33.a4 g5 34.a5! h4? 35.g4 h3 36.♗d3 f6 37.♗c3!

Now Black must move its ♗

37...♗d6 38.♗c4 ♗c6 39.d5+ ♗d6 40.♗d4 ♗e7 41.♗c5 ♗d7 42.♗b6 ♗c8 43.d6!



The Novag Citrine



43...♗d7 44.♗xb7 ♗xd6 45.b5 axb5 46.a6 f5 47.a7 fxg4 48.a8♖ 1-0

Novag Super Expert C/6 - Novag Citrine

A32: Symmetrical English: 2 Nf3 Nf6 3 d4 cxd4 4 Nxd4 e6

1.c4 c5 2.♗f3 ♗f6 3.d4 cxd4 4.♗xd4 e6 5.♗c3 ♘b4 6.♗db5 d5 7.cxd5 exd5 8.a3 8.♘g5 0-0 9.e3 is considered best, as in Aronian ,L (2584) – Gustafsson,J (2513) / Deizisau 2002, and an early 1/2-1/2 8...♘xc3+ 9.bxc3 0-0 10.e3 ♗c6N

10...♗e4 11.♘d3 ♘d7 was 1/2-1/2 in Jimenez Zerquera – Polugaevsky, Palma de Mallorca 1970.

You notice how I make sure to get these famous names in – Aronian – Polugaevsky – so that you know I am doing my research properly!

11.♘e2?!

This is inaccurate because of Black's reply

I believe 11.♔d3 ♖e5 12.0-0 was better

11...♖e4! 12.♔b2?!



The ♔ doesn't have a great future here at present, White should probably have castled

12...♖a5?!

I think this was probably to stop White playing the freeing 13.c4, but in choosing this Black misses the excellent 12...♗g5! 13.♕f1 ♔d7+ 13.0-0 ♖e8 14.♖d4 ♔d7 15.a4

White has isolated pawns on a4 and c3, and both will now come under attack

15...♖c8 16.♗c2 ♖c4!
17.♔xc4 ♖xc4 18.♖fd1 ♖c5
19.♖b5 ♔c6 20.♖d4 ♖e4



White has a choice of captures, or protect the rook with ♗d1

21.♖xc4!

Let's take them in turn:

21.♖xa7? ♔xa4 (not
21...♖xa4? 22.♖xc6 ♖xa1+

23.♔xa1 bxc6 24.c4=)
22.♗e2 ♖exd4 23.exd4 ♖e6,
and with ♗b6 next Black
should win the a7/♖ for a
pawn, so this isn't so good

21.♖xe4 dxe4 22.♔a3 ♖xa4
23.♖d1+ wouldn't be too bad

Nor would 21.♗d1 a6
22.♔a3+ which also looks
just about reasonable

21...♖xc4

As I've shown 21.♖xc4 was probably the best choice, but now, instead of 22.♖d4 or ♔a3, which produce their own complications anyway, White tries for too much

22.♖xa7? ♔xa4 23.♗f5 ♖e6
24.♗e5 b5! 25.f4 ♗b6 26.f5!



26...♖f8!

The only way to win! And not the tempting 26...♗xa7?? as simply 27.fxex6! ♖e4 28.exf7+ ♗xf7 29.♗d6 and the game is back to level!

27.♖c8 ♖xc8 28.c4!

The Super Expert is doing all it can to save the game, but the Citrine finds the answer for everything

28...♗h6 29.cxd5 ♔c2
30.♖a7?! f6 31.♗e7

Still playing bravely
31...♔xf5 32.d6 ♔e6
33.♕h1?!

Of course ♕f1 was better here, but it's now too late to save the game anyway

33...♗g6 34.h3 ♔d5

The threat of ♗xg2 mate ends the game

35.♗xg7+ ♗xg7 0-1

So there we are, three interesting games which show that both computers can have their good (and occasionally bad) moments at different points of any game. But despite the Super Expert C/6 winning the first 2 games - much to Greg's concern! - the Citrine actually came out an easy winner 13½-6½, coming from 11 wins, 4 losses and 5 draws.

Greg then started another match, dropping the Super Expert's selectivity to 4 (the default is 5), but the Citrine quickly went into a 3-1 lead!

The last I heard from him he'd started a Novag Citrine v Mephisto Master match, but I think he was finding out what Frank has already discovered - the Citrine has trouble with Franz Morsch's programs - and I haven't heard from him for a while!

The OPEN DUTCH tournament for PC engines was held at LEIDEN over the past few days (18-20 May!). Our friend Harvey Williamson took Hiarc11.33 there, and it made a fine start, winning in rounds 1 and 2, then drawing with Rybka (the favourite) and Zap Zanzibar on BIG hardware (2nd favourite), before beating The King in round 5. But, not for the first time, Scorpio (which we beat regularly in our matches at the office) was our undoing in round 6. More next time

FINAL POSITIONS

1. Rybka 7½/9
2. Zap Zanzibar 7/9
- 3= Hiarc11.33, Deep Sjeng 6/9
5. IsiChess 5½/9
- 6= The Baron, Scorpio, TheKing 5/9

DAVID WIEKRYKAS CONTINUES HIS *BEAT THE PC ENGINE MASTERCLASS!*

In *SelSearch 128* I recalled for readers the exploits of our ultimate 'Computer Killer', **David Wiekrykas**.

From the late 1990's until mid-2003 David used to send me quite regular copies of his victories against Fritz, Junior, Shredder, Tiger and Hiarc. I think other readers were as fascinated as I was that, while Kasparov, Kramnik, Bareev, Adams and others were busy drawing (or losing) matches against Fritz, Junior and Hiarc etc. David can play his - err - daft opening moves and beat them, sometimes quite easily.

In issue 128 I included wins against Shredder and a new one against Junior10.

It seems Dave is back in the groove again, as he's sent me another new one, this time against **Gambit Tiger**, a name which in this game is a misfit, as it turns out to be a very gentle pussy cat indeed. Although Dave's hardware isn't state-of-the-art, it's definitely fast enough at a time control of G/90+30secs to give the PC engine plenty of time to have a chance to see what's coming!

DAVID WIEKRYKAS - GAMBIT TIGER 2.0 ATHLON/1333

G/90+30secs, 2007

Closed Sicilian: Lines without g3

1.e4 c5 2.♘c3 e6 3.d3 d5 4.f3N

Dave has stayed in theory to move 4 – is this a record for him!?

4...d4 5.♘ce2 ♘c6 6.f4 e5 7.f5 ♘f6 8.h3 b6?!

At this point there was a delightful comment in the computer analysis: "*White's pieces can't move!*" I hope you're taking note of that Dave, you need to develop your pieces more actively!

Actually I think the computer missed a chance with 8...b6?! I'd have liked to see 8...♘xe4!? and then I reckon 9.dxe4 ♗h4+ 10.g3 ♗xe4 11.♔f2 ♗xf5+. I wonder how Dave would have reacted to that?!

9.♘f3 ♗d6 10.g4! h6 11.♘g3 ♗b7 12.a4 ♘b4 13.b3 0-0 14.♖g1 ♔h8 15.♘h1 ♗e7 16.♘f2 ♗c7 17.♗d2



'Gambit' Tiger now becomes very negative, in fact it appears it is Black's pieces which can't move!

17...♗ad8 18.♗c1 ♘h7?! 19.h4! ♗e8?! 20.♗e2 ♘c6 21.♘h1 ♗d6 22.♘g3 ♘b8?!

Really negative – and encouraging for Dave. 22...♘b4 was better, Tiger, DO something **23.g5!**



23...hxg5?

Opening it up – 'lovely jubbly' for Dave. 23...♖g8 had to be better, though 24.gxh6 gxh6 25.♗xh6 is still uncomfortable for Black to say the least

24.hxg5 ♘c6 25.♖h1! ♘e7 26.♔f2 ♘xf5 27.♘xf5 f6 28.♗g1 fxg5 29.♗xg5

29.♘xg5! ♖xf5+ 30.exf5 was a quicker win, but it's no problem anyway for White now

29...♗d7 30.♖h3

30...g6 31.♖xh7+ ♖xh7 32.♘xd6. **1-0**

The next game was inevitable sometime

DAVID WIEKRYKAS - RYBKA 2.2 ATHLON/1333

G/90+30. C00: French: Unusual White 2nd moves

1.e4 e6 2.d3 g6!?

Although just about known to theory, David

didn't make it clear in his letter if this was a Book move or Rybka's own choice. I've given the '!' on the basis that Vas Rajlich had pre-programmed Rybka ready for its unavoidable meetings with Dave!!

3.f4

For the record the most popular move has been 3.♘f3 which has been played 18 times scoring 64%, and 3.g3 has been played 17 times scoring 65%. But I did find 2 games with 3.f4, with White winning one and drawing the other!

3...♖c6N

My database found a game 3...♙g7 4.♘f3 Wissmeier – Habermann, 2005, ½-½ (39), and a 1992 game where 3...♘ge7 was played, which White won

4.♘f3 d5 5.e5

One of David's typical space-gaining moves

5...♘h6 6.d4 ♘f5 7.c3 b6

The Rybka style really is quite different to everything else

8.♙d3 ♙b7 9.♘bd2 h6!?



Almost anticipating the pawn charge which Dave makes when everything is ready, but Dave continues with a familiar manoeuvre

10.♘f1 ♗d7 11.g4!

Here we go!

11...♘g7 12.h4 0-0-0!

It's a shame Dave never sends me any notes with his games – I think he likes to see what I make of them on my own. But I'd have really loved to know if he expected this as, in probably all of the other games we've covered, castling occurs on the kingside and then Dave really starts to get the charge underway

13.b4!

Okay, queenside then!

13...h5 14.g5 ♘f5!

A nice square for the black knight

15.b5 ♘a5 16.a4 ♖b8 17.♞h2 c5 18.♞ha2

Interestingly if 18.dxc5!? Rybka would respond 18...bxc5 rather than ♙xc5

18...♞c8 19.♙d2 c4

19...♘c4 was an at least equal alternative

20.♙c2 ♞g8 21.♖f2 ♙g7 22.♘g3 ♗c7

23.♘xf5 gxf5



Rybka has blocked the position very successfully, and it is hard to see how David can achieve his usual breakthrough

24.♞b1 ♞h8 25.♗e2 ♗d8 26.♘h2 ♙f8

27.♘f1 ♞h7 28.♘g3 ♙e7 29.♞ab2

29.♘xh5 doesn't win a pawn as Black plays

29...♗c7 30.♞h1 ♞ch8 31.♘moves ♞xh4

29...♙a3 30.♞a2

Dave did add a postscript to the game – he wondered if, instead of taking a repetition draw, one of the other top PC engines might go for a bit more here?!

30...♙e7 31.♞ab2

Most engines see this as pretty equal and are happy to take the draw, but Hiarcs11 thought 31.♙c1!? left White with an edge. Neither Rybka nor I were so sure as, after 31...♗f8 32.♖e1 ♗e8 33.♙a3 ♙xa3 34.♞xa3 ♗f8 35.♞a2, I still couldn't really see that White was going anywhere, even though Hiarcs is showing +0.93. Then Rybka would play 35...♗g7, and now Hiarcs gets even more excited with 36.♙d1! and the next few moves could be 36...♞ch8 37.♗b2 ♗g6 38.♗b4, and now maybe there's the slightest hint of something opening up for White. 38...♞d8 would be Rybka's next move

31...♙a3

Twofold repetition

32.♞a2 ♙e7 ½-½

PC Programs - **RATING LIST** and Notes

The HEADINGS:

ECF. These are English Chess Federation ratings. They are calculated from Elo figures by (Elo - 600) / 8.

Elo. This is the main Rating system in popular use Worldwide. The ECF and Elo figures shown in *Selective Search* are calculated by combining each Computer's results v computers with its results v humans. I believe this makes the *SelfSearch* Rating List the most accurate available anywhere for Computer Chess.

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

Games. The total number of Computer v Computer games played.

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

A GUIDE to PC Gradings:

The **RATINGS** shown represent the programs on a Pentium4/AMD at approx. 1200MHz, or Centrino 1000MHz, with 256MB RAM.

USERS will get slightly more (or less!) if their PC speed differs significantly: A doubling/halving of 1200 MHz speed = approx. +/-30 Elo.

A doubling in **MB RAM** = 3-4 Elo. The **GUIDE** below will help readers calculate approximately what rating their program should play at when used on such alternative hardware.

**Comp-v-Comp PC GUIDE,
if Pentium4/1200 = 0**

Deep prog on 8x2000	100
Deep prog on Quad 4x2000	75
Deep prog on Dual 2x2000	50
P4-Ath/2400 Centrino/2000	30
P4/1200	0
P3-K7/500	-60
PPro2-K6/300	-100
PPro2-K6/233	-120
Pent/200	-140
486DX4/100	-200
486/66	-240
386/33	-320

ECF	Engine	Elo	+/-	Games	Pos	GamesvHumans
286	Rybka 2.2n	2886	22	416	1	
285	Rybka 2.1o	2880	30	226	2	
283	Rybka 1.2f	2852	18	653	3	
275	Fritz 10	2804	30	231	4	
274	Zap Zanzibar	2792	38	155	5	
270	Shredder 10	2757	15	922	6	
269	Hiarcs 10	2752	12	1329	7	
267	Junior 10/10.1	2741	19	585	8	
267	Fruit 2.21	2738	12	1368	9	
266	Fritz 9	2733	12	1294	10	2670/4
264	Shredder 9	2712	12	1483	11	2640/20
263	Shredder 8	2705	14	1049	12	2619/21
261	Shredder 7.04	2687	11	1668	13	2703/20
258	Fritz 7	2669	11	1587	14	
258	Junior 9	2665	11	1697	15	
258	Junior 8	2664	12	1481	16	2401/4
257	Fritz 8	2658	8	2678	17	2769/14
256	Hiarcs 9	2647	11	1761	18	
255	Gambit Tiger 2	2640	11	1720	19	2542/2
254	Chess Tiger 14	2638	12	1344	20	2705/13
254	Zap Paderborn	2636	22	445	21	
253	Chess Tiger 15	2627	10	2029	22	
253	Fritz 6	2627	10	2081	23	2616/53
252	Shredder 6	2622	12	1356	24	2478/7
252	Hiarcs 8	2620	11	1642	25	2651/14
251	Gambit Tiger 1	2611	22	430	26	
251	Junior 7	2609	12	1419	27	2701/12
251	Rebel Tiger 12	2608	15	872	28	
250	Gandalf 6	2604	13	1182	29	
250	Junior 6	2604	10	1891	30	2621/22
249	Rebel Century 4	2596	21	480	31	2674/4
249	Hiarcs 7-DOS	2596	12	1397	32	
248	Hiarcs 732	2590	9	2347	33	2467/19
247	Fritz 516	2578	12	1375	34	2513/6
247	Chessmaster 6000/7000	2575	24	353	35	2594/22
246	Fritz 532	2574	12	1480	36	
247	Shredder 4	2572	16	760	37	2600/15
247	Shredder 5	2570	14	1018	38	2642/15
246	Nimzo 98	2568	12	1308	39	2475/10
246	Nimzo 7	2566	13	1208	40	
246	Nimzo 8	2565	12	1326	41	
245	Rebel Century 3	2565	25	340	42	2655/6
244	Junior 5	2554	11	1537	43	
244	Hiarcs 6	2550	13	1207	44	2592/24
243	Gandalf 5	2545	20	513	45	
243	Gandalf 4	2544	13	1147	46	
242	Rebel 9	2542	14	1063	47	2677/14
242	Rebel 10	2539	25	333	48	2598/17
242	Nimzo 99	2538	14	1051	49	
242	Rebel Century 1.2	2536	21	460	50	2592/43

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Please send **ARTICLES, RESULTS, GAMES** and **SUBSCRIPTIONS (!)** direct to **Eric**, at the above address please!

DEDICATED CHESS COMPUTER RATINGS

Tasc R30-1995	2353	Novag Jade2+Zircon2	1965	SciSys Turbostar 432	1760
Mephisto London 68030	2314	Mephisto Milano	1958	Mephisto MM2	1759
Tasc R30-1993	2312	Mephisto Montreal+Roma68000	1956	Fidelity Excellence/3+Des2000	1755
Mephisto Genius2 68030	2305	Mephisto Amsterdam	1950	Novag Jade1+Zircon1	1750
Mephisto London Pro 68020	2277	Mephisto Academy/5	1950	Kasparov A/4 module	1740
Mephisto Lyon 68030	2273	Fidelity 68000 Mach2B	1933	Conchess/4	1735
Mephisto Portorose 68030	2270	Novag Super Forte+Expert B/6	1931	Kasparov Renaissance basic	1730
Mephisto RISC2	2261	Kasparov Barracuda+Centurion	1928	Kasparov Prisma+Blitz	1730
Mephisto Vancouver 68030	2254	Kasparov GK2000+Executive	1928	Novag Super Constellation	1730
Meph Lyon+Vanc 68020/20	2250	Mephisto Mega4/5	1927	Mephisto Blitz module	1717
Mephisto Berlin Pro 68020	2247	Kasparov Maestro D/10 module	1923	Novag Super Nova	1713
Kasparov RISC 2500-512	2243	Fidelity 68000 Mach2C	1919	Fidelity Prestige+Elite A	1688
Meph RISC1	2232	Kasparov Explorer, TAdvTrainer	1908	Novag Supremo+SuperVIP	1688
Mephisto Atlanta+Magellan	2224	Kasparov AdvTravel, Bravo	1908	Fidelity Sensory 12	1682
Mephisto Montreux	2219	Mephisto MM4	1906	SciSys Superstar 36K	1668
Kasparov SPARC/20	2218	Kasparov Talk Chess Academy	1903	Mephisto Exclusive S/12	1666
Kasparov RISC 2500-128	2200	Mephisto Modena	1901	Meph Chess School+Europa	1664
Mephisto London 68020/12	2196	Kasparov Maestro C/8 module	1894	Conchess/2	1660
Novag Star Diamond/Sapphire	2183	Novag Super Forte+Expert A/6	1888	Novag Quattro	1652
Fidelity Elite 68040v10	2179	Fidelity Travelmaster+Tiger	1885	Novag Constellation/3.6	1650
Mephisto Vancouver 68020/12	2167	Fidelity 68000 Mach2A	1884	Novag Primo+VIP	1638
Mephisto Lyon 68020/12	2162	Meph Supermondial2+College	1884	Fidelity Elite B	1638
Mephisto Portorose 68020	2146	Mephisto Monte Carlo4	1884	Mephisto Mondial2	1611
Mephisto London 68000	2143	Novag Ruby+Emerald	1882	Fidelity Elite original	1609
Novag Sapphire2+Diamond2	2132	Mephisto Monte Carlo	1874	Mephisto Mondial1	1598
Fidelity Elite 68030v9	2122	Kasparov Travel Champion	1870	Novag Constellation/2	1594
Mephisto Vancouver 68000	2119	CXG Sphinx Galaxy	1870	CXG Super Enterprise	1589
Mephisto Berlin 68000	2118	Conchess Plymate Victoria/5.5	1869	CXG Advanced Star Chess	1589
Mephisto Lyon 68000	2116	Kasparov TurboKing2	1859	Novag AgatePlus+OpalPlus	1580
Mephisto Almeria 68020	2114	Novag Expert/6	1859	Kasparov Maestro touch screen	1560
Meph Master+Senator+MilPro	2105	Kasparov AdvTrainer+Capella	1850	Kasparov Touch+Cosmic	1540
Novag Sapphire1+Diamond1	2091	Conchess Plymate Roma/6	1847	Fidelity Sensory9	1527
Mephisto MM4/Turbo18	2089	Fidelity Par Excellence/8	1845	Kasparov Astral+Conquistador	1526
Mephisto Portorose 68000	2088	Fidelity 68000 Club B	1845	Kasparov Cavalier	1526
Fid Mach4+Des2325+68020v7	2076	Novag Expert/5	1845	Chess 2001	1500
Fidelity Elite 2x68000v5	2059	Novag Super Forte+Expert A/5	1837	Novag Mentor16+Amigo	1497
Mephisto Mega4/Turbo18	2050	Fidelity Par Excellence	1834	GGM+Steinitz module	1496
Mephisto Polgar/10	2047	Fidelity Elite+Designer 2100	1834	Excalibur Touch Screen	1480
Mephisto Dallas 68020	2043	Fidelity Chesster	1834	Mephisto 3	1479
Mephisto Roma 68020	2040	Novag Forte B	1833	Kasparov Turbo 24K	1476
Novag Citrine	2028	Fidelity Avant Garde	1829	SciSys Superstar original	1475
Kasparov Brute Force	2027	Mephisto Rebell	1826	GGM+Morphy module	1472
Mephisto Almeria 68000	2023	Novag Forte A	1822	Kasparov Turbo 16K+Express	1472
Mephisto MM6	2014	Fidelity 68000 Club A	1818	Mephisto 2	1470
Kasparov Challenger+Cougar	2014	Kasp Stratos+Corona+B/6mod	1813	SciSys C/C Mark6	1428
Kasparov Cosmos+Expert	2014	Kasparov Maestro A/6 module	1811	Conchess A0	1426
Novag Scorpio+Diablo	2012	Kasparov TurboKing1	1806	SciSys C/C Mark5	1419
Kasp President+GK+TC2100	1993	Conchess/6	1805	CKing Philidor+Counter Gambit	1380
Mephisto Nigel Short	1987	Mephisto Supermondial1	1802	Morphy Encore+Prodigy	1358
Mephisto MM4/10	1985	Conchess Plymate/5.5	1798	Sargon Auto Response Board	1320
Fid Mach3+Des2265+68000v2	1985	Excalibur Grandmaster	1794	Novag Solo	1280
Meph Dallas 68000	1983	SciSys Turbo Kasparov/4	1793	CXG Enterprise+Star Chess	1260
Novag Obsidian+StarRuby	1974	Novag Expert/4	1792	Fidelity Sensory Voice	1250
Mephisto MM5	1972	Kasparov Simultano	1792	ChessKing Master	1200
Mephisto Polgar/5	1971	Fidelity Excellence/4	1784	Boris Diplomat	1150
Mephisto Mondial 68000XL	1966	Conchess Plymate/4	1779	Fidelity Chess Champion 10	1140
Nov Super Forte+Expert C/6	1965	Fidelity Elite C	1778	Novag Savant	1100
Novag Emerald Classic+Amber	1965	Fidelity Elegance	1764	Boris2.5	1060