SELECTIVE SEARCH 88
THE COMPUTER CHESS MAGAZINE

Est. 1985
Jun-Jul 2000

Editor: Eric Hallsworth
£3.75

CONTENTS: NO.88

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NEWS & RESULTS - Keeping you right UP-TO-DATE in the Chess Computer World!

We're at the time of year when things can go a little quiet, and in a sense that has been almost a good thing for me as I had a 10 day period of illness at the end of April when I wasn't able to get any work done at all.

Catching up has been very difficult, with almost 100 personal Internet e-mails and over 1,000 items of News on the Internet chess sections alone to read through, and respond to in many cases.

So I certainly apologise for *Selective Search 88* being late, but am sure readers can understand why.

Whilst I was ill in bed, others were still busily involved playing computer chess, so it's time to start getting you all up-to-date as quickly as I can!

REBEL CENTURY - competition result

After 2½ months of intensive testing, the **REBEL team** were forced to report on their website that *'nobody was able to find a stronger personality in CATEGORY-1 (playing games)'.*

Readers may recall from *SS/86* that 5 new personalities were made available on the Rebel site for improved tactical ability, but it was made clear then that none of these improved the actual playing results. So the search continued.

All of the 'improvements' submitted to Schroder BV were very thoroughly tested, but none proved stronger than the official version. However 2 reduced prizes were awarded, one going to **Marc van Hal** for an 'Alekhine personality' which plays *'brilliant chess at times... a kind of bluff chess, scattering with pawns as soon as it smells your king or notices other positional advantages'.*

The other prize went to **Howard Exner** who (having been a prize-wiiner in the tactics section) produced a *'very natural, balanced, strong attacking style'* engine.

With prize money left over from the Strength category, the Rebel doubled the prizes for the top 3 in the Tactical category.

"It's a pity," says the Rebel team, *"that nobody noticed that lowering the CHESS KNOWLEDGE parameter apparently was the key to make Rebel a stronger computer vs computer player. The classic theme **chess knowledge** versus **speed** remains actual, and needs the constant attention of chess programmers for the near future."*

A result of everybody's efforts is the **Rebel Century 1.2** upgrade (available for Rebel Century owners free from the subscription area of their web site). Of course this is mostly a result of the Rebel Team's own work rather than those of the competition entries, but it's good that an upgrade has come out of the competition, however it's been arrived at! The main features are:-

- FAST EVALUATION. A specific method for computer chess, with the Chess Knowledge parameter set to a fixed value of 25.
- FAST SEARCH. Another specific method for computer chess, involving a new pruning algorithm which will speed-up the search process by about 25%.

Both these options can be switched on/off, though the FAST SEARCH is recommended for permanent use! Some may prefer to switch FAST EVALUATION off for games v humans, as this allows Rebel to use its preferred KNOWLEDGE figure (from 25-500) according to the type of position.

REBEL CENTURY v SMYSLOV!

- the latest GM Challenge.

On April 15 the revised version of **REBEL CENTURY** played veteran GM **Vassily SMYSLOV** in the latest game of the GM Challenge series.

REBEL was running on a 1000MHz machine (!) whilst Smyslov, now aged 79, currently rates at 2516 Elo. The game and some photos start on page 7.

FRITZ6 in Dutch Championships

In *SS/87* I bemoaned the fact that **Kasparov** has reportedly refused to play in the **Frankfurt Giants** tournament if FRITZ6 takes its (rightful) place, and in my article on DEEP JUNIOR's appearance in the **Club Kasparov Grand Prix**, I showed how the organising bodies managed to eliminate the PC program whilst the GM's were losing to it at chess.

I also expressed concern that we might be unlikely to see many **computers** allowed into human tournaments in future - a great shame, as we can only really judge their progress (or, some would still say, lack of it) from results against (IM/GM strength) humans in serious play.

So I was delighted to see that FRITZ6, programmed by Holland's **Franz Morsch**, is being allowed to enter this year's **Dutch Championship**! (There's more good news under the heading *'Computer RATINGS in Israel!'* and JUNIOR also has a big date!).

Although there's been a bit of a hue and cry - as you'd expect - the latest news I have is that this is still 'on', and I believe only one player has refused to meet the PC program, and opponent's willing to play include **Jeroen Piket** and **Loek van Wely**.

But what happens if FRITZ becomes their National Champion?! See pages 17-20.

Chris TAYLOR's tournament

Chris has become a busy helper for *Selective Search* and has already provided us with some valuable results.

In his latest Tournament he used 9 of the very top programs, each one playing a total of 72 games.

The word 'top' must now include latest versions of **Crafty** it seems. The version **17.07** recently made its appearance on the prestigious *SSDF* list, in 9th. place only 30 Elo behind Fritz532, Nimzo732 and Hiarcs732.

For the record **Fritz6a** tops the Swedish list, with **Junior6a** 2nd. and **Rebel Tiger** 3rd - exactly the same order as our own list at the time of writing. As readers will see, the latest *ChessBase* version (**17.10**) did even better that 17.07 in Chris's tournament.

The details, with our results Cross-Table is shown on page .

ChessBits news

An occasional visit to the *ChessBits* web pages is well worthwhile. They recently posted an interesting Tournament result there, as well as a new edition of their Rating List.

First the Tournament Result:

Pos	Program	/60
1	**Fritz 6a**	29
2=	**Hiarcs 732**	26½
	Shredder 4	26½
4	**Junior 6a**	23
5=	**Nimzo 732**	22½
	Rebel Tiger	22½

I don't know the time control in use, but the PC's were 2 x AMD K6-2/450 machines.

Throughout much of this Issue readers will find evidence that the FRITZ6->6a upgrade has put it to the top of the program Ratings, whilst the JUNIOR6->6a upgrade (which may have been designed more specifically for dual processor Deep Junior use) is producing uncertain results. The above *ChessBits* result falls into that very category.

The *ChessBits* Rating List:

This reveals some very interesting information, but first I must mention that it is based on a particularly wide range of playing time controls! These vary from G/15 to G/90, so includes a fuller spectrum than even *Selective Search!*

We are now allowing from 40/2 down to G/60, and even G/30 where both processors in a PC v PC match are 450MHz or faster (but not engine v engine matches at any speed, played on only one PC which means there's no thinking in opponent's time).

Back to the *ChessBits* list! As well as using a wide range of time controls, they also include different versions of various programs, e.g. 3 earlier versions of Chess Tiger before its launch as Rebel Tiger, the original '6' and new '6a' versions of both Fritz and Junior... and Deep Junior.

The ratings which will interest readers (which generally are about 20-40 Elo above the equivalent *Selective Search* figures) are as follows:-

2685 Fritz 6a
2684 Deep Junior
- obviously a bit of a disappointment, especially as the figure is based on 270 games so must be considered close to reliable! *SS* reader Charles Palmer also had disappointing engine-engine results at first, but with *ChessBase's* Matthias Wullenweber's help has re-installed it on his dual processor PC and is getting good scores now.

2653 Fritz6
- 30 behind 6a, so the Fritz6->6a upgrade *is* an upgrade!

2635 Rebel Tiger
2633 Shredder 4
2628 Fritz 532
2624 Hiarcs 732
2621 Junior 6
- Note that this is the *original* Junior6. I must say that its low position here surprises me. As much as I would love to believe that Hiarcs732 is better than Junior, I don't really think it is - for newer readers or any who don't know, I do a lot of work with Mark Uniacke for Hiarcs, especially on the openings, and testing, so I'd soon tell everyone if I thought Hiarcs was still best! :-)

2602 Nimzo 732
2602 Junior 6a
- !! Very interestingly regular *SS* reader Frank Holt has told me he believes the upgrade is not as good as the original, and Frank usually knows what he's talking about. It is also to be noted that it has dropped quite a few points on both the *Selective Search* and *SSDF* lists since version 6a was introduced, so now it seems there's something to this?! However the *'Junior mark'* rating you get within the program to test its speed went up with the introduction of 6a, so presumably tactical speed was improved... but not necessarily playing strength!?!

2592 Nimzo 2000
2561 Hiarcs 6
2558 Shredder 3
2549 Rebel Century
2548 Genius 6.5
2520 Crafty 16.15
2508 Nimzo 99
2456 Zarkov 5
2454 W Chess 2000

Computer RATINGS in Israel!

Four top **chess programs** are now being allowed to play games for different teams in the Israeli state league! If this proves successful and acceptable, it is expected that other teams will be allowed to use a PC program as a team member!

Results so far are:-

- Rebel Century P/500 +4=1-0 rating 2698
- Shredder 4 P/500 +2=2-0 rating 2608
- Fritz 6 P/500 +1=3-1 rating 2461
- Deep Junior +1=2-0 rating 2443

The REBEL CENTURY result and rating is a big boost for the programming effort to concentrate on its *v human* strength, and SHREDDER has also been considered for some time to be particularly good against humans.

DEEP JUNIOR's rating is a disappointment - it's not been helped by playing weakish opposition, but has twice been held to draws. From *SS* readers Charles Palmer's results and discussions with *ChessBase* it seems that the Junior **6a** upgrade might be a specific help for the dual processor version rather than the standard PC, so one wonders which version was in use in Israel. Even so, you'd expect better than this.

Reg COX still busy with FRITZ!

Over 2 sessions Reg has just finished a 40/120, 20/6 + G/30 engine-engine match between Fritz6 and Fritz532. The new version was 4½-½ up after only 5 games, and still led 6½-2½ with only 4 to play. Here's how it ended up:-

Fritz 6	½	1	1	1	1	0	½	1	½	0	1	0	½	0	**8**
Fritz 532	½	0	0	0	0	1	½	0	½	1	0	1	½	1	**6**

At G/60 the match went:-

Fritz 6	0	0	1	1	½	1	½	½	1	0	**5½**
Fritz 532	1	1	0	0	½	0	½	½	0	1	**4½**

I don't know if many readers have tried out the *ChessBase "incidental"* programs which are often packaged with the likes of Fritz and Junior?! Reg has played a couple of shorter matches between **Exchess2.51** and **Doctor?3.0**, which Doctor won by 6-2. He also reports that **Fritz532** beat **ExChess** by 10-0 (!), but against **Doctor?3.0** it went 7-3.

A newer version of EXCHESS also appears in **Andreas Schwartmann**'s latest tournament, the result for which is shown on our **'Extra Tournament Results'** pages 24-25.

Charles PALMER experiments with DEEP Junior!

When Charles first got his copy of DEEP JUNIOR he was still waiting for his new dual processor machine to arrive. So it made its first appearance on a standard P3/500, at Game in 12+3:

	Table 1 - single proc.	/40
1	Fritz 6a	26½
2	Hiarcs 732	19
3	Deep Junior	14½

Rather disappointed, Charles then got hold of the Junior6-6a upgrade files from the *ChessBase* site.

These have proved of 'doubtful' value for the standard JUNIOR6 in most tests, but they changed Charles's result fairly dramatically:

	Table 2 - single proc.	/40
1	Deep Junior 6a	21
2=	Fritz 6a	19½
	Hiarcs 732	19½

Charles wrote: *"Clearly DJ has done much better and, if you can imagine that it can only gain from being on a dual processor (next week I hope), then it should do better still. However, what is also interesting is that it is only against Fritz that it did measurably better! Hiarcs' overall score is much the same as before".*

On 26/April Charles e-mailed again... the dual processor was up-and-running, and the DEEP JUNIOR P3/500 'mark' of 349 had gone up to 629! (exactly the 1.8 forecast in *SS*). But the results did not improve correspondingly:

	Table 3 - dual proc.	/24
1	Deep Junior 6a	14
2	Fritz 6a	12
3	Hiarcs 732	10

Finally Charles played two head-to-head matches between Fritz 6a and Deep Junior 6a:

	Table 4 - single proc.	/56
1	Fritz 6a	32
2	Deep Junior 6a	24

	Table 5 - dual proc.	/56
1	Deep Junior 6a	29½
2	Fritz 6a	26½

Deep JUNIOR gets a big invitation!

Whilst the controversy still raged over the Dutch Chess Federation invitation to FRITZ, to play in the Dutch National Championships - front page news in the *Daily Telegraph*, and the enlightened FIDE (please forgive the sarcasm), was beginning moves to have computers banned from rated events (according to Malcolm Pein, also in the *Daily Telegraph)*, news filtered through that **Deep Junior** had been invited to play in the SUPER-GRANDMASTER Tournament in Dortmund, to be held July 7-16 this year.

This will be a *'classical'* Tournament, category 18-19 (!), so it's another unique opportunity. How long will they last?!

Having become Kasparov's latest choice of program, replacing his previous favourite Hiarcs, **Junior** was also top of the Swedish and *Selective Search* Rating Lists earlier in the year, and **Deep Junior** is so far undefeated (though against weakish opposition) in the Israeli Chess League.

One should add that **Fritz** has now gained an even higher rating than Junior, and there will be inevitable comparisons between the Deep Fritz (Quad 550MHz processors) performance in the Dutch Championship and the Deep Junior performance at Dortmund against the likes of Anand, Kramnik, Leko, Khalifman & Adams.

Whether either is true no.1 against humans is another issue open to debate - though I love Theron's comment in the *Pawlak-Theron* interview: in answer to the question, *"is Chess Tiger programmed to play against humans or computers"*, he replies *"it is programmed to play chess!"*. A good move is a good move, whoever you're playing against!

Rebel CENTURY v Vassily SMYSLOV

The REBEL G.M. CHALLENGE

The REBEL team clearly appreciated their great privelege in getting chess legend **Vasily SMYSLOV** as their opponent in the most recent G.M. CHALLENGE game.

Born in 1921 Smyslov became World Champion in 1957, and is classed by *Keene & Divinsky* in the *Batsford Chess Encyclopedia* as the 9th. greatest player of all time.

He won the Zurich 1953 event, the renowned Tournament which became the subject of *David Bronstein's* magnificent book, and so qualified as the official challenger to Mikhael Botvinnik for the 1954 match for the World Championship. This was drawn 7-7=10, leaving the world crown still on Botvinnik's head.

Undeterred, Smyslov won the 1956 Candidates, and then won his 1957 battle against Botvinnik by 6-3=13.

Sadly for Smyslov, his reign was short-lived, as Botvinnik defeated him in the mandatory return match by 7-5=11. Botvinnik wrote that, *"For 5 years, between 1953 and 1958, Smyslov was unbeatable... he scored wins thanks to his admirable skill in positional play and excellence in the endgame."*

Amazingly Smyslov qualified as a Candidate again in 1983 at age 62, which was now being played in match form. He beat Hubner in the quarter-final and then Ribli in the semi, so qualifying to play the young Kasparov in the final to determine World Champion Karpov's opponent! His last attempt for the title ended, however, against Kasparov, who beat him easily 4-0=9.

Smyslov still plays actively - his current grading of 2516 is not a relic from past achievements, but represents appearances in veterans and other events right up to the present time.

For its game against Smyslov, the revised **Rebel Century1.2** ran on an ultra-fast Athlon 1000 MHz PC!

Smyslov,V (2516) - Rebel Century

[B22] Monthly GM Chall 40/2

1.e4 c5 2.c3 d5 3.exd5 ♕xd5 4.d4 ♘f6 5.♘f3 ♗g4 6.♗e2 e6 7.h3 ♗h5 8.0-0 ♘c6 9.♗e3 cxd4 10.♘xd4 ♘xd4 11.♗xd4 ♗xe2

Photo left: Smyslov a few minutes before the game

12.♕xe2

An opening in which White has the distant pawn majority for nurturing into the endgame

12...♗e7 13.♖d1 ♕c6 14.♘d2 0-0 15.♕c4 ♖fd8

15...♖fc8 is F6 book, then 16.♕xc6 ♖xc6 17.♘b3 ♔f8

16.♕xc6 bxc6 17.♔f1 ♖d5 18.♘f3 ♖ad8

It may have been worth prefacing this move with 18...c5 then 19.♗e5 ♖ad8 20.♖xd5 exd5

19.c4! ♖5d7 20.♔e2

Smyslov seeks to take advantage of his queenside pawn majority as quickly as possible

20...♘e4 21.♗e3 ♗f6 22.♖xd7 ♖xd7 23.♖d1 ♖xd1 24.♔xd1 a6!

Smyslov in his prime (players used to be older before they reached their prime!) - this photo was taken around the time of his epic World Championship matches with fellow Soviet, Botvinnik

Avoiding 24...♗xb2?! which would give White his passed a–pawn much too easily after 25.♔c2 ♗f6 26.♗xa7 c5 27.a4!

25.♔c2

Although Smyslov has got his king nicely on the move well before Rebel (it's move 34 before the Black king makes a start!), it never really comes to anything.

25...♘d6 26.♔b3 e5 27.♔b4 ♘b7!

Very necessary, a piece of good timing. Not 27...e4? 28.♘d2 ♗xb2 *(28...♘b7 29.♘xe4 ♗xb2 30.♘c5! a5+ 31.♔b3 ♘xc5+ 32.♗xc5 ♗e5 33.♗b6!)* 29.♔c5!

28.c5

This appears to block White's chances, for example one wonders if the knight should have headed for c5 as an outpost. Instead it prepares ♘f3–d2–c4–a5 which Smyslov hopes will gain him the queen–side breakthrough

28...g6 29.♘d2 ♗e7 30.♘c4 f6 31.♘a5 ♘d8 32.♔c4 f5! 33.b4 f4

33...♔f7 was also possible, trying to maintain the tension which has developed

34.♗d2 ♔f7!

The '!' is because it's moved at last. The timing is fine, and Black's king threatens to support its own kingside majority, so almost ensuring the game will be a draw

35.♔d3 ♗f6 36.g3 fxg3 37.fxg3

Above: his other great love, at which he also excels: Opera - a CD made in 1997 is shown below. Right: Smyslov the chess teacher.

37...♔e7 38.♔e4 ♔d7 39.h4 ♘f7 40.♗c3 ♗g7 41.g4 ♘h6 42.g5 ♘f7 43.♗b2 ♗h8!

Computers are not embarassed by qui–etly waiting, which is important here. Not, for example, an over–ambitious 43...h6? 44.gxh6 ♗xh6 45.♘c4 and Black's e–pawn falls

44.♗c3

Smyslov has been hoping in vain for Rebel to make a mistake. It doesn't look like happening, so if White is to pursue the win, he probably now needs to try a more active approach. So better here might have been 44.♘c4 forcing 44...♔e6 then 45.a4 ♗g7 but it hardly looks like getting anywhere.., for example, if 46.♘a5 simply 46...♔d7 is okay

44...♗g7 45.a4 ♗h8 46.♘c4 ♔e6 47.♗d2 ♗g7 48.♗e3 ♗f8 49.♘a3 h6

Smyslov has tried everything and got nowhere. So now Rebel plays the h6 sim–plifying move that has finally become possible, and the draw is agreed shortly afterwards

50.♘c4

50.gxh6 ♗xh6 51.♗xh6 ♘xh6 52.b5 gets the Tablebases buzzing, but the con–clusion is the same... 0.00!

50...hxg5 51.♗xg5 ♗g7 52.♘a5 ♔d7 53.♘c4 ♔e6 ½-½

Afterwards Smyslov generously congratu–lated Rebel on its *"great defense in the end–game... I never had a clear win!"*

LETTERS TO *SELECTIVE SEARCH*, AND AN INTERVIEW with *CHRISTOPHE THERON*

Letter from CLIVE MUNRO

April 2000

Hi Eric

I thought you might be interested to hear about my exploits on the Internet using chess computers. I started off with joining the MSN site (which is free) and using the Mephisto RISC II playing under the name of *"Chesscrusher"*.

I played mostly 10 minute games setting the computer on 5 mins to give me time to transfer the moves.

However the computer had a hard time of it achieving only 158BCF after 80 games. I found that players over 160 rarely lost to the computer. Most players did not know they were playing a computer although I told anyone who asked.

I also put the Travel Champion 2100 to the test playing as *"Dragon10min"* (to encourage only 10 min games).

After 27 games it rates at 145BCF. Both computers struggle to get any higher than this. Do you think that allowing my opponents double time should really make that much difference at this speed? Especially when computers are supposed to excel at blitz!

One opponent called *"Urbancowboy"* told me he thought my computer (the RISC II) was flawed! He beat it 8 times on the trot and even played a Danish gambit (1.e4 c5 2.d4 exd4 3.c3 dxc3 4.Bc4 cxb2 5.Bxb2) winning as white comfortably!

Just in case you think he might have been using a program himself, I can assure you it is easy to spot another program: it plays most moves RISC expects and always takes about the same time to make each move. A human is always erratic with time. However I notice that *"Urbancowboy"* now ranks 9th on this site with a current rating of over 280BCF!!!

I find that the TC2100 plays a dangerous game and is very exciting to use, although its poor endgame lets it down. It also takes more time to transfer moves to the peg sensory board.

RISC against good opponents tends to play solidly and give a good end game, only it often loses in a time scramble at the end.

Unfortunately I have no games recorded as I have to reset the computer quickly for the next opponent/game. But if you are interested in any games I will endeavour to write some down.

[Eric: I have asked Clive to let me have a few games if he gets the chance].

I have spoken to another user in Holland who uses the Chessmaster 7000 program, but he has also found it difficult to increase its grade above 190BCF.

Have any other readers of *SS* done this and how well did they do? I have played over 150 games myself and found that the rating system seems quite accurate to my grade at blitz.

I believe the site has over 300,000 chess players registered, and has kept me glued to this screen for many happy hours of fun!

I hope you find this of some interest and if you have any ideas you wish me to try, just e-mail

me a line!

My wife and I are expecting our first baby to arrive any day now, so I'm not sure how much time I will have for this sort of thing in the future.

However I wonder how the new Star Sapphire would do.....?

Clive

Letter from Douglas Smith

April 2000

Dear Eric

Reading your interesting remarks in the Editorial of *SS/86*, I thought I would keep in touch by dropping you a line on the question raised on page 27 relating to **Mark Crowther**'s comments about DEEP BLUE *"destroying"* chess, and I am most interested to follow up just what this might actually mean, and just what form it would take.

Recently I bought **Hans Berliner**'s book *"The SYSTEM"* in which he sets out a case that, using a system of lines based on 1.d4, White can so increase his initial advantage that in a short while, perhaps a decade, all the Black defences will be shown to be losing, and that chess will be *"solved"*.

Apart from the implications of the title, he uses much colourful rhetoric in the book such as *"glimpses of Nirvana"* etc., but the important implication of the book is that chess will be solved with White winning.

I have had quite a detailed exchange of correspondence with Dr. Berliner on this and, while I appreciate that he is a considerable somebody and I am not, I cannot see how he can make out a case for getting something for nothing: in chess terms going from = to +- (chess Nirvana) without Black's play being even ever-so-slightly faulty somewhere to allow this, and therefore capable of improvement.

My own opinion for what it is worth is that with computer analysis it will be more and more difficult for White to show any advantage, and games will get longer and the margin of draw will increase.

I think **Bent Larsen** expressed this view some years ago, and I wonder with your involvement with top chess analysts just what your view on this is.

Another very interesting point raised by your remarks under *"The FUTURE"* is to wonder if you have done a study on the reasons why people buy chess computers and programs, and what they actually use them for?

I find it hard to imagine many people battling hard and setting up match-like conditions the beat the machines - and what reward would there be? Unlike over-the-board, the silicon opponent doesn't have an ego and doesn't mind losing, which removes a great deal of the pleasure of winning - there is no *"winner first through the swing door"* as at Hastings!

Personally I use Fritz and Hiarcs to widen the move options at e-mail chess.

The move sent is mine - my choice of option usually among many, and owing to the horizon effect the options have to be watched carefully. You know yourself how easily Fritz will win you a pawn but get you into a lost ending as a result!

I am not shy in revealing this, for this reason:

- Chess consists of two sets of rules - **one** setting out how the pieces move, including castling, en passant etc. and the aims of the game, mates, stalemates, draws and all the

rest. The **other** is how the contest is to be conducted... time controls; over-the-board, correspondence, internet; two players or more; touch and move or not; consultation with others or books or prorams or not, and so on.

While personally I would not tamper with the first set - chess is OK as it is - it seems to me the second set is variable, and is set or not set by the rules of the specific competition.

Personally I think that the concept of *Advanced Chess* as in the recent **Anand+PC vs. Karpov+PC** is a wonderful idea, giving the audience more and providing a basis for sponsorship with the programs and machines.

In *Correspondence Chess* it seems to me that the players are free to bring whatever they can and like to the game, to open and examine their options for each move.

Whether you are phoning a friend (great if you're 'in' with one of the K's!), browsing a book, firing up Hiarcs, or studying the position without even touching the men, the choice still has to be made by the player before sending the move off.

And it's the same for both players and, thankfully, the game does not get any easier [*is this despite or, perhaps, even because of the range of modern resources?!... Eric*].

It would be interesting to investigate this use, and not to be deceived by people claiming to use machines as databases only.

Well, Eric, there is plenty of food for thought here, with a bearing on your point about people taking up chess, buying computers, and subscribing to *SS*.

Keep it up, it's a wonderful Magazine.

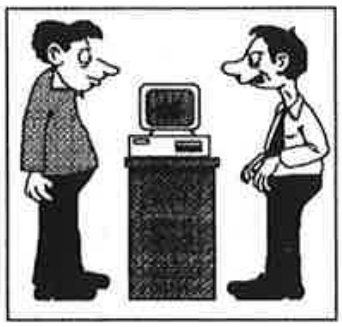
Best wishes to you and Sky, from **Doug and Max.**

[*Eric's response*]:
There's some great food for thought in Doug's letter. The whole question of the place of **computers** in **chess** is very important (especially to someone like me!).

On the web site hosting the results of the Dutch National Championships, in which FRITZ is controversially entered, the **Broekhuis NK Schaken** group which hosts, organises and funds chess events and players on both a national and local level, say:

"Computers are very important in the world of chessplayers. A computer can be a worthy opponent. But a computer is also an elementary component of the chessplayer's preparation for a game or match."

That, I'm sure, is perfectly true as far as it goes... but to what degree should computers be used to influence ongoing games, and to what degree should they be allowed into Tournaments, whether as serious challengers or for assessment purposes... these are other issues, and pretty contentious ones at that!



Opinions of others are very welcome. How are different *SS* readers using their computers? If Correspondence or Internet players have things they can share with us but don't want to be named, just say so when you write and I'll make sure you're not embarrassed.

Interview with Christophe THERON

Christophe is the programmer of **Chess [Rebel] Tiger**, which is currently sitting very snugly in 3rd. place on our Rating List!

The interview questions were posed by Robert Pawlak, whose book the *"Chess Software Sourcebook"* was

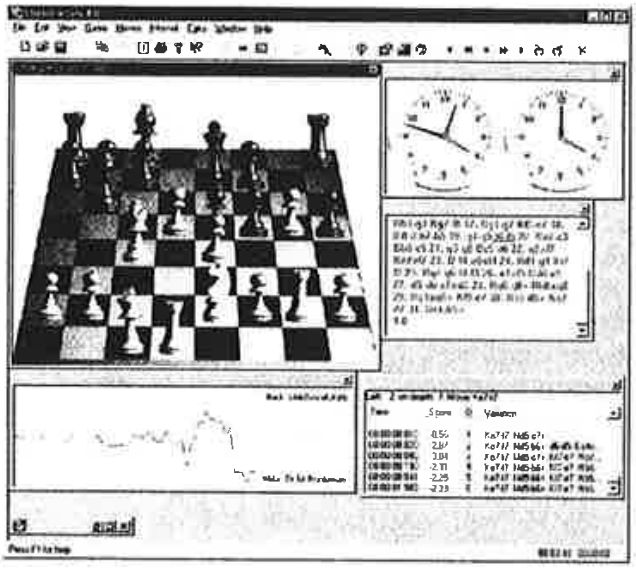
reviewed in our last Issue (87).

RP: How long has the engine been in development?

CT: Since 1981. I have not spent all of that time on it, but during these years I was either working on it actively, or thinking about it 'in the background'.

RP: Is there any difference between the engine used for the Chess Partner interface (which is used in the commercial REBEL TIGER package) and that used for Chess Assistant5.0?

CT: Absolutely no difference, it is the same .dll! Just that CA5.0 by default includes the new improved settings NSEW=1 and MoreSel=1. (With Rebel Tiger this is achieved by editing the CT.INI file, as explained in *SS/87*).



RP: What is your philosophy on how your engine should play chess? In the past I believe that you emphasised that Tiger has a lot of chess knowledge, but is not an especially fast searcher.

CT: Right, but I have a flexible point of view. I'm very pragmatic. Whatever works must be investigated. Often I first find a new improvement 'by luck', because I try a lot of silly things. Then I want to understand why it works, and only then I improve it to make it more efficient.

A fascinating new approach

The most important thing in computer chess is to have lots of ideas and to try them. You have to be creative all the time.

RP: What computer language is Tiger written in? Assembly? C?

CT: 100% in C (not C++). Not a single line of assembly.

RP: Is the engine optimised for play against people or computers?

CT: It is optimised to play chess. Even if I wanted to, I don't think I could optimise either for humans or for computers. It is already hard enough to improve it. If I had to ask myself, "is it going to be better against humans or computers?" all the time, I would not make any steps forward.

RP: Who designed the opening book for Rebel-Tiger?

CT: Jeroen Noomen, who is also the author of Rebel's opening book.

RP: How is Tiger different from other chess engines?

CT: I think that I sue more ideas than any other program. There are a lot of different concepts in Tiger. Several different ways of pruning the search tree for example, all based on different techniques. Several different ways of extending the search over the nominal depth also, all using non-related concepts. This is not unusual in chess programs, but I think that I have pushed things to a high level in Tiger.

Graham White's GAME of the MONTH

Graham has recently been playing a series of engine-v-engine Blitz Tournaments, using various time controls from G/4+2 to G/10+2, and one with G/2+8.

A *"mammoth"* effort, as Graham says, and using two powerful machines.

Here's a summary of the results:

Athlon 500MHz PC

Pos	Program	/66
1	Junior6	38½
2	Fritz6	34½
3	Hiarcs 732	34
4	Nimzo732	25

P3/700MHz PC

Pos	Program	/85
1	Junior6	47½
2	Hiarcs732	46
3	Fritz6	43
4	Nimzo732	33½

From these, one game in particular emerged which produced massive middle-game complications which were, in the event, handled remarkably well by the programs.

Graham asked, at the end of his letter to me, if other readers might like to send analysis if they found any improvements and corrections. He had made *"considerable use"* of Junior6, so I went through the game with Fritz6 and added some notes of my own.

Game comments:

- After each move W20/8 ›d5. This indicates the evaluation which was displayed when the move was made. W=White ahead, B=Black ahead. The first number is the evaluation, the second the search depth. If › is shown, the move there is what the program expected the opponent to reply. These are only shown where the move played was different to the one expected.
- G+J: means the note is Graham & Junior.
- E+F: means the note is from Eric & Fritz.

Hiarcs732 P/700 - Nimzo732 P/700

[D91: Grünfeld: 4 Nf3 Bg7 5 Bg5]
Graham White's Blitz Series

1.d4 1...♘f6 2.♘f3 g6 3.c4 ♗g7 4.♘c3 d5 5.♗g5 ♘e4 6.cxd5 ♘xg5 7.♘xg5 e6 8.♘f3 exd5 9.e3 0-0 10.b4 c6 11.♗e2 ♗e6 12.0-0 ♘d7 13.♘e1 ♕e7N

13...a5 (which lost), and 13...♗f5 (which drew) have been tried here in tournament play

14.♘d3 f5 15.♖c1 a6

Prevents intrusion on b5

16.♖e1 g5 17.♗f1 ♖ae8 18.♗e2 ♕d6 19.♘c5 ♘xc5 20.bxc5 ♕d7 21.♗h5

Hiarcs W16/8 –>♖e7

21...♖b8

Nimzo W105/9 –>♕b3

Graham+Junior (**G+J**), and Eric+Fritz (**E+F**) join the game here for the analysis!

22.♕e2

Hiarcs W17/8 –>♕e7

22...g4

Nimzo W88/10.

G+J: In this quiet looking position, Black tries to block out White's bishop and is preparing an 'avalanche' with f4. See how the position explodes!

E+F: Nimzo is fighting for extra space. F6 prefers a more sober 22...♖f6, though after 23.♕f3= the position may be equal, but still promises an interesting game. It seems to us that, at this stage, the Nimzo evaluation is a little over–pessimistic.

23.♕d3
Hiarcs W0/9 ->f4

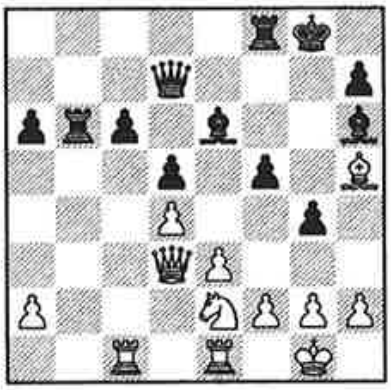
23...♗h6!?
Nimzo W92/9 ->g3
G+J: 23...f4 was also possible.
E&F: Fritz prefers 23...♗f6 and has the aggressive-looking f4 in second place - the move many of us would choose? Nimzo's choice seems equally as good.

24.♘e2
Hiarcs W-7/9 ->♕c7

24...b5!?
Nimzo W95/10 ->♘f4
G+J: 24...♕g7!? is also possible - I wonder if any reader can work out a way to win White's bishop?
E+F: 24...♗g5!? is an interesting alternative, which Fritz believes is good enough to equalise.

25.cxb6!
Hiarcs W28/9.
E+F: White gets in control with this response. If 25.♘f4?! as expected by Nimzo, Fritz recommends 25...♕e7 with at least equality

25...♖xb6



Nimzo W108/10.
G+J: The result of the exchange is that, at the cost of some damage to his pawn structure, Black has opened more lines

26.♘c3
Hiarcs W28/9 ->♕d6.
G+J: White is aiming to get the knight to c5, squashing Black's pieces into restricted defensive positions

26...♖b4!?
Nimzo W110/9.
G+J: Enterprising - but is it sound?
E+F: Hiarcs expected 26...♕d6 27.♘a4 ♖b5 *(if Nimzo had tried the game move 27...♖b4?! 28.♕xa6 ♖c4 29.♖xc4 dxc4 30.♕b6,* White has the advantage providing he can extricate his ♗h5*)* 28.♘c5 and material equality is maintained.
Fritz would play 26...f4 immediately, expecting White to make the temporary exchange sacrifice 27.♘a4 fxe3 28.♖xe3 ♗xe3 29.♕xe3 ♖b5. Now 30.♘c5! regains the exchange after 30...♖xc5 best! *(30...♕e7?? 31.♘xe6* winning*)* 31.♖xc5.

27.♕xa6
Hiarcs W76/8

27...f4
Nimzo W121/9 ->♘a4

28.e4
Hiarcs W48/8 ->Bg7
G+J and **E+F**: Hiarcs initially and Fritz looked at 28.♘a4 fxe3 29.fxe3 ♖c4 30.♖xc4 dxc4 which is evaluated at almost equal.
G+J: 28.♘d1 looks passive, but best! White consolidates and attacks c6.

28...g3!
Nimzo W51/8 ->♖cd1
G+J: Hiarcs had expected 28...♗g7 which was Nimzo's initial choice.
28...f3 is also dangerous... 29.exd5 *(*not *29.♖b1 ♖xb1 30.♖xb1 dxe4∓)* 29...♗xd5

G+J: diagram needed, so we can follow two alternatives available to Hiarcs
A) 30.♘xd5 ♕xd5 31.♗xg4! *(31.♖xc6 ♗e3!! 32.♖c2 ♕e4 33.fxe3 ♕xc2 34.♕e6+ ♔h8 35.♕e5+ ♔g8* is a draw*)* 31...♕xd4 32.♗e6+ *(32.♖c4 ♕d2 33.♖ce4 ♖b2∞* **(G+J** class this as unclear, but **E+F**: Fritz claims that *34.♕f1* leaves White clearly ahead, expecting *34...fxg2 35.♕c4+*. What do readers think about this position? Would you rather be White or Black?*)*. 32...♔h8 33.♖cd1 ♕c5∞.

B) 30.♗e8!! 30...♕g7! *(30...♖xe8?! 31.♖xe8+ ♕xe8 32.♘xd5 cxd5 33.♕xh6* and White has the extra pawn and better chances, though a draw seems most likely*)* 31.♘xd5 cxd5 32.♖c2 *(***E+F**: Fritz does not like 32.♖c2 at all, and much prefers the protective *32.♖cd1)* 32...♖xd4∞

29.♘d1

Hiarcs W75/7 ->♖c8.

G+J: If 29.♖cd1 which Nimzo expected:

A) 29...gxf2+ 30.♔xf2 dxe4 31.♘xe4 ♖b2+ *(***E+F**: Fritz prefers *31...♕d5* and shows *32.♗f3 ♕xa2+ 33.♕xa2 ♗xa2=)* 32.♖e2±;

B) 29...dxe4 30.♘xe4 ♖b2 31.♖e2 ♕xd4 32.♖xb2 ♕xb2 33.♕xc6 ♕xa2=;

G+J again: if 29.♖c2 ♗g7∞

E+F: note that White's 29.♘d1 reveals an attack on the backward c-pawn. Not 29.hxg3? fxg3 30.♖c2 gxf2+ 31.♖xf2 ♖xf2 32.♔xf2 ♗d2!∓;

Back to the actual game, so a diagram!

29...f3

Nimzo W30/8.

G+J: even a Tal or a Shirov would be bamboozled by these positions!! The move 29...♖c8, expected by Hiarcs and Nimzo's initial choice, is quieter but certainly playable – Black has clear compensation.

E+F: the idea of Black's 29....f3 is to clear the h6–d2 diagonal, making the White rooks vulnerable and thereby increasing the danger to White's f+g pawns.

30.♖xc6

Hiarcs W62/8

E+F: if 30.♗xf3 gxh2+

30...♗d2

Nimzo W72/8

31.hxg3

Hiarcs W63/8.

G+J: White cannot save the rook! 31.♖f1? fxg2 32.♔xg2 *(***E+F**: maybe better is *32.♖xe6,* but Black is still winning after *32...gxf1♖+ 33.♔xf1 gxh2 34.♔g2* and F6 shows Black ahead at +340 in around 10secs*)* 32...♗h3+ and Fritz shows Black now at +500!

E+F: a very interesting try to save the rook looks to be 31.♖xe6!? gxf2+ 32.♘xf2 but with the g-file cleared we now see 32...♕g7! 33.♗xf3! ♗xe1 34.exd5 ♗xf2+ 35.♔xf2 ♕xd4+ 36.♔f1 ♕xd5∓ and Black has some pressure, so we must change the initial '!?' to '?!';

All-in-all, the Hiarcs choice is best, and Graham's comment *"White cannot save the rook"* is right.

31...♗xe1

Nimzo W60/8

32.♖xe6

Hiarcs B14/8 ->♖xd4.

G+J: Hiarcs thought it was fractionally worse in playing this, the only time in the game either side showed Black ahead. But Black's next appears to be a mistake, even if not obviously so.

32...fxg2?!

Nimzo W54/8 ->♖e5

G+J: we should also check out 32...♖b1 but, in fact, if White finds 33.♗xf3! he gets a clear advantage 33...♗xf2+ *(33...♖xf3 34.gxf3 ♖xd1 35.exd5* White +125 says Fritz*)* 34.♔xf2 ♖xd1 35.♖f6

E+F: Fritz6 has White at +100 here;

G+J: Nimzo's initial choice was the move Hiarcs expected, viz 32...♖xd4! and it looks better. 33.♖d6 ♕a4 34.♕xa4 *(34.♖g6+ hxg6 35.♕xg6+ ♔h8 36.♕h6+* etc. is a draw*)* 34...♖xa4

35.♖xd5 *(***E+F**: *35.exd5* is as good a try... *35...♖d4 36.♗xf3 ♖xf3 37.gxf3 ♖xd1* with an ending to entertain the technically minded, White having R+5P against R+B+1P! Probably a draw!?*)* 35...fxg2 36.♔xg2 ♖xa2 looks to be just about equal

33.♖f6!
Hiarcs W108/6
E+F: Nimzo expected 33.♖e5 which is not as good if 33...♕h3! 34.♕e6+ ♕xe6 35.♖xe6 ♗xf2+ 36.♘xf2 ♖b2 37.♖e8 ♖bxf2 38.♖xf8+ ♖xf8 39.exd5 ♖a8 and Black should draw

33...♖xf6
Nimzo W127/9.
G+J: this is what Hiarcs expected, but we must see if there is anything better! Two possibles...
A) 33...♖bb8!? 34.♔xg2 dxe4 35.♕e6+ ♕xe6 36.♖xe6 ♖fd8 might be tenable;
B) 33...dxe4 34.♖xf8+ ♔xf8 35.♕f6+ ♔g8 36.♘e3 ♖b2 37.♘g4 ♗xf2+ 38.♘xf2 transposes to a position very similar to the game, and White is winning.

34.♕xf6
Hiarcs W153/6

34...dxe4
Nimzo W130/9
G+J: 34...♗d2 would stop White's next but, unfortunately 35.e5! would prove to be much too strong for Black.

35.♘e3!
Hiarcs W195/6 ->♗xf2+.
G+J: bringing up reinforcements with decisive effect – ♘g4 and ♗g4 are major threats

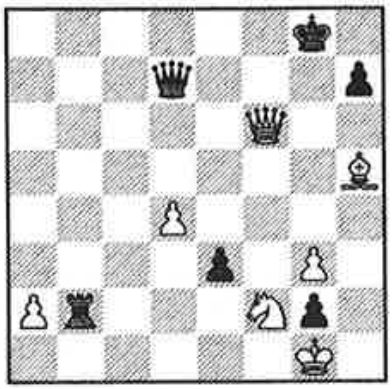
35...♖b2
Nimzo W293/9
E+F: 35...♖xd4?? may look tempting but it's definitely not playable! Black must resist capturing the pawn as 36.♘f5 ♗xf2+ 37.♔xg2 ♗e3 38.♘e7+ is an easy win;
Hiarcs expected 35...♗xf2+ but 36.♔xf2 and the g2 pawn also falls in the next couple of moves

36.♘g4
Hiarcs W233/7.
E+F: threatening ♘h6 mate and better than ♗g4

36...♗xf2+
Nimzo W324/10

37.♘xf2
Hiarcs W233/8

37...e3



Nimzo W331/9.
E+F: 37...♕g7 may have resisted longer, though 38.♕e6+ ♔h8 39.♕e8+ ♕g8 40.♕e5+ ♕g7 41.♘xe4 and White will win 41...♖xa2 *(*or *41...♕xe5 42.dxe5 ♖xa2 43.e6 ♖a7 44.♘f6+–)* 42.♘d6 ♕xe5 43.dxe5+–
We will leave the program evaluations after the next move, and watch Hiarcs finish off the game, as both sides now see it has a winning position. However without the evaluations, how would you and I feel facing the threat of Nimzo's pawns on e3 and g2?!

38.♕g5+
Hiarcs W338/6, and unconcerned. It easily sees the e3 pawn falls in a moment

38...♔f8
E+F: now Black threatens mate! ♖b1+ and g1=♕mate!

39.♕h6+ ♔g8 40.♕xe3
G+J: It's all over bar the shouting now

40...♕d5 41.♗f3 ♕xa2 42.♕g5+ ♔f8 43.♗d5 ♕b1+ 44.♔xg2 ♔e8
E+F: A last effort to resist the inevitable would be 44...♖xf2+ delaying things only a little... 45.♔xf2 ♕c2+ 46.♔f3 ♕d3+ 47.♔g2 ♕e2+ 48.♔h3 ♕f1+ 49.♔h4 and Black's checks are over, it's White's turn next and he'll win the game

45.♗c6+ ♔f7 46.♕f4+ ♔g8 47.♗d5+ 1-0.
G+E: Phenomenal chess!!

Fritz plays in the Dutch Champs!

The CHAMPIONSHIP is a 12 player, all-play-all. Time controls 40/2, 20/1, G/30 finish.

Only **Van den Sterren** (Elo 2526) announced before the start his refusal to play the computer – a game scheduled for round 10.

[1]- Piket (2641) - Fritz SSS*

A07: Réti Opening: N.York/Capa Systems

A tough opener for Fritz, playing Kasparov's recent conqueror in the Kasparov Internet Challenge. **1.g3 e5 2.♗g2 d5 3.d3 ♘f6 4.♘f3 ♘c6 5.0-0 ♗e7 6.c3 a5 7.♕c2 0-0 8.e4 dxe4 9.dxe4 ♗e6 10.♖d1N** *10.♘bd2 and ♘h4 have been tried here, but Black came out better in the games on my database* **10...♕e8 11.♗g5 ♖d8 12.♘bd2 ♘d7 13.♗f1 ♗xg5 14.♘xg5 ♗g4 15.♘gf3 ♕e7 16.h3 ♗e6 17.♘c4 ♕f6 18.♘fd2 ♕h6 19.h4 f5 20.exf5 ♗xf5 21.♗d3 ♗xd3 22.♕xd3**

Black has a small kingside advantage to compensate for the isolated e-pawn, which will surely be a key to this game **22...♕h5?!** *22...♘c5 23.♕e2 ♕g6 intending ♕f5 or ♕d3 might have been stronger* **23.♘e3 ♔h8 24.♕c2 ♘c5 25.♘b3 ♖xd1+ 26.♖xd1 ♘e6 27.♖d5 ♕f7 28.♕e2** *Not good is 28.♘xa5? ♘ed4! 29.cxd4 ♘b4∓* **28...b6 29.♖d1 a4 30.♘d2 ♘c5 31.♘dc4 e4∓ 32.♖d5 ♘e7 33.♖d4 ♔g8 34.a3 ♕e8 35.♘e5 ♘c8 36.♘5c4 b5 37.♘d2** *White continues to attack the isolated e4 pawn, and it can no longer be defended, as we soon see* **37...♘d6 38.♖d5! ♘d3 39.♘xe4 ♘c1!** *It is better not to take the knight yet! 39...♕xe4? 40.♕xd3 ♕xd3 41.♖xd3± and White is a good pawn up; or 39...♘xe4?! 40.♕xd3 ♘xf2 41.♕d4=* **40.♕c2 ♘xe4** *Black still should not take with the queen: 40...♕xe4? 41.♕xc1 ♕f3 42.♕e1=* **41.♕xc1 ♘xf2 42.♖f5!** *Saves the day!* **42...♖xf5 43.♘xf5 ♘g4 44.♕d2 h5 45.♘d4 c5 46.♘f3 ♕e3+ 47.♔g2 ♕e4 48.♕e1 ♕xe1 49.♘xe1 ♘e5** *A well-played game by Fritz – it had a small advantage much of the time. Piket seemed relieved to reach the draw, having had some time trouble running up to the 40th move. A promising start!* **½-½**

[2]- Fritz SSS* - Bosboom (2461)

A40: Unusual replies to 1 d4.

Bosboom tried a new strategy: he offered a draw at move 3 and, when Franz Morsch operating Fritz refused, Bosboom resigned! **1.d4 c6 2.c4 d6?! 3.♘f3 ♗g4 4.♘c3 1-0**

[3]- Van den Doel (2537) - Fritz

A22: English Opening: 1...e5 2 Nc3 Nf6.

1.c4 ♘f6 2.♘c3 e5 3.e4 *Van den Doel's strategy is already clear, to block the centre and, probably, aim for a kingside attack. There had been rumours he would refuse to play Fritz, but in the end he decided to play using this well-known anti-computer strategy. Van Wely would repeat the theme in round 7, but with a very different result!* **3...♗c5 4.g3 0-0 5.♗g2 ♘c6 6.♘ge2 d6 7.d3?!N** *7.0-0 ♗g4 8.♔h1 has been tried in high-level play, though unsuccessfully* **7...♘g4 8.0-0 f5! 9.♘a4**

9.exf5 ♗xf5 10.♗d5+ ♔h8 11.♔g2∓ probably isn't much better **9...♘xf2!** *No doubt den Doel missed this – all dreams of a White kingside attack are out of the window!* **10.♖xf2 ♗xf2+ 11.♔xf2 f4! 12.gxf4 exf4 13.♘g1??** *Terrible, but the game is lost in any case. Even 13.♗f3 ♕h4+ 14.♔g1 offers no real hope after 14...♘e5 15.♘xf4 g5* **13...♕h4+ 14.♔f1 f3!** *Clearing the f-file for his rook!* **15.♘xf3** *15.♗xf3 ♘d4!!* **15...♕xh2** *After 16.♕e2 ♘d4 and if 17.♕f2 ♘xf3* **0-1**

[4]- Fritz SSS* - Reinderman (2561)

E82: King's Indian: Sämisch: 6...b6.

1.d4 ♘f6 2.c4 g6 3.♘c3 ♗g7 4.e4 d6 5.f3 0-0 6.♗e3 b6 7.♗d3 e5 8.dxe5N *Very interesting! Fritz normally plays 8.d5 here, immediately getting a blocked centre, which we all know by now, computers don't play so well. It seems the book's been changed to try and stop this happening, though maybe ♘ge2 – a sound book alternative – was a better way to try this* **8...dxe5 9.♘ge2 c5** *And Reinderman has his blocked centre anyway. The computer thinks its quite happy – most programs dislike fianchettoed bishops, so Fritz believes it has a useful advantage* **10.♕d2 ♘c6 11.♖d1 ♘d4 12.♗g5 ♗b7 13.♘d5 ♕d6 14.♘xd4 cxd4**

15.♘xf6+ *Possibly better was 15.0-0 though Fritz might have disliked the central pawn structure even more after 15...♘xd5 16.cxd5 ♖ac8* **15...♗xf6 16.0-0 ♗xg5 17.♕xg5** *At this point Fritz changed its mind and decided*

that Black has a small advantage. It stays so to the end of the game, when both parties are happy as a slightly-short-of-time Reinderman offers the draw **17...♔g7 18.f4 f6 19.♕h4 ♖ae8 20.f5 ♕e7 21.♕g3 g5 22.a3 h5 23.♕f3 ♔h6 24.♗e2 g4 25.♕d3 ♕g7 26.♖de1 ♕g5 ½-½**

After 4 rounds **FRITZ** shares the lead, on **3/4**, with Reinderman, Tiviakov and Van Wely. Quite a few folk fear it may win the Championship, especially in view of its 'free' point in round 10.

[5]- Nijboer (2540) - Fritz SSS*

B01: Scandinavian Defence

1.e4 d5 2.exd5 ♘f6 3.♘f3 ♘xd5 4.d4 ♗f5 5.♗e2 e6 6.0-0 ♗e7 7.c4 ♘b6 8.♘c3 0-0 9.♗e3 ♘c6 10.h3N *New? ♕d2 or ♗e3 are usual* **10...♗f6 11.♕d2 ♗g6 12.♖fd1± ♖e8 13.♖ac1 ♕e7 14.c5 ♘d5 15.♘xd5 exd5 16.b4 a6**

Stopping White's queenside expansion **17.a3 ♕d7 18.♖e1 ♖e7 19.a4 ♘a7 20.♖a1 ♖ae8 21.♖a3!? ♖e4 22.♗d3 ♖4e6 23.♗f1 ♘c6 24.♖ea1** *24.b5 here might have been good: 24...♘a7 25.♕a5* **24...♗e4 25.♘h2 ♗e7 26.b5** *White makes another attempt to expand on the queenside* **26...♘a7 27.♖b3 ♗h4 28.♘g4 ♕d8**

29.♖a2 *29.bxa6 bxa6 30.♖b7 seems a natural idea. But both sides are playing warily, and Fritz appears to be holding its own* **29...b6 30.cxb6 ♖xb6 31.♘e5** *An alternative, and trying to maximise the gain from his queenside advantage, would be 31.a5 ♖b7 32.b6 ♘b5 (not 32...cxb6? 33.♗xa6 ♖be7 34.axb6+-) 33.bxc7 ♕xc7 34.♖ab2 hoping to make something of the pin and attack on ♘b5* **31...♗e7 32.♖ab2 axb5 33.♕a5 ♕a8 34.axb5 ♕b7** *If 34...♖b7?! 35.♘d7 ♕c8 36.♘c5 has Black in some trouble* **35.♖a2?!** *As in the note to the previous move 35.♘d7! still seems strong here: 35...♖g6 36.♘c5 ♗xc5 37.dxc5± 35...♘c8* **36.♘d7** *Now it's too late!* **36...♖e6?!** *Safer was 36...♖g6 37.♗f4 ♘b6 38.♘c5 ♗xc5 39.dxc5 and now 39...d4 40.♖e2 ♘d5 promises some tense and exciting chess!* **37.♕a8?** *Played too soon. Would 37.♘c5!? still work here?! 37...♗xc5 forced 38.dxc5 f6 I can't guarantee this is best, but some lines involving White's ♕a8 leave Black with back-rank problems, so I think it needs to be played 39.♕a8 ♕xa8 40.♖xa8 ♔f7 41.♗d4 and White looks to have good chances* **37...♕xa8** *The game is now equal* **38.♖xa8 ♗d6 39.♘c5 ♗xc5 40.dxc5 d4** *Note this discovers an attack on ♖a8, so forces White's reply* **41.♖xc8 ♖xc8 42.♗xd4 ♖d8 ½-½**

[6]- Fritz SSS* - Grooten (2393)

A44: Semi-Benoni.

This next game is very interesting - it gets really complicated, and the comparatively lowly rated Grooten puts in a fine performance: until.....!

1.d4 c5 2.d5 e5 3.e4 d6 4.♘c3 ♗e7 5.♘f3 a6 6.a4 ♗g4 7.♗e2 b6N *Black usually plays ♗xf3 or ♘d7. Grooten is (you've guessed it) blocking the centre!* **8.♘d2 ♗c8 9.♘c4± ♘f6 10.a5?!** *I was surprised at this, as it helps Grooten jam the queenside as well as the centre* **10...b5 11.♘b6 ♖a7 12.♘xc8 ♕xc8 13.♕d3 0-0 14.♕f3 ♘e8 15.0-0 ♕d8 16.♕h5 h6 17.♘d1 ♗g5 18.♘e3 g6 19.♕h3 ♘f6 20.♕f3 ♘h7 21.c4 ♕d7 22.♗d3 b4 23.♗c2 h5 24.♕d1 h4 25.h3 ♕d8 26.b3 ♘d7 27.♖e1 ♘df6 28.♗b1 ♗f4 29.♗b2 ♕e7 30.♗c2 ♔h8 31.♘g4 ♘g8 32.♕e2 ♕g5 33.♘h2 ♕h6 34.♖ad1 f5 35.♔h1 ♖af7 36.exf5 gxf5 37.♖g1 ♖g7**

Grooten has achieved what he would want from blocking the pawn centre - a piece majority on the king side. So it's worth rejoining the game here. **38.♘f3 ♕f6?!** *His knight is better mobilised on this square. 38...♘e7 straightaway looks sharper 39.♘e1 ♘f6 40.♘d3 ♘g6! looks very threatening!* **39.♘e1!** *White gets back in the game with this* **39...♘e7 40.♘d3 ♘g6 41.g3 ♗h6 42.f4 hxg3**

White's passed h3-pawn looks weak rather than a useful weapon if and when it advances towards h5 **43.fxe5 ♕h4 44.♕g2 f4 45.e6** *The passed pawn on e6 quickly leads to threats and must not be underestimated. Of course 45.exd6 also creates a passed pawn, and the way Hiarcs for one would do it... which method is the stronger?* **45...♘f6** *If 45...♘g5 46.♘xf4 ♘xf4 47.♕xg3 (not 47.♗xg7+? ♔xg7 48.♕xg3 ♕xh3+ 49.♕xh3 ♘fxh3∓) 47...♕xh3+ 48.♕xh3 ♘gxh3 49.♖gf1± and we have an interesting finish in sight!* **46.♖df1 ♕g5 47.♘e1 ♘h4 48.♕e2 ♖e7**

49.♘g2

Positions like these need plenty of diagrams! **49...f3 50.♖xf3!** *Moving the queen away allowing fxg2 is no good!* **50...♘xf3 51.♕xf3 ♗g7??** *Loses the game. That's the trouble with such fiendish positions - one mistake and all the hard work goes down the drain. With 51...♔g8 the whole thing remains quite complicated. However I think 52.♗c1 ♕g7 53.♘h4 aiming for f5 probably puts White in with good chances* **52.♗c1 ♕h5 53.♕xg3 ♖g8?** *53...♗h6 was the last chance for counterplay 54.♘h4 ♖g7 55.♘g6+ ♔g8 but the simple 56.♗d1! cannot be met* **54.♘f4! ♗h6 55.♕xg8+! ♘xg8 56.♘xh5 ♗xc1 57.♖xc1** *and White's position is overwhelming. After 57...♘h6 58.♖g1+-* **1-0**

After 6 rounds we still have a 3-way tie for the lead, and Fritz is still there:-
4½ **Fritz**, **Van Wely**, **Tiviakov**.

So round 7's a 'big' one!

[7]- Van Wely (2646) - Fritz SS*

A25: English Opening vs King's Indian with ...Nc6 but without early d3

1.c4 e5 2.g3 ♘f6 3.♗g2 ♘c6 4.♘c3 ♗b4 5.a3 *Van Wely was ready for this!... he puts Fritz out of book already* **5...♗xc3 6.bxc3 0-0 7.e4** *The c4/e4 pawn formation tried unsuccessfully by van den Doel in round 3* **7...a6?!** *Fritz is out of book, but both 7...d6 and 7...♘e7 have been played here* **8.a4 d6 9.d3 ♗g4 10.f3 ♗d7 11.♘e2 ♕c8 12.h3 b6?!** *The first of a series of pointless moves by the computer. It is strange how, in most games, it finds decent moves and some activity whatever the opponent tries, and then suddenly, in one particular game, it manages to play a series of very ordinary moves. It's almost human-like!... as if it got out of bed on the wrong side this morning and just doesn't feel like thinking properly* **13.f4**

All the warning signs are there - White hasn't castled, so the rook's still on h1, the queen can quickly get to g4 and h5... and the pawn storm is beginning! **13...♗e6?! 14.f5 ♗d7 15.g4 ♘e8** *If 15...h6 is tried, hoping to fend off the worst of the attack (though it sometimes leads to h3-h4 and a bishop sac' on g5), in fact 16.♘g3! would immediately be strong* **16.♘g3 ♕d8 17.g5** *Once the position's been set up, the game almost plays itself* **17...♗c8 18.h4 f6 19.♕h5 ♘a5 20.♖a3** *An unusual piece of prophylactic play, to stop Black's knight coming to b3* **20...♕e7 21.♘f1 ♘c6** *21...♗b7!? is worth consideration, even though it would be this bishop's sixth move* **22.♘e3 ♕d7 23.g6! h6 24.♘g4 ♖a7?!** *You have to smile, don't you?! 24...♗b7 would at least be cosmetically acceptable, though it wouldn't achieve anything in truth after 25.♖g1* **25.♖g1!** *White's terrible threat is ♗xh6. Fritz sees the sad truth and drops to -300, so Franz Morsch who is operating puts it out of its misery and resigns. 25...♘e7 26.♗f3 ♘xg6 27.♕xg6+-* **1-0**

[8]- Fritz SSS* - Tiviakov (2567)

B51: Sicilian: Moscow Var. (3 Bb5+) without 3...Bd7

After Van Wely's fireworks, Tiviakov is about to try something different. For over 4 hours and 40 moves it's careful manouvering, angling for little mistakes. Good pawn strucutre becomes the issue! We join 'properly' at move 42, with the game still quite even.

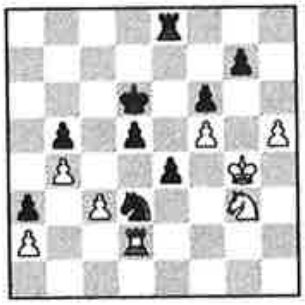
1.e4 c5 2.♘f3 ♘c6 3.♗b5 d6 4.0-0 ♗d7 5.c3 ♘f6 6.♖e1 a6 7.♗f1 ♗g4 8.h3 ♗h5 9.d3 e6 10.♘bd2 ♗e7 11.g4 ♗g6 12.♘h4 ♘d7 13.♘g2 h6N 14.♘f4 ♗h7 15.♗g2 0-0 16.♘f3 ♘de5 17.♗e3 ♘xf3+ 18.♕xf3 ♗g5 19.♖ed1 ♖c8 20.♕g3 ♘e5 21.b3 ♖e8 22.♘e2 ♗h4 23.♕h2 b5 24.d4 cxd4 25.♖xd4 ♕c7 26.♖ad1 ♗e7 27.♕g3 ♘d7 28.g5 hxg5 29.♗xg5 ♗f8 30.♖4d3 ♘c5 31.♖e3 ♔h8 32.♗h4 e5 33.♕g4 ♕d7 34.♕xd7 ♘xd7 35.♔f1 f6 36.♗g3 ♘c5 37.h4 ♖c6 38.♗h2 ♗g8 39.h5 a5 40.♗h3 ♖c7 41.♔e1 a4

42.b4?! *Leaves Black with an outpost on c4 and marks his own c3-♙ as backward* **42...♘d7** *Manoeuvre Nc5-d7-b6-c4* **43.♘c1 ♘b6 44.♗f1 ♘c4 45.♖g3 ♗e6 46.♗h3 ♗f7 47.♗f5 ♖b8 48.♖h3 ♖b6 49.f4 ♖bc6 50.♘e2 ♔g8**

The position <u>still</u> seems fairly equal **51.♗g6?!** *This Fritz move, and its next, are endorsed by Hiarcs. But I'm not convinced. Although Black's king is now 'trapped', the White ♗ on g6 is no better than a pawn, and note the resulting blocked pawn centre with his c3 and now e4-♙ both backward!* **51...♗e6 52.f5?!** *Okay, so White has backward pawns on c3+e4, Black has them on b5+d6. But Black's rooks are now better, and the c4-♘ has a beautiful outpost. Black will replace this piece with a rook and*

attack the e4-♙! **52...♗d7 53.♔f2 ♔h8 54.♖g3 ♘b2 55.♖d2 a3 56.♔g2** *I wonder if 56.♗f7!? here was worth trying, taking advantage of Black's king vacating the g8 square, and getting the bishop into the game more actively (note that the backward e4 pawn is on a White square!)* **56...♖c4! 57.♖e3 ♗c6∓ 58.♔f3 ♘a4 59.♗g1 ♘b6 60.♔g3 ♖b7 61.♔f3 ♔g8 62.♔f2 ♖xe4**

So Black wins his pawn **63.♗e8 ♖c4 64.♗xc6∓ ♖xc6 65.♖g3 ♔f7 66.♔e1 ♘a4 67.♖d5 ♖c4 68.♗f2 ♔e8 69.♖dd3 ♘b2 70.♖d2 ♖e4 71.♔f1 ♔d7 72.♖g6 ♔e7 73.♖d5 ♔f7 74.♖g3 ♗e7 75.♖g6 ♗f8 76.♖g3∓ ♖c4 77.♖d2 ♖c8 78.♔g2 ♗e7 79.♖d5 ♖h8 80.♖h3 ♔e8 81.♖h4 ♔d7 82.♔f3 ♔c6 83.♔e4 ♖bb8 84.♗a7 ♖a8 85.♗f2 ♖h7 86.♖h1 ♘c4 87.♘g3 ♗d8 88.♖hd1 ♗c7 89.♔f3 ♖d8 90.♔g4 ♗b6 91.♗xb6 ♔xb6** *Not 91...♘xb6 92.♖c5+! dxc5 93.♖xd8 cxb4 94.cxb4 and the rook on the eighth could cause trouble* **92.♖1d3 ♖hh8 93.♔f3 ♔c6 94.♖d1 ♘b6 95.♖5d3 d5 96.♔e2 ♖c8 97.♔e1 ♔b7 98.♔f2 ♖c4 99.♔g2 ♖f4 100.♖f1 ♖xf1 101.♔xf1 ♔c6 102.♔e2 ♘a4 103.♔d2 e4 104.♖d4 ♘b2 105.♔e3 ♖e8 106.♔f4 ♔d6 107.♖d2 ♘d3+ 108.♔g4**



108...♔e5? *108...♖c8! was better, 109.♘e2 ♔e5 110.♘d4 ♖xc3 111.♘xb5 ♖c1 112.♘xa3 ♘xb4 and the d+e pawns should win the game for Black* **109.♖g2 ♘b2 110.♘e2 ♘d1 111.♖g3 ♖c8 112.♔h3 ♖c7 113.♔g2 ♖b7 114.♘d4 e3 115.♘e2 ♔xf5?** *The 2nd. miss ends it! With ♖c7 Black wins the c3-♙ and still has chances* **116.♔f3! ♔e5 117.♖g1 ♘b2?!** *After 118.♔xe3 ♖c7 119.♔d2 the game is drawn. A great tussle and, whilst Tiviakov might well have won, Fritz's rearguard battle must be admired. Here 117...♘f2! 118.♔xe3 ♘e4 was better, though 119.♔d3 may still hold the draw* ½-½

Selective Search was due to go to the printers right here. I'd got 1½ columns left, so I decided I would print for readers the Tournament Table as it stands after round 8, then grab game 9 off the Internet, do some quick analysis, and stick it on at the end!

Tournament Table - round 8

Pos	Player	Elo	/8
1	**Van Wely**	2646	**6½**
2	**Tiviakov**	2567	**6**
3	**Piket**	2633	**5½**
4=	**Van der Sterren**	2526	**5**
	Fritz SSS*		**5**
6	**De Vreught**	2498	**4½**
7=	**Nijboer**	2540	**3½**
	Reinderman	2561	**3½**
9	**Bosboom**	2461	**3**
10=	**Van der Wiel**	2558	**2**
	Grooten	2393	**2**
12	**Van den Doel**	2522	**1½**

So, as I write this summary before our final game, **Fritz** has **De Vreught** in round 9, **Van der Sterren** who *'wont play'* in round 10, and **Van der Wiel** (once a World Championship qualifier) in round 11.

It probably can't win, but it may yet make a top 3 spot!

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[9]- De Vreugt (2498) - Fritz SSS

B12: Caro Kann

1.e4 c6 2.d4 d5 3.e5 ♗f5 4.♘f3 e6 5.♗e2 c5 6.♗e3 cxd4 7.♘xd4 ♘e7 8.c4 ♘bc6 9.♘c3 ♘xd4 10.♗xd4 dxc4 11.♕a4+ ♘c6 12.♖d1 ♗d3

A simple trap **13.♗xd3? cxd3 14.♖xd3 ♗c5 15.♘e4 ♗xd4** *Although Fritz shows itself about +100 playing this, I noticed that Hiarcs is >200. They probably evaluate the to-be-trapped ♖h8 differently, which is an important computer chess issue – see note to move 20 – but White's chances are minimal already I think whichever evaluation you prefer* **16.♘d6+ ♔f8 17.♖xd4 ♘xd4 18.♕xd4 ♕a5+ 19.♔e2 ♔g8?! 20.h4**

20...h5! *Well played Fritz... as much to release the rook as to block White's h-pawn. Programmers have to find ways of penalising trapped or immobilised pieces, so that they are encouraged to concentrate on extricating them as soon as possible!* **21.♖h3 ♕xa2 22.♖f3 ♕a6+ 23.♔e1 ♖d8 24.♖a3 ♕c6 25.♕f4 f6 26.♖xa7 ♖h6 27.♖xb7 ♖g6 28.♕e4?** *That does it! To have any hope de Vreugt needed 28.♕b4 ♕xg2 29.♕b6 though 29...♖f8 leaves him in desperate trouble. He must play 30.♖b8 ♖xb8 31.♕xb8+ ♔h7 and Fritz is going to win* **28...♖xd6 29.♕xg6?** *29.♕xc6 lasts longer to no avail: 29...♖xc6 wins easily* **29...♕c1+ 30.♔e2 ♕d2+ 31.♔f3 ♖d3+ 32.♔e4.** *White resigned as ♕e2 is m/2* **0-1**, *so* **Fritz** *moves to 6/9, with a 1-0 vs. der Sterren next?!*

Tricky (and Interesting) POSITIONS to try out on your COMPUTER!

POSITION 1 is taken from one of the Rebel G.M Challenge games, earlier this year. (page 22, *SS86*).

Scherbakov,R - Rebel

White has just brought the bishop back from a6, by playing **21.♗d3**

"The main idea of the whole line – to keep the Bishop on g6 out of play" says Scherbakov.

Readers! Have a look and see what your program/s play now.

21...e5??

"Unbelievable!!!" says Scherbakov. *"Obviously Rebel did not consider seriously White's next move after which Black is practically a piece down. It was better to make almost any other move (or even don't move at all!)"*

Okay – I've checked a few programs, and most hardly even look at 21...e5. If any others do, please let me know!

I reckon 21...f5!? was not so bad as after the direct 22.exf5 ♗xf5 23.♗xf5 exf5 Black has active pieces and good play on the kingside.

Not finished yet. Now please check what your program does here! It's okay to say, *"Mine didn't play e5!"*, but that's of little value if you don't know how to punish a mistake! I've not found any who do!

22.g4!

The Bishop on g6 is now... *"a big pawn. Note that the attempt to escape with f6–f5 is pointless"* says Scherbakov. Readers who enjoyed Bill Reid's articles on *'Tactics & Statics'* will know that computers often struggle to recognise a semi-permanent lack of scope.

Although this game has appeared in *SS*, it did so with only nominal notes from myself. I hope readers will enjoy reading what Scherbakov himself had to say!

22...h5 23.h3 h4? *This makes White's life easier. It was much better to keep the Rook on h8 or to move the King to g5 – White had to keep one of piece (R on h1 or N on e2) in defence so it was more difficult to break the queenside.* **24.♖d1** *I was thinking about other possible plans, for example a4–a5 then Ra1-a4–c4 looked promising but the intuition prompted me it would be not so big task to swap the Rooks on d–file.* **24...♖d4** *Yes, I made him do it! Instead of this pointless move Black should keep the Rook somewhere on b8 making more difficult White's task on the queenside. I was not much worried about possible a7–a5 as after b3, Bc4 Ne2–c1-d3, Rb1, Kc3 White will break with b3–b4 anyway.* **25.b3 ♖d6** *It was a good time to go back with 25...♖d8* **26.♘e2** *Immediate 26.♗a6! was more precise, but after Black's last move I was sure the Rook will not leave the d–file.* **26...♗e3 27.♗a6 ♖xd1 28.♔xd1+–** *Position is obviously winning for White. Black can only stay in waiting mode.* **28...♔d7 29.♔c2 ♔c7 30.b4 ♗g5 31.♗c4 ♔d6 32.♔d3 ♔d7 33.♘c3 ♗h6 34.♘b1** *My first intention was to break with b4–b5 after Bb3 and Kc4 which was probably also enough but I decided to try another idea first. Besides, I had a lack of time and did not want to change the pawn structure before the time control.* **34...♗f8 35.♔c3 ♔d6 36.♘d2 ♗h6 37.♔d3 ♔c7 38.♗b3 ♗f8 39.♔c4 ♗g7 40.♔d3 ♔d7 41.♘c4 ♗f8 42.♔c3 ♗h6 43.a5!** *The most clear way to win.* **43...♔c7 44.♗a4 ♗f4** *After 44...a6 White wins easily: 45.♘b2 then Nd3, Bb3–c4 (K should stay on b7), Nc5 (forcing Bc5 bc), K goes to e3, then f3–f4, e4–e5 and so on).* **45.a6! ♗g3 46.♔d2** *Not 46.♘a5? because of 46...c5, although it should be winning as well.* **46...♗f2**

47.♘a5 c5 *This is forced as in case of 47...♔b6 48.♗xc6! ♔xa6 49.♘c4 and the black King could suddenly find himself in the mating net – b4–b5 is inevitable.* **48.b5 ♗g1 49.♔d3** *An absolutely unnecessary move by me which allows Black to open the diagonal with c5–c4. White can win without a King but I had not realized it yet.* **49...♔b6 50.♘c4+ ♔c7 51.♗b3** *51.b6+! axb6 52.♗b5! could finish the game with nice picture as taken from draughts: all white forces are on the light squares and there is no defence against Queen promotion: 52...♗d4 53.♘d6 ♔b8 54.♗c4! with next Nb5. For my excuse I can say it was deep into the night already.* **51...♔b8 52.b6** *At this moment I realized my omission but decided to stop thinking about the way to return and just win the game – there was not much time left.* **52...axb6 53.♘d6 ♔a7 54.♗c4 b5 55.♗xb5 c4+ 56.♔xc4** *It was the only way to stop my a–pawn, but now White can collect all the kingside pawns starting, for example, from Ne8 then Nf6–d7, Kd5, Ne5 etc. so Black resigned.* **1-0**

POSITION 2 is from one of the games at Paderborn. This appeared in *SS87* on page 15, but insufficient attention was paid by me to a good/very good/superb/remarkable move (delete as you think fit), played by Shredder4!

Shredder4 - Nimzo732

We join the game with Black (Nimzo) to play; Shredder has just played **17.♗(e2)f3**

17...g5?

Nimzo is here a bit wild and neglectful of his king safety... but even so, who could anticipate Shredder's excellent reply?!

17...c6 18.♘b5 *(note that now 18.♘xc6 ♖xd1 19.♕xd1 bxc6* gives White nothing*)* 18...♖xd1 19.♕xd1 ♗f5 was probably as good as anything for Black, and any disadvantage is small.

Right. <u>This is the position I'd like readers to try out</u>!

18.♘c6!

The *Millennium* company, main distributors for Shredder, enthuse over this move: *"A superb move, taking advantage of Black's poor development. Like a strong grandmaster the German program is able to consequently apply strategic criteria (e.g. underdevelopment), usually not easily perceived by computer programs. This is the main advantage of modern* ***knowledge–based*** *programs."*

Does any other program find this? I've tried a few and not found another one yet.

Let's see the next few moves again, to show how Shredder finishes the game.

18...♖xd1 19.♕xd1 bxc6

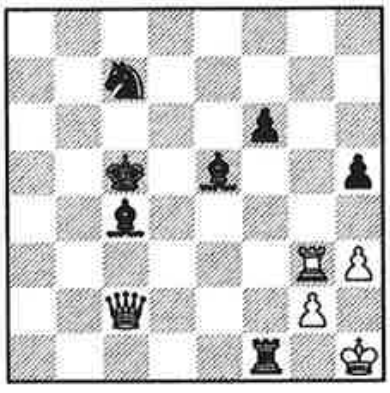
19...♕f8 20.♕d5+ ♔h8 21.♗xg5 fxg5 22.♖e7 bxc6 23.♕e5+ ♔g8 24.♕xg5+ ♔h8 25.♖xh7+ ♔xh7 26.♗e4+ forces 26...♗f5 27.♗xf5+ ♕xf5 28.♕xf5+ winning

20.♕d8+ ♔g7 21.♖e7!

And it's all over! **1-0**

POSITION 3 comes from a game shown on the Internet, where a new owner was greatly disappointed with a move his just purchased Junior6 played. *"I was feeling really happy about the strength of my new chess-playing program... it was beating me easily! Then it suddenly cracked!"*

Kjenner - Junior6



"In this position, which is of course won for Black, I played the obvious..."

47.♔h2

And Junior's response?

47...h4??

"I've tried various time control and hashtable settings, but it always come up with the same" says Kjenner.

I (Eric) have only tested Fritz6 and Hiarcs7, and they both play 1...♘d5!, winning easily. This is probably another null–move problem in Junior, readers will remember we saw one or two in issue 87.

48.♕xc4+

This guarantees stalemate, but Junior wont play it, always coming up with something else allowing Black to win af–ter all.

48... ♔xc4 is stalemate.

Finally **POSITION 4** comes from a game which Thorsten Czub posted on the Inter–net. Here is the position he commented on:

Crafty-CSTal

The actual game went: **27...♘hg3 28.cxd5 ♗a8 29.♘f4 g5 30.♘f5+ ♘xf5 31.♘h5+ ♔h7 32.gxf5 ♗xd5 33.♗xd5 ♖xd5 34.♖f1 ♖d7 35.♕g2 ♕b7 36.♖c2 ♕d5 37.♖f4**

Not a trap computers will fall for!

37...♖d6

Not 37...gxf4?? 38.♕g7#

38.♖c7 ♔h8 39.f6?!

Better was 39.♖xe4! ♕xe4 40.♕xe4 ♖xe4 41.♖xf7 ♖xe3 42.♘f6 (threatening ♖h7 mate) 42...♖xf6 43.♖xf6±

39...♖c6 40.♖e7 ♖c1+ 41.♖f1 ♖xf1+ 42.♕xf1 ♖c8 43.♕b1? ♘d2 44.♕d1 ♘f3+! 45.♔f2 ♘h4 46.e4 ♕d6 47.♔g1 ♕b4! 48.♘g3 ♕xb2 49.♘e2 ♖c2 50.♔f1 ♕b3 51.♕xc2

Of course 51.♘g1 makes no difference, Black just plays 51...♖f2+ forcing 52.♔xf2 and the queen still goes ♕xd1

51...♕xc2

Okay, back to the diagram. Give your computer up to, let's say, 15 minutes, and see if any come up with:

27...♘g5!?

Thorsten says Junior6 got this in 7½ mins (he has a 400 Celeron I think), and Zarkov5 also got it – even quicker in fact, but with the wrong follow–up, so it didn't actually know why! Fritz, Hiarcs, Genius and WChess have been tested, and none of them found it within 15mins, but it would be good to hear what Rebel Tiger, Rebel Century and Shredder4 think.

We should play some moves now, to see how this turns out!

28.cxd5

28.gxh5 is not as good 28...♘xh3+ 29.♔h1 dxc4+∓

28...♘xh3+!

If 28...♗xd5 29.♗xd5 ♖xd5 30.♔g2, then everything seems covered, so after 30...♘f6 it seems =

29.♔g2 ♖xe3

J6 has Black at +143 here, but when I tested on Fritz6, after 2 mins. it played:

30.dxc6

And had them equal. Interestingly J6 chose the same move and dropped to Black +30 as well, so let's play another couple more moves to see if we can de–cide!

30...♖xd4 31.c7 ♖xg4+ 32.♔h2 ♘g5!

Threatening ♖h3 mate. F6 has Black +90 now, and J6 has gone right up to +281 for Black. Although one could ar–gue that CSTal won the actual game, it was partly due to Crafty's mistake at move 39, so maybe 27...♘g5 was better than 27...♘hg3.

Readers might like to check if my sug–gested analysis after 27...♘g5!? does rep–resent best moves on both sides!

EXTRA TOURNAMENT RESULTS

In our last Issue, *SS87*, we showed the scores in **Andreas Schwartmann**'s major tournament, at the half-way stage. We repeat these below, adding the scores in the second round of this 15 program Double Round Event, with the final column showing the finished result.

At that half-way stage we were interested to see how well the amateur programs **Anmon**, **Phalanx** and **Little Goliath** were doing (all ahead of Crafty and Comet, a better known pair due to their airing in *ChessBase* engine versions!).

Controller: **Andreas Schwartmann**
Computer: AMD K6-3 450MHz
Time Control: 40 moves in 40 minutes
Double Round engine v engine event = 28 games each

Pos	Program	1st 14	2nd 14	Pos	Program	Total
1=	Fritz 6a	11	11	1	**Fritz 6a**	22
	Hiarcs 732	11	10	2	**Hiarcs 732**	21
	Nimzo 732	11	9½	3	**Nimzo 732**	20½
4=	Anmon 5.06	9	7½	4	**Junior 6a**	18½
	Junior 6a	9	9½	5	**Crafty 17.07**	17½
6	Phalanx 22	8½	6	6	**Anmon 5.06**	16½
7	Little Goliath 2000 2.5	8	8	7	**Little Goliath 2000 2.5**	16
8=	Crafty 17.07	7½	10	8	**Phalanx 22**	14½
	Comet B13	7½	6½	9	**Comet B13**	14
10	Gromit 3	6½	6	10	**Gromit 3**	12½
11	Ant 4.16	4	4	11	**The Crazy Bishop 0.45**	11
12=	EXchess 3.11	3½	5	12	**EXchess 3.11**	8½
	InmiChess 3.01	3½	2	13	**Ant 4.16**	8
14	The Crazy Bishop 0.45	3	8	14	**InmiChess 3.01**	5½
15	KnightX 1.52	2	2	15	**KnightX 1.52**	4

The top 3 were far enough ahead at the ½-way stage that it was always probable that one of them would win - and so it proved, with FRITZ6a once more indicating that the upgrade 'a' version is probably now the top playing program.

The year-old HIARCS732 program continues to show up well, but the JUNIOR6a result again casts a few questions marks over the benefit of the 'a' upgrade for standard PC users.

CRAFTY's slow start was not greatly noticed at the time, but results coming in over the past few weeks for the 17.07-17.10 versions would have made us raise our eyebrows over its position after 14 games. However a finish of 10/14 put it where you'd expect to find it.

Remember that this was an engine-engine tournament, so the results have not been included in our Rating List calculations.

Chris TAYLOR's involvement with *Selective Search* is comparatively new, but readers will have seen his very useful results contribution in our last Issue. He has an almost full range of the top programs, and now has TWO fast PC's to work with: an AMD K6/450 and a Celeron/500, each with 128MB RAM.

I asked him how these compared, and he tells me the timings they produce with the different programs are almost identical. So he loads them up with his AUTO232 software and lets them get on with it!

Graham White suggested a couple of issues ago that, with the faster PC's now available, we might consider whether to allow 60/30 and G/30 results for the **Rating List**, and of the few responses and comments I got, none were against the suggestion. So **Chris** has used **G/40** for his latest, major Tournament, and here's the result:-

Controller: **Chris Taylor**
Computers: one AMD K6-450MHz & one Celeron/500
Time Control: G/40 minutes
8 Rounds, 9 games each Match = 72 games each

Pos	Program	*SS* rate	F6a	RTig	J6a	F532	H732	C17.10	S4	N732	C17.07	Total	Perf
1	**Fritz 6a**	2642	*	4½-4½	4½-4½	4½-4½	6-3	8-1	5-4	6½-2½	6½-2½	**45½**	2692
2	**Rebel Tiger**	2619	4½-4½	*	3½-5½	4½-4½	5½-3½	6-3	7-2	7-2	6-3	**44**	2678
3	**Junior 6a**	2630	4½-4½	5½-3½	*	6½-2½	3½-5½	4½-4½	4½-4½	4½-4½	7½-1½	**41**	2643
4	**Fritz 532**	2593	4½-4½	4½-4½	2½-6½	*	3½-5½	4½-4½	4-5	5½-3½	7-2	**36**	2592
5=	**Hiarcs 732**	2618	3-6	3½-5½	5½-3½	5½-3½	*	2½-6½	5½-3½	4-5	4½-4½	**34**	2567
	Crafty 17.10	--	1-8	3-6	4½-4½	4½-4½	6½-2½	*	4½-4½	5-4	5-4	**34**	2573
7	**Shredder 4**	2593	4-5	2-7	4½-4½	5-4	3½-5½	4½-4½	*	3½-5½	5½-3½	**32½**	2554
8	**Nimzo 732**	2597	2½-6½	2-7	4½-4½	3½-5½	5-4	4-5	5½-3½	*	5-4	**32**	2547
9	**Crafty 17.07**	--	2½-6½	3-6	1½-7½	2-7	4½-4½	4-5	3½-5½	4-5	*	**25**	2486

I have shown the Tournament Performance ratings mainly so that readers can see how the **Crafty** versions work out! The results have gone into my Rating List, and the column *'SS rate'* actually reflects those figures afterwards. I should really have taken the figures immediately beforehand, in order to produce this Table, but didn't think about it until it was too late - it wont have made that much difference, if any, to the *'Performance'* figures!

I have previously indicated that I felt Crafty **16.x** versions were at least 100 and maybe as much as 200 Elo 'off the pace', but here Crafty 17.10 performs at 'only' 70 Elo behind top-ranked FRITZ6a's *SS* figure.

In Sweden they are testing Crafty 17.07 and, though its games so far have been on 450MHz equipment against other programs on 200MHz, which is a sure way to risk getting some false figures, it is still worth noting that its grading there is the equivalent of an *SS* figure of around 2560-2570 Elo. Okay, so the 17.07 result in Chris's tournament hasn't come up to that, but the signs are definitely there that Crafty is becoming a force in the Computer Chess PC world! Hiarcs in particular suffered and, as Chris sent me all the games, I shall be going through the Crafty17.10 v Hiarcs732 match to see if I can work out what happened (though the current experimental version of Hiarcs I am using, as we work towards the next upgrade, beats Crafty quite comfortably, so maybe we've already solved something there or the result was just one of those glitches, which can happen!). Thanks, Chris!

Left: Stefan Meyer-Kahlen's Shredder wins at Paderborn. *Right:* Franz Morsch (left on photo) watching his Fritz at play!

The Brains of the World Challenge!
Solutions for the (dreaded) POSITION 6

by **John Nunn** & **Frederic Friedel**, printed with the kind permission of **ChessBase**.

The first **Brains of the World** article, setting the scene, appeared in various magazines including ***SS/85*** (pages 12-13). Part 2 was ***SS/86*** (pages 28-30). The last part - the mind-boggling position 6 - will be in ***SS/88***.

There was a background story involving an ALIEN spaceship challenging the World to find its top brain to solve a tough intellectual challenge, and show humankind's suitability to join interstellar civilisation... or else!

The subject of this definitive test was to be **king and pawn endgames**, and the renowned Doctor - Who? - No! - Nunn!! - selected six pawn endgame positions to seek out a representative - **'The Brains of the World'** - to solve the endgames and prove the fitness of the human race for the challenges ahead.

John Nunn's solutions have now been made available, and the one finally shown here is for the very difficult position 6.

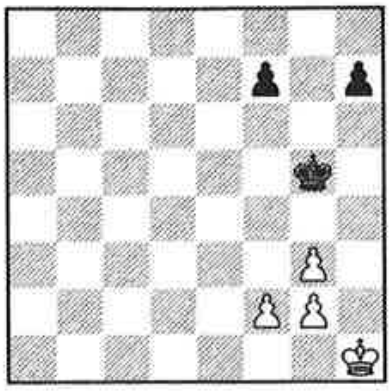
These solutions use the so-called *'Nunn-convention'*, which was introduced in the *Secrets of Rook Endings*. It is explained in more detail there, but the general principle is that a move receives a question mark if it changes the result of the position, while it receives an exclamation mark if it is the *only* move not to change the result of the position (i.e. it's an 'only' move).

I have taken the liberty of extending his solutions slightly in some places - remarks like *"is now clearly a draw/a win etc"* proliferate in many chess books... and I'm sure they are *'clearly draws or wins'* to top IM's and GM's.

But not always to me, many chess computers, and maybe some of you! Thus I've added a few extra moves in some cases where I felt they might be useful.

I should add that the **TableBases** which come with *ChessBase* and other products, e.g. Fritz6, Junior6, Hiarcs732 & Shredder4, have been a great help to me, and John Nunn himself also refers specifically to Hiarcs in this respect!

Test 06 - White to play and win



Eric's opening comment: I have to say that I found this one quite mind-boggling, and struggled to understand some of the explanations supporting the solution.

In the hope of making it slightly easier to follow, I have taken the liberty of changing the presentation order which John Nunn used, and have removed some of the more diverse lines which he discusses.

It is worth considering Nunn's own opening remarks in his introduction to the solution:

"This position is the star of the show and is far and away the most difficult in the set. When I discovered it, I showed it to my wife, who declared that, 'Even Kasparov wont be able to solve that one!' However Gary actually proved Petra wrong!"

1.♔h2

Unbelievable as it may seem, this is the only move which wins because it already creates a position of reciprocal zugzwang (Nunn assures us). He does this by starting the solution off with a consideration of two reciprocal zugzwang positions which can occur later in the play and, as befits these solutions, can be reached with either White or Black to play next! I found that trying to understand these before even starting the main solution actually only served to confuse me, so I have incorporated the diagrams and comments instead within the solution.

I (Eric) have only alternated between Fritz6 and Hiarcs732 in playing through all of these lines – it was quite hard enough without trying to worry too much

about what the programs were thinking! In general I found Fritz6 to be slightly the better in finding the correct moves, though it needed to get to move 5 or 6 in most lines before it became convinced of the win (i.e. around +300 or more). At this point for example, both found 1.♔h2 within 15secs (!) but neither had a particularly big plus evaluation – Hiarcs was higher, but it is always more optimistic in these positions anyway. So they'd found the best move, but certainly not yet a sure way to win!

Why is the position so complex? Because the pawns are not yet fixed! Therefore Black can still choose between various pawn arrangements, each giving rise to a network of corresponding squares. And White does not yet know which network will arise, so he must play this king move first.

1...f6

The move from Black which puts up most resistance!

There are so many alternatives that I'll just put a few moves for each one to try and help readers get started. In my view, if you follow the article and variations through, the *second* time you go through it, you will begin to recognise the patterns and winning methods in these sub-variations.

A. 1...♔g4 2.f3+! ♔g5 3.g4! ♔h4 4.♔g1 ♔g3 5.♔f1 and now White waits until Black exhausts his spare pawn moves... after them his king must retreat. E.g. 5...f6 6.♔g1! h6 7.♔f1 ♔f4 8.♔f2+–;

B. 1...♔f5 2.♔h3 ♔g5 3.f4+ ♔f5 4.♔h4+–;

C. 1...♔g6 2.♔h3 as in the ♔f5 line;

D. 1...♔f6 2.♔h3 as in the ♔f5 line;

E. 1...♔h6 2.♔h3 as in the ♔f5 line;

F. 1...♔h5 2.♔h3 f5 3.f4+–;

G. 1...h5 2.♔h3! f6 (2...f5 3.f3!+–) 3.f4++–;

H. 1...h6 2.♔h3 ♔h5 (2...h5 3.f4+! ♔f5 4.♔h4 ♔g6 5.g4! hxg4 6.♔xg4 m/25) 3.f4 ♔g6 4.g4+–;

I. 1...f5 2.♔h3. Now 2...h6 and 2...h5 transpose into the above lines, whilst 2...♔f6 3.♔h4 ♔g6 4.g4+–

2.♔h1!

Fritz6 does incredibly well, finding this in 5secs. changing to 2.♔g1, and then back again to the correct move at around ½ a minute, and thereafter sticking with it, though still with an unconvincing +72 evaluation. Hiarcs however wants to play 2.♔g1? (see *'Who solved the Test'* later!).

But back to the move 2.♔h1! itself... as John Nunn says, *'Surely one of the most incredible moves ever seen in a king and pawn ending'*... and again the only move to win!

Here are the two main alternatives:

A. 2.♔g1? the Hiarcs choice. 2...h5!

3.f3 (3.♔h1 ♔f5!=; 3.♔f1 ♔f5!=; 3.♔h2 ♔g4!=) 3...f5! This move establishes an important point. Playing f3 is ineffective if Black can set up a blockade with pawns on f5 and h5. White could win if he gains the opposition and gets his king to f4, but starting from g1 here, that is clearly impossible! 4.♔f2 ♔f6! 5.♔e2 ♔e6! and White cannot escape from reciprocal zugzwang and the draw;

B. 2.♔h3? f5!

3.♔h2 ♔f6! Black must rush in order to be sure of gaining the opposition when White's king arrives on the e-file. 4.♔g1 ♔e5! 5.♔f1 ♔d4! 6.♔e1 (6.♔e2 ♔e4 is similar) 6...♔e5! Play with this pawn structure is governed by the opposition. Therefore all these positions with opposed kings are reciprocal zugzwang and end in a draw! 7.♔e2 ♔e4 and White cannot make progress; 2.f3? f5! Black will play h5 next and it's a simple draw as White cannot gain the opposition on the

e–file 3.♔g1 h5 4.♔f1 ♔f6 etc.

Back to the main line:

2...f5

Of course there are many alternatives again! In brief:

A. 2...♔g4 3.♔g1! h6 (3...h5 4.♔h2! ♔f5 5.♔h3) 4.♔f1;

B. 2...h5 3.♔g1 ♔f5 4.f3! (not 4.♔h2? ♔g4 and Black has the reciprocal zugzwang. E.g. 5.f3+ ♔g5 6.♔h3 f5!=) 4...♔g5 5.♔f2 ♔f5 6.♔e3 ♔e5 7.g4 hxg4 8.fxg4 m/25;

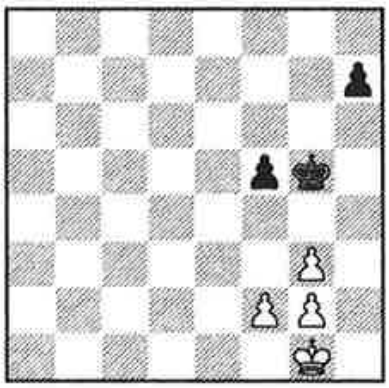
C. 2...h6 3.♔h2 ♔g4 4.f3+ ♔g5 5.g4 ♔h4 6.g3++–;

D. 2...♔h5 3.♔g1! ♔g5 4.♔f1 ♔f5 5.♔e2 ♔e4 6.f3+ ♔e5 7.g4! ♔f4 8.♔f2! h6 9.g3+ ♔e5 10.♔e3+–;

E. 2...♔g6 3.♔g1 (3.g4 also wins) 3...♔f5 4.f3 h5 to stop g4+ 5.♔f2! ♔e5 6.♔e2! ♔d4 7.g4 hxg4 8.fxg4 ♔e4 9.g3 and Black's king will be gradually driven back.

3.♔g1

We'll have another diagram, to make sure we're all at the same place!



3...♔f6

Black must hurry, otherwise White's king reaches e3, with an easy win.

4.♔f1! ♔e5 5.♔e1!

Extreme care is necessary throughout. 5.♔e2? ♔e4! gives Black the opposition!

5...♔d5

Black puts up maximum resistance with this.

5...h6, or 5...h5 are also possible but, once the h–pawn moves, Black's choice of pawn arrangements is reduced and White, instead of having to find the only move every time, will have wider choices and is less likely to go wrong.

6.♔d1!

After just over 4mins and with 100,000+ hits in the tablebases, Fritz6 goes to +330 here... well done.

As usual, the side with the opposition can only make progress if a by–pass is possible. Here White must choose exactly the right moment for his by–pass.

6...♔e5

We should check the alternatives here, as Black has three other choices:

6...♔d4 was the Fritz6 choice, though it has already seen that it loses to 7.♔d2! which gains direct opposition;

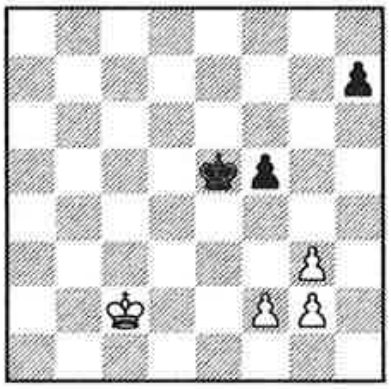
6...h6. Remember, we've said that Black must not touch his h–pawn! Now we have another good chance to see why, as White's king runs back to the h–file: 7.♔e2! ♔e4 (7...♔e5 8.♔e3!) 8.♔f1 ♔e5 9.♔g1 ♔f6 10.♔h2 ♔g5 11.♔h3 ♔f6 12.♔h4;

6...♔c5 7.♔e2! ♔d4 8.♔f3!

7.♔c2!

This is the correct moment to go for the by–pass!

Fritz6 found the move quite quickly, but took nearly 3mins to realise it wins. This was strange in view of its evaluation at 6..♔d1, but it was presumably due to its not having seen Black's best response, i.e. 6...♔e5.



7...♔d4

7...♔e4 8.♔c3 virtually forces Black to touch his h–pawn 8...h6 *(if 8...♔e5 9.♔d3! ♔f6 10.♔d4 ♔e6 11.♔e3 ♔e5 12.♔f3)* 9.♔c4 h5 10.♔c3!! ♔e5 11.♔d3

8.♔d2! ♔e4 9.♔e2!

Now Black must move the h–pawn; if he moves his king he will give White's king access to f3.

9...h6

Almost all of the manouvres up to here have been designed to extract h6 from Black. Now Black has lost his reserve tempo, White can win by playing his king from e2 to f1–g1–h2–h3.

If 9...h5 then the same 10.♔f1 wins, but only because White does have a spare tempo pawn move in reserve. 10...♔e5 11.♔g1 ♔f6 12.♔h2 ♔g6 *(12...♔g5 13.♔h3 ♔g6 14.♔h4 ♔h6 and here it is... 15.f3!)* 13.♔h3 ♔g5 and White now plays his spare tempo move: 14.f3! ♔f6 15.♔h4.

10.♔f1! ♔e5 11.♔g1! ♔f6 12.♔h2! ♔g6 13.♔h3! ♔g5 14.f4+ ♔h5 15.g4+ fxg4+ 16.♔g3!

m/19 says F6

16...♔g6 17.♔xg4 winning easily

An incredible position and analysis - I think that the word *congratulations* is not out of place for **John Nunn**'s mammoth effort in constructing the *'BRAINS OF THE EARTH'* test.

In his own conclusion to the test, Nunn discussed THE POSITIONS and WHO SOLVED THEM! So we'll finish off with his remarks, which I found very interesting.

About the Positions

Positions 4 and 5 were pre-existing composed positions, but the other four were all specially composed for this challenge. My main tool for this was a piece of software developed by ***Lars Rasmussen*** *of Denmark. This enables one to create a database for king and pawn endings with up to (about) seven pawns, although there are some limitations.*

Each pawn structure requires the construction of a separate database and the program only works for certain types of ending, mainly those in which there are no passed pawns and the result does not depend on a queen ending.

Hitherto, the theory of pawn endings has concentrated on basic positions with few pawns, and on positions in which the pawn structure is fairly blocked. I used the Rasmussen program to examine types of pawn ending more similar to those which arise in practical play.

These involved between five and seven pawns, with both sides having mobile pawns. The results were surprising, to say the least, and I decided to share some of these results with other pawn ending enthusiasts around the world.

I could have made the challenge impossibly difficult (except, perhaps, for Kasparov), but in the end I included only one really hard position - the incredible number 6 which Selective Search readers have just 'enjoyed'. I believe that a great deal remains to be discovered in these pawn-like endings.

Curiously, while I was putting the challenge together, ChessBase provided me with another tool for analysing pawn endings: ***Hiarcs732*** *with the* ***Nalimov tablebases****. These 'tablebases' are databases for all five-man endings, including ♔+2♙⇔♔+♙. Hiarcs analyses positions using the traditional iterative deepening approach, and when a tablebase position arises, it cuts off the analysis and extracts the result from the tablebase.*

This approach is quite powerful for certain types of ending, including many pawn endings. Hiarcs (also now ChessBase's Fritz6 and Junior6, and the Millennium Shredder4 package) can give the result instantly for ♔+2♙⇔♔+♙ (for example in POSITION 1 it almost immediately announces mate in 26), while it can often firmly evaluate with more pawns if the play being evaluated by the engine leads in the search to a reduction in the number of pawns.

New tools such as the Rasmussen program and the Nalimov tablebases provide methods which help tackle increasingly complex pawn endings. Of course some human intervention is still required to separate the interesting and significant results from the dross, but all in all, these are good times for those interested in basic endings.

Who Solved the Test?

The number of solutions that were received by ChessBase direct, or via other publications, was quite limited. For this there were a number of probable causes, the most important being that the positions were rather difficult! Most solutions that were sent in

contained a fair number of errors.

The first, and almost correct solution, was submitted by GM ***Karsten Muller****, who is currently in the process of publishing a book on pawn endings!*

Naturally he knew the previously published positions 4 and 5. Karsten also solved three of the remaining four positions correctly, so that was 5 out of 6 right for him.

When I told him that the last was incorrect, Karsten went back to work and successfully solved it. The whole process lasted 24 hours, though I am not suggesting Karsten spent all of that time solving the puzzles!

GM ***Jonathan Mestel*** *took seven hours to solve the first five positions, but he too slipped up on number 6.*

A German study expert, ***Gerd Wilhelm Horning****, sent four full pages of extensive analysis, containing almost every one of the lines given in the solutions.*

Horning, whose best over-the-board rating was 2000, was assisted by Hiarcs732 on an AMD K6-2 400MHz with 131MB for hash tables, and the Nalimov tablebases.

Of the six positions once more five were correctly solved by Horning. Unfortunately in position 6 he found the key move and the strongest defence, but gave the wrong refutation (2.♔g1 instead of 2.♔h1!! - this was also the error made by Karsten Muller and Jonathan Mestel... and Hiarcs!).

Having been told that the solution was not correct he re-analysed the position and, two days later, sent the correct solution. Horning spent a total of about six hours solving the test, all in one week-end.

The winner, however, is none other than ***Garry Kasparov****.*

Frederic Friedel *takes up the story:*

"Shortly before the positions were published, on August 9, I sent him (Kasparov) the positions by e-mail. Garry was in his training camp in Croatia, filling himself up with playing strength for the new season.

"About four hours after I had dispatched my e-mail he called to say that he and his second, Yuri Dokhoian, sitting outside with a chessboard (but no computer) had solved all six positions in 45 minutes!

"I was well prepared to see if Garry was right. John (Nunn) had sent me all the solutions and indicated the critical lines which the candidate would have to give. He also told me where to ask for certain alternatives to make sure that any/all successful candidates had fully understood the solution.

"Immediately the first position presented a problem! Garry gave 1.♔f5 *as the key... but both Nunn and Hiarcs refute this with* 1...♔f7. *When he challenged this with* 2.h3, *I realised he had the position wrong, with the h-pawn on h2 instead of h3.*

"Positions two to five he solved perfectly, answering all supplementary questions immediately and correctly.

"Then came position six! Garry gave 1.♔h2 *and dictated all lines perfectly. However, he left out the critical* 1...f6.

"'You are missing the strongest defence for Black', I said. He sunk into silence and promised to call again later.

"About an hour later the phone rang again. Garry said that this time he had spent another 30 minutes analysing the positions, this time without a board (and a computer).

"Number one with the correct position was very easy, and he gave me the decisive king manouvre ♔g4-h5-h4-g3-g4.

"And with position six he was audibly delighted with his discovery: 1...f6 2.♔h1!! *The full analysis after this came in rapid-fire dictation. The time spent to solve all six positions: one hour fifteen minutes."*

To that, says John Nunn, I can only add my own - "Well done, Garry!"

Finally John Nunn closed the article with his thanks to **ChessBase** for their help in organising this challenge.

I must add my own thanks, to *ChessBase* and Frederic Friedel in particular for their permission for *Selective Search* to use the articles, and my *ChessBase* contact, Matthias Wullenweber for negotiating the agreement.

And not least to **John Nunn** whom I have met a couple of times but who, if we met on the street, probably wouldn't remember me from Adam - even though my name appears on the Hiarcs732 packaging!: thanks for sharing such in-depth research with so many people through the various chess magazines which have had the opportunity to use this excellent material.

RATING LISTS and NOTES

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

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

Elo. This is the Rating figure which is in popular use Worldwide. The BCF and Elo figures shown in SELECTIVE SEARCH are calculated by combining each Computer's results v computers with its results v humans. I believe this makes the SS Rating List the most accurate available for Computers and Programs anywhere in the world.

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

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

Human/Games. The Rating obtained and total no. of Games in Tournament play v rated humans.

A guide to PC Gradings:

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

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

Pent-PC represents a program on a Pentium at approx. 100-133MHz, with 8-16MB RAM.

PPro-PC represents a program on a Pentium Pro/233, or a Pentium MMX//233, 32-64MB RAM.

Users will get slightly more (or less!) if the speed of their PC is significantly different. A doubling or halving in **MHz speed** = approx. **50** Elo; a doubling or halving in **MB RAM** = approx. **5** Elo.

Approx. guide if PentiumPro2/233 = 0

Pentium3-K6-Cel/450	+40	Pent K6-Pro2/300	+20
Pent Pro2-MMX/233	0	Pentium/166	-40
Pentium/133	-60	Pentium/100	-80
486DX4/100	-140	486DX2/66	-160
486DX-SX/33	-220	386DX/33	-280

RATING LIST (c) Eric Hallsworth. PC progs SS/88 June 2000

BCF	Computer	Elo	+/-	Games	Pos	Human	Games
255	FRITZ6A PPRO-PC	2642	17	670	1	2380	6
253	JUNIOR6A PPRO-PC	2629	20	536	2	2403	3
252	REBEL TIGER PPRO-PC	2620	23	382	3		
251	HIARCS732 PPRO-PC	2615	14	1089	4	2538	9
251	HIARCS7.1 PPRO-PC	2612	13	1204	5		
249	SHREDDER4 PPRO-PC	2596	19	547	6	2616	7
249	FRITZ532 PPRO-PC	2593	14	1070	7		
249	NIMZ0732 PPRO-PC	2592	18	606	8		
247	NIMZ099A PPRO-PC	2583	17	724	9		
247	FRITZ516 PPRO-PC	2581	13	1279	10	2443	6
247	CHESSMASTER 6000 PPRO-PC	2579	25	339	11	2529	15
247	NIMZ098 PPRO-PC	2576	12	1295	12	2405	10
246	JUNIOR5 PPRO-PC	2572	13	1153	13		
244	HIARCS6 PPRO-PC	2557	13	1165	14	2522	24
243	SHREDDER3 PPRO-PC	2548	38	145	15	2641	2
243	REBEL9 PPRO-PC	2547	14	1042	16	2619	6
243	REBEL-10 PPRO-PC	2547	26	308	17	2533	8
242	REBEL8 PPRO-PC	2542	20	538	18		
242	MCHESS PRO7 PPRO-PC	2536	14	1056	19	2530	1
241	MCHESS PRO6 PPRO-PC	2534	17	699	20	2474	12
241	MCHESS PRO8 PPRO-PC	2533	16	758	21		
241	CHESS GENIUS5 PPRO-PC	2533	13	1186	22	2389	6
241	REBEL CENTURY PPRO-PC	2533	26	300	23	2546	40
240	SHREDDER2 PPRO-PC	2525	15	875	24	2148	6
237	GANDALF3 PPRO-PC	2501	27	277	25		
235	JUNIOR4.6 PPRO-PC	2481	44	108	26		
235	HIARCS6 PENT-PC	2481	11	1680	27	2540	2
234	FRITZ5.16 PENT-PC	2475	35	170	28		
234	HIARCS5 PENT-PC	2475	19	585	29		
234	KALLISTO2 PPRO-PC	2474	22	412	30		
233	REBEL8 PENT-PC	2470	10	2106	31		
233	REBEL9 PENT-PC	2468	16	805	32		
232	CHESS GENIUS5 PENT-PC	2457	11	1567	33		
231	CHESS GENIUS3 PENT-PC	2448	14	1028	34	2658	10
230	CHESS GENIUS4 PENT-PC	2445	13	1199	35	2387	16
230	MCHESS PRO6 PENT-PC	2442	11	1721	36	2316	4
230	HIARCS4 PENT-PC	2440	14	1008	37	2348	6
229	REBEL7 PENT-PC	2439	14	1082	38	2242	11
229	REBEL6 PENT-PC	2436	19	594	39	2403	6
229	MCHESS PRO5 PENT-PC	2433	15	925	40	2423	19
228	NIMZ03.5 PENT-PC	2427	15	961	41	2426	6
228	CHESSMASTER 5000+5500 PENT-PC	2426	25	340	42	2372	6
227	JUNIOR4.0 PENT-PC	2418	16	844	43		
227	NIMZ03.0 PENT-PC	2416	16	843	44		
226	HIARCS3 PENT-PC	2414	18	628	45	2631	6
226	CSTAL2 PPRO-PC	2411	31	218	46	2177	6
225	SHREDDER1 PENT-PC	2406	37	151	47	2068	6
225	CHESSMASTER 4000 PENT-PC	2406	45	104	48	2394	12
224	CHESS GENIUS4 486-PC	2396	15	919	49		
224	MCHESS PRO4 PENT-PC	2394	19	597	50	2497	13

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ARTICLES, RESULTS, GAMES and SUBSCRIPTIONS should be sent direct to Eric, please!

RATING LIST (c) Eric Hallsworth. SS/88 Jun 2000

BCF	Computer	Elo	+/-	Games	Pos	Human	Games
223	TASC R30-1995	2385	17	724	1	2276	18
219	MEPH LONDON 68030	2355	35	175	2	2272	6
217	TASC R30-1993	2336	12	1346	3	2336	66
216	MEPH GENIUS2 68030	2333	18	657	4	2308	23
215	MEPH LONDON PRO 68020/24	2325	67	47	5		
212	MEPH RISC2 1MB	2300	21	466	6	2237	6
212	MEPH LYON 68030	2300	15	869	7	2392	51
211	MEPH PORTOROSE 68030	2289	20	505	8	2340	82
210	MEPH BERLIN PRO 68020/24	2281	13	1221	9	2217	29
209	MEPH VANCOUVER 68030	2276	18	656	10	2347	54
209	KASP RISC 2500-512K	2274	25	338	11	2384	10
208	MEPH LYON-VANC 68020/20	2270	27	286	12	2327	10
207	MEPH RISC1 1MB	2262	9	2542	13	2232	95
207	KASPAROV SPARC/20	2257	14	1077	14	2251	24
205	MEPH MONTREUX	2244	16	821	15	2288	54
205	MEPH ATLANTA-MAGELLAN	2240	19	593	16	2288	6
203	KASP RISC 2500-128K	2229	9	2648	17	2270	67
203	MEPH LONDON 68020/12	2228	77	36	18	2040	4
200	FID ELITE 68040-V10	2206	53	75	19	2215	21
199	MEPH VANCOUVER 68020/12	2198	9	2335	20	2121	33
199	MEPH LYON 68020/12	2192	8	3337	21	2250	80
196	MEPH LONDON 68000	2175	69	45	22		
196	MEPH PORTOROSE 68020	2169	10	1823	23	2240	188
195	NOV SAPPHIRE2-DIAMOND2	2167	19	558	24		
195	FID ELITE 68030-V9	2160	15	899	25	2169	13
194	MEPH BERLIN 68000	2159	12	1325	26	2221	25
193	MEPH VANCOUVER 68000	2148	12	1383	27	2126	23
193	MEPH LYON 68000	2147	11	1658	28	2083	33
192	MEPH ALMERIA 68020	2143	14	980	29	2172	215
191	NOV SAPPHIRE1-DIAMOND1	2130	12	1353	30	2152	77
191	MEPH MILANO PRO-SENATOR	2129	21	486	31	2169	10
189	MEPH PORTOROSE 68000	2116	11	1593	32	2111	25
188	FID MACH4-DES2325 68020-V7	2111	9	2245	33	2179	130
186	FID ELITE 2*68000-V5	2091	26	312	34	1888	2
184	MEPH POLGAR/10	2074	18	632	35	2080	54
183	MEPH ROMA 68020	2070	14	1066	36	2041	64
183	KASPAROV BRUTE FORCE	2068	14	1070	37	2182	42
183	MEPH DALLAS 68020	2066	14	971	38	2069	197
181	MEPH ALMERIA 68000	2052	14	1004	39	2093	31
181	NOVAG SCORPIO-DIABLO	2048	10	2064	40	2132	129
179	KASP PRESIDENT-MM6-COUGAR	2032	16	824	41	2072	65
178	MEPH NIGEL SHORT	2026	25	322	42	2136	5
177	FID MACH3-DES2265 68000-V2	2019	6	5543	43	2105	230
176	MEPH DALLAS 68000	2014	11	1511	44	1988	50
175	MEPH MM5/5	2007	11	1758	45	1902	11
175	MEPH POLGAR/5	2005	8	2817	46	2076	17
175	NOV SUPER FORTE-EXP C/6	2005	8	2920	47	2000	24
175	NOV EMERALDCLASS-AMBER	2003	64	52	48		
175	MEPH MILANO	2002	13	1163	49	2063	13
174	MEPH MONDIAL 68000XL	1997	15	857	50	2049	77
174	NOVAG JADE2-ZIRCON2	1993	41	128	51	2032	48
173	MEPH MONTREAL-ROMA 68000	1990	9	2516	52	1968	56
172	MEPH AMSTERDAM	1980	9	2253	53	2054	182
172	MEPH ACADEMY/5	1979	9	2385	54	2023	111
170	NOV SUPER FORTE-EXP B/6	1966	12	1434	55	2017	84
170	FID MACH2B	1965	27	276	56	1960	25
170	MEPH MEGA4/5	1963	8	2681	57	2029	169
170	KASPAROV MAESTRO D/10	1960	12	1285	58	1956	109
169	FID MACH2C	1954	9	2617	59	2059	127
169	KASP GK2000-BARRACUDA	1953	14	972	60	1862	20
168	MEPH MODENA	1946	16	793	61		
167	MEPH MM4/5	1941	8	2723	62	2006	97
166	FID TRAVELMASTER	1933	19	561	63	1917	83
166	NOVAG RUBY-EMERALD	1932	17	723	64	1981	48
165	MEPH SUPERMOND2-COLLEGE-MCARL04	1927	27	284	65	2074	8
165	NOV SUPER FORTE-EXP A/6	1927	12	1406	66	2021	176
165	KASPAROV MAESTRO C/8	1923	27	295	67	1999	98
164	FID MACH2A	1919	26	310	68	1912	35
164	KASP TRAVEL CHAMPION	1919	30	237	69	1862	22
164	CONCH PLY-VICTORIA/5.5	1914	16	794	70	1870	15
164	MEPH MONTE CARLO	1913	28	260	71	2046	10
163	CXG SPHINX/4	1911	9	2393	72	1943	155
163	KASP TURBOKING2	1905	14	982	73		
161	NOV EXPERT/6	1895	32	206	74	2026	22
160	FID CLUB B	1885	12	1309	75	1827	18
159	NOV SUPER FORTE-EXP A/5	1879	11	1521	76	1825	29
159	NOV EXPERT/5	1878	26	305	77	2012	68
159	FID PAR E-ELITE+DES2100	1872	9	2486	78	1916	220
158	NOV FORTE B	1869	10	1813	79	1965	208
158	MEPH REBELL	1868	9	2205	80	1940	69
158	FID AVANT GARDE/5	1868	11	1670	81	1852	80
157	NOV FORTE A	1859	9	2196	82	1921	134
157	FID CLUB A	1858	31	224	83	1767	6
156	KASP STRATOS-CORONA	1855	10	2093	84	1890	48
156	MEPH SUPERMONDIAL1	1851	11	1575	85	1990	6
156	KASPAROV MAESTRO A/6	1849	15	927	86	1864	131
155	CONCH PLYMATE/5.5	1845	9	2201	87	1923	55
155	KASP TURBOKING1	1844	24	355	88	1900	61
155	CONCHESS/6	1843	45	104	89	2017	8
155	KASP SIMULTANO	1840	13	1139	90	1824	36
154	NOV EXPERT/4	1835	14	1025	91	1960	43
154	FID EXCELLENCE/4	1832	11	1671	92		
153	SCI TURBO KASPAROV/4	1831	21	478	93	1933	64
153	CONCH PLYMATE/4	1825	24	372	94	2007	6
152	FIDELITY ELITE C	1816	35	176	95	1869	11
151	FID ELEGANCE	1810	17	700	96	1852	40
150	MEPHISTO MM2	1805	17	747	97	1776	8
150	SCI TURBOSTAR 432	1804	12	1364	98	1872	67
149	FID EXCELLENCE-DES2000	1799	11	1590	99	1852	52
147	CONCHESS/4	1781	20	511	100	1875	28