

SELECTIVE SEARCH THE COMPUTER CHESS NEWS SHEET

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Editor: Eric Hallsworth
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A WORLD COMPUTER CHESS CHAMPIONSHIP 'SPECIAL'

After 3 Rounds:

3/3 Deep Blue Prototype

2½

2 Star Socrates, Genius,
Rebel, Schach3, Fritz,
HiTech, W-Chess, Dark
Thought, SOS, Cheiron

After 5 Rounds:

4/5 FRITZ, Star SOCRATES

3½ Deep Blue Prototype,
Frenchess, Junior

3 Rebel, Genius, W-Chess,
Zugzwang, HiTech

• And FRITZ wins the play-off
game!



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

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The 8th WORLD COMPUTER CHAMPIONSHIP proved an unexpected and almost astonishing triumph for FRITZ programmer **Franz MORSCH**, as well as giving a boost to major WCC sponsors **Saitek**, who market the Morsch programs in their dedicated boards (e.g. Travel Champion 2100, GK-2100, President and Renaissance Brute Force).

After a poor start **FRITZ** crept into =2nd. place in time for the 5th. and final round, earning the honour (!) of a game with Tournament Leader **DEEP BLUE** (Prototype.... the latest DB program but still on Deep Thought's computer hardware). An amazing win (largely due to a neat transposition programmed into the opening book) put **FRITZ** into =1 and a play-off game for the title with **STAR SOCRATES** (another massive main frame, apparently 50 feet long!). Drawing Black again, but handling the opening well, **FRITZ** once more came out victorious to become official World Computer Champion!

Full details, reports, opinions and many of the games are included in this Issue.

Tasc R30, the 1995 UPGRADE had been getting some confusing early results. After good scores encouraging semi-euphoria were obtained by **Simon Knight** (8½-1½ vs Berlin Pro) and **Gary Preston** (5-2 vs Genius 030), regular contributor **Frank Holt** wrote that he was disappointed and had a 1-3 defeat against Genius2 486/66. The extra knowledge has resulted in a slight slowing down in solving tactical positions which also didn't suit Frank.

Then **Keith Kitson** contacted me to say his R30-1995 was down 18½-16½ to the Berlin Pro. Played at the same G/60 as Simon Knight's test, this was a surprising change of scoreline which emphasised for the umpteenth time the dangers of small samples (i.e. 30 or 40 games!). Readers will also note that every one of the results had been against a Richard Lang program - no balance for making judgements on.

The very latest scores in from **Peter Marriott**, however, have boosted confidence again!

G/60 R30 on Solid, Random
R30-1995 5-3 Meph RISC1
 G/60 R30 on Normal, Random
R30-1995 3½-2½ Meph RISC1
 G/60 R30 on Active, Tournament
R30-1995 9-3 Meph RISC1
 G/30 R30 on Normal, Random
R30-1995 7½-4½ Meph RISC1
 G/30 R30 on Active, Random
R30-1995 6½-5½ Meph RISC1

Our view is that the upgraded R30-1995, with its increased chess knowledge, plays a better balanced game of chess, and the changes have improved its play in the quieter types of position. The 'price' for the extra knowledge is a small slowing down in speed through the plys, and a slight softening of the very aggressive playing style (which both won and lost points!). We think that the resulting program plays a more human-like game, able to produce its highest quality play in the positions resulting from all types of opening, enhancing its value to a wider range of players both for practice and when required for analytical duties of course.

CHESSICA is the latest PC program from **Franz MORSCH**, and the box claims it to be the very same **FRITZ** program which won the World Computer Championship. Before getting too carried away and rushing to the phone to buy it from us (not that we mind!) readers should note that Morsch himself states that **FRITZ'3'** and **FRITZ'WCC winner'** are 'almost identical' apart from work done on the opening book. The next thing to note is that Chessica is a **WINDOWS** (Windoze!) program. So it will certainly run slower on your PC than Fritz does under DOS! Computer Schach&Spiele say that the difference varies from PC to PC and time control to time control, and that Chessica is between 30%-70% slower. CSS also

state that Chessica has fewer features!?

Issue 58's ENDGAME TEST results are coming in slowly at present - I know, there's a LOT to do! Early scores suggest that the improvement achieved between 3 mins and 10 mins is only 1 or 2 pts for most programs. In other words if they CAN do it, fine - if NOT, then more time (and therefore much faster processors) isn't going to make that much difference. Hopefully we'll have enough to go into some detail for Issue 60.

The Mephisto MONTREUX appears to be on the point of arriving in Britain in September or October! Please note that NOT MANY will be available in the first shipment here, so sales really will be on a *'first come first served'* basis.

Its launch in a couple of European countries a few weeks ago has enabled one or two of the foreign Chess Computer mags to do brief reviews, and I believe the overall expectancy is that there could be a 50-60 Elo gain over the RISC 2500. This in part because the RISC 2500 used de Konings King1 program and this uses his King2. Also it is on the latest 32-bit ARM6 processor (previously ARM2) and this will help with speed and hash tables. These improvements are estimated at 30-40 and 20 Elo pts respectively in Ply Mag. Larry Kaufman reports that his CCR test suggests 50 Elo, and that the Franz Maresch Endgame test (see our Issue 58) gives the Montreux a 30 Elo endgame improvement compared again with RISC 2500.

I think the Board and Features will be as in the RISC 2500, but am positively assured that NONE of the RISC 2500 'teething troubles' will be seen in the new and very carefully tested **Montreux**. At Aegon it scored the same as the new R30 and graded only 14 Elo less! I believe the price will probably be £499 which means the **Montreux** can be compared to the **Berlin PRO** at £595: the difference in strength between them will be small, but BPro will have better features for the extra £100.

The Internet Chess Club G.M vs COMPUTER Challenge was issued on the Internet on 21st June 1995, offering a \$300 prize to the first G.M who could beat W-CHESS by 2-0 in a two game G/30 match! W-CHESS would be running on a Pentium 100MHz and the game would be played over the Internet so that 'spectators' could log-in and 'watch' the game Oracle style!

Young 18 y.o. Israeli G.M Ronen HARZVI volunteered his services very quickly and the games were duly scheduled for 25th June. The Internet invited 'all Grandmasters' to schedule their attempts for the prize as soon as possible, apparently confident that W-CHESS would look after their funds for some time to come, and provide distributors with plenty of good advertising material. But it was not to be as HARZVI safely 'netted' (!) the 2-0 score... and the cash! One of the games is in this Issue, printed out as a part of the ChessBase vs ChessAssistant article.

Have you ever thought of DRAUGHTS for your PC? It's not at all a bad idea for a slightly different form of relaxation with your beloved PC on occasional evenings.

The programming of DRAUGHTS has been, and still is, another major challenge... and no, before you ask, draughts has NOT been solved! There are, like CHESS, large opening theory books which operate in the top draughts programs in the same way. In addition large endgame databases are in use in the top draughts programs - World Champion (human and computer!) CHINOOK now has an endgame database which has solved ALL endgames with 8 pieces or less! Unfortunately it takes up 6 Gigabytes of memory and you'd need a Unix box to run it. Seriously.

Interestingly the draughts world has not opposed the presence of Chinook and the top draughts players have taken on board various new tactical ideas which it has shown them. A couple of years ago World Draughts Champion Dr. Marion TINSLEY fully welcomed a match with Chinook as he had comprehensively

beaten all of the top human players and hoped the computer would give him a real challenge! He even offered to resign his World Title to play Chinook under World Championship conditions in an unofficial Title Match! After losing a couple of early games Tinsley started to discover minor weaknesses in parts of Chinook's strategic play and finally ran out a 4-2 winner, with close to 30 draws. Tinsley immediately encouraged programmer Jonathan Schaeffer to work on the discovered weaknesses and a new challenge was set up last year. Sadly Tinsley, who was taken ill in the early stages of the match with the scores even, and was forced to resign, has since died. Chinook now holds the title and has triumphed over all other challengers... so far!

There are **2 excellent programs available for PC's...** and not *that* far behind Chinook. Both are quite probably amongst the top ten players in the World when on a fast 486 PC, and both are confidently expected to be able to regularly beat any readers of this Magazine! (I am sorry, that is not a cash challenge à la Internet!).

I start with **COLOSSUS** by Martin Bryant, as it won the recent Derek Oldbury 'Man vs Machine' Tournament. Martin was the Colossus4/10 chess programmer, but now prefers the challenge of draughts where play might appear simpler - but variations must be calculated much deeper!

Martin actually prepared the opening book used by Chinook... which Chinook then tested and corrected in one or two places! The 'corrected' book is in all three versions of the Colossus program. In exchange for his work on the opening book, the Chinook team gave Martin their endgame databases for 2-6 pieces!

- A **COLOSSUS Starter** version for **£40** contains the 2-3 piece endgame databases.
- **COLOSSUS/5** version for **£80** has the 2-5 piece endgame databases, plus a 769 best games database. It requires 2MB memory and 5MB hard disc space.
- **COLOSSUS/6** version for **£240** has the

2-6 piece endgame databases, and the 769 games. It comes on 20 discs and requires 4MB memory and 55MB hard disc space... you have been warned!

The **result** of the Derek Oldbury Memorial Tournament saw **COLOSSUS/6** score 6½/7; a program called **CHECKERS** came 2nd with 5½, and my friend Adrian Millett's **SAGE** was 3rd. with 5/7. The top human came in 4th. and was Tom Landry with 4½ - not the ex-coach of the Dallas Cowboys as far as I know, but a strong British Master who has represented Britain internationally on several occasions.

- **SAGE** is the other recommended and commercially available program. Adrian is a long-time reader of our Magazine and I have had a 1994 **SAGE 3200** version on my 486/33 for over a year and know that *it* is very strong. Adrian has even re-written parts of the later 1995 **SAGE** program since the above Tourny to produce the new **SAGE 4000** version. As it costs just **£37** perhaps it was entitled to come behind the £240 Colossus/6 in the event, and it may be that it is as strong as the £80 Colossus/5! This would be the acid test if someone feels like running it for us!?

You can **order** your Draughts programs through the distributors of this Magazine - please add £3 for p/p.

AMUSING TOUCHES on the INTERNET! A feature of posting letters, articles and views to the Internet is the frequent use of '**SMILEYS**'. They are intended to express the writer's emotions, in much the same way as we can sometimes judge the words folk say in conversation in part by the expression on their face. The idea is that, if you're saying something a bit 'sharp' to someone, but don't mean it unkindly, you give them a little :-) smile to go with it!

To view a 'smiley' you need to turn the page sideways - on the PC screen you simply screw your head to a 90° angle! Some of my samples are as seen on the Internet, some are from Davey Winder's book called

.net, and others are from good friend Alastair Cargill.

: -)	basic happy
: -(basic sad
: -[not amused
: -))	very happy
: -((very sad
: -c	very unhappy
; -)	wink
-O	yawn
: -I	indifferent
: '-(crying
: '"-(floods of tears
<: -)	dumb question
? -)	black eye (threat)
: -C	disbelief
: -D	laughing out loud
: -}	leer
: -O	shocked
: -v	speaking
: -V	shouting
: -X	my lips are sealed
-)	sleeping
B -)	Batman
: -<	vampire
: -)X	wearing a bow tie
: ^)	broken (or large) nose
X -)	cross eyed
8 ^)	spectacles wearer
8 :)	gorilla
=: -)	punk
.0: -)	saint
* -)	stoned
C : -)	wearing bowler hat
d: -)	wearing cap
: -)	wearing headphones
: -(#)	wearing teeth braces
: -{)	smiley with moustache
{: -)	smiley with toupe
% -)	I've just finished the News Sheet

Well, with DRAUGHTS and HUMOUR, nay frivolity, whatever *is* this magazine coming to?! 8^{} Back to more important issues....

HIARCS3 available for the MAC! Due out about the same time as this magazine reaches readers, it will cost £79 the same as the PC version. Easily the MAC's no.1!

GLOSSARY of CHESS COMPUTER Terms

Here is an initial list of TERMS, some of which we would propose to discuss in future Issues. Explanations will be either brief or lengthy depending on subject complexity - and how much WE know about each one! For example the exact search techniques and evaluation functions used by specific chess-playing programs are rarely available, for obvious reasons.

If there are particular terms that you would like us to look at, listed or unlisted, then please get in touch! We CANNOT promise to be experts on every single one, but we'll do our best if at all possible, or try and find a man that can!

- ♦Analytical features and helps
- ♦Board types
- ♦Development
- ♦Display features
- ♦Evaluations
- ♦Hash Tables
- ♦Heuristics
- ♦Memory
- ♦Move ordering
- ♦Nodes per second = Speed
- ♦Opening and Endgame databases
- ♦Opening Books
- ♦Playing styles
- ♦Ply and Depth of search
- ♦Programming languages
- ♦Processors: types and chess value
- ♦RAM
- ♦ROM
- ♦Search systems
 - Brute Force
 - Selective Search
 - Tactical extensions
 - Null move algorithms
- ♦Self-learning from mistakes
- ♦Tactical Motifs
- ♦Talking computers
- ♦Tempo
- ♦Time Controls and 'Levels'
- ♦Transpositions
- ♦Upgradeability

ChessBase v ChessAssistant

Which is better?!

ChessBase/ChessBase for Windows and ChessAssistant are (I think indisputably) the top two PC Chess Database products at this time.

In saying this I am aware that I leave out the popular **BookUp** program (but I really think the main use for BookUp is specific Openings Study rather than as a games storage database system), and NicBase, which doesn't appear to have so much in way of either new game-files, advertising or support as it did perhaps 12 months ago, so seems to be losing ground to 'the big two'?!

WHICH IS BETTER?

If you already have one or the other, then the answer is easy!... the one you've GOT! Both are massively multi-featured and offer a wealth of game storage, study, comparison and manipulation facilities, and the actual differences in what each can achieve are quite few, though the modus operandum varies somewhat! Before making some personal comparisons on specific areas which I liked in each, let's first have a brief check-up of the main features. A bracketed asterisk (*) in the list means the feature is subject of a separate discussion later in the article.

ChessBase for Windows

- Windows based - pull-down menus, help features, icon-based point and click operations, VGA graphics.
- Informator Key.
- 216,000 games basic 'BigBase'.
- TopBase adds 63,000 World Champ and Interzonal games, of which 12,000 annotated. •Regular new Disk or CD-Rom game files from all major Tournaments.
- Repertoire trees for merging and comparing games/openings.
- Find any position, manouvre, theme or material equation.
- Statistical analysis.
- Display shows Board/s, moves, comments and analysis all at same time.
- High-quality printing of games with diagrams, or create textfiles in normal or RTF (Rich Text Format) for Word Processing.
- Desktop Publishing with figurine fonts; even list ECO tables (*).
- On-line analysis from Fritz3 (*) showing choice of best, or best+next best moves.
- Generate and edit Fritz3 Books.

•BASIC package £199.00.

ChessAssistant

- MS-DOS based, but pull-down menus, help features, point and click operations, VGA graphics.
- 230,000 games on 14 floppies (requires 46MB on hard disk) for £10 (you pay £40 but £30 is refunded when you return the discs).
- 370,000 games on CD-Rom £35.00.
- Regular new Disk or CD-Rom game files from all major Tournaments.
- Statistical analysis.
- Very fast and comprehensive search methods, by player, tournament, year, opening by name or ECO code, result, number of moves, position, or structural features.
- Can show Chess Tree paths both to and from each position.
- Print games with diagrams direct to printer, or textfile in normal or RTF (*).
- Conversion utilities for ChessBase, NicBase and PGN (*) files to the Chess Assistant format, allowing game load from multiple sources.
- Generate analysis at chosen position using HIARCS3 or Genius3, plus PGN game import/export to/from HIARCS3.

•BASIC package £199.00.

The adverts for either could lengthen the lists considerably!... the full possibilities are only appreciated when one starts using and experimenting with the programs. Interestingly there has been no little 'discussion' on Internet Demon's rec.games.chess over which is better... well 'discussion' is all too often not the correct word to use when describing events on the Internet. I have never come across so many blinkered and rude people in all my life, and one enters one's own views at some peril, prepared always for intense reaction from many who might disagree.

Generally the contributors on the Internet are Americans, and they seem to come out slightly in favour of ChessAssistant. However my recommendation is this: if a user already has one or the other, I would definitely stick and upgrade with *it*.

You see, someone will ask me "*Which is easier to use?*" and the answer *I* would give is: "*ChessBase*". But that is because I've been using it for 5/6 years and can do many things so automatically that I am able to speed through games, changes, variations, adding comments, getting analysis etc. leaving me able to concentrate more on the chess than on how to operate the program.

However when I started using ChessAssistant, everything slowed down quite horribly. Not I believe because CA is actually harder to use, but the pair are SO different in their operating methods that it was like starting from scratch, and just inserting the moves of a New Game and adding a few notes and alternative lines felt as if it was taking me ages. I am pretty sure that, if I put CBase away for a couple of months and just used CA, I'd conclude that any difference was negligible... indeed CA supporters *insist* that IT is faster.

Plus marks for ChessAssistant

- The facility to import PGN files. These are very popular, on the Internet for example, which means plenty of Tournament files can be downloaded from there to build up massive databases for keen users. HIARCS3 also imports/exports PGN files, so these can be easily moved from one to the other for preparing analysis and then typing it in etc.
- From within ChessAssistant the user can call up HIARCS3, GENIUS3 or ZARKOV3.2 (?) at specific game points, and obtain their analysis and evaluation of a position. It is necessary to set up a suitable time control for the appropriate program (or Infinite) so that the imported opinion is likely to be useful. Using HIARCS the exact line of analysis and evaluation can itself be incorporated into the game notes at the click of a button. However none of the Programs can be kept permanently running on screen whilst inputting or playing through a game, and the Program has to be specifically called up each time it is wanted. I believe Mark Uniacke is currently at work so that the next version of HIARCS will be able to run permanently on screen if required by the user, and this will be a good boost for CA.
- Both CBase and CA can manipulate information and game comparison searches in every way imaginable; but CA seems (from a view of the drop down Menus) to maybe have a few more choices and certainly works very, very fast.

Plus marks for ChessBase for Windows

- I preferred the game printout available from within CBase to that from CA. However I will include a page comparing the two printouts side-by-side so that readers can form their own opinions.
- After spending an extra £60 I was able to get Fonts for CBase which now allows me to send gamefiles to a Windows Word Processor from where I can fully set out articles with

diagrams etc. I was not able to achieve this with CA, and was unable to trace the CA fonts for loading into Windows for diagram printing, though I am told that they are there and do work with Lotus AmiPro. However they don't seem to work with Write, Microsoft Works for Windows, PFS WindowWorks or PagePlus3, the packages I have. With CBase I got PFS WindowWorks to do a pleasing job. PagePlus3, despite its big reputation, imported the diagram files in a most confusing way and seems to require abilities not known to me to get anything to work at a reasonable speed or consistency. •Whilst the MS-DOS CBase and Fritz3 were able to run together, for permanent on-screen analysis whilst using CBase, CBase for Windows requires that you spend yet more money even if you already have FRITZ3. However you do buy it at a small discount if you already have it! Very generous. Nevertheless CBase for Windows with FRITZ3 running permanently makes a formidable tool for mere mortals, and has a readily admitted value - even to G.M.'s who have confirmed their usage of it whilst preparing recent books (e.g John Nunn's recent "Best Games"). So this is another 'plus' for CBase, though the hidden extra costs for working Fonts and FRITZ3 within Windows are a minus and mean that I, for example, have ended up paying quite a bit more than expected to get what I wanted.

Conclusion

The I.M and G.M may quite likely prefer CA because of the massive games collection available, the range of manipulation techniques for comparing opening lines and results etc. and the ease with which new Tournament files can be readily obtained via the Internet, keeping him up-to-date with all current theory and his various opponent's trends!

Whether this is of such value to the County, Club and week-end player, I don't know! True the games collection is a delight to own (not that the CBase collection is exactly small!) but how many games on either CA or CBase will the week-end player find for the opponents he meets at King's Head, or even the British Major Open? Not so many I guess. Therefore I believe the advantage CBase has with the on-screen analysis from FRITZ3 makes this the more useful tool for the majority of readers of this magazine.

Finally for preparing articles, bulletins etc (not to mention magazines) the high-quality printouts available working within both CA and CBase have a slightly limited value in that the user won't know how much space the finished game, analysis and diagram will take up until he's printed it out. Of course if space, or no. of stapled pages is no problem, it doesn't matter. But it's not so good for a magazine, and the business of getting out the scissors and glue to cut and paste everything onto pages went out in the 1980's didn't it? Therefore the ability to quickly and reliably export the finished games and diagrams into a Word or DeskTop Publisher seems vital, so CBase gets my vote here at present... but maybe someone can tell me how to get CA up-and-running to its claimed full potential using RTF and without my having to spend another fortune, which I haven't got.

ChessBase will be used extensively with the PFS program for this Issue. The only other question which seems to immediately arise is, "*Do readers prefer symbol notation (♔♚♙♜) or are they happy with KQRBN*"? The symbol method requires only a little more work, and some folk have suggested that a magazine still using the old KQRBN formula is out-of-date. However I for one find them easier to read when playing through games! What do readers think?

Game print-outs: The short games I have chosen both give the programs their 'come-uppance'!... perhaps not such a bad thing with all of the hype generated by some of the recent success stories at Aegon, Fritz3's I.M performance, Genius v. Kasparov etc.

The **ChessAssistant** one was at Blitz and was played by Chess Computer expert Jurgen Faas. The **ChessBase** game is from Internet's \$300 'Beat W Chess Pentium' challenge. It was won 2-0 by the very first challenger: 18 y.o. Israeli G.M Ronen HarZvi.

Printout from within ChessAssistant
Jurgen FAAS - MChess PRO4

486
1995, Germany

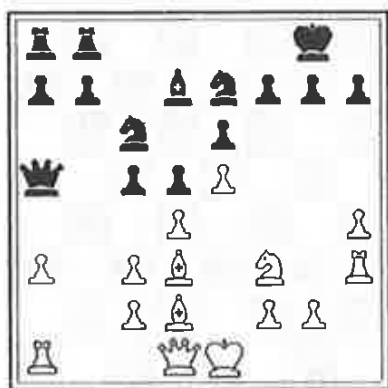
1. e4 e6 2. d4 d5 3. ♖c3 ♗b4 4. e5 c5 5. a3 ♗xc3+ 6. bc ♖e7 7. ♖f3 ♗d7 8. h4 ♖bc6

MCP4 has 9. h5 in Book here. Jurgen considered 9. Bd3, but didn't want to put MCP off 0-0! 9. ♖h3 ♗a5 10. ♗d2 O-O?!

Just what Jurgen has been waiting for!

11. ♗d3! ♖fb8

Genius3 suggests 11... Rfc8 +21. Hiarc3 and MCP4 (at 40mins) have Qa4!



12. ♗xh7+! ♗xh7 13. ♖g5+

MCP4 reads +270 here, but drops to +36 on its next

13... ♗g8

[13... ♗g6? 14. ♗g4!]

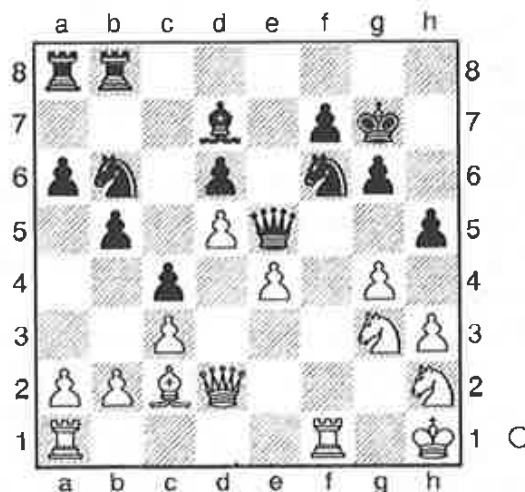
14. ♗h5 ♖g6

If MCP4 had played 11... Qa4, then 14... Qxc2 would be playable here, covering the h7 square 15. ♖f3! {A convincing win} 15... ♖cxe5 16. de ♖xe5 17. ♖xf7 ♖xf7 1:0

Printout from within ChessBase

□ R HARZVI C97 2550
■ W CHESS Pentium 2400
Internet Challenge G/30 1995

1.e4 e5 2.♖f3 ♖c6 3.♗b5 a6 4.♗a4 ♖f6 5.0-0 ♗e7 6.♖e1 b5 7.♗b3 d6 8.c3 0-0 9.h3 ♖a5 10.♗c2 c5 11.d4 ♗c7 12.♖bd2 ♗d7 13.♖f1 ♖c4 [13...cxd4 is the Book move I know, so W Chess may have been on its own now.] 14.d5 g6?! 15.♗d3 ♖b6 16.♗h6 ♖fb8 17.g4 c4 18.♗c2 ♖f8 19.♗d2 ♗xh6 20.♗xh6 ♗c8 21.♖g3 ♗f8 22.♗d2 h6?! [Signs of a well known Computer malaise: restlessness!] 23.♖h1 ♖g7 24.♖h2 ♗d8 25.f4 ♗e7 [25...exf4 26.♗xf4 ♗e7 27.♖f1±] 26.♖f1 h5 27.fxe5 ♗xe5



28.♖xh5+! ♖xh5 [28...gxh5?! 29.♖f3 ♗e7 (29...♗e8?? 30.♗g5+-; 29...♖xe4? 30.♖xe5 ♖xd2 31.♖xf7+±) 30.♗g5+±] 29.gxh5 ♖xh3 [29...♗xh5 looks possible: 30.♗f4 ♖e8±] 30.h6+ ♖g8 31.h7+ ♖xh7 32.♖xf7+ ♖g8 33.♖f3 ♖d7 34.♖g1 ♖e8 35.♗h6 ♗g7 36.♗h4 ♖d7 [36...♖d7 is not as good due to 37.e5!] 37.♖g4 ♖e5 38.♖h6+ 1-0

Getting INFO from your Computer DISPLAY with the Mephisto NIGEL SHORT

We join a demonstration game after 21... f6, with the computer (NS) to move.



22.exf6

This is found very quickly – in seconds. Here is the NS display at 2 mins. as the move is played:

What do these numbers mean?

1 2 3 4

0.24 07.01-46
e5f6 e5f6

5 6 7

[1] The evaluation for the best move found so far, as shown at [7]. NS thinks it is 0.24 pawns ahead.

[2] The current depth of search in plys. The first ply is the next half-move (exf6 itself). The next 3 plys (half-moves) can be viewed by pressing [INFO].

[3] The moves are reset after each ply into order of preference. This no. shows us the number of the move currently being searched. That move itself is shown at [6]. In this case we are at the very start of the ply 7 search which stopped as the move was played at this point.

[4] The no. of possible legal moves in the position for the side to move.

[5] An evaluation of the opponent's previous move (i.e. mine?!). Nothing there at present as this was our start position by using setup mode.

[6] The move currently under investigation (see [3] above).

[7] The best move found so far, to which the evaluation at [1] relates.

What was the NS forward analysis at this point? A press on the [INFO] button brings it into view.....

nr e5f6 e7f6
22 e3e5 e8g7

22...Qxf6

The Computer had expected Qxf6 (e7f6).

23.f5!

I have not played the expected move, so let's check the NS display to see what it thinks of my Nxf6!

We see from [5] that it rates my move at -0.24 and believes its prospects have improved!

0.49 06.01-47
-0.24 f4f5 f4f5

I'd better come clean – this is Zukertort vs Blackburne, 1883, and not Eric vs Nigel at all! But the analysis *is* the Computer's own, and it finds EVERY move played by White within its 6 ply search. Keep playing... there's a lovely Queen sac' to come!

23...Qe4 24.Qxe4 dxe4 25.fxg6 Qc2 26.gxh7+ Qh8 27.d5+ e5 28.Qb4!!

Of course you want to know if NS found this sac' as well. Don't blame you! Having expected 27...e5, it would have used some opponent's time in actual play. But I started each search from zero and though found in the 6th. ply,

it took 6½ mins to actually choose the move! Here is how this wonderful game ended:

-0.09 06.20-47
-0.39 b2c1 d2b4

28...Q8c5 29.Qf8+ Qxb7 30.Qxe4+ Qg7 31.Qxe5+ Qxf8 32.Qg7+ 1-0



World Championship 1995 - Games and Round by Round Summary

11

Here are the Round-by-Round results and my selection of the games played in the 8th ICCA World Computer Championships played in late May 1995 at The Chinese University of Hong Kong. The games were played at a rate of 40 moves in two hours followed by 40 moves per hour.

Summaries by Mike Valvo, IM are included.

First, the Equipment!

Most (11) of the 14 PC programs were running on Pentium 90's although (3), Genius, VirtuaChess and Schach 3.0 were using Pentium 120MHz machines.

Three more PC programs were on SUN SPARC 10/20 60MHz workstations. They were Ulysses, SOS and Cheiron. A fourth, Phoenix, was on a SPARC 2000.

▪Dark Thought was on a DEC 175MHz Alphaserber.

The basic main-frame info of the remote entries was as follows:-

- Deep Blue Prototype: IBM Workstation with 14 chess engines.
- Frenchess: A parallel chess program on a CRAY T3D (128 Alpha processors).
- HiTech: SUN 4 Workstation.
- Star (*)Socrates was on a 1824 node Intel Paragon supercomputer.
- Zugzwang used a 96 processor GC-Powerplus distributed system.

Round 1 Results

Deep Blue 1-0 Star Socrates
Zugzwang ½-½ Genius 3.0
Rebel 1-0 Virtua
Schach 3.0 1-0 Fritz 3.0
Hitech 1-0 Junior
Frenchess ½-½ W-Chess
Ferret 1-0 Ulysses
Dark Thought 1-0 Pandix
Phoenix 0-1 SOS
Zeus 3.0 1-0 time Nightmare

Gandalf 0-1 Cheiron
Woodpusher ½-½ L-Chess

Deep Blue - *Socrates was a quiet Colle where Socrates played an early anti-positional Nc6!? The game was a long grinding affair. **Zugzwang** - **Genius** seemed to be clearly in Genius' favor in the early going, then Genius surprised all by allowing a Queen trade after giving up a pawn for the attack. **Rebel** used an ancient opening to displace Virtua's pieces and control more space. Eventually a key pawn was dropped and the game was decided. **Fritz** played the dubious Greco counter gambit against **Schach3.0** and was never in the game. **Hitech** played Berliner's famous Be2 King's Gambit accepted against **Junior**, but Junior hung tough for a long time before caving in. **W-Chess** had a slight advantage throughout against **Frenchess**, but a peaceful ending was the result. **Ulysses** gave up the two knights for a rook and pawn, but had inadequate compensation against **Ferret**. **Dark Thought** had the slightly worse position against **Pandix**, until the latter denuded its King of protection and got mated. **Phoenix** had a tremendous position, but slowly gave it all away and eventually lost to **SOS**. **Nightmare** had a bug that kept materializing a pawn every time it considered en passant possibilities, but eventually lost on time in a dead drawn position. **Gandalf** went astray by exchanging a Knight on c6 in a Sicilian against **Cheiron**, giving Black the initiative. **Woodpusher** was thrilled to achieve a perpetual repetition against **L-Chess**.

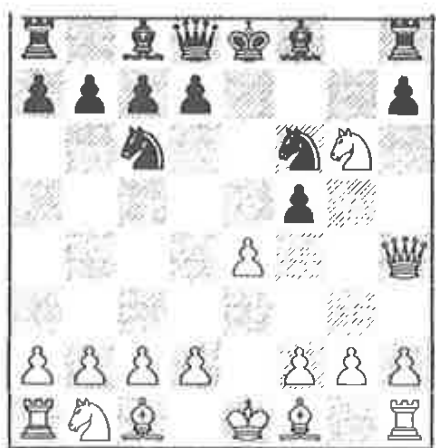
DEEP BLUE - STAR SOCRATES

1.d4 Nf6 2.Nf3 d5 3.e3 e6 4.Bd3 Nc6 5.Nbd2 Bd6 6.e4 e5 7.0-0 0-0 8.exd5 Nxd4 9.c4 Bg4 10.Re1 Nd7 11.h3 Bh5 12.g4 Bg6 13.Bxg6 fxe6 14.Kg2 Kh8? (14...Qf6! exp. by Deep Blue. The threat is to play 14...e4 after Rae8 or Nc5) 15.Nxd4 exd4 16.Ne4 Ne5 17.Bg5 Qd7 18.f4 Nxc4 19.Qxd4 Nb6 20.Nxd6 Qxd6 21.Re5

Rae8 22.Rae1 Rxe5 23.Rxe5 Nc8 24.Re6 Qd7 25.Kh2 Kg8 26.Qe5 Qa4 27.Qxc7 Qxa2 28.Qe5 Qa4 29.d6 Qc2+ 30.Kg3 Qd1 31.Kh4 Qd2 32.f5 Qf2+ 33.Qg3 Qd4 34.Qe3 Qd5 35.Qd2 Qxd2 36.Bxd2 Nb6 37.fxg6 hxg6 38.Kg5 Rd8 39.Bc3 Rd7 40.Kxg6 Kf8 41.Bd4 Nd5 42.Kf5 b6 43.h4 Nb4 44.h5 Nc6 45.Be3 Nd8 46.h6 Rf7+ 47.Ke4 g5 48.Rg6 Rh7 49.Bxg5 Nb7 50.Kd5 Kf7 51.Rf6+ 1-0

SCHACH3.0 (2400) – FRITZ3X (2450) [C40]WCC, 1995[ELH]

1.e4 e5 2.♖f3 f5?! [We have to say that the Latvian Gambit is somewhat dubious, even if Fritz does have a good built-in Book for it!] 3.♗xe5 ♗c6?! [3...♗f6 is the best way to continue once this route has been chosen] 4.♗h5+ g6 5.♗xg6 ♗f6 6.♗h4



[Probably this put Fritz out of Book as 6.♗h3 is, I think, the 'known' move] 6...hxg6 [6...♗g8!? 7.e5 ♗xg6 8.exf6 ♗xf6 9.♗xf6 ♗xf6 runs us close to the endgame already with White a Pawn+ up] 7.♗xh8 ♗e7 8.d3 fxe4 9.dxe4 ♗xe4+ 10.♗c3 ♗d5 11.♗d2 ♗xc2 12.♗h6 ♗f5 13.0-0-0 d6 14.♗e1+ ♗e5 15.♗b5+ ♗d7 16.♗d3! [Forcing the exchange of Queens virtually ends the contest] 16...♗f6 [16...♗xd3?? 17.♗xf8#] 17.♗xf6 ♗xf6 18.♗xg6+ ♗d8 19.♗g5 ♗xg6 20.♗xf6+ ♗c8 21.g3 ♗c6 22.♗hf1 ♗d7 23.f4 ♗e7 24.♗b1 ♗d5 25.♗e4 ♗e7 26.♗xe7 ♗xe7 27.f5 ♗h8 28.f6+ ♗f7 29.♗g5+ ♗g6 30.f7 ♗xg5 31.f8♗ ♗xf8 32.♗xf8 ♗g4 33.♗ef1 a6 34.♗f2 ♗h3 35.♗c1 ♗g4 36.♗d2 ♗b5 37.♗e1 c6 38.♗f7 1-0.

It was hard to believe from this that [1]

FRITZ would go on to win the title, and [2] that it's Opening Book would get the credit!

Zugzwang - Chess Genius

1.e4 d5 2.exd5 Qxd5 3.Nc3 Qa5 4.d4 Nf6 5.Nf3 Bf5 6.Ne5 c6 7.g4 Be6 8.Bg2 Nbd7 9.Nxd7 Bxd7 10.Bf3 e6 11.0-0 Be7 12.Re1 0-0 13.Ne4 Nxe4 14.Bxe4 Bd6 15.Be3 f5 16.Bd3 Qb6 17.Rb1 Qc7 18.h3 Bh2+ 19.Kg2 c5 20.dxc5 Bc6+ 21.Kf1 Qc5 22.gxf5 Qd5 23.Qg4 exf5 24.Qc4 Rf7 25.Qxd5 Bxd5 26.a3 Rc8 27.Bd4 g6 28.b4 Rd8 29.Be5 Bxe5 30.Rxe5 Kg7 31.Rbe1 Kf6 32.f4 Ba2 33.Kg2 Rc7 34.Kg3 b6 35.cxb6 axb6 36.a4 Bd5 37.Rle3 Rc3 38.h4 Be4 39.Kf2 Bxd3 40.cxd3 Rc6 41.b5 Rcd6 42.Re7 Ra8 43.d4 Rxa4 44.Kf3 Rb4 45.Kg3 Rxb5 46.Rxh7 Rxd4 47.h5 g5 48.Rh6+ Kf7 49.Rf3 Rdb4 50.fxg5 Rg4+ 51.Kh3 Rxg5 52.Rg3 Rxg3+ 53.Kxg3 Rb4 54.Rg6 b5 55.Rb6 Rg4+ 56.Kf3 b4 57.h6 Kg8 58.Rb7 Kh8 59.Kf2 Rh4 60.Kf3 Rxh6 61.Rxb4 Rg6 62.Kf2 Kg7 63.Rb5 Rf6 64.Kf1 Kg6 65.Rb7 Rd6 66.Kf2 Rd3 67.Rb8 Kg5 68.Kg1 Rd2 69.Rh8 Kg4 70.Kf1 f4 71.Rg8+ Kf3 72.Kg1 Rd+ 73.Kh2 Kf2 74.Ra8 Rd2 75.Kh3 ½-½

Rebel - Virtua Chess

1.e4 e5 2.Nf3 Nc6 3.c3 Nf6 4.d4 Nxe4 5.d5 Ne7 6.Nxe5 Ng6 7.Qd4 Qf6 8.Qxe4 Qxe5 9.Qxe5+ Nxe5 10.Bf4 d6 11.Na3 a6 12.0-0-0 Be7 13.Re1 Ng6 14.Bg5 f6 15.Bd2 0-0 16.h4 Re8 17.f4 Bf5 18.g3 Bf8 19.Bg2 Ne7 20.h5 b5 21.Nc2 Bd3 22.Rhg1 Nf5 23.Nb4 Rxe1+ 24.Rxe1 Bc4 25.b3 a5 26.Nc6 Bd3 27.Kb2 Nh6 28.Bh3 f5 29.Nd4 a4 30.Rc3 Be4 31.Nxb5 c5 32.dxc6 Bxc6 33.Nc7 Ra7 34.Ne6 Be4 35.b4 a3+ 36.Kb3 Be7 37.Nd4 Bf6 38.Nb5 Ra6 39.Nxa3 d5 40.Bf1 Ra8 41.Re1 Ng4 42.Nb5 Ra6 43.Be2 Nh2 44.Nd4 Rb6 45.Be3 Rb7 46.a4 Ng4 47.Bg1 Re7 48.Rd1 Rd7 49.a5 Rc7 50.b5 Rc8 51.b6 Rb8 52.Nc6 Re8 53.b7 d4 54.b8Q Rxb8+ 55.Nxb8 dxc3 56.Nd7 c2 57.Rc1 Kf7 58.Rxc2 Bd8 59.Rc8 Bd5+ 60.Ka4 Be7 61.Bc4 Bxc4 62.Rxc4 Ke6 63.a6 Kxd7 64.a7 Bd6 65.a8Q 1-0

Hitech - Junior

1.e4 e5 2.f4 exf4 3.Be2 d5 4.exd5 Nf6

5.Nf3 Nxd5 6.c4 Nb4 7.d4 Bf5 8.Na3 g5
9.h4 g4 10.Ne5 N4c6 11.Bxf4 Qxd4
12.Qxd4 Nxd4 13.Nb5 Nxb5 14.cxb5
Bb4+ 15.Kf2 Bd6 16.Rhe1 0-0 17.Kg3 h5
18.Bc4 Nd7 19.Nxd7 Bxf4+ 20.Kxf4 Bxd7
21.Re5 Kg7 22.Rxh5 Rad8 23.Rd1 f5
24.Rg5+ Kh7 25.Re1 Bc8 26.Re7+ Kh6
27.Bf7 Rd4+ 28.Kc3 Rfd8 29.Rh5+ Kg7
30.Bd5+ Kf6 31.Kxd4 Kxe7 32.Ke5 Re8
33.Rh7+ Kd8+ 34.Kf6 f4 35.Rf7 c6
36.bxc6 bxc6 37.Bc4 f3 38.gxf3 gxf3
39.b3 f2 40.Kg6 Rg8+ 41.Kh7 Rg2 42.h5
Ke8 43.Rf4 Rh2 44.h6 Bh3 45.Kg6 f1Q
46.Bxf1 Bxf1 47.Rxf1 Rg2+ 48.Kh7 Kd8
49.Rf7 a6 50.a4 Rg3 51.Kh8 Ke8 52.Ra7
Rxb3 53.Kg7 Rg3+ 54.Kf6 Rf3+ 55.Ke6
Re3+ 56.Kd6 Rd3+ 57.Kxc6 Rh3 58.h7
Rh6+ 59.Kd5 Rh4 60.Ke6 Kf8 61.Rf7+
Ke8 62.Rg7 Kd8 63.Kf7 Rh2 64.Kg8 Kc8
65.h8Q 1-0

Frenchess - WChess

1.e4 e5 2.Nf3 Nf6 3.d4 Nxc4 4.Bd3 d5
5.dxe5 Nc6 6.Qe2 Nc5 7.0-0 Nxd3 8.cxd3
Bg4 9.Be3 Bxf3 10.Qxf3 Nxc5 11.Qe2
Nc6 12.Bxa7+ Qe7 13.Re1 Qxe2
14.Rxe2+ Kd7 15.Be3 d4 16.Bf4 Nb4
17.Nd2 Nxd3 18.Bg3 Bb4 19.Nf3 f5 20.a3
f4 21.Rd1 fxg3 22.axb4 Rhe8 23.Rxe8
Kxe8 24.fxg3 Nxb4 25.Nxd4 Rd8 26.Re1+
Kf7 27.Rf1+ Kg6 28.Nf3 Re8 29.Nh4+
Kh5 30.h3 g5 31.g4+ Kh6 32.Nf5+ Kg6
33.Rd1 h5 34.Rd7 hxg4 35.hxg4 Re1+
36.Kh2 Rc1 Rxc7 Rxb4 42.g3 Kf6 43.Rc5
b6 44.Rc6+ Ke7 45.Kg2 Kd7 46.Rg6 Rb5
47.Kf3 Kc7 48.Ke4 Kb7 49.Rg7+ Ka6
50.Rf7 Rc5 51.Rf6 Kb5 52.Kd3 Ka5
53.Kd4 Rb5 54.Ke4 Ka4 55.Re6 Kb3
56.Rf6 Kc4 57.Rc6+ Kb4 58.Rd6 1/2-1/2

Woodpusher - LChess

1.Nf3 f5 2.c4 Nf6 3.g3 e6 4.Bg2 Be7 5.d4
0-0 6.0-0 d6 7.Nc3 Qe8 8.b3 a5 9.Bb2 Na6
10.Rc1 c6 11.e4 Nxc4 12.Nxc4 fxe4
13.Rxe4 Bd7 14.Qd2 b6 15.Rac1 Qh5
16.g4 Qg6 17.Bc3 Rf7 18.h4 Rff8 19.h5
Qf7 20.h6 g6 21.R1e2 Qe8 22.Rc1 Qf7
23.R1e2 Qe8 24.a4 Qd8 25.Rf4 Rxf4
26.Qxf4 g5 27.Qe3 Nc7 28.Bd2 Qf8 29.d5
e5 30.Qxb6 Bxg4 31.Qxc7 Bxf3 32.Bxf3
Qxf3 33.Qxe7 Qg4+ 1/2-1/2

Round 2 Results

Hitech 0-1 Deep Blue
Schach 1/2-1/2 Rebel
Genius 1-0 Frenchess
WChess 1-0 Zugzwang
Fritz 1-0 Ferret
StarSocrates 1-0 Dark Thought
Virtuachess 1-0 Zeus
Junior 1/2-1/2 SOS
Cheiron 1-0 Woodpusher
Lchess 1/2-1/2 Gandalf
Pandix 1-0 Nightmare
Ulysses 0-1 Phoenix

Hitech played an unusual form of the c3 Sicilian and got little out of the opening. After an early Bb5 and exchange on c6, **Deep Blue's** pieces leapt to life. 23...Nd3! signaled the beginning of the end. **Genius** against **Frenchess** followed book for 14 moves when Frenchess had to defend too many weaknesses. Genius patiently and surgically dissected the Black position. **Ferret** played the Center Counter against **Fritz** and soon had Queen safety problems. 15...Qxc1! would favor Black in a human's eyes (3 pieces for the Queen), but Ferret chose to die a slow, painful death. **Nightmare** was unable to cope with all his Pawn weaknesses against **Pandix** and had to resign the Rook and Pawn ending. **Schach** was out of book on move 2 of the Sicilian against **Rebel**, but seemed unconcerned. An exciting repetition of moves abruptly ended matters. **Cherion** dominated **Woodpusher's** position and began to PACMAN-like eating of pawns. **Ulysses** and **Phoenix** was a boring affair until Phoenix engineered 48...Bxe3 abruptly ending matters. **Virtua** won a Pawn soon out the opening and gradually increased its advantage. **Star Socrates** obtained a typical King side pawn majority out of an exchange Ruy Lopez against **Dark Thought**. **Junior** should have won with a early pawn advantage, but the Pawn was weak and he was unable to generate any serious play. A 1/2-1/2 was the outcome. **W-Chess** dominated the board with his powerful Knight, and **Zugzwang**, seeing his position collapsing and looming communication problems, decided to throw in the towel.

Hitech - Deep Blue

1.e4 c5 2.c3 Nf6 3.d3 Nc6 4.Nf3 d6
 5.Nbd2 e5 6.Qa4 Be7 7.d4 cxd4 8.cxd4
 Bd7 9.Bb5 a6 10.Bxc6 Bxc6 11.Qc2 0-0
 12.d5 Bd7 13.0-0 Rc8 14.Qb3 Bb5 15.Re1
 Nd7 16.Re3 Nc5 17.Qa3 f5 18.exf5 Rxf5
 19.h3 a5 20.Rc3 Bf6 21.g4 Rf4 22.Rc2
 Ra4 23.Qe3 Nd3 24.Rxc8 Qxc8 25.b3
 Rxc4+ 26.Kh1 Rf4 27.Kg2 Rxf3 28.Nxf3
 Nf4+ 29.Qxf4 exf4 30.Bb2 Bxb2 31.Re1
 Qf5 32.a4 Bd7 33.Ng1 f3+ 34.Kh2 Be5+
 35.Kh1 Qf4 36.Rxe5 dxe5 37.b4 Bxh3
 38.Nxh3 Qg4 39.Nf4 exf4 40.bxa5 Qg2#
 0-1

Chess Genius - Frenchess

1.c4 e5 2.Nc3 Nf6 3.Nf3 Nc6 4.g3 Bb4
 5.Nd5 e4 6.Nh4 Bc5 7.Bg2 d6 8.0-0 Be6
 9.Nxf6+ Qxf6 10.Bxe4 Bxc4 11.Qa4 d5
 12.d3 a6 13.Bf3 Bb5 14.Qf4 Ne7 15.Qxf6
 gxf6 16.Bf4 Bb6 17.Be3 Ba7 18.Bxa7
 Rxa7 19.Rac1 Bc6 20.Ng2 0-0 21.Nf4 Rd8
 22.d4 a5 23.e3 Ng6 24.Nh5 Rd6 25.Rc3
 Ra6 26.Rfc1 a4 27.Be2 Rb6 28.R1c2 f5
 29.Bd3 Ne7 30.Rc5 Rd8 31.Ra5 Rc8
 32.Nf4 Rd8 33.Bf1 f6 34.Ne6 Rc8 35.Nc5
 Be8 36.Nxa4 Bxa4 37.Rxa4 Kf7 38.Bd3
 Ke6 39.b4 Kd6 40.b5 c6 41.Ra5 h6
 42.Kg2 Rg8 43.a4 Rb8 44.Kh3 Ke6
 45.Kh4 h5 46.Be2 Rh8 47.Ra7 cxb5
 48.axb5 Kd6 49.Bd3 Rg8 50.Rc5 Rf8
 51.Bf1 Rb8 52.Bg2 Ng6+ 53.Kh3 Ne7
 54.Bf3 Rh8 55.Be2 Kd7 56.Bd3 Kd6
 57.Rc1 Rg8 58.Ra5 Rb8 59.Kg2 Rg8
 60.Kf3 Ke6 61.h4 Kd6 62.Rc5 Ke6 63.Ra2
 Kd7 64.Ke2 Ke6 65.Kd2 Rh8 66.Be2 Kd6
 67.Bf3 Ke6 68.Ra7 Kd6 69.Kc3 Ke6
 70.Kb3 f4 71.gxf4 Rd8 72.Ka4 Rb8
 73.Bxh5 Nc8 74.Ra5 Rd6 75.Rc7 Rd8
 76.Bf3 Nb6+ 77.Kb4 Rdc8 78.Rh7 Rc2
 79.Bg4+ Kd6 80.Rf7 Rxf2 81.Ra3 1-0

Virtua Chess - Zeus 3.0

1.e4 c5 2.Nf3 d6 3.d4 cxd4 4.Nxd4 Nf6
 5.Nc3 a6 6.Bg5 e6 7.f4 Qb6 8.Nb3 Nbd7
 9.Qf3 Be7 10.0-0-0 h6 11.Bh4 g5 12.fxg5
 Ne5 13.Qg3 Nh5 14.Qe1 hxg5 15.Bf2 Qc7
 16.Kb1 Bd7 17.Qd2 f6 18.h4 Ng7 19.Be2
 gxh4 20.Bxh4 0-0-0 21.Qd4 Nh5 22.Bxh5
 Rxh5 23.Bxf6 Be8 24.Bxe7 Qxe7 25.Rxh5
 Bxh5 26.Rh1 Bg6 27.Nd2 Qc7 28.Nf3 Qc4
 29.Qf2 Nd7 30.Rd1 Qc7 31.Ng5 Nf8
 32.Qf6 Qd7 33.Rh1 Re8 34.Rh6 Kb8

35.Rxc6 Nxc6 36.Qxc6 Rf8 37.b4 Qc6
 38.Kb2 Rc8 39.Qf6 e5 40.Qf3 Qc4 41.a3
 Qd4 42.Nh7 Rc7 43.Nf6 Rf7 44.Qh5 Rc7
 45.Nfd5 Rc8 46.Qf7 Qc4 47.g4 Qc6 48.g5
 Ka7 49.g6 Qe8 50.Ne7 Rb8 51.Qf2+ b6
 52.Ncd5 Qf8 53.Nc6+ Ka8 54.Nxb6+ Kb7
 55.Na5+ Kc7 56.Nd5+ Kd7 57.Qa7+ Ke6
 58.Qh7 Qg8 59.Qe7# 1-0

Star_Socrates - Dark Thought

1.e4 e5 2.Nf3 Nc6 3.Bb5 a6 4.Bxc6 dxc6
 5.0-0 f6 6.d4 Bg4 7.dxe5 Qxd1 8.Rxd1
 fxe5 9.Rd3 Bd6 10.Nbd2 b5 11.b3 Ne7
 12.Bb2 Ng6 13.g3 0-0 14.Kg2 Rfe8 15.h3
 Bd7 16.Rd1 Rf8 17.Bxe5 Bxh3+ 18.Kxh3
 Bxe5 19.Kg2 Bd6 20.Rc3 c5 21.Ne1 Ne5
 22.f4 b4 23.Re3 Ng4 24.Rf3 Rad8 25.Nc4
 Be7 26.Rfd3 Nf6 27.Kf3 Rxd3+ 28.Nxd3
 Rd8 29.Na5 Bf8 30.e5 Ne8 31.Nc6 Ra8
 32.Ke4 a5 33.Kd5 c4 34.Kxc4 Ra6 35.Kd5
 Rb6 36.Nb2 Ra6 37.f5 Kh8 38.Nc4 a4
 39.N4a5 axb3 40.cxb3 Ra8 41.Ke6 Bc5
 42.Rd8 Rxd8 43.Nxd8 Bf2 44.Kf7 Nd6+
 45.exd6 cxd6 46.g4 d5 47.g5 Be3 48.g6
 hxg6 49.fxg6 Bg5 50.Nac6 Bh4 51.Kf8
 Bxd8 52.Nxd8 d4 53.Nf7# 1-0

WChess - Zugzwang

1.e4 e6 2.d4 d5 3.Nd2 c5 4.cxd5 exd5
 5.Ngf3 Nc6 6.Bb5 Bd6 7.dxc5 Bxc5 8.0-0
 Nge7 9.Nb3 Bd6 10.Re1 0-0 11.Bg5 Bg4
 12.Bh4 Re8 13.Bg3 Bxg3 14.hxg3 Qb6
 15.a4 h6 16.Qd2 Bxf3 17.gxf3 Rad8
 18.Rad1 Rd6 19.c4 Qd8 20.Nd4 a6
 21.Bxc6 bxc6 22.c5 Rf6 23.Re5 Ng6
 24.Rxe8+ Qxe8 25.Re1 Qb8 26.Re2 Ne5
 27.Qe3 Nc4 28.Qe8+ Qxe8 29.Rxe8+ Kh7
 30.b4 Nd2 31.Kg2 Nc4 32.Ra8 a5 1-0

Fritz - Ferret

1.e4 d5 2.exd5 Qxd5 3.Nc3 Qa5 4.d4 Nf6
 5.Bc4 Nc6 6.Nge2 Bd7 7.0-0 e5 8.Bd2
 Bd6 9.Nd5 Qa4 10.b3 Qa3 11.Nxf6+ gxf6
 12.c3 Bg4 13.b4 Ne7 Bxf1 17.Rxf1 0-0-0
 18.Qb3 Rhf8 19.b5 Kb8 20.Bxd6 Rxd6
 21.Rd1 Re6 22.dxe5 fxe5 23.Qc4 Rc8
 24.Rd7 Rd6 25.Rxd6 cxd6 26.Qxf7 Rxc3
 27.g4 Nc8 28.Qxh7 Rc4 29.Qf5 Rc5 30.g5
 e4 31.Qf6 1-0

Schach 3.0-Rebel

1.e4 c5 2.Bb5 a6 3.Be2 Nc6 4.d3 e6 5.Nf3
 d5 6.Bf4 Nge7 7.Bg3 Ng6 8.0-0 f5 9.h3

Be7 10.Nbd2 0-0 11.exd5 exd5 12.c3 Rc8
13.d4 f4 14.Bh2 cxd4 15.Nxd4 Nxd4
16.cxd4 Bf6 17.Nf3 Bf5 18.Bd3 Bxd3
19.Qxd3 Qb6 20.Qf5 Rad8 21.Bxf4 Rc4
22.Be5 Ne7 23.Qh5 g6 24.Qh6 Nf5
25.Qd2 Nxd4 26.Bxd4 Bxd4 27.Rab1 Bg7
28.b4 Rc4 29.Rfc1 Qc7 30.Qc3 Qc6
31.Re1 Re4 32.Qa3 Rf8 33.Rxc4 dxe4
34.Qb3+ Kh8 35.Ng5 Bd4 36.Rd1 Bxf2+
37.Kh1 Bh4 38.Nf7+ Kg7 39.Nc5 Qc8
40.Rd7+ Kh8 41.Nf7+ Kg7 42.Nc5+ Kh8
½-½

Pandix - Nightmare

1.d4 c6 2.c4 d5 3.Nc3 dxc4 4.c4 e5 5.Nf3
exd4 6.Qxd4 Qxd4 7.Nxd4 Nf6 8.f3 b5
9.a4 b4 10.Nd1 Ba6 11.Bf4 Bc5 12.Nf5
0-0 13.Rc1 Nbd7 14.Bxc4 Bxc4 15.Rxc4
Rfc8 16.Bd6 Bxd6 17.Nxd6 Ne5 18.Nxe8
Nxc4 19.Nxf6+ gxf6 20.Rf1 Rd8 21.Rf2
Kg7 22.Rc2 Ne5 23.Kc2 a6 24.Nc3 Rd7
25.g3 Rc7 26.f4 Nd7 27.Nd5 b3 28.Rc3
Rc8 29.Ke3 Kf8 30.a5 f5 31.Nb6 Nxb6
32.axb6 Rc8 33.e5 a5 34.Rxb3 a4 35.Rc3
f6 36.Rxc6 Kg7 1-0

Round 3 Results

Deep Blue 1-0 Cheiron
Ferret 0-1 Hitech
Zeus 0-1 Frenchess
Woodpusher 0-1 Junior
Nightmare ½-½ Ulysses
Rebel ½-½ Chess Genius
Gandalf ½-½ Zugzwang
Wchess ½-½ Schach 3
Phoenix 0-1 Fritz
SOS ½-½ Pandix
Dark Thought 1-0 Virtua Chess
LChess 0-1 Star Socrates

Deep Blue-Cheiron ended violently with a Rook sacrifice that initiated a mating attack. **Rebel-Genius** was a peaceful affair throughout. **Ferret-Hitech** was interesting in the beginning, but Ferret was increasingly unable to cope with his pawn weaknesses and the two Bishops. **Zeus** tried an unusual gambit against **Frenchess**, but never obtained compensation. **SOS-Pandix** essayed the same first two moves, but waited until move 15 to gambit a Pawn with the same result as in the previous

game. **Woodpusher** played an unsound Nb5 attack against **Junior** and got smashed. **LChess** "won" the two Bishops against ***Socrates**, but it turned out to be good for the Knights! **Nightmare-Ulysses** was another quietly drawn affair, as was **Gandalf-Zugzwang**. **Dark Thought** was in the process of establishing a massive center when **Virtuachess** tried to relieve the pressure with a piece sacrifice to no avail. **Phoenix** was swept away with Pawn center v **Fritz**. **WChess-Schach** was another in the many draws this round.

Deep Blue - Cheiron

1.Nf3 Nf6 2.b3 Nc6 3.Bb2 d6 4.e3 e5
5.Bb5 Bc7 6.d4 e4 7.Nfd2 Bg4 8.f3 exf3
9.gxf3 Bh3 10.Nc3 0-0 11.Bxc6 bxc6
12.Qe2 Rb8 13.Rg1 Qc8 14.d5 Qb7
15.Qf2 Nh5 16.Ne2 Bd7 17.Nf4 Bf6
18.Bxf6 Nxf6 19.Qh4 Kh8 20.Rxg7 Qb6
1-0

Zeus - Frenchess

1.e4 c5 2.d4 exd4 3.f4 Nc6 4.Nf3 Bc5 5.a3
a5 6.Bd3 Nf6 7.0-0 d5 8.e5 Ng4 9.Qe2 0-0
10.h3 Nc3 11.Bxe3 dxe3 12.Nc3 Ne7
13.Ng5 h6 14.Na4 Ba7 15.Bh7+ Kh8
16.Bd3 c5 17.Qh5 c4 18.Be2 Kg8 19.Nf3
Nf5 20.Nc3 d4 21.Ne4 d3 22.cxd3 g6
23.Nf6+ Kg7 24.Qg4 Nd4 25.Qh4 Nxe2+
26.Kh2 cxd3 27.g4 Rh8 28.Ne1 Nd4
29.Nxd3 Nc2 30.Rac1 Qxd3 0-1

Rebel - Chess Genius

1.Nf3 d5 2.c4 c6 3.cxd5 cxd5 4.d4 Nf6
5.Nc3 Nc6 6.Bf4 a6 7.e3 Bg4 8.Bd3 e6
9.0-0 Be7 10.h3 Bh5 11.Rc1 0-0 12.a3
Rc8 13.Qe2 Bg6 14.Na4 Bxd3 15.Qxd3
Ne4 16.Rc2 Qa5 17.Nc3 Nd6 18.Rfc1 Nc4
19.Ng5 Bxg5 20.Bxg5 f6 21.Bf4 Ne7
22.e4 dxe4 23.Nxe4 Qf5 24.Rxc4 Rxc4
25.Rxc4 Qxf4 26.g3 Qb8 27.Rc2 Qd8
28.Qb3 Qd5 29.Qxd5 exd5 30.Nd6 Nc6
31.Rc5 Re8 32.f4 Kf8 33.Kf2 Nxd4
34.Rxd5 Nb3 35.Rd3 Nc5 36.Rd2 Rd8
37.Ke3 Nb3 38.Rd3 ½-½

W-Chess - Schach 3

1.e4 c5 2.c3 Nf6 3.e5 Nd5 4.Nf3 d6 5.d4
e6 6.Bd3 cxd4 7.cxd4 dxe5 8.dxe5 Bb4+
9.Bd2 Nf4 10.Bb5+ Bd7 11.Bxd7+ Qxd7
12.0-0 Bxd2 13.Nbxd2 0-0 14.Nc4 b5

15.Na3 a6 16.Qc2 Qd3 17.Rad1 Qxc2
18.Nxc2 Nc6 19.Ncd4 Rac8 20.Nxc6 Rxc6
21.g3 Ne2+ 22.Kg2 Rc2 23.Rd2 Rxd2
24.Nxd2 Rc8 25.Nb3 Rd8 26.Kf3 Nd4+
27.Nxd4 Rxd4 28.Rc1 Kf8 29.Ke3 Ra4
30.a3 b4 31.axb4 Rxb4 32.Rc8+ Ke7
33.Rc7+ Ke8 34.Rc2 Kd7 35.Rd2+ Kc6
36.f4 a5 37.Rd6+ Kc7 38.Rd2 Rb5 ½-½

Phoenix - Fritz

1.c4 e5 2.Nc3 d6 3.Nf3 g6 4.g3 f5 5.d3
Bg7 6.Bg2 Nc6 7.Bg5 Nf6 8.d4 e4 9.Nd2
Ne7 10.0-0 h6 11.Bf4 g5 12.Be3 Ng4
13.Qb3 0-0 14.c5+ d5 15.h3 Nxe3 16.fxe3
c6 17.Kh2 Kh8 18.Rad1 Qc7 19.Na4 b5
20.cxb6 axb6 21.Qxb6 Qxb6 22.Nxb6
Rxa2 23.b3 Ba6 24.Rfe1 Bb5 25.Nb1 Bxe2
26.Rd2 Rxd2 27.Nxd2 Bh5 28.Nd7 Ra8
29.Nf1 Ra3 30.Nc5 f4 31.exf4 gxf4
32.gxf4 Bxd4 33.Nxe4 dxe4 34.Rxe4 Bf6
35.Rb4 Bf7 0-1

Dark Thought - Virtua Chess

1.d4 Nf6 2.c4 e6 3.Nc3 Bb4 4.e3 0-0
5.Bd3 Nc6 6.Nge2 d5 7.cxd5 exd5 8.a3
Bd6 9.Nb5 Be7 10.0-0 Re8 11.f3 a6
12.Nbc3 Bd6 13.Bc2 Qe7 14.e4 dxe4
15.fxe4 Bg4 16.Be3 Rad8 17.Qe1 Bxe2
18.Qxe2 Nxd4 19.Bxd4 Bxh2+ 20.Kxh2
Rxd4 21.Kh1 Qd6 22.Rad1 c5 23.Qf3 Re5
24.Kg1 Qe6 25.Qg3 Qd6 26.Rf5 Rxd1+
27.Nxd1 Qd4+ 28.Ne3 Re8 29.Rf2 Qe5
30.Qxe5 Rxe5 31.Nc4 Re6 32.e5 Nd7
33.Rd2 Nf8 34.Bf5 Re7 35.Rd8 h5 36.Bc8
g6 37.Nd6 Rxe5 38.Bxb7 Re2 39.Nc4 Kg7
40.Bxa6 Ne6 41.Rd2 Re4 42.Nd6 Re1+
43.Kf2 Rc1 44.Bc4 Ng5 45.Bd5 Kf8
46.Kg3 f6 47.a4 Ke7 48.Nb7 Nf7 49.a5
Ne5 50.a6 c4 51.a7 Ra1 52.Nd6 Kxd6
53.a8Q Rxa8 54.Bxa8+ Kc5 55.Rd5+ Kb4
56.Rd6 f5 57.Re6 Nd3 58.Rxg6 f4+
59.Kh4 Nxb2 60.Rf6 Kc3 61.Rxf4 1-0

Results Round 4

Deep Blue ½-½ Wchess
Chess Genius ½-½ Schach
Frenchess 1-0 Cheiron
Fritz 1-0 DarkThought
StarSocrates 1-0 Rebel
Virtuachess 1-0 Lchess
SOS 0-1 Hitech
Junior 1-0 Pandix

Ulysses 1-0 Woodpusher

Gandalf 0-1 Nightmare

Zugzwang 1-0 Ferret

Zeus 1-0 Phoenix

There were several surprises in round 4. **Deep Blue** only managed to draw against **WChess** setting up an exciting final round to decide who will be world champion. Deep Blue, Fritz, Hitech and Star Socrates all still have the chance of taking the title. According to GM Robert Byrne, the key error by Deep Blue was when it played 37... Bd5 followed by 38... Ra8 exchanging rooks in a position where it needed its rook to help the advance of its two queen-side pawns and maintain winning chances. The game **Schach -Genius** was a long one which ended surprisingly ½-½. Genius had a clear advantage but allowed Schach to swindle the draw when it missed perpetual check. **Fritz** defeated **Dark Thought** in a Pirc opening, to set up an exciting final round pairing against Deep Blue.

I.M Mike Valvo comments: One of the surprises of the tournament is that Fritz 3, running on a stock Pentium 90Mhz supplied by the University has so far obtained a better tournament result than either W-Chess or Genius which are both run on 120MHz pentiums shipped to Hong Kong by their respective teams.

Of course the comparison is not statistically significant since they have encountered opposition of very different strengths (WChess has already played Deep Blue) and the number of games is extremely small.

Standings after 4 rounds

- 1 Deep Blue (3½)
- =2 Fritz, Hitech, Star Socrates (3)
- =5 Chess Genius, Frenchess, Junior, WChess, Schach (2½)
- =10 Cheiron, Dark Thought, Rebel, SOS, Virtuachess, Zeus, Zugzwang (2)
- =17 Ulysses, Nightmare, Pandix (1½)
- =20 Ferret, Gandalf, Lchess, Phoenix (1)
- 24 Woodpusher (½)

WChess - Deep Blue

1.e4 c5 2.c3 d5 3.exd5 Qxd5 4.d4 Nf6

5.Nf3 e6 6.Be2 Nc6 7.0-0 cxd4 8.cxd4 Be7
9.Nc3 Qd6 10.Nb5 Qd8 11.Bf4 Nd5
12.Bg3 a6 13.Nc3 0-0 14.Qb3 Nf6 15.Rfd1
b5 16.a3 Bb7 17.Qa2 Na5 18.b4 Rc8
19.Rac1 Nc6 20.Bf4 Re8 21.d5 exd5
22.Nxd5 Nxd5 23.Qxd5 Qxd5 24.Rxd5
Bxb4 25.axb4 Rxc2 26.Be3 Re8 27.Rd7
Ba8 28.Nd2 Nxb4 29.Kf1 R2xc3 30.fxe3
Nd5 31.Kf2 h6 32.Nf1 Nb4 33.Nd2 Bd5
34.Rb1 Be6 35.Ra7 Nd3+ 36.Ke2 Nc5
37.Rb4 Bd5 38.g3 Ra8 39.Rxa8+ Bxa8
40.Rd4 Kh7 41.Rd8 Bb7 42.Rb8 Bh1
43.Rc8 Ne6 44.e4 Bg2 45.Ke3 Bh3 46.Rc6
f5 47.Rxa6 Nc5 48.Rd6 Nxc4 49.Nxe4
fxe4 50.Kf2 Bg4 51.Rb6 Bf3 52.Rxb5 g5
53.Ke3 Kg7 54.Rb7+ Kg6 55.Rb6+ Kg7
56.Re6 h5 57.Rd6 h4 58.g4 Bxg4 59.Kxe4
Bh3 60.Rd3 Bg4 ½-½

Chess Genius - Schach

1.c4 Nf6 2.Nf3 d6 3.Nc3 e5 4.d4 e4 5.Ng5
Bf5 6.g4 Nxg4 7.Ngxe4 Bxe4 8.Nxc4 d5
9.cxd5 Bb4+ 10.Bd2 Bxd2+ 11.Qxd2 0-0
12.Bg2 Nd7 13.Rc1 Rc8 14.Bf3 Ngf6
15.Rg1 Nxe4 16.Bxe4 Nf6 17.Bf3 Qd6
18.Rg3 Rfc8 19.Rc5 Nd7 20.Rc2 Re7
21.Qa5 Ree8 22.Kf1 a6 23.Qc3 Nf6
24.Qb3 Rb8 25.e3 Kh8 26.Kg1 Re7
27.Rc5 Kg8 28.Rc3 h6 29.a3 Kf8 30.Rc5
Kg8 31.Rc1 Kh8 32.Rc3 Kg8 33.Rc2 Kf8
34.Rc1 Kg8 35.Kh1 Kh8 36.Rcg1 g6
37.Rc1 Kg7 38.Kg1 Kh7 39.Rc5 Nd7
40.Rc2 f5 41.Rg2 Nb6 42.Rc1 Rd8 43.a4
Rb8 44.h4 a5 45.Rc5 Ra8 46.Qc2 Rf7
47.b3 Ra6 48.Qc3 Qd8 49.Rh2 Nc8
50.Rxa5 Rxa5 51.Qxa5 Nd6 52.Qc5 Qe7
53.h5 g5 54.Qc2 Nc8 55.Rh1 Kg7 56.Kf1
Qb4 57.Ke2 Qd6 58.Bg2 Qf6 59.Qd3 Qe7
60.Kd2 Qa3 61.Qc2 Nb6 62.Ke2 Kg8
63.Bf3 Kh8 64.Re1 Kg8 65.Kf1 Qb4
66.Ra1 Qd6 67.Qc5 Qd8 68.a5 Nc8 69.a6
bxa6 70.Rxa6 Nd6 71.Qc2 Kg7 72.Rc6
Re7 73.Be2 Kf7 74.b4 Kg8 75.b5 Rf7
76.Bd3 Kg7 77.Qb1 Qb8 78.Ke2 Kh7
79.b6 cxb6 80.Rxb6 Qf8 81.Rb8 Qe7
82.Ra8 Rf8 83.Ra6 Kg8 84.Kf1 g4 85.Qb6
Rd8 86.Ra7 Qf6 87.Bxf5 g3 88.f4 Qh4
89.Be6+ Kh8 90.Qc7 Qh1+ 91.Ke2 Qg2+
92.Kd1 Qf1+ 93.Kd2 Qg2+ 94.Kc1 Qf1+
95.Kb2 Qe2+ 96.Kb1 Qd1+ 97.Ka2 Qe2+
98.Ka1 Qf1+ 99.Ka2 Qe2+ 100.Kb3 Qd3+
½-½

Frenchess - Cheiron

1.e4 c5 2.Nf3 Nc6 3.d4 cxd4 4.Nxd4 Nf6
5.Nc3 e5 6.Ndb5 d6 7.Bg5 a6 8.Na3 b5
9.Nd5 Be7 10.Bxf6 Bxf6 11.Nb1 Bg5
12.a4 b4 13.Nd2 0-0 14.Bc4 Kh8 15.0-0 f5
16.Nc3 Bd7 17.Nb3 Be3 18.fxe3 Qc7
19.Qd3 fxe4 20.Qxe4 a5 21.Bd3 g6
22.Bb5 Rab8 23.Qc4 Rxf1+ 24.Rxf1 Rc8
25.Qh4 Kg7 26.Nd4 Re8 27.Qf6+ Kh6
28.Bxc6 Qd8 29.Bxd7 Qxf6 30.Rxf6 Rd8
31.Rxd6 exd4 32.exd4 Kg7 33.Rd5 1-0

Fritz - Dark Thought

1.e4 d6 2.d4 Nf6 3.Nc3 g6 4.f4 Bg7 5.Nf3
c5 6.dxc5 Qa5 7.Bd3 Qxc5 8.Qe2 0-0
9.Be3 Qa5 10.h3 Qb4 11.0-0 Qxb2 12.Nb5
Ne8 13.e5 dxe5 14.fxe5 Qb4 15.Nxa7 Nc6
16.Rab1 Qa3 17.Nxc8 Rxc8 18.Rxb7 Nc7
19.Bc4 Nxe5 20.Nxe5 Bxe5 21.Bb3 Bf6
22.Rd1 Qa6 23.Qf3 Nb5 24.Rdd7 Qa5
25.Rxe7 Bxe7 26.Rxe7 Qc3 27.Bxf7+ Kh8
28.Qf4 g5 29.Qxg5 Rxf7 30.Rxf7 Nd6
31.Re7 Ne8 32.Qh4 Nf6 33.Bd4 Qxd4+
34.Qxd4 Rc6 35.Qe5 Rb6 36.Qg5 Rb1+
37.Kh2 Ng4+ 38.hxg4 Rh1+ 39.Kxh1 h5
40.Qg7# 1-0

Junior - Pandix

1.e4 e5 2.Nf3 Nc6 3.Bb5 a6 4.Ba4 Nf6
5.0-0 Be7 6.d4 cxd4 7.e5 Ne4 8.Re1 Nc5
9.Bxc6 dxc6 10.Nxd4 0-0 11.c3 Ne6
12.Nf5 Bg5 13.Qg4 Bxc1 14.Rxc1 Ng5
15.Qf4 f6 16.Ne3 Be6 17.Rd1 fxe5
18.Qxe5 Qf6 19.Qxf6 Rxf6 20.Nd2 Rf4
21.Nb3 Raf8 22.f3 Re8 23.Re1 Bxb3
24.axb3 Kf7 25.h3 Re5 26.Rad1 Ne6
27.Kf2 Kc7 28.g3 Rf8 29.f4 Rb5 30.b4
Rh5 31.h4 g6 32.c4 Rf7 33.Ng4 Rf8
34.Ne5 Rg8 35.Rd7+ Ke8 36.Rd3 Ke7
37.Nf3 Kf6 38.g4 Rg7 39.Rde3 Nf8
40.gxh5 1-0

Zeus 3 - Phoenix

1.e4 c6 2.d4 d5 3.e5 Bf5 4.Nc3 e6 5.g4
Bg6 6.Nge2 c5 7.Be3 Nc6 8.dxc5 Nxe5
9.Nf4 d4 10.Nxg6 hxg6 11.Bb5+ Ke7
12.Bf4 f6 13.Bxe5 fxe5 14.Qf3 Rb8
15.0-0-0 a6 16.Bc4 Qc7 17.Ne4 Nf6
18.Ng5 Qxc5 19.Bxe6 Qd6 20.Qd3 Rh6
21.Rde1 Nh7 22.Nf3 Rh3 23.Bc4 Nf6
24.Rxe5+ Kd8 25.Rhe1 Kc7 26.Be6 g5
27.Bf5 b5 28.Kb1 Ra8 29.a3 Rb8 30.Re6
Qd5 31.Qd2 Bd6 32.Nxd4 Bc5 33.Rxf6

gxf6 34.Nxb5+ Kc6 35.Be4 Qxe4 36.Rxe4
Rxb5 37.Re6+ Kc7 38.Qd5 1-0

Star Socrates - Rebel

1.e4 c5 2.c3 d5 3.exd5 Qxd5 4.d4 cxd4
5.cxd4 Nc6 6.Nf3 e5 7.Nc3 Bb4 8.Bd2
Bxc3 9.Bxc3 e4 10.Ne5 Nxe5 11.dxc5
Ne7 12.Qa4+ Bd7 13.Qb4 a5 14.Qd6 Bc6
15.Rd1 Qxa2 16.Qc5 Qe6 17.Bc4 Qg4
18.0-0 b6 19.Qe3 b5 20.Be2 Qc8 21.Qg5
b4 22.Bd4 Ng6 23.e6 f6 24.Qc5 Ne7
25.Bc4 Qb7 26.Qh5+ g6 27.Qh4 Nf5
28.Qxf6 Rf8 29.Qg5 Nxd4 30.Rxd4 Rf5
31.Qe3 a4 32.Rfd1 Rb8 33.Rd6 Qb6
34.Qg3 e3 35.fxe3 Qc5 36.e7 Qxc4 1-0

Results Round 5

Deep Blue 0-1 Fritz
Dark Thought 0-1 Frenchess
Pandix ½-½ Ulysses
Phoenix 1-0 LChess
Genius ½-½ W Chess
Rebel 1-0 SOS
Ferret 1-0 Nightmare
Cheiron ½-½ Virtua Chess
HiTech 0-1 Star Socrates
Gandalf ½-½ Woodpusher
Zugzwang 1-0 Zeus
Schach3 0-1 Junior

Dark Thought - Frenchess

1.d4 d5 2.c4 c6 3.Nf3 Nf6 4.Nc3 dxc4 5.a4
Bf5 6.e3 e6 7.Bxc4 Bb4 8.0-0 Nbd7 9.Nh4
Bg6 10.Qb3 a5 11.g3 Qb6 12.Nxg6 hxg6
13.Rd1 0-0-0 14.Bf1 Rh5 15.Bg2 g5 16.f3
Rdh8 17.h3 Rxh3 18.Bxh3 Rxh3 19.Ne2
g4 20.fxg4 Nxg4 21.e4 Rh2 22.Bf4 Rf2
23.Nc1 g5 24.Bxg5 Nde5 25.Rd3 Nxd3
26.Qxd3 Be7 27.Qd1 Bxg5 28.Qxg4 Qxd4
0-1

Fritz created what can only be described as a *sensation* by managing to win against Deep Blue Prototype, thanks entirely to careful preparation of its better opening library.

The Deep Blue Prototype was out of its opening book in a highly complex position where concrete analysis and calculation was of less use than the home preparation and chess knowledge.

DEEP BLUE (2550) – FRITZ3X (2450) [B33]WCC, 1995/ELII

1.e4 c5 2.♘f3 ♘c6 3.d4 cxd4 4.♘xd4 ♘f6
5.♘c3 e5 6.♘db5 d6 7.♙g5 a6 8.♘a3 b5
9.♙xf6 gxf6 10.♘d5 f5 11.♘d3 ♙e6 12.♙h5



[All good Sicilian Pelican theory so far!] 12...f4?! [Not a totally new move, but it is rarely in the PC program books. The FRITZ team added the transposition, aware that most programs on their own will answer wrongly! Would DBP? Usual is 12...♞g8! 13.g3! (13.0-0?? is in Sveshnikov's book on the Pelican, with a big + to Black after 13...f4!! The programs all have this in Book so play 13.g3.) 13...♘d4 is +/-equal; 12...♙g7 is also good.] 13.0-0?? [DBP has indeed gone out of Book and falls for the trap. It sees the vital need for King safety so castles after a very short 'think' – right into the pit! 13.g3 is correct according to Sveshnikov, but with no further analysis! Perhaps 13...♙xd5 14.exd5±] 13...♞g8! [Played immediately as prepared 'in hope' by the FRITZ team] 14.♙h1 [14.♙xh7?! ♞g6 15.♙h5 ♙g4∞] 14...♞g6 15.♙d1? [15.g3 ♙g4 16.♙xh7 ♞h6 probably leads to a draw by repetition] 15...♞c8 [FRITZ is on its own now, but well able to find strong moves in this position!] 16.c4?! [16.♙c2 may be best here, or f3!?] 16...♙h4! 17.g3 ♙h3 18.♙d2 f3 19.♞g1 ♞h6 20.♙xh6 [No choice about it... the game is lost] 20...♙xh6 21.exb5 ♙xd5 22.exd5 ♘b4 23.♙f5 ♞c5 24.bxa6 ♘xa6 25.♘c2 ♙d2 26.♘e1 ♞xd5 27.♘xf3 ♙xf2 28.♙e4 ♞a5 29.♞g2 ♙e3 30.♞e1 ♙h6 31.♙c6+ ♘d8 32.a3 f5 33.♞c2 ♞c5 34.♞xc5 ♘xc5 35.♞f1 ♙e7 36.a4 f4 37.gxf4 ♙xf4

38.♖g1 ♠xa4 39.b4 ♣xb4 0-1

Chess Genius - W-Chess

1.c4 c6 2.d4 d5 3.Nc3 Nf6 4.Nf3 dxc4 5.a4 Bf5 6.Ne5 e6 7.f3 Bb4 8.Bg5 h6 9.Bh4 c5 10.dxc5 Qa5 11.Qd4 Nc6 12.Nxc6 bxc6 13.e4 Bg6 14.Bf2 0-0 15.Be2 Rfd8 16.Qxc4 Nd7 17.0-0 Bxc5 18.Bxc5 Qxc5+ 19.Qxc5 Nxc5 20.b4 Nb3 21.Ra2 Nd4 22.Rb1 a5 23.Bc4 axb4 24.Rxb4 Ra5 25.Kf2 Kh7 26.Rab2 e5 27.Ke3 Rc5 28.Ne2 f5 29.exf5 Bxf5 30.Bb3 Nxb3 31.R4xb3 Kg6 32.Ra3 Ra5 33.Rb6 Rd6 34.Rb7 Bc2 35.Rb4 c5 36.Rb5 Rxa4 37.Rxa4 Bxa4 38.Rxc5 Kf6 39.Nc3 Bc6 40.h4 Ke6 41.Nb5 Bxb5 42.Rxb5 Ra6 43.Rb4 Ra2 44.g4 Ra7 45.Ke4 Ra6 46.h5 Rd6 47.Rb7 Rd4+ 48.Ke3 Rd7 1/2-1/2

Hitech - StarSocrates

1.d4 d5 2.c4 c6 3.Nc3 Nf6 4.cxd5 cxd5 5.f3 Nc6 6.e4 e6 7.e5 Nd7 8.f4 Bb4 9.Nf3 Qa5 10.Bd2 Qb6 11.Na4 Bxd2+ 12.Qxd2 Qb4 13.Nc3 Nb6 14.Nb5 0-0 15.Rc1 Qxd2+ 16.Kxd2 f6 17.Nd6 fxe5 18.fxe5 Nb4 19.a3 Nc6 20.Bb5 Bd7 21.Ke3 Rab8 22.Rhf1 Nc8 23.Nxc8 Rfxc8 24.Bxc6 bxc6 25.b4 a5 26.bxa5 Rb5 27.Rc5 Rxc5 28.dxc5 Ra8 29.Rc1 Rxa5 30.Rc3 Kf7 31.Nd4 g5 32.Nc2 Kg6 33.h3 h5 34.Kd4 Ra4+ 35.Nb4 g4 36.Rg3 Kg5 37.Rb3 Be8 38.hxg4 Kxg4 39.g3 Ra7 40.Re3 Ra4 41.Rd3 Ra8 42.Rc3 Bd7 43.Re3 Kh3 44.Rf3 Kg2 45.Rf7 Be8 46.Re7 Kxg3 47.Rg7+ Kf4 48.Rg8 Kf5 49.Rf8+ Kg5 50.Rg8+ Kh6 51.Rf8 Kg7 52.Rf3 h4 53.Rh3 Ra4 54.Rf3 Bg6 55.Rb3 Be4 56.Rc3 Bg2 57.Ke3 d4+ 58.Kxd4 h3 59.Rc1 h2 60.Kc4 Ra8 0-1

Rebel - SOS

1.e4 c5 2.b3 b6 3.Bb2 Bb7 4.Nc3 e6 5.Nf3 a6 6.d4 cxd4 7.Nxd4 d6 8.Bd3 Nd7 9.0-0 Ngf6 10.b4 Be7 11.f4 0-0 12.Qe2 b5 13.Kh1 Qb6 14.Nb3 Rfc8 15.a3 Qc7 16.Na5 Rcb8 17.Nxb7 Rxb7 18.Rae1 Rf8 19.e5 dxc5 20.fxe5 Ne8 21.Rd1 g6 22.Na2 Nb6 23.Nc1 Na4 24.Bd4 Rb8 25.c4 bxc4 26.Bxc4 a5 27.Bb5 Nb6 28.bxa5 Nd5 29.Nb3 Bxa3 30.a6 Rc8 31.a7 Qe7 32.Bc6 Nec7 33.Qf3 h6 34.Qh3 h5 35.Qf3 Bb4 36.Rc1 Ba3 37.Rc4 Bb4 38.Nc5 Rcd8 39.Ra1 Nb6 40.Rxb4 Rxd4 41.Rxd4 Qxc5

42.Qe4 Nca8 43.Rd6 Qc3 44.Rad1 Nc7 45.Qd4 Nbd5 46.Qxc3 Nxc3 47.Rf1 N3b5 48.a8Q Nxa8 49.Bxb5 Nc7 50.Bc4 Ne8 51.Rd7 Ng7 52.Rf6 g5 53.g3 h4 54.g4 h3 55.Kg1 1-0

Final Standings

- 1 **Fritz** (4/5, 5/6): Fritz won the title on the playoff versus Star Socrates.
- 2 **Star Socrates** (4/5, 4/6)
- =3 **Deep Blue Prototype, Frenchess, Junior** (3½/5)
- =6 **Rebel, Chess Genius, WChess, Zugzwang, Hitech** (3/5)
- =11 **Cheiron, Schach3, Virtuachess** (2½/5)
- =14 **Zeus3, Ulysses, Phoenix, Ferret, Dark Thought, SOS, Pandix** (2/5)
- =21 **Gandalf, Nightmare** (1½/5)
- =23 **Woodpusher, Lchess** (1/5)

Championships Playoff

Fritz became the new World Computer Chess Champion after winning the one game playoff, which was played under standard time controls of 40 moves in 2 hours followed by 40 moves per hour. The colors in the playoff were decided by the toss of a coin and Fritz had to start the game by defending with the black pieces. The playoff was a tense game in which Fritz managed to obtain an opening advantage on the black side of the Ruy Lopez opening.

The game started at 9pm on Monday 29 May and lasted until about 3am on Monday 30 May, Hong Kong time. By winning the championships Fritz demonstrated that chess knowledge was at least as important as computing power - Fritz was using one of the least powerful computers in the tournament (a standard Pentium 90MHz PC supplied by the Chinese University of Hong Kong).

Fritz's opponent in the playoff was StarSocrates, a powerful chess computer system developed by MIT Laboratory for Computing Science. StarSocrates was using the Intel Paragon parallel supercomputer located at the Sandia National

Laboratories, USA. The Paragon is 50 feet long and weighs 30,000 pounds, and has 1824 processors, each with 16 or 32 MByte of memory.

The game was played at the Chinese University of Hong Kong, with the Star-Socrates program relaying its moves to Hong Kong via the Internet.

*SOCRATES - FRITZ

1.e4 e5 2.Nf3 Nc6 3.Bb5 Nf6 4.0-0 Bc5 5.Nxe5 Nxe5 6.d4 a6 7.Ba4 Nxe4 8.Qe2 Be7 9.Qxe4 Ng6 10.f4 0-0 11.Bb3 Bf6 12.Nc3 c6 13.Qd3 d5 14.Be3 h6 15.f5 Ne7 16.Rf3 [I have not looked fully into this game, but believe this was the start of White's troubles. 16.Ne2 was better] 16...c5! 17.dxc5 d4 18.Rd1 Bb7 19.Bxd4 Bxf3 20.gxf3 Bxd4+ 21.Qxd4 Qxd4+ 22.Rxd4 bxc5 23.Rf4 Rac8 24.Bc4 Rc6 25.Ne4 Rd8 26.Kf2 Nd5 27.Rg4 Kf8 28.Rh4 Nf6 29.Ke3 h6 30.b3 Rd1 31.a3 Ra1 32.a4 Rd1 33.Bd3 Ke7 34.Ke2 Rg1 35.Rh3 Nd5 36.Rg3 Rh1 37.Rxg7 Rxh2+ 38.Kf1 Kf8 39.Rg3 Rh5 40.Kf2 Nb4 41.f6 Nd5 42.Rg1 Nxf6 43.Rd1 Re5 44.Nd2 Nd5 45.Nc4 Rg5 46.Be4 Nc3 47.Bxc6 Nxd1+ 48.Ke1 Nc3 49.f4 Rh5 50.Kd2 Nd5 51.Bb7 Ke7 52.Kc1 Nxf4 53.Bxa6 Rh2 54.Ne3 Ne2+ 55.Kb2 Nd4 56.Bc4 Nc6 57.Bb5 Na5 58.Nc4 Nxc4+ 59.Bxc4 f5 60.a5 Kd6 61.Kc3 h5 62.a6 Kc7 63.Be6 Rf2 64.a7 Kb7 65.Kd3 h4 66.a8Q+ Kxa8 67.Ke3 Rxc2 68.Bxf5 Rc3+ 69.Kf2 Rxb3 70.Be4+ Ka7 71.Bd5 Rh2+ 72.Kg1 h3 73.Be6 h2+ 74.Kh1 Ka6 75.Bd5 0-1

The Aftermath.

There has been considerable discussion, even controversy, since the Tournament, with all parties trying to explain and come to terms with this shock result.

Firstly how on earth did Deep Blue come to be humbled? In addition, with a PC program winning, why wasn't it Genius, Rebel or W Chess, all rated quite some way higher than Fritz in the accepted Lists?! Equally important, what version of Fritz was it?... '3' or something greatly changed!?

[1] The Deep Blue version was a 'prototype' using, yes, the latest version of the program, but NOT all the forthcoming processing power. Nevertheless most of us agree that it was using so much it SHOULD easily have been able to win... and couldn't!

[2] The accelerated Swiss pairing system in use did give Fritz3X an easy Tournament *in the middle rounds*. Additionally it was only 5 rounds which just isn't enough for a serious result, especially when there are such potentially enormous commercial possibilities. But Fritz DID beat both DBP and Star Socrates to get the Title at the end, and no-one will ever be able take that away from it, whether they want to or not.

For the record the SUM OF OPPONENTS scores of the leading programs was as follows (with each program's 1st. Round result in brackets, demonstrating the point fairly clearly):

Fritz3X 12 (0)
 Star Socrates 12½ (0)
 Deep BlueP 16½ (1)
 Frenchess 12½ (½)
 Junior 10½ (0)
 W Chess 15½ (½)
 HiTech 15 (1)
 Genius 15 (½)
 Rebel 14 (1)
 Zugzwang 11½ (½)
 Schach3.0 16½ (1)
 Cheiron 12 (1)
 VirtuaChess 10½ (0)

[3] The FRITZ3 version was, according to Franz Morsch himself, a slightly modified '3' version with a brand-new opening book.

[4] David Levy, in the Guardian, said "...in chess brain is more important than brawn". Now where have I heard that before?! Even so, I am pretty sure that the DEEP BLUE Prototype version would beat FRITZ3 'Pentium and all' with a bit to spare in, say, a 16 or 20 game Match. Maybe after the KASPAROV vs DEEP BLUE Match?! That would be nice.

8th World Computer Chess Championship

Report by John Hamlen

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(John HAMLEN was in Hong Kong with his program WOODPUSHER. This is his personal report of events for our mag!)

The inaugural event of the World Computer Chess Championships (WCCC) was held in Stockholm in 1974, and since that time it has been held every 3 years alternating (until this year) between Europe and North America. The 8th WCCC was thus held in Hong Kong on May 25th-30th. Unlike the more frequent World Microcomputer Championship, with which it is often confused, this "Absolute" World Championship has no restrictions on type of hardware. The result is that the WCCC is often a showcase for state-of-the-art supercomputers, parallel machines, and special purpose chess hardware. In fact the previous event (Madrid, 1992) was the very first in which a "lowly" microcomputer, (Ed Schroeder's Chess Machine/Gideon/Rebel) beat the odds to become champion. This year, 5 "Big Iron" machines were here to try and put that result to rights!

The Hardware

Hitech was the oldest of these and has been competing at the top level now for almost 10 years. It uses dedicated chess hardware to search around 100,000 nodes/second which, although still impressive, is now actually matched, or nearly matched, by some software programs!

Star Socrates and Frenchess were versions of Socrates and Virtua Chess respectively, but running on parallel computers: Socrates on 3648 Intel RISC processors, and Frenchess on a 128 processor Cray T3D. For years people have been speculating about how strong commercial chess programs could be if they were able to run on the supercomputers often used by amateur teams from well funded universities and government institutions. This time had now come, and I was very much looking

forward to seeing how these two programs would fair, especially as VirtuaChess was also entered on a 120MHz Pentium!

Zugzwang (the 1992 runner up) was a program running on 192 Power PC processors by a likeable German team.

Finally there was Deep Thought, playing in Hong Kong under the name of Deep Blue Prototype (DBP). "Blue" because since leaving Carnegie Mellon University, the Deep Thought team have been working full time for IBM on the project, and "Prototype" because it was still using the old Deep Thought chess processors. Feng-hsiung Hsu seemed rather unsure when asked how many processors DBP would be running on: "We started with 16, but I think we will be down to 13 or 14 because of hardware failures"! Because of the uncertainty it became subsequently known as Deep Whatever on the Internet pages!

All the remaining programs either ran on fast Unix workstations, or on Pentium PCs. 90MHz PCs were supplied, but most of the commercial entries brought their own 120MHz machines. The Chess Genius team had a bit of a shock when they found the fan, which had been attached to the Pentium, crashing around the inside of their computer having become detached in transit! Hardware has certainly moved on since Madrid in '92 when we used "state of the art" 66MHz '486's... the slowest machines in Hong Kong were 90MHz Pentiums!

Bodily Comforts!

All the competitors stayed in the same hotel about 10 minutes bus ride from the Chinese University of Hong Kong which was hosting the tournament. The playing hall itself was spectacular! Huge glass windows gave wonderful views across hills and the harbour when you needed a break from agonising about what move your program was going to play next (an all too

frequent experience in my case!).

Before the first round there was much anxiety among the teams with remote machines about the slowness of the supplied Internet connections. Readers will appreciate that teams like Deep Blue or Socrates (with its apparently 50 foot long hardware set-up) could hardly bring their computers with them! The Zugzwang team joked about their concern with the 40/2 time control as they had measured their round-trip communication delay was likely to actually be 3 minutes! The first games were therefore played down expensive, open telephone lines. In later rounds IBM, (the main sponsor of the event), was able to generously offer connections through their world-wide network. This was very sporting considering their involvement with one of the competitors.

Play Begins - Rounds 1-3

The first round games began and almost immediately there was spectator interest as Fritz played a very dubious Latvian Gambit against Schach. Fritz was 2 pawns down out of the opening, and quickly lost more material and then the game. Everyone was astounded that such a line had been included in the program's book for the tournament - especially as Franz Morsh had explained over breakfast that the chess engine was almost identical to Fritz3, but that "a lot of work" had been done on the opening book!

The reason turned out to be that Fritz had a deep Latvian Gambit book with which it had been very successful in testing against other commercial programs. Unlike those programs however, Schach knew very little theory in this opening, and was thinking for itself by about move 4... thus playing a non-Book move (also known as a theoretical novelty when one works!). Fritz was left out of book and materially down in a position it didn't understand! Franz and Mathias looked a bit glum but joked that this "Swiss Gambit" was all part of the plan. As things turned out, they might have been right!

(Note by Eric: The "Swiss Gambit" comment is a reference to the fact that the Swiss accelerated pairing system in operation often results in 1st. round winners subsequently get three hard rounds, and 1st. round losers getting an easy ride for their next three!)

By coincidence, my program, Woodpusher, was drawn against L-Chess, the program of my room-mate Lex Loop. The day before this game, while preparing Woodpusher's opening book, I'd found a position where it thought almost any move was good and was blind to things like some moves actually losing material! Despite a night of debugging, I still hadn't found the cause of the problem so decided to set a high negative contempt factor to encourage Woodpusher to draw at the earliest possible opportunity. This year's honoured guest was GM Robert Byrne, and we were very happy that he took a great interest in our game as it reached it's critical point. He pointed out what he believed to be a winning plan for Woodpusher and was very disappointed when instead it forced a draw by repetition. I explained that Woodpusher liked his suggested move (1.5 pawns) but thought a draw was worth 2 pawns. Mr Byrne immediately coined the excellent phrase "self-contempt factor" and regularly visited Woodpusher's board in later rounds to offer wit and advice in equal measure!

The competitive spirit of Ossie Weiner was on display in Chess Genius' game against Zugzwang, which simplified to a RP vs R endgame in Genius' favour. Zugzwang however was playing from Ken Thomson's endgame database, and knew the position to be a long draw. Ossie was determined to play on, saying that he wanted to try and "refute the database". The Zugzwang team tried to put the cost per minute of the phone line to their computer in Germany out of their mind, and played on until their opponents accepted that a mistake was not going to be made!

Competition between the amateur programs was thankfully less intense! It was

nice to see all the amateur teams, and even some of the professionals (notably W-Chess & Socrates), exchanging ideas in the refreshments room. An example of the more relaxed atmosphere occurred in my third round game with Woodpusher against the Israeli program Junior. When the operator half of their husband and wife team left the tournament hall, I was left moving round the table effectively operating both programs for several moves while Woodpusher was being crushed!

The Programs v the Hong Kong team

On the morning prior to round 4 the **Saitek Challenge Match** was played: six 40/2 games between selected Computers and a team of players from Hong Kong, in fact their Olympic team! The result was another boost for the Computers, coming

Wong Meng Kong (IM. 2430) ½-½ Fritz3
Xian Yang (FM. 2425) ½-½ Chess Genius
W Chess 1-0 John Ady (FM. 2325)
Dave Carless (FM. 2240) ½-½ Schach3.0
Virtua Chess 1-0 Kaarlo Schepel (2240)
Hon Tsang (2200) 0-1 Mephisto Advantage (Rebel6.0 version)

Final Score: **Computers 4½,
Hong Kong team 1½.**

on top of their recent success in the big Aegon Tournament. Here are the individual scores:

These games in our next Issue.

Rounds 4 and 5

The fourth round provided more shocks. W-Chess drew with DBP, an amazing performance... yet the W-Chess team seemed a lot more proud of the win they had managed in the Saitek Challenge match?!

There were echoes of Chess Genius' game against Nimzo in the last World Championship when it again allowed a draw in a won position. This time it was in a very long game against Schach. IM Mike Valvo did not feel an adjudication was

appropriate at 80 moves, so the game continued into the night as the rest of us took the last bus back to the hotel. The next morning David Levy told me that Schach's extra check extensions had allowed it to find a forced draw just as Genius' evaluation was reaching +4 pawns. Drama and disappointment indeed!

The fifth round was preceded by an ICCA rules meeting. There was not time to discuss all the topics on the agenda, but one item that seemed to receive universal support was a proposal to increase the number of rounds from 5 to at least 7. Unfortunately, there was also a vocal resistance to reducing the time limits from the 40/2, 40/1 format of this event. I believe that halving the time limits and doubling the number of rounds would produce exciting chess, enough rounds to minimise the element of luck, and still keep the tournament length to a manageable 5 days. *(A preference voiced in this magazine on various occasions, and one with which the majority of this magazine's readers will agree. Eric).*

Going into the last round, DBP held a half point lead over Fritz, Hitech and Star Socrates. A win against Fritz would have sealed the championship. This particular event was the first time I'd actually been present to see DBP, DT or Deep Whatever for that matter, in action. I was expecting to be impressed by the speed with which it searched through each iteration, but to my horror it seemed to be taking longer to complete, (say), the 8th ply search than many of the other programs present. How could this be? Even though it was "only" a 13-14 processor prototype, it was still searching around 5 MILLION positions per second! The answer lies in the fact that the dedicated chess processors take over for the last 3 or 4 ply of the search; so the 8th iteration is actually searching to 11 or 12 ply brute force! Two team members were in Hong Kong to remotely operate DBP via a laptop computer, (IBM of course!), while the remainder of the team were baby-sitting the computer at IBM's research centre in New York state.

Incidentally Feng-hsiung Hsu is the principle designer of DBP's chess processors, and once estimated his chess rating to be less than 1400! Murray Cambell is a programmer who used to work on the Hitech team, and has a rating of around 2000-2200 USCF. Hsu would also have won the prize for the best dressed competitor; he arrived every day in a suit or blazer defying the 90 degree temperatures and energy sapping humidity outside!

5th Round Drama

Woodpusher's fifth round game seemed to have only just started when someone came past proclaiming that DBP had blundered. My opponents and I took this with a pinch of salt and continued with our game. A few moves later we heard something about DBP losing it's queen! Our game is temporarily forgotten as we all go to join the growing crowd around DBP's table. Apparently DBP inexplicably spent very little time thinking about 13. O-O?, it's first move out of book. *(For further discussion of this, see the Games Section. Eric)*. The DBP team carried on until their evaluation dropped below -700 and then threw in the towel.

I think I was in the minority in feeling sorry for them. Many of the other programmers were very vocal in their criticism about how little progress had been made after 5 years solid work at IBM, compared with that achieved during their original low budget university project. This summer they will have fabricated the new Deep Blue single chip chess processors which should give them a 10x speedup, but its not clear whether this will be enough to overcome the knowledge gaps displayed by some of its moves in Hong Kong. A 1000 processor version however, could/should be a different matter! *(See note elsewhere in the magazine about the Kasparov-Deep Blue match which is to take place in 1996! Eric)*.

The last round five game to finish was between Zeus and Zugzwang, which again demonstrated the usefulness of the latter's

endgame databases. The game had come down to an NPP vs N ending in Zugswang's favour, but it couldn't find a way to break through. Then Zeus found a way to win a pawn back, but unfortunately Zugzwang had a NP vs N database and immediately knew how to win! The Zugzwang team admitted after the game that if Zeus hadn't captured the pawn it would probably have ended in a draw!...

Epilogue

So that's it for another 3 years! This event was by far the strongest computer chess tournament ever held; over half a dozen competitors already had Grandmaster scalps on their belts!

Having said this however, there were still many occasions when even the strongest programs (IM/GM level) lost their way and made moves that complete patzers (such as myself) could see were pointless. I therefore believe (and hope!) that it will be a long time before the human World Champion is beaten in a serious Match.

Paradoxically, however, I think it is also good for computer chess. Everyone left Hong Kong with ideas about how they could improve their programs: if the "mistakes" become too subtle to identify then progress will stop. Thankfully this is not the case and computer chess remains a fascinating subject!

The Challenge Match 6 Games at 40/2

Current World Human Champion

Garry KASPAROV

VS

DEEP BLUE

*The new program + the new
hardware!*

10-17 February 1996

Philadelphia, USA

\$500,000 prize, split 80-20 to winner

Correspondence Chess 21 MEPH[isto] VANCOUVER 68020

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For new readers: 'MEPH' under the watchful eye of **Phil Gosling** continues its successful BCCS campaign. Please note that MEPH is entered as a computer and its opponents know what they are playing!

BCCS 2494 (2490) - Vancouver 020 (2275) [B00]Corr.20, 1994

18.♖xe3 ♕d7



[#58 eval +51 >b4. MEPH seems pretty pleased with this position] 19.b4 ♖a6 20.h3 ♕c7 [#59 eval +48 >Qd2. MEPH's QN has moved 6 times already and may even now be thinking of c7-e8-f6 to help with the defence!?] ♖

Unfortunately our two games for the BCCS on Board 8 against the Army are over, our opponent being unable to find time to continue. In the first we had looked very likely to win anyway (#58 showed +287). But in the other we were still working hard to get a draw, having come back from a -212 early middle game eval. to a fairly respectable -87 thanks to the excellent work of MEPH's very active Queen!

However our tremendous 2-game struggle with one of the BCCS 'Top Ten' players continues unabated...

Vancouver 020 (2275) - BCCS 2466 (now 2606!) [A00]Corr.24, 1994.

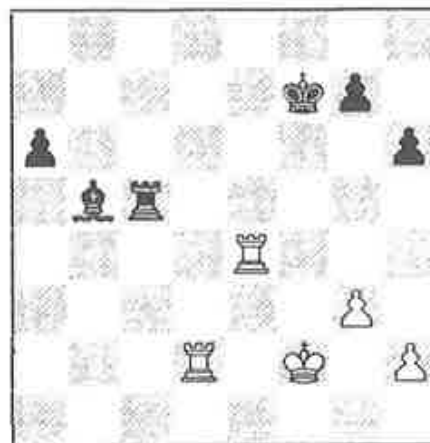
41.♕e7 ♖f7 42.♕d6



[#58 eval +30 >b5] 42...b5 43.♖b2 ♕c4 44.♕f2 ♖f6 45.♕e7 ♖a6 46.♕c5 ♕f7 47.h4 ♖h6 48.♖b4 ♖a6 [The first change for quite some time to the response expected by MEPH, as the game seems to be headed for a draw. MEPH had thought [48...♕d3 but none of it seems to get very far!] 49.♖b1 ♖h6 50.♕g3 [#59 eval +6 >Rg6] =

BCCS 2466 (2606) - Vancouver 020 (2275) [A29]Corr.25, 1994

47.♖xd2 ♕f7



[#58 eval -66 >Ra2. MEPH has a passed pawn, but his bishop is the wrong colour for queening and we'll do well to draw this one against the 2 menacing rooks] 48.♖a2 g5 49.♕e3 ♕g7 50.♖e7+ ♕f6 51.♖h7 ♕g6 52.♖b7 ♕f5 [MEPH now has -66 >Rf7+.

Phil comments that the computer hasn't shown a single plus evaluation throughout the whole game... and we don't expect that it will!] 53.♔d4 ♖c6 54.♗g7 ♕f6 55.♖h7 ♕g6 56.♗e7 ♕f6 57.♗e3 ♖c4+ [#59 eval -72 >Kd5.57...♗d6+ would have allowed 58.♕c5 though 58...♖c6+ 59.♕d5 ♕f5 may not have been much different in evaluation to the game.] ±

BCCS 2559 (2555) - Vancouver 020 (2275) [B15] Corr.26, 1994

We next rejoin the unfortunate game in which White (now graded 2613) brilliantly opened an apparently blocked f-file and gained a big and, I fear, lasting advantage.

38.♖xe6 ♖xf7



[#58 eval -272 >Rxc6. MEPH is being 'reeled in' and the eval looks sure to start dropping rapidly at any time] 39.h4!? ♗d7 40.g5 hxg5 41.hxg5 ♗d5 42.g6 ♗d8 43.♖xc6 [White's unexpected delay of the capture gets MEPH's approval with a new eval of -433!] 43...♗e7 44.♗e6 ♗g8 45.d5 ♗f6 46.d6 [46.♖c1! was MEPH's recommendation, with a -427 figure, and we think that would indeed have been even stronger. E.g. 46...♖b8 (46...♗xd5? 47.♗d1!; 46...♗xd5?? 47.♖c8+ m/4) 47.d6] 46...♗g8 [#59 eval -378 >a4. Phil reckons MEPH's best chance will be to show off a little by announcing a mate against itself before our opponent spots it!] +

Vancouver 020 (2275)-BCCS 2428 (2425) [B07] Corr.28, 1995

25.♖e2



[#58 eval = >Ng6. Despite MEPH's opinion Eric feels a bit concerned about our prospects in this one!] 25...♗g6 26.f3 ♗e5 27.♗d5 ♗xd5 28.exd5 ♗e7! 29.♖c1 [Ah! MEPH has gone -27 >Ng4 here.] 29...♗g4 30.♖d2 ♗e3 31.c4 ♗f5 32.♖c2 ♖e5 33.♕f2 ♖e3+!? [Is the exchange of Queens Black's best option? MEPH expected [33...g4?! showing -51, when play might have gone 34.fxg4 ♖e3+ 35.♖xe3 ♗xe3 and Black's advantage seems quite nominal again. So I would go with the move played by our opponent.] 34.♖xe3 [#59 eval -21 (and the rest! Eric) >fxe3+] +

To replace our 2 games v. the Army we welcome the chance to cover 2 more against another BCCS 'Top Ten' man, Roy THOMAS. We are also able to name him as he's a reader of this very magazine (and something of a computer and correspondence expert!).

Roy THOMAS, BCCS 2448 - Vancouver 020 [B09] Corr 29, 1995

1.e4 d6 2.d4 ♗f6 3.♗c3 g6 4.f4 ♗g7 5.♗f3 c5 6.dxc5 ♖a5 7.♖d3 ♖xc5 =

Vancouver 020-Roy THOMAS, BCCS 2448 [D03] Corr 30, 1995

1.d4 ♗f6 2.♗f3 d5 3.♗g5 ♗e4 4.♗f4 ♗f5 5.♗bd2 e6 [Roy shows his computer awareness - he puts MEPH out of Book early, for it expected 5...c6] 6.e3 [#59 eval +3 >Bd6] =

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

BCF: British Chess Federation Ratings. These can also be calculated from Elo figures by (Elo-600)/8, or from USCF figures by (USCF-720)/8.

£'00: Cost in Britain. [1] = £100, [10] = £1,000.

a '+' after the price shows it can cost more! E.g [10 +] is for Mephisto RISC1 in an Exclusive board; it is dearer in the Munchen.

a '-' after the price usually shows that it is an out-of-date model or version. The price is its original cost - you may be able to buy it second-hand and cheaper now, depending on availability. If '-' is shown relating to an

Upgradeable program (e.g Meph Portorose or Lyon) owners should be able to buy an upgrade.

Elo: The Rating figure which is popularly in use Worldwide. The BCF and Elo figures shown in the NEWS SHEET Rating List determine the ranking order, and combine each Computer's results v. Computers with its results v. Humans.

+/-: 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 precise standard deviation principles.

Games: Total No. of games on which the

Computer's Rating is based.

Human/Games: Total games played in official Tournaments v Humans, and the Rating in same.

A guide to PC Gradings:

286-PC represents the program running on an 80286 at approx. 16MHz.

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

486-PC represents the program running on an 80486 at approx. 50-66MHz, with 4MB RAM.

Pent-PC will represent the programs on a Pentium (586) 90MHz with 8MB RAM.

Users will get slightly more (or less!) in each case, if the speed of their PC is significantly different. A doubling in **MHz Speed** equals approx. 60 Elo. A doubling in **MB RAM** equals approx. 10 Elo.

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ARTICLES, RESULTS, GAMES etc should always be sent direct to Eric please

RATING LIST (c) Eric Hallsworth. Issue 59									
BCF	Elo	+/	-	Games	Pos	Human/Games			
£'00									
232	2463	16	825	1					
229	2433	18	624	2					
229	2433	13	1253	3					
227	2416	16	796	4					
226	2411	17	682	5					
224	2398	21	466	6					
224	2398	13	1246	7					
224	2396	18	658	8					
221	2370	15	876	9					
220	2367	10	1793	10					
220	2363	15	919	11					
220	2362	17	698	12					
219	2352	20	537	13					
217	2342	25	326	14					
217	2340	12	1322	15					
215	2326	18	650	16					
213	2306	28	261	17					
212	2302	16	791	18					
209	2277	13	1207	19					
207	2257	16	753	20					
206	2253	13	1188	21					
206	2249	48	93	22					
205	2242	14	1085	23					
200	2201	25	337	24					
200	2200	20	523	25					
197	2178	32	206	26					
197	2177	12	1280	27					
196	2176	58	64	28					
194	2172	38	145	29					
193	2156	30	226	30					
193	2149	26							
193	2144	21							
191	2133	23							
189	2118	28							
189	2115	75							
188	2115	23							
187	2104	32							
184	2102	18							
183	2075	62							
183	2071	42							
183	2069	99							
183	2068	16							
183	2068	16							
183	2068	45							
181	2064	30							
179	2048	29							
179	2039	26							
179	2033	19							

The PENTIUM P/90 GAP			
	486/66	P/90	Diff
Genius3	2463	2537	74
Rebel6.0	2411	2518	107
Hiarcs3	2416	2517	101
MCPro4	2433	2510	77
Fritz3	2370	2468	92
WChess	2398	2397	-1 (!)
AVERAGE		ELO 75	

RATING LIST (c) Eric Hallsworth. Issue 59

BCF	Elo	Computer	Elo	Aug +/-	1995 Games	Pos	Human/Games	172	2	MEPH MEGA4/5	1981	9	2654	48	2029	169
224	15	TASC R30-1995	2398	43	114	1	2249	172	5	KASPAROV MAESTRO D/10	1977	12	1319	49	1956	109
223	15-	TASC R30-1993	2389	13	1214	2	2322	172	3-	FID MACH2C	1976	8	2706	50	2059	127
223	14	MEPH GENIUS2 68030	2386	22	421	3	2342	171	3-	FID MACH2B	1973	26	302	51	1960	25
219	12	MEPH RISC2 1MB	2353	34	184	4	2237	170	1	FID TRAVELMASTER	1966	18	628	52	1968	63
217	45-	MEPH LYON 68030	2341	21	460	5	2392	170	2	MEPH MODENA	1966	17	728	53		
217	6	MEPH BERLIN PRO	2338	16	752	6	2225	169	4-	MEPH MM4/5	1960	8	2928	54	2006	97
216	6	KASP RISC 2500-512K	2332	30	231	7	2284	168	1	KASP TRAVEL CHAMPION	1957	30	237	55	1864	2
215	45-	MEPH PORTOROSE 68030	2332	20	525	8	2240	168	2	NOVAG RUBY/ENERALD	1948	17	724	56	1991	48
214	45	MEPH VANCOUVER 68030	2322	18	646	9	2247	167	2+	MEPH SUPERMOND2/MCARLO4	1944	27	287	57	2071	8
213	10	MEPH RISC1 1MB	2311	9	2217	10	2264	167	3-	NOV SUPER FORTE-EXP A/6	1943	12	1413	58	2021	176
213	20	MEPH LYON/VANC 68020/20	2309	35	176	11	2227	166	2	MEPH MONTE CARLO	1933	28	262	59	2046	10
211	8	KASPAROV SPARC/20	2293	16	781	12	2200	166	5-	KASPAROV MAESTRO C/8	1932	26	313	60	1999	98
209	4	KASP RISC 2500-128K	2275	9	2305	13	2270	165	4	CONCH PLY-VICTORIA/5.5	1926	16	814	61	1870	15
205	10+	MEPH VANCOUVER 68020/12	2240	9	2244	14	2131	165	2	KASP TURKOKING2	1924	9	2356	62	1943	155
203	10-	MEPH LYON 68020/12	2228	8	3106	15	2250	165	3-	FID MACH2A	1922	14	1035	63		
203	50	FID ELITE 68040-V10	2228	53	75	16	2215	163	5-	NOV EXPERT/6	1920	25	338	64	1912	35
199	4	MEPH BERLIN 68000	2198	13	1175	17	2221	163	3-	NOV SUPER FORTE-EXP A/5	1904	31	222	65	2026	22
199	10-	MEPH PORTOROSE 68020	2197	10	1865	18	2240	161	3-	FID CLUB B	1895	11	1548	66	1825	29
199	30	FID ELITE 68030-V9	2194	16	750	19	2169	161	4-	NOV EXPERT/5	1894	12	1459	67	1827	18
198	8-	MEPH LYON 68000	2184	11	1642	20	2083	160	3-	NOV FORTE B	1885	26	316	68	2012	68
197	8+	MEPH VANCOUVER 68000	2182	13	1186	21	2126	160	2+	FID PAR E/ELITE+DES2100	1880	10	1917	69	1965	208
196	2	NOVAG SAPPHIRE/DIAMOND	2175	16	807	22	2164	159	4-	MEPH REBEL	1879	9	2619	70	1916	220
196	10-	MEPH ALMERIA 68020	2169	14	1053	23	2172	159	5-	FID AVANT GARDE/5	1879	9	2313	71	1940	69
193	8-	MEPH PORTOROSE 68000	2146	11	1663	24	2111	159	2	KASP STRATOS-CORONA	1878	11	1738	72	1862	80
192	9-	FID MACH4/2325 68020-V7	2146	10	1857	25	2179	158	3-	NOV FORTE A	1872	9	2251	74	1921	48
188	15	FID ELITE 2*6800-V5	2109	27	290	26	1888	158	2-	MEPH SUPERMONDIAL1	1871	9	1591	75	1900	134
187	5+	KASPAROV BRUTE FORCE	2101	14	978	27	2179	157	3-	FID CLUB A	1865	11	1591	75	1900	6
186	7+	MEPH POLGAR/10	2095	17	698	28	2080	157	4-	KASPAROV MAESTRO A/6	1862	29	242	76	1767	6
186	10-	MEPH ROMA 68020	2094	14	1083	29	2041	157	4-	CONCH PLYMATE/5.5	1860	14	990	77	1863	123
185	3	MEPH NIGEL SHORT	2082	46	102	30	2136	157	2-	KASP TURKOKING1	1858	9	2332	78	1923	55
185	10-	MEPH DALLAS 68020	2080	14	996	31	2069	157	2-	KASP SIMULTANO	1857	24	364	79	1900	61
184	8-	MEPH ALMERIA 68000	2078	14	1025	32	2093	156	4-	CONCHESS/6	1856	13	1149	80	1824	36
184	3+	NOV SCORPIO/DIABLO	2075	10	1957	33	2132	155	1	NOVAG JADE1/ZIRCON1	1850	45	106	81	2017	8
183	1+	NOVAG JADE2/ZIRCON2	2066	62	56	34	2107	155	2-	FID EXCELLENCE/4	1847	106	19	82		
180	4-	FID MACH3/2265 68000-V2	2042	6	5733	35	229	155	3-	NOV EXPERT/4	1843	11	1756	83	1960	43
180	2+	KASP PRESIDENT/TC*6K2100	2041	20	533	36	1988	155	2-	SCI TURBO KASP/4	1843	14	1059	84	1933	64
179	4+	MEPH MM5/5	2038	11	1649	37	1902	154	3-	CONCH PLYMATE/4	1832	20	524	85	2007	6
178	5+	MEPH POLGAR/5	2031	8	2713	38	2076	154	6-	FIDELITY ELITE C	1832	24	372	86	1869	11
178	8-	MEPH DALLAS 68000	2030	11	1580	39	1988	153	4-	FID ELEGANCE	1827	34	182	87	1882	40
178	2	MEPH MILANO	2027	14	1075	40	2063	152	2-	SCI TURBOSTAR 432	1816	17	702	88	1882	40
177	3-	NOV SUPER FORTE-EXP C/6	2027	8	2944	41	2000	151	4-	MEPHISTO MM2	1812	12	1407	89	1872	67
176	4	MEPH MONDIAL 68000XL	2017	15	862	42	2049	151	2	FID EXCELLENCE/DES2000	1807	16	791	90	1776	8
176	4	MEPH MONDIAL/ROMA 68000	2013	9	2481	43	1968	150	4-	KASPAROV MAESTRO A/4	1802	74	39	92	1864	8
175	4	MEPH ACADEMY/5	2001	9	2341	44	2024	149	2	KASP PRISMA/BLITZ	1793	25	338	93	1782	59
174	10-	MEPH AMSTERDAM	1992	9	2373	45	2054	148	3-	CONCHESS/4	1789	20	515	94	1875	28
173	3-	NOV SUPER FORTE-EXP B/6	1984	12	1430	46	2017	148	3-	NOV SUPER CONST	1785	7	3736	95		
172	2	KASP GK2000/TURB ADV TR	1982	15	847	47		147	2-	NOV SUPER NOVA	1780	22	411	96	1833	284