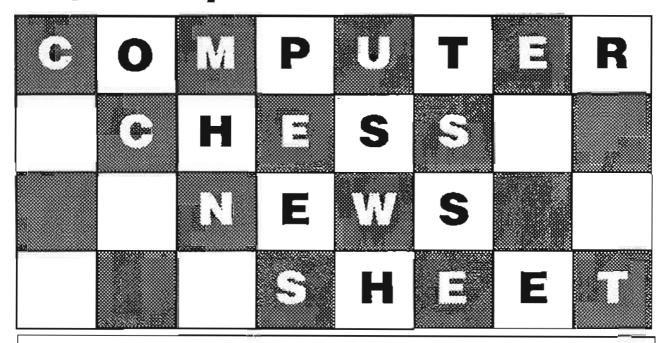
Computer Chess NEWS SHEET 45 April-May 1993 £3



TO GET REGULAR COPIES OF THE LATEST NEWS SHEET AND RATING LIST - SUBSCRIBE NOW - simply ring me, Eric Hallsworth, on 0258 840 285 Mon-Fri, 1-5pm: £15 per year for 6 Issues by mail. Foreign readers £18. Australia and New Zealand £20 (Sorry 'Down Under' - postage costs!)

EDITORIAL NOTE from Eric Hallsworth: The purpose of the **NEWS SHEET**, established by me in 1985, and produced continuously by me since then, has always been to survey the CHESS COMPUTER scene, with special emphasis on reliable assessments of the PLAYING STRENGTHS of the many machines and programs now available.

PUBLICATION DATES: Early Feb, Apr, Jun, Aug, Oct, Dec (Each year one of these Issues will incorporate our Chess Computer ANNUAL).

A REMINDER LABEL or INSERT will be included when you are sent the LAST ISSUE covered by your current sub. You will then need to send your RENEWAL, payable to Eric Hallsworth, in order to receive the next Issue.

NEW SUBSCRIBERS: Always please state the number of the FIRST ISSUE that you wish your sub. to cover - otherwise we send a copy of the CURRENT Issue.

ARTICLES, REVIEWS, GAMES sent in by Readers, Distributors, Programmers etc. are always welcome, and will receive fair consideration for publication.

CONTENTS

NEWS: Novag, Kasparov, TASC, Your Editor on GM Video.
 4 New PORTABLES - the spotlight on Novag RUBY.
 10 The 1993 ACM TOURNAMENT - a surprise winner.
 14 INTERVIEW with ED SCHROEDER. 16 READERS' GAMES!
 19 WHICH PC Software Program?
 22 The PC PROGRAMS play Mephisto RISC.
 26 CORRESPONDENCE Chess. 28 RATING LIST.

(c) Feb 1993 Eric Hallsworth: No part of this publication may be reproduced in any way without the express written permission of Eric Hallsworth.

The Red House, 46 High Street, Wilburton, Cambs CB6 3RA Tel: 0258 840 285 (Mon-Frl. 1-5 p.m.)

CHESS COMPUTER NEWS: Novag, Kasparov, TASC, GM Video

We are accustomed to things being fairly quiet in the "NEWS" column at the approach of Spring. But NOT this time! In fact there is quite a lot going on, especially from the Kasparov company as they seek to establish themselves as not only the manufacturers offering the widest range of products, but now the strongest as well. Novag and TASC also have new offerings, so let's get straight on with it.

NOVAG: The 1993 range is all named after well-known jewels. The TOPAZ, OPAL, CORAL and PEARL are for beginners and occasional players, but four others will be good enough to make their appearance in the NS Rating List in due course: JADE, ZIRCON, RUBY and EMERALD. A review of these appears later in this Issue: the stronger RUBY/EMERALD program certainly offers pretty good strength for a very reasonable price.

KASPAROV: There is plenty happening here. Due at the end of April or early May (probably the latter) is a 512K high speed RAM program UPGRADE for the RISC 2500! Nick Gibbons reports from the auto-tester results that the improvement is coming out "greater than anyone expected - it is having more effect than we had forecast".

The new price for a RISC 2500 512K will be £599; existing 128K owners will be able to upgrade for £199 by returning the RISC 2500 to their supplier. As far as I know the "standard" RISC 2500 128K will remain available just as it is, to leave new purchasers with a choice.

Readers should note that it is now considered "certain" that the de Koning RISC programs are stronger on Active and Offensive than they are on Normal. Not only is their tactical chess even more positive and direct, but some owners are reporting on small positional improvements as well. Example games in NS/46. The Swedish PLY testers have been asked by de Koning himself to do all their ChessMachine KING testing on Offensive! It is believed that RISC 2500 512K on Offensive will reach 2400.

Now out - and doing WELL - is Franz Morsch's **BRUTE FORCE** module for **RENAISSANCE** boards. I don't understand the logic behind the name as, whilst one of the playing styles it offers is brute force, Morsch is best known for the quality of his selective programs, and that is where BRUTE FORCE's strength is. At the time of writing it stands a few points ABOVE 200 BCF/2200 Elo after quite a good number of games. This must make it first class value-for-money at £569 in the RENAISSANCE board!

The Kasparov RENAISSANCE measures just over 20" x 20", and is a real beauty. The display is already built in - the same display type as in the Simultano, so it gives not only clock times, forward analysis, depth of search, evaluations, and helpful info during level setting etc, but also shows a small but full LCD current board position for easy set-up or verification, and following the Computer's lines of analysis. Link-up to PC and Atari ST is also possible and, more than that, to ChessBase on your Personal Computer so that you can enter or play over ChessBase games on the board, and get analysis sent to the PC for reference or print-out.

With batteries fitted you can also store up to 64 games in the RENAISSANCE memory and use the first 32 Time Control levels away from the mains! A lot of folk don't know this but, when you buy an UPGRADE Module for your RENAISSANCE, the basic 140 BCF program does NOT disappear! In fact if you select any of the 32 A1-D8 levels, you play with the hobby program. When you select any of the 32 E1- H8 levels, THEN you get the BRUTE FORCE Module to play! In some families a change or upgrade of Computer can suit "the chess player" in the family, but disappoint sons, daughters (and wives?), so the Kasparov RENAISSANCE method has been well thought out. As I say, at £569 fitted with the BRUTE FORCE Module, this is a very good buy. Prospective purchasers would compare it alongside a Novag DIABLO, or a Mephisto MUNCHEN POLGAR.

Computer	Price	BCF
Kasparov RENAISSANCE BRUTE FORCE	£569	202
Novag DIABLO	£539	188
Mephisto MUNCHEN POLGAR	£755	182

We stay with the RENAISSANCE Board to mention DAN and KATHE SPRACKLENS forthcoming program! This has been on, off, on, off, and on for rather a while now - but this time it is definitely ON! It will be called the Kasparov SPARC (because it uses the 32 bit SPARC RISC processor), and will have a very high performance 256K program with 512K DRAM (that's Dynamic, not Static RAM) for the Hash-table Memory. As with the BRUTE FORCE, the SPARC will offer 32 additional Time Control Levels to those in the basic RENAISSANCE. The many standard RENAISSANCE features will also all operate as mentioned above, and the price for a RENAISSANCE SPARC is set to be just £799.

Likely STRENGTH will be NS readers' next question, especially in view of my use of the word "just". Thorough auto-test results are showing the SPARC as virtually equal to or fractionally ahead of the Kasparov RISC 2500! So I think, when you consider the size and quality of the RENAISSANCE, the features and the SPARC strength, £799 seems pretty reasonable for the whole package. It would compare favourably in my opinion with the prices for a Mephisto MUNCHEN VANCOUVER 68020 (similar features), or Mephisto MUNCHEN RISC 1MB (similar strength, fesser features).

Computer	Price BCF
Mephisto MUNCHEN RISC 1MB	£1155 218
Kasparov RENAISSANCE SPARC	£799 215
Mephisto MUNCHEN VANCOUVER 020	£1155 208

TASC: Have now brought out two new **ChessMachine** versions, both on the ARM61 RISC processor. This is faster than the ARM2 previously used, and achieves an equivalent of either 28MHz or 30MHz! Sorry, opinions vary, and I'm not yet sure which is the CORRECT speed. Sweden's PLY has called it 30MHz, so I will follow them. As the ARM2's are 15MHz, the new ones run twice as fast (= appr. 60 Elo).

The results in so far indicate a 76 Elo improvement for the Schroeder v3.0 program on the new processor, but a massive 159 Elo uplift for the Koning v2/30, which at present

leads Schroeder v3.0/30MHz by 52 Elo on my list. This strongly confirms the preferance for Aggressive in the de Koning programs and this must be providing a useful part of increase, though I feel certain the gap will drop!

Readers should note that Schroeder's GIDEON3.0 is NOT his MADRID 1992 World Champion version... that is numbered v3.1! Price for the ChessMachine ARM61/30MHz is £995 (with the Schroeder program - the de Koning program will be £79 extra). Don't forget you will need a PC to plug the RISC Card into... and it is the Internal system, not the External, so the distributors warn Laptop owners that they will NOT be able to use it.

TASC are also launching their own dedicated BOARD RISC system! It is to be called the **TASC R30** and the Board will be around 15" x 15" and auto sensory. I understand that it will contain the de Koning v2 KING program using a 30MHz, so it looks as if it's the ARM61 again, with 256K ROM and 512K RAM. This ought to be the strongest dedicated Chess Computer available (at least for a while)... but the price might put you off a bit... £1995! Orders are VERY welcome! - if I can sell 2 or 3 of those before NS/46, I'll be earning my keep quite nicely!

GRANDMASTER VIDEO As I told (warned?) you in NS/44, I recently visited Woking to star in the latest Issue (no.8) of the GM VIDEO Magazine. I have referred to this product in the past, so you already know I enjoy them hugely... up to now anyway! No - only joking, the new Issue is extremely good despite my 10 minute presence sandwiched between Cathy Forbes (perhaps I should re-phrase that?) taking us through the Fischer-Spassky re-Match, and Malcolm Pein covering Nigel Short's great victory over Jan Timman.

My part was to look at a small range of personally recommended machines, discuss Ratings, show how different machines are used (i.e portables, press-sensory, auto-sensory and PC programs), to talk about progress and why chess players now find Computers so useful. Filming took about 2 hours, despite excellent help and advice from Chris White and the PBF film crew. The astonishing thing is there's only 10 minutes worth at the end. Still, if you've always wondered what I look and sound like, you can now find out!

Cathy Forbes does a very good job - there's footage from the original Match, a helpful insight into how the re-Match came to take place, as well as analysis of some of the games - plus Cathy on the beach, and at a dance at the Match half-way stage (when Fischer responded to her challenge for a game by producing his pocket set - unfortunately they would not allow filming of this, for which Cathy was probably grateful in the end as it didn't last too long!)

Malcolm Pein shows a small selection of the games from Short-Timman. It was done just a bit too fast for me, but Malcolm's analysis is still helpful and stronger players will no doubt get on with it fine, glad that so much gets covered. There are some very interesting Interviews from both during and after the Match. When discussing Kasparov, Nigel's dislike for him is not even thinly veiled, but in other scenes it is nice to seem him relaxed and obviously happy with his family.

The Video runs for a massive 2¼ hours, and I think it excellent value at £19.95 (+ £1 p/p). If you order one, tell Chris White that it's because of the Computer Chess NEWS SHEET. He's quite interested in doing something else using

Chess Computers, and I have put an idea to him involving an I.M or G.M playing a timed Simul. against 4 or 6 different Computers and Programs. Obviously if Chris knows that there are people out there who WILL BUY something like that for a decent 20-30-40 minute Computer Section, he is all the more likely to do it. Send your c/q for GM VIDEO NO.8 for £20.95 to Chris White, GRANDMASTER VIDEO, PO Box 50, Woking, Surrey GU22 7YT. Or ring 0276 855418 with your Access/Visa no (or FAX 0483 751447). However you buy, do mention NS.

PC SOLUTIONS do a nice range of PC SOFTWARE covering various Board and Strategy games. Their Othello/Reversi program (FLIP IT) is very strong - as is their SAGE DRAUGHTS! They are also interested in sharing ideas with other programmers. Send an s.a.e for info. to PC SOLUTIONS, PO Box 954, Bournemouth BH7 6YJ. Please mention NS when writing... thanks.

RESULTS, FROM READERS etc... held over until next time. My apologies to the many folk who like these, but there's just no room left in another very packed Issue!

NEW PORTABLES

For what feels like a quite a long time PORTABLE CHESS COMPUTERS seem to have been stuck at a maximum grading of around 1800 Elo/150 BCF. At last we have some new, genuine portables which have managed to break the barrier. And quite comfortably at that!

When mention is made of a "chess computer", the image which most quickly comes to mind is of a table-top model - "plugged in" to the mains and rather too big to go in your pocket! And they are the most popular, perhaps because they are closest to what players will be using in their Club games and matches. Equally it is these which have progressed most during the past two or three years, as chess computers have benefitted in full from the massive memory and speed improvements within the computer industry.

THE ADVANTAGES OF A PORTABLE

Whilst table-top models are the best sellers,

the advantages offered by a portable computer come quickly to mind. Journeys, lunch-time breaks at work, holidays, and sat up in bed to name just a few. But the very size-limitation to keep them portable has restricted the amount of memory which can be fitted, which in turn affects the chess knowledge and opening book size. Equally there can be reliability problems for a really fast processor in the small space of a portable - thus, it seems, the 1800 Elo barrier. Note the Ratings from NS/44 for some of the most popular of the genuine portables: Mephisto's MARCO POLO (1745 Elo), CXG's ADVANCED STAR CHESS (1651), Kasparov's CAVALIER and TRAINER (1595), and Novag's AMIGO (1567). It has often seemed to me that it ought to be possible to improve on these figures, despite the limits forced by size and space. Even Novag's popular SUPER VIP just misses the 1800 figures (1771).

THE "BARRIER" BROKEN!

Finally the sought-for breakthrough has been

achieved by, first, the Franz Morsch H8 program used in the Fidelity TRAVELMASTER and the Kasparov TRAVEL CHAMPION and, second, Dave Kittinger's H8 program for Novag's JADE and RUBY.

However, there is always more which needs comparing between portables than just their gradings! In fact many buyers may not choose one over another because of the gradings at all, but because of its individual method in use!

THE FRANZ MORSCH PROGRAMS

The TRAVELMASTER and TRAVEL CHAMPION both cost £99.95, and have been briefly reviewed in previous Issues. The former uses a press-sensory Board ON which you also move the pieces and built INTO which is the display. This is a sensible design and makes it easy to hold using one hand. However readers will know there have been quite serious reliability problems with the unit supplied by Fidelity - about which I shall say no more. The Kasparov TRAVEL CHAMPION is a plug-in set with a solid playing surface in black and grey plastic. The black and light grey pieces, which you press into the holes to register moves, are small but recognisable - though Bishops and Pawns need watching! The Computer has a clip-on lid which fits snugly as a base for the set when you are using it, and then as a lid when you've finished keeping the pieces in place for next time. A neat compartment stores captured pieces. Again it is easy to hold using one hand and no problem at all to play on with its useful information display.

The Morsch playing program in both is very similar in fact to his FRITZ program for PC's. The opening book is small at 2,000 positions, though plenty of variety for the first moves has been subtely built into that. This program has been entered into a couple of week-end Events where it has graded at 1983 Elo/173 BCF. Taking its Computer v Computer games into account as well, it shows at 2008 on my List, from 136 games in the TRAVEL CHAMPION board, and 1995 as the TRAVELMASTER. We have kept separate records as the Kasparov machine came out some months later with minor changes and a revised opening book, so they are slightly different.

Incidentally the Kasparov ADVANCED TRAINER (£79.95) now has the same T/CHAMPION program. This also is a plug-in,

with a hinged rather than detachable lid. You don't have the info. display, but you do get a built-in Teaching and Training program that also warns you of mistakes you may make, plus an excellent and quite substantial teaching Book which makes full use of the computer and will certainly help beginners improve quickly.

THE DAVE KITTINGER PROGRAMS

Now to the Novag machines. First the RUBY which I have seen and tested, and which costs £139.95. It is exactly like its Novaq predecessor, the SUPER VIP, in appearance, use and features. Thus the separate calculator-like keyboard and plastic fold-over chess board come in a useful carry box. The pieces used are of the magnetic disc variety so, in play, you enter your move on the keyboard (E-2-E-4), and move the piece on the separate opened wallet-size board (or your favourite wood board if you're playing at home, of course). The RUBY also has its own display. which shows its move in algebraic notation, as well as giving the same wide variety of information as does the TRAVEL CHAMPION.

RUBY has a range of 48 time controls and levels, plus all of the features you would need, including the important memory save. It is also mains or battery operable. I believe there will be a facility to plug it into a PC for print-out of games and analysis, but the appropriate cables and RUBY manual were not with the test version sent to me, so I can't give any details.

The program is by Dave Kittinger and also uses the RISC-like H8 chip to get tactical speed and strength. The opening book is a particularly good one, quoted as 12,000 positions.

Though it is too early at the time of writing to give it my "official" grading (I have only played 20 computer v computer games on it, and some of those at a speed slightly faster than I use for official results... plus one or two games against it myself), I am quite certain it will reach over 2050 Elo/180 BCF... at the moment 2095/187 would be my best guess.

Apart from wondering how chess players will get on explaining to their friends (or wives) that they have just been playing a game with RUBY, the only negative comment I have concerns a point of design. Like its pre-decessor, once the computer's move appears on display, it stops its own clock and starts yours. You have to transfer that move to another board, which may

be in your other hand or on the table in front of you. Whichever, it will take a few seconds off YOUR clock! This is of little importance at, say, 1-3 mins per move, but is a little prejudicial against you at any form of speed or blitz chess.

The Novag JADE I haven't yet seen, but it appears to use the same lovely little board that previously housed the AMIGO. This means that it's of the plug-in variety, which is my personal preference. The playing area is slightly smaller than you get with most plug-ins, but the finished product is unarguably good to look at,

Although this is also a Dave Kittinger program, and also uses the same H8 chip, the same 32K memory, the same number of levels etc. it is NOT quite the same program! Novag's own brochure shows its estimated grade to be 160 Elo below that for the RUBY, and Paul Cohen of Eureka - who kindly loaned me the RUBY - told me that in a short test of his the RUBY had beaten the JADE by 6-3 (which is a 130 Elo gap). This explains why the JADE is cheaper at £99.95.

Before moving on to a few games, those who prefer their machines in a table-top version can buy all of these programs in a press-sensory housing: the Travel Champion becomes the GK-2000, the Jade becomes ZIRCON (£125), and the RUBY is named EMERALD (£150).

GAMES

As part of my tests to evaluate the new machines, the first Match I played was of 8 games at 30 secs per move between Novag RUBY and Kasparov TRAVEL CHAMPION, with this result:

Both programs play interesting, thought-provoking chess, and are good at tactics. Their endgames fall off a little due to the difficulties of getting specialised knowledge for this part of the game into the available memory area, but I was still impressed by the overall performance of both machines, especially in view of the attractive prices. I can also report that both computers behaved with 100% reliability during my tests.

Strangely, in the match, all the games with RUBY as White were drawn. The wins for either side were when TRAVEL CHAMPION was White. Perhaps its smaller opening book is designed for interesting chess more than a maximum grading!

Here are two games from the Match. The first

is one with interesting middle game moments, and some endgame play for readers to make their own assessments.

Novag RUBY (2095) - Kasparov TRAVEL CHAMPION (2000)

60/30. Game 3. French Defence, Tarrasch.

1.e4 e6 2.d4 d5 3.Nd2 Nf6 4.e5 Nfd7 5.Bd3 c5 6.c3 Nc6 7.Ne2 cxd4 8.cxd4 Qb6 9.Nf3 f6 10.exf6 Nxf6 11.0-0 Bd6 12.Nc3

[Though the Computers have been out of their own Books for a few moves, they still managed to play along a line found in BCO2 up to this point. Here Georgiev-Farago, 1979, went 12.Re1]

12...0-0 13.Nb5 Bb8 14.Re1 Bd7 15.Nc3 Bd6 16.Nb5 Bb4 17.Re2 a6 18.Nc3 Rac8 19.Bg5 h6 20.Be3 Ng4 21.h3 Nxe3 22.Rxe3 Bd6 23.Re2

[23.Bc2 was needed, so adding his Queen's protection to d4. Then Rf4 would be pointless due to 24.Ne2l]

23...Rf4!

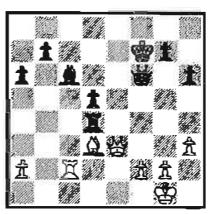
[23...Rxf3 might also have been tried, at least for effect! E.g 24.gxf3 Nxd4 25.Rd2 (25.Re1? Qxb2!) Bf4 with advantage!

24.Ne5 Bxe5 25.dxe5 Nxe5 26.Rxe5 Qxb2 27.Nxd5 exd5

(27...Qxf2+ might have won for TC)

28.Re2 Qf6 29.Rc1 Rxc1 30.Qxc1 Rd4 31.Qe3 Kf7 32.Rc2 Bc6?

[32...Rb4 was better, as the Bishop is not safe on its new square]



33.Bxa6!

[An excellent find by Novag RUBY, equalising]

33...bxa6 34.Rxc6 Rd1 + 35.Kh2 Qxc6 36.Qf3 + Qf6 37.Qxd1

[It is worth playing through a few more moves, to see how the Computers handle the endgame, even at 30 secs per move!] 37...d4 38.Qb3 + Kg6 39.Qd3 + Kg5 40.Kg1 Kf4 41.g3 + Ke5 42.f4 + Kd5 43.Qf3 + Kc4 44.Qe4 g5 45.f5 Kc3 46.Qe6 Qxe6 47.fxe6 d3 48.e7 d2 49.e8Q d1Q + 50.Kf2 Qc2 +

[And the draw was agreed a few moves later]

In our second game from this Match we see the RUBY at its best!

Kasparov TRAVEL CHAMPION (2000) -Novag RUBY (2095)

60/30. Game 4. Centre Counter!

1.e4 d5

[I would not expect the RUBY to win with this all that often, but it's full marks for enterprise, and human opponents wont meet it so often]

2.exd5 Nf6 3.d4 Nxd5 4.c4 Nb6 5.Be3

[Nf3 is in BCO2, but both programs are already 'on their own' here]

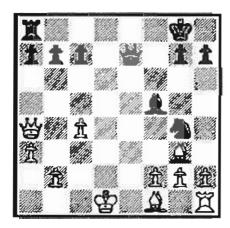
5...e6 6.Nc3 Bb4 7.Qb3 Nc6 8.Nf3 0-0 9.Rd1 Qe7 10.a3 Bxc3+?!

[Leaves White with a good Pawn centre restricting his Knights' potential. 10...Ba5 11.Be2 Bd7 looks better for White]

11.Qxc3 Rd8 12.Bg5 f6 13.Bf4 e5 14.dxe5 Rxd1 + 15.Kxd1 Na4 16.Qc2 fxe5 17.Nxe5 Nxe5 18.Qxa4 Ng4! 19.Bg3

[19.Qc2 looks better. Then Bf5 20.Qe2 Qd7+21.Ke1 Re8 22.Be3 Now Black has a big development advantage for the Pawn, but it may not be so easy to turn it into a win.]

19...Bf5!



20.Kc1??

[20.Be2 was necessary. Qe4 still looks very useful for Black however. If 21.Kd2 Rd8+! is winning, so 21.Ke1 Qxg2 22.Rf1 is best, though it is Black who is a Pawn up after 22...Nxh2 23.Bxh2 Qxh2]

20...Qe4!! 21.Bh4

[21.Bd3 was the only vaguely worthwhile reply that I can find, and even this loses heavily after Qxd3 22.Rd1 Qb1 + 23.Kd2 Qxb2 + 24.Ke1 Bc2!]

21...Nxh2

[The RUBY after finding a series of "best moves", finally misses one... 21...Qf4+ was totally decisive, 22.Kd1 Rd8+! And if 23.Bxd8 Nxf2+ is mate in 4]

22.Rxh2 Qb1 + 23.Kd2 Qxb2 + 24.Kd1 Qa1 + 25.Kd2 Qd4 + 26.Ke1 Qe5 + 27.Kd2 Qxh2 28.c5 Qe5 29.Qb4 Re8 30.f3 g5 31.Qc4 + [31.Bf2 Rd8 + !]

31...Kg7 32.Be2 Qe3 + 33.Kd1 Rd8 + 34.Ke1 gxh4 35.Qb5 Rd2 36.Qc4 Rb2

[Time to give up - it's mate in 5. An excellent game by the Novag RUBY, apart from the one miss at move 21 which allowed TC to last longer, though with the same end result[0-1]

With an overall win of 5-3 against the 2000 Elo rated TRAVEL CHAMPION, it seemed right to test it against something even stronger. For another 8-gamer, this time I chose the interesting HIARCS MASTER program which, running on my 386/20, grades at around 190 BCF.

British readers will no doubt welcome another look at HIARC's games, this being by a "home grown" programming team led by MARK UNIACKE. For this Match the time control was All moves in 60, but the first game suggested that the Novag machine might be overmatched...

Novag RUBY (2095) - HIARCS 386/20 (2120) . G/60 (1). English (Rubinstein/Botvinnik)

1.c4 c5 2.Nc3 Nf6 3.g3 d5 4.cxd5 Nxd5 5.Bg2 Nc7 6.Nf3 Nc6 7.0-0 e5 8.d3 Be7 9.Nd2 Bd7

[The Computers' books have got them to here; now Novag starts to think]

10.Bxc6 Bxc6 11.Nc4 Bf6 12.Na5 Qd6 13.Qb3 Rb8 14.Qa3 0-0

[HIARCS reads -49 playing this, -> Nxc6]

15.Nc4?! Qe7 16.Qxa7?!

[Both programs think they are about +50 ahead; RUBY because of the won Pawn, HIARCS because it can imprison the White Queen away from the real action]

16...Ra8 17.Qb6 Ra6 18.Qb3 Ne6 19.Nd2 Nd4 20.Qd1 Qe6 21.e3 Nb5

(By here HIARCS has dropped to +19. It expects 22. Noe4 which possibly does have White getting

back into the game still the Pawn ahead)

22.Nxb5

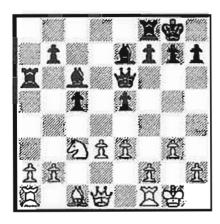
[22.Nde4 Be7 23.Nxb5 Bxb5 24.Nc3 Bc6 and Black's compensation for the Pawn doesn't look enough. Or 22.Nce4 Be7 23.Qb3 Qxb3 24.Nxb3 b6 25.Ned2 now seems pretty even]

Arrana ta ta anaka kacamatan Arrana ta arawa ka kacamatan ka

22...Bxb5

[HIARCS goes to a sophisticated + 76 with this]

23.Ne4 Be7 24.Nc3 Bc6



[Get ready for a sudden ending as the Bishop is placed onto a very dangerous diagonal]

25.Bd2

[25.f3 was expected, perhaps leading to b5 26.b3 Rd8. 25.b3 was the FRITZ2 preferance, whilst I was preparing the game record for NS, then Rd8 26.Qe2 looks about equal]

25...Rd8

[The RUBY was expecting this after waiting 2 mins for the HIARCS choice. But it responds with a blunder!]

26.Qc2??

[26.e4 was expected by Black, showing +140, Rxd3 27.Qe2 Qc4 and an advantage. 26.Qe2 also looks to hold, Qd6 27.Rfd1! Qxd3 28.Bc1 Qxe2 29.Rxd8+ Bxd8 30.Nxe2 leaves Black with a small extra in mobility]

26...Bf3!!

[Wins outright - found and played within a minute] 27.Qd1

[Most other moves seem to allow a quick mate: e.g 27.Nd5 Qh3 is m/4 by 28.Nxe7+ Kh8 29.Ng6+ Rxg6 30.Qxc5 Qg2+]

27...Bxd1 28.Raxd1 Rxd3

[And Novag resigned] 0-1. Was HIARCS going to over-power RUBY tactically? In game 2 it seemed definitely NOT - for the first 25 moves!

HIARCS 386/20 (2120) - NOVAG RUBY (2095), G/60 (2). Giuoco Piano

1.e4 e5 2.Nf3 Nc6 3.Bc4 Bc5 4.c3

Nf6 5.d4 exd4 6.e5 d5 7.Bb5 Ne4 8.cxd4 Bb6 9.Nc3

[RUBY goes out of book here; HIARCS follows immediately]

9...Nxc3 10.bxc3 Bg4 11.Qa4 Qd7 12.0-0 Bxf3 13.gxf3 0-0 14.Ba3 Rfe8 15.Bxc6 bxc6 16.Kg2 Re6 17.Kh1

[White seems to be showing concern over his endangered King with a time-wasting shuffle and -68 evaluation]

17...Rh6!

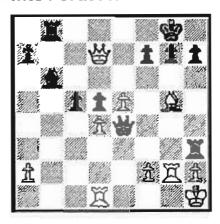
[Novag knows what it's after!]

18.Bc1 Rh3 19.Be3 Rxf3 20.Rab1 Rd8 21.Rg1 Qf5 22.Rbf1 Qe4 23.Rg2 [Nothing else available, but White now reads -238]

23...c5 24.Rfg1 Rh3 25.Rd1 cxd4 26.Bg5 Rb8 27.cxd4

[The HIARCS eval. reaches its worst... -302 -> c5]

27...c5 28.Qd7!?



[Can a counter-attack save the day at this stage?] It may seem unlikely, but it's the only practical chance and therefore worth taking]

28...Qf3 29.Rb1 cxd4 30.e6! Rxh2+? [30...Rh5 was expected, and seems right to keep Black just ahead. But 31.e7 Bxh2+ (31...Qxg2+?? 32.Kxg2 Bxg5+ 33.Kf3 and Black is lost because of the back-rank mate threat) 32.Kxh2 Bc7+ is a draw!

31.Kxh2 Bc7+ 32.Qxc7 Qh5+ 33.Kg1 Rxb1+ 34.Bc1 Qd1+ 35.Kh2

[And a perpetual check draw! A quite unexpected end] ½-½. After this I wasn't sure what to expect, but I thought HIARCS would probably still win the match. Mmmm!

NovagRUBY (2095) - HIARCS 386/20 (2120) G/60 (3). Grunfeld, Exchange variation.

1.d4 Nf6 2.c4 g6 3.Nc3 d5 4.cxd5

Nxd5 5.e4 Nxc3 6.bxc3 c5 7.Bc4 Bg7 8.Ne2 0-0 9.0-0 Nc6 10.Be3 Qc7 11.d5

[HIARCS has a comparatively small opening book compared with many PC progs - but it's a cleverly designed one as, once again it's RUBY which has had to start analysing first]

11...Ne5 12.Qb3 Nxc4 13.Qxc4 b6 14.f4!

[Challenging, and good to see. For a few moves Black prefers its own position. But the next time this Pawn is pushed, it changes its mind!]

14...Bd7 15.Rab1 Rac8 16.Qd3 Rcd8 17.c4 h6 18.Ng3 Bg4 19.Qa3

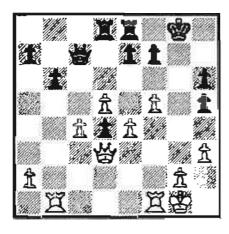
[After a series of excellent moves obtaining a big centre and preparing a King-side assault, this seemed strange]

19...Rfe8 20.f5

[But the g4 Bishop suddenly looks a bit sick!] 20...Bd4?

[20...g5 looks better to me, starting to create a possible escape route for the beleagured Bishop to f7]

21.Bxd4 cxd4 22.h3 Bh5 23.Nxh5 gxh5 24.Qd3



[Great Novag play! The Black King now looks draughty, and the d-Pawn is under threat as well]

24...Rc8 25.Rbc1 Qe5 26.Rfd1 e6 27.fxe6 fxe6 28.Qxd4 exd5 29.exd5

[So White has a powerful, supported passed Pawn. The rest of the game is interesting because I.M Peter Wells in endorsing HIARCS has specifically applauded its endgame... and I have suggested the H8 programs may fall away a little there!]

29...Qg3 30.Rd3 Qg5 31.Rf1 Re2 32.Rf2 Rce8 33.Rdf3 R2e4 34.Rf8 + Rxf8 35.Rxf8 + Kxf8 36.Qxe4 h4 37.a4 Qc1 +?

[A typical computer move - encouraging the enemy King to get centralised in the endgame!]

38.Kf2 Qg5 39.Ke2 Qe7 40.Kf3!

Qa3+?

[If a check was required, wasn't 40...Qf7+ the better choice?]

41.Qe3 Qxe3+ 42.Kxe3

[Of course Black is lost now, though neither computer's eval. makes that 100% clear just yet. But Novag's finishing moves are all very correct]

42...Ke7 43.Kf4 Kd6 44.Kg4 a6 45.Kxh4 Kc7

[Perhaps not the best choice to retain hopes of an unlikely last minute blunder. But if, 45...b5 46.axb5 axb5 47.cxb5 Kxd5 48.Kh5 Kc5 49.Kxh6 Kxb5 50.g4 there are no chances of a swindle]

46.Kh5 Kd7

[HIARCS, with an eval. of -1137, resigned here]

So that made it 1½-1½, which is where we leave the RUBY games for this Issue. The full MATCH SCORE TABLE ended like this:-

RUBY 0 ½ 1 0 ½ 1 1 0 = 4 HIARCS 386/20 1 ½ 0 1 ½ 0 0 1 = 4

... clearly confirming the RUBY as a more than sprightly newcomer!

I want to share 2 more interesting games from this Match with you next time and, before I return the loaned machine, I'm going to squeeze in a few against ZARKOV, also on my 386.

This would mean RUBY will have played against three different styles of program, AND it will give me enough games to allot this new portable a grading on the NS/45 Rating List! Maybe there'll be a ZARKOV-RUBY game worth publishing too!

Even without any further games, it seems that the Novag RUBY will be the strongest available PORTABLE, at least for now. Like almost all Dave Kittinger programs, it is an interesting opponent and has an attractive playing style which makes for good and varied chess.

What of HIARCS? Though I cannot put it up with Chess GENIUS or M CHESS PRO if choosing the strongest PC program, it IS good value and I also like its style of play very much. It has a human-like character much of the time and usually plays well in the endgame. Use of features (no Mouse control) isn't as easy as with most, but I hope there will be a future version to correct that, maybe increase the Opening Book size, and speed things up with Machine Coded algorithms. Then, perhaps, others will need to watch out!

The 1993 ACM TOURNAMENT

The 1993 ACM International Computer Chess Championship: Report by Eric Hallsworth

The annual Tournament, now in its 23rd, year, was held in February this time.

We start with a brief description of the various contestants, which are listed in order of INITIAL SEEDING by the Tournament Organisers. Some of these bring new names and programmers to NS Readers' attention. The estimated gradings are taken from the pre-Tourny PROGRAM GUIDE.

1. **Chess Machine/Schroeder** by Ed Schroder and Jan Loumann, Rotterdam, Netherlands. World Champion from Madrid Tournament, 1992.

PC laptop with 32MHz ARM RISC. *8000 nodes/second; 434 Kbyte hashtable; *Estimated rating 2495*

2. **M Chess Professional** by Marty Hirsch, San Rafael CA.

PC 486/50 running a commercially available chess program. 5000 nodes/second; 2 Mbyte hashtable; *Estimated rating 2460*

3. **B*Hitech** by Dr. Hans Berliner and Chris McConnell, Carnegie Mellon University.

Special purpose chess hardware running the B* search algorithm instead of alpha-beta search. 100,000 nodes/second; 1 Mbyte hash table; *Estimated rating 2400*.

4. **Zarkov** by John Stanback of Ft. Collins, USA. HP

PA_RISC 9000/735C (99 Mhz) running a "hobby program" (not the commercially available version of Zarkov). 15,000 nodes/second; 64 Kbyte hash table; *Estimated rating 2400*.

5. Cray Blitz by Robert Hyatt, Harry Nelson and Albert Gower, Univ. Alabama at Birmingham, USA.

CRAY C-90 16 Processors (located at Cray Research's Production Laboratory, Chippewa Falls, Minnesota). 10⁶ nodes/second; 2*10⁹ byte hash table; *Estimated rating 2200*+.

(Seeded above its committee-given grading?!)

6. **Socrates If** by Don Dailey and Larry Kaufman, Heuristic Software, Berkeley, California - though Don and Larry live and work in Florida)

PC 486/50 running a soon-to-be-commercially-available program written entirely in C. About 8,000 nodes/second; 32K hashtable; *Estimated rating 2400*.

7. **Kallisto** by Bart Westrada and Franz van de Eng. Wormerueer Netherlands.

PC 486/50. ?? nodes/second; 128K Hash table; Estimated rating 2300.

8. **BP** a "hobby program" by Robert Cullum of Prospect Heights, IL, USA.

PC 486/50 running a "hobby program", 2400 Nodes/second; 165K entries (96 bits per entry?); *Estimated rating 2260*.

9. **BeBe** by Tony and Linda Scherzer, SYS-10 Inc., Hoffman Estates, JL, USA.

SYS 10 Chess Engine (special purpose chess hardware) 40,000 nodes/second; 3 Meg hash table; *Estimated rating 2100*

10. **StarTech** by Bradley C. Kuszmaul, Charles Leiserson, Ryan Rifkin, James Schuyler, all of MIT.

A highly parallel alpha-beta algorithm developed at MIT, using the Hitech static evaluation function, on a 512 processor CM5. 200,000 nodes/second; 200Megabtye hash table; *Estimated rating 2100* in guide, but "the organizers just made that up" according to the programming team. StarTech is probably more like 2300-2400.

- 11. **Now** by Mark Lefler, Frankfurt, Germany. PC 486/50; the program is written in C*. 8K nodes/second; ?? hash table; *Estimated rating* 2250.
- 12. Innovation by Jeff Mallett, Hickory NC, USA.

Macintosh Quadra 700 (68040); the program is written in C. 2,000 nodes/second; 123 K hashtable; *Estimated rating 2000*

Here is the final cross-table. Where programs have tied, I have placed them in "sum of opponents' scores" order. It is easily clear that the ChessMachine/Schroeder had an EXTREMELY tough set of opponents (sum of

opponents' scores was 16 - the winner's was 10½! Also note that the sum of opponents' faced by M Chess Pro was a massive 16½. It seems the organisers had it in for the commercially available entrants!).

FINAL TABLE: ACM TOURNAMENT, Feb. 1993								
Pos	Neme	Rnd 1	Rnd 2	Rnd 3	Rnd 4	Rnd 5	Tot	SoOp
1.	Socrates (Soc)	Inn,1	CMS,1	CB,1/2	MCP,1	Kal,1	4 1/2	
2.	Cray Blitz (CB)	Now,1	MCP,1	Soc, 1/2	CMS,1/2	ST,1/2	3⅓	
3 = .	Star Tech (ST)	Zar,1	B*H,1/2	MCP,0	BeB,1	CB,1/2	3	121/2
3 = .	B*Hitech (B*H)	BeB ₁ 1	ST,1/2	Zar,0	BP,1/2	CMS,1	3	12
3=.	Zarkov (Zar)	ST,0	BeB,1	B*H,1	Kal,0	MCP,1	3	111/2
6 = .	Chess Machine/Schroeder (CMS)	Ka1,1	Soc,0	BP,1	CB,1/2	B*H,0	21/2	16
6 = .	Kallisto (Kal)	CMS,0	Inn,1	Now, 1/2	Zar,1	Soc,0	21/2	121/2
6=.	BP (BP)	MCP,0	Now,1	CMS,0	B*H,1/2	l n n,1	21/2	10
6 = .	Now (Now)	CB,0	BP,0	Kal, 1/2	lnn,1	BeB,1	21/2	91/2
O.	M Chess Professional (MCP)	BP,1	CB,0	ST,1	Soc,0	Zar,0	2	
1.	BeBe (BeB)	B*H,0	Zar,0	lnn,1	ST,0	0,woN	1	
12.	Innovation (lnn)	Soc.0	Kal,0	BeB,0	Now,0	0,48	0	

Before we look at a small SELECTION of GAMES - a word about the different VERSIONS of some of the playing programs might be of interest:-

[a] ZARKOV. The program entered here was on RISC hardware, and neither of the versions (2.5 and 2.6) available commercially. By the way, 2.6 does not appear to make any worthwhile improvement over 2.5 to me.

[b] CHESSMACHINE/SCHROEDER. I have it on GOOD authority that this was NOT the version 3.1 which won in MADRID. I understand that it was the 3.0 version currently showing in the RATING LIST, Version 3.1 is CLAIMED to be 60-80 Elo stronger, which MADRID confirms! [c] M CHESS PRO. I don't know which Version was at the ACM! My initial V/3.0, like everyone else's, had problems with its features (position set-up, game replay, settings storage for example). I now have V/3.12, so it seems (as with the original M CHESS) there are "new vesrions" coming out every few days. What PLAY TESTING the small changes get before issue I wouldn't know. Some versions quite likely correct faults in the intended improvements of earlier versions. My V/3.12 is getting disappointing results on the 386 machines. Some results from Sweden on a 486 are very good; whether this is due to the 486 or a different program Version, I wouldn't know!

So... to the GAMES, which are mainly those involving either PROGRAMS available in a COMMERCIAL format, or the Tournament LEADERS in key match-ups.

[Round 1] Chess Machine/Schroeder-Kallisto

1.e4 e5 2.Nf3 Nc6 3.d4 exd4 4.Nxd4 Nf6 5.Nxc6 bxc6 6.e5 Qe7 7.Qe2 Nd5 8.c4 Ba6 9.b3 O-O-O 10.g3 f6 11.Bb2 fxe5 12.Bg2 Re8 13.Nd2 Qf6 14.O-O Nb6 15.Rad1 Qf5 16.Be4 Qe6 17.Rfe1 Bc5 18.Bf3 Qf5 19.a4 Bb4 20.Bh5 g6 21.Bg4 Qg5 22.Bxe5 h5 23.Bh3 Rhf8 24.f4 Qe7 25.Qg2 Bb7 26.Kf1 c5 27.Qf2 Qd8 28.a5 Bxa5 29.Qxc5 Bxd2 30.Rxd2 Kb8 31.Qa5 d6 32.c5 Nd7 33.Bxd7 Rxe5 34.Rxe5dxe5 35.c6 Bc8 36.Be6 Qe8 37.Rd7 1-0

[Round 2] M Chess Pro-Cray Blitz

1.e4 e5 2.Nc3 Nc6 3.f4 exf4 4.Nf3 g5 5.d4 g4 6.Bc4 gxf3 7.O-O d5 8.exd5 Bg4 9.Qd2 Na5 10.Bb5+ c6 11.Qxf4 Nf6 12.Re1+ Kd7 13.dxc6+ bxc6 14.Ne4 Nxe4 15.Qxg4+ Kc7 16.Rxe4 cxb5 17.Qxf3 Qd7 18.Rf4 Be7 19.Rxf7 Raf8 20.Bf4+ Kb6 21.Be5 Rhg8 22.c3 Nc6 23.Re1 Qe8 24.Rxf8 Qxf8 25.Qd5 Rg5 26.a4 bxa4 27.c4 Nxe5 28.Rxe5 Rxe5 29.Qxe5 Qd8 30.c5+ Kb5 31.Qe2+ Kb4 32.Qd3 Bf6 33.Qc3+ Kb5 34.Qd3+ Kc6 35.Qf3+ Kd7

36.Qe4 Qe7 37.Qb7+ Ke8 38.Qa8+ Qd8 39.Qc6+ Kf7 40.Qb7+ Kf8 41.d5 Qe7 42.Qb8+ Kf7 43.Kf1 Bxb2 44.g4 Bc3 45.Kf2 Qxc5+ 46.Kf1 Qc4+ 47.Kf2 Qd4+ 48.Kf3 Qd1+ 49.Ke3 Bd2+ 50.Kf2 Qe1+ 51.Kg2 Qe2+ 0-1

[Round 2] **Socrates-Chess Machine Schroeder**

1.d4 d5 2.c4 c6 3.Nc3 Nf6 4.e3 e6 5.Nf3 Nbd7 6.b3 Bb4 7.Bd2 O-O 8.Bd3 dxc4 9.bxc4 Nc5 10.Be2 Bxc3 11.Bxc3 Nce4 12.Bb4 c5 13.dxc5 Qc7 14.Qd4 a5 15.Ba3 Rd8 16.Qe5 Qb8 17.Qxb8 Rxb8 18.Ne5 Bd7 19.f3 Nc3 20.Bb2 Na4 21.Bd4 Rbc8 22.Nd3 Bc6 23.O-O Nd7 24.Rac1 f6 25.e4 e5 26.Be3 NfB 27.Rfd1 Ne8 28.Rc2 Nd4 29.Bxd4 Rxd4 30.Rb1 Rcd8 31.Rb3 h5 32,Kf2 Kf8 33,Ra3 Kf7 34.Ke3 g5 35.Rc1 Ke6 36.Bd1 Ke7 37.Bxa4 Bxa4 38.Rcc3 Bc6 39.Rxa5 Kf7 40.Ra7 Kg6 41.a4 g4 42.a5 h4 43.Nb4 Rd2 44.Rd3 R8xd3+ 45.Nxd3 gxf3 46.gxf3 Ra2 47.f4 exf4 + 48.Nxf4 + Kf7 49.Nd5 Ra3+ 50.Kd4 Ra4 51.h3 Kf8 52.Nxf6 Ra3 53.Nd5 Rxh3 54.a6 bxa6 55.Rxa6 Be8 56.c6 Rh1 57.Ra8 Kf7 58.Ra7+ Kf8 59.c7 Bd7 60.Ke5 Rg1 61.Kd6 Bg4 62.Ra8 + 1-0

Free points were available for those lucky enough to meet Innovation, reminding us of the shallow nature of a 5 Round Tournament...

[Round 3] Bebe-Innovation

1.e4 c6 2.d4 d5 3.Nc3 dxe4 4.Nxe4 Nf6 5.Nxf6+gxf6 6.c3 Bf5 7.Ne2 h5 8.h4 Nd7 9.Ng3 Bg4 10.Be2 Bxe2 11.Qxe2 Qa5 12.O-O O-O-O 13.c4 e6 14.Bf4 Bh6 15.Bd6 Rdg8 16.b4 Qb6 17.Ne4 Rg4 18.Bc5 Nxc5 19.Nd6+ Kd7 20.dxc5 Qxb4 21.Rab1 Qxc5 22.Rfd1 Qxd6 23.Rxb7+ Kc8 24.Rxd6 Kxb7 25.Rd7+ Ka8 26.f3 Rxh4 27.Qf2 1-0

[Round 3] M Chess Pro-StarTech

1.e4 e5 2.Nf3 Nc6 3.Bb5 a6 4.Bxc6 dxc6 5.O-O f6 6.d4 exd4 7.Nxd4 c5 8.Nb3 Qxd1 9.Rxd1 Bg4 10.f3 Be6 11.Bf4 c4 12.Nd4 O-O-O 13.Nc3 Rxd4 14.Rxd4 Bc5 15.Ne2 Ne7 16.Kf1 Bxd4 17.Nxd4 Bd7 18.Rd1 Re8 19.Kf2 f5 20.Bg3 fxe4 21.fxe4 Nc6 22.Ke3 Nb4 23.Kf4 Nxa2 24.c3 Rf8 + 25.Ke3 c5 26.Nf3 Ba4 27.Ra1 Bb3 28.Bd6 Rf6 29.Bxc5 Rc6 30.Kd4 b6 31.Ba3 b5 32.Nd2 Rf6 33.h3 a5 34.Kc5 b4 35.cxb4 exb4 36.Bxb4 Rf2 37.Nxb3 cxb3 38.Ba3 Rc2 + 39.Kd6 Rxg2 40.e5 Rd2 + 41.Ke7 Rd3 42.Rf1 Rxh3 43.e6 Rd3 44.Rf8 + Kc7

45.Kt7 g5 46.Bc5 g4 47.e7 Rd7 48.Ke6 Rxe7+49.Bxe7 Kb7 50.Rt7 Kc6 51.Bd6 h6 52.Rh7 1-0

[Round 4] Socrates-M Chess Pro

1.d4 Nf6 2.c4 e6 3.Nc3 Bb4 4.Qc2 c5 5.dxc5 O-O 6.a3 Bxc5 7.Nf3 d5 8.cxd5 exd5 9.Bg5 Be6 10.e3 h6 11.Bh4 Nc6 12.Rd1 Be7 13.Be2 Rc8 14.O-O Ne4 15.Nxe4 Bxh4 16.Nxh4 Oxh4 17.Nd6 Nd4 18.Qd3 Nxe2+ 19.Qxe2 Rb8 20.Nb5 a6 21.Nd4 Rbc8 22.h3 Qg5 23.Qf3 Rc7 24.Rc1 Rfc8 25.Rxc7 Rxc7 26.Rb1 Bd7 27.Re1 Qe5 28.Rd1 Rc8 29.b3 Rc3 30.a4 Qg5 31.Kh1 Bc8 32.a5 Bd7 33.Qe2 Qd8 34.Qd2 Qc7 35.Kg1 Rc5 36.b4 Rc4 37.Rb1 Qd6 38.Qa2 Qg6 39.Kh1 Bf5 40.Rg1 Qh5 41.Re1 Be4 42.f3 Bg6 43.Qd2 Qe5 44.Rd1 Qc7 45.Ne2 Bc2 46.Ra1 Qd7 47.Rc1 Bf5 48.g4 Be6 49.Nd4 Qc7 50.Rb1 Bc8 51.b5 h5 52.Kg2 hxg4 53.hxg4 Bd7 54.b6 Qc5 55.Ra1 Rc3 56.Ra2 Qc8 57.Ne2 Rc4 58.Nf4 d4 59.exd4 Qc6 60.g5 Qd6 61.Ne2 Qd5 62.Kg3 Bf5 63.Kf2 Kf8 64.Qf4 Rc6 65.Ra3 Kg8 66.Qe5 Qd7 67.Re3 Kf8 68.Ng3 Bg6 69.Ne4 Rc2 + 70.Kg3 Bxe4 71.Qxe4 Rc6 72.Qh7 Re6 73.Rc3 Rc6 74.Qh8+ Ke7 75.Rxc6 Qxc6 76.Qxq7 Qc1 77.Qe5+ Kd7 78.Qd5+ Ke8 79. Kg4 Qg1 + 80.Kf5 Qh1 81.Qe5 + Kf8 82.Qb8 + Kg7 83.Qxb7 Qh3+ 84.Ke4 Qe6+ 85.Kf4 Qd6+ 86.Ke3 Qa3 + 87.Ke4 Qxa5 88.Qc7 Qe1 + 89.Kd5 Qf1 90.b7 Qxf3+ 91.Kd6 Qf4+ 92.Kc6 Qe4+ 93.d5 Qc4+ 94.Kb6 1- 0

[Round 4] Zarkov-Kallista

1.d4 Nf6 2.c4 g6 3.Nc3 d5 4.Nf3 Bg7 5.Bf4 O-O 6.cxd5 Nxd5 7.Nxd5 Qxd5 8.Bxc7 Bg4 9.e3 Rc8 10.Bf4 Nc6 11.a3 g5 12.Bg3 Rd8 13.Bd3 Bxf3 14.Qxf3 Qa5 + 15.Kf1 e5 16.Qf5 exd4 17.Qxh7 + Kf8 18.exd4 Rxd4 19.Re1 Rad8 20.Be2 Rd2 21.Qh5 Rxb2 22.f4 Nd4 23.Qxg5 Rd5 24.Qg4 Nxe2 25.Rxe2 Rd1 + 26.Be1 Rxe1 + 27.Rxe1 Qb5 + 0-1

[Round 5]... a brief Interlude, to introduce the next game!

It is well known that endings of Bishops of opposite colors are usually drawn but can be very tricky. For instance, in the 20's before the important principles were well understood, Capablanca won three such endings (that could have been drawn) against players who were among the top 20 in the World! In the following game Hitech demonstrates its understanding of the domain by winning a B's of opposite colours

ending in which it is a pawn down!!

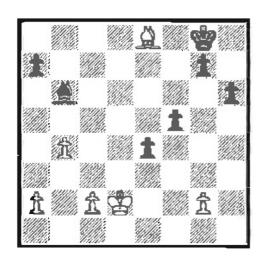
The game was played in the 5th and final round of the 1993 ACM International Championship, between Hitech and Chess Machine Schroeder (the World Computer Champion). The endgame comments are by the Hitech team, and Hans Berliner in particular, in which they seek to temphasise their success in programming Bishop endgames into their program.

[Round 5] Hitech*B-Chess Machine Schraeder

1.e4 c6 2.d4 d5 3.Nc3 dxe4 4.Nxe4 Nd7 5.Bc4 Ngf6 6.Ng5 e6 7.Qe2 Nb6 8.Bb3 h6 9.N5f3 c5 10.dxc5 Bxc5 11.Ne5 O-O 12.Ngf3 Nbd7 13.O-O Nxe5 14.Nxe5 Qc7 15.Bf4 Qe7 16.Rad1 Bd7 17.Rd2 Rfd8 18.Rfd1 Be8 19.Rd3 Bc6 20.Nxc6 bxc6 21.Be5 Rxd3 22.Rxd3 Rd8 23.Bc4 Rxd3 24.Bxd3 Nd7 25.Bc3 Qg5 26.Be4 Nf6 27.Bf3 Nd5 28.Bd2 Nf4 29.Qe1 Nh3+ 30.Kf1 Qf5 31.Bc3 Nxf2 32.Qe5 f6 33.Qxf5 exf5 34.b4 Bb6 35.Bxc6 Ng4 36.Ke2 Nxh2 37.Kd3 Ng4 38.Bd4 Ne5+! 39.Bxe5

(Forcing this, with the result that his weak Pawns get undoubled, appears to put ChessMachine on top)

39... fxe5 40.Be8 e4 + 41.Kd2



41... g5??

[A serious error. Hitech anticipated the correct Kh7! with a minimal edge for Black. After the text, Hitech evaluates the position as favorable to Whitel]

42.Bg6 e3+ 43.Kd3 f4 44.c4 Kg7 45.Bh5 Kf6 46.c5 Bc7 47.Ke4!

[Hitech had foreseen that this position is

favorable to White. His pawns are mobile, and Black's are not]

47... Bb8?

[This is an error. Black must prevent the white queen side pawns from advancing and his bishop should keep an eye on b6; therefore Bd8! White can probably still win even then by playing b5 and a4, and a well timed Kd5-c6, followed by b6. However, Black would have definite counter-chances and the whole thing would have to be carefully calculated. As it is, Black's king remains a helpless spectator while the white q-side pawns advance].

48.b5 Ke7?

[48... Bc7] can and should still be played. Note how the black King and Bishop cannot cooperate since Bg4 will always keep the king in the bishop's path. The position is now clearly lost for black].

49.a4 Kd7

[It is too late now for 49... Bc7. 50.Kd5 Kf6! 51.Bg4! Ba5 52.Kc6 will win].

50.Kd5 Kc7 51.a5 Kc8 52.Bg4+ Kc7 53.c6 Kd8 54.b6 axb6 55.axb6 h5 56.Bxh5 Ke7 57.Bf3 Kd8 58.Ke6 g4 59.Bxg4 f3 60.Bxf3 Bg3 61.Kf7 Kc8 62.Bd1 Kb8 63.c7+ Bxc7 64.bxc7+ Kxc7 65.g4 Resigns. 1-0.

[Round 5] Kallisto-Socrates

1.c4 e5 2.Nc3 Nf6 3.Nf3 Nc8 4.g3 Bb4 5.Bg2 O-O 6.O-O e4 7.Ng5 Bxc3 8.bxc3 Re8 9.f3 exf3 10.Nxf3 d5 11.d4 Ne4 12.Qc2 dxc4 13.Rb1 f5 14.g4 g6 15.Ne1 fxg4 16.Bxe4 Nxd4 17.Qb2 Rxe4 18.cxd4 Qxd4+ 19.Qxd4 Rxd4 20.Bh6 Rd8 21.Rf4 c6 22.Rxc4 Be6 23.Ra4 b6 24.e4 Kf7 25.Bg5 Re8 26.Nd3 c5 27.Kf2 Bd7 28.Rc4 Rac8 29.Ke3 Ke6 30.Nf4+ Ke5 31.Nd5 Rf8 32.Bf4+ Ke6 33.Nc7+ Ke7 34.Rd1 Rf7 35.Bg5+ Kf8 36.Bh6+ Kg8 37.Nd5 Bb5 38.Rc3 Rf3+ 39.Kd2 Kf7 40.Be3 Rd8 41.Kc1 Bc6 42.Ra3 Rd7 43.Kc2 Ke6 44.Nf4+ Ke5 45.Nd3+ Kxe4 46.Nf2+ Kf5 47.Rxd7 Bxd7 48.Rxa7 Rxe3 49.Rxd7 h5 50.Rd8 Ra3 51.Kb2 Rf3 52.Kc1 c4 53.Rb8 q5 0-1

A great result for Don Dailey, Larry Kaufman and SOCRATES II, especially after the disappointing G/30 result in NEU-ISENBURG (see elsewhere). Here it apparently also beat Chess GENIUS 2-0 in a brief G/30 Match on equal hardware.

ED SCHROEDER INTERVIEW

The following INTERVIEW with WORLD CHAMPION programmer, ED SCHROEDER, appeared on the CompuServe bulletin board in mid-February. NS Readers will find it VERY interesting and, in one or two places, quite surprising I think.

Ed's programs have, in Championships, usually appeared under one of two names. Originally it was nearly always called REBELL (a name which speaks for itself). More recently it has always been named GIDEON - a Biblical hero from Old Testament, days, called by God a "mighty man of valour".

ED SCHROEDER has programmed a fine series of 6502-based programs for MEPHISTO since 1986 Rebell, MM4, MM5, Polgar, and Milano. These have frequently represented the best in 6502 programming at their time of appearance, and one has often suspected that a Schroeder program on hardware equivalent to that used by the Spracklens (in their Fidelity days) or those by Richard Lang (also for Mephisto), would have been a really serious challenger for World Titles.

The nearest we got commercially was a Polgar/10, though some bit-sliced 18MHz efforts also appeared occasionally in big Tournaments. It was never quite enough - until the Dutch company TASC brought out an improved Polgar using 15MHz RISC hardware plugged into a PC. This was immediately successful in the Vancouver 1991 Championship, where Ed's GIDEON program, operating on TASC's "Chess Machine" RISC equipment, won the Software group outright with 6/7. It's only defeat was to previous (and 7 times) World Champion Richard LANG, and his program running on Mephisto 68030 hardware at around 50-60MHz.

A 4-game play-off was arranged - though quite why, as GIDEON had WON the Tournament, no-one has even satisfactorily explained. This went Lang's way in the first 2 games, putting him 1½-½ ahead. On day two the second pair of games were both going Schroeder's way, but a ½-1½ result was agreed verbally, resulting in a 2-2 draw and a shared Title. We believe Ed Schroeder's program would have WON both games, if they had been played through (which has usually been a condition in Computer Tournaments).

Soon after the Vancouver event, TASC brought GIDEON out commercially for PC owners to install in their machines, and it immediately went to the top of the RATING LISTS, where it was headed only by the very expensive (at that time > £5,000) Mephisto LYON and VANCOUVER fan-cooled 68030's.

Interestingly the TASC Chess Machine production soon had a second program made available for it - from the fast-rising star JOHAN DE KONING. Though this placed at around 20-30 Elo points behind GIDEON on the Rating Lists, various folk (including British G.M. JOHN NUNN) thought THE KING was actually a slightly tougher opponent. There is little doubt that both are VERY strong indeed.

During 1992 the Schroeder program made its much-heralded appearance in Mephisto's dedicated boards - it was also a slightly improved version and, for a short while, stood at the very TOP of the Ratings. When enough results were in, it settled just 10 Elo points behind the Mephisto 68030, where it was soon joined by de Koning's latest effort, also in a dedicated board - this time from the Kasparov company.

As I write, TASC have produced version 3 programs from both Schroeder and de Koning which run on ARM61 RISC processors, making them the equivalent of 28MHz. A 32MHz version of this won the Madrid Championship for Ed Schroeder at the end of 1992. Needless to say both new programs, with their super-fast hardware, have shot to the top of the Ratings though this time it is de Koning who has the lead - probably due to the discovery that his programs are all slightly better on an aggressive or offensive setting.

Here, then, is the ED SCHROEDER INTERVIEW... exactly as it appeared on the Computer Bulletin Board.

10/2/1993. This week's issue of the respected Dutch weekly magazine "Vrij Nederland" contains an extensive interview with Ed Schroeder by I.M and journalist Max Parn. Schroeder's program "ChessMachine" became World Champion by winning the Tournament in Madrid, last December. Some

of you folks may find it interesting if I transcribe here some statements made - (copyright Max Pam, I guess). **Background:** ChessMachine became World Champion by beating all of its contestants, including Hans Berliner's Hi-Tech. [Not actually correct: it drew one game against... you guessed it, de Koning's ChessMachine entryl - Eric]. In its commercial version it sells for around \$800 in microcomputer software shops. Schroeder works on his creation in a shack beside a church in Deventer, The Netherlands.

A DESCRIPTION OF THE PROPERTY OF THE PROPERTY

Q: What's your driving force?

Ed: Hobbyism. I'm a low grade chess player (Elo 1800), and a mediocre programmer, but I wanted to do something special. I had some ideas, which I implemented. The first time I lost to my program I experienced it as a triumph.

Q: How strong is ChessMachine now? **Ed:** About 2350 Elo. However, in Madrid it scored a Tournament Rating of 2450 Elo. That may have been a lucky shot, but I've been wondering how the program would perform running on Deep Thought's hardware. A doubling of the speed that the PC Chessmachine runs on gained me 60 Elo points. Deep Thought is a hundred thousand times as fast as that. Maybe ChessMachine running on the Deep Thought hardware could eventually score in the GM ranges.

Q: Has your program a certain playing style?

Ed: It's rather aggressive, but in a responsive way. My ideal is Tal's style, with its intuitive appearance. ChessMachine is particularly good at positional sacrifices. In Madrid it sacced a Pawn versus Hi-Tech, and I thought, "Oops, a bug, this is completely idiot". When we analysed the game it turned out to be a very interesting and correct conception.

Q: What's special about the program?

Ed: It has an extremely efficient handling of recurrencies in tree structures, which is based on a mathematical concept I found a long time ago. Furthermore, the evaluation function focusses on Pawns, and Pawn structures. In the Cologne 1986 Tournament it played away the World Championship in the last Round because it mishandled a free Pawn. I decided that that would never happen again, and sought and found the definition of the actual danger of

an advanced free Pawn. It was difficult though to translate that definition into computer programming terms - but at the end I succeeded.

The state of the s

Q: So what is that definition?

Ed: I cannot give that away, I'm afraid. The competitors are listening! The only thing I can say is that it is surprisingly simple and clear. It is a rule, in fact, that probably most strong players know unconsciously.

Q: You're the World Champion now, yet Deep Thought is generally regarded to be the strongest.

Ed: Deep Thought combines fast hardware with little chess knowledge. It computes 7 moves deep and additionally another 3 to 4 selectively. It would probably lose a match by 7-3. But if I could employ their fast hardware, the result might be reversed! My program has chess knowledge implemented as simple rules, such as: "What is an open file worth?" and "What is the meaning of a doubled Pawn?" Just the sort of basic things that you learn in chess class at secondary school!

Q: Why didn't Deep Thought compete in Madrid?

Ed: Deep Thought has been bought by IBM with a lot of fuss. Since then, no results. IBM has injected millions of dollars into the project and cannot afford a defeat at this point in time. Even a 2nd. place by this \$20 million machine, behind an \$800 program, would be disasterous. It has happened before: me playing against a gigantic machine and winning! And then afterwards, have a look at their faces when I draw my floppy out of the PC!

Q: You're working in a church building, are you a religious person?

Ed: Yes. I find it surprising that I could achieve all this, being a mediocre man, and I'm grateful to the Lord.

Q: Isn't the game of chess damaged by the existence of Chess Computers?

Ed: Nonsense. I think it's right that Computers are disallowed at important Tournaments. You don't allow horses at athletics races either. You should use the Computer to help in finding the truth in certain positions - that is what it's very useful for.

·

NS READERS GAMES v Their COMPUTERS!

Our first contributor is W A (Bill) REID. In his first letter to me in early January, a few weeks after getting his Kasparov RISC 2500, he wrote, "My experience with this machine suggests that such a rating (2359, NS/43B) is a fair reflection of its play in most situations. But it seems to have some blind spots involving strategic dangers against its King, and I have been successful against it with a King's Indian".

Regular Readers will know that this has applied to even the best of programs since the year dot. There are still ways of giving both Kasparov and Mephisto RISC, Vancouver's and all the other programs that I know of some unhappy moments if you know how to do it, via a specialist anti-Computer attack.

Since then Bill has written again, saying that his KRIS continues to give good value, and promising to try some games with the machine on "Offensive" (believed to be its strongest by ourselves and, we are told, programmer Johan de Koning).

In the meantime Bill sent me a "Normal" game, showing his attempt to embarrass the Computer with an energetic attack against its King via a QGA. There are some exciting moments that make this game well worth showing, though that was not why Bill sent it to me.

W A REID - Kasparov RISC 2500 (2350) Kidderminster 30 secs p/m, 1993 Notes by BILL REID (in italics by Eric).

1.d4 d5 2.Nf3 Nf6 3.c4 dxc4 4.e3 e6 5.Bxc4 c5 6.0-0 a6 7.Ne5

[RISC 2500 usually gets the better of me with the QGA. This is my latest attempt to upset it]

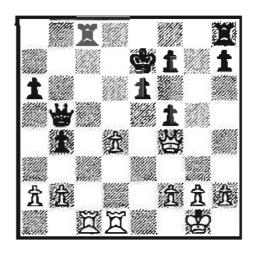
7...b5 8.Be2 Bb7 9.Bf3 Bxf3 10.Qxf3 Nbd7 11.Rd1 cxd4 12.exd4 Rc8 è13.Nc3 Qc7 14.Bf4 Bd6 15.Rac1 Qb8 16.Nxd7 Kxd7!

[The King has to stay in the centre. If 16...Nxd7? 17.Bxd6 Qxd6 18.Ne4 Qb8 19.Rxc8+ Qxc8 20.Nd6+ Ke7 21.Nxc8+ Rxc8 22.Qa3+ and an easy win]

17.Be5 b4 18.Ne2

[18.Na4 might be even better: Rxc1 19.Nc5+! Ke7 20.Rxc1 Rc8 21.Bxd6+ Qxd6 22.Qb7+ Rc7 23.Qxb4 with advantage]

18...Qb5 19.Ng3 Ke7 20.Bxf6+ gxf6 21.Ne4 f5 22.Nxd6 Kxd6 23.Qf4+ Ke7



24.Rc7+?

[The idea is to exploit Black's shaky King. But this is not the best way to go, and 24.Qh4+ puts it under more pressure].

[24.d5 also looks an interesting possibility - can it be played here? - (Eric): but 24...Rxc1 25.d6+ Kf6 26.Rxc1 h6 doesn't look to leave White much ahead, to be honest!

24...Rxc7 25.Qxc7+ Kf6 26.d5?! [This is the point of 24.Rc7+, but it's over-optimistic. 26.Qc1 or Rd2 would keep some advantage]

26...Qe2i 27.Rc1 Qxb2 28.d6 Qxd2 [The passed d-Pawn looks impressive, but Black can keep a material advantage and still restrain it]

29.f4 h6 30.Qe7+ Kg7 31.d7 Qd2 32.Rf1 Qd4+ 33.Kh1 b3 34.h3 b2 35.Kh2 Rb8

[The game looks to be KRIS's for the taking, doesn't it? - (Eric)]

36.Rf3! Kh7!

[Readers would be surprised how many programs would promote the b-Pawn here, especially when on 30 secs per move. But 36...b1Q?? 37.Rg3 + Kh8 è38.Qe8 + Kh7

39.Qxf7+ Kh8 40.Qe8+ Rxe8 41.dxe8Q+ Kh7 42.Qg8+ mate]

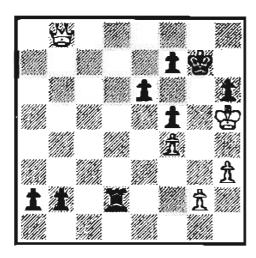
37.Rg3 Qg7

[Only move]

38.R×g7+ K×g7 39.d8Q Rxd8 40.Qb4 Rd2 41.Kg3!

[Using the 'King safety' factor in reverse!]

41...a5 42.Qb8 a4 43.Kh4 a3 44.Kh5 o2



[Visually it seems RISC must win]

45.Qe5+ Kh7 46.Qc7 Rxg2 47.Qxf7+ Rg7 48.h4!! a1Q

[Correct. 48...e5? 49.Qxf5+ and it is White who has every chance of winning]

49.Qxg7+ Kxg7

[Stalemate! Lovely!] 1/2-1/2

Our next 2 games were sent by M C FRANKS, who writes that he enjoys the statistics and ratings in the NEWS SHEET, being an ex-scientist. He also prefers the Computer games against humans, and sends some played by his brother against the Mephisto LYON. M.C generously admits that his brother is stronger than he ("about BCF 200").

Mephisto LYON 020 (2250) - P FRANKS (2200)

Shepperton G/30, 1993. Notes by M C FRANKS.

1.b3 e5 2.Bb2 d5

[Not a new Gambit, but a complete oversight which can (only?!) occur at Blitz!]

3.Bxe5 Nc6 4.Bb2 Nf6 5.e3 Bd6 6.Bb5

[6.f4 may be better, blocking the d6-Bishop, and preparing Nf3]

6...0-0 7.Bxc6 bxc6 8.Nf3 Bg4 9.0-0

Re8 10.d3 Qd7?!

[Deliberately risking Bxf6 to open lines, with being that silly Pawn down]

11.Bxf6

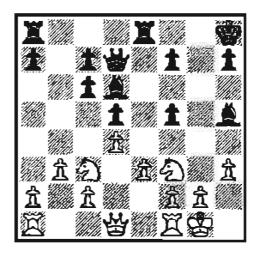
[Mephisto takes the bait, showing + 151. Of course Black's position does appear to be shattered]

11...gxf6 12.h3 Bh5 13.Nc3 [13.Nbd2 supporting the f3-Knight may be better]

13...f5

[Cutting down on e4 and g4. The LYON, showing +118, expected Bb4]

14.d4 Kh8



[Can you see it coming? LYON, showing +72, had expected f4]

[As in the first game, it's another demonstration of building up a long-range attack against the Computer's King. This time it works - Eric]

15.Qe2 Qe7

[Preventing Ne5 and eyeing e4]

16.Nd1 Rg8 17.c4?

[Showing +100, but of course this overlooks the sacrifice, 17.Re1 came through on a 2-Player mode replay afterwards. But at 3 mins this dropped to -780. Then, at 5 mins: 17.Re1 -> Qe4 and a -184 indication. 17.Nc3 was shown after 8 mins, with an = evaluation, with which we have no quibble]

17...Rxg2+! 18.Kxg2

[Showing -320, and expecting the winning but pedestrian Qe4. Of course Black has something much better...]

18...Rg8 + 19.Kh1

[Played announcing mate in 7 against itself! Amazing that the LYON can do this so quickly at this point, in many such positions and with no apparent effort. Yet a move or two earlier it

thought its position was perfectly okay. Though the search extensions make the top programs of the 1990's much less subject to the horizon effect than they used to be, it is still there in certain types of situation. I continued the game...]

19...Qe4 20.Rg1 Bxf3 + 21.Rg2 Bxg2 + 22.Kg1 Bxh3 + 23.Qg4 Rxg4 + [And mate it is... though in less than 7l] 0-1

The Computer's revenge...

Mephisto LYON 020 (2260) - M C FRANKS Shepperton G/30, 1993 Notes by M C FRANKS.

1.d4 e6 2.c4 Nf6 3.g3 Bb4 + 4.Bd2 Bxd2 + 5.Qxd2 d5?!

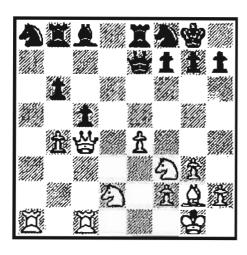
[Oh dear, an obvious-looking move, yet I do know this is a bad positional mistake in the Catalan. Black must play d6 here, now both black-squared Bishops are gone, to avoid weaknesses on the black squares]

6.Bg2 0-0 7.Nf3 c6 8.0-0 Qe7 9.Qc2![A nice positional choice, making room for the Knight and aiming at e4]

9...Nbd7 10.Nbd2 e5 11.cxd5 Nxd5 12.e4 N5b6?

[A poor choice, as White can (and does!) kick it around from here]

13.a4! Rb8 14.a5 Na8 15.Qc3 exd4
16.Qxd4 c5 17.Qc4 Re8 18.Rfe1 Nf8
[I have been forced to go backwards to re-group]
19.Rec1 b6 20.axb6 axb6 21.b4!



21...Be6

[21...cxb4 allows a neat trap, says our author].

I (Eric) confess I have struggled to find the convincing continuation. The best I can come up with so far is 22.Nd4. but 22...Be6 23.Nc6 Bxc4 24.Nxe7+ Rxe7 è25.Rxc4 looks fairly even. Help!

What am I missing?

Mephisto RISC showed 22.Rcb1 Bb7 23.Qxb4 (Bxe4 24.Nxe4 Qxe4 25.Nd4 at 10 mins with only a +24 eval. Shortly after it went 22.Rcb1 Bb7 23.Nd4 Be6, but the same eval. Then, at 12mins it had 22.Nd4 (my original choice) Be6 23.Qe2 Rbc8 24.Nc6 Qd7 25.Nxb4 and +29. No tricks or traps in thiis. Kasparov RISC always has 22.Nd4 Be6, but then 23.Qd3 - still nothing special.

22.Qe2 Rec8 23.e5 cxb4

[Hoping now to get something from the passed Pawns]

24.Nd4 Rxc1 + 25.Rxc1 Bd7 26.f4! [And now LYON starts an attack on the Kingside, with its own pieces well placed indeed for this]

26...Ne6 27.Nf5 Qd8 28.Nd6 b5 29.Kh1 Qb6 30.Nb3

[LYON's smooth play makes it look so easy, I am being slowly crushed]

30...Nat7 31.Qd2 Nf8? 32.Nd4 Ne8? 33.Nxf7!

[Oh dear! I have felt pushed into some negative play - and perhaps I've overdone it?! Now the pressure is getting too much, and LYON has all sorts of threats, so I will call the "bluff"!?]

33...Kxf7?!

[Was there a better choice? 33...Be6 34.Nxe6 Nxe6 35.Bd5 Qd4 might be slightly better for Black. Or 33...Rc8 34.Rxc8 Bxc8 35.Ng5 Nc7 (still -155 according to Mephisto RISC). Clearly White's 33rd. deserves it's "!", if not "!!"]

34.Bd5+ Kg6

[34...Ne6 35.Nxe6 Bxe6 36.Rc6!]

35.f5 + Bxf5 36.Nxf5

[And I resigned. If (A) 36...Kxf5 37.Qf4+ Kg6 38.Be4+ is mate. Or (B) 36...h6 lasts longer, but 37.Rc6+ Qxc6 38.Bxc6 Nc7 (38...Kxf5 39.Qf4+1) 39.Nd6 is a one-sided finish]. 1-0

Ages ago ANTHONY BROWN sent me some of his Best Games against Computers. Here is one:

Mephisto MONDIAL 68000XL - ANTHONY BROWN. 40/2.

1.e4 e5 2.Nf3 Nc6 3.Bb5 a6 4.Ba4 b5 5.Bb3 Na5 6.d3 Nxb3 7.oxb3 d6 8.Nc3 Bd7 9.0-0 f5 (Here we go!) 10.Bg5 Be7 11.Bxe7 Nxe7 12.Qd2 f4 13.d4 Bg4 14.dxe Bxf3 15.gxf3 0-0 16.exd cxd 17.Rfd1 Ng6 18.Qxd6 Qh4 19.Rxa6 (eval. +380!) Rxa6 20.Qxa6 Qh3 21.Rd7 Nh4 22.Qe6+ (and, of course, -999) Qxe6 (wins easily) 0-1

WHICH PC SOFTWARE PROGRAM? by Eric Hallsworth

[A follow-up discussion expanding COMMENTS made in NS/44, and updating the information CHART from there].

The Article has been prepared solely to HELP YOU CHOOSE, because the choice you make is likely to VARY according to your own PRIORITY requirement/st

[1] What PC do you have? I.e. 80286/386/486, or one of the older ones? Some programs will NOT work on the older Processors, or even an 80286!

[2] What HARDWARE do you have?

- [a] If your Computer is a 386 or 486 (i.e 32 bit) the Program MAY be able to make use of Extended or Expanded RAM for hash tables, to speed it up! Some programs DON'T use this at all (one, Chess GENIUS, hardly seems to need it!), and OTHER programs DO use it but some rather better than others!
 - [b] Do you have/use a MOUSE? Is use of a MOUSE important to you?
- [c] What sort of Monitor/Display do you have? Colour or Black/White. CGA, EGA or VGA Graphics.

[3] What will you be using your CHESS PROGRAM to do, in the main?...

- [a] Mostly to PLAY against it yourself.
- [b] ANALYSE games or positions.

In these cases, maximum PLAYING STRENGTH will be the first requirement. If you want to play over games in a Magazine or Book, and refer to the Computer's Analysis, it needs to be able to provide this information whilst in 2-Player/Monitor mode. Or perhaps you would like to leave it to analyse a game overnight, then give you a printout of the results next day? Not all can do this.

- [4] **To STORE games** for long-term use: perhaps your Correspondence ones, or for Openings study, or simply a growing record of Computer or Human tournament games safely held on disk. Then the quality and ease of use of your Programs DATABASE will be vital.
- [5] **To practice or prepare OPENINGS**. You may wish to categorise for study and practice the openings and variations you, or a particular other player, like to use. For this the size of the program's Opening Book will be a key point. If you wish to seek and try out new ideas ("novelties" not in the written Books!), then two areas of playing strength will be important, based
 - [a] On good knowledge for responsible positional play out-of-book, and
 - [b] Strong tactical ability, to find any material weakness in your "new" move.
- [6] To prepare PRINTED records of games. This could include, if you buy the right program (!) some or all of the following additional possibilities:
 - [a] Addition of your OWN notes, comments or analysis, for future reference.
- (b) Analysis by the Computer added by yourself at the keyboard, or inserted for a printout by the program itself.
 - [c] A Diagram printout at a critical point.

All of the programs will printout a game in one form or another - from bare moves to much more sophisticated stuff. Some give you useful into in the printout automatically, and some don't! Some give you a choice, and a couple will let you add preferances of your own, as in [a]-[c] above.

My CHART will give you a good all-round indication of what each Program can, and cannot do!

BUT, FIRST, LET'S EXAMINE EACH PROGRAM IN OUTLINE [they are shown in PRICE ORDER!]

M CHESS PRO. £99.95. A very strong program, second-rated to only Chess Genius. Has the overnight analysis/next day printout feature. A massive opening book (which users can add to and/or adjust), followed by an enjoyable, active and resourceful playing style; a good tactician; also a strong endgame. The graphics are fine, and some features are very good - others (such as diagram print) are missing altogether. Makes use of your PC's RAM, and 4MB or upwards will give a big-looking hash table size. However the increase in analysis speed is only around 6-7%, even with 2560K showing, which is both surprising and disappointing.

CHESS GENIUS. £89.95. By Richard Lang, the commercial World Champion programmer on Mephisto hardware from 1985-1991. Chess GENIUS is the strongest software program and is, basically, a straight conversion of Richard's Mephisto's VANCOUVER coding. This means that it is has plenty of sound chess knowledge giving it a playing style which often exhibits good positional understanding. The opening book is pretty big, and tactical speed is also good. The program's playing style is quieter than the others, but it is a master at creating and nurturing small advantages, and has a strong endgame to maximise potential points earned from this. The limited range of printing facilities is slightly disappointing, and the database method for recovering stored games relies on users having a wonderful memory, or using MS-DOS to list filenames before running the program. Otherwise, no complaints. Though Chess GENIUS does NOT use extra RAM, but a "mere" 320K from the initial Conventional 640K (as long as your start-up files use minimum memory), the finished playing strength is what counts and that speaks for itself. Use of hash etc. is, like the actual chess programming itself, simply a part of the method aiming to maximise the finished strength, when all's said and done.

FRITZ2. £79.95. Not the strongest, but works on all PC's and provides an EXCELLENT Chess database system which isn't far short of a full ChessBase! Thus a listing of all games stored, with opponents, results, openings classification etc. is quickly available anytime. You can add your own notes, show alternative lines of play, and include exclamation symbols (1? etc) - these will all appear on screen during game replay - and printout when required! FRITZ2 can also be left to analyse a game overnight, and ADD it's own analysis to the same file for future use. The screen display is comfortably no.1, with a superb, clear board. It is also top for printing out diagrams (of professional quality with a good printer!). The play? Very fast at tactics (often equalling or beating ALL the others AND, on a 486, sometimes the Mephisto and Kasparov RISC programs). But it is noticeably weaker on positional play and endgames, having less built-in chess knowledge. However FRITZ2 goes make good use of spare PC RAM, and 4MB or upwards makes a very useful difference to analysing speed, by 20% + . In endgames a 486 with 8K or more RAM can sometimes see FRITZ2 overcoming it's lack of endgame knowledge through sheer speed of calculation. There seems so far to be quite a difference between 386 and 486 performances - but even a user with an old Amstrad 1512 will get the excellent graphics, database and printing facilities!

HIARCS is their first commercial release after winning quite a few amateur "computer chess" awards. Works fine on 286/386/486 and, in my view, gives the best strength for the 286 owner. This is not to imply it is only worthwhile for the 286 folk - HIARCS MASTER is good value on any PCI Above all it has a most attractive playing style, which definitely "feels" human-like in many positions, especially in quieter moments with instructive manouvres and probings. It also has good endgame knowledge where its evaluation is occasionally quicker to spot the "truth" of a position than my other programs.. However, it's not quite as easy to use as the others (it's also a "Mouseless" program), has no "mate solve" levels, and has limited printout facilities (and nothing for diagrams) - nor does it benefit from extra RAM, using just 160K for hash tables. On the plus side it will show on-screen analysis in 2-player mode, and incorporates a 'Fischer clock' time control system, which I greatly enjoy in play!

Before the FEATURES CHART, a brief mention for some other or older PC PROGRAMS:-

M CHESS (original version) £79.95: for all PC's - smaller opening book, fewer features and only moderate graphics - but not much behind the new PRO version for playing strength. Still quite good value. 386 grade 2214 Elo.

ZARKOV 2.6 £69.95: for all PC's - quite nice program, though poor screen display. 2-player mode analysis, overnight analysis plus add own notes for printing, and diagram save for use with desktop publisher systems makes this worth thinking about for some folk. 386 grade 2107 Elo.

FRITZ1 £39.95 for all PC's. Has most of the features of the upgrade, but FRITZ2 is well worth the extra for its strength. 386 grade 2077 Elo. **SARGON 5** £39.95. A Dan and Kathe Spracklen program - quite strong, but poor graphics, and disappointing features. If you run out of time, you've had it! 386 grade 2117 Elo.

"All of the programs install quite easily onto your Hard Disk!"

PC PROGRAMS FEATURES CHART

Daine	MCP	CG	F2	H
Price	£99.95	£89.95	£79.95	£69.95
Elo Grade on a 286/16	no	no	2040e	2062
Elo Grade on a 386/25-33	2213	2358	2143	2122
Elo Grade on a 486/40-50	2368	2411	2286	2242e
CGA/EGA/VGA	all	VGA	all	all
Hash Table maximum	10MB	320K	32MB	1 60 K
Mouse usago	$\sqrt{}$	V	√_	no
Ease of Use overall	3	4	5	2
Installations allowed	1	2 3	infinite	1
Display quality	4		5	3
Analysis shown during normal play	√.	\checkmark	√.	√.
Evaluations shown in normal play	√.	\checkmark	√.	\checkmark
Depth of Search info shown	√	√	\checkmark	\checkmark
Above Info shown in 2 play mode	no	√	√	1/2!
Playing Styles	1	3	1	1
Next Best move	no	\checkmark	no	no
Clocks on view	\checkmark	\checkmark	√	\checkmark
Range of Time Controls	4	4	4	5
Mate solve	\checkmark	\checkmark	\checkmark	no
Diagram print	no	1	5	no
Game print	2	3	4	3
Add own Notes to games	no	no	√	no
Overnight analysis by Computer	\checkmark	no	\checkmark	no
Set-up Positions	√	\checkmark	\checkmark	\checkmark
Save/Load games	✓	\checkmark	√	\checkmark
DataBase, ease of use	<i>3</i>	1	5	1
O/Book size	200K	100K	25Ke	8K
Openings named	√	no	√	√
Add own Openings	V	no	CBase	no

TO BUY: Phone TERRY or ERIC on 0353 840 285, 9.30 - 5p.m, Mon-Fri. with your CREDIT CARD details. Or **Post** your order, with CHEQUE PAYABLE TO COMPETENCE, and addressed to <u>Eric Hallsworth</u>, c/o Competence, P.O. Box 759, Wimbome, Dorset BP21 5YH. Please remember to add £3 for post and packing. Thankyou.

GAMES of the PC PROGRAMS reviewed in this ISSUE

Here are some games by M CHESS PRO 386, Chess GENIUS 386, and FRITZ2 386 - all against Mephisto RISC 1MB, so you get a direct comparison for these three! There are HIARCS 386 games elsewhere - against lesser opposition which gives it an advantage this time - but I will show the HIARCS 386-Meph RISC Match result at the end of this Article.

I hope readers will accept the slightly more concentrated method used for producing theseit was the only way to fit so many in.

M CHESS PRO 386 (2240) - MEPH RISC (2350) Eric's G/60 (1)

1.d4 d5 2.c4 e6 3.Nc3 Be7 4.cxd5 exd5 5.Bf4 Nf6 6.Qc2 Nc6 7.Nf3 0-0 8.e3 Nb4 9.Qb1 Nh5 10.Be5 f6 11.Bg3 g6 12.Nh4? f5 13.a3 Bxh4 14.Bxh4 Qxh4 15.axb4 Re8 16.Qd3 [MR is about to launch one of its renowned offensives) 16...f4 17.Nxd5 c6! 18.g3 fxg3 19.fxg3 [19.Nc7 Qf4!] 19...Nxg3 20.hxg3 Qxg3+ 21.Kd2 cxd5 22.Be2 Bf5 23.Qb3 Rac8 24.Qxd5+ Kh8 25.Qf3 Qd6 26.Qxb7 [Showing only -115, MCP believes it is nearly back in the game. MR quickly dispels that ideal 26...Rc7! 27.Rxa7 [27.Ra6 Qe71; or 27.Qb5 Rc2+1] 27...Rxb7 28.Rxb7 g5 29.Rf1 Qe6 30.Rf3 g4 31.Rg3 Qd6 32.Rg1 Qc6 33.Rxh7+ /33.Rf7 Qc2+ 34.Ke1 Qc1+ 35.Kf2 Qxe3+ m/7} 33...Bxh7 34.Bd1 [And White resigned] 0-1

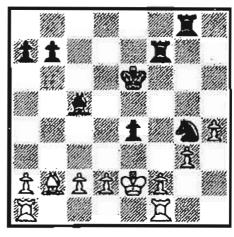
MEPH RISC (2350) - M CHESS PRO 386 (2240) Eric's G/60 (4).

1.c4 e5 2.Nc3 Nf6 3.Nf3 Nc6 4.e3 Bb4 5.Qc2 Bxc3 6.Qxc3 Qe7 7.a3 d5 8.cxd5 Nxd5 9.Qb3 Nb6 10.Bb5 Bd7 11.Qc3 0-0-0 12.Bxc6 Bxc6 13.Qxe5 Qd7 14.Qxg7?! [White will pay a heavy price for neglecting his King's safety] 14...Rhg8 15.Qxh7 Nc4! 16.Nd4 [16.Qc2 looked worth considering] 16...Bxg2 17.Rg1 c5! 18.Nb3 Qd5 19.e4 [19.d4 Rh8 (19...cxd4 20.Nxd4 looks okey for White) 20.Qg7 Rdg8 21.Qf6 cxd4 22.Nxd4 and White is still surviving] 19...Bxe4 20.Qxg8 [Apparently expecting Rxg8 21.Rxq8+] 20...Bf3!

21.Qg5?? | Gives it away... perhaps MR saw mates in every other variation? How about 21.d4 Qe4 + 22.Be3 Nxe3 23.Qxd8 + Kxd8 24.Rg8 + Ke7 25.fxe3 Qxe3 + 26.Kf1: a line in which White is losing, but living - perhaps I have missed something better for Black along the way? | 21...Qe4 + 22.Qe3 Nxe3 23.fxe3 Qc4 | And MR resigned. If 23...Qc4 if 24.Kf2 Qe2 + 25.Kg3 Bc6! winning comfortably | 0-1

M CHESS PRO 386 (2240) - MEPH RISC (2350) Eric's G/60 (5).

1.e4 e5 2.Nf3 f5 3.Bc4 /3.Nxe5 was played by CGENIUS in its game against MRISC, Play continued Qf6 4.Nc4 fxe4 5.Nc3 Qf7 6.Ne3 c6 7.Nxe4 d5 8.Ng3 h5 9.h4 g6 10.d4 Bg7 11.c3 Ne7 12.Bd3 Nd7 13.Nc2 c5 14.dxc5 Nxc5 15.Be3 Nxd3+ 16.Qxd3 a6 17.0-0-0 Be5 18.Bd4 Bxd4 19.Qxd4 0-0 20.Rd2 b5. CG has stayed its Pawn to the good, and won a long struggle in 68 moves) 3...fxe4 4.Nxe5 d5 5.Qh5 + g6 6.Nxg6 hxg6 7.Qxg6 + Kd7 8.Bxd5 Nf6 9.Nc3 Qe7 10.b3 Rh6 11.Qf7 Qxf7 12.Bxf7 Nc6 13.Bb2 Bd6 | Both programs were in their Books to here! 14.h4 Ne5 15.Bc4 Nxc4 16.bxc4 Ke7 17.Nb5 Be6 18.c5 Bxc5 19.Nxc7 Rg8 20.Nxe6 Kxe6 21.g3 [After a lengthy period showing a small, but positive, plus evaluation, MCP drops to -93 with this 21...Ng4 22.Rf1 Rh7 23.Ke2 Rf7 [Diagram]

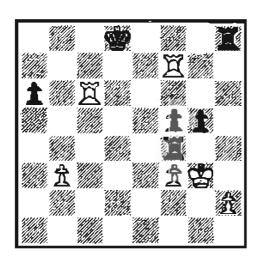


24.f4 Nh6 25.Rae1 | 25.d4 exd3 + 26.cxd3 | Rxg3 27.Rae1 Nf5! looks no better for White] 25...Nf5! 26.Kd1 Nxg3 27.f5 + Rxf5 28.Rxf5

Kxf5 29.d4 Rd8 30.c3 Be7 31.h5 Nxh5 32.Rf1 + Nf4 33.Bc1 Bd6 34.c4 Be5 35.Be3 Rxd4+1 36.Bxd4 Bxd4 37.Kc2 e3 38.Rb1 e2 39.Kd2 Bf2 40.c5 Ke4 41.Rb4+ Kd5 42.Rb1 Kxc5 43.a3 b5 44.Rc1+ Kd4 (White resigned, showing -1079) 0-1

MEPH RISC (2350) - M CHESS PRO 386 (2240) Eric's G/60 (6).

1.e4 c5 2.Nf3 e6 3.d4 cxd4 4.Nxd4 a6 5.Bd3 g6 6.c4 Bg7 7.Be3 Nf6 8.0-0 Nc6 9.Nxc6 dxc6 10.e5 IMCP thought this push was too early, and a -70 eval. improved to equal. Perhaps Nc3 or Qe2 was more circumspect, but this is MR's style!) 10...Ng4 11.Qxg4 Qxd3 12.Rd1 h5 13.Rxd3 hxg4 14.Bf4 Rh5 [Throwing] everything it can at the e5 Pawn, MCP now shows +481 15.Nc3 Bxe5 16.Bxe5 Rxe5 17.Rad1 b6 18.f4 gxf3 19.gxf3 (Black, now a Pawn up and with better Pawn structure, looks to have plenty of compensation for the lesser development. MCP reads + 106) 19...Rg5+ 20.Kh1 Rf5 21.Ne4 Ke7 22.Kg2 Rf4? [Black] adopts a bad plan, which will leave his Rook entombed) 23.Re3 f57 24.Kg3! e5 25.Nd6 Ke6 26.b3 g5 [Black's Pawn storm is visually impressive, and the MCP eval. is still + 106) 27.Nxc8 Rxc8 28.Rde1 Kd6 29.Rxe5 Rh8 30.Re6+ Kd7 31.Re7+ Kd8 32.Rf7 b5 33.Re6 bxc4 [Now showing a 000 evaluation] 34.Rxc6 cxb3 35.axb3 [Diagram]



35...a5 [35...Rfh4 may have been the only hope. Now if 36.Rxa6 f4 + 37.Kf2 Rxh2 + 38.Ke1 Re8 + 39.Kd1 Rh1 + 40.Kd2 Rh2 + 41.Kc3 Re3 + 42.Kb4 Ke8 Phewl] 36.Ra6! [Wins outright] 36...Ke8 37.Rb7 Rd4 38.Ra8 + Rd8 39.Rxd8 + Kxd8 40.Rb8 + [And Black resigned, showing -1047] 1-0

Match Progress Chart:

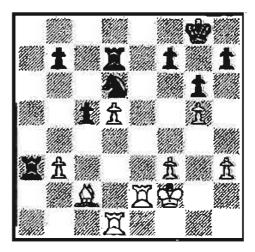
M CHESS PRO 386 01 ½ 1000 ½ = 3 MEPH RISC 1MB 10 ½ 01111½ = 5

Other important **MCP 386** results in my test Series:

v MEPH VANCOUVER 020, 1½-6½ (! including a defeat from a position in which it showed itself at +753 after 40 moves!) v KASP BRUTE FORCE, 4½-3½ v KASP RISC 2500, 2½-5½

MEPH RISC (2350) - CHESS GENIUS 386 (2340) Eric's G/60 (3).

1.e4 c6 2.d4 d5 3.Nc3 dxe4 4.Nxe4 Nd7 5.Nf3 Ngf6 6.Nxf6 + Nxf6 7.c3 Bq4 8.h3 Bxf3 9.Qxf3 e6 10.Bd3 Be7 11.0-0 Qd5 | The offer of Q-exchange is often made by CG, and suits its style with having such good endgame knowledge. However White has the distant Pawn majority at this moment, as well as the 2 Bishops, so might it be a mistake here?) 12.Qxd5 Nxd5 13.c4 Nf6 14.Be3 0-0 15.g4 Rfd8 16.Rad1 g6 17.Kg2 Rd7 18.Bc2 Rad8 19.f3 Ne8 20.g5 a6 21.Rfe1 a5 22.Re2 a4 23.Rde1 [23,Bxa4 Nd6 24,b3? b5] 23...Nd6 24.b3 axb3 25.axb3 Ra8 26.Bf4 Nc8 27.Rd1 Ra3 28.Kf2 Bd8 29.Bxd6 Nxd6 30.d5? exd5 31.cxd5 c5 [Diagram. Amazing - now Black has the distant majority!}

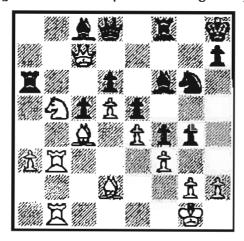


32.f4 b6 33.Re3 Ra2 34.Re2 Nb5! [This Knight has proved invaluable] 35.f5 [35.Rdd2 Nd4! Clever!] 35...Rd8 36.Bd3 Rxe2 + 37.Bxe2 Nd4 38.fxg6 fxg6 39.Bc4 [39.Bg4 Kf8 (39...Rxd5? 40.Be6 + Nxe6 41.Rxd5!) 40.Bf3 Nxb3 is only slightly better, it seems] 39...b5 40.Rxd4 [A desperate attempt to solve the problems created by CG. But if 40.Bd3 Rxd5 41.h4 Kg7 Black has a useful advantage. Still, 40.Bd3 had

to be best, I think | 40...cxd4 41.Bxb5 Kf8 42.Bc4 Re8 43.b4 Re3 44.h4 Ke7 45.b5 Rc3 46.Be2 Kd6 [CG uses his King and Rook pairing with expertise] 47.Ke1 Kxd5 48.h5 gxh5 49.Bxh5 Rg3 50.Be2 Rxg5 51.Kd2 Rg2 52.Kd1 Rxe2! |The benefits of superior endgame knowledge enable this from a Computer - it would come automatically from a Club/County player, but not from many computer programs! | 53.Kxe2 h5 54.b6 Kc6 55.Kd3 h4! |White resigned. A really well-played endgame by CG| 0-1

MEPH RISC (2350) - CHESS GENIUS 386 (2340) Eric's G/60 (5).

1.04 Nf6 2.c4 g6 3.Nc3 Bg7 4.e4 d6 5.Nf3 0-0 6.Be2 e5 7.0-0 Nc6 8.d5 Ne7 9.Nd2 a5 10.a3 Nd7 11.Rb1 f5 12.b4 b6 13.f3 Kh8 14.Qc2 f4 15.Nb5 g5 16.c5 [A typically enjoyable MR Pawn sac' to open lines and seek sharp play.It is clear that there are some big 'plusses' in the MR positional evaluation table for piece activity] 16...bxc5 17.bxc5 Nxc5 18.Nb3 Nxb3 19.Rxb3 Rb8 20.Qc3 Rb6?! [Giving the Pawn back. 20...a4 21.Rb2 Ba6 would have been my choice, seeking some simplification through exchanges] 21.Qxa5 c5 22.Bd2 Ra6 23.Qc7 Ng6 24.Rfb1 Bf6 25.Bc4 g4 [Diagram. Is this complicated enough for you?]



26.fxg4 Qxc7 27.Nxc7 Ra4 28.Bf1 Rxe4 [CG looks to have recovered the advantage again at this point] 29.Nb5 Be7 30.h3 Bd7 [30...Re4 looks better to me, getting the Rook out to keep it in the game] 31.Nc3 Rd4 32.R1b2 Ra8 33.g3 Ba4 34.Rb7l Bg5 35.h4 Bh6 36.g5 Bf8 37.h5 [Now we see that White has the makings of a quite nasty attack!] 37...Ne7 38.gxf4 exf4 39.Nxa4 Rdxa4 40.Bc3+ Kg8 41.Bh3! Re4 42.Be6+ Rxe6 43.dxe6 Nd5 44.Rb8 Rxa3 45.Bf6 [A position worth thinking about because CG shows only -172 at this point; yet MR reads

+800! Some difference! 45...Ra1 + 46.Kh2 Nc7 [CG resigned. After 47.e7 Ne6 (otherwise Rxf8 is mate) 48.e8Q Re1 49.g6 and mate in 4: 49...Rh1 + 50.Kxh1 hxg6 51.Qxe6 + Kh7 52.Qf7 + Kh6 53.Qxg6 +] 1-0

Match Progress Chart:

CHESS GENIUS 386 ½ 0 1 1 0 1 1 ½ = 5 MEPH RISC 1MB ½ 1 0 0 1 0 0 ½ = 3

Other **CG 386** results in my Series: v KASP BRUTE FORCE, 5½-2½ v KASP RISC 2500, 3½-4½

FRITZ2 386 (2150) - MEPH RISC (2350) Erlc's G/60 (1).

1.c4 e5 2.Nc3 Nf6 3.g3 d5 4.cxd5 Nxd5 5.Bg2 Nb6 6.d3 Bb4 7.Bd2 0-0 8.Rc1 a5 9.Qc2 f5 10.f4 exf4 11.Bxf4 Nd5 12.Nh3 Nxf4 13.Nxf4 Kh8 14.e3 Re8 15.0-0 c6 16,Nd1 Nd7 17,a3 Bd6 18.Ne2 Ne5 19.Nd4 Bb8 20.b3 Ba7 21.Qc3 Ng4 [Diagram. Only after this does F2 see that it has problems from MR's long- range piece attacks) 22.Nc2 Nxe3 23.Ndxe3 Rxe3 24.Nxe3 Bxe3+ 25.Kh1 Bxc1 26.Rxc1 [Leaving White a Pawn down with no compensation | 26...Be6 27.Re1 Qd6 28.Re3 Bf7 29.a4 Qa3 30.d4 Qa2 31.Kg1 Qb1 + 32.Kl2 Kg8 33.h3 Rf8 34.Bf3 f4 35.gxf4 Qf5 36.Re7 Qxf4 37.Ke2 Qh2+ 38.Ke1 Qxh3 39.Rxb7 Re8 + 40.Kf2 Qh2 + 41.Kf1 Bd5 42.Re7 Rf8 43.Re3 g5 44.Qxa5 g4 45.Ke1 gxf3 46.Rxf3 Re8+ [And White resigned at -1500] 0-1

FRITZ2 386 (2150) - MEPH RISC (2350) Eric's G/60 (3).

1.c4 c6 2.Nf3 d5 3.d4 Nf6 4.Nc3 e6 5.Bg5 h6 6.8xf6 Qxf6 7.83 dxc4 8.Ne5 b5 9.g3 Bd6 10.Nxb5 cxb5 11.Bg2 Bxe5 12.dxe5 Qxe5 13.Qc2 Bd7 14.Bxa6 Bc6 15.f4 Qe3 16.Bxc6 + Nxc6 17.Qc3 Qe4 18.0-0-0 0-0 19.Rhe1 e5?! /19...a5 creating pressure against White's King looks better] 20.fxe5 Re8 21.Qf3 Qg6 22.Qf2 Rxe5 23.Qf4 a5 24.Rd8+! [Piece exchanges should be good for White) 24...Nxd8?! [24...Kh7 25.Rd7 Rf5! leaves White with little, if any, advantage) 25.Qxe5 Qb6 26.Rd1 Ne6 27.Rd7 Qg1 + 28.Kd2 Qb1 29.Rb7 b4 [Hoping to save the game with the a-Pawn, but it doesn't work) 30.axb4 a4 130...axb4 31.Rxb4 Kf8 is less palatable still at this stage - the mistake has already been made, so MR must make the best of it) 31,65 a3 32.Rb8 + Nf8 33.Qc5 Qxb2 + [MR's conduct of

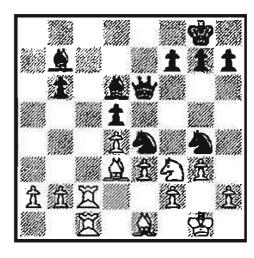
the attack looks to give real potential at this stage 34.Ke3 Qc3+ 35.Ke4 f5+ [To keep the checks going. If 35...a2 36.Rxf8+ Kh7 37.Qf5+ g6 38.Rxf7+ Qg7 is the only move to stave off mate; 39.Qf6 Qxf7 40.Qxf7+ Kh8 41.Qf6+ stopping the a-Pawn and winning easily) 36.Kxf5 Qf6+ 37.Ke4 Qe6+ 38.Kf3 Qf7+ 39.Ke3 a2 [Safe, but unavailing, now that Black has his Queen back in defence] 40.Ra8 Kh7 41.Rxa2 Nd7 42.Qc7 Qe6+ 43.Kd4 Qf6+ 44.Kd5 Nb6+ 45.Kc5 Qf2+ 46.Kc6 c3 [Okay-let's try with this one instead]) 47.Qf4! Qxf4 48.gxf4 Nc4 49.b6 Nxb6 [49...Nb2 50.b7 c2 51.Ra1] 50.Kxb6 Kg6 51.Rc2 Kf5 52.e3 g5 53.fxg5 hxg5 54.Rxc3 1-0

MEPH RISC (2350) - **FRITZ2 386** (2150) Eric's G/60 (6).

1.d4 f5 2.Qd3!? d5 3.g4!? |This, from a Computer, must be unique I would think... how many out there would know what to do with Black? 3...fxg4 4.h3 Nf6 5.Bf4 c6 6.Nd2 g6 7.hxg4 Bxg4 8.Bh3 Bxh3 9.Nxh3 (It is quite amazing that MR should get a draw from this though I don't believe F2's next helps Black's cause, putting the Queen into a position away from the forthcoming action. I shall have a look at what one or two other programs would do here!] 9...Qb6 10.Ng5! Na6 11.Nxh7 0-0-0 12.Qxg6 Qxb2 13.Rb1 Qxa2 14.Rh3 Rd7 15.Be5 Rg8 16. Qxg8 Nxg8 17. Nxf8 Rd8 18. Ne6 Re8 19.Ng7 Rf8 20.Ne6 Rf5? [20...Re8 looks better -21.Rhb3 b5 leaves Black with a useful advantage/ 21.Rh8 Kd7 22.Rxg8 Kxe6 23.Rg6+ (The first of a series of checks - an event repeated through the rest of the game which was finally drawn on move 771 I included it here because of the surprise opening moves? 1/2-1/2

MEPH RISC (2350) - **FRITZ2 386** (2150) Eric's G/60 (8).

1.c4 c6 2.d4 d5 3.Nf3 Nf6 4.Nc3 e6 5.e3 Nbd7 6.Qc2 Bd6 7.Be2 0-0 8.0-0 Re8 9.Bd2 b6 10.cxd5 exd5 11.Nxd5?! [This looks sharp, but unfortunately it doesn't quite work for White) 11...cxd5 12.Qc6 Qc7! [Missed by White in the analysis at 11.Nxd5 where it had expected 12...Bxh2+ 13.Kxh2 Rb8 14.Rec1 with a small plus] 13.Qxa8 Bb7 14.Qxa7 Ra8 15.Qxa8+ Bxa8 16.Rfc1 Qb8 17.Rc2 Bb7 18.Rac1 Ne4 19.Be1 Ndf6 20.Bd3 Qe8 21.Nh4 Ng4 22.g3 Qe6 23.Nf3 [Diagram]



23...Qh6? [With everything aiming at White's King, it seems F2 must win. However 23...Qf5 24.Kg2 Ngf6 was certainly better, as the move played gives MR a chance to strike back with a vengeance) 24.Bxe4! dxe4 25.Rc8+ [Now White is winning! 25...Bxc8 26.Rxc8+ Bf8 27.Bb4 g5 28.Bxf8 Qe6 29.Ab8 f6 30.Bc5+ Kf7 31.Rxb6 [Hoping for 31...Qxa2?] 31...Qc4|| |31...Qf5 also looks strong| 32.Rb7+ [32.Nxg5 + here leads to... fxg5 33.h3 Ne5 34.Rb7 + Kg6 35.b3 Nf3 + and a draw as in the game) 32...Kg6 33.Nxg5! [Saves White, If 33.Nd2 Qc1 + 34.Kg2 (34.Nf1 Qe1 is also mate in 5) xd2 35.Rg7 + Kf5 mate in 4] 33...Qc2 [Gets the draw, If 33...fxg5 34.h3 Ne5 35.b3 Nf3 + 36.Kg2 Ne1 + it's still a draw / 34.Nh3Qd1 + 35.Kg2 Qf3 + 36.Kg1 Qd1 + 1/2-1/2

Match Progress Chart:

FRITZ 2 386 00100½1½ = 3 Meph RISC 11011½0½ = 5

Other FRITZ2 386 results in the Series are: v KASP RISC 2500, 2½-5½ v KASP BRUTE FORCE, 4-4 v MEPH VANCOUVER 020, 3½-4½ v FID MACH 2C, 2½-5½ (?)

Finally, the promised **HIARCS 386** results: v MEPH RISC, 1-7 v KASP RISC 2500, 1-7 v KASP BRUTE FORCE, 2-6 v FID MACH 2C, 5½-2½

Perhaps strangely, a Match at G/60 between HIARCS on a 286/12 v FRITZ2 on the 386/20 has gone only 3½-4½, so I do think HIARCS has the ability as long as it isn't outgurned by a strong tactical opponent on good hardware. Their scores v MACH 2C probably also confirm this view.

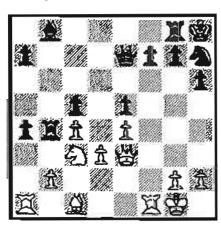
Correspondence Chess, 7 Mephisto VANCOUVER 68020

Philip GOSLING and MEPH have now reached the dizzy heights of 7/8 (6-0=2) and a 2420 BCCS Grading putting them 4th. on the Correspondence Society's Grading List at this time.

There are just 2 games left from the first 10 Game Tournament we have been covering -both tight struggles against very strong opponents. We are adding new games as they are started in the defence of this somewhat auspicious grading: in the meantime MEPH has played on Board 7 in the County Match against Surrey... and got a draw! On with the chess...

Vancouver 020 (2275) - **BCC\$ 2237** (2235) Corr.5, 1992

Here is where we left it:-**32.Nc3** [NS/44, Eval. + 0.57, -> Nf6]

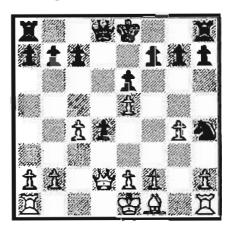


The pace of moves from Wigan had slowed to a trickle last time, and has now stopped altogether. The Controller has been approached about this silent withdrawal, and the game awarded to MEPH. So now it's 7-0=2 and we're up to 2435!

Phil analysed a win for MEPH anyway: 32...Nf6 33.Nxa4 Nd7 34.Nc3 Rb3 35.Qf2 Nf6 36.Qb4 Qd6 37.Bxh6 Nh7 38.Bc1 Qd4+ 39.Qf2 Nf6 40.Qxd4 exd4, +151 with a pawn to win plus queen exchange to simplify to a won ending. If anyone can see an escape or improvement for Black, please write as Phil was keen to end this game properly.

BCCS 2445 (2445) - Vancouver 020 (2275) Corr.6, 1992

12...Nh4 [NS/44, Eval. + 024, -> Qb4]



13.Rg1 0-0 14.g5

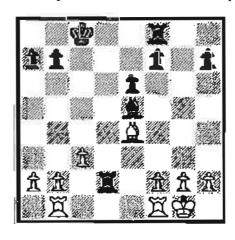
[Planning to drive the Knight away. MEPH appears to be unimpressed by this, but Phil isn't so sure]

14...c5 15.Rg4 Nf5

[NS45. Eval +60 - > 0-0-0. In fact White also has two other good-looking moves in Bg2 and h4. At 2445 our Iranian opponet is a desirable scalp for MEPH, but will it happen that way?]

Vancouver 020 (2275) - **A Mrugala** (2415) Corr.11, 1992

20.Rab1 [NS/44, Eval. + 042 -> Bc7]



20...h6 21.g3 Bc7 22.a4 Bb6 23.b4 f5 24.a5

[NS45. Eval + 78 -> Bc7. 24.a5 is a nice little counter-move. If 24...Bc7 we plan 25.Bg2, so I'm quite cheerful. I'd be even more so if Black's Rook on d2 would take up residence elsewhere!]

And now to 3 of the new games - all against particularly strong opposition!

We start with a second Game against the BCCS' top-rated player, our newly married Iranian friend from Game 6.

Vancouver 020 (2275) - **BCCS 2445** (2445) Corr.12 (#2 v BCCS 2445), 1993

1.Nf3 Nf6 2.c4 e6 3.d4 d5 4.Nc3 c5 5.cxd5 Nxd5 6.dxc5

[I allowed MEPH to come out of it's book here - 6.e3 and 6.e4 are actually in there, but it's own evals, for them are not too encouraging. Our opponent wrote to say we should have stayed in book, as dxc5 is weak. Read on!]

6...Nxc3 7.Qxd8 + Kxd8 8.bxc3 Bxc5 9.e4 Nc6 10.Bb5 Bd7 11.0-0 Ke7 12.Rb1 f6 13.e5 Rhd8?!

[With 13.e5 MEPH showed $+9 \rightarrow$ fxe. It now jumps to +69]

14.Bd3 h6 15.exf6+ Kxf6 16.Rxb7 [NS45. Eval +87 -> Na5]

Vancouver 020 (2275) - **BCCS 2324** (2320) Corr.13, 1993

1.e4 c5 2.f4 Nc6?!

[No-one can complain that it's a dull life in Correspondence chess when folk play like this! Of course it restricts Vancouver's opening book considerably - 3.Nc3 is all that's there]

3.Nc3 d6

[Here Vancouver only had 3...e6, so it's on its own alreadyl]

4.Nf3 g6 5.Bc4 Bg7 6.0-0 Nf6 7.d3 Bg4 8.h3 Bxf3 9.Qxf3 Nd4 10.Qf2 0-0 11.Be3 Nd7 12.f5 e6

[MEPH had expected gxf]

13.fxg6 fxg6 14.Qd2 Ne5 15.Bb3 Qe7 16.Bxd4 cxd4 17.Nb5

[Heading for a situation in which Bishop and Knight will be exchanged for Black's Rook and Pawn. Rooks are on 110% - on normal MEPH would have played 17.Ne2]

17...Nc6 18.Bxe6+ Qxe6 19.Nc7 Qe7 20.Nxa8 Rxa8 21.a3 Qe5 22.Qf2

Rf8 23.Qe2 Bh6 24.Rxf8 + Kxf8 25.Qg4

[NS45. Eval +27 -> Be3+, It will be interesting to see how MEPH gets on from here in this game heavily influenced by the Rook 110% theory!]

BCCS 2000 (2000) - **Vancouver 020** (2275) Corr.14, 1993

Our opponent's "2000" grading here represents the fact that he's a newcomer to the Correspondence form of chess. In fact he played for his country in the MANILA OLYMPIAD, so we expect another tough time in this one.

1.d4 Nf6 2.c4 e6 3.Nc3 c5 4.d5 exd5 5.cxd5 d6 6.e4 g6 7.Nf3 a6 8.a4 Bg4 9.h3 Bxf3

[Out of book, showing -48]

10.Qxf3 Bg7 11.Be2 0-0 12.Bg5 Nbd7 13.0-0 Re8 14.Qf4 h6!?

[MEPH had expected the continuation which follows...]

15.8xh6 Bxh6 16.Qxh6 Nxe4 17.Bd3 Nef6 18.Rfe1

[18.Bxg6 and MEPH would have lost grading points by settling for a perpetual check draw with fxg6 19.Qxg6+ Kh8 20.Qh6+ Kg8 (20...Nh7 21.Qxd6) 21.Qg6+ Kh8 etc. It looks as if a Contempt Factor of +25 might be needed for opponents below 2200, Phill - in case this actually happened again]

18...Qb6

[NS45. Eval = -> Reb1. It's very nicely poised. Note that Bxg6 by White no longer works, with having the Queen on b6 to protect the d6/pawn]

Clive CURTIS sent me a couple of middle game positions in which his new RISC 2500 had turned fairly even positions (obtained whilst using his Academy) into very dramatic wins. One was a Queen sac, in fact, against an opponent scoring 7/8 in his other games, but 0-2 against the CURTIS/RISC 2500 pairing! Starting from "scratch" the RISC has also won another game in just 13 moves!

However in Phil's case, everyone knows they are playing a Computer (MEPH by name), whereas Clive's Correspondence entry is in his own name, so I don't feel it right to print the games, much as I'd dearly have liked to.

OLITANO LICE (.) Frie Helleweeth	NC 4E	An-: 1002				3CF COMPUTER 155 FID ELITE C 154 FID ELEGANCE 154 SCI TURBOSTAR 432 154 MEPHISTO MM2 154 KASP GAL-REN 8/4 153 FID EXCELLENCE-DES2000 152 KASP PRISMA-BLITZ 151 CONCHESS/4 150 NOV SUPER CONST 150 NOV SUPER NOVA 149 MEPH BLITZ 147 NOV SUPERMO 146 NOV SUPER VIP 145 FID ELITE A 145 FID PRESTIGE 144 FID SENSORY 12 144 MEPH EUROPA-MARCC DOLO 142 SCI SUPERSTAR 36X 142 CONCHESS/2 140 NOV QUATTRO 140 NOV CONST/3.6 140 NOV CONST/3.6 140 NOV PRIMO-VIP 139 MEPH HONDIAL 2 139 FID ELITE B 135 FID ELITE B 135 FID ELITE B 137 FID ELITE B 138 FID ELITE B 139 FID ELITE B 139 FID ELITE B 139 FID ELITE B 130 FID ELITE B 131 SUPER ENT-ADV STAR 126 CHESS 3000 124 FID SENSORY 9 124 KASP ASTRAL-CONO-EAVL 120 NOV MENTOR 16-AMIGO 120 GGM + STEINITZ 119 CHESS 2001 118 MEPHISTO 3 118 SCI SUPERSTAR ORIG RATING LIST (c) Evic Hailsmorth BCF COMPUTER RATING LIST (c) Evic Hailsmorth BCF COMPUTER	Fla	+1-	73088	202
RATING LIST (c) Eric Hallsmorth BCF Computer 219 MEPH LYON 68030 219 MEPH LYON 68030 218 MEPHISTO RISC 1MB 217 MEPH PORTOROSE 58030 217 KASP RISC 2500 214 MEPH LYON 58020/20 208 MEPH LYON 58020/20 208 MEPH LYON 58020/12 206 FID ELITE 58040-Y10 205 MEPHISTO SERLIN 204 KASP BRUTE FORCE/10 203 MEPH VANCOUVER 68000 203 FID ELITE 68030-V9 202 MEPH PORTOROSE 68020 201 MEPH LYON 68000 199 MEPH ALHERIA 58025 196 MEPH PORTOROSE 68000 195 FID MACH4+2325 68020-V7 191 FID ELITE 2668000-V5 189 MEPH ROMA 68020 189 MEPH POLGAR/10 188 NOV 01ABLO/SCORPIO 68000 188 NOVAG RUBY/SERRALD	. N343	4/- Games [0s	Human/	Games	155 FID ELITE C	1844	34	182	76
219 MEPH LYON 68030	2359	24 372 1 22 420 1	ļ i	2407	51	154 FID ELEGANCE	1838	17	685	77 78
218 MEPHISTO RISC 198	2349	13 1262 3	; 1	2272	43	134 HEPHISTO MM2	1835	16	791	79
217 MEPH PORTOROSE 58030	2343	21 460		2354	32	154 KASP GAL-REN 8/4 _	1832	76	37	80
217 KASP RISC 2500	2338	16 791 5 48 92 5		2268	24	153 FID EXCELLENCE-DE52000	1829	11	1646	81 82
208 HEPH VANCOUVER 68020/12	2266	11 1759 7	1	2139	32	151 CONCHESS/4	1011	20	509	83
206 HEPH LYON 68020/12	2255	9 2628 6		2269	74	150 NOV SUPER CONST	1807	7	3675	84
206 FID ELITE 58040-710	2251	53 75 9 18 620 1	10	2230 2254	21	150 NOV SUPER MOVA 149 YERH RLITT	1793	27	411 277	85 86
204 KASP BRUTE FORCE/10	2234	52 79		2289	10	147 HOV SUPREMO	1777	75	38	87
203 MEPH VANCOUVER 68000	2227	17 728	12	2120	12	146 NOV SUPER VIP	1770	24	373	88 89
203 F10 EL11E 58030-V9 202 MERH RORTOROSE 69020	2227	18 619 1 10 1803 1	13	2180 2258	13 182	145 FID PRESTIGE	1763	17	715	97 90
201 MEPH LYON 68000	2215	12 1304	iš ;	2090	33	144 FID SENSORY 12	1755	12	1340	91
199 MEPH ALHERIA 58020	2197	14 1003 1 12 1486 1	16	2188	215	144 MEPH EXCL 5/12	1754	31	213	92 93
195 FID MACH4+2325 68020-V7	2166	12 1498 1	18	2199	130	142 SCI SUPERSTAR 36%	1741	14	1007	94
191 FID ELITE 2*68000-V5	2133	28 258 1	9	1888	2	142 CONCHESS/2	1739	14	1096	.95
189 MEPK ROMA 68020	2117	14 1068 2 17 678 2	20 21	2052	54	140 NOV QUATTRO 140 NOV CONST/3 A	1725	19	565 a25	96 97
188 NOV DIABLO/SCORPID 68000	2108	12 1392	22	2164	117	140 NOV PRIMO-VIP	1723	24	354	98
CLARAMAYYBUR BAVOK 881	2107	86 29	23 }	2444	^4	139 HEPH HONDIAL 2	1718	83	31	99
187 MEPH ALMERIA 68000 187 MEPH DALLAS KRADO	2103	14 1025 2 14 996 2	24	2104 2080	11 197	135 FID ELITE ORIG	1684	39	139	100 101
188 NOV OTABLO/SCORPIO 68000 188 NOVAG RUBY/EMERALO 187 MEPH ALMERIA 68000 187 MEPH DALLAS 68020 193 FID NACH3+2265 68000-V2 182 MEPH MM5/5 181 MEPH POLGAR/5 181 MEPH POLGAR/5 181 MEPH HOALLAS 68000 181 NOV SUPER FORTE-EXP C/6 180 MEPH HILANO 180 MEPH HONDIAL 68000XL 179 MEPH RONA 68000 178 MEPH AKSTERDAH 176 KASP GK-2000 176 NOV SUPER FORTE-EXP B/6 175 KASP TRAVEL CHAMPION 175 MEPH MEGA 4/5 175 FID NACH 2C 68000 174 KASP GAL-REN D/10 174 FIO TRAVELMASTER 174 FIO TRAVELMASTER 174 FID MACH 2B 68000 173 MEPH SUPMOND 2-MCARLO 4 173 MEPH SUPMOND 2-MCARLO 4 173 MEPH HM4/5 171 NOV SUPER FORTE-EXP A/6	2068	6 5154	26	2117	229	134 MEPH HONDIAL 1	1676	29	247	102
182 MEPH MM5/5	2062	12 1320 2	27	1902	11	133 NOV CONST/2	1664	12	1289	103 104
181 MEPH DALLAS 68000	2055	9 2201 2 12 1501 2	28	2000	50	126 CHESS 3000	1614	112	17	105
181 NOV SUPER FORTE-EXP C/6	2053	9 2556	30	2005	24	124 FID SENSORY 9	1599	13	1114	106
180 MEPH HILANO	2047	16 761 3 16 804 3	31	2062	11 77	124 KASP ASTRAE-CONG-BAVL	1595	59	61	197 108
179 MEPH RONA 68000	2035	9 2311	33 1	1975	54	120 GGM + STEINIYZ	1563	27	287	109
178 HEPH ACADENY/5	2028	10 2004	14	2932	109	119 CHESS 2001	1556	50	84	110
1/6 MEPH AMSTERDAM	2014	9 2373 3 27 291	35 36	2068	192	THE MERHICAL S	1544	10 29	242	111 112
176 NOV SUPER FORTE-EXP B/6	2009	12 1373	37 :	2020	82		10	-,		
175 KASP TRAVEL CHAMPION	2007	29 136	30	27.1.1	آ میں	RATING LIST (c) Eric Hailsworth	Or D	2309	N\$45	
175 MEPH MESH 475 175 FID MACH 20 68090	2007	9 2476 3	39	2041 2066	169 127	BCF Computer	Elo	+/-	Games	Pos
174 KASP GAL-REN D/10	1999	13 1209	41	1967	109	230 CMACHINE THE KING2/30-PC	2445	37	155	1
174 FIO TRAVELMASTER	1994	19 576 6 26 302		1983 1968	53 25	226 CHESS GENIUS 486-0C 224 CHACHINE GIDEON3.0/30-0C	2411 2393	30 36	226 161	2
174 FID HACH 20 BOODD 173 MEPH SUPMOND 2-NCARLO 4	1986	31 224			ر ا رو	221 4 CHESS PRO 486-PC	2368	29	245	3
173 MEPH MODENA	1985	25 338	45		` .	221 M CHESS PRO 486-PC 219 CHESS GENIUS 386-PC 214 CMACHINE GIDEDNI/IS-PC	235 0 2317	50	96 945	5 6
172 MEPH MM4/5 171 NOV SUPER FORTE-EXP A/6	1982 1970	8 2904 4 13 1155 4	47		97 176	311 B CHESS 188-56	2208	17	597	ž
169 MEPH HONTE CARLO	1956	28 262		2046	10	210 CHACHINE THE KING1/15-PC	2288	16	749	9
169 KASP GAL-REN C/8	1954			2016	98	210 FRITZ2 486-PC 204 ZARKOV 486-PC	2266 2235	49 33	99 196	9 10
168 CONCH PLY-VICTORIA/5.5 168 KASP TURBO XING 2	19 49 1949		50	1890	15	203 PSION 2 486-PC	2229	54	72	Î1
168 CXG SPHINX/4	1948	10 2062	52	1956	155	201 M CHESS 386-PC	2214	14	1083	12
167 FID MACH 2A 68000 165 NOV EXPERT/6	1941 1924	25 338 3 31 222		1918 20 36	35 22	201 M CHESS PRO 386-90 199 SARGON 5 486-PC	2211 2194	34 63	177 54	13 14
165 NOV SUPER FORTE-EXP A/5	1920	12 1440		1836	29	197 FRITZ1 486-PC	2175	27	276	15
164 FID CLUB B 68000	1917	12 1459	56	1827	18	196 REX 486-PC 192 FRIFZ2 386-PC	2171 2143	32 40	206	16 17
163 NOV EXPERT/5 162 NOV FORTE B	1907 1902			2052 1975	52 208	191 CHESSMASTER 3000 486-PC	2135	39	131 136	18
162 KEPH REBELL	1901	10 2141	59	1948	69	191 M CHESS 286-PC	2131	19	598	19
162 FID AVANT GARDE/5	1899		60	1862 1927	90	190 HTARCS 386-PC 189 SARGON 5 386-PC	2122 2117	52 70	78 14	20 21
				19//	220			1 V	***	4.1
162 FID PAR E-ELITE-DES2100	1899	9 2558		1/2/	ı	188 C-CHAMPION 2175 485-9€	2111	44	109	22
162 FID PAR E-ELITE-DES2100 161 KASP STRATOS-CORONA 161 NOV FORTE A	1899 1895 1893	9 2558 (10 2060 (9 2206 (62	1930	134	188 ZARKOV 386-PC	2111 2107	44 19	109 543	22 23
162 FID PAR E-ELITE-DES2100 161 KASP STRATOS-CORONA 161 NOV FORTE A 160 MEPH SUPERMONDIAL 1	1899 1895 1893 1886	9 2558 1 10 2060 1 9 2206 1 12 1461 1	62 63 64	1930 1990	6	180 ZARKOV 386-PC 187 PSION 2 386-PC	2111 2107 2097	44 19 32	109 543 199	22 23 24
162 FID PAR E-ELITE-DES2100 161 KASP STRATOS-CORONA 161 NOV FORTE A 160 MEPH SUPERMONDIAL 1 160 FID CLUB A 68000	1899 1895 1893 1886 1883	9 2558 6 10 2060 6 9 2206 6 12 1461 6 29 242 6	62 63 64 65	1930 1990 1767 1830	6 6 36	180 ZARKOV 386-PC 187 PSION 2 386-PC 184 FRITZI 386-PC 182 HIARCS 286-PC	2111 2107 2097 2077 2062	44 19 32 26 61	109 543 199 300 58	22 23 24 25
162 FID PAR E-ELITE-DES2100 161 KASP STRATOS-CORONA 161 NOV FORTE A 160 MEPH SUPERMONDIAL 1 160 FID CLUB A 68000 160 KASP SIMULTANO 160 CONCH PLYMATE/5.5	1899 1895 1893 1886 1883 1883	9 2558 (10 2060 (9 2206 (12 1461 (29 242 (14 1076 (9 2213 (62 63 64 65 66	1930 1990 1767 1830 1939	6 6 36 55	188 ZARKOV 386-PC 187 PSION 2 386-PC 184 FRITZI 386-PC 182 HIARCS 286-PC 182 REX 386-PC	2111 2107 2097 2077 2062 2057	44 19 32 26 61 19	109 543 199 300 58 557	22 23 24 25 26 27
162 FID PAR E-ELITE-DES2100 161 KASP STRATOS-CORONA 161 MOV FORTE A 160 MEPH SUPERMONDIAL 1 160 FID CLUB A 68000 160 KASP SIMULTANO 160 CONCH PLYMATE/5.5 159 KASP GAL-REN B/6	1899 1895 1893 1886 1883 1883 1881 1879	9 2558 6 10 2060 6 9 2206 6 12 1461 6 29 242 6 14 1076 6 9 2213 6 14 976 6	62 63 64 65 66 67	1930 1990 1767 1830 1939 1873	6 6 36 55 123	180 ZARKOV 386-PC 187 PSION 2 386-PC 184 FRITZI 386-PC 182 HIARCS 286-PC 182 REX 386-PC 180 ZARKOV 286-PC	2111 2107 2097 2077 2062 2057 2041	44 19 32 26 61 19 33	109 543 199 300 58 557 190	22 23 24 25 26 27 28
162 FID PAR E-ELITE-DE52100 161 KASP STRATOS-CORONA 161 NOV FORTE A 160 MEPH SUPERMONDIAL 1 160 FID CLUB A 68000 160 KASP SIHULTANO 160 CONCH PLYMATE/5.5 159 KASP GAL-REN B/6 159 KASP TURBO KING I 158 CONCHESS/6	1899 1895 1893 1886 1883 1881 1879 1879	9 2558 6 10 2060 6 9 2206 6 12 1461 6 29 242 14 1076 6 9 2213 6 14 976 6 24 364 6 44 107	62 63 64 65 667 667 669	1930 1990 1767 1830 1939 1873 1910 2037	6 6 36 55 123 61	188 TARKOV 386-PC 187 PSION 2 386-PC 184 FRITTI 386-PC 182 HIARCS 286-PC 182 REX 386-PC 180 TARKOV 286-PC 178 PSION 2 286-PC 177 FRITTI 286-PC	2111 2107 2097 2077 2062 2057 2041 2025 2020	44 19 32 26 61 19 33 43 35	109 543 199 300 58 557 190 113 172	22 23 24 25 26 27 28 29 30
162 FID PAR E-ELITE-DE52100 161 KASP STRATOS-CORONA 161 NOV FORTE A 160 MEPH SUPERMONDIAL 1 160 FID CLUB A 68000 160 KASP SIHULTANO 160 CONCH PLYMATE/5.5 159 KASP GAL-REN B/6 159 KASP TURBO KING I 158 CONCHESS/6 158 NOV EXPERT/4	1899 1895 1893 1886 1883 1883 1881 1879 1879 1871 1868	9 2558 6 10 2060 6 9 2206 6 12 1461 6 29 242 1 14 1076 9 2213 6 14 976 6 44 107 1 14 972 7	62 63 64 65 65 67 68 69 70	1930 1990 1767 1830 1939 1873 1910	6 6 36 55 123 61	188 ZARKOV 386-PC 187 PSION 2 386-PC 184 FRITZI 386-PC 182 HIARCS 286-PC 182 REX 386-PC 180 ZARKOV 286-PC 178 PSION 2 286-PC 177 FRITZI 286-PC 175 C-CHAMPION 2175 386-PC	2111 2107 2097 2077 2062 2057 2041 2025 2020 2005	44 19 32 26 61 19 33 43 35 71	109 543 199 300 58 557 190 113 172 42	22 23 24 25 26 27 28 29 30 31
162 FID PAR E-ELITE-DE52100 161 KASP STRATOS-CORONA 161 NOV FORTE A 160 MEPH SUPERMONDIAL 1 160 FID CLUB A 68000 160 KASP SIHULTANO 160 CONCH PLYMATE/5.5 159 KASP GAL-REN B/6 159 KASP TURBO KING I 158 CONCHESS/6 158 NOV EXPERT/4 158 FID EXCELLENCE/4	1899 1895 1893 1886 1883 1881 1879 1879 1871 1868 1867	9 2558 6 10 2060 9 2206 6 12 1461 6 29 242 14 1076 9 2213 6 4 107 14 972 11 1740	62 63 64 65 65 67 68 67 71	1930 1990 1767 1830 1939 1873 1910 2037 1975	6 6 36 55 123 61 8	188 TARKOV 386-PC 187 PSION 2 386-PC 184 FRITZI 386-PC 182 HIARCS 286-PC 182 REX 386-PC 180 TARKOV 286-PC 178 PSION 2 286-PC 177 FRITZI 286-PC 175 C-CHAMPION 2175 386-PC 175 SARGON 5 286-PC	2111 2107 2097 2077 2062 2057 2041 2025 2020	44 19 32 26 61 19 33 43 35	109 543 199 300 58 557 190 113 172 42 30	22 23 24 25 26 27 28 29 30 31 32
162 FID PAR E-ELITE-DES2100 161 KASP STRATOS-CORONA 161 NOV FORTE A 160 MEPH SUPERMONDIAL 1 160 FID CLUB A 68000 160 KASP SIHULTANO 160 CONCH PLYMATE/5.5 159 KASP GAL-REN B/6 159 KASP TURBO KING I 158 CONCHESS/6 158 NOV EXPERT/4	1899 1895 1893 1886 1883 1883 1881 1879 1879 1871 1868	9 2558 6 10 2060 6 9 2206 6 12 1461 2 29 242 6 14 1076 6 9 2213 6 14 976 6 24 364 6 44 107 14 972 11 1740 2 24 372 20 512	62 63 64 65 667 667 669 770 771	1930 1990 1767 1830 1939 1873 1910 2037	6 6 36 55 123 61	188 ZARKOV 386-PC 187 PSION 2 386-PC 184 FRITZI 386-PC 182 HIARCS 286-PC 182 REX 386-PC 180 ZARKOV 286-PC 178 PSION 2 286-PC 177 FRITZI 286-PC 175 C-CHAMPION 2175 386-PC	2111 2107 2097 2077 2062 2057 2041 2025 2020 2005 2004	44 19 32 26 61 19 33 43 35 71	109 543 199 300 58 557 190 113 172 42	22 23 24 25 26 27 28 29 30 31

: