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Computer Chess News Sheet 33
"SELECTIVE SEARCH"
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The purpose in publishing SELECTIVE SEARCH (previously known as the NEWS SHEET) has always been to provide a survey of the CHESS COMPUTER scene, with a special emphasis on realistic assessments of the PLAYING ABILITIES of the many machines now available. My work at COUNTRYWIDE COMPUTERS is of special help in this as they provide financial backing and also allow me some time during office hours in which to prepare part of the material. We handle there a very wide range of Computers and I enjoy freedom to maintain personal opinions and preferences, which I seek to share with readers. Final games and articles selection for each Issue is done independently and solely by myself.

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A REMINDER LABEL is placed on the Envelope of each Reader where the Issue enclosed is the LAST covered by their current sub. If there is such a Label on YOUR envelope, you will need to send your payment, payable either to "Selective Search" or myself, to obtain the next Issue.

NEW SUBSCRIBERS; always please state the number of the first Issue you wish your sub. to cover - otherwise you will always be sent a copy of the current Issue.

ARTICLES: Articles or Games sent in by Readers, Distributors or Programmers are always welcome and will receive fair consideration for publication.

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- * TEST YOUR TACTICS - by Graham White.
 - * Mephisto LYON v. various PC PROGRAMS - Dave Overton's findings.
 - * Chess Computers - VALUE FOR MONEY - a new assessment by Steve Maughan.
 - * Fidelity NACH 3 and Mephisto HNS v. PC PROGRAMS by Jeremy Deane.
 - * Recent RESULTS: Mephisto LYON plays in KINGS HEAD and HULL Events.
 - * GAMES Selection: NOVAG wins; NUNN v. Mephisto ROMA (uugh!).
 - * Full RATING LISTS for DEDICATED and PC Programs.
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Welcome to another VERY FULL, 24 page Issue! And thanks to all the help from Contributors whose involvement makes the Magazine so much more interesting. Articles already in preparation for the NEXT ISSUE include:

*** A COMPUTER ENGINE STUDY by Graham White *** FULL DISCUSSION of all the different DEDICATED and PC PROCESSORS with SPEED COMPARISONS and PC price guide.

2.

TEST YOUR TACTICS, by Graham White. No. 2

(Solutions with brief notes, on Inside Back Cover)

The positions are designed to test YOU and YOUR COMPUTER (either or both!) - even where the solution is a Mate announcement it is best, for the purposes of this type of test, to put the Computer on INFINITE mode so that it searches "naturally" for the mate.

All of the positions here were used amongst over 1,000 tested during the developing of the much improved tactical ability of the Mephisto LYON over its predecessor, the Portoroze. Timings for these are shown for comparison.

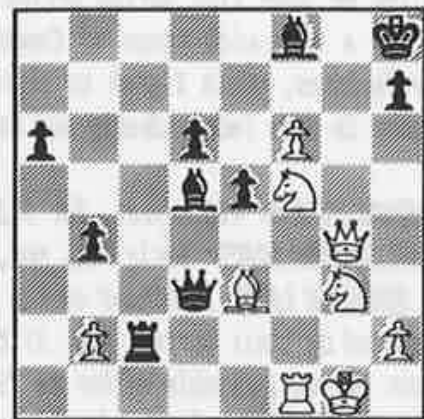
Here are the 3 positions given without Solutions in SS32.



1. White to mate in 8
Lyon 0m 25s. PROse X



2. White to mate in 7
Lyon 3s. PROse 50s.



3. White to mate in 6
Lyon 2s. PROse 1m 50s.

And here are three further tricky ones. In number 4 we see that Tactics can be useful in endgames too but 5 and 6 look more complicated to "us" humans!



4. White to play
Lyon 38s. PROse 2m 0s.



5. White to play
Lyon 10s. PROse 22s.



6. White to play
Lyon 3s. PROse 1m 40s.

PROLOGUE

Unfortunately this cannot be quite as full a report as I had hoped - two **Nephisto LYON 68020**'s were entered, one operated by myself and the other (Eric's own machine) by Gary Preston. Sadly something went wrong with the attempted saving of the games on Eric's board, and so some exceptional chess is unable to be shown. The cause of the fault was not Gary, I hasten to add! - we really have no idea what happened and Eric's board continues to cheerfully store all sorts of other work, as it has for over 2 years.

An even greater disaster, though, was narrowly averted! There was a problem with the electrical power in the area where the Computers were plugged in, and this was remedied less than 5 minutes before play was due to start, so Gary and I only just got ready in time! Following the result last year with the **PORTOROSE**, when "Active" performed better than "Solid", both machines were set to play on "Active" this year. The Time Control was the standard for this Tournament - i.e. 30mins each for the whole game. However, as we feel that Richard Lang's programs tend to play quicker than they need to in the earlier parts of the game, we both made adjustments to the LYON clocks - Gary set his to play its first 30 moves in 20mins, then 10mins for the remainder of the game; I set mine at 40 moves in 23mins, then the remainder in 7. We both allowed for an operator time loss of 3secs per move in transferring moves from the computer to the main board, and vice-versa.

A GOOD START

The Tournament started successfully for us, both machines winning quite comfortably against 170 BCF opposition. However both Gary and I were just a little worried as both machines were entering the "last 5 minute zone" before victory was achieved. This was something we wanted to avoid - obviously we didn't want to risk actually losing any games on time, but also there is always the extra risk of operator errors due to time pressure, and such mistakes are invariably costly. Gary and I wanted to increase the operator time to 5 or 6secs per move... but Eric (from the safety of the Countrywide Stand in the Entrance Hall!) was keen to keep it as low as we dared. Thus a compromise of 4secs per move was finally agreed on, and this worked out fine for the rest of the Tournament.

Gary's machine won again in round 2, and against strong opposition. Meanwhile mine was playing very well against D.MACKLE (about 200 BCF from conversations held, though his "official" figure at Kings Head and thus used for grading calcs. was shown as 183). In fact the LYON won a Pawn quite early on with a nice tactic but, unfortunately, it got sidetracked into another tactical line which allowed Mackle to Queen a Pawn (*see game later*). The LYON had been unable to see the consequence of the complications at this time setting, and may have been slightly unlucky -

4.

though this evened out fairly in the end!

Whilst discussing this, Gary told me that he believed most games were effectively decided by move 30, and this was why he was giving his machine as much time as he dared for the first 30 moves. I thought he was probably right and this could have helped in the Mackle game! From now on both Computers were set to play the first 30 moves in 20mins.

Eric's machine continued its storming form in the 3rd. Round and beat another 200 player. It is truly a great shame that this game was lost from its memory as it was one of the very BEST Computer games I've seen. It took control from early in the game, and always looked as if it was going to win. When its opponent resigned the Computer was a decisive 4 Pawns up in a straightforward Pawn ending!

Mine, however, had started badly and was forced to sac a Piece for 2 Pawns to keep itself in the game with chances. However, in time trouble, our opponent managed to blunder the material back. Still, the LYON didn't have any advantage and it went into a line which allowed a perpetual check. The opponent (who, incidentally, had asked the Controllers to arrange for him to play this game v. the LYON!), was down to his last 2 or 3mins, and I think a human would have played differently to seek a possible win from his opponent's severe time disadvantage at this stage.

I think I should say here that I believe we made a tactical error in not using the "Contempt Factor" in this Tournament. This Function/Option can be used to artificially increase the Computer's evaluations so that it will play to avoid any forced draws unless it sees itself as clearly losing by, say, -025, or -050. Mephisto themselves recommend a "Contempt Factor" of +025 be set against ANY opposition under 2100, as they believe the LYON should always be looking for a win against such opponents!

IN THE LEAD... BRIEFLY

So now Gary's machine had an impressive 3/3, whilst mine had only 1.5/3! But I was confident about regaining some ground now, as mine was paired against a 112 player whereas Gary's was down to meet Peter LARGE, I.M and 220+, who also had 3/3, as did Julian HODGSON (who eventually won with 6/6!).

My game went to plan, and we got quite an easy win. Unfortunately on the table next to me, Peter Large was playing excellent chess. He sacked a Pawn just out of the Opening to obtain a strong initiative which eventually netted a Knight for another Pawn, and continued to play powerfully with the better development and the 2 Bishops. I managed to reproduce from memory the first 20 moves of this game, after learning it was not held in the Computer's storage area, so at least part of the game has gone to programmer Richard Lang. It is these rather rare defeats which are of most help to him in his work preparing, we hope, the next upgrade!?!

Two more wins were recorded in Round 5. My LYON played an incredibly aggressive variation of the Queen's Gambit Accepted which paid off when its opponent failed to find the best defence. The LYON quickly took advantage and won a Piece in 13 moves! In the last Round Gary's machine, with 4/5 and still an outside chance of a top three finish, allowed another draw by repetition - this time against 180 BCF player, C.BAKER. Once again we were left rueing our non-use of the LYON's Contempt Factor, which may have earned both machines an extra half point in the end! Certainly it would have done no harm. Meanwhile my machine was engaged in what proved to be our most exciting game of the Tournament; the game was balanced on a knife-edge with both Computer and Player running seriously short of time and our board surrounded by a very large number of excited spectators. The player, G.HAMILTON, obtained some good pressure at one stage, but eventually the LYON squeezed a brilliant win after offering the exchange of its Queen for Rook and Bishop to nullify the attack, and then pushing its Pawns cleverly in the tricky endgame which was being played at "full speed"!

EPILOGUE

Thus both machines finished creditably with 4.5/6 against 180+ opposition. The only 2 games lost were against 200/200+ men, and one of those I felt was slightly unlucky with hindsight. From the experience of this Tournament I would conclude:-

- [1] "Active" is best for faster chess.
- [2] "Contempt" should be used to make the LYON tend towards avoiding forced draws against under 190's.

I hope you enjoy the highlights (and lowlights!) in the games and notes which follow.

White D.NACILE, Black Mophisto LYON 60020

Not a very nice one to start with!

1.d4 d5 2.Nf3 Nf6 3.Bf4 c5 4.c3 cd

(The LYON is OUT of Book playing this)

5.cd Bf5

(IN Book playing this)

6.Nc3 Nc6

(OUT of Book playing this)

7.e3 e6

(IN Book playing this!)

8.Bd3 Bd3 9.Qd3 Be7 10.O-O O-O 11.h3 Qb6

(and now, finally, OUT of Book playing this)

12.Qe2 Rac8 13.Rfc1 a6 14.Na4 Qb4 15.Nc5?! Bc5 16.Rc5

(White has deliberately played a very quiet Opening - looking for a draw perhaps, or an anti-computer strategy? But LYON quickly finds an unexpected tactic)

Nd4!! 17.ed Nc5 18.dc

(Watch this Pawn!)

6.

Qf4 19.Qe1 Qc4

(Black does look to be totally winning)

20.Qa5 Ne4 21.b4 Qe2?!

(The start of a faulty plan. Given more time the LYON finds 21...d4, to answer 22.Qb6 with either Qd5 or even d3! Even the Queen exchange, 21...Qb5 22.Qb5 ab5 is better with Black materially ahead and "safe")

22.Rf1 Qb2 23.Qb6! Nc3 24.Qb7 Na2 25.c6!

(The LYON had completely missed this, having apparently expected 25.Qa6)

Nb4?

(This loses, despite the +045 eval. Better was 25...Qb4 26.Qa6 Nc3 27.c7 Qc5 28.Qb7 Nb5; but the LYON needs 2min. to find this)

26.c7 Qc3 27.Ne5!

(Now White clearly wins, and LYON shows -172. Nackle threatens both Nf7 and also Nd7 followed by Nb6. In tests later the LYON always played 27...f6 next, which is an improvement on the move it produced in the game...)

Re8? 28.Nf7 Qc6 29.Qc6 Nc6 30.Nd6 Ra8 31.c8=Q Rc8 32.Nc8 Kf7

(and eval. -339, so we resigned. A disappointment after the good play of the first 20 moves).

White Nephisto LYON 68020, Black D.HAYKES

A weird and wonderful opening, but White gets in trouble after 13.g3?

1.c4 c5 2.Nc3 Nc6 3.Nf3 e5 4.e3 f5!?

(Puts LYON out of Book, of course)

5.d4 e4 6.Ne5 Nf6 7.Ne2 Ne7 8.0-0 0-0 9.Nc6?

(Given just a little longer, LYON would have played 9.f3, and the game would have taken on an altogether different flavour)

dc6 10.b3 Qc7! 11.Na3 Nd8 12.Bb2 Bd6 13.g3 cd 14.ed f4!

(Black's simple chess puts heavy pressure on the LYON King. There are threats of fg, followed by Bg3; or f3 as occurs in the game)

15.Qc1?!

(15.Re1 is better, to answer f3 by Bf1. The LYON would have found this improvement with just a little more time, but even so 15...e3 would then be strong)

f3! 16.Bd1 Qd7!

(This forces White's next...)

17.Ne4 Ne4 18.Bf3

(And the LYON shows -145. Now it starts an excellent fightback however..)

Qf5 19.Bg2 Bd7 20.f4 Re8 21.Re1 Bb4 22.Re2 Re6 23.a3 Ba5 24.b4 Bb6 25.Qc2

Rae8 26.c5 Bc7 27.Rc1 Qg6 28.Qc4 Kh8 29.Qc2

(Nephisto predicted...Ng3 30.Re6 Re6 31.hg Qg3, and Black is still ahead despite LYONS excellently co-ordinated recovery attempts. However White's efforts are about to gain their reward...)

Nc5? 30.Re6 Ne6 31.f5!

(Black must have missed this!)

Nd4 32.Nd4 Bf5 33.Qf2 Be4 34.Rf1 Bd6

(No points for any move which allows Qf8 mating!)

35.Be4 Qe4 36.Ba7 h6 37.Qb6 Be5 38.a4 Qd5 39.Qb7?!

(Which allows a draw SEEN by Nephisto! It's "Next Best" was 39.a5!?, which evaluates at -003 but would have kept play going in fact to the Computer's advantage as Mayers was now terribly short of time)

Bd4+ 40.Bd4 Qd4+ 41.Ig2 Qe4+ 42.Kh3 Qe6+ etc. and a draw.

It's not really very fair to have started off with two of the LYON's more ordinary performances, when it ended the Tournament with an 8-2=2 record, but we believe such games are of interest to Readers. To re-dress the balance, let's finish with 2 of its 8 wins! First is the one where LYON went wild in the Opening!

White Nephisto LYON 68020, Black B.BARLOW

1.d4 d5 2.c4 dc 3.Nf3 Nf6 4.e3 Bg4 5.Bc4 e6 6.h3 Bh5 7.Nc3 c5

(This puts LYON out of Book, as the Computer is programmed to expect a6)

8.Bb5+ Nbd7 9.dc!? Bc5

(And now LYON becomes very "positive"!)

10.g4!? Bg6 11.g5 Nd5 12.Ne5 N5b6 13.Na4!

(Here LYON expects Ie7, which is actually quite a remarkable and useful move, and which keeps the game quite finely balanced. But the complications created now pay off handsomely for White...)

Bb4+? 14.Bd2 0-0 15.Bd7 Bd2 16.Qd2 Be4?

(Probably 16...Na4 17.Ba4 Qg5 was Black's best chance, but it was going to be an impossible struggle anyway after the loss of material, and Black had to resign in due course).

White G.HAMILTON, Black Nephisto LYON 68020

1.d4 d5 2.e3 Nf6 3.c4

(Bringing about a very early departure for LYON from its 100,000 position Opening Book!)

Nf5 4.Nc3 e6 5.Nf3 c6 6.Qb3 b6 7.cd ed 8.Ne5?!

(This looks a bit premature, and 8.Be2 is more natural)

Bd6 9.Be2

(Now, however, Bd3 would have been better)

Be5 10.de Nfd7 11.f4 Nc5 12.Qd1 0-0 13.0-0 Re8 14.b4 Ne4 15.Ne4 Be4 16.Qd4

(It might have been better to exchange off Black's strong Bishop with Bd3)

a5! 17.a3 ab 18.ab c5 19.Qb2 Ra1 20.Qa1 Nc6 21.Bb5 Re6 22.f5!? Rh6!

(Not 22...Qg5? when 23.Rf2 Rh6 24.Bc6 Rc6 25.Qa8!)

23.bc bc 24.f6!

(It's getting hot now!)

Ig6! 25.Rf2 Qb6 26.Qa4!?

(A good move, and generously given a "!" here; BUT White misses the even better 26.Qa8+ Nd8 (not Nb8? 27.Bf1! threatening Rb2 and wins) 27.Bc6! putting Black under pressure. Probably Black would have been better off with 25...Qc8, but LYON needs close to 3mins. to choose this)

8.

Nd8!

(Not Na7? 27.Bd3!)

27.Bd9!

(A mate threat; LYON had expected 27.fg)

Qc6

(The only move. Now White could have tried repeating with 28.Bb5, but he has the bit between his teeth...)

28.Qa5!? Be6 29.Bb5?!

(29.Bd3 would have been safer)

Qb7 30.Bb2?!

(30.fg!?)

gf 31.Ba6 Qb2!!

(31.Qa8 was also strong; but this is a finely-timed way of bringing White's pressure to an end)

32.Bb2 Rg2+ 33.Kf1 Rb2 34.ef Rh2

(And we reach an endgame where only Black has winning chances, and White is running out of time!)

35.Bc8 Rh6 36.De6 Rf6+ 37.Kel fe 38.Qd8+ Ig7 39.Qe7+ Ig6 40.Qc5 h5!

(White's only hope is to find a perpetual check... but how?)

41.Qc8! h4 42.Qg8+ Kh5 43.Qh8+ Ig5 44.Qg7+ Bg6! 45.Qc7! Bf5!

(Now if 46.Qg7+ Rg6 47.Qe7+ Ig4!)

46.Qf4+ Kh5 47.Qf3 Ig6 48.Qg2+ If7

(And out of checks again!)

49.Qh2! Rh6! 50.Kf2

(If 50.Qc7+?! then Kg6! and no more checks, at least for now!)

h3 51.Kf3 e5?!

(Played immediately, with both sides short of time! But perhaps a mistake! White should take the Pawn, 52.Qe5, after which LYON had supposed Be4+ 53.Kg3 h2, and winning. BUT 54.Qc7+ Ke6 55.Qc6+ Kf5 56.Qd7+ draws for White. However though forward analysis intimated 52...Be4+, LYON would have played (even this short of time it seems) h2! Perhaps hoping for 53.Qf5? Rf6! winning. Another amusing line is 53.Qc7+ Ke6 54.Qb6+ Kd7! 55.Qxh6 h1=Q 56.Qxh1 Be4+ winning! But if (after 52.Qe5 h2) 53.Qd5+! it still looks very unclear! After Be6 54.Qb7, [a] Kf6 55.Qb2+ Kg6 56.Qg2+ Kf7 57.Qh1! which should draw, or [b] Ke8 55.Qb8+ Ke7 56.Qb4+ Kf6?! 57.Qf4+ Kg6 58.Qh6+ and draws, this being White's other threat, as well as the perpetual. Of course all of this after-game analysis with plenty of time at one's disposal ignores the very serious time trouble which White, particularly, was in. Under the pressure which LYON had put him under, it is obviously very doubtful that he could have hoped to find his way through the above variations; even now we may not have found all of the LYON's best lines anyway. But I think HAMILTON should have tried 52.Qxe5 anyway, on an instinctive basis! Be all that as it may, he played...

52.Ig3?! Kf6 53.Kf3 Rg6 54.Qa2 Be4+

(With this LYON announced N/5. With 3mins. of its own time left, and HAMILTON's flag about to drop, it was over anyway. A marvellously exciting game in which it was a nerve-racking joy to be involved; and a super finish to the Tournament!).

The Value Of A Chess Computer: A New Approach

9.

Have you ever wondered which chess computer would be a good buy for say £500? There would seem to be plenty of people willing to give their opinions, some of them well known Grandmasters. The only trouble is that they do not generally agree with one another. Some favour *Mephisto*, other *Novag* or *Fidelity* etc. You see with such a product as chess computers it is not obvious which is the best buy. People make very *subjective* judgments. What is needed is some *unbiased objective* method of comparing computers of different playing strengths, board qualities, sizes and features.

One such method would be to use regression analysis to investigate the chess computer market. For those who have not come across regression analysis it is a mathematical way of drawing a line through lots of points of data; a bit like what you did at school in physics lessons when you plotted the results of some experiment on a graph, then drew a straight line through them. In the context of market analysis we start with the assumption that the price of the product, in this case chess computers, is determined by some basic attributes. This means that if we change any of its attributes (eg increase playing strength) we would expect a change in the price. We then try to find some mathematical equation which given the basic attributes of the product, will accurately predict its price. To cut a long story short the equation given below was found to give good results. Good results are not ones that make any particular company look good, but ones that best predict the price of a chess computer given its attributes. For those more familiar with regression analysis the equation has an R^2 of just over 91%.

$$\text{EstimatedPrice} = \alpha(\text{ELO} - \Omega)^\beta + \mu.\text{ELO} + \delta.\text{Wood.Size} + e.\text{MatrixDisplay} + \sigma.\text{Sensor}$$

$$\alpha = 3.3177 \times 10^{-9}$$

$$\mu = 0.0309$$

$$\sigma = 49.72$$

$$\Omega = 1500$$

$$\delta = 0.7195$$

$$\beta = 3.966$$

$$e = 14.41$$

ELO

ELO rating using Eric's Results.

Size

The size of the chess board in inches squared.

Wood

Whether or not the computer is wooden (1=wood; 0=plastic)

Sensor

Whether or not the computer is auto sensory (1=Auto sensory; 0=other)

MatrixDisplay

Whether or not the computer has a matrix display (1=Matrix; 0=Standard)

Once we have this equation we can define the value of a chess computer as;

$$\text{ValueOfComputer} = \frac{\text{EstimatedPrice}}{\text{ActualPrice}}$$

In other word a good value machine will be one with a high predicted price and a low actual price. We can then rank the machines in order of value, as in the table opposite.

You will also notice that there is a column indicating which computers are value buys. This needs some explanation. A 'Value Buy' is a computer for which there is not a cheaper computer with a higher predicted price (the *Super Enterprise* is awarded the status of Value Buy only by virtue that it is the cheapest machine in the survey!).

Now at this stage a word of warning must be given. As already stated the analysis is trying to compare computers on the grounds of some *basic* attributes (playing strength, board quality, size if wooden, display quality and method of move entry). As such if a computer has some unique features they will not be taken into account. A good example of this is the PC interface offered by the *Novag Super Expert*, *Super Forte* and *Super Nova*. This is certainly a valuable feature if you have a PC, and could be worth going for as opposed to the *MMV Exclusive* which has a higher

predicted price and a lower actual price. In the end all the survey does is increase the awareness of the consumers as to which computers are competitively priced based on some basic attributes. Ultimately the decision as to which computer is the right choice for any one individual is very much one of personal preferences.

	Computer	ELO	Price	% Value	
1	Monte Carlo	1979	£249	143%	Value Buy
2	MMV Exclusive	2100	£479	135%	Value Buy
3	MMV Modular	2100	£349	132%	Value Buy
4	MMV Munchen	2100	£599	125%	Value Buy
5	Monte Carlo+	2017	£329	124%	Value Buy
6	Academy	2053	£399	121%	Value Buy
7	Designer 2265	2098	£339	120%	
8	Super Forte C 6 Mhz	2067	£299	119%	
9	Supermondial II	2017	£215	118%	Value Buy
10	Super Expert C 6 Mhz	2067	£499	118%	
11	Sphinx Galaxy	1965	£159	117%	Value Buy
12	Elite 2265	2098	£595	116%	Value Buy
13	Polgar 5 Mhz Exclusive	2091	£579	110%	
14	Mega 4	2029	£249	110%	
15	Polgar 5 Mhz Munchen	2091	£699	106%	
16	Lyon 16 Bit Exclusive	2258	£1125	106%	Value Buy
17	Elite v5	2157	£799	106%	Value Buy
18	Elite 2100	1915	£399	106%	
19	Lyon 16 Bit Munchen	2258	£1245	104%	Value Buy
20	Lyon 32 Bit Exclusive	2320	£1475	103%	Value Buy
21	Lyon 32 Bit Munchen	2320	£1595	102%	Value Buy
22	Lyon 16 Bit Modular	2258	£995	101%	Value Buy
23	Polgar 5 Mhz Modular	2091	£449	101%	
24	Mondial XL	2061	£329	100%	
25	Designer Display 2100	1915	£149	94%	Value Buy
26	Polgar 10 Mhz Exclusive	2147	£879	89%	
27	Roma Exclusive	2058	£629	89%	
28	Roma Munchen	2058	£749	88%	
29	Corona	1910	£170	88%	
30	Designer Display 2000	1848	£120	81%	Value Buy
31	Polgar 10 Mhz Modular	2147	£749	80%	
32	Roma Modular	2058	£499	75%	
33	Renaissance D 10 Mhz	2021	£749	72%	
34	Simultano	1892	£198	69%	
35	Elite v7	2198	£1500	65%	
36	Super Enterprise	1673	£99	55%	Value Buy
37	Super Nova	1808	£149	54%	

If anyone has any comments or suggestions I would be happy to discuss them, and explain in more detail, if necessary, the thinking behind the final equations.

Steve Maughan

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GAMES SELECTION...GAMES SELECTION...GAMES SELECTION...GAMES SELECTION

First the promised game by **Novag SUPER VIP** from the Herne Bay Club Championship, which was reported in SS/31 with the Computer getting a very creditable 6/8 for a performance grade of 158BCF/1864Elo. Notes by Frank Cole.

White N. NICKLETHWAITE (164BCF), Black Novag SUPER VIP

1 e4 e5 2 Nf3 Nf6 3 d4 exd4 4 e5 Ne4 5 Nxd4 -

BCO gives 5 Qe2 Nc5 6 Nxd4 Nc6

5 - d5 6 Bd3 Nc5 7 c3 Nd7 8 e6 Ne5 9 exf7+ Nxf7 10 O-O Qh4 11 Be3 Ne5 12 Nf3? Nxf3+ 13 Qxf3? Bg4!

The White Queen comes under serious pressure. If 14 Qf4, then Bd6 wins. Best is 14 g3 Qh5 15 Qg2 Bf3 16 g4, when Black wins the exchange with 16 - Bxg2 17 gxh5 Bxf1.

14 Bxe4 -

This way sees White giving up the Queen for 2 minor pieces.

14 - Bxf3 15 Bxf3 Bxe3 16 fxe3 Qg5 17 Na3? -

17 Kf2 followed by Nd2 would be better.

17 - Qxe3+ 18 Kh1 O-O-O 19 Rad1 Qb6 20 Nd2 Rhf8 21 Rfd1 c6 22 b4 Qe3 23 Nd3 Qf2 24 Nb1 Bde8

The end is near.

25 h3 Re1+ 26 Kh2 Rxf3

Destroys the guard on d1, and the SUPER VIP wins easily. 0-1.

It seems ages ago that Keith Kitson sent me the following "miniature", played at 2mins per move.

White Novag SUPER KIPERT B/6, Black Mephisto POLGAR/5

1 c4 c6 2 e4 d5 3 exd cxd 4 d4 Nf6 5 Nc3 Nc6 6 Bg5 Qa5 7 Bxf6 exf6 8 cxd Bb4 9 Qd2 Bxc3 10 bxc3 Qxd5 11 Ne2 O-O 12 Nf4 Qe4 13 Be2 Re8 14 O-O g5 15 Nh5 Qxe2 16 Nxf6+ Kh8 17 Qxg5 Rf8 18 Qb6 Bf5 19 Rf1 Qb2 20 Nh5 Qxf2+ 21 Kxf2 Bg8 22 Qf6 Bg7 23 Qxg7++!

Here is another brevity, this time from Bryan Whitby's "50 GRANDMASTER v. COMPUTER GAMES", reviewed in SS/32 and available from Bryan at 16 Manse Field Road, Kingsley, Warrington, Cheshire WA6 8BZ, for £2.50 (Cheques payable to "BCCAS" please).

12.

White John NUNN, Black Nephisto ROMA. Blitz Game.

1 e4 Nf6 2 e5 Nd5 3 d4 d6 4 Nf3 Nc6 5 c4 Nb6 6 e6 fxe6 7 Nc3 Bd7? 8 Bd3 Na5?

I was playing over this game on monitor mode on my LYON - which continues to analyse even though not directly playing!... a great help for editors! For just a few moments the LYON showed its opinion of the ROMA's 7th. by actually considering putting the Bishop back on c8! Eval. -045. It quickly moved to 8 - g6, -030 -> c5.

9 Ne5! g6

If 9 - dxe5 10 Qh5+ g6 11 Bxg6+ hxg6 12 Qxg6++. LYON evaluated 9 - g6 at -339, showing how very bad was ROMA's 8 - Na5.

10 hxg6 Rg8?

It is really quite fascinating to see how much Richard Lang's program has improved, even over the last 2 or 3 years. The LYON goes straight to 10 - Ba4 which has the virtue of making d7 available as an escape square. Eval. -348 -> 11 Qh5 hxg6 12 Bxg6+ Kd7.

11 Qh5 c5??

Unthinkable; it simply allows N/3 as confirmed by the LYON in 2 secs. LYON would have played John NUNN's 11 Qh5 of course, with a +621 eval; and would now play 11 - Qb8 showing -687. Even at 1sec per move the latest program would not play any of Black's moves 7, 8, 10 or 11!

12 Ne5+ Rg6 13 Qxg6+ hxg6 14 Bxg6++ and 1-0.

Nephisto LYON v. various PC PROGRAMS

I mentioned in SS/32 that Dave Overton was testing his LYON 68020 against various PC programs, running on his 80386 at 20MHz. At the time of SS/32, the match nearly over was against CHESSMASTER 2100, but Dave has also completed a second match since then, this one against Richard Lang's own PSION 2.13!

Was it a "close call"... or "one-sided"? In fact the first match was VERY one-sided, despite claims from certain quarters that CHESSMASTER 2100 has an Official USCF grade of 2325 (which was really earned by the Spracklens' program running in Fidelity 68030 hardware; but Chessmaster 2100 is reputed to be the "same program" and so is implying for itself the Fidelity grading in some adverts). If, of course, it WAS, then the score should have been at least a bit closer than the 18-2 result the LYON obtained in Dave's match!

However the LYON 68020 v. PSION 2.13 80386/20MHz was a MUCH closer-run affair, with a final score of 13.5-6.5. Of course PC's like the 80386 have emerged since

Richard's PSION first saw the light of day, and the 20MHz version which Dave has runs 11 times faster than the original standard on pure number crunching. Dave believes PSION on his hardware is from 20 to 30 BCF stronger than its SELECTIVE SEARCH Atari grading. *[The range of PC's now in use for running Chess programs will necessitate a change of method in printing the RATING LIST; a subject which will be discussed elsewhere in either this Issue or SS/34, depending on available space].*

Both Matches consisted of 10 games at 30secs. per move, and 10 at 1min. per move. Here is Dave's choice of the best games, with his Introductions to one or two:-

White Nephisto LYON 68020, Black CHESSMASTER 2100 386/20. 30secs. per move.

1 e4 e5 2 Nf3 Nc6 3 Bb5 a6 4 Ba4 Nf6 5 0-0 Be7 6 Re1 b5 7 Bb3 d6 8 c3 0-0
9 h3 Na5 10 Bc2 c5 11 d4 Qc7 12 d5 Bd7 13 Nbd2 Nb7 14 Nf1 Bxc0 15 Ng3 Na5
16 Nh4 Nxd5 17 exd5 Nc4 18 Qd3 g6 19 Nhf5 gxf5 20 Nxf5 Bxf5 21 Qxf5 e4 22
Bxe4 Kg7 23 Qxh7+ Kf6 24 Qh6+ Ke5 25 f4++, and 1-0.

White Nephisto LYON 68020, Black PSION 2.13 386/20. 30secs. per move.

This may not actually be Black's best defence to what I otherwise think is quite a poor Opening line for White - especially a Computer! (2 Pawns down after the Opening!). However it is one of the most amazing counter-attacks that I have witnessed; the piece sacrifices made to get the advantage both in the middle and the end game are astonishing. Sit back... and prepare yourself for a treat!

1 e4 e5 2 d4 exd4 3 Nf3 Bb4+ 4 c3 dxc3 5 Bxc3 Qe7 6 Be2 Bxc3+ 7 bxc3 Qxe4
8 0-0 Nc6 9 Ng5 Qf5 10 Bd3 Qf6 11 Qe1+ Nge7 12 Bd2 h6 13 Ne4 Qe5 14 Qc1 d6
15 Bf4 Qd5 16 Qe3 Ne5 17 Rfd1 Nxd3 18 Nxd3 Qe6 19 Re1 Bd7 20 Bxd6 Nf5 21
Qc5 cxd6 22 Nxd6+ Nxd6 23 Bxc6+ Bxc6 24 Qxd6 b6 25 Qc6+ Ke7 26 Qb7+ Kf6 27
Rf3+ Kg6 28 Qe4+ Kh5 29 Rxf7 -

Announcing Mate in 5! - icing on the cake.

- Bxf7 30 Qf5+ g5 31 Qxf7+ Kh4 32 g3+ Kg4 33 Kg2 Rhd8 34 f3++!... 1-0, and beautiful!

White CHESSMASTER 2100 386/20, Black Nephisto LYON 68020. 1min. per move.

1 e4 e5 2 Nf3 Nc6 3 Bb5 a6 4 Ba4 Nf6 5 0-0 Bxe4 6 d4 b5 7 Bb3 d5 8 dxe5
Be6 9 c3 Nc5 10 Bc2 Bg4 11 Re1 Be7 12 b4 Ne6 13 Bb3 d4 14 h3 Bb5 15 a3
0-0 16 g4 Bg6 17 Bxe6 fxe6 18 Nxd4 Qd5 19 f4 Bb4 20 Rf1 Rad8 21 Bb2 Bg3
22 Qd2 Qe4 23 Bc1 Nxd4 24 exd4 Nxd4 25 Qa2 Bc4 26 Nd2 Qe2 27 Nf3 Rc2 28
Qxc2 Bxc2 and White resigned, 0-1.

White PSION 2.13 306/20, Black Mephisto LYON 60020. 1min. per move.

This one is a fitting tribute to the superior program. LYON loves to open up the game, and occasionally takes real risks to create tactical situations. Its defeats and draws against PSION were mainly the result of such, with VERY long games, as LYON sought to rescue a share of the points from difficult situations of its own over-enthusiastic making. But in this game we see a superb attack by well co-ordinated pieces - the key to most of LYON's best work.

1 c4 e6 2 Nf3 c5 3 e4 Nc6 4 Nc3 Nf6 5 d4 cxd4 6 Nxd4 Bb4 7 Nxc6 bxc6 8 Qd3 0-0 9 e5 Ng4 10 Qg3 Qe5 11 Nf4 f6 12 exf6 Rxf6 13 Bd2 Rxf2 14 Ng1 Qb6 15 Ke2 Bxc3 16 Qxc3 Ne4 17 Qe3 Rf2+ 18 Kd3 Nxd2 19 Qxb6 axb6 20 Ke3 Rxf1 21 Raxf1 Rxf1+ 22 Rxf1 Rxa2 23 Rf2 d5 and White resigned, 0-1.

TESTS AND COMPARISONS, by Jeremy Deane.

Atari & Amiga PC Progs: PSION 2, CHESSMASTER, SARGON 3

Dedicated Computers : Fidelity ELITE 2265, Mephisto HHS

No doubt like many readers, I seem to spend rather too much of my time pitting one computer chess program against another - and working out the similarities and differences, as well as the relative strengths of each. The impetus for this Article began many months ago, when I started to read in not-very-good Computer Magazines (whose motto would seem to be, "Who on our staff can't play chess so that we can give them this new chess program and get a wonderful review?"), that my then favourite PC program was not very highly rated. Given that the level of reviewing tended to be of the "Arcade fans wont find this very rewarding", or "It seems to know all the moves!", or "Well it beat me on level one in three minutes" variety, I concluded I could safely ignore these. But then came "SELECTIVE SEARCH" and there was the same relatively low opinion again - and now I couldn't dismiss it so easily!

Having tried as many home computer chess programs as I could locate over quite a few years, I had become convinced that SARGON 3 was just about the tops. I really did not rate COLOSSUS X; and CHESSMASTER 2000 (although very pretty), was slow and cumbersome in its play. SARGON consistently seemed to think deeper, to avoid crass errors, and to come up with solid attacks followed by a sound endgame. As I moved into chess computers "proper", the same pattern continued - for example in games against the STRATOS. But "SELECTIVE SEARCH" was emphatic: STRATOS= 1910; CHESSMASTER 2100= 1839; CHESS CHAMPION 2175= 1833; CHESSPLAYER 2150= 1821; CHESSMASTER 2000= 1722, and poor old SARGON 3 back at 1689.

And then, with a pocket of money to burn, I bought a Mephisto POLGAR, only to find that SARGON ran it all round the place! And the POLGAR was rated by SS at 2106. What on earth was happening? It was at this point that I decided to investigate more deeply! Here is a specimen of that series between POLGAR and

SARGON 3, played (as in all games in this Article) at one minute per move. It is a fairly unremarkable Caro-Kann; a slow and equal opening, leading to routine piece exchanges. However, instead of the expected draw, POLGAR makes mistakes, then under-estimates the impact of these, and SARGON slowly draws ahead and wins.

White Mephisto POLGAR/5, Black SARGON 3

1 e4 c6 2 d4 d5 3 Nc3 dxc4 4 Nxc4 Bf5 5 Ng3 Bg6 6 h4 h6 7 h5 Bh7 8 Nf3 e6
9 Bf4 Bd6 10 Bxd6 Qxd6 11 Qd2 Nf6 12 0-0-0 0-0 13 Bd3 Bxd3 14 Qxd3 Na6 15
a3 Ng4 16 Qd2 c5 17 dxc5 Qxc5 18 Ne4 Qc7 19 Nd4 Bxd6 20 f3 e5 21 Qe2 Bxd4
22 Bxd4 exd4 23 fxg4 Qf4+ 24 Kb1 Qe5 25 Qd3 Nc7 26 Re1 Re8 27 Qc4 Re6 28
g3 Ne8 29 Ka2 b6 30 g5 hxg5 31 g4 h5 32 Qd3 Nd6 33 Bxd6 Qd5+ 34 Qb3 Qxb3+
35 Kxb3 Rxe1 36 Nxb5 Re4 37 Nxa7 Rxy4 38 Kc4 Rh4 39 h4 g4 40 Kxd4 g3+ 41
and White resigns, 0-1.

This was fairly typical: SARGON absorbing pressure and then calculating better in the endgame. I particularly remember POLGAR having awful trouble coping with passed Pawns and ending up just losing this match.

A little later saw me pitting SARGON against the Fidelity ELITE 2265, and here the pattern changed. SARGON became exposed as safe but pedestrian - unable to see sacrifices far enough ahead, and neither imaginative nor aggressive in its use of Pawns (two of the virtues of the Fidelity). I was particularly pleased with the following game, in which White (ELITE 2265), after a Ruy Lopez (Steinitz Defence), built a prolonged, almost forced, attack out of a Rook pin on move 15. Black ends up powerless as the build-up continues, and at move 26 the Fidelity declared a mate in 8 against best play.

White Fidelity ELITE 2265, Black SARGON 3

1 e4 e5 2 Nf3 Nc6 3 Bb5 d6 4 d4 Bd7 5 Nc3 end4 6 Bxd4 g6 7 0-0 Bg7 8 Be3
Nge7 9 Be2 f5 10 Nxc6 Nxc6 11 Qd3 0-0 12 Qc4+ Rf7 13 Qb3 Nd4 14 Bxd4 Bxd4
15 Bc4 Be8 16 exf5 gxf5 17 Ne2 Bb6 18 Qf3 Qc8 19 Ng3 Bd7 20 Rae1 a5 21 Re7
Be8 22 Nxf5 Kf8 23 Bxf7 Bd7 24 Bd5 Bxf5 25 Rf7+ Ke8 26 Re1+ Qe6 27 Nxe6+
Nxe6 28 Rf8+ Kd7 29 Nxe6+ Nxe6 30 Qf5+ Ke7 31 Qf7++

I had now to come to the reluctant view that, while SARGON is indeed a good program, it has not got the versatility to cope with the best of the dedicated Chess Computers. I have recently played it in a match against the new Mephisto MM5, and hesitate to give the score! Suffice it to say that SARGON did not win any, and drew only one!

At this stage I turned my attention to the PSION 2 program for the Atari. The SS rating for this is currently at 1971, and I can confirm the tenacity with which it defends against what should be better programs. Here is a game where PSION

16.

was White against the ELITE 2265, playing a Ruy Lopez (Murphy Defence). They were out of Book at move 9, and by move 23 the evaluation was up to 5.72! Not bad going. The damage was caused by three less than precise moves by the 2265 (12, 14 and 15) which allowed PSION to build up a crushing King-side attack with Queen and Knights, leading to the forced capture of the Black Queen. I have included the moves following just to show the degree of impotence that PSION managed to inflict on the ELITE 2265.

White PSION 2, Black Fidelity ELITE 2265

1 e4 e5 2 Nf3 Nc6 3 Bb5 a6 4 Ba4 Nf6 5 d4 exd4 6 O-O Be7 7 e5 Ne4 8 Nxd4 O-O 9 Re1 Nc5 10 Bxc6 dxc6 11 Nc3 Bd7 12 a3 Qe8 13 b4 Ne6 14 Nf5 Ng5 15 Qg4 Bxc1 16 Baxc1 g6 17 Ne4 Kh8 18 Nf6 Qc8 19 Qh4 h5 20 Ne7 Qd8 21 Rcd1 Qxe7 22 Nxd7 Qxd7 23 Nxd7 Ng8 24 Qf6+ Nf7 25 c4 a5 26 b5 cxb5 27 cxb5 Rc8 28 a4 c5 29 Nb6 Bd8 30 Qe7 Bb8 31 Bd1 Kg8 32 Nd7 Ba8 33 Bxc5 Bxc5 34 Qxc5 Bf8 35 b6 f6 36 Qxa5 fxe5 37 Qxe5 Kh7 38 f3 and Black resigns, 1-0.

PSION in fact went on to win this match (though only just, 5.5-4.5), and was only brought to heel, by a clear but not overwhelming margin (7-3), in a further match against the Mephisto MH5. I would like (perhaps unfairly) to give only one game from this match, and that to show the strength of PSION's play in the early middle-game, the accurate decision to ignore a powerful Queen-side attack by MH5, and then produce a crushing King-side counter, ending with the sacrifices of Rook and Queen. Altogether up there with the best!

White Mephisto MH5, Black PSION 2

1 d4 d5 2 c4 c6 3 cxd5 cxd5 4 Nf3 Nf6 5 Nc3 Nc6 6 Bf4 Bf5 7 e3 e6 8 Ne5 Bd6 9 Bxc6 bxc6 10 Qa4 O-O 11 Bnd6 Qnd6 12 Rcl Rfb8 13 Nd1 Rb6 14 b3 Ne4 15 f3 Ng6 16 Ba6 Bab8 17 O-O Re8 18 Nf2 e5 19 Bd3 exd4 20 Bxy6 hxy6 21 Qxa7 c5 22 exd4 cxd4 23 Rc2 Re7 24 Rc8+ Kh7 25 Qa8 g5 26 Bd8 Qf4 27 Rh8+ Ig6 28 Nd1 Re2 29 Qa7 Rbe6 30 g3 Qd2 31 f4 gxf4 32 gxf4 Bbe5 33 a3 Ng5+ 34 Kh1 Qxf4 35 Qxf7+ Kxf7 36 Rf8+ Kxf8 37 Rxf4 Re1+ 38 Rf1 Rxf1++

Finally I am now experimenting with CHESSMASTER 2100 for the Amiga, and I have to say - putting it as politely as I can - that the claim, "The best just got even better" seems not totally to be the case. During a terrible pasting at the hands of the ELITE 2265 the following game was played, which neatly displays I think the strengths and limitations of each of the programs. CHESSMASTER 2100, as Black, defends with a Queens Indian, and there is a tense conflict to resolve the fluid central position. White moves a Knight up the board at move 10 in a way that looks premature, but turns out to be a key part of the pressure leading to the breakthrough around move 24. Fidelity's quiet Pawn move on move 23, forestalling a Black counter, is impressive, as is the positioning of its Queen on move 25. The cream for me was Fidelity's announcement of mate in 9 against best play upon making its 30th. CHESSMASTER knew nothing about it.

1 d4 Nf6 2 c4 e6 3 Nf3 b6 4 a3 Bb7 5 Nc3 d5 6 cxd5 exd5 7 Bf4 Be7 8 e3
0-0 9 Be2 Nbd7 10 Nb5 c5 11 0-0 Ne4 12 Nd2 Nxd2 13 Qxd2 Nf6 14 b3 Ne4 15
Qc2 Bf6 16 f3 Ng5 17 Bd3 g6 18 Rac1 Ne6 19 Nd6 Be7 20 dxc5 Nxc5 21 Be5
Nxd3 22 Qxd3 Bc5 23 b4 Qg5 24 f4 Qf5 25 Qb3 f6 26 hxc5 fxe5 27 cxb6 axb6
28 Rc7 Ba6 29 Qxd5+ Kh8 30 Nd6 Qh5 31 Nf7+ Kg7 32 Ng5+ Kh8 33 Qxe5+ Rf6 34
Qxf6+ Kg8 35 Qg7++

In summary: There seems to be only one home computer program (for Ataris and Amigas) that can give a real tussle to the leading dedicated models: and that is the PSION 2. SARGON 3 is good and sound, quite hard to beat, but when pushed is a bit slow calculating and a bit unimaginative in attack. CHESSMASTER 2100 is a real disappointment, and seems unable to see far enough ahead in the middle game. In other words, "SELECTIVE SEARCH" has got the various ratings for these programs about right! What a surprise!
(Jeremy Deane, 14/2/1991)

BITS & PIECES...BITS & PIECES...BITS & PIECES...BITS & PIECES...BITS & PIECES

* The German "**SCHACH & SPIELE**" Magazine recently re-printed sections of our SS RATING LIST, which was encouraging to see. Their main purpose was to discuss the so-called "Novag Factor" (see Goran Grotting's Article in SS/32), but they were using "our" Rating List due to the very clearly properly-worked relationship between Computer-Computer results and Computer-Human.

* New Hitachi NB and RISC/SPARC processor systems can be expected during 1991, from CXG, Fidelity, Mephisto, and Saitek. I also hear that Novag could have a Kittinger program on a 68000 too, late in the year. A further discussion of the differences between the many various processor systems, how they affect SPEED in Chess Computers, and which end of the market they should be suitable for, will be in SS/34 (I hope!). I will also attempt to relate them to PC Hardware systems when running Chess Software, thus extending the details given in SS/30.

* **RESULT** given in "**SCHACH & SPIELE**", from Weida/Thuringen:-

- 1 Mephisto HH5, 17 (out of 24)
- 2= Kasparov HANSTRO D/10, Mephisto ACADEMY, Fidelity DESIGNER 2265, 16
- 5 Novag SUPER FORTE C/6, 13.5
- 6 Mephisto POLGAR/5, 13
- 7 Mephisto MONTI CARLO, 12.5
- 8= CXG SPHINK, Kasparov PRISMA, 9.5
- 10 Novag SUPER CONSTELLATION, 9
- 11 CXG SPHINK 40, 8.5
- 12 Mephisto HH2, 8
- 13 Fidelity PAR KICKLENCE, 7.5

18.

* **Mephisto 68030 v. Fidelity 68040**, per Larry Kaufman.

The score of 5-0 for the Mephisto in their Active Chess Match was given in the last SS, with still 1 game to play. The last was, in fact, drawn, so the final score was

Mephisto LYON 68030 5.5 Fidelity 68040/v10 0.5

A second 5min. Blitz Match was played and EXACTLY the same score obtained.

It should be said that these two very one-sided results favour Mephisto more than we would have expected. A score of 3.5-2.5 or 4-2 for Mephisto would accord more closely with our Rating difference, but Larry assures us of the validity of the test, being conscious himself of its implications. Although Mephisto now owns Fidelity, I am sure they will be delighted to see these scores, as their future is obviously geared much more to the development by Richard Lang of his own programs than any work that might be done on Dan & Kathe Spracklen's.

Regarding the Spracklens, they are currently working with RISC/SPARC chips in connection with their first Saitek/Kasparov program. The latest I hear is that this is up-and-running at 20MHz but will NOT be entered in the mid-1991 World Micro Champs in Vancouver, Canada, as was originally rumoured. The hope had been that a so-called "Lightning" chip (120MHz!?) might have been available to give them a competitive chance against Mephisto, but this will not be around until "later in the year" (and is hardly likely to be a commercial proposition anyway - at least in the immediate future - any more than Mephisto on say, a 68040 at 75MHz!). We wait to see if ANYONE will challenge Richard Lang's 68030 version! Noting how far ahead the LYON 68030 is of ANYTHING else commercially available.. in fact LYON 68020 is currently closest and THAT lost 4.5-1.5 to the 030 in a mini-Match test I ran.. my own guess is that once more no-one else will want to challenge in either the Manufacturers or Commercial Section, and that there will just be a Software Group again.

* **Results...Results...Results...Results**

Following on from the 68030 v. 68040 result above, I also hear from Joe Blandford his score of 15-15 between Mephisto LYON 68020 v. Fidelity 68030/v9. Whilst the speed gap in the 030 v. 040 Match was around 2 to 1 in Fidelity's favour, in Joe's Match it would be nearly a 4-1 gap! The PORTOROSE went down in this test by 17.5-12.5 previously, but it had been thought that the LYON might just edge the result this time, especially as an Austrian tester had actually had an exactly even score with PORTOROSE 68020 v. Fidelity 030/v9. Goran Grotting of Sweden's PLY mag. now believes the LYON-PORTOROSE gap is 40/50.

I have completed a 12-gamer LYON 68020 v. Fidelity 68020 where the speed gap favouring Fidelity is back down to around 1.7 to 1, and my result was a win for Mephisto LYON by 9-3 (6-0=6!). I am playing LYON 68030 v. Fidelity 68020 at this moment, where Mephisto has the speed advantage (!) by around 2-1; the early score is 4-0 for Mephisto.

Readers will have surely noticed the growing number and variations of /PC programs appearing in the RATING LISTS of late. The cause has been partly the emergence of one or two NEW programs... and partly due to the considerable possible variations of HARDWARE available for them to run on.

Gone are the times when it was Amstrad CPC/Spectrum/Commodore/BBC... or Atari/Amiga... or an original IBM using the "standard" 8088 at 4.77MHz. Many programs only ran on "one or the other", so differentiating between running speeds was not especially important - also, with the exception of Richard Lang's PSION 2, most of the programs on their "basic" PC processors lagged a good way behind all of the leading (and mid-table) dedicated machines.

Things do seem to be changing at the present time however, (a) due to the emergence of one or two somewhat stronger programs... NOT up to the standards of the top dedicated machines, but no slouches either!... and particularly (b) the availability of faster and faster PC hardware which, at its top (and very expensive!) end, can be AS FAST OR FASTER even than the dedicated Computers on their (also very expensive) 68030 and, yes, 68040 processors. Thus there are IBM program versions of COLOSSUS X, CHESSMASTER 2100, PSION, REX and MCHES (and, no doubt, others I've not seen yet), and each of these can run on the "old" 8088's at 4.77 or 9.54MHz... or an 80286 at anywhere from 10 to 16MHz... or an 80386"sx" at anything from 16 to 33MHz... or an 80386 also 16 to 33MHz... and the 80386 may have a Cache system giving a further speed boost to some Chess progs... and there are 80486's, with or without Cache, running at 25-33MHz. Needless to say I am beginning to GET scores for MOST of the above-named programs running on a VERY WIDE variety of the different hardware systems. The number of permutations clearly means that the PC programs COULD take over the Rating List... NOT AT the top, but from MID-table up to NEARISH the top in the case, possibly, of MCHES on an 80486.

NEWS SHEET/SELECTIVE SEARCH has always given "light" coverage to PC program progress... and intends to continue doing so. However NS/SS started out as a Magazine looking at dedicated Chess Computers and that will remain the priority, at least for now. This is where my own main personal interest, and business interest (and hopefully, expertise) lies anyway - but I am interested and have no intention of ignoring progress made in PC Hardware and Software where that seems to be relevant. It may be that I will need to buy an 80286 or 80386 of my own to do some personal testing (though subs. would have to go UP a bit to help pay for it!?! Just a joke). At the moment Steve Naughan, Dave Overton, Jeremy Deane and one or two others are keeping their eyes open and reporting to SS - as indeed can be seen from Articles this Issue. For NOW I am SEPARATING the PC programs from the main Rating List and will run INDIVIDUAL DEDICATED and PC Lists. This does not mean that PC's are about to get more coverage than at present... nor does it mean I am about to quietly "phase them out"!

Hephisto LYON 68020 wins HULL QUICKPLAY PREMIER

A week after the Kings Head Tournament, LYON owner Eric Fisher entered his machine in the HULL QUICKPLAY. Everything had been set up well in advance but, the day before the Event, the organisers rang Eric suggesting they might be refusing the Computer entry at the last moment to pacify players who didn't want to meet it. However, on the basis that only players who wanted to would play the Computer, the threat was withdrawn at 10.30pm in the evening and, bright and early on Saturday morning, the LYON met its first opponent.

SELECTIVE SEARCH has discussed before this situation, which often pertains nowadays even though it is obviously prejudicial to the machine involved, in which players may choose if they wish to play the Computer, or not. Thus the Computer only meets opponents who "fancy their chances" (which often means they have one of their own, or that they have learned "how to beat them"?!). It is something which Manufactureres just have to accept, along with the increased Entrance Fees which are usually charged for Computers, if they want to get a proper Grading for "their" machine under genuine Tournament conditions (which are very different to any other tests against humans, whether in simuls. or casual play or whatever - such results are for boasting, but not grading!)

Our good friend, Eric Fisher, had decided to follow pretty much the same Time Limit method as Graham and Gary had at Kings Head - in fact he used 32 moves in 20mins and 10mins for the remainder, but just 2secs(!) per move operator time! A brave choice to absolutely minimise the time lost to the Computer but needed by the operator - a factor which really means that the Computer is running at the equivalent of perhaps 8 or 9 tenths of its true speed in an Active Chess Tournament. None of this is really a complaint - after all, we don't have to enter the Computer's if we don't want to - but I think they are points worth bearing in mind when evaluating results and, sometimes, finding them a little lower than one might have hoped. That didn't happen this time, anyway!

Game 1 was against R.NOBLE (148BCF) and the LYON, playing Black, started off with a very straightforward win in just 30 moves.

Game 2 proved, says Eric, to be the toughest of the Tournament as the Computer was drawn with White to meet P.R.HUGHES - known to be a very strong Junior and graded at 202BCF for this Event. Hughes could perhaps have gone into the endgame a Pawn up but missed the best line and, in time trouble, just scraped a draw by 3-fold Repetition with his flag hanging (LYON still had 4mins left).

In **Game 3** the Computer was "drawn" to meet the Hull Club President, D.H.WESTRA. Actually he had asked specifically if he could play the LYON - as had a confident Aaron Summerscale, stating that no Computer had ever beaten him!). The LYON played very strongly again and had only used 12mins when Westra, playing White and running short of time, resigned in an impossible position at move 35.

In this Round, S.C.BROWN (214BCF, 2/2) won a great game against AARON SUMMERSCALE (1.5), which effectively ended the latter's chances of meeting the Computer, as it transpired. After this Round there was another player also with 3/3 but, as Eric describes it, he had "signed the pledge" (not to play a Computer!). P.N.HUGHES, the LYON and A.N.OTHER PLEDGE shared 3= with 2.5.

As the Computer had played Hughes and the A.N.Other on 2.5 also didn't want to meet the Lyon, it was drawn for Game 4 to play TED OXLEY, who is known as Hull's "Computer expert". I remember Ted well from my days with Competence ("Hi there, Ted, when you're reading this") where he helped us out in the grading Tests we ran there for Fidelity's CLUB, MACH 2 and MACH 3 Computers. Eric Fisher writes, "Actually I had to pop into the toilet and lost 2 minutes on the clock in this game. Ted made most moves almost instantly and took only ten minutes for the whole game. It proved easy for the Computer, but jolly hard for me as he kept making his reply while I was still making the move on the Computer, and put me under a lot of pressure!" Happily the LYON announced a Mate in 6 at move 43 to win well.

Meanwhile S.C.BROWN had won again and, with the LYON clear 2nd., the pairing at the top for Game 5 decided itself. The Computer was given Black again for this game and, Eric admits, he nearly made a mess of it during a tremendous struggle when Brown found himself in a crazy race with the clock. Eric, trying to cope with White's fast play, placed a Knight move onto the wrong square and panic started to set in with a huge crowd already gathered around the board. Here is the game:-

White S.C.BROWN (214BCF), Black Nephisto LYON 68020

1.d4 d5 2.Bg5 c6 3.Nc3 Qb6 4.Rb1 g6 5.Nf3 Bg7 6.e3 Nf6 7.Bd3 Bg4 8.h3
Bxf3 9.Qxf3 0-0 10.Qe2 Nbd7 11.b4 Qc7 12.f4 a5

(Dynamic play!)

13.a3 axb4 14.axb4 Ra3 15.Qd2 Rfa8 16.0-0 e6 17.Nd1 Qd6

(The LYON is winning and applying some pressure)

18.Nf2 Ra2 19.Rfc1 Raa3 20.Qe1 Nb6 21.Bxf6 Bxf6 22.Ng4 Bg7 23.c3 Nc4?

(Na4 was best)

24.Bxc4 dxc4 25.Ba1 f5 26.Nf2 Qb8 27.Rxa2 Rxa2

(After Black's inaccuracy at 23 the game is much more even)

28.Ba1 Qa7 29.Rxa2 Qxa2 30.e4 Kf7 31.exf5 exf5 32.Kh2 Bf6 33.Nd1 Qc2 34.Qf1
Ke7 35.Qf3 Kf8 36.Nf2 h5 37.g3 h4 38.g4 Be7 39.Kg2 Bd6 40.h5?!

(This has the merit of getting White's Queen onto the 7th. rank - but leaves Black with very strong Q-side Pawns)

41.Qxb7 fxg4! 42.Qc8+ Kf7

(LYON reads +106 here)

43.Qd7+ Be7 44.Qxg4 Qxc3 45.f5 Qg3+! 46.Qxg3 hxg3 47.fxg6+ Kxg6 48.Kxg3 c3
49.Kf3 c2 50.Bd3

(The LYON was down to its last 5mins. now - but BROWN was very short of time.

22.

Even with time to spare, when LEDs are flashing at you because you've just put the Knight on the wrong square, and you need to take it back, press [clear] and correct it etc... that clock can appear to be running VERY, very fast! But Eric recovers his composure and the LYON finishes off smoothly...)

**Bg5 51.Kc4 b4 52.d5 b3 53.d6 b2 54.Nxb2 c1=Q 55.d7 Qxb2 56.Id5 Qb5+
57.Id6 Bf4+ 58.Kc7 Qg5+ 59.Kc8 Bc7**

(0-1. I gather the LYON announced Mate in 6 somewhere near the end, but Eric missed the exact moment in the rush!).

So now the LYON was outright leader with 4.5/5; Brown and Hughes both had 4; and 9 players were on 3.5. As the Computer had played both the 2= players, it had to play the top-graded of those on 3.5... the Club President's brother and many times Hull Champion, R.D.WESTRA, 188BCF. And the controllers' gave the LYON its 4th. game with Black!

White R.D.WESTRA (188BCF), Black Nophisto LYON 68020

**1.d4 d5 2.Nf3 Nf6 3.e3 Bg4 4.c3 e6 5.Nbd2 Nd6 6.Qc2 0-0 7.Bd3 c5 8.dxc5
Rxc5 9.0-0 Nc6 10.e4 Qd6 11.b4 Bb6 12.b5 Ne5 13.Nxc5 Qxc5 14.Kh1 Rac8
15.Bb2 Rfd8 16.f4 Qh5 17.e5 Nd7 18.Nb3 Rc7 19.a4 Bdc8 20.a5 Bc5 21.Qd2?**

(Slackens White's compensating pressure on h7; LYON responds immediately)

Bf5! 22.Rxf5 Qxf5 23.h3 Qg6 24.Ra1 Qg3 25.Rf3 Qh4 26.Rc2 Be7 27.Kh2 Nc5!

(The Computer is winning now)

**28.Nxc5 Rxc5 29.g3 Qh5 30.g4 Qh4 31.Qd3 Rc4 32.Kg2 Rbc5 33.b6 Rxa5 34.bxa7
h5 35.gxh5 Rxa7 36.h6?**

(f5 looks worth trying)

Qxb6 37.Bc1 Ra1 38.Be3 Ra3 39.f5 Qh7 40.Bd4 exf5 41.Rxf5??

(Of course it has all been somewhat complicated over the past few moves and the tension and pressure, with spectators crowding round and the Computer clearly ahead anyway, don't make life easier. But this is still a blunder and 41.Qxf5 Qxf5 42.Rxf5 Bc5 43.Rf2 gave the only chance there was likely to be)

**Qg6+! 42.Kh2 Rxd4!! 43.Qf3 Rc4 44.Bg2 R4xc3 45.Rxg6 Rxf3 46.Rxf3 Rxf3
47.Rb6 Re3 48.Rxb7 Rxc5 49.Kg3 g5 50.Kg4 f5+ 51.Kh5 Rf7**

(And White resigned here. Again I gather the Computer had announced a Mate in 6 a move or two earlier).

In the other games, Brown beat Hughes to earn clear 2nd. for himself (or clear 1st. when it came to the Prize-giving!). Hughes' loss left him on joint 3rd. with 5 others, including J.COOPER (191), P.HUTCHINSON (208) and AARON SUMMERSCALE. 28 played altogether, and our calculation of the LYON's grade comes out at 2353 Elo, 219 BCF. Aaron Summerscale finally got his wish after the Tournament proper when he challenged the LYON to two 10min. Blitz games in which he won the first but lost the second. Needless to say, Eric Fisher now has "the bug!", and is aiming to enter the LYON in the Hull Weekend Congress in September if possible. Our thanks to him for his efforts and getting copies of the games to us as well.

1. This is from a famous game - Edward Lasker v. Sir George Thomas. White has an incredible and beautiful FORCED mate here and, equally incredibly, the LYON finds mate in 8 as soon as it searches 1.Qxh7 on its 3rd.Ply Brute Force/15 Selective. This takes only 1m 25s even though Qxh7 is understandably very low on its move ordering list! The mating sequence goes, 1.Qh7!!! Kh7 2.Nf6+ Kh6 3.Neg4+ Kg5 4.h4+ Kf4 5.g3+ Kf3 6.Kf1 (this quicker mate in 7 is found later, having earlier shown 6.Be2+ Kg2 7.Rh2+ Kg1 8.0-0-0 mate!!). After 6.Kf1, Black cannot stop 7.Nh2 mate. Some Computers will spend a VERY long time on this one.

2. White has mate in 7 against best play after 1.Nf8+ Kf6 2.Nh5+ Kg5 3 Bd2+

3. White forces mate in 6 with 1.Qg7+!! Bg7 2.fg+ Kg8 3.Ne7+ Ig7 4.Nh5+ Kh8 5.Rf8+ Bg8 6.Rg8 mate. Notably the Fidelity MACH 3 also finds this mate in 2s!

4. On first (and second) glance one would probably expect that the White Knight would play an important part in this one. Quite the reverse! 1.Qxg6+ Kxd7 2.Qf7+ Kc8 3.Qe8+ Kb7. The Computer wont announce mate from the first position as Black can delay mate by the sac. of his Queen. 4.Qd7+ and, [a] Ka6 5.Qb5+ mates, or [b] Kb8 5.Kb6! wins.

5. In this one White wins by 1.Rxb2! Qxb2 2.Qxc8+ Nxc8 3.d7!!

6. 1.Rd7! wins as, if Bxd7 2.Qxg7+!! Rxc7 3.Rxc7+ Nxc7 4.Nf6+ Kh8 5.Nxf7 is mate. Astonishing for a Computer to find this in 3s! In most cases the Portorose and Fidelity Mach 3 were left a long way behind the Lyon timings, but in this one the Mach 3 also achieved a very respectable 15s.

NOTES re the RATING LIST (back page) to help MAGAZINE NEWCOMERS

*/5 after a machine indicates its PROCESSOR SPEED in MHz. Some programs are available running at different speeds and this helps to distinguish them.
+/- shows the maximum future RATING MOVEMENT likely for that computer. It is 95% certain mathematically that a machine's rating will stay within its +/- range. As the no. of games played by a machine increases, the reliability of the Rating also increases and the +/- figure will decrease!*

Human Games This column shows the total results each computer has obtained, in various countries, in tournament play against humans. The figures are adjusted to British levels and affect, (1) the FINAL rating given to the INDIVIDUAL machine concerned, and (2) the overall LEVEL of the finished Rating List for ALL computers. Many people feel that the results v. humans are more important than those v. computers, but they often involve only a small number of games and can thus be inaccurate. The main BCF and Elo figures shown combine BOTH (which are USUALLY very close to each other!), and are the most accurate in my own view.

RATING LIST (c) SEL SEARCH 33		April 1991		Human/Games	
BCF	Computer	Elo	+/-	Games	Pos
226	MEPH LYON 68030	2409	48	91	1
220	MEPH PORTOROSE 68030	2362	21	460	2
212	MEPH LYON 68020/12	2302	17	731	3
209	FID ELITE 68040-V10	2273	91	26	4
206	FID ELITE 68030-V9	2251	20	538	5
204	MEPH PORTOROSE 68020	2248	11	1535	6
204	MEPH LYON 68000	2234	31	217	7
201	MEPH ALMERIA 68020	2215	14	995	8
199	FID MAC4+ELITE 68020-V7	2195	14	1062	9
199	MEPH PORTOROSE 68000	2193	12	1358	10
194	FID ELITE 2+68000-V5	2156	29	248	11
192	MEPH POLGAR/10	2143	23	402	12
192	MEPH ROMA 68020	2140	14	1009	13
190	MEPH ALMERIA 68000	2126	14	1025	14
189	MEPH DALLAS 68020	2116	14	996	15
187	FID MAC3+2265 68000-V2	2099	7	3505	16
186	MEPH POLGAR/5	2088	12	1360	17
185	MEPH HMS/5	2081	12	439	18
184	MEPH DALLAS 68000	2075	12	1478	19
183	MEPH MONDIAL 68000 XL	2064	18	653	20
182	NOV SUPER FORTE-EXP C/6	2061	14	1041	21
182	NOV SUPER FORTE-EXP C/6	2058	10	1957	22
181	MEPH ROMA 68000	2050	11	1614	23
179	MEPH ANSTEROM/5	2033	9	2320	24
178	MEPH ANSTEROM	2028	10	2006	25
178	MEPH NEGA 4/5	2028	9	2338	26
178	FID MAC4 2C 68000	2027	9	1069	27
178	NOV SUPER FORTE-EXP B/6	2024	13	1166	28
177	KASP GAL-REN D/10	2023	14	131	29
177	KASP TURBO KING 2	2017	40	197	30
177	MEPH SUPEROND 2-MCARLO 4	2017	33	302	31
176	FID MAC4 2B 68000	2011	26	2387	32
175	MEPH NMA/5	2005	9	1070	33
174	NOV SUPER FORTE-EXP A/6	1995	14	240	34
172	MEPH MONTE CARLO	1977	30	313	35
171	KASP GAL-REN C/8	1970	26	1539	36
171	CX6 SPHINX/4	1969	11	330	37
169	FID MAC4 2A 68000	1957	25	330	37
167	NOV EXPERT/6	1941	31	222	38
167	NOV SUPER FORTE-EXP A/5	1941	12	1450	39
167	FID CLUB B 68000	1938	12	1399	40
167	NOV EXPERT/5	1936	29	247	41
165	NOV FORTE B	1920	10	1888	42
164	MEPH REBELL	1919	10	1887	43
164	FID AVANT GARDE/5	1918	11	1703	44
164	FID PAR E-ELITE-DES2100	1915	9	2313	45
164	KASP STRATOS-CORONA	1912	10	1828	46
163	NOV FORTE A	1910	10	2088	47
162	CONCH PYMATE/5 5	1900	10	1830	48
162	MEPH SUPERMONDIAL 1	1899	13	1236	49
162	KASP GAL-REN B/6	1898	14	966	50

RATING LIST (c) SEL SEARCH 33		Apr 1991		Human/Games	
BCF	Computer	Elo	+/-	Games	Pos
161	KASP TURBO KING	1894	34	187	51
161	FID CLUB A 68000	1894	30	228	52
161	KASP SIMUL TANO	1893	17	711	53
161	CONCHESS/6	1888	44	107	54
160	FID EXCELLENCE/4	1886	11	1602	55
160	NOV EXPERT/4	1885	15	946	56
159	CONCH PYMATE/4	1874	24	372	57
158	SCI TURBO KASP/4	1871	20	512	58
158	CX6 SPHINX 40	1864	94	24	59
157	FID ELITE C	1861	34	182	60
156	FID ELEGANCE	1855	17	685	61
156	MEPHISTO HNZ	1855	16	749	62
156	SCI TURBOSTAR 432	1854	12	1395	63
156	FID EXCELLENCE-DES2000	1849	11	1621	64
155	KASP GAL-REN B/4	1847	76	37	65
155	KASP PRISMA-BLITZ	1845	36	164	66
153	CONCHESS/4	1829	20	509	67
153	NOV SUPER CONST	1825	8	3355	68
151	NOV SUPER NOVVA	1813	32	208	69
151	MEPH BLITZ	1812	27	277	70
149	NOV SUPREMO	1792	75	38	71
148	NOV SUPER VIP	1788	28	263	72
147	FID ELITE A	1777	39	141	73
146	FID SENSOR 12	1774	13	1242	74
146	MEPH EXCL S/12	1771	31	213	75
145	FID PRESTIGE	1767	17	695	76
145	MEPH EUROPA-MARCO POLO	1761	35	171	77
145	SCI SUPERSTAR 36K	1760	15	927	78
143	NOV QUANTRO	1745	19	585	80
143	NOV CONST/3.6	1744	16	825	81
142	NOV PRIMO-VIP	1742	25	320	82
141	MEPH MONDIAL 2	1729	83	31	83
139	FID ELITE B	1719	47	97	84
136	MEPH MONDIAL 1	1695	29	247	85
136	FID ELITE ORIG	1693	39	139	86
134	NOV CONST/2	1677	13	1262	87
133	SUPER ENT-ADV STAR	1667	15	850	88
128	CHES 3000	1626	14	112	89
125	FID SENSOR 9	1606	14	1000	90
123	KASP ASTRAL-CONG-CAVL	1595	77	36	91
121	GEN + STEINITZ	1575	27	287	92
121	CHES 2001	1570	50	84	93
119	HEPHISTO 3	1562	18	633	94
119	SCI SUPERSTAR ORIG	1557	29	242	95
119	KASP TURBO 24K	1554	45	104	96
119	KASP TURBO-EXPRESS 16K	1553	35	169	97
118	GEN + MORPHY	1552	19	559	98
116	NOV MENTOR 16-ANTI60	1551	38	145	99
		1532	134	12	100

RATING LIST (c) SEL SEARCH 33		April 1991		PC SOFTWARE	
BCF	Computer	Elo	+/-	Games	Pos
210	N CHESS 486-33/PC	2286	53	76	1
208	N CHESS 386-25/PC	2266	33	190	2
197	REX 386-33/PC	2181	54	74	3
184	PSION 2 386-20/PC	2079	70	43	4
183	REX 386-20/PC	2070	27	289	5
171	PSION 2 ATARI/PC	1971	10	1807	6
166	COLOSSUS X 386-33/PC	1933	94	24	7
166	C*MASTER 2100 386-20/PC	1933	49	89	8
163	C*MASTER 2100 386-33/PC	1908	94	24	9
155	CHESSMASTER 2100/PC	1846	43	114	10

RATING LIST (c) SEL SEARCH 33		April 1991		PC SOFTWARE	
BCF	Computer	Elo	+/-	Games	Pos
154	PSION 1/PC	1836	39	137	11
151	CHESSPLAYER 2150/PC	1809	47	95	12
150	SARGON 3/PC	1804	49	90	13
149	CHES CHAMPION 2175/PC	1795	31	212	14
149	FINAL CHESSCARD/PC	1795	44	111	15
142	PSION OL/PC	1737	55	70	16
141	SARGON 4/PC	1733	46	98	17
140	CHESSMASTER 2000/PC	1727	24	360	18
135	COLOSSUS 4/PC	1681	30	240	19
129	COLOSSUS X ATARI/PC	1638	57	65	20