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# M I C R O C H E S S

## Superstar

*Tony Harrington examines the story behind the reluctant launch of the Superstar from SciSys and compares it with the Novag Constellation.*

Last year was not a rosy one in the chess computer industry, at least from the suppliers' point of view. While the public took pleasure in the fact that there were more, and better, chess computers on the market than ever before, the large number of different sets available meant tight profit margins and hard times for the companies producing them.

For SciSys, one of the leading suppliers, it was a particularly tricky year. Its Mark V system, the set that won the Trevemunde World Microcomputer Chess Championship in 1981, had aged somewhat (although it will still beat most casual players). The Mark VI module that SciSys intended to be the natural upgrade path for Mark V owners found few takers, partially because of production problems and partially because it never really proved itself to be conclusively stronger than the Mark V.

Fortunately for SciSys, Hegener and Glaser ran into problems producing a working, bug-free version of the Mephisto III, and Fidelity dithered over the European launch of the new version of its Chess Challenger 9. Unfortunately for SciSys, Novag moved with great speed and had its Constellation in the

shops by the end of 1983. Priced at around £150, the Constellation rapidly proved itself to be a very successful machine.

SciSys's answer to the Constellation, developed through 1983 and launched at the end of that year, is Superstar. Its first appearance, in pre-production form at the Budapest World Championships in October last year, was distinctly ordinary. It came 13th, with three out of seven points. The fact that this was the same number of points as that obtained by the commercial version of the Novag Constellation was little consolation.

Novag, Fidelity and the Mephisto

for second place with five points each. Against this sort of showing, Superstar, as SciSys's best offering, didn't promise much.

But, as Andrew Page, SciSys's European marketing manager points out, no conclusions about Superstar's strength should be drawn from that first appearance.

'You have to consider the background to our participation in that event,' he explained. 'We decided in May last year to develop a new chess computer to be programmed by Julio Kaplan.'

Originally, we expected a launch date around October this year. Word got out

| Fig 1          | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | Score |
|----------------|----|----|----|----|----|----|----|----|----|----|-------|
| Superstar:     | ½  | 1  | 1  | 0  | 0  | 1  | 0  | 1  | 1  | 0  | 5½    |
| Constellation: | ½  | 0  | 0  | 1  | 1  | 0  | 1  | 0  | 0  | 1  | 4½    |
| No of moves    | 56 | 81 | 66 | 27 | 22 | 57 | 57 | 67 | 89 | 40 |       |

people could all point to experimental versions which displayed great promise in Budapest. The Fidelity Elite finished top with six out of seven points. The Mephisto X (an extravagantly expensive machine costing around 5000 Deutschmarks), and the Novag X (due in the shops by July) tied

that we were at work on a new version and Lazlo Lindner, the organiser of the Budapest tournament urged us to enter. We told him well in advance of the event that there was no way we could get a version of Superstar ready in time, but he persisted and in the end we decided, at the last moment, to allow an early experimental version of Superstar to compete.'

This version, Page points out, was the twelfth in the development line. SciSys was already on version 16 at that time, but although version 16 was better in some respects, version 12 was deemed to be more reliable for competition purposes. Its major weakness was that the tournament clocks built into the set were not yet bug-free.

Page reckoned that SciSys intended version twelve of Superstar to be entered anonymously. The organisers overlooked that, and the Superstar started life under its own name. The result is that it now has a poor performance to live down. The main fact to bear in mind is that as a

### Micro Chess—a guide for beginners

Micro Chess covers all the news and events in the busy world of computer chess. With new chess programs and new chess computers appearing all the time, we evaluate their strengths and weaknesses as they become available. We shall be presenting profiles of programmers, both amateurs and professionals, which will cover their methods and their interest in chess programming, and we shall be talking to suppliers and looking at their plans. Computer Chess affects computer

enthusiasts in two different ways. For some, the fact that they can now play chess against either their home computer or a dedicated chess computer has opened up the delights of the game. For others, the real interest is not so much in playing chess as in trying to build a chess program. Micro Chess aims to meet the interests of both.

Chess is a game that can be as exciting for the beginner as it is for the grand master. So if you haven't played before, get yourself a good introduction to the game — there are dozens in the bookshops — and get to it. Remember, with computer chess a game can be as fast or as slow as you want.

development project, it was barely four months old on that first appearance.

So how does the finished version of Superstar now compare to machines like the Constellation? Part of that answer has been provided by SciSys. It asked KK Chang, the second highest rated chess player in Hong Kong (where SciSys is based) to carry out a series of games between Superstar and Constellation. Chang was also asked to make suggestions about possible ways of improving Superstar's play and to comment on its playing style.

Chang supervised ten games, with Superstar playing on level B2 and Constellation on level 6; both levels being equivalent to tournament play at the rate of 40 moves in two hours, followed by 20 moves per hour thereafter.

The result table is shown in Fig 1: Superstar plays the white pieces in all the odd numbered games.

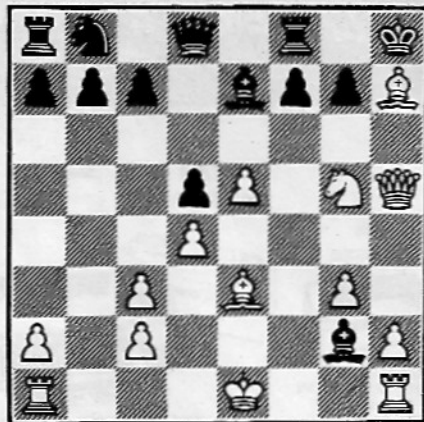
The openings, incidentally, were reasonably varied. In order, starting with game one, they were: Sicilian, Alekhine's Defence, Queens Gambit Accepted, Ruy Lopez, Ruy Lopez, Alekhine's Defence, English Opening, Dutch Defence and King's Indian Defence.

The one factor that emerges from these games, aside from the obvious fact that the two programs seem to be of approximately equal strength, is that the longer a game went on, the better Superstar's chances of winning seemed to be.

The two programs have very different styles of play. Constellation plays a relatively more aggressive game in the opening stages. This paid off in several of the games, where it caught Superstar with some sharp play directed at the enemy kingside. But Superstar is strong in the endgame (for a chess computer). It converted some drawn games into wins by capitalising on one or two relatively weak end games moves by Constellation.

With the honours about even in playing strength, one has to turn to the features each machine offers. Both are touch sensitive machines; both have LEDs down the two axes of the board and indicate moves by showing the rank and file of the piece to be moved; both are pleasantly designed and are roughly the same size. Superchess definitely has the more sophisticated level-setting mechanism, as well as offering a wider range of playing conditions. Unlike previous level setting devices, which have basically involved pressing the 'level' key five times if you want to play at level five, with Superstar you only need to press 'level', then the square that corresponds to the mode of play you want. You can also change levels during play.

Levels A1 to A8 are the 'casual play' levels. They range from a two second average response time to 10 minutes. Levels B1 to B8 are rather more complicated and need to be considered



Fidelity Elite vs Mephisto Excalibur

individually:

**B1** is what SciSys calls 'fast tournament' mode, 30 moves per hour.

**B2** is standard tournament mode, 40 moves in two hours and 20 moves per hour after that.

**B3** is Grandmaster tournament mode, 40 moves in two and a half hours and 16 moves per hour thereafter.

**B4** is one hour for the entire game (though how anyone can know in advance how many moves have to be played to meet this criterion is a mystery to me).

**B5** takes two hours for the entire game. **B6** is five minute chess.

**B7** is a useful little feature which gives you 10 seconds per move, with an acoustic reminder when the 10 second period is up.

**B8** is the analysis mode, where the machine will continue computing until you tell it to move.

Levels H1 to H8 are the problem modes with the level number corresponding to mate-in-one, mate-in-two and so on up to mate-in-eight. As Superstar has a replay key, you can step through all the moves leading up to a mate in eight once the computer has found the solution.

This replay key, used in conjunction with the 'take-back' key, enables the player to step backwards and forwards through an entire game. It's a useful way of recovering a game that you haven't recorded as you've gone along. Both Constellation and Superstar have excellent facilities for setting up problem positions or adjourned positions.

One point which augurs well for the future is that plans are afoot for Gary Kasparov (in London recently to play his semi-final world championship match against Victor Korchnoi) to mastermind an openings repertoire for a future Superstar module. Page took Kasparov out to dinner one night and the net result of their discussions is that you can expect to see a Kasparov endorsement of SciSys computers in SciSys adverts and packaging in the near future. Kasparov, it seems, was impressed enough to take one or two machines back home with him. Whether the openings module ever sees the light of day depends on the gods of the market-place.

## Games section

White: Fidelity Elite. Black: Mephisto Excalibur. World Microcomputer Chess Championship, Budapest 1983. Vienna Gambit. Notes by David Levy.

1 e2-e4 e7-e5  
2 Nb1-c3 Ng8-f6  
3 f2-f4

(An exciting opening dating from the 19th century, which is now rarely seen in master chess. It often leads to lively positions in which one error can be immediately fatal.)

3 ... d7-d5  
(The best reply.)

4 f4xe5 Nf6xe4  
5 Ng1-f3 Bf8-e7  
6 d2-d4 0-0  
7 Bf1-d3 Be7-h4+

(A wasted move. Correct is 7... f7-f5 8 e5xf6 Be7xf6 9 0-0 Nb8-c6, with approximately equal chances.)

8 g2-g3  
(Naturally not 8 Nf3xh4 Qd8xh4+ 9 g2-g3?? because of 9... Ne4xg3.)

8 ... Ne4xc3  
(Forced, otherwise Black loses a pawn when the bishop retreats.)

9 b2xc3 Bh4-e7  
10 Bc1-e3 Bc8-h3?

(Hoping to prevent White from castling K-side.)

11 Nf3-g5 Bh3-g2?

(If 11... Be7xg5 12 Qd1-h5, and if 12... h7-h6 13 Be3xg5 followed by 14 Qh5xh3. This would have offered roughly equal chances, and Black ought to have tried this continuation. The text, however, is an attempt to justify Black's previous move.)

12 Bd3xh7+ Kg8-h8  
13 Qd1-h5 Be7xg5  
14 Bh7-e4+ Bg5-h6  
15 Be4xg2

(White has won a pawn, and Black's king is now rather exposed.)

15 ... Kh8-g8  
16 Be3xh6 g7xh6  
17 Qh5xh6 Nb8-c6  
18 Ra1-b1 Nc6-a5  
19 Qh6-h5 Qd8-d7  
20 Qh5-g5+ Kg8-h8  
21 Qg5-h6+ Kh8-g8  
22 0-0

(Now White threatens 23 Rf1-f6, followed by Qh6-g5+ and Rf6-h6 mate.)

22 ... Ra8-c8  
23 Qh6-g5+ Kg8-h8  
24 Rf1-f4

(This is just as good. On 24 Rf1-f6, Black can prolong the game with 24... Qd7-e6.)

24 ... f7-f6  
25 Rf4-h4+ Qd7-f7  
26 Rh4xh7+ Kh8xh7  
27 e5xf6 Resigns.

Not a great game, but a demonstration of the Elite's efficiency at capitalising on its advantage.

END