

Tony Harrington investigates Fidelity's new Prestige — an up-market machine that demonstrates just how good a dedicated chess-playing program can be.

During the course of 1982, over 15,000 UK households bought a chess computer supplied by the Miami company Fidelity. Its biggest selling machine, the Sensory Chess Challenger 9, has a US rating of 1771 and it is among the top three or four popularly available chess computers as far as playing strength is concerned.

Fidelity claims — and I haven't yet heard it disputed — to have been the first company to produce a dedicated microcomputer based chess machine for sale to the public. It released its first machine, the Chess Challenger 1, in 1977. David Morein, the managing director of Computer Games, brought it over to the UK in August of that year. 'It wasn't the first computer chess program,' he points out. 'People had been writing programs for years, but only for big computers. This was the first time a chess computer had appeared that the man in the street could afford to buy.'

According to Dr John Renaldo, Fidelity's marketing manager in the US, the company — which prior to 1977 had distributed hearing aids and had nothing to do with computers — got into computer chess via a long chain of coincidences.

Sidney Samola, one of the three brothers who run Fidelity, happened, one night in 1976, to watch an episode of Star Trek. In the episode Samola watched there was a short scene in which the Vulcan Spock took on the ship's computer at three-dimensional chess.

Whether Spock won or not I do not know. But the next day Samola mentioned the incident to his secretary. It had caught his fancy. As luck would have it, the secretary had a boyfriend who was an electronics engineer. His hobby was trying to write chess programs. She told Samola. He decided to talk to the boyfriend. The idea had substance, and Fidelity decided to boldly go where no supplier had been before.

If this tale sounds to you as if it was dreamed up by a marketing man, you are welcome to think so. I simply repeat what I was told. It's implausible enough to be true.

The fact is that, having decided to go into chess computers, Fidelity has done very well indeed. It still distributes hearing aids. But its programs, written for the most part by a husband and wife team Dan and Kathe Spracklen, have proved themselves to be among the best.

Fidelity's latest machine, the Prestige, released in October 1982, costs just under £900. But it is one of the most exciting developments in a long time. When Fidelity decides to put the Prestige program inside the popular models, instead of confining it to this rich man's toy, chess enthusiasts are going to have something to get their teeth into.

According to Dr Renaldo, Fidelity expects it to get a rating of around 1950 shortly. To qualify for a US rating, you (human or computer) have to play 20 games and the Prestige had played 15 when I spoke to Dr Renaldo. But to give you some idea of the way it plays, this week's games section features a game played by the Prestige against some unfortunate human during the US Open in August 1982. The human - and I would welcome any suggestions that would enable one to stop talking about 'humans' as against computers - had a rating of 1991. He had the misfortune to walk into a highly aggressive prepared attack against the Sicilian Dragon and came out of the opening a pawn down. You may see the results for yourself.

Dr Renaldo didn't remember where the Prestige came in the overall tournament, so clearly its final position was less than memorable. But the game shows how much computer chess programming has advanced since Fidelity first exhibited its Challenger 1 at the Chicago Electronics Fair in 1977.

In future issues I would like to give some space to readers' games against any of the commercially available chess computers. So if you think you have an interesting game, annotate it (nothing elaborate, just a comment or two) and send it to us at *PCW*. Similarly, if you have any points you'd like to make about computer chess, the suppliers or their machines, write to me at *PCW*.

White = Prestige; Black = Human (ranking 1991).

1	e4	c5	9	e6	Ne5
2	Nf3	d6	10	Bb5+	Nbc6
3	d4	cxd		exf+	
4	Nxd	Nf6	12	0-0-	- Bf6
5	Nc3	g6	13	NxN	bxN
	f4	Bg7	14	QxQ	RxQ
7	e5	dxe	15		
8	fxe	Nfd7			

(According to Dr Renaldo, the Prestige begins, on move 16, to 'think' for itself. Up to now it has been playing straight out of its opening book. The pawn on c6 gets the chop on move 18 as a natural consequence of White's opening play, which has shattered Black's queen side pawn structure. As we will see, the White queen side pawns are all defensible. But turning this pawn advantage into a win needs tactical skill and technical precision.)

16	Bf4	Bf5	21	Re6	Rb4
17	Rae1	Nf7	22	Bel	Rc5
18	Bxc	Rac8	23	Kh1	Ne5
19	Be4	BxB	24	a3	Rb6
20	RxB	Rd4	25	Na4	

(This move unleashes complexities that most club players would far rather avoid. The average mortal would have settled quite happily for the chance of exchanging off the constricted rook on e6. It goes anyway, but in a fashion that suits White better.)

25 ... RxR 27 b4 Nc4 26 NxR Rc6

(The 'advantage' White has gained from his knight manoeuvre is that the Black pawn on a7 is less of an impediment to the eventual march of the White pawns on a3, b4 and c2, than it would have been on b6 after 25 RxR axR. But the advance of the Black knight among the White queen-side pawns makes it look as though getting these pawns rolling will be tricky. White achieves this with admirable dexterity.)

28 g4 Bb4 30 Na5 29 Nb3 Be3

(On the principle that if a move is worth doing once, it is worth doing twice! Once again the computer prefers to complicate rather than simply to exchange — and quite rightly. The simple exchange BxB gives back the pawn and leaves White with a wrecked position after 30. . .NxB; 31 Rf2 (or Rc1) RxP.)

30 ... Re7 32 RxB RxN 31 NxN BxB 33 g5

(Simplest and best. It moves the pawn out of the rook's line of fire and stops Black's king advancing to join the action.)

33 ... c5

(Playing 33. . . Rc3 only speeds the White a and b pawns on their way.)

34 Rd1 Rc7

(Taking the White pawn on C2 means giving up the pawn on a7. Black's position is quite hopeless. He cannot stop the White queenside majority from rolling home. But the human player is determined to make the machine 'show' him. Prestige is happy to oblige.)

25	c4	Kf7	4.4	Khl	Kb8
36	c5	Ke7	45	Ra7	Rh5
37	Kg2	a5	46	c7+	Kc8
38	Rc1	axb4	47	Ra8+	Kd7
39	axb	Kd7	48	c8(Q)+	Ke7
40	b5	Kc8	49	Ra7+	Kf6
41	b6	Rf7	50	Qd8+	Ke6
42	c6	Rf5	51	Qd7+	Resigns.
43	Ra1	Rxg+		terroll f	7775

All those who believe that computers can't play end-games should spend a little time contemplating this game. The Prestige may be priced out of reach of most of us at the moment. But we fully expect its program to be mass-produced in the near future. It is just one more instance of competition among the manufacturers driving the quality of the programs remorselessly upward. Whether the logical end point, namely a cheap unbeatable chess computer, will be much more satisfying than the present range of machines remains to be seen. Personally, I like winning occasionally. END