

A New World Champion

by David Levy and Kevin O'Connell

The World Microcomputer Chess Championships were held in Travemunde, West Germany, 21-27 September. The world's leading manufacturers were all invited to take part, and the strongest accepted the invitation.

The competition was split into two groups. The commercial group was a kind of consumer test, and was open only to those companies who had commenced production of this year's model. The "Experimental" group was for amateur entries and for the commercial companies who wished to test the latest version of their next generation program. Originally, the commercial group was planned as a double round, all-play-all, but when it became clear that there would be only four contestants, the organising committee suggested the tournament be quadruple round, and the four companies agreed.

Before the first round could begin, a technician was called in to examine each of the products in the commercial section, to ensure that it did not contain any special hardware and that it represented the machine as sold to the general public. This examination was specifically designed to prevent companies from entering a machine with a fast microprocessor when they were selling units with a slower (and cheaper) processor, and to guarantee that the program itself was in a genuine ROM (read only memory) and had not been

put together just for the tournament. Once these tests had been carried out, the competition began.

Readers can see from the crosstable that in the commercial group the Philidor program, living in the Chess Champion Mark V computer, scored an impressive victory. The Mark V made a slight negative score in its individual encounter against the Chess Challenger (Champion Sensory Challenger) but the Mark V scored so heavily against the remaining contestants that the final result was never really in doubt. Unfortunately the event was marred by the withdrawal of the Grunfeld/Morphy/Capablanca machine, made by Applied Concepts Inc., of Garland, Texas. Their three module system was playing in competition for the first time, although the Grunfeld and Morphy had been on the market for some time, and in one or two endgame positions the Capablanca module made moves which were far below the standard expected from a special endgame module. It was revealed that the programmer had delivered the program only a few days before the event, so one can assume that he was working right up to the last moment, and that a bug had crept in to his program. When the Applied Concepts personnel saw how the Capablanca module was performing, they withdrew from both sections (at that time they were in last place in the commercial group).

The 2nd World Microcomputer Chess Championship Travemunde and Hamburg, 21-27 September

Commercial Group

	1	2	3	4	Pts
1 Chess Champion Mark V (SciSys, Hong Kong).....	xxxx	0½01	½111	½1++	8½
2 Champion Sensory Challenger (Fidelity, USA).....	1½10	xxxx	100½	110½	6½
3 Savant (Novag, Hong Kong).....	½000	011½	xxxx	01++	6
4 Grunfeld/Morphy/Capablanca (Applied Concepts, USA)	½0--	001½	10--	xxxx	3

Experimental Group

	1	2	3	4	5	6	7	8	Pts
1 Fidelity Experimental (USA).....	x	1	0	1	1	1	1	+	6
2 Princhess (Sweden).....	0	x	1	0	1	1	1	1	5
3 Philidor Experimental (England).....	1	0	x	0	1	½	1	+	4½
4 Phoenix/Novag Experimental (USA/Hong Kong).....	0	1	1	x	½	0	1	+	4½
5 Logichess (Denmark).....	0	0	0	½	x	½	1	+	2½
6 Conic Experimental (Hong Kong).....	0	0	½	1	½	x	0	0	2
7 SciSys Experimental (Hong Kong).....	0	0	0	0	½	1	x	½	2
8 Applied Concepts Experimental (USA).....	-	0	-	-	0	1	½	x	1½

This withdrawal did not affect the final results, since the Mark V had already shown itself capable of destroying the Grunfeld/Morphy/Capa in the first cycle, and even if the Mark V had lost 1½-½ in the second cycle, it would still have finished ahead of the field.

In the experimental group the Fidelity Experimental scored a convincing win, though not without some nasty moments. In the first round the Fidelity program was smashed by Philidor Experimental, and later in the event Phoenix/Novag had to turn a won ending into a loss in order for Fidelity to win the section.

After the tournament there was a match between the winner of each group, and Fidelity Experimental routed the Chess Champion Mark V by 3-0. The Fidelity Experimental was using a microprocessor running at twice the speed of the one in the commercial Chess Champion Mark V, and it will be interesting to see what happens at next year's World Championship when these two giants of the microcomputer world clash again.

Philidor's best game:

Sicilian Defence Fidelity Experimental White

	Philidor Black
1 P-K4	P-QB4
2 P-QB3	P-Q4
3 P x P	Q x P
4 P-Q4	P-K3
5 N-B3	N-QB3
6 N-R3	P x P
7 N-QN5	Q-Q2

This position has only been reached once, so far as we know, in master chess, when Black played 7 ... Q-Q1 and was bashed flat by 8 B-KB4. 7 ... B-Q3 is probably best.

8 B-KB4 P-K4

Forced, to prevent 9 N-B7ch.

9 B x P N x B

10 N x N Q-K2

11 Q-K2 P x P

12 N-B7ch

Like all computer programs, Fidelity is greedy. White had to play 12 NxQB or possibly 12 PxP, but it prefers to win material.

12 ... Q x N(B2)

13 N-N6 dis ch N-K2?



When this move was played, we were sure that it was inferior to 13 ... B-K2, which seemed to us to help bring the bishop into play on QB4 or QN5. But as it turns out, the knight plays a very useful part in the attack, and the bishop still comes into play on QB4 or QN5, so probably Philidor's move was better than our first reaction.

14 N x R P x P

Now Black is probably winning.

15 Q x P Q-R4ch

16 K-K2 Q-R3ch

17 K-Q2 Q-R4ch

When Philidor repeats the position it does not necessarily mean that it wants a draw. What happens is that the program first satisfies itself that it has the draw in hand, then the next time round it looks deeper, and finally, before submitting to a draw by threefold repetition, it usually consumes a lot of time in an endeavour to discover something better in the position. We shall never know exactly how Philidor would have changed its mind, as the Fidelity program did not go back to K2.

18 K-Q1

Fidelity is ahead on material, and so tries to avoid the draw!

18 ... B-N5ch

19 P-B3 R-Q1ch

20 K-K2 B-K3

21 P-N3

Hoping to create a flight square on KN2.

21 ... N-Q4!

No! The knight comes into play with devastating effect.

22 Q-B1

Everything is hopeless.

22 ... B-QB4

23 K-Q1

There is no way to survive.

23 ... N-B6 dbl ch
24 K-B2 B-KB4ch

Announcing mate in four.

25 B-Q3 B x Bch
26 K-Q2 N-K5 dbl ch
27 K-Q1 N-B7 mate

This is undoubtedly one of the very best games that the program has played, in any of its versions, and was the only loss sustained by Fidelity Experimental during the entire event.

Games . . .

Boris Gulko, who has suffered the wrath of the Soviet chess authorities over the last two years after applying with his wife to emigrate, made a comeback by winning the Moscow Open Championship in July with 11½ out of 17. 2-3 Makarychev and Psakhis 10½; 4-6 Gorelov, Kremenetsky and Vyzhmanavin 9½; 7-9 Bronstein, Razuvayev and Yusupov 9; 10-11 Andrianov and Suetin 8½; 12 Maya Chiburdanidze 8; 13-15 Sokolov, Vaganyan and Vasyukov 7½; 16 Panchenko 7; 17 Arbakov 5; 18 Antoshin 4½.

Grand master Alexei Suetin annotates for CHESS:

Sicilian

A. Sokolov White A. Suetin Black
1 P-K4 P-QB4 2 N-KB3 P-K3 3 P-Q4 PxP 4 NxP P-QR3 5 P-QB4 Q-B2 6 N-QB3 N-KB3 7 B-Q3 N-B3 8 N(Q4)-K2!?

8 NxN NPxN 9 P-B4 was simpler. Now Black could have tried 8 ... B-B4!?

8 ... B-K2 9 P-B4 P-Q3 10 O-O O-O 11 K-R1 B-Q2 12 B-K3 QR-N1 13 P-QR3 N-QR4!?

The start of very sharp complications, but the only way for Black to get counterplay.

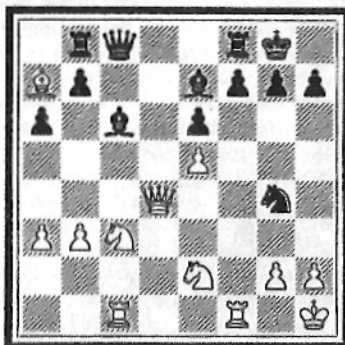
14 R-B1!?

The quiet move was 14 P-QN3, but Black has enough play after 14 ... P-QN4 15 PxP PxP 16 R-B1 Q-N2.

14 ... N x BP!
15 B x N Q x B
16 P-QN3

16 N-Q5 QxP 17 NxBch K-R1 leaves White's QB attacked and his knight cut off.

16 ... Q-B1
17 P-K5 P x P
18 P x P N-N5
19 B-R7 B-QB3!
20 Q-Q4



20 BxR? fails to 20 ... BxNPch!

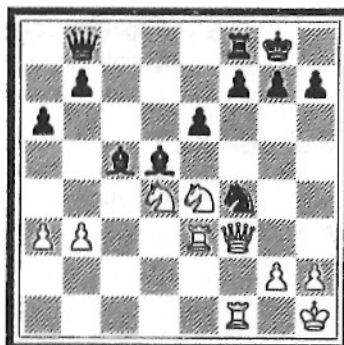
20 ... N-R3!

The most difficult move in the game. It was natural to play 20 ... R-R1 21 QxN RxB, but after 22 N-B4 (*threatening 23 N-R5!*) White's attack is very strong.

21 B x R Q x B
22 Q-KB4 N-B4
23 N-K4 N-R5!

23 ... BxP was possible, but this is much better, beginning a sharp king's side counterattack.

24 N-Q4 B-Q4 25 QR-K1 N-N3 26 Q-N4 NxP 27 Q-R5 N-Q6! 28 R-K3 N-B5! 29 Q-B3 B-B4!



White's pieces are curiously tied up, in fact fatally so. Now 30 QxN QxQ 31 RxQ KBxN was the best chance, but Black is winning.

30 NxB BxQ 31 R(K3)xB Q-B2 32 P-QN4 P-K4!

Not 32 ... N-N3? 33 N(Q4)xPI PxN 34 RxRch NxR 35 RxNch! KxR 36 NxKPch and White wins!

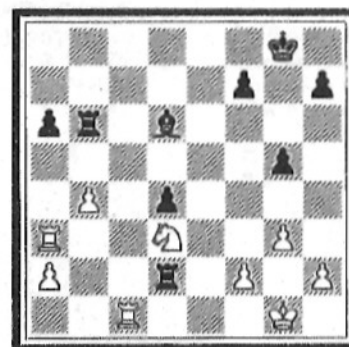
33 N-B5 P-QR4 34 R-KN3 P-KN3 35 P-KR4 PxP 36 PxP R-R4 37 R-N5 K-R2 38 N-K3 P-B3 39 R-N3 P-N3 40 N-K4 Q-B3 41 White resigns.

Played in the England v Czechoslovakia match, European Team Championship, Skara 1980. Notes by John Nunn for CHESS.

QGD, Tarrasch

Plachetka White Nunn Black

N-KB3 N-KB3 2 P-QB4 P-K3 3 P-KN3 P-Q4 4 B-N2 P-B4 5 O-O N-B3 6 PxP PxP 7 P-Q4 B-K2 8 PxP BxP 9 B-N5 O-O 10 N-B3 P-Q5 11 BxN QxB 12 N-Q5 Q-Q1 13 N-Q2 P-QR3 14 N-N3 B-R2 15 R-B1 Q-Q3 16 Q-Q2 R-K1 17 N-B4 B-KB4 18 N-QR5 NxN 19 QxN B-K5 20 BxB RxB 21 Q-B7 QxQ 22 RxQ P-KN4 23 N-Q3 RxP 24 RxNP R-Q7 25 R-N3 R-N1 26 R-R3 R-N3 27 R-QB1 B-N1 28 P-QN4 B-Q3



29 N-B5 B x N

Not 29 ... RxNP 30 RxP (30 N-K4? R-B7!) 30 ... BxN 31 RxB and White is slightly better since Black's KNP is in trouble.

30 R x B?

30 PxB R(N3)-N7 31 P-B6 is a safe draw e.g. 31 ... RxBP 32 P-B7 and Black must give perpetual check or 31 ... R(Q7)-B7 32 RxR RxR 33 RxP P-Q6 34 P-B7 RxP 35 R-Q6 exchanging all the queen's side pawns.

After the move played Black gains the advantage.

30 ... P-R3?

A better chance was offered by the sharp 30 ... R-KB3!, for example 31 RxNPch K-B1 32 P-B4 P-Q6! 33 R(R3)-R5 (33 R-Q5 R-QB3 34 R-QB5 R-Q3 is dangerous) 33 ... R-QN7 34 R(N5)-Q5 R-K3 35 K-B1 P-Q7 36 R-Q8ch K-K2 37 R(R5)-Q5 R-K8ch and wins. White can probably improve on this but even so the pawn sacrifice would have offered good winning chances.

31 R-KB5

Necessary to prevent 31 ... R-KB3.

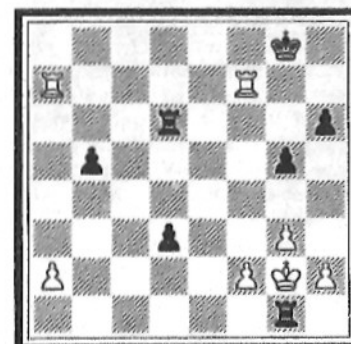
31 ... R-Q3
32 P-N5!

A sharp move which in fact is the most clear-cut route to a draw.

32 ... P x P

If 32 ... P-Q6? 33 PxP R-Q8ch 34 K-N2 P-Q7 35 P-R7 R-KN8ch 36 KxR! P-Q8=Qch 37 K-N2 and wins e.g. 37 ... R-Q1 38 P-R8=Q RxQ 39 RxRch K-N2 40 R-R7.

33 R-R7 P-Q6
34 R(B5)xBP R-Q8ch
35 K-N2 R-KN8ch



Now if 36 KxR? P-Q7 37 R-KN7ch K-B1 38 R(N7)-KB7ch K-K1 39 R(B7)-K7ch K-Q1 40 R-KR7 P-Q8=Qch 41 K-N2 Q-Q4ch 42 K-N1 R-K3 covers the mates and wins.

36 K-R3

The only move. Now Black could force a draw at once by 36 ... P-Q7 but I decided to make one more rather cheeky attempt to win.

36 ... R-Q5