A New World Champion by David Levy and Kevin O'Connell

The World Microcomputer Chess Championships were held in Travenunde, 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-playall, 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 tast 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 cross table 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 2011 event was married by the withdrawark the Grunfeld/Morphy/Capablanca machine, made by Applied Concents 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 endoame 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 S	ept	em	ber						
Commercial Group		1		2		3	4		PS
1 Chess Champion Mark V (SciSys, Hong Kong)	XX	xx	0%	01	151	11	151	++	8%
2 Champion Sensory Challenger (Fidelity, USA)	1%	10	XX	XX	10	0%	11	0%	6%
3 Savant (Novag, Hong Kong)	160	100	01	1%	XX	XX	01	++	6
4 Grunfeld/Morphy/Capablanca (Applied Concepts, USA)	150)	00	135	10		XX	XX	3
Experimental Group	,	2	3	4	5	6	7	8	Pts
1 Fidelity Experimental (USA)	×	1	0	1	1	1	1	+	6
2 Princhess (Sweden)									5
3 Philidor Experimental (England)	1	0	x	0	1	1/2	1		415
4 Phoenix/Novag Experimental (USA/Hong Kong)	0	1	1	X	1/2	0	1	+	4%
5 Logichess (Denmark)	0								21/2
6 Conic Experimental (Hong Kong)	0	0	%	1	15	×	0	0	2
7 SciSys Experimental (Hong Kong)									2
8 Applied Concepts Experimental (USA)	~	0	100	-	0	1	16	×	11/2

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 ost 194-16 in the second cycle, it would still have finished abead of the field.

October-November 1981

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 was a fidelity Experimental routed a 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 I 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

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

Phillidor Black

This position has only been reached once, so far as we know, in master common than the set of the s

8 B-KB4 P-K4
Forced, to prevent 9 N-B7ch.
9 B x P N x B
10 N x N Q-K2

10 N x N 11 Q—K2 12 N—B7ch

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

PYP

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 QNS. But as it turns out, the kinght 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 taself 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 them in an endeavour to discover something better in the position. We shall never know extra the control of the program of the mind, as we will be the program dist mind, as the Ffelity program dist mind, as the program distinction back to X.

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-Q84

23 K-O1

There is no way to survive

24 K—B2	N-B6 dbl ch B-KB4ch	
innouncing 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 11% out of 17. 2-3 Makarychev and Psakhis 10%: 4-6 Gorelov, Kremenetsky and Vyzhmanavin 9%: 7-9 Bronstein, Bazuvayev and Yusupov 9: 10-11 Andrianny and Suetin 81/2: 12 Maya Chiburdanidze 8: 13-15 Sokolov, Vaganyan and Vasyukov 71/6: 16 Panchenko 7: 17 Arbakov 5: 18 Antochin All.

Grand master Alexei Sustin annotates for CHESS

Sicilian

A. Sokolov White A. Suetin Black 1 P-K4 P-OB4 2 N-KB3 P-K3 3 P-Q4 PxP 4 NxP P-QR3 5 P-QB4 Q-B2 6 N-OB3 N-KB3 7 B-O3 N-B3 8 N(Q4)-K2!?

8 NxN NPxN 9 P-B4 was simpler. Now Black could have tried 8 B-B417 8 ... B-K2 9 P-B4 P-Q3 10 Q-Q O-O 11 K-R1 B-O2 12 B-K3 OR-N1 13 P-OR3 N-OR412

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

14 R-B1!?

The quiet move was 14 P-ON3 but Black has enough play after 14 ... P-ON4 15 PxP PxP 16 R-B1 Q-N2

14 ... N x BP!? 15 B x N OYR 16 P-ON3

16 N-OS OxP 17 NxBch K-B1 leaves White's OB attacked and his knight cut off.

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



20 BxR2 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-R50 White's attack is very strong

> 21 B x R 22 Q-KB4 23 N-K4

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

OxB

N-B4

N_R51

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 fied up. in fact fatally so. Now 30 QxN QxQ 31 ByO KBxN was the best chance but Black is winning.

After the move played Black gains the 30 NxB BxQ 31 R(K3)xB Q-B2 32 P-ON4 P-K41 advantage

Not 32 ... N-N3? 33 N(Q4)xPl PxN 34 RxRch NxR 35 BxNch! KxR 36

October-November 1981

NyKPch and White wins!

33 N-B5 P-OR4 34 R-KN3 P-KN3 35 P-KR4 PxP 36 PxP P-R4 37 R-N5 K-R2 38 N-K3 P-R3 39 R-N3 P-N3 40 N-K4 Q-B3 41 White resigns.

Played in the England v Czechostovakia match European Team Championship. Skara 1980. Notes by John Nunn for CHESS OGD. Tarrasch

Plachetka White Nunn Black N-KB3 N-KB3 2 P-QB4 P-K3 P-KN3 P-Q4 4 B-N2 P-B4 5 O-O N-83 6 PrP PrP 7 P-04 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-O2 P-OR3 14 N-N3 B-R2 15 R-R1 Q-Q3 16 Q-Q2 R-K1 17 N-B4 B-KB4 18 N-QR5 NxN 19 OxN B-K5 20 BxB RxB 21 Q-B7 OxO 22 RxO P-KN4 23 N-O3 RxP 24 RyNP R-07 25 R-N3 R-N1 26 R-R3 R-N3 27 R-QB1 B-N1 28



BXN 29 N-B5

Not 29 ... RxNP 30 RxP /30 N-K42 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 ... B(Q7)-B7 32 RxR RxR 33 RxP P-Q6 34 P-B7 RxP 35 R-Q6 exchanging all the queen's side pawns.

30 ...

P-932

A better chance was offered by the sharp 30 ... R-KB3', for example 31 BxNPch K-B1 32 P-B4 P-Q6! 33 B(B3)-B5 (33 B-O5 B-OB3 34 B-OB5 R-Q3 is dangerous) 33 ... R-QN7 34 R(N5)-Q5 R-K3 35 K-B1 P-Q7 36 R-Q8ch K-K2 37 B(B5)-Q5 R-K8ch and wins. White can probably improve on this but even so the nawn sacrifice would have offered good winning chances.

31 R-KR5 Necessary to prevent 31 ... B-KB3.

31 ... B-03 32 P-N51

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

If 32 ... P-Q6? 33 PxP R-Q8ch 34 K-N2 P-Q7 35 P-B7 B-KN8ch 36 KxRI P-O8-Och 37 K-N2 and wins e.g. 37 R-Q1 38 P-R8-Q RxQ 39

BxBch K-N2 40 B-B7. 33 R-R7 P-06 34 R(R5)×RP R-ORch 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-O8-Och 41 K-N2 Q-O4ch 42 K-N1 R-K3 covers the mates and

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.

R-QS 36 ...