## Richard Shorman

## Chess

## CHESS PLAYING COMPUTERS MAKING RAPID STRIDES

By professional tournament standards the current crop of table-top chess machines (Boris, Chess Challenger, et al) must still be classified as rank amateur. But their deficiencies in playing strength do not in the least detract from their value as technologically advanced toys for the sophisticated or as com-plaisant sparring partners for the very weak. Besides, the performance of the machines may be upgraded in effect by handicapping the player, e.g., by spotting the micro-processor material, granting time odds, retracting glaring errors by the computer in order to substitute better moves and, for enterprissorts, playing the machine blindfold chess.

The situation with respect to the largest and best computer chess programs, however, is quite different. The multi-million dollar Control Data Corporation chess center located in Minneapolis, Minnesota, has beaten experts and masters in individual tournament and match games. If the history of electronic handheld calculators is any indication of future trends, then chess machines will continue to make rapid strides in playing ability and that progress will eventually be reflected in ever stronger

and cheaper models for the general public.

West Germany's 19-year-old woman chess champion, Barbara Hund, was among those defeated by Control Data's "Chess 4.8" program in a recent simultaneous exhibition on 24 boards conducted by satellite transmissions between Minneapolis and a Hamburg television station.

White: CDC "Chess 4.8". Black: Barbara Hund. Simultaneous exhibition, Hamburg, 1979.

Gori	ng Gambi	t			
1	e4	e5	16	Kh1	Nd4
2	Nf3	Nc6	17	Qa7	Bh3(f)
3	d4	ed	18	Bf3	c6
4	c3	d5(a)	19	Nd6(g)	Rd6
5	ed	Qd5	20	gh!(h)	Kc7(i)
6	cd	Bg4	21	Nb5	cb
7	Be2	0-0-0	22	Rac1	Kd8
8	Be3	Nf6	23	Qb8	Ke7
9	Nc3(b)	Qh5	24	Qh8(j)	Ne6
10	Qa4	Nd5	25	Qh7	Qe5
11	0-0	Bd6(c) .	26	Qh4	Kd7
12	h3!	Ne3?(d) .	27	Bb7	Ng5
13	fe	Bd7	28	Qh8(k)	Rd2(1)
14	Ne5(e)	Qg5	29	Bc8(m)	Resigns
15	Nf7	Qe3			

(Notes translated from "64", No. 28, July 12-18, 1979, pg. 7)
(a) A well analyzed continuation along with the gambit accepted.

(b) But here the books recommend 9 . . . Qa5 with an equal game. Black's deviation from approved theory does not work out very well.

(c) On all its previous moves the "exhibitioner" used up only a single second, a sure sign that the variation came from stored memory. Now, however, the computer "thought" for almost a minute. Nor was its time spent in vain: White's reply is crushing.

(d) Only 12... Nc3 13 be Bd7 holds out any hope of avoiding imminent disaster.

(e) And why not 14 d5 instead? Apparently, material gain (in this case, winning the exchange) ranks paramount in the this case, winning the exch machine's hierarchy of values

(f) Black demonstrates tactical alertness in a dangerous position. The threat is 18 . . . Bg2! But the "exhibitioner" sees all

(g) Abandoning once and for all the idea of picking up the exchange, which would be answered unpleasantly by 19 . . . Qe5. (h) The consequences of taking the rook, 20 Qa8 Kc7 21 Qh8? Bg2! 22 Kg2 Rg6 23 Kh2 Qh6 24 Bh5 Qh5mate, are subject to exact calculation. However, it did require the examination of

140,000 positions (i) Unfortunately, the move 20. . Nf3 cannot be played. The computer exploits the pin of the knight very effectively.

(j) Another, more creative way, would be 24 Qb7 Rd7 25 Rce1.

(k) Faster is an immediate 28 Bc8.

(l) Just one move away from delivering mate, but White mates an instant sooner.

(m) "Mate in two moves," announced "Chess 4.8" as it

transmitted its reply.

## REDUCING THE ELEMENT OF CHANCE IN CHESS By Cecil Purdy,

Former World Correspondence Chess Champion

Chess is so complex that the result of any particular game is partly a matter of luck. Over a series of games the slightly stronger player should win, but in an individual game anything can happen.

How can you reduce the element of chance in your games? In a simple position, it is easier to avoid oversights than in a complex position. It follows that by deliberately avoiding complexity, you will reduce the element of chance in your

games.

Some of the masters have based their whole style of play on this obvious truth, notably Capablanca and Flohr. Yet these players' games are not dull. Indeed, the games of Capablanca at his best are still the ideal of thousands of amateurs, the ones who delight in clear-cut, logical play. These chess lovers recognize the adventurous and romantic elements in the games of Alekhine, Spielmann, Nimzovitch and so forth, and duly admire such masters. But they realize that they cannot hope to emulate them. In Capablanca, however, they find a feasible model to follow.

Do not misunderstand: by "simple" I do mean "easy." By a simple position, I mean one in which there are not a great many things that call for attention. Such a position, however, may give scope for the most profound calculation, e.g., some endgames

with two pawns against one.
All endgames are "simple," in that they are less complex than most middlegames and openings, yet it is certain that most amateurs play the opening and middlegame decidedly better than they play the endgame, impossible as it usually is to convince them of the fact.

In a nutshell, my advice to the player who would like to reduce the element of luck in his game is to make the endgame his speciatly. Study it systematically, and play always with the endgame in view, unless a clear opportunity presents itself for forcing the issue earlier.

True, it is useless to be very much better at the endgame than you are at the middlegame and opening, for you must be able to

play well enough to arrive at an endgame!

In this direction, much may be accomplished by scurpulously avoiding speculative pawn grabbing. You do not need a material advantage to win an endgame, and by going for material at the expense of position you are certainly decreasing your chance of bringing about an endgame.

The following rules will help reduce the element of chance in

the opening and middlegame:

(1). When you are offered a pawn, never take it unless it will annoy you if not taken. In other words, sometimes take threatening pawns, but rarely take non-threatening pawns.

(2) Avoid openings that violate simple principles. The ordinary player should study the openings only enough to make sure of getting out of them with a roughly equal game. No amount of study will enable him to get more than slight advantages out of the openings, and what is the use of that if he is weak in the middlegame and endgame? Always aim at natural, developing

(3) At all stages, unless you have a losing position, avoid moves that may be good if you can play a move that you know must be

(Adapted from "The Australasian Chess Review," Sept. 1939, pp. 227-29)

CAPPS MEMORIAL TOURNAMENT

Mike Goodall will direct the ninth Carroll M. Capps Memorial Chess Tournament, a USCF and CalChess event, at the Mechanics' Institute, 57 Post St., 4th Floor, in San Francisco, Sept. 14-16. The five-round Swiss system competition features a prize fund of \$1,325 (based on 80 entrants), with \$300 for 1st place, \$150 for 2nd and \$125-\$50 for 1st-end in Expert, A, B, C and D-E-Unrated. Entry fee is \$20, if received in advance; please make checks tyable to Mechanics' Institute Chess Club, 57 Post St., San ancisco, CA 94104. Late registration is \$5 more and takes re at the tournament site, 5:30-6:30 p.m., Friday, Sept. 14. nd one begins at 7 p.m., with rounds 2-3 and 4-5 starting at 1m. and 5:30 p.m., Saturday and Sunday. Time control is 50

n<sub>3</sub> in two hours, 25 moves each hour thereafter. For further in ation, please leave message at 421-2258.