

# Computer Chess Reports

## Hold the Presses

These articles arrived literally minutes after the magazine went to print. So, instead of asking our readers to wait until the next issue, we decided to include them as an addendum to this one. Our apologies for any inconvenience.

### CHESS 232

*by Nick Schoonmaker*

At long last... Until now, there have been only two options for chessplayers interested in purchasing a chess program: 1) a dedicated chess computer, or 2) software for a PC. For the person who does not own and has no plans to own a PC, the first option is the only one. But for the owner of a PC, buying a high quality dedicated chess computer may seem extravagant when compared to the relatively modest price of a powerful software package. Dedicated chess computers can be expensive and they are not always easily upgraded. However, many players (including myself) prefer to play on a real chessboard with real pieces than to stare blurry-eyed at a monitor for hours at a time.

Now the best of both worlds is possible. Chess 232, produced in Germany and now available in the U.S. is the answer. It consists of an attractive wooden auto-sensory board (about 1.5" squares) with pieces (2.75 King height), which connects via an RS-232 interface to a serial port on a PC - a smart idea because most PCs have 2 serial ports but only one parallel port which is usually occupied by a printer. This device allows any of several top PC programs to be played without requiring the user to stare at the monitor. The moves are played on the chessboard, in exactly the same manner as when playing an autosensory dedicated chess computer; the chessboard responds in like fashion, illuminating LEDs on the 'from' and 'to' squares for each move made by the program running on the PC.

Setting up Chess 232 to operate with a PC is very easy. The chessboard connects with a control box via a ribbon cable; and in turn, the control box connects with a serial port on the back of a PC. The cable has a nine pin connector but a nine to twenty-five pin adaptor is included for those PCs with the latter connector type. COM 1 and COM 2 are the addresses which are supported by Chess 232. Many computers may have only one serial interface connection on the I/O card, which in most cases is used for the mouse. So for these computers, the mouse would have to be disconnected in order to use Chess 232. And if you do have to remove the mouse, remember to disable the mouse driver in your AUTOEXEC.BAT file. This can easily be done by editing this file to add "rem" at the

beginning of the line containing the mouse driver command, which typically looks something like "MOUSE.COM". I forgot to do this once and Chess 232 would not communicate with any chess program. I am mentioning this here because the Chess 232 manual does not state that the mouse driver needs to be disabled if the mouse is disconnected.

A 3.5" disk is provided which contains the software necessary to use Chess 232. The installation program must be run once for each chess program to be used in conjunction with Chess 232. The programs which are supported as of the time of this writing are Mephisto Genius (versions 1.0 and 2.0), MChess Pro 3.5, REBEL 6.0, HIARCS 3.0, and Kallisto. By the time you read this article, WChess, Genius 3.0, MChess 4.0, Fritz 2&3 should also be supported. The installation program copies a few files into the directory of the chess program. I was successful in getting Chess 232 to work with both versions of Mephisto Genius, REBEL 6.0, and M-Chess Pro 3.5. However, with M-Chess Pro 3.5, Chess 232 forced the language displayed to change from English to German (a problem which should be fixed with an improved interface in M-Chess Pro 4.0, according to Marty Hirsch). Not having HIARCS 3.0, I attempted to install the software using HIARCS 2.1 but was unsuccessful. The makers of Chess 232 will soon develop software so that this device can be used in conjunction with the other top PC programs.

It is very easy to play the various chess programs using Chess 232. The control box, which connects to the chessboard, has buttons for accessing frequently used functions in each chess program. These include: start new game, take back move, player-player mode (if you want to enter a sequence of moves for both sides), invert board (Of course, you must rearrange the pieces on the Chess 232 board yourself.), switch sides, and force computer to move. Chess 232 does not disable keyboard or mouse operations, so all options which are normally available using these devices are still available when using Chess 232. One feature which Chess 232 does not have is a clock. So, if you are interested in playing timed games, you will have to glance occasionally at the clock displayed by the program on the monitor.

Chess 232 is a wonderful new product which seems long overdue. Once chessplayers start using it, they will probably wonder how they got along without it.

# Latest CCR I Hour Test Info

by Larry Kaufman

I tested several programs since our last review, and have, in general, found a good correlation with playing strength. For ChessMachine Schroder v. 2.1 512k I got 45 points = 2360 (others got higher numbers for CM, see "Bits & Pieces" in this issue). On my ALR Pentium 66 Mhz, I tested Hiarcs 2.1 - 62 points = 2496, and Rex 2.3 - 36 points = 2288. As for the new dedicated models, Novag Diamond & Sapphire each got 36 points = 2288, while the Saitek President scored 30 points = 2240.

The Novag score agrees closely with its estimated rating of about 2300 from actual play (its CRA Action rating is 2383, which implies about 2303 at 40/2, which also agrees closely with the foreign rating lists). However the test only shows an increase of 64 points over the older Ruby, which is much less than the gain observed in practical results. By contrast, the Saitek President showed a healthy gain over the 13 points = 2104 results reported for Travel Champ, a gain which has not been confirmed in actual play.

In order to (partially) correct the overrating of the weaker models caused by the minimum rating in the formula, I am proposing to modify the formula to: predicted USCF rating = 1880 + 10 times test score. For British ratings, use 1780 as the base, for Swedish use 1700. If I use this formula to calculate ratings, using 486/66 as the standard for pc programs (I subtract 4 points from the test score if the test was run on my Pentium 66 MHz, and I add 9 points to the score for tests run on Nick's 386 33 MHz, since these are the average score differences for programs tested on the indicated computers. The indicated rating differences between 386, 486, and Pentium agree closely with what one would predict using the 60 points per doubling rule.), these are the indicated USCF ratings for programs tested to date. Please remember that these are based only on opening problems and are not intended to replace ratings from actual play, only to try to predict them.

PC programs: Genius 3 2630, Genius 2 2620, CM 4000 2530, The King (TascBase) 2500, WChess (pre-production) 2480, Rebel 6.0 2480, Fritz 3 2470, Hiarcs 2.1 2460, MChess Pro 4.0 (pre) 2440, Gideon Pro 2430, Socrates 3.0 2420, Kallisto 1.82 2420, Fritz 2 2390, Fritz 1 2350, Nimzo 2340, ChessMachine 2.1 2330, Rex 2.3 2200.

Dedicated models: Genius 68030 2560, TASC R-30 2530, Berlin 68020 2520, Saitek RISC "2500" 2400, Mephisto Lyon 68000 2330, Mephisto Berlin 68000 2320, Mephisto Portorose 68000 2300, Novag Diamond & Sapphire 2240, Saitek President 2180, Mephisto Almeria 68000 2180, Mephisto Nigel Short 2180, Novag Ruby 2160, Mephisto Amsterdam 2120, Mephisto MM5 2100, Fidelity Elite V. 5 2100, Mephisto MM4 2090, Mephisto Academy 2080, Fidelity Mach III 2070, Mephisto Polgar 2050, Saitek Travel Champ 2010, Excalibur Advanced Star Chess 1970.

Overall these numbers correlate rather well with actual play ratings, but the underrating of Fidelity models and the overrating of Richard Lang's (Genius and Mephisto) programs stand out as exceptions which suggest that the test unduly rewards selective search relative to full width search.

# Updated I Hour CCR - PCs

by Nick Schoonmaker

The One-Hour CCR Test, which was provided in the last issue of CCR, has since been used to evaluate a number of programs. As a faster PC was not readily available, these tests were performed on a 33 MHz 386DX system with 8 MB of RAM. Although the 386DX is a relatively slow processor by today's standards, the manner in which the results are used should still be valid for faster processors. However, we have elected not to estimate USCF ratings based only on these test results [The rating formula is: multiply the test score by 8 and add it to 2000 (for British ratings, add 1900; for Swedish, add 1820)]. The primary reason is that all the problems involve strategic decisions and tactics in the opening, with no emphasis given to the endgame; and it has been observed that different programs tend to have significantly different results even though other tests (e.g., games against other computer programs and games against humans) do not indicate such discrepancies. The effects of different processor speeds on different programs can be important too. For instance, there is evidence that the Chess Genius programs lose less chess strength than some other programs when going from a 486 to a 386.

The results from this test are quite useful though, especially in cases where this same test was given to an older version of the same program. The results can be used to predict the improvement (if any) of the updated version if the strength of the earlier version had been established through other testing. Using this test, for each additional point scored by the newer version, an eight-point rating (USCF) improvement is assumed. In addition, for opening/middlegame positional play and tactics, the results certainly provide some comparative measure of chess strength and should be of interest to the reader. Below are the One Hour CCR Test raw scores:

PROGRAM	SCORE
* WChess .....	51
* M-Chess Pro 4.0 .....	47
*Final version not available - earlier version tested	
ChessGenius 3.0.....	66
Genius 2.0 .....	65
The King (comes with TascBase) .....	53
Chessmaster 4000.....	53
HIARCS 2.1 .....	51
REBEL 6.0 .....	51
Fritz3 .....	50
Fritz2 .....	48
Socrates 3.....	45
Mephisto Gideon Pro .....	45
M-Chess Pro 3.5 .....	44

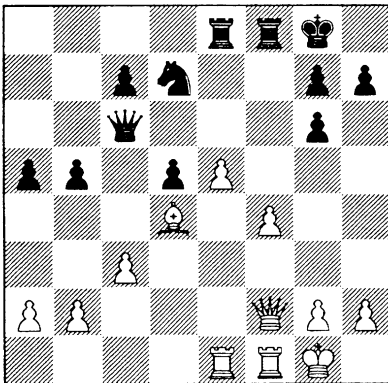
# We Blew It Again!

Make believe that this page actually appears in your Computer Chess Reports.

Here are the four games that WChess played against MChess and Hiarcs at the Uniform Platform Tournament in London:

## WChess - Hiarcs

1. e4 e5 2. Nf3 Nc6 3. Bb5 a6 4. Ba4 Nf6 5. 0-0 Nxe4 6. d4 b5 7. Bb3 d5 8. de5 Be6 9. c3 Bc5 10. Nb1d2 0-0 11. Bc2 Bf5 12. Nb3 Bg6 13. Nf3d4 Bxd4 14. Nxd4 Qd7 15. f3 Nc5 16. Bxg6 fg6 17. Nxc6 Qxc6 18. Be3 Na4 19. Qd2 Ra8e8 20. Bd4 Nb6 21. f4 Nc4 22. Qc2 Nb6 23. Ra1e1 a5 24. Qf2 Nd7 (diagram)



25. Qe3 Re6 26. Kh1 Nf6 27. Rd1 Ne4 28. Qd3 a4 29. Bg1 Rd8 30. Rf3 g5 31. Bd4 gf4 32. Rxf4 Qc4 33. Qh3 Re7 34. Qh5 Qxa2 35. e6 Qxb2 36. Rd1f1 c5 37. Qxd5 Rc8 38. Qxe4 h6 39. Rf8 Rxf8 40. Rxf8 Kxf8 41. Qa8 Re8 42. Qf3 Kg8 43. Qf7 Kh8 44. Qxg7 Checkmate 1-0

## Hiarcs - WChess

1. d4 d5 2. c4 dc4 3. Nf3 Nf6 4. e3 Bg4 5. Bxc4 e6 6. h3 Bh5 7. 0-0 Nb8d7 8. Nc3 Bd6 9. e4 e5 10. Be2 0-0 11. Be3 Re8 12. d5 Bg6 13. Qc2 Bc5 14. Bxc5 Nxc5 15. Bb5 Rf8 16. Bd3 Qd6 17. Ra1c1 Nxd3 18. Qxd3 c6 19. Nh4 cd5 20. Nxc6 hg6 21. Nxd5 Rf8d8 22. Rf1d1 Nxd5 23. Qxd5 Qe7 24. Qb5 Ra8c8 25. Rxc8 Rxc8 26. Qd7 Qxd7 27. Rxd7 Rc1 28. Kh2 b5 29. Rxa7 Rc2 30. b4 Rxf2 31. Ra5 f6 32. h4 Rb2 33. a3 Re2 34. Rxb5 Rxe4 35. g3 Re2 36. Kh3 Ra2 37. Ra5 e4 38. Kg4 Rf2 39. Ra8 Kf7 40. Ra7 Ke6 41. Rxc7 e3 42. Rg8 Kf7 43. Rc8 e2 44. Rc7 Ke8 45. Rc8 Ke7 46. Rc1 Rf1 47. Re1 f5 48. Kg5 Rxe1 49. h5 Rh1 50. Kxc6 e2e1 51. g4 Qe6 52. Kg5 Qe4 53. Kh6 Qxc4 54. a4 Rxc5 Checkmate 0-1

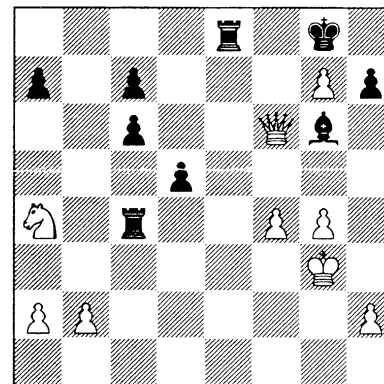
## WChess - MChess

1. e4 e6 2. d4 d5 3. Nd2 c5 4. ed5 ed5 5. Ng1f3 Nf6 6. Bb5 Bd7 7. Bxd7 Nb8xd7 8. 0-0 Be7 9. dc5 Nxc5 10. Re1 0-0 11. Nb3 Nc5e4 12. Nf3d4 Bd6 13. Nf5 Rc8 14. f3 Nc5 15. Kh1 Qd7 16. Nxd6 Qxd6 17. Nxc5 Qxc5 18. c3 Rf8e8 19. Bg5 Rxe1 20. Qxe1 Re8 21. Qd2 Nd7 22. Re1 Rxe1 23. Qxe1 Qc4 24. h3 Nf8 25. Qg3 Qxa2 26. Be7 Qxb2 27. Qb8 h6 28. Bxf8 Kh7 29.

Qc7 a5 30. Kh2 Qd2 31. Bd6 b6 32. Qxf7 Qxc3 33. Qf5 Kg8 34. Qxd5 Kh7 35. Be5 Qc2 36. Qd4 Qg6 37. Bc7 Qe8 38. Bxb6 a4 39. Bc5 Kg8 40. Qd5 Kh8 41. Ba3 Qb8 42. Kg1 Qb6 43. Kf1 Qb1 44. Ke2 Qc2 45. Qd2 Qc4 46. Ke3 Qe6 47. Kd4 Qb6 48. Bc6 Qd8 49. Kc3 Qa5 50. Bb4 Qc7 51. Kb2 Qc4 52. Qc3 Qe2 53. Qc2 Qf1 54. Ka2 Qg1 55. Bc3 Kg8 56. Ka3 Qc5 57. Kxa4 Qc4 58. Ka3 Qc8 59. Kb4 Qb7 60. Kc5 Qc7 61. Kd5 Qb7 62. Ke5 Qb5 63. Ke4 Qc4 64. Ke3 Qc5 65. Ke2 Qb6 66. Qa2 Kh7 67. Qc4 Kh8 68. Be5 Kh7 69. Qd3 Kg8 70. Qd7 Qa6 71. Kf2 Qb6 72. Qd4 Qg6 73. Qd5 Qf7 74. Qxf7 Kxf7 75. Ke3 Kg6 76. Kf4 Kf7 77. Kg4 Kg6 78. Bc3 h5 79. Kh4 Kh6 80. Bd2 Kg6 81. Be3 Kf7 82. Kxh5 Ke6 83. Kg6 Kd5 84. Kxc7 Kc4 85. g4 Kd3 86. Bh6 Ke2 87. f4 Kf3 88. f5 Kg3 89. f6 Kxh3 90. f7 Kxc4 91. f7f8 Kg3 92. Qf1 Kg4 93. Qf4 Kh3 94. Qf3 Kh2 95. Bf4 Kg1 96. Qe2 Kh1 97. Qf1 Checkmate 1-0

## MChess - WChess

1. e4 e5 2. Bc4 Nf6 3. d4 ed4 4. Nf3 Nc6 5. e5 d5 6. Bb5 Ne4 7. Nxd4 Bd7 8. Bxc6 bc6 9. 0-0 Bc5 10. f3 Ng5 11. Be3 Bb6 12. Qd2 Ne6 13. Nc3 Nxd4 14. Bxd4 0-0 15. Na4 Qe7 16. Qc3 Bxd4 17. Qxd4 Bf5 18. Ra1c1 f6 19. Rf1e1 Ra8e8 20. ef6 Qxe1 21. Rxe1 Rxe1 22. Kf2 Rc1 (diagram)



23. g4 Rxc2 24. Kg3 Bg6 25. fg7 Ra8 26. f4 Rc4 27. Qf6 Re8 28. Nc3 d4 29. Nd1 d3 30. f5 Bf7 31. Qh6 Re1 32. Nf2 Rd4 33. Qxc6 d2 34. f6 h5 35. h3 hg4 36. hg4 d2d1 37. Nxd1 Rd3 38. Kh4 Rd3xd1 39. Qa8Be8 40. a4 Rd3 41. Kg5 c5 42. f7 Kxf7 43. Qxa7 Kg8 44. Qxc5 Kxc7 45. a5 Bf7 46. Kf4 Rf1 47. Ke4 Rd3d1 48. Qb5 Rd1e1 49. Kd3 Rg1 50. b4 Rxc4 51. Qc5 Rb1 52. Qe5 Kg6 53. Qd6 Kf5 54. Qc5 Kf6 55. Qc3 Kg6 56. Qc6 Kg7 57. Qc3 Kh6 58. Qf6 Bg6 59. Kc3 Rg3 60. Kc4 Ra3 61. Qf4 Kh5 62. Qe5 Kg4 63. Qd4 Kf5 64. Qd7 Kf4 65. Qd6 Kg5 66. Qd5 Bf5 67. Qd8 Kf4 68. Qd6 Kg4 69. Qd4 Kh3 70. Qf4 Bc2 71. Kc5 Bd3 72. Kb6 Kg2 73. Kc6 Ra3b3 74. Kc5 Bf1 75. Qe4 Kf2 76. Qd4 Ke1 77. Qe5 Kd1 78. Qd6 Kc1 79. Qf6 Bd3 80. Qd4 Rb1b2 81. Qg1 Kc2 82. Qh2 Kb1 83. Qg3 Rc2 84. Kd6 Rc6 85. Ke7 Re6 86. Kd8 Re8 87. Kc7 Rc3 88. Kb6 Re6 89. Ka7 Ra6 90. Kb8 Ra8 91. Kxa8 Be4 92. Ka7 Rxc3 93. b5 Rg7 94. Kb6 Kb2 95. Kc5 Kc3 96. Kd6 Kb4 97. a6 Kxb5 98. a7 Rxa7 99. Ke5 Ra4 100. Kf4 Bb1 101. Ke5 Kc5 102. Kf6 Kd6 103. Kf7 Rg4 104. Kf6 Rg6 105. Kf7 Kd7 106. Kf8 Ke6 107. Ke8 Rg8 Checkmate 0-1