HITECH AGAIN WINS PENNSYLVANIA CHESS CHAMPIONSHIP:
Becomes First Computer Senior Master

ICCA Communication

by Hans Berliner

The Pennsylvania State Chess Championship was held in Pittsburgh, on July 23-24. In a field of 46 players, including 8 masters, Carnegie-Mellon University’s Hitech won the title outright with a score of 4.5 - 0.5. The finale was very exciting as the number one seeded player, International Master Ed Formanek, had a perfect 4-0 going into the final round against the number-two seed Hitech, which was the only competitor with 3.5 - 0.5. Hitech had to win to gain the title, whereas Formanek could become Champion by drawing this game. Hitech played beautifully, and the game culminated in a brilliant endgame that Hitech handled perfectly. The game is appended below.

Hitech also finished first in last year’s State Championship, but after the fact a number of issues arose relating to whether the computer would be the State titlist. This year the rules specified that a computer could win the title. So Hitech received the title, but was not eligible for the $400 first prize money and was supposed not to get the trophy either. However, in a fine gesture of sportsmanship, Prof. Formanek, of the Mathematics Department of Penn State University, gave Hitech the trophy which he had been awarded as the most highly placed human, since he indicated Hitech clearly deserved it. Formanek was one of four Masters that ended tied for 2nd at 4-1.

This is the first time Hitech has won a non-computer tournament outright; that is, without sharing the 1st place. Formanek, rated at 2485, is the highest rated player Hitech has ever beaten. It is the first time that Hitech has beaten an IM, and we believe only the second time that a machine has beaten an IM (Fidelity also did).

We estimate Hitech’s new rating to be 2405; so it has crossed the magical 2400 boundary and is now a Senior Master in the US Chess Federation (USCF). It is the first computer to achieve this title, the highest that the USCF can award. The above are subject to verification by the USCF; however, in the past our calculated ratings have never differed from the USCF’s by more than 2 points. This advance also places Hitech among the top 150 players in the US. Hitech’s performance rating was 2507.

In tournaments since our last report, Hitech had a mediocre result of 3.5 - 2.5 at the Fredkin Masters Open in Pittsburgh, May 28-30. Over the 4th-of-July holiday, Hitech competed in the World Open, Masters Section. The field was made up of 126 humans, almost all of which were Masters, and Hitech. Hitech scored 5.5 - 2.5 and finished tied for 10th. It lost its last round game, when winning would have meant tying for 1st.

Since August 1987, when Hitech was reborn with new pattern recognizers and properly working software, it has played 48 US-rated games and 4 games in international matches. Its US performance rating over this period is 2440. In two matches earlier this year, it beat M. Peretz of Israel 1.5 - 0.5, and drew M. Apicella of France 1-1. A summary of these results by category of player can be found below:

<table>
<thead>
<tr>
<th>Category</th>
<th>Wins</th>
<th>Losses</th>
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<tbody>
<tr>
<td>Experts or less</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Master</td>
<td>14.5</td>
<td>6.5</td>
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<tr>
<td>Sr. Mstr</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Top 50 US</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Foreign</td>
<td>2.5</td>
<td>1.5</td>
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</tbody>
</table>
White: IM Formanek (2485)
Black: Hitech (2385)


BONA FIDE?

ICCA Communication

by David Welsh

As a service to our readers, we are glad to republish an extract from the Transactions of the United States Chess Federation Computer Chess Committee, Vol. 5, No. 1, May 10, 1988.

The republication has been prompted by its relevance to the vexed question whether and to what extent computer programs are chess-players under FIDE rules.

"Recent successes by HITTECH have raised its performance rating to the 2400 Elo level and would make the program eligible for a FIDE rating, except that FIDE does not recognize chess programs as "players". The following letter from Prof. Lim Kok-Ann of FIDE answered a USCF inquiry:

[address and saluting formulae]

1. [...] There is no official FIDE policy on rating of computers. The following is my interpretation of what is implied by FIDE regulations.

2. The principles of the FIDE rating system is described in Reg. 3.0, B.01 of the Handbook, "Measurement of Over-the-Board Play." Reference is made there to the performance of "players", a term that implied human players. It is a moot point if machines can "play".

3. According to my understanding, a computer cannot be a player, in fact a game "played by a computer is a game played by a human with the assistance of a machine programmed to do so. The Laws of Chess specifically prohibits in Section 15.1(a), the use of "handwritten, printed or otherwise recorded matter, or to analyze the game on another chess-board." This rules out the use of a computer whether the player himself is at the chessboard or places there a remote-controlled machine.

4. The application of the FIDE rating system to games played in violation of the Laws of Chess is therefore meaningless. Please do not include in your rating reports any results obtained with the assistance of computers.

5. The technical skill involved in programming chess computers is of course of great interest, similar to the interest evoked by the construction of flying machines [1Eds]. FIDE has a Commission on Chess..."