4 Computer Chess Tournaments

Since 1970 the Association for Computing Machinery (ACM) has organized a chess tournament as part of its annual conference. In 1974 the first World Championship for computer programs took place in Stockholm. Since then computer tournaments have become increasingly popular, with events taking place in Germany, Canada, the Netherlands as well as the annual tournament in the U.S.A. In 1978, the first competition exclusively for microcomputers was held - a suggestion of my own which was implemented thanks to Douglas Penrod, founder/editor of the Computer Chess Newsletter. There is now an international society for those interested in computer chess and it looks as though interest in the subject is increasing at an almost exponential rate, which is perhaps not so surprising in view of the advent of home computing as a hobby.

The two principal computer chess tournaments continue to be the annual ACM competition and the World Championship which is held every three years. I have written books on the 1975 and 1976 ACM events; this chapter and Appendix B of this volume are devoted to coverage of the 1977 ACM tournament in Seattle and the Second World Computer Championship which was held in Toronto earlier in the same year.

### Second World Computer Championship

#### Toronto, August 7th-9th 1977

<table>
<thead>
<tr>
<th>No.</th>
<th>Program</th>
<th>Rd 1</th>
<th>Rd 2</th>
<th>Rd 3</th>
<th>Rd 4</th>
<th>Total</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CHESS 4.6 (USA)</td>
<td>W11</td>
<td>B 9</td>
<td>W2</td>
<td>B 4</td>
<td>4</td>
<td>1st</td>
</tr>
<tr>
<td>2</td>
<td>DUCHESS (USA)</td>
<td>W3</td>
<td>B 14</td>
<td>B 1</td>
<td>B 9</td>
<td>3</td>
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<td>3</td>
<td>KAISSA (USSR)</td>
<td>B 2</td>
<td>W16</td>
<td>B 5</td>
<td>B 6</td>
<td>3</td>
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<tr>
<td>4</td>
<td>BELLE (USA)</td>
<td>W6</td>
<td>B12</td>
<td>W7</td>
<td>W1</td>
<td>2½</td>
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<td>5</td>
<td>CHAOS (USA)</td>
<td>W15</td>
<td>B 7</td>
<td>W3</td>
<td>B 12</td>
<td>2½</td>
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<td>6</td>
<td>BLACK KNIGHT (USA)</td>
<td>B 4</td>
<td>W8</td>
<td>B14</td>
<td>W3</td>
<td>2</td>
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<td>7</td>
<td>DARK HORSE (Sweden)</td>
<td>B 16</td>
<td>W5</td>
<td>B 4</td>
<td>B 10</td>
<td>2</td>
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<tr>
<td>8</td>
<td>ELSA (W. Germany)</td>
<td>W12</td>
<td>B 6</td>
<td>W9</td>
<td>B 15</td>
<td>2</td>
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<tr>
<td>9</td>
<td>MASTER (England)</td>
<td>B 13</td>
<td>W1</td>
<td>B 8</td>
<td>W2</td>
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<tr>
<td>10</td>
<td>WITA (Canada)</td>
<td>B 14</td>
<td>B 11</td>
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<td>W7</td>
<td>2½</td>
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<tr>
<td>11</td>
<td>BCP (England)</td>
<td>B 1</td>
<td>W10</td>
<td>B 16</td>
<td>W14</td>
<td>1½</td>
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<tr>
<td>12</td>
<td>BLITZ V (USA)</td>
<td>B 8</td>
<td>W4</td>
<td>B 13</td>
<td>W5</td>
<td>1½</td>
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<tr>
<td>13</td>
<td>CHUTE 1.2 (Canada)</td>
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<td>B 7</td>
<td>W12</td>
<td>B 16</td>
<td>1½</td>
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<tr>
<td>14</td>
<td>OSTRICH (Canada)</td>
<td>W10</td>
<td>W2</td>
<td>W6</td>
<td>B 11</td>
<td>1½</td>
<td>11th</td>
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<tr>
<td>15</td>
<td>BS 6676 (Netherlands)</td>
<td>B 5</td>
<td>W13</td>
<td>W10</td>
<td>W8</td>
<td>1</td>
<td>15th</td>
</tr>
<tr>
<td>16</td>
<td>TELL (Switzerland)</td>
<td>W7</td>
<td>B 3</td>
<td>W11</td>
<td>W13</td>
<td>0</td>
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The sensation of the tournament was KAIISSA’s loss to DUCHESS in the first round. KAIISSA, the defending World Champion, had been seeded number one, but played very much below the level that I had expected. Full credit must go to DUCHESS which demonstrated that it had made a greater improvement during the preceding year than any other program. The
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DUCHESS-KAISSA game is annotated below but for reasons of space I have decided to depart from my usual pattern and am giving the remainder of the games from this event (and all of the games from ACM 77) in Appendix B, without notes.

White: DUCHESS
Black: KAISSA

Centre Counter
1 P-K4 P-Q4
KAISSA’s favourite defence.
2 P×P N-KB3
3 P-Q4 N×P
4 N-KB3 P-KN3
5 B-K2 B-N2
6 P-B4 N-N3
7 N-B3 O-O
8 B-K3 B-N5
9 P-B5

This move drives Black’s knight off ...QN3 so that White’s eleventh move attacks the black QNP.

9 ... N-Q4
10 O-O P-K3
11 Q-N3 P-N3

Now or on the previous move Black should have considered the exchange ...N×B.

12 N×N P×N
13 B-KN5 Q-Q2
14 P-KR3 B-B4
15 Q-B3 R-K1
16 KR-K1 B-K5
17 N-Q2 Q-B4

18 B-K3 Q-K3
19 N×B P×N
If 19...Q×N 20 B-KR6!, followed by B-QN5.
20 P×P BP×P
21 KR-QB1!

Keeping the QB-file firmly under control, White makes it clear that the Black knight will not find it easy to reach a comfortable square.

21 ... N-Q2
22 B-N4 Q-Q4
23 Q-B6 N-B3
24 B-K2 QR-Q1
25 Q-R4 R-K2
26 B-QN5 Q-KB4
27 R-B2 N-Q4

At last the knight has reached a sensible looking square but it is too late to do anything about the invasion of the QB-file by White’s major pieces.

28 R(1)-QB1 B-B3
29 Q-N3 P-QR4
30 P-N4 Q-K3
31 R-B6