

## THE 1989 CSVN-AEGON TOURNAMENT

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Since 1984, the Dutch Computer Chess Association (CSVN) and the AEGON insurance company have organized a yearly dedicated man-machine tournament. The general formula of this event is that about a dozen invited human chess-players compete with an equal number of computers in a 6-round Swiss tournament. The rules of pairing are modified such that there will be man-computer confrontations only. The tournaments held from 1984 to 1987 were mere encounters between average-level human chess-players and commercial chess computers. A first step towards the participation of stronger chess programs was made last year when Jonathan Schaeffer's PHOENIX was invited. Unfortunately, the program then ran only on a few computers as opposed to its 'standard' tournament hardware of at least 20 interconnected machines. The final score of 2 out of 6 was a bitter disappointment to those who had predicted that PHOENIX would finish in 3<sup>rd</sup> place or better. This made it even more difficult to persuade the public that chess programs were stronger than their performance. Disastrously, this fostered the notion that in order to persuade the sceptics, ever stronger computers had to be invited to future episodes of the tournament.

The 1989 edition of this man-computer tournament was organized by Cock de Gorter, Dap Hartmann and Bart Verbaan. The main goal was to get two of the strongest chess-playing computers to lead the machines' team. Initial contacts with the two computer-chess teams at Carnegie-Mellon University showed that they were only luke-warm to join. In order to make the event worthwhile, at least two grandmasters should be invited, since programs of this caliber 'eat masters for breakfast' (quoting Hans Berliner). This condition put the pressure on the organizers for two reasons. Firstly, the number of grandmasters in The Netherlands is only about half a dozen. Since the tournament was spread out over a three-week period, inviting foreign grandmasters was infeasible. Besides these practical problems, there were serious financial issues. Up to that point, chess-players participating in the AEGON tournaments competed for the (limited) prize money only. Grandmasters demand a certified income apart from the prize money. Moreover, operating two chess machines via long-distance telephone lines is a costly affair. With considerable financial support of the CSVN and the importers of commercial chess computers, the 6<sup>th</sup> AEGON man-computer tournament was made possible in spite of these obstacles. The only concession made was that there were to be only 5 rounds of play this year, as opposed to the usual 6.

The 32 participants to the 1989 AEGON tournament were 16 human chess-players (Ree, Ligterink, Van der Vliet, Jongsma, Tudjman, Van der Berg, Bakker, Pam, Kieboom Loewenthal, Voorn, Wagenaar, Verbaan, Voortmeyer, Van der Laan and Rek), and 16 computers (ChipTest, Hitech, Mach IV+, Mach IV, Mach III, Almeria 32-bit, Almeria 16-bit, Quest, Novag-1, Novag-2, Sfinx, The King, Kallisto, Dappet, Complete Chess Machine and Phantom). The pre-tournament expectancy was that there would be a serious battle for first place between the best of the humans, IGM Hans Ree and IM Gert Ligterink, and the top-notch computers, ChipTest and Hitech.

Most believed that there would be some permutation of these four over the first four final places. So it was not to be. As the tournament progressed, it became clear that the human players had few problems defeating the best computers. How came? ChipTest and Hitech had defeated numerous masters and grandmasters in various open tournaments in the US. Why then should they lose to players like Ad van den Berg and Fred van der Vliet, whose ELO ratings are much lower? In my opinion two important factors make all the difference. First, the humans invited to play in this tournament enjoy playing computers. Voluntary participating in a 5-round man-computer tournament with very modest prize money is a different cup of tea from playing in an open tournament with high stakes and 'running the risk' of meeting a computer as an opponent. Essentially the human beings were eager volunteers willing to eat a computer for breakfast. Second, most of the players had been participating in previous AEGON tournaments or otherwise had wide experience in playing computers. Some had formulated special strategies to defeat computers. Lex Jongsma (last year's winner) and Ad van den Berg (this year's winner) handled the white pieces in a rather unorthodox but very efficient way. The main strategy behind their opening moves (1. Nc3 2. e4 3. Nce2) was to force the computer out of book as soon as possible, while still sticking to a plan of their own. Playing Black, Jongsma pursued similar tactics by playing an obscure line from the Sicilian defence : 1. e4 c5 2. Nf3 g6.

Most of the humans, however, chose to play sound orthodox openings in which hoary principles underlay the moves. Their experience in playing computers had taught them that in most games there is a point where the computer shows a definite lack of understanding of the positional aspects of a particular opening. That is what most players were trembling to exploit. The obvious mistake, seen all too often in games where seasoned chessplayers lose against computers, is that humans conceive plans beyond hope of success. Most competitors in the AEGON tournament knew the temptation, therefore they chose to play soundly, quietly waiting for the machine to slip up.

The combination of positive motivation to play computers and the experience in doing so clearly gave these participants a definite edge over chess machines, even of this calibre. The games of ChipTest and Hitech in this tournament clearly show that they lack the ability to adapt their play to the sound strategies of the experienced computer fighters.

Here is where they finally stood:

1 - 2	v.d.Berg, v.d.Vliet	5 pnt
3	Ree	4.5 pnt
4 - 7	Ligterink, Verbaan, Loewenthal, Jongasma	4 pnt
8 - 12	Mach IV+, Pam, Kieboom, Wagenaar, Tudjman	3.5 pnt
13 - 15	Voorn, Bakker, v.d.Laan	3 pnt
16 - 18	Hitech, Mach IV, Almeria 32-bit	2.5 pnt
19 - 22	ChipTest, Mach III, Voortmeyer, Rek	2 pnt
23 - 24	Quest, Novag-1	1.5 pnt
25 - 28	The King, Novag-2, Sphinx, CC Machine	1 pnt
29 - 30	Almeria 16-bit, Dappet	0.5 pnt
31 - 32	Kallisto, Phantom	0 pnt

In summary: Humans-Computers: 57.5 - 23<sup>1)</sup>

The final result may seem disappointing for the computers, since the human players got 71% of the points, and the highest-finishing computer held only 8<sup>th</sup> place. However, I feel that this tournament was an exceptionally good confrontation between human chess-players and chess-computer players.

The CSVN-AEGON tournament clearly leads the way for future man-machine encounters: well-motivated, well-prepared humans giving their best against computers whose programmers are equally eager for improvement of their programs.

I think that the resulting games are very worthwhile to study in detail, for both programmers and chess-players. To the former it will clearly show the weaknesses still present in even the best of today's programs, whereas the latter can learn how to compete successfully against those emotionless creatures soon to be invincible.

A selection of the games of the tournament (all games of Ree, Ligterink, ChipTest and Hitech) follows.

1) The seeming inconsistency in the final score is the result of a special decision made by the tournament direction. The game between Hitech and Kieboom could not take place because the communication equipment at the tournament site was malfunctioning. Therefore the game was regarded as a win for Kieboom. After protests of the Hitech team it was then decided to give Hitech the opportunity to earn its score in this game by playing an extra game against an equally strong player. A few days later that game was played between Hitech and Loewenthal. The result of this game was a draw. Loewenthal's score was not affected by this, and the result of the game Hitech - Kieboom is therefore 0.5 - 1.

**Ree - Quest**

1. d4 f5 2. Bg5 Nf6 3. Bxf6 exf6 4. e3 d5 5. Bd3 Bd6 6. Qf3 c6 7. Bxf5 Bxf5 8. Qxf5 0-0 9. Ne2 Qc7 10. Nd2 Nd7 11. 0-0-0 g6 12. Qf3 Rae8 13. h4 Qa5 14. Kb1 f5 15. h5 g5 16. g3 Nf6 17. h6 a6 18. c4 Ne4 19. Nb3 Qb4 20. cxd5 Qb5 21. Qh5 cxd5 22. Rc1 Kh8 23. Rc2 Nxf2 24. Nc3 Qd3 25. Nc1 Qxe3 26. Re2 Nxh1 27. Rxe3 Rxe3 28. Qxh1 Bxg3 29. Qxd5 Re7 30. Nd3 g4 31. Qc5 Ree8 32. d5 Bh4 33. Nf4 Rf7 34. d6 Re1+ 35. Kc2 Re8 36. Qd5 Rd7 37. Qxf5 Rxd6 1-0.

**Mach IV - Ligterink**

1. e4 c5 2. Nf3 e6 3. d4 cxd4 4. Nxd4 Nc6 5. Nc3 d6 6. Bc4 Nf6 7. Be3 Be7 8. Qe2 0-0 9. 0-0-0 Bd7 10. Kb1 Rc8 11. Nxc6 bxc6 12. Bxa7 c5 13. e5 dxe5 14. Bb5 Bxb5 15. Qxb5 Qc7 16. Qb6 Qxb6 17. Bxb6 Rc6 18. Ba7 Ra8 19. Nb5 Ra6 20. f3 R6xa7 21. Nxa7 Rxat 22. The1 Nd7 23. Re3 f5 24. b3 Kf7 25. c4 Bf6 26. Re2 Ke7 27. g3 Nb8 28. Re3 Nc6 29. Re2 Nd4 30. Re3 Kd6 31. Red3 g5 32. Re1 h5 33. h3 e4 34. fxe4 f4 35. g4 hxg4 36. hxg4 Ke5 37. Rc3 f3 38. Rce3 Kf4 39. e5 Ne2 40. R3xe2 fxe2 41. exf6 Ke3 42. Rh1 Kd2 43. Kb2 e1Q 0-1.

**Tudjman - ChipTest**

1. c4 e5 2. Nc3 Bb4 3. g3 Bxc3 4. dxc3 Nf6 5. Bg2 d6 6. Nf3 0-0 7. 0-0 Nc6 8. Bg5 Be6 9. Nd2 h6 10. Bxf6 Qxf6 11. Qc2 Qg5 12. e3 Rab8 13. b3 f5 14. f4 Qg6 15. Bxc6 bxc6 16. Nf3 e4 17. Nd4 Bd7 18. Qe2 c5 19. Nc2 a5 20. Rab1 Kh7 21. Rfd1 Rb6 22. Rbc1 Qf7 23. Na3 a4 24. Rb1 Rfb8 25. Qc2 Bc6 26. Rdc1 axb3 27. axb3 h5 28. h4 Ra6 29. Qb2 Qg6 30. Kg2 Ba4 31. b4 Bd7 32. Rf1 Be6 33. Ra1 Rba8 34. bxc5 dxc5 35. Rfe1 Qf7 36. Nb5 Bxc4 37. Rxa6 Rxa6 38. Na3 Rb6 39. Qc2 Bd3 40. Qd2 Qb3 41. Ra1 Qb2 42. Qxb2 Rxb2+ 43. Kg1 Re2 44. c4 Rxe3 45. Kg2 Re2+ 46. Kg1 e3 47. Nb5 Bxc4 48. Nxc7 Kg6 49. Rb1 Rd2 50. Re1 e2 51. Kf2 Kf7 0-1.

**Hitech - Van den Berg**

1. e4 c5 2. c3 d6 3. d4 Nf6 4. Bd3 g6 5. Nf3 Bg7 6. Be3 cxd4 7. cxd4 0-0 8. Nc3 Bd4 9. 0-0 Nc6 10. Rc1 Qa5 11. a3 Bxf3 12. Qxf3 Nd7 13. Qh3 Qd8 14. Bb5 a6 15. Bxc6 bxc6 16. Bh6 a5 17. Rfd1 Rb8 18. Na4 Nb6 19. Bxg7 Kxg7 20. Nxb6 Qxb6 21. Rd2 Rfc8 22. d5 c5 23. Rc3 a4 24. Rcc2 Qa5 25. Qh4 Rc7 26. f4 f6 27. f5 Rb3 28. fxe6 hxg6 29. Kh1 c4 30. g3 c3 31. bxc3 Rbxc3 32. Rb2 Rb3 33. Rf2 Rc4 34. Kg2 Qc3 35. Rbe2 Rxa3 36. Qg4 Ra1 37. Kh3 Qe5 38. Rf4 Qh5+ 39. Qxh5 gxh5 0-1.

**Almeria 16-bit - Ree**

1. c4 g6 2. d4 Bg7 3. Nc3 c5 4. Nf3 cxd4 5. Nxd4 Nc6 6. e3 Nf6 7. Nc2 0-0 8. e4 d6 9. Be2 Nd7 10. Bd2 Nc5 11. f3 f5 12. b4 Ne6 13. Rb1 Ned4 14. Nxd4 Bxd4 15. b5 Ne5 16. f4 fxe4 17. Nxe4 Bf5 18. Ng5 Nf7 19. Nxf7 Rxf7 20. Rb3 Qb6 21. Rf1 Rc8 22. Rg3 e5 23. Qa4 Qd8 24. fxe5 Bxe5 25. Rg5 Qb6 26. Qb3 Be6 27. Rxf7 Bxf7 28. Be3 Qc7 29. Rg4 a6 30. b6 Qe7 31. Bg5 Bf6 32. Bxf6 Qxf6 33. g3 Qe5 34. Kf1 Re8 35. Qc2 Be6 36. Rh4 Rf8+ 37. Ke1 Qc5 38. Qe4 Qb4+ 39. Kd1 Bd7 40. Qd5+ Rf7 41. Bd3 Ba4+ 42. Kc1 Qa3+ 43. Kb1 Bc6 44. Qd4 Rf3 45. Kc2 Qxa2+ 46. Kc1 Rf2 47. Qc3 Rxh2 48. Rxh2 Qxh2 49. Qe1 Qh1 50. Qxh1 Bxh1 51. Kd2 Kf7 52. Ke3 Ke6 53. Kd4 Bc6 54. Be4 Bxe4 55. Kxe4 h5 0-1.

**Ligterink - Sfinx**

1. d4 Nf6 2. Nf3 d5 3. c4 e6 4. Nc3 Be7 5. Bg5 0-0 6. e3 Nbd7 7. Bd3 c5 8. 0-0 dxc4 9. Bxc4 cxd4 10. exd4 a6 11. a4 Nb6 12. Bb3 Bd7 13. Ne5 Bc6 14. Qe2 Qxd4 15. Nxf7 Kxf7 16. Qxe6+ Ke8 17. Rfe1 Nc8 18. Rad1 Qg4 19. Qxg4 Nxg4 20. Nd5 Bxd5 21. Bxd5 Nxh2 22. Rd2 Rf5 23. Bxe7 Nxe7 24. Bxb7 Ra7 25. Bc8 Rf4 26. Rxf2 Rxa4 27. Be6 a5 28. Rf7 h6 29. Rxg7 Rf4 30. Rh7 Kf8 1-0.

**Jongsma - Hitech**

1. Nc3 d5 2. e4 d4 3. Nce2 e5 4. Nf3 Nc6 5. Ng3 Bd6 6. Bc4 Qf6 7. h3 Bd7 8. d3 Bb4+ 9. Kf1 g6 10. Kg1 Na5 11. Bd5 Ne7 12. a3 Bd6 13. Bg5 Qg7 14. Qc1 Nac6 15. Bh6 Qg8 16. Qg5 0-0-0 17. Ba2 Be6 18. Bxe6+ fxe6 19. Qf6 Qe8 20. Qxe6+ Qd7 21. Qxd7+ Rxd7 22. Kh2 Ng8 23. Bd2 Rf7 24. Rhf1 Nf6 25. c4 Nd7 26. b4 h6 27. Rac1 Be7 28. c5 Nd8 29. h4 Kb8 30. h5 gxh5 31. Nf5 Bf8 32. N3h4 Rf6 33. Ng3 Ra6 34. Ra1 Nf6 35. f3 Rg8

36. Ngf5 Nf7 37. a4 Nd7 38. Rfc1 Rc6 39. Ng3 a5 40. b5 Rxc5 41. Bxa5 Rxc1 42. Rxc1 b6 43. Bd2 Nc5 44. Nxh5 Be7 45. Nf5 Bg5 46. Bxg5 Rxg5 47. Nf6 Nxd3 48. Rc2 Nc5 49. Nd5 Kc8 50. f4 d3 51. Nfe7+ Kb8 52. Rd2 exf4 53. Nxf4 Ne5 54. Ned5 Nxe4 55. Rd1 Ng4+ 56. Kg1 d2 57. Ra1 Re5 58. g3 Nef2 59. Rf1 Re1 60. Nc3 Ne4 61. Nfe2 Ne3 0-1.

### ChipTest - Voorn

1. e4 e6 2. d4 d5 3. Nc3 Bb4 4. e5 Ne7 5. Bd2 c5 6. Nb5 Bxd2+ 7. Qxd2 0-0 8. f4 cxd4 9. Nf3 Nbc6 10. Bd3 f6 11. Nbx4 Nxd4 12. Nxd4 fxe5 13. fxe5 Nc6 14. Nxc6 bxc6 15. 0-0-0 Bd7 16. c4 Qh4 17. g3 Qh5 18. The1 Rab8 19. Kb1 Rf7 20. b3 Rbf8 21. Qe3 Be8 22. cxd5 cxd5 23. Rd2 a5 24. Qb6 Qh6 25. Qxa5 Rf3 26. Bc2 Re3 27. Rg2 d4 28. Rd1 Bg6 29. Rxd4 Qg5 30. Bxg6 Qxg6+ 31. Rc2 h6 32. Kb2 Rf1 33. Rf4 Rh1 34. Qa8+ 1-0.

### Van der Vliet - ChipTest

1. d4 d5 2. Nf3 Nf6 3. Bg5 Ne4 4. Bh4 c5 5. dxc5 Nc6 6. e3 Qa5+ 7. Nbd2 Qxc5 8. c3 Bf5 9. Be2 Qb6 10. Nb3 0-0-0 11. 0-0 Kb8 12. a4 Na5 13. Nxa5 Qxa5 14. Qb3 Rd6 15. Rfd1 Bg4 16. Qb5 Qxb5 17. axb5 g5 18. Bg3 Nxg3 19. hxg3 f6 20. Ra4 Bd7 21. Rda1 a6 22. Ra5 axb5 23. Bxb5 Bxb5 24. Rxb5 b6 25. Kf1 Kb7 26. Rb4 e5 27. Rba4 Kc6 28. Ra7 g4 29. Ne1 h5 30. Rf7 Bh6 31. Nc2 Kc5 32. Ke2 Kc4 33. Ra3 Kb5 34. Rc7 Rc6 35. Rd7 Rc5 36. Nb4 d4 37. exd4 exd4 38. Rxd4 Re8+ 39. Kd3 Re1 40. Kc2 Rc4 41. Rd5+ Rc5 42. Rd6 Re2+ 43. Kb3 Rd2 44. Rxf6 Bg7 45. Rf4 Be5 46. Rf7 Rc4 47. Nc2 Rc6 48. Ra4 Rf6 49. Rxf6 Bxf6 50. Rf4 Be7 51. Nd4+ Ka6 52. Rf5 Bc5 53. Rf4 Be7 54. Ka2 Bd6 55. Rf5 Bc5 56. Nb3 Re2 57. Nxc5+ bxc5 58. Ka3 Kb6 59. b3 Rc2 60. c4 Kc6 61. Rf6+ Kd7 62. Ka4 Ke7 63. Rf5 Ke6 64. Rf8 Kd6 65. Kb5 Rb2 66. Rd8+ Ke6 67. Kxc5 Rxf2 68. b4 Rxf2 69. Rb3 Rf2 70. b5 Rf5+ 71. Kc6 h4 72. gxh4 Rf4 73. c5 Rf3 74. Rd5 Rf5 75. Rd6+ Ke5 76. b6 g3 77. b7 Rf8 78. Rg6 Rh8 1-0.

### Mach III - Ligterink

1. d4 Nf6 2. c4 e6 3. Nc3 Bb4 4. e3 c5 5. Nge2 cxd4 6. exd4 0-0 7. Bg5 d5 8. cxd5 exd5 9. Qb3 Nc6 10. Rd1 Re8 11. Bxf6 Qxf6 12. a3 Ba5 13. Qxd5 Bf5 14. Qc4 Rad8 15. d5 Ne5 16. Qa4 Bxc3+ 17. bxc3 Nd3+ 18. Rxd3 Bxd3 19. Qb4 Re4 0-1.

### Ree - Mach IV+

1. d4 Nf6 2. g3 d5 3. Bg2 e6 4. Nf3 Bd6 5. c4 dxc4 6. Qa4+ c6 7. Qxc4 Qa5+ 8. Nbd2 Nbd7 9. 0-0 0-0 10. Qc2 Bc7 11. Nc4 Qf5 12. Qb3 a5 13. a4 Qh5 14. Bd2 Ne4 15. Be3 Rd8 16. Rac1 Ra6 17. Rfd1 Nef6 18. h3 h6 19. Ph4 b5 20. axb5 Qxb5 21. Qxb5 cxb5 22. Na3 Bb8 23. Nxb5 Rb6 24. Na3 Rxb2 25. Nc4 Rxe2 26. Bd2 g5 27. Nf3 g4 28. Nfe5 Bxe5 29. dxe5 Nxe5 30. Nxe5 gxh3 31. Bc3 Rxd1+ 32. Rxd1 hxg2 33. Rd8+ Kh7 34. Rxc8 Ne4 35. Ng4 Rc2 36. Rh8+ Kg6 37. Rg8+ Kh7 38. Rh8+ Kg6 39. Bd4 f5 40. Ne5+ Kg7 41. Nd3+ Kf7 42. Ne5+ Kg7 43. Nf3+ Kg6 44. Kxg2 a4 45. Ra8 Ra2 46. Ra6 Kf7 47. Ne5+ Kf6 48. Nd3+ Kf7 49. Ra7+ Ke8 50. Nc5 Nxc5 51. Bxc5 Kd8 52. Bb6+ Kc8 53. Be3 h5 54. Re7 Rc2 55. Rxe6 a3 56. Ra6 a2 57. Kf3 Kb7 58. Ra5 Kc6 59. Kf4 Rb2 60. Kxf5 Rb5+ 61. Rxb5 a1Q 62. Rc5+ Kd7 63. Kg6 Ke6 64. Kxh5 Qg7 65. g4 Qh8+ 66. Bh6 Qe8+ 67. Kh4 Qe7+ 68. Rg5 Qf6 69. Kh5 Qxf2 70. Rg6+ Kd5 71. Bg5 Qf7 72. Bf6 Ke4 73. Kh6 Qf8+ 74. Bg7 Qf4+ 75. Kh7 Qf3 76. g5 Qf4 77. Bf6 "Time" 1-0.

### Hitech - Loewenthal

1. e4 c5 2. c3 d5 3. exd5 Qxd5 4. d4 Nf6 5. Nf3 Nc6 6. Be3 e6 7. dxc5 Qxd1+ 8. Kxd1 Ng4 9. b4 Nxe3+ 10. fxe3 a5 11. Bb5 Bd7 12. Rf1 f6 13. Nbd2 axb4 14. Bxc6 Bxc6 15. cxb4 b6 16. cxb6 Bxb4 17. Rb1 Bc5 18. b7 Rb8 19. Rc1 Ba4+ 20. Ke1 Bxe3 21. Rc3 Bb6 22. Nc4 Bc5 23. Nb2 Bb4 24. Nxa4 Rxb7 25. Ke2 Bxc3 26. Nxc3 Rc7 27. Kd3 Kf7 28. Nb5 Rd8+ 29. Nbd4 Rd5 30. Ke4 Rc4 31. Rb1 Rxd4+ 32. Nxd4 e5 33. Rd1 Ra4 34. Rd2 Ke7 35. Kd5 exd4 36. Rb2 d3 37. h3 h5 0.5-0.5.

### Ligterink - Hitech

1. d4 d5 2. c4 dxc4 3. Nf3 Nf6 4. e3 e6 5. Bxc4 c5 6. 0-0 a6 7. Bd3 Nc6 8. Nc3 cxd4 9. exd4 Bb4 10. Bg5 h6 11. Bh4 g5 12. Bg3 g4 13. Ne5 Qxd4 14. Nxc6 bxc6 15. Qe2 Bd6 16. Rfd1 Bxg3 17. hxg3 Kf8 18. Rac1 Bb7 19. Ne4 Qe5 20. Nxf6 Qxf6 21. Qxg4 Rg8 22. Qb4+ Qe7 23. Qc3 Rc8 24. b4 Rg7 25. Be4 Kg8 26. Bf3 e5 27.

Qc4 Rg6 28. Bh5 Rg7 29. Bg4 Rd8 30. Rxd8+ Qxd8 31. Rd1 Qf6 32. Bd7 Qd8 33. Qc5 Rg5 34. Qa7 Qa8 35. Qxa8+ Bxa8 36. Be8 Bb7 37. Rd8 Kh7 38. Bxf7 Rg7 39. Bc4 Re7 40. f3 Kg7 41. Bd3 Rf7 42. Be4 Rf8 43. Rxf8 Kxf8 44. a4 Ke7 45. b5 Kd6 46. bxc6 Bxc6 47. Bxc6 Kxc6 48. Kf2 Kd6 49. Ke3 Kd5 50. g4 a5 51. Kd3 Kc5 52. g3 Kd5 53. f4 Ke6 54. Ke4 exf4 55. gxf4 Kf6 56. Kd5 1-0.

### ChipTest - Ree

1. e4 d6 2. d4 Nf6 3. Nc3 c6 4. Nf3 Bg4 5. Be2 e6 6. Be3 d5 7. e5 Nfd7 8. 0-0 Be7 9. h3 Bh5 10. Nd2 Bg6 11. Bd3 c5 12. Bxg6 hxg6 13. Re1 Nc6 14. Nb3 cxd4 15. Bxd4 Nb6 16. Kh2 Nc4 17. Rb1 Rc8 18. f4 Nxd4 19. Qxd4 Qb6 20. Qxb6 Nx b6 21. Nd4 Bb4 22. Re3 Nc4 23. Rg3 Nd2 24. Rd1 Bxc3 25. Rxc3 Rxc3 26. bxc3 Nc4 27. Kg3 Kd7 28. Rb1 b6 29. Rd1 Rc8 30. Rd3 Nb2 31. Re3 Nd1 32. Rd3 Nxc3 33. Kh4 Rc4 34. a3 Ne4 35. g3 Rc8 36. Re3 f5 37. exf6 gxf6 38. Kg4 Rc4 39. c3 Rxc3 0-1.

### Ree - Mach IV

1. d4 Nf6 2. g3 d5 3. Bg2 e6 4. Nf3 Bd6 5. c4 dxc4 6. Qa4+ c6 7. Qxc4 Qa5+ 8. Nbd2 Nbd7 9. 0-0 Nb6 10. Qc2 0-0 11. e4 Be7 12. a4 Rd8 13. Rd1 a6 14. e5 Nfd5 15. Nb3 Qb4 16. a5 Qc4 17. Qxc4 Nxc4 18. Bf1 b5 19. axb6 Ndb6 20. Be2 Bb7 21. Nc5 Bxc5 22. dxc5 Rxd1+ 23. Bxd1 Nd7 24. Bf4 Nxb2 25. Bc2 Rb8 26. Be3 Nc4 27. Bd4 a5 28. Be4 f6 29. exf6 gxf6 30. Ra4 Ba6 31. Bxc6 Rb1+ 32. Kg2 Nb2 33. Nd2 Nxa4 34. Nxb1 Naxc5 35. f3 Kf7 36. Bc3 Nb8 37. Ba8 a4 38. Bb4 Nbd7 39. Nc3 Nd3 40. Bd6 N7c5 41. Be4 Nxe4 42. Nxe4 Ne1+ 43. Kf2 Nc2 44. Nc3 a3 45. Na2 e5 46. Nb4 Nxb4 47. Bxb4 a2 48. Bc3 Ke6 49. Ke3 Bb7 50. f4 e4 51. g4 Bd5 52. h4 Ke7 53. f5 h6 54. Kf4 Bb7 55. Bb2 Kf7 56. Ba1 Bc6 57. Bb2 Ba8 58. Ba1 Bb7 59. Bb2 Bc6 60. Ba1 Ba8 0.5-0.5.

### Van den Berg - ChipTest

1. Nc3 d5 2. e4 d4 3. Nce2 e5 4. Nf3 Nd7 5. Ng3 Ngf6 6. Bc4 Bd6 7. 0-0 0-0 8. d3 Nb6 9. Bb3 a5 10. a3 a4 11. Ba2 Bg4 12. h3 Bd7 13. Qe2 c5 14. Nh4 Be6 15. Bxe6 fxe6 16. Nf3 Nbd7 17. Rb1 h6 18. c4 Qb6 19. Qc2 Qa6 20. b3 axb3 21. Qxb3 b6 22. Nd2 Qc8 23. Qd1 Qe8 24. Nf3 Qg6 25. Nh2 Rf7 26. Ng4 Nxg4 27. Qxg4 Qxg4 28. hxg4 Ra6 29. Rb3 Be7 30. Bd2 Ra4 31. Ne2 g5 32. f3 Bd8 33. Ng3 Nf6 34. Ra1 Kg7 35. Nh1 Kg6 36. Nf2 Bc7 37. Nd1 Ra8 38. a4 Bd8 39. Nb2 Rfa7 40. Rb1 Bc7 41. Rb5 Nd7 42. Kf2 Ra6 43. Ke2 Kg7 44. Kd1 Bd6 45. Kc2 Nb8 46. a5 bxa5 47. Na4 Nd7 48. Rb7 R6a7 49. R1b5 Kf6 50. Rxd7 Rxd7 51. Nb6 Rda7 52. Nxa8 Rxa8 53. Rxa5 Rxa5 54. Bxa5 Ke7 55. Kb3 Kd7 56. Ka4 Kc6 57. Bd8 Kd7 58. Bf6 Kc6 59. Bg7 Bc7 60. Bxh6 Bd8 61. Bg7 Kb7 62. Bxe5 Kc6 63. g3 1-0.

### Mach IV+ - Ligterink

1. e4 c5 2. Nf3 e6 3. Nc3 d6 4. d4 cxd4 5. Nxd4 Nc6 6. Be3 Nf6 7. Bb5 Bd7 8. Be2 Be7 9. Ndb5 Qb8 10. 0-0 a6 11. Nd4 b5 12. a3 0-0 13. Nxc6 Bxc6 14. f3 Rd8 15. Qe1 d5 16. exd5 Nxd5 17. Nxd5 Bxd5 18. Rd1 Qc7 19. Bd3 Bf6 20. c3 Bb3 21. Rd2 Bc4 22. Qb1 Bxd3 23. Rxd3 Rxd3 24. Qxd3 Rd8 25. Qc2 Rd5 26. Rd1 Qe5 27. Re1 Qd6 28. g3 h5 29. a4 h4 30. Kg2 bxa4 31. Qxa4 Rd2+ 32. Bxd2 Qxd2+ 33. Kf1 Qxh2 34. Re2 Qh3+ 35. Rg2 Qh1+ 36. Kf2 g6 37. Qb4 h3 38. Rg1 Qh2+ 39. Kf1 Qc2 40. Qb8+ Kg7 41. Qb6 Qd1+ 42. Kf2 Qd2+ 43. Kf1 a5 44. Qb5 a4 45. Qe2 Qd6 46. Rh1 Qxg3 47. Qf2 Qd6 48. Rxh3 a3 49. bxa3 Qxa3 50. Qd2 Bxc3 51. Qd8 Qc1+ 52. Kg2 Qc2+ 53. Kg1 Qc1+ 54. Kg2 Qd2+ 55. Qxd2 Bxd2 56. Rh4 g5 57. Rc4 Bf4 58. Kh3 Kg6 59. Rc8 Kf5 60. Rc5+ e5 61. Rb5 Be3 62. Kg3 Bd4 63. Rb7 f6 64. Rb4 Ke6 65. Kg4 Be3 66. Ra4 f5+ 67. Kh5 Kd5 68. Ra5+ Kd4 69. Kg6 g4 70. f4 71. Kf6 e4 72. Ra4+ Kd3 73. Ke5 f3 74. Ra3+ Kd2 75. Kxe4 f2 76. Ra2+ Kc3 77. Ra1 Kd2 78. Kf3 Bd4 79. Rf1 Kd3 80. g5 Kc4 1-0.

### Hitech - Pam

1. e4 e5 2. Nf3 Nc6 3. d4 exd4 4. Nxd4 Bc5 5. Be3 Bb6 6. Nc3 Nge7 7. Nxc6 bxc6 8. Bd4 0-0 9. Bxb6 axb6 10. Bd3 d6 11. 0-0 f5 12. Re1 Ra5 13. Ne2 f4 14. Nd4 Re5 15. h3 Ra5 16. a4 Bd7 17. b4 Ra8 18. e5 dxe5 19. Qh5 Ng6 20. Nf3 Be8 21. Ng5 h6 22. Ne6 Qd6 23. Nxf8 Nxf8 24. Qxe5 Qxb4 25. Qxc7 f3 26. Rab1 Qh4 27. Re7 Qg5 28. g3 c5 29. Rxb6 Rxa4 1-0.