

[Home](#) * [Engines](#) * **Boris**

Boris ^[9]

Boris,
an early [dedicated chess computer](#),
which appeared in February 1978,
designed and manufactured by
[Applied Concepts](#) ^[1] and marketed
by primary distributor [Chafitz](#).
Already in March 1978, Boris
played [Second West Coast
Computer Faire Microcomputer
Chess Tournament](#) in the
"microcomputers with less than 8K
of memory class" ^[2].

The name was likely in dependence
on the given name of [Boris Spassky](#)
, who lost the [Chess World
Championship 1972](#) from [Bobby
Fischer](#) in [Reykjavik](#). Boris ran on
a [Fairchild F8](#) 8-bit microprocessor
with only 2.5 KiB [ROM](#) and 256
byte [RAM](#).

[David Lindsay](#) was hired to
program the machine ^[3], and two
further Boris models with Lindsay
programs appeared in 1979, the
first travel chess computer *Boris
Diplomat* ^[4] ^[5], where Lindsay
holds a patent ^[6] on the [Chess piece
font](#) ^[7], and the *Boris Master* ^[8].

Table of Contents

[Photos](#)

[Bobby Fischer calling](#)

[Co-Author](#)

[Boris 2.5](#)

[Boris Handroid](#)

[Boris Experimental](#)

[WMCCC 1980](#)

[Controversy](#)

[ACM 1980](#)

[ACM 1981](#)

[See also](#)

[Publications](#)

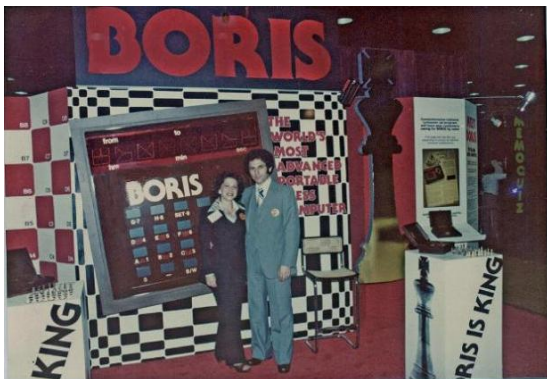
[Forum Posts](#)

[External Links](#)

[References](#)

[What links here?](#)

Photos



[Arleen](#) and [Steve Chafitz](#), Boris is King ^[10] ^[11]

Bobby Fischer calling

[Steve Chafitz](#) on a call from [Bobby Fischer](#) ^[12]:

Just to rewind a bit, one evening when I was home having dinner, I got a call from Bobby Fischer. He was excited about our electronic chess

game "Boris" and I realized that if he was interested in our electronic chess game that there was a major market out there. We increased our development of electronic games and yes, we hired the brightest and the best programmers in the country to develop programs for our games.

Co-Author

The [ICGA](#) site mentions [Rex Kent](#) as author of *Boris Experimental* which played the [1st World Microcomputer Chess Championship](#) 1980 in [London](#) ^[13]. However, *Boris X* was already the work of [Kathe](#) and [Dan Spracklen](#), and additionally with modifications by [John Aker](#) and [Terry Fredrick](#). Rex Kent operated *Boris* at the [PCW-MCC 1978](#) ^[14]. It is a bit unclear whether Kent was operator or co- or book-author of the early *Boris* otherwise credited to [David Lindsay](#).

Boris 2.5

In 1979, following the development of the original Boris when more advanced programs were required, [Arleen](#) and [Steve Chafitz](#) contracted [Kathe](#) and [Dan Spracklen](#) to be their chess programmers for their [Chafitz modular game system](#) as well the [Applied Concepts Great Game Machine](#) ^[15]. Their [Sargon 2.5](#) program appeared as *Chafitz Sargon 2.5 MGS module* ^[16], and in 1980, as [Chafitz ARB Sargon 2.5](#) ^[17], also called *Boris Sargon 2.5* ^[18] or simply dubbed *Boris 2.5*. [John Aker](#) and [Terry Fredrick](#), affiliated with Applied Concepts, were involved in improving the Sargon and Boris program ^[19].

Boris Handroid



Handroid ^[22]

Boris Handroid was the first but very rare electronic [chess robot](#) from 1980 ^[20], with 64 [Hall effect sensors](#) to recognize pieces, and three [servomechanisms](#) to control the [cartesian robotic arm](#). The Handroid program, adapted by [Terry Fredrick](#) ^[21] was also based on [Sargon 2.5](#) by [Kathe](#) and [Dan Spracklen](#).

Boris Experimental

Boris Experimental (Boris X) was the further development of the *Boris 2.5* aka *Sargon 2.5* program, but no longer by the Spracklens, who after their [experience](#) no longer worked for [Chafitz](#), but for [Samole's Fidelity Electronics](#). [John Aker](#) continued the job.

WMCCC 1980

The Sargon based *Boris Experimental* played the [1st World Microcomputer Chess Championship](#), September 4-9, 1980, in London, where it only lost versus later champion and Sargon based [Challenger X](#), blundering an endgame a piece up ^[23], and became second with 4 out of 5!

```
[Event "WMCCC 1980"]
[Site "London, United Kingdom"]
[Date "1980.09.05"]
[Round "3"]
[White "Chess Challenger"]
[Black "Boris Experimental"]
[Result "1-0"]
```

```
1. e4 e5 2. Nf3 Nc6 3. Bb5 a6 4. Ba4 b5 5. Bb3 Bc5 6. c3 Nf6 7. d4 exd
4
8. e5 Qe7 9. cxd4 Bb4+ 10. Kf1 Ng8 11. Bf4 Na5 12. a3 Nxb3 13. Qxb3 Ba
5
14. Nc3 Bb7 15. d5 O-O-
O 16. Rc1 f6 17. exf6 Nxf6 18. d6 Qe6 19. Qxe6 dxe6
20. dxc7 Rd7 21. Ng5 Re8 22. Re1 h6 23. Nxe6 Rde7 24. b4 Bb6 25. a4 Rx
e6
26. Rxe6 Rxe6 27. axb5 axb5 28. Be3 Bxc7 29. Bd4 Bc6 30. f3 Bd6 31. Na
2 Bd5
32. Nc3 Bc4+ 33. Kf2 Bxb4 34. Rb1 Bd6 35. Nxb5 Bxh2 36. Nc3 Bd6 37. g3
Kd7
38. f4 g6 39. Kf3 Nd5 40. Ne4 Be7 41. Rb7+ Kc6 42. Rb2 h5 43. Rc2 Kb5
44. Rb2+
Bb4 45. Be5 Bd3 46. Nd6+ Kc5 47. Rb3 Bc2 48. Nb7+ Kb6 49. Rb2 Rc6 50.
Nd6 Bd1+
51. Ke4 Kc5 52. f5 Nc3+ 53. Kd3 gxf5 54. Nxf5 Nd5 55. Bd4+ Kb5 56. Be5
Kc5
57. Bd4+ Kb5 58. Be5 Ka4 59. Ra2+ Ba3 60. Kd4 Nc3 61. Ra1 Nb5+ 62. Ke3
Bc2
63. Kf4 Rc4+ 64. Kg5 Rg4+ 65. Kf6 Rc4 66. Kg5 Rg4+ 67. Kf6 Kb3 68. Rh1
Bxf5
```

69. Kxf5 Nd6+ 70. Ke6 Rg6+ 71. Kd5 Nc4 72. Bf4 Rb6 73. Ke4 Rb5 74. Rd1 Bb2
75. Re1 Be5 76. Rb1+ Bb2 77. Re1 Be5 78. Rb1+ Ka4 79. Rxb5 Bxf4 80. Rc5 Kb4
81. Rxc4+ Kxc4 82. Kxf4 Kd5 83. Kg5 Ke4 84. Kxh5 Kf5 85. g4+ Ke4 86. g5 Kf5
87. g6 Ke6 88. Kh6 Kf6 89. g7 Kf7 90. Kh7 Ke6 91. g8=Q+ Ke5 92. Kg6 Ke4
93. Qc4+ Ke5 94. Kg5 Kd6 95. Kf6 Kd7 96. Qc5 Kd8 97. Ke6 Ke8 98. Qe7#
1-0

Controversy

ACM 1980

Boris X was also registered for the [ACM 1980](#). A brief description is given in the tournament booklet with [Applied Concepts](#) CEO [Alan Mead](#) as representative ^[24]:

BORIS EXPERIMENTAL, Alan Mead, Applied Concepts, Garland, Texas

The program uses [alpha-beta](#) pruning with recently developed and improved search heuristics. The program runs in 8k of program space and has nine levels of play including two tournament levels. The tournament level play is expected to be 100 points stronger than the present BORIS 2.5 program.

But *Boris X*, despite registered, finally did not play the [ACM 1980](#). [Kathe Spracklen](#) had filed a protest, claiming *Boris X* is too similar to *Sargon 2.5*, and requested mutual comparison of the source code. After John Aker admitted that *Boris X* was a revamped *Sargon 2.5*, *Boris* was rejected ^{[25] [26]}.

ACM 1981

At the 12th [ACM 1981](#), *Boris X* was mentioned in the booklet again, now with a long list of its authors and Applied Concepts representatives ^[27], but again, did not participate, likely also because [David Slate](#) was already competing with [Nuchess](#):

BORIS EXPERIMENTAL, [John Aker](#), [Alan Mead](#), [Terry Fredrick](#), [John Jacobs](#), [David Slate](#), [Larry Atkin](#) (c/o AM, Applied Concepts, Inc. 207 N. Kirby, Garland, Texas 75042), [Great Game Machine](#) (at site)

See also

- [Applied Concepts](#)
- [Chafitz](#)
- [Chess legends](#)
- [Given Name](#)

Publications

- [Boris assembly manual](#) (pdf) hosted by [Alain Zanchetta](#)
- Editor (1978). [What's New? Computer chess; Microchess 1.5; Boris, BYTE, Vol. 3, No. 10](#), pp. 193, [pdf](#) from [The Computer History Museum](#) » [MicroChess](#)
- Editor (1978). *Black-box war*. [Personal Computing, Vol. 2, No. 11](#), pp. 17 » [Chess Challenger](#)
- [Harry Shershow](#) (1979). *Chafitz' Big Move in Computer Chess*. [Personal Computing, Vol. 3, No. 9](#), pp. 59 » [Sargon](#)
- Michael Ham (1980). *Modular Game System and Boris / Sargon 2.5*. [Personal Computing, Vol. 4, No. 7](#), pp. 79 » [Modular Game System](#)
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- [David E. Welsh](#) (1980). *Rating Boris 2.5*. [Personal Computing, Vol. 4, No. 10](#), pp. 78
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- [David E. Welsh](#) (1980). *Rating Boris 2.5 - Part II*. [Personal Computing, Vol. 4, No. 11](#), pp. 87
- [Harry Shershow](#) (1981). *Two New Units In Aktion*. [Personal Computing, Vol. 5, No. 2](#), pp. 91 » [MCC 1980](#), [John Aker](#), [Morphy](#)
- [Applied Concepts - Boris Diplomat](#) (pdf) by [Hein Veldhuis](#)

Forum Posts

- [The old Boris chess computer](#) by [Truman Collins](#), [rgcc](#), January 25, 1996 ^[28]
- [Collectors Corner. Chafitz Chess Computers..The Early Years](#) by [Steve B](#), [Hiarc Forum](#), March 30, 2008

External Links

- [Boris Experimental ICGA Tournaments](#)
- [Boris is King](#) by Daniel Collin ^[29]
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- [Chafitz Boris](#) from [The Spacious Mind](#)
- [Chafitz Boris](#) from [Schachcomputer.info Wiki](#) (German)
- [Chafitz Boris Master](#) from [Schachcomputer.info Wiki](#) (German)
- [Chafitz Boris Diplomat](#) from [Schachcomputer.info Wiki](#) (German)
- [Other F8 games - Boris Diplomat](#) by [Sean Riddle](#) - playable in [MESS](#)
- [Directly coming from the 21st Century: the Boris HANDroid](#) by [Rob van Son](#), [ChessEval](#), February 2014

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for [Applied Concepts, Inc.](#) from [Patents](#) from [Chess Computer UK](#) by [Mike Watters](#)
2. [^ Larry Wagner \(1978\). Results of First Microcomputer Chess Tournament. Silicon Gulch Gazette, Vol. 2, No. 4, May 10, 1978, pg. 9](#)
3. [^ Collectors Corner. Chafitz Chess Computers..The Early Years](#) by [Steve B, Hiarcs Forum](#), March 30, 2008
4. [^ Applied Concepts - Boris Diplomat \(pdf\)](#) by [Hein Veldhuis](#)
5. [^ Chafitz Boris Diplomat](#) from [Schachcomputer.info Wiki](#) (German)
6. [^ Professional Profiles for Innovators of D255247, Lindsay, David including employment histories, technology specializations, innovator rankings/ratings, residence addresses, co-workers, Chess piece font](#) from [PatentBuddy](#)
7. [^ Boris Diplomat character's](#) from [Boris is King](#) by Daniel Collin
8. [^ Chafitz Boris Master](#) from [Schachcomputer.info Wiki](#) (German)
9. [^ Boris Electronic Chess Computer, Applied Concepts,](#) from [The Computer History Museum](#)
10. [^ Ft.Boris | Flickr - Fotosharing](#) by [Chewbanta](#)
11. [^ Boris is King](#) by Daniel Collin
12. [^ e-End – Secure Electronic Data Destruction and Computer Electronics Recycling, Frederick MD](#)
13. [^ Rex Kent's ICGA Tournaments](#)
14. [^ David Levy \(1978\). The PCW Microcomputer Chess Championships, Personal Computer World 11/78, pdf](#) from [Chess Computer UK](#) by [Mike Watters](#)
15. [^ Welcome to the Great-Game Machine Workshop](#)
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17. [^ Chafitz ARB Sargon 2.5 Electronic Chess Computer](#) from [The Spacious Mind](#)
18. [^ Boris Sargon 2.5](#) by [Tom Luif](#)
19. [^ Terry M. Fredrick - Resume](#)
20. [^ Schachroboter](#) from [Kurt's Schachcomputer Homepage](#) by [Kurt Kispert](#) (German)
21. [^ Terry M. Fredrick - Resume](#)
22. [^ Boris Handroid](#) from [Kurt's Schachcomputer Homepage](#) by [Kurt Kispert](#) (German), Photo by Rolf Böhlers
23. [^ London 1980 - Chess - Round 3 - Game 1 \(ICGA Tournaments\)](#)
24. [^ The Eleventh ACM's North American Computer Chess Championship, pdf](#) from [The Computer History Museum](#)
25. [^ Applied Concepts - Morphy Edition Master Chess \(module\) \(pdf\)](#) by [Hein Veldhuis](#)
26. [^ Evan Katz \(1981\). The Eleventh North American Computer Chess Championship. Personal Computing, Vol. 5, No. 2, pp. 87](#)
27. [^ The Twelfth ACM's North American Computer Chess Championship, pdf](#) from [The Computer History Museum](#)
28. [^ Truman Collins \(1995\). A Trip Down Chess Computer Memory Lane. Computer Chess Reports, Vol. 5, No. 3-4 Addendum, pp. 33](#)
29. [^ Boris is King website address has been changed !](#) by Boris is King, [Hiarcs Forum](#), May 31, 2017

What links here?

Page	Date Edited
More Links	
ACM 1980	Dec 25, 2017
ACM 1981	Jan 19, 2018
Alan Mead	Mar 23, 2014
Applied Concepts	Dec 25, 2017
Arleen Chafitz	Jun 5, 2017
Boris	Dec 25, 2017
Byte Magazine	Nov 20, 2016
Chafitz	Dec 25, 2017
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Chess Challenger	Dec 27, 2017
Chess Champion Pocket Chess	Sep 19, 2014
CPWTIPC 1981	Oct 12, 2013
David E. Welsh	Dec 25, 2017
David Lindsay	Jun 5, 2017
Engines	Mar 10, 2018
Fairchild F8	Jul 31, 2015
Gerhard Piel	Nov 29, 2012
Great Game Machine	Dec 20, 2017
Harry Shershow	Dec 27, 2017
John Aker	Dec 26, 2017
John Jacobs	Jul 8, 2011
MCC 1980	Dec 27, 2017
MCCT 1978	Dec 22, 2017
MicroChess	Jul 14, 2015
Mike Johnson	Jan 7, 2016
Morphy	Dec 25, 2017
PCW-MCC 1978	Dec 9, 2012
Personal Computing	Dec 27, 2017
Playing Strength	Mar 31, 2018
Rex Kent	Jan 8, 2016
Robots	Feb 20, 2018
SABA Videoplay 20	Sep 19, 2014
Sargon	Dec 25, 2017
Steve Chafitz	Aug 2, 2013
Stockholm MCCT 1979	Oct 12, 2013
Stockholm MCCT 1980	Sep 5, 2017
Terry Fredrick	Nov 21, 2012
The Penrod Memorial Microchess Tournament	Dec 22, 2017
Tiny Chess 86	Dec 24, 2017
Truman Collins	Feb 5, 2012

[Up one level](#)