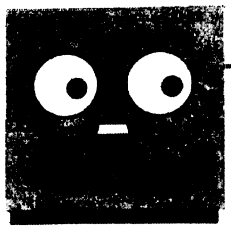
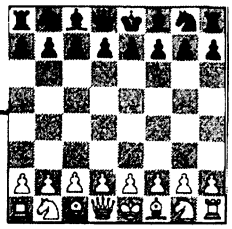


INTERNATIONAL COMPUTER CHESS ASSOCIATION
(I.C.C.A.)



ICCA Newsletter

Vol. 2 No. 2
December 1979

Editor: B. Mittman
Editorial Asst.: J. Cesal
Northwestern University

EDITORIAL

The International Computer Chess Association (ICCA) presently has about 200 members. The current membership list is enclosed. Until now, the ICCA has functioned solely out of its headquarters at the Vogelback Computing Center of Northwestern University as a medium of communication among people interested in computer chess. The ICCA Newsletter serves this purpose. Beginning in 1980, however, the organization will attempt to assume other roles which its organizers had hoped it would take on. These include tournament rules and organization, a computer chess rating or ranking system, and needed liaison with other organizations like the International Chess Federation (FIDE), the U. S. Chess Federation (USCF), the Association for Computing Machinery (ACM), the International Federation for Information Processing (IFIP), and others.

A meeting of ICCA was held in Detroit on October 30 during the Tenth ACM North American Computer Chess Championship. At that meeting reports were presented by chairmen of four committees: Bylaws, Tournament Rules and Organization, External Liaison, and Computer Chess Rating System. A draft set of statutes for ICCA was distributed and discussed. It was decided that the Bylaws Committee would revise the statutes and publish a modified set of statutes in this Newsletter so that the membership could react. A mail vote by the membership will be needed to ratify the statutes. Other committee reports and working papers are also published in this issue of the Newsletter. Written comments are solicited. We also urge members to send short articles, announcements and news for future issues to:

ICCA Newsletter
Vogelback Computing Center
Northwestern University
Evanston, Illinois 60201
USA

The Tenth ACM tournament was a great success. In addition to an exciting climax to the tournament in which CHESS 4.9 drew BELLE to win the title with 3 1/2 points, there was an interesting exhibition of man and computer vs. man in a chess game. David Slate of Northwestern University, playing with the help of CHESS 4.9, was defeated by International Master David Levy. A report of the tournament and the exhibition game appears later in the Newsletter. In addition, as a supplement to this Newsletter, we are pleased to publish the games played and the cross tables of results of the ten ACM computer chess tournaments from the first one in New York in August of 1970 to Detroit in October of 1979. The game scores had been entered into a computer data base by Ken Thompson of Bell Telephone

EDITORIAL

Laboratories, and then photo typeset directly from this data base. This computer data base is expected to grow and to become an invaluable research tool in computer chess. We want to thank Ken for providing our members with this valuable collection of computer chess games from the ACM tournaments.

This issue of the ICCA Newsletter is the largest one produced to date. I want to thank Ms. Joan Cesal of Vogelback Computing Center for her role in editing and publishing the Newsletter, as well as for handling membership business and correspondence. Without her help, the ICCA would not have reached its current position of importance to the computer chess world.

Note: In order to limit the total size of the Newsletter and to save on mailing costs, a number of items have been photo reduced. We hope that this does not cause hardship for any readers.

B. Mittman
Editor

NEWS AND NOTICES

This section will report on general news of interest to the computer chess community.

Computer Chess Bibliography Available

Mr. Hartmut Tanke of West Berlin informs us that his computer chess bibliography, which currently contains references to 830 documents, is available at no charge to ICCA members by writing to:

Prof. Dr. H.-J. Schneider
Technische Universität Berlin
Fachbereich Informatik (20)
Institut für Angewandte Informatik
Computergestützte Informationssysteme
KU-A1
Kurfürstendamm 202
1000 Berlin 15, West Germany

International Computer Go Association

Mr. David Lewis of Los Angeles informs us of the establishment of the International Computer Go Association. Anyone wishing further information should write to:

Mr. David S. Lewis
P.O. Box 48829
Los Angeles, California 90048
USA

Analysis of MACHACK Available in German

We have received information about the availability of a report, written in German by Mr. Gerd Friedrich, concerning the Richard Greenblatt chess program MACHACK. Copies are available from:

Mr. Gerd Friedrich
Erbacher Str. 32
D-6101 Rossdorf 1, Germany

Book on Nonnumerical Information Processing Available in German

We received the following announcement from Prof. H. Bruderer of the Institute of Computational Linguistics in Bern, Switzerland of a book which deals with a number of topics in nonnumerical information processing, including computer chess:

Herbert E. Bruderer
Nichtnumerische Informationsverarbeitung
Linguistische Datenverarbeitung, künstliche Intelligenz, Computerschach, Computerkunst, automatische Dokumentation, Bibliotheksautomatisierung, Rechtsinformatik.
Verlag Linguistik, P. O. Box 149
CH-9400 Rorschach, Switzerland
194 pages, 1979
Price: surface-44 Swiss Francs
air-50 Swiss Francs
For checks please add 6 Swiss Francs.
(Foreign orders must be prepaid.)

NEWS AND NOTICES

ACM Forms a Computer Chess Committee

The Association for Computing Machinery (ACM) has formed a standing committee on computer chess with the following charter:

> "The Computer Chess Committee (CCC) has as its mandate to provide a framework for computer chess activities within the ACM. The CCC will organize chess tournaments, talks, panel discussions, technical sessions and other appropriate activities which have as their purpose advancing the state of computer chess and providing ACM members and the general public a perspective of these advances."

The initial membership of the Committee is Prof. Monroe Newborn, Mc Gill University, Chairman; Prof. Benjamin Mittman, Northwestern University, Vice Chairman; Prof. Anthony Marsland, University of Alberta, and Dr. Kenneth Thompson, Bell Telephone Laboratories, Committee Members.

Preserving Computer-Related Source Materials

Enclosed with this issue of the ICCA Newsletter is a brochure produced by the American Association of Information Processing Societies on preserving computer-related source materials. Someday a valuable archive will be established to collect the important materials which are connected with the development of computer chess. Save your source materials. If funds can be found and if a volunteer can be recruited, the ICCA should consider sponsoring such an archive. Member comments and ideas are solicited.

Third World Computer Chess Championship

Plans are being made to hold the Third World Computer Chess Championship in Melbourne, Australia during the week of October 13, 1980 at IFIP80, the world computer congress of the International Federation for Information Processing. An organizing committee, made up of Prof. Benjamin Mittman of Northwestern University, USA, Chairman, Prof. Monroe Newborn of Mc Gill University, Canada, Prof. Rodney Topor of Monash University, Australia, and International Master David Levy of England, has been trying to raise the necessary funds to hold the tournament in Australia. A considerable amount of money is needed to provide travel grants for sixteen team members and for the officials of the tournament, for communications charges, and for local expenses. If sufficient funds cannot be raised to hold the tournament in Australia, other sites and sponsors are being considered.

The tournament is open to computer chess programs from all over the world. Tournament participants will be required to make their own arrangements for computer time. The tournament committee will try to assist in this effort if possible, but is under no obligation to provide facilities for any participant. The committee will attempt to attract the strongest programs in the world to compete and also to provide the widest geographic representation possible, while maintaining the highest quality of competition.

Applications for the Third World Computer Chess Championship are available from:

> Prof. Monroe Newborn
> Mc Gill University
> School of Computer Science
> Montreal, PQ, Canada H3A 2K6
> Telephone: (514) 392-8274

Completed applications must be received no later than June 20, 1980.

NEWS AND NOTICES

The Euwe Prize

We have received the following notice from Dr. Max Euwe, former World Chess Champion and past president of FIDE, concerning his challenge and prize offering:

1. The Dutch Software House VOLMAC offers a prize of US $50,000 for the team which first develops a computer program and/or chess hardware which beats Prof. Dr. Max Euwe in a match of four games. This offer remains in force until January 1, 1984.

2. The director of the tournament is assigned by VOLMAC after having consulted the participating team. Games are played at a speed of 40 moves per player in the first two hours and then 10 moves every 30 minutes thereafter.

   After six hours of play the game will be adjourned and continued at a time to be specified later. However, the director of the tournament has the power to adjudicate the adjourned game.

3. Unless otherwise specified, rules of play are identical to those of regular "human" tournament play. If a point is in question, the tournament director has the authority to make a decision from which appeal is only possible to the president of FIDE.

4. If a team encounters technical difficulties (machine failure, communication failure or error, or program failure) during the course of the game, the tournament director may allow them to stop their clock as long as necessary, but not to exceed 20 minutes, in order to restore their system. At the end of at most 20 minutes, their clock will be started again. The tournament director may grant a team permission to stop their clock at most two times during the course of a game, but the total time that a team's clock may be stopped cannot exceed 20 minutes.

5. There is no manual adjustment of program parameters during the course of the game. In the case of failures, the program parameters must be reset to their original settings if it is at all possible. Information regarding castling status, en passant status, etc. may be typed in after a failure. If at any time during the course of the game the computer asks for the time remaining on either his or his opponent's clock, this information may be provided. However, the computer must initiate the request for information.

6. It is intended that Dr. Euwe plays a match against the winner of the U.S.A. championship in the years 1979, 1980, 1981, 1982, and 1983 insofar as the winning team wishes. The same goes for the winners of the world championships of 1980 and 1983 and for the winners of European championships, possibly to be held in these years. If, apart from these winning teams, other teams should be interested, Dr. Euwe will make a choice. The expenses, however, resulting from these last-mentioned matches are for the account of the challenger. Teams interested are asked to direct their challenge to VOLMAC, 3500 GN Utrecht (Holland), PB2575.

7. During the matches VOLMAC will send an observer to the place of the computer. The observer has the right to inspect the logbook made during the match.

8. If Dr. Euwe should die within five years or if his chess-playing strength should clearly diminish, VOLMAC has the right to substitute him by another test partner, whose rating should remain below 2500 (Euwe's last official rating dates from 1972 and then was 2530).

NEWS AND NOTICES

The Levy/Omni Prize for Computer Chess and the Second Levy Bet

In August 1968 David Levy, the Scottish Chess Champion, made a bet that no computer program would win a chess match against him within ten years. Four university professors bet a total of £1,250 against Mr. Levy, and lost. At the end of August 1978 David Levy played the final, deciding match against the world's strongest chess program, CHESS 4.7. Mr. Levy won the match by 3 1/2 points to 1 1/2.

In order to stimulate interest and to encourage further research in the field, Mr. Levy has decided to offer a prize of $1,000 U. S. to the programmers of the first program that wins a match against him. OMNI magazine has agreed to augment this sum with $4,000 of their own. The total value of the Levy/Omni prize is, therefore, $5,000.

The rules of the challenge are as follows:

1. A match shall consist of 4 or 6 games at the choice of the challenger.

2. A challenge may be issued by any member of any programming group on behalf of their own program; or by anyone who has accepted the bet on behalf of any one, specific program. Arrangements for the match and the payment of Mr. Levy's traveling and hotel expenses for the match shall be the responsibility of those issuing the challenge, which must be paid in advance.

3. Mr. Levy is not obliged to play more than one match against the same program within any six-month period.

4. Having played three matches during any six-month period, Mr. Levy is not obliged to play again during that period against any program which does not have a current rating of 2300 or more on the U. S. Chess Federation scale (or equivalent).

5. Mr. Levy may not postpone acceptance of a challenge for more than two months.

6. Mr. Levy is free to play extra matches, over and above those arising as the result of a challenge, but any such extra matches in no way affect the number of challenges that he is obliged to accept under rules 2, 3 and 4.

7. There shall be no media coverage of the games during play, nor shall the moves of the games be relayed to an audience, without the written agreement of Mr. Levy and of a representative of OMNI magazine.

8. In the event of the death or permanent incapacity of Mr. Levy, all bets are void and the prize shall be cancelled.

9. The rules governing human international tournament play shall be followed where applicable but there shall be no adjournments.

10. The rate of play shall be 40 moves in the first two hours by each player, and 20 moves in each subsequent hour.

11. There are no restrictions on hardware facilities but no allowance will be made for technical difficulties (machine failure, program failure, communication failure or error).

12. An inspector nominated by Mr. Levy will remain at the computer site while play is in progress.

13. Games shall be played at the rate of one per day for the duration of each match, unless otherwise agreed by Mr. Levy.

14. If Mr. Levy plays in Europe, each game must start no earlier than 2 P.M. nor later than 5 P.M., unless otherwise agreed by Mr. Levy. If Mr. Levy plays in North America,

(continued on page 7)

RESEARCH NOTES

In this issue of the ICCA Newsletter, we are beginning a new section containing short research reports from people working in the field of computer chess and related fields. We are pleased to begin this series with an article by Prof. Jacques Pitrat of the Centre National de la Recherche Scientifique in Paris.

A Program which Uses Plans for Finding Combinations in Chess, J. Pitrat, CNRS, Paris

Many chess programs develop a very large tree. This program tries to limit the width of the tree, so that it can increase its depth. The idea is to generate a node if and only if there is a reason to do so.

The program performs a very sophisticated analysis of the given position. This analysis will be made at no other node of the tree, so that the computer can devote quite a bit of time on it. The analysis generates a set of plans. Each plan is a sequence of moves and of modifications which must be made.

For instance, the program generates several plans for the position of Figure 1, among them:

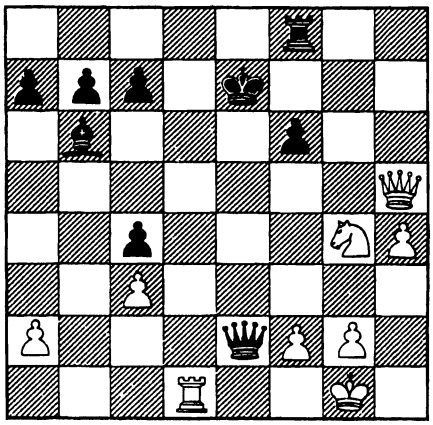


Figure 1.

Remove the white Knight from g4.
Then consider the move: Qh5xe2.

When a plan has been found, the program executes it. For each kind of modification, there are some methods which may achieve it. For instance, for removing an enemy piece, E, we can threaten it, we can capture a piece protected by E, etc. In the preceding plan, we want to remove one of our pieces. One method is to threaten an enemy piece with it. The program analyses the situation only for goals which are needed. So the analysis is faster than the initial one. It generates several subplans which are put ahead of the preceding plan. In this case, the program finds that it could threaten the King if it were on another square, for instance, d7.

It generates several plans, among them:

- Induce the enemy King to move to d7
- Consider the move Ng4xf6
- Consider the move Qh5xe2

We have a new modification: induce the King to move to d7. One method is to move one of our pieces to this square, so that it gives check. So the plan which will produce the main variation is:

- Rd1-d7
- Check that the enemy King is on d7
- Ng4xf6
- Qh5xe2.

RESEARCH NOTES

The program does not consider initially Rd1-d7: it is a move without a priori interest; the program does not want to lose a Rook for the pleasure of giving check. But later it considers this move because it has a serious reason for it; it induces the enemy King to move to a square, where a Knight could threaten it, and simultaneously create a discovered attack on the Queen.

If a plan succeeds, the program considers possible opponent's replies. First, the program looks for its moves which are necessary for the success of its combination. Then it creates opponent's plans for destroying this move: capturing the threatening piece, removing the threatened piece, etc.

So the tree is built gradually. Some moves, which were not considered initially, are added to the tree. Generally, the tree is not very wide, and the program has found in 30 seconds of IBM 370-168 time combinations in which it is necessary to develop a tree which has a depth of 19 ply.

Reference

"A chess combination program which uses plans"
Artificial Intelligence, 8, 1979, pp. 273-321.

NEWS AND NOTICES

(continued from page 5)

The Levy/Omni Prize.....continued

each game must start no earlier than 11 A.M. nor later than 2 P.M. unless otherwise agreed by Mr. Levy. Mr. Levy is not obliged to play on any other continent.

15. There shall be no time restriction on this prize.

Mr. Levy's New Bet

Mr. Levy is willing to wager up to $10,000 that the Levy/Omni prize will not be won on or before January 1, 1984. He will only bet with personal acquaintances, in units of $1,000, and reserves the right to refuse bets without giving any reason for so doing.

CORRECTION

We received the following correction from Prof. Allan Gottlieb to his letter on handicapping computer chess programs which appeared in the February 1979 ICCA Newsletter. Prof. Gottlieb informed us that the third paragraph of his letter should have read:

"Since there would be no inducement to go to the expense and bother of obtaining a fast machine, all the FORTRAN-based programs may as well run on a micro to eliminate any phone line problems. Any IBM/Amdahl programs will migrate down the product line since 138's are cheaper and more available than 470's and 3033's."

Tenth Annual ACM North American Computer Chess Championship

By David J. Slate of Northwestern University

The Detroit Plaza Hotel in Detroit's Renaissance Center was the scene of the tenth annual North American Computer Chess Championship tournament sponsored by the Association for Computing Machinery on October 28-30, 1979. Eight programs from the U.S., three from Canada, and one from the Netherlands took part in the four round Swiss-style event. As usual, I.M. David Levy directed and also commented on the games for the audience. Special guests George Koltanowski and Max Euwe observed the play.

Northwestern University's chess program has dominated most of these annual tournaments since they began in 1970, but other strong programs nip at its heels, and occasionally it is dislodged from its top position. Last year Ken Thompson of Bell Telephone Laboratories in New Jersey introduced a new version of his Belle program. Featuring super-fast special chess playing circuitry, Belle beat N.U.'s Chess 4.7 in an exciting game which featured sharp play and mistakes by both sides. So this year N.U.'s Chess 4.9, entered by the team of David J. Slate of N.U., Larry R. Atkin (formerly of N.U.), and David A. Cahlander of Control Data Corporation, was the underdog, seeded second behind Belle. Chess 4.9, running on a powerful Control Data Cyber 176 computer, beat Ostrich, Blitz 6.9, and Duchess before facing Belle in the last round. This time Chess 4.9 needed only a draw, since Belle had only 2.5 points, having blown a won ending against Chaos in round 2.

Belle opened with the queen's pawn, and Chess 4.9 defended with the Modern Benoni. Both programs were in their "openings books" for 14 moves or so, and a sharp double edged position resulted. Chess 4.9 played aggressively, advancing its queen side pawns. Occasionally it repeated moves with its king's knight, as if inviting Belle to accept a draw by repetition. In fact, prior to the game, we had set a parameter called the "contempt factor" so that Chess 4.9 would be willing to take a draw even if as much as a pawn ahead. Against weaker opposition we usually set the "contempt factor" the other way, so that the program would still play for a win from a slightly inferior position.

Belle — Chess 4.9 1 d4 Nf6 2 c4 c5 3 d5 e6 4 Nc3 exd5 5 cxd5 d6 6 e4 g6 7 Nf3 Bg7 8 Be2 O-O 9 O-O Re8 10 Nd2 Na6 11 f3 Nc7 12 a4 b6 13 Nc4 Ba6 14 Bg5 h6 15 Bh4 g5 16 Bf2 Nh5 17 Ne3 Bc8 18 Qc2 Nf4 19 Bc4 Bd7 20 Rfd1 Qf6 21 Bg3 Nh5 22 Be1 Nf4 23 Kh1 a6 24 Bg3 b5 25 axb5 axb5 26 Rxa8 Rxa8 27 Bf1 b4 28 Ne2 b3 29 Qb1 Nh5 30 Bf2 Nf4 31 Nc4 Nxe2 32 Bxe2 Bb5 33 Bg3 Ra4 34 Qc1 Bf8 35 Rd2 Qd8 36 Qf1 h5 37 Kg1 h4 38 Bf2 Bg7 39 Ne3 Bxe2 40 Qxe2 Ra1† 41 Rd1 Ra2 42 Qd3 Rxb2 43 Nc4 Rc2 44 e5 Bxe5 45 Nxe5 dxe5 46 Qxb3 Re2 47 Kf1 c4 48 Qb7 Ra2 49 Bb6 h3 50 Qxc7 Qf6 51 Qd8† Qxd8 52 Bxd8 Rxg2 53 Re1 c3 54 Rxe5 c2 55 Re8† Kg7 56 Bxg5 Rxg5 57 Rc8 Rg2 58 d6 Rxh2 59 d7 Rd2 60 Kg1 Rxd7 61 Rxc2 Rd3 62 Rf2 Kf6 63 Kh2 ½-½

Belle turned down the draw offers and Chess 4.9 pressed forward on the queenside, overextending itself and underestimating Belle's counter-chances. Belle counter-attacked in the center, and Chess 4.9's game started to crumble. Soon it was losing a piece by force, and it looked certain that Belle would retain its title. But Chess 4.9 made a last desparate attempt at counter-play on the king side. Belle mis-defended, and suddenly Chess 4.9 was alive again. In the end, Belle had to fight for the draw, and Chess 4.9 had won the tournament.*

Chess 4.9's third round game against Duchess shows how computers, with their somewhat anti-positional style, tend to wander into peculiar positions in which one program suddenly gets a tactical idea that decides the issue.

Chess 4.9 — Duchess 1 e4 d5 2 exd5 Qxd5 3 Nc3 Qd6 4 d4 Bf5 5 Nf3 Nc6 6 Nb5 Qd7 7 Bf4 Rc8 8 Ne5 Nxe5 9 dxe5 Qc6 10 Qf3 Qxf3 11 gxf3 a6 12 Nd4 Bd7 13 O-O-O g6 14 Nb3 Rd8 15 Na5 Bc8 16 Rxd8† Kxd8 17 Bc4 Ke8 18 Rd1 Bh6 19 Bd2 Bg7 20 Bc3 c6 21 e6 Bh6† 22 Kb1 f6 23 Nxb7 Bxb7 24 Ba5 Kf8 25 Rd7 Bf4 26 h3 Be5 27 Rxb7 g5 28 Bxa6 h5 29 a4 Rh6 30 Bc4 f5 31 Bd2 Rg6 32 a5 Bd4 33 a6 Bxf2 34 a7 Bxa7 35 Rxa7 g4 36 Bc3 Nf6 37 Bb4 Ng8 38 Ra8† Kg7 39 Bc3† Kh6 40 Bd2† Kg7 41 fxg4 hxg4 42 hxg4 Rxg4 43 Bd3 f4 44 Bc3† Kh6 45 Rf8 c5 46 Be5 f3 47 Rxf3 c4 48 Rf4 Rg1† 49 Bf1 Kg5 50 Rf7 Kh6 51 Ka2 Rh1 52 Bxc4 Re1 53 Bg7† Kg5 54 Bf8 Re4 55 Rg7† Kf6 56 Bd3 Ra4† 57 Kb3 Ra7 58 Rxg8 Kxe6 59 Bc4† Ke5 60 Rg7 Rb7† 61 Kc3 1-0

Dan and Kathe Spracklen's Sargon III plays very well for a micro-processor program. It nearly drew with Belle in round three, but its own "contempt factor" proved to be its undoing. The Sargon program was in a memory cartridge that fit into a special electronic chess board. The Spracklen's had provided no controls on the board for adjusting the "contempt factor", which was fixed at plus one-half pawn. This "contempt" for Belle was fatal, as Sargon turned down a draw only to become a victim of a typical Belle mating attack.

Sargon 3 — Belle 1 Nc3 d5 2 e4 Nf6 3 exd5 Nxd5 4 Nxd5 Qxd5 5 Ne2 Nc6 6 d3 e5 7 Nc3 Bb4 8 Bd2 Bxc3 9 bxc3 Bf5 10 c4 Qd4 11 Be3 Qc3† 12 Bd2 Qa3 13 g4 Bd7 14 Bg2 O-O 15 O-O f5 16 Qb1 Rab8 17 gxf5 Bxf5 18 Qb5 a6 19 Qd5† Rf7 20 Rfb1 Rd8 21 Qf3 Nd4 22 Qd1 c6 23 Bg5 Rdf8 24 Be3 Qc3 25 Rc1 Qb2 26 a4 Bg6 27 Rab1 Qa3 28 Ra1 Qc3 29 Bd2 Qb2 30 Rab1 Qa2 31 Ra1 Qb2 32 Be3 Kh8 33 Rab1 Qa3 34 Ra1 Qc3 35 Bd2 Qb2 36 Rab1 Qa2 37 Ra1 Qb2 38 Be3 Re7 39 Rab1 Qa3 40 Ra1 Qc3 41 Bd2 Qb2 42 Rab1 Qa2 43 Bb4 Rff7 44 Ra1 Qb2 45 Rab1 Qa2 46 Bxe7 Rxe7 47 Ra1 Qb2 48 Kf1 Rf7 49 Rab1 Qa2 50 Qe1 Nxc2 51 Qxe5 Bxd3† 52 Kg1 Qa3 53 Qh8† Rf8 54 Qxb7 Nd4 55 Ra1 Qc5 56 Rd1 Bxc4 57 Kh1 Bd5 58 Bxd5 Qxd5† 59 Kg1 Ne2† 60 Kf1 Qf3 61 Ke1 Qxf2† 62 Kd2 Rd8† 63 Kc2 Nd4† 64 Kd3 Nb5† 65 Qd7 Rxd7† 66 Kc4 Qc2† 67 Kb4 Qc3# 0-1

*Editor's Note: Following this report is the score, annotated by Prof. Hans Berliner of Carnegie Mellon University, for the BELLE vs. CHESS 4.7 game played during last year's ACM tournament.

North American Computer Chess Championship

Detroit, Michigan
October 28-30, 1979

	#	rate	perf	1	2	3	4	5
1	Chess 4.9	2040	2099	8W	9W	3W	2D	3½
2	Belle	1950	1982	5W	4D	7W	1D	3
3	Duchess	1889	1942	10W	7W	1L	4W	3
4	Chaos	1775	1794	12W	2D	9W	3L	2½
5	L'Excentrique	0	1640	2L	12W	8W	6D	2½
6	Mychess	0	1552	7L	10W	11W	5D	2½
7	Sargon 3	0	1614	6W	3L	2L	9D	1½
8	Ostrich 80	1450	1374	1L	11W	5L	10D	1½
9	Blitz 6.9	0	1516	11W	1L	4L	7D	1½
10	Awit	1325	1314	3L	6L	12W	8D	1½
11	BS '66 '76	0	1045	9L	8L	6L	12W	1
12	Rufus	0	644	4L	5L	10L	11L	0

Man and Computer vs. Man

At the suggestion of Daniel McCracken, President of ACM, a special exhibition game was organized with Dave Slate, assisted by his program CHESS 4.9, playing against David Levy. The idea of the game was to experiment with man/computer collaboration, and to see whether a player and program (both Slate and CHESS 4.9 have low expert ratings) could compete successfully against a player with clearly higher chess-playing ability (Levy is an International Master). The game score appears below. Levy mated Slate in 50 moves.

After the game was completed, Slate revealed that he had overridden the computer-generated moves only a few times, including move 10. Qe2 over 10. 0-0. Both Levy and Slate felt that the experiment was of considerable interest and would be willing to do it again after Slate has had an opportunity to improve his ability to interact with the program.

Exhibition Game

Slate and CHESS 4.0 vs. Levy

	(White)	(Black)		(White)	(Black)		(White)	(Black)
1.	f4	d5	18.	b:c4	Qb4+	35.	Ra4	Rc8
2.	Nf3	Nf6	19.	Kc1	Q:c3	36.	Ra5	Qe4
3.	e3	Bg4	20.	c:b5	c:b5	37.	R:a7	Q:c2+
4.	b3	Nbd7	21.	B:d5	Nb6	38.	Qd2	Qe4
5.	Bb2	c6	22.	Bb3	Nc4	39.	Qe1	c3
6.	Be2	B:f3	23.	B:c4	b:c4	40.	Kf2	h5
7.	B:f3	Qc7	24.	Qe1	Qa3+	41.	Ra5	h4
8.	Nc3	e5	25.	Kd2	Rab8	42.	Ra1	h3
9.	f:e5	N:e5	26.	Ke2	Rb2	43.	Qh1	Qc2+
10.	Qe2	Bd6	27.	Qd2	R:a2	44.	Kf3	Rc6
11.	g3	Qe7	28.	Rb1	Qe7	45.	Qb1	Rf6+
12.	o-o-o	o-o	29.	Ra1	Qe4	46.	Kg4	Qe2+
13.	Bg2	Ba3	30.	Rhc1	R:a1	47.	Kh4	Rh6+
14.	Kb1	B:b2	31.	R:a1	Qg2+	48.	Kg5	Qh5+
15.	K:b2	b5	32.	Kd1	Qh1+	49.	Kf4	Rf6+
16.	Rdf1	Nfd7	33.	Qe1	Qb7	50.	Ke4	Qf5++
17.	d4	Nc4+	34.	Ke2	Rb8			

Report Submitted by Kathe Spracklen

SECOND ANNUAL EUROPEAN MICROCOMPUTER CHESS CHAMPIONSHIPS

November 1-3, 1979

Personal Computer World Show - London, England

		Round 1	Round 2	Round 3	Round 4	Round 5	Total Points
1.	SARGON	1 W7	1 B4	1 W2	1 B3	1 B6	5
2.	VEGA	1 W5	1 B3	0 B1	1/2 W6	1 B8	3 1/2
3.	MYCHESS	1 B8	0 W2	1 B4	0 W1	1 W7	3
4.	TINYCHESS	1 B6	0 W1	0 W3	BYE	1 B9	3
5.	MIKE II	0 B2	1 W9	0 B6	1 W8	BYE	3
6.	VOICE Chess Challenger	0 W4	1 B7	1 W5	1/2 B2	0 W1	2 1/2
7.	MAX	0 B1	0 W6	BYE	1 W9	0 B3	2
8.	DELTA	0 W3	BYE	1 B9	0 B5	0 W2	2
9.	WIZARD	BYE	0 B5	0 W8	0 B7	0 W4	1

Authors

1. SARGON - Dan & Kathe Spracklen (USA)
2. VEGA - David Broughton (UK)
3. MYCHESS - David Kittinger & John Urwin (USA)
4. TINYCHESS - Jan Kuipers (Belgium)
5. MIKE II - Mike Johnson (UK)
6. VOICE Chess Challenger - Fidelity Electronics (USA)
7. MAX - Guy Burkhill (UK)
8. DELTA - D.R. Wilson (UK)
9. WIZARD - Jeffrey & Clare Cooper (UK)

ACM-79 Ninth North American Computer Chess Championship

Game Annotations by Prof. Hans Berliner
Carnegie-Mellon University, Pittsburgh, Pennsylvania

White - BELLE	Black - CHESS 4.7
1. P-K4	N-QB3
2. P-Q4	P-Q4
3. N-QB3 (A)	P-K3
4. N-B3	B-N5
5. P-K5	N/1-K2
6. B-Q2	N-B4
7. N-K2	B-K2
8. P-B3	0-0
9. N-B4	P-B3 (B)
10. B-Q3	PxP
11. PxP (C)	P-KN4! (D)
12. P-KN4! (E)	N-N2!
13. N-N2	P-N3? (F)
14. Q-K2	B-N2
15. R-KN1 (G)	P-QR4 (H)
16. P-QR4	K-R1
17. P-R3	K-N1
18. R-R1	P-R3
19. P-R4	P-Q5 (I)
20. PxP/5?	N-N5!! (J)
21. PxP/6?? (K)	NxB ch?? (L)
22. QxN	PxP
23. Q-N6! (M)	PxB ch
24. NxP	R-B2
25. PxN	RxP/2
26. QxP ch	R-B2
27. Q-R6!	R-N2
28. Q-R8 ch	K-B2
29. P-K6 ch (N)	KxP
30. QxR	BxN
31. R-R6 ch	K-Q2
32. 0-0-0 (O)	B-Q4
33. N-K4	K-B1
34. R-R8	BxN
35. R/1xQ ch	BxR
36. Q-K7	K-N2
37. QxB/4 ch	K-R2
38. R-N8	R-N1
39. P-N5	B-K2
40. RxR	BxP ch
41. P-B4	BxP ch
42. QxB	KxR
43. K-Q2	K-N2
44. K-Q3	K-B1
45. P-N4	PxP
46. QxP/4	K-Q2
47. Q-N5 ch	K-Q1
48. K-K4	K-K2
	Resigns

A) This is undoubtedly the best move against this frequently essayed opening of CHESS 4.7. Black is forced to play 3.-- P-K3 after which he gets a cramped French Defense because he will not be able to play P-QB4 soon; the alternative 3. -- PxP, 4. P-Q5 gives White too much.

B). White has achieved a slight space superiority and Black must now break here in order to alleviate the pressure, since the usual P-QB4 requires too much preparation.

C) After 11. N/3xP Black can play B-B3 with a satisfactory game.

D) A fine, though anti-positional idea. Black must create some room for himself on the K-side before White gets too strong there. The weakening of the K-side is two sided as White must also weaken himself or submit to the loss of a pawn.

E) Best. After 12. N-R5, P-N5, followed by NxKP Black will gain enough space and time to be able to overcome any adverse effects due to his open king's position.

F) Here I suspect most Masters would play the "automatic" 13.-- RxN!, 14. QxN, NxP, 15. Q-K2, NxB ch, 16. QxN, P-K4. This results in settling upon White a very inferior pawn position and inactive minor pieces against Black's fine center and active minor pieces; certainly worth half a pawn. In view of what transpires, Black's play must be judged inferior. In any case, White is not interested in preventing this line.

G) Probably White does not play the beckoning 15. P-KR4 because of RxN, 16. QxR, NxP, 17. Q-K2, NxBch, 18. QxN, PxP which gives Black two pawns for the exchange; however, it would be appropriate to prepare this thrust by 15. 0-0-0. If above, 17. BxPch, then KxB, 18. PxPch, K-N1, 19. Q-R3 with a wild position that White need not let himself in for. The text is weak.

H) Both sides are hard put for a good idea. On this and the next moves RxN is stronger than ever before, and White should castle queen's-side.

I) Why has Black not tried this obvious move before? The answer is that it leads to a ferocious attack for White. White should now play 20. Q-K4!, RxN!, 21. Q-R7ch! (not QxR, NxP with a good game for Black), K-B1, 22. B-N6!, B-B3!, 23. PxB, QxP, 24. PxP, PxP, 25. B-K4, RxKBP, 26. BxP with a winning position. Black seeing much danger, but not being able to see to the end of all this, considers this his best chance. He would have been better advised to have played 19.-- RxN (better late than never), 20.QxR, NxP, 21. Q-K2, NxBch, 22. QxN, P-K4, 23. Q-N6, Q-Q3, 24. QxQ, PxQ with somewhat the worst of it.

J) A tremendous move which now makes White play correctly to save himself. After the correct 21. PxN!, BxN, 22. B-R7ch!, K-R1! (not KxB, 23. RxPch, K-N1, 24. Q-Q3, BxN, 25. Q-R7 ch, K-B2, 26. Q-N6ch, K-N1, 27. R-R7!, R-B2, 28. Q-R6 and mate next), 23. RxP! (not 23. Q-Q3, BxKNP!, 24. Q-N6!, BxN, 25. BxB, QxB, 26. QxQ, PxQ, 27. B-K4ch, K-N1, 28. BxB, QR-Q1 after which Black certainly has nothing to fear), BxQ, White draws with 24. B-N1 ch, K-B2, 25. B-N6ch, K-N1, 26. B-R7ch, etc. Less exact would be 21. RxP?!, RxN!, 22. PxN, BxKNP 23. R-R2, PxP with a wild position which appears to favor

Black.

K) A blunder that should lose because now the attack on the rook file is gone.

L) Black returns the compliment and lands in an irrevocable loss. From the theoretical point of view this must be the worst move ever made by any version of the Northwestern U. program; it turns a sure win into a sure loss. From a practical point of view the situation is anything but easy. 21.-- PxP wins by force as White then has 3 pieces en prise and cannot begin to save them all. If 22. B-R7ch, KxB, 23. PxNch, KxP, 24. B-R6ch, K-N1, 25. R-Q1 (BxR, QxB leaves Black in complete control), BxN!!, 26. RxQ, QRxQ, 27. BxR, BxQ and wins. Less precise is 21.-- BxN, when 22. PxN!, BxQ, 23. PxR=Qch, BxQ, 24. B-R7ch!, K-B2, 25. KxB gives White many chances. After the text, Black is hopelessly lost.

M) This must have been what was not appreciated by 4.7. White's attack is now overwhelming and Black dare not capture any more material.

N) Winning the exchange and more; in effect, ending the game.

O) After all these hours of indecision about where to take up a royal residence! The rest is silence. It is interesting that two such search oriented programs, whose strong suit is obviously tactics should make so many tactical errors. The answer is in the fact that the outcomes of the various tactical forays were far from easy to evaluate in so far as mating threats and threats against material abounded even after a quiet move would end the quiescence search. Thus even 4.7, with its excellent judgement of positions, was fooled.

White - Blitz	Black - BELLE
1. P-K4 (P)	P-K4
2. N-KB3	N-QB3
3. N-B3	N-B3
4. B-N5	N-Q5
5. B-B4 (Q)	B-B4
6. NxP? (R)	Q-K2
7. BxP ch?? (S)	K-B1
8. N-N6 ch? (T)	PxN
9. B-B4	NxKP
10. O-O	RxP!! (U)
11. KxR (V)	Q-R5 ch
12. K-N1	N-KN6!! (W)
13. Q-R5	PXQ
14. PxN ch	N-B6!! mate

P) This is undoubtedly the most brilliant game of chess yet played by a computer. If Mikhail Tahl or Bobby Fischer had played it, the game record would undoubtedly be making the rounds of the chess journals right now. However, one must say that the competition from White in the early stages is very weak, to say the least.

Q) White is best advised to head for the draw with 5. NxN, PxN, 6. P-K5, PxN, 7. PxN, QxP (PxPch, 8. BxP is superior for White), 8. QPxP with a known drawn position. This is why White seldom plays 4. B-N5. As the game shows, Black is prepared for this variation with an opening book, and White is not. 5. B-R4 is also possible, but cedes Black the initiative for a pawn.

R) Not advisable. This pawn cannot be held and only furthers Black's development, but White is under the illusion that he is winning something.

S) This is already ruinous; the "attack" and "win" of pawns only loses pieces. However, after any knight retreat Black rapidly gains the upper hand with P-Q4 (a move that would not be possible if 5. B-R4 had been played. From now on it is all Black's show.

T) White probably thinks that after 8.-- PxN, 9. BxP will leave him with 3 pawns for the piece. But if he had looked a little further, he would find that R-R3 snares the bishop. This accounts for his change of heart on the next move.

U) A "stock" sacrifice which in this case has some beautiful points. Black must have been able to see 7 ply ahead (including detecting mate on the last ply) in order to make this move. Not bad for a machine!

V) If 11. NxN, Q-R5, 12. N-N3, QxN!!, 13. PxQ ch, N-B6 mate is even more beautiful.

W) The coup de gras! Now White can capture a piece giving check and threatening the queen, only to be mated on the next move. Very appealing to human eyes, but just good old search for Belle. Now, White delays the immediate mate one move. The two main lines are indeed very appealing.

COMMENTS ON RULES, RATINGS, AND TOURNAMENT PARTICIPATION

The following letters and proposals have been received from members on some of the issues involved in computer vs. human chess competition, computer vs. computer chess competition, computer rating systems, etc. They are published along with reports of the cognizant ICCA committees.

RATING PREFERRED TO HANDICAPPING: A PROPOSAL

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1979 October 19

1.0 PROPOSAL

It is recommended that the present system for rating human chess players (the Elo/USCF system) be adopted with minor changes for computer chess players. Rather than handicap players based on hardware characteristics, it is urged that computer players be allowed to change just as human players progress in their performance (although by different means).

To avoid confusion, it is further recommended that computer players be treated as individuals. Offspring of a computer player (clones and mutations) are treated as different individuals, competing and earning ratings separately. Progressive improvement of an individual is allowed, by whatever means, but introduction of a new 'version' involves usually - permanent withdrawal of any prior version from competition. If there has been a material (i.e., non-automatic) change to the player, involving substantive hardware or program change, it may be necessary to continue the prior rating as a provisional one until experience determines the new level. As further protection of comparability and the integrity of the rating system, it is necessary that a minimum percentage of rated games be against human opponents under official tournament conditions.

Finally, to avoid comparison difficulties, it is recommended that computer-only tournaments be conducted in the same manner as human tournaments and rated by the appropriate official body. Such tournaments will be eligible for rating only if a minimum proportion of the entrants possess non-provisional ratings. Computer players with established ratings in different jurisdictions will be accorded equivalent ratings in the usual manner.

It is the essence of this proposal that no attempt be made to maintain a separate rating system for computer players when performing under standard tournament conditions.

2.0 DISCUSSION

How should we rate computer programs used to play competitive chess? Against each other? Against human opponents? Should some form of handicapping be used to offset the effects of differing hardware, so that tournament results more truly reflect the quality of the algorithms rather than the speed of the machine? Do we know how to do that, or does attempting such a thing pre-judge what we think an ideal computer player is like well before we've found one?

The philosophy of this proposal is that the ultimate and final measure of computer chess play is the same as for humans: competitive tournament performance, mainly against human opposition. Existing rating systems admirably normalize tournament performance for the calibre of opposition faced, and this durable system is ideal for comparison of computer player success against the large pool of human chess competitors. Attempting to normalize computer programs in any other manner depends on the doubtful ability to factor out hardware differences that are poorly correlated with chess performance and easily masked by implementation approach. That large - scale, expensive systems seem to dominate current results tables is viewed here as neither inevitable nor particularly different than the situation in competitive human chess, even though the latter occurs in rather different ways. So long as human tournaments are not handicapped (although rating points effectively are), there is no justification for doing otherwise in computer play. The loss of performance comparability isn't worth it. (As the number of computer players increase, conduct of class tournaments can provide for broader competition in the same way now available for rated human competitions. This class system is urged as a better means of handicapping tournaments because it parallels the human system.)

In the sane world beyond computing, handicapping is based on observed, historical performance -- earned results -- not some analysis of vaguely correlated parameters. The player rating system for human players provides just such sound measurements. The only thing we need to assure for computer players is that we preserve the statistical validity of that system by not doing anything that can't happen with rated humans.

3.0 WHY ELO RATINGS ARE ENOUGH

At the moment, the ideal chess competitors are the World Championship class human players. Fortunately, there is a rating system, based on competitive performance alone, that reflects how well one is playing with respect to players of that (and any other) class. The Elo rating system is now used to rate competitive performance in North America and in international competition. These ratings are already used as a benchmark for computer chess performance, and there is every reason for that to continue. If, at some peculiar future time, computer players were to dominate master-level play, such ratings would continue to be of importance, then as now, as a mark for humans to strive for.

If our goal is to genuinely learn how well our chess programs are doing at competitive tournament chess, then there is nothing better than using the same rating system, based on competitive results alone, that has served so well for human players.

In short: The appealing measure of computer chess performance is one that permits comparison with human performance under the same competitive, tournament conditions. It is doubtful whether any other measure is so compelling. Employing the same performance rating system is therefore natural end to the point. The Elo system is well thought out and, more importantly, supported by an extensive data base of validating usage. We are better off linking with that experience base than coming up with some perhaps more elegant scheme that denies comparability with human experience. If improvements are really necessary, they should be promulgated in the human rating system, not used to place computer chess performance on a separate footing.

The principle suggested here is actually quite simple:

1. A new computer player enters competition as unrated. So long as enough competitors are rated, the new player will develop a continuously-adjusted performance rating after about 20 tournament games against human opponents. That rating will continue to change, especially if true player level has not yet been established. (Opponent ratings are not entirely accurate, merely statistics, so fluctuations will also occur due to the variance encountered in the rating scheme.) To maintain the validity of continued ratings, a minimum percentage of subsequent rated games must be against human opponents. This may have to be as high as 75% or higher, and results against computers should not be rated unless the opponent ratio is preserved.

2. When a mutation occurs, the mutated system is treated as a different new player. If the original had an established rating, it is quite appropriate to allow the earlier rating as the provisional initial rating of the mutation, except that the mutation enters competition as otherwise unrated.

3. When progression occurs by normal adjustment of the computer player without material change of hardware or program, there is no need to recognize occurence of a clone or mutant provided that the previous version is withdrawn from competition. If both are to remain in competition, the second must be registered as a separate individual, clone, but carries forward the rating experience of its precursor without the necessity of being unrated. The precursor continues in competition and receives further rating as a separate individual. (Note that cloning cannot occur in the course of a single event, since tournament results must be those of the same individual. Mutation is similarly barred.)

4. Now all we have to do is agree on the distinction between mutation, cloning, and progression. Basically, progressive computer players are permitted to be treated as single individuals encountered at different points in time, provided that the appearance of progressive versions in competition is also in progressive sequence. If some version is kept in competitive play, then its progressive successor is recognized as a clone, a new individual that, nevertheless, inherits the rating of its precursor at the start. A mutation is a more dramatic form of progression, requiring suspension of the prior rating and treatment as unrated although the prior rating may be used provisionally as a seed in the establishment of the new rating. Mutations may continue under the previous identity provided that the mutation is announced and, as before, the previous version is withdrawn from competition.

5. Until there is sufficient experience, it may be preferable to regard all but automatic progressions as mutations. Progression would then be limited to changes made to the computer player system by its own automatic actions based on experience (including coaching but not direct manual intervention on internal parameters of the player).

4.0 THE PLAYER IDENTITY ISSUE

The Elo/USCF rating system provides some attractive characteristics. Ratings apply to individual competitors, providing a sort of running average of a single player's tournament experience against rated opponents. With experience, player ratings change, improving or declining as time goes on. The present Elo rating scheme is relatively tolerant of this obvious characteristic of human players. There are also normalizing effects over time. That is, if the quality of tournament play changes in general (as it has been observed to do in the United States from time to time), ratings do not inflate but tend to hover over the same base. This seems to reflect the entry of new players as initially unrated performers, along with the exit of players who no longer choose competitive play. In the long run, the system reflects each player's performance in reasonable comparison with the world's current crop of best players (an elite group that is also observably better than in the past). The Elo rating is a statistic and extensive data exists for its derivation and validation. Because of the magnitude and variety of the Elo sample, there is presently no better discriminator among the chess - playing population.

Although the rating system accomodates change in player performance over time, predicting the standing of players among the pool of rated competitors, there are ways that chess programs threaten the stability of this scheme. That has to do with the fact that chess programs undergo episodic changes that can cause previously - earned ratings to be too unreliable as indicators of current playing level. The problem, then, is that the rating of computer opponents will be erroneously determined based on a mis-judged rating for the computer player. This problem can be alleviated if we treat the computer player that results from such change as only provisionally rated or unrated, since opponent ratings are not influenced by the outcome of play against the computer until a new, stable rating has once again been demonstrated.

Fearing that computer programs are subject to too much variability, the United States Chess Federation formulated stringent rules for when a computer system is to be viewed as a different player requiring separate rating. These restrictions are in fact too severe, not allowing programs to show as much progress as occurs regularly in the pool of human competitors. It is recommended here that determination of computer player "individuality" be modified to permit reasonable changes in the player but that a major change be treated as a mutated, separate offspring.

5.0 SOME EXAMPLES

It is worthwhile to see how some of these principles are applied in practice.

Chess Challenger is a well-known commercially-available chess player. For participation in chess competition, beside the usual rules, it is necessary to distinguish between versions of Challenger, not only from the standpoint of series model production but with regard to parameters used in the course of play. Each individual model of Chess Challenger has an externally-controlled "difficulty" level that is specified at the commencement of play. Consequently, each level for each model constitutes a different individual. In competition, the same level would have to be used in all games of the tournament and ratings would be developed separately for each individual. The concepts of cloning and mutation are inappropriate in these circumstances. If a future Chess Challenger model provided improved versions of previous levels of play, these could be treated as progressive mutations, although there would seem no pressing reason to do so. Note that these observations do not change the fact that only the originators of the Chess Challenger may register the player and participate in tournaments with it.

Consider a fictitious new product, "Chess Conquerer," that operates much like Chess Challenger except that, instead of "difficulty," the initial parameter consists of the time control that the player must adhere to. Under these conditions, there is only one player, since adaptation to conditions is now intrinsic to the player and not subject to arbitrary external variation. Subsequent models might contain improvements and then be registered as new individuals or as a progressive improvement, depending on the desire of the originators.

Now consider "Chess Overlord," a system like "Chess Conquerer" that also remembers material from played games, revising internal parameters in accordance with algorithms for that purpose. Here, each copy of the system is in fact a clone and a different individual, since the game experiences will be different. It is quite possible that several clones would be registered and entered in tournament play simply to obtain good statistical experience with provisions for experience - based adaptation.

Since the series of players culminating in Chess 4.7 has, as well as involving different programs, resided on different hardware configurations, it would be interesting to see how many different individuals have been entered in competition according to this view.

RULES FOR PLAY INVOLVING COMPUTERS

Proposal Submitted to the USCF by
Ken Thompson of Bell Telephone Labs

The following rules are for USCF-rated tournaments when one of the players (or both) is a computer. In matters not covered by these rules, play is governed by applicable human rules, as interpreted by the arbiter. In these rules, the term "computer" refers to a chess program running on a computer. The term "opponent" refers to the computer's opponent, human or computer. The term "operator" refers to the person running the computer.

The following rules shall govern play:

1. Before play begins, the operator shall do all initial setting up of the computer. At this time, the operator may freely specify any operational parameters, such as rate of play, suggested openings, value of a draw, etc. After play begins, the role of the operator is passive. As such, the operator is not allowed to alter any parameter settings during play that might alter the course of the game.

2. During play, the operator is to communicate the moves of the opponent to the computer.

3. The operator is to execute the computer's specified move on the playing chessboard. "Touch" rules do not strictly apply to the operator, although blatant cases may be violations of other rules.

4. After the computer's move is executed, the operator is to start the opponent's clock.

5. If, during play, different positions should arise on the playing chessboard and the computer's representation thereof, due to operator error, such differences shall be corrected with the assistance of the arbiter. The opponent may chose either to accept the playing chessboard as official or to retrace the moves to the point of departure. If the opponent choses to back up the game, then the arbiter shall readjust the clocks accordingly.

6. If, during play, the computer is unable to accept a legal move because of discrepancies, communication trouble, or computer trouble, then the operator may set up the current board position and status, along with clock times. Other parameters set must be the same as those in effect at the start of the game. The clocks are not stopped during the resetting of the computer.

7. The operator may communicate the clock times to the computer only if the computer initiates the request.

8. The operator may offer a draw, accept a draw, or resign on behalf of the computer. This may be done with or without computer consultation.

9. The operator may claim the game in cases where the opponent has exceeded his time limit.

10. The operator shall carry out the necessary adjournment formalities.

11. The operator and/or the computer must keep a score of the game. If the operator keeps the score on behalf of the computer, then the opponent may appoint a deputy to record his game score.

The following rules are for blitz (5 minute) chess when one of the players (or both) is a computer. In matters not covered by these rules, play is governed by applicable human and computer rules, as interpreted by the arbiter

1. The computer's clock is not official. The computer keeps its own time.

2. The computer is allowed 5 minutes for the game. This time is measured, by the computer, from the receipt of the opponent's move to the transmission of its own move. It is the responsibility of the operator to resign, on behalf of the computer, when the time limit has been exceeded.

3. The time taken by the operator in communicating moves to and from the computer is charged to neither player.

4. The computer is allowed no more than 60 moves to complete the game. It is the responsibility of the operator to resign, on behalf of the computer, when the move limit has been exceeded. A special dispensation is allowed if the computer announces a demonstrable mate on or before move 60.

5. The computer must keep a score of the game.

6. The opponent may inquire as to the time and number of moves used by the computer. The operator must supply this information to the operator.

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PROPOSAL ON COMPUTER CHESS GAME ANNOTATIONS*

Prof. John McCarthy

It has always bothered me that the scores of computer chess games are annotated just as though they were games between humans, and there were no way of determining what the program was thinking about. This is particularly bothersome when the sponsor of the contest is the ACM, which should be alert to opportunities to advance computer science.

Therefore, I would like to propose that it be a condition of entry to the ACM tournament in 1980 that programs have some minimal facilities for printing what they were thinking about. I don't have recent experience with chess programs, but I would like to suggest some facilities that we used in an ancient program for the game of Kalah. The program ran on a PDP-1 computer that had only 4096 18 bit words, so costly analysis features could not be used. I think these proposed facilities are well within the capability of any of the recent programmers of chess.

After each move the program printed the following:

1. The first two plies of the move tree examined.

2. From each end point of the first two plies, the subsequent principal variation to the maximum depth of search. (This was sometimes distorted by alpha-beta cutoffs).

3. At the end of each such variation, the value of the endpoint, also sometime distorted by cutoffs, and the amount of effort that went into the subtree. The effort was the number of positions examined, but only relative values are wanted, so any such measure, e.g. computer time would also be acceptable.

4. It would also be worthwhile to print the values of *alpha* and *beta* with which each of the variations was entered.

5. It would be further worthwhile if the programs stored the values of the parameters used to make each move, so that the move could be re-evaluated for the benefit of a commentator, who could, for example, ask whether a particular variation was considered.

The ACM might not require that this information be printed with the move although there would probably be time to print it while the opposing program was thinking about its next move.

In my opinion, imposing some such requirements on entries to the ACM tournament would raise the scientific level of the whole enterprise, would educate the public to the fact that we really do know something about how these things work and to the differences between human thought and current programs, and would lead to better programs by leading to more informed criticism of existing programs.

*Excerpt from letter to Prof. Monty Newborn

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79.07.24

Rules for Computer Chess Tournaments: An Open Letter to the Tournament Rules & Organization Committee of the International Computer Chess Association.

As you may know, I have long been an advocate of a change in the rules of chess in order that the "learning of innumerable lines" should be eradicated. This would be of even greater value in computer chess tournaments than in human tournaments because the storage of "the book" (such as Modern Chess Openings or the Encyclopedia of Chess Openings) gives an unfair advantage to the machine with the larger storage facilities. The basic objection to the storage of opening variations is that it has hardly any relevance to the logic of artificial intelligence.

Two methods of "eliminating the book" have been suggested, "Randomized Chess" and "Prechess". There is very little difference between them since, in both forms, the pieces on the first and eighth ranks are permuted in a random or partly random manner.

In randomized chess the white pieces are permuted randomly (except that, if the bishops land on squares of the same color, the bishop on the right is interchanged with the piece on its left) and then the black pieces are placed by "mirror reflection". There are 1440 essentially distinct opening positions.

In prechess the two players place their own pieces alternately so that they play an eight-move game before the ordinary game starts. A disadvantage of prechess over randomized chess is that it takes an additional eight moves and so tends to last longer. Also there is a danger of a "book" evolving on how to play the "pre" part of the game.

I appeal to the Tournament Rules & Organization Committee of the International Computer Chess Association to consider seriously the merit of "killing" the book.

I. J. Good

Should computers participate in USCF rated tournaments?

A personal opinion by David J. Slate.

Background:

Computer programs that play chess are becoming stronger and more numerous. The best of them play tournament chess at a 2000 rating level and speed chess (5-minute) at at least 2300. Since 1970, computers have competed against each other in special tournaments resembling those of USCF or FIDE. Time controls are similar. A human representative actually moves the pieces and punches the clock, but he obeys the decisions made by his computer and communicated typically through a tele-typewriter or the like.

Developing chess-programs can be part of serious research into the problems of making computers "behave" intelligently. It can also be a challenging and creative recreation. So the computer tournaments are both competitive sporting events and research evaluation tools. Since the best chess players are human, chess programmers are also eager to test their creations against human opposition. This can be done informally, of course, but the rating resulting from USCF tournament play is considered a more accurate performance measure.

Since the late 1960's, several computers have been allowed to participate in USCF tournaments. The most successful of these has been Northwestern University's program, which has played well enough to win some tournaments since it was coupled to Control Data Corporation's large Cyber 176 computer in 1976.

The Issue:

The computer has had a mixed reception by tournament players. To some, it is an exciting phenomenon that spices up the game. They welcome this new challenge to their abilities. Others view it as an alien interference with their source of enjoyment of tournament play - the struggle against flesh-and-blood adversaries. The opposing viewpoints have generated debate within USCF about the desirablility of allowing computers into tournaments. The controversy is likely to deepen as playing strength increases due to improved programs and faster computers.

I have a stake in this issue in three separate roles:
1. As co-author (with Larry Atkin) of the Northwestern University chess program (now Chess 4.7).
2. As a USCF member and sometimes tournament player (rating = 2013).
3. As a member of the external liaison committee of the International Computer Chess Association (ICCA), whose function includes generating discussion with USCF on this matter.

Since the function of the USCF is to serve the interests of the (human) chess playing community (particularly USCF members), then it needs to decide whether or not computer participation in rated events is of benefit to the human participants. I will summarize some of the pros and cons.

Pros:
1. The computer attracts spectators and publicity and tends to generate interest in the events it participates in.
2. The computer's sharp "style" often produces aesthetically pleasing games and so contributes positively to the quality of chess played at a tournament.
3. Many chess players would enjoy playing the computer, and tournaments offer a chance they wouldn't otherwise get.

Cons:
1. Computers are not legitimate tournament participants, because they violate the Laws of Chess. This point is advocated by Harold B. Dondis in the September 1979 Chess Life and Review.
2. Many chess players reasonably expect live opponents. The human nature of their adversaries is essential to their enjoyment of the game, and computers cannot substitute.
3. The proliferation and increasing strength of computers threatens to crowd out humans by competing for the prizes, distorting pairings, etc.
4. The computer worsens playing conditions by increasing noise and other distractions.

A Proposed Compromise Solution:

I propose that USCF adopt rules that permit limited participation of computers in tournaments while at the same time safeguarding the rights of human players and answering the cons listed above:
1. To play in tournaments, computers would have to be registered as USCF "members" by their sponsors (authors, owners, or whatever), so that each has an identity known to the national federation. USCF could establish whatever criteria of acceptability it desired for computer membership. Note that the problem of identity is non-trivial and involves the distinction between the chess playing program and the particular computer it is run on. For example, Chess 4.7 has a published rating based on its performance on CDC Cyber 176 computers. It has not always run on the same Cyber 176, but we have considered that fact unimportant, since the machines were nearly identical in their capabilities. However, if we were to transfer the same program to a slower computer, we would have to consider the new program/computer combination a separate entity, since it would not play as well. In addition, if Chess 4.7 were substantially modified, it would also have to be considered to be a new

Should computers participate in USCF rated tournaments?

entity, even if run on the same computer as before.
2. A tournament organizer could decide which, if any, computers would be invited to play in his tournament and also certain conditions of their entry, such as whether or not humans would be able to decline to be paired against them, and whether or not computers could win prizes.
3. A tournament organizer would have to warn prospective human entrants, in the ads for the event, of the possibility of computer participation. If computers were not explicitly mentioned, then they would be presumed not to be allowed in.
4. A tournament organizer who invites one or or more computers assumes the responsibility of arranging facilities and procedures so that each computer obeys the rules and doesn't cause excess noise or otherwise interferes with its opponents' play or with other games of the tournament.

I think that these guidelines effectively answer cons # 2, 3, and 4 listed above. The most important point is that it would be in the power of each organizer to control the extent of computer participation. Thus humans would retain the "upper hand" and the interests of human players could always be put first. Those organizers who didn't like computers, or didn't think they could handle the additional organizational details, or wished to cater only to players who didn't like computers, could just ignore the whole question. For those organizers willing to accomodate computers, a little advance planning can make computer participation work very smoothly. It would be mostly a matter of taste whether computers participated in a given tournament. Just as chess players now choose tournaments based on their formats: smoking vs no smoking, large prizes or small, class vs open, fast time control vs slow, etc., they will also be able to choose or reject tournaments which include computers.

Con # 1 requires a separate answer. It is important to the issue and is debated in the Sept. 1979 Chess Life and Review. The computer, which is a collection of electrically interconnected devices including its central processor, main memory, and auxiliary memory (such as disk), plays chess without access to advice from any external person, machine, written materials, or boards. Thus it conforms to the essential rules of tournament play that we hold humans to. The truth of this depends on our understanding of what is external and what is internal to the computer, and that is partly a matter of definition (we don't have the same problem with humans, fortunately!). However, the main and disk memories that usually hold the board representations to which Mr. Dondis (in Cl+R) objects are commonly considered part of the computer itself, and they are connected to it automatically and function together with the central processor as a single entity. Mr. Dondis believes that the computer, as so constituted, does not play

"fairly". He cites various advantages that the computer's "brain" and memories have over their human counterparts. He is perhaps correct in this matter. However, our motivation for allowing computers in human tournaments is not contingent on the notion of "fairness". Computers and humans are too different for the idea of fairness to have much meaning when applied to a contest between them. The real reason for permitting computers to participate is that they may contribute to the enjoyment of the tournament by the human players (and perhaps spectators). The ability of a computer to play competent, interesting, and perhaps instructive chess is remarkable, and a chance to play against it in a tournament would be welcomed by many players. As an aside I would like to comment on Mr. Dondis's assertion that computers would be seriously handicapped if deprived of their "encoded book of openings and endings". I think he overemphasizes the importance of this matter. Chess 4.7, for example, has no endings book, and plays well enough without it. Its openings book is of some use, but, ironically, the two games in which 4.7 was most successful in its 1978 match with David Levy were the ones which least utilized its book. In game 1, which it drew, it was out of book immediately, and in game 4, which it won, it played only two moves (e4 and Nf3) from its book and had to improvise its own response to Levy's Latvian Counter Gambit.

A comment about the future of computers in USCF tournaments:
Presently there are only a few computers that have played in rated tournaments. Except for the commercially available microprocessor programs, this situation will probably not change very much in the next several years, so individual programs entered in tournaments by their authors will increase in number but still remain a novelty. They will still constitute a very small percentage of rated players. As the better programs increase their strength to the master level and beyond, presumably they will be banned from all but perhaps very special tournaments and matches. The microprocessors pose another problem. Tournament organizers may have to guard against the phenomenom of thousands of Boris's or Chess Challengers entered in tournaments by their curious owners. Perhaps special tournaments might be set up to accommodate them.

In conclusion, I think that intelligent decisions by the USCF and tournament organizers can enable computers to make an interesting contribution to tournament play and still cater to the tastes of chess players who prefer only human opponents.

ICCA COMMITTEE REPORTS

The ICCA formed four committees with the following members:

Bylaws - Monroe Newborn, Kathe Spracklen

Tournament Rules and Organization - Tom Truscott, Fred Swarz, Michail Donskoy

External Liaison - David Levy, Barend Swets, Tony Marsland, David Slate

Computer Chess Rating System - Allan Gottlieb, David Cahlander

The reports of these committees follow. Written comments on these reports are solicited.

Bylaws Committee Report

The following is the formal draft of the Constitution and Bylaws for the ICCA. Items which were raised as questions at the ICCA meeting in Detroit are included in parentheses. Article VI, Section 2 and Article VIII, Section 1 are required in the bylaws to obtain tax-exempt status for our organization.

Written comments are solicited. After a reasonable period of time, a revised Constitution and Bylaws will be sent to all members for approval by mail ballot.

CONSTITUTION

Article I - Name

The name of this organization shall be the International Computer Chess Association.

Article II - Object

The organization is a non-profit group devoted to providing an international framework for activities in computer chess and encouraging advances in this field.

Article III - Qualification of Members

Members in the ICCA are individuals. Membership is open to anyone interested in pursuing the objectives of the organization as stated in Article II, who makes application and pays current dues.

Article IV - Officers and their Election

The elective officers, their terms, and their duties shall be as set forth in the By-Laws.

BY-LAWS

Article I - Membership

Section 1. General Membership. General Membership shall be as set forth in the Constitution.

Section 2. Honorary Membership. Honorary Membership may be awarded by vote at general meetings to any person who has especially aided the organization.

Article II - Meetings

Section 1. The World Championship and the Triennial Meeting. The ICCA will hold a World Computer Chess Championship every three (3) years. The first championship to be held under ICCA auspices will be in 1980. The Triennial Meeting will take place during and at the site of the World Championship.

Section 2. Other Meetings. Other meetings of the ICCA may be called from time to time to be held concurrent with and at the site of major international computer chess tournaments.

Section 3. Quorum. A quorum at the Triennial Meeting will consist of at least twenty (20) members.

Article III - Officers

Section 1. Elective Officers. The elective officers of the organization shall consist of a President, Vice-President and Secretary-Treasurer. They shall constitute the Executive Committee of the organization and shall be charged with the administrative affairs of the ICCA.

Section 2. Elections. Elections for the members of the Executive Committee will be held at each Triennial Meeting, with elected officers taking on their duties at the end of that meeting. Nominations are to be made by petition no later than three (3) months before the elections. The ICCA Newsletter will announce the candidates at least two (2) months before the election. At least five (5) member signatures are required on each nominating petition. (Discussion suggested a lower number than five.) All candidates for election must have been members of the ICCA for no less than two (2) years. (Requirements of one year membership were discussed.) Officers are elected by a majority of those present and voting, via secret, written ballot. Runoffs will be held if no candidate receives a simple majority. The candidate with the least votes will be eliminated from the ballot for each runoff, until one candidate receives the simple majority.

Section 3. Terms of Office. All members of the Executive Committee serve for a three year term.

Section 4. Executive Committee. The Executive Committee shall be presided over by the President.

Article IV - Standing Committees

Section 1. Chairmen. Committee Chairmen are appointed for a three year term by the Executive Committee.

Section 2. Standing Committees. Standing Committees shall be the Publications Board, the Ranking Committee, the Tournament Organizing Committee, the Sanctioning Committee, the Program Rights Committee, the Standards Committee, and the Liaison Committee. (Discussion suggested a separate Rules Committee, a combination of the Program Rights Committee and Standards Committee into a single committee, and the inclusion of a Publicity Committee.)

Section 3. Publications Board. The Publications Board will encourage the publication of technical and non-technical works on the subject of computer chess. The official publication of the ICCA shall be the ICCA Newsletter.

Section 4. Ranking Committee. The Ranking Committee will establish a rating or ranking system for programs and will rank and rate active programs.

Section 5. Tournament Organizing Committee. The Tournament Organizing Committee will assist local organizers to the degree necessary with ICCA-sanctioned events. This committee will organize the World Championship (see Article II, Section 1 of the By-Laws).

Section 6. Sanctioning Committee. The Sanctioning Committee will give formal ICCA recognition to appropriate events. It will also decide on the time and place of the World Championship subject to Article II, Section 1 of the By-Laws.

Section 7. Program Rights Committee. The Program Rights Committee will decide on matters related to the rights of an individual to use a given program in ICCA-sanctioned events.

Section 8. Standards Committee. The Standards Committee will look into the problem of developing program input/output to facilitate the automation of computer chess match play.

Section 9. Liaison Committee. The Liaison Committee will seek to establish appropriate ties with other organizations. Any formal ties must be voted upon at the Triennial Meeting (see Article II, Section 1 of the By-Laws).

Article V - Council

Section 1. Council Membership. The governing body of the ICCA shall be the Council. The Council shall consist of the President, Vice-President, Secretary-Treasurer and the Chairmen of the Standing Committees.

Section 2. Council Organization. The Council shall be presided over by the President.

Article VI - Dues and Finances

Section 1. Annual Dues. Dues will be ten dollars ($10.00) in United States currency per year payable in advance. Dues are collected during the month of July.

Section 2. Disposition of Funds. No part of the net earnings of the ICCA shall ever inure to or for the benefit of or be distributed to its members, officers or private persons, except that the ICCA shall be empowered to pay reasonable compensation for services rendered, and to make payments and distributions in furtherance of the exempt purposes for which it was founded.

Article VII - Amendment of the By-Laws

Section 1. Presentation. A request for changes to the By-Laws must be made by written petition of at least five (5) members. Petitions must be made no later than three (3) months before the elections. The ICCA Newsletter will announce the proposed amendments at least two (2) months before the elections.

Section 2. Voting on Proposed Amendments. Proposed amendments to the By-Laws will become a part of the ballot which includes those running for elected offices. All procedures for voting such a change are the same as for electing officers, except that two-thirds of the members voting and present must support the change.

Article VIII - Dissolution

Section 1. Dissolution of the ICCA. Upon winding up and dissolution of the ICCA, after paying or adequately providing for the debts and obligations of this organization, the remaining assets shall be distributed to a non-profit fund, foundation, or corporation whose purposes are consistent with the Object of this organization.

Computer Science Department
Duke University
Durham, N.C. 27706
(919) 684-3048

November 28, 1979

Prof. Ben Mittman
Director, Vogelback Computing Center
Northwestern University
2129 Sheridan Road
Evanston, Illinois 60201

Dear Ben,

Enclosed is the long lost Rules Committee Report. I hope it arrives in time to be sent out in the next ICCA newsletter. It was prepared primarily by myself, with input from Fred Swartz. Unfortunately, Michail Donskoy was not contacted. Now, however, he will be able to make more specific suggestions.

It falls short of my original expectations in several ways. It makes no profound statement on the function of rules in advancing the activities of the ICCA, nor is there even discussion of why these particular rules were chosen. On the other hand, it is less complex as a result. Hopefully, the ICCA community will provide additions, clarifications, total rewrites, and so forth.

Sincerely Yours,

Tom Truscott

Tom Truscott

TRT/unix

cc: Fred Swartz
Michail Donskoy

Rules Committee Report

members

Tom Truscott
Fred Swartz
Michail Donskoy

The "Rules and Guidelines" which follow attempt to define appropriate procedures for ICCA-sponsored events. Such events will in most cases be "conventional computer chess tournaments", by which is meant computer chess tournaments with rules similar to those for the North American Computer Chess Championships. Such events attempt to follow the human rules for chess competition as closely as possible. The rules formulated for these tournaments by Monroe Newborn, Ben Mittman, and David Levy are followed closely in this offering. A more detailed set of rules proposed by Ken Thompson has also been used extensively.

There will probably be unconventional computer chess tournaments sanctioned by the ICCA; however, it is difficult to formulate rules for such events in advance. It is hoped the following rules and guidelines will provide a framework for rules for other events. Specific proposals for unconventional computer chess tournaments have not been considered here. The ICCA community should debate the merits of the several proposals, and help determine whether such tournaments should be held. The Rules Committee will not take a position on these proposals, but will instead concentrate on their implementation.

Rules Committee

Purpose: The Rules Committee of the ICCA has as its purpose the formulation of rules and guidelines for ICCA-sanctioned events. The purpose of the rules and guidelines is to assure a high standard for these events.

Rules and Guidelines

All aspects of an event are the responsibility of the event organizers and are subject to approval by the Tournament Organizing Committee. The ICCA Tournament Organizing Committee may provide additional rules and guidelines to govern ICCA-sanctioned events.

Rules cannot cover all situations, and in some situations the applicable rules may be inappropriate. In such situations, a decision should be made which attempts to follow the intent of the rules, and a report of the situation should be submitted to the Rules Committee.

1. Event Organization

A requests for ICCA-sanctioning of an event must be made to the Tournament organization committee.

2. Selection of Event Participants

Criteria for the selection of event participants should be available on or before the date applications for the event are accepted.

For conventional computer chess tournaments, the following rules are in effect:

1. The computer may not employ any living component for the purpose of selecting a move. The operator(s) at the tournament site is not considered to be a component of the computer. If the computer does contain a living component (such as for unusual communications procedures), the arrangement must be approved by the tournament organizers prior to the first round of the tournament.

2. The computer may employ any non-living components.

3. The application for a computer entry must be submitted by an implementer of the computer (chess program). No implementer may submit an application for the computer. An objection by any implementer of the computer voids the application.

4. A program listing or other detailed description of the computer (possibly verbal) should be available on demand.

3. Event Procedures

Event procedures (e.g. rate of play, adjudication procedure, tie break rules) should be available on or before the date applications for the event are accepted.

For conventional computer chess tournaments: Unless otherwise specified, the rules are identical to those for "regular" human tournaments. If a point is in question, the arbiter (tournament director) has the authority to make the final decision.

For tournament games, the following rules are in effect:

1. Before play begins, the operator shall do all initial setting up of the computer. At this time, the operator may freely specify any operational parameters, such as rate of play, suggested openings, value of a draw, etc. After

play begins, the role of the operator is passive. As such, the operator is not allowed to alter any parameter settings during play that might alter the course of the game. The arbiter must give permission for non-routine communication by the operator.

During play, the operator is to communicate the moves of the opponent to the computer. This may not be necessary if the moves can be directly sensed by the computer.

3. The operator is to execute the computer's specified move on the playing chessboard. This may not be necessary if special apparatus is available which allows the computer to move the chessmen. "Touch" rules do not strictly apply to the operator.

4. After the computer's move is executed, the operator is to start the opponent's clock. Again, this may not be necessary if the computer has direct access to the clock.

5. A well-defined procedure must be used for communication of moves between the computer and the operator. The arbiter must give permission to change the communication procedure (see rule 7).

6. If, during play, different positions should arise on the playing chessboard and the computer's representation thereof, due to operator error, such differences shall be corrected with the assistance of the arbiter. The opponent may chose either to accept the playing chessboard as official or to retrace the moves to the point of departure. If the opponent choses to back up the game, then the arbiter shall readjust the clocks accordingly.

7. If, during play, the computer is unable to accept a legal move because of discrepancies, communication trouble, or computer trouble, then with permission from the arbiter, the operator may set up the current board position and status, along with clock times. Other parameters set must be the same as those in effect at the start of the game.

8. If the operator encounters technical difficulties (e.g. input-output device failure) which are local to the tournament site and for which the event organizers are responsible, then the clock for that computer will be stopped until the problem is solved. Other difficulties, such as computer failure or non-local communication failure, are not covered by this rule.

9. If an operator encounters technical difficulties not covered by rule 8, prior to the first move by the computer, then the arbiter may permit the clock to be stopped until the problem is solved, but not to exceed 20 minutes.

10. If an operator encounters technical difficulties not covered by rule 8, during the course of the game, then the arbiter may permit them to stop their clock until the problem is solved, but not to exceed 20 minutes. The arbiter may grant an operator to stop their clock at most two times during the course of a game.

11. The operator may communicate the clock times to the computer only if the computer initiates the request.

12. The operator may offer a draw, accept a draw, or resign on behalf of the computer. This may be done with or without computer consultation.

13. The operator may claim the game in cases where the opponent has exceeded his time limit.

14. The operator shall carry out the necessary adjournment formalities.

15. The operator and/or the computer must keep a score of the game.

External Liaison Committee Report

Informal discussions have been held with FIDE, the International Chess Federation, concerning possible affiliations with this world chess body. In the past FIDE has sanctioned both of the World Computer Chess Championships, but this was before the existence of ICCA. One type of affiliation with FIDE, which seems very attractive, would be similar to that enjoyed by the International Correspondence Chess Federation. ICCF-run championships are sanctioned by FIDE, but the organization and running of the tournaments, as well as rating, are the responsibility of ICCF.

Before the ICCA can apply for any type of affiliation with FIDE, it must have a set of approved statutes. Therefore, the next step is to formalize ICCA's structure before additional contacts are made with FIDE.

Elsewhere in this Newsletter is a report on the establishment of the ACM Computer Chess Committee. No official connection currently exists between ICCA and ACM (although all the members of the ACM Committee are also ICCA members).

Several members of the ICCA have participated in the past in advising the U. S. Chess Federation about computer participation in USCF-sanctioned tournaments. However, no formal ICCA contacts have been made there either.

Future issues of the Newsletter will report on these and other external contacts.

Computer Chess Rating Committee Report

After speaking to several ICCA members at our meeting during ACM'79, I have concluded that my proposal can be quite simple.

1. Adopt the ELO system as used by the USCF.

2. Any program with a current USCF rating is initially given an identical ICCA rating. The initial ICCA rating for other programs is calculated the same way the USCF calculates initial ratings.

3. If an ICCA rated program participates in a USCF tournament, those results are counted toward the ICCA rating. If an opponent has just a USCF rating, that rating is used. If an opponent has both USCF and ICCA ratings, the latter is used.

Since the USCF will probably not have an analogue to my third rule, ICCA and USCF ratings will not be identical. Apparently this is not terribly serious since currently USCF ratings do not exactly agree with international ratings. The purpose of rule 3 is to try to keep ICCA ratings "close" to those of the USCF.

Allan Gottlieb, Chairman

ICCA APPLICATION FORM

Dues for 9/1/79 to 8/31/80: $10.00 (U.S.)

Enclosed is a ☐ check (U.S. only) made out to ICCA
or ☐ international money order

Name:_____

Address:_____

City:_____

State or Province:_____ Zip Code:_____

Country:_____

I would like to receive the previous issues of the Newsletter - $2.00 for a set of :
Please mail to: Yes_____ No _____

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