

## ICCA Newsletter

Vol. 3 No. 3
November 1980
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## EDITORIAL

Computer chess has come of age!
The ICCA has been officially launched, with an approved constitution and bylaws and a set of elected officers; the 3rd World Computer Chess Championship was held in Linz, Austria and produced a new world champion; the Association for Computing Machinery began its second decade of support of the North American Computer Chess Championship; several microchess events have been held and more are scheduled; ICCA is moving toward closer affiliation with FIDE, the World Chess Federation; and the first Fredkin Prize incentive award was split between the human and computer opponents. These and other computer chess activities are reported in this final ICCA Newsletter of 1980 .

1981 will see even greater growth of interest in computer chess. Enclosed is the ICCA membership renewal form for current members whose membership expires in December 1980 (totaling just under 400 at the present time). Dues for 1981 will continue at $\$ 10.00$ per year. A set of reprints of all previous Newsletters can be purchased for $\$ 5.00$. To renew or to apply for membersinip,

Editor: B. Mittman<br>Editorial Asst.: J. Cesal<br>Northwestern University<br>Evanston, Illinois 60201, USA

or to request reprints, write to:
Ken Thompson
Bell Telephone Labs
Room 2C423
Murray Hill, New Jersey
07974 , USA

During the ICCA Triennial Meeting in Linz on September 28, Monty Newborn suggested that the name of our publication be changed from Newsletter to Bulletin to encourage more serious and scholarly publication. As Editor of the Newsletter, I feel that such a change would be beneficial, but I do not believe that a mere name change will accomplish the desired effect. Therefore, I shall encourage the yet-to-be named chairman of the Publications Committee to make recommendations concerning the content and form of our Newsletter and to set up an editorial board to improve the quality and extend the scope of this publication.

Other ICCA committees specified in the bylaws are to be formed during the coming year. They are listed elsewhere in this Newsletter. I want to encourage as

## EDITORIAL (cont'd)

many members as possible to become involved in the business of the Association. Joining a committee and working is a way to do that. please send me a letter indicating your interest in one (or more) of the committees so that we can begin forming them without delay. We have also added a check list to the membership renewal form where you can express your interest in working with ICCA.

We congratulate Ken Thompson and Joe Condon for their double victory this year. Read on and enjoy the excitement of the 1980 computer chess events!

## B. Mittman Editor

## The Pfleger "Turing Test"

With the last Newsletter, we sent a letter from Frederic Friedel and Albrecht Fölsing telling about a simultaneous exhibition in which German International Grandmaster Dr. Helmut Pfleger played 26 opponents, among whom were "hidden" three computers. Five game scores from that exhibition accompanied the letter, along with the question: Which game was played by a computer? Don't feel bad if you couldn't guess which was the computer, since Dr. Pfleger could not tell either. He was astounded to learn that Game Number One was played from moves made in Murray Hill, New Jersey, transmitted over the telephone to Hamburg, and relayed to the player at the board. BELLE, developed by Ken Thompson and Joe Condon, produced one of the two losses for Dr. Pfleger in Hamburg: A letter from Messrs. Friedel and Fölsing follows on page 3.

## - The Fredkin Prize Incentive Competitions

The first computer chess incentive competition sponsored by the Fredkin Foundation was held at Stanford University in August. CHESS 4.9, developed by David Slate of Northwestern University, Larry Atkin, formerly of Northwestern, and David Cahlander of Control Data Corporation, played a two-game match against Paul Benjamin of New York. Both the program and Benjamin have low expert chess ratings. Benjamin won the first game, which he played conservatively, preventing the computer from opening lines of attack. In the second game, he chose to play aggressively and before long, CHESS 4.9 developed a decisive attack which forced Benjamin to resign after 35 moves. The authors of CHESS 4.9 and Benjamin split the $\$ 1500$ incentive prize.

The next Fredkin competition is scheduled to be held between BELLE and another player of expert rating at Carnegie-Mellon University in November. BELLE and CHAOS, the first and second place finishers in the Linz tournament, will play in the 1981 incentive competitions. The eventual goal of the Fredkin Prize is to award $\$ 100,000$ to the first computer program to defeat the world chess champion in a match. Details of the competition were published in the July 1980 ICCA Newsletter.

An English Language Bibliography of Computer Chess

Prof. Tony Marsland's excellent bibliography of computer chess is available to ICCA members for $\$ 2.00$ (for postage and handling) by writing to:

The Librarian Computing Science Dept. University of Alberta Edmonton, Alberta T6G 2Hl, Canada


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ear chess friends.
many thanks for the numerous replles to our computer chess test. Ol the five games we published the first one - the game or. Pileger lost. was played by a computer. He used the American programme BiLLE (Ken thompson and Joe Condon), the new version of which was just two days old when it participated in our test. It ran at "only" 30,000 nodes/sek (vs. 180,000 today) and we insisted on BELLE's making a move every time pfleger approached the board. BELLE had an average of 2 minutes per move and well under a minute " the endgame. In spite of this it played a very pretty game that delighted all participants.
llie replics we received to our test were most llluminating. llifie was a basic tendency for computer experts to plek the right gane and for good chess players to guess wrong. The latter were obviously looking for decisive blunders that should betray a compuler whereas the former used exactly these blunders to identify the numans! lnspite of the astonishing elegance of the first game it was their only choice since the other four contalned short-term blundets that "no decent computer would commit"

There were of course exceptlons. Dr. Hans Berliner of filtshurgh chose (os did victor kortschnoi and inany others) game 4. And the ll-year-old Russian chess genius Garry Kasparov picked the right gaine after reading the five gamescores simultaneously during in diner party.

One ef the lest replies came from Dr Laszlb llndner from Budapest. Dr Lindner wrote:
"The experidient was most interesting. The fact that it was not at all easy to a:iswer ... shows that computers are indeed on the way to becoming masters. After playing over the games 1 found It impossible to decide so 1 had to employ an elimination process....

In game 2 black plays a strange opening. Strange, too, 18. -Sus which does not protect the attacked pawn. A computer would probably have played re6. 30. - Td6: is a decisive mistake,

Nr. 3 was played uy a weak player. 19. -Dc8i? is a blunder no goud computer would make.

In game 4 black uverlooks (2.8. - Oc5:+) the queen, A human may well do this, but a computer?

In game 5 the move 13. -fg3: is more natural than Sd5:, 23, - Dd6. Instead of gh6: is also hardly a computer move.

What about game 17 White played strategically well but black could always equalize. In the endgame white was theoretically ahead,.. but with the beautiful tactical combinations 52. -esili 5月. -Lhllif 63. -Tgill 67. -hal black turns the game around and wins. I can well Imagine that these tactical combinations could be found by a computer a If this is genuinely the case, my congratulations for the computer!"

Six weeks after our test belle won the 3rd Computer Chess World Championship in Linz, Austria.

He hape you enjoyed our test.

> Yours sincerely,
> F. Frienlel
> (fredcric A. friedel) (álóréchi fölsiny)

## Computer Chess Tournament Results

Ken Thompson of Bell Telephone Laboratories has supplied us with game scores and cross tables for three recent tournaments: the 3rd World Computer Chess Championship in Linz, Austria, ACM's llth North American Computer Chess Championship in Nashville, Tennessee, and a Microcomputer Chess Championship in San Jose, California. These results were produced from Ken's data base of computer chess tournaments using an automatic typesetting machine at Bell Labs. In order to minimize confusion among the names of commercially available microcomputer chess machines and corresponding experimental versions which might eventually be marketed, Ken adopted the convention of adding an "X" to the commercial name when an experimental version of a commercial machine was entered in a tournament. Thus, "Challenger $X$ ' and "Boris $X$ " appear in the cross tables, referring to Chess Challenger Experimental and Boris Experimental. We greatly appreciate Ken's efforts in producing these invaluable records of major computer chess championships.

## Microchess Tournament in Paris

The French magazine L'ORDINATEUR INDIVIDUEL is sponsoring a microcomputer chess tournament to be held in Paris in late May or early June of 1981. Mr. Pierre Nolot has requested ICCA recognition for this tournament. We have informed him that one of the newly formed committees of ICCA will be considering questions of sanctioning and sponsoring tournaments. However, in the meantime, we are pleased to recognize their tournament and to publish results when they become available. For further information about the tournament, please (see next column)

## New USCF Registration Rules

On September 16, 1980, the United States Chess Federation issued new rules concerning the participation of computers in USCF-rated tournaments. These rules are reproduced on page 5. Ken Thompson of Bell Telephone Laboratories sent us the following communication:
"Attached are letters to registered computer chess programs from the USCF stating the new registration rules. I would like to voice my objections to certain parts of these rules.

1) The registration fee is $\$ 30$ while regular membership is $\$ 20$. It's no big deal, but I guess I object to the discrimination.
2) Although not stated, computer registrants do not receive Chess Life. The only excuse for this that I could obtain from USCF headquarters was the tongue-in-cheek "Computers can't read."
3) I object to the rules concerning prizes. First, computers should be able to win prizes. If they pay entry fees, they should be able to compete for prizes. Second, the option of returning prizes to the organizers or to special organizations such as ACF or ICCA should be an option. Computers should be able to compete freely for trophies and/or titles. The USCF is treading very heavily on the Tournament Directors' turf with these rules."
contact:
M. Pierre Nolot

Appt. 3181
130 Boulevard Massena
75013 Paris, France
Telephone: 5842458

## UNITEII STATES CIIESS FEIJEIIATION

## united states chess fenenation

180 ROUTE $9 W$ - NEW WINDSOR. NEW YOAK RSSO
PHONE 1914) 562 -8350

## Computers In USCF-Rated Tournaments

September 16, 1980

Dear Computer Owner,
As you may have heard already, the USCF Doard of Delegates decided to continue to allow chess-playing machines to comprevailed in 1979-80.
The rejulations are enclosed. You will note that only proyram authors or sponsors may register machlnes and that latter point anticipates problems of hardware/software identity that may arise in the future. Also, individual tourna ments may liave restrictions of one sort or another, so you should check to

Thank youl for participating in inst year's experiment if you quallify under the new regulations, we hope you will con tinue to compete in tournaments for our mutual benefit and enjoyment.
sincerely

c.Jo: rlkm

Fincl.

At their August 1980 meeting, the USCF Delegates adopted a series of regulations governing the participation of chess-playing
computers ir USCF-rated tournaments:

1. Computers may participate in USCF-rated tournaments only if registered In advance with the USCF office at a foe of $s$ jo per year. These computers are not consldered membera of the USCF.
2. Computers may be registered only by program authors or sponsors. Specific identification and regiatration pro cedures shall be determined adminlstratively.
3. An event in which computers will (or may) participate must be so dosinnated ather advance uritton publlalty
4. An organdzer is under no obllgation to accept the entry of any particular computer
5. By playing in a tournament meeting the above criteria, player agrees to play the computor if palrod. llowevar, a player may indicato before the start of the evant that
or ahe prefers not to play the computar and tournament directors will attempt to avoid such pilirings until such time that places or prizes appear to be directly affected by the results of particular games.
6. Computers may win only prizos speciflicaliy designated for them. Other prizns shali bo distributed as though computer were not entered.

Any questions nbout thene regulations should ba addronsed

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ICCA Holds its First Triennial Meeting in Linz
The ICCA held its First Triennial Meeting in Linz, Austria on Sunday, September 28, 1980, during the 3rd World Computer Chess Championship. Some 50 ICCA members were in attendance. David Levy presided over the meeting. He first announced that the proposed Constitution and Bylaws, dated June 1980, had been approved by mail ballot. The next order of business was the election of officers. One nominating petition had been received for each position, and since there were no additional nominations, the following officers were elected:

Benjamin Mittman, President<br>Monroe Newborn, Vice President<br>Kenneth Thompson, Secretary/Treasurer

They were to take office at the conclusion of the First Triennial Meeting and would then serve for a three-year term, until the next triennial meeting.

## Comittee reports followed:

Monty Newborn reported that the Bylaws Committee, made up of Kathe Spracklen and Newborn, completed its work with the writing and subsequent ratification of the Constitution and Bylaws.

Tom Truscott, chairman of the Tournament Rules and Organization Coumittee, made up of Fred Swartz, Michail Donskoy, and Truscott, reported that the rules governing the 3rd World Computer Chess Championship were those developed by his committee and then modified by agreement of the participants during their pretournament meeting held on Wednesday, September 24, at 5 P.M. The major modification to the original set of rules involved adjudication. It was decided that a specific time for adjudication would be agreed upon before each game (to take into account such things as scheduled loss of a remote computer), and that the adjudication decision would be made solely on the basis of the chess position at the time of adjudication. (A general discussion on adjudication was held later in the meeting.) After Linz, the work of the Rules Committee would be transferred to one of the newly formed standing committees.

Several reports were made by members of the External Liaison Committee. David Levy reported that excellent contacts had been made with FIDE. Fridrik Olafsson, President of FIDE, and his wife were invited as special guests to the 3rd World Computer Chess Championship. Mr. Olafsson suggested that the ICCA develop a similar agreement with FIDE as now exists between FIDE and the International Correspondence Chess Federation (ICCF). In that agreement the organizations declare their conviction that a close collaboration in the common interest of development and promotion of chess is useful, and for that purpose they join as partners in an association in which each partner remains legally, economically and technically independent.*
$\star$ After Linz, B. Mittman prepared a draft agreement which parallels the ICCF agreement and sent it to Mr. Olafsson for consideration. If agreed to by FIDE, the agreement will be submitted to the ICCA membership for approval.

Estintinnial Meeting (continued):-
ne additional idea, which was put forth, was the exciting possibility of sending our international team of chess programs to the Chess Olympiad in 1982. This will also be discussed with FIDE

David Slate reported that a computer chess committee had been formed by the U. S. Chess Federation (USCF). "Slate is a member of that committee. Ken Thompsion also reported that USCF has issued new rules concerning registration of chess programs (see page 4).

Tony Marsland has made contact with the International Federation for Information Processing (IFIP). It appears that no formal affiliation is possible with IFIP since it is a federation of national computer societies. However, many of the ICCA members present felt that the triennial IFIP conference is an excellent site for the world computer chess championships if appropriate funding can be obtained (which was not the case in 1980). Prof. Marsland has written to the IFIP Secretariat to explore the possibility of resuming the world championship at IFIP'83.

The final liaison report was made by Monty Newborn. He is chairman of the Computer Chess Committee of the Association for Computing Machinery (ACM). ACM sponsors the annual North American Computer Chess Championship. Close contact is being maintained with ACM, since every member of Monty's committee (Kathe Spracklen, Tony Marsland, Ken Thompson, and Ben Mittman) is also a member of ICCA.

No report was available from the Computer Chess Rating Committee, chaired by Allan Gottlieb.

The above committees are no longer in existence since their functions will be taken over by the standing committees which are specified in the new Bylaws: Publications and Publicity, Ranking, Tournament Organizing, Sanctioning, Program Rights and Standards, and Liaison. Members are urged to indicate their willingness to work on these committees by marking their choices on the 1981 membership renewal forms which are enclosed with this Newsletter. These committees will be named in early 1981.

Another issue which generated considerable discussion was the participation of commercial entries and the potential conflict of such participation with the rule which requires possible presentation to the tournament director of a program listing. It was pointed out that the scientific value of the tournaments could be diminished if secrecy were the rule. This issue will have to be considered seriously for future tournaments as more and more commercial interests enter the computer chess world.

Finally, the ICCA adopted a resolution thanking the City of Linz for its generous support of the 3rd World Computer Chess Championship and for its outstanding hospitality during the tournament.

Minutes prepared by B. Mittman

## CORRECTION

In the July Newsletter an unfortunate error appeared in the results of the Man-Machine Othello Tournament which was held at Northwestern University on June 19, 1980. The program listed as 6 th by Paul Rosenbloom and Hans Berliner of Carnegie-Mellon University should have been listed as Sth with a score of 3-3-1 (W-L-T). The program of Levy, Reeve and Stean, London, should have been 6th with a score of 3-4-0. Sorry!

Stockholm Micro 1980
The 2nd annual chess tournament for microcomputers is to be held at the Schackhuset, Hornsgatan, Stockholm, Sweden, December 16-18, 1980.

Organizing Committee: Sven-Gunnar Samuelsson (International Chess Master)
Johan Enroth
U1f Rathsman
The tournament is played under the recognition of the ICCA and FIDE.

The closing date for entries is November 30, 1980, although entries may be accepted after that date at the discretion of the organizing committee.

All entries and queries regarding the tournament should be addressed to:

Stockholm Micro 1980
Johan Enroth
Box 96
S-16212 văllingby, Sweden


## ICCA Computer Chess Archive

In order to ensure that an historical record can be kept, the ICCA will try to maintain an archive of source code, object code, and/or documentation of chess programs. If accepted by the Archive, the materials will be preserved under the conditions specified by the authors. However, the intended long-term goal of the archive is to make the materials available to the computer chess community. For large-machine programs, the storage medium will be 9-track magnetic tape. For microcomputer systems, the programs will be preserved in whatever form the authors can supply, e.g., floppy disk.

The following programs have been already stored in the Archive:

BLITZ'79, DUCHESS'79, KAISSA'79, OSTRICH'79, CHAOS'76, CHUTE'76, ETAOIN SHRDLU'76, TREEFROG'76, WITA'76, BELLE'75, COKO'74, and SCHACH' 72.

Copies of your archival material should be sent to:

Prof. T. A. Marsland Computing Science Dept. University of Alberta Edmonton, Alberta
T6G 2H1, Canada
Prof. Marsland will provide periodic reports on the ICCA Archive in the News letter.


# 3rd WORLD EDMPUTER CHESS CHATMPIDISHIP 

Linz, Austria. September 25th - 29th 1980

Report by D. Levy, London, England<br>B. Mittman, Northwestern University, Evanston, IL, USA<br>M. Newborn, McGill University, Montreal, Quebec, Canada

## BELLE is the New World Champion

A new world champion was crowned in Linz, Austria on September 29, 1980 at the 3rd World Computer Chess Championship. BELLE, written (and built) by Kenneth Thompson and Joseph Condon of Bell Telephone Labs in Murray Hill, New Jersey, won the tournament in an exciting playoff game against CHAOS on the fifth day of the tournament. BELLE was run on a newly constructed chess machine tied to a DEC LSI-1l at Bell Labs. CHAOS of the University of Michigan, written by Fred Swartz, Mike Alexander, Jack $0^{\prime}$ Keefe, and Victor Berman, was run on an Amdahl 470 in Sunnyvale, California. Third place went to DUCHESS of Duke University, written by Tom Truscott, Bruce Wright, and Eric Jensen. They also competed on an Amdahl located at the Triangle Universities Computing Center in North Carolina. A list of participants and their computers appear in Table 1 ; the complete results of the tournament appear on pages 16-19.

As can be seen from the results and from the game descriptions which follow, there were some surprises, and also a good deal of excellent chess and excitement. The two former world champions, CHESS 4.9 of Northwestern University in Evanston, Illinois (Toronto, 1977) and KAISSA of the Institute for System Science in Moscow (Stockholm, 1974), won only two and one-half and two points, respectively. Other features of the tournament were the fine play shown by several microcomputers and the introduction of special purpose chess hardware.

Support for the tournament was provided by the City of Linz after it became clear that insufficient funds would be made available to hold the tournament as originally planned in Melbourne, Australia as part of IFIP 80, the world computer congress of the International Federation for Information Processing. The Championship was held instead as part of finz's annual Bruckner Festival and was presented as one of the special
events in the Ars Electronica activities which included seminars on electronics and the arts, computer music, and a microcomputer chess exhibition. In keeping with the Ars Electronica theme, the Linz organizers had a unique first prize designed and built by their college for artistic and industrial design. We quote from the presentation document:
'The prize consists of an aluminum cube, its top surface made up of a three-dimensional chess board of 64 movable aluminum blocks, forming a unique relief-like arrangement.

The interior of the cube houses an electronic control system causing the individual blocks to move up and down. This computer chess prize is intended to symbolize the tremendous possibilities of the game as well as those of the computer. It is programmed so as not to repeat any single pattern during the coming 1.169 trillion years provided the apparatus doesn't stop working before reaching that age."

The tournament organizers were David Levy, Benjamin Mittman, and Monroe Newborn. Commentary was done in German and English by German Grandmaster Dr. Helmut Pfleger. Local arrangements were organized by Dr. Ernst Kubin of the Linz Office of Special Events (LIVA).

Sunny afternoons found the programmers sipping Austrian white wine and analyzing and reanalyzing their games on the Tourotel terrace next to the Brucknerhaus overlooking the Danube. Two special guests had been invited to the tournament - Dr. Claude Shannon, the developer of information theory, and Mr. Fridrik Olafsson, President of the International Chess Federation, FIDE. Chess journalists and radio and television reporters interviewed participants, organizers, and guests. Dr. Shannon, who published a landmark article entitled "Programming a computer to play chess" thirty years ago, stated in an interview that although tremendous progress has been made in those thirty years, the world chess champion has nothing to fear from computers for many more years to come.
Mr. Olafsson, a grandmaster, had no problem in defeating CHESS 4.9 in two blitz games. Nevertheless, he felt that computer chess had a great deal to offer in attracting world attention to the game and encouraged the officers of ICCA to pursue some level of affiliation with FIDE. A number of ICCA members have suggested the possibility of entering an international team of chess programs in the Chess Olympiad in 1982 in Lucerne. Negotiations along these, and along other lines, will begin soon, as ICCA continues to promote and encourage computer chess world-wide.

## The Play

Surprises began immediately in the first round on Thursday morning, September 25. The reigning world champion, CHESS 4.9 , was defeated by L'EXCENTRIQUE, written by Claude Jarry, running on an Amdahl V/7 at McGill University. Mr. Jarry, a former student of Prof. Newborn at McGill, saw his program generate considerable pressure by creating an early passed pawn. After this initial advantage, L'EXCENTRIQUE began to play passively, allowing CHESS 4.9 to recover and even pull ahead (at one point CHESS 4.9 calculated an evaluation of plus two pawns for its side). However, L'EXCENTRIQUE fought back after CHESS 4.9 itself began to play passively, allowing a key bishop, which was protecting a queening square on the main diagonal, to be blocked. L'EXCENTRIQUE queened, and Larry Atkin and David Cahlander resigned for the program. (Programs still do not resign themselves.) The tournament ended with both programs earning $21 / 2$ points to tie for fourth place; so in retrospect, L'EXCENTRIQUE was stronger than most people had given it credit, and CHESS 4.9 was weaker than had been expected.

The second round saw BELLE draw against NUCHESS, a new entry by David Slate, one of the original authors of CHESS 4.9, and William Blanchard of Northwestern University. This hard fought game provided winning chances for both sides, but ended in draw by repetition in a very even position.

DUCHESS and KAISSA entered the third round with two points each. KAISSA played the white side of a Ruy Lopez opening and made a strategic error which allowed DUCHESS to infiltrate with a rook on the D-file. KAISSA's position became more and more passive and quickly collapsed. In the NUCHESS-CHAOS game in the third round, history repeated itself. Unexpectedly, David Slate had not modified the openings library which he inherited from CHESS 4.9, and found himself in essentially the same Queen's Gambit Accepted opening which was played against CHAOS by CHESS 4.0 in Stockholm in 1974. That game saw CHAOS sacrifice a knight in what David Levy later described as the first computer chess game in which a program sacrificed material to gain a positional advantage. In Linz, the same sacrifice again led to an easy win for CHAOS.

The fourth and final round of the Swiss-style tournament found DUCHESS with three points, only needing a draw to guarantee a finish no lower than a tie for first place. DUCHESS met BELLE. DUCHESS played an opening variation in which White sacrifices a pawn in return for some pressure. By failing to play sufficiently actively, DUCHESS found "herself" a pawn down for nothing, and after BELLE picked up another pawn, there was no hope for White, although the game dragged on for some time.

The championship was decided in the most exciting game of the tournament between BELLE and CHAOS on Monday. In an unusual variation of Alekhine's Defense, CHAOS twice failed to find the most active move. (David Levy's annotations, which were prepared as the game progressed, are found on pages 14 - 15.) Instead of reaching a position in which it would have had good chances, it was soon a piece down without any real compensation. BELLE's king found itself stuck in the center and was subjected to a few harassing checks. But by careful parrying of Black's simple threats, BELLE insured that the result was never in doubt. It ended the game decisively with an announced mate at move 34.

Special purpose chess hardware permitted BELLE to examine about 160,000 chess positions per second. This immense brute force search capability represents the best of today's level of play by a chess computer. Even so, most observers, including Ken Thompson, feel that brute force alone is insufficient to play at the grand master level, let alone to defeat the World Chess Champion. Nevertheless, by winning the tournament, BELLE has earned the right to participate, with CHAOS, in the two 1981 incentive competitions of the Fredkin prize. The Fredkin Foundation of Massachusetts has established a prize of $\$ 100,000$ to the first program to defeat the World Chess Champion in an official contest. Before a serious threat by a computer can become feasible, Dr. Hans Berliner of Carnegie-Mellon University and a committee of trustees of the Fredkin prize will be organizing a series of incentive competitions matching the best programs in the world against human players of comparable chess ratings to these programs. The first such competition earlier this year saw CHESS 4.9 split two games with Mr. Paul Benjamin, a player with a low expert rating.

Other programs appeared with special chess hardware and microcomputers. BEBE and ADVANCE 1.0 , as well as BELLE, use specialized circuitry for such functions as move generation, positional evaluation, or transpositions table management to speed up analysis. Among the microcomputer participants were MYCHESS and CSC. Even the last place finisher played at a level which would have been respectable three years earlier in Toronto. The microcomputers at the toumament site participated in a speed-chess competition on Sunday against six Austrian chess players. MYCHESS was impressive in winning five of its six games.

## Participants

| Program Name | Auchor(s) |
| :---: | :---: |
| ADVANCE 1.0 | Mike Johnson Dave Filson |
| ANIT | T. A. Marsland |
| BCP | Don Beal |
| BEBE | Tony Scherzer |
| BELIE | Ken Thompson Joe Condon |
| CHAOS | Fred Swartz, Mike Alexander, Jack O'Reefe, Victor Berman |
| CRESS 4.9 | Lawrencé Ackin <br> David Cahlander |
| CSC | Dan and Rache Spracklen, Ron Nelson, Frank Duason, Ed English |
| DARK HORSE | Ulf Rathsman |
| DUCHESS | Tom Truscort, Bruce Wright, Eric Jensen |
| L'EXCENTRIQUE | Claude Jarry |
| KAISSA | V. L. Arlazaroff <br> M. V. Donskoy |
| MASTER | Peter Kent John Birmingham |
| TYCHESS | David Kiteinger |
| SUCTESS | David Slate William Blanchard |
| OSTRICH | Monroe Newborn |
| PARWELL | Thomas Nitsche, Elmar Henne, Wolfram Wolff |
| SCHACH 2.3 | Matchias Engelbach |


| Affillacton | Computer (Locacion) |
| :---: | :---: |
| Privace Enery <br> London, England | 6502 plus chess harduare (at tournament site) |
| Universicy of Alberta Edmontun, Canada | Andahl 470 V/7 <br> (Edmoncon, Canada) |
| Queen Mary College London, England | PDP 11/70 <br> (London, England) |
| $\begin{aligned} & \text { SYS-10, Inc. } \\ & \text { Hoffman Escaces, IL, USA } \end{aligned}$ | BEBE Chess Machine (at toumament site) |
| Bell Telephone Labs Murray Hill, NJ,OSA | DEC LSI-11 with chess hardware (Marray Hill, NJ, USA) |
| University of Michigan Ann Arbor, MI, USA | And ahl 470 <br> (Sunnyvale, CA, USA) |
| Northwestern Oniversity Evanston, IL, USA and Control Data Corp. Minneapolis, MN, USA | CDC Cyber 176 <br> (Arden Hills, MN, USA) |
| Fidelicy Electronics Miami, FL, USA | Champion Sensory Challenger (at cournament site) |
| Private Encry Stockholm, Sweden | Univac 1100/81 (Stockholm, Sueden) |
| Duke Universiry Durham, NC, USA | Amdahl $\nabla / 8$ (Research Triangle, NC, USA) |
| McGill University Montreal, Canada | Amdahl V/7 <br> (Moncreal, Canada) |
| Inscituce for <br> Syerams Studies <br> Moscow, USSR | $\begin{gathered} \text { IBM } 370 / 168 \\ \text { (Pisa, I caly) } \end{gathered}$ |
| Atomic Energy <br> Research Escablishment <br> Harve 11, England | IBM 3033 <br> (Harwell, England) |
| Privace Encry <br> Anchorage, AK, USA | Cromenco (at tournament site) |
| Norchwescem University Evanscon, IL, USA | CDC Cyber 176 <br> (Sunnyvale, CA, USA) |
| McGill University Moncreal. Canada | Dara General Nova 4 (ac cournament site) |
| PI-Cesellscinaft fur Informacik $\mathbf{V B H}$ Stunich, Germany | Siemens SMS 2 <br> (Munich, Germany) |
| Bundeswehrhochschule Neubiberg bei München Gemamav | Burroughs 7900 (Neubiberg/Munich, Germany |

## Playoff Game, September 29, 1980

White: BELLE (USA)
Black: CHAOS (USA)
Notes written by David Levy while the game was in progress.

| 1 | $e 2-e 4$ | $\mathrm{Ng} 8-\mathrm{f6}$ |
| ---: | ---: | ---: |
| 2 | $e 4-e 5$ | $\mathrm{Nf6-d5}$ |
| 3 | $\mathrm{~d} 2-\mathrm{d} 4$ | $\mathrm{~d} 7-\mathrm{d} 6$ |
| 4 | $\mathrm{Ng} 1-\mathrm{f3}$ | $\mathrm{~d} 6 \mathrm{xe5}$ |
| 5 | $\mathrm{Nf} 3 \mathrm{xe5}$ | $\mathrm{~g} 7-\mathrm{g} 6$ |
| 6 | $\mathrm{~g} 2-\mathrm{g} 3$ |  |

More usual is $6 \mathrm{Bfl}-\mathrm{c4}$. The text move is rarely played and now CHAOS was out of its openings book.

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6 ..... Bc8-f5
7 c2-c4
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Black must be careful. If 7......Bf5-e4?, White wins a piece with 8 f2-f3, while if 7......Nd5-b4? 8 Qdl-a4+ Nb8-c6 9 Ne5xc6 Nb4xc6 10 d4-d5, again winning a piece.

7 ..... Nd5-b4?
Having written the above note, I was naturally taken aback when CHAOS played this move. What had I overlooked?

8 Qdi-a4+ Nb4-c6
CHAOS had probably been under the same illusion as $I$, but in fact, it
could have played 8......Nb8-c6 quite safely, as 9 Ne5xc6 Nb4xc6 10 d4-d5
can be met by 10.....Bf5-d7 11 d5xc6 Bd7xc6, forking White's queen and rook.

Another possibility after 8.....Nb8-c6 is $9 \mathrm{~d} 4-\mathrm{d} 5 \mathrm{Bf5}-\mathrm{c} 2$ !, when
10 b2-b3 Bf8-g7 11 Bcl-b2 can be met by $11 \ldots . .0-0$, and if 12 d5xc6?? Qd8-dl is mate! White may also try 10 Qa4-b5, but then 10.....a7-a6
11 Qb5xb7 Nc6xe5 12 Qb7xb4 Ne5-f3+ 13 Kel-e2 Nf3-d4+ gives Black good play for the pawn.

The conclusion is that Black's 7th move is probably playable.
9 d4-d5 Bf5-c2
10 Qa4-b5 Qd8-d6?
In view of Black's difficulties it would have been better to try 10.....a7-a6 11 Qb5xb7 Nc6xe5 12 Qb7xa8 Ne5-f3+ 13 Kel-e2 Nf3-d4+, when it is not clear who stands better.

11 Ne5xc6 Nb8xc6
And here Black could try 11.....b7xc6 12 Qb5-b7 Qd6-e5+ 13 Kel-d2 Bc2-f5.

The complications following 14 Qb7xa8 Bf8-h6+ are extremely unclear.

12 Nbl-c3-•
White cannot yet capture on $c 6$ because of mate on $d$.

| 12 | … | Bf8-g7 |
| :--- | :--- | :--- |
| 13 | Qb5xb7 | $0-0$ |
| 14 | Qb7xc6 | Qd6-b4 |
| 15 | Kel-d2 | Bc2-e4 |
| 16 | Rh1-gl | Rf8-b8 |
| 17 | Bf1-h3 | Bg7-h6+ |
| 18 | f2-f4 |  |

Black's counter threats have now been repulsed and White can play to consolidate its material advantage.

| 18 | O... | Qb4-a5 |
| :--- | :---: | ---: |
| 19 | Rg1-el | f7-f5 |
| 20 | Qc6-e6+ | Kg8-f8 |
| 21 | b2-b3 | Bh6-g7 |
| 22 | Bc1-b2 | Bg7-d4 |
| 23 | g3-g4 | Rb8-b6 |
| 24 | Qe6-d7 | Rb6-d6 |
| 25 | Qd7-a4 | Qa5-b6 |

Black's only hope is to keep the queens on and play for an attack against the white king.

| 26 | Bb2-a3 | Bd4xc3+ |
| :--- | :--- | :--- |
| 27 | Kd2xc3 | Rd6-d8 |
| 28 | Ral-d1 | Qb6-f2 |

Although White is a piece ahead, his task is not easy. The exposed king gives rise to all sorts of tactical possibilities.

| 29 | g4xf5 | Qf2-c2+ |
| :---: | :---: | :---: |
| 30 | Kc3-d4 | g6xf5 |
| 31 | Qa4-c6 | Qc2-f2+ |
| 32 | Kd4-e5 | Kf8-g8 |
| 33 | Rel-gl+ |  |

Black's king now comes under attack.
33 ..... Kg8-h8
34 Ba3xe7
With this move Belle announced that it had found a forced mate. The threat is 35 Be7-f6 or 35 Qc6-f6.

34 ..... Qf2-g2
35 Qc6-f6+ Kh8-g8
36 Rh3xg2 Rd8xd5+
37 Ke5-e6 h7-h6
38 Qf6xh6 . Rd5-e5+
39 f4xe5 Ra8-f8
40 Bg2-f3 mate
1:0

# Third World Computer Chess Championship Linz, Austria 

September 25-29, 1980

|  | rate | perf | 1 | 2 | 3 | 4 | otal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 Belle (USA) | 2150 | 2189 | 8+0 | 6=a | 4+0 | $3+\square$ | 3\% |
| 2 Chaos (USA) | 1800 | 2026 | $17+0$ | 4 = | 6+0 | $7+0$ | 34. |
| 3 Duchess (USA) | 1900 | 1948 | $18+0$ | $12+0$ | $7+$ a | 1-0 |  |
| 4 L'Excentrique (CAN) | 0 | 2031 | 5+0 | $2=0$ | 1-■ | $12+$ © |  |
| 5 Chess 4.9 (USA) | 2050 | 1902 | 4-9 | 9=0 | $11+$ + | $10+0$ | 2\% |
| 6 Nuchess (USA) | 0 | 1760 | $16+$ ! | $1=0$ | 2-■ | $9=0$ | 2 |
| 7 Kaissa (USSR) | 0 | 1637 | $14+\square$ | $13+0$ | 3-0 | 2- | 2 |
| 8 BCP (UK) | 0 | 1608 | 1-■ | $10=0$ | $14=0$ | $15+0$ | 2 |
| 9 BeBe (USA) | 0 | 1781 | $10=0$ | 5 = | $12=0$ | 6=0 | 2 |
| 10 Schach 2.3 (FRG) | 0 | 1710 | 9=0 | 8= | $13+0$ | 5- | 2 |
| 11 Awit (CAN) | 1400 | 1334 | 13-■ | $17+$ \% | 5-0 | $18+\square$ |  |
| 12 Master (UK) | 0 | 1654 | $15+0$ | 3-a | $9=$ | 4-0 |  |
| 13 Ostrich (CAN) | 1450 | 1438 | $11+0$ | 7-■ | 10-■ | $14=0$ |  |
| 14 Mychess (USA) | 0 | 1407 | 7-0 | $15=\square$ | $8=0$ | $13=$ |  |
| 15 Parwell (FRG) | 0 | 1334 | 12-■ | $14=0$ | $16+\square$ | 8-■ |  |
| 16 Advance 1.0 (UK) | 0 | 1103 | 6-0 | $18=$ | 15-0 | $17+0$ |  |
| 17 Dark Horse (SWE) | 0 | 1013 | 2- | 11-0 | $18+0$ | 16- |  |
| 18 Challenger X (USA) | 1000 | 900 | 3-9 | $16=0$ | 17-6 | 11-0 | 0\% |

## Round 1

September 25
L'Excentrique - Chess 4.91 e4 e5 2 Nf3 Nf6 3 d4 Nxe4 4 Bd3 d5 5 Nxe5 Bd6 6 c4 Bxe5 7 dxe5 Ne6 8 BC2 Nxe5 9 Qxd5 Qxd5 10 exd5 Bf5 11 O-O c6 12 f4 Ng4 13 h3 Ngf6 14 g4 Nd2 15 Re1t Kf8 16 Bdl Bxbl 17 Bxd2 Bd3 18 Re3 Bc4 19 Bb4t Kg8 20 d6 Nd5 21 Re4 Bd3 22 Rd4 Nxb4 23 Rxb4 b6 24 Rd4 Bb5 25 a4 c5 26 Rd2 Bc6 27 a5 Rd8 28 a6 h5 29 gxh 5 Rh6 30 Bg4 Rhxd6 31 R×d6 Rxd6 32 Kf2 Rd2t 33 Ke3 R×b2 34 Rd1 Rb3t 35 Kf2 Be4 36 Rd8t Kh7 37 Rf8 f6 38 Rf7 Ra3 39 Rxa7 f5 $40 \mathrm{Be} 2 \mathrm{Rxh} 341 \mathrm{Rd} 7 \mathrm{Rh} 2+42 \mathrm{Ke} 3 \mathrm{Rh} 143$ Rd8 Rh3t 44 Kd2 Rb3 45 Bc4 Rb4 46 Bf7 Rd4t 47 Rxd4 cxd4 48 a7 Kh6 49 Bg6 Bg2 50 Kd3 b5 51 Bxf5 g5 52 Be4 Bf1t 53 Kxd4 Kxh5 54 f5 g4 55 a8(Q) Kh4 56 Ke 3 Kh 357 Kf 2 1-0
Schach 2.3 - BeBe 1 e4 c5 2 Nf3 d6 3 d4 $\times$ dd4 4 N×d4 Nf6 5 Ne3 g6 6 Be2 Bg7 7 O-O O-O 8 Be3 Bd7 9 Qd3 Na6 10 Nb 3 Nb 411 Qd2 Ng4 12 Bg 5 Rc8 13 h 3 Nf6 14 Be3 a5 15 Nd4 e5 16 Ndb5 d5 17 exd5 Bxb5 18 Bxb5 Nbxd5 19 Nxd5 Q×d5 20 Qe2 e4 21 c3 Qe6 22 Rad1 Nd5 23 a3 Nxe3 24 Qxe3 Rfd8 25 R×d8t Rxd8 26 Rel Qb3 27 Qb6 Rd1 28 Rxdl Qxdlt 29 Kh2 Bf8 30 Bc4 Qd6t 31 Qxd6 Bxd6t 32 Kgl Bf4 33 Bd5 b6 34 b4 axb4 35 cxb4 e3 36 Kf1 exf2 37 Kxf 2 b5 38 Bc6 Bcl 39 a4 bxa4 $40 \mathrm{Bxa} 4 \mathrm{Kf} 841 \mathrm{b5} \mathrm{Ba} 342 \mathrm{Bb} 3 \mathrm{Ke} 743 \mathrm{Bd} 5 \mathrm{f} 6$ 44 Kg 3 Bc5 $45 \mathrm{Kf} 4 \mathrm{Ke} 842-1 / 2$
Advance 1.0 - Nuchess 1 e4 d5 2 exd5 Qxd5 3 Nc3 Qd6. 4 d4 Nf6 5 Nb5 Qb6 6 Bf4 Nd5 7 Bg3 c6 8 c4 a6 9 axd5 axb5 $10 \mathrm{dxc6}$ bxc6 11 Nf3 g6 12 Be5 Qa5t 13 Qd2 Q×d2t 14 Nxd2 f6 15 Bxb8 Rxb8 16 O-O-O Be6 17 b3 Ra8 18 Kb2 Bh6 19 Re1 Bd5 20 Nb1 Kf7 21 f3 b4 22 Bd3 f5 23 a4 Bg7 24 Kc 2 Bxd 425 Nd 2 Rhd8 26 Rd1 e6 27 h3 c5 28 Rhfl Rab8 29 a5 Ra8 30 a6 Bc3 31 Rf2 Rd6 32 h 4 Rad8 33 Re2 h5 34 f4 Bf6 $35 \mathrm{~g} 3 \mathrm{~B} \times \mathrm{b} 3+36 \mathrm{~N} \times \mathrm{b} 3 \mathrm{c} 4$ 37 Bxc4 Rxdl 38 Nd 2 Rgl 39 Rxe6 Kg7 40 Nfl Rc8 $41 \mathrm{~Kb} 3 \mathrm{Rxc} 442 \mathrm{Kxc4} \mathrm{Rxf1} 43 \mathrm{Kxb4} \mathrm{Bd} 444$ Re7t Kh6 45 Kc 4 Bf2 46 Re8 Ral 47 Ra8 Bag3 48

Kd3 Bxf4 49 a7 Kg7 $50 \mathrm{Ke} 2 \mathrm{Bg} 351 \mathrm{Rd} 8 \mathrm{R} \times \mathrm{a} 7$ adjudicated 0-1
Master - Parwell 1 Nf3 Nf6 2 g3 Na6 3 Nc3 Nc5 4 d4 Nce4 5 Nxe4 Nxe4 6 Ng5 Nxg5 7 Bxg5 f6 8 Bd2 e6 9 Bg2 Be7 10 e4 O-O 11 O-O d6 12 Bc3 c6 13 a4 b6 14 d5 Ba6 15 Rel Bc8 16 a5 b5 17 dxc6 Qc7 18 Bb4 Rb8 19 Re3 Ra8 20 Rc3 g6 21 a6 Qd8 22 Ba5 Qe8 23 Bc7 b4 24 Rc4 Bxa6 25 Rxa6 Qc8 26 Ral Qxc7 27 Ra6 Rfb8 28 Qg4 e5 29 Qe6t Kh8 30 Qf7 Rf8 31 Qd5 Rfb8 32 Qe6 Rb5 33 Qd7 Q×d7 34 cod7 Rc5 35 R×c5 dxc5 36 Re6 b3 37 Rxe7 bxc2 38 Re8t Kg7 $39 \mathrm{Rxa} 8 \mathrm{cl}(\mathrm{Q})+40 \mathrm{Bfl}$ 1-0
Mychess - Kaissa 1 d4 Nf6 2 c4 c5 3 d5 d6 4 Nc3 g6 5 Nf3 Bg7 6 e4 O-O 7 Bg5 h6 8 Bxf6 Bxf6 9 Qd2 h5 10 O-O-O Bg4 11 Be2 Nd7 12 h3 Bxf3 13 Bxf3 Qa5 14 g 4 Bd 415 KbI Ne 516 Be 2 Bxf 2 17 gxh5 Bd4 18 hxg6 fxg6 19 Nb 5 Qxd 220 Rxd 2 Be3 21 Rddl Rf2 22 Nc3 Raf8 23 h4 Bd4 24 Rdel R2f4 25 Rc 1 Bxc 326 Rxc 3 Rxe4 27 Rc2 Rf2 28 Bd1 R×c2 $29 \mathrm{~K} \times \mathrm{C} 2 \mathrm{Rxc} 4+30 \mathrm{Kd} 2 \mathrm{Rd} 4+31 \mathrm{Ke} 3 \mathrm{Nc} 4+32$ Ke2 Nxb2 33 Bc2 c4 34 Rbl c3 35 Rcl Rd2t 36 Kf3 Nd3 37 Bxd3 Rxd3t 38 Ke4 Rh3 39 Kd 4 b5 40 Rel c2 41 Rg 1 Kf 742 Rcl Rxh4t 43 Kd 3 Rh 5 44 Kd4 Rh2 45 Kd 3 Kf6 46 Rel a6 47 a3 g5 48 Reft Kf5 49 Rel g 450 Kc 3 g 351 Kb 2 g 252 Rg 1 Rh1 0-1
Chaos - Dark Horse 1 d4 d5 2 c4 e6 3 Nc3 c5 4 cxd5 exd5 5 Nf3 Nf6 6 Bg 5 Be6 7 Bxf6 gxf6 8 e4 dxe4 9 Nxe4 cxd4 10 Bb 5 Bd B 11 Bxd7t Nxd7 12 Qxd4 Qb6 13 Qxb6 axb6 14 O-O Rg8 15 Rfdl Rg6 16 Nd6t Bxd6 17 Rxd6 5518 Relt Kd8 19 Rd5 Ra5 20 Red1 Rxd5 21 Rxd5 Rct 22 h3 Rc5 23 R×c5 bxc5 24 Ng5 Ne5 $25 \mathrm{~N} \times \mathrm{h} 7 \mathrm{Nd} 326 \mathrm{Ng} 5 \mathrm{f} 6$ 27 Nf7t Ke7 28 Nh6 Nxb2 29 Nxf5t Ke6 30 Ne3 Nd3 31 a4 Kd7 32 g 3 Nb 233 a 5 Nd 334 h 4 Ne 5 35 Kf1 Ne6 36 Nc4 Ke6 37 h5 Kd5 38 h6 Ne5 39 Nxe5 b6 40 axb6 Kxe5 41 b7 Ke6 1-0
Duchess - Challenger $X 1$ e4 e5 2 Nf3 Na6 3 Bb5 a6 4 Ba4 Nf6 5 O-O Nxe4 6 d4 b5 7 Bb3 d5
$\square$

8 dxe5 Be6 9 c3 BC5 10 Qe2 O-O 11 Be3 Bxe3 12 Qxe3 Na5 13 Nbd2 Nab3 14 axb3 Nxd2 15 Qixd2 of 16 Qe3 Qc8 17 Rícl f6 18 b4 cxb4 19 ab4 Qd7 20 Nd4 fre5 21 Qre5 Bg4 2213 Rae8 23 Qg3 Bxf3 24 Re7 Qg4 25 Nxf3 Qxg3 26 hag3 Ret 27 Rxa6 Rxb4 28 Raa7 Rg4 29 Kh 2 h 530 RdFRef 31 Rd8t Kh7 32 Ra28 g5 33 Rd7t Kg6. 34 Ra6t Rf6 35 Rdd6 Rxd6 36 Rxd6t Kg7 37 Rxd5 Rb4 38 Rxg5t Kh6 39 Rc5 Rxb2 40 Nd 4 b4 41 Rb5 Rbl 42 Nc6 b3 43 Na5 Re1 44 Nxb3 Re2 45 Nd4 Re8 46 Rb6t Kh7 47 Nf5 Rh8 48 Rh6t Kg8 49 Rf6 Rh7 50 Rd6 adjudicated 1-0
Belle - BCP 1 e4 c5 2 d3 Nf6 3 e5 Nd5 4 d4 cxd4 5 cod4 d6 6 Nf3 Nc6 7 Bc4 e6 8 Bb3 dxe5 9 dxe5 Bb4t 10 Bd2 O-O 11 O-O b5 12 Bxd5 Qxd5 13 Bxb4 Qxd1 14 Rxd1 Nxb4 15 Nc3 Ba6 16 a4 bxa4 17 Rxa4 Rfbs 18 Rd4 Nc6 19 R×a6 Nxd4 20 Nxd4 Rb4 21 N66 Rxb2 22 f4 Rb7 23 Kf2 h5 24 Ke3 Rb2 $25 \mathrm{Ne} 2 \mathrm{Rb} 3+26 \mathrm{Ke} 4 \mathrm{Rb} 227 \mathrm{Kf} 3 \mathrm{Rb} 3 \dagger$ 28 Kf2 Rb7 29 h3 Rd7 30 Ned4 Rb7 31 g 4 hxg 4 $32 \mathrm{hxg} 4 \mathrm{Rb} 2 \mathrm{t} 33 \mathrm{Ke} \mathbf{~ R b 7} 34 \mathrm{f} 5 \mathrm{exf5} 35 \mathrm{Nxf5} \mathrm{Rd} 7$ 36 Nd6 Kh8 37 Nb 5 Rd 138 Ncaa7 Rad8 39 Rd6 R8xd6 40 exd6 f6 41 Nc6 g5 42 Nbd 4 Rxd4 43 Nxd4 Kg7 44 d7 1-0
Ostrich - Awit 1 e4 d5 2 exd5 Nf6 3 Bb5t Bd7 4 Bc4 g6 $5 \mathrm{Ne} 2 \mathrm{Bg} 76 \mathrm{Nbc} 3 \mathrm{O}-\mathrm{O} 7 \mathrm{~d} 4 \mathrm{Re} 88 \mathrm{Be} 3$ Ng4 9 Qd2 Nxe3 10 fxe3 Na6 11 O-O-O Rf8 12 Rhel Bg4 13 h 3 Bd 714 Kbl Bf6 15 Kal Kg 76 Kbl Nb4 17 a3 Na6 18 Bxa6 bxa6 19 e4 co 20 e5 Bh4 21 g3 ad5 22 gxh4 Bxh3 23 Qg5 f6 24 exf6t exf 25 Q×d5 2526 Qxd8 Raxd8 27 d5 Rd6 28 Ne4 Rb6 29 c4 Rbs 30 Rd2 Rd8 31 c5 Rb3 32 Nd4 Rb7 33 Nc6 Re8 34 Nxa5 Rbe7 35 Nab Rxe4 36 Rxe4 Rxe4 37 Nxa7 Rxh4 38 of Bf5 39 Kcl Rc4t 40 Kdl Bg4t 41 Kel Re4t $42 \mathrm{Kf} 2 \operatorname{Re} 743 \mathrm{~d} 6$ - R×a7 44 d7 Rxd7 45 Rxd7t Kf8 46 Rd8 $+\mathrm{Ke7} 47$ c7 Bd7 48 b4 h5 49 b5 f5 50 b6 g5 51 b7 Bct 1-0

## Round 2

 September 26Duchess - Master 1 e4 d6 2 d4 Nf6 3 Nc3 g6 4 Nf3 Bg7 5 Be2 O-O $6 \mathrm{O}-\mathrm{O}$ b6 7 e5 Nfd7 8 Bf4 Na6 9 Bb5 Bb7 10 Bxc6 Bxc6 $11 \mathrm{d5} \mathrm{Bb} 712 \mathrm{Rel}$ dxe5 13 Nxe5 Nxe5 14 Bxe5 f6 15 Bf4 g5 16 Bcl Re8 17 Re6 $f 518$ Bxg5 Bxc3 19 bxc3 Qxd5 20 Qxd5 Bxd5 21 Re5 e6 22 g 3 Kg 723 a3 h6 24 Bh4 Bf3 25 Re3 Bc6 26 Rae1 Bd5 27 f3 c5 28 Kg2 a5 29 Rbl Rab8 30 Ral c4 31 Rd1 Kg6 32 Rd4 a4 33 Re1 b5 34 Rd2 Rf8 35 Rb1 Rf7 36 Rd4 Rd7 37 h3 Rb6 38 Rel Rbd6 39 g4 fxg 40 Rxg4t Kh7 41 Bg3 Rb6 $42 \mathrm{Bf} 4 \mathrm{~h} 543 \mathrm{Rh} 4 \mathrm{Rg} 7+44 \mathrm{Kf} 2 \mathrm{Kg} 845$ R×h5 Rf7 46 Rg 5 Kf 847 Kg 3 Rf6 $48 \mathrm{~h} 4 \mathrm{Rb7} 49$ h5 Rh7 50 Kg 4 K 751 Re 3 Bct 52 Rg 6 Bd 753 R×f6t Kxf6 54 Bg5t Kg7 55 Rel e5t 56 Kh4 Be8 adjudicated 1-0
BCP - Schach 2.31 e4 e5 2 Nf3 Nct 3 d4 exd4 4 Nxd4 Bc5 5 Nb3 Bb6 6 Nc3 N66 7 Bb5 O-O 8 O-O Ne5 \& Bg5 c6 10 Be 2 d 611 Qcl Be6 $12 \mathrm{Kh1}$ h6 13 Bh4 g5 14 Bg 3 c5 $15 \mathrm{f} 4 \mathrm{gxf4} 16$ Q×f4 Bxb3 17 axb3 Nfd7 18 Qxh6 f6 19 Bc4t Rf7 20 Bxe5 Nxe5 21 Rxf6 Qxf6 22 Qxf6 Nxc4 23 Qg6t Rg7 24 Qe6t Nh7 25 bxc4 Rf8 26 Qxd6 Rf2 27 Qd3 Rfxg2 28 Qh3t Kg8 29 Qxg 2 Rxg $230 \mathrm{Kxg} 2 \mathrm{Kf} 731 \mathrm{Nd5}$ Ke6 $32 \mathrm{~N} \times 66 \mathrm{a} \times 6633 \mathrm{Ra7} \mathrm{Ke} 534 \mathrm{Kf} 3 \mathrm{Kd} 435$ R×b7 Ke5 36 c3 Kd6 37 R×b6t Ke5 38 b4 c×b4 39 Rb5t Ke6 40 Rb6t Ke5 41 Rb 5 K K $42 \mathrm{Rb} 6+\mathrm{Ke} 5$

4-4
Challenger $X$ - Advance 1.01 e4 e6 2 d 4 d 53 Nc3 Bbt 4 e5 c5 5 a3 Buc3t 6 bxc3 Ne7 7 dxc5 Qa5 8 Qd4 Nbes 9 Qe3 d4 10 Qg3 N25 11 Qd3 Qxc5 12 NK3 dxc3 13 Qb5 Qd5 14 Qxd5 exd5 15 Bg5 h6 16 Bcl Nid4 17 Nxd4 Nxd4 18 Bd3 Bt5 19 Bxf5 Nxf5 20 f4 Nd4 21 Kdl O-O 22 Rbl b6 23 Be3 Nf5 24 BC2 Racs 25 Ke2 Rc4 26 Rb4 Rxb4 27 axb4 Rc8 28 Ra1 Rc4 29 Kf3 g5 30 g 3 Rxb4 31 Rxa7 gxf4 32 Rc fxg3 33 hxg 3 Nd 4 t 34 Bxd4 Rxd4 35 Rxc3 Re4 36 Re6 Rxe5 37 Rxb6 Kg7 38 c3 h5 39 Ra6 6640 Ra7t Kg6 41 Rd7 Rg5 42 Kf Kh6 43 Rf7 Rest 44 Ke3 Kg6 45 Rd7 Rg5 46 Kf2 Re5 47 Kf3 Rf5t $48 \mathrm{Kg} 2 \operatorname{Rg} 549 \mathrm{Kf} 2 \mathrm{Re} 550 \mathrm{Kf3}$ Rf5t $51 \mathrm{Kg} 2 \mathrm{Rg} 55^{\mathrm{Kf}} \mathbf{2} \mathrm{Re5}$ y-1/2
Nuchess - Belle 1 f4 e5 2 e4 exf4 3 Nf3 d5 4 exd5 Nf6 5 Bb5t c6 6 dxc6 Nxe6 7 d4 Bd6 8 O-O O-O 9 Nc3 Bg4 10 Bc4 Bb4 11 Ne 2 Bd6 $12 \mathrm{Nxf4}$ Bx\{3 13 Rxf3 Bc5 14 c3 Ne5 15 Be2 Nxf3t 16 Bxf3 Bd6 17 Bxb7 Rb8 18 Qf3 Re8 19 Bc6 Re1t 20 Kf2 Rxcl 21 Rxcl Rxb2t $22 \mathrm{Kg1}$ Qc7 23 g 3 Bxf4 24 gxf4 Rxa2 25 Rb1 Qd6 26 Bb5 Qb8 27 Bd3 Qe8 $28 \mathrm{Kh} 1 \mathrm{a5} 29 \mathrm{Bb} 5 \mathrm{Qd} 830 \mathrm{Bc} 4 \mathrm{Rc} 231 \mathrm{Rb} 7 \mathrm{Qa} 832$ Bxf7t Kh8 33 Bd5 Qe8 34 Rb1 Nxd5 35 Qxd5 Rxc3 36 Qe5 Qa8t 37 d5 Rc8 38 Rg1 Qb7 39 t5 Qf7 40 Rbl a4 41 Rb Rxb8 42 Qxb8t Qg 843 Qe5 a3 44 f6 h6 45 fxg7t Qxg7 46 Qe8t Kh7 47 Qe4t Kh8 48 Qe8t Kh7 49 Qe4t Kh8 50 Qe8t \%
Parwell - Mychess 1 f4 e5 2 fxe5 d6 3 exd6 Bxd6 4 e3 Qh4t 5 Ke2 Bxh2 6 Nf3 Bg4 7 c3 Nc6 8 Qc2 O-O-O 9 Qb3 f6 10 e4 h5 11 d3 Nge7 12 Be3 Qg3 13 Qa3 a6 14 Bf2 Qf4 15 Be3 Qg3 16 Bf2 Qe5 $17 \mathrm{Kel} \mathrm{Bxf3} 18$ gxi3 Qf4 19 Nd2 h4 20 Kd1 h3 21 Qb3 f5 22 Bcs Kbs 23 d 4 a5 24 Bxe7 Nxe7 25 Qf7 Nat 26 Qxf5 Qxf5 27 exf5 Bf4 28 f6 gxf6 29 Ne4 f5 30 Ne5 Nxd4 31 exd4 Rxd4t 32 Nd3 h2 33 Kc co 34 Be 2 Bg 335 Kbl Re8 36 Ncl Rd5 37 a3 Rd2 38 Ka2 Rdxe2 39 Nxe2 Rxe2 40 Rhdl Be5 41 Rabl Re3 42 Rd8t Ka7 43 f4 Bxf 44 Rf8 Rh3 45 Rxf5 hl(Q) 46 Rxh1 Rxhl 47 Rxf4 Rh3 $48 \mathrm{Rf} 7 \mathrm{~Kb} 649 \mathrm{~b} 3 \mathrm{Rh} 2+50 \mathrm{Kb1} \mathrm{C} 51 \mathrm{Rg} 7$ Kc6 52 Rg6t Kd5 53 Rb6 Rhlt $54 \mathrm{Kc} 2 \mathrm{Rh}^{2}+55$ Kbl Rhlt $56 \mathrm{~Kb} 2 \mathrm{Rh} 2+57 \mathrm{Kb1} \mathrm{Rh} 758 \mathrm{Rb5} \mathrm{Kc} 6$ 59 R×a5 y_-1/
Kaissa - Ostrich 1 e4 d5 2 exd5 Nf6 3 d4 Nxd5 4 c4 Nb6 5 Nc 3 e5 $6 \mathrm{dxe5}$ Qxdlt 7 Kxdl Bg4t 8 f3 Bf5 9 Be3 Bb4 10 Nd5 Nxd5 11 लxd5 Nd7 12 g4 Bg6 13 Rcl O-O-O 14 a3 Ba5 15 b4 Bb 16 Bxb6 axb6 17 d6 $\mathrm{N}_{\mathrm{e}=5} 18 \mathrm{Rxc} 7+\mathrm{Kb8} 19 \mathrm{Re7}$ Rxd6t 20 Ke1 Rd5 21 Bg2-Rhd8 22 Ne 2 Nc 23 a4 Nb2 24 f4 R5d7 25 Rxd7 Rxd7 26 f5 Bxf5 27 $\mathrm{gxf} 5 \mathrm{~N} \times \mathrm{a} 428 \mathrm{Rg} 1 \mathrm{Nb} 29 \mathrm{Be} \mathrm{g}_{6} 30 \mathrm{Rg} 3 \mathrm{Re} 731$ Bc2 Rc7 32 Rc3 $\mathrm{gxf5} 33 \mathrm{Rxc} 7 \mathrm{Kxc} 734 \mathrm{Bxf5}$ h6 35 Nc3 Nc4 36 Ke2 Nd6 37 Bd3 Kd7 38 Kf3 Kc6 39 Kg4 b5 40 Kh5 Nc4 41 Kxh6 Nd6 42 Kg5 Kb6 43 Kí Kc6 44 h 4 Kb 645 h 5 Kc 646 h 6 Ne 8 t 47 Ke 7 1-0

L'Excentrique - Chaos 1 e4 Nf6 2 e5 Nd5 3 d4 d6 4 Nf3 dxe5 5 Nxe5 g6 6 c4 Nb6 7 c5 N6d7 8 Bc4 Nxe5 9 dxe5 Qxdlt 10 Kxdl Nd7 11 e6 fxe6 12 Be 3 Ne 513 Bd 4 Bg 714 Re 1 Nxc 415 Bxg 7 Rg 9 16 Bc3 b6 17 b3 Na5 18 b4 Nb7 $19 \mathrm{cxb6} \mathrm{cxb} 620$ Be5 Kf7 21 Re3 Nd6 22 g 4 Bb 723 Nd 2 Rac8 24 Rh3 h5 25 a4 Nc4 26 N×c4 Rxc4 27 Kd 2 Rd8t 28

Rd3 Rxd3t 29 Kxd3 Rxg4 30 f4 Rg2 31 h4 Rh2 32 Rcl a6 33 Rc7 Bd5 34 Bd6 Rxh4 35 Rxe7t Kg8 36 $\mathrm{Re} 8 \mathrm{H} \mathrm{Kg} 737 \mathrm{Re} 7+\mathrm{Kf6} 38 \mathrm{Ra} 7 \mathrm{Rh} 3+39 \mathrm{Kd} 4 \mathrm{Ra} 3$ 40 R×a6 h4 41 Ra7 Kf5 42 Re7t Kg4 43 Rg7 Rxa 44 R×g6t Kf3 45 Rh6 Ra2 46 Rxh4 Rd2t 47 Kc3 Rg2 48 b5 Ra2 $49 \mathrm{Rh} 3+\mathrm{Kg} 450 \mathrm{Rh} 8 \mathrm{Ra} 551 \mathrm{~Kb} 4$ Ral 52 Rg8t Kf3 53 Rc8 Rb1t $54 \mathrm{Ka4}$ Bb3t 55 Ka3 Bd1 56 Re3t Ke4 $57 \mathrm{Ka} 2 \mathrm{Rxb5} 58 \mathrm{Bb} 8 \mathrm{Ra5t}$ $59 \mathrm{~Kb} 2 \mathrm{Kf5} 60 \mathrm{Kc}$ Rd5 $61 \mathrm{Rg} 3 \mathrm{Bg} 462 \mathrm{Re} 3 \mathrm{b5} 63$ Re5t Rxe5 4n-4
Dark Horse - Awit 1 e4 c5 2 Nf3 d6 3 d4 cxd4 4 Nxd4 Nf6 5 Nc3 a6 6 Be3 g6 7 Be2 Bd7 8 O-O Bg7 9 a4 O-O 10 a5 Qc7 11 Qd3 Rc8 12 Rfdl Nct 13 Nxc6 Qxc6 14 Ra4 Bg4 15 f3 Bd7 16 Rc4 Qxc4 17 Qxc4 Rxc4 18 Bxc4 Rc8 19 Bd5 Nxd5 20 Nxd5 Rxc2 21 Nxe7t Kf8 22 Bg5 f6 23 Nag6t $\mathrm{h} \times \mathrm{g} 624 \mathrm{Rxd6} \mathrm{Ke} 725 \mathrm{Bf4} \mathrm{g5} 26 \mathrm{Bg} 3 \mathrm{Rxb} 227 \mathrm{Rd} 1$ b5 28 axb6 a5 29 Bd6t Ke8 30 Bc 5 Kd8 31 g3.a4 32 Kh1 Rb3 33 f4 Kc8 34 fxg5 fxg5 35 Rd6 Bf8 36 Rd5 B×C5 37 R×c5t Kb8 38 R×g5 Bc6 39 Rg 8 Kb 7 40 Rg4 a3 41 Rh4 a2 42 Rh7t K×b6 0-1
Chess 4.9-BeBe 1 e4 52 Nf3 d6 3 d4 oxd4 4 N×d4 Nf6 5 Nc3 g6 6 Be2 Bg7 7 O-O O-O 8 Bg5 Bd7 9 Nd5 Nxd5 10 exd5 Qb6 11 Nb3 Bxb2 12 Bxe7 Re8 13 Rb1 Rxe7 14 Rxb2 Na6 15 Rb1 Nb4 16 Ncl Qc5 17 c4 Rae8 18 Qd2 a5 19 a3 Na6 20 R×b7 Qxa3 21 Qf4 Bf5 22 Rxe7 Rxe7 23 c5 N×c5 24 Qxd6 Re8 25 Bb5 Rf8 26 Nb 3 Qxb3 27 Qxc5 Rc8 28 Bc6 Qb4 $29 \mathrm{Qa7} \mathrm{Qa} 330 \mathrm{Rel} \mathrm{Qc} 331 \mathrm{Qe} 3$ Qb4 32 Ral Qb2 33 Qe1 Qb4 34 Qe5 Rb8 35 h 3 Rc8 36 Qe3 Bc2 37 Qa3 Q×a3 38 Rxa3 a4 39 f 4 f 40 Kf2 Kf7 41 Ke3 Kf6 42 Kd4 Rb8 43 d6 Be 44 Bxe4 Rb4t 45 Kd5 Rxe4 46 g3 h6 47 Rd3 Kf7 48 d7 Ke7 49 Kcb adjudicated 4 -1/2

Round 3
September 27
BeBe - Master 1 e4 d6 2 d4 Nf6 3 Nc3 g6 4 f4 Bg7 5 Nf3 c5 $6 \mathrm{dxc} 5 \mathrm{Qa5} 7 \mathrm{Bb5t} \mathrm{Bd} 78 \mathrm{Qd} 3 \mathrm{~N} \times 4$ 9 Qxe4 Bxb5 10 Qxb7 Bxc3t 11 bxc3 Bc6 12 Qc8t Qd8 13 Qxd8t Kxd8 $14 \mathrm{Ba} 3 \mathrm{Nd} 715 \times \mathrm{d} 6$ exd6 16 O-O-O B×\{3 17 g×f3 Re8 18 Rxd6 Re6 19 Rd5 Ke8 20 f5 Re2 21 fxg6 hag6 22 Bb4 Rc8 23 Rhdl Nb6 24 R5d2 Rxd2 25 Rxd2 Nc4 26 Re2t Kd8 27 $f 4$ a5 28 Bf8 Rc7 29 h3 Kc8 30 h 4 Kb 731 Re8 Kc6 32 a4 Kb7 33 Be7 Rc6 34 Bd8 5535 Rf8 Rd6 36 Kb1 Kcb 37 Ka 2 Kd 738 Kb 3 Nd 2 t 39 Ka 2 Nc 4 $40 \mathrm{~Kb} 3 \mathrm{Nd} 2+41 \mathrm{Ka} 2 \mathrm{Nc} 412-1 / 2$
Kaissa - Duchess 1 e4 e5 2 Nf3 Nct 3 Bb5 a6 4 Ba4 d6 5 O-O Nf6 6 c3 Bd7 7 d4 Be7 8 Rel O-O 9 Nbd2 Re8 10 Nf1 h6 11 Ng3 Bf8 12 a3 Na5 13 Bc2 c6 14 Be3 Nc4 15 b3 Nxe3 16 Rxe3 b6 17 h3 Qc7 18 Rel c5 $19 \mathrm{dxe5} \mathrm{dxe5} 20 \mathrm{Qe} 2 \mathrm{Bb5} 21 \mathrm{Bd} 3$ Bxd3 22 Qxd3 Red8 23 Qe3 b5 24 Red1 c4 25 b4 a5 26 Rxd8 R×d8 27 Qe1 Rd3 28 Khl g6 29 bxa5 Bc5 30 a4 bxa4 31 a6 Qa7 32 Ra 2 Nd 733 Qal a3 34 Qcl Bxf2 35 Nf1 Bc5 36 Nel Rd6 37 Q×h6 Rdl 38 Qh4 Q×a6 39 Qd8t Kg7 40 Qh4 Qf6 41 Qxf6t Nxf6 42 Nf3 Rxflt 43 Kh 2 Nxe4 44 Re2 Rhl $+45 \mathrm{~K} \times \mathrm{h} 1 \mathrm{Ng} 3+46 \mathrm{Kh} 2 \mathrm{~N} \times 2247 \mathrm{Ne}$ a2 0-1
Belle - L'Excentrique 1 e4 c6 2 d4 d5 3 Nc 3 dxe4 $4 \mathrm{~N} \times \mathrm{e} 4 \mathrm{Nd} 75$ Bc4 Ndf6 6 Ng 5 e6 7 Ne 2 h 6 8 Nf3 Bd6 9 O-O b5 10 Bd3 Ne7 11 a4 b×a4 12 Rxa4 O-O 13 Be3 Ng4 14 Bf4 Bxf4 15 Nxf4 Qd6 16 Nh5 g6 17 Ng 3 f 518 Qal a6 19 Rel Nf6 20 B×a6 B×a6 21 R×a6 R×a6 22 Q×a6 4423 Ne4 N×e4

24 Rxe4 g5 25 c4 Rb8 26 © 0 Qd5 27 Re2 g4 28 Qa7 Re8 29 Re5 Qd8 30 Nel NE5 31 Qa6 Nxd4 32 Qd3 Kg7 33 Qe4 Rf8 34 Khl Rf5 35 Nd3 Kf6 36 Nxf4 g3 37 f3 gxh2 38 Rxe6t Nxe6 39 Qxe6t Kg7 40 Qxf5 Kg8 41 Qg6t Kh8 42 Qi7 Qg5 43 Ng6t Qxg6 44 Qxg6 h5 45 f4 h4 46 EF h3 $47 \mathrm{f6}$ hag2t 48 Qxg2 1-0
Advance 1.0 - Parwell 1 e4 e6 2 d4 d5 3 Nc3 Bb4 4 e5 Ne7 5 Bd2 O-O 6 a3 Bxc3 7 Bxc3 NE5 8 Nf3 Nh4 9 Nxh4 Qxh4 10 Bd3 Bd7 11 O-O Nc6 12 g3 Qh3 13 Qd2 Qh5 14 Rael Rac8 15 f3 Rb8
 21 g4 Qh6 22 f5 exf5 23 gxf5 Rbe8 24 f6 Bxh3 25 Qxg7t Qxg7t 26 fog7 Kxg7 27 Bxb5 c6 28 R(3 exb5 29 Rxh3 Kh8 $30 \mathrm{Khl} f 631$ e6 Nf5 32 Rf3 Nd6 33 e7 Rf7 34 Re6 Nc4 35 Bel Rfxe7 36 Rxe7 Rxe7 37 Bh4 Kg8 38 Rg3t Kf7 39 Rf3 Re3 40 Rxf6t Kg8 41 Bf2 Rc3 $42 \mathrm{Kg} 1 \mathrm{~N}_{\mathrm{xa} 3} 43 \mathrm{Rf5} \mathrm{Rxc} 2$ 44 Rxd5 Rc1t 45 Kh2 Rb1 46 Rd8t Kg7 47 Rd7t Kg6 48 Rd6t Kh5 49 Rd7 h6 50 Rd6 Rb2 51 Kg2 Rxb4 52 Be3 Nc2 53 Rxh6t Kg4 54 Bf2 Rb3 55 d5 Rd3 56 d6 b4 57 Rg6t Kf5 58 Rh6 a3 59 Rh5t Kg6 60 Ra5 b3 61 d7 a2 62 Ra6t Kf5 63 Ra5t Ke6 64 Ra6t Kxd7 65 Ra7t Kc6 66 Ra6t Kb5 67 Ra8 al(Q) 68 Rxal Nxal adjudicated $0-1$
Dark Horse - Challenger X 1 e4 e5 2 Nf3 Nc6 3 d4 exd4 4 Nxd4 Qh4 5 Nb5 Qxe4t 6 Be2 Bb4t 7 Bd2 Bxd2t 8 Nxd2 Qf4 9 g3 Qe5 10 Nf3 Qxb2 $11 \mathrm{Nxc} 7+\mathrm{Kd} 812 \mathrm{Nxa} 8 \mathrm{Nb} 413 \mathrm{Bd} 3 \mathrm{Nxa} 214 \mathrm{O}-\mathrm{O}$ Nh6 15 Re1 f6 16 Qe2 Qb4 17 Rxa2 a6 18 Bxh7 d5 19 Ra4 Qc5 20 Bd3 b5 21 Raal Bb7 22 Qe3 Qxe3 23 fxe3 Kd7 24 Nb6t Kc7 25 Na4 bxa4 26 Rxa4 Ra8 27 Rb1 Bc8 28 Rbb4 Bb7 29 Nd4 Bc8 30 e4 Bd7 $31 \mathrm{Ra} 5 \mathrm{dxe4} 32 \mathrm{Bxe4} \mathrm{Ra} 733 \mathrm{Bd} 3 \mathrm{Bc} 34$ Nb5t Kb6 35 Nxa7t Kxa7 36 Be4 f5 37 Rc5 fxe4 $38 \mathrm{Rc} 7+\mathrm{Ka} 839 \mathrm{Rxc} 8+\mathrm{Ka} 740 \mathrm{Rc} 7+\mathrm{Ka} 841 \mathrm{Rxe4}$ Kb8 42 R×g7 Nf7 43 R×f7 a5 44 Re8\# 1-0
Schach 2.3 - Ostrich 1 e4 d5 2 exd5 Nf6 3 d4 N×d5 4 Nf3 Bg4 5 h3 Bxf3 6 Qxf3 Nct 7 c3 e6 8 Nd2 Bd6 9 Bd3 O-O 10 O-O Qh4 11 Nc4 Rae8 12 Nxd6 cxd6 13 Bd2 a5 14 b3 Kh8 15 Rae1 Kg8 16 Re2 Re7 17 Reel Ra8 18 Be4 Nc7 19 Bxct bxct 20 Q×c6 d5 21 g3 Q×h3 22 Bf4 e5 23 Rxe5 Qd7 24 Qb7 Rxe5 25 Bxe5 Rc8 26 c4 dxc4 27 bxc4 Qd8 28 c5 Ne6 29 c6 f6 30 Bd6 Nxd4 31 c7 Qd7 32 Qd5t Ne6 33 Rel Kf7 34 Re3 g5 35 f4 gxf4 36 gxf4 Rg8t 37 Kf2 a4 38 f5 Re8 39 Rxe6 Rxe6 40 fxe6t Qxe6 41 Qxe6t 1-0
Awit - Chess 4.91 b3 Nf6 2 Bb2 d5 3 e3 Bd7 4 Nf3 e6 5 Be2 Ne6 6 O-O Be7 7 Ne5 O-O 8 Nxd7 Qxd7 9 f4 Ne4 $10 \mathrm{Nc} 3 \mathrm{~N} \times \mathrm{c} 311 \mathrm{Bxc} 3 \mathrm{~d} 412 \mathrm{Bb} 2$ Bc5 13 Bcl Rad8 14 Rbl f5 15 Kf 2 Nb 416 a 3 dxe3t 17 dxe3 Qc6 18 Bd3 Nd5 19 Qf3 a5 20 Bd2 e5 21 fxe5 Qe6 22 b4 axb4 23 axb4 f4 24 Bxh7t Kxh7 25 Qh5t Kg8 26 bxc5 fxe3t 27 Ke 2 Qa6t 0-1

Mychess - BCP 1 d4 Nf6 2 c4 g6 3 Nc3 d5 4 c×d5 N×d5 5 e4 Nxc3 6 bxc3 Bg7 7 Bc4 c5 8 Nf3 Nẹ 9 Bd5 cxd4 10 cxd4 O-O 11 Rbl Nxd4 12 Nxd4 e6 13 Bxb7 Bxb7 14 Rxb7 Qxd4 15 Qxd4 Bxd4 $16 \mathrm{Ke} 2 \mathrm{Rfc} 817 \mathrm{Be} 3 \mathrm{Rc} 2+18 \mathrm{Kd} 3 \mathrm{Rb} 219$ Rbl Rxbl 20 Rxbl Bxe3 21 Kxe3 Rc8 22 Rb7 Rc3t 23 Kd2 Rc4 24 Kd3 Rcl 25 Rxa7 Rg1 26 g3 Rg2 $27 \mathrm{~h} 4 \mathrm{R} \times \mathrm{f} 228 \mathrm{Ke} 3 \mathrm{Rc} 229 \mathrm{a} 3 \mathrm{Kg} 730$ e5 g5 31 hag5 Rc3t 32 Kf4 Rc2 $33 \mathrm{~g} 4 \mathrm{Rc} 4+34 \mathrm{Kg} 3 \mathrm{Kg} 635$

Kh4 Rc5 36 a4 Kg7 37 Rb7 Rc4 38 Ra7 Rcs 39 Rb7 Rct 40 a5 Rc5 41 a6 Rue5 42 a7 Ra5 43 Rd7 e5 44 Re 7 e4 45 Rxe 4 Ra a 746 Re 2 Ra 547 Rc 2 f 5 $48 \mathrm{~g} \times 16+\mathrm{K} \times \mathrm{fl}_{6} 49 \mathrm{~g} 5 \mathrm{t}$ Ke5 50 Kh 5 Ra 3 H :-h
Chaos - Nuchess 1 d4 d5 2 c4 dxc4 3 Nf3 Nf6 4 e3 e6 5 Bxc4 C5 6 Qe2 a6 7 O-O b5 8 Bb3 Bb7 9 Rd1 Nbd7 10 Nc3 Bd6 11 e4 cxd4 12 Nxd4 Qb8 13 g3 b4 14 Na4 Bxe4 15 f3 Bb7 16 Nxe6 fxe6 17 Qxe6t Kd8 18 Rxd6 Oc7 19 Be3 Re8 20 Bb6 Rxe6 21 Bxe6 Bxf3 22 Rcl Ra7 23 Rxc7 Rxc7 24 Bxc7t K×c7 25 R×a6 Bç 26 Ra7+ Kb8 27 Ra5 Kc7 28 b3 Kd6 29 Bxd7 Bxd7 30 Nb6 Kc6 31 Nxd7 Nxd7 32 Kf2 Ne5 33 Ke3 Kb6 34 Ra8 Ne6 35 Ke4 Kc5. 36 Ra5t $\mathrm{Kb} 637 \mathrm{Re} 5 \mathrm{Nc} 5+38 \mathrm{Kd} 4 \mathrm{Nb} 739 \mathrm{Re} 7 \mathrm{Nd} 6$ 40 Ke5 Nb5 41 Rag7 h5 42 Rff Nc3 43 Rf2 Kc5 44 Rd2 NbS 1-0

## Round 4

September 28
Chaos - Kaissa 1 d4 Nf6 2 c4 53 d5 d6 4 Nc3 g6 5 e4 $\mathrm{Bg} 76 \mathrm{Be} 2 \mathrm{O}-07 \mathrm{Bg} 5 \mathrm{~h} 68 \mathrm{Bf} 4 \mathrm{Qb6} 9$ Qd2 g5 $10 \mathrm{Bg} 3 \mathrm{Nh} 711 \mathrm{Nf3} \mathrm{~g} 412 \mathrm{Nh} 4 \mathrm{Ng} 513$ Nf5 Bxf5 14 exf5 Qa6 15 Qe3 Re8 16 Bh4 Bf6 17 O-O Nd7 18 Rfe1 Qb6 19 Rabl Qa6-20 Qf4 Be5 21 Qe3 Bf6 22 Qf4 Be5 23 Qd2 Bf6 24 Qe3 Ne5 25 Qg3 Rf8 26 h3 Nxc4 27 Qxg4 b5 28 N×b5 Ne5 29 Qg3 Qb6 30 Nc3 Nd7 31 f4 c4t 32 Khl Rfb8 $33 \mathrm{f} \times \mathrm{g} 5 \mathrm{Be} 534 \mathrm{Qg} 4 \mathrm{~h} \times \mathrm{g} 535 \mathrm{Q} \times \mathrm{g} 5 \mathrm{Bg} 736 \mathrm{Bxc} 4$ Ne5 $37 \mathrm{Bb5} 5638 \mathrm{Be} 2 \mathrm{Ra} 739 \mathrm{Qg} 3 \mathrm{~K} f 840$ Qf2 Rab7 41 Q×b6 R×b6 42 Bf2 R×b2 43 R×b2 R×b2 44 Rbl Rxblt 45 N×b1 a5 46 Nd2 Bh6 47 Nc4 N×c4 $48 \mathrm{Bxc} 4 \mathrm{Bg} 749 \mathrm{~g} 4 \mathrm{a} 450 \mathrm{Kg} 2 \mathrm{a3} 51 \mathrm{Kf} 3 \mathrm{Bb} 21-0$
Chess 4.9 - Schach 2.31 e4 e5 2 Nf3 Nct 3 d4 exd4 4 c 3 dxc 35 Bc4 Nf6 $6 \mathrm{~N} \times \mathrm{c} 3 \mathrm{Bd} 67 \mathrm{Qe} 2 \mathrm{O}-\mathrm{O}$ $8 \mathrm{O}-\mathrm{O}$ Ne5 9 Bd 2 co $10 \mathrm{Bb} 3 \mathrm{~b} 511 \mathrm{Nxe5} \mathrm{Bxe5} 12$ $f 4 \mathrm{Bd} 4+13 \mathrm{Kh} 1$ Re8 14 e5 Bxc3 15 Bxc 3 d 516 a4 d4 17 Bd2 bxa4 18 R×a4 c5 19 Ba5 Qd7 20 Qc2 Ba6 21 Rfal d3 22 Qxc5 Rac8 23 Qg1 Nh5 24 Bd 2 Bb7 25 R×a7 Rc7 26 Bdl Qh3 27 Qf2 Qf5 28 Bf3 Rb8 $29 \mathrm{~B} \times 67 \mathrm{~N} \times \mathrm{f} 430 \mathrm{Bxf4} \mathrm{~d} 231 \mathrm{Qxd} 2 \mathrm{~g} 52 \mathrm{Bxg} 5$ Rcxb7 33 R×b7 R×b7 34 Ra8t Kg7 1-0
Ostrich - Mychess 1 e4 c5 2 Nf3 d6 3 d4 cxd4 4 Nxd4 Nf6 5 Nc3 Nc6 6 Bb5 Bd7 7 O-O Nxd4 8 Qxd4 e5 9 Bxd7t Qxd7 10 Qd1 Be7 11 Be3 Ng4 12 a4 Nxe3 13 fxe3 O-O 14 Khl Rac8 15 Qel f6 16 Qg 5517 exf5 R×f5 18 R×f5 Q×f5 19 e4 Qe6 20 Rdl b6 21 Rd5 Qh6 22 Qg4 Rf8 23 Rd1 Rf2 24 Qc8t Bf8 25 Nb 5 Qg6 26 Qc4t Kh8 27 Rgl a5 28 Qc6 Kg8 $29 \mathrm{Na} 3 \mathrm{Rf} 430 \mathrm{Re} 1 \mathrm{Be} 731 \mathrm{Q} \times 66 \mathrm{R} \times \mathrm{e} 432$ Qxa5 Rxelt 33 Qxel e4 34 a5 d5 35 b4 e3 36 c3 Qd3 37 Nb e2 $38 \mathrm{Nd} 2 \mathrm{Bf6} 39 \mathrm{a} 6 \mathrm{Bxc} 340 \mathrm{a} 7 \mathrm{Qa6}$ 41 Qxe2 Qalt 42 Nf1 Bxb4 43 Qe6t Kf8 44 Qc8t Ke7 45 Qb7t Ke6 46 Qc8t Ki6 47 Qcrt Ke5 48 Qe8t Kf6 49 Qct Ke5 50 Qe8t Kf6 51 Qct Ke5 :
Master - L'Excentrique 1 Nf3 f5 2 g3 e6 3 Bg2 Nf6 4 4d3 Be7 5 O-O O-O $6 \mathrm{Nbd} 2 \mathrm{d5} 7 \mathrm{Nb} 3$ b6 8 c3 Nc6 9 Nbd4 Nxd4 10 Nxd4 Bd7 11 Bf4 c5 12 Nc2 a5 13 f 3 Nh 514 Be 5 Ba 415 b3 Be8 16 f 4 a 4 17 e4 axb3 18 axb3 dxe4 19 dxe4 Rxal 20 Nal Qxdl 21 Rxdl fxe4 22 Bxe4 g5 23 fxg5 Bxy 24
 Rxe5 Rd7 29 Be4 Rd2t $30 \mathrm{Kf} 3 \mathrm{R} \times \mathrm{h} 231 \mathrm{Kf} 4 \mathrm{Bg} 6$ $32 \mathrm{~B} \times \mathrm{g} 6 \mathrm{~h} \times \mathrm{g} 633 \mathrm{Rel} \mathrm{Rh} 334 \mathrm{c} 4 \mathrm{Rd} 335 \mathrm{Re} 5 \mathrm{~K} f 7$ 36 Nc2 R×b3 37 Ne3 Rd3 38 Nc 2 Rd 239 Ne 3 Rd4 $40 \mathrm{Kg} 5 \mathrm{Ne} 841 \mathrm{Nc} 2 \mathrm{R} \times \mathrm{c} 42 \mathrm{Ne} 3 \mathrm{O}-1$

BCP - Parwell 1 e4 e5 2 N $/ 3$ Nct 3 d4 exd4 4 $\mathrm{N} \times \mathrm{d} 4 \mathrm{Bc} 55 \mathrm{Nb} 3 \mathrm{Bb} 66 \mathrm{Nc} 3 \mathrm{Nf} 67 \mathrm{Bb} 5 \mathrm{O}-\mathrm{O} 8$ O-O Ne5 9 Bg5 c6 10 Be2 d6 11 Qcl Bee 12 Kh 1 h6 13 Bh4 Ng6 14 Bxf6 Qxf6 $15 f 4$ Nh4 16 f5 Bxb3 $17 \mathrm{~g} 3 \mathrm{~d} 518 \mathrm{axb} 3 \mathrm{dxe4} 19 \mathrm{gxh} 4 \mathrm{Q} \times \mathrm{h} 420 \mathrm{Rf} 4$ Qh3 21 Nxe4 Rfe8 22 Nc3 Bc7 23 Rf2 Bd6 24 Rg2 Be5 25 Bg 4 Qh4 26 Qd2 Bxh2 27 R×h2 Qxg4 28 Rg1 Qf3+ 29 Qg 2 Re3 $30 \mathrm{R} \times \mathrm{h} 6 \mathrm{Q} \times \mathrm{g} 2+31 \mathrm{Rag} 2 \mathrm{ab}$ 32 Rh4 Rd8 33 Rgh2 Re1t $34 \mathrm{Kg} 2 \mathrm{Rd} 2+35 \mathrm{Kg} 3$ R×h2 36 R×h2 b6 37 Kf4 Rf1t 38 Ke4 Relt 39 Ne2 Rbl 40 Nd 4 C 5 adjudicated 1-0
Nuchess - BeBe 1 Nc3 d5 2 d4 Bf5 3 f3 Nf6 4 g4 Bg6 5 g 5 Nh5 6 e4 e6 7 exd5 exd5 8 Qe2t Be7 9 Qb5t Na6 10 Nxd5 O-O 11 c3 Bxg5 12 Bxg5 Qxg5 13 Nh 3 Rfe8t 14 Be 2 Rxe2t $15 \mathrm{Qxe2} \mathrm{Q} \times \mathrm{d} 5$ 16 O-O Rd8 17 b4 Qf5 18 Rfel Nf6 19 Kg2 Bh5 $20 \mathrm{b5} \mathrm{Na} 521 \mathrm{Ng} 1 \mathrm{Rc} 822 \mathrm{Khl}$ Rd8 23 Kg 2 Rc 8 24 Kh 1 Rd 825 Kg 2 \%-1/2
Challenger X - Awit $1 \mathrm{~d} 4 \mathrm{Nf} 62 \mathrm{c4} \mathrm{~g} 63 \mathrm{Nc} 3 \mathrm{~d} 5$ 4 Nf3 Bg75 Qb3 dxc4 6 Q×c4 O-O 7 e4 Nc6 8 e5 Nd7 9 Nd5 Nb6 10 N×b6 a×b6 11 Qc3 Bg4 12 Be2 Bxf3 13 Bxf ${ }^{\text {N }} \times \mathrm{d} 414$ Bxb7 Ra7 15 Be4 Bxe5 16 Bh6 Re8 17 Qc4 Qd6 18 f4 b5 19 Qd3 f5 20 fxe5 fxe4 21 Qxe4 Qb4t $22 \mathrm{Kf1} \mathrm{Q} \times \mathrm{b} 223 \mathrm{Rb} 1$ Qxa2 24 Rc 1 Rd 825 Rg 1 ct 26 Kel Qb2 27 Rb Qc3t $28 \mathrm{Kf1} \mathrm{Ra} 229 \mathrm{Rc} 1 \mathrm{Rf} 8+30 \mathrm{Bxf8}$ Qxclt 31 Qel Qf4t 32 Qf2 Qxf2\# 0-1
Advance 1.0 - Dark Horse 1 e4 e5 2 Nf3 Nct 3 Bb5 Nf6 4 O-O Be7 5 Rel Bd6 6 d4 Nxd4 7 Nxd4 a6 8 Bc4 b5 9 Bd5 Nxd5 10 exd5 O-O 11 Nf5 Bb7 12 Bh6 gxh6 13 Qg4t 1-0
Duchess - Belle 1 e4 e5 2 Nf3 Ne6 3 Bc4 Nf6 4 d4 exd4 5 O-O Nxe4 6 Rel d5 7 Bxd5 Qxd5 8 Nc3 Qa5 9 Nxe4 Be6 10 Bd2 Bb4 11 Nxd4 Nxd4 12 c3 Be7 13 cxd4 Qd5 14 Rcl c6 15 Bg5 Bxg5 16 Rc5 Qxa2 17 Nag5 O-O-O 18 Nxe6 fxe6 19 Qd2 Rd5 20 Rccl Rb5 21 Re2 Rd8 22 Qc3 Rd6 23 Qc2 g6 24 Rd1 Rbd5 25 Re4 e5 26 Re3 Rxd4 27 Rdel Rd2 28 Qc5 Q×b2 29 Rxe5 Qb6 30 Re8t Rd8 31 Rxd8t Rxd8 32 Qe7 Qa5 33 Rbl Rd7 34 Qe3 Qb6 35 Qe8t Qd8 36 Qe6 Qe7.37 Qg8t Rd8 38 Qc4 h5 39 f4 Re8 40 Ral Qe3t 41 Kf1 a6 42 Rd1 g5 43 f5 Qe5 44 Qd3 Rf8 45 Qd7t Kb8 46 Kgl Qc5t 47 Khl Q×f5 48 Qd6t Kc8 $49 \mathrm{~h} 3 \mathrm{~g} 450 \mathrm{~h} \times \mathrm{g} 4 \mathrm{~h} \times \mathrm{g} 4$ 51 Rel Rd8 52 Qh6 Qf2 0-1

> Playoff
> September 29

Belle - Chaos 1 e4 Nf6 2 e5 Nd5 3 d4 d6 4 Nf3 dxe5 5 Nxe5 g6 6 g3 Bf5 $7 \mathrm{c} 4 \mathrm{Nb} 48 \mathrm{Qa} 4+\mathrm{N} 4 \mathrm{c} 69$ d5 Bc2 10 Qb5 Qd6 11 N×c6 N×c6 12 Ne3 Bg7 13 Qxb7 O-O 14 Q×c6 Qb4 15 Kd2 Be4 16 Rg1 Rfb8 17 Bh3 Bh6t 18 f4 Qa5 19 Rel f5 20 Qeft Kf8 21 b3 Bg7 22 Bb2 Bd4 23 g4 Rb6 24 Qd7 Rd6 25 Qa4 Qb6 $26 \mathrm{Ba} 3 \mathrm{Bxc} 3+27 \mathrm{~K} \times \mathrm{c} 3$ Rdd8 28 Rad1 Qf2 29 gxf5 Qc2t $30 \mathrm{Kd4} \mathrm{gxf5} 31$ Qe6 Qf2t 32 Ke5 Kg8 $33 \mathrm{Rg} 1+\mathrm{Kh} 834 \mathrm{Bxe} 7 \mathrm{Qb} 2+35 \mathrm{Rd} 4 \mathrm{Qg} 2$ 36 Qf6t Kg8 37 Bxg2 Rxd5t 38 Ke6 h6 39 Q×h6 Rejt 40 fxej Rf8 41 Sf3\#1-0


# The Eleventh ACM North American Computer Chess Championship 

Nashville, Tennessee, October 26-28, 1980

BELLE followed its victory at the 3rd World Computer Chess Championship in Linz, Austria with a repeat first place finish at the ACM' 80 tournament in Nashville. BELLE, developed by Ken Thompson and Joe Condon of Bell Laboratories in Murray Hill, New Jersey, finished with a perfect score of four points in the Swiss-style championship. BELLE ran on an LSI-11, augmented with special chess hardware, which Thompson and Condon brought to the Opryland Hotel. Second place, with three points, went to CHAOS of the University of Michigan, the work of Fred Swartz, Mike Alexander, Jack O'Keefe, and Vic Berman. CHAOS ran on an Amdahl V/8 in Sunnyvale, California. The former North American champion, CHESS 4.9 of Northwestern University, didn't participate due to the last minute illness of one of its authors.

A new feature of this year's event was a round-robin speed chess tournament involving all ten programs. The games were played at a rate of five seconds per move. The winner, with a perfect score of nine points, was CRAY BLITZ of the University of Southern Mississippi, developed by Robert Hyatt, Albert Gower, Dave Darling, and Derek Robb. CRAY BLITZ ran on a CRAY-1 in Mendota Heights, Minnesota. BELLE came in second with eight points, having lost only to CRAY BLITZ. The level of play in both the regular tournament and in speed chess was generally impressive, with several of the programs playing at the Expert Level.

It is worthy to note that five of the ten participants brought their microcomputers and/or special chess hardware to the toumament site. At the other extreme, two of the programs ran on CRAY computers.

A complete listing of the game scores and results of the tournament are found on pages 24-26.
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David Levy sent us the following analysis of the Chess Challenger vs. BELLE game (see next page).

|  |  |  |
| :--- | :--- | :---: |
| 1 | $e 2-e 4$ | $e 7-e 5$ |
| 2 | Ng1-f3 | Nb8-c6 |
| 3 | Bf1-b5 | a7-a6 |
| 4 | Bb5-a4 | $N g 8-f 6$ |
| 5 | $0-0$ | $N f 6 x e 4$ |

11th ACM Tournament
White: Chess Challenger
Black: BELLE
Notes by David Levy
The Open Variation, which leads to very lively play, has long been a favourite of Viktor Korchnoi, and was used by him several times during his 1978 Horld Championship match against Karpov.

| 6 | $d 2-d 4$ | $b 7-b 5$ |
| :--- | :--- | :--- |
| 7 | $B a 4-b 3$ | $d 7-d 5$ |
| 8 | $d 4 \times e 5$ | $B c 8-e 6$ |
| 9 | $c 2-c 3$ | $B f 8-c 5$ |

Up to now both programs have been following well known opening theory, taken directly from their openings books. Now, however, Challenger is out of book and at once makes a serious strategic mistake.

10 Bc1-e3?
This allows Black to saddle its opponent with doubled, isolated pawns. Normal here is $10 \mathrm{Nb} 1-\mathrm{d} 2$.

| 10 | $\ldots$ | $B c 5 x e 3$ |
| :---: | :---: | :---: |
| 11 | f2xe3 | $\mathrm{RaZ-b8}$ |
| 12 | $\mathrm{Nb} 1-\mathrm{d} 2$ | $\mathrm{Ne} 4-\mathrm{c} 5$ |

Threatening 13...Nc5-d3, forking the pawns on $e 5$ and b2, as well as the slower plan of 13...0-0, followed by ...Nc5-d7, ...Rf8-e8, ...Nd7-f8 and ...Nf8-g6, when the thite pawn at $e 5$ would soon be lost.

```
13 Qd1-e1 Nc5-d3
14 Qe1-g3 O-O
15 Ra1-b1?
```

Perhaps it is a little unfair to give this move a question mark, since the correct continuation requires a depth of analysis well beyond the scope of Chess Challenger, but from the pure chess point of viev: thite should be criticized.

The correct move was $15 \mathrm{Bb} 3-\mathrm{c}$, when Black would almost certainly have played 15...Nc3xb2, allowing the combination 16 3c2xh7+ Kg8xh7 $17 \mathrm{Nf} 3-\mathrm{g} 5 \mathrm{Kh} 7-\mathrm{g} 818 \mathrm{Qg} 3-\mathrm{h} 4$ Rf8-e8 19 Qh4-h7+ Kg8-f8 20 Ng $5 x f 7$ Ce6xf7 21 Rf1xf7+ Kf8xf7 22 Ra1-f1+ Qd8-f6 (22...kf7-e6 23 Ch7-f5+ Ke6-e7 24 Qf5-f7 mate) 23 e5xf6, and thite will win.

```
15 ... QdS-e7?
16 Bb3-c2 Qe7-c5
```

BELLE had Rinned all its hopes on this move when making the frevious one, but a better glan would have been 15...h7-h 9 . No:: l:'hite cannot capture on d3 because of ...Oc5xe3+, but there is something better for !hite.

| 17 Nf $3-g 5!$ | $N c \in \times e 5$ |
| :--- | :--- |
| 18 N!c5xh7 | $R f 8-d 8$ |

And not 18...Kgexh7 19 Qa3xe5, when the knight on d3 is also lost.

```
Nh7-f6+ Kg8-f8
Bc2xd3 Ne5xd3
Nf6-h5 g7-g6
Nh5-f6 BeG-f5?
```

This move soon lands Black in trouble. There were numerous alternatives, such as 22...b5-b4.

| 23 | Qg3-g5 | b5-b4 |
| :--- | :--- | ---: |
| 24 | Nf6-h7+ | Kf8-e8 |
| 25 | Nh7-f6+ | Ke8-f8 |

Here, and for a few moves, thite could force a draws.

| Nd2-b3 | Qc5-c4 |
| :--- | :--- |
| Nf6-h7+ | Kf8-e8 |
| c3xb4 | Rb8×b4 |
| Nh7-f6+ | Ke8-f8 |
| Nf6-g4 | Rd8-d6 |
| Ng4-h6 | Qc4-e4! |

A dual purpose move, putting pressure on g2 (see later) and supporting the K-side.

32 Rffuff:?
An interesting exchange sacrifice that just fails. But if white vacillates, Black will play ...Ef5-e6 or ...Nd3-e5 followed by ...Ne5- 4 , when Black has the more active game.

| 32 | —. | g6xf5 |
| :--- | :--- | :--- |
| 33 | Qg5-g8+ | Kf8-e7 |
| 34 | Qg8xf7+ | Ke7-d8 |
| 35 | Nh6xf5 | Rd6-c6 |
| 36 | h2-h4 |  |

A typical computer move, and not a bad try. In many variations Uhite only just fails to promote this pawn.

| 36 | O. | Rc6-c2! |
| :--- | :--- | :--- |
| 37 | Qf7-f8+ | Kd8-d7 |
| 38 | Qf8-f7+ | Kd7-c8 |
| 39 | Qf7-g6 | Kc6-b7 |
| 40 | Nb3-a5+ | Kb7-a8!! |

A very profound move. Black gives up a pawn with check in order to cause its opponent to lose a tempo (a move) l/hite then finds its queen on the wrong flank, and in bringing it back to the K-side l:hite hands over the initiative for just long enough.

```
41 Qg6xa6+ Ka8-b8
42 Qa6-g6
```

```
    Preventing mate on g2, but now comes a deadly blow.
42 .... Nd3-e5!
    Threatening the queen as vell as ...Rc2xg2+:
43 Qg6-g8+ Kb8-a7
44 Rb1-f1 Rb4xb2
45 Kg1-h1 Rc2xg2
    thite could well resign here, to save further embarrassment.
4 6 ~ N a 5 - c 6 + ~ N e 5 x c 6 ~
47 Q98-a8+ Ka7xa8
48 a2-a4
```

Having delayed mate for as long as possible, thite finally runs out of checks, but now a bug appears in BELLE.

| 48 | $\ldots$ | Ka8-b8? |
| :--- | :--- | :--- |
| 49 | $a 4-a 5$ | Kb8-a8? |
| 50 | $a 5-a 6$ | Ka8-a7? |
| 51 | $h 4-h 5$ | Ka7-b6? |
| 52 | $a 6-a 7$ | $R g 2-g 1+$ |

At last:
53 Kh1xg1 Qe4-g2 mate.

One of the most exciting games in the history of the ACis tournaments.

# ACM's Eleventh <br> North American <br> Computer Chess Championship Nashville, Tennessee 

October 26-28, 1980

|  | rate | perf | 1 | 2 | 3 | 4 total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 Belle | 2150 | 2294 | 6+0 | $5+\square$ | $2+0$ | $3+4$ |
| 2 Chaos | 1800 | 1952 | $7+$ - | $9+0$ | 1-■ | $5+03$ |
| 3 Challenger X | 0 | 1807 | $4=0$ | $7+\square$ | $9+\square$ | 1-0 2\%/2 |
| 4 BeBe | 0 | 1762 | $3=\square$ | 6+ | 5-0 | 9+0 21/2 |
| 5 Cray Blitz | 1850 | 1791 | $8+0$ | 1-0 | 4+! | 2- ${ }^{-1}$ |
| 6 Mychess | 0 | 1545 | 1-6 | 4-0 | $8+\square$ | $10+$ m |
| 7 Ostrich 81 | 1450 | 1372 | 2-0 | 3-0 | $10+\square$ | $8=018$ |
| 8 Cube 2.0 | 0 | 1334 | 5-■ | $10+0$ | 6-0 | $7=1 / 2$ |
| 9 Awit | 1400 | 1337 | $10+0$ | 2-■ | 3-0 | 4-1 |
| 10 Clash | 1000 | 875 | 9-■ | 8-9 | 7-0 | 6-00 |

Swiss Toumament*

|  | rate | erf | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 Cray Blitz | 2000 | 2219 | $7+\square$ | 4+0 | $10+$ 吅 | $5+$ m | 9+0 | $8+$ m | $6+\square$ | $3+\square$ | $2+\square 9$ |
| 2 Belle | 0 | 1922 | $9+0$ | $8+$ | 6+0 | $3+$ + | 5+0 | $7+0$ | $4+$ - | $10+0$ | 1-68 |
| 3 BeBe | 0 | 1722 | $8+0$ | $6+$ + | $5+0$ | 2-0 | 7+■ | $4+0$ | $10+$ E | 1-0 | 9+m7 |
| 4 Challenger $X$ | 0 | 1411 | $10=0$ | 1-■ | $9+0$ | $8+\square$ | 6+0 | 3-■ | 2-0 | $7+$ - | $5=05$ |
| 5 Ostrich 80 | 0 | 1294 | 6-1 | $10+0$ | 3-■ | 1-0 | 2-m | $9+0$ | $7+$ - | $8=0$ | $4=4$ |
| 6 Awit | 0 | 1186 | $5+0$ | 3-0 | 2-■ | 7-0 | 4-■ | $10+0$ | 1-■ | 9+0 | 8-4 3 |
| 7 Chaos | 0 | 1186 | 1-0 | $9+$ - | $8=0$ | 6+ | 3-0 | 2-■ | 5-0 | 4-0 | $10=3$ |
| 8 Mychess | 0 | 1186 | 3-■ | 2-0 | $7=\square$ | 4-0 | $10+\square$ | 1-0 | 9-■ | 5= | $6+03$ |
| 9 Cube 2.0 | 0 | 1074 | 2- | 7-0 | 4-■ | $10+0$ | 1-■ | 5-6 | $8+0$ | 6- | 3-0 2 |
| 10 Clash | 1000 | 938 | $4=$ - | 5- | 1-0 | 9-啰 | 8-0 | 6-a | 3-0 | 2-: | $7=01$ |

Speed Tournament *

[^0]
## Speed Game <br> October 28

Cray Blitz - Belle 1 e4 e5 2 Nf3 Net 3 Bct Bc5 4 c3 Nf6 5 d4 exd4 6 Odd Bb4t 7 Bd2 Bxd2t 8 Nbxd2 d5 9 exd5 Nud5 10 Qb3 Nce7 11 O-O O-O 12 Rfel c6 13 Racl b6 14 Ne5 Be6 15 Qg3 c5 16 dxc5 bxc5 17 Ne4 Qb8 18 Bxd5 Nxd5 19 b3 $\mathrm{Nb} 420 \mathrm{Nxacs} \mathrm{N} \times \mathrm{az} 21$ Nxe6 fxe6 22 Rob Re8 23 Qh3 Qb4 24 Rd1 Qe7 25 Rd7 Qf6 26 Qg3 Re7 27 Rxe7 Qxe7 28 Qg4 Res 29 Qc4 Qf6 30 i4 Qd8 31 Rxe6 Qdit 32 Kiz Qd2t 33 Kg3 Qelt 34 Kh 3 Qc3t 35 Qxc3 Rf8 36 Qd2 Nc1 37 Qxc1 Kh8 38 Qe3 Kg8 $39 \mathrm{Nd7} \mathrm{~g} 540 \mathrm{Nxf8} 2541$ £× F 5 a 42 Re 8 a3 43 Qebt Kh8 44 Nxh7t Kg7 45 Qg8*: 1-0

## Round 1 <br> October 26

Awit - Clash 1 b3 es 2 Bb2 Nc6 3 e3 Bc5 4 Nf3 d6 5 Bc4 N66 6 d4 exd4 7 exd4 Bb4t 8 c 3 Qe7t 9 Be2 Ba5 10 O-O Nd5 11 Bc4 Nf4 12 Re1 Be6 13 d5 Kd7 14 dxc6t Kxe6 15 Nd4t Kc5 16 b4t Kxc4 17 Nd2t Kd5 18 c4\# 1-0
Belle - Mychess 1 e4 e5 2 Nf3 Nf6 3 d4 exd4 4 e5 Ne4 5 Qxd4 d5 6 exd6 Nxd6 7 Nc3 Nef 8 Qf4 Bf5 9 Bb5 Qe7t 10 Be3 Bxc2 11 Bxc6t bxc6 12 Nd4 Be4 13 O-O c5 14 Ndb5 N×b5 15 N×b5 g5 16 Qg3 Rc8 17 f3 c6 18 B×g5 f6 19 Nxa7 Ra8 20 Rael Qxa7 21 Bxf6 c4t 22 Kh1 Bg7 23 Bxg7 Rg8 24 Rxe4t Kf7 25 Rfel Rxg7 26 Qf4t Kg8 27 Re8t Rxe8 28 Rxe8\# 1-0
Ostrich 81 - Chaos 1 e4 c5 2 Nf3 Nc6 3 d4 cxd4 4 Nxd4 Nf6 5 Nxc6 bxc6 6 Nc3 e6 7 Be2 Bb4 8 Bd2 d5 9 f3 dxe4 10 Nxe4 Nxe4 11 fxe4 Qh4t 12 Kf1 Qff 13 Bf3 Ba6t $14 \mathrm{Kf} 2 \mathrm{Bc} 5+15$ Be3 Bxe3t 16 Kxe3 Rd8 17 Qcl Qg5t 18 Kf2 Rd2t 19 Qxd2 Q×d2+ 20 Kg 3 Q×c2 21 b3 Qd2 22 Rhel Qg5t 23 Kf2 Ke7 0-1
Cray Blitz - Cube 2.01 e4 e5 2 Nf3 Nc6 3 Bc4 d6 4 Nc3 Nf6 5 Ng5 d5 6 exd5 Nd4 7 d6 Be6 8 Bxe6 fxe6 9 dxc 7 Qxc7 10 O-O 1-0
Challenger X - BeBe 1 e4 c5 2 Nf3 d6 3 d4 cxd4 4 Nxd4 Nf6 5 Nc3 g6 $6 \mathrm{f4} \mathrm{Nbd7} 7 \mathrm{Be} 2 \mathrm{Bg} 7$ 8 O-O O-O 9 Be3 a6 10 Rc1 e6 11. Nf3 Ng4 12 Qd2 Nxe3 13 Qxe3 Qc7 14 Rcd1 b5 15 Qd2 b4 16 Na4 Rb8 17 b3 d5 18 exd5 exd5 19 Qxd5 Qxf4 20 Bc4 Nb6 21 N×b6 Qe3t 22 Khl Qxb6 23 Ng5 Bb7 24 Od7 Bc8 25 Bxf7t Kh8 26 Qd6 BF5 27 Bc4 Qxd6 28 Rxd6 Bc3 29 Bxa6 Bxc2 30 Rd7 Rxfit 31 Bxfl Bg7 32 Bc4 h6 33 Nf7t Kh7 34 Nd8 Bf5 35 Ne6 Bxe6 36 Bxe6 Ra8 37 Rd2 Ra6 38 Bc4 Ra7 39 $\mathrm{Kg} 1 \mathrm{~h} 540 \mathrm{Re} 2 \mathrm{Bd} 4+41 \mathrm{Kf1} \mathrm{Kg} 742 \mathrm{Re} 4 \mathrm{Bb} 243$ Bd3 Bc3 $44 \mathrm{Re} 2 \mathrm{Rf} 7445 \mathrm{Rf} 2 \mathrm{Rd} 746 \mathrm{Bb5} \mathrm{Rd} 547$ Bc4 Ra5 48 g 3 Bd4 49 Rd2 Bc3 50 Re2 g5 51 Rf2


## Round 2 <br> October 26

Mychess - BeBe 1 e4 c5 2 Nf3 d6 3 d4 cxd4 4 N×d4 Nf6 $5 \mathrm{Nc} 3 \mathrm{~g} 66 \mathrm{Be} 3 \mathrm{Bg} 77 \mathrm{Be} 2 \mathrm{O}-\mathrm{O} 8 \mathrm{Qd} 2$ Ne6 9 O-O-O Bd7 10 Kbl Re8 11 h 4 Re8 12 h 5 N×h5 13 Bxh5 gah5 14 N×ct bxce 15 Bxa7 Ra8 16 Bd4 Bxd4 17 Qxd4 Ra5 18 at Rg5 19 f4 R×g2 20 Rdg1 R×g1t 21 Q×git Kh8 22 Qd4t 6623 R×h5 Rg8 24 b3 Rg 325 b4 e5 26 fxe5 dxe5 27 Qc5 Bh3 28 Rh 4 Qb 829 Ne 2 Rf 330 a 5 Bf 131 Ng 1 Rg 332 Qe7 Rg7 33 Qc5 Rag1 34 Q×g1 Qxb4t 35 Ka 2

Bc4† 36 Kal Qa3† 37 Kbl Ba2t $38 \mathrm{Kal} \mathrm{Bb3+} 39$ $\mathrm{Kbl} \mathrm{Qa} 2+40 \mathrm{Kcl} \mathbf{Q u c} 2$ : $0-1$
Cray blitz - Belle 1 e4 e5 2 NE3 Nob 3 Bc4 Nf6 4 Ng5 d5 5 exd5 Na5 6 Bb5t o6 7 dxco bxo6 8 Be2 h6 9 NB3 e4 10 Ne5 Bd6 11 f4 exf3 12 Nxf3 O-O 13 O-O Qc7 14 d4 c5 15 Nc3 a6 16 dxc5 Bxc5t 17 Khl Bb7 18 Qe1 Rae8 19 Qh4 Ne4 20 Bf4 Qa6 21 Nxe4 Qxe4 22 Bd3 Qe6 23 Qh5 Qb6 24 Qf5 g6 25 Qh3 h5 26 Bh6 Qxb2 27 Bxf8 Bxf8 28 Qd7 Re7 29 Qa4 Qc3 30 Qf4 Bd5 31 Bxa6 Qxc2 32 Rfcl Qb2 33 Qd2 Qxd2 34 Nxd2 Bg7 35 Rab1 Bxa2 36 Rb 6 Re6 $37 \mathrm{Rb} 8+\mathrm{Kh} 738$ Bfi Bh 39 Rb2 Bxd2 40 Rxd2 Nb3 41 Rxa2 Nxcl 42 Rd2 Kg7 43 g3 Nb3 44 Rd5 Rc6 45 Kg2 Rc2t 46 Kh 3 Kf6 47 Rd6t Ke5 48 Rd8 Nd4 49 Bd3 Rf2 50 Rc8 g5 51 Rh8 Nf3 52 Rxh5 $f 553$ Bxff Kxf5 54 g4t Kf4 55 Rh6 R×h2* 0-1
Chaos - Awit 1 d4 Nf6 2 c4 g6 3 Nc3 d5 4 cxd5 $\mathrm{N} \times \mathrm{d} 55 \mathrm{e} 5 \mathrm{Nxc3} 6 \mathrm{bxc} 3 \mathrm{Bg} 77 \mathrm{Bc} 4 \mathrm{C} 58 \mathrm{Ne2} \mathrm{O}-\mathrm{O}$ 9 O-O Nc6 10 Be3 cad4 11 odd Bd7 12 Rc1 Rc8 13 f3 Na5 14 Bd3 Qb6 15 Qd2 Rxcl 16 Rxcl Rb8 17 d 5 Qd8 18 Bxa7 Rc8 19 Rxc8 Bxc8 20 Bcs b6 21 Be3 Be5 22 Qb4 Bc7 23 Qb2 Qd6 24 Bf4 Qc5t 25 Kh 1 Nc 426 Qc3 Bxf4 $27 \mathrm{Nxf4}$ b5 28 Be2 Qa3 29 Qxa3 Nxa3 30 Kg 1 g5 31 Nd 3 Kg 732 K 2 h 6 33 Nb4 h5 34 Ke3 $\mathrm{f} 535 \mathrm{Kd} 4 \mathrm{~g} 436 \mathrm{Bd} 3 \mathrm{gxf3} 37$ g××3 Kf6 38 e5t Kg6 39 Nc6 Kf7 40 Na7 Bb7 41 Bxf5 Ba6 42 f4 Nc4 43 Bd3 h4 44 N×b5 Bxb5 45 Bxc4 Bxc4 46 Kxc4 Ke8 47 d 6 h 348 Kd 5 exd6 49 K×d6 Kf7 50 e6t Kg6 1-0
Ostrich 81 - Challenger X 1 e4 e5 2 Nf3 Nc6 3 Bb5 a6 4 Bxc6 dxo6 5 d4 exd4 6 Qxd4 Qxd4 7 Nxd4 Bd7 8 O-O Bd6 9 Be3 Nf6 10 Nc3 Ng4 11 Nf3 Nxe3 12 fxe3 Be6 13 Rfd1 O-O-O 14 Nd4 Be5 15 Nxe6 fxe6 16 Rxd8t Kxd8 17 Nd1 Kc8 18 h3 Rd8 19 Kf1 Rd2 20 c 3 Kd 721 a4 Kd6 22 Rb1 Bg3 $23 \mathrm{c} 4 \mathrm{Kc} 524 \mathrm{~b} 3 \mathrm{~Kb} 425 \mathrm{a5}$ c5 26 e5 h5 27 e4 Kxa5 28 Ralt Kb4 29 Rb1 Bxe5 30 Ne 3 Kc 31 Ke1 Kd3 32 Nd1 Bd4 33 b4 Rxg2 34 Rb3+ Kxc4 35 Ne3t Bxe3 36 Rxe3 0-1
Cube 2.0 - Clash 1 e4 e5 2 Nf3 Na6 3 Bb5 Bc5 4 c3 Qf6 5 b4 Bb6 6 d3 Nge7 7 Na 3 d 58 Bg 5 Qd6 9 exd5 Nxd5 10 Nc4 Qet 11 Bd2 e4 12 Ng5 Qf6 13 Nxe4 Qf5 14 Ned6t cxd6 15 Nxd6t Ke7 16 Nxf5t Bxf5 17 Qf3 Ke6 18 Bxc6 bxct 19 c4 Ne7 20 c5 Bc7 21 Qe3t Kd7 22 Qd4t Nd5 23 Q×g7 Kc8 24 O-O-O Bg6 25 Qf6 Kb7 26 b5 B×h2 27 bxc6t Kb8 $28 \mathrm{R} \times \mathrm{h} 2 \mathrm{Nc} 729 \mathrm{Q} \times \mathrm{g} 6 \mathrm{hag} 630 \mathrm{R} \times \mathrm{h} 8 \mathrm{t}$ Ne8 31 Bf4t Kc8 32 Rxe8\# 1-0

## Round 3 <br> October 27

Clash - Ostrich 811 e4 d5 2 Nc3 Nf6 3 Nxd5 Nxe4 $4 \mathrm{Nc} 3 \mathrm{Nxc} 35 \mathrm{dxc} 3 \mathrm{Qxdl}+6 \mathrm{Kxdl}$ Bf5 7 Bd3 e6 8 Bf4 Bc5 $9 \mathrm{Ke} 2 \mathrm{Bxd}+10 \mathrm{Cxd} 3 \mathrm{Na} 611 \mathrm{Be} 5$ O-O 12 b4 f6 13 bxc5 fxe5 14 d4 exd4 15 cxd4 e5 16 dxe5 N $\times$ c5 17 Rd1 Ne4 18 Nf 3 Nc 3 t 19 Ke 3 Nxdlt 20 Rxdl c5 21 Rd7 b6 22 e6 Rae8 23 e7 Rr7 24 Rxa7 Rexe7t 25 Rxe7 Rxe7t 26 Kd3 Ra7 27 h3 R×a2 28 Ke 3 c 429 g 4 b5 30 Ne5 Ra3t 31 Ke 4 R×h3 32 f3 c3 33 Kd 4 c2 $34 \mathrm{Nd} 3 \mathrm{Rxf3} 35 \mathrm{Ne} 1$ Rf4t $36 \mathrm{Ke5} \mathrm{cl}(\mathrm{Q}) 37 \mathrm{Nd} 3 \mathrm{Qe} 3+38 \mathrm{Kd6} \mathrm{Qxd} 3 \dagger$ $39 \mathrm{Kc} 6 \mathrm{R} \times \mathrm{g} 440 \mathrm{Kc} 7 \mathrm{Rg} 641 \mathrm{KbS}$ Qd8t 42 Kb 7 Rb6t $43 \mathrm{Ka7}$ Qb8\# 0-1

Belle - Chaos 1 e4 c5 2 c3 Nf6 3 e5 Nd5 4 d4 cod4 5 cxd4 d6 6 N63 Nc6 7 Bc4 Nb6 8 Bb5 e6 9 O-O Be7 10 exd6 Qxd6 11 Na3 O-O 12 Re1 Bd7 13 Be3 Nd5 14 Ba4 Nxe3 15 fxe3 Rfc8 16 e4 a6 17 Bxc6 Rxct 18 Ne5 Rc7 19 Re2 Be8 20 NB3 Rac8 21 e5 Qb4 22 d5 Qc5t 23 Kh1 exd5 24 Nxd5 Rd8 25 Rd2 Rcd7 26 b4 Qxd5 27 Rxd5 Rxd5 28 Qel Ba4 29 Qc3 Be6 30 a3 Bg5 31 Qc2 Bf4 32 Re1 Rd3 33 Qc4 Bh6 34 e6 Rxa3 35 exf7t Kf8 36 Qc5t Kxf7 37 Qe7t Kg8 38 Qxd8t 1-0
Awit - Challenger X 1 b3 d5 2 Bb2 Nf6 3 e3 e6 4 Nf3 Bd6 5 Be2 O-O 6 O-O Bd7 7 Na3 Ng4 8 h3 Qe7 9 Nb5 Bxb5 10 Bxb5 Nf6 11 Ne5 c6 12 Be2 Nbd7 13 f4 Ne4 14 Nxd7 Qxd7 15 Qe1 Qd8 16 d3 Nf6 17 Bf3 Rc8 18 a4 Re8 19 Qg3 Bc5 20 Rfe1 Bb4 21 Re2 Be7 22 Rae1 Rf8 23 Kh2 Bb4 24 c3 Bd6 25 e4 dxe4 26 dxe4 Bc5 27 b4 Be7 28 Qf2 c5 29 Rd2 Qc7 30 e5 cxb4 31 exf6 Bxf6 32 cab4 Qxf4t 33 g3 Qxb4 34 Bxf6 gxf6 35 Rb 2 Qxa4 36 Bxb7 Rc4 37 Ra2 Qb4 38 Rxa7 ff 39 Qe3 Rc2t 40 Kg1 Rb8 41 Bf3 f4 42 gxf4 Rc3 43 Qe5 Rxf3 44 Kg2 Qxf4 45 Qxf4 Rxf4 46 Kg3 Rc4 47 Re7 Rb3t $48 \mathrm{Kh} 2 \mathrm{Rc} 2+49 \mathrm{Kg} 1 \mathrm{Rg} 3+50 \mathrm{Kf1}$ Rf3t 51 Kg 1 Rxh3 52 Rf1 Rg3t 53 Khl Rh3t 54 Kg 1 h 555 Rexf7 Rg3t 56 Kh1 h4 57 R1f4 e5 58 Rf8t Kg7 59 R8f7t Kg6 60 R4f6t Kh5 61 Rh7t Kg5 62 Rhh6 e4 63 Rhg6t Kh5 64 Rh6t Kg4 65 Rc6 Rxc6 66 R×c6 0-1
BeBe - Cray Blitz 1 e4 c5 2 Nf3 e6 3 Be2 Nc6 4 O-O Nf6 5 Nc3 Be7 6 d4 cxd4 7 Nxd4 O-O 8 Bf4 Nxd4 9 Qxd4 d6 10 e5 dxe5 11 Qxe5 Qb6 12 Rab1 Bd7 13 Rfd1 Bc5 14 Bg3 Rac8 15 a3 Rfd8 16 b4 Be7 17 Bf4 Be8 18 R×d8 Bxd8 19 Rb3 Bc7 20 Qg5 Bxf4 21 Qxf4 Rd8 22 Bf3 Bc6 23 Bxc6 Qxc6 24 Kf1 b6 25 a4 Qe8 26 a5 e5 27 Qc4 Rd2 28 axb6 axb6 29 Rb 2 e4 30 Ra 2 h 631 Qc 7 Qe6 32 b 5 Ng4 33 Kel Rxf2 34 h3 Rxg2 35 hxg4 Rg1t 36 Kf2 R×g4 $37 \mathrm{Ra}+\mathrm{Kh} 738 \mathrm{Ke} 3 \mathrm{f} 539 \mathrm{Rb} 8 \mathrm{f} 4+40$ Kd4 e3 41 Qc8 f3t $42 \mathrm{Kd3} 0-1$
Cube 2.0 - Mychess 1 d4 Nf6 2 c4 g6 3 Nf3 e6 4 Qa4 Nc6 5 a3 a5 6 Nc 3 Bg 77 e4 Ng4 8 h 3 Nh 6 9 d5 Ne7 10 dxe6 fxe6 11 Bg5 Nf7 12 Bh4 O-O 13 Rd1 Ne5 14 Nxe5 Bxe5 15 Bd3 d6 16 Bc2 c5 17 Qb3 Qc7 18 Nb5 Qd7 19 Qd3 Ra6 20 b3 Kg7 21 Bg3 Bxg3 22 fag3 d5 23 exd5 exd5 24 cxd5 Nxd5 25 Ne 3 Re6t 26 Ne4 Re5 27 Rf1 Qe7 28 Rxf8 Qxf8 $29 \mathrm{Kd2}$ Bf5 30 Qf3 Qe7 $31 \mathrm{Kcl} \mathrm{Ree4} 32 \mathrm{~g} 4$ B×g4 $33 \mathrm{~h} \times \mathrm{g} 4 \mathrm{Qg} 5+34 \mathrm{Kbl}$ Rd4 35 Rxd 4 cxd 436 Bd3 h6 $37 \mathrm{Bc} 4 \mathrm{Nc} 3+0-1$

## Round 4 <br> October 28

Clash - Mychess 1 e4 e5 2 Bc4 Nf6 3 Nc3 Nc6 4 d3 Be5 5 Qf3 d6 6 Be3 Bg4 7 Qg3 Bxe3 8 Q×e3 Nd4 9 Rcl O-O 10 Nce2 b5 11 Bb3 Nxb3 12 cxb3 c5 13 Nf3. Qa5t 14 Nc3 b4 15 Nd5 N×d5 16 exd5 Q×a2 17 Rc4 f5 18 h 3 Bxf3 19 Q×f3 a5 20 O-O Q×b2 21 Qdi a4 22 b×a4 Qa2 23 Qf3 Q×a4 24 g4
fxg 25 Qxg4 Rff 26 Qe4 Rf4 27 Qe3 Rxc4 28 dxc4 Qa3 29 Rel Qxe3 30 Rxe3 Ra3 31 Kg2 Rxe3 32 fxe3 b3 $33 \mathrm{~K} 13 \mathrm{~b} 234 \mathrm{~h} 4 \mathrm{b1}(\mathrm{Q}) 35$ e4 Qd 3 t 36 Kf2 Qxe4 $37 \mathrm{h5}$ Qxct 38 Kg3 g6 39 hxg6 hxgf 40 Kg2 et 41 Kg 3 Qxd5 42 Kh 4 e3.43 Kg3 Qf5 44 $\mathrm{Kh2}$ e2 45 Kg 3 c4 $46 \mathrm{Kg} 2 \mathrm{c} 347 \mathrm{Kg3} \mathrm{c} 248 \mathrm{Kg} 2 \mathrm{~d} 5$ $49 \mathrm{Kg} 3 \mathrm{~d} 40 \mathrm{Kg} 2 \mathrm{~d} 351 \mathrm{Kh} 2 \mathrm{~d} 252 \mathrm{Kg} 3 \mathrm{cl(R)} 53$ Kg2 d1(R) 54 Kg3 Rg1t $55 \mathrm{Kh4}$ Qg4\# 0-1
Challenger X - Belle 1 e4 es 2 NB3 Nc6 3 Bb5 a6 4 Ba4 Nf6 5 O-O Nxe4 6 d4 b5 7 Bb3 d5 8 dxe5 Ве6 9 ca Вc5 10 Вe3 Вxe3 11 fxe3 Rb8 12 Nbd2 Nc5 13 Qe1 Nd3 14 Qg3 O-O 15 Rab1 Qe7 16 Bc2 Qc5 17 Ng5 Ncxe5 18 Nxh7 Rfd8 19 Nf6t Kf8 20 Bxd3 Nxd3 21 Nh5 g6 22 Nf6 Bf5 23 Qg5 b4 24 Nh7t Ke8 25 Nf6t Kf8 26 Nb3 Qc4 27 Nh7t Ke8 28 cxb4 R×b4 29 Nf6t Kf8 30 Ng4 Rd6 31 Nh6 Qe4 32 Rxf5 gxf5 33 Qg8t Ke7 34 Qxf7t Kd8 35 Nxf5 Rc6 36 h4 Rc2 37 Qf8t Kd7 38 Qf7t Kc8 39 Qgb Kb7 $40 \mathrm{Na5t} \mathrm{Ka} 841$ Qxa6t Kb8 42 Qg6 Ne5 43 Qg 8 H Ka7 $44 \mathrm{Rf1} \mathrm{Rbxb2} 45 \mathrm{Kh}$ Rxg2 46 Ncot Nxc6 47 Qa8t Kxa8 48 a4 Kb8 49 a5 Ka8 50 a6 Ka7 $51 \mathrm{~h} 5 \mathrm{~Kb} 52 \mathrm{a} 7 \mathrm{Rg} 1+53 \mathrm{Kag} 1$ Qg2* 0-1
Chaos - Cray Blitz 1 d4 d5 2 c4 e6 3 Nc3 Nf6 4 Bg5 Be7 5 e3 O-O 6 Nf3 h6 7 Bh4 Ne4 8 Bxe7 Qxe7 9 cxd5 Nxc3 10 bxc3 exd5 11 Qb3 Rd8 12 c4 dxc4 13 Bxc4 Ne6 14 Be2 Rd6 15 O-O Be6 16 Qc3 Rad8 17 Rab1 Bxa2 18 R×b7 a5 19 Bd3 Bd5 20 Rfb1 a4 21 Qal Ra8 22 Nd2 Rdd8 23 Nc4 Qe6 24 Rxc 7 Qg 425 Bf 1 Na 526 Nb 6 Nb 327 Qa 2 Be 4 28 N×a8 Bxb1 29 Q×b1 R×a8 30 Bc4 Nxd4 31 exd4 Qxd4 32 Bxf7t Kh8 33 g3 Rf8 34 Qf5 Qalt 35 Kg2 Qb2 $36 \mathrm{Bg} 6 \mathrm{Qb} 837 \mathrm{Qd} 7 \mathrm{Qa} 8+38 \mathrm{Kg} 1 \mathrm{Rg}^{2}$ 39 Ra7 Qf3 40 Rxa4 Qc3 41 Qd5 Rf8 42 Kg2 Qb2 43 Bf5 Qb8 44 Bd3 Qb2 45 Rf4 Rg8 46 Qe4 1-0
BeBe - Awit 1 e4 c5 2 Nf3 d6 3 d4 cxd4 4 Nxd4 Nf6 5 Nc3 a6 6 Be2 e5 7 Nf3 Ne6 8 O-O Be7 9 Be3 Bd7 $10 \mathrm{Nd} 5 \mathrm{O}-\mathrm{O} 11 \mathrm{Bb} 6 \mathrm{Qc8} 12 \mathrm{~N} \times f 6 \mathrm{~g} \times \mathrm{ff}$ 13 c3 $5514 \mathrm{Bd} 3 \mathrm{Bd} 815 \mathrm{Bxd8}$ Qxd8 16 exf5 d5 17 Bc2 Qb6 18 f6 Qb5 19 Qd2 Rfc8 20 Qh6 1-0
Ostrich 81 - Cube 2.01 e4 52 Nf3 Nf6 3 Nc3 Ne6 4 Be2 d6 5 O-O Bg4 6 h3 Bxf3 7 Bxf3 g6 8 Rel Bh6 9 e5 N×e5 10 Bxb7 Rb8 11 Ba6 Qa5 12 Be2 O-O 13 d3 Bxc1 14 Q×c1 Nc6 15 Rbl Nd4 16 a4 Qb4 17 Kh a5 18 Qd1 Qb7 19 b3 Qb4 20 Ne4 Nxe4 21 dxe4 Nxe2 22 Rxe2 c4 23 Re3 Rfc8 24 Qf3 Rb6 25 Qg4 Rcb8 26 Qh4 Qd2 27 Rbel Qxc2 28 Rle2 Qdit 29 Rel Qd4 30 bxc4 e5 31 Rcl Rb4 32 Ra3 R×c4 33 R×c4 Q×c4 34 Ral $f 535$ $f 3$ fxe4 36 fxe $4 \mathrm{~d} 537 \mathrm{Qel} \mathrm{Qxe4} 38 \mathrm{Q} \times 5 \mathrm{Rb} 1+39$ R×b1 Q×blt $40 \mathrm{Kh} 2 \mathrm{Qb} 741 \mathrm{Qd} 8+\mathrm{Kg} 742 \mathrm{a5} \mathrm{Q} 7$ 43 a6 Qf4t 44 Kh1 Qf1t 45 Kh 2 Qxa6 46 Qe7t Kh6 47 Qxe5 Qd3 48 Qf4t Kg7 49 Qe5t Kg8 50 Qe8t Kg7 51 Qe7t Kh6 52 Qh4t Kg7 42-4

## Microcomputer Chess Championship San Jose, Calif

September 5-7, 1980

|  | rate | perf | 1 | 2 | 3 | 4 total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 Challenger | 1200 | 1582 | 6+0 | $2+$ | 4+0 | 3+a 4 |
| 2 Mychess B | 1200 | 1270 | $9+$ - | 1-0 | 5+■ | 4=0 2\% |
| 3 Tryom | 1200 | 1270 | $8+\square$ | 5=0 | 7+ | 1-0 2\% |
| 4 Boris 2.5 | 1200 | 1270 | $10+0$ | 8+0 | 1-■ | 2=0 2\% |
| 5 Boris X | 1200 | 1270 | 7+0 | $3=\square$ | 2-0 | 9+a 2\% |
| 6 Atari A | 1200 | 1199 | 1- | 10+0 | $8=0$ | $7=0$ |
| 7 Sfinks | 1200 | 1128 | 5-■ | 9+0 | 3-0 | 6=1\% |
| 8 Mychess A | 1200 | 1128 | 3-0 | 4-■ | 6=1 | 10+■ 1\% |
| 9 Atani B | 1200 | 1051 | 2-0 | 7-■ | $10+$ | 5-0 |
| 10 Lane | 1200 | 815 | 4-0 | 6-1 | 9-0 | 8-0 0 |

Round 1
Challenger - Atari A 1 d4 d5 2 ct dxct 3 N 63 Na6 4 e4 Bg4 5 Bxc4 e5 6 Qb3 Bb4t 7 Bd2 Bxf3 8 Bxf7t Kf8 9 Bxb4t Nxb4 10 Bxg8 Qe7 11 Qxf3t Kxg8 12 Qb3t Kf8 13 dxe5 Rd8 14 O-O Nd3 15 e6 Nc5 16 Qf3t Qf6 17 Qa3 Qe5 18 f4 Qd4t 19 Rf2 b5 20 Nd2 Rd6 21 Nf3 Qc4 22 b3 Qc3 23 Rcl Qe3 24 Qxe5 Qxes 25 Rxe5 Rxe6 26 e5 c6 27 f5 Rh6 28 e6 Rf6 29 Rxc6 Ke7 30 Rc7t Kd6 31 Rd7t Kc5 32 Ng5 Kb6 33 Rxg7 h5 34 Ne4 Rff8 35 f6 Rhg8 36 e7 Rc8 37 Rag8 Rag8 38 f7 Rc8 39 Rf1 Rc2 40 f8(Q) $R \times 2241$ e8(Q) $1-0$
Atari B - Mychess B 1 e4 e5 2 Nf3 Nat 3 d4 exd4 4 Nxd4 Nf6 5 Nc3 Bb4 6 Bg5 Qe7 7 f3 Qe5 8 Bxf6 Qxf6 9 a3 Bxc3t 10 bxc3 O-O 11 Rbl Re8 12 Be 2 Qg 513 Kf 1 Qff 14 Qd3 Ne5 15 Qe3 b6 16 Bd3 c5 17 Nf5 d5 18 g4 Bxf5 19 gxf5 Nxd3 20 Qxd3 c4 21 Qxd5 Qxc3 22 f4 Rad8. 23 Qe6 Qf3+ 24 Kg1 Rxe4 25 Qc7 Qg4t 26 Kfl Rxf4t 27 Kel Qh4t 28 Ke2 Qf2\# 0-1
Mychess A - Tryom 1 c4 e5 2 Nc3 Nc6 3 Nf3 Bc5 4 Ne4 Bb4 5 a3 Be7 6 d3 d5 7 cxd5 Qxd5 8 Nc3 Qc5 9 Qa4 Be6 10 Be3 Qd6 11 Nb 5 Qd7 12 Bg5 Bag5 13 Nag 5 Nf6 14 Nxe6 fxe6 15 Rcl O-O 16 Qh4 a5 17 b3 Nd5 18 e4 Nf4 19 Rc3 Kh8 20 g 3 Ng 621 Qh5 Qe7 22 Bg 2 Rad8 23 O-O Rf6 24 Rfcl Rf7 25 Bh1 Rf6 26 Qg5 h6 27 Qg4 Kg8 28 f3 Kf8 29 Rlc2 Kg8 30 h 3 Kh 831 Rcl Kh 732 R1c2 Nf4 33 gxf4 Rg6 34 fxe5 Rxg4t 35 fxg4 Rd7 36 d4 Qf8 37 Re5 Qd8 38 R5c4 Nxd4 39 Nxd4 Rxd4 40 Rxc7 Rd2 41 Bf3 Qd4t $42 \mathrm{Kh} 1 \mathrm{R} \times \mathrm{C} 243 \mathrm{R} \times \mathrm{C} 2 \mathrm{Qd} 344 \mathrm{R} 2$ Q×b3 45 Kg2 Q×a3 46 Rc2 b5 47 h4 a4 48 h5 b4 49 Rc5 b3 $50 \mathrm{Rb} 5 \mathrm{Qa} 2+51 \mathrm{Kf1} \mathrm{O-1}$
Lane - Boris 2.51 a3 Nc6 2 h4 Nf6 3 g3 d5 4 Bh3 Bg4 5 Nf3 Bxh3 5 R×h3 e5 7 b3 e4 8 Nh2 Qd7 9 g 4 Nxg4 10 Nag4 Qxg4 11 Rhl Qg2 12 Rf1 Qh3 13 Nc3 O-O-O 14 d3 Q×h4 15 dxe4 d4 $16 \mathrm{Nb5}$ a6 17. N×d4 R×d4 18 Bd2 Bd6 19 Rg1 Bf4 20 e3 Bxe3 21 Qg4t Q×g4 22 Rag 4 Bxd2t 23 Ke2 Bc3 24 Ra2 $f 525$ R×g7 Rxe4t 26 Kf 3 Bxg 7 $27 \mathrm{a} 4 \mathrm{Nb} 428 \mathrm{Ra} 3 \mathrm{Bb} 229 \mathrm{c} 3 \mathrm{Bxa} 330 \mathrm{cxb} 4 \mathrm{R} \times \mathrm{b} 431 \mathrm{a} 5$ R×b3t 32 Kf4 Rb5 $33 \mathrm{f} 3 \mathrm{Bc} 1+34 \mathrm{Kg} 3 \mathrm{R} \times \mathrm{a} 535 \mathrm{Kh} 4 \mathrm{Bf} 4$ $36 \mathrm{Kh} 3 \mathrm{Ra} 2 \mathrm{O}-1$
Boris X - Sfinks 1 f4 co 2 Nc3 d5 3 Nf3 d4 4 Nbl e6 5 e3 BC5 6 Bc4 dxe3 7 dxe3 Qxd1t 8 Kxdl Nf6 9 Bd2 O-O 10 Bd3 Rd8 11 b4 Be7 12 a4 Nd5 13 b5 Bf6 14 Ra2 cxb5 15 e4 Nb6 16 axb5 Bd7 17 Ba5 Bxb5 18 Bxb6 Bc4 19 Bxd8 Bxa2 20 Bxf6 Bxbl 21 Bc3 Nc6 22 Ke2 Ba2 23 Ral e5 24 Rxa2 exf4 25 Bd2 h6 26 Rb2 b6 27 Bxf4 Rd8 28 e5 Rell 29 Bb5 Nd4t 30 N×d4 Rxd4 31 Kf3 Rdl 32 Be2 Rd7 33 Bb5 Rc7 34 Kg4 Kf8 35 ef Re7 36 Bd6 h5t 37 Kxh5 g6t 38 Kg5 a6 39 Bct fxe6 40 Kag6 e5 41 Rab6 Kg8 42 Rb8t Re8 43 Rxe8* 1-0

Round 2
Mychess B - Challenger 1 d4 Nff 2 ct ef 3 Nf 3 th 4 g3 Bb7 5 Bg2 Be7 6 O-O O-O 7 Nc 3 Ne 48 Qc 2 Ninc 9 Qxec d5 10 Ne5 Na6 11 Bd2 ff 12 Nd3 c5 13 cxd5 exd5 14 dxe5 bxc5 15 Rad1 Rb8 16 b3 Qd7 17 Bf4 Rbe8 18

Rfel g5 19 Bd2 Bd6 20 e3 Of5 21 f4 h5 22 fxg $5 \times \mathrm{f} 523$ Rf1 Qg4 24 Rxf8t Bxf8 25 Nf2 Qf5 26 Qd3 Qxd3 27 Nxd3 Bg7 28 Rf1 Rf8 29 Rcl Rc8 30 Bc3 Bxc3 31 Rxc3 Kf7 32 Kf2 Ke6 33 Bf3 Rf8 34 Ke2 R××3 35 Nxc5t Nxc5 36 Rxc5 Rf7 37 e4 Kd6 38 Ra5 dxe4 39 Rxg5 Rh7 40 Ke3 Bc6 41 Rg6t Kd5 42 Rg5t Ke6 43 Rg6t Kd7 44 Rf6 Kc7 45 Rf5 Kd6 46 Rf6t Kd5 47 Rf5t Keb 48 Res Kd6 49 Kd4 $\mathbf{a} 650$ Ra5 Bb7 51 Rf5 Ke6 52 Re5t Kf6 53 Re8 Rd7t 54 Ke3 Rd3t 55 Ke2 Bc6 56 Rf8t Kg7 57 Rf5 Bb5 58 Kel Kg 659 Re 5 e3 60 Re4 Rc3 61 Kdl e2t 62 Kd 2 Re6 63 Re5 Rd6t 64 Kel Rd1t $65 \mathrm{Kf2}$ Rf1t 66 Kg 2 Bebt 67 Kh 3 el(Q) 68 Rxel Rxel 69 b4 Kg5 70 b5 axb5 71 a3 Re2 72 g4 Re3\# 0 -1.
Tryom-Boris X 1 e4 d6 2 d4 Nf6 3 Nc3 Nc6 4 Bf4 e5 5 dxe5 dxe5 6 Qxd8t Kxd8 7 O-O-Ot Bd6 8 Be3 Bes 9 Nf3 Nb4 10 N×e5 N×a2t 11 Nxa2 Bxa2 12 f3 Be6 13 Nc4 Bxc4 14 Bxc4 Ke7 $15 \mathrm{h4}$ a6 16 Kbl b5 17 Be2 Rhd8 18 Bg5 Be5 19 Rxd8 Kxd8 20 f4 Bxf4 21 Bxf4 Nxe4 22 Bf3 $f 523$ Rel Rbs 24 Bxe4 fxed 25 Rxe4 Rb6 26 h5 g6 27 hag6 Rag6 28 g4 c5 29 g5 c4 30 b4 Kd7 31 c3 Re6 32 Rxe6 Kхе6 $33 \mathrm{~Kb} 2 \mathrm{Kf5} 34 \mathrm{Be} 3 \mathrm{Ke} 435 \mathrm{Bd} 4 \mathrm{Kf} 436 \mathrm{Bf} 6$ Kf5 37 Be7 Ke6 38 Bc5 Kf5 $39 \mathrm{~g} 6 \mathrm{~h} \times \mathrm{g} 640 \mathrm{Bd} 4 \mathrm{~g} 541$ Kc2 g4 $42 \mathrm{Kd2}$ g 34 Kc 2 g 244 Kd 2 Kg 445 Ke 2 Kh 346 Bg1 Kg3 $47 \mathrm{Ke} 3 \mathrm{Kg} 448 \mathrm{Kf} 2 \mathrm{Kf5} 49 \mathrm{~K} \times \mathrm{g} 2 \mathrm{Kf} 450 \mathrm{Bd} 4$ $\mathrm{Kg} 451 \mathrm{Kh} 2 \mathrm{Kf} 352 \mathrm{Kh} 1 \mathrm{Kg} 353 \mathrm{Kg} 1 \mathrm{Kf} 354 \mathrm{Kf1} \mathrm{Ke} 455$ Kgl Kf3 56 Be5 Ke4 57 Bd6 Kd3 58 Be5 Ke4 59 Bf6 Ke3 60 Be5 Kf3 61 Kh 2 Ke 462 Bd 4 Kf 363 Kh 3 Kf 464 Kh 4 Kf5 $65 \mathrm{Kh} 3 \mathrm{Kf} 466 \mathrm{Kh} 2 \mathrm{Kf} 367 \mathrm{Kg} 1 \mathrm{Kg} 368 \mathrm{Be} 5+\mathrm{Kf} 369$ Kf1 Ke4 70 Bd4 Kf3 71 Kel Ke4 72 Kd1 Kf5 73 Kd2 Ke4 74 Kcl Kf5 75 Kc 2 Ke4 $76 \mathrm{~Kb} 2 \mathrm{Kf5} 77 \mathrm{Ka} 2 \mathrm{Ke} 478$ Ka3 Kd3 79 Kb 2 Kd 280 Ka 2 Ke 281 Ka 3 Kd 282 Be 5 Kd3 $83 \mathrm{Ka} 2 \mathrm{Kc} 24 \mathrm{Kal} \mathrm{Kd3} 85 \mathrm{Kbl}$ Ke4 86 Bd 4 Kf 587 Kal \%-4/
Boris 2.5 - Mychess A 1 c4 52 Nf3 Nf6 3 d4 cxd4 4 'Nxd4 e5 5 Nf3 Nc6 6 Nc3'Qa5 7 Bd2 Bb4 8 a3 Bxc3 9 Bxc3 Qc5 10 e3 O-O 11 b4 Qb6 $12 \mathrm{Nxe5} \mathrm{Re} 813 \mathrm{c5} \mathrm{Qc} 7$ 14 f4 b6 15 Bb5 Nxe5 16 fxe5 Ne4 17 Bb2 Qb7 18 Bc4 Qb8 19 Bd5 Bb7 20 Qd4 Ng5 21 O-O bxc5 22 Q×c5 Rc8 23 Qb5 Bxd5 24 Qxd5 Qb6 25 Qd3 Ne6 26 Rad1 Rab8 27 Rd2 Re8 28 Rcl Rb7 29 Rc4 Qb5 30 Qc3 Rbb8 31 Kf2 Rb6 32 Qd3 Nf8 33 Kf3 Re6 34 R×co Qxctot 35 e4f5 36 exf6 gxf6 37 b5 Qe6 38 Bd4 Ng6 39 Bc3 1-0
Alari A - Lane 1 e4 Nh6 2 Nf3 c5 3 d4 b6 $4 \mathrm{dxc5}$ bxc5 5 Bf4 f6 6 Nc3 Nc6 7 Bc4 g5 8 Be3 Na5 9 Qd5 Bb7 10 Qd3 Qb6 11 O-O Q×b2 12 Bb5 Bc6 13 Bxc5 Bxb5 14 N×b5 Rc8 15 Rß1 Q×al 16 Rxal R×c5 17 Nxa7 e6 18 a4 f5 19 Nag5 Bg7 20 Rbl fxe4 21 Nee4 Rc7 22 Nb5 Rct 23 Nd4 Rc7 24 Qg3 Bxd4 25 Qac7 Nct 26 Rb7 Kf8 27 Qc8 $\dagger$ Nd8 28 Q×d8t Kf7 29 Rxd7t Kgo 30 Qg5\# 1-0
Sfinks - Atari B l d4 d5 2 e.j Ned 3 Bb5 et 4 Bxctt bact 5 Nf3 Nf6 6 O-O Rb8 7 c3 Bd7 8 Ne5 Bd6 9 Qa4 Bee5 10 dxe5 Net 11 Qxa7 O-O 12 Qd4 Qe7 13 Qdi Nc5 14 b4 Net 1513 Ng5 16 ht Naf3t 17 R×f3 Qah4 18 Rh3 Qe4 19 Qd4 Qf5 20 Nd2 Bef 21 Nf3 Bd7 22 Qd1

Qet 23 Rh4 Qf5 24 Bb2 © 25 Rf4 Qg6 26 Qcl c4 27 Qd2 Qd3 28 Rd4 Qf5 29 e4 dxe4 30 Nh4 e 31 Nwf5 end7 32 Ne7t Kh8 33 Rud7 Rfd8 34 Rxd8t Rxd8 35 Rd1 Rd7 36 Nc6 Rd5 37 Nd4 c5 38 Nf3 cxb4 39 cab4 Rb5 40 Bc3 Kg8 41 Nxd2 Rd5 42 Rcl Kf8 43 Nrc4 Rd7 $44 a 4$ Rd8 45 a5 1-0

## Round 3

Challenger - Boris 2.51 e4 e5 2 Nf3 Nf6 3 Nwe5 d6 4 Nr3 Nxe4 5 Qe2 Qe7 6 d3 Nf6 7 Nc3 Nct 8 Bg5 Be6 9 Ne4 O-O-O 10 d4 Bct 11 Bxf6 gxf6 12 Nxd6t Rxd6 13 Qxe7 Bxe7 14 Bxc4 Nxd4 15 Nxd4 Rxd4 16 Bx7 Re4t 17 Kf1 Rd8 18 Re1 Rxe1t 19 Kxel Rd6 20 Ke2 5521 c3 Bg5 22 Rel Rd2t 23 Kf1 R×b2 24 Be6t Kd8 25 Rd1t Rd2 26 Rb1 Bf4 27 R×b7 Rd1t $28 \mathrm{Ke} 2 \mathrm{Rd} 2+29 \mathrm{Kel} \mathrm{Ke7} 30 \mathrm{Bg} 8$ Rd7 31 Rxa7 Kf6 32 Ra6t Kg5 33 Be6 Rd6 34 Rxd6 Bxd6 35 g3 f4 36 a4 Be5 37 Kd2 Kf6 38 Bc4 h5 39 as Bd6 40 $\mathrm{Be} 2 \mathrm{fxg} 341 \mathrm{~h} \times \mathrm{g} 3 \mathrm{Bc} 542 \mathrm{Ke} 1 \mathrm{Kgb} 43 \mathrm{f} 4 \mathrm{Be} 74 \mathrm{Bd} 3+\mathrm{Kf} 6$ 45 Be2 h4 46 gxh4 Bd6 $47 \mathrm{Kd} 2 \mathrm{Bxf4t} 48 \mathrm{Kd} 3 \mathrm{Bg} 349 \mathrm{~h} 5$ Bf2 50 Bf3 Kf5 51 Ke2 Bc5 52 Kd3 Kf4 53 h6 Bd6 54 a6 c5 55 a7 K×f3 56 a8(Q)+ 1-0
Sfinks - Tryom 1 d4 d5 2 e3 Nc6 3 Bb5 Bf5 4 Bxcot bxct $5 \mathrm{Ne} 2 \mathrm{Qd} 66 \mathrm{O}-\mathrm{O} \mathrm{Nf} 67 \mathrm{Ng} 3 \mathrm{Bg} 48 \mathrm{f} 3 \mathrm{Bd} 79 \mathrm{Nc} 3$ Rb8 10 e4 dxe4 11 Ngxe4 Nxe4 12 Nxe4 Qd5 13 Nc3 Qf5 14 Rel e6 15 Re5 Qg6 16 Ra5 Rb7 17 Rg5 Qf6 18 Ne4 Qh6 19 Rb5 Rxb5 20 Bxh6 gxh6 21 Nfft Kd8 22 Nxd7 Kxd7 23 Rb1 Bd6 24 Kh1 Rg8 25 Qd3 5526 b3 Kc8 27 Re1 Rg6 28 a4 Rd5 29 c3 Kb7 30 c4 Ra5 0-1
Boris X - Mychess B 1 c4 c5 2 Nf3 Nf6 3 d4 cxd4 4 Nxd4 d6 5 Nc3 e5 6 Ndb5 a6 7 Na 3 Be6 8 e4 Nc6 9 Be2 Nd4 10 Be3 Nxe2 11 Qxe2 Be7 12 O-O O-O 13 Nd5 Rc8 14 Bb6 Qd7 15 Nxe7t Qxe7 16 Qd3 Nd7 17 Ba7 b6 18 Qe3 Qd8 19 f4 exf4 20 Qxf4 Qc7 21 R/2 Qxa7 22 Qxd6 Bxct 23 Nxc4 Rxc4 24 Qd5 b5 25 Qf5 g6 26 Qf3
 Rc2t $31 \mathrm{Re} 2 \mathrm{Rxe2t} 32 \mathrm{Kxe2} \mathrm{Ne} 533 \mathrm{Kd} 2 \mathrm{b4} 34 \mathrm{Kc} 2 \mathrm{Ng} 4$ $35 \mathrm{~Kb} 3 \mathrm{~N} \times \mathrm{h} 236 \mathrm{~K} \times \mathrm{b} 4 \mathrm{Ng} 437 \mathrm{Ka} 5 \mathrm{Ne} 338 \mathrm{~g} 3 \mathrm{f5} 39$ exf5 Nxf5 40 g4 Ne3 41 g5 Nc4t 42 Kxa6 Nxb2 $43 \mathrm{Kb5}$ Nd3 44 a4 Ne5 45 a5 Nf7 46 a6 Nd6t 47 Kc6 Nc8 48 Kb7 Nd6t 49 Kb8 Nb5 50 a7 Nxa7 0-1
Atari A - Mychess A 1 d4 d5 2 Nf3 Nf6 3 Bf4 Nc6 4 Nc3 Nh5 5 e3 Nxf4 6 exf4 e6 7 Bd3 Qf6 8 Qe2 Nxd4 9 Qe5 N×f3t $10 \mathrm{gxf3}$ Qxe5t 11 fxe5 f6 12 f4 fxe5 13 fxe5 Bc5 14 O-O O-O 15 Radl Rf4 16 Ne2 Ra4 17 Ne 3 Rb4 18 Nb5 Bd7 19 Nxc7 Rc8 20 Na6 bxa6 21 Bxa6 Rc6 22 Bd3 R×b2 23 Ral Bd4 24 Rfbl Rbxc2 25 Bxc2 R×c2 26 Rb8t Bc8 27 Rabl Bxe5 28 Ra8 Bd4 29 Rbb8 Bxf2t 30 Kf1 Bb6 $31 \mathrm{R} \times \mathrm{c} 8 \mathrm{t}$ R×c8 $32 \mathrm{R} \mathrm{\times c8t} \mathrm{Kf} 733 \mathrm{Ke2}$ g6 34 Kd 3 e5 35 h4 e4t 36 Kc3 Kff 37 Rctt Ke5 38 Rc8 Bd4t 39 Kd2 Bf2 40 Rc 7 h 541 Kc 2 Kf 642 Kc 3 Bxh 443 Rxa 7 Belt 44 Kc2 h4 45 Ra6t Kf5 46 Rd6 Ke5 47 R×g6 Kf5 48 Rg7 Kf6 49 Rc 7 Bg 350 Rb 7 h 3 Sl a4 h2 52 Rh 7 Ke 553 a5 Kd4 54 a6 Bb8 55 Rxh2 Ba7 56 Rh7 Bb6 57 a7 Bxa7 58 Rxa7 Ke3 $59 \mathrm{Kc} 3 \mathrm{~d} 4+60 \mathrm{Kc} 4 \mathrm{~d} 361 \mathrm{Kd5} \mathrm{~d} 262 \mathrm{Ra} 3+$ Ke2 $63 \mathrm{Ral} \mathrm{dl}(\mathrm{Q})+64 \mathrm{Rxdl}$ Kxdl $65 \mathrm{Kxe4} \mathrm{Ke} 2$ y-1/2

Lane - Alari B 1 g4 © 2 g5 Nct 3 h4 e5 4 Bg2 d5 5 a4 Nge7 6 B/3 Nf5 7 Bh5 Bd6 8 Nc3 Be6 9 Nb5 O-O 10 Bg4 Nce7 11 e4 dxe4 12 Nxd6 Nad6 13 Bxe6 fxe6 14 b3 Nd5 15 Ba3 Qc7 16 Nh3 Rad8 17 c4 Nb4 18 Ng1 Nd3t 19 Ke2 Naf2 20 Qc2 Nxh1 21 Nh3 Ng3t 22 Kel Rfl \# 0-1

## Round 4

Tryom - Challenger 1 e4 e5 2 d4 exd4 3 Qxd4 Na6 4 Qd5 Nf6 5 Qf5 d5 6 Qf3 dxe4 7 Qe3 Bb4t 8 Nc3 O-O 9 Bc4 Nd4 10 Bb3 Bc5 11 Qg3 Bd6 12 Qg5 N×b3 13 axb3 Re8 14 Be3 Re5 15 Qre5 Bxe5 16 Rxa7 Rxa7 17 Bxa7 Qd6 18 h4 Bg4 19 Re3 Bxc3t 20 Bd2 Qxd2t 21 Kf1 Qel * 0-1
Boris 2.5 - Mychess B 1 d4 Nf6 2 c4 g6 3 Nc3 Bg7 4 Nf3 O-O 5 e4 Na6 6 d5 Nb4 7 a3 Na 88 Be3 Ng 49 Qcl e6 10 Bg5 ft 11 Be3 f5 12 Bg5 Qe8 13 h3 fxe4 14 hag4 exf3 15 Qe3 exd5 16 cxd5 Bd4 17 Qxe8 Rxe8t 18 Be3 Bxe3 19 fxe3 Rxe3t 20 Kf2 fxg2 21 Bxg2 Re8 22 Rael Rxel 23 Rxel Ki7 24 Rh1 Kg7 25 Rel h6 26 Re7t Kf6 27 Rh 7 Kg 528 Kg 3 Kf6 29 Ne4t Kes 30 Rxh6 Kxd5 31 R×g6 Kd4 32 Nc3 c6 33 Ne2t Ke5 34 Rg5t Kd6 35 Nd4 c5 36 Nb3 c4 37 Nd2 c3 38 Nc4t Ke6 39 Rg6t Ke7 40 bxc3 Rb8 41 Ne3 b5 42 BdS Nc5 43 Nf5t Kd8 44 Nd6 Ke7 45 Ni5t Kd8 46 Kf3 Na4 47 c4 bxc4 48 Bxe4 Rbl 49 Rg8t Kc7 50 Re8 d6 51 Re7t Bd7 52 Re3 Bxf5 53 g×f5 Rcl 54 fo Nb6 55 Re7t Kc6 56 B7 Rf1t 57 Ke4 d5t 58 Kd4 Rxf6 59 Ke5 Rd6 60 Be8t Nd7t 61 Rxd7 Rxd7 62 Ke6 d4 63 Bxd7t Kc5 64 Ke5 d3 65 Ke4 d2 66 Bg 4 Kc4 67 Ke 3 Kb 3 4-1/2
Atari B - Boris X 1 e4 co 2 Bc4 d5 3 exd5 cxd5 4 Bb5t Ne6 5 Nf3 Nf6 6 O-O Bg4 7 d4 Qb6 8 Nc3 O-O-O 9 Be3 Bxf3 10 gxf ef 11 Rel Bd6 12 Qd3 Qc7 $13 \mathrm{~h} 3 \mathrm{Bh} 2 t$ 14 Khl Nb4 15 Qd2 Bd6 16 b3 Rhg8 17 Bd3 Nxd3 18 Q×d3 Qct 19 Nb5 Bb8 $20 \mathrm{c} 4 \mathrm{dxc} 421 \mathrm{Qxc4} \mathrm{Qxc} 422 \mathrm{bxc} 4$ Rd7 23 Rabl Rgd8 24 d5 exd5 25 oxd5 b6 26 Rbclt Kb 7 27 Nd4 Rxd5 28 Red1 Rh5 29 Kg2 Nd5 30 a4 Rd6 31 Nb5 Rg6t 32 Kfl a6 33 Nd4 R×h3 34 Ke2 Rh5 35 Bd2 Nf4t 36 Bxf4 Bxf4 37 Rc2 Ra5 38 Rc4 Rd5 39 Rh1 h6 40 Rh3 Bg5 41 Nf5 Reft 42 Kfl Bff 43 Ne3 Rd4 44 Kg 2 R×c4 45 Nxc4 Kct $46 \mathrm{Kg} 3 \mathrm{Kc} 547 \mathrm{Ne} 3 \mathrm{~Kb} 448 \mathrm{Nd} 5 \dagger$ Kxa4 49 Kf4 Bd4 50 Rh5 Re2 51 Rf5 $f 652$ Rh5 Kb3 53 Rh3 Kc4 54 Ne3t Kd3 55 N65 g5t 56 Kg4 R×\{2 57 R×h6 Rg2t $58 \mathrm{Kh} 3 \mathrm{Rg} 159 \mathrm{Kh} 2 \mathrm{Bc} 50 \mathrm{R} \times f 6 \mathrm{Rf} 10-1$
Atari A - Sfinks 1 e4 cf 2 Nf3 d5 3 exd5 cxd5 4 d4 e6 5 Nc 3 Ne6 6 Bd3 Bb4 7 Bf4 Nf6 8 O-O O-O 9 Rel Bxe3 10 bxc3 Kh8 11 Rb 1 Qa5 12 Bd6 Rd8 13 Ne 5 Kg 8 $14 \mathrm{~N} \times \mathrm{c} 6$ bxef $15 \mathrm{Be} 7 \mathrm{Re} 816 \mathrm{Bxf6} \mathrm{gxf6} 17$ Qf3 Kg 718 Qgit Kf8 19 Qf4 Kg7 20 Qg4t Kh8 21 Qf4 Kg7 22 Qg4: 5x-3/2
Lane - Mychess A1 g3 Nf6 2 f3 e5 3 Na3 Nct 4 Bh3 Nd4 $5 \mathrm{c} 3 \mathrm{Ne} 66 \mathrm{Nb} 5 \mathrm{a} 67 \mathrm{Na} 3 \mathrm{Bc} 58 \mathrm{Qa4} \mathrm{O}-\mathrm{O} 0-1$


[^0]:    $\star$ Most of these programs participated in the 3rd World Computer Chess Championship and are listed on page 13. The others are: Cray Blitz, written by Robert Hyatt, Albert Gower, Dave Darling, and Derek Robb, University of Southern Mississippi, Hattiesburg, MS, running on a CRAY-1 in Mendota Heights, Minnesota; Cube 2.0, written by Lloyd and James Lank, United Computing, Kansas City, Missouri, running on a CRAY-1 in Kansas City; and Clash, written by Chris Peters, University of Washington, Seattle, Washington, running on a Texas Instruments TX990, at the tournament site.

