In the multilingual *Enciklopedija šahovskih završnica* (1993), a table of widely-used chess notation symbols is given. These form a system of symbols used by the Serbian chess magazine *Informator* (officially *Chess Informant* in English, though many people just refer to it by its Serbian name). *Informator* also publish the *Encyclopedia of Chess Openings*, the *Encyclopedia of Chess Endings*, the *Encyclopedia of Chess Problems*, and other references. These symbols enable the publishing of expert annotation of high level games in a language-independent way. *Informator* has been an important publication since the 1960s—historically, it was a major means for the dissemination of chess expertise across the Iron Curtain. Most of the characters it uses are encoded in the UCS. This document offers mappings for the existing characters and proposes the addition of nine missing characters.

### Symbols used in chess notation

- **2BBA**  
  INTERLOCKED WHITE SQUARES
  
  = pair of bishops
  
  → 29C9  two joined squares

- **2BBB**  
  INTERLOCKED WHITE AND BLACK SQUARES
  
  = bishops of opposite colour

- **2BBC**  
  INTERLOCKED BLACK SQUARES
  
  = bishops of the same colour

- **2BF9**  
  EQUALS SIGN WITH INFINITY BELOW
  
  = with compensation for the material

- **2BFA**  
  UNION SYMBOL
  
  = united pawns
  
  → 26AE  divorce symbol

- **2BFB**  
  SEPARATION SYMBOL
  
  = separated pawns
  
  → 26AF  unmarried partnership symbol

- **2BFC**  
  DOUBLE MEDIUM SMALL WHITE CIRCLE
  
  = double pawns
2. Existing characters

<table>
<thead>
<tr>
<th>Code</th>
<th>Glyph</th>
<th>Chess usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2A72</td>
<td>±</td>
<td>white stands slightly better</td>
</tr>
<tr>
<td>2A71</td>
<td>⊳</td>
<td>black stands slightly better</td>
</tr>
<tr>
<td>00B1</td>
<td>±</td>
<td>white has the upper hand</td>
</tr>
<tr>
<td>2213</td>
<td>⊳</td>
<td>black has the upper hand</td>
</tr>
<tr>
<td>002B</td>
<td>+−</td>
<td>white has a decisive advantage</td>
</tr>
<tr>
<td>2212</td>
<td>−+</td>
<td>black has a decisive advantage</td>
</tr>
<tr>
<td>003D</td>
<td>=</td>
<td>even</td>
</tr>
<tr>
<td>221E</td>
<td>⊤</td>
<td>unclear</td>
</tr>
<tr>
<td>27F3</td>
<td>⌒</td>
<td>development advantage</td>
</tr>
<tr>
<td>25CB</td>
<td>○</td>
<td>greater board room</td>
</tr>
<tr>
<td>2192</td>
<td>→</td>
<td>with attack</td>
</tr>
<tr>
<td>2191</td>
<td>↑</td>
<td>with initiative</td>
</tr>
<tr>
<td>21C6</td>
<td>⇋</td>
<td>with counter-play</td>
</tr>
<tr>
<td>2A00</td>
<td>⌋</td>
<td>zugzwang</td>
</tr>
<tr>
<td>0023</td>
<td>#(#)</td>
<td>mate</td>
</tr>
<tr>
<td>0021</td>
<td>!</td>
<td>a very good move</td>
</tr>
<tr>
<td>203C</td>
<td>!!</td>
<td>an excellent move</td>
</tr>
<tr>
<td>003F</td>
<td>?</td>
<td>a mistake</td>
</tr>
<tr>
<td>2047</td>
<td>??</td>
<td>a blunder</td>
</tr>
<tr>
<td>2049</td>
<td>!?</td>
<td>a move deserving attention</td>
</tr>
<tr>
<td>2048</td>
<td>??</td>
<td>a dubious move</td>
</tr>
<tr>
<td>25B3</td>
<td>△</td>
<td>with the idea</td>
</tr>
<tr>
<td>25A1</td>
<td>□</td>
<td>only move</td>
</tr>
<tr>
<td>2313</td>
<td>▽</td>
<td>better is</td>
</tr>
<tr>
<td>21D4</td>
<td>⇐</td>
<td>file</td>
</tr>
<tr>
<td>21D7</td>
<td>↢</td>
<td>diagonal</td>
</tr>
<tr>
<td>229E</td>
<td>[]</td>
<td>centre</td>
</tr>
<tr>
<td>27EB</td>
<td>»</td>
<td>king’s side</td>
</tr>
<tr>
<td>27EA</td>
<td>«</td>
<td>queen’s side</td>
</tr>
<tr>
<td>00D7</td>
<td>×</td>
<td>weak point</td>
</tr>
<tr>
<td>22A5</td>
<td>↓</td>
<td>ending</td>
</tr>
<tr>
<td></td>
<td>⌨</td>
<td>pair of bishops</td>
</tr>
<tr>
<td></td>
<td>⌛</td>
<td>bishops of opposite colour</td>
</tr>
<tr>
<td></td>
<td>⌘</td>
<td>bishops of the same colour</td>
</tr>
<tr>
<td></td>
<td>⌠</td>
<td>united pawns</td>
</tr>
<tr>
<td></td>
<td>⌠</td>
<td>separated pawns</td>
</tr>
<tr>
<td></td>
<td>⌡</td>
<td>double pawns</td>
</tr>
<tr>
<td></td>
<td>↑</td>
<td>passed pawn</td>
</tr>
</tbody>
</table>
3. Unicode Character Properties.


Figures

1993. 1. $\text{d}c5 \text{d}c6 2. \text{d}7? \text{d}7 3. \text{d}d3 \text{d}g5 13... \text{d}e3 4. \text{d}e5 \text{d}e6 5. \text{e}4++; 3... \text{d}h6 4. \text{d}h3 \text{d}e5 5. \text{f}7++ 1 4. \text{e}c5 \text{d}e6 5. \text{d}f7 \text{e}6 6. \text{g}5 \text{d}h6 7. \text{d}h7! \text{d}g6 8. \text{e}8 \text{d}f5 9. \text{d}d7++–

1994. 1... \text{e}c5 2. \text{g}2 [2. \text{e}c2 \text{b}5++] \text{d}e6 3. \text{d}1 \text{a}4! [3... \text{d}g4? 4. \text{a}4! \text{d}c3 5. \text{h}5! \text{h}5 5... \text{d}g5 6. \text{f}2=+ 6. \text{g}3 \text{d}5 7. \text{c}2= 4. \text{h}5 4. \text{e}2 \text{a}3 \text{d}5++ 13. \text{g}6 \text{h}6 5... \text{h}6?? 6. \text{g}7 \text{d}5 7. \text{h}3++ 16. \text{h}6 \text{d}5! [3... \text{d}4 7. \text{d}f3 8. \text{d}f3 \text{g}9 9. \text{d}f1 \text{g}7 17. \text{d}2 \text{g}8 18. \text{d}2 \text{d}3++; 7. \text{h}3 \text{a}2 \text{d}e6++; \text{d}7. \text{h}2 \text{a}2 8. \text{d}2 (\Delta \text{d}b3) \text{g}8! 9. \text{h}5 \text{a}2 10. \text{a}2 \text{a}2++] \text{a}2 8. \text{d}c1 \text{d}4 9. \text{e}2 \text{a}2 10. \text{d}2 \text{b}3 \text{d}11. \text{a}1 \text{d}5 12. \text{d}d1 \text{d}4 13. \text{b}3 \text{a}14. \text{b}3 [5/\text{a}] \text{e}4 15. \text{e}2 \text{d}5 16. \text{d}3 \text{g}7 17. \text{c}2 \text{e}4 [18. \text{a}5 \text{b}4 19. \text{b}3 \text{d}a3\text{O}] 0:1 [\text{Halifman}]

$\text{c}4 6. \text{c}e4 7. \text{c}e4! \text{c}e4 8. \text{c}e6 \text{h}4! 9. \text{b}6 \text{h}3 10. \text{c}g1 \text{d}6 11. \text{b}7! \text{b}7 12. \text{d}7 \text{f}5 13. \text{d}e6 \text{d}4 14. \text{d}f5! \text{d}f5 15. \text{d}f6 \text{g}2 16. \text{f}7 \text{g}1 17. \text{f}8 \text{h}2 18. \text{c}e5 \text{g}2 19. \text{e}c2 \text{g}1 20. \text{d}d1! \text{g}2 21. \text{c}g4 \text{h}1 22. \text{c}e4++ 7. \text{c}e4 \text{c}e4 8. \text{b}6 \text{b}7 9. \text{d}d4 \text{d}4 10. \text{c}e5 \text{b}7 11. \text{d}c7 \text{c}4 (11... \text{h}4 12. \text{g}4 \text{f}5 13. \text{h}5! \text{g}3 14. \text{e}c3 \text{g}2 15. \text{d}d4+++) 12. \text{d}d8 \text{b}7 13. \text{c}c4 \text{c}4 14. \text{f}5! \text{f}5 15. \text{d}d6++ 17. \text{g}4 \text{g}7 7. \text{d}f4 4. \text{d}h4 8. \text{d}g7 \text{h}3 9. \text{d}g4 \text{c}7 10. \text{d}h3 \text{h}7 11. \text{d}c6 \text{d}d8 13. \text{b}6 \text{g}2 14. \text{d}d6++ 1:0 [\text{Kasparov}]

1997. 1. \text{f}5 \text{e}8 2. \text{d}f3 \text{b}5 3. \text{g}3 \text{d}7 3... \text{c}b3 4. \text{b}h3 \text{c}e4 5. \text{d}c4 \text{d}c4 6. \text{e}c4++ 1. \text{d}6 \text{d}7 5. \text{b}4 \text{d}4 6. \text{d}5 \text{b}3 7. \text{e}6 \text{e}6 8. \text{d}e6 \text{e}6 8/\text{g}9 9. \text{d}d1! \text{e}3 10. \text{d}f4 \text{f}4 11. \text{d}f7 11. \text{d}c2 11. \text{d}e4 \text{d}5 12. \text{g}5 \text{e}2 [12. \text{e}3++ 13. \text{d}d4 13. \text{d}e4! \text{d}e4 14. \text{d}e2 \text{d}e4 15. \text{d}d2 \text{h}2 16. \text{e}c4 \text{d}d2
Figure 2a. From Enciklopedija Šahovskih Završnica, 1993.
Figure 2b. From Enciklopedija Šahovskih Završnica, 1993.
Figure 2c. From Enciklopedija Šahovskih Završnica, 1993.
Figure 3. From Enciklopedija Šahovskih Završnica, 1993.
6/a

1327. GRAAFLAND*
_Tidsskrift_ 1916

1328. BERGER
1922

1. ? __  =  1. ? __

1327. 1. h6 h6 2. d2 a1= 3. c3=

1328. 1. a6 f5 2. f3 [2. c3
h3 3. f3 f1 4. a7 c4 d5=]
d3! [2... d5? 3. a7 c4 4. c3++]
3. a7 c4 4. a8= d5=

**Figure 4.** From _Enciklopedija Šahovskih Završnica_, 1993.
Figure 5. From *Enciklopedija Šahovskih Završnica*, 1993.
Figure 6. From Enciklopedija Šahovskih Završnica, 1993.
A. Administrative

1. Title
Proposal to encode symbols for chess notation

2. Requester’s name
Michael Everson

3. Requester type (Member body/Liaison/Individual contribution)
Individual contribution.

4. Submission date
2017-01-26

5. Requester’s reference (if applicable)

6. Choose one of the following:
6a. This is a complete proposal
   Yes.
6b. More information will be provided later
   No.

B. Technical -- General

1. Choose one of the following:
1a. This proposal is for a new script (set of characters)
   No.
1b. The proposal is for addition of character(s) to an existing block
   Yes.
1b. Name of the existing block
   Miscellaneous Symbols and Arrows.

2. Number of characters in proposal
9.

3. Proposed category (see section II, Character Categories)
   Category A.

4a. Is a repertoire including character names provided?
   Yes.
4b. If YES, are the names in accordance with the character naming guidelines in Annex L of ISO/IEC 10646-1: 2000?
   Yes.
4c. Are the character shapes attached in a legible form suitable for review?
   Yes.

5a. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard?
   Michael Everson.
5b. If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used:
   Michael Everson, Fontographer.
6a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?
   No.
6b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?
   Yes.

7. Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)?
   No.
8. Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at http://www.unicode.org for such information on other scripts. Also see Unicode Character Database http://www.unicode.org/Public/UNIDATA/ UnicodeCharacterDatabase.html and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

   The characters should have the same properties as other symbols.

C. Technical -- Justification

1. Has this proposal for addition of character(s) been submitted before? If YES, explain.
   No.
2a. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?
   Yes.
2b. If YES, with whom?
   Garth Wallace

2c. If YES, available relevant documents

3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?
**Everyone.**

4a. The context of use for the proposed characters (type of use; common or rare)

**Common.**

4b. Reference

5a. Are the proposed characters in current use by the user community?

No.

5b. If YES, where?

6a. After giving due considerations to the principles in Principles and Procedures document (a WG 2 standing document) must the proposed characters be entirely in the BMP?

No.

6b. If YES, is a rationale provided?

6c. If YES, reference

7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?

8a. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?

No.

8b. If YES, is a rationale for its inclusion provided?

8c. If YES, reference

9a. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?

No.

9b. If YES, is a rationale for its inclusion provided?

9c. If YES, reference

10a. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character?

No.

10b. If YES, is a rationale for its inclusion provided?

10c. If YES, reference

11a. Does the proposal include use of combining characters and/or use of composite sequences (see clauses 4.12 and 4.14 in ISO/IEC 10646-1: 2000)?

No.

11b. If YES, is a rationale for such use provided?

11c. If YES, reference

12a. Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?

No.

12b. If YES, reference

13a. Does the proposal contain characters with any special properties such as control function or similar semantics?

No.

13b. If YES, describe in detail (include attachment if necessary)

14a. Does the proposal contain any Ideographic compatibility character(s)?

No.

14b. If YES, is the equivalent corresponding unified ideographic character(s) identified?