

Universal Multiple-Octet Coded Character Set  
International Organization for Standardization  
Organisation internationale de normalisation  
Международная организация по стандартизации

**Doc Type: Working Group Document****Title: Proposal to encode symbols for chess notation****Source: Michael Everson and Garth Wallace****Status: Individual Contribution****Action: For consideration by JTC1/SC2/WG2 and UTC****Date: 2017-01-21**

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 publishes 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 ten missing characters.

**Symbols used in chess notation**

	2BF3	EQUALS SIGN WITH INFINITY BELOW = with compensation for the material
	2BF4	WHITE TOP HALF CIRCLE ON BASELINE = better is
	2BF5	INTERLOCKED WHITE SQUARES = pair of bishops
	2BF6	INTERLOCKED WHITE AND BLACK SQUARES = bishops of opposite colour
	2BF7	INTERLOCKED BLACK SQUARES = bishops of the same colour
	2BF8	UNITED SYMBOL = united pawns
	2BF9	SEPARATED SYMBOL = separated pawns → 26AF ∞ unmarried partnership symbol
	2BFA	DOUBLE MEDIUM WHITE CIRCLE = double pawns

	2BFB	VERTICAL MALE SIGN = passed pawn
	2BFC	REVERSED RIGHT ANGLE = without (with is 221F L right angle)

## 2. Existing characters

Code	Glyph	Chess usage	
2A72	±	white stands slightly better	
2A71	∓	black stands slightly better	
00B1	±	white has the upper hand	
2213	∓	black has the upper hand	
002B 2212	+−	white has a decisive advantage	
2212 002B	−+	white has a decisive advantage	
003D	=	even	
221E	∞	unclear	
	∞	with compensation for the material	MISSING
27F3	⊙	development advantage	
25CB	○	greater board room	
2192	→	with attack	
2191	↑	with initiative	
21C6	↔	with counter-play	
2A00	⊙	zugzwang	size? 2299? ⊙ ;cf 25CB
2317	♯	mate	or 0023 #
0021	!	a very good move	
0021 0021	!!	an excellent move	
003F	?	a mistake	
003F 003F	??	a blunder	
0021 003F	!?	a move deserving attention	
003F 0021	?!	a dubious move	
25B3	△	with the idea	
25A1	□	only move	
	∩	better is	MISSING
21D4	↔	file	
21D7	↗	diagonal	
229E	⊞	centre	
27EB	⟩	king's side	
27EA	⟨	queen's side	
00D7	×	weak point	
22A5	⊥	ending	
	♖♗	pair of bishops	MISSING
	♖♜	bishops of opposite colour	MISSING
	♜♜	bishops of the same colour	MISSING
	○○	united pawns	MISSING
	○-○	separated pawns	MISSING
	○○	double pawns	MISSING
	♞	passed pawn	MISSING

003E	>	advantage in number of pawns
2295	⊕	time
221F	└	with
	┘	without
2016		etc
2212	-	see

MISSING

### 3. Unicode Character Properties.

```
2BF3;EQUALS SIGN WITH INFINITY BELOW;So;0;ON;;;;;N;;;;;
2BF4;WHITE TOP HALF CIRCLE;So;0;ON;;;;;N;;;;;
2BF5;INTERLOCKED WHITE SQUARES;So;0;ON;;;;;N;;;;;
2BF6;INTERLOCKED WHITE AND BLACK SQUARES;So;0;ON;;;;;N;;;;;
2BF7;INTERLOCKED BLACK SQUARES;So;0;ON;;;;;N;;;;;
2BF8;UNITED SYMBOL;So;0;ON;;;;;N;;;;;
2BF9;SEPARATED SYMBOL;So;0;ON;;;;;N;;;;;
2BFA;DOUBLE MEDIUM WHITE CIRCLE;So;0;ON;;;;;N;;;;;
2BFB;VERTICAL MALE SIGN;So;0;ON;;;;;N;;;;;
2BFC;REVERSED RIGHT ANGLE;So;0;ON;;;;;N;;;;;
```

### 4. Bibliography.

Matanović, Aleksandar (ed.). 1993. *Enciklopedija šahovskih završnica = Энциклопедия шахматных окончаний = Encyclopaedia of Chess Endings = Enzyklopädie der Schachendspiele = Encyclopédie des finales d'échecs = Enciclopedia de Finales de Ajedrez = Enciclopedia dei Finali negli Scacchi = Encyklopedi över Slutspel i Schack = 収局大成*. Nicosia: S. I. Chess Informant Ltd.

### Figures

**1993.** 1. ♖c5 ♗c6 2. d7! ♙d7 3. ♗d3 ♙g5 [3... ♙e3 4. ♗c5 ♗d6 5. ♗c4+-; 3... ♙h6 4. ♗e5 ♗d6 5. ♗f7+-] 4. ♗c5 ♗d6 5. ♗f7 ♗e6 6. ♗g5 ♗f6 7. ♗h7! ♗g6 8. ♗f8 ♗f5 9. ♗d7+-

**1994.** 1... ♙c5 2. ♗g2 [2. ♗c2 ♙b5+-] ♙c6 3. ♙d1 a4! [3... ♗g4? 4. a4! ♙e3 5. h5! ♗h5 (5... ♙g5 6. ♗f2=) 6. ♗g3 ♙d5 7. ♙c2=] 4. h5 [4. ♙c2 a3 △ ♙d5+-] a3 5. g6 hg6 [5... h6?? 6. g7 ♙d5 7. ♙b3+-] 6. hg6 ♙d5! [6... ♙d4 7. ♗f1! ♙f3 8. ♙f3 ♗f3 9. ♗c1=] 7. ♗f1 [7. g7 ♙a2 8. ♗e1 ♙d5! 9. ♙f3 ♙g8 10. ♗d3 ♗c3+-; 7. ♗h3 ♙a2 △ ♙e6+-; 7. ♗h2 ♙a2 8. ♗d2 (△ ♙b3) ♙g8! 9. ♙b3 a2 10. ♙a2 ♙a2+-] ♙a2 8. ♗e1 ♙c4 9. ♙e2 a2 10. ♗c2 ♙b3 11. ♗a1 ♙d5 12. ♙d1 ♙d4 13. ♙b3 ♙b3 14. ♗b3 [♗♙5/a] ♗e4 15. ♗c2 ♗d5 16. ♗d3 ♙g7 17. ♗c2 ♗c4 [18. ♗a5 ♗b4 19. ♗b3 ♗a3⊙] 0 : 1 [Halifman]

♗c4 (6... ♙c4 7. ♙e4! ♗e4 8. ♗c6 h4! 9. b6 h3 10. ♙g1 ♗d6 11. b7! ♗b7 12. ♗b7 ♗f5 13. ♗c6 ♗e4 14. f5! ♗f3 15. f6 ♗g2 16. f7 ♗g1 17. f8♙ h2 18. ♙c5 ♗g2 19. ♙c2 ♗g1 20. ♙d1! ♗g2 21. ♙g4 h1♙ 22. ♙e4+-) 7. ♙c4 ♙c4 8. b6 ♙b7 9. ♙d4 ♙e4 10. ♙e5 ♙b7 11. ♙c7 ♙c4 (11... h4 12. gh4 ♗f5 13. h5! g3 14. ♙e5 g2 15. ♙d4+-) 12. ♙d8 ♙b7 13. ♙h4 ♙c4 14. f5! ♗f5 15. ♗d6+-] 5. gf4 ♗g7 [5... h4 6. ♙g4 ♗f6 7. ♗c5 ♙g2 8. b6 ♗g3 9. ♙e1!+-] 6. ♗c5 ♙g2 7. ♙d4 h4 8. ♙g7 h3 9. ♙g4 ♗c7 10. ♙h3 ♙h3 11. ♗b6 [11... ♙f1 12. ♗c6 ♗d8 13. b6 ♙g2 14. ♗d6+-] 1 : 0 [Kasparov]

**1997.** 1. f5 ♙e8 2. ♗f3 ♙b5 3. ♗g3 ♗f7 [3... cb3 4. ♙b3 ♙c4 5. ♙c4 dc4 6. ♗e4+-] 4. f6 ♙d7 5. bc4 dc4 6. d5 b3 7. c6 ♙e6 8. dc6 ♗e6 [♗♙8/g] 9. ♙d1! ♙c3 10. f7! ♙b4 [10... ♗f7 11. ♙c2] 11. ♗e4 ♗d5 12. ♗g5 [12. ♗e3+-] ♗d4 13. ♗c4 ♗d3 14. ♙e2 ♗d4 15. ♗d2 b2 16. ♙c4 ♙d2

Figure 1. A typical page from the *Enciklopedija Šahovskih Završnica*, 1993. This is certainly plain text.

SISTEM ZNAKOVA • СИСТЕМА ЗНАКОВ • CODE SYSTEM • ZEICHEN-ERKLÄ-  
 RONG • SYSTEME DE SIGNES • SISTEMA DE SIGNOS • SPIEGAZIONE DEI SIGNI  
 • TECKENFÖRKLARING • 解説記号 • نظام الرموز

- ± beli stoji nešto bolje • у белых несколько лучше • white stands slightly better • Weiss steht etwas besser • les blancs sont un peu mieux • el blanco está algo mejor • il bianco sta un po' meglio • vit står något bättre • 白や、優勢 • وضع الابيض افضل نوعا ما
- ± crni stoji nešto bolje • у черных несколько лучше • black stands slightly better • Schwarz steht etwas besser • les noirs sont un peu mieux • el negro está algo mejor • il nero sta un po' meglio • svart står något bättre • 黒や、優勢 • وضع الاسود افضل نوعا ما
- ± beli stoji bolje • у белых лучше • white has the upper hand • Weiss steht besser • les blancs sont mieux • el blanco está mejor • il bianco sta meglio • vit står bättre • 白 優勢 • الابيض في وضع مسطر
- ± crni stoji bolje • у черных лучше • black has the upper hand • Schwarz steht besser • les noirs sont mieux • el negro está mejor • il nero sta meglio • svart står bättre • 黒 優勢 • الاسود في وضع مسطر
- +- beli ima odlučujuću prednost • у белых решающее преимущество • white has a decisive advantage • Weiss hat entscheidenden Vorteil • les blancs ont un avantage décisif • el blanco tiene una ventaja decisiva • il bianco é in vantaggio decisivo • vit har avgörande fördel • 白 勝勢 • الابيض تتمتع بأفضلية حاسمة
- +- crni ima odlučujuću prednost • у черных решающее преимущество • black has a decisive advantage • Schwarz hat entscheidenden Vorteil • les noirs ont un avantage décisif • el negro tiene una ventaja decisiva • il nero é in vantaggio decisivo • svart har avgörande fördel • 黒 勝勢 • الاسود تتمتع بأفضلية حاسمة
- = jednako • равно • even • ausgeglichen • égalité • igual • equivalente • lika • 形勢 互角 • كامو •
- ∞ neizvesno • неизвестно • unclear • unklar • incertain • incierto • incerto • oklar • 形勢 不明 • غير واضح
- ∞ kompenzacija za materijal • компенсация за материал • with compensation for the material • mit Kompensation für den materiellen Nachteil • avec compensation pour le matériel • con compensación por el material • con compenso per il vantaggio materiale avversario • med kompensations för materialet • 駒損不利なし • مع تعويض خسارة المادة
- razvojna prednost • преимущество в развитии • development advantage • Entwicklungsvorsprung • avantage de développement • ventaja de desarrollo • vantaggio di sviluppo • utvecklingsförsprång • 展開 よし • افضلية التطور
- prostorna prednost • преимущество в пространстве • greater board room • beherrscht mehr Raum • avantage d'espace • ventaja de espacio • maggior vantaggio spaziale • terrängfördel • 模様 大 • افضلية مكانه على الرقعة
- sa napadom • с атакой • with attack • mit Angriff • avec attaque • con ataque • con attacco • med angrepp • 攻 勢 • مع الهجوم
- ↑ sa inicijativom • с инициативой • with initiative • mit Initiative • avec initiative • con inciativa • con iniziativa • med initiativ • 主導権あり • مع المبادرة
- ⇄ sa protivigrom • с контригрой • with counter-play • mit Gegenspiel • avec contre-jeu • con contrajuego • con controgiooco • med motspel • 反 擊 • مع لعب مضاد
- ⊙ iznudica • цугцванг • zugzwang • Zugzwang • zugzwang • zugzwang • zugzwang • dragtvång • ツーク、ツワング • روعرواع
- # mat • mar • mate • matt • mat • mate • matto • matt • メイト • اماته تمام

Figure 2a. From *Enciklopedija Šahovskih Završnica*, 1993.

!	vrlo dobar potez • очень хороший ход • a very good move • ein sehr guter Zug • très bon coup • muy buena jugada • buona mossa • ett bra drag • 好手 • نغلة حده جدا
!!	odličan potez • отличный ход • an excellent move • ein ausgezeichnete Zug • excellent coup • excelente jugada • mossa ottima • ett utmärkt drag • 妙手 • نغلة ممتازة
?	slab potez • слабый ход • a mistake • ein schwacher Zug • coup faible • mala jugada • mossa debole • ett dåligt drag • 疑問手 • نغلة خطأ
??	gruba greška • грубая ошибка • a blunder • ein grober Fehler • erreur grave • grave error • grave errore • ett grovt fel • 悪手 • نغلة سيئة جدا
!?	potez zaslužuje pažnju • ход заслуживающий внимания • a move deserving attention • ein beachtenswerter Zug • coup qui mérite l'attention • jugada que merece atención • mossa degna di considerazione • ett drag som förtjänar uppmärksamhet • 注目手 • نغلة تستحق الانتباه
?!	sumnjiv potez • сомнительный ход • a dubious move • ein Zug von zweifelhaftem Wert • coup de valeur douteuse • jugada de dudoso valor • mossa dubbia • ett tvivelaktigt drag • 鬼手 • نغلة متكوك في سحتها
△	sa idejom • с идеей • with the idea • mit der Idee • avec l'idée • con idea • con l'idea • med idé • 狙いは…… • تيمؤر
□	jedini potez • единственный ход • only move • der einzig spielbare Zug • le seul coup • unica jugada • unica mossa • enda draget • 絶対手 • النغلة الوحده
∩	bolje je • лучше • better is • besser ist • meilleur est • es mejor • è meglio • bättre är • 正着は • الامصل هو
⇔	linija • линия • file • Linie • colonne • linea • linea • linje • 横列 • الرتل
/	dijagonala • диагональ • diagonal • Diagonale • diagonale • diagonal • diagonal • diagonal • 斜筋 • العطر
⊕	centar • центр • centre • Zentrum • centre • centro • centro • centrum • 中央 • المركز
»	kraljevo krilo • королевский фланг • king's side • Königsflügel • aile-roi • flanco de rey • lato di R • kungsflygel • キング側 • جناح الملك
«	damino krilo • ферзевый фланг • queen's side • Damenflügel • aile-dame • flanco de dama • lato di D • damflygel • クイーン側 • جناح الملكة
×	slaba tačka • слабый пункт • weak point • schwacher Punkt • point faible • punto débil • punto debole • svaghet • 弱点 • نقطة ضعف
⊥	završnica • эндшпиль • ending • Endspiel • finale • final • finale • slutspel • 取局 • المرحلة النهائية
♖♗	lovački par • два слона • pair of bishops • Läuferpaar • paire de fous • pareja de alfiles • la coppia degli alfieri • löparpar • 双ビショップ • العملان
♖♗♘♙	raznobojni lovci • разноцветные слоны • bishops of opposite color • ungleichfarbige Läufer • fous de couleurs opposées • alfiles de distinto color • alfieri di colore diverso • löpare med olika färg • 異色ビショップ • فيلان من اللونين مختلفين
♖♗♘♙♚♛	istobojni lovci • одноцветные слоны • bishops of the same color • gleichfarbige Läufer • fous de même couleur • alfiles del mismo color • alfieri di colore uguale • löpare med samma färg • 同色ビショップ • فيلان من نفس اللون
○○	vezani pešaci • связанные пешки • united pawns • verbundene Bauern • pions liés • peones unidos • pedoni uniti • garderade bönder • 連ボーン • سادو مرتبطة
○-○	razdvojeni pešaci • изолированные пешки • separated pawns • isolierte Bauern • pions isolés • peones aislados • pedoni isolati • isolerade bönder • 離ボーン • سادو منعصه
⊗	udvojeni pešaci • двоянные пешки • double pawns • Doppelbauern • pions doublés • peones dobles • pedoni doppi • dubbel bönder • 重ボーン • سادو مزدوجة

Figure 2b. From *Enciklopedija Šahovskih Završnica*, 1993.

- ♙ slobodan pešak • проходная пешка • passed pawn • Freibauer • pion passé • peón pasado • pedone libero • fribonde • 歩・在・ポ・ン • بيدق حر
- > prednost u broju pešaka • преимущество в числе пешек • advantage in number of pawns • im Bauernmehrbesitz • avantage quantitatif en pions • ventaja en el número de peones • vantaggio quantitativo dei pedoni • fördel i antal bönder • ポ・ン・数・マ・の・優・勢 • الأفضلية بعدد البنادق
- ⊕ vreme • время • time • Zeit • temps • tiempo • tempo • tid • 時間切迫 • الوقت



7/113, 48/241... Šahovski informator • Шахматный информатор • Chess Informant • Schach-informator • Informateur d'échecs • Informador ajedrecistico • Informatore scacchistico • Schack-informator • チェス新報巻/局 • دليل الشطرنج

A 30, B 17, C 92... Enciklopedija šahovskih otvaranja • Энциклопедия шахматных дебютов • Encyclopaedia of Chess Openings • Enzyklopädie der Schacheröffnungen • Encyclopédie des ouvertures d'échecs • Enciclopedia de aperturas de ajedrez • Enciclopedia delle aperture negli scacchi • Encyklopedi över spelöppningar i schack • 布局大成 • موسوعة افتتاحيات الشطرنج

♚ 3/c3, ♜ 3/d... Enciklopedija šahovskih završnica • Энциклопедия шахматных окончаний • Encyclopaedia of Chess Endings • Enzyklopädie der Schachendspiele • Encyclopédie des finales d'échecs • Enciclopedia de finales de ajedrez • Enciclopedia dei finali negli scacchi • Encyklopedi över slutspel i schack • 收局大成 • موسوعة نهايات الشطرنج

N novost • новинка • a novelty • eine Neuerung • nouveauté • novedad • un'innovazione • nyhet • 新 手 • حدد مسكر



(ch) šampionat • чемпионат • championship • Meisterschaft • championnat • campeonato • campionato • mästerskap • 世界チャンピオン戦 • البطولة

(izt) međuzonski turnir • межзональный турнир • interzonal tournament • Interzonenturnier • tournoi interzonal • torneo interzonal • torneo interzonale • interzonturning • インター・ゾーン • دورة مباريات المناطق

(ct) turnir kandidata • турнир претендентов • candidates' tournament • Kandidatenturnier • tournoi des candidats • torneo de candidatos • torneo dei candidati • kandidatturning • 挑戰者決定戦 • دورة مباريات المرشحين

(m) meč • матч • match • Wettkampf • match • encuentro • match • match • マッチ • مباراة

(ol) olimpijada • олимпиада • olympiad • Olympiade • olympiade • olimpiada • olimpiade • olympiad • オリンピック • الاولمبياد

CORR. dopisna partija • партия по переписке • correspongence game • Fernpartie • partie par correspondance • partida por correspondencia • partita per corrispondenza • korrespondensparti • 通信戦 • لعبة أو مباراة بالمراسلة

RR primedba redakcije • примечание редакции • editorial comment • Anmerkung der Redaktion • remarque de la rédaction • nota de la redacción • nota redazionale • redaktionens anmärkning • 編集部評 • تعليق هيئة التحرير

R razni potezi • разные ходы • various moves • verschiedene Züge • différents coups • diferentes movidas • mosse varie • olika drag • 変化手 • غلاب متنوعة

L sa • с • with • mit • avec • con • con • med • 以下の手順となるもの • مع

┘ bez • без • without • ohne • sans • sin • senza • utan • 以下の手順とならないもの • بدون

|| itd. • и.т.д. • etc • usw. • etc. • etc • ecc • o.s.v. • 等等 • الخ

— vidi • смотри • see • siehe • voir • ved • vedi • se • 参照 • انظر

Figure 2c. From *Enciklopedija Šahovskih Završnica*, 1993.

6.6

: ,

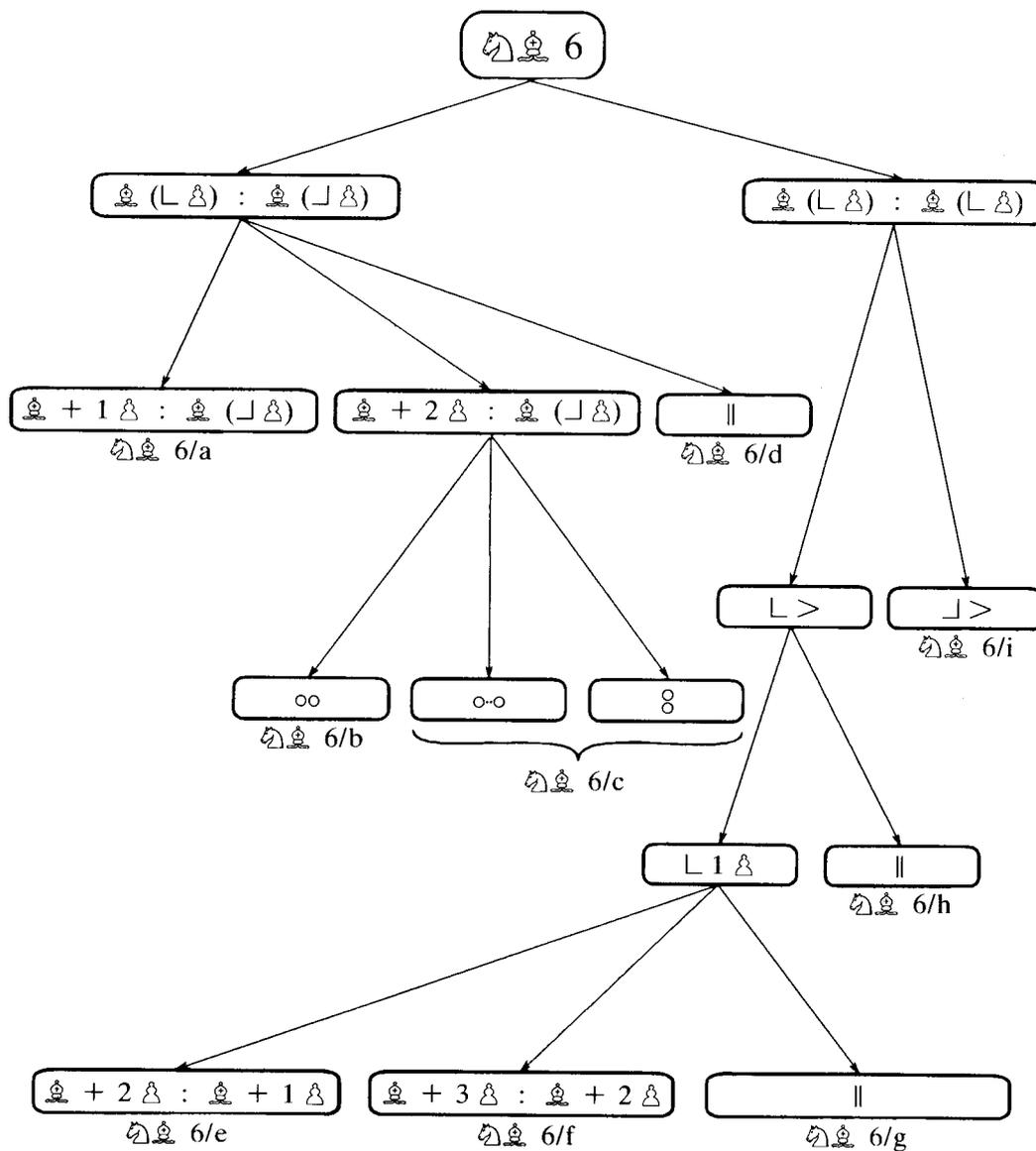
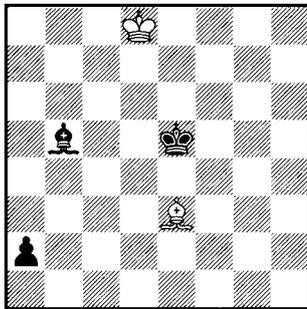


Figure 3. From Enciklopedija Šahovskih Završnica, 1993.

♘♙ 6/a	♙ + 1 ♘ : ♙ (♘ ♘), ♘	1327–1328	365
♘♙ 6/b	♙ + 2 ♘ ♘ : ♙ (♘ ♘), ♘	1329–1337	366
♘♙ 6/c	♙ + 2 ♘ ♘ : ♙ (♘ ♘), ♘	1338–1361	368
♘♙ 6/d	♙ + 3, 4, 5 ♘ : ♙ (♘ ♘), ♘	1362–1367	373
♘♙ 6/e	♙ + 2 ♘ : ♙ + 1 ♘, ♘	1368–1376	374
♘♙ 6/f	♙ + 3 ♘ : ♙ + 2 ♘, ♘	1377–1388	376
♘♙ 6/g	♙ (L ♘) : ♙ (L ♘), ♘, L > 1 ♘	1389–1442	379
♘♙ 6/h	♙ (L ♘) : ♙ (L ♘), ♘, L > 2, 3, 4 ♘	1443–1481	393
♘♙ 6/i	♙ (L ♘) : ♙ (L ♘), ♘, ♘ >	1482–1499	403

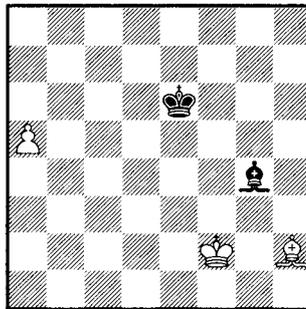
## ♘♙ 6/a

1327. GRAAFLAND\*  
Tidskrift 1916



1. ? =

1328. BERGER  
1922



1. ? =

1327. 1. ♙h6 ♚f6 2. ♙d2 a1♚ 3. ♙c3=

1328. 1. a6 ♙f5 2. ♚f3 [2. ♚e3 ♙h3 3. ♚f3 ♙f1 4. a7 ♙c4 ♙d5=] ♙d3! [2... ♚d5? 3. a7 ♙e4 4. ♚e3+-] 3. a7 ♙c4 4. a8♚ ♙d5=

Figure 4. From *Enciklopedija Šahovskih Završnica*, 1993.

KLASIFIKACIJA • КЛАССИФИКАЦИЯ • CLASSIFICATION •  
 KLASSIFIZIERUNG • CLASSIFICATION • CLASIFICACION •  
 CLASSIFICAZIONE • KLASIFIKATION • 大分類 • التصنيف



♞♚ 0	♞ : ♚ ♞ : ♚	12
♞♚ 1	♚ : ♚ ♚ : ♚	42
♞♚ 2	♞ : ♞	76
♞♚ 3	♚ (L ♞) : ♞ (┘ ♞) ♚ (┘ ♞) : ♞ (L ♞)	182
♞♚ 4	♚ (L ♞) : ♞ (L ♞), L >	220
♞♚ 5	♚ (L ♞) : ♞ (L ♞), ┘ >	306
♞♚ 6	♚ : ♚, ♞	364
♞♚ 7	♚ : ♚, ♞	408
♞♚ 8	♞♞/♞♚/♚♚ : ♚ ♞♞/♞♚/♚♚ : ♚ ♞♞/♞♚/♚♚ : ♞/♚	470
♞♚ 9	♞♚	520

Figure 5. From *Enciklopedija Šahovskih Završnica*, 1993.

Figure 2

White : White

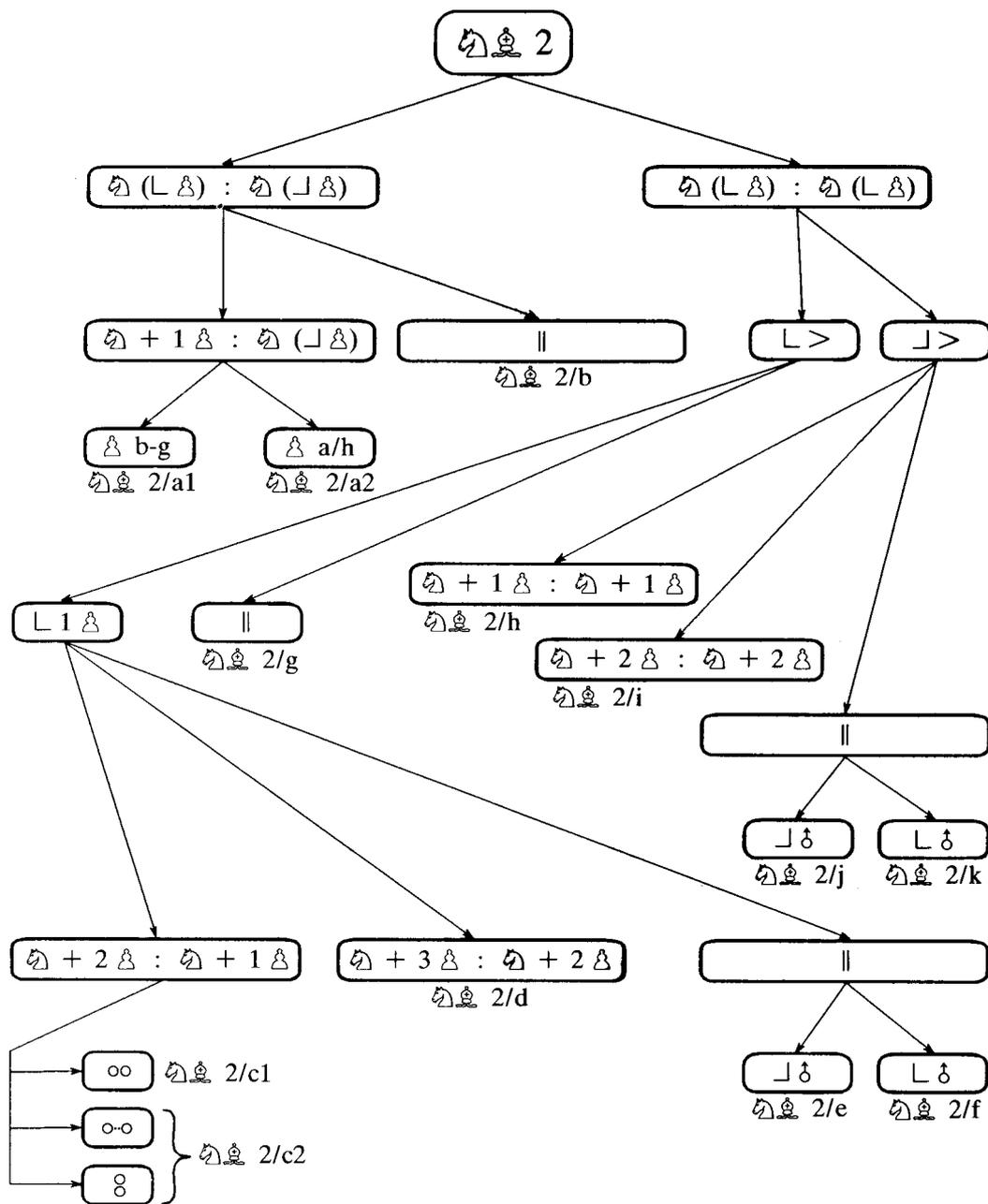


Figure 6. From Enciklopedija Šahovskih Završnica, 1993.

## 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

**2017-01-21**

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.**

Proposed name of script

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

**10.**

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?