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This document reviews various documents relating to the encoding proposals for Hungarian Runic and Szekely-Hungarian Rovas, and identifies the commonalities as well as outstanding differences. It is meant to act as a reference document to use in discussion on the encoding of this script.

I. Source documents¹

A. Proposals

N4007 (L2/11-087) Revised proposal for encoding the Szekely-Hungarian Rovas script in the SMP -- Hungary N.B. 2011-03-03 [earlier proposals by G. Hosszu: proposal N3527 and for punctuation, N3670]

N3697 (L2/09-333) Proposal for encoding the Hungarian Runic script -- Michael Everson, André Szabolcs Szelp 2009-10-21

N3664 (L2/09-240) Proposal for encoding generic punctuation used with the Hungarian Runic script -- Michael Everson & André Szabolcs Szelp

B. 2009 Ad Hoc summary and report on outstanding issues:

N3637 (L2/09-165) Outstanding Issues on Old Hungarian/Szekler-Hungarian Rovas/Hungarian Native Writing -- Deborah Anderson

N3640 (L2/09-168) Old Hungarian/Szekler-Hungarian Rovas Ad hoc report -- Deborah Anderson

C. Other documents

N4042 (L2/11-165) Mapping between Hungarian Runic proposals in N3697 and N4007²

N3532 (L2/08-355) Mapping between Old Hungarian proposals in N3531, N3527, and N3526 -- Everson

II. Changes since April 2009

Since the 2009 ad hoc on Hungarian Runic/S-H Rovas, the authors have made some changes and revised their documents:

- N3697 by Everson/Szelp removed LETTER CSULYAK A. No other major changes were made.
- N4007 by the Hungarian NB now locates all the characters in SMP, handles historical ligatures with the font, removed several punctuation marks (instead recommending use of existing

¹ Another proposal was submitted by BAKONYI Gábor, N3566R (L2/09-059) "Hungarian Native Writing Proposal" (revised; WG2 N3566R). He was not present at the Dublin ad hoc meeting. He has since sent in two other contributions, L2/09-399 "Code Collisions..." and L2/09-400 "Distinct Close 'É' Letter in the Native Hungarian Text Named Rudimenta?" Time precluded adding a comparison with his proposal at this time.

² N4042 was not available at the time this document was drafted.

characters), and took out a few other characters (AS and ATY). N4007 also includes 23 brand-new characters³ – not in the earlier proposal – made some name changes to a few characters, and added new examples.

III. Outstanding issues

A. NAME OF SCRIPT

Currently choice based on ad hoc report (N3640): Hungarian Runic or Szekely-Hungarian Rovas.

Comments:

- No new information is provided in N4007 on the name, but some discussion was in the earlier proposal, N3527, on pp. 2-3 (which mentions “Scythian,” “Szekler,” and “Hunnish” as names that have been used in the past).
- No new information is provided on the name in N3697 (but general discussion of other names, such as “Hungarian Runic,” “Szekeler script”, “Hungarian Rovás”, and “Old Hungarian,” appears on page 1).

B. REPERTOIRE

A total of 108 characters are shared between in both proposals (with some difference in the names and order). N4007 has a total of 48 additional characters beyond what is in N3697, and N3697 has 1 letter (=2 characters, including upper/lowercase) not in N4007.

A list of the common characters appears in **Appendix A**. Differences are discussed below.

1. Modern letters

N4007 alone includes 6 letters (=12 total including upper/lowercase) used to represent more recent sounds in Hungarian (dz and dzs), and other letters (q, w, x, y) which are used to transcribe historical names and loanwords in the Latin-based orthography of Hungarian today.

These letters are: DZ , DZS , Q , W , X , Y 

- N3697 says other means should be used to represent these letters:
 - DZ and DZS can be handled as ligatures (of D+Z and D+ZS) or as digraphs
 - Q, W, X, Y can be handled as a ligatures (Q = EK + V, W = V + V, X = EK + SZ, Y = I + J)The predecessor of N4007, N3527, showed the explicit origins of the new signs by S. Vér, clearly deriving them from ligatures (table 14.10-1 in N3527). The authors of N3697 feel encoding these characters “for modern usage would seem to be counterproductive in terms of future data and corpus consistency and also in concept in regard to the character/glyph model” (p.4).
- As evidence for these letters, N4007 gives examples of X and Y from a textbook published in 1971 (fig. 2-16). The proposal also includes an example from a book with the six letters (fig. 2-17), written by the original creator of the symbols, S. Vér.


2. Reptilian or “Bug” Characters (primarily homorganic nasals)

³ The brand-new (in N4007) characters are: DIAGONAL F, TRIANGULAR K, CIRCLE ENDED O, SCH, GH UU, OPEN V (6 x 2 = 12 for upper/lowercase), NUMBER TWO, NUMBER THREE, NUMBER FOUR, EQUALS MARK-LIKE HYPHEN, WORD SEPARATOR CROSS, DOUBLE COMMA-LIKE HYPHEN, DOUBLE CROSS FULL STOP, BEGINNING MARK RIGHT, BEGINNING MARK LEFT, END OF MESSAGE MARK, DUPLICATING MARK.

Though 7 of the “bug” or “reptilian” characters (which are primarily made up of homorganic nasals) are shared between the 2 proposals (AMB, AND, EMP, ENT, TPRUS/ENT-SHAPED SIGN, UNK, US), N4007 proposes 5 additional ones (=10 total including upper/lowercases).

The symbols proposed only in N4007 are: ANT, MB, TPRU, NB, NAP.

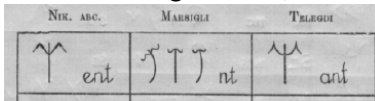
- ANT 

Comments: This is considered a glyph variant of ENT  in the mapping document, N3532 (p. 3). The evidence in N4007 for this character is from:

- o figure 2-7 (from Rudimenta)

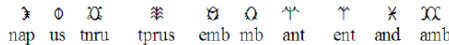


- o a chart from figure 2-34, a handbook by Németh (of variants?):



In the above image, the first column is Nikolsburg abc, the second the Bologna manuscript (=Runic Calendar of Marsigli), the third column is from the Rudimenta by J. Telegdi.

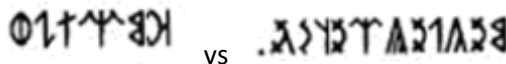
- o fig. 2-28b, a listing of “bug” characters in a manuscript of a 2009 textbook:




- o fig. 2-28/a, in apparent contrast with ENT (but no discussion or transcription of the text is provided):



- o fig. 2-27/d, which seems to show ANT vs ENT contrasting, from a 2009 book, *Stars of Eger*⁴ (but no discussion or transcription is provided):



- MB 

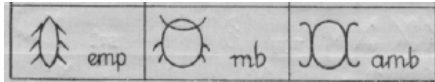
Comments: This is considered a glyph variant of EMP  in N3697 (p. 6), which cites an article by Máté in 2002.⁵

In N4007, it appears:

- o without contrast in fig. 2-5;
- o in fig. 2-23, a transcribed text on a webpage with MB contrasting with NB;
- o in figure 2-28/b, a listing of various “bug” characters from a manuscript of a 2009 textbook (see above, under ANT);
- o in fig. 2-27/d, which seems to show MB and NB contrasting on the same page from a 2009 book, *Stars of Eger*.
- o on a chart in figure 2-34, a handbook by Németh (of variants?):

⁴ The book was originally published in 1899 by Géza Gárdonyi, under the title *Egri csillagok*. The edition in Szekely-Hungarian Rovas script appeared in 2009, with the transcription by Tamás Rumi, László Sípos and Tamás Somfai.

⁵ Máté Zsolt. 2002. “A székely rovásírás latin rejtélye”, in *Nyelvtudományi Közlemények* 98. Budapest: Magyar Tudományos Akadémia. (<http://www.nytud.hu/nyk/98/mate98.pdf>)



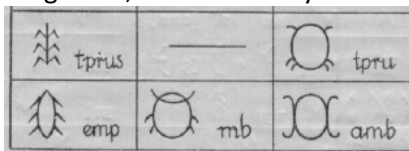
In the above image, the first column is Nikolsburg abc, the second the Bologna manuscript (=Runic Calendar of Marsigli), the third column is from the Rudimenta by J. Telegdi.

- TPRU 

Comments: This is considered a glyph variant of EMP  in N3697 (p. 6).


In N4007, it appears:

- with a few other symbols without contrast in Rudimenta, fig. 2-7;
- on a screenshot of Szekely-Hungarian Rovas transcription software in fig. 2-22;
- in figure 2-28/b, a listing of various “bug” characters from a manuscript of a 2009 textbook (for image, see above, under ANT);
- in a 2010 calendar, appearing on a “Rovas” website, in fig. 2-30, without contrast, but meaning ‘month’;
- in a 2009 web journal article on the “reptilian symbols”, fig. 2-32, with no contrast vs. MB, EMP, or NB.
- in fig. 2-34, a handbook by Németh, as part of a chart:



In the above image, the first column is Nikolsburg abc, the second the Bologna manuscript (=Runic Calendar of Marsigli), the third column is from the Rudimenta by J. Telegdi.

- NB 

Comments: This “has been identified as a glyph variant of ” (p. 19, N3697), being used for both /mb/ and /mp/.

In N4007, it appears:

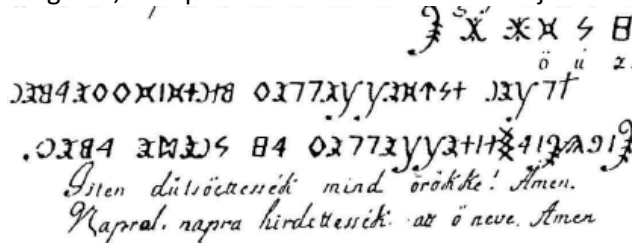
- in the Bologna calendar, fig. 2-13, with name “enb”, but no contrast with other “bug” characters;
- in fig. 2-23, a transcribed text on a webpage with MB contrasting with NB;
- in fig. 2-27/d, which seems to show MB and NB contrasting on the same page from a 2009 book, *Stars of Eger*;
- in fig. 2-28a, without any contrast to other EMP-like characters, and figure 2-28/b, a listing of various “bug” characters from a manuscript of a 2009 textbook (for image, see above, under ANT);
- in fig. 2-31, a 1975 book, discussing various signs (but no translation provided), referring to NB glyph as “MB”, no contrast with other “bug” characters;
- on a chart in figure 2-34, a handbook by Németh (variants?) (see above, under TPRU)

- NAP 

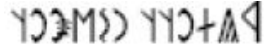
Comments: This is considered a ligature of N+ P in N3697 (p. 7).

This symbol appears in N4007 at:

- o in fig. 2-6, an alphabet and sentences of J. Kájoni from 1673:



- o (purportedly in fig. 2-22)
- o in fig. 2-23, in parts of a poem transcribed into the S-H R script on a webpage:



- o in fig. 2-26, a snapshot of a webpage generated with "technology" (but citation is to a figure in the 2009 book on the script by Gábor Hosszú, Tamás Rumi, and László Sípos)
- o in figure 2-28/b, a listing of various "bug" characters from a manuscript of a 2009 textbook (see above, under ANT)
- o appearing in a 2009 web journal article on the "reptilian symbols", fig. 2-32, in a discussion of the symbols NAP, TPRU, and TPRUS.

3. Historical characters:

New in N4007 are 6 new historical characters (=12 total, including upper/lowercase), which do not appear in N3697:

- DIAGONAL F \emptyset

Comment: Examples appear in figs. 2-1 and 2-2.

- o Figure 2-1, an inscription from Vargyas and dated to 13-14C, is:



Figure 2-1 appeared in the earlier proposal, N3527, as fig. 14.4-4, but with a completely different reading ("MiHÁLY J iRTÁn KöVeT", 'J. Mihály wrote the stone'). In the earlier reading of N3527 the DIAGONAL F was read as LY. The reading of fig. 2-1 in N4007 is /'me: fioy t^e n^ekyd/, '[Woman] here is your Son', which is identified as coming from the Gospel of John (John 19, 26). It is transcribed as:





- o Fig. 2-2, an early relic dated to 12-13C:



The discussion in N4077 transcribes the above as /h'sek fiu:nək/ and translates it as 'I believe in Son' a line from the Gospel of John (John 3,18).



- TRIANGULAR K Δ

Comment: The sole example appears in fig. 2-2, from an early relic dated to 12-13C.

- CIRCLE ENDED O 
Comment: The sole example appears in fig. 2-1, see above. In the earlier reading of N3527, the “circle ended o” was not transcribed.
- SCH 
Comment: The sole example appears in fig. 2-9, from a handwritten book dating to 1655, which lists various symbols in the script:

25. sch esch 




The symbol is not mentioned in N3597, though it appears in fig. 8 of the proposal.

- GH UU 
Comment: The sole example appears in fig. 2-1. In the earlier proposal, N3527, “GH UU” was read as “R”, though in “R” the diagonal connecting the two verticals runs the other direction. The name “GH UU” is not discussed. (For image, see above DIAGONAL F).
- OPEN V 
Comment: The sole example appears in fig. 2-3, from the Székelyderzs inscription, which dates to 14C. No transcription or interpretation is provided.



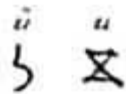
4. Other character differences (excluding digits, combining marks, and punctuation marks)



The repertoire of N4007 has 2 additional characters (=4 total, including upper/lowercase) not contained in N3697:

- OPEN UEE 
Comment: In the earlier S-H Rovas proposal, this symbol was called “OLD UEE”. In the mapping document, N3532, this symbol is identified as a glyph variant of RUDIMENTA UE  (cf. NIKOLSBURG UE ).

OPEN UEE appears in 3 examples in N4007:

- Fig. 2-11, the Harsányi alphabet from 1678:



- fig. 2-27/d, in the 2009 book *Stars of Eger*, which includes a contrast of  (right) with  (left), but without discussion:



- fig. 2-29, in a 2010 book *Rovas Fundamentals*, where the various shapes of UE (by Forrai and others) are exemplified on the left, but the shape of “OPEN UEE” is given on right:

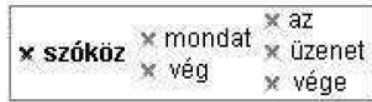


- CLOSE UE 

- 2Ex3 WORD SEPARATOR CROSS ✕

Comments: This symbol appears in:

- figure 20 is from a web-page of a Hungarian Scouts manual:



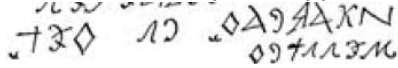
In the above, “szóköz” means ‘word separator’, “mondat vég” means ‘sentence end’, and “az üzenet vége” means ‘the end of message’.

- figure 2-33 is an image of a carved stick showing WORD SEPARATOR CROSS, used by Hungarian scouts in Western countries.

While fig. 20 describes the apparent use of these crosses, further examples showing the crosses in text are needed.

- 2Ex4 DOUBLE COMMA-LIKE HYPHEN “

Comments: This symbol appears in a 1770 letter in fig. 2-10:



More information on this symbol is needed.

- 2Ex5 DOUBLE CROSS FULL STOP ✕

Comments: See WORD SEPARATOR CROSS, above.

- 2Ex6 BEGINNING MARK RIGHT }{

Comments: This mark appears in fig. 2-15/a, a chart from 1933 attributed to D.V. Kiss. Further examples are needed.

- 2Ex7 BEGINNING MARK LEFT }{

Comments: This mark appears in fig. 2-15/b, a chart from 1933 attributed to D.V. Kiss. Further examples are needed.

- 2Ex8 END OF MESSAGE MARK ✕

Comments: See WORD SEPARATOR CROSS, above. Additional evidence is provided in fig. 2-15/b (see note above, BEGINNING MARK LEFT).

7. Combining Mark

New in N4007 is 1 combining mark characters. This is not included in the earlier version of the proposal (nor in N3697).

- 1DC0 DUPLICATING MARK ̇

Comments: One example is provided in N4007, fig. 2-12, a page of the handwriting book of Á. Kova prior to 1873. Is this mark used elsewhere? If approved, this mark should not be located in the Combining Diacritical Marks Supplement block, since it is script-specific.

C. NAMES OF CHARACTERS

1. Consonant Names

N3697 prefixes the consonant character names with “e”, as is shown in that document’s fig. 4 (Rudimenta), 5 (Nikolsburg abecedarium), and chart in figure 8 of N3697.


The earlier Szekely-Hungarian Rovas proposal mentions (p. 10 of N3527) that the naming conventions follow the current Latin-based Hungarian names, but not the names on the oldest relics (presumably those given on Rudimenta and Nikolsburg abecedarium). However, the “bug” characters follow their historical names.

The names which have “e” prepended to them in N3697 are: B, C, CS, D, F, G, GY, H, J, K, L, LY, M, N, NY, P, R, SHORT R, S, SZ, T, TY, V.



2. Other name differences:



There are six other name differences between the proposals.

- **OE vs RUDIMENTA OE** 

Comment: N3697 (p.11) notes that the representative glyph for this letter does not occur in the Rudimenta, which instead uses the glyph shape . As a result, this name could be confusing to users, though N3697 explains that “Rudimenta” is used as a term to cover a broad group which shares other features⁶, such as the letters representing /ø/ and /y/ (p. 3, N3697). Because the representative glyph does not appear in the RUDIMENTA, the earlier version of N4007 recommended the name “RUDIMENTA” be removed⁷ (and presumably this is why the name for this character in N4007 is just “OE”).

- **OPEN UE vs RUDIMENTA UE** 

Comment: As noted under OE/RUDIMENTA OE above, N3697 separates sources into two groups, depending on the symbols used for the phonemes /ø/ and /y/. The “Rudimenta” group, composed of Rudimenta, Istanbul, and Csíkzentmiklos inscriptions, uses  for /y/, but the “Nikolsburg” group, made up of Nikolsburg and Bologna sources, use  for /y/. Hence the names “Rudimenta” and “Nikolsburg” are used to differentiate the two symbols for /y/.

This division into “Rudimenta” and “Nikolsburg” is not shared by the authors of N4007, for whom  is used for ü and  is used for ũ (at least in the discussion on p. 10 of the earlier version of N4007, N3527), so no such attribute is needed.

- **CLOSE UEE vs NIKOLSBURG UE** 

Comment: See note above, under RUDIMENTA UE.

- **CH vs NIKOLSBURG ETY** 

Comment: This character is known to have different readings, as noted in N3697 (p. 11): “some researchers read it as a sign for χ /x/ rather than ty /c/”. In the earlier proposal for Szekely-Hungarian Rovas, it was named “HH.” Clearly, the name “NIKOLSBURG ETY” give prominence to the ty reading, but a decision between the two reading needs to be made.

⁶ Hence, identifying RUDIMENTA as an “unambiguous source prefix” (p. 9) in the case of RUDIMENTA OE is perhaps too strong.

⁷ N3527 called the shape in the Rudimenta OLD OEE (p. 18), and the “K” shape represented here “OE” (p. 12).

- **OPEN K vs AK** ↴

Comment: The earlier version of N4007, N3527, named the character “AK”. In N4007, however, it is named “OPEN K.” There is no discussion on the name change in N4007, but it appears explicitly in several figures of N3697 with the name “AK”: fig. 2 (Bologna manuscript), 4 (Rudimenta), 5 (Nikolsburg abc), 7 (Forrai, with “?”), and 8. (Also, it appears as “K” in fig. 6, and “K-K” in fig. 1.)

- **TPRUS vs ENT-SHAPED SIGN** 𐌿

Comment: N3697 refers to the article by Máté, who interprets TPRUS as an abbreviation for “temperius”, ‘earlier’, which was an interpretive note signaling that the adjacent sign was an old letter. The work of Máté is not cited in N4007.

The examples of TPRUS in N4007 include:

- in fig. 2-4, the Nikolsburg alphabet from 15C, where the symbol appears separately on a line:



- in fig. 2-22, a screenshot of Szekely-Hungarian Rovas transcription software, it appears: 2009 𐌿 𐌿𐌿𐌿𐌿𐌿 𐌿 (but no discussion of its use – ‘year?’);
- in fig. 2-28/a, a manuscript of a text book, it appears in a word 𐌿𐌿𐌿 with no discussion of its use, and /b, it appears in a listing of “bug” characters
- in fig. 2-30 on a 2010 calendar, appearing on a “Rovas” website, where TRPUS means ‘year’ (and TPRU ‘month’)
- in a 2009 web journal article on the “reptilian symbols” in fig. 2-32
- in fig. 2-34, a handbook by Németh, as part of a chart:

𐌿 tpris	—	𐌿 tpru
𐌿 emp	𐌿 mb	𐌿 amb

In the above image, the first column is Nikolsburg abc, the second the Bologna manuscript (=Runic Calendar of Marsigli), the third column is from the Rudimenta by J. Telegdi.

D. ORDER

The characters in the code charts roughly follow Latin ABC order, with long vowels following short vowels: A, AA, etc.

The main difference is between the two proposals is the placement of the homorganic nasals (bug characters) and historic characters. They are interfiled in N3697 but they are put at the end in N4007. (N4007 also interfiles DZ, DZS, W, X, Y, in the A-Z order; these newer letters are not included in the repertoire of N3697.)

Differences in order are shown below in bold:

N3697:

A, AA, EB, **AMB**, EC, **ENC**, ECS, ED, **AND**, E, **CLOSE E**, EE, EF, EG, EGY, EH, I, II, EJ, EK, AK, **UNK**, EL, ELY, EM, EN, ENY, O, OO, **NIKOLSBURG OE**, RUDIMENTA OE, OEE, EP, **EMP**, ER, **SHORT ER**, ES, ESZ, ET, **ENT**, ETY, **NIKOLSBURG ETY**, U, UU, **NIKOLSBURG UE**, RUDIMENTA UE, EV, EZ, EZS, **ENT-SHAPED SIGN**, US

N4007:

A, AA, B, C, CS, D, **DZ**, **DZS**, E, EE, **CLOSE E**, F, G, GY, H I, II, J, K, OPEN K, L, LY, M, N, NY, O, OO, OE, OEE, P, **Q**, R, S, SZ, T, TY, U, UU, **CLOSE UE**, **OPEN UE**, **CLOSE UEE**, **OPEN UEE**, V, **W**, **X**, **Y**, Z, **ZS**, **AMB**, **AND**, **ANT**, **EMP**, **ENT**, **MB**, **NAP**, **NB**, **TPRU**, **TPRUS**, **UNK**, **US**, **ENC**, **DIAGONAL F**, **CH**, **TRIANGULAR K**, **CIRCLE ENDED O**, **SHORT R**, **SCH**, **GH UU**, **OPEN V**.

E. COLLATION

The two proposals have different sort orders. The order in N3697 “is based on the needs of modern users (as sorting serves only modern text corpora), taking into consideration the modern Latin Hungarian alphabet and its collation algorithms...[H]istoric material for characters which are not used in modern orthographies have been taken into account. ” (pp. 9-10).

- N3697 (with removal of ^{bol}a and ^{nik}a and insertion of á):
a << á < b < mb < c < nc < cs < d < nd < e << ë << é < f < g < gy < h < i << í < j < ek < ak < nk < l < ly < m < n < ny < o << ó < ^{nik}ö << ^{rud}ö << ő < p < mp < r << shr < s < sz < t < nt < ty << ^{nik}ty < u << ú < ^{nik}ü << ^{rud}ü <v < z < zs < ^{sign}ent < us
- N4007:
A < AMB < AND < ANT < AA < B < C < CS < D < DZ < DZS < E < ENC < EMP < ENT < CLOSE E < EE < F < DIAGONAL F < G < GY < H < CH < I < II < J < K < TRIANGULAR K < OPEN K < L < LY < M < MB < N < NAP < TPRU < TPRUS < NB < NY < O < CIRCLE ENDED O < OO < OE < OEE < P < Q < R < SHORT R < S < SCH < SZ < T < TY < U < UNK < US < UU < GH UU < CLOSE UE < OPEN UE < CLOSE UEE < OPEN UEE < V < OPEN V < W < X < Y < Z < ZS

APPENDIX A

The common characters are listed below (if the names vary, they appear with N4007 name first, then the name that appears in N3697, separated by a slash):

1. CAPITAL LETTER A
2. CAPITAL LETTER AA
3. CAPITAL LETTER B/EB
4. CAPITAL LETTER C/EC
5. CAPITAL LETTER CS/ECS
6. CAPITAL LETTER D/ED
7. CAPITAL LETTER E
8. CAPITAL LETTER CLOSE E
9. CAPITAL LETTER EE
10. CAPITAL LETTER F/EF
11. CAPITAL LETTER G/EG
12. CAPITAL LETTER GY/EGY
13. CAPITAL LETTER H/EH
14. CAPITAL LETTER I
15. CAPITAL LETTER II
16. CAPITAL LETTER J/EJ
17. CAPITAL LETTER K/EK
18. CAPITAL LETTER OPEN K/AK
19. CAPITAL LETTER L/EL
20. CAPITAL LETTER LY/ELY
21. CAPITAL LETTER M/EM
22. CAPITAL LETTER N/EN
23. CAPITAL LETTER NY/ENY
24. CAPITAL LETTER O
25. CAPITAL LETTER OO
26. CAPITAL LETTER OE/RUDIMENTA OE
27. CAPITAL LETTER OEE
28. CAPITAL LETTER P/EP
29. CAPITAL LETTER R/ER
30. CAPITAL LETTER R/ES
31. CAPITAL LETTER SZ/ESZ
32. CAPITAL LETTER T/ET
33. CAPITAL LETTER TY/ ETY
34. CAPITAL LETTER U
35. CAPITAL LETTER UU
36. CAPITAL LETTER OPEN UE/RUDIMENTA UE
37. CAPITAL LETTER CLOSE UEE/NIKOLSBURG UE
38. CAPITAL LETTER V/EV
39. CAPITAL LETTER Z/EZ
40. CAPITAL LETTER ZS/EZS
41. CAPITAL LETTER AMB
42. CAPITAL LETTER AND
43. CAPITAL LETTER EMP

44. CAPITAL LETTER ENT
45. CAPITAL LETTER TPRUS/ENT-SHAPED SIGN
46. CAPITAL LETTER UNK
47. CAPITAL LETTER US
48. CAPITAL LETTER ENC
49. CAPITAL LETTER CH/NIKOLSBURG ETY
50. CAPITAL LETTER SHORT R
51. SMALL LETTER A
52. SMALL LETTER AA
53. SMALL LETTER B/EB
54. SMALL LETTER C/EC
55. SMALL LETTER CS/ECS
56. SMALL LETTER D/ED,
57. SMALL LETTER E
58. SMALL LETTER CLOSE E
59. SMALL LETTER EE
60. SMALL LETTER F/EF
61. SMALL LETTER G/EG
62. SMALL LETTER GY/EGY
63. SMALL LETTER H/EH
64. SMALL LETTER I
65. SMALL LETTER II
66. SMALL LETTER J/EJ
67. SMALL LETTER K/EK
68. SMALL LETTER OPEN K/AK
69. SMALL LETTER L/EL
70. SMALL LETTER LY/ELY
71. SMALL LETTER M/EM
72. SMALL LETTER N/EN
73. SMALL LETTER NY/ENY
74. SMALL LETTER O
75. SMALL LETTER OO
76. SMALL LETTER OE/RUDIMENTA OE
77. SMALL LETTER OEE
78. SMALL LETTER P/EP
79. SMALL LETTER R/ER
80. SMALL LETTER R/ES
81. SMALL LETTER SZ/ESZ
82. SMALL LETTER T/ET
83. SMALL LETTER TY/ ETY
84. SMALL LETTER U
85. SMALL LETTER UU
86. SMALL LETTER OPEN UE/RUDIMENTA UE
87. SMALL LETTER CLOSE UEE/NIKOLSBURG UE
88. SMALL LETTER V/EV
89. SMALL LETTER Z/EZ
90. SMALL LETTER ZS/EZS
91. SMALL LETTER AMB

- 92. SMALL LETTER AND
- 93. SMALL LETTER EMP
- 94. SMALL LETTER ENT
- 95. SMALL LETTER TPRUS/ENT-SHAPED SIGN
- 96. SMALL LETTER UNK
- 97. SMALL LETTER US
- 98. SMALL LETTER ENC
- 99. SMALL LETTER CH/NIKOLSBURG ETY
- 100. SMALL LETTER SHORT R
- 101. NUMBER 1
- 102. NUMBER 5
- 103. NUMBER 10
- 104. NUMBER 50
- 105. NUMBER 100
- 106. NUMBER 1000
- 107. REVERSED COMMA
- 108. DOUBLE LOW-REVERSED-9 QUOTATION MARK