









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 additional Runic characters in the UCS****Source: Michael Everson and Andrew West****Status: Individual Contribution****Action: For consideration by JTC1/SC2/WG2 and UTC****Date: 2011-04-01**

**0. Introduction.** A number of Runic characters should be encoded to fill gaps in the UCS. Five of them are found on the Anglo-Saxon Franks Casket, and three of them in the writings of J. R. R. Tolkien, who used Runes in some of his writings. If this proposal is accepted, the following characters will be added to the standard:

	16F1	RUNIC LETTER FRANKS CASKET OS
	16F2	RUNIC LETTER FRANKS CASKET IS
	16F3	RUNIC LETTER FRANKS CASKET EH
	16F4	RUNIC LETTER FRANKS CASKET AC
	16F5	RUNIC LETTER FRANKS CASKET AESC
	16F6	RUNIC LETTER K
	16F7	RUNIC LETTER SH
	16F8	RUNIC LETTER OO

**1. Anglo-Saxon runes.** The Franks Casket (or Auzon Runic Casket) is a small and beautiful chest made out of whalebone and dating to 8th century England. It presents a number of carved historical scenes alongside of which are extensive texts in Runes. On the right side of the casket, which appears to be an illustration of Sigurðr who slayed the dragon Fáfnir, a set of “cryptogrammic” Runes are used for the vowels. (the ordinary rune vowels are used on the other three sides) The text on that side of the casket reads:

HXR NHY HETAD HT HARMBXRXL

*her hos sitæþ on hærmbergæ*

hXf... DRXEB HPJ HRE XRTH XXE HXRHP

*agl... drigip; swæ hiri erta egi sgraf*

HARMHt HXRXL HtM HXE THRTJ

*særden sorgæ and sefâ tornæ*

Here these “cryptogrammic” Runes are shown in red; note that  $\mathring{M}$  is the standard rune for *e*, rather than cryptogrammic  $\lambda$  *e*. Note too  $\mathring{F}$  *f* $\grave{a}$  the ligature of  $\mathring{V}$  *f* and  $\mathring{F}$  *a*, where the latter is not the cryptogrammic  $\mathring{h}$  *a*. See Figure 1.

**2. Tolkienian extensions.** Although for *The Lord of the Rings* J. R. R. Tolkien devised and employed two writing systems, the featural Tengwar script and the runiform Cirth script, in *The Hobbit* and some of his other writings he made use of Old English runes. Owing to the importance of Tolkien as one of the major writers of the twentieth century and in particular to the scholarly attention given to his linguistic work, it is proposed here to add two character to the Runic block in order to enable his texts to be completely represented in the UCS.

The adaptation of the Runic alphabet Tolkien used is given here, in Latin alphabetical order (See Figure 2, 3, 4, 5).

$\mathring{F}$  *a*,  $\mathring{B}$  *b*,  $\mathring{C}$  *c*,  $\mathring{D}$  *d*,  $\mathring{M}$  *e*,  $\mathring{V}$  *f*,  $\mathring{X}$  *g*,  $\mathring{H}$  *h*,  $\mathring{I}$  *ilj*,  $\mathring{K}$  *k*,  $\mathring{L}$  *l*,  $\mathring{M}$  *m*,  $\mathring{N}$  *n*,  $\mathring{O}$  *o*,  $\mathring{P}$  *p*,  $\mathring{R}$  *r*,  
 $\mathring{S}$  *s*,  $\mathring{T}$  *t*,  $\mathring{U}$  *u/v*,  $\mathring{W}$  *w*,  $\mathring{Y}$  *x*,  $\mathring{Z}$  *y*,  $\mathring{A}$  *z*,  $\mathring{E}$  *ea*,  $\mathring{E}$  *ee*,  $\mathring{Z}$  *eo*,  $\mathring{X}$  *ng*,  $\mathring{O}$  *oo*,  $\mathring{N}$  *sh*,  $\mathring{M}$  *st*,  $\mathring{P}$  *th*

The red characters  $\mathring{K}$  *k*,  $\mathring{N}$  *sh*, and  $\mathring{O}$  *oo* are not encoded in the UCS; the blue characters  $\mathring{C}$  *c* and  $\mathring{S}$  *s*, and  $\mathring{E}$  *ee* are similar to *k*, *sh*, and *oo*. A variety of texts written by Tolkien make use of these letters. The title-page text of *The Hobbit* reads:

$\mathring{F}$   $\mathring{M}$   $\mathring{H}$   $\mathring{F}$   $\mathring{E}$   $\mathring{B}$   $\mathring{I}$   $\mathring{T}$   $\mathring{F}$   $\mathring{R}$   $\mathring{F}$   $\mathring{M}$   $\mathring{R}$   $\mathring{M}$   $\mathring{F}$   $\mathring{Y}$   $\mathring{D}$   $\mathring{B}$   $\mathring{E}$   $\mathring{K}$   $\mathring{L}$   $\mathring{F}$   $\mathring{X}$   $\mathring{F}$   $\mathring{I}$   $\mathring{T}$   $\mathring{B}$   $\mathring{M}$   $\mathring{I}$   $\mathring{X}$   $\mathring{F}$   $\mathring{F}$   $\mathring{M}$   $\mathring{R}$   $\mathring{M}$   $\mathring{L}$   $\mathring{F}$   $\mathring{E}$   $\mathring{R}$   $\mathring{D}$   $\mathring{F}$   $\mathring{P}$   $\mathring{F}$   $\mathring{H}$   $\mathring{Y}$   $\mathring{T}$   $\mathring{R}$   $\mathring{H}$   $\mathring{I}$   $\mathring{M}$   $\mathring{H}$   $\mathring{R}$   $\mathring{F}$   $\mathring{M}$   
 $\mathring{M}$   $\mathring{F}$   $\mathring{D}$   $\mathring{M}$   $\mathring{B}$   $\mathring{B}$   $\mathring{I}$   $\mathring{M}$   $\mathring{B}$   $\mathring{E}$   $\mathring{F}$   $\mathring{F}$   $\mathring{X}$   $\mathring{X}$   $\mathring{I}$   $\mathring{T}$   $\mathring{H}$   $\mathring{F}$   $\mathring{P}$   $\mathring{H}$   $\mathring{F}$   $\mathring{E}$   $\mathring{B}$   $\mathring{I}$   $\mathring{T}$   $\mathring{F}$   $\mathring{E}$   $\mathring{K}$   $\mathring{L}$   $\mathring{F}$   $\mathring{M}$   $\mathring{K}$   $\mathring{I}$   $\mathring{M}$   $\mathring{M}$   $\mathring{P}$   $\mathring{R}$   $\mathring{F}$   $\mathring{M}$   $\mathring{H}$   $\mathring{I}$   $\mathring{H}$   $\mathring{M}$   $\mathring{M}$   $\mathring{M}$   $\mathring{F}$   $\mathring{I}$   $\mathring{R}$   $\mathring{H}$   $\mathring{B}$   
 $\mathring{I}$   $\mathring{R}$   $\mathring{R}$   $\mathring{A}$   $\mathring{T}$   $\mathring{F}$   $\mathring{M}$   $\mathring{I}$   $\mathring{M}$   $\mathring{F}$   $\mathring{F}$   $\mathring{Y}$   $\mathring{D}$   $\mathring{K}$   $\mathring{N}$   $\mathring{E}$   $\mathring{M}$   $\mathring{H}$   $\mathring{M}$   $\mathring{B}$   $\mathring{X}$   $\mathring{Z}$   $\mathring{R}$   $\mathring{X}$   $\mathring{M}$   $\mathring{F}$   $\mathring{I}$   $\mathring{M}$   $\mathring{F}$   $\mathring{F}$   $\mathring{Y}$   $\mathring{D}$   $\mathring{N}$   $\mathring{F}$   $\mathring{I}$   $\mathring{T}$   $\mathring{F}$   $\mathring{I}$   $\mathring{A}$   $\mathring{D}$   
 PE HOBBIT OR PERE AND BACK AGAIN BEIN PE RECORD OF A YÆRS IOURNEY  
 MADE BY BILBO BAGGINS OF HOBBITON COMPILED FROM HIS MEMOIRS BY  
 I R R TOLKIEN AND PUBLISHED BY GØERGE ALLEN AND UNWIN LTD

In Thrór’s map the following text is given in “moon letters”:

$\mathring{Y}$   $\mathring{T}$   $\mathring{F}$   $\mathring{D}$   $\mathring{B}$   $\mathring{A}$   $\mathring{F}$   $\mathring{M}$   $\mathring{X}$   $\mathring{R}$   $\mathring{M}$   $\mathring{A}$   $\mathring{Y}$   $\mathring{T}$   $\mathring{M}$   $\mathring{H}$   $\mathring{P}$   $\mathring{I}$   $\mathring{M}$   $\mathring{F}$   $\mathring{M}$   $\mathring{F}$   $\mathring{R}$   $\mathring{N}$   $\mathring{Y}$   $\mathring{H}$   $\mathring{H}$   $\mathring{T}$   $\mathring{F}$   $\mathring{K}$   $\mathring{H}$   
 $\mathring{F}$   $\mathring{D}$   $\mathring{F}$   $\mathring{M}$   $\mathring{Y}$   $\mathring{M}$   $\mathring{T}$   $\mathring{T}$   $\mathring{I}$   $\mathring{X}$   $\mathring{Y}$   $\mathring{N}$   $\mathring{T}$   $\mathring{F}$   $\mathring{I}$   $\mathring{F}$   $\mathring{F}$   $\mathring{M}$   $\mathring{F}$   $\mathring{F}$   $\mathring{Y}$   $\mathring{T}$   $\mathring{F}$   $\mathring{I}$   $\mathring{X}$   $\mathring{H}$   $\mathring{T}$   $\mathring{F}$   $\mathring{P}$   $\mathring{D}$   $\mathring{N}$   $\mathring{R}$   $\mathring{I}$   $\mathring{T}$   $\mathring{H}$   
 $\mathring{D}$   $\mathring{F}$   $\mathring{R}$   $\mathring{F}$   $\mathring{I}$   $\mathring{T}$   $\mathring{Y}$   $\mathring{H}$   $\mathring{I}$   $\mathring{T}$   $\mathring{M}$   $\mathring{N}$   $\mathring{H}$   $\mathring{T}$   $\mathring{F}$   $\mathring{M}$   $\mathring{H}$   $\mathring{M}$   $\mathring{H}$   $\mathring{T}$   $\mathring{M}$   
 STAND BY PE GREY STONE HWEN PE PRUSH KNOCKS  
 AND THE SETTING SUN WITH THE LAST LIGHT OF DURINS  
 DAY WILL SHINE UPON THE KEYHOLE

As is the following note by Thrór:

$\mathring{F}$   $\mathring{I}$   $\mathring{N}$   $\mathring{M}$   $\mathring{F}$   $\mathring{O}$   $\mathring{T}$   $\mathring{H}$   $\mathring{I}$   $\mathring{X}$   $\mathring{H}$   $\mathring{F}$   $\mathring{M}$   $\mathring{D}$   $\mathring{O}$   $\mathring{R}$   $\mathring{F}$   $\mathring{E}$   $\mathring{D}$   $\mathring{O}$   $\mathring{R}$   $\mathring{M}$   $\mathring{E}$   $\mathring{F}$   $\mathring{F}$   $\mathring{M}$   $\mathring{F}$   $\mathring{E}$   $\mathring{R}$   $\mathring{M}$   $\mathring{F}$   $\mathring{H}$   $\mathring{T}$   
 FIUE FÆT HIGH PE DOR AND PRÆ MAY WALK ABREAST

The  $\mathring{N}$  *sh* and  $\mathring{O}$  *oo* characters were used in a letter from Tolkien to Mrs Ferrer; see Figure 4.



figure carving. Beginning at the upper left-hand corner, it goes along the top, down the right side, along the bottom where the runes are upside down, and finishes going upwards on the left-hand side. A unique feature of the inscription on this side of the casket is its use of the following arbitrary vowel-runes:

h a, l æ, x e, { i, + o.

Normal vowel-runes occur only twice in the main inscription: M e in *særden*, and F a in the ligature *fæ* in *sefa*, where Napier preferred to read *sefu*. In the three short words carved in runes within the figure-panel itself, however, the normal vowel-runes only are employed. These words will be considered later. The main inscription reads:

Top:        H X R N H H H { T L P H X N L R M B X R X L H  
              h e r h o s s i t æ þ o n h æ r m b e r g æ a  
              X R I  
              g l . .

Right side: H R { X { P H P L  
              d r i g i þ s w æ

Bottom:    H { R { X R T H X X { H X R H F H L R M X H  
              h i r i e r t a e g i s g r a f s æ r d e n s  
              H R X L H  
              o r g æ a

Left side: X H H X { T H R X L  
              n d s e f a t o r n æ

This may be transcribed into three lines of alliterative verse:

her hos sitæþ on hærmbergæ  
agl. . drigip; swæ hiri erta egi sgraf,  
særden sorgæ and sefa tornæ.

The interpretation of these lines, however, is beset with difficulties,<sup>1</sup> and a fresh study of them must be reserved for another occasion. The most plausible rendering hitherto advanced is:

Here the horse stands above the mound of woe,  
It suffers tribulation; just as to her Erta appointed anxiety,  
A grave of grief, in sorrow and anguish of heart.

**Figure 2.** Description of the text of the right panel of the Franks Casket from Ralph Warren Victor Elliott's *Runes: An introduction* (Manchester University Press, 1959; 2nd edition, 1989), giving a transcription and transliteration of the text.



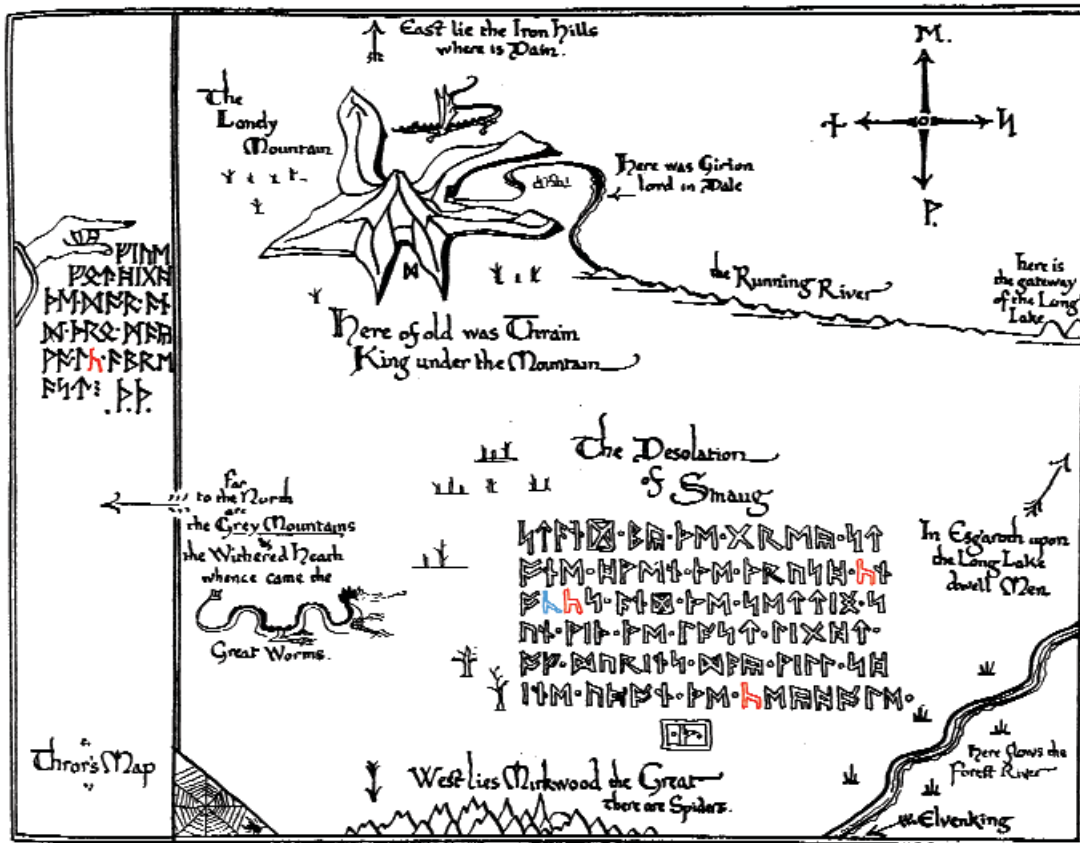


Figure 3. Thor's map showing the Tolkienian runic extensions.

Þ M · H M E B T · M · M · E · M · R · M · S · M ·  
 R · N · M · M · M · S · S · A · Y · R · I · S · T · R · E · M ·

E N H · E X N C · E M I X · Þ M ·  
 M M M · E S · E I N E · E X X G · L · S ·

WORKS BY J. R. R. TOLKIEN  
 The Hobbit  
 Leaf by Niggle  
 On Fairy Stories  
 Farmer Giles of Ham  
 The Homecoming of Beowulf's  
 The Lord of the Rings  
 The Adventures of Tom Bombadil  
 The Road Goes Ever On (with Donald Swann)  
 Smith of Wootton Major



# The Hobbit

OR THERE AND BACK AGAIN

BY  
 J. R. R. TOLKIEN

WORKS PUBLISHED POSTHUMOUSLY  
 Sir Galam, Pearl and Sir Galas  
 The Father Christmas Letters  
 The Silmarillion  
 Pictures by J.R.R. Tolkien  
 Unfinished Tales  
 The Letters of J.R.R. Tolkien  
 Mr Bliss  
 Finn and Hengest  
 The Monsters and the Critics and Other Essays  
 Roverandom

ILLUSTRATED BY ALAN LEE

THE HISTORY OF MIDDLE-EARTH BY CHRISTOPHER TOLKIEN  
 I The Book of Lost Tales Part 1  
 II The Book of Lost Tales Part 2  
 III The Lays of Beleriand  
 IV The Shaping of Middle-earth  
 V The Lost Road and Other Writings  
 VI The Return of the Shadow  
 VII The Treason of Isengard  
 VIII The War of the Ring  
 IX Sauron Defeated  
 X Menzies's King  
 XI The War of the Jewels  
 XII The Peoples of Middle-earth

HarperCollins Publishers

Þ M · H M E B T · M · M · E · M · R · M · S · M ·  
 R · N · M · M · M · S · S · A · Y · R · I · S · T · R · E · M ·

E N H · E X N C · E M I X · Þ M ·  
 M M M · E S · E I N E · E X X G · L · S ·

Figure 4. Sample text showing Runic text on the title page of a recent edition of *The Hobbit*.



## A. Administrative

1. Title

**Proposal to encode additional Runic characters in the UCS.**

2. Requester's name

**Michael Everson and Andrew West**

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

**Individual contribution.**

4. Submission date

**2011-04-01**

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.**

1c. Name of the existing block

**Runic.**

2. Number of characters in proposal

**8**

3. Proposed category (A-Contemporary; B.1-Specialized (small collection); B.2-Specialized (large collection); C-Major extinct; D-Attested extinct; E-Minor extinct; F-Archaic Hieroglyphic or Ideographic; G-Obscure or questionable usage symbols)

**Category B.1.**

4. Is a repertoire including character names provided?

**Yes.**

4a. If YES, are the names in accordance with the "character naming guidelines"

**Yes.**

4b. Are the character shapes attached in a legible form suitable for review?

**Yes.**

5. Fonts related:

5a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?

**Michael Everson.**

5b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):

**Michael Everson, Fontographer.**

6. References:

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. Special encoding issue: 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)?

**Yes. Unicode character properties above.**

8. Additional Information: 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.

**See above.**

## C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before? If YES explain

**No.**

2. 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. The proposers are users of the Runic script.**

2a. 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?

**Runologists, Anglo-Saxonists, Tolkienists.**

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

**Relatively rare.**

4b. Reference

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

**Yes.**

5b. If YES, where?

**In texts dealing with the Franks Casket and the linguistic works of J. R. R. Tolkien.**

6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP?

**Yes.**

6a. If YES, is a rationale provided?

**Yes.**

6b. If YES, reference

**Contemporary use and accordance with the Roadmap.**

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

**Yes.**

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?

**Yes.**

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

**No.**

11c. If YES, reference

11d. Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?

**No.**

11e. If YES, reference

12a. Does the proposal contain characters with any special properties such as control function or similar semantics?

**No.**

12b. If YES, describe in detail (include attachment if necessary)

13a. Does the proposal contain any Ideographic compatibility character(s)?

**No.**

13b. If YES, is the equivalent corresponding unified ideographic character(s) identified?