A. Administrative

1. Title: Proposal to Encode Modifier Letter Low Circumflex Accent
2. Requester's name: Lorna A. Priest
3. Requester type (Member body/Liaison/Individual contribution): Individual contribution
5. Requester's reference (if applicable): L2/06-244R
6. Choose one of the following:
   a. This is a complete proposal: Yes
      or, More information will be provided later: No

B. Technical – General

1. Choose one of the following:
   a. This proposal is for a new script (set of characters): No
      Proposed name of script:
   b. The proposal is for addition of character(s) to an existing block: Yes
      Name of the existing block: Spacing Modifier Letters
       Number of characters in proposal: 1
3. Proposed category (select one from below - see section 2.2 of P&P document):
   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

4. Proposed Level of Implementation (1, 2 or 3) (see Annex K in P&P document): 1
   Is a rationale provided for the choice? No
   If Yes, reference: 

5. Is a repertoire including character names provided? Yes
   a. If YES, are the names in accordance with the “character naming guidelines” in Annex L of P&P document? Yes
   b. Are the character shapes attached in a legible form suitable for review? Yes

6. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard? SIL International
   If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used: http://scripts.sil.org/DoulosSILfont (Modifier Letter Low Circumflex Accent is currently at U+F1E7)

7. References:
   a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided? Yes
   b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached? Yes

8. Special encoding issues:
   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
   Suggested character properties, annotations and cross-referencing are included.

9. 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. 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 http://www.unicode.org/Public/UNIDATA/UCD.html and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.
C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before? No
   If YES explain ____________________________________________________________________________
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
   If YES, with whom? via Martin Hosken
   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? Yes
   Reference: See comments in Section E
4. The context of use for the proposed characters (type of use; common or rare) Common
   Reference: This orthographic character is used in dictionaries, liturgical books and general literature.
5. Are the proposed characters in current use by the user community? Yes
   Reference: See comments in Section E
6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP? Preferably
   If YES, is a rationale provided? If possible, should be kept with other related blocks in the BMP.
   If YES, reference: If possible, should be kept with other related blocks
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)? Preferably with other related blocks
8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence? No
   If YES, is a rationale for its inclusion provided? ____________________________________________________________________________
9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters? No
   If YES, is a rationale for its inclusion provided? ____________________________________________________________________________
10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character? Possibly
    If YES, is a rationale for its inclusion provided? Yes
    If YES, reference: See comments in Section E
11. Does the proposal include use of combining characters and/or use of composite sequences? No
    If YES, is a rationale for such use provided? ____________________________________________________________________________
    Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided? ____________________________________________________________________________
    If YES, reference: ____________________________________________________________________________
12. Does the proposal contain characters with any special properties such as control function or similar semantics? No
    If YES, describe in detail (include attachment if necessary) ____________________________________________________________________________
13. Does the proposal contain any Ideographic compatibility character(s)? No
    If YES, is the equivalent corresponding unified ideographic character(s) identified? ____________________________________________________________________________
    If YES, reference: ____________________________________________________________________________

D. Proposed Characters

A code chart and list of character names are shown on a new page.
### D.1. Proposed Characters

<table>
<thead>
<tr>
<th>A78</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td></td>
</tr>
</tbody>
</table>

### D.2. Character Names

- **A788** MODIFIER LETTER LOW CIRCUMFLEX ACCENT
  - Tone marker for Lahu and Akha
  - → 02C6 ^ modifier letter circumflex accent
  - → 02C7 † caron
  - → 02EC ´ modifier letter voicing

### D.3. Annotation and cross referencing

- **02C6** MODIFIER LETTER CIRCUMFLEX ACCENT
  - → 02C7 ^ caron
  - → 02EC ´ modifier letter voicing
  - → A788 ´ modifier letter low circumflex accent

- **02C7** CARON
  - → 02C6 ^ modifier letter circumflex accent
  - → 02EC ´ modifier letter voicing
  - → A788 ´ modifier letter low circumflex accent

- **02EC** MODIFIER LETTER VOICING
  - Tone marker for Lahu and Akha
  - → 02C6 ^ modifier letter circumflex accent
  - → 02C7 † caron
  - → A788 ´ modifier letter low circumflex accent
D.4. Unicode Character Properties
A788 should have a general category of Lm. Other properties should match those of similar characters, such as U+02C6 MODIFIER LETTER CIRCUMFLEX ACCENT.

E. Other Information
Akha is a language spoken by close to half a million people in Myanmar, China, Laos, Thailand and Viet Nam. Akha has oral vowels occurring on three level tones:

\[
\begin{align*}
/\acute{\text{a}}/ & \text{ high U+02C7 CARON} \\
/\text{a}/ & \text{ mid (not marked)} \\
/\grave{\text{a}}/ & \text{ low U+02EC MODIFIER LETTER VOICING}
\end{align*}
\]

and largyngealized vowels occur on two level tones:

\[
\begin{align*}
/\acute{\text{a}}/ & \text{ mid U+02C6 MODIFIER LETTER CIRCUMFLEX ACCENT} \\
/\grave{\text{a}}/ & \text{ low}
\end{align*}
\]

Lahu is spoken by over half a million people in China, Laos, Myanmar, Thailand and Vietnam. There are several orthographies in use. The Protestant orthography uses:

\[
\begin{align*}
/\acute{\text{a}}/ & \text{ high rising U+02C9 MODIFIER LETTER MACRON} \\
/\grave{\text{a}}/ & \text{ high falling U+02C7 CARON} \\
/\grave{\text{a}}/ & \text{ low (not marked)} \\
/\text{a}/ & \text{ low falling U+02EC MODIFIER LETTER VOICING} \\
/\grave{\text{a}}/ & \text{ very low U+02CD MODIFIER LETTER LOW MACRON} \\
/\acute{\text{a}}/ & \text{ high checked U+02C6 MODIFIER LETTER CIRCUMFLEX ACCENT} \\
/\grave{\text{a}}/ & \text{ low checked}
\end{align*}
\]

We are proposing the addition of MODIFIER LETTER LOW CIRCUMFLEX ACCENT. We considered requesting the addition of MODIFIER LETTER LOW CARON but decided that U+02EC MODIFIER LETTER VOICING would be suitable for the Lahu and Akha needs and would cause less confusion for the identity of U+02EC. We also considered using U+02EF MODIFIER LETTER LOW DOWN ARROWHEAD and U+02F0 MODIFIER LETTER LOW UP ARROWHEAD for both characters. However, they are based on arrowheads and Lahu and Akha needs tone marks based on the circumflex/caron design.

If MODIFIER LETTER LOW CIRCUMFLEX ACCENT is approved, we would request U+02EC be annotated as also having the function as a tone mark for Lahu and Akha. We also request the cross-referencing of MODIFIER LETTER LOW CIRCUMFLEX ACCENT, U+02C6, U+02C7 and U+02EC to establish the intended tying together of all 4 as a family of “wedges” that should have similar shape in font design (see D.3).

---

2 [http://www.ethnologue.com]
3 Lewis, 1968, p. xii.
4 [http://www.ethnologue.com]
5 Matisoff, 2006, p. xx.
Some forms show interesting prefix fusions in all Akha dialects.

Lightning (328)  
myew-ru  #b-lyap^l

which may imply reanalysis as *sime (329) *Cml^2 + *needle (382) *rep^l.

Bath (630)  
myew-ru  #m-lyak^l

again, fusion which differs from that seen in other Loloish languages.

Figure 1. MODIFIER LETTER LOW CIRCUMFLEX ACCENT in Akha examples (Bradley, 1977. p. 37).

<table>
<thead>
<tr>
<th>Accommodation &amp; Meals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have (you) eaten rice yet?</td>
</tr>
<tr>
<td>(I) have eaten.</td>
</tr>
<tr>
<td>(I) have eaten morning rice.</td>
</tr>
<tr>
<td>(I) have eaten noon rice.</td>
</tr>
<tr>
<td>(I) have not eaten evening rice yet.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Are you hungry?</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am hungry.</td>
</tr>
<tr>
<td>(I) am not hungry yet.</td>
</tr>
<tr>
<td>(I) have not become hungry yet.</td>
</tr>
<tr>
<td>I am not hungry yet.</td>
</tr>
</tbody>
</table>

Figure 2. MODIFIER LETTER LOW CIRCUMFLEX ACCENT in Akha phrasebook (Bradley, 1991. p. 62).

da^* tsi tsi-eu to fish without a hook, but with bait on the string. When the fish, eel, crab, turtle, etc. bites down on the bait, one must pull it out real fast (it will not work for every kind of fish)
da^* tsui a person's back
da^* tsui g'ah-eu for one's back to be stiff from sitting in one place too long, or doing some type work
da^* tsui sha^* yoe^* a person's spine
da^* yeh^* (yeh^*) a thin bamboo strip
da (PP) (see ta)
- da^* eu, pa^* zaw^* (see full)
da^* m. da a type of bird that they cannot see (aw-m. aw)
da^* (WM) 1. a load of something carried by animals (k'a^* da^* ti^* da^*)
2. the width of one's thumb (la^* ma ti^* da^*)
da^* (PP) (see ta^*)

Figure 3. MODIFIER LETTER LOW CIRCUMFLEX ACCENT in Akha dictionary (Lewis, 1968. p. 71).
Figure 4. MODIFIER LETTER LOW CIRCUMFLEX ACCENT in Lahu New Testament (TBS, 2003. p. 194).

Figure 5. MODIFIER LETTER LOW CIRCUMFLEX ACCENT in Akha New Testament (BST, nd. p. 296).

F. References


