Typotheque

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# Typotheque North American Syllabics

Proposed revisions to the representative characters of the Unified Canadian Aboriginal Syllabics code charts

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#### **1 SUMMARY OF PROPOSED CHARACTER REVISIONS**

The following proposal requests 120 revisions to the representative characters in the official code charts of Unified Canadian Aboriginal Syllabics main and extended blocks. The proposed characters for revision have been summarized below with representative glyphs and corresponding character names with annotations where applicable. Additionally, revised code charts for UCAS main and extended has been provided in the following section with the proposed revised representative characters marked in pink, implemented into their corresponding code point locations.

The author has prepared a style-matched font for the purpose of implementing into the code chart:

144B	h	CANADIAN SYLLABICS CARRIER H
14D1	U	CANADIAN SYLLABICS CARRIER NG
1506	S	CANADIAN SYLLABICS ATHAPASCAN S
15C0	Ν	CANADIAN SYLLABICS SAYISI HE
15C1	r	CANADIAN SYLLABICS SAYISI HI
15C2	J	CANADIAN SYLLABICS SAYISI HO
		• Sayisi (HU)
15C3	Ь	CANADIAN SYLLABICS SAYISI HA
15E4	D	CANADIAN SYLLABICS CARRIER TTE
15E5	$\Sigma$	CANADIAN SYLLABICS CARRIER TTEE
15E6	Ð	CANADIAN SYLLABICS CARRIER TTI
15E7	Σ	CANADIAN SYLLABICS CARRIER TTA
15EA	D	CANADIAN SYLLABICS CARRIER PE
15EB	Ð	CANADIAN SYLLABICS CARRIER PEE
15EC	Ð	CANADIAN SYLLABICS CARRIER PI
15ED	D	CANADIAN SYLLABICS CARRIER PA
15EE	T	CANADIAN SYLLABICS CARRIER P
15F1	З	CANADIAN SYLLABICS CARRIER GE
15F2	Ð	CANADIAN SYLLABICS CARRIER GEE
15F3	Э	CANADIAN SYLLABICS CARRIER GI
15F4	E	CANADIAN SYLLABICS CARRIER GA
15F7	В	CANADIAN SYLLABICS CARRIER KHE
15F8	B	CANADIAN SYLLABICS CARRIER KHEE
15F9	₿	CANADIAN SYLLABICS CARRIER KHI
15FA	В	CANADIAN SYLLABICS CARRIER KHA
15FD	В	CANADIAN SYLLABICS CARRIER KKE
15FE	B	CANADIAN SYLLABICS CARRIER KKEE
15FF	B	CANADIAN SYLLABICS CARRIER KKI
1600	B	CANADIAN SYLLABICS CARRIER KKA
1601	v	CANADIAN SYLLABICS CARRIER KK
1602	Ե	CANADIAN SYLLABICS CARRIER NU
1603	ſ	CANADIAN SYLLABICS CARRIER NO
1604	С	CANADIAN SYLLABICS CARRIER NE
1605	Ð	CANADIAN SYLLABICS CARRIER NEE
1606	Ð	CANADIAN SYLLABICS CARRIER NI
1607	C	CANADIAN SYLLABICS CARRIER NA
160A	З	CANADIAN SYLLABICS CARRIER ME
160B	З	CANADIAN SYLLABICS CARRIER MEE
160C	3	CANADIAN SYLLABICS CARRIER MI

160D	ε	CANADIAN SYLLABICS CARRIER MA
160E	6	CANADIAN SYLLABICS CARRIER YU
160F	ດ	CANADIAN SYLLABICS CARRIER YO
1610	Б	CANADIAN SYLLABICS CARRIER YE
1611	G	CANADIAN SYLLABICS CARRIER YEE
1612	G	CANADIAN SYLLABICS CARRIER YI
1613	G	CANADIAN SYLLABICS CARRIER YA
1614	б	CANADIAN SYLLABICS CARRIER JU
		• Athapascan (ZA), Sayisi (TZO),
		South Slavey (DHA)
1615	J	CANADIAN SYLLABICS SAYISI JU
		• Athapascan (ZO), Sayisi (TZU),
		South Slavey (DHO)
1616	2	CANADIAN SYLLABICS CARRIER JO
1617	ାଚ	CANADIAN SYLLABICS CARRIER JE
1618	୲୕	CANADIAN SYLLABICS CARRIER JEE
1619	୲ଚ	CANADIAN SYLLABICS CARRIER JI
161A	୲୦	CANADIAN SYLLABICS SAYISI JI
		<ul> <li>Athapascan (ZE), Sayisi (TZE),</li> </ul>
		South Slavey (DHE)
161B	ପ	CANADIAN SYLLABICS CARRIER JA
161B	ପ	CANADIAN SYLLABICS CARRIER JA
161C	6	CANADIAN SYLLABICS CARRIER JJU
161D	ହ	CANADIAN SYLLABICS CARRIER JJO
161E	ଗ	CANADIAN SYLLABICS CARRIER JJE
161F	ଗ	CANADIAN SYLLABICS CARRIER JJEE
1620	ଚ	CANADIAN SYLLABICS CARRIER JJI
1621	ପ	CANADIAN SYLLABICS CARRIER JJA
1622	U	CANADIAN SYLLABICS CARRIER LU
1623	Ω	CANADIAN SYLLABICS CARRIER LO
1624	ט	CANADIAN SYLLABICS CARRIER LE
1625	Ð	CANADIAN SYLLABICS CARRIER LEE
1626	5	CANADIAN SYLLABICS CARRIER LI
1627	C	CANADIAN SYLLABICS CARRIER LA
1628	U	CANADIAN SYLLABICS CARRIER DLU
1629	Ω Ω	CANADIAN SYLLABICS CARRIER DLO
162A	ט מ	CANADIAN SYLLABICS CARRIER DLE
162B	り の	CANADIAN SYLLABICS CARRIER DLEE
162C	り	CANADIAN SYLLABICS CARRIER DLI

162D	C	CANADIAN SYLLABICS CARRIER DLA
162E	Ω	CANADIAN SYLLABICS CARRIER LHU
162F	Ω	CANADIAN SYLLABICS CARRIER LHO
1630	С	CANADIAN SYLLABICS CARRIER LHE
1631	Ð	CANADIAN SYLLABICS CARRIER LHEE
1632	Э	CANADIAN SYLLABICS CARRIER LHI
1633	C	CANADIAN SYLLABICS CARRIER LHA
1634	Q	CANADIAN SYLLABICS CARRIER TLHU
1635	Ω	CANADIAN SYLLABICS CARRIER TLHO
1636	р	CANADIAN SYLLABICS CARRIER TLHE
1637	$\mathfrak{O}$	CANADIAN SYLLABICS CARRIER TLHEE
1638	Ð	CANADIAN SYLLABICS CARRIER THLI
1639	С	CANADIAN SYLLABICS CARRIER THLA
163A	${\mathbb Q}$	CANADIAN SYLLABICS CARRIER TLU
163B	Ω	CANADIAN SYLLABICS CARRIER TLO
163C	В	CANADIAN SYLLABICS CARRIER TLE
163D	ß	CANADIAN SYLLABICS CARRIER TLEE
163E	3	CANADIAN SYLLABICS CARRIER TLI
163F	а	CANADIAN SYLLABICS CARRIER TLA
1646	z	CANADIAN SYLLABICS CARRIER Z
1647	z	CANADIAN SYLLABICS CARRIER INITIAL Z
1650	Я	CANADIAN SYLLABICS CARRIER SE
1651	æ	CANADIAN SYLLABICS CARRIER SEE
1652	Я	CANADIAN SYLLABICS CARRIER SI
1653	E	CANADIAN SYLLABICS CARRIER SA
1656	B	CANADIAN SYLLABICS CARRIER SHE
1657	B	CANADIAN SYLLABICS CARRIER SHEE
1658	B	CANADIAN SYLLABICS CARRIER SHI
1659	æ	CANADIAN SYLLABICS CARRIER SHA
165A	\$	CANADIAN SYLLABICS CARRIER SH
165D	B	CANADIAN SYLLABICS CARRIER TSE
165E	B	CANADIAN SYLLABICS CARRIER TSEE
165F	B	CANADIAN SYLLABICS CARRIER TSI
1660	æ	CANADIAN SYLLABICS CARRIER TSA
1663	В	CANADIAN SYLLABICS CARRIER CHE
1664	Ð	CANADIAN SYLLABICS CARRIER CHEE
1665	R	CANADIAN SYLLABICS CARRIER CHI
1666	B	CANADIAN SYLLABICS CARRIER CHA
1669	B	CANADIAN SYLLABICS CARRIER TTSE
166A	B	CANADIAN SYLLABICS CARRIER TTSEE
166B	B	CANADIAN SYLLABICS CARRIER TTSI
166C	æ	CANADIAN SYLLABICS CARRIER TTSA
18DB	ა	CANADIAN SYLLABICS OJIBWAY SH
18EC	J	CANADIAN SYLLABICS SAYISI HOO
	<u>.</u>	• Chipewyan Dene (GU)
18EE	Ż	CANADIAN SYLLABICS CARRIER GEE
		• Chipewyan Dene (CHU)

18EF	Ė	CANADIAN SYLLABICS CARRIER GAA
		• Beaver Dene (CHAI)
18F0	E٠	CANADIAN SYLLABICS CARRIER GWA
		• Hare Dene (SHYA)
18F1	Ġ	CANADIAN SYLLABICS SAYISI JUU
		<ul> <li>Chipewyan Dene (TSU)</li> </ul>
18F2	ଦ	CANADIAN SYLLABICS CARRIER JWA
		• Beaver Dene (TSYE)
18F5	s	CANADIAN SYLLABICS CARRIER DENTAL S

### Unified Canadian Aboriginal Syllabics Main

#### 14DF

	140	141	142	143	144	145	146	147	148	149	14A	14B	14C	14D
0	1400	·Å	1420	Å 1430	<b>&gt;</b>	<b>)</b>	<u>ن</u> .	<b>d</b>	• <b>b</b>	L 1490	<b>:ل</b>	• <b>「</b> 14B0	<b>0</b>	<b>Q_</b> 14D0
1	$\nabla$	٨	U	٨	≻	Ċ	·C	ä	ŀ	i	U	۲·	ở	υ
2	1401	•Þ	1421	1431	•	<sup>1451</sup>	1461 <b>C</b> •	<sup>1471</sup>	:b	1491 • <b>^</b>	14A1 J	14B1	14C1	14D1
3	1402	1412 <b>&gt;</b>	1422 <b>)</b>	1432	<u>۱442</u>	1452 D	1462	<sup>1472</sup>	1482 b	1492 <b>^</b> .	14A2	14B2	14C2	
4	1403	1413	1423 O	1433	<u>1443</u>	1453 •	1463 Ċ	1473 • <b>Q</b>	1483 d	1493 • <b>(</b>	14A3	14B3	14C3	14D3
5	1404 <b>D</b>	1414 <b>&gt;</b>	1424 //	**	1444	1454 C	1464	1474 <b>Q</b> •	1484 <b>QI</b>	1494 <b>^.</b>	14A4	14B4	14C4	14D4
6	1405 ••••••••••••••••••••••••••••••••••••	1415 Č	1425	1435 >	1445 • <b>、</b>	<sup>1455</sup>	1465 C	-1475 • <b>ρ</b>	1485 PI	1495 •ົ	14A5	14B5	<sup>14C5</sup>	14D5
7	1406	<sup>1416</sup>	1426	1436	1446	1456	1466 UI	<sup>1476</sup>	<sup>1486</sup>	1496 <b> </b>	14A6	14B6	14C6	14D6
	1407	1417	1427	1437	1447 *	1457		1477	1487	1497	14A7	1487	14C7	14D7
8	1408	<b>√</b> • 1418	1428	< 1438	1448	1458	1468	• <b>Ď</b>	<b>b</b> <sup>1</sup> 1488	• <b>J</b> 1498	14A8	•	<b>Q</b> 14C8	 14D8
9	► 1409	· <b>〈</b> 1419	+	1439	<b>&lt;</b> 1449	• <b>∩</b>	<b>)</b>	<b>ρ</b> .	<b>1</b> 489	J. 1499	 14A9	L•	• <b>~</b>	<u>ت</u> ۱4D9
А	A	٩	Т	·V	I	<b>∩</b> ∙	C	٠d	Ļ	·j	L	:L	ס.	C
в	140A	141A	142A	143A	h	145A	146A	d.	148A	J.	14AA	14BA	14CA	i4DA
с	₩	UU	142B	143B	U	145B	<sup>146B</sup>	·d	148B	۱49B ال	14AB	14BB	14CB	14DB
D	140C	141C	142C	143C	Ů	145C	ρ	d.	J	<sub>149C</sub>	14AC	14BC	14CC	14DC
E	140D	141D	142D	143D		145D	i46D	• <b>b</b>	J48D	149D	14AD	14BD 2	14CD	14DD
F	140E	141E	142E	143E	144E 144E	145E	146E <b>d</b> 146F	147E	148E <b>J</b> 148F	149E	14AE 14AF	14BE 2 14BF	14CE	14DE

Unified Canadian Aboriginal Syllabics Main

15AF

	14E	14F	150	151	152	153	154	155	156	157	158	159	15A
0	<b>ن</b>	<b>نہ</b> 14F0	· <b>-</b>	<b>1</b> 510	;. 1520	<b>4</b> .	<b>+</b> 1540	<b>S</b>	<b>6</b>	1570	<b>۶</b> 1580	<b>°</b> 1590	<b>رے</b> 15A0
1	<b>ن</b> ۔ ۱4E1	<b>ل</b> م 14F1	<b>5.</b>	<b>5</b> 1511	• <b>~</b>	· <b>-</b>	<b>X</b> 1541	<b>&gt;</b>	1561	1571	<b>чо</b>	<b>مر ا</b>	خے
2	<b></b>	<b>ن</b> 14F2	·5	<b>5</b>	<b>ب</b>	<b>۲</b> -	U 1542	3	<b>6</b>	<b>D</b>	<b>۶</b> 1582	<b>من</b> 1592	<b>~</b>
3	<u></u> .	<b>نې</b> 14F3	<b>5</b> .	<b>N</b>	·;	·六	<b>U</b> 1543	<b>V</b> 1553	<b>i</b>	<b>C</b> 1573	<b>ч</b> 1583	<b>م</b> ل 1593	<b>ب</b>
4	<u>ن</u>	<b>5</b> 14F4	: <b>-</b>	: 1514	;; 1524	<b>ب</b> ا	<b></b>	<b>Å</b> 1554	<b>9</b>	<b>Q</b> 1574	<b>ч</b> 1584	<b>من</b> 1594	<b>5</b> 44
5	<b>ن</b> ۔	<b>5</b> 14F5	<b>5</b>	<b>S</b>	<b>()</b>	· <b>イ</b>	<b>°</b> 1545	<b>6</b> 1555	<b>9</b> 1565	<b>P</b> 1575	<b>ЧЬ</b>	<b>e,</b> 1595	<b>ن</b>
6	• <b>C</b>	• <b>~</b> 14F6	<b>S</b> 1506	; 1516	<b>4</b> 1526	<b>イ・</b> 1536	<b>1</b> 546	<b>ذ</b> 1556	<b>P</b> 1566	<b>,</b> 1576	<b>9</b>	<b>معر</b>	<b>5</b> 46
7	<b>ر.</b> ۱4E7	<b>4</b> F7	<b>ل</b> م 1507	· <b>\</b> 1517	<b>ہ</b> 1527	<b>ب</b>	<b>أب</b>	<b>9</b> 1557	ė 1567	<b>ď</b>	<b>R</b> 1587	<b>ရ</b>	<b>4</b>
8	• <b>ن</b> _	<b>. ب</b>	1508	<b>1</b> 518	<b>۲</b>	<b>નં</b> .	<b>P</b>	<b>9</b> 1558	.خ 1568	<b>d</b> 1578	<b>ک</b>	р 1598	<b>4</b>
9	<b>ن</b> ۔ ۱4E9	<b>ب</b> م 14F9	<b>5</b>	• <b>J</b>	<b>ذ</b> 1529	・ <b>ト</b> <sup>1539</sup>	<b>ہ</b>	<b>e</b> 1559	ė.	<b>b</b>	<b>K</b>	<b>J</b>	<b>ہے</b> 15A9
А	<b>C_</b> 14EA	نې. 14FA	<b>6</b> 150A	<b>J.</b>	<b>H</b> 152A	<b>۲</b> -	<b>5</b>	<b>.</b>	<b>e</b> 156A	<b>b</b>	<b>L</b> 158A	<b>b</b> 159A	<b>7</b>
в	<b>K</b> 14EB	<b>بر</b>	150B	۰ ۱51B	<b>1</b> 52B	• <b>5</b>	<b>S</b> 154B		U 156B	<b>b</b> 157B	1588	159B	<b>1</b> 5AB
с	14EC	• <b>~</b> 14FC	** 150C	<b>ن.</b> ۱510	<b>ب</b> 1520	<b>5</b> -	<b>Ġ</b>	<b>ب</b> 1550	1560	H	J 158C	<b>0</b>	<b>ラ</b> 15AC
D	<b>\</b> 14ED	<b>ال</b> م 14FD	<b>ن</b> ر 1500	• <b>~</b> 151D	<b>b</b> 152D	<b>ب</b>	<b>d</b> 154D	<b>e</b>	<b>Э</b>	<b>X</b> 157D	<b>1</b> 158D	<b>1</b> 59D	<b>チ</b> 15AD
Е	<b>م</b> 14EE	نم. ۱4FE	505 150E	151E	<b>5</b> 152E	<b>5</b>	• <b>Ġ</b>	<b>e</b> 155E	<b>E</b> 156E	<b>۹</b> م 157E	<b>°</b> 158E	159E	<b>5</b> 15AE
F	<b>ہ</b> 14EF	<b>نم</b> <sub>14FF</sub>	<b>ن</b> ل ۱50F	·: 151F	• <b>4</b> 152F	<b>M</b> 153F	<b>Ġ.</b> 154F	<b>1</b> 55F	** 156F	<b>۶</b> ρ <sub>157F</sub>	<b>°</b> 158F	<b>0</b> 159F	<b>b</b> 15AF

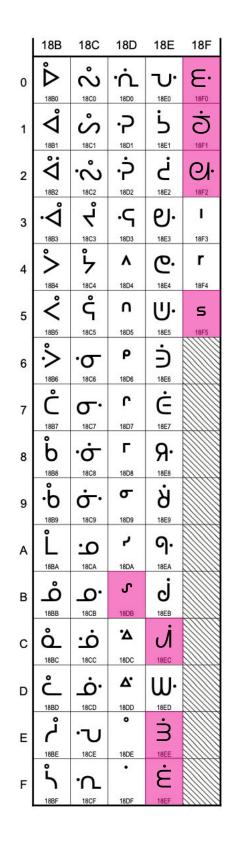
Unified Canadian Aboriginal Syllabics Main

167F

,	15B	15C	15D	15E	15F	160	161	162	163	164	165	166	167
0	<b>P</b> 15B0	<b>N</b>	<b>V</b> 15D0	D 15E0	<b>1</b> 5F0	1600	<b>D</b> 1610	<b>1620</b>	D 1630	<u>ປ</u>	1650	<b>Æ</b> 1660	<b>ኈ</b> ๅ <sup>1670</sup>
1	15B1	15C1	15D1	15E1	<b>B</b> 15F1	<b>V</b> 1601	1611	<b>e</b> 1621	1631	<b>೧</b> 1641	<b>F</b> 1651	<b>U</b> 1661	<b>هر</b> م <sub>1671</sub>
2	1582	<b>J</b>	> 15D2	15E2	<b>H</b> 15F2	1602	1612	1622	1632	<b>)</b>	<b>3</b> 1652	<b>M</b>	<b>ዲሶ</b> 1672
3	<b>¶</b> 15B3	15C3	<b>→</b> 15D3	<b>م</b> 15E3	15F3	<b>1</b> 603	Q 1613	1623	<b>C</b> 1633	<b>)</b>	<b>E</b> 1653	<b>B</b> 1663	<b>محر</b> ل 1673
4	<b>F</b>	<b>V</b> 15C4	► 15D4	15E4	15F4	1604	<u>Б</u> 1614	<b>)</b> 1624	<b>5</b>	<b>Э</b>	<b>Ж</b> 1654	<b>B</b> 1664	<b>می</b> ن 1674
5	15B5	A 15C5	<b>4</b>	15E5	15F5	<b>ر</b>	1615	<b>D</b> 1625	<u>م</u>	<b>C</b> 1645	<b>A</b>	1665	<b>حر</b> ل 1675
6	1586	<b>&gt;</b>	15D6	15E6	<b>1</b> 5F6	• 1606	<u>9</u> 1616	<b>1</b> 626	<b>D</b> 1636	<b>Z</b> 1646	<b>B</b> 1656	<b>E</b> 1666	<b>حرن</b> 1676
7	1587	► 15C7	<b>A</b> 15D7	15E7	B 15F7	L 1607	1617	<b>C</b> 1627	1637	<b>Ž</b> 1647	<b>B</b> 1657	1667	<b>4</b> • 1677
8	<b>M</b>	<b>₽</b> 15C8	► 15D8	<b>H</b> 15E8	15F8	1608	1618	1628	<b>1</b> 638	<b>ប</b> 1648	<b>B</b> 1658	1668	<b>₽</b> . 1678
9	1589	<b>K</b> 15C9	→ 15D9	<b>A</b> 15E9	15F9	<b>M</b>	1619	1629	<b>C</b> 1639	<b>Ω</b> 1649	<b>E</b> 1659	<b>B</b> 1669	<b>بے</b> . 1679
А	<b>الم</b>	<b>V</b> 15CA	<b>→</b> 15DA	<b>D</b> 15EA	15FA	<b>B</b>	161A	<b>1</b> 62A	<b>55</b>	<b>Đ</b> 164A	<b>\$</b> 165A	<b>B</b> 166A	<b>そ</b> . 167A
в	15BB	15CB	15DB	15EB	15FB	B 1608	<b>C</b> 161B	162B	163B	<b>D</b> 164B	165B	166B	<b>そ</b> 1678
с	15BC		15DC	D 15EC	15FC	<b>B</b> 160C	1610	162C	163C	<b>D</b> 164C	<b>A</b> 165C	166C	た. 167C
D	15BD	15CD	15DD	15ED	) 15FD	<b>E</b> 160D	<b>9</b> 161D	162D	163D	<b>E</b> 164D	<b>B</b> 165D	<b>X</b> 166D	167D
Е	15BE		D 15DE	15EE	15FE	160D	161E	162D	163D	164E	165E	<b>X</b> 166E	167E
F	15BF		D 15DF	UU 15EF	15FF	160F	161F	162F	163F	164F	165F	5 <b>Q</b> 166F	167F

Unified Canadian Aboriginal Syllabics Extended

18FF



q

#### **Revised representative characters for Carrier**

Revis	sed r	EPRESENTATIVE CHARACTERS for CE CANADIAN SYLLABICS CARRIER H CANADIAN SYLLABICS CARRIER M CANADIAN SYLLABICS CARRIER TTE CANADIAN SYLLABICS CARRIER TTE CANADIAN SYLLABICS CARRIER TTE CANADIAN SYLLABICS CARRIER TTE CANADIAN SYLLABICS CARRIER TTA CANADIAN SYLLABICS CARRIER TTA CANADIAN SYLLABICS CARRIER TTA CANADIAN SYLLABICS CARRIER TE CANADIAN SYLLABICS CARRIER TE CANADIAN SYLLABICS CARRIER PE CANADIAN SYLLABICS CARRIER GE CANADIAN SYLLABICS CARRIER ME CANADIAN SYLLABICS CARRIER KH CANADIAN SYLLABICS CARRIER KK CANADIAN SYLLABICS CARRIER KK CANADIAN SYLLABICS CARRIER NU CANADIAN SYLLABICS CARRIER NU	nrier
144B	h	CANADIAN SYLLABICS CARRIER H	(FIG. 1, 4, 5, 6, 8, 10, 11, 12, 14)
14D1 1506	U S	CANADIAN SYLLABICS CARRIER NG CANADIAN SYLLABICS ATHAPASCAN S	(FIG. 5, 6, 8) (FIG. 5, 6, 8, 11, 12, 13, 14, 15)
15E4	D	CANADIAN SYLLABICS CARRIER TTE	(FIG. 5, 6)
15E5	Ð	CANADIAN SYLLABICS CARRIER TTEE	(FIG. 5, 6, 10, 11)
15E6 15E7	D C	CANADIAN SYLLABICS CARRIER TH	(FIG. 5, 6, 11) (FIG. 5, 6, 8, 10, 14)
15EA	D	CANADIAN SYLLABICS CARRIER PE	(FIG. 5, 6, 7)
15EB	Ð	CANADIAN SYLLABICS CARRIER PEE	(FIG. 5, 6, 10, 11)
15EC	D	CANADIAN SYLLABICS CARRIER PI CANADIAN SYLLABICS CARRIER PA	(FIG. 5, 6, 13, 14) (FIG. 4, 5, 6, 7, 8, 11, 13, 14)
15EE	1	CANADIAN SYLLABICS CARRIER P	(FIG. 5, 6, 10)
15F1	а П	CANADIAN SYLLABICS CARRIER GE	(FIG. 5, 6, 8, 14)
15F2 15F3	3	CANADIAN STLLABICS CARRIER GEE	(FIG. 5, 6)
15F4	E	CANADIAN SYLLABICS CARRIER GA	(FIG. 5, 6, 10)
15F7	B	CANADIAN SYLLABICS CARRIER KHE	(FIG. 5, 6, 11) (FIG. 5, 6)
15F9	B	CANADIAN STELABICS CARRIER KHI	(FIG. 5, 6)
15FA	В	CANADIAN SYLLABICS CARRIER KHA	(FIG. 5, 6, 7, 8, 10, 15)
15FD 15FF	н Н	CANADIAN SYLLABICS CARRIER KKE	(FIG. 5, 6, 11, 14) (FIG. 5, 6, 14)
15FF	B	CANADIAN SYLLABICS CARRIER KKI	(FIG. 5, 6)
1600	æ	CANADIAN SYLLABICS CARRIER KKA	(FIG. 5, 6, 8)
1601	Ů.	CANADIAN SYLLABICS CARRIER RK	(FIG. 5, 6, 14) (FIG. 5, 6, 11)
1603	ñ	CANADIAN SYLLABICS CARRIER NO	(FIG. 5, 6, 10)
1604	כ	CANADIAN SYLLABICS CARRIER NE	(FIG. 1, 5, 6, 7, 12)
1605	ہ ج	CANADIAN SYLLABICS CARRIER NEE	(FIG. 5, 6, 12) (FIG. 1, 4, 5, 6, 7, 12, 13)
1607	Ċ	CANADIAN SYLLABICS CARRIER NA	(FIG. 5, 6, 7, 8)
160A	л Э	CANADIAN SYLLABICS CARRIER ME	(FIG. 5, 6)
160B 160C	3	CANADIAN SYLLABICS CARRIER MEE	(FIG. 5, 6, 7) (FIG. 5, 6)
160D	Ē	CANADIAN SYLLABICS CARRIER MA	(FIG. 5, 6, 10)
160E	0	CANADIAN SYLLABICS CARRIER YU	(FIG. 5, 6, 10)
1610	5	CANADIAN SYLLABICS CARRIER YO	(FIG. 5, 6, 10, 11)
1611	G	CANADIAN SYLLABICS CARRIER YEE	(FIG. 5, 6, 10)
1612	0	CANADIAN SYLLABICS CARRIER YI	(FIG. 5, 6, 10, 11, 14, 15)
1613	6	CANADIAN SYLLABICS CARRIER TA	(FIG. 5, 6)
		<ul> <li>ATHAPASCAN (ZA), SAYISI (TZO),</li> </ul>	
1414	G	SOUTH SLAVEY (DHA)	
1617	ดิ	CANADIAN SYLLABICS CARRIER JE	(FIG. 5, 6)
1618	0	CANADIAN SYLLABICS CARRIER JEE	(FIG. 5, 6, 10)
1619 1618	lo Cl	CANADIAN SYLLABICS CARRIER JI	(FIG. 5, 6) (FIG. 5, 6, 7, 10)
161C	6	CANADIAN SYLLABICS CARRIER JJU	(FIG. 5, 6)
161D	ຊ	CANADIAN SYLLABICS CARRIER 330	(FIG. 5, 6)
161E 161F	ଜ	CANADIAN SYLLABICS CARRIER JJE CANADIAN SYLLABICS CARRIER 11EE	(FIG. 5, 6, 14) (FIG. 1, 5, 6)
1620	ଚ	CANADIAN SYLLABICS CARRIER JJI	(FIG. 5, 6)
1621	ଥ	CANADIAN SYLLABICS CARRIER JJA	(FIG. 5, 6)
1622	0	CANADIAN SYLLABICS CARRIER LU	(FIG. 5, 6) (FIG. 5, 6, 10, 14)
1624	b	CANADIAN SYLLABICS CARRIER LE	(FIG. 5, 6, 12)
1625	5	CANADIAN SYLLABICS CARRIER LEE	(FIG. 4, 5, 6, 12)
1626	C	ATHAPASCAN (ZA), SAYISI (TZO), SOUTH SLAVEY (DHA)     CANADIAN SYLLABICS CARRIER JO     CANADIAN SYLLABICS CARRIER JE     CANADIAN SYLLABICS CARRIER JE     CANADIAN SYLLABICS CARRIER JI     CANADIAN SYLLABICS CARRIER JI     CANADIAN SYLLABICS CARRIER JI     CANADIAN SYLLABICS CARRIER JI     CANADIAN SYLLABICS CARRIER JII     CANADIAN SYLLABICS CARRIER LII     CANADIAN SYLLABICS CARRIER LI     CANADIAN SYLLABICS CARRIER LIE     CANADIAN SYLLABICS CARRIER LIE     CANADIAN SYLLABICS CARRIER DLI     CANADIAN SYLLABICS CARRIER LHI     CANADIAN SYLLABICS CARRIER HII     CANADIA	(FIG. 5, 6, 7, 8)
1628	U	CANADIAN SYLLABICS CARRIER DLU	(FIG. 5, 6, 9)
1629	n n	CANADIAN SYLLABICS CARRIER DLO	(FIG. 5, 6)
162B	5	CANADIAN STELABICS CARRIER DEE	(FIG. 1, 5, 6)
162C	り プ	CANADIAN SYLLABICS CARRIER DLI	(FIG. 5, 6)
162D 162E	σ	CANADIAN SYLLABICS CARRIER DLA CANADIAN SYLLABICS CARRIER I HII	(FIG. 5, 6, 14) (FIG. 5, 6)
162F	Ω	CANADIAN SYLLABICS CARRIER LHO	(FIG. 5, 6)
1630	2	CANADIAN SYLLABICS CARRIER LHE	(FIG. 5, 6)
1631	Ð	CANADIAN SYLLABICS CARRIER LHEE	(FIG. 5, 6) (FIG. 5, 6)
1633	C	CANADIAN SYLLABICS CARRIER LHA	(FIG. 5, 6)
1634	U U	LANADIAN SYLLABICS CARRIER T.H.H CANADIAN SYLLABICS CARRIER T.H.HU CANADIAN SYLLABICS CARRIER T.H.HO CANADIAN SYLLABICS CARRIER T.H.HE CANADIAN SYLLABICS CARRIER T.H.HI CANADIAN SYLLABICS CARRIER T.H.H CANADIAN SYLLABICS CARRIER T.L.HA CANADIAN SYLLABICS CARRIER T.L.O CANADIAN SYLLABICS CARRIER T.L.O	(FIG. 5, 6) (FIG. 5, 6)
1636	â	CANADIAN STELABICS CARRIER TEHO	(FIG. 5, 6)
1637	g	CANADIAN SYLLABICS CARRIER TLHEE	(FIG. 5, 6)
1638	0 D	CANADIAN SYLLABICS CARRIER TLHI ΓΔΝΔΠΙΔΝ SYLLABICS ΓΔRRIER TLHΔ	(FIG. 5, 6) (FIG. 5, 6)
163A	ũ	CANADIAN SYLLABICS CARRIER TLU	(FIG. 5, 6)
163B	Ω n	CANADIAN SYLLABICS CARRIER TLO	(FIG. 5, 6, 9)
163C	B	CANADIAN STLLABICS CARRIER TLE	(FIG. 5, 6, 11) (FIG. 5, 6)
163C 163D 163E 163F	20	CANADIAN SYLLABICS CARRIER TLEE CANADIAN SYLLABICS CARRIER TLI	(FIG. 5, 6)
163F 1646	دi z	CANADIAN SYLLABICS CARRIER TLA CANADIAN SYLLABICS CARRIER Z	(FIG. 5, 6, 7) (FIG. 4, 5, 6, 10, 15)
1646 1647 1650	z	CANADIAN CVI LADICC CADDIED INITIAL 7	(FIG. 5, 6)
1650 1651	m m		(FIG. 5, 6, 14) (FIG. 5, 6, 10)
1452	⇒ ⊋	CANADIAN SYLLABICS CARRIER SEE CANADIAN SYLLABICS CARRIER SI CANADIAN SYLLABICS CARRIER SA	(FIG. 5, 6, 10, 14, 15)
1653	ε	CANADIAN SYLLABICS CARRIER SA	(FIG. 5, 6, 8, 11, 14)
1656 1657	B B	CANADIAN SYLLABICS CARRIER SA CANADIAN SYLLABICS CARRIER SHE CANADIAN SYLLABICS CARRIER SHEE	(FIG. 5, 6) (FIG. 5, 6)
1658	B	CANADIAN STELABICS CARRIER SHE	(FIG. 5, 6)
1659	æ	CANADIAN SYLLABICS CARRIER SHA	(FIG. 5, 6, 7,8)
1657 1658 1659 165A 165D 165E 165F	₽ ₽	CANADIAN SYLLABICS CARRIER SH CANADIAN SYLLABICS CARRIER TSE	(FIG. 5, 6, 8) (FIG. 5, 6)
165E	B	CANADIAN STELABICS CARRIER TSE CANADIAN SYLLABICS CARRIER TSE CANADIAN SYLLABICS CARRIER TSI	(FIG. 5, 6)
165F	B B	CANADIAN SYLLABICS CARRIER TSI CANADIAN SYLLABICS CARRIER TSA	(FIG. 5, 6) (FIG. 5, 6, 7, 8)
1660 1663	В	CANADIAN SYLLABICS CARRIER CHE	(FIG. 5, 6, 7, 8) (FIG. 5, 6, 10, 14)
1664	B	CANADIAN SYLLABICS CARRIER CHEE	(FIG. 5, 6)
1665 1666	2	CANADIAN SYLLABICS CARRIER CHI CANADIAN SYLLABICS CARRIER CHA	(FIG. 4, 5, 6, 10) (FIG. 5, 6, 8)
1669	B		(FIG. 5, 6, 10, 14)
166A	$\mathbb{R}$	CANADIAN SYLLABICS CARRIER TTSEE	(FIG. 5, 6)
166B 1660	£	CANADIAN SYLLABICS CARRIER TTSI CANADIAN SYLLABICS CARRIER TTSA	(FIG. 5, 6) (FIG. 5, 6, 7, 8, 10)
18EE	÷	CANADIAN SYLLABICS CARRIER GEE	(FIG. 5, 6, 7, 6, 10) (FIG. 17)
	Ė	<ul> <li>CHIPEWYAN DENE (CHU)</li> </ul>	(EIC 10)
18EF	<u> </u>	<ul> <li>CANADIAN SYLLABICS CARRIER GAA</li> <li>BEAVER DENE (CHAI)</li> </ul>	(FIG. 18)
18F0	E٠	CANADIAN SYLLABICS CARRIER GWA	(FIG. 19)
18F2	Gł	<ul> <li>HARE DENE (SHYA)</li> <li>CANADIAN SYLLABICS CARRIER JWA</li> </ul>	(FIG. 16)
		<ul> <li>BEAVER DENE (TSYE)</li> </ul>	
18F5	5	CANADIAN SYLLABICS CARRIER DENTAL S	(FIG. 5, 6, 10)

#### **3 REVISIONS FOR CARRIER**

This proposal requests revisions to the following representative characters for Carrier, which corrects errors in the proportions of the character shapes and vertical positioning of the final consonant marks, restoring the original intention of the script encoding committee for the disunified Carrier characters in UCAS.

<b>h</b> h	<b>⊥</b> p	<b>V</b> kk	<b>U</b> ng	<b>Z</b> Z	<b>Ž</b>	<b>S</b>	<b>S</b>	<b>\$</b> sh			
<b>C</b> tta	<b>D</b> tte	<b>D</b> ttee	<b>&gt;</b> tti	D pa	D pe	D pee	D pi				
<b>E</b> ga	<b>B</b> ge	<b>₽</b> gee	<b>B</b> gi	<b>H</b> kha	B	<b>B</b> khee	<b>B</b> khi				
<b>H</b> kka	<b>B</b> kke	<b>æ</b> kkee	<b>B</b> kki	C na	<b>)</b> ne	<b>)</b> nee	<b>)</b> ni	no	<b>L</b> nu		
<b>E</b> ma	<mark>З</mark> me	B	<b>B</b> mi	<b>0</b> ya	уe Уe	<b>D</b> yee	<b>o</b> <sub>yi</sub>	G yo	<b>O</b> yu		
<b>el</b> ja	Ю je	Ю jee	<b>Ю</b> јі	<b>9</b> jo	<mark>Б</mark> ju	<b>e</b> jja	<b>i</b> je	)jee	<b>)</b> ]]	<mark>9</mark> <sub>jjo</sub>	<b>ک</b> jju
C la	D le	<b>D</b> lee	<b>!</b>	D lo	<b>U</b> lu	<b>C</b> dla	<b>D</b> dle	<b>D</b> dlee	b dli	<b>D</b> dlo	<b>U</b> dlu
C lha	D lhe	D	<b>)</b> Ihi	Ω lho	<b>U</b> lhu	<b>C</b> tlha	<b>D</b> tlhe	D	<b>D</b> tlhi	Ω tlho	<b>U</b> tlhu
<b>E</b> tla	<b>B</b> tle	B	<mark>3</mark> tli	<b>M</b> tlo	<b>ໄ</b> ປ	<b>ک</b> 53	<b>N</b> se	<b>R</b> see	<b>R</b> si		
<b>E</b> sha	<b>B</b> she	<b>B</b> shee	<b>B</b> shi	<b>Æ</b> tsa	<b>B</b> tse	<b>₽</b> tsa	<b>B</b> tsi	<b>E</b> cha	<b>B</b> che	<b>B</b> chee	R
<b>X</b> ttsa	B	<b>B</b> ttsee	B	<b>.</b> gee	Ė	E. gwa	<b>Cŀ</b> jwa				

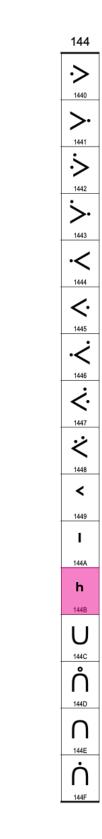
The Carrier syllabics have a very distinct graphic appearance compared to that of the other syllabics orthographies covered in UCAS. Carrier syllabics should appear uniform in height and width – without variation between full size and medium size characters, and the final pure consonant marks should be vertically positioned at the centre point between the top height of the full syllabics, and the baseline. (figures 1, 3 & 4)

The original script encoding committee that prepared the UCAS repertoire identified the distinct graphic requirements of Carrier by providing disunified characters to accommodate these preferences. (figures 2 & 3) The current code chart font for UCAS renders many of the Carrier characters incorrectly, and the incorrect representations have negatively impacted the user community in language revitalization and preservation efforts.

The requested revisions have been illustrated on pages 10–15, with attestations and descriptions in the figures to follow.

#### Proposed representative character revision





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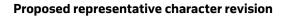
Proposed representative character revision

#### **Current representative characters**

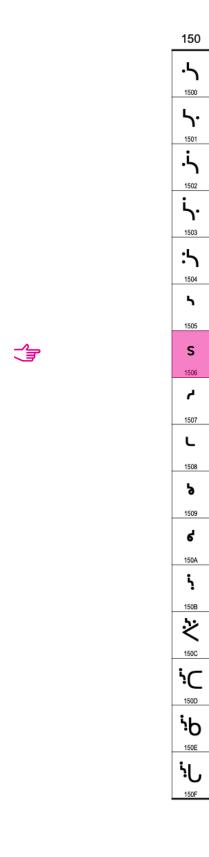
⋽

## 14D ٩ 14D0 U 14D1 م 14D2 つ 14D3 ٹ 14D4 $\subset$ 14D5 ÷ 14D6 2 14D7 ذ 14D8 ݗ 14D9 ് 14DA ċ 14DB ·) 14DC $\neg$ 14DD ·C 14DE $\overline{}$ 14DF

14D
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14D0
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14D1
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14D2
14D3
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14D4
14D5
-
14D6
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14D7
ا خـ ا
14D8
ا تـــ
14D9
14DA
14DB
• ) 14DC
<b></b> .
14DD
·_
14DE
<u>_</u> .
14DF







#### 15E 15F 160 161 162 D M 8 G 6 15E0 15F0 1600 1610 1620 З V D G થ 15E1 15F1 1611 1601 1621 $\heartsuit$ B ୦ υ J 15E2 15F2 1602 1612 1622 3 n G A n 15E3 15F3 1613 1623 1603 ε 5 2 D つ 15E4 15F4 1614 1624 1604 D መ 2 ጛ 15F5 1625 15E5 1605 1615 Э 2 5 Ш $\overline{\mathbf{b}}$ 15E6 15F6 1606 1616 1626 C Σ В C ิเจ 15E7 15F7 1607 1627 1617 А B ω บ 0 15E8 15F8 1608 1618 1628 η Α B **C** 0 15E9 15F9 1609 1619 1629 Ъ В D 3 NO 15EA 15FA 162A 160A 161A U 3 Ъ D େ 15EB 15FB 160B 162B 161B 3 Ъ 6 Ð മ 15EC 15FC 160C 161C 162C ຊ B ٤ Č D 15ED 15FD 160D 161D 162D т B 0 U 6 15EE 15FE 160E 161E 162E W B 6 Ω 6 15EF 15EE 162



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15E	15F	160	161	162
15E0	<b>1</b> 5F0	1600	<b>D</b> 1610	1620
15E1	<b>B</b> 15F1	1601	1611	<b>e</b> 1621
15E2	<b>H</b> 15F2	1602	1612	1622
<b>A</b> 15E3	15F3	<b>1</b> 603	Q 1613	1623
15E4	15F4	1604	1614	<b>)</b>
15E5	15F5	<b>ر</b>	1615	<b>1</b> 625
15E6	<b>1</b> 5F6	• 1606	<u>9</u> 1616	<b>1</b> 626
15E7	B 15F7	1607	1617	<b>C</b> 1627
<b>H</b> 15E8	15F8	1608	1618	<b>1628</b>
A 15E9	15F9	1609	1619	1629
D 15EA	15FA	<b>В</b> 160А	161A	162A
D 15EB	15FB	B 160B	<b>C</b> 161B	162B
15EC	15FC	<b>B</b> 160C	ତ	1620
15ED	B	160D	161C	1620
15ED	15FD H	160E	161D 161E	Ω
15EE	15FE	160F	161F	162E

#### Proposed representative character revisions

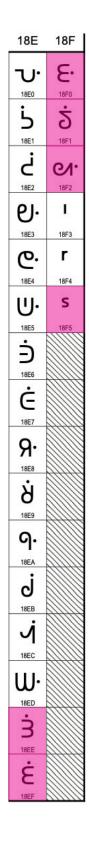
#### 163 164 165 166 5 З ບ Ð 1630 1640 1650 1660 ቓ Э ឃ Ω 1631 1641 1651 1661 ጋ 3 5 M 1642 1652 1662 1632 ς E B ጋ 1643 1663 1633 1653 ত ጠ B J 1634 1644 1664 1654 C B ጪ ഹ 1645 1655 1665 1635 Ъ Ζ B E 1636 1646 1656 1666 Ż Ъ W B 1647 1667 1637 1657 സ Ъ B Q 1668 1638 1648 1658 ζ B B Ω 1639 1649 1669 1659 \$ ພ Ð B 163A 164A 165A 166A መ M Ð B 164B 165B 166B 163B ₿ æ Æ Ð 166C 163C 164C 165C Ъ G B Х 166D 165D 163D 164D Ъ ຆ B х 163E 164E 165E 166E ۶q Ę B M 164F 165F 166F

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163	164	165	166
<b>D</b> 1630	<u>ປ</u>	1650	<b>E</b>
1631	<b>S</b>	<b>H</b>	<b>U</b>
	1641	1651	1661
1632	<b>)</b>	<b>A</b> 1652	<b>M</b> 1662
<b>C</b>	<b>)</b>	1653	<b>n</b>
1633	1643		1663
<b>5</b>	<b>Э</b>	<b>Ж</b>	<b>F</b>
	1644	1654	1664
<b>1</b> 635	<b>C</b>	<b>A</b>	<b>A</b>
	1645	1655	1665
<b>D</b>	<b>Z</b>	<b>B</b>	<b>K</b>
1636	1646	1656	
<b>D</b> 1637	<b>才</b>	<b>B</b> 1657	<b>1667</b>
1638	<b>ប</b> 1648	<b>B</b> 1658	<b>1668</b>
<b>C</b>	<b>Ω</b>	<b>E</b>	<b>B</b>
1639	1649	1659	1669
<b>53</b>	<b>ච</b>	<b>\$</b>	<b>B</b>
	164A	165A	166A
163B	<b>P</b> 164B	<b>5</b> 58	<b>B</b> 166B
<b>B</b>	<b>P</b>	<b>A</b>	<b>166C</b>
163C	164C	165C	
<b>163D</b>	<b>G</b>	<b>B</b>	<b>X</b>
	164D	165D	166D
<b>163E</b>	<b>U</b>	<b>B</b>	<b>X</b>
	164E	165E	166E
163F	<b>M</b>	<b>B</b>	<b>5Q</b>
	164F	165F	166F

Proposed representative character revisions

#### Proposed representative character revisions







30 March 2021

## Regarding correcting the errors with the representative Carrier syllabics shapes in the Unified Canadian Aboriginal Syllabics

I, Francois Prince, have been utilising the Carrier syllabic system since 2007. My father Nicholas Prince has helped organise the original syllabic fonts when I was a youth. I learned syllabics from him when I was young and began to move more into teaching a few years after he passed.

I currently have contracts in school district 91, and 57. Which covers over 10 First Nations communities including, Lheidli (Prince George), Saik'uz (Stoney Creek), Nadleh, Stellat'en(Fraser Lake), Burns Lake Band (Ts'il k'az Koh), Lake Babine Nation( Nadot'en), Chestl'ada, Takla First Nations (Tatl'ah), Nak'azdli (Fort Saint James), Tl'azt'en, and Yekooche.

The Syllabics are adaptable to all of the dialects within the Carrier Nation and my hope is that a revision from the incorrect representative characters to the correct form we expect to see will help bring the Syllabic teaching to the forefront of our language revitalisation. There is only one other first nations person in all of these communities that is working at keeping the syllabics in high priority, his name is Dennis Cumberland. He and I work along side of each other to help bring syllabics awareness and documentation to every house in the Dakelh Language group. The Dakelh Syllabics are the Original Writing System for the Dakelh and we are the only tribe in British Columbia with a writing system. I have helped 6 communities decipher their syllabic writing on the old headstones and continue to fill in much material that has not been deciphered yet.

I feel that I had to add to this description to stress the need to help bring the original writing system of the Dakelhne to the forefront of our language revitalization. The way the current Carrier syllabics are represented in Unicode is not correct and are difficult to read. We expect our syllabics characters to look like the characters originally developed by Adrien-Gabriel Morice in the late 19th century. They should be uniform in height, and the final characters to be centered to the middle of each word. The current appearance of our characters make them very hard to read, and they do not capture the spirit of our language. This leads to the syllabics characters not being used in daily correspondences over email and text messaging, which leads to the decline in their use in the community.

I support the full proposal of Kevin King. He has worked diligently and painstakingly to bring the best and most complete system that can help Dennis and I train more people in the communities.

The staff in some of the school districts are signing their names in syllabics on their emails and I find it an eyesore and a disrespect to the original format, when I see the syllabics written in another unfriendly font. All of the 10 First Nation members of the Dakelhne (Carrier Nation) that I teach in expect the Dakelh Syllabics to appear only in the form of the system developed by Adrien-Gabriel Morice. Do Do  $\mathcal{A}$  (correct characters) to  $\mathcal{A}$ (incorrect characters). The current representation in system fonts has seriously altered this, and is not adequate to write Dakelh.

With that I do hope this letter can support Kevin and anyone willing to bring our Dakelh Language to the forefront of Language revitalisation.

Thank you for your time. Soo whenaoondleh (do your best)

Francois Prince NEYUPS@outlook.com

**figure 1** A letter of support dated 30 March 2021 from Francois Prince, expressing support and the context for the current proposal effort to revise the representative characters for the Carrier syllabics in the UCAS code charts.

The above letter shows attestation for the correct form of U+162B  $\bigcirc$  Carrier dlee, U+1606  $\supset$  Carrier ni, U+1604  $\supset$  Carrier ne, and U+161F  $\bowtie$  Carrier jjee and the correct vertical positioning of final U+144B  $\triangleright$  Carrier h.

From Francois Prince, 'Regarding correcting errors with the representative Carrier syllabics shapes in the Unified Canadian Aboriginal Syllabics.' Neyu Professional Services, 30 March 2021.

#### **Disunified Carrier characters within UCAS**



89	CANADIAN SYLLABICS CE
8A	CANADIAN SYLLABICS CAAL
8B	CANADIAN SYLLABICS CI
SC.	CANADIAN SYLLABICS CII
SD	CANADIAN SYLLABICS CO
8E	CANADIAN SYLLABICS COO
BF	CANADIAN SYLLABICS Y-CREE COO
90	CANADIAN SYLLABICS CA
03	CANADIAN SYLLABICS LE
	CANADIAN SYLLABICS LA



-	
211	
	1
C	

03	CANADIAN SYLLAB
DA	CANADIAN SYLLABICS



02	CANADIAN SYLLABICS CARRIER NU	
02	CANADIAN SYLLABICS CARHIER NO	
	CANADIAN SYLLABICS CARRIER NE	
G4	CANADIAN STLLADIGS CANNIER HE	
05	CANADIAN SYLLABICS CARHIER NEE	
06	CANADIAN SYLLABICS CARRIER NI	
07	CANADIAN SYLLAHICS CARRIER NA	

<b>L</b> 1490	
<b>ח</b> 1489	
<b>)</b> 14D3	
<b>C</b> 14DA	

1490	ե	CANADIAN SYLLABICS CA • Inuktitut (GA), Athapascan (DHA), Sayisi (THA), Blackfoot (MO)
1489	ſ	CANADIAN SYLLABICS CE

CANADIAN SYLLA RICS CE • Inuktitut (GAI), Athapascan (DHE), Sayisi (THE), Blackfoot (MA)

- 14D3 ⊃ CANADIAN SYLLABICS LE Inuktitut (LAI)
- 14DA CANADIAN SYLLABICS LA

figure 2 Two showings above of ranges U+1490-U+14DA and U+1602-U+1607 from the UCAS main block-from L2/98-128, and the current UCAS main code charts for Unicode version 13.0, respectively-showing Carrier characters that were disunified from graphically-similar characters due to the distinct difference in proportions of the Carrier syllabics from the other syllabics orthographies supported in UCAS.

The script encoding committee that prepared the original UCAS main character repertoire (The Canadian Aboriginal Syllabics Encoding Committee) proposed disunified characters to meet the graphical requirements of the Carrier syllabics, where otherwise they would overlap with visually-similar characters used by other orthographies within UCAS.

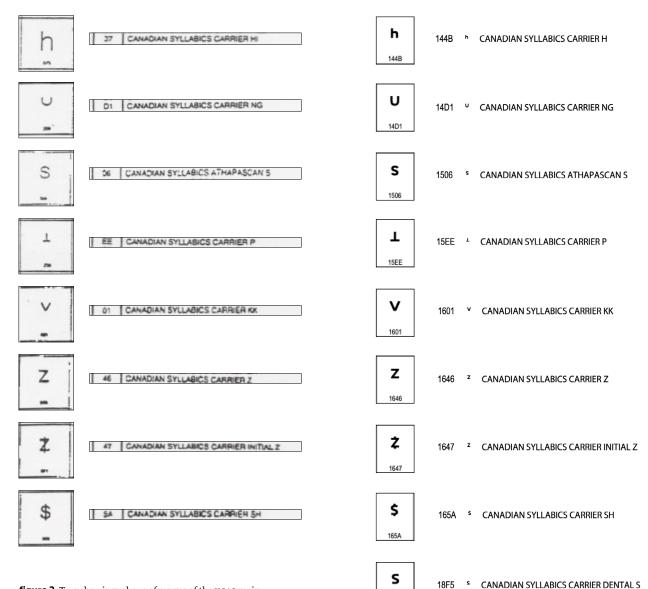
In later versions of the Unicode Standard, the chart font for  $\ensuremath{\mathsf{ucas}}$ misrepresented a large number of these distinct Carrier characters. This resulted in the current errors specified for revision in this document to the correct forms the Carrier community desires for their syllabic characters.

From L2/98-128, ISO/IEC 10646-1:1993, FDAM 11, 1998 and 'Unified Canadian Aboriginal Syllabics.' Range: 1400-167F, Version 13.0, The Unicode Consortium, copyright @ 1999–2020

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1604	С	CANADIAN SYLLABICS CARRIER NE
1605	Ð	CANADIAN SYLLABICS CARRIER NEE
1606	∍	CANADIAN SYLLABICS CARRIER NI
1607	C	CANADIAN SYLLABICS CARRIER NA

#### Disunified and dedicated Carrier finals characters within UCAS



**figure 3** Two showings above of ranges of the UCAS main block – from L2/98–128, left, and the current UCAS main code charts for Unicode version 13.0, right, respectively – showing Carrier finals characters that were either disunified from graphically-similar finals characters, or, encoded as distinct Carrier finals as they were only required for the Carrier syllabics orthography.

In the Carrier syllabics, finals are expected to appear vertically positioned at the centre point between the full height of the syllabic characters and the baseline. This is opposed to the standard vertical positioning within UCAS for finals characters, where finals are always positioned at the top position. The diagram, right, titled 'Vertical positioning of Carrier finals' demonstrates the Carrier finals vertical positioning, and the way the distinct Carrier finals are positioned in the current chart font for UCAS.

As in the case of disunification for Carrier syllabics characters described in figure 2, the original script encoding committee provided one disunified character for Carrier in U+14D1  $\circ$  *Carrier ng,* as well as provided the necessary distinct Carrier finals characters as shown in the above listings. As U+14D1  $\circ$  *Carrier ng* is disunified from U+1421  $\circ$  CANADIAN SYLLABICS FINAL BOTTOM HALF RING, and the distinct Carrier finals characters are only used for this orthography, these characters can be vertically positioned at the centre position to accommodate this Carrier syllabics orthography preference.

From L2/98–128, 1998 and 'Unified Canadian Aboriginal Syllabics.' Range: 1400–167F, Version 13.0, The Unicode Consortium, copyright © 1999–2020

#### Vertical positioning of Carrier finals

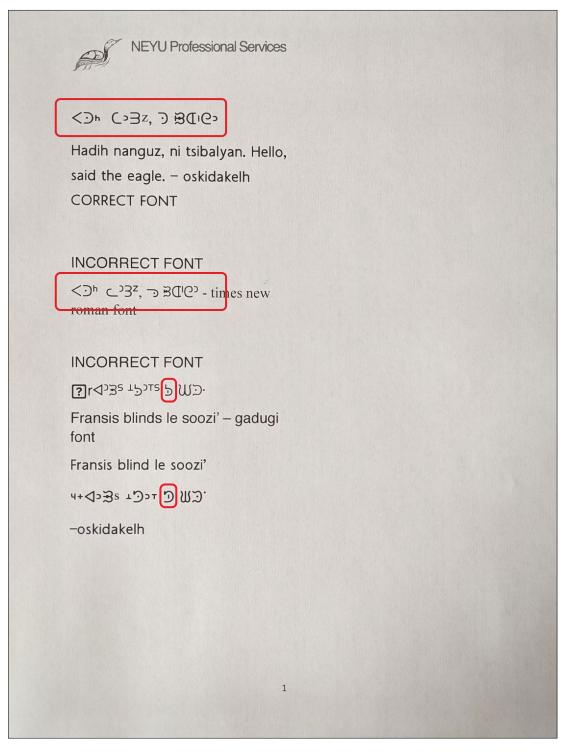
CORRECT FINALS POSITION

18F5



INCORRECT FINALS POSITION





**figure 4** A document prepared by Francois Prince to express the differences between the correct appearance of the Carrier syllabics characters, and the incorrect representation of the characters.

Note that Prince's showing – in the "correct font" example at the top of the document – clearly depicts the preferred form of the Carrier syllabic characters as uniform in height, without variation in height between full-size and medium-size characters (ex.  $\mathfrak{D}$  vs  $\mathfrak{D}$  for U+1625  $\mathfrak{D}$  *Carrier lee*). Additionally, Prince's showing depicts the preferred positioning of the finals characters at the mid line position, centered between the full height of the syllabics characters and the baseline (ex. < $\mathfrak{D}h \subset \mathfrak{I}\mathfrak{Z}$ ,  $\mathfrak{D}$  $\mathfrak{B}(\mathfrak{U} \circ vs. <\mathfrak{D}h \subset \mathfrak{I}\mathfrak{Z}$ ,  $\mathfrak{D} \mathfrak{B}(\mathfrak{U} \circ \mathfrak{D})$ .

Additionally, the above showings depict the correct

graphical distinction between U+14DA  $\subset$  *ca* and U+1607  $\subset$  *Carrier na*, demonstrating the purpose these characters – as well as the entire Carrier n-series range (U+1602–U+1607) – were disunified from range U+1490–U+14DA in the original UCAS main block character repertoire.

The above document shows attestation for U+144B  $\triangleright$  Carrier h, U+1607  $\subset$  Carrier na,

U+15F1 ∃ Carrier ge, U+1606 ⊃ Carrier ni,

U+1665 B Carrier chi, U+15ED C Carrier pa,

U+1613 @ Carrier ya, and U+162B D Carrier dlee.

From Francois Prince, 'Correct form of the Dakelh syllabics', 2021

figure 5 Right, pages 11 and 12 from Father Adrien-Gabriel Morice's ⊃sBs ∇v>T DCz⊃♡ / Carrier prayer book of 1901, showing the technical mapping of the Carrier syllabary that he originally devised in collaboration with Jimmy Alexander in 1885. This syllabary chart provides attestation for the correct representative forms preferred by the contemporary Carrier Nation, showing U+144B h Carrier h, U+14D1 v Carrier ng, U+1506 s Athapascan s, U+15E4 D Carrier tte, U+15E5 D Carrier ttee, U+15E6 D Carrier tti, U+15E7 C Carrier tta, U+15EA D Carrier pe, U+15EB D Carrier pee, U+15EC D Carrier pi, U+15ED C Carrier pa, U+15EE  $\perp$  Carrier p, U+15F1  $\exists$  Carrier ge, U+15F2  $\exists$  Carrier gee, U+15F3  $\exists$  Carrier gi, U+15F4 ∈ Carrier ga, U+15F7 B Carrier khe, U+15F8 B Carrier khee, U+15F9 B Carrier khi, U+15FA & Carrier kha, U+15FD & Carrier kke, U+15FE 
∋ Carrier kkee, U+15FF 
∋ Carrier kki, U+1600 \ Carrier kka, U+1601 v Carrier kk, U+1602 ∪ Carrier nu, U+1603 ∩ Carrier no, U+1604 ⊃ Carrier ne, U+1605 ⊃ Carrier nee, U+1606  $\supset$  Carrier ni, U+1607  $\subset$  Carrier na, U+160A ∃ Carrier me, U+160B B Carrier mee, U+160C B Carrier mi, U+160D € Carrier ma, U+160E <sup>(9)</sup> Carrier yu, U+160F G Carrier yo, U+1610 O Carrier ye, U+1611 @ Carrier yee, U+1612 @ Carrier yi, U+1613 @ Carrier ya, U+1614 G Carrier ju, U+1616 9 Carrier jo, U+1617 10 Carrier je, U+1618 10 Carrier jee, U+1619 10 Carrier ji, U+161B @ Carrier ja, U+161C G Carrier jju, U+161D @ Carrier jjo, U+161E 10 Carrier jje, U+161F @ Carrier jjee, U+1620 @ Carrier jji, U+1621 @ Carrier jja, U+1622 U Carrier lu, U+1623 D Carrier lo, U+1624 D Carrier le, U+1625 D Carrier lee, U+1626 D Carrier li U+1627 C Carrier la, U+1628 U Carrier dlu, U+1629 Q Carrier dlo. U+162A D Carrier dle. U+162B D Carrier dlee, U+162C D Carrier dli, U+162D C Carrier dla, U+1630 D Carrier lhe, U+1631 D Carrier lhee, U+1632 D Carrier lhi, U+1633 C Carrier lha, U+1634 U Carrier tlhu, U+1635  $\Omega$  Carrier tlho, U+1636  $\Im$  Carrier tlhe, U+1637 D Carrier thee, U+1638 D Carrier thli, U+1639 C Carrier thla, U+163A び Carrier tlu, U+163B 1 Carrier tlo, U+163C 1 Carrier tle. U+163D B Carrier tlee. U+163E B Carrier tli, U+163F & Carrier tla, U+1646 z Carrier z, U+1647 <sup>z</sup> Carrier initial z, U+1650 ∃ Carrier se, U+1651 ∃ Carrier see, U+1652 ∃ Carrier si, U+1653 € Carrier sa, U+1656 B Carrier she, U+1657 B Carrier shee, U+1658 B Carrier shi, U+1659 & Carrier sha, U+165A \$ Carrier sh, U+165D B Carrier tse. U+165E B Carrier tsee. U+165F 
₿ Carrier tsi, U+1660 
€ Carrier tsa, U+1663 ∃ Carrier che, U+1664 ∃ Carrier chee, U+1665 B Carrier chi, U+1666 E Carrier cha, U+1669 B Carrier ttse, U+166A B Carrier ttsee, U+166B & Carrier ttsi, U+166C & Carrier ttsa, and U+18F5 = Carrier dental s.

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**figure 6** Right, a contemporary Carrier Syllabary chart, as composed by Carrier Syllabics teacher and language keeper Francois Prince in 2018. This chart shows consistency with the character forms in Morice's chart from 1901, which provide evidence of the Carrier Nation's current preferences for the appearance of their characters.

Showing attestation for U+144B h Carrier h, U+14D1 v Carrier ng, U+1506 s Athapascan s, U+15E4 D Carrier tte, U+15E5 D Carrier ttee, U+15E6 D Carrier tti, U+15E7 C Carrier tta, U+15EA D Carrier pe, U+15EB D Carrier pee, U+15EC D Carrier pi, U+15ED C Carrier pa, U+15EE  $\perp$  Carrier p, U+15F1  $\exists$  Carrier ge, U+15F2  $\exists$  Carrier gee, U+15F3  $\exists$  Carrier gi, U+15F4 ∈ Carrier ga, U+15F7 B Carrier khe, U+15F8 B Carrier khee, U+15F9 B Carrier khi, U+15FA & Carrier kha, U+15FD & Carrier kke, U+15FE B Carrier kkee, U+15FF B Carrier kki, U+1600 \ Carrier kka, U+1601 ∨ Carrier kk, U+1602 ∪ Carrier nu, U+1603 ∩ Carrier no, U+1604 ⊃ Carrier ne, U+1605 ⊃ Carrier nee, U+1606  $\supset$  Carrier ni, U+1607  $\subset$  Carrier na, U+160A ∃ Carrier me, U+160B B Carrier mee, U+160C B Carrier mi, U+160D & Carrier ma, U+160E (9 Carrier yu, U+160F G Carrier vo, U+1610 O Carrier ve, U+1611 O Carrier yee, U+1612 O Carrier yi, U+1613 @ Carrier ya, U+1614 G Carrier ju, U+1616 9 Carrier jo, U+1617 10 Carrier je, U+1618 12 Carrier jee, U+1619 12 Carrier ji, U+161B @ Carrier ja, U+161C G Carrier jju, U+161D ຊ Carrier jjo, U+161E lo Carrier jje, U+161F @ Carrier jjee, U+1620 @ Carrier jji, U+1621 @ Carrier jja, U+1622 U Carrier lu, U+1623 Q Carrier lo, U+1624 D Carrier le. U+1625 D Carrier lee, U+1626 D Carrier li U+1627 C Carrier la. U+1628 U Carrier dlu. U+1629 Q Carrier dlo, U+162A D Carrier dle, U+162B D Carrier dlee, U+162C D Carrier dli, U+162D C Carrier dla, U+1630 D Carrier lhe, U+1631 D Carrier lhee, U+1632 D Carrier lhi, U+1633 C Carrier lha, U+1634 U Carrier tlhu, U+1635 Ω Carrier tlho, U+1636 D Carrier tlhe, U+1637 D Carrier thee. U+1638 D Carrier thli, U+1639 C Carrier thla, U+163A W Carrier tlu, U+163B \Q Carrier tlo, U+163C \B Carrier tle, U+163D 3 Carrier tlee, U+163E 3 Carrier tli, U+163F & Carrier tla, U+1646 z Carrier z, U+1647 ≠ Carrier initial z, U+1650 ∃ Carrier se, U+1651 ∃ Carrier see, U+1652 ∃ Carrier si, U+1653 € Carrier sa. U+1656 ₿ Carrier she. U+1657 𝔅 Carrier shee, U+1658 𝔅 Carrier shi, U+1659 & Carrier sha. U+165A \$ Carrier sh. U+165D B Carrier tse, U+165E B Carrier tsee, U+165F B Carrier tsi, U+1660 & Carrier tsa, U+1663 B Carrier che, U+1664 B Carrier chee, U+1665 B Carrier chi, U+1666 E Carrier cha, U+1669 B Carrier ttse. U+166A B Carrier ttsee. U+166B B Carrier ttsi, U+166C & Carrier ttsa, and U+18F5  $\leq$  Carrier dental s.

Note that Prince uses the name "Dakleh" in the title of the document to refer to the syllabic writing system, as opposed to Carrier. Dakelh is the proper Indigenous name for both the language and writing system used by the community. "Carrier" is the European name given to the Dakelh Nation, and has been applied to the character names in the UCAS code charts.

From Prince, *Dakelh Syllabics writing system,* Neyu Professional Services, 2018

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**First Section** 1953 January 2 ୰s ⊃> ▷> ① 1953 January 2 zoos din en ba & う∆<う << Cs DCV// BSBI Meshel chali oowani ada nas bulaookh ⊇י < עעירטי ⊃⊃נצעי ⊳י Nukh ha baookhlakh ndi dustl'ahakh un U < (R) > (R) U/(C) Soo aja njan ba ts'an tookhya Ds CB ∧// ▷>0>. >0> C&> Ta bus ya kan hokh enjan njan bats'an Tookhya soo a dakhli t'akh soo ba la  $D \parallel \overline{O} \triangleleft C (s)$ T'ukh niya adanas 1

**figure 7** A transcription of a Carrier tombstone prepared by Francois Prince, in both the syllabics and roman orthographic systems. Showing attestation for U+1506  $\pm$  Athapascan s, U+15ED  $\square$  Carrier pa, U+160B  $\exists$  Carrier mee, U+165D  $\boxplus$  Carrier tse, U+1660  $\oplus$  Carrier tsa, U+162C  $\boxdot$  Carrier dli, U+1606  $\ni$  Carrier ni, U+1607  $\subset$  Carrier na, U+15EA  $\square$  Carrier pe, U+1627  $\square$  Carrier la, U+1604  $\supset$  Carrier ne, U+163F  $\bowtie$  Carrier tla, U+161B  $\bowtie$  Carrier ja, U+166C  $\circledast$  Carrier ttsa, U+1613  $\square$  Carrier ya, and U+15FA  $\boxminus$  Carrier kha being  $\triangleleft C \square \in C \cap C \square$  So, the pupil who becomes familiar with these nine symbols may also be said to have mastered the whole alphabet.

Also, the modifications of each character take place internally and in conformity to logical and easily learned rules. To illustrate we will use the  $\mathcal{E}$ . The student who is familiar with the nine signs will recognise it by sight – through its double undulating curve – as a hard sibilant which, being affected by no modification, must be given the primary hissing sound *Sa*. Lets now insert the perpendicular line, when used as an internal accretion to a sign, corresponds to the *h* of the roman alphabet (as in  $\triangleleft$  gha,  $\blacktriangleleft$  wha,  $\bigcirc$  ta(tha),  $\textcircled{\blacksquare}$  ka (kha),) and we obtain  $\textcircled{\blacksquare}$  Sha. Should we cross the end of the horizontal line, we will thereby add a  $\neg$  to that sign which will then become  $\textcircled{\blacksquare}$  cha (tsha). In like manner,  $\Huge{\blacksquare}$  Sa may be changed to  $\Huge{\blacksquare}$  Tsa which, in its turn is liable to be transformed into  $\textcircled{\blacksquare}$  ts'a (t'sa),  $\bigcirc$  ta,  $\Huge{\blacksquare}$  ga etc. may also become  $\fbox{\square}$  t'a,  $\vcenter{\blacksquare}$  k'a.

In our system, all of the small signs are consonants without vowels and in no instance is any of them used in any other capacity. They always have the same value, and the method and logic which we have noticed in the formation of the main or syllabic signs have also presided to the composition of those which are merely consonantal. The importance of this reference is to ensure the meaning and translations stay true to its form and references. Thus the non syllabic gutturals are expressed by vertical lines ( $\prime g$ ,  $\land k$ ,  $\lor k'$ ); the nasals by ( $\triangleright n$ ,  $\upsilon ng$ ,  $\varsigma m$ ). Also note the transformation of s stofs sh. through the insertion l or modified h h of the large characters.

We claim for our syllabary a greater synthesis which renders the writing shorter and, by avoiding the accumulation of non syllabic signs, making the reading easier. This syllabary can be easily studied at a leisurely pace

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**figure 8** Page 3 from Francois Prince's book  $\supset \mathbb{B} \supset \mathbb{B}^{\top}$  $\supset \mathbb{B} \supset \supset \mathbb{S} \supseteq ^{2} / Duchun k'ut 'uk'une'usguz / Dakelh syllabic writ$ ing system, providing a lesson in the structure of the Carrier $syllabics. Showing attestation for U+144B <math>\triangleright$  Carrier h, U+14D1  $\circ$  Carrier ng, U+1506  $\circ$  Athapascan s, U+15ED  $\square$  Carrier pa, U+15F4  $\in$  Carrier ga, U+1607  $\subset$  Carrier na, U+166C  $\Subset$  Carrier ttsa, U+1613  $\bigcirc$  Carrier ya, U+15FA  $\boxminus$  Carrier kha, U+1627  $\bigcirc$  Carrier la, U+1653  $\in$  Carrier sa, U+1666  $\rightleftharpoons$  Carrier cha, U+1659  $\circledast$  Carrier sha, U+1660  $\circledast$  Carrier tsa, U+15E7  $\square$  Carrier tta, U+1600  $\oiint$  Carrier kka, and U+165A  $\diamond$  Carrier sh

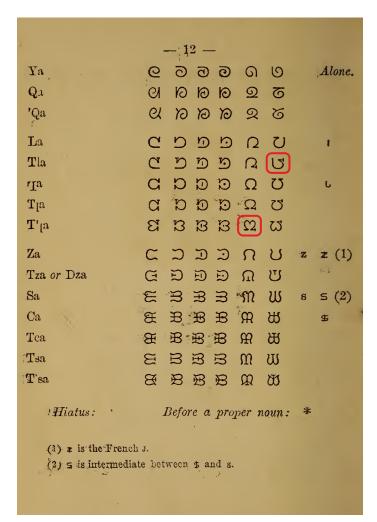
From Prince, Neyu Professional Services, 2018

figure 9 The following Carrier syllabics charts, right, from Morice's original syllabary mapping of 1894, and Prince's contemporary syllabics chart of 2018, provide attestation for the correct representation of characters U+1628 U *Carrier dlu* and U+163B Q *Carrier tlo*.

In addition to the errors in the shaping of these representative characters, they have also be positioned in the incorrect orientation. This has subsequently led to their incorrect orientation in system level typefaces such as Euphemia CAS and Google's Noto UCAS. These incorrect orientations result in errors in interpreting the correct pronunciation of the syllable-consonant cluster being represented by these characters.

From Morice, *Carrier reading-book*, 1894, and Prince, *Dakelh Syllabics writing system*, Neyu Professional Services, 2018.

#### Correct orientation of Carrier tlo and dlu





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**figure 10** From Morice's *Carrier reading-book* of 1894, showing the Carrier Syllabics characters in textual setting, rendered in the appearance preferred by the contemporary Carrier Nation.

Showing attestation for U+1506 \$ Athapascan s, U+1669 ₿ Carrier ttse, U+166C & Carrier ttsa, U+1603 ∩ Carrier no, U+144B h Carrier h, U+15E5 D Carrier ttee, U+15E7 C Carrier tta, U+1605 ⊃ Carrier nee, U+1606 ⊃ Carrier ni, U+1607 ⊂ Carrier na, U+15EA D Carrier pe, U+15ED ☐ Carrier pa, U+1627 ⊂ Carrier la, U+1624 D Carrier le, U+162B D Carrier dlee, U+15F4  $\in$  Carrier ga, U+15F1  $\exists$  Carrier ge, U+1601 v Carrier kk, U+15FD 🗄 Carrier kke, U+15F8 B Carrier khee, U+1610 ∂ Carrier ye, U+1613 @ Carrier ya, U+1611 @ Carrier yee, U+1612 O Carrier yi, U+160E O Carrier yu, U+1660 & Carrier tsa, U+1657 B Carrier shee, U+1626 <sup>(D)</sup> Carrier li, U+160A <sup>(C)</sup> Carrier me, U+160D € Carrier ma, U+163F € Carrier tla, U+1618 1<br/>  $\oslash$  Carrier jee, U+1652  $\exists$  Carrier si, U+1623 ∩ Carrier lo, U+1646 <sup>z</sup> Carrier z, U+15EE ⊥ Carrier p, U+1663 ∃ Carrier che, U+1665  $\exists$  Carrier chi, and U+1651  $\exists$  Carrier see.



Be dustl'us uts'odul'eh /Carrier Reading Book

>> >sBs >U. D> D J.

Ndi dustl'us khinoolh'en ene ba.

Dit yusk'ut inle' da, be dustl'us uts'odul'eh Dakelhne ba uts'inla.

Tat hondut on'un ook'wunets'uzguz inle', et hoonts'i aoo'et ts'inla sulli'; et huwa doocha i dustl'us za buba nats'inla.

Andit tube nzoots'ulhtsi : lhendun hoonilyaz ook'wunets'uzguz cha uts'inla, ink'ez be tenazdutli i te, kadulik 'kohts'e be ts'ujun i te, t'ewhunoodzeh hoba Hoonzoo i te ook'wunets'uzguz cha uts'inla.

Et hoonts'i whunats'odoolnukh junnih : dustl'us buts'odul'eh hokwats'uninzun te, khuni soo udechoo ookw'uneusguz i ts'iyaooh soocho t'uznoozeh; ilho ootus ts'odooyilh junnih.

1

**figure 11** Page 1 from Francois Prince's book  $\supset \mathbb{B}^{3} \mathbb{B}^{T}$  $\supset \mathbb{B}^{3} \supset \mathbb{S}^{3}\mathbb{Z}$  / Duchun k'ut 'uk'une'usguz / Dakelh syllabic writing system, showing attestation for U+1506 s Athapascan s, U+144B  $\triangleright$  Carrier h, U+1605  $\supset$  Carrier nee, U+1602  $\cup$  Carrier nu, U+15ED  $\square$  Carrier pa, and U+15EB  $\square$  Carrier pee



**figure 12** Left, a 19th century Carrier tombstone for Chief Kwah, in Carrier syllabics and Latin script for the English text. Right, Francois Prince's transcription of the historical syllabics text into the modern-day Carrier language in syllabics, showing the continuity between the historical Carrier syllabics character forms, and the proportions the contemporary Carrier community prefers for their syllabics. Showing attestation for U+144B  $\triangleright$  Carrier h, U+1506  $\triangleleft$  Athapascan s, U+1604  $\supset$  Carrier ne, U+1610  $\supseteq$  Carrier ye, U+1627  $\bigcirc$  Carrier la, U+1624  $\bigcirc$  Carrier le, U+1625  $\bigcirc$  Carrier lee, U+1626  $\bigcirc$  Carrier li, U+15F7  $\bowtie$  Carrier khe, U+1605  $\supset$  Carrier nee, U+1606  $\supset$  Carrier ni, U+15FD  $\bowtie$  Carrier khe, U+1612  $\supseteq$  Carrier yi, U+15E5  $\supseteq$  Carrier ttee, U+15E6  $\supseteq$  Carrier tti, U+1653  $\cong$  Carrier sa, and U+1646  $\triangleleft$  Carrier z.

ጋጋ ሺ. Ѣ <
∇B₽⊤
1775 ∧. ⊲D ¥z⊃
1840 ∆Dr V. Cz≅⊳
୩ ⊳ପଅ ୦.
D <b>≬</b> ଃD° ⊳°D, ⊳° BD
C, € ରାୟ ରମ⊳<,
€ D6 DC B¢V ™
01 De
HERE LIES THE REMAINS OF
GREAT CHIEF KWAH
BORN ABOUT 1755
DIED IN SPRING OF 1840
HE ONCE HAD,IN HIS HANDS, THE LIFE OF JAMES DOUGLAS, BUT WAS GREAT

ENOUGH TO REFRAIN FROM TAKING IT

193 . . Suls

**figure 13** An envelope for a letter from Chief Louis Billy Prince to Winnipeg, dated 3 October 1937, written in both Carrier syllabics and Latin script for the English text. Showing attestation for U+1506  $\degree$  *Athapascan s*, U+1626  $\boxdot$  *Carrier li*, U+1606  $\urcorner$  *Carrier ni*, U+15EC  $\boxdot$  *Carrier pi*, U+15EB  $\Huge$  *Carrier pee*, and U+15ED  $\boxdot$  *Carrier pa*.

200 Quistin Sheet Wirmingeg & Bals. 37 DOD DZD 5 A BJUBZ BDS € DZD Dry, Dr Vig 5g ·> 60 STOT B' JRECTO. JD. COST D, USR ZOS JD.DI DD-DrB= > Draib 1. 4. 5. 3, 2, USO シ Dr & ZNマ, DD シロ·マック・ハッイ: シンの SATT AV. DT 78T DT AU. DO BOSB 35. VºB J∌Z LAC DSD? U& D6 H' LAC AT DSC. USC AV > . . . D' C. · ? & C A' C 31 5 5 6 A ? DO & A'B BASDO A'D' AO BERM WDDDA AZS, AZS UNDSA. D' Mys マ">>

**figure 14** A letter from Chief Louis Billy Prince to Winnipeg, dated 3 October 1937, written in both Carrier syllabics, showing attestation for U+1506  $\,^{\text{s}}$  Athapascan s, U+1626  $\,^{\text{D}}$  Carrier li, U+1606  $\,^{\text{O}}$  Carrier ni, U+15EC D Carrier pi, U+15EB D Carrier pee, U+15ED C Carrier pa, U+144B  $\,^{\text{b}}$  Carrier h, U+1626  $\,^{\text{D}}$  Carrier li, U+1652  $\,^{\text{H}}$  Carrier si, U+1663  $\,^{\text{H}}$  Carrier che, U+166B  $\,^{\text{H}}$  Carrier ttsi, U+1669  $\,^{\text{H}}$  Carrier ttse, U+1660  $\,^{\text{H}}$  Carrier tsa, U+162D C Carrier dla, U+161E  $\,^{\text{O}}$  Carrier jje, U+1613  $\,^{\text{C}}$  Carrier y, U+1610  $\,^{\text{O}}$  Carrier se, U+1612  $\,^{\text{O}}$  Carrier yi, U+15FD  $\,^{\text{H}}$  Carrier kke, U+1650  $\,^{\text{H}}$  Carrier se, U+1653  $\,^{\text{H}}$  Carrier sa, U+1601  $\,^{\text{V}}$  Carrier kk, U+15E7 C Carrier tta,

U+15FE  $\cong$  Carrier kkee, U+15F1  $\exists$  Carrier ge, U+1623  $\Omega$  Carrier lo, and U+161B  $\bowtie$  Carrier ja.

Coach (chief) Dayi, (බ
Captain (big boss) Mooditi, ພ∋⊡
Assistant Captain (little boss) Moodiyaz, ယ၁၉z
Captain, विम्D> Assistant captain, ब्रिडविञ्ग

**figure 15** A translation document by Francois Prince rendering the titles of a local Carrier sports team in the syllabics, showing attestation for U+1506 s Athapascan s, U+1613 Q Carrier ya, U+1612 D Carrier yi, U+1646 z Carrier z, U+15FA B Carrier kha, U+1613 Q Carrier ya, and U+15EE ± Carrier p.

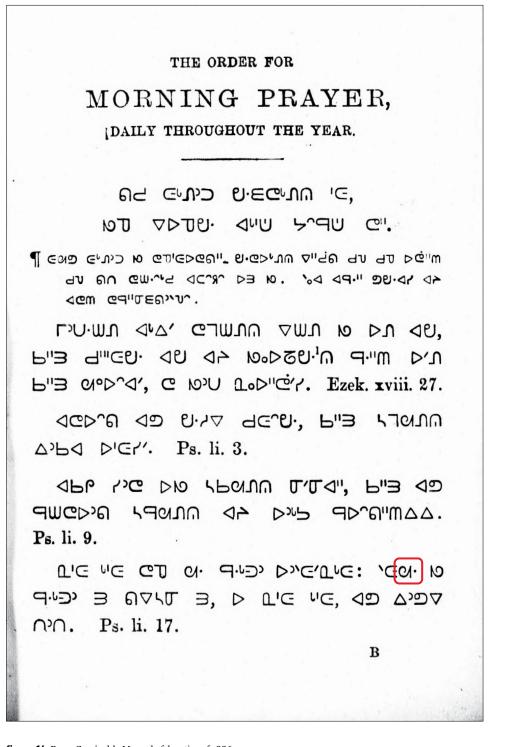


figure 16 From Garrioch's *Manual of devotion* of 1886, showing showing attestation for U+18F2 OF *Carrier jwa*. Note that Garrioch's text, above, was printed in the

Beaver language, using the Beaver Dene syllabics orthography. Everson and Harvey proposed in L2/08-342 to encode this character with the corresponding character name "CANADIAN SYLLABICS CARRIER JWA", although listing it under "section 3, Additions for Beaver Dene."

From Garrioch, *Manual of devotion in the Beaver Indian language*, London, 1886.

INITIALS.	a	е	i	0	u	FINALS.
	0	▽	Δ	⊳		·⊲wa,·⊽we
b	<	V	$\wedge$	>	>	·∆wi,∙⊳wo
$\mathbf{ch}$	ε	W	m	Э	і Э	+ i
d	С	υ	$\cap$	$\supset$	Ċ	⊂ d
g	N	η	n	J	ü	∿g
k	Ь	Р.	Р	Ч	Ŀ	ь k
kl	R	Я	R	в	В	~r
1	2	υ	J.	Э	5	د ا
m	L	٦	Ē	Г	Ŀ	L m
n	۵.	ט	ሆ	ጌ	ŗ	a n
s	5	ካ	۲	ہے .	تہ	۲ s
sl	ხ	9	9	ე	j	
t	ര	ย	ត	ഉ	<b>.</b>	œ t
th ·	ե	า	ſ	J	j	٥ th
tth	G	Ų	n	Ð	Đ	~ accent
tz	Q	C/	N	2	5	<b>X</b> Christ
у	5	4	4	て	ų.	

**figure 17** From Kirkby's *Manual of devotion and instruction in the Chipewyan language*, 1879, showing showing attestation for U+18EE  $\exists$  *Carrier Dene gee.* 

Note that the above text was printed in the Chipewyan language, using the Chipewyan Dene syllabics orthography. Everson and Harvey proposed in L2/08-342 to encode this character with the corresponding character name "CANADIAN SYLLABICS CARRIER DENE GEE", although listing it under "section 5, Additions for Chipewyan Dene."

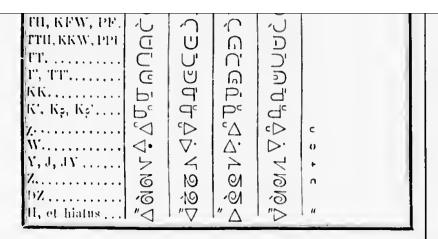
From Kirkby, Manual of devotion and instruction in the Chipewyan language, 1879.

3 5"3 dufulas or" 3 4"65, eve au al"u"e. jv? 4 5"3 DOV 'CO, IN 'CU' 'C NE" CANTEDIAL DDED"UN OC'A'N, P.3 DIED.6.2 \* 5 5"3 MY DUYU'2, DOV"3 4"0, L'EU. 13' DAU OF AU L'EN 1201915 AA 1\* 6 4". DU EAD DA AA DID, L'E "E UA DE AN 3 \* 7 OF DN UN CHE DWN' D 3, HH3 CNAD HH OODA'; 8 P. 3 9. 3 D. 4. CON 92. C. 50 D. 4. C. 2. C. 2 2"290.7 \* 9 ▷ ⊲> עכייכ פאישיים\_טסי, ספטע סיבקי עלטן \* 1461 DU, NE 900\_ \* 12 an 3 Cord du". du d"3 lo"du ami du, re ada. \* 13 ישטעני איישטעני אאפ אמל אשטאר: אספטע איישטעני. א געיבי גא געיבי JI1 1 4 4 14 מג׳ סממה, מייטי אש רדייהק מיחזג, הייש שסע אייה, יכטיי אייניי NO AM'ET LE'''EDU'N, H''S AD LL''A''A': AN AU LDDAR L'E''E \* ON "4.P 15 ים ייח סמיפים, החת פי דאהיהה גיפיים פיאי אחת פייח שם הייח 004'P \* 16 היש אשע דיאסיישי , היש איהפיים, היש השא אמעיתטיישי \* 17 5"3 re ene duer quim, duide rumune ienduis bus rm L3°CCJ", 5"3 CD'C. 4"6, 907, D3 CUMD'>A, COP2Ud' d"C9 00°C'U €? 18 5"3 MY 207 4"9, 49 E D3 D'OU' L'OS E? 2010 D3 D'U., VILOU, AP L'E "E\*

**figure 18** From Garrioch's *The Gospel according to St. Mark*, 1886, showing attestation for U+18EF  $\doteq$  *Carrier gaa*.

Note that the above text was printed in the Chipewyan language, using the Chipewyan Dene syllabics orthography. Everson and Harvey proposed in L2/08-342 to encode this character with the corresponding character name "CANADIAN SYLLABICS CARRIER GAA", although listing it under "section 3, Additions for Beaver Dene."

From Garrioch, *The Gospel according to St. Mark*, London, 1886.



Exemples d'écriture Déné tirés de deux fables Peaux de Lievre :

> Le fils du plongeon-noir genissait sur le rivage, Alors sa mère, en chantant pour l'endormir, lui-disait : Mon fils, c'est en vain que tu cries ! Mon fils, car mes entrailles sont insensibles !

Cette fable roule sur un jeu de mots. Le plongeon a la peau trèsdure (bé *l'ogé kodeyte*, et c'est en usant de cette phrase dans un seus figure, que les l'eaux de Lièvre disent d'une mère qu'elle a le cour dur.

Le plongeon arctique et le plongeon noir se promenzient sur une expansion de rivière: ils chaient noirs tous deux. Lors le corbeau : « l'ourquoi nos têtes sont-elles toutes semblables ? » dit-il. (Piqué de D'antres mats dérivés sort formés de la tr à laquelle on ajoute un i. Ainsi de yalt'i, il q le parleur, le prieur (le prêtro), de tatli, il da danseuse. Mais ces mots ne sont usites q gnuis et il ne fandrait pas en abuser.

Les Peaux de Lièvre forment quelques m tant a une racine ou à la troisième person  $\chi i, \chi i e$  ou  $n\chi^i, ni, ri$ . Ainsi de llaë, maladie  $i\chi v a$ , il galopt, ils font  $i\chi v a \chi i e$ , galop. Ges equivalent à des participes.

Les particules da, dè, di, dw; an, èn, in, o, uŋ, ko, kwo, kwô, kuŋ; tsè, se rencontrent les parties du discours. Mais elles ne reçoi liant aux racines.

15. — Les composés sont ou bien des com par la jonction de deux mots; v. g. na-fwn lule, ka-kual lacet à lièvre, thi-danna;, gue sons multiples et pol; synthétiques, et ce se noms verbaux formés de l'impersonnel ou d verbe, comme il a été dit plus haut; v. g. bé kuné-kelaié, celui qui chasse ou le chassem pèche ou le pècheur.

16. — Relativement à leur emploi dans en *déné-deudjié*, dix sortes de mots : l'affix defini, le nom, l'adjectif, le pronom, le ver la postposition, la conjonction et l'interject

Nous divisons ce précis de grammaire o Dans la première nous étudions les quatre cours.

La seconde est entièrement occupée par parce que le verbe est le principal clemen en effet, toutes les autres parties du discoula conjugaison. et par la même perdeut le cours ; ou bieu elles rentrent dans la conjug dificatifs.

Enfin, dans la troisième partie, nous én nières parties du discours, et disons un mo maticale.

**figure 19** From Petitiot, Dictionnaire de la langue dènè-dindjié dialectes montagnais ou chippewayan, peaux de lièvre et loucheux, renfermant en outre un grand nombre de termes propres à sept autres dialectes de la même langue, 1867, showing attestation for U+18F0  $\in$  Carrier gwa.

Note that the above text was printed in the Chipewyan language, using the Chipewyan Dene syllabics orthography. Everson and Harvey proposed in L2/08-342 to encode this character with the corresponding character name "CANADIAN SYLLABICS CARRIER GWA", although listing it under "section 4. Additions for Hare Dene."

From Petitiot, Paris, 1876.

**figure 20** The contemporary Carrier syllabary chart technical mapping, showing the proposed character revisions for Carrier marked in red.

Note that the unmarked finals characters are positioned at the syllabics top height line, as they share use with other syllabics orthographies within UCAS. A proposal for additions to UCAS has been prepared to request disunified finals characters for Carrier that would allow the unmarked finals to be correctly positioned at the vertical centre point, as is the preference for the Carrier syllabics.

The standard Carrier roman transcription system has been used for this chart. Additionally, IPA transcriptions have been provided where more clarity towards pronunciation is required for a syllabic series.

### Carrier Syllabary orthography (フıv≼ʰ₿)

	а	u	e	i	0	00		
	$\triangleleft$	⊳	⊳	⊳	Δ	$\nabla$		
h	<	>	⊳	≥	Λ	V	h	
gh [ɣ]	٩	⊳	⊳	⊳	Δ	$\forall$	II	
kh [x]	∢	⊳	⊳	∢	А	$\forall$	//	
w	€	>	≽	≽	$\Lambda$	V		
wh [x <b>w</b> ]	€	€	≯	≽	A	₩		
d [t]	С	С	Ŀ	Э	$\cap$	U	т	
t [th]	D	D	D	D	Δ	Ο		
ť	Σ	Σ	٦	$\Sigma$	Д	Ы		
p [b]	D	D	D	Ð	Α	A	Ŧ	
g [k]	Е	З	Э	Э	M	W	1	
k [kʰ]	В	В	₿	B	Ш	ω	١	
k'	В	В	₽	B	ш	W	v	
n	C	С	J	$\overline{\mathbf{O}}$	ſ	L	c	U ng
m	٤	З	З	З	η	ω	c	
y [j]	9	0	С	ට	ର	୦		
j [tʃ]	ମ	ାଚ	ାତ	୲୦	2	6		
ch' [tʃ']	ମ	ଗ	ଷ	ଚ	ର	ତ		
l	C	ט	5	5	Ω	U	I	
dl [t4]	C	り	ŋ	り	Q	Q		
lh [ɬ]	С	С	D	$\mathfrak{O}$	Ω	Ω	U	
tl [t4h]	C	Ŋ	Ð	Ð	Ω	Q		
tl' [t4]	B	В	ß	ß	Ω	S		
Z	С	ン	כ	$\mathfrak{I}$	Ω	ឋ	z	<b>Z</b> ∠
dz [ts]	Œ	Ð	Ð	Ð	Ŋ	ឃ		
S	E	Э	æ	Э	M	ឃ	S	<b>S</b> <u>s</u>
sh [ʃ]	B	B	B	B	Щ	ጠ	\$	
ch [t∫ʰ]	Æ	B	₿	$\mathbb{B}$	Щ	ጠ		
ts [tsʰ]	B	Э	£	B	M	ឃ		
ts'	æ	B	B	B	Q	W		
, [S]	.⊲	.⊳	.⊳	.⊳	.∇	.Δ.	•	

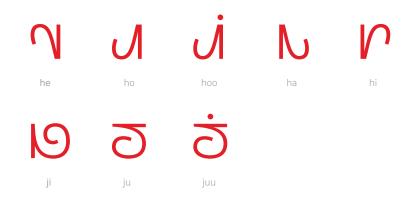
#### **Revised representative characters for Sayisi**

15C0	N	CANADIAN SYLLABICS SAYISI HE (figures 22, 23, 24, 25)
15C1	r	CANADIAN SYLLABICS SAYISI HI (figures 22, 23, 25)
15C2	J	CANADIAN SYLLABICS SAYISI HO • Sayisi (HU) (figures 22, 23, 25)
15C3	Ν	CANADIAN SYLLABICS SAYISI HA (figures 22, 23, 24, 25)
1615	б	CANADIAN SYLLABICS SAYISI JU • Athapascan (ZO), Sayisi (TZU), South Slavey (DHO) (figures 22, 23, 24, 25)
161A	19	CANADIAN SYLLABICS SAYISI JI • Athapascan (ZE), Sayisi (TZE),

- Athapascan (ZE), Sayisi (TZE), South Slavey (DHE) (figures 22, 23, 24, 25)
- 18EC *d* CANADIAN SYLLABICS SAYISI HOO • Chipewyan Dene (GU) (figures 23)
- 18F1 さ CANADIAN SYLLABICS SAYISI JUU • Chipewyan Dene (TSU) (figures 23)

#### 4 REVISIONS FOR SAYISI

This proposal requests revisions to the following representative glyphs for Sayisi Dene. The proportions of these characters are incorrectly represented in the current UCAS main and extended block code charts, and therefore produce incorrect results in the system-level typefaces Euphemia CAS and Noto Syllabics in digital text transmission.



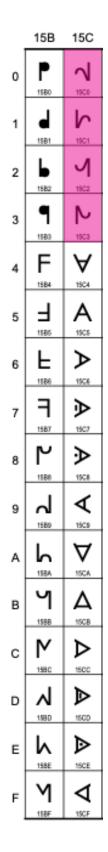
As a member of the Déné Syllabics-using languages, the Sayisi Dene community prefers the use of the Square Form Syllabics style, which has been used since the earliest Sayisi printing in the late 19th century, all of which featured Square Form proportions. (figure 21) It should be noted that Sayisi syllabics have similar graphic proportion and shape preferences to that of the Carrier syllabics, which also present in the Square form style. As a result of this shared graphic preference, characters such as U+161A IS CANADIAN SYLLABICS SAYISI JI follow the same shape pattern as U+161B CI CANADIAN SYLLABICS CARRIER JA.

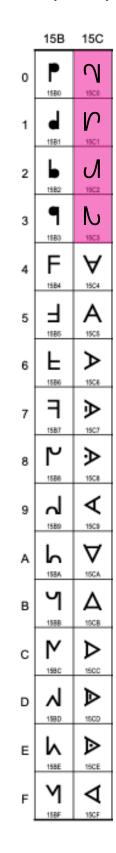
The requested revisions have been illustrated on pages 39–41, with attestations and descriptions in the figures to follow.

# **Current representative characters**

∽⊒

Proposed representative character revisions





# Current representative character

# 161 G 1610 ୦ 1611 ୦ 1612 G 1613 ሪ 1614 2 1615 2 1616 ิเอ 1617 ิเจ 1618 ิเจ 1619 ิเง 161A ଦ 161B б 161C ୨ 161D ര 161E ଜ 161F



# Proposed representative character revisions

# **Current representative character**

Proposed representative character revisions

18F

E٠

18F0

Ġ

cv.

18F2

L

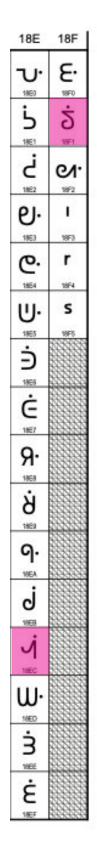
18F3

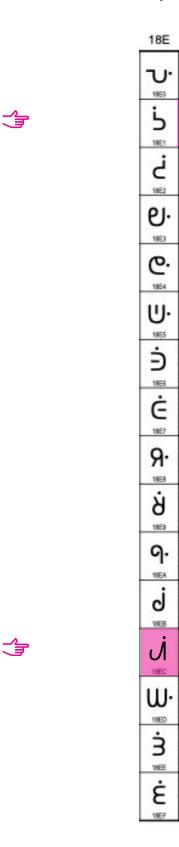
r

18F4

s

18F5





**figure 21** A comparison of the Round form (top) and the Square form (bottom), two differing styles within syllabics-using communities across North America. The Round Form (*Kâ-wâwiyêyaki* in Nêhiyawêwin) is commonly used for the Algonquian and Eskaleut language families, and geographically in eastern syllabics-using communties. The Square Form (*Kâ-ayisawêyaki* in Nêhiyawêwin) is used primarily for the Déné languages in the west of Canada, where these orthographies prefer to have their syllabics represented in the Square form style, including the Sayisi Dene Syllabics orthography.

The requested revisions to the Sayisi characters specified in this proposal are intended to return these characters to their correct Square form shapes, which is the appearance that the Sayisi user community expects for these shapes.

#### **Comparison of Round and Square form syllabics styles**

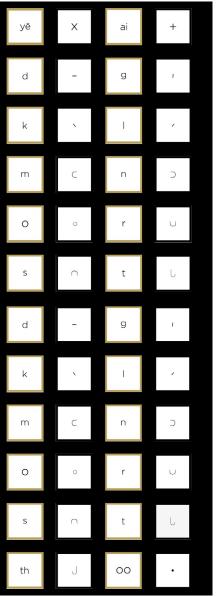
ROUND FORM

SQUARE FORM

# በባቢհረባ

∆ הייסה ה', ביע סרו, ביע סרו, -ז'. יעם הסע ער, עס למם ה' יע, ה על פיחחס לייס מיח פ. עם שה וש סוה ה' טע סויט מייט עי ה, קייט-צ ער זיסט ה'.

	а	e		0
	$\bigcirc$	$\bigtriangledown$	$\bigcirc$	$\triangleright$
$\mathbb{W}$	°	•	°	•
þ	$\leq$	$\bigvee$	$\bigcirc$	>
ch		$\bigcup$	$\bigcap$	$\bigcap$
d			$\bigcap$	$\Box$
g	$\left  \right\rangle$	$\bigcap$	$\left  \right\rangle$	
K	Ь		Ρ	
K	К	9	R	$\square$
		$\boxed{}$		
m				
Π			$\Box$	
S			$\left[ \right]$	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$
sh				
t	$\bigcirc$	$\bigcirc$	6	0
th				
tth	<u> </u>			-
tz	6	0/	N	
У		$\square$		



**TYPOTHEQUE** PROPOSED REPRESENTATIVE CHARACTER REVISIONS OF THE UNIFIED CANADIAN ABORIGINAL SYLLABICS

**figure 22** The Sayisi Dene syllabics technical mapping, as seen in version 2.7 of the Sayisi Dene language learning app *Sayisi Dene dictionary*, 2017, from Binasii Inc. Showing attestation for U+15C0  $\cap$  *Sayisi he*, U+15C1  $\cap$  *Sayisi hi*, U+15C2  $\cup$  *Sayisi ho*, U+15C3  $\wedge$  Sayisi ha, U+1615  $\supseteq$  *Sayisi ju*, and U+161A  $\bowtie$  *Sayisi ji* 

4 SAYISI

Lyllabarium.								
NITIALS.	a	e	i	0	u	FINALS.		
	Δ	$\nabla$	Δ	⊳	.⊳	·⊲wa,·⊽we		
b	<	$\vee$	$\wedge$	> .	>	·∆wi,·⊳wo		
$\mathbf{ch}$	ε	W	m	Э	÷	+ i		
d	С	U	$\cap$	$\supset$	Ċ	⊂ d		
g	N	2	n	U	u	Ng		
k	Ь	q.	P	Ч	Ŀ.	۰ k		
kl	К	Я	R	в	К	Ϋ́r		
1	Ч	υ	J.	· 5	5	۲ ۲		
m	L	٦	Г		Ŀ	L m		
n	۵.	ס	ሆ	ட	ف	a n		
s	5	ካ	۲	ہے ا	نہ	۶		
sl	6	ງ	٩	ე	j			
t	ല	ย	ត	ฏ	<b>.</b> 9	⊂ t		
th	L	า	ſ	J	j	<sup>ь</sup> th		
tth	G	Ч	n	Ð	ė	~ accent		
tz	S	CI .	0	2	ວັ	<b>X</b> Christ		
у	5	4	<u>ح</u> .	4	4			
				- : •				

figure 23 The Sayisi Dene syllabary chart from Kirkby's Manual of devotion and instruction in the Chipewyan language, for the Indians of Churchill, 1879, showing attestation for U+15C0  $\land$  Sayisi he, U+15C1  $\land$  Sayisi hi, U+15C2  $\land$  Sayisi ho, U+15C3  $\land$  Sayisi ha, U+1615  $\boxdot$  Sayisi ju, U+161A  $\bowtie$  Sayisi ji, U+18EC  $\land$  Sayisi hoo, and U+18F1  $\circlearrowright$  Sayisi juu.

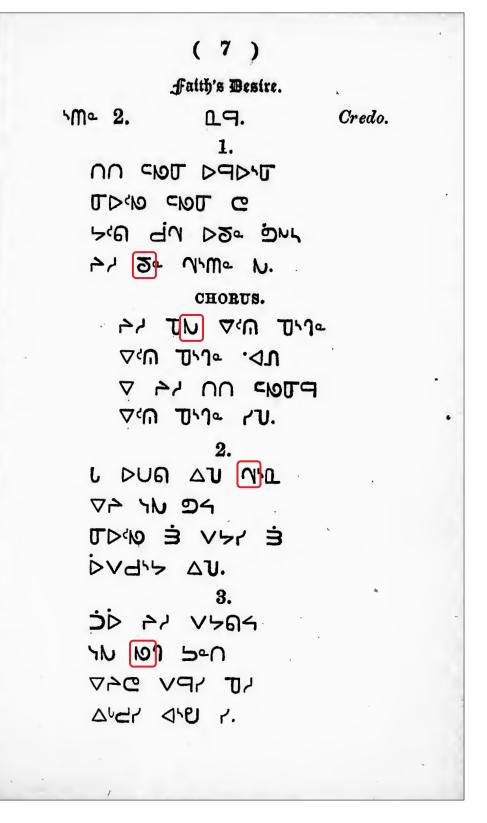


figure 24 Page 7 from Kirkby's Manual of devotion and instruction in the Chipewyan language, for the Indians of Churchill, 1879, showing attestation for U+15C0 ∩ Sayisi he, U+15C3 \scribes Sayisi ha, U+1615 \vec{a} Sayisi ju, U+161A \vec{b} Sayisi ji.

-		
	<u> </u>	
	$\begin{array}{ccc} & & & & \\ & & & \\ & &$	
	C tta U tthe A tthi D tthou	
	b ka, ga 9 ke, ge P ki, gi d kou, gou	
	'B kka 9' kke 'P kki d' kkou	
	'b 'ka, 'ga 'C 'ke, 'ge 'P 'ki, 'gi 'd 'kou, 'gou	
	E cha, ja W che, je M chi, ji B chou, jou	
	Cla Ule fili 5 lou, lo	
	C'ia V'le M'li S'lou, 'lo	
	L ma me mi mou, mo	
_	<u>na</u> ne <u>I</u> ni <u>I</u> nou, no	
	Npa Npe Npi Upou, po	
	ra re ri rou, ro	
	∽ sa ∽ se ⊢ si ← sou, so	
	, tsa, tssa, ' tse, tsse , ' tsi, tssi , ' tssou	-
	G za N ze C/ zi J zou, zo	
	$4 \text{ ya}$ $4 \text{ ye}$ $\Rightarrow \text{ yi}$ $\Rightarrow \text{ you, yo}$ fa, va fe, ve fi, vi fou, vou	
	$\bigcup$ sha, zha $\bigcap$ she, zhe $\bigcap$ shi, zhi $\bigcup$ shou,	
	sha, zha spine, zhe j shi, zhe shou	
	·∪ dsha, dzha ·∩ dshe, dzhe - ·∩ dshi, dzhi ·∪ dshou, dzhou, dsho, dzho	
	יל xe יל xe יל xi יל xou, xo	

**figure 25** From Père LeGoff,  $\Box \supset \cap \cup \Box \land \cap \cap \cap \land / Livre$ de prières en langue Montagnaise. C. O. Beauchemin & Fils, Libraires-Imprimeurs, 1890, showing attestation for U+15C0  $\cap$  Sayisi he, U+15C1  $\cap$  Sayisi hi, U+15C2  $\cup$  Sayisi ho, U+15C3  $\cup$  Sayisi ha, U+1615  $\supseteq$  Sayisi ju, and U+161A  $\boxtimes$ Sayisi ji.

**figure 26** The following technical chart mapping shows the Sayisi Dene Syllabics's orthography, with proposed revised characters marked in red.

In the case of characters U+1615  $\boxdot$  Sayisi ju and U+161A  $\bowtie$  Sayisi ji, the correct shapes for these representative glyphs are graphically related to the similar proposed revisions to the Carrier representative characters U+1614  $\boxdot$  Carrier ju and U+161B  $\boxdot$  Carrier ja, with the only difference being the orientation of the syllabics to accommodate the Sayisi vowel and consonant structure.

Note that the syllabary chart, right, shows a row representing the *u* vowel, which does not appear in contemporary mappings of the Sayisi Dene syllabics orthograhpy, such as the chart depicted in figure 11, from the *Sayisi Dene Dictionary* language learning app.

## **Sayisi Dene Syllabary**

	а	е	i	0	u	
	4	$\nabla$	Δ	$\triangleright$	Þ	
w	∘⊲	∘∇	∘∆	∘⊳	۰Ď	
b	<	V	$\wedge$	>	>	
ch	Е	W	M	З	Ġ	
d	С	U	$\cap$	С	Ċ	-
g	N	N	$\mathbf{r}$	J	j	I
k	Ь	Р	Ρ	Ь	Ч	١
kl	R	Я	R	В	ઝં	
ι	2	υ	Л	5	5	/
m	L	٦	Г		Ĺ	c
n	۵	σ	σ	Ъ	ف	C
s	ጘ		ہ	۲	نم	n
sh	ხ	ባ	ရ	ძ	d	
t	୯	ମ	ດ	ඉ	ڧ	L
th	Ե	ſ	ቦ	J	j	J
tth	e	U	U	Э	ė	
tz	6	ମ	9	อ	Ġ	
у	ל	4	4	4	۲	
yē						x
ai						+
r						U
0						o
00						•

#### Revised representative character for Ojibway

**18DB** CANADIAN SYLLABICS OJIBWAY SH (figures 27, 29, 30)

# **5 REVISIONS FOR OJIBWAY**

This proposal requests a revision to the representative character of U+18DB CANADIAN SYLLABICS OJIBWAY SH in the UCAS Extended code chart.

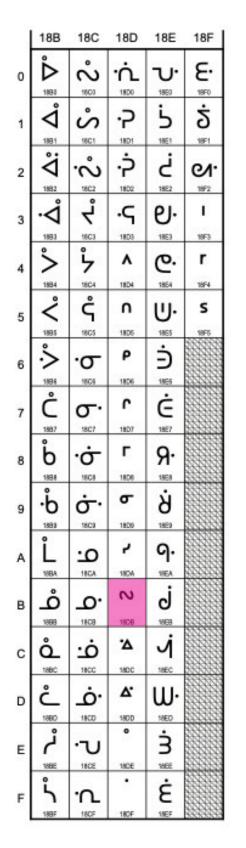


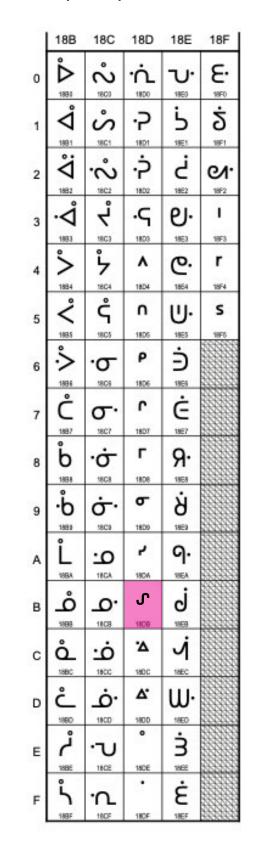
This character was proposed for inclusion into UCAS in L2/08-132 in 2008, which sought to encode the unique variant of the *sh* final for Ojibway in some Northern Ojibway-speaking communities, particularly those in the eastern region of the Northern Ojibway dialect. Everson and Harvey identified the correct orientation of this character, and supplied the correct representative character in L2/08-132, however, the current extended block code chart font contains the incorrect representative character for U+18DB CANADIAN SYLLABICS OJIBWAY SH. (figure 28)

The requested revisions have been illustrated on pages 10–15, with attestations and descriptions in the figures to follow.

### **Current representative character**

## Proposed representative character revision





ſ

8. Additional finals for Ojibway (U+A9EE..U+A9F7).  $^{n p r r \sigma} / O^{\Delta \Delta} / p / t / k / c / m / n / s / s / w / w / w / certain dialects (e.g. Northern Ojibway) use superscript i-finals instead of the a-finals used in eastern Cree and Inuktitut. Only one of these is currently encoded in the UCS, <math>^{\Delta} / y /$ . For orthographies which place mid-dots before base letters, the w-final is U+A9F6  $^{\Delta}$  CANADIAN SYLLABICS EASTERN W; for orthographies which position mid-dots after base letters, the w-final is U+A9F7  $^{\Delta}$  CANADIAN SYLLABICS WESTERN W. See Figures 2, 14, 15, and 16.

**figure 27** Detail from page 2 of L2/08-132, *Proposal to encode 39 Unified Canadian Aboriginal Syllabics in the UCS*, 2008, showing the correct representative character that Everson and Harvey proposed for U+18DB *s Ojibway sh*, and providing a description from the authors describing the preference that some Northern Ojibway dialects have towards using superscript finals following the i-vowel orientation. The current chart font has changed the representative form to an incorrect orientation.

Both the a- and i-vowel orientation schemes represent the same final pure consonant sound, however, certain user communities across the Northern Ojibway linguistic region prefer to follow one scheme over another for stylistic purposes.

The primary issue with the current representative character in the UCAS code charts for U+18DB  $^{\circ}$  Ojibway sh is that it follows the o-vowel orientation, which does not match the schematic for the other Ojibway i-position finals ranging U+18D4 – U+18DB in the UCAS extended block that Everson and Harvey proposed in L2/08-132.



INCORRECT O-POSITION (U+18DB)

∿ o∽ b ∿

CORRECT I-POSITION (U+18DB)



A-POSITION (U+1525)

**figure 28** Although the correct representative character was proposed for U+18DB CANADIAN SYLLABICS OJIBWAY SH in L2/08-132, a change was made to the representative character in the chart font for the UCAS, resulting in the incorrect o-vowel position orientation (shown above, top line) that is present in the current code chart for UCAS extended, as seen in the image, right, from the official code chart from Unicode 13.0.

In the correct orientation scheme for these representative characters, U+1525 <sup>69</sup> CANADIAN SYLLABICS SH, follows the a-vowel orientation, while U+18DB <sup>69</sup> CANADIAN SYLLABICS OJIBWAY SH, should follow the i-vowel orientation (shown above, examples two and three).

35 VOOLS JAA.P, NOS VOODAPPP, NOS VPSPP. 29 ON CS 6PSPP. · DD 79292920 14.0 JOS L rLd.rrgp. Abda. LPd. Ld. L POPLA bU 30 L C2 PVbb 00 LPL: 2.9 90. CJ29 960099 ">96000 9260 Dadper dos DA VSab.p? 31 -VSab.P: CASS AV. VSP PAbor. 60620 DDL OPP 6<PNO-6UP PN60 32 L P P PLULAL PLAIL C' A. BPQ BELADDE. Δσ LLOND . AP CS NOSSP NAS 90.P VSOLO.V. PAPD. 33 010. A AS DO NO 07.162"

**figure 29** A detail from page 35 of  $\triangle \Delta \nabla \cdot \Gamma_{\circ} \cdot \cap \Box \Delta^{\circ \sigma} b \Delta_{\circ}$   $\supset C^{\circ} \triangleleft \triangleleft L^{\circ}$  / The Gospel of Mark in Northern Ojibway (Saulteaux) and English (TEV), 1974, showing attestation for the correct orientation of U+18DB  $^{\circ}$  Ojibway sh.

Note that this textual example also shows all finals following the i-vowel orientation scheme.

Consonant	Vowels			Finals			
	e	1/11	0/00	a/aa	West	East a-series	East i-series
none/h/?		Δ	Þ	4	"	11 ×	/2/ △
w (West)		۵.	⊳ •	⊲۰	0		
(East)	• 7	• •	• Þ	• 4		0	° or ·Δ
P	V	~	>	<	•	<	^
t	U	$\cap$		C	1	c	n
k	9	٩	Р	Ь		ь	P
c	า	r	J	L		L.	r
m	٦	Г	<b>_</b> .	L	¢	L	Г
n	٥	σ	م	٩	>	<u>~</u>	σ
s	5	ب ا	نم	5	n n	4	ب
š	l	ſ	6	5	U	5	L
у	4	4	۲	5	•	ې م	Δ
r (West)	3 🗸	3 ∆	3 ⊳	30	3		
(East)	ע	~	5	ς		4	
l (West)	٤۵	₹∆	٤ 🗅	٤٩	٤		
(East)	7		د	۰ _	د		
sk					5	8	
hk		· · · · ·		·.	×		
			da jila se	da ser e			

**figure 30** The technical mapping of the Ojibway syllabary chart, presenting local community orthographic preferences in Western and Eastern regions of the Northern Ontario dialect of Ojibway. Showing attestation for the correct orientation of U+18DB *S Ojibway sh.* 

There is variation in the preferred orientation of finals in Northern Ojibway communities, following the position of either the a- or i- vowel series in the orthography. The chart, above right, in the final two columns, shows the contrast between the two positional orientations across the shared finals characters in Nothern Ojibway communities. Typically, the Ojibway and Oji-Cree communities that use "Western" finals (finals shapes / orientations that follow the Western Cree shaping for finals) use the same scheme across all language communities. Communities that prefer the use of the Eastern finals (which follow the Eastern Cree orthographic structure of using superscripted versions of the a-position syllabic orientation) show variation in the orientation scheme they choose to follow, notably between the a-or i-series position.

From Fiero, 'Style manual for syllabics', pp 95–104, 1985

# Ojibway Syllabics orthography (ΦσʃαVJ·Δ)

**figure 31** A technical mapping of the Ojibway Syllabics repertoire, with finals characters shown in the i-position orientation. The correct orientation for U+18DB *s Ojibway sh* is shown marked red, following the shape of the full-size syllabic character *shi* 

Everson and Harvey's proposal in L2/08-132 requested the necessary characters that were required to satisfy this finals orientation scheme, with the Ojibway i-finals characters becoming part of the UCAS extended block, code points ranging 18D4–18DB). Although Everson and Harvey provided the correct representative character in their proposal, the currect chart font for UCAS renders this character incorrectly.

The Ojibway double vowel transcription system has been used for the following chart, developed by Charles Fiero and used by the majority of Ojibway communities in Canada and the United States, including the Northern Ojibway dialects.

		e	i	0	а	ii	00	аа	
		$\nabla$	Δ	$\triangleright$	٩	À	ò	Ą	
F	o [b]	V	Λ	>	<	Ņ	>	Ċ	۸
t	[d]	U	$\cap$	С	С	Ń	Ċ	Ċ	n
k	(g]	٩	ρ	d	Ь	ρ	ġ	Ь	ρ
C	:h [j]	ſ	ſ	J	Ե	ŕ	j	i	r
r	n	Г	Г	L	L	Ļ	Ŀ	Ĺ	г
r	ı	ס	σ	ڡ	م	σ	ف	ġ	σ
5	5 [Z]		ې	۲	ጘ	نې	ن	ί	ų
5	sh [zh]	Ն	J	$\sim$	S	٠	Ś.	Ś	J
У	/	4	4	4	ל	Ż	۲	ې	o
f		8	6	Ġ	م	ف	ৎ	Ś	ৎ
t	h	ย	ດ	ត់	୭	ڧ	୯	ė	ھ
v	v	$\cdot \nabla$	·\	·Þ	۰	·ڬ	·⊳	Ā	۵
ŀ	ı	"∇	۵"	"⊳	"⊲	"À	"⊳	".  -	II
ι									٤
r									3
,	[7]								۵

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- ADRIEN-GABRIEL MORICE, D' ⊃\$ℑ\$ ▷\$\$\D' ▷ / Carrier reading-book. Second edition, Stuart's Lake Mission, 1894
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FRANCOIS PRINCE, つおっ B \* でおつでらるz / Duchun k'ut 'uk'une'usguz / Dakelh syllabic writing system. Neyu Professional Services, 2018

Note that "Dakelh" is the proper name for the language of the Dakelh Nation. The term "Carrier" is the Anglophone and Francophone name given to the people of the Dakelh Nation and their language, beginning in the 19th century. The UCAS encoding uses the name "Carrier" to note characters specific to this language group, and therefore the name "Carrier" has been used for continuity with the existing UCAS character naming model.

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