Preliminary proposal to encode Vexillology Symbols in Unicode

Anshuman Pandey
pandey@umich.edu

April 6, 2017

1 Introduction

This is a preliminary proposal to encode symbols used in the field of vexillology for conveying information regarding usage and features of national flags. These symbols are used in printed materials and in digital content. A tentative character set is shown in the attached code chart and names list. The set contains two categories of characters: 64 flag information symbols and 19 flag typology symbols.

The flag information symbols have character names beginning with 'FLAG SYMBOL'. The glyphs for these symbols were produced from SVG images generated by the `fiav_dots.pl` Perl application written by Claus Faerber (2006). The flag typology symbols have names beginning with 'FLAG TYPOLOGY SYMBOL'. Glyphs for these characters were designed by António Martins-Tuválkin and Željko Heimer.

Research on encoding vexillology symbols is ongoing and a formal proposal is forthcoming. Please submit comments and questions to the proposal author at the above address.

2 Description

2.1 Flag information symbols

The flag information symbols were officially adopted by Fédération internationale des associations vexil-lologiques (FIAV). The symbols are described in the "Flag Information Code", which was adopted on August 27, 1981, and amended on July 5, 1995. Section 5 ("National Flag Use") of the code states:

> (a) The following grid is used to describe the use or uses of a flag whose primary function is to identify nationality rather than some other characteristic (such as the rank of an individual, the existence or a specific government or military institution, or some other concept):

<p align="center">╬</p>

(b) The six areas of the grid indicate the six basic uses of national flags: (1) use by private individuals and institutions on land; (2) use by nonmilitary government institutions on land; (3) use by military institutions on land; (4) use by private individuals and institutions at sea; (5) use by nonmilitary governmental institutions at sea; and (6) use by military institutions at sea. Private, nonmilitary governmental, and military use is indicated from left to right by the three vertical columns; use on land and sea is indicated from top to bottom by the two horizontal rows.

(c) The grid is to be written or printed in the line of identifying text near an illustration of a flag, together with the ratio indicating proportions. The use or uses of the flag design are indicated by placing a point (•) or an × in the appropriate area or areas of the grid.

The ⊞ grid may be visualized as per the following schema:

	Private use	*Public use*	*Military use*
Land use	Civil flag	State flag	War flag
Sea use	Civil ensign	State ensign	War ensign

Some vexillologists use symbols based upon a 3×3 gird, in which an additional row is added to the top for indicating air flags. The expanded grid has not been officially recognized by FIAV.

2.2   Flag typology symbols

The flag typology symbols are used for describing the design and additional features of flags.

3   Tentative encoding model

Although there are a variety of methods for representing flag information symbols, the tentative model proposes encoding each of the 63 configurations as distinctive characters in addition to 1 empty grid. Alternate models will be discussed in the formal proposal.

4   References

Faerber, Claus. 2006. `fiav_dots.pl`. `http://commons.wikimedia.org/wiki/User:3247's_Image_Wizard/ Scripts/fiav_dots.pl`.

Fédération internationale des associations vexillologiques. 2001. "Flag Information Code". `http://www. fiav.org/FlagInformationCode.pdf`

Heimer, Željko. 2012. "The Flags & Arms of the Modern Era". `http://zeljko-heimer-fame.from.hr/ descr/use.html`

Raeside, Rob. 2014. "FIAV Flag Information Symbols". `http://www.crwflags.com/fotw/flags/xf-fis. html`

Wikimedia. 2010. "Template:IFIS". `http://en.wikipedia.org/wiki/Template:IFIS`

———. 2013. "Category:Vexillological symbols". `https://commons.wikimedia.org/wiki/Category:Vexillological_symbols`

———. 2017. "Template:FIAV". `http://en.wikipedia.org/wiki/Template:FIAV`

	1FA0	1FA1	1FA2	1FA3	1FA4	1FA5
0	1FA00	1FA10	1FA20	1FA30	1FA40	1FA50
1	1FA01	1FA11	1FA21	1FA31	1FA41	1FA51
2	1FA02	1FA12	1FA22	1FA32	1FA42	1FA52
3	1FA03	1FA13	1FA23	1FA33	1FA43	
4	1FA04	1FA14	1FA24	1FA34	1FA44	
5	1FA05	1FA15	1FA25	1FA35	1FA45	
6	1FA06	1FA16	1FA26	1FA36	1FA46	
7	1FA07	1FA17	1FA27	1FA37	1FA47	
8	1FA08	1FA18	1FA28	1FA38	1FA48	
9	1FA09	1FA19	1FA29	1FA39	1FA49	
A	1FA0A	1FA1A	1FA2A	1FA3A	1FA4A	
B	1FA0B	1FA1B	1FA2B	1FA3B	1FA4B	
C	1FA0C	1FA1C	1FA2C	1FA3C	1FA4C	
D	1FA0D	1FA1D	1FA2D	1FA3D	1FA4D	
E	1FA0E	1FA1E	1FA2E	1FA3E	1FA4E	
F	1FA0F	1FA1F	1FA2F	1FA3F	1FA4F	

Flag information symbols

Grid symbols based upon the Flag Information Code adopted by Fédération internationale des associations vexillologiques (FIAV). The first row represents land use; the second row represents sea use. From left, columns indicate civil, state, and military usage.

1FA00   FLAG SYMBOL NO ATTRIBUTES SELECTED
- Text: ***/***

1FA01   FLAG SYMBOL WAR ENSIGN
- Text: ***/**W

1FA02   FLAG SYMBOL STATE ENSIGN
- Text: ***/*S*

1FA03   FLAG SYMBOL STATE AND WAR ENSIGN
- Text: ***/*SW

1FA04   FLAG SYMBOL CIVIL ENSIGN
- Text: ***/C**

1FA05   FLAG SYMBOL CIVIL AND WAR ENSIGN
- Text: ***/C*W

1FA06   FLAG SYMBOL CIVIL AND STATE ENSIGN
- Text: ***/CS*

1FA07   FLAG SYMBOL NATIONAL ENSIGN
- Text: ***/CSW

1FA08   FLAG SYMBOL WAR FLAG
- Text: **W/***

1FA09   FLAG SYMBOL WAR FLAG AND ENSIGN
- Text: **W/**W

1FA0A   FLAG SYMBOL WAR FLAG AND STATE ENSIGN
- Text: **W/*S*

1FA0B   FLAG SYMBOL WAR FLAG AND STATE AND WAR ENSIGN
- Text: **W/*SW

1FA0C   FLAG SYMBOL WAR FLAG AND CIVIL ENSIGN
- Text: **W/C**

1FA0D   FLAG SYMBOL WAR FLAG AND CIVIL AND WAR ENSIGN
- Text: **W/C*W

1FA0E   FLAG SYMBOL WAR FLAG AND CIVIL AND STATE ENSIGN
- Text: **W/CS*

1FA0F   FLAG SYMBOL WAR FLAG AND NATIONAL ENSIGN
- Text: **W/CSW

1FA10   FLAG SYMBOL STATE FLAG
- Text: *S*/***

1FA11   FLAG SYMBOL STATE FLAG AND WAR ENSIGN
- Text: *S*/**W

1FA12   FLAG SYMBOL STATE FLAG AND ENSIGN
- Text: *S*/*S*

1FA13   FLAG SYMBOL STATE FLAG AND STATE AND WAR ENSIGN
- Text: *S*/*SW

1FA14   FLAG SYMBOL STATE FLAG AND CIVIL ENSIGN
- Text: *S*/C**

1FA15   FLAG SYMBOL STATE FLAG AND CIVIL AND WAR ENSIGN
- Text: *S*/C*W

1FA16   FLAG SYMBOL STATE FLAG AND STATE AND CIVIL ENSIGN
- Text: *S*/CS*

1FA17   FLAG SYMBOL STATE FLAG AND NATIONAL ENSIGN
- Text: *S*/CSW

1FA18   FLAG SYMBOL STATE AND WAR FLAG
- Text: *SW/***

1FA19   FLAG SYMBOL STATE AND WAR FLAG AND WAR ENSIGN
- Text: *SW/**W

1FA1A   FLAG SYMBOL STATE AND WAR FLAG AND STATE ENSIGN
- Text: *SW/*S*

1FA1B   FLAG SYMBOL STATE AND WAR FLAG AND ENSIGN
- Text: *SW/*SW

1FA1C   FLAG SYMBOL STATE AND WAR FLAG AND CIVIL ENSIGN
- Text: *SW/C**

1FA1D   FLAG SYMBOL STATE AND WAR FLAG AND CIVIL AND WAR ENSIGN
- Text: *SW/C*W

1FA1E   FLAG SYMBOL STATE AND WAR FLAG AND CIVIL AND STATE ENSIGN
- Text: *SW/CS*

1FA1F   FLAG SYMBOL STATE AND WAR FLAG AND NATIONAL ENSIGN
- Text: *SW/CSW

1FA20   FLAG SYMBOL CIVIL FLAG
- Text: C**/***

1FA21   FLAG SYMBOL CIVIL FLAG AND WAR ENSIGN
- Text: C**/**W

1FA22   FLAG SYMBOL CIVIL FLAG AND STATE ENSIGN
- Text: C**/*S*

1FA23   FLAG SYMBOL CIVIL FLAG AND STATE AND WAR ENSIGN
- Text: C**/*SW

1FA24   FLAG SYMBOL CIVIL FLAG AND ENSIGN
- Text: C**/C**

1FA25   FLAG SYMBOL CIVIL FLAG AND CIVIL AND WAR ENSIGN
- Text: C**/C*W

1FA26   FLAG SYMBOL CIVIL FLAG AND CIVIL AND STATE ENSIGN
- Text: C**/CS*

1FA27   FLAG SYMBOL CIVIL FLAG AND NATIONAL ENSIGN
- Text: C**/CSW

1FA28   FLAG SYMBOL CIVIL AND WAR FLAG
- Text: C*W/***

1FA29   FLAG SYMBOL CIVIL AND WAR FLAG AND WAR ENSIGN
- Text: C*W/**W

1FA2A   FLAG SYMBOL CIVIL AND WAR FLAG AND STATE ENSIGN
- Text: C*W/*S*

1FA2B   FLAG SYMBOL CIVIL AND WAR FLAG AND STATE AND WAR ENSIGN
- Text: C*W/*SW

1FA2C   FLAG SYMBOL CIVIL AND WAR FLAG AND CIVIL ENSIGN
- Text: C*W/C**

1FA2D   FLAG SYMBOL CIVIL AND WAR FLAG AND ENSIGN
- Text: C*W/C*W

1FA2E   FLAG SYMBOL CIVIL AND WAR FLAG AND CIVIL AND STATE ENSIGN
- Text: C*W/CS*

1FA2F   FLAG SYMBOL CIVIL AND WAR FLAG AND NATIONAL ENSIGN
- Text: C*W/CSW

1FA30   FLAG SYMBOL CIVIL AND STATE FLAG
- Text: CS*/***

1FA31   FLAG SYMBOL CIVIL AND STATE FLAG AND WAR ENSIGN
• Text: CS*/**W

1FA32   FLAG SYMBOL CIVIL AND STATE FLAG AND STATE ENSIGN
• Text: CS*/*S*

1FA33   FLAG SYMBOL CIVIL AND STATE FLAG AND STATE AND WAR ENSIGN
• Text: CS*/*SW

1FA34   FLAG SYMBOL CIVIL AND STATE FLAG AND CIVIL ENSIGN
• Text: CS*/C**

1FA35   FLAG SYMBOL CIVIL AND STATE FLAG AND CIVIL AND WAR ENSIGN
• Text: CS*/C*W

1FA36   FLAG SYMBOL CIVIL AND STATE FLAG AND ENSIGN
• Text: CS*/CS*

1FA37   FLAG SYMBOL CIVIL AND STATE FLAG AND NATIONAL ENSIGN
• Text: CS*/CSW

1FA38   FLAG SYMBOL NATIONAL FLAG ON LAND
• Text: CSW/***

1FA39   FLAG SYMBOL NATIONAL FLAG AND WAR ENSIGN
• Text: CSW/**W

1FA3A   FLAG SYMBOL NATIONAL FLAG AND STATE ENSIGN
• Text: CSW/*S*

1FA3B   FLAG SYMBOL NATIONAL FLAG AND STATE AND WAR ENSIGN
• Text: CSW/*SW

1FA3C   FLAG SYMBOL NATIONAL FLAG AND CIVIL ENSIGN
• Text: CSW/C**

1FA3D   FLAG SYMBOL NATIONAL FLAG AND CIVIL AND WAR ENSIGN
• Text: CSW/C*W

1FA3E   FLAG SYMBOL NATIONAL FLAG AND CIVIL AND STATE ENSIGN
• Text: CSW/CS*

1FA3F   FLAG SYMBOL NATIONAL FLAG AND ENSIGN
• Text: CSW/CSW

Flag typology symbols

Additional symbols proposed by FIAV, but never officially adopted.

1FA40   FLAG TYPOLOGY SYMBOL NORMAL
• Normal or de jure version of flags, or obverse side

1FA41   FLAG TYPOLOGY SYMBOL PROPOSED
• Design proposed but not officially adopted

1FA42   FLAG TYPOLOGY SYMBOL RECONSTRUCTION
• Design is a reconstruction based on observations

1FA43   FLAG TYPOLOGY SYMBOL REVERSE
• Reverse side of flag

1FA44   FLAG TYPOLOGY SYMBOL VARIANT
• Design is an acceptable variant

1FA45   FLAG TYPOLOGY SYMBOL ALTERNATE
• Alternative version of flag

1FA46   FLAG TYPOLOGY SYMBOL DE FACTO
• De facto version of flag

1FA47   FLAG TYPOLOGY SYMBOL TWO AND SIDED
• Flag has different designs on its obverse side and its reverse side

1FA48   FLAG TYPOLOGY SYMBOL SINISTER
• Obverse side meant to be hoisted with pole to the observers right

1FA49   FLAG TYPOLOGY SYMBOL AUTHORISED
• Design officially authorized to represent nation by government of that nation

1FA4A   FLAG TYPOLOGY SYMBOL HISTORICAL
• Design used in the past, but now abandoned

1FA4B   FLAG TYPOLOGY SYMBOL MIRROR
• Reverse side is mirror image of obverse side

1FA4C   FLAG TYPOLOGY SYMBOL EQUAL
• Reverse side is congruent with obverse side

1FA4D   FLAG TYPOLOGY SYMBOL NO REVERSE INFO
• Information on reverse side is not available

1FA4E   FLAG TYPOLOGY SYMBOL VERTICAL NORMAL
• Flag can be hung vertically by hoisting on a normal pole, then turning the pole 90°

1FA4F   FLAG TYPOLOGY SYMBOL VERTICAL ROTATED
• Flag can be hung vertically by rotating the design first

1FA50   FLAG TYPOLOGY SYMBOL VERTICAL UNKNOWN
• Vertical hoist method of flag is unknown

1FA51   FLAG TYPOLOGY SYMBOL VERTICAL INAPPLICABLE
• Design has no element that can be rotated

1FA52   FLAG TYPOLOGY SYMBOL VERTICAL EXCLUSIVE
• Flag can be hoisted vertically only