TO: UTC and ISO/IEC JTC1/SC2 WG2
FROM: Azzeddine Lazrek and Deborah Anderson (SEI, UC Berkeley)
RE: Proposal for PENTAGRAM characters
DATE: 14 May 2009

1. Background

It has come to our attention that the U+269D ⛝ OUTLINED WHITE STAR is not the symbol that customarily appears on the Moroccan flag. Instead, the pentagram is used (see http://www.crwflags.com/fotw/flags/ma.html).

After research into the pentagram and the interlaced pentagram symbols, all of which are used in mystical or occult contexts, it now is clear that one pentagram symbol and two different interlaced pentagrams symbols require encoding. Additionally, an annotation needs to be added to U+269D.

Below are examples of pentagrams that appear on the Moroccan flag.

(Source: http://www.crwflags.com/fotw/flags/ma.html)
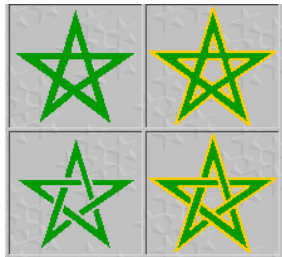
The solid pentagram, as found in the top row of the figure above, is also used in mysticism and occult contexts (see figures in section 6).

The interlaced version of the pentagram (bottom row) is the more common shape on the Moroccan flag. The interlaced pattern is that of the *right-handed* cinquefoil in topological knot theory (cf. http://en.wikipedia.org/wiki/Trefoil_knot and http://en.wikipedia.org/wiki/Cinquefoil_knot).

(Note that frimbriation -- fringe around the design in a different color [shown below in the right-hand column] -- is a variant that also occurs with the pentagram and interlaced pentagram.)

Ethiopia also has an interlaced pentagram on its flag (see http://www.crwflags.com/fotw/flags/et.html), but its interlacing is slightly different:

Ethiopia: Morocco:

The interlacing on the flag of Ethiopia follows that of a *left-handed* cinquefoil knot in topological knot theory. The pentagram on the Moroccan Naval Jack flag also shows this pattern (http://www.crwflags.com/fotw/flags/ma~n.html#j).

Mystical and occult uses show both interlacings (see section 7, below).

Because the two interlacing pentagrams are different topologically, we request two new interlaced pentagrams be added to the UCS, with names based on their topological equivalents (RIGHT-HANDED INTERLACED PENTAGRAM and LEFT-HANDED INTERLACED PENTAGRAM).

2. History of the Pentagram

The pentagram (or pentalpha, pentangle) is a symbol that has been in use since at least the time of the ancient Near East; it was already a common sign amongst the Sumerians ca. 3000 BC. The sign has conveyed different meanings to different groups. It continues in use today by modern religious groups such as Wiccans. Examples of the use of the pentagram and the interlaced pentagrams are included in sections 6 and 7, below.

3. Request for Annotation change

 269D OUTLINED WHITE STAR

• alternative form of the interlaced pentagram, a symbol of Morocco

4. Request for three new characters

 26E4 PENTAGRAM
= pentalpha, pentangle
• mystic or occult symbol
• symbol of various uses, including symbol on Moroccan flag
--> 2606 WHITE STAR

(Note: The glyph has been enlarged to show the shape more clearly.)

 26E5 RIGHT-HANDED INTERLACED PENTAGRAM

• mystic or occult symbol
• symbol of various countries, including Morocco
--> 269D OUTLINED WHITE STAR

(Note: The glyph has been enlarged to show the shape more clearly.)

 26E6 LEFT-HANDED INTERLACED PENTAGRAM

• mystic or occult symbol
• symbol of various countries, including Ethiopia
--> 269D OUTLINED WHITE STAR

(Note: The glyph has been enlarged to show the shape more clearly.)

5. Character Properties
26E4;PENTAGRAM;So;0;ON;;;;;N;;;;;
26E5;RIGHT-HANDED INTERLACED PENTAGRAM;So;0;ON;;;;;N;;;;;
26E6;LEFT-HANDED INTERLACED PENTAGRAM;So;0;ON;;;;;N;;;;;

5. References

Tresidder*, Jack, ed.*The Complete Dictionary of Symbols*. San Francisco: Chronicle Books, 2004.

Liungman, Carl G. *Dictionary of Symbols.* Santa Barbara: ABC-CLIO, 1991.

6. Examples of PENTAGRAM

a. PENTAGRAM
Source: *Dictionary of Symbols* by Carl G. Liungman, Santa Barbara: ABC-CLIO, 1991

(p. 298)

The **pentagram** or **pentacle** belongs to the group of some 20 basic gestalts in Western ideography. Despite the fact that ☆ consists of five straight lines it is still a single entity, a holistic design. It is quite unlikely that this design was discovered by chance. (For a discussion of

(p. 299)

In Western ideography ☆ appears on some of the crusader knights' coats of arms. During the Middle Ages, however, ☆ began to be associated with magic and the Devil. In Nordic countries it was drawn on doors and walls as *protection against trolls and evil.* When the sign

b. PENTAGRAM
Source: *Dictionary of occult, hermetic, and alchemical sigils*, by Fred Gettings, London/Boston: Routledge and Kegan Paul, 1981

PENTAGRAM   *Occ.*   One of the recurrent sigils of occultism, with very
    many different levels of meaning: ⛤   AGRIPPA 1531 reproduces it in
    symbolic form as representative of the form of the human body, an idea
    which is expressed in BLAVATSKY 1888, and (through the connexion of the
    sigil with the planet Venus) in SOMMERHOFF 1701, and in SCHULTZ 1963
    (from a heliocentric point of view) - but see MICROCOSMIC PENTAGON.
    STEINER 1906 treats it as an ancient sigil of the *Third Logos* and of
    the Microcosm itself.   In the esoteric tradition the *pentagram* is

7. Examples of INTERLACED PENTAGRAMS

a RIGHT-HANDED INTERLACED PENTAGRAM
(Source: *Essential Wicca* by Paul Tuitéan and Estelle Daniels, Freedom, CA: Crossing Press, 2001.)

Pentacle

pentagram—The five-pointed interlaced star that
is the symbol for the religion and faith of Wicca,
much as the cross is the symbol for Christianity,
the star and crescent for Islam, or the Star of
David for Judaism. The five points symbolize the
five elements: Air, Fire, Water, and Earth, with
the top point symbolizing Spirit. It is also used as
a mandala and magickal symbol in various
magickal and/or spiritual Traditions. It also sym-
bolizes a person, with the head at top and out-
stretched arms and legs as the other four points.
The pentagram (or five-petaled "flower") is also
an ancient symbol of the planet Venus, related to
its orbit and its pattern in the zodiac, retrograd-
ing five times in eight years.

b. LEFT-HANDED INTERLACED PENTAGRAM
(Source: *The Complete Dictionary of Symbols* by Jack Tresidder, ed., San Francisco: Chronicle Books, 2004)

*The mystic pentagram or pentacle – a
five-pointed star also known as the
"Seal of Solomon".*

c. LEFT-HANDED INTERLACED PENTAGRAM of occultist and magician Eliphas Lévi.
(Source: *Dogme et Rituel de la Haute Magie* Part I: The Doctrine of Transcendental Magic by Eliphas Lévi [Alphonse Louis Constant], translated by A. E. Waite, Rider & Company, England, 1896)

ISO/IEC JTC 1/SC 2/WG 2
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646[1]
Please fill all the sections A, B and C below.
Please read Principles and Procedures Document (P & P) from http://www.dkuug.dk/JTC1/SC2/WG2/docs/principles.html **for guidelines and details before filling this form.**
Please ensure you are using the latest Form from http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html**.**
See also http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html **for latest *Roadmaps*.**

A. Administrative

1. **Title:** Proposal for three PENTAGRAM characters
2. Requester's name: *Azzeddine Lazrek and Deborah Anderson (SEI)*
3. Requester type (Member body/Liaison/Individual contribution): *Liaison contribution*
4. Submission date: *14 May 2009*
5. Requester's reference (if applicable):
6. Choose one of the following:
   This is a complete proposal: *Yes*
   (or) More information will be provided later:

B. Technical – General

1. Choose one of the following:
   a. This proposal is for a new script (set of characters): *No*
      Proposed name of script:
   b. The proposal is for addition of character(s) to an existing block: *Yes*
      Name of the existing block: *Miscellaneous Symbols*
2. Number of characters in proposal: *3*
3. Proposed category (select one from below - see section 2.2 of P&P document):
   A-Contemporary   *X*   B.1-Specialized (small collection)   B.2-Specialized (large collection)
   C-Major extinct   D-Attested extinct   E-Minor extinct
   F-Archaic Hieroglyphic or Ideographic   G-Obscure or questionable usage symbols
4. Is a repertoire including character names provided?
   a. If YES, are the names in accordance with the "character naming guidelines"
      in Annex L of P&P document? *Yes*
   b. Are the character shapes attached in a legible form suitable for review? *Yes*
5. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard? *TrueType*
   If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used: *Azzeddine Lazrek*
6. References:
   a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided? *Yes*
   b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached? *Yes*
7. Special encoding issues:
   Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)? *No*

8. Additional Information:
Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at http://www.unicode.org for such information on other scripts. Also see http://www.unicode.org/Public/UNIDATA/UCD.html and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before? *No*
    If YES explain

2. Has contact been made to members of the user community (for example: National Body,
    user groups of the script or characters, other experts, etc.)? *Yes*
        If YES, with whom? *Azzeddine Lazrek in Morocco*
        If YES, available relevant documents:

3. Information on the user community for the proposed characters (for example:
    size, demographics, information technology use, or publishing use) is included? *See proposal*
    Reference:

4. The context of use for the proposed characters (type of use; common or rare) *Common*
    Reference:

5. Are the proposed characters in current use by the user community? *Yes*
    If YES, where? Reference: *See references in document*

6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely
    in the BMP? *No*
        If YES, is a rationale provided?
        If YES, reference:

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

8. Can any of the proposed characters be considered a presentation form of an existing
    character or character sequence? *No*
        If YES, is a rationale for its inclusion provided?
        If YES, reference:

9. Can any of the proposed characters be encoded using a composed character sequence of either
    existing characters or other proposed characters? *No*
        If YES, is a rationale for its inclusion provided?
        If YES, reference:

10. Can any of the proposed character(s) be considered to be similar (in appearance or function)
    to an existing character? *No*
        If YES, is a rationale for its inclusion provided?
        If YES, reference:

11. Does the proposal include use of combining characters and/or use of composite sequences? *No*
    If YES, is a rationale for such use provided?
        If YES, reference:
    Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?
        If YES, reference:

12. Does the proposal contain characters with any special properties such as
    control function or similar semantics? *No*
        If YES, describe in detail (include attachment if necessary)

13. Does the proposal contain any Ideographic compatibility character(s)? *No*
    If YES, is the equivalent corresponding unified ideographic character(s) identified?
        If YES, reference: