### Kawasaki's Rose – Alternative Precreasing Method

Sequence developed by Kevin Hines 9/00

This method was developed specifically to make the folding process for the rose as efficient as possible, while still assuring accuracy and consistency.

The folding sequence published in Origami for the Connoisseur uses a grid of complete folds. The folder must identify which segments of these folds to use, and which direction (mountain of valley) to fold them. Because of the high number of folds which need to be collapsed simultaneously, and the complexity of visualizing which grid folds to use and which NOT to use (and which direction to fold them,) the collapsing process is difficult at best, especially for the novice folder. I will be willing to bet that there are very few folders who have learned how to fold the rose from the previously published diagrams alone.

The inefficiency of this method is obvious. Why make more folds in the paper than you really need to form the completed rose? Why make some folds in one direction, only to "change your mind" later when you collapse the model? Paper has memory- a very good memory, actually. If a fold has been made in one direction, the paper will remember which direction it wants to fold on that crease. If you can make the paper remember how it wants to fold, the collapsing process becomes much simpler. As soon as you reverse (or neutralize) a fold, you rob that crease of any memory. Ergo, a precreasing pattern which contains only folds made in the proper direction results in a model that is MUCH easier to collapse.

This notion has led me to develop a precreasing sequence in which only folds that are needed for the collapse are formed to begin with. The sequence is "self-indexing;" that is, there is no need for landmarks other than previous folds in the sequence. Additionally, all folds are folded in their correct direction (sense,) so the memory in the creases eliminates the need for as thorough an understanding of the collapse- no creases will need to be reversed. To take full advantage of the crease memory, I suggest folding the rose out of stiffer-than-usual paper- I find Canson works very well. The end result is very clean, looking almost wet-folded.

#### **Key to Diagrams**

Folds are diagrammed using Yoshizawa-Randlett notation.

All folds are executed as valley folds, so the folds can be made on a surface. (I would recommend folding "in-hand" however- it is much faster once you get the hang of it, and you can do it anywhere.)

Begin each step colored side up or down as indicated, and when you are done you will have both mountains and valleys. (If using solid-colored paper, designate one side as the "colored" side.)

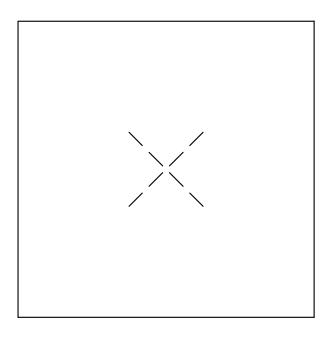
Each step must be executed four times. Rotate the model as you go, so each fold in a particular step is executed identically.

The "map" diagram illustrates all folds up to and including the current step.

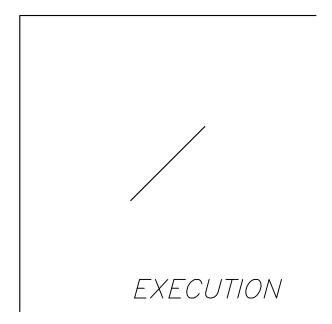
The "execution" diagram illustrates the execution of each fold, indicating only the part of the fold which should be creased (drawn as an "orphaned" solid line.) Do not extend creases more than necessary.

Once the precrease is complete, the rose may be finished as usual.

STEP 1 COLOR UP

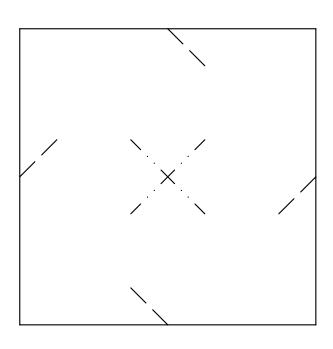


MAP

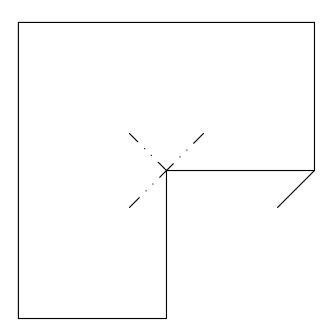


BEGIN WITH COLORED SIDE UP. CORNER TO OPPOSITE CORNER (2X) CREASE ONLY MIDDLE QUARTER



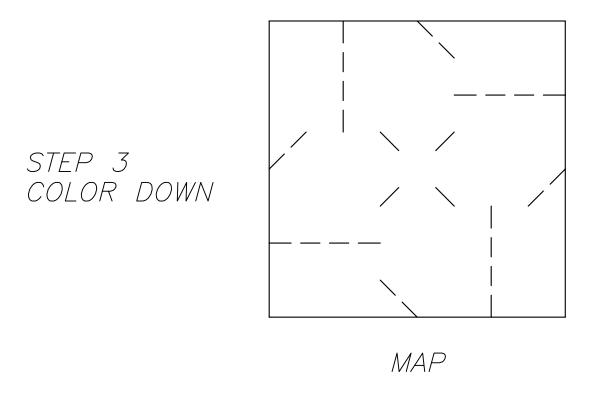


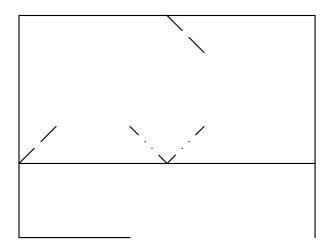
MAP



EXECUTION

TURN COLORED SIDE DOWN CORNER TO MIDDLE (4X) CREASE ONLY RIGHT HAND QUARTER

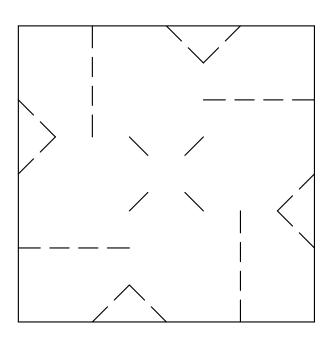




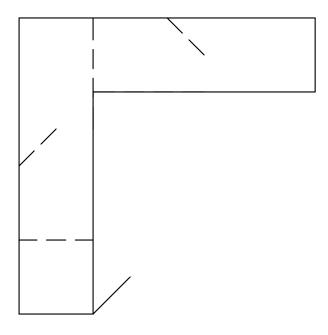
EXECUTION

BOTTOM EDGE TO CENTER (4X) CREASE ONLY LEFT HAND THIRD

STEP 4 COLOR DOWN

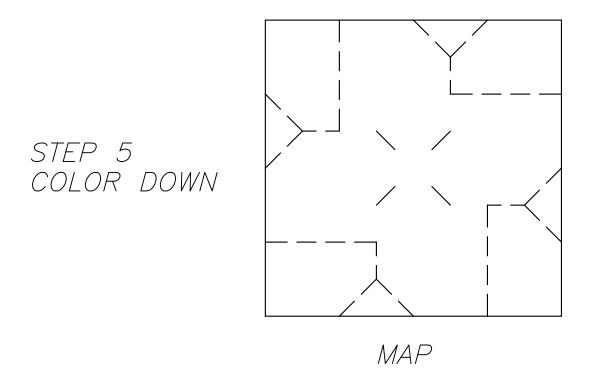


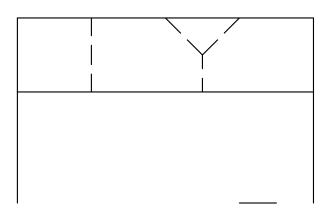
MAP



EXECUTION

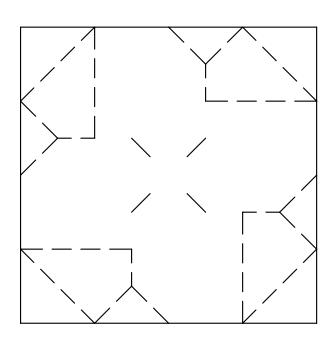
CORNER TO OPPOSITE QUARTER POINT(4X) CREASE ONLY LEFT HAND END



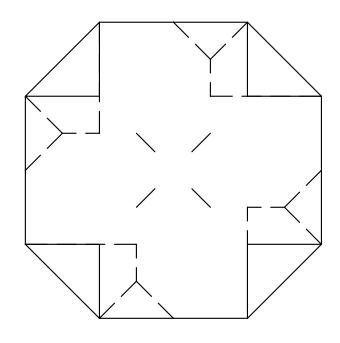


LOWER EDGE TO UPPER QUARTER LINE (4X) CREASE ONLY THE EIGHTH INDICATED

STEP 6
COLOR DOWN

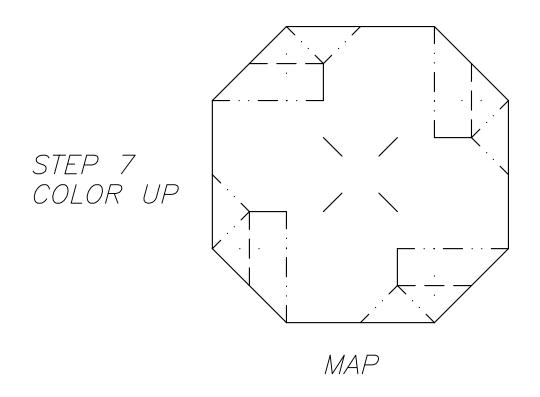


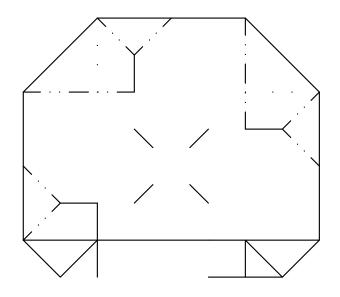
MAP



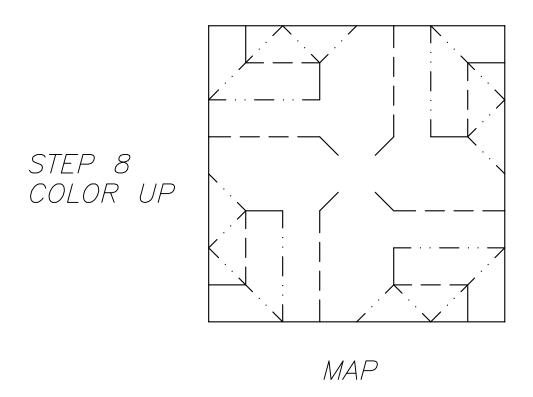
EXECUTION

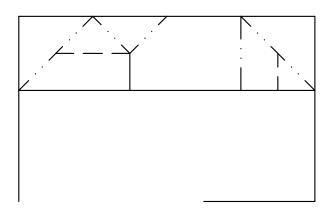
CORNER TO NEAR QUARTER POINT(4X)
CREASE FULLY AND LEAVE FOLDED



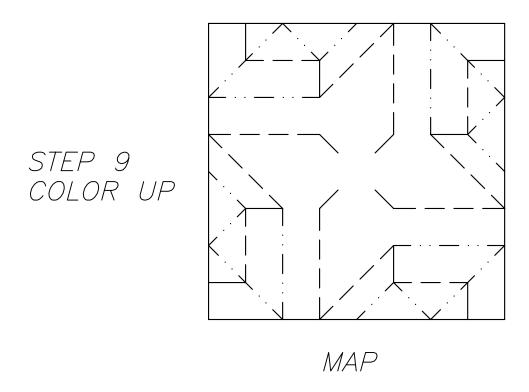


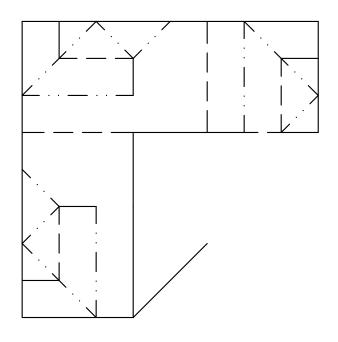
TURN COLORED SIDE UP BOTTOM EDGE TO NEAR QUARTER LINE (4X) CREASE QUARTER INDICATED, 2 LAYERS.





OPEN ALL CREASES. BOTTOM EDGE TO FAR QUARTER LINE (4X) CREASE RIGHT HAND THREE EIGHTHS



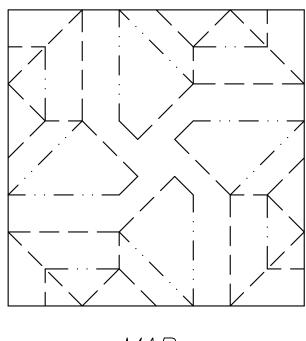


EXECUTION

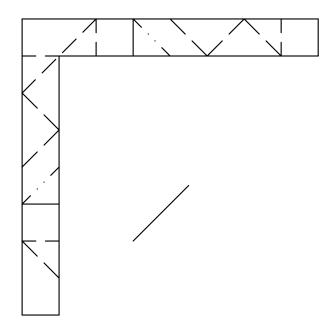
CORNER TO FAR 3/8 POINT (4X)

CREASE LEFT HAND THIRD

STEP 10 COLOR DOWN

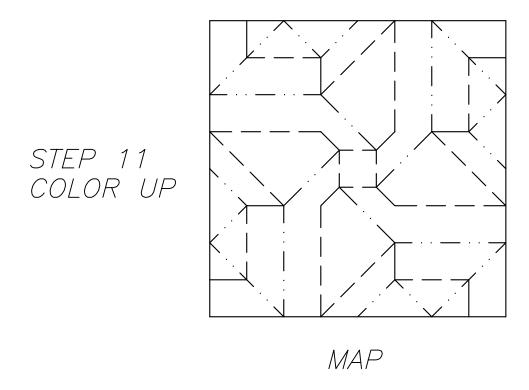


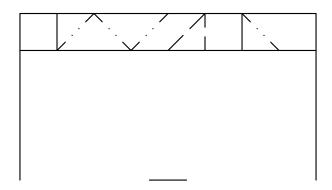
MAP



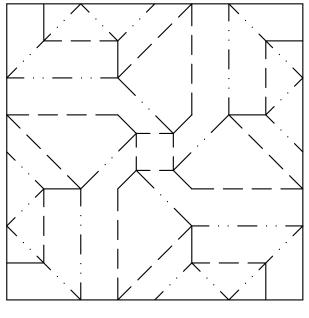
**EXECUTION** 

TURN COLORED SIDE DOWN CORNER TO FAR 1/8 POINT (4X) CREASE QUARTER INDICATED

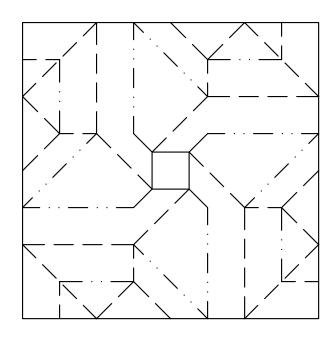




TURN COLORED SIDE UP LOWER EDGE TO FAR EIGHTH LINE (4X) CREASE MIDDLE EIGHTH



MAP - COLOR UP



MAP - COLOR DOWN

FINISHED PRECREASE ALL FOLDS IN PLACE COLLAPSE AND FINISH MODEL AS USUAL...