The following cutting information has to do with the Jeff Graham's "Utopia," which is the Masters Design for 2002 USFG SINGLE STONE COMPETITION.

Ralph Mathewson CUT the stone; Steps 18, Step 20, Step 19 were cut in that order in order to establish the culet.

Comments from Ralph Mathewson, USFG Competition Co-chair: " In order to establish the culet, the steps for cutting should be as follows: Complete Step 18, then go immediately to Step 20 (which will establish the culet) then cut Step 19. None of the other Steps were out of order."

Ralph's angles were only hundreths off of what Jack Gross found via GemCad. Ralph recommends that you use Jack's angles where they disagree with the publish design.

The following is from Jack Gross regarding Jeff Graham's "Utopia":

"If the published pavilion cutting sequence is followed in assembling the sequence in GemCad, some of the meets will appear to be off. However, this seems to be the
result of a computing "glitch" in GemCad. If the pavilion cutting sequence is changed, the meets come together OK. The pavilion cutting sequence that produced a GemCad plan comparable to the design as published in our newsletter is as follows:

P-1; P-10; P-11; P-12; P-13; P-14; P-15; P-16; P-17; P-2; P-3; P-4; P-5; P-6; P-7; P-8; P-9; P-18; P-20; P-19; P-21; P-22; P-23; P-24.

NOTE: This GemCad cutting sequence thing apparently does not affect the actual cutting of the stone but cutters should be aware of the GemCad peculiarity.

This sequence in GemCad produced an L/W ratio of 1.435 which is off from the 1.436 value in the published diagram but is close enough.

The only changes to get "perfect" pavilion meetpoints (in GemCad) is facet P-19, which is changed from 39.00 to 39.10, and facet P-24 which is changed from 40.45 to 40.46. Facet P-19 is the facet that the "tweaking" note referred to in the newsletter. In some copies of the design that are in circulation, pavilion facet P-19 is shown with an open meetpoint at the culet. Changing the angle from 39.00 to 39.10 corrects this open meetpoint."