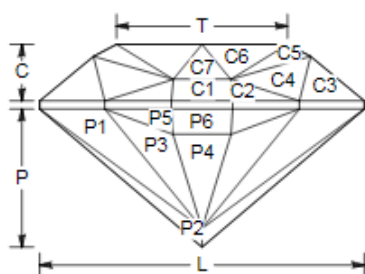
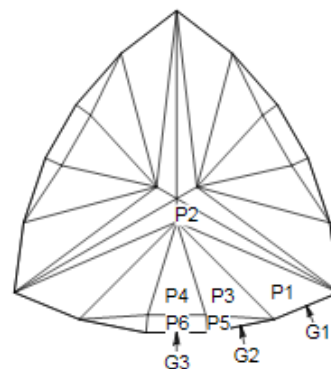
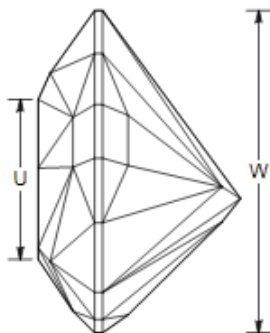
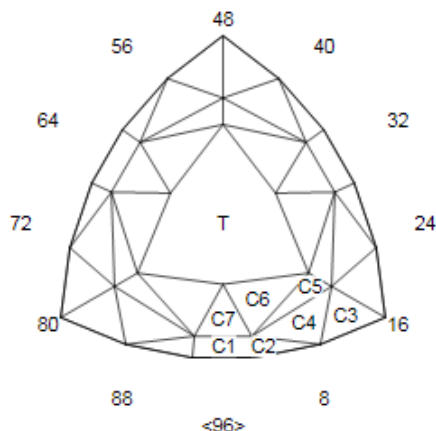




# United States Faceters Guild

## 2016 Single Stone Competition

### MASTER CLASS



#### Event Horizon - 2016 USFG Master

by Arya Akhavan (November 2013)

Angles for R.I. = 1.540

67 + 15 girdles = 82 facets

3-fold, mirror-image symmetry

96 index

$L/W = 1.010$   $T/W = 0.533$   $U/W = 0.496$

$P/W = 0.429$   $C/W = 0.175$

$Vol./W^3 = 0.195$



#### PAVILION

P1	43.19°	06-26-38-58-70-90	Cut to centerpoint.
G1	90.00°	06-26-38-58-70-90	Set stone size.
P2	41.50°	07-25-39-57-71-89	Meet P1, G1
P3	44.04°	05-27-37-59-69-91	Meet P1, P2
P4	45.37°	96-32-64	Meet P1, P2, P3
P5	55.00°	03-29-35-61-67-93	Meet P1, G1, P3
P6	55.00°	96-32-64	Meet P3, P4, P5
G2	90.00°	03-29-35-61-67-93	Level girdle.
G3	90.00°	96-32-64	Level girdle.

#### CROWN

C1	45.00°	96-32-64	Set girdle width.
C2	45.00°	03-29-35-61-67-93	Level girdle.
C3	41.95°	06-26-38-58-70-90	Level girdle.
C4	39.84°	04-28-36-60-68-92	Meet G1, G2, C2, C3
C5	34.53°	03-29-35-61-67-93	Meet C1, C2, C4; C3, C4
C6	32.36°	02-30-34-62-66-94	Meet C1, C2, C4, C5
C7	33.98°	96-32-64	Meet C1, C2, C4, C5, C6
T	0.00°	Table	Meet C5, C6; C6, C7

Pay close attention to the generation of the girdle outline of this design. Not only is it exceptionally difficult, but because it's a multi-step process, cutting the stone to the required size will also be particularly difficult.

Material: quartz, any color, natural or man-made

Size: width 12 mm +/- 0.1, girdle thickness 0.3 mm +/- 0.1

The Master Class is designed for professional gemcutters and highly skilled hobbyists. Success with this design will require meticulous attention to detail, flawless meetpoints, and perfection on the girdle outline.

To certify as a Master, you must score a minimum of 93. To be eligible for awards, you must score a minimum of 95. The 1<sup>st</sup>, 2<sup>nd</sup>, & 3<sup>rd</sup> place rankings will go to the top 3 scores. A score of 95 or above will allow a Master to elect to move up to the Grand Master competition in future years. The 1<sup>st</sup> place winner of the Master Class MUST move up to the Grand Master competition if he or she chooses to compete again.