

**2015
ANNUAL
FACETING
COMPETITION**



**SCHEDULE
CONDITIONS
DIAGRAMS &
ENTRY FORM**

**2015 AUSTRALIAN FACETORS' GUILD COMPETITION
CONDITIONS, TROPHIES, DIAGRAMS & ENTRY FORM**

CONDITIONS OF ENTRY:

1. Unless otherwise stated in these Conditions, this competition is staged in accordance with the Competition & Judging Manual No. 7, issued April 2006 by the Australian Federation of Lapidary & Allied Crafts Association (AFLACA)
2. This is a Level 3 competition as defined in the AFLACA Judging & Rules Manual on page 6. Copies of the Manual are available from the AFG Supplies Officer, whose address is shown on the supplies order form in Facet Talk.
3. The competition is conducted in three Divisions – **NOVICE, INTERMEDIATE & OPEN:**
NOVICE DIVISION entrants should carefully read Rule B4.2 on page 6 of the Manual.
INTERMEDIATE DIVISION entrants should carefully read Rule B4.3 on page 7 of the Manual.
OPEN DIVISION entrants should carefully read Rule B4.4 on page 7 of the Manual.
4. Section numbers used in this competition reflect the numbers in the AFLACA Manual; e.g. In Section N8A.1, N = Novice Division, 8A is Standard Round Brilliant with Continuous Girdle, as defined on page 44 of the Manual: 1 means the first section in Novice Division.
5. Competitors are permitted only one entry in each Section for which they are eligible.
6. The entry fee for each entry by AFG members is \$1.00, and the fee for non-members is \$2.00.

Entry fees for **Australian Entrants Only** may be made by means of, Cheque, Australia Post money order or by Electronic Funds Transfer. **DO NOT send cash through the mail.** If using EFT you will need to transfer money to **Bendigo Bank BSB 633000 Account number 145648416 Swift Code BENDAU3B**

Overseas entrants please note: Fees may be paid by Electronic Funds Transfer into the Guild's Group Bank Account **Bendigo Bank BSB 633000 Account number 145648416 Swift Code BENDAU3B** Otherwise only use Western Union or Bank Draft payable to the Australian Facetors' Guild in Australian dollars. No personal cheques or cash can be accepted.

7. The Competition Committee reserves the right to change the competition Division or Section of entries where it is deemed appropriate under the rules governing this competition. Competitors are urged to consult the AFLACA Manual and this Schedule before completing the official Entry Form in this Schedule.
8. Boxes containing entries must be clearly marked with the Section number in this Schedule, with the name colour of the gem material. The abbreviation M/M is acceptable for man-made material.
The entrant's name must NOT appear on the box, but MUST be enclosed separately for identification purposes.
9. **Competitors are totally responsible for postage, insurance & cost of return postage for their entries. All entries will be return posted as you indicate on the entry form.**
Overseas entrants should note: (1) Packages should be labeled "Lapidary Competition Entries to be returned to sender", with no reference to gemstones. (2) To minimize possible difficulties with Australian Customs, it is recommended that a copy of the competition entry form be included with the stones and only **nominal value** be placed on the customs declaration form which must be fixed to the package.
10. Where **Coloured** material is specified, it must be **obviously coloured in the cut stone.**
11. Except for 'Specified Size Sections' the minimum size in all other Sections is 6mm on shortest axis of outline shape when viewed from above. Stones up to and including 0.1mm below minimum size, as measured by the Judge, will be eligible. *Stones which are more than 0.1mm below minimum size will be ineligible.* Minimum size does not apply to 'Specified Size' sections.
12. Entries, with official Entry Form and appropriate Entry Fees and return postage (where applicable), must be received no later than **13th June 2015** to:
Competition Co-ordinator at P.O. Box 462, Wentworthville, N.S.W. 2145. We recommend Australian entries be mailed no later than **6/06/2015.**
Entrants wanting confirmation of receipt of entries **MUST** enclose stamped, self-addressed envelope with entries, or by nominating an e-mail address on the entry form.

CONDITIONS OF ENTRY (cont):

13. All entries will be displayed and results announced at the AFG Annual Seminar held in September 2015
14. Judging sheets may be collected at noon on the Saturday of the Seminar.
15. Entries, medallions and keeper trophies will be available for collection from 2.00pm on the Sunday of the Seminar. Entries and awards not collected by this time will be mailed to entrants by 31/10/2015.

SPECIAL CONDITIONS:

All chosen designs have either been previously used in competitions or are known to have been successfully cut using instructions given. Please note the following:

- [A] Angles are not judged and competitors may vary those supplied in this Schedule **PROVIDED** this does not change meet points or facet index.
- [B] All designs must be cut according to the diagram, that is the facet position and meet points must conform to the diagram. However facet sizes may be altered if necessary to achieve meet points.
- [C] Entrants may vary cutting sequence if desired.

TROPHY SECTIONS & CONDITIONS:

- a. **Open Champion - Quality Gem Rough Trophy** – Keeper donated by **Glenn Huntley**: Entrant with the highest aggregate points score in Open Sections 1, 2, 3 & 4.
- b. **Open Runner - up – Bob Chipperfield Trophy - Second** to a. above. Keeper donated by Victorian Facetors' Group.
- c. **Intermediate Champion – Tony Annear Trophy – Keeper** provided by the Australian Facetors' Guild. Entrant with highest aggregate points score in Intermediate Sections 1, 2, 3 & 4.
- d. **Intermediate Runner - up - Ruth & Ray Grandcourt Trophy - Second** to c. above. Keeper donated by Ruth & Ray Grandcourt.
- e. **Novice Champion Facetor – Keith Pittaway Memorial Trophy** – Keeper donated by Ian Pittaway. Entrant with the highest aggregate points score for the best entries in Novice sections 1, 2, 3, and 4.
- f. **Novice Runner - up – Jim Goldacre Trophy** - Second to e. above. Keeper donated by Mr. Richard Dunn.
- g. **Champion State – Peter Collins Trophy** – (No Keeper): Aggregate of 2 Highest scores per State/Territory in each of Novice, Intermediate & Open Divisions, with a minimum of 3 entrants from a State or Territory contributing to the aggregate.
- h. **Highest Scoring Entry** – Gold Medallion: Highest scoring entry in any Section or Division.
- i. The selection/presentation of the above trophies is subject to the approval being obtained/given by each donor prior to the competition.
- j. Gold, Silver and Bronze medallions will be awarded to the Winner, Second place getter and Third place getter in each section.

2015 AUSTRALIAN FACETORS' GUILD COMPETITION SCHEDULE

NOTE: this schedule includes diagrams of all cuts nominated in the Sections below

NOVICE	INTERMEDIATE	OPEN
<u>Section N.8B.1</u> STD CUT STANDARD ROUND BRILLIANT with FACETED GIRDLE COLOURED MM SPINEL	<u>Section I.8A.1</u> STD CUT STANDARD ROUND BRILLIANT with CONTINUOUS GIRDLE COLOURED MM CORUNDUM	<u>Section O.10.1</u> MODIFIED STD CUT SPINWHEEL COLOURED MM SPINEL
<u>Section N.9A.2</u> STD CUT STANDARD OBLONG STEP CUT with CUT CORNERS COLOURED MM CORUNDUM	<u>Section I.10.2</u> MODIFIED STD CUT MB CHEVRON SQUARE CUSHION MM CORUNDUM	<u>Section O.10.2</u> MODIFIED STD CUT FEDERATIUN STARE 2 COLOURED CUBIC ZIRCONIA
<u>Section N.10.3</u> MODIFIED STD CUT MIXED CUT COLOURED CUBIC ZIRCONIA	<u>Section I.10.3</u> MODIFIED STD CUT TRIBBLE - A TRIANGULAR BRILLIANT SMOKEY QUARTZ	<u>Section O.10.3</u> MODIFIED STD CUT TRI HEART COLOURED MM SPINEL
<u>Section N.11.4</u> FANCY CUT 12 MAIN BRILLIANT No 6 TOPAZ	<u>Section I.11.4</u> FANCY CUT ROBIN CUBIC ZIRCONIA	<u>Section O.11.4</u> FANCY CUT CUBE ILLUSION TRIANGLE COLOURED CUBIC ZIRCONIA

Full size copies of this Schedule, complete with diagrams of all cuts, are available from the AFG Website: www.facetorsguild.com.au

2015 AFG FACETING COMPETITION ENTRY FORM

NAME: Miss, Mrs, Ms, Mr ----- **JUNIOR:** YES/NO

ADDRESS: -----(under 16 years at 1/09/15)

-----**POSTCODE** -----**PHONE**-----

E-mail ADDRESS:-----

NOVICE		INTERMEDIATE		OPEN	
Material	Colour	Material	Colour	Material	Colour
Section N.8B.1		Section I.8A.1		Section O.10.1	
Section N.9A.2		Section I.10.2		Section O.10.2	
Section N.10.3		Section I.10.3		Section O.11.3	
Section N.11.4		Section I.11.4		Section O.11.4	

Notes for Entrants:

1. Decide which Sections you are going to enter.
2. Write **Name of Material & Colour** in appropriate space for each Section entered.
3. Total the number of Sections entered and multiply by \$1.00 for AFG members, or by \$2.00 for non-members to calculate the Entry Fee.
4. Fill in the section below and send this form, your Entries and Entry Fee, plus cost of Return Post if required to:

Competition Committee P.O. BOX 462, WENTWORTHVILLE, N.S.W. 2145
To arrive not later than 13th June 2015

My entries will be collected at the Seminar. Entry Fee \$

Return postage by ORDINARY POST is enclosed.

Return postage by REGISTERED POST is enclosed. Return Postage \$

(N.B. Return post costs are identical to costs that you sent entries)

Overseas entrants only: Please use EFT, Western Union or bank draft payable to Australian Facetors' Guild in Australian Dollars, **Bendigo Bank BSB 633000 Account number 145648416 Swift Code BENDAU3B** (NO personal Cheques or Cash) This is important!

I declare that my entries are all my own work, and have not previously won a first prize in any competition at the same Level and Division.

Entrants Signature ----- **Date** -----/-----/-----

Official Use Only:

Entry Form & Entries Received: ----- Actual Entry Fee \$

Entries Checked ----- Return Postage \$

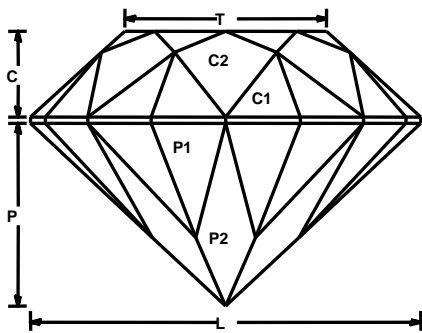
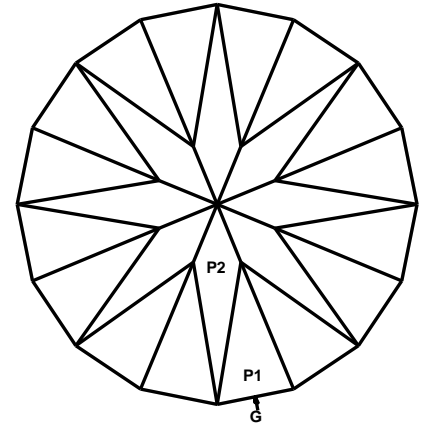
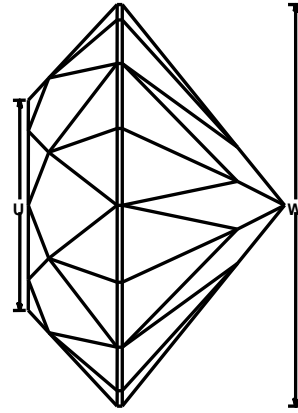
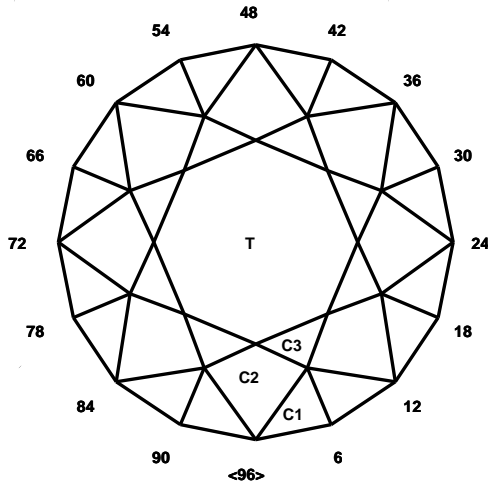
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AUSTRALIAN FACETORS' GUILD LIMITED – 2015 ANNUAL COMPETITION

NOVICE SECTION N.8B.1 – STANDARD BRILLIANT WITH FACETED GIRDLE

MATERIAL – COLOURED MM SPINEL

FACETS - 73: MEETS - 57 (Crown - 32, Pavilion - 25)



STANDARD BRILLIANT WITH FACETED GIRDLE

Angles for R.I. = 1.720

57 + 16 girdles = 73 facets

8-fold, mirror-image symmetry

96 index

L/W = 1.000 T/W = 0.516

P/W = 0.466 C/W = 0.218

Vol. $AW^3 = 0.240$

PAVILION

P1 43.00° 03-09-15-21-27-33-39-45-51-57-63-69-75-81-87-93

Cut to TCP

G 90.00° 03-09-15-21-27-33-39-45-51-57-63-69-75-81-87-93

Outline girdle

P2 41.00° 96-12-24-36-48-60-72-84

Cut to meet P1 - G

CROWN

C1 48.00° 03-09-15-21-27-33-39-45-51-57-63-69-75-81-87-93

Set girdle width

C2 43.00° 96-12-24-36-48-60-72-84

Cut to meet C1 - G

C3 27.00° 06-18-30-42-54-66-78-90

Cut to meet C1 - C2

T 0.00° Table

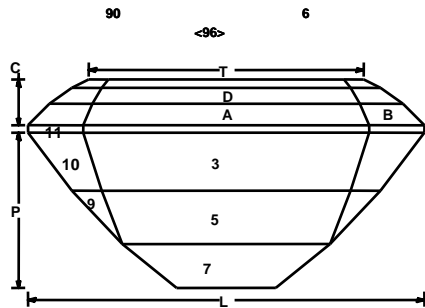
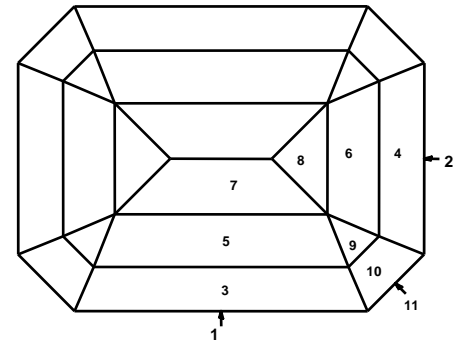
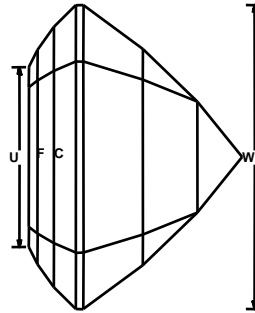
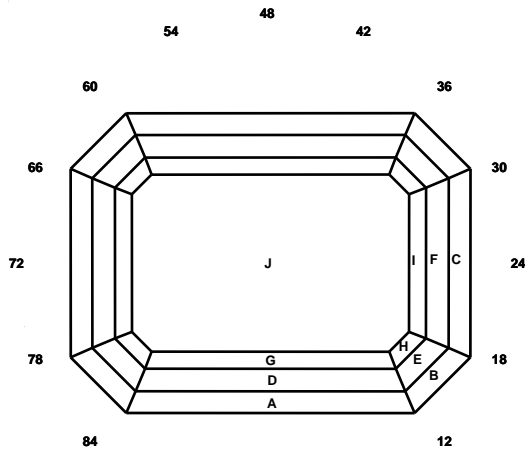
Cut to meet C3 - C2 - C3

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NOVICE SECTION N.9A.2 – STANDARD OBLONG STEP CUT WITH CUT CORNERS

MATERIAL – COLOURED MAN MADE CORUNDUM

FACETS - 53: MEETS - 44 (Crown - 24, Pavilion - 20)



STANDARD OBLONG STEP CUT WITH CUT CORNERS

Angles for R.I. = 1.76

45 + 8 girdles = 53 facets

2-fold, mirror-image symmetry

96 index

L/W = 1.25 T/W = 0.996 U/W = 0.662

P/W = 0.641 C/W = 0.171

Vol. /W³ = 0.602

PAVILION

1	90.00°	96-48	Size to width
2	90.00°	24-72	Size to length
3	53.00°	96-48	Locate girdle
4	53.00°	24-72	Level girdle, MP 1-2-3
5	46.00°	96-48	Cut as required
6	46.00°	24-72	MP 3-4-5
7	39.00°	96-48	Cut as required
8	39.00°	24-72	MP 5-6-7
9	46.00°	12-36-60-84	MP 5-6-7-8
10	53.00°	12-36-60-84	MP 3-5-9
11	90.00°	12-36-60-84	MP 1-3-10-2 level girdle

CROWN

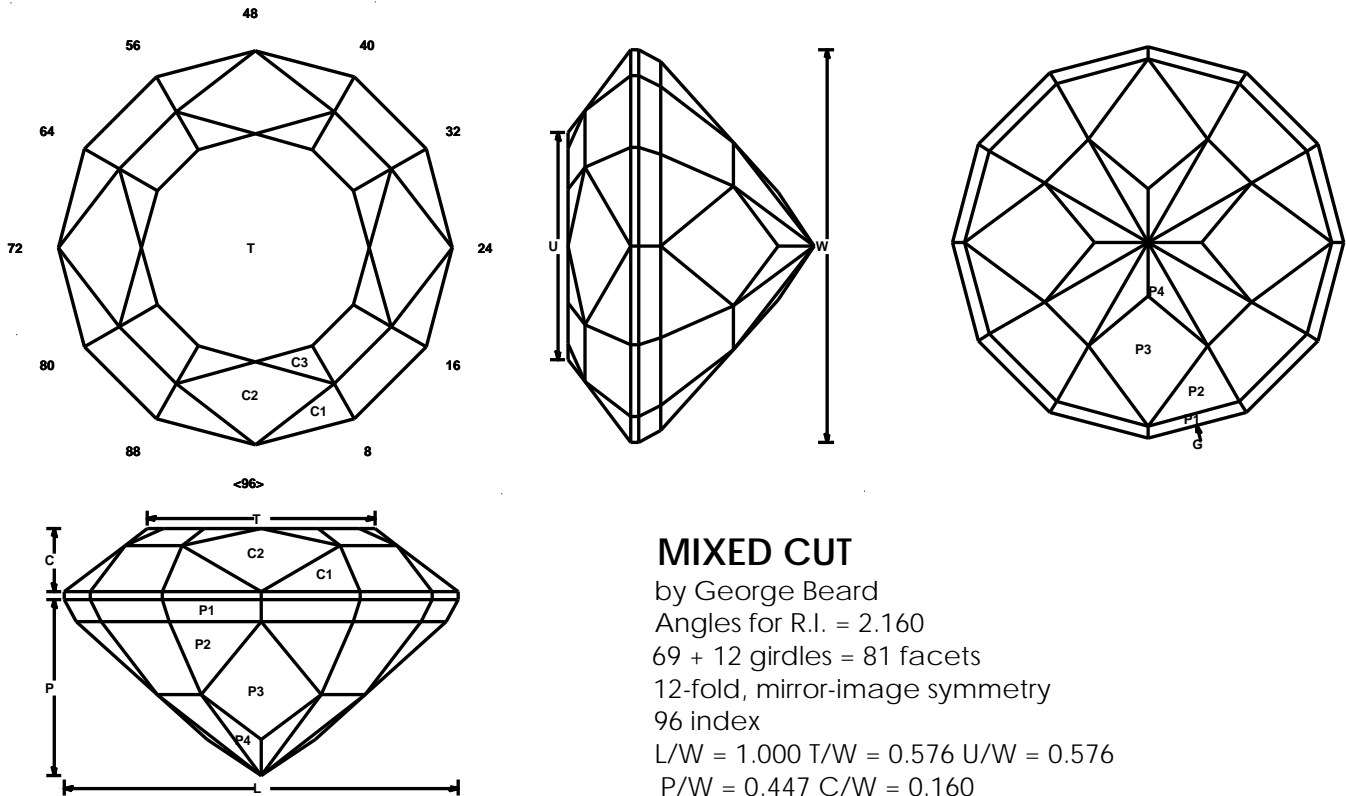
A	45.00°	96-48	Set girdle width
B	45.00°	12-36-60-84	Level girdle
C	45.00°	24-72	Level girdle
D	35.00°	96-48	Cut as required
E	35.00°	12-36-60-84	Level 2nd tier
F	35.00°	24-72	Level 2nd tier
G	25.00°	96-48	Cut as required
H	25.00°	12-36-60-84	Level 3rd tier
I	25.00°	24-72	Level 3rd tier
J	0.00°	Table	Cut as required to set 3rd tier & table

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NOVICE SECTION N.10.3 – MIXED CUT

MATERIAL – COLOURED CUBIC ZIRCONIA

FACETS - 81: MEETS - 57 (Crown - 24, Pavilion - 33)



MIXED CUT

by George Beard
 Angles for R.I. = 2.160
 69 + 12 girdles = 81 facets
 12-fold, mirror-image symmetry
 96 index
 $L/W = 1.000$ $T/W = 0.576$ $U/W = 0.576$
 $P/W = 0.447$ $C/W = 0.160$
 $Vol. /W^3 = 0.238$

PAVILION

P1	60.70°	04-12-20-28-36-44-52-60-68-76-84-92	Cut TCP
G	90.00°	04-12-20-28-36-44-52-60-68-76-84-92	Size stone
P2	49.30°	04-12-20-28-36-44-52-60-68-76-84-92	Leave small step facet at P1
P3	42.00°	96-24-48-72	Meet P1, P2
P4	35.20°	04-12-20-28-36-44-52-60-68-76-84-92	Meet P2, P3 form PCP

CROWN

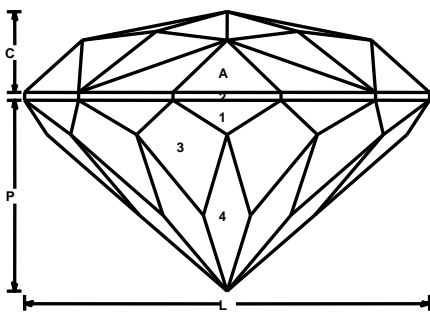
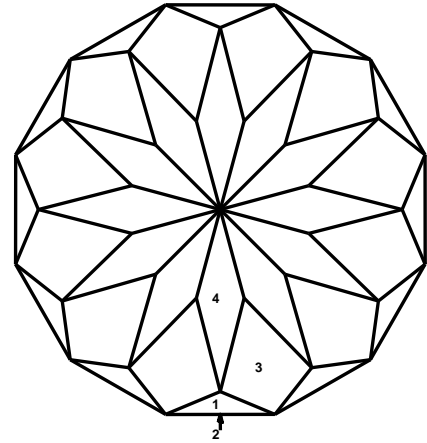
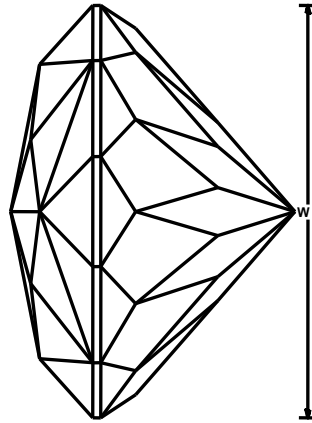
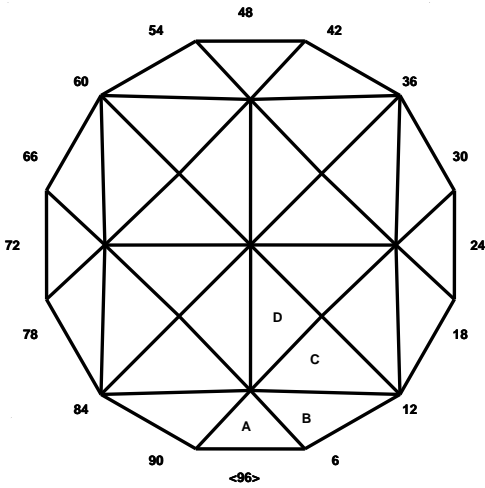
C1	50.00°	04-12-20-28-36-44-52-60-68-76-84-92	Set girdle thickness
C2	37.00°	96-24-48-72	Meet C1, G
C3	22.00°	04-12-20-28-36-44-52-60-68-76-84-92	Meet C1, C2
T	0.00°	Table	Meet C2, C3

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NOVICE SECTION N.11.4 – 12 MAIN ROUND BRILLIANT No 6

MATERIAL – TOPAZ

FACETS – 76: MEETS - 46 (Crown - 21, Pavilion - 25)



12 Main Round Brilliant No 6

by Evan A Williams

Angles for R.I. = 1.610

64 + 12 girdles = 76 facets

4-fold, mirror-image symmetry

96 index

L/W = 1.000 P/W = 0.472 C/W = 0.199

Vol./W³ = 0.232

PAVILION

1	57.00°	96-08-16-24-32-40-48-56-64-72-80-88	Form TCP
2	90.00°	96-08-16-24-32-40-48-56-64-72-80-88	Set size
3	44.00°	04-12-20-28-36-44-52-60-68-76-84-92	Meet at 1, 2
4	41.00°	96-08-16-24-32-40-48-56-64-72-80-88	Meet at 1,3 form PCP

CROWN

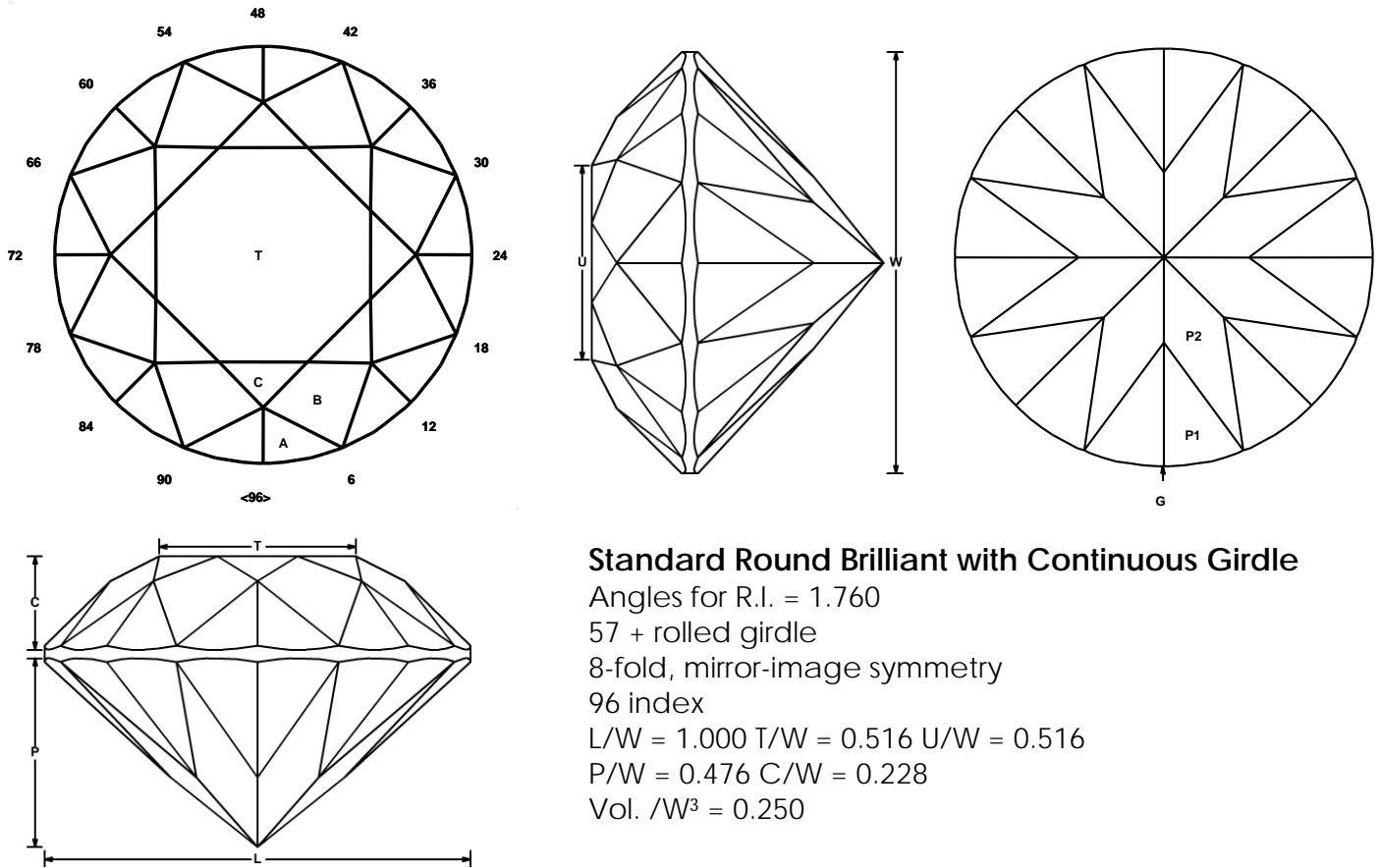
A	42.00°	96-24-48-72	Set girdle thickness
B	34.00°	08-16-32-40-56-64-80-88	Meet at A, 2
C	29.23°	10-14-34-38-58-62-82-86	Meet at B, 2
D	12.00°	06-18-30-42-54-66-78-90	Meet at A, B, C

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INTERMEDIATE SECTION I.8A.1 – STANDARD BRILLIANT WITH CONTINUOUS GIRDL

MATERIAL – COLOURED MM CORUNDUM

FACETS - 58 (57 + 1 Girdle): MEETS - 41 (Crown - 24, Pavilion - 17)



Standard Round Brilliant with Continuous Girdle

Angles for R.I. = 1.760

57 + rolled girdle

8-fold, mirror-image symmetry

96 index

$L/W = 1.000$ $T/W = 0.516$ $U/W = 0.516$

$P/W = 0.476$ $C/W = 0.228$

$Vol. /W^3 = 0.250$

PAVILION

P1	43.00° 03-09-15-21-27-33-39-45-51-57-63-69-75-81-87-93	Cut to TCP
G	90.00°	Cut to size, "rolled girdle"
P2	41.00° 06-18-30-42-54-66-78-90	MP, 1 at girdle, form PCP

CROWN

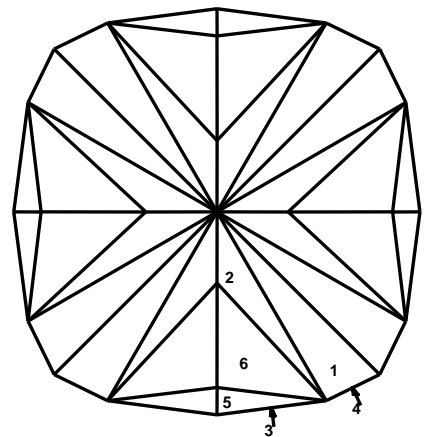
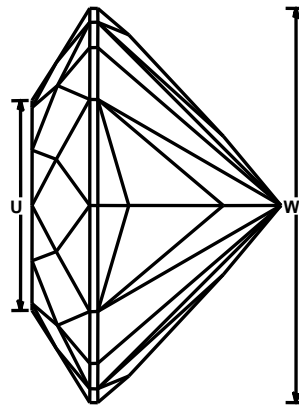
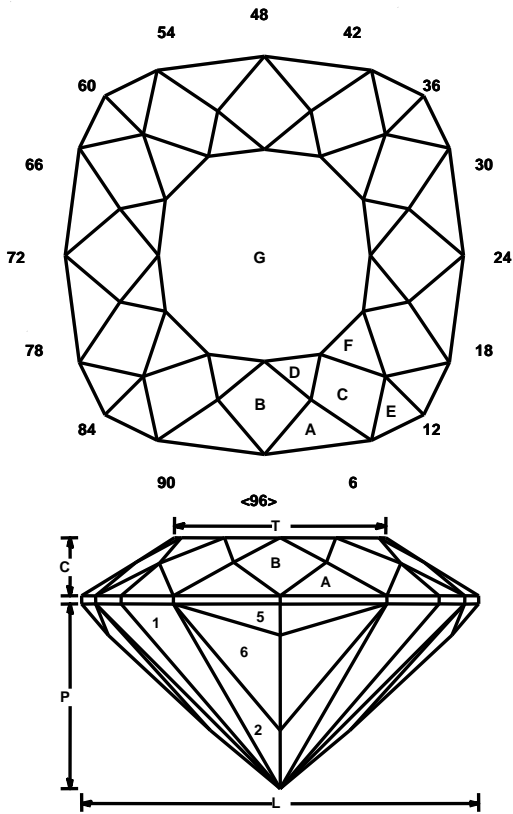
A	45.00° 03-09-15-21-27-33-39-45-51-57-63-69-75-81-87-93	Set girdle width
B	40.00° 06-18-30-42-54-66-78-90	MP, A at girdle
C	27.00° 96-12-24-36-48-60-72-84	MP, A-B
T	0.00°	Table

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INTERMEDIATE SECTION I.10.2 –MB CHEVRON SQUARE CUSHION

MATERIAL – MAN MADE CORUNDUM

FACETS 89: MEETS - 65 (Crown - 40, Pavilion - 25)



MB Chevron Square Cushion

By Alexandre Wolkonsky

Angles for R.I. = 1.760

73 + 16 girdles = 89 facets

4-fold, mirror-image symmetry

96 index

L/W = 1.000 T/W = 0.531 U/W = 0.531

P/W = 0.466 C/W = 0.146

Vol./W³ = 0.231

PAVILION

1	41.00°	07-17-31-41-55-65-79-89	Cut TCP
2	41.50°	05-19-29-43-53-67-77-91	Meet TCP
3	90.00°	02-22-26-46-50-70-74-94	Set size
4	90.00°	07-17-31-41-55-65-79-89	Level girdle line
5	50.00°	02-22-26-46-50-70-74-94	Meet 3 - 4
6	43.50°	03-21-27-45-51-69-75-93	Meet 3 - 4 - 5

CROWN

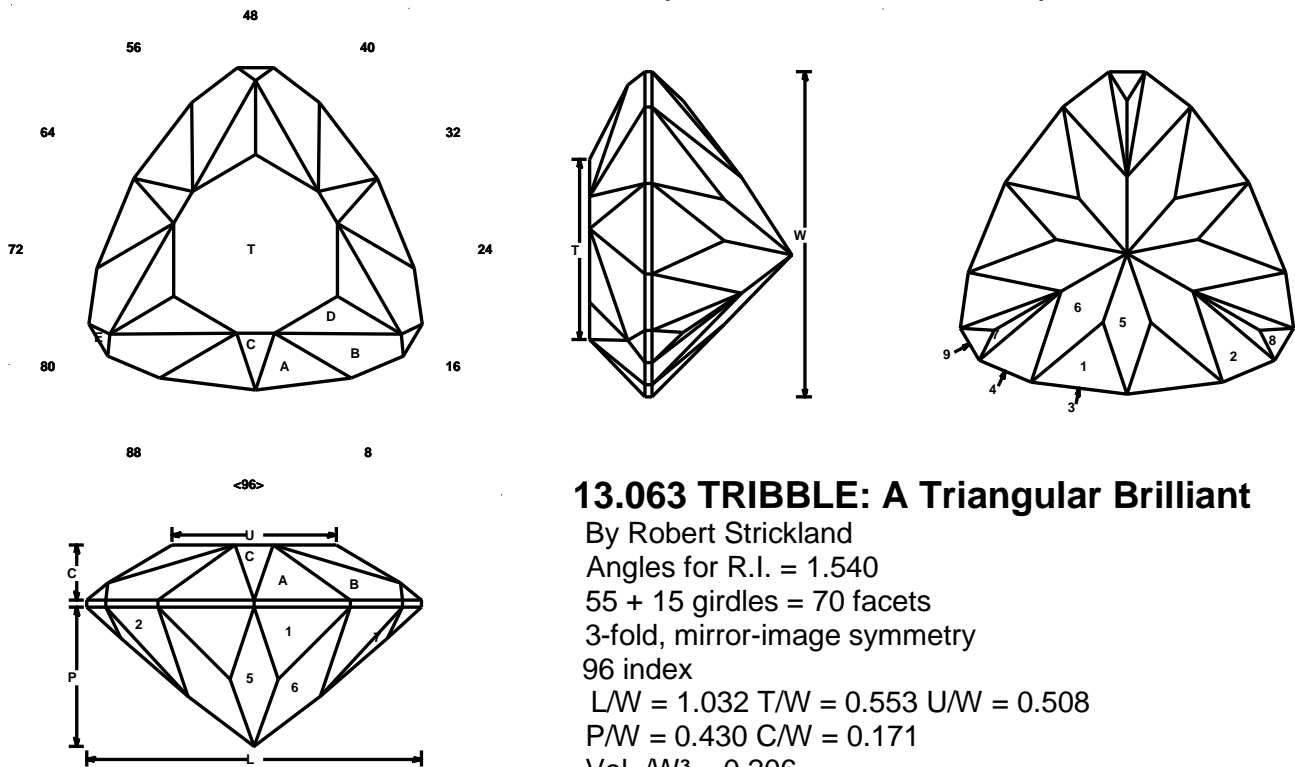
A	35.40°	02-22-26-46-50-70-74-94	Set girdle thickness
B	32.00°	96-24-48-72	Meet 3 - A
C	30.60°	05-19-29-43-53-67-77-91	Meet A - 3
D	28.50°	02-22-26-46-50-70-74-94	Meet A - B - C
E	32.90°	07-17-31-41-55-65-79-89	Meet 3 - 4 - C
F	21.91°	12-36-60-84	Meet E - C
G	0.00°	Table	Meet B - D, D - F

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INTERMEDIATE SECTION I.10.3 – TRIBBLE- A TRIANGULAR BRILLIANT

MATERIAL – SMOKEY QUARTZ

FACETS - 70: MEETS - 43 (Crown - 24, Pavilion - 19)



13.063 TRIBBLE: A Triangular Brilliant

By Robert Strickland

Angles for R.I. = 1.540

55 + 15 girdles = 70 facets

3-fold, mirror-image symmetry

96 index

$L/W = 1.032$ $T/W = 0.553$ $U/W = 0.508$

$P/W = 0.430$ $C/W = 0.171$

Vol. $/W^3 = 0.206$

PAVILION

1	46.00° 02-30-34-62-66-94	Cut to TCP
2	43.00° 06-26-38-58-70-90	Meet TCP of 1
3	90.00° 02-30-34-62-66-94	Cut to final size
4	90.00° 06-26-38-58-70-90	Meet 1-2-3 (level girdle)
5	44.50° 96-32-64	Meet 1-1-3-3
6	42.96° 04-28-36-60-68-92	Adjust to meet culet and 2-3-4
7	42.10° 07-25-39-57-71-89	Meet 2-2-6-6. Sensitive to angle!
8	47.00° 16-48-80	Meet 2-7-4
9	90.00° 16-48-80	Meet 2-7-4-8

CROWN

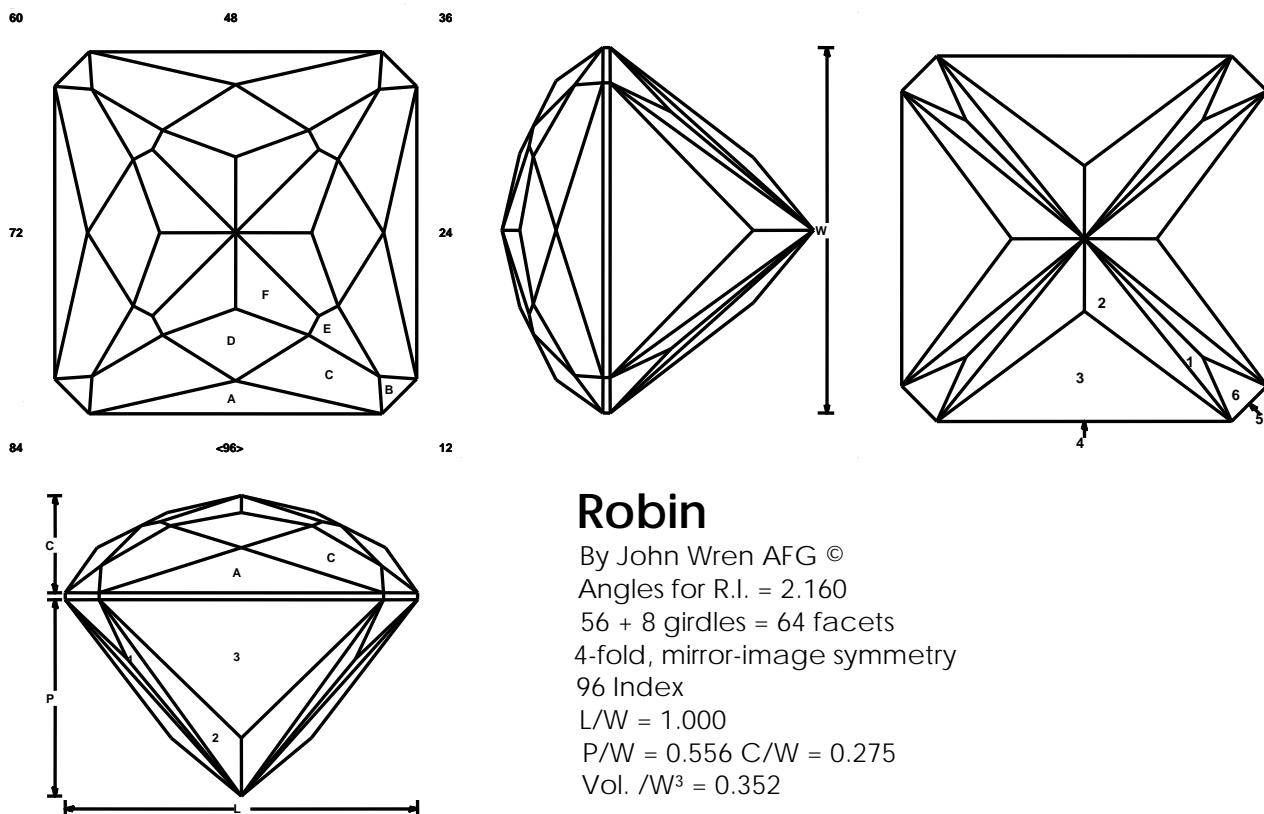
A	45.50° 02-30-34-62-66-94	Set girdle thickness
B	38.00° 06-26-38-58-70-90	Level girdle
C	44.00° 96-32-64	Meet 3-3-A-A
D	30.94° 08-24-40-56-72-88	Meet A-B-C
E	52.20° 16-48-80	Adjust to meet B-B-D-D and girdle
T	0.00° Table	Meet A-B-C-D

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INTERMEDIATE SECTION I.11.4 – ROBIN

MATERIAL – CUBIC ZIRCONIA

FACETS - 64: MEETS - 34 (Crown - 25, Pavilion - 9)



Robin

By John Wren AFG ©
 Angles for R.I. = 2.160
 56 + 8 girdles = 64 facets
 4-fold, mirror-image symmetry
 96 Index
 L/W = 1.000
 P/W = 0.556 C/W = 0.275
 Vol. /W³ = 0.352

PAVILION

1	41.00°	09-15-33-39-57-63-81-87	Cut to PCP
2	42.06°	06-18-30-42-54-66-78-90	Meet 1 at PCP
3	52.29°	96-24-48-72	Cut so meet point 1, 2, 3 is at girdle
4	90.00°	96-24-48-72	Meet 1, 2, 3 & level girdle
5	90.00°	12-36-60-84	Meet 1, 2, 3, 4
6	42.50°	12-36-60-84	Meet 1, 2, 3, 4, 5 & level girdle

CROWN

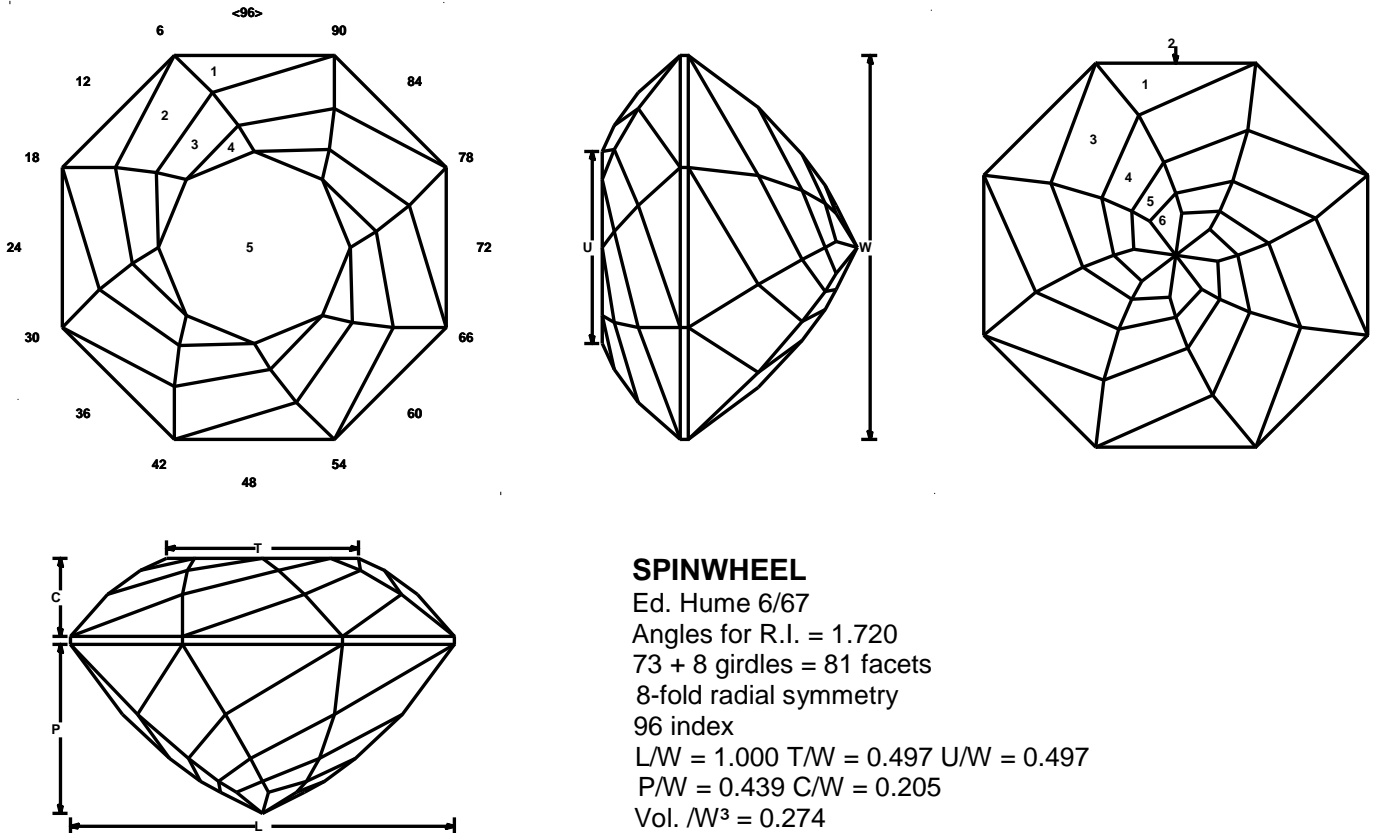
A	54.00°	96-24-48-72	Establish girdle thickness - form TCP
B	45.00°	12-36-60-84	Meet A, 4, 5 & level girdle - new TCP
C	36.98°	03-21-27-45-51-69-75-93	Meet A, B, 4, 5 new TCP
D	26.63°	96-24-48-72	Meet A, C, C - new TCP
E	27.40°	12-36-60-84	Meet B, C, C
F	14.06°	06-18-30-42-54-66-78-90	Meet C, D, E & create PCP

AUSTRALIAN FACETORS' GUILD LIMITED – 2015 ANNUAL COMPETITION

OPEN SECTION O.10.1 – SPINWHEEL

MATERIAL – MAN MADE SPINEL

FACETS - 81: MEETS – 65 (Crown - 32, Pavilion – 32)



SPINWHEEL

Ed. Hume 6/67

Angles for R.I. = 1.720

73 + 8 girdles = 81 facets

8-fold radial symmetry

96 index

$L/W = 1.000$ $T/W = 0.497$ $U/W = 0.497$

$P/W = 0.439$ $C/W = 0.205$

$Vol. /W^3 = 0.274$

PAVILION

1	53.00°	96-12-24-36-48-60-72-84
2	90.00°	96-12-24-36-48-60-72-84
3	46.00°	10-22-34-46-58-70-82-94
4	40.00°	08-20-32-44-56-68-80-92
5	34.00°	06-18-30-42-54-66-78-90
6	28.00°	04-16-28-40-52-64-76-88

CROWN

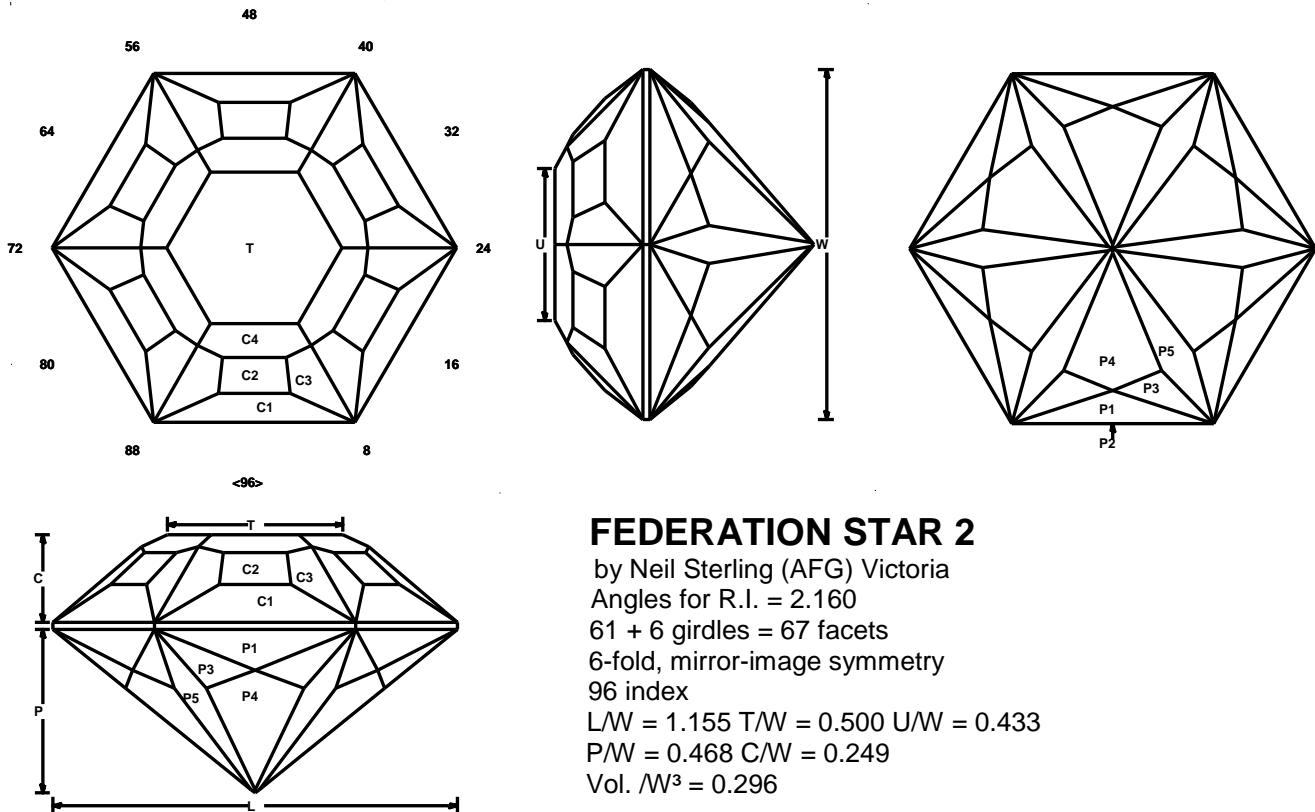
1	49.00°	96-12-24-36-48-60-72-84
2	39.00°	10-22-34-46-58-70-82-94
3	30.00°	08-20-32-44-56-68-80-92
4	22.00°	06-18-30-42-54-66-78-90
5	0.00°	Table

AUSTRALIAN FACETORS' GUILD LIMITED – 2015 ANNUAL COMPETITION

OPEN SECTION 0.10.2 – FEDERATION STAR 2

MATERIAL – COLOURED CUBIC ZRICONIA

FACETS - 67: MEETS - 25 (Crown - 12, Pavilion - 13)



FEDERATION STAR 2

by Neil Sterling (AFG) Victoria

Angles for R.I. = 2.160

61 + 6 girdles = 67 facets

6-fold, mirror-image symmetry

96 index

$L/W = 1.155$ $T/W = 0.500$ $U/W = 0.433$

$P/W = 0.468$ $C/W = 0.249$

$Vol. /W^3 = 0.296$

PAVILION

P1	51.05°	96-16-32-48-64-80	Cut TCP
P2	90.00°	96-16-32-48-64-80	Size & level girdle
P3	45.99°	01-15-17-31-33-47-49-63-65-79-81-95	Meet P1, P1, P2, P2 new TCP
P4	41.00°	96-16-32-48-64-80	Meet P1, P3, P3 new TCP
P5	39.02°	08-24-40-56-72-88	Meet P1, P1, P2, P2, P3, P3 form PCP

CROWN

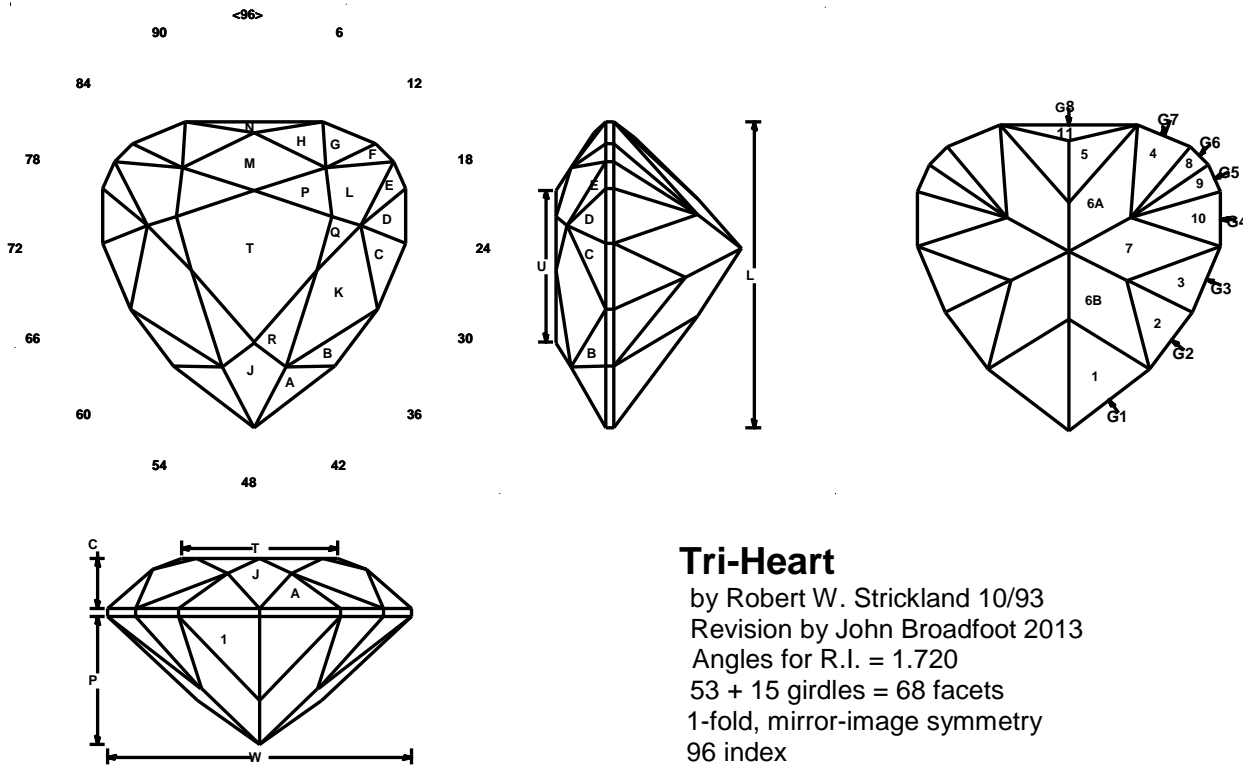
C1	52.00°	96-16-32-48-64-80	Set girdle thickness, level girdle
C2	42.00°	96-16-32-48-64-80	Make steps C2 & C4 equal depth
C3	42.00°	03-13-19-29-35-45-51-61-67-77-83-93	Meet C1, C1, P1, P1
C4	27.00°	96-16-32-48-64-80	See instruction at C2
T	0.00°	Table	

AUSTRALIAN FACETORS' GUILD LIMITED – 2015 ANNUAL COMPETITION

OPEN SECTION O.10.3 – TRI-HEART

MATERIAL – COLOURED MAN MADE SPINEL

FACETS – 68: MEETS – 50 (Crown - 28, Pavilion - 22)



Tri-Heart

by Robert W. Strickland 10/93

Revision by John Broadfoot 2013

Angles for R.I. = 1.720

53 + 15 girdles = 68 facets

1-fold, mirror-image symmetry

96 index

$L/W = 1.011$ $T/W = 0.512$ $U/W = 0.503$

$P/W = 0.424$ $C/W = 0.165$

$Vol. /W^3 = 0.204$

PAVILION

2	45.00°	34-62	Cut 2 & 5 at 45° to establish a TCP
3	44.50°	30-66	Cut to CP
1	43.60°	38-58	Cut to CP
4	43.40°	06-90	Cut to CP
5	46.00°	01-95	Check 5 is cut to CP
G1	90.00°	38-58	Cut girdle to establish outline L & W
G2	90.00°	34-62	Cut to meet G1, 1 & 2 level girdle
G3	90.00°	30-66	Cut to meet G2, 2 & 3 level girdle
6A	42.45°	04-92	Cut to form meetpoint at girdle
6B	42.45°	36-60	Cut to form meetpoint at culet with 6A
7	41.50°	28-68	Cut to new CP
8	42.00°	12-84	Cut to meetpoint with 6A & 7
9	42.00°	18-78	Cut to meetpoint with 6A & 7
10	42.89°	24-72	Cut to meetpoint with 6A & 7
G4	90.00°	24-72	Level girdle
G5	90.00°	18-78	Level girdle
G6	90.00°	12-84	Level girdle
G7	90.00°	06-90	Level girdle
G8	90.00°	96	Cut to meet with girdle & 4
11	53.15°	96	Cut to form a level girdle – any angle About 50

CROWN

A	52.30°	38-58	Cut breaks to desired girdle thickness
B	42.90°	34-62	Level girdle
C	39.31°	30-66	Level girdle
D	41.40°	24-72	Level girdle
E	35.54°	18-78	Level girdle
F	33.60°	12-84	Level girdle
G	40.31°	06-90	Level girdle
H	37.54°	01-95	Cut to meet at girdle & G (girdle not level yet)
J	30.40°	48	Cut main to form meetpoint at girdle
K	34.69°	32-64	Cut main to form meetpoint at girdle
L	31.07°	14-82	Cut main to form meetpoint at girdle
M	33.50°	96	Cut main to form meetpoint with H
N	47.06°	96	Cut small break to meet girdle & meetpoint G-H
P	18.80°	05-91	Cut to meetpoint with M,H,G,F & L
Q	19.15°	28-68	Cut to meetpoint with P,L,E,D,C & K
R	19.99°	35-61	Cut to meetpoint with Q,K,B,A & J (may need to adjust)
T	0.00°		Table

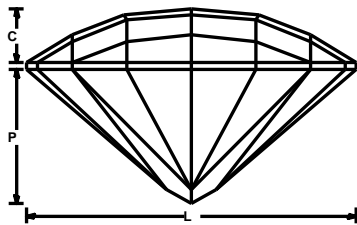
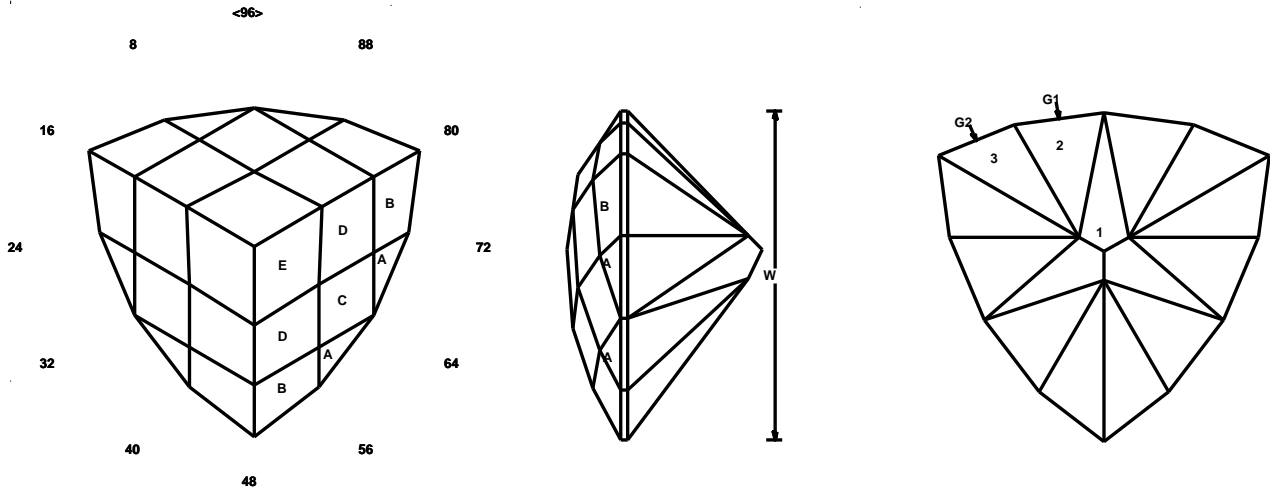
Revision by John Broadfoot to provide an easier Preform. Pav 2 & 5 are initially cut at 45° to establish a meetpoint at culet. 5 recut.

AUSTRALIAN FACETORS' GUILD LIMITED – 2015 ANNUAL COMPETITION

OPEN SECTION O.11.4 – CUBE ILLUSION TRIANGLE

MATERIAL – COLOURED CUBIC ZIRCONIA

FACETS - 51: MEETS - 42 (Crown - 27, Pavilion - 15)



Cube Illusion Triangle

by Robert W. Strickland 1995

Angles for R.I. = 2.160

39 + 12 girdles = 51 facets

3-fold, mirror-image symmetry

96 index

L/W = 1.003

P/W = 0.412 C/W = 0.164

Vol. /W³ = 0.169

PAVILION

1	44.37°	96-32-64	Cut PCP
2	45.37°	02-30-34-62-66-94	Estimate depth, meet 1-2
3	43.36°	06-26-38-58-70-90	Meet 1-2-3
G1	90.00°	02-30-34-62-66-94	Meet G1-1-2
G2	90.00°	06-26-38-58-70-90	Meet G1-2-3

CROWN

A	41.36°	02-30-34-62-66-94	Set girdle thickness
B	34.04°	06-26-38-58-70-90	Level girdle
C	33.97°	96-32-64	Meet G1-A
D	24.16°	05-27-37-59-69-91	Meet A-C
E	8.41°	96-32-64	Meet C-D, form PCP