

the  
New Mexico

faceter

*July/August, 2006*



**The Official Newsletter of the New Mexico Faceters Guild**

# NMFG

## *Show and Tell*



Above a pair of lovely earrings by **Nancy and Steve Attaway**.

**Nancy** also cut the wonderful Aspen Leaf (Oro Verde citrine), cut corner emerald-cut tourmaline and the gorgeous Montana sapphire on the title page (cut for its owner Ray Hess). This Stone was awarded an Honorable Mention in the Classic Gemstone Category of the 2007 AGTA Spectrum Awards / Cutting Edge Awards.



Faceted pearl by **Dylan Houtman**.



## *The New Mexico Faceters Guild*

### **Guild Officers 2006-2007**

**President:** Dylan Houtman  
**Vice President/Programs:** Ernie Hawes  
**Secretary/Treasurer:** Betty Annis  
**Guild Gemologist:** Edna Anthony  
**Guild Mineralogist:** Paul Hlava  
**Workshop Chairman:** Ernie Hawes

### **Newsletter Editor:**

Carsten Brandt

### **Newsletter Production:**

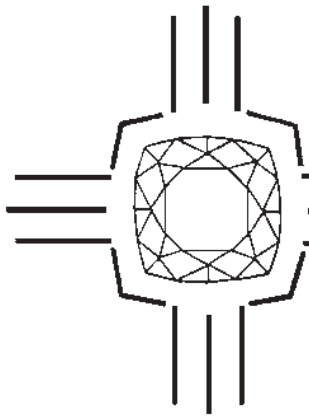
Ernie Hawes

**Purpose of the Guild:** The purpose of the New Mexico Faceters Guild is to bring together persons who are interested in faceting or faceted stones. We promote the art and science of faceting and provide a means of education and improvement in faceting skills. Finally, we provide a means of communication between those persons involved in or interested in faceting as a hobby.

**Guild Membership:** Dues are \$20.00 per calendar year (January through December) for newsletter issues sent by e-mail. Hard copies of newsletter issues sent by US mail are \$30. Please see the membership application/renewal form on the last page of the newsletter.

**Meetings:** The Guild meets now on the second Monday of odd numbered months at 7:00 p.m. at the New Mexico Museum of Natural History, 1801 Mountain Road N.W., Albuquerque, NM. Workshops are generally held in even-numbered months. Date, time, and place are given in newsletter. Also, any change in guild meeting times or dates will be listed in the newsletter.

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# The New Mexico Facetor

Volume 26, No. 4, July/August, 2006



NMFG President Dylan Houtman

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## New Mexico Faceters Guild Official Website

We invite everyone to visit our website at:  
[www.attawaygems.com/NMFG](http://www.attawaygems.com/NMFG) for inter-  
esting and informative articles on gem-  
stones and faceting techniques.

## The Prez Sez:

by Dylan Houtman

Hello everyone,

I have acquired two laps which are new to me, but not to the world, a Corian lap and a Plexiglas lap. I have never had much interest in cutting quartz, partly because I don't view it as having much value and mainly because I have had trouble polishing it. I recently cut a large chunk of quartz and had reasonable luck polishing it with cerium oxide on a lead-tin lap. I still had some problems with scratches, especially on the larger facets.

I got the opportunity to make my own acrylic lap. When turning the faces of the lap true I decided I wanted a fairly coarse finish, to allow someplace for the polishing agent to collect, so I used a cutting tool with an 1/64 th radius and a feed of 0.008 inches per revolution. This produced a surface finish, in machine shop terms, of about 125.

As the first stone to try my new lap on I cut a 14mm X 11mm oval light-colored amethyst. The going was a little slow at first, but as the lap got charged, it soon was polishing facets more quickly and easily than I ever imagined. Light pressure was all that was required to get a nice flat well polished facet, heavy pressure tended to distort the edges of the facet. For me the table facet on this size stone was huge and I feared I would have an extremely difficult time polishing it. It took less than one minute, and I noticed, when the light hit the table just right, I could see the chevrons of the growth structure of the crystal, absolutely awesome!!

I have had my Corian lap for some time, I just hadn't gone out to get some floor-wax to prepare the surface to accept the polish. I swabbed some wax onto the lap and let it dry, then scraped what I perceived as the excess wax from the lap. I sprayed some 50,000 grit diamond on the lap and approached it with a piece of aquamarine to polish. Great shavings of wax began peeling away from the lap! It became obvious I needed



to scrape more wax from the lap! Recharged this lap proved quite efficient at polishing. Where on a lead-tin lap with aluminium-oxide, flaws tend to cause a drag mark behind them, the Corian lap exhibited no such tendency. I have also polished a very dark peridot with this lap; both it and the aqua show much greater dispersion than I am used to--I think that means I achieved an excellent finish.

So far my experience with Corian makes me certain this will become one of my favorite laps. With wax laps being suggested for soft materials I intend to try things like fluorite and celestite on this lap. If you don't have one or the other of these laps I believe they would be a wise investment.

Keep-on Cutting,  
Dylan.



## Minutes of the NMFG Meeting

July 10, 2006

by Nancy L. Attaway

**President** Dylan Houtman called the meeting to order at 7:30pm, ending a forty-minute discussion that occurred before the meeting had actually begun. Tonight's small but vocal group of faceters entertained many discussions throughout the evening. Topics included how to polish a large table facet, how jewelry television shows affect gemstone prices and what their effect is on suppliers, the new European laws on white metals, the new gold and silver alloys, and American gemstone prices.

### Old Business:

**Steve Vayna** reminded folks that he is still missing his DVD made by Fac-ette on how to facet gemstones. Whoever has this DVD, please return it to Steve.

### New Business:

The Faceters Workshop that had been scheduled for mid June was cancelled because so many folks were not available to attend it. The next Faceters Workshop is scheduled for August 26 from 9:00 am to 4:00pm at the home of Dylan Houtman. Workshop Chairman Ernie Hawes will send out an e-mail regarding this workshop a week before the date.

**Nancy Attaway** announced that John Rhoads is selling his business, whether in three parts or as one large part. She said that John has certain expectations of the prospective buyer. Nancy mentioned that John and Donna were only doing maybe a few shows in 2007 in order to concentrate their efforts on their gem tours held abroad. She also said that John was negotiating with a college in Pennsylvania to organize a course curriculum for obtaining a gemology degree.

Nancy Attaway said that noted replica faceter **Scott Sucher** had shown her his latest famous diamond replica, the Spoonmaker's Diamond. This absolutely marvelous replica is a double-rose pearshape with all triangular facets. This design is very difficult to render. One small error can propagate throughout the stone and become a large problem. The actual Spoonmaker's Diamond is called The Kasikci and resides in the Topkapi Museum in Istanbul, Turkey. Scott also told Nancy that he is certain that the carat weight of the Kasikci Diamond is grossly in error and hopes to travel to Turkey and work with the museum there to ascertain the actual carat weight.

Newsletter Editor Carsten Brandt requested that all contributors to the newsletter send in material as soon as possible to complete the remaining issues. Ernie Hawes said that costs have increased on publication, but they are still less than when the newsletters were done in the past by an outside source.

Nancy Attaway said that she will ask the Guild Treasurer about the Guild procuring two or three large folding tables just for workshops.

### **Refreshments:**

**Nancy Attaway** baked a cherry-chocolate cake for tonight's refreshments. Gourmet coffee was also served. **Linda Vayna** and **Becky Hawes** volunteered to bring refreshments to the meeting in September.

Thank you all very much.

### **Show and Tell:**

The Show and Tell Case was filled to capacity tonight with many new items of jewelry and glittering gemstones. Moderator Steve Attaway was occupied with the many discussions that ensued, inspired by the lovely objects in the display case.

**Elaine Weisman** displayed a ring that she had recently made. Elaine had faceted a large round clear quartz in a "Petal cut", and she remarked that it had taken her a long time to finish the stone, due to a variety of reasons. She made a wide, tall ring with a flattened bottom in sterling silver, hammered the shank, set the quartz in a sterling silver half dome, and soldered 14Kt. yellow gold balls of granulation around the base of the quartz. Her ring was a very nice item of jewelry and was also comfortable to wear.

**Phil Rudd** displayed a cut-cornered emerald cut garnet he recently faceted. Phil had purchased several crystals of grape garnet from Orissa, India. The crystals exhibited a deep purple hue when backlit by a lamp, but he had difficulty in showing that same color with the faceted gem. He had used diamond angles for this very saturated gem material and was somewhat disappointed with the absence of the grape color.

**Dylan Houtman** displayed twenty-one stones that he recently faceted. Dylan is a one-man cutting house and facets gems several hours each day. He showed a most impressive huge cut-cornered

emerald cut fluorite that showed a taupe-pink to greenish hues. What a lovely gem it was. Dylan polished the fluorite on a sheet of Mylar with diamond and aluminum oxide. Dylan showed a large oval zircon with taupe and peach hues, an absolutely gorgeous gem that would make a great ring stone. Dylan faceted a small black pearl, carefully done first on a 1,200-grit lap and polished on a sheet of Mylar with diamond. He had seen a jewelry television show, where the moderator said that these faceted pearls were near impossible to do and done only by one person. Dylan accepted the challenge and faceted the black pearl, a remarkable faceting endeavor. Dylan showed a large cushion triangle white phenakite, an oval andradite garnet from California, a small blue round sapphire, a small triangular blue sapphire, a blueish-green synthetic spinel cushion triangle, a large white topaz cut-cornered emerald cut, a small yellow beryl square barion, and a large round aquamarine. He showed a very lovely cut-cornered emerald cut Oregon sunstone, a pale pink sapphire pearshape, two oval dark pink Nigerian tourmalines, a cut-cornered emerald cut dark pink Nigerian tourmaline, a small pyrope-almandine bright red garnet square, a bright red Mandarin garnet round, two red spessartite garnet rounds, and a long emerald cut with cut corners spessartite garnet. Whew! Dylan also showed two well-formed crystals, a demantoid garnet from Russia and a spessartite garnet.

**Nancy Attaway** displayed eight stones that she recently faceted. She showed a large Madagascar rose quartz tablet that exhibited rich pink to lavender hues. The tablet is a special order, where Steve will carve in reverse intaglio a hummingbird and set the gem into a 14Kt. white gold pendant with a hummingbird bail. Nancy showed a large Aspen Leaf design and a small Aspen Leaf design, both in Oro Verde (green gold) citrine, a heat-treated citrine. The small aspen leaf was like the original version, first seen in the July/August 2002 New Mexico Facetor and published in the October, 2003 issue of Lapidary Journal. The larger one is a wider version where she had "stretched" the design to accommodate a wider piece of rough. She plans to have the newer version

published in the Guild newsletter this year. Nancy showed an intense deep pink cut-cornered long emerald cut Nigerian tourmaline and a cut-cornered emerald cut red Nigerian tourmaline. She showed a large oval and a large Barion cut-cornered emerald cut, both in Oro Verde citrine. Nancy also showed a 10x10mm square Barion 5.85-carat Montana heat-treated sapphire that exhibited a pale blue background color with brilliant flashes of gold. The stone is owned by Ray Hess, a third-generation Montana sapphire miner who had invited Nancy and Steve, with Scott Wilson, to Montana several years ago to check his sapphire prospects. Nancy had faceted eleven Montana sapphires for Ray, including the remarkable square Barion, and she plans to enter the stone in AGTA's Cutting Edge Competition this year.

**Steve Attaway** displayed a wide variety of his fine jewelry and carved gemstones, many of his latest creations. He showed four large Montana agate carvings and a pair of carved Montana agate carvings for earrings, plus two Kelly mine smithsonite carvings slated for pendants. He showed four of his Namibian chalcedony cabochons he set into custom 14Kt. yellow gold custom rings, one accented by small diamonds, and he showed a small round Australian chrysoprase cabochon set into a 14Kt. yellow gold custom ring. He showed one of his large carved Australian chrysoprase carvings that he set in a custom 14Kt. yellow gold pendant with a round cabochon of purple cat's eye scapolite and small diamonds paved in the bail, a special order. He showed a new custom ring design in 14Kt. yellow gold, three rings done with the same lovely swirls with tube-set diamond accents and each holding a large cut-cornered emerald cut gem, a deep purple Bolivian amethyst, a Mozambique aquamarine, and a bicolored Nigerian tourmaline, all stones cut by Nancy. He showed two imperial precious topaz custom rings in 14Kt. yellow gold accented by small diamonds, two cut-cornered long emerald cut Mozambique aquamarine custom rings in 14Kt. yellow gold accented by small diamonds, a hot pink square Barion Nigerian tourmaline custom ring in 14Kt. yellow gold accented by small diamonds, a

cut-cornered long emerald blue-green Nigerian tourmaline custom ring in 14Kt. yellow gold accented by small diamonds, a cut-cornered long emerald cut blue sapphire custom ring in 14Kt. yellow gold accented by small diamonds, all stones cut by Nancy. Steve showed two pair of 14Kt. yellow gold dangle earrings in his new custom design. One pair had two matching round cabochons of chrysocolla (gem silica) accented by white and irradiated blue diamonds, and the other pair held two matched round cabochons of Australian chrysoprase accented by tube-set emeralds and diamonds. Ask Steve about tube setting emeralds sometime. Steve showed two 14Kt. yellow gold custom pendants that held Nancy's new design for a very long and thin cut-cornered emerald cut gem. One pendant had a reddish-pink Nigerian tourmaline with a diamond drop at the bottom. The other held a pale green beryl from Brazil with a diamond drop at the bottom, and this one sported a new bail design by Steve that had a row of paved small diamonds on one side. Steve also showed a 14Kt. yellow gold custom pendant that held a very, very long emerald cut cabochon of Australian chrysoprase, accented by a row of small diamonds at the bottom, and a small round imperial precious topaz at the top. Wow!



## **Program Speaker**

Ernie Hawes showed a DVD about Arizona Four Peaks Amethyst. The following is mostly excerpted from Mason B "Amethyst Mine at Four Peaks", Fountain Hills Times 6/17/98.

Some of the world's finest gem-quality amethyst is found in the Arizona Four Peaks Amethyst Mine. This mine is remarkable not only for the depth of purple hue and clarity of the stones, but also for the owner's commitment to running an environmentally sensitive mining operation.

Kurt Cavanaugh and Jim MacLachan are partners in this enterprise. Kurt is a graduate biologist, which may explain his cautious approach to mining. Jim MacLachan is based in London. The

onsite mining operation is managed by Jack Lowell, of Colorado Gem and Minerals. Striking geologic formations all around the mine bear witness to violent activity that must have occurred millions of years ago. Now, two trained miners work in this harsh terrain in shifts of seven days, living inside the mine shaft so as to minimize human impact on the surrounding environment.

They work only with hand tools. Helicopters bring water, food and tools and carry away the rough, which is sent by the commercial mining company (sole dealer of Four Peaks Amethyst) to Bangkok and China for cutting. This mine represents a model for doing business in the 21st century, in stark contrast to the rapacious and destructive mining methods typical of the last two hundred years.

The Arizona Four Peaks lode is recorded by Spanish historians of the 18th century; gems from this deposit are found in the crown jewels of five European countries. An American gold miner, Jim McDaniels, rediscovered the lode in 1900. It passed into the hands of Mrs. Gertrude Evelin, who sold it to two German stonecutters, Louis and Rudolph Juchem, for \$2500. The Juchems owned it for twenty years, then leased it to Bob Dye for seven years. The Juchems then sold the property to Mr. and Mrs. Storer in 1963 for \$50,000. In 1972, Joe Hyman bought the property and found several amethysts which he donated to the Arizona Mining and Mineral Museum. He then sold the property to Darryl E. Smith for \$350,000 (\$100,000 down). Smith had every intention of establishing a commercial operation, using dynamite and bulldozers to get at the amethyst, but was foiled by the National Forest Service, who revoked his operating rights after a series of unfortunate events involving tractors and damaged wilderness areas. At that point, ownership reverted to Joe Hyman, who now knew that the mine contained gemstone quality amethyst. He sold the mine to Canvaugh and MacLachlan in 1997. It is likely to prove a good investment since supplies of natural amethyst from Brazil and Africa are declining, and it is known that rich veins of crystal still exist within Four Peaks Mine. There is value added to these stones by the laborious and careful

mining process, which seeks to protect the surrounding environment.

This may become an attractive selling point for many customers.

Amethyst, the birth stone for the sign of Aquarius and the month of February, has long been considered a royal gemstone because of its purple color. The origin of the word 'amethyst' recalls its legendary power to prevent drunkenness. The Four Peaks amethyst occurs in the linings of voids in faults of Mazatzal quartzite. These voids were periodically filled with manganese-containing, hot liquid solutions from intrusions below. Successive stages of quartz deposition are indicated by concentric rings of clear quartz, hematite and amethyst. "The more valuable darker colors of amethyst reflect a higher manganese content", according to Ken Phillips, chief engineer for the Arizona Department of Mines and Resources. Arizona is the only state that produces top quality stones, and the Four Peaks amethyst rivals the best anywhere in the world.

Final note: Carsten has twice seen Four Peaks amethyst rough advertised on E-Bay.



## **Aligning Your Machine for Perfect Transfers**

**By Ernie Hawes**

During the workshop, I demonstrated how to make a simple alignment jig for any machine that uses keyed dops. The idea is to align the index gear to the transfer block, thus assuring very accurate transfers. It involves using two matched dops and a small square or rectangle of plate glass.

The first step is to glue the glass approximately on the center of one dop. The dop is inserted in the quill and a flat is cut at 90 degrees across the lower edge of the glass. The index gear must be set in the zero position (96, 64, 72, etc.)

Next, the dop with the glass attached is placed in



the transfer block and the second dop is glued to the opposite side of the glass. Both dops are left attached to the glass. The second dop is now placed in the quill and checked to see how much it is rotated from the position when the first dop was in the quill. This is done by adjusting the cheater. Let's assume that this requires rotating the cheater three marks on the cheater dial or indicator. Next, set the cheater to approximately half the rotation that was required to reach the first flat.

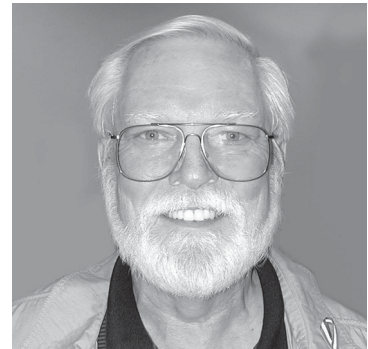
Now, cut a new flat completely across the lower edge of the glass. Reverse the dops and check to see if the new cut on glass touches the lap completely. It very well may not, but will be close. Tweak the adjustments to the cheater and repeat the cutting and switching of dops in the quill until the edge of the glass fully touches the lap when each dop is inserted in the quill. Once this is achieved, return the cheater to its zero position, and while the dop is still in the quill, loosen the nut that holds the index gear in position and rotate the gear until the edge of the glass is flat on the lap. Tighten the nut. Your index gear is now aligned with your transfer block.

If your index gear is secured by screws or a key to a fixed position, you can still zero in by simply marking the position of the cheater when the glass fully touches the lap with either dop inserted. Use this jig whenever you change index gears, or whenever you've made adjustments with your cheater. If everything else is properly aligned on your machine, you will eliminate "stair-stepping" on girdles and you won't have to cheat to align the pavilion and crown.

Our thanks go to Dr. Alston Lundgren, who provided the plate glass pieces for the workshop participants.



## Facet Designer's Workshop



By *Ernie Hawes*

One of my first efforts at creating a faceting design was a flat drawing with no angles given. I put it in the newsletter as a design problem, offering whoever could come up with appropriate angles the privilege of naming the design and being designated the designer. Louie Natonek, co-founder of the New Mexico Faceters Guild, calculated angles for CZ and named the design, *Cloud Nine*. It was published in the August, 1987 newsletter. A couple of years ago, I decided to re-work the design so that it would be suitable for corundum and other medium RI materials. Although I first tried a simple tangent ratio conversion, I felt that a better result was achieved by modifying the angles in relation to each other. While similar in appearance, the results were sufficiently different that I considered the pattern to be a modification of the original design. Keeping Louie's original name, I called the modification, *Cloud Nine II*. More recently, I decided to see if I could further modify the design so it would work with lower RI materials, such as quartz, beryl and the feldspars. Once again, a simple tangent ratio didn't work as well as modifying the angles in relation to each other. Again keeping the original name, the lower RI version is called simply, *Cloud Nine III*.

Since this issue covers the month of August, I decided that I should come up with a design suitable for peridot, the August birthstone. Also, it's been awhile since I've designed anything in the square emerald shape, so I further decided that I would see what I could come up with that fit that category. Actually, I came up with a number of emerald square shaped patterns, including several variations. Con-



sequently, allowing for my usual lack of creativity when it comes to naming my designs, I've called this one simply, **Rounded Square 6**, it being the sixth in the sequence I developed. Perhaps I'll publish some of the others in this series later, but for now, I hope you'll like this one. And if someone can think of a better name, please let me know. Meanwhile, I hope you'll give both designs a try. **Cloud Nine III** requires both time and some careful cutting. **Rounded Square 6** is easier and will take less time to finish. Both will cut very attractive gems.



## In the News

### **Beryllium-Treated Blue Sapphires**

*Source: JCK August 2006*

According to GIA, beryllium treatment of blue sapphires has been determined to originate in Thailand. The treatment cooks dark blue sapphires for two or three weeks or more to lighten the color close to Ceylon blue hues. However, the treatment leaves some very strange inclusions. Shane McClure of GIA provided images of these inclusions, and he described them as "swirling, spiraling, milky, ribbon-like inclusions, oddly shaped circles surrounding once whole and now divided included crystals, and spiderweb surrounding supernovas". Although dealers associated with the Thai Gem and Jewelry Institute have banned the production of beryllium-treated blue sapphires, such stones will continue to appear. Costs on beryllium-treated blue sapphire melee and beads can run as little as \$8 per carat, while identification of beryllium treatment costs hundreds of dollars per stone.

### **New Treatment for Coated Topaz**

*Source: Colored Stone July/August 2006*

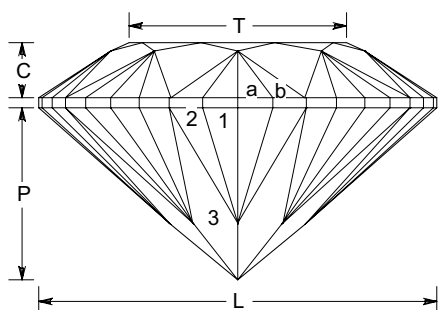
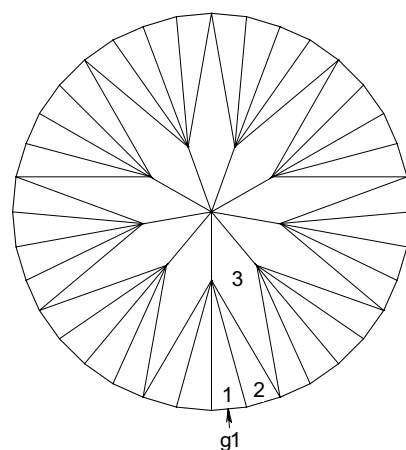
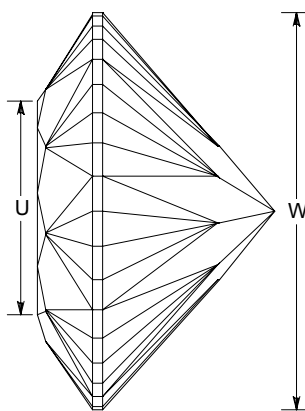
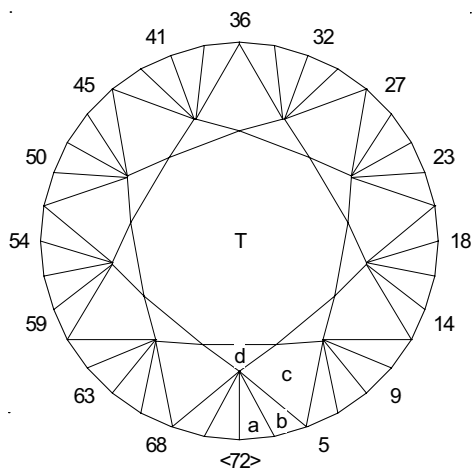
Sithy Gems and Lapidary of Sri Lanka specializes in both custom cutting and color-coating of gems. The company introduced a new coating for topaz in January of 2006. Currently, the two most common treatments for topaz are surface diffusion, where a color-causing element is diffused into a topaz, and

vapor deposition, where color-causing compounds are deposited in a layer on top of a gem. Both treatments affect only a gem's surface and will be removed if the stone is repolished or recut. The new method developed by Sithy Gems involves coating the surface of a piece of white topaz rough with a color-causing agent. Then, two pieces of topaz are fused together using heat and pressure to allow the colored layer to be placed in the middle. When the stone is faceted, the layer is oriented to be at the girdle of the cut gem. The company is calling this treatment "center-diffused colored topaz". The same treatment may also be performed on quartz. The new treatment is more permanent and can color topaz in shades called: "tangerine topaz, pink topaz, paraiba topaz, tsavorite green topaz, tanzanite topaz, yellow topaz, amethyst topaz, precious topaz, peridot topaz, ruby topaz, and padparadscha topaz". The treatment is targeted for volume manufacturers.

### **The Dangers of Silicosis in Gem Carving**

*Source: Colored Stone July/August 2006*

A very informative article appeared in this issue of Colored Stone that documented the cases of silicosis in workers of factories located in the Far East where gemstone material is rendered for carving. The article described how the lack of proper ventilation, respiratory protection, and safety measures all contributed to the thousands of cases of silicosis known to exist. The article also reported that many such facilities in Hong Kong have recently modernized their equipment, provided healthcare for their workers, and installed precaution procedures in their factories. This is a timely reminder for artisans who work in carving various gem materials, from hard materials to soft stones, including pearls, to wear good respiratory protection that safeguards them from silicosis.



## Cloud Nine III

By Ernie Hawes

Angles for R.I. = 1.540

100 + 36 girdles = 136 facets

1-fold, mirror-image symmetry

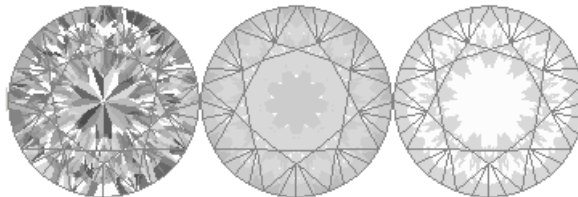
72 index

L/W = 1.000 T/W = 0.544 U/W = 0.536

P/W = 0.435 C/W = 0.140

Vol./W<sup>3</sup> = 0.204

Average Brightness: COS = 87.4 % ISO = 93.2 %

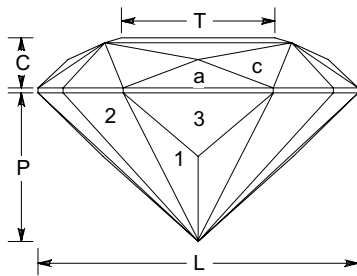
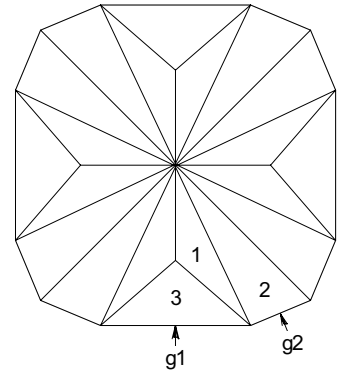
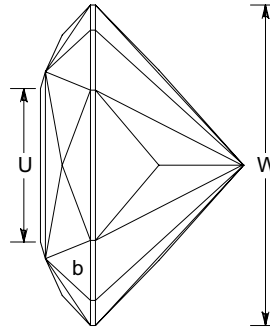
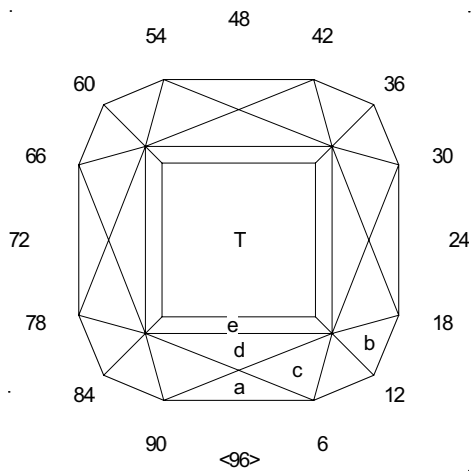


### PAVILION

g1	90.00°	(36 total) use step 1 & 2 settings
1	42.00°	01-07-09-15-17-23-25-31-33-39-41-47-49-55-57-63-65-71
2	41.55°	03-05-11-13-19-21-27-29-35-37-43-45-51-53-59-61-67-69
3	41.00°	04-12-20-28-36-44-52-60-68

### CROWN

a	34.90°	01-07-09-15-17-23-25-31-33-39-41-47-49-55-57-63-65-71
b	33.45°	03-05-11-13-19-21-27-29-35-37-43-45-51-53-59-61-67-69
c	32.00°	04-12-20-28-36-44-52-60-68
d	16.30°	72-08-16-24-32-40-48-56-64
T	0.00°	Table



## Rounded Square 6 By Ernie Hawes

Angles for R.I. = 1.650

49 + 12 girdles = 61 facets

4-fold, mirror-image symmetry

96 index

$L/W = 1.000$   $T/W = 0.478$   $U/W = 0.478$

$P/W = 0.462$   $C/W = 0.159$

$Vol./W^3 = 0.250$

Average Brightness: COS = 68.3 ISO = 85.1

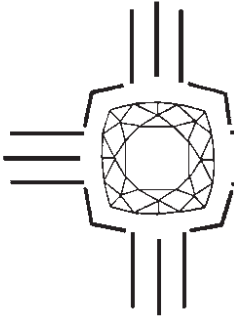


### PAVILION

1	42.00°	01-23-25-47-49-71-73-95
2	40.00°	06-18-30-42-54-66-78-90
3	44.00°	96-24-48-72
g1	90.00°	96-24-48-72
g2	90.00°	06-18-30-42-54-66-78-90

### CROWN

a	42.40°	96-24-48-72
b	39.30°	06-18-30-42-54-66-78-90
c	35.00°	02-22-26-46-50-70-74-94
d	24.60°	96-24-48-72
e	20.40°	96-24-48-72
T	0.00°	Table



# The New Mexico Facetors Guild

Membership application or renewal form

**Dues:**

- 1 year membership, includes electronic copy of NMFG newsletter:.....\$20.00
- 1 year membership and mailed paper copy of newsletter.....\$30.00

Please print this page and send it along with a check (made out to NMFG or New Mexico Facetors Guild) for dues to:

**NMFG**  
**Betty Annis**  
**1112 Orr Ave. NE**  
**Albuquerque, NM 87111.**

Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_  
 State: \_\_\_\_\_  
 Zip: \_\_\_\_\_  
 e-mail: \_\_\_\_\_

Amount Enclosed: \_\_\_\_\_

Your e-mail address will be needed for you to receive the newsletter on-line. If you do not have e-mail or access to the web, you can receive a paper copy of the newsletter.



## E-mail Addresses:

- |  |   |
|--|---|
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