

The Midwest Faceter

A Publication of The Midwest Faceters' Guild, December 2010

President's Notes

By Barb Yost



As the close of the year is upon us I trust you can look back at 2010 with fondness. It will most definitely be marked as a multifaceted year. Many of you facet as a hobby, many as a living and many to supplement income. To all I wish for your many hours of faceting, and beautiful stones when you remove them from the dop.

I would like to take a moment to thank Dave Root for serving as President for the past few years and Tyler Miller for stepping in as President to finish Dave's term. We appreciate both of you and your service to the Guild.

Your 2011 officers are Ruth Ann Lehner: Secretary, Melvin Lehner: Treasurer, Tyler Miller: Vice President and myself Barb Yost: President. We look forward to serving you this next year. Should you have any questions or concerns please feel free to contact us. Also serving is Ernie Auchenbach as Parliamentarian, Virginia Steele as Historian and Competition chairperson, and Amy Uphaus as Raffle chair person.

We are making plans for 2011 and would love your feedback. What type of programs and gatherings would you like to see and take part in. Our first meeting is January 22. We will be meeting at Ruthann Lehner home. Lunch will be provided at noon (please RSVP) with the meeting to follow. Ruthann lives in Dewitt Michigan (near Lansing) more details are available elsewhere in this news letter. We will be having one of our famous raffles so be sure to plan for this. Donations are welcome and greatly appreciated.

It is our plan this year to hold two seminars; one in June along with MGAG's the other to be held in August in the Grand Rapids area. Details for both of these seminars will be posted on the website and made available in future news letters and flyers. If you have a rock club and would like the brochure's mailed to you, please contact Barb Yost. We also have several members interested in demonstrating faceting at rock and gem shows so if your club has a need; let us know and we will do our best to find someone willing and able to be there.

We have plans in the works for several frats. If you have been unable to attend a frat, I can tell you first hand, these are awesome, and I have learned so much by faceting with others. It is so much fun, plenty of laughter, and great food. I hope you will consider being apart of our next frat.

I would like to challenge each of you to be involved in your guild. We need your input; we would love to have you take part in our meetings, frats and seminars. At some meetings we will have skype available for any one interested in being at the meeting via computer. Also articles for our newsletter are greatly appreciated by our editor.

There is one more item that I need to address. I would like to apologize to all the members of this Guild. During my time as treasurer I used Guild funds for personal use. All monies have been paid back to the Guild, but this does not negate the fact that I betrayed a trust placed in me by you, the members. I am really sorry for creating this situation. I admit that I was wrong and can only say how sorry I am.

Thank you for your continued support. Looking forward to a "Fascinating" Year.

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The Midwest Faceters' Guild

<http://midwestfacetersguild.org/>

The Midwest Faceters' Guild was established July 14, 1979 and chartered in October of that year. The MFG is a member of the American Federation of Mineralogical and Geological Societies and the Midwest Federation of Mineralogical and Geological Societies. Our purpose is:

- To promote education and recreation.
- To develop the art of faceting.
- To exchange information related to faceting.
- To provide meetings for those of like interests.
- To promote the achievement of individuals.

The official publication of the Midwest Faceters' Guild is *The Midwest Faceter*, published five times per year.

Membership in the Midwest Faceters' Guild is open to anyone with an interest in The Art of Faceting, regardless of geographical location. Membership applications are available on the website or by contacting the Membership Chairperson. Membership is \$20 single and \$30 family and includes a subscription to *The Midwest Faceter* and enables you to participate in Guild activities such as our Faceter Frats and gemstone competitions.

Calendar of Events

January 22, Noon	General Membership Meeting Melvin & Ruthann Lehner's home 1100 W. Chadwick Rd. Dewitt, MI 48820
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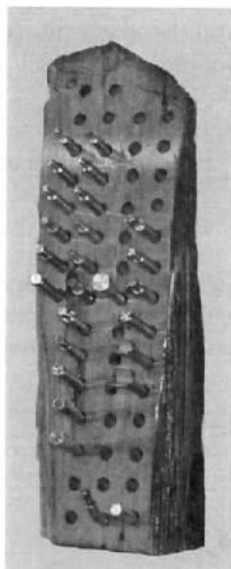
Editorial

Barb Yost made a mistake, suffered a lapse of judgment. We have all made mistakes. But Barb also has done a couple of things that aren't so common. She has publically acknowledged her transgression and apologized, and that takes a lot of courage. And Barb stepped forward and volunteered her time and effort for the Guild, which I can tell you, is a pretty rare thing.

Barb has proven to be a very capable and effective Seminar Chair over the last couple years, and early indications are that she will also be a good President. All the Guild's money has been returned and Barb no longer has access to the Guild account. As far as I'm concerned that incident is in the past and there is nothing to be gained by dwelling on it. It's time to move forward.

The Guild needs people willing to do the jobs that need to be done if we are to survive, especially competent people. I support Barb and I urge all of you to support her also.

Dave Root
Editor & Past President



MIDWEST FACETERS GUILD MEETING, Annual Election of Officers**November 6, 2010**

Tyler Miller brought the meeting to order at 5:15 p.m.

Minutes from the last meeting were not available from Barb Yost.

Editors report. Dave Root reports no minutes were given to him.

Treasurers report not available from Barb Yost.

Everett Brake brought up a suggestion that we include the financial report in the minutes of the meeting. Dave Root said that the minutes are going out to various clubs. So the concession from all was that we eliminate the financial report from the minutes. The financial report will be available to any member at anytime that would like an update or a copy.

Seminar update from Webberville held on June 11 - 13 2010.

- Barb Yost reported that a bill had not been submitted to her from MGAGS. October 27, 2010 she sent them a check for \$300.00.
- Discussion about if they don't send us a bill should we pay them?

Old business:

- Virginia Steele reported that she received the stones back from the judges and sent them back to the faceters with the results.
- Tyler requested that he should have gotten the results but didn't.
- Entered into the competition were 2 Novice stones, and 1 Pre master stone.
- No one passed for qualification.
- Tyler Miller asked if on a Novice stone do they have to score 80% to pass. According to Ernie 85% is passing, 90% for Pre Master, 95% for Master and 98% for Grand Master. No one passed above 60% in Novice, and no one passed above 70% in Pre Master.
- Barb Yost added that everyone should get a certificate of participation and that she would take care of that. The grading sheets were sent back with the stones.

New Business:

- Barb reported that the Blossomland Gem and Mineral Society invited us to their annual show on April 16 & 17th of 2011. It will be held this year at the Orchards Mall in Benton Harbor. They have invited us to come and demonstrate along with the other commercial vendors. Their thought was it would be a good time to have a frat and to recruit students for a seminar. They would be asking \$10.00 per person to help with the costs.
- Barb also reported that the Madison Gem and Mineral Club has invited the MWFG to host a seminar in a facility in Stoughton Wisconsin. It will host up to 40 faceters. The amount charged is yet to be determined and also the availability. Discussion on this was: Would there be Security Guards on Duty? Malls usually have their own security. Tyler said he would be skeptical about this security. It will be tabled until a next meeting.
- Dave Root was contacted by a place in California about purchasing add space in our newsletter.
 - Discussion: Tyler doesn't think advertising belongs in a 501C3.
 - Discussion: Amy asked if there could be any other options?
 - Ernie reminded us of ads in the USFG magazine.
 - Discussion: Could we stipulate they would have to be a member of the guild?
 - Discussion: Would we have to investigate the dealers to make sure they were reputable?
 - Discussion: Walt brought up the point that Kingsley North has always been very supportive of the Faceters Guild in the past and would that infringe on them if we let strangers put adds on the site.
 - Discussion: Amy asked if we have ever done Links?
 - Discussion: We do have Links to our website. We do not get paid for Links.
 - Discussion: Question--If we have something for sale can we post this on line in on the website? Answer--We can but it has to only pertain to individuals, not businesses.
 - Regarding putting ads in newsletter and links: Everett made a motion we should look further into this matter and bring results to a future meeting. Motion was seconded by Melvin Lehner. Motion was carried.

- Everett Brake made a motion to have the Treasurer Report included in the Quarterly newsletter. Discussion before a vote: Tyler is against the advertising the Treasurers report. It is private information and shouldn't be advertised. Everett withdrew his motion.
- Everett Brake made the motion to vote on President, Vice President, Treasurer, and Secretary all in one vote as long as no one else was running against any of them.
President : Barb Yost
Vice President: Tyler Miller
Treasurer: Melvin Lehner
Secretary: Ruth Ann Lehner
Motion was seconded by Walt Siedelman. Motion carried. These are the newly elected officers for the year 2011.
Duties will start as of this meeting.

Melvin Lehner reported on the audit that he has been trying to prepare for the past several months. It has been difficult for him to present all of the information because he has not had full cooperation. When he has all the information and the report is complete he will have it available to any member of the Guild who would wish a copy.

Faceters from various places came for a 3 day weekend to facet, tour the Shelby Gem Factory and enjoy each others company and wisdom. We had 10 faceters, one a Jr. member, 2 guests, and 2 members who came and helped with the food and clean up. Thank you Joe and Tina!! 1 GemCad man, which was Everett Brake. Thank you Everett for all your wisdom!!.

Larry from the Shelby Gem Factory showed us all a very nice time and donated a few pieces of rough faceting material for our In House Raffle.

In House Raffle : 139 tickets were sold by Amy Uphaus . Raffle coordinator.

Tyler Miller made a motion to adjourn the meeting
Seconded by Amy Uphaus

Respectfully Submitted:
Ruth Ann Lehner
MidWest Faceters Guild Secretary



Melvin and Ruthann in action

History and Lore of Garnets

by Sylvia LaCroix

Editor's Note: This article was presented at the October meeting of the Columbia-Williamette Faceters' Guild and was published in the November issue of FACETS, their newsletter.

Garnet is the birthstone for January. It is often referred to as a gift of love and is also given for the second year, sixth year and nineteenth year of marriage. Garnets were found as beads in a necklace worn by a young man in a grave that dates back to 3000 BC.

The name garnet comes from the Latin word *Garanatus*, meaning seed-like, in reference to a pomegranate. Small garnets look like the bright red seeds inside a pomegranate.

Garnets were popular in Europe in the 18th and 19th Centuries. They were used for jewelry. In ancient times the garnet was known as a Carbuncle which relates to the color and refers to a boil or blister. In ancient Asia and the American Southwest, garnets were used as bullets because the glowing red color was said to increase the ferocity of a wound. In 1892, the king of Kashmir used garnet bullets against the British army on the Kashmir frontier.

In medieval times garnets were thought to cure depression, protect against nightmares, and relieve liver disease and hemorrhages.

According to the Talmud, Noah used a finely cut, glowing garnet lantern to illuminate the ark during those dark wet days and nights. The Hebrew writers include the garnet as one of the twelve gems in Aaron's breastplate. In about 3,500 BC, Moses selected a red garnet, probably from India, as one of the dozen gems to be used in the breastplate of Aaron, the high priest of Israel.

The main players in the Garnet Group are: Almandite, Pyrope, Spessartite, Grossularite, Andradite and Uvarovite. Where do the names originate?

Almandine comes from Alabanda, an ancient garnet source in Turkey.

Pyrope comes from the Greek word *pyros* meaning fiery, alluding to the stone's deep red color.

Spessartite comes from Spessart, the Bavarian district where it was first found.

Andradite was named for the Portuguese mineralogist J. B. d'Andrada who discovered it in 1800.

Grossularite is derived from the botanical name of the gooseberry.

Uvarovite is named after the Russian mineralogist Sergei Simonovich Uvarov. This garnet is seldom used as a gemstone.

Plato had his portrait engraved on a garnet by a Roman engraver.

The King of Saxony is said to have had a garnet of over 465 carats.

Bohemia, now a part of Czechoslovakia, was once a great source of garnet. Many churches have their insides decorated with garnets.

The Physical Properties of Garnet include Color, crystal system, refractive index, hardness, and density.

Garnet is a name for a group of silicate minerals. Garnets belong to the isometric crystal class which produces very symmetrical, cube-based crystals. Garnets crystallize in the cubic system having three axes that are all of equal length and perpendicular to each other.

The most common shape is the dodecahedron, a twelve sided crystal with Rhombic faces. Garnets do not show cleavage, so when they fracture under stress, sharp irregular pieces are formed.

Garnet's variations in color reflect the compositions of its species.

- Almandite: an iron aluminum silicate – $\text{Fe}_3\text{Al}_2\text{Si}_3\text{O}_{12}$
- Pyrope: a magnesium aluminum silicate – $\text{Mg}_3\text{Al}_2\text{Si}_3\text{O}_{12}$
- Spessartite: a manganese aluminum silicate – $\text{Mn}_3\text{Al}_2\text{Si}_3\text{O}_{12}$
- Grossularite: a calcium aluminum silicate – $\text{Ca}_3\text{Al}_2\text{Si}_3\text{O}_{12}$
- Andradite: a calcium aluminum silicate – $\text{Ca}_3\text{Al}_2\text{Si}_3\text{O}_{12}$
- Uvarovite: a calcium chromium silicate – $\text{Ca}_3\text{Cr}_2\text{Si}_3\text{O}_{12}$

Notice the first three's second chemical element is aluminum and the last three's first chemical element is calcium.

Garnets are like making cookies. You have the basic recipe and add chocolate chips, or walnuts, or white chocolate chips, or peanuts, or peanut butter. We add Fe, Cr, Va to gems to get different colors. Some Garnets may be magnetic due to the iron in their composition.

Colors: Garnets are a gem for all seasons.

The oranges of autumn leaves, the glowing red coals of a winter fire, the sparkling green summer field, and the beautiful pinks of spring flowers. Garnet is a gemstone for all seasons. Garnets are a closely related group of gemstones that are available in every color: dark reds, tangerine, orange, vivid lime green, soft bluish pinks and now blue. There are garnets

that change color in different light, translucent green garnets that look like jade, garnets with stars, garnets that have been mined for thousand of years and garnets that were just discovered in the last decade.

Hardness

Because the chemical composition of garnet varies, the atomic bonds in some species are stronger than in others. As a result, this mineral group shows a range of hardness on the Mohs Scale of about 6.5 to 7.5. The harder species, like almandine, are often used for abrasive purposes.

Density

The density of garnet varies from 3.4 to 4.25. This is due to the elements which make up each species of garnet.

Refractive Index

Garnets are SR or singly refractive, as in spinel. Corundum is doubly refractive. The refractive index ranges from 1.714 to 1.896.

Almandine

Almandine or almandite is the name applied to a certain kind of garnet. This garnet was found at Alabanda, a town in Caris in Asia Minor. This town was an ancient cutting center. This garnet is an iron alumina garnet of deep red color or purple. It is found in the gem gravels of Sri Lanka, and in the Northern Territory of South Australia. Some of the cabs have four rays which are caused by needle like inclusion of rutile.

Star Garnet is the Idaho state gemstone. It is found in northern Idaho. Emerald Creek garnet area is a pay dig run by the Forest Service.

The four or six pointed phenomenon is rare in garnets and is largely unknown in some gemstone communities. In this almandine, the star is caused by the inclusion of tiny rutile crystals (Titanium Dioxide) called silk. The rutile needles are oriented at 70 and 110 degrees. The star form of garnet occurs only in Idaho and India.

Pyrope

Pyrope means fire-eyed due to its red color. The color is from deep red to almost black. "Ant hill" garnets are from Arizona and are called chrome pyrope. They are called anthill garnet because they are mined by ants, which carry them up when they are excavating their anthills. It is pure blood red in color and is on the San Carlos Indian Reservation. They are rarely found above two carats.

Rhodolite

Rhodolite comes from the Greek meaning rose. It may have been named from the rhododendron flowers, which are abundant in North Carolina where rhodolites were discovered. The color is purple-red. Rhodolite is a mixture of two parts pyrope and one part almandine.

In the Andradite Group the demantoid is most famous.

Demantoid

Demantoid was first discovered in the Ural Mountains in Russia in 1868. It quickly became a stone to have. Russia's star jeweler, Carl Faberge was fascinated by the stone's brilliance. The demantoid is a brilliant gemstone and the name comes from Dutch meaning "similar to diamond" due to its brilliance and luminosity. Demantoid has a higher dispersion than diamond. It is usually found in smaller sizes.

In December of 1996 a wondering goat herder in Namibian came across some crystalline structures which struck his interest. He soon found out they were demantoids. They however were missing the characteristic of demantoid the so called "horsetail-inclusions". These stones are inclusion free.

A beautiful and well-shaped inclusion in the demantoid will increase the value of the stone. The Russian Demantoid is more valuable than the Namibian stones. The inclusions are a form of asbestos that forms the beautiful patterns like the tail of a horse. Its hardness is 6.5 and is the softest of the garnets.

Grossular Garnets – Tsavorite and Hessonite

The name grossular is derived from the botanical name for gooseberry in reference to the green garnet found in Siberia.

Tsavorite

This is a bright green variety of grossular garnet. It gets its name from the Tsavo National Park in Tanzania, which is where it was found. It was discovered in 1967. It was also found in Kenya. The green color is due to vanadium and chromium.

The British geologist Campbell R/Bridges discovered it in Tanzania, but could not export it out of the country so he continued to search along the Tanzania-Kenya border and discovered it in 1971 in Kenya where he could get an export license. In 1974 Tiffany started a special campaign and soon everyone knew about green tsavorite. The name honors the Tsavo National Game Park and Tsavo River running through it. The former president of Tiffany & Company suggested the name Tsavorite.

Tsavorites are not heated or oiled. It has high brilliance, a hardness of 7.5 and is very durable. Sizes over two carats are hard to find.

Hessonite

Hessonite is an orange-brown colored garnet which has earned the nickname "Cinnamon Stone". The color range is honey-yellow to orange-brown to brown-red. It has subtle inclusions under magnification.

Spessartite

First found in the mid 1800s in the Spessart district in Bavaria, Germany, spessartine garnet is bright orange yellow to yellowish orange. The color is caused by its chemical composition. With increasing iron the pink is intensified, and with increasing manganese the orange becomes stronger.

This garnet was discovered in May 1903 at The Little Three Mine near the town of Ramona in San Diego County, California. This mine has produced some of the finest gems in the last hundred years. This mine is about 31 miles northeast of San Diego. These pegmatite districts are some of the best studied in the area. Only in the late 1990s was fine spessartine found in Namibia and Nigeria. Spessartine was recently found in Brazil, Afghanistan, Sri Lanka, Madagascar, and Pakistan.

Malaya

Malaya garnet from Bekily, Madagascar, is pink to pink-ish orange, with some stones orange to red. This garnet was discovered in the late 1990s. Bekily is located near the southern tip of Madagascar.

Malaya garnets from east Africa are from the late 1970s. These pyrope spessartines and grossular almandines contain traces of vanadium and chromium.

Some blue garnets have been found in Madagascar, they are very rare.

Grape Garnet

The original garnet rough was mined in Orissa in northern India. In 2000, Eric Braunwart of Columbia Gem House of Vancouver, Washington became the leading mover in the grape garnet market.

Another source of grape garnet was Brazil. The ideal grape color is intense purple with rich cranberry. The color would be similar to Welch's grape or a Purple Cow. This garnet is a combination of almandine and pyrope garnets. Some think that these stones may have lower iron content than the reds and the lower iron content may create the purplish hue.

Color Change Garnet

These gems change from reddish purple in incandescent to blue-green in daylight. These were found in Madagascar.

The color change occurs in garnet because of the atomic structure of the stone. The UV rays in sunlight or fluorescent light excite the atoms in a color change, but artificial light does not. The more vivid the colors the more valuable the gemstone.

Color Change or Color Shift?

Use a color grading wheel or as GIA calls it a hue wheel. If a color moves from red to the next color on the wheel (orange) then this is called a color shift. If the color moves from red to green, which is on the other side of the wheel, then this is called a color change.

Some of the major color change gemstones are sapphire, ruby, alexandrite, spinel and garnet. Be also aware there are a lot of coated or diffused gemstones that will also show color change.

Uses of Garnet

In 1878, according to ISGS, Henry Hudson Barton, the founder of the Barton Mines Corporation, was the first to use garnets in industry when he used them to make garnet coated sandpaper.

Coarse varieties of almandine are often crushed for use as an abrasive agent. The United States produced about 16 percent of the industrial garnet mines worldwide in 2001.

It is slowly replacing silica sand in the blast cleaning market because of the health risks associated with the inhalation of the airborne crystalline silica. The US petroleum industry is one of the largest garnet consuming industries using garnet for cleaning drill pipes and well casings.

The cost of this garnet ranged from \$61 to \$441 per ton in 2001. In 1994 the US used about 110,000 tons at about \$14 million.

Major uses were water jet cuttings, abrasive blasting, water filtration, abrasive powders, and other uses. They were used by aircraft manufacturers, ceramic and glass producers, optical lens grinding and plate-glass grinding, electronic components, water filtration plants and finishing of wood, leather, hard rubber, felt, and plastic products.

New Use of Garnet

GE's new garnet based CT scintillator. GE said it examined 150,000 material compositions for the scintillator before choosing the garnet.

GE has developed a HD CT scanner based on the garnet gemstone, the scanner produces clearer images.

The CT (Computed Tomography) scanners turn x-rays into light by a scintillator which is composed of a new garnet gemstone material developed by GE. The light is converted into electrical signals by a photo diode that results in the image reviewed by a person. This promises to be 50 times faster than conventional CT scanners and lowers the x-ray dose to patients.

GE claims this is the first major CT advance in 30 years. This scanner is better because it is faster, exceeds light output, lowers transparency, afterglow, lowers radiation damage and is environmental and temperature stable.

Garnet is a favorite in children's jewelry. It is set into dainty swirls, hearts, and roses for rings, pendants and earrings. Garnets are a basic for the businesswoman's wardrobe. Garnets of a color are fashioned into rings, pendants, pins, and earrings, this slide shows red and violet garnets strung into beads to be worn alone or in combination with pearls or gold beads. Garnets are smart for any social occasion.

Garnets are very durable. Only diamonds surpass garnet's light properties. They are a gemstone for all seasons.

Durability and Cleaning

Ultrasonic: usually safe; Steamer: never; Warm Soapy Water: safe; Avoid sudden temperature changes.

Proteus

In Greek mythology, Proteus was a Sea God, capable of changing his shape. It has become a noun for one who easily changes their appearance or principles. Proteus is the only treated garnets. All the others resist change but a few Almandine/Pyrope from the US, Idaho, will change into Proteus. The treatment brings a thin layer of metals to the surface. This causes it to have a dual appearance. In reflected light, they have a dark gray, metallic luster, much like hematite or marcasite, while still allowing light to pass through to show deep red reflections from the interior.

According to the marketers of Proteus, the color centers of certain types of garnets can be reorganized and a metallic component of the garnet itself is driven to the surface, "plating" it.

The literature did not say what the treatment was, but I would assume it would be heat, and the Fe ion of the almandine would be driven to the surface, since hematite is iron oxide.

Garnet Doublets

A few hundred years ago the double was born. Someone solved the durability problem of glass gem substitutes. The bottom was glass with a thin slice of garnet for the top put together with some sort of glue. Garnet doublets are amazing. The stone has the luster and hardness of a garnet on the top and it takes on the color of the glass on the bottom. These were common in Victorian and older jewelry. There is a definite luster difference where the glass ends and the garnet begins. Triplets are the next step. Triplets consist of crown and pavilion section and have some coloring substance bonding the top and bottom together, such as the opal triplets which are common today.

Synthetic Garnets

YAG is Yttrium Aluminum Garnet. YAG was used as a diamond stimulant in the 1970s. The critical angle of YAG is 33 degrees. YAG cuts similar to natural garnet. It has many different names such as Diamonique, Diamonite, Kimberly and Linde simulated diamond. After the 1970s, synthetic cubic zirconium or CZ took over. Today YAG is used in lasers.

GGG is Gadolinium Gallium Garnet. It is usually colorless, used as a diamond simulant. It is used in making some optical components. It has good mechanical, thermal and optical properties. Its density is 7.08 and hardness between 6.5 and 7.5. Its color can be modified with addition of various dopants or metal ions.

I wish to thank all those individuals who have studied and written about garnet. The information for this presentation was obtained from various sources such as reference books, journals, textbooks, and the internet. Much time and effort was required to make this garnet presentation. The education in itself was well worth the effort.

Essay on the State of Our Hobby Groups

By Diane Eames, GG

Editor's Note:

The following essay was written by Diane Eames, GG, who was charged with finding a way to save the Texas Faceters' Guild which is in very real danger of going under. Diane contacted me as part of her efforts and we exchanged a few emails. Walt Heitland published Diane's essay in the November issue of Meet Points, the newsletter of the Vancouver Island Faceters' Guild and I felt it was something that would be worthwhile reading for the members of the Midwest Faceters' Guild. This past year saw the Intermountain Faceters' Guild fold after 20 years. The Midwest Faceters' Guild has been steadily losing membership for years. We have a very rich, nearly 32 year history; and it would really be a shame to see the Guild fade away. We have a small group that is trying to return the Guild to its glory days. We could use some help. Think about it.

"As I've written several times, this year my assignment has been to find a way for the Texas Faceters' Guild to regain its past energy and viability. As part of this process, I've talked or written to lots of people in the gem world. These conversations have been by phone, talking to gem and mineral groups, to faceting forums, and members of faceting guilds in other parts of the country. Here are some of the conclusions I've come to over this year.

All faceting guilds and gem and mineral groups have lost membership over the last 20 years. Older, long time members make up the majority of both groups. Regional faceting competitions have died off due to lack of entries. However, several gem and mineral groups in Texas have a significant faceting community, primarily Houston, Austin and Arlington. The other groups appear underserved, with a few members interested in faceting, but few sources to draw on for education. The rural cutters are also finding it difficult to find someone for training.

Texas Faceters' Guild has been inactive this year. A couple of members have contacted other members asking where their newsletter is, but no one has stepped up to help create new life into our guild. The newsletter is not being created as there is no one to serve as the editor. A newsletter takes a great amount of energy (ask Bob Lucas,) but it offers limited returns, such as a way to reach potential members.

We do owe our active members some way to serve them as they paid their dues. The newsletter will be replaced by our website. We will create a members only section with back issues of the newsletters. Current members can attend our seminar in October free of charge, less any cost for food. The website will also have a forum. USFG has a very active forum, and I think we can do the same.

Faceters are telling me that the Internet is how they are learning. Instead of calling a local fellow cutter, faceters get advice from all over the world. With our forum, we can blend the forum with a mentor program. That extends the forum to the phone and the mentor that is close enough for a face to face, if need be.

To stay vibrant, we need to attract new members, and a website is an excellent education and recruitment tool. We need to assure new faceters that support will be there for them. This is the way we survive. The areas of the state that need our help are more often the rural areas. However, the Dallas Gem and Mineral Club doesn't have enough internal support to encourage members to take up the craft.

I will also try to recruit members from an area so far not attempted, as far as I can tell. When I started in the jewelry business in Dallas in 1984, I had no idea there were active groups of gem faceters already around me. The entire time I've been a jeweler, if a faceter was needed, you usually looked to New York or southeast Asia. We need to find out if there are jewelers interested in learning the craft. I'll start talking to my colleagues and let you know.

We are not at all visible at this time and anyone considering taking up gem cutting does not know we exist. The most effective ways to be visible are faceting demonstrations at gem and mineral shows, and speaking at their meetings, along with our website. I am trying to attend one or the other about once a month. It's been very interesting, and I hope that some of you decide to do the same. Texas is a big state, and I could use the help." – B. Diane Eames, GG

OUR DEEPEST THANKS TO MERLE A. REINIKKA, DESIGNER, AND NORTH CAROLINA LAPIDARY SOCIETY FOR THEIR COURTESY IN GRANTING REPRINTING** MIDWEST FACETERS GUILD

7.

THE MIDWEST FACETER

STONE CUTTER

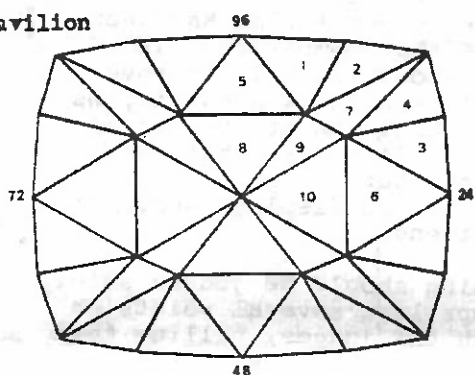
OCTOBER, 1985

A Split-Mains Cushion by Merle A. Reinikka

This design is really only a modification of the Gabriel Regent---the single difference being the absence of additional culet facets in this pattern. Indexing given for the Gabriel Regent was for use with a 120 index, whereas the Split Mains Cushion utilizes a 96 index---an index gear more popularly used by most faceters.

The prototype of this design was done in smoky quartz. The finished stone measured 17 x 20mm.

Pavilion



Cutting Directions

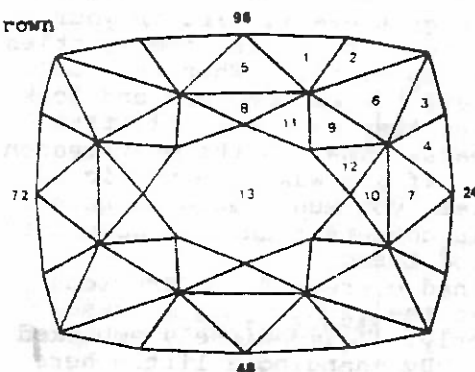
Preform girdle at 90°, indexing 94-2-46-50, 90-6-42-54, 23-25-71-73, 14-34-62-82.

Numbers outside the diagram indicate index reference points. Numbers inside the diagram indicate cutting order.

PAVILION

Step	Angle	Index
1	49.5°	94-2-46-50
2	50°	90-6-42-54
3	57°	23-25-71-73
4	53.5°	14-34-62-82
5	44.5°	96-48
6	55.5°	24-72
7	43°	10-38-58-86
8	41.5°	96-48
9	40.5°	10-38-58-86
10	40.5°	24-72

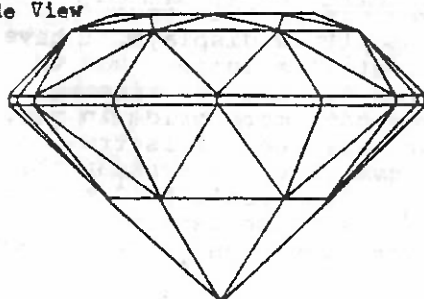
Crown



CROWN

Step	Angle	Index
1	46°	94-2-46-50
2	46°	90-6-42-54
3	49°	14-34-62-82
4	48.5°	23-25-71-73
5	41.5°	96-48
6	40°	10-38-58-86
7	45.5°	24-72
8	39.5°	96-48
9	39.5°	10-38-58-86
10	42°	24-72
11	29.5°	93-3-45-51
12	28.5°	20-28-68-76
13	0°	Table

Side View



The Midwest Faceter

October 1998:

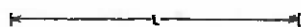
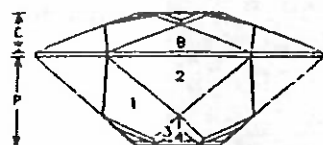
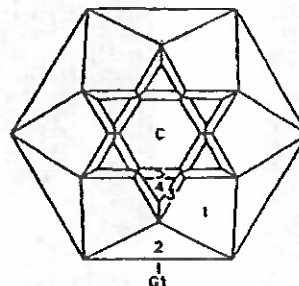
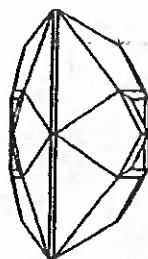
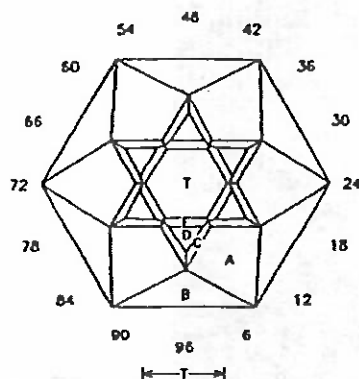
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FROM: U.S.F.G.

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**David's Gem (Star of David)**

Wilf Ross March 17th 98

Angles for R.I. = 1.72 - 1.76

74 facets + 6 facets on girdle = 80

2-fold, mirror-image symmetry

96 index

 $L/W = 1.155$ $T/W = 0.326$ $T/L = 0.282$ $P/W = 0.346$ $C/W = 0.154$ $H/W = (P+C)/W+0.02 = 0.520$ $P/H = 0.665$ $C/H = 0.296$ $Vol./W^3 = 0.249$ **PAVILION**

G1	90.00	96-16-32-48-64-80	
1	41.50	08-24-40-56-72-88	
2	58.55	96-16-32-48-64-80	
3	36.02	06-10-22-26-38-42-	Do not polish
		54-58-70-74-86-90	
4	26.59	96-16-32-48-64-80	
5	22.64	96-16-32-48-64-80	Do not polish
C	0.00	Culet	

CROWN

A	21.50	08-24-40-56-72-88
B	36.05	96-16-32-48-64-80
C	17.93	06-10-22-26-38-42-
		54-58-70-74-86-90
D	12.56	96-16-32-48-64-80
E	10.52	96-16-32-48-64-80
T	0.00	Table

Acknowledgement; This design evolved from the Doublestar cuts designed by Ralph Mathewson and published in January-April 1996 Texas Faceters' Guild Newsletter.

