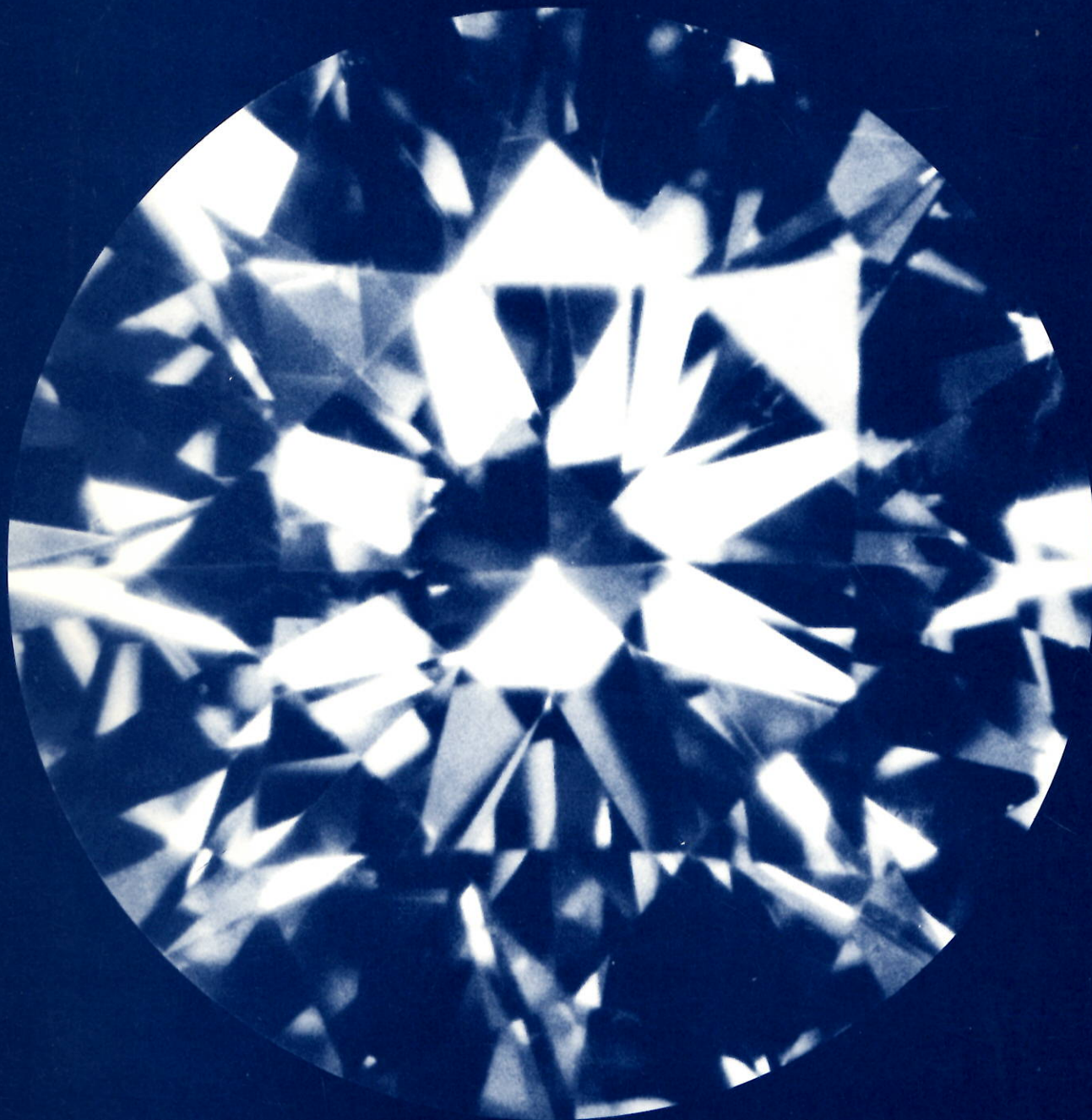


# CORNERSTONE

 ACCREDITED GEMOLOGISTS ASSOCIATION



MAY 1986

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## TABLE OF CONTENTS

President's Report at Tucson . . . . .	2
Highlights from Trade Publications . . . . .	3
Diamond Report . . . . .	5
Pearl Primer . . . . .	5
Old Prospector's Mine Produces Rare Gems . . . . .	6
Jade . . . . .	7
On the Lighter Side . . . . .	9
Ivory . . . . .	10
Heat Treatment . . . . .	12
Of Computers and Programs . . . . .	15
An Introduction to Aganet . . . . .	17
Aganet; A Beginner's Point of View . . . . .	20
Annual Report . . . . .	22
Statement of Revenues and Expenses . . . . .	29
AGA Bestows Honorary Memberships . . . . .	21
Membership Directory . . . . .	30
MGA Directory . . . . .	37
AGA Membership Application . . . . .	39

## PRESIDENTS REPORT AT TUCSON

Speaking at the recently completed 4th annual Tucson conference and seminar, President Neil Cohen characterized 1985 as a period of growth and adjustment for AGA. From a more centralized structure, AGA has worked toward a more diversified organization making fuller use of committee resources. This effort, with volunteer help he hopes to continue and strengthen in 1986. To this end he announced the appointment of Jack Kelsey as the 1st AGA Executive Director whose charter is to coordinate the activities of all Committees and the Board of Governors.

Neil announced that the committee heads from 1985 would continue in 1986 and introduced each one with a few comments:

### Admissions and Membership -

Robert L. Rosenblatt -- prepared and with the assistance of the Publications Committee issued the recruiting pamphlet "A Closer Look".

### Public Relations -

B.J. Caldwell -- Issued many individual press releases, had major features in McCalls, Personal Investor and Bride's Magazines, following a concerted effort to obtain AGA publicity in the consumer press -- which resulted in business for many of our members.

### Publications -

Dana Richardson -- Produced and distributed the first issue of Cornerstone in it's new format and looks forward to two issues in 1986 plus the addition of about eight to ten Newsletters during the year to foster better communications and provide more service to the members.

### Member Benefits -

David Atlas -- Obtained Avis discount cards for all members and is looking into insurance and other areas of interest.

### MGA -

Donald Palmieri -- Continued the good work of previous years, strengthening the MGA designation by policing and maintenance of high standards.

### Research and Development -

Ted Themelis -- Issued four valuable reports in 1985 of interest to us all.

### Constitution and Bylaws -

Joe Tenhagen -- Reviewed, rewrote, conducted membership vote and obtained acceptance of revised documents more suited to AGA's present size and activity.

With reference to the last item - an election of regional governors is required and members will soon be receiving ballots.

Neil announced that ASA, at their Mid-Term Meeting, had unanimously voted to accept the MGA designation in lieu of their Gems and Jewelry Examination, and that MGAs joining ASA would be accepted for Senior Membership without being tested in their specialty.

Neil further announced that plans for Tucson 1987 were underway and that he expected to return to present facility next year. He also indicated that a summer conference was being planned for the East Coast and that a joint conference with ASA in Portland, Oregon was being discussed for June.



## A.G.A. AUTHORS IN PRINT

Congratulations to "Cap" Beesley for his feature article in February's Jewelers Circular-Keystone on "Pakistan's Emeralds!" The text, photographs, maps and gemological data make it "must" reading for all of us and we look forward to Part II on other Pakistan gemstones in an upcoming issue.

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# HIGHLIGHTS FROM TRADE PUBLICATIONS

**NATIONAL JEWELER 2/16/86**  
by YOUNG McQUEEN

Page 1

## JEWELER MUST PAY \$12,000 IN LANDMARK 'DECEPTION' CASE

The city of San Diego cracked down on one retailer, Jewelry Connection, for deceptive advertising. Our example was a "One Week Only Sale". It ran for 65 consecutive weeks.

## JEWELERS' POLYGRAPH COALITION POISED TO ATTACK LEGISLATION

Comments on continued efforts of the jewelry industry, et. al. to defeat the proposed ban on use of polygraph testing.

## LATE BRIEF: WARRANT ISSUED FOR ARREST OF PHILLY 'DIAMOND KING'

The Philadelphia district attorney issued a warrant for the arrest of Ron Perlstein on 213 counts of deceptive business practices, theft by deception, et.al.

Page 8

## PERLSTEIN MISREPRESENTATION REVEALED IN APPRAISAL CLINIC

A group of Pennsylvania gemologists participated in a free clinic to evaluate diamonds purchased from Perlstein in Philadelphia. The consensus was that color and clarity grades were often continually overstated by an average of three grades each, and weights were overstated several points on each stone. State Senator Greenleaf planned to add amendments to his bills to include mandatory warranties and refunds for dissatisfied customers, and State Licensing requirements for appraisers.

Page 12

## RAISED TREASURE OFFERS GOLDEN OPPORTUNITIES

Details on the treasure found in the Atocha last summer with emphasis on retail jewelry trade.

Page 16

## SUPPLIER BLASTED; LURES CONSUMERS TO WHOLESALE SHOW

Discusses continuing problem of retail customers at wholesale shows. In this case a G & LQ show in Santa Monica, California.

Page 20

## FLORIDA SCAM CASE ENDS; JEWELER BEATS FRAUD CHARGE

Suppliers are defrauded of over \$1 million dollars by Hollywood Florida retailer, P & J Jewelry.

## THE JOURNAL OF GEMMOLOGY VOLUME 20 NUMBER ONE JANUARY 1986 by PAM ABRAMSON

With this issue of The Journal of Gemmology (first issue 1947) a new style and format has been introduced. The new appearance includes more color and illustrations, larger page size, and an all-together more up-to-date look.

If the commitment to journalistic excellence is as important to the Gemmological Association of Great Britain as the Journal's new "look" (and it certainly has been in the past), there should be no problem with their higher overseas subscription rate of U.S. \$50.00.

Pages 14-17

## SEIKO SYNTHETIC EMERALD by Stephen J. Kennedy, B.Sc., F.G.A.

Seiko of Seiko watches has developed a new synthetic emerald made by the flux-melt method. It is currently being marketed only as a set stone in their own line of jewelry named Bijoreve. The optical properties of the new synthetic are discussed. These values accord to the values of other synthetic emeralds grown by the flux-melt method.

Pages 20-33

## AN IMPROVED SAMPLE HOLDER

A sample holder that can be used with gemmological microscopes is discussed. The

holder has a dial to measure degrees and may be used to determine angles between crystal faces. Applications include the distinction between natural and synthetic ruby and amethyst.

Page 34

ACCIDENTAL DIAMOND COATINGS by Pamela J. Abramson, G.G.

The effect on the color of diamonds subjected to long years of wear while using iron enriched water is discussed. The iron tends to coat diamonds and cause a distinct color change.

Pages 49-51

VISUAL OPTICS WITHOUT THE GLOOM by James B. Nelson, Ph.D., F.G.A.

The Hodgkinson Method of gaining information concerning the optical properties of gemstones is a simple way of determining these by looking through the table of a stone at a light source three to six meters away and studying the light's reflective pattern. The method is detailed and a discussion of how best to teach it in post-gemmological courses is discussed.

**GOLDSMITH 2/86**  
by LARRY PHILLIPS

Page 26

ISREAL DECLARES POLICY FOR OILING EMERALDS

"Oils must be transparent... not have color."

"Done not to improve color and will not harden into stones..."

"(Done) to make it easier to clean (the stones)."

Page 89

METTLER

Has published a new booklet called WEIGHING THE RIGHT WAY. Free copies available through: Mettler Instrument Corp. Box 71 Hightstown, N.J., 08520 (609) 448-3000

**JEWELERS QUARTERLY**  
**1ST QUARTER 1986**  
by LARRY PHILLIPS

Page 6

CHROME TOURMALINE by Mark P. Herschede, Jr. G.G.

Mr. Herschede reports on the approximately 2400 cts. of gem quality chrome tourmaline mined per year.

Topics include:

- \*Color: bG to yG, medium tone, vivid colors best
- \*Treatment: No treatment will affect it as it is colored by chromium.
- \*Imitations and Substitutes: Watch out for Chrome Diopside
- \*Inclusions: The author discusses the five most common including:
  - included crystals
  - included crystals with strain halos
  - white to orange-brown acicular needles
  - opaque black inclusions
  - fingerprints with minute crystals or typical fluid pattern
- \*Durability: Good

Mr. Herschede also includes a full list of properties.

Page 10

TANZANITE by Robert C. Kammerling, GG  
Mr. Kammerling discusses the origins and romance of Tanzanite as well as:

- \*Notable Specimens: Largest found yielded 360 carats, faceted
- \*Identification: Most likely confused with sapphire and iolite - key tests are R.I. and pleochroism
- \*Fashioning and Heat Treatment: Treatment stable to about 900 degrees Celsius

The author again warns against using ultrasonic or steam cleaning Tanzanite. A full list of properties is given.

## DIAMOND REPORT

by ELIE G. KASSAB

Martin Rappaport's lawsuit against the Diamond Dealers Club has been settled out of court as of March 21st, 1986. His membership in the Club has been restored.

Mr. Rapaport publishes the famous "Rapaport Diamond Report" weekly reflecting diamond wholesale or asking prices on 47th Street. His report has in one way or another become the industry reference to diamond prices.

Lower grades of fancy cuts are in tight supply. Demand in the U.S. market is still sluggish. The presence of Far Eastern buyers is improving the market especially in the certified and high quality mellee areas. 1.5 caraters are very scarce. Well made fancies are bringing in a premium. 1 carat D-Flawless running \$9000 to 12000 per carat depending on make.

A 12.01 carat D-Flawless ring was sold by Christie's last December for \$253,000 (\$21,000 per carat).

White gold and platinum are making a comeback. Combinations of white and yellow are increasing in popularity. Pearls have increased 15% (wholesale) due to the drop of the dollar. Gold and silver have seen very little fluctuation, a puzzling phenomenon with all what is going on.

## NATURAL AND TREATED ROUGH

AVAILABLE TO MEMBERS FOR RESEARCH  
CORTNEY BALZAN



The disclosure issue is important to our Gemological Laboratory. Consulting to the larger firms, requires how others handle this problem. This can come from AGA members in small, medium and large firms where disclosure plays a role in their activities.

I spoke to "Cap" at the show and mentioned that Montgomery Wards has a method in dealing with this subject, along with Shreeve and Co. The trade magazines will publish information on this subject but I need to broaden the scope for my purposes.

In our laboratory, disclosure of treatments and country of origin are noted when evident. Our information is given to clients when necessary. The lab receives calls on this issue from both the public and trade sectors. This is such because recently consumer advocates have made this an issue in the San Francisco Bay Area.

On a recent buying trip in Sri Lanka I picked up heat treated rough blue sapphires along with the natural rough. This can be available upon request to AGA members for experimentation, though as Dr. Nassau mentioned about the scientific approach and destruction of material, please make note this should not happen.

Members can forward their information to: P.O. Box 6007, San Rafael, CA 94903.

## PEARL PRIMER TYPES OF PEARLS

FROM JEWELERS ON AMERICA INFORMATION GUIDE (1ST OF SERIES)

**AKOYA** - The most familiar type of cultured pearl, grown in true pearl oysters off the coasts of Japan. Akoya pearls are known for lovely orient and warm color. They rarely grow more than 9mm in size.

**SOUTH SEA** - Large cultured pearls (10 mm and larger) grown in large oysters off the coasts of Australia. Usually silvery in appearance and sometimes not as lustrous as fine Akoya pearls. South Sea pearls are rare and costly.

**BURMESE** - Large cultured pearls (10mm or larger) grown in large oysters off the coasts of Burma. Warmer in color tone than South Sea pearls, rare and costly.

**MABE** - Large hemispherical cultured pearls grown against the inside shells of oysters instead of within the body. Less expensive than regular round cultured pearls and, because of their hemispherical shape, used mounted in such jewelry as earrings, rings and brooches.

BIWA - A freshwater pearl cultivated in a mollusk only in Japan's Lake Biwa. Smoother and more lustrous than fresh water pearls from China.

FRESH WATER - Pearls cultivated in mollusks, not oysters, found in fresh water lakes and rivers. Fresh water pearls generally are elongated in shape and have a milky translucent appearance. Their wide range of interesting shapes and colors make up in fashion appeal for their relatively low value.

KESHI - Tiny pearls, some a little bigger than a grain of sand, which form naturally in many cultured pearl oysters.

## **OLD PROSPECTOR'S MINE PRODUCES RARE GEMS**

EXCERPTS FROM SALT LAKE  
TRIBUNE April 6th 1986 by  
S.J. Guffey-Associated Press Writer

GUNNISON NATIONAL FOREST, Colorado  
The rich minerals folded into the Rocky Mountains have shaped Colorado history. First the miners came for the gold, then the silver. Now it's lapis lazuli, the gemstone that gave royal blue its name.

High on North Italian Mountain in southwestern Colorado is the Blue Wrinkle Mine, a deposit of lapis lazuli that shaped the lives of prospector Carl Anderson and his son Ande.

Assays have declared Blue Wrinkle ore among the best lapis the world has ever seen.

As far back as the pharaohs, those who wanted the best lapis looked for it in Afghanistan. That trade ended with the Soviet invasion in late 1979.

Not long before that invasion, a Tulsa, Okla. oilman heard about the Blue Wrinkle Mine and talked his partners into buying the claims Ande Anderson had held since his father's death a decade before.

Ande Anderson died in 1981, but the mine he and his father worked with pick and shovel for 40 years turned out to be a big winner after the new owners moved in with modern mining equipment.

Paul Schultz, the Oklahoma oilman, wouldn't divulge the takeover cost. "Just say it was for something over \$60,000", he said. He also won't discuss how much the mine is yielding, but one morning in mid-March he shipped 300 pounds of gem-quality Lapis to Hong Kong where it will be cut down and polished for the first large collection of Blue Wrinkle jewelry. Polished lapis sells for \$10 to \$15 a carat.

The story around Gunnison County is that Carl Anderson just stumbled across the Blue Wrinkle back in 1939. Paul Schultz, now the manager of the mine tells it this way:

"He had a garnet claim up in these parts. One night, after a day of prospecting, he was heading over the ridge to get back to the Star silver mine where he worked. Some say he had a little too much to drink and fell down, others say he was on horseback.

Whichever way he came, it was raining that night. He looks down and sees this blue stone. He took some into town and nobody knew what they were. Who knows whether Carl knew? We do know he staked four claims in the area he thought the blue stone had come from. And that he worked those claims for about 30 years.

After just a few years under new ownership, the Blue Wrinkle Mine now cuts twice as deep and wide into North Italian Mountain as the Andersons had managed in their 40 years of digging.

The highest-quality lapis taken from the mine came out after Ande sold his claim, and Schultz said the vein shows no sign of narrowing in any direction.

### **BLUE TOPAZ**

At the Tucson show this year, blue topaz was more than abundant. The prices-unbelievable! After having just purchased some lovely, well cut sky blue stones for a mere \$2.50 per carat, we wandered past yet another blue topaz dealer. When asked his price for very similar material, he quoted us \$4.75 per carat-and warned us to beware of lower priced goods-they may have been irradiated!

# JADE

EXCERPTS FROM A TALK BY  
EDMOND ROOT AND JOHN  
NG

Mr. Edmond Root stated that in the course of his years of appraising, the biggest problems he encountered were in putting a value on pearls, opals and jade. He met John Ng (of the Jade n Gem Corp.) shortly after John came out with the color chart and after much discussion they decided to collaborate on a book aimed at the jeweler and appraiser that deals with jewelry jade. The book is titled, "Jade For You-a Value Guide to Fine Jewelry Jade".

John stressed the point that there are several things that go into evaluation of jade. They are tone, translucence texture, shape, size, polish and finish. It takes all three T's to make a piece of jade a good jade.

**TONE** - tone is simply the color, and the scale goes from 1 to 5 and back down to 1. The 1 at the one end is a very, very light green and at the other end the 1 is a very, very dark color. So dark that it looks black, but if you shine a light on it you will see that it is green. 5 is the median, being very very green and very brilliant.

**TRANSLUCENCY** - The scale for translucency is as follows from 5 to 1:

5-Water Jade-you can't see through it like water or glass, but you can read printing through it.

4-Honey Jade-Honey has fine particles suspended in it. This jade will also have fine particles usually a shade of green color.

3-Normal Jade-This stone is just translucent. You can relatively well see a light shining through it.

2-Nearly Opaque-If you shine a light from the back, you will see just a circle or rim of light.

1-Opaque-Shine a light from the back and you see nothing.

**TEXTURE** - The scale for texture is also a 1 to 5 scale with 5 being the best. The best example for a five is clear quartz or a fine aqua or topaz with no inclusions. However, even the finest jade will have the characteristics of fine jade and that is several fine little dots inside. The scale is a matter of degree until there is so much texture that the stone is opaque.

To have really fine jadeite, you have to score all fives in the three categories or at least 90%. If you are missing or low in any one of the categories, you may have fine jade, but never really top quality.

Next points are shape and size. The shape we are stressing is the cabochon. The better cuts resemble the ginkgo nut-good oval shape and well rounded. Placed on a flat smooth surface, it will spin freely. Odd shapes are usually the result of recutting a broken bangle or carving. Broken pieces are a good source of fine jade-often you can buy a broken piece for a hundred dollars or so, but after recutting to maximize the color you can sell it for five to six hundred dollars. It's just like in diamonds-when you recut to remove flaws, you reduce the size but increase the value. The most popular shapes in jade are ovals, pears, hearts and cylinders. All these shapes have to do with when the rough was found. It also explains why calibrated shapes have not been perfected in fine-jade. They always try to maximize the color.

**Size-rule of thumb.** The Chinese say that the size cabochon you wear on your finger should be about the size of your thumbnail. The sizes you encounter are based on the popular sizes currently acceptable. Everything being equal, the larger sizes will fetch more money and matched pairs are usually three times the cost of a single piece of the same quality. Oversize pieces present problems just as they do in other gemstones-what do you do with them. They are too heavy to use as pendants and they are not big enough for a bangle. After much thought you usually wind up cutting them into cabochons. A



point of interest-the Japanese favor a high dome thick cabochon while the Chinese want it just right, a high dome but a flatter back. Buying lots of jade is just like buying parcels of diamonds. The table is covered with lots of junk jade with two or three nice pieces thrown in. If you want the nice pieces, you buy it all. Sometimes the lesser quality jade will make nice jewelry.

Next is polish. A fine jade will always have a high luster. One of the final steps in this process is to immerse the jade in a molten wax for 48 hours. This covers all the pores and cracks and makes about a 5% difference in appearance. It will transform a dehydrated looking piece of jade into a nice stone. Most repolishing of jade is really rewaxing.

Finally we have the finish. This is important and is basically the workmanship that goes into the piece. The curve on the bottom actually comes to a point that is symmetrically placed and allows the stone to spin freely on a flat smooth surface. The finish also means sacrificing material to remove blemishes, clear spots and imbalances of color. This is why there are so many elongated shapes such as the marquise.

Mr. Root then took over again and gave the multipliers for the scales which helps arrive at a final number. The multipliers are:

Tone 25%

Texture 20%

Translucency 15% In the far East, tone and translucency would be reversed as far as importance

Shape, Size, Polish and Finish 10%each This scale applies mostly to the greens because this is where the trading is done. The lavenders, reds and other colors have a slightly different method of trading.

We need to acquire stones from our suppliers that fit in the middle of each classification except for the two top categories-they are too expensive. Then you can use the suggested scoring system against an average price and against what cabochon size-a good size is 11x15mm. This will let you come up with an estimated value in the lower types that will be pretty accurate.

The other way of grading is through observation. Shine a light on it and look. What is it, where does it fit? What is the tone, the texture? Then shine the light from the back-what is the degree of translucency? What lines or cracks do you see? Then spin the stone to determine its finish.

Jade is a strange thing. The more you look at it, the more you feel it, the more you acquire that feeling-is it cool, does it ring right? The point is that using this observation method, you can devise your own scoring system against a reference stone you already possess. The important thing is to look at lots of jade and get a feeling for prices associated with certain tones, textures and translucencies.

Points brought out during the question and answer session:

1. Jade N Gem will appraise pieces for the trade. Normal turn around is about one week. Prices will normally be stated as a range.
2. They do not do carvings but have sources that will.
3. On carvings and cabochons of the same color and quality, the cabochon will always command the higher price because of its higher luster. The exception is one of a kind carvings which adds anti-iquity value to the gem value.
4. A natural stone will always show areas that are heavier in color than others. A dyed stone will show even color.
5. The price of an 11x15mm cabochon of Old Mine Jade of the top quality will range between \$15,000 and \$50,000 for the stone. The price depends on what the dealer paid for the boulder and how much color he was able to recover. Also, the Japanese will pay top dollar for the fine color at this time and that is a determinant of the price.

## ON THE LIGHTER SIDE OF APPRAISING

by DANA RICHARDSON



Let me explain the appraisal job I used to have, working for the Zales Corp. Fine Jewelers Guild stores in the Salt Lake and Denver areas.

My job was to haul all of my full size lab equipment (purchased just before the dawn of modern portable labs!) by auto or airplane to the various stores, whereby I would set up, usually at a counter where I could stand up for an entire 12 hour period, in poor lighting conditions, and proceed to appraise the sorted jewels of the store's customers-while they waited-and watched!

When I first started at this line of work I found it very distracting to have these people breathing down my neck and bombarding me with a million questions, and to be forced to listen to these (mostly) women tell all about how they themselves designed their lovely pieces, or how they had been acquired, not to mention the unusual non-jewelry related topics these women felt obligated to discuss with me-things such as how one 45 year old customer was having a hard time getting her 5 year old daughter to discontinue breastfeeding.

It was always a joy to learn that my current customer had never removed her wedding ring since that big day-and that she surely hoped I could appraise it for her without her taking it off. If I was able to convince her to remove it, she would typically stick her entire finger (and half of her hand) into her mouth and get it very 'slippery'-then pull with all her might and drop the saliva covered ring into my hand-proudly. It was also a thrill to quickly check the prongs under the scope and view the multitude of living organisms lodged between stone and prongs.

Often after returning from ultrasonic and steam cleaning the ring (during which time I would stand way back and cover my face and cloths to avoid having the mysterious substances blown all over me!) I would often be accused of 'switching' the stone. "That's not my stone! My stone looked different!" Somehow they couldn't grasp the visual, not to mention the sanitary aspects of keeping their jewelry clean-I often wondered if they bothered to change their underwear....

The value I placed on these people's precious jewels were always too low, or too high. It was hard to win. Thousands of "natural alexandrites" crossed over the surface of my refractometer. Upon my identification many would turn and walk away, muttering "stupid young girl-what does she know!" and the like. Some people cried when they found out Grandma's ruby was synthetic-or worse, their diamond was a C.Z.

All in all it was one wonderful experience after another.

While working at the prestigious downtown Denver location one day, I got some very strange looks from a number of rich old ladies with large 'flawless, perfect' diamonds. At the time I was traveling from store to store with a jeweler and a salesman from a remount company, resetting your old diamonds in new mountings, while you wait! Ysidro the jeweler was from Gualajajara, Mexico. He was an excellent jeweler and had an unusual sense of humor. At the end of this particular day he asked me if my eyes were bothering me? I said no, why? and he started laughing. I looked in the mirror and discovered black circles all the way around both eyes. While I had been out to lunch he had rubbed black carbon paper around the eyepieces of the microscope-Funny. Other tricks were taping a piece of paper under the lens so all I saw was white, and putting the close-up lens of my camera on upside down. I made a great impression on my customers.

One day I was reminded what a mistake it can be to 'overwhelm' a customer with your gemological knowledge.

I was appraising (while they watched) several pieces of jewelry for a couple (mid-thirties) and noticed that the diamond in her engagement ring had a chip in

the girdle area. They were shocked to find out that diamonds were not indestructible! They asked how it could have happened, and I proceeded to explain.

While drawing an outline of the rough diamond crystal, I asked if they knew what the term 'cleavage' meant. When I got no answer I looked up and noticed that the very well endowed woman with the very low cut dress, and her husband, both had red faces and were giving me a very unusual look. I was glad I didn't try to explain the girdle also.

## IVORY

EXCERPTS FROM A TALK BY  
ED AND SUE PRIMOFF

The elephants are starving. Now what is happening is that their ivory is becoming very scarce.

Elephant is only one form of ivory. There are actually twenty different animals that have ivory. The most important thing in identifying ivory is that ivory has lines in it. This is the technical name if anyone wants to try and pronounce it-Retzius Lines. You'll see the growth lines in ivory.

Now when you have an elephant tusk (and we start with elephant because that is the most common and the one you'll see the most), the lines grow parallel to the tusk, but at the end of the tusk-the tusk is solid only about 1/3rd the way in, the other 2/3rds is where the root goes. When you look at a slab of ivory, something these lines do, and I've heard it referred to many ways, I like the term "Circular Crosshatching". It's easy to remember. These lines actually come together and that's what's going on to help you identify ivory. Kind of like curved striae and they cross in circles. Now that will identify about 90% of your elephant ivory. It's in all ivory, you just have to find it. Now if you look at this slab, you'll see the lines going down. And if you'll look at the ends, you'll see them crossing. You may need a loupe depending on how good your eyes are, but they cross exactly like this. And that's what you have to find-these circles crossing. Now, these are actually planes of weakness, and when you break a piece of ivory, this will be very ridged. This is an excellent method of testing ivory.

1.70-1.98 is the specific gravity of ivory. It's kind of a unique specific gravity because the fakes are either much higher or they are much lower. There are a lot of ways to test ivory. The easiest is to use the specific gravity so I make a liquid of 1.80 and the ivory will just barely float. Most of your fakes are either celluloids or plastics which are very low, 1.2-1.3, or they're very heavy compositions. I don't know what they are using but it's almost like cement and it has a very high S.G., usually over 3. I play with this all the time and your fakes are very heavy or 99% of the time they're very light.

Your refractive index is very unreliable. I've never known anyone to get this figure of 1.54 that's in the gemology books. I play with the R.I. many times and I can't get that figure to save myself. The hardness is 2½. That's good to know. It also fractures kind of splintery. So if you have a scrap piece of ivory and just scrape it and then take a piece of celluloid, the most common fake, you'll notice a definite distinction. The celluloid will just peel right off where the ivory will splinter and catch.

Now the best way to tell (and this is hard to do in the field), and one of the easiest, is to fluoresce it. It's a very simple test, Ivory fluoresces. Now the problem with that is all your organic materials fluoresce-bone, shell- but what it tells you is what it's not.

The yellow you sometimes see on ivory is called patina, and it comes from years of age. Now something you want to remember if you have any of this, the patina really enhances the value. The darker and more yellow it is, the more valuable. By leaving this in the sun, it will bleach back to white.

The hole in the ivory where the root is is always round. That's something you want to remember. It will help identify a lot of ivory for you. In elephant ivory the hole is always round and it is generally rather large. The female tusks don't get as large as the males. The largest male tusk on record is 228 pounds.

There was another kind of elephant that lived millions of years ago, the Mastodon or Woolly Mammoth, and the best place to see them is at the Smithsonian Museum.

The mastodon lived only in the arctic where it was very cold and the tusk is shaped differently. Their tusk came down and curved out and then back, and they touched. As they got older, their tusks separated and you can see it in the cave drawings. Other than weathering, to identify this type of ivory from modern elephant ivory, the mastodon ivory is much more brittle and it has a little higher S.G. But instead of the circular cross-hatching, it comes down in "V"s. These continue all the way around and no matter how small the piece, it's generally very easy to find.

There is a way to prematurely age the ivory, with one stain that I know of, a purple liquid called Potassium Permanganate. You put it on the ivory and it gives a beautiful patina. However, it's not the golden yellow, it's more of a brown. It won't fade in sunlight either. Once you put it on, it's that color until you sand it off.

The most common thing that has been sold for years and years as ivory, and is not, is bone, and it is somewhat difficult to tell. It looks so much like ivory, and it fluoresces. Once you know what to look for it's one of the easiest to tell. Bone has pits. You may need a loupe to tell, but usually not. On carvings you can see instantly that they are bone. One of the dead give-aways with bone is that it is hollow inside. Quite often it will be capped. Bone is also heavier than ivory. The S.G. usually starts out around 2.

The next type of ivory is Hippo ivory. Don't believe everything you read in the manuals. I have read more about ivory that is not true. The book Practical Gemology will tell you that the Rhino tusk is ivory—a very fine ivory. The Rhino tusk is actually the furthest thing from ivory—they're hair! So when you read about ivory, don't believe everything you read. I find that even the experts don't really know a lot. As a matter of fact, when you go to museums, a lot of what you see is fake.

Hippo ivory has something very peculiar and you can tell instantly. Hippo is one of the few ivories that has enamel on it. Hippo ivory is very similar to elephant in that the first 40% is solid. On hippo though, there is no cross-hatching.

Instead it has circles, growth circles like a tree only not as many.

Warthog tusks—it's a little larger to tell, it has no grain. You won't see many, but the easiest way to tell is by the shape of the tusk, they're generally very small.

Walrus tusk—there are more fakes of this available than real ones. Fakes are everywhere and they usually, but not always, have brown scrimshaw. Now what identifies this is that they give it the root of an elephant tusk. All the fakes have roots, but a walrus doesn't have a root. It has a cavity that goes in about an inch and stops. If you look, it's harder than the ivory and very crystalline. No other ivory has this. What they're doing now in Alaska is shipping in elephant ivory and making eskimo carvings. This is a scam. They're selling it in Alaska as walrus ivory, but you can see from the cross-hatching it is elephant.

What causes splitting in ivory is the changes in humidity. People that sell ivory water it down and the reason they give is to keep it moist, but that's not the reason. If you were selling sponges, wouldn't you want to sell them wet? It's funny, but people come to me all the time and say they bought 300 pounds of ivory and now it doesn't weigh that much. Believe me, you can lose 20% of the weight by the time you get it home. Walrus ivory is more expensive than elephant ivory, but your most expensive ivory is what's been called white gold—whales teeth. They're probably one of the prettiest ivories. It's the thing most commonly faked right now. They are faking these teeth because the genuine ones are very, very valuable.

Whales teeth have rings, the cross section looks like a tree. It's the dentine that's just darker, a sort of tan color and it cracks in a kind of circular pattern. Another way to tell the fake is if you have some nitric acid. Nitric acid doesn't do a thing to the fakes but it will soften up the ivory. After the test, wash it off with water and the ivory will harden back up. Another test is to take a little chip and put it in a test tube and heat it up. Then get some litmus paper—ivory is very alkaline.

Vegetable ivory is very easy to tell,

but if you have a carving you might have some difficulty, however the S.G. is much lighter.

The most expensive ivory is the ivory of the Narwhal. You'll probably never see one. The tusk is generally about eight feet long and straight. It is twisted, sort of like taking a wet towel and twisting it while keeping it straight. The narwhals are very rare and they only live in the Arctic, miles under the ice.

The last thing we have here is some celluloid, also called French Ivory. I want you to look at the lines, they look very much like the lines in elephant ivory. The difference is at the ends-the lines just wrap around while in elephant ivory they cross.

Another way to tell whale ivory from hippo ivory once it's carved is that a whales root is a dot and a hippos is a slash. So if you look at a carving and you see the growth circles with a dot, it's whale.

## HEAT TREATMENT

EXCERPTS FROM THE  
CONFERENCE LECTURE by  
DR. KURT NASSAU



The following is a list of interesting and important information and charts which help explain heat treatment and what it causes to happen. It has been summarized from Dr. Nassau's Tucson lecture. The video tape of his talk on heat and irradiation treatment is available.

A chromium containing substance may be heated to remove other colors to reveal pink/red/orange color

Browns can be heated to remove the brown

If you overheat topaz it can be irradiated to restore color

Any material which fades in light can be removed of color by placing in only 200°C (400°F) oven for 2 hours-this can be done to check stability

Red Tourmaline most probably has been irradiated, heating (high) will remove color-Too dark can be lightened

Amethyst fades slowly at low temperatures to colorless

Aquamarine with yellow or greenish tints is heated to produce blues (by removing iron) and can be irradiated to restore original color

Heating amber causes spangles-stress crack

Heating can induce fingerprints into Flame Ruby

When nature causes color or a star in gem material it is at a low temperature over a long period of time, but when man does it it is at a high temperature over a short period of time, and for this reason evidence is left of high temp. heat

Rather than using the phrase "This stone shows evidence of color enhancement", Dr. Nassau uses the phrase "Stone shows evidence of high temperature heating". Sometimes the color may not have been enhanced! If nothing is detected he uses the phrase "No evidence of heating"

When a color or star is to be 'added' to a stone, a compound of iron or titanium in paste form is painted on to stone and then heated.

Star development can be done at a lower temp (1200°C) and may not show evidence of heat treatment.

Ametrine may be produced by heat and/or irradiation

Recognizing synthetic amethyst versus natural amethyst by twinning is a good test now-may change later

Many pale green and pink tourmalines may turn red with irradiation

## THE USE OF HEAT ON GEMSTONES

All heat produced color changes are stable to light

### EFFECT

AMBER- Darkened  
AMETHYST-Lightened\*or to Citrine  
AQUAMARINE-Heated to reduce green, bring out blue\*  
CARNELIAN-To red  
CITRINE-Darkened  
IVORY-Darkened  
RUBY-Improved red\*  
SAPPHIRE-To yellow or green or blue\*, To star or clear\*  
SMOKEY QUARTZ-Lightened or To greenish yellow\*  
STARS-Removed, Added, Increased-Improved in Ruby and Sapphire\*  
TOPAZ-Blue or Brown, lighten or to Pink\*  
ZIRCON-Change to colorless or blue\*  
ZOISITE-Improve\*

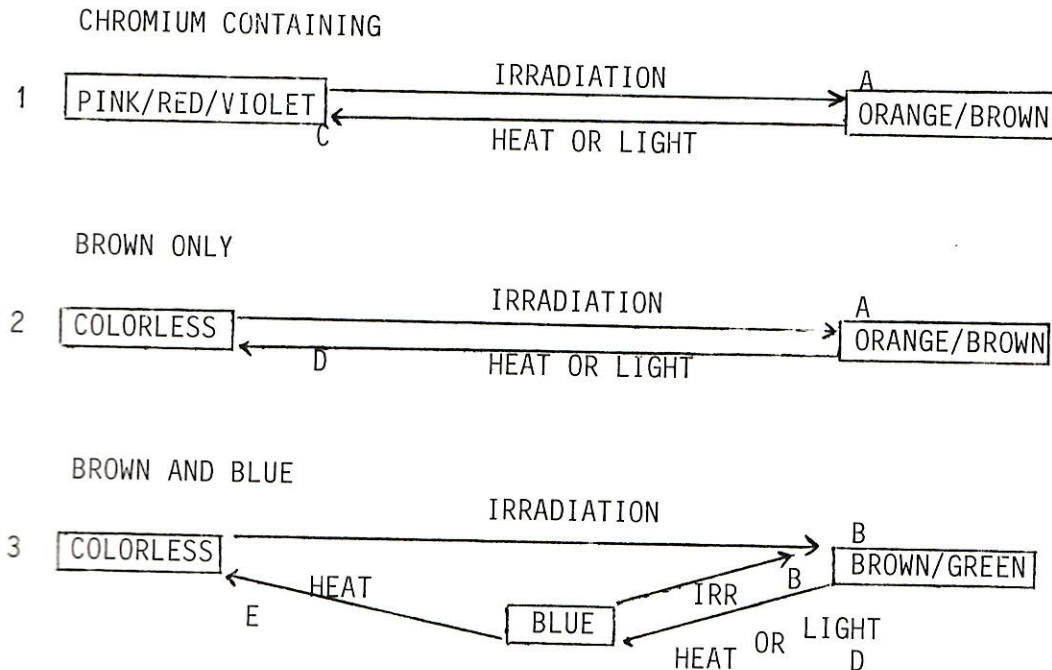
### PHYSICAL CHANGES

AMBER-Reconstruct or clarify (Old process, goes back to Pliny)  
TORTOISE SHELL-Reconstitute  
ZIRCON<sub>1</sub>-Restore\*

ADD MATERIAL (PRODUCT THEN A COMPOSITION)

RUBY AND SAPPHIRES-Diffuse in color and/or star

This first chart shows what happens to  
TOPAZ with heat and irradiation.



Iron and Titanium each in two different forms ( $Fe^{2+}$ ,  $Fe^{3+}$ ,  $Te^{3+}$ ,  $Te^{4+}$ ) may be present in sapphire in differing amounts and ratios. The chart below explains what may happen to the corundum during heat treatment.

A TITANIUM PRESENT (only)



2  $\xrightarrow{\text{EXTENDED. MEDIUM TEMP}}$

Needles reform 1200°C several days

1  $\xleftarrow{\text{HIGH TEMP, RAPID COOL}}$

Needles convert-dissolve Long heating and rapid cool get rid of silk 1800°-2000° C

1 IRON PRESENT ALONE



Oxidizing  $\rightarrow$   
Reducing  $\leftarrow$

2 IRON PLUS CHROMIUM



If no iron present it won't work

B IRON + TITANIUM PRESENT



3  $\xrightarrow{\text{REDUCING HEATING}}$

4  $\xleftarrow{\text{OXIDIZING HEATING}}$

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## OF COMPUTERS AND PROGRAMS

by CYNTHIA C. CARTER

When my husband, Preston, retired from Martin Marietta Data Systems four years ago, we decided to buy a home computer. First we discussed what uses we had for a computer. I wanted to be able to write Gemological appraisals and letters; and he wanted the capability to do financial spread sheets, graphs, household inventory, maintain genealogy records, write letters, and pick up data by phone. This approach, the determination of scope of work, must be the first step in planning the purchase of a computer. Too many people have purchased without planning, only to find that they had acquired equipment which was unsatisfactory to meet all of their requirements, and in some instances the result is that the equipment is put in a corner unused because of the loss of enthusiasm. Quite a lot of research went into putting together our hardware requirements (processor, keyboard, monitor (screen or display), printer, modem for communications, etc.), and the software programs).

As GIA is to the jewelry business, so IBM was to the computer business and Hayes was to communications and to the modem. Now, there are other good computers on the marketplace, some are fully IBM compatible and some are not. There are many software programs available, but all are not compatible with all computers and modems. This is another reason why pre-planning must include determination of software needs before the hardware is purchased. We decided to go with an IBM PC using compatible hardware and programs. I needed a word processing program that would do superscripts ( $34^{\circ}$ ) and subscripts ( $VS_1$ ) for my jewelry appraisals. We needed a printer that would print these as well as graphs, acceptable letters, and large financial and inventory sheets. We needed a maximum amount of memory to operate the program we chose for financial and inventory work. Some programs require 128k bytes or more of memory, so one must consider expansion capabilities. We are now updating to 640k, the maximum now available for a DOS operating system. We

decided on a color monitor in order to facilitate eye ease as well as the ability to put color graphs on the screen at a later time.

To begin with, we decided on some essential pieces of hardware: a processor with 256k of memory and a keyboard, a color monitor, a wide carriage printer, a surge protector: and three programs: PC-disc operating system (DOS), a word processing program, and a financial spread sheet with graphics. We bought the hardware locally so that any defects could be corrected. Our computer dealer connected the equipment and ran the system overnight using a diagnostic program to be sure everything was operating properly. This process is called "burning in". We brought the hardware home, plugged the equipment into the surge protector which was plugged into the wall socket. The processor was now protected from electrical storms or unforeseen power surges through the power line.

The thinking of men and women may differ, but a computer does not think. It only does what it is instructed to do by some program, and you must learn the commands to make the program operate. At first we had two floppy disk drives in our processor. PC-DOS was placed in drive-A so that the Disk Operating System would turn on (boot-up) the computer. PC-DOS also contains a program language called Advanced Basic or Basica. This is the programming language we used to write my gemology appraisal program. Therefore, my appraisal system will only run on a computer that has a disk operating system which will understand the IBM Basica language. However, it should be noted that with some minor changes, a program written in IBM Basica can be modified to operate on other systems.

We found we had another language problem. Preston was using computer terms that I did not know, and I was trying to explain formulas and gemological practices that were not familiar to him. It took a lot of patience and time to communicate our ideas to each other and translate them into Basica.

I have three separate appraisal programs so that I can obtain certain facts quickly without running one long program.



My appraisal programs now contain all the gem weight formulas, an interpolation program to use with the Leverage Gauge, and systems that standardize my diamond and jewelry appraisals. When doing an appraisal I still have to measure, weigh, make subjective decisions and find prices. The program asks for the information in a logical order, does the math, and prints the results so that I have a record to put in my files. Where a subjective entry must be used, the program pauses and asks for this entry. If a piece of jewelry contains many different stones, the program can add the carat weights, subtract the weight from the metal weight, add the costs, determine a wholesale value and a retail value. My mind is freed from many calculations and able to grasp an allover picture of value in a shorter time.

Using our word processor program, I can now call up letter forms and appraisal forms. The information that I place in these forms can be reviewed, revised and corrected on the screen before it is printed. Now we have a program resident in memory that gives me the ability to write often used phrases automatically without repetitive typing. Some examples of these phrases are dates, retail replacement value, a list of instruments used, my signature, etc. Copies can be printed for by files and for my customer.

A word to the wise! Save, save, save. Computers have idiosyncrasies. A slight blip in electric power and they loose their memory. Or maybe you are working with a form and hit a wrong key that throws the form into a wrong context. It is better to have saved the title and a partially correct page than to begin the form anew and loose time unnecessarily. Also, make back-up disks of all your programs, letters and documents.

Through the years the programs that we bought have been updated by the companies that originally issued them. Sometimes the company sends a replacement, but usually there is an additional charge to obtain the newer program. This is done to incorporate improvements or to correct 'gliches' in the program. The updated program usually contains a slight change in operation which means you must relearn a few of the methods you have been using. The new programs will run the old programs

but often the old programs will not run the new programs, making it necessary to adopt all programs to the new system.

As in gemology, there is continual change and discovery in computer science, thereby resulting in the necessity to keep up with the state of the art. Preston had been reading manuals and computer magazines, plus acquiring additional programs. He decided to replace one of the floppy-disk drives with a hard disk drive. This would increase the storage capability of the computer and speed up the time associated with retrieval of programs and/or data. When the processor returned from the dealer with one floppy disk drive and one hard disk drive, Preston spent time putting together a configuration of different programs. Now when we turn on the processor it will boot-up automatically without our spending time inserting floppy disks and a menu is provided on the screen enabling us to retrieve programs and/or data with a minimum of effort. Though memory is lost when the computer is turned off, the programs remain ready for retrieval.

About two months passed while we were happily adding data to our files. Then one morning the unthinkable happened. When the computer was turned on, nothing came up on the screen. The processor had to be disconnected and taken back to the dealer. Our worst fears were confirmed. Something had failed within the hard disk and it had to be replaced. Preston confessed that he had failed to make back-up disks of some of the programs, letters, and documents developed after obtaining the hard disk. A lesson was learned that we won't soon forget.

Subsequently we became interested in communicating with other persons and/or sources of information and purchased a modem. Ours is the type that is placed inside the processor as an add-on board instead of a separate box. We learned afterward that this has several disadvantages. First, it takes up an extra slot and these can become scarce in an IBM PC. Second, if there is a voltage surge through the telephone line, damage could be done to the computer's system board which might have been restricted to the modem if it were externally installed. Surge protectors are also available for a

telephone line but these could be expensive and at present we overcome the problem by unplugging the modem when it is not in use.

A modem requires a program to make it operative. Sometimes these programs are included with the purchase of a program which permits communications with source data, and sometimes one uses stand-alone communications software (e.g. communicating with bulletin boards). Telephone charges are only assessed if the call is long distance. In addition, there may be charges associated with access to data bases for source data. I have not had the opportunity to use any programs available for pricing gemstones, though our system now has this capability if a source is made available.

Of course I am writing this article with a "user friendly" word processing program. This allows me to compose directly on the screen. I can delete or insert words, sentences, and paragraphs, or move them around in context at will. There is a spelling checker in the program that helps with the final proof reading. Then the article is printed out for me, so that I do not have to spend further time typing. Without this help, I would not have been able to send my article to Dana Richardson by her required deadline.

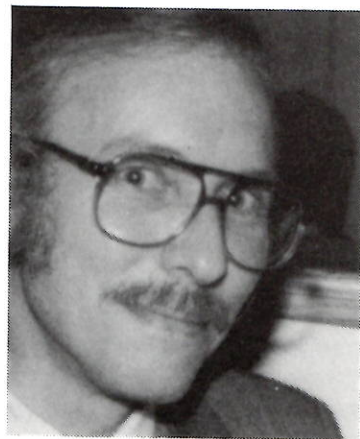
I think that it is exciting that AGA has formed a new "COMMUNICATIONS" committee, as noted in the March issue of the AGA Update. This will enable us to have a central point of contact for gemological information as well as the capability to help each other progress in an expanding communication system. I look forward to learning more and participating in AGANet. I am very curious about the revolutionary method of utilizing existing color grading systems.

A computer must pay for itself in the business world. It should save you time and money, plus providing information quickly. It is time consuming in the beginning to place data in your programs and learn the operation of the computer, but one must learn to walk before one can run. If we can all share our knowledge, we could help to standardize appraisals and advance our communications. Though I have made mistakes, I think the reason that I

am still enthusiastic about our computer system, is the fact that we bought a processor which accommodated a variety of programs and permitted expansion for future developments.

## AN INTRODUCTION TO AGANET

by RODNEY WAGNER



### AGA MEETS THE ELECTRONIC AGE

This year in Tucson a new committee was formed called Communications. The first job for this committee was to establish a computer bulletin board for the use of our membership. This has been accomplished and is on-line. You might ask what is a bulletin board and how do you use it effectively?

This modern age has brought us the personal computer and the amazing power to manipulate data. We have at our disposal the capabilities to access inventories, write reports, leave electronic mail, access huge data bases, do accounting, desktop publishing, and a variety of other functions at very low cost. AGANET, which is what we are calling our bulletin board, is capable of performing some of the above functions. We have at hand a great communication medium. It is possible to call AGANET and post or read messages, leave E-mail (electronic mail), get involved with a forum on various gemological topics, vote on issues we are discussing, read the latest industry news, visit our network store, and other functions yet to be decided.

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All this is made possible by the low cost of the new computers and their great power. A bulletin board can be addressed in a variety of ways. The message board area is the heart of the board. Here a person has access to various data bases to explore. Each subject matter has its own board. By going to the board on the subject you wish to explore you open an area of information in the form of messages that others have left for you to read and are given the opportunity to respond to messages.

This ability in our organization will allow us to have an open forum type discussion message base that we all can use for advancement in our fields of interest. The opportunity to read about the latest advances in an area of the gem world and comment on your findings in this area gives us a chance to be the foremost leaders in the gemological field. We can implement a board on any subject matter the membership wishes to discuss. In addition to general topics of interest, the message boards have an area for each of the committees to use for their work. This format will lend itself to any communication task we want to put into action. The boards have two ways of saving replies to messages. You can leave a reply that all who go to that board can read, allowing for some private as well as public discussion message boards.

Another area on the AGANET that will be useful to the membership is the E-mail area. This allows you to send electronic mail to another individual and it will be private for that person's eyes only. When a person logs on the board he will be notified that he has a message in the E-mail area. You will be given the opportunity to see if the message has been received by that person and the ability to erase the message. This is much more effective than trying to phone a person and wondering where he is if you can't reach him. E-mail allows you to leave messages and that person gets them as soon as he logs on the network. You know that the person has the message because only that individual can read the message. There is a polling feature that will allow the membership to vote on issues of importance and publish the results on line. With our membership so spread out, this will be a great fea-

ture for taking group action on various topics of interest.

AGANET has other features that we can employ to benefit our membership. The main menu area has a board with the current news items. Here you will find articles of note on the industry in general. If warnings are to be made to the industry we can post them in this message base. There is also a board called Down/Upload that lists articles to be transferred to your computer to be read at leisure on topics of interest. You can also transfer files through this board to be placed for the general membership to read, on various boards. This area will serve a function similar to what our newsletter provides.

The network store is another area that will benefit the general membership. We all have needs that can be listed for our supplier members to respond. You can also list goods for sale to other members. The format for listing gemstones will correspond to systems that we are all familiar with, i.e. Colormaster, Color Scan, GemDialogue, Munsell, GIA, AGL, CIE notation etc. We have all taken time to learn these systems for communication of colored stone parameters. There is a chart available that correlates all these systems, and you will be able to access this chart on AGANET.

In order to use AGANET effectively, you will need some detailed instructions and a password. If you have a computer terminal and phone AGANET, we will validate your password and allow you to access the network. AGANET has many levels of access and visitors to the system will have only limited access. Members will have more access and the top levels will only be accessible by officers. This gives us a chance to operate many different functions on the same board. The potential for the board is limited only by the input of the membership. The more we all use the board the more valuable it becomes. We have all seen how other commercial boards have grown with user participation. CompuServe and The Source are two boards that have grown quickly do to membership participation. The results allowed them to offer more to their membership. These services charge a fee per minute. AGANET is free with your membership and with no hourly rate a member should feel free to use the

system often. With interest in the board, we will be able to offer the membership more value and services. Let us have the most exciting bulletin board. With a little help from the membership, by leaving messages, the board will be able to grow and become very useful to us all.

A preview of the main menu and a tentative board listing are displayed here:

#### MAIN MENU

<A>GANET.....INFORMATION AND NEWS  
<B>OARDS.....ACCESS MESSAGE BOARD  
<C>HAT.....TALK WITH SYSOP\*  
<D>OWN/UPLOAD..TRANSFER TEXT FILES  
<F>ILE.....LIST OF AGANET USERS  
<H>ANG UP.....QUICK DISCONNECT  
<I>NFORMATION..COMPUTER INFORMATION  
<L>IST.....AGA MEMBERSHIP LIST  
<N> AGA STORE..NETWORK STORE  
<P>OLLING.....SURVEY TAKING  
<S>YSTEM.....TIME AT AGANET BASE  
<T>IME.....YOUR LOCAL TIME  
<U>TILITIES....USER UTILITIES

\*SYSOP-means system operator. I'm here to help with problems getting on AGANET or using any of its features. <S>YSTEM is placed on the board for you to consult my time. Hours will be posted when I will be available.

These are current functions and they can be changed to serve our purposes.

#### BOARDS

<A> MEMBERSHIP.....GENERAL MEMBER  
<B> INTRODUCTION....TO BOARD USAGE  
<C> INSTRUCTIONS....ON HOW TO USE  
<D> AGA'S GEM FORUM.OPEN GEM FORUM  
<E> I WANT TO SELL..MARKET PLACE  
<F> I WANT TO BUY...MARKET PLACE  
<G> SUGGESTIONS.....LEAVE SOME  
<H> COMMITTEES.....AGA COMMITTEES  
<I> PUBLICATIONS....AND NEWSLETTER  
<J> PUBLIC RELATIONS.PRESS RELEASES  
<K> RESEARCH.....DEVELOPMENT  
<L> GEM OF THE WEEK.TEXT TO READ  
<M> GEM GAME.....GEM ID GAME  
<N> COMPUTERS.....INFORMATION  
<O> AGA STORE.....AGA'S STORE  
<P> E-MAIL.....FLAGGED MAIL  
<S> SYSOP.....SYSTEM HELP

This is the current message board format. These can be changed as the needs of our organization change. The first selection gives the overall functions of the board. INSTRUCTIONS help you use the board at the beginning. You are directed to download the instruction manual. MEMBERSHIP board is used to leave messages for the general membership. I WANT TO SELL and I WANT TO BUY are the want ad area. Here you can list items for sale and see what other members need. AGA'S GEM FORUM is our open gemological board. Here questions on all gemological matters can be placed before our membership. There should be some interesting questions put on this board. Try the experts on technical questions on GEM ID and TREATMENTS. GEM OF THE WEEK is a gemstone profile that will be available for downloading to the membership. Save these for reference because GEM GAME will be another feature to be found on AGANET. GEM GAME will be a gem identification game testing your knowledge on gemstones. Each time you log on AGANET you will be given a chance to vote on the gem's identity. A new clue will be given daily. The winners will be called GEMOLOGIST OF THE WEEK. RESEARCH will try to answer needs on long term projects. You might be asked to leave information on this board on your observations. PUBLICATIONS will have available merchandise for sale and you can place orders for it on this board. AGA STORE will have suppliers listing common supplies for sale. Gem papers, tweezers, and other expendables will be available. COMPUTERS will deal with any questions you have about computers and their use in the accessing of functions on AGANET. SUGGESTIONS is a place for you to list problems with the board or ideas you would like to see on the board. SYSOP means system operator. The system operator is available for your service. You can CHAT with him from the main menu and have him help you on the board. Sysops are friendly people and they like to chat. E-MAIL is the electronic mail function that lets you send mail to any other member. The mail is private and you are notified when you log on if you have mail.

Again, boards can be added or taken away depending upon what you want to do on this network. Forums for discussion

groups would be very valuable. A bulletin board is a living medium, it can change easily and is not limited as a communication tool. Use this opportunity to communicate more effectively with our membership.

Communications means being able to exchange information in a form that we both understand. Alphanumeric characters are easily transferred over phone lines. This allows us to transfer easily read data between computers. Computers as opposed to terminals (SCANSET) give you a great amount of power with little increase in cost over the cost of the terminal. With a computer you can take data and put it into other more useful formats. You can also take and run programs designed to help you in your work. There are very reasonable programs available to do accounting, grading inventory functions, and a multitude of other commands. Artificial intelligence programs are challenging new frontiers in computing abilities. An organization that can use computers effectively will make great advances in the next few years. Like anything new, it takes practice to do it well, however, once learned it is difficult to forget.

The enjoyment that can come from using a computer is like using a calculator instead of paper and pencil. There will be available for members a video tape of how to use AGANET effectively. After watching this you should be able to post messages, read mail, place a vote, download an article, upload a news release, review upcoming events, sell a gemstone, buy some supplies, join a forum on synthetic rubies and leave a message or two for friends. This should interest all of us. Have fun on the board and leave comments when you log off on what you would like to see changed or added. This is AGA's BOARD, let us make it the best board around.

## AGANET; A BEGINNERS POINT OF VIEW

by ROBERT ROSENBLATT



I have never owned or learned how to use a computer. Although my nine year old daughter has already learned the basics, I am still ignorant of the new world's form of communication.

Rod Wagner, the chairman of our Communication Committee, started me with an ATARI 130XE, including a printer (letter quality), a modem, and a disc drive. The hardware was less than \$500.00. I first "logged on" (having nothing to do with tree logs) to AGANET having never even run a computer. Poor Rod was so frustrated trying to get me up and running, that he ended up sending me out to buy a software package. One called "Homepak", which is available for most computers, seems to include everything needed to do beginning as well as advanced programs. It includes word processing, file and text storage, phone or communication packages allowing you to talk to the "NEW WORLD", and much more. After a couple of very long nights, I had, with Rod's help, learned to use AGANET, and actually become quite good at the keyboard. I even "CRASHED" his program so many times he complimented me! (It's a status symbol to do BIG crashes).

The moral of the story is, If I can do it anyone can!!! More important, I found myself becoming fascinated with the computer and started imagining dozens of uses I could apply the computer to in my daily personal and business life. I really believe that the computer will ultimately be the saving grace of the jewelry business, both in cutting cost and in gaining accuracy and standardizing our evaluation of gems.

AGANET was THREE years in research and development, and I believe it will become a hallmark of AGA and a landmark for the gemological profession. It is the finest in design and format, it is flexible, it is friendly, and best of all it is "FREE" with your membership!!!

We have plans for AGANET that might just 'by accident' help us all increase our income. We hope to provide not only a bulletin board for communication with each other, but we are building in formats to transfer or "DOWNLOAD" files back and forth to each other. This allows us all to share large libraries of test and data and to finally bridge the barrier of geography that separates us all.

AGA's membership has remained low and members constantly scream for value in their dollars spent on membership. Our upcoming TUCSON '87 is already in planning, and will take on a whole new format of round table, hands on, lecture, and discussion with emphasis on "How can we turn our technical knowledge and years of professional training into dollars!" We will cover new topics such as antique and estate jewelry, how to use auction information, how to be honest about treatment of gems and make money from disclosure, hands on workshops on treatment and evaluation. We will have presentations on jewelry design and speakers on how to be positive and promote yourself without spending vast sums. Generally all around VERY EXCITING!

As we enter a new era for AGA (the NEW WORLD) I urge all of you to keep in touch, use AGANET, tell a friend, and "EACH ONE BRING ONE". If we all signed up just one new member, we would double the membership. Don't you know someone who would like to join?

We need people on committees. Many of you who indicated interest in committees on the last survey will be hearing from us. We need YOUR HELP! Neil Cohen wants us to consider a new 'supplier member' category where suppliers to the industry can hold a non-voting membership. This would allow us to put entire inventories for sale on AGANET, and you could actually order by your computer and potentially receive your merchandise the next day. Supplier members could advertise membership and would have an open access to potential customers (us)

at a fraction of what it would cost for traditional advertising. When you receive the ballot to approve this member category, I urge you to vote YES, but especially VOTE!!!

I look forward to our continued success. AGANET, another AGA first, will put AGA on the map. I hope you will all support and use the system. Rod has spent thousands of hours and would appreciate your input and thanks. Let him hear from you. He has taken my mistakes and learning, made AGANET a very "USER FRIENDLY" system! I hope you like it as well as I do.

Robert Rosenblatt, MGA  
1st Vice President, AGA

## **A.G.A. BESTOWS HONORARY MEMBERSHIPS**

by ROBERT ROSENBLATT

The board of directors voted unanimously, to honor many of the professionals in the gemological field, who have helped AGA grow. This will be an ongoing process and will focus primarily on our distinguished speakers at our Tucson conferences. Those who come to speak without remuneration and do so much to enrich our lives, deserve our praise and thanks. We will bestow an honorary lifetime membership, and a formal letter of thanks on behalf of the AGA and it's members to the following individuals:

Dr. Kurt Nassau

Dr. Peter Keller

David J. Callaghan

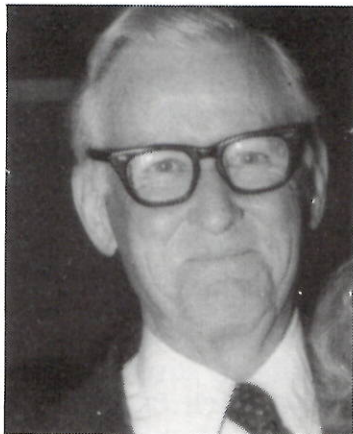
Kenneth A. Martin

Again, thank you to these individuals for their efforts.

Certainly there have been many others who deserve our award, however, those mentioned above shall be the first in a long line of what we hope will be many years of continued distinction in education excellence. As we plan and focus attention on our Tucson '87, we expect an even better program and look forward to making future award presentations to our professional colleagues.

# ANNUAL REPORT

by S.D. KELSEY  
EXECUTIVE DIRECTOR  
ACCREDITED GEMOLOGISTS  
ASSOCIATION



## AUTHORITY

This report is submitted to the membership of the ACCREDITED GEMOLOGISTS ASSOCIATION by their Board of Directors & Board of Governors. It covers activities of the Association during the period of February 4, 1985 to February 11, 1986 - from membership meeting to membership meeting. The report is mandated by Article XIV, Section 6 of the 1982 Constitution for the board of Governors and Article XIV, Section 5 of the draft Constitution of 1985 for the Board of Directors.

## INTRODUCTION

In Florida and California, our two most populous states, 1985 saw the difficulties of chapter survival reach a climax. Formation of chapters proved not too difficult. In those states, however, chapter activity, once begun, was spasmodic. The Washington, D.C. chapter continued on a steady course and there were no other chapters.

It is apparent that the dispersion of our membership is too great still for most chapters to meet on a physical basis each month. It seems also that the duties of regional governors and international staff need to be focussed more intensely on the essential qualities of personal professional contacts throughout the Association all during the year and periodic high quality gemological events.

To meet the needs of a diffuse population and steady communication, a study by the directors and governors in 1985 recommended certain "horizontal" communication, such as the Cornerstone and the AGA

updates, changes in some regional boundaries, more frequent and significant "vertical" communication such as President - Governor - Chapter - Member and return and major gemological meetings in each region.

To briefly summarize above, the recommendations have and are still producing beneficial (we believe) changes in our structure and operation.

Consider first the "horizontal" communications. In Salt Lake City, Dana Richardson & Committee, ably helped by her professional photographer husband Ed Rosenberger, and by Vice-President Bob Rosenblatt, has produced the first Cornerstone of truly professional character, as well as the excellent recruiting brochure, A Closer Look, and in March 1986, the

first of eight AGA Updates. The second Cornerstone is scheduled for May delivery. To produce these publications, Dana has a staff of (variably) fourteen dedicated and volunteer AGA members across the country. Another form of horizontal communications, which is unique in the gem trade, is provided by the AGA Research and Development reports of Ted Themelis, which are discussed elsewhere in this report.

The Publications committee has been budgeted for \$7500 in Fiscal '87 to reach its goals. In addition, the Research and Development Committee has been budgeted for \$2000 in Fiscal '87 to produce at least four reports.

President Neil Cohen, Vice-President Bob Rosenblatt, Governor Cortney Balzan, and AGA member Rod Wagner initiated plans at Tucson '86 for still another horizontal communication system which holds every promise of tremendous value and profit to all members who choose to use it. To be called AGAnet, it will soon be introduced more fully outside of this report.

Except for the 10% of our membership who are involved in the above activities - and we need your help, so please call up and put your name in as a helper -- all of these efforts to keep members in the picture are "Manna from heaven" -- all you have to do is read it. But the second area of communications -- vertical communications -- can exist only by virtue of the members' activity. It is planned that the local chapter, except for the Washington, D.C. chapter, will be replaced by cells, groups of three or more who gather

together over cocktails, lunch, or in someone's back office to cement friendships, gossip or talk shop on a definite schedule. Each cell will pass to its regional governor a report of the meeting. Periodically, the regional governor will send back to each member in his region a consolidated report of all cell activities. He will also pass this information to the President. In a like manner, the President will periodically communicate with the regional governors, who will include such messages in their letters to the cells. It is the intent of this complex network to involve as many members as possible as deeply as possible in the organization's life and existence. Without you, there is no life.

Members who prefer to wait for their Regional Governor to initiate the cells may have to wait until new Governors are elected in May or June. We hope you will not wait, but will organize your cells on your own initiative, reporting (call collect) to your Governor and to the Executive Director (305-628-8230).

It is planned also that governors will be mandated to produce at least one gemological event of significance each year in their regions. This has been tested and has been found to have a far stronger attraction for members and new candidates than was believed probable. Your suggestions for other improvements will be appreciated.

The fact of improved and more meaningful cohesion within the AGA, as well as more powerful recruitment, has been brought to fruition by the actions put in motion last year. But the proof of the pudding is in the eating, and the proof depends on your elected officers and the proof depends on you. Help your buddy - participate. Join in a cell. Write President Neil and tell him why you joined AGA and what you want to do to achieve your reason for becoming an Accredited Gemologist Association member.

## REPORTS BY ACTIVITY

### ANNUAL CONFERENCE

The annual seminar and conference of the Accredited Gemologists Association, held at the Tucson Holiday Inn Holidome from 9 February to 11 February, 1985 was

generally acclaimed as a continuation in the high quality of speakers and in the professionalism of subject matter presented.

The officers elected at the membership meeting were:

President	Neil H. Cohen ASA, MGA
1st Vice-President	Thomas E. Tashey Jr MGA
2nd Vice-President	Brenda J. Caldwell MGA
Treasurer	Jeffrey I. Hurwitz ASA, MGA
Secretary	Elena Davy MGA

Vice-President Tashey and Secretary Davy found it necessary to resign from their positions during the year and were replaced by Robert Rosenblatt, MGA and Marilyn G. Thomas, ASA, MGA, respectively. See Annex B for a full listing of officers, governors, and committee chairmen as elected and in place following the annual membership meeting of February 11, 1986.

The annual seminar and conference of the Accredited Gemologists Association, held at the Hotel Park Tucson from 9 February to 11 February, 1986 continued in the tradition, with fascinating talks this year focussing on treatment. Excerpts from Dr. Kurt Nassau's two discussions appear in this Cornerstone issue. As is usually the case, a 'heated' panel discussion on Heat Treatment was observed. See Annex A for a schedule of the speakers and topics presented.

### TREASURER

The treasurer's report for AGA, Inc. for the period 1 January 1985 - 31 December 1985 was presented and approved at Tucson '86. With revenues of \$39,859.50 and expenses of \$40,977.94, the association ended 1985 with a positive balance of \$5,012.11. See Annex C for the entire report.

The treasurer's report for the MGA Program was presented as a separate fund report for 1 January to 31 December, 1985 and was approved at Tucson '86. With revenues of \$14,697.70 and expenses of \$15,070.54, the Program balance as of 31 December 1985 was \$2,636.96. See Annex C for the entire report.





### RESEARCH AND DEVELOPMENT

In an action unprecedented in the gemological field, our professional organization has established a research program which has already provided all AGA members with five research reports of excellent quality and coverage. The AGA budget provides \$2000 in Fiscal '87 for four or more research reports. In addition, members may call the R & D Committee chairman, Ted Themelis, for answers or discussion of problems they may be having.

R & D papers for Fiscal '86 were written on (1) Sapphires from Montana's Sapphire Mountain, (2) Yogo Sapphires, (3) Heat Treatment of Sri Lanka and Thai Rubies, (4) Analysis of Colored Stones for Appraisal, (5) Combined report on Afghan Ruby, Yellow Sapphire and Heat Treated Blue Sapphires.

One R & D paper for Fiscal '87 has been completed to date: Analysis of Diamond Color Grading Masters. It was distributed to members only in April 1986.

In addition to writing the R & D reports, R & D made a two-hour presentation in Lakeland, Florida, November '86 on "Heat Treatment of Corundum in Sri Lanka and Thailand." The audience of fourteen Florida Chapter members from Miami to Jacksonville enthusiastically congratulated the speaker, Ted Themelis, on a very beneficial, first-hand report. Association cordiality was definitely enhanced both before and after the report.

### PUBLICATIONS

During the twelve months following Tucson '85, membership communications were improved by a number of activities. Perhaps first among these were the first fruits of the newly-born Publications Committee: (1) the bi-annual Cornerstone; (2) a new AGA promotional and recruiting booklet entitled A Closer Look; (3) four well-done research bulletins on Montana sapphires, heat-treated corundum, analysis format, Afghan ruby and yellow sapphires, and, (4) in March 1986, the first AGA monthly magazine format AGA Update, to be published every month (give or take a few months).

### PUBLIC RELATIONS



B.J. Caldwell

The targets of this publicity were twofold. First, presentation of the AGA and its members to the consumer press as the reliable and knowledgeable body of gemological experts and, second, releases to many local newspapers concerning individual AGA members, insofar as members responded to Committee request for background information. Although we cannot track the publication of each release sent out, Chairman Brenda J. Caldwell is aware of increasing success.

A complete list of press releases issued to date will appear in the upcoming newsletter.

### COOPERATION WITH OTHER ORGANIZATIONS

It is only natural that many of our members, professionals as they are, would seek out relationships with other professionals. For this reason, a number of members have also become members and officers of other groups, notably the prestigious American Society of Appraisers.

From this has sprung an outstanding benefit to both organizations. ASA, under its Resolution 6, Technical Written Exam Recognition, has accepted our MGA designation as complete satisfaction of its technical exam requirement for Senior Member status. MGA's may join ASA as Candidates and upgrade immediately to Senior Member status. MGA's are cautioned, however, that they still must take the ethical and administrative portions of ASA's examination.

Continuing the practice originated at Tucson '85, ASA and AGA cooperated both in ASA's summer conference in Orlando and in AGA's Tucson '86 to produce joint gemological conferences, to the benefit of the members of each society. And while firm statistics are not now available, the continuing trend toward dual membership with ASA, the American Gem Society or GIA Alumni Association is a healthy broadening of the individual member's base.



Don Palmieri and Ted Themelis

#### DISCLOSURE STATEMENTS

Consumerism and a national trend toward traditional basic values, both of which are compatible with AGA policies, surfaced strongly in the Pennsylvania legislature in March 1986. Senator Greenleaf's public inquiry into gemstone treatment and related disclosure statements, or lack of same, turned to two AGA members for input -- Ted Themelis and Don Palmieri -- both testified in the inquiry placing AGA in the vanguard of those who favor complete disclosure of treatments. This action is consistent with the AGA Code of Ethical Conduct, Para. IIB.

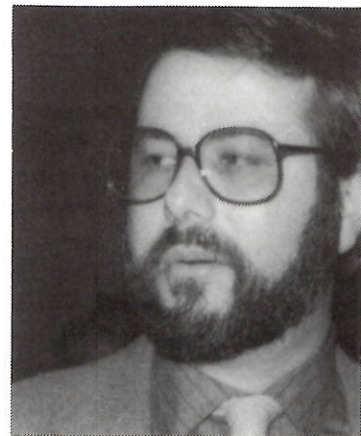
The Standards and Disclosure Committee is currently considering disclosure statements' wording and usage -- how to -- and is to report on this subject by June 11, 1986.

#### LITIGATION

At Tucson '86, the membership voted enthusiastically to pursue aggressively the suit against two ex-members -- Cary and Bruce Keno of Fort Lauderdale, Florida -- based on their flagrantly using the logo and initials MGA, which are under full copyright protection by the Accredited Gemologists Association.

(Their creating an MGA organization followed on the heels of Bruce's being suspended from MGA status for signing an (erroneous) appraisal which he had not done himself, in contravention of the AGA Code of Professional Conduct, and of Cary's (ex-GIA instructor) misidentifying the Kashan ruby as a pink sapphire and pricing it as a sapphire). This incident occurred during a routine exercise of the MGA policing system -- applicable only to, and paid for by, MGA members.

The litigation is in process now, following a negative response from our earlier request that their use of MGA be terminated. The unwarranted use of this designation by another group of appraisers causes grave damage to AGA professionals who have successfully earned the right to call themselves MGA. This is the basis for the litigation.



David Atlas

#### MEMBERSHIP BENEFITS

AVIS agreed to a contract with AGA which allows our members a substantial discount on certain car rental rates. If any member does not now have an AVIS card, he should contact Dave Atlas, who procured this benefit, to receive one. It is important to our being able to continue

these rates, that we show an acceptable use rate, so please use the AVIS card whenever possible.

Dave has been working on several other benefits, including "errors and omissions" insurance, a bronze name-stand including the phrase "Member AGA" or "MGA", and a lapel pin/pin/pendant. We thank Dave for his past help as Chairman of the Member Benefits Committee, which will this year be Chaired by John Lauri. For those members who cannot wait for "errors and omissions" insurance, it is available to members of ASA.



John Lauri

#### MGA PROGRAM

The following people qualified as Master Gemologist Appraisers at Tucson '86 Congratulations!!

Michele Hallier, GG, MGA

Alfredo Molina, GG, MGA

Nancy Stacy, GG, MGA

MGA's from the first class of 1983, conducted in Tony Bonanno's Columbia School of Gemology, along with the second class of 1983, held at GIA in Santa Monica recertified in Tucson '86. Congratulations. Continuous policing and testing is of the essence in the MGA program.



Al Molina and Michele Hallier



Nancy Stacey

Only by this means can the consumer be assured of quality in appraising. No other organization tests so vigorously and non (as far as we know) polices itself.

The MGA roster now stands as 45 MGA and the next MGA class is tentatively scheduled for July 1986 in New York.



Chairman Standards and Disclosure Committee, C.R. "Cap" Beesley

ANNEX A  
SCHEDULE, TUCSON '86 CONFERENCE

MONDAY-February 10th

Morning Sessions

- 9:00 to 9:50 AM THE RUBY AND SAPPHIRE MINES OF THAILAND AND METHODS OF RECOVERY.  
by Ted Themelis  
AGA's Research and Development Director
- 10:00 to 10:50 AM VALUATION SCIENCE  
by Dr. Richard Rickert  
Director of Valuation Science, Lindenwood College
- 11:00 to 11:50 AM MAKING MONEY WHEN BUYING COLORED STONES.  
by Janice Mack G.G.
- 12:00 to 12:50 PM LUNCH  
Speaker: President Neil H. Cohen, MGA

AFTERNOON SESSIONS

- 1:00 to 1:50 PM DETECTION OF HEAT TREATED GEMSTONES  
by C.R."Cap" Beesley G.G., M.G.A.  
American Gemological Laboratories
- 2:00 to 2:50 PM HEAT TREATMENT PROCESS; AN INDEPTH PRESENTATION  
by Dr. Kurt Nassau  
Optical Materials Research Department  
Bell Laboratories
- 3:00 to 3:50 PM COLOR CHARACTERIZATION OF GEMSTONES; AN INSTRUMENTAL  
AND OBJECTIVE APPROACH.  
by Dr. Peter Gielissee  
Capital Technologies International

4:00 to 5:30 PM

PANEL DISCUSSION ON HEAT TREATMENT

There will be five panelists each discussing a different area of the Treatment Issue.

- 1). Dr. Kurt Nassau  
The Scientist's Point of View.
- 2). Ted Themelis  
Heat Treatment as it's done in Sri Lanka.
- 3). C.R."Cap" Beesley, G.G., M.G.A.  
Laboratory Detection of the Heat Treatment Process.
- 4). Donald Palmieri, A.S.A., M.G.A.  
Heat Treatment and its Effect on Pricing.
- 5). David Federman  
Heat Treatment as it Relates to Product Information.

TUESDAY- February 11th

Morning Sessions

- 9:00 to 9:50 AM A MINERALOGIST VIEW TOWARDS GEMSTONE IDENTIFICATION  
by Dr. Abraham Rosenzweig  
Mineralogist
- 10:00 to 10:50 AM IRRADIATION PROCESS: AN INDEPTH PRESENTATION.  
Dr. Kurt Nassau  
Bell Laboratories
- 11:00 to 11:50 AM INCLUSIONS, NATURE'S HIDDEN HALLMARKS.  
Joseph W. Tenhagen, A.S.A., M.G.A.  
J.W. Tenhagen Gemstones

12:00 to 12:50 PM

LUNCH  
Speaker: Kenneth A. Martin, President American Society of Appraisers.

AFTERNOON SESSIONS

- 1:00 to 1:50 PM PEARLS, GRADING AND PRICING.  
by Freddy Kohn  
United Pearl Company
- 2:00 to 2:50 PM GEM RESOURCES OF CHINA.  
by Dr. Peter Keller  
Los Angeles County Museum
- 3:00 to 3:50 PM NEW INSTRUMENTATION AND DESIGNS OF THE 1980'S.  
by Manfred Eickhorst  
System Eickhorst
- 4:00 to 5:30 PM ANNUAL MEMBERSHIP MEETING



ANNEX B  
OFFICERS, GOVERNORS, COMMITTEES

**BOARD OF DIRECTORS**

President	Neil H. Cohen ASA, MGA
First Vice-President	Robert L. Rosenblatt MGA
Second Vice-President	Brenda J. Caldwell ASA, MGA
Secretary	Marilyn G. Thomas ASA, MGA
Treasurer	Jeffrey I. Hurwitz ASA, MGA
Past President	Joseph W. Tenhagen PGA, ASA, MGA
Executive Director	Straughen D. (Jack) Kelsey ASA, MGA

**REGIONAL GOVERNORS**

Governor, Region 1	Donald A. Palmieri ASA, MGA
Governor, Region 2	T. William Benedict ASA, MGA
Governor, Region 3	Jerrold B. Root GG, FGA
Governor, Region 5*	Jack Kelsey ASA, MGA
Governor, Region 6	Anna M. Miller ASA, MGA
Governor, Region 8*	Robert L. Rosenblatt MGA
Governor Region 9	Thom S. Underwood MGA
Governor Region 12	Charles A. Zawacki MGA
Governor Region 13	Cortney G. Balzan MGA
Governor Region 15	C.R. "Cap" Beesley MGA

\*Acting as governor pending next election

**COMMITTEE CHAIRMEN**

International Board of Examiners	Donald A. Palmieri ASA, MGA
Public Relations	Brenda J. Caldwell ASA, MGA
Admissions and Membership	S.D. (Jack) Kelsey ASA, MGA
Chapter Formation	S.D. (Jack) Kelsey ASA, MGA

Constitution and By-Laws	Charles A. Zawacki MGA
Ethics and Grievances	David S. Atlas ASA, MGA
Nominations	Joseph. A. Tenhagen ASA, MGA
Member Benefits	John P. Lauri MGA
Publications	Dana L. Richardson MGA
Research and Development	Theodore Themelis GG, PG
Standards and Disclosure	C.R. (Cap) Beesley MGA

**REPORT FROM  
TREASURER'S  
OFFICE**

JEFFREY HURWITZ,  
TREASURER



After a fine turnout at the Hotel Park Tucson and excellent membership renewals we are in sound financial shape. Our major expected outlays this year are for printing of additional copies of the Closer Look membership recruitment booklet and expences for the Cornerstone and Newsletters, all coming out of our Salt Lake City offices. We have budgeted \$2,000.00 for Research and Development reports, reports that have been very well received. Last year we spent a larger than normal amount of funds on publications, with much of the costs going for initial set-up fees. I think we can now see that our new format is much easier to follow and makes for a much better newsletter.

P.S. If any paid member has not received their 1986 membership card, please drop me a note.

Sincerely,  
Jeffrey Hurwitz  
TREASURER

**ACCREDITED  
GEMOLOGISTS  
ASSOCIATION**

**BALANCE SHEET**

DECEMBER 31, 1985

ASSETS

Cash in Checking \$5,012.11  
\$5,012.11

LIABILITIES AND FUND BALANCE

Prepaid 1986 Membership Dues \$6,785.00  
\$6,785.00  
Fund Balance (Deficit) (1,772.89)  
Total Liabilities and Fund Balance \$5,012.11

**STATEMENT OF  
REVENUES AND  
EXPENSES**

FOR THE YEAR ENDED DECEMBER 31, 1985

REVENUES:

Membership Dues \$ 21,554.50  
Annual Conference Fees 17,845.00  
Seminar Fees 90.00  
Donations 370.00  
Total Revenues \$ 39,859.50

EXPENSES:

Office and Secretarial \$ 1,259.03  
Annual Conference Expense 11,498.21  
President's Office Expense 4,893.69  
Treasurer's Office Expense 111.19  
Professional Fees 998.00  
Public Relations Committee 472.00  
Printing 233.20  
Nominating Committee 248.86  
Admission and Membership 7,682.16  
(Of this 4200 for mailings)  
Chapter Formation 1,676.76  
Publications 5,839.31  
Research and Development 1,026.36  
Executive Director 309.22  
Refund Conference Fees 600.00  
Newsletters 369.21  
Mid-term Meeting Expense 3,245.58  
Constitution and Bylaw Committee 515.16  
Total Expenses \$ 40,977.94

EXCESS OF EXPENSES OVER  
REVENUE

\$ 1,118.44

**MASTER  
GEMOLOGIST  
APPRAISERS  
A DIVISION OF A.G.A.**

**BALANCE SHEET**

DECEMBER 31, 1985

ASSETS

Cash in Checking \$2,636.96  
\$2,636.96

FUND BALANCE

Fund Balance \$2,636.96

**STATEMENT OF  
REVENUES AND  
EXPENSES**

FOR THE YEAR ENDED DECEMBER 31, 1985

REVENUES:

Fees and Miscellaneous Receipts \$ 14,698.70

EXPENSES:

Policing \$ 200.00  
Operating Expenses 3,003.90  
Professional Fees 220.92  
Printing 3,801.16  
Seminars 7,844.56

Total Expenses \$ 15,070.54

EXCESS OF EXPENSES OVER  
REVENUES

\$ 372.84

# MEMBERSHIP DIRECTORY ALPHABETICAL LISTING

*With member numbers*

- AARON, Lloyd, G.G.** (305) 947-8386  
1706 N.E. Miami Gardens Dr. # 150  
North Miami, FL 33179
- ABRAMSON, Pamela J., G.G.**  
1050 Montcalm Street # 151  
Orlando, FL 32806
- ADAMS, Alfred Reed, G.G.**  
250 South 800 East Apt. H  
Salt Lake City, UT 84102
- ADAMS, Marshall, G.G., M.G.A.** (714) 883-8463  
2364 North Del Rosa Avenue # 397  
San Bernadino, CA 92404
- AHARONOFF, Samuel, G.G.**  
1212 Ave. of the Americas  
New York, NY 10036
- ALLEN, Darold, C., G.G.** (213) 623-3773  
607 South Hill Street, Suite 820 # 152  
Los Angeles, CA 90014
- ANCINEC, Henry, G.G.**  
#7 35000 W. Warren Avenue # 153  
Westland, MI 48185
- ANDERSON, Jay E., Ph.D** (515) 327-2683  
P.O. Box 20859 # 154  
Dallas, TX 75220
- ANDERSON, Suzanne M., G.G.** (619) 457-2090  
8950 Villa La Jolla, Suite 2200 # 155  
La Jolla, CA 92037
- ANGELO, Luiz, G.G.** (021) 257-4393  
74 Rua Almirante Guilhem, Apt. 401 # 156  
Rio de Janeiro, BRAZIL Cep 22440
- ASCHER, David S., G.G.**  
201 Civic Center Drive East # 157  
Santa Ana, CA 92701
- ATKINSON, Lorin, G.G.**  
1718 Westwind Way  
McLean, VA 22102
- ATLAS, David S., G.G., C.G., A.S.A., M.G.A.** (215) 922-1926  
732 Sansom Street # 398  
Philadelphia, PA 19106
- BAKER, J. Michael, G.G.**  
P.O. Box 10610 # 158  
Jackson, MS 39212
- BALZAN, Cortney G., G.G., M.G.A.** (415) 924-1600  
260 Magnolia # 323  
Larkspur, CA 94939
- BANNON, Lewis A., G.G., F.G.A.** (504) 925-8900  
3155 Murphy Drive # 159  
Baton Rouge, LA 70809
- BARANOV, Sylvan J., Gemologist**  
1200 3rd Avenue, Suite 1102 # 159  
San Diego, Ca 92101
- BARIL, Rodney P., G.G.**  
45 Myron Street # 161  
West Warwick, RI 02893
- BARKER, Austin J., G.G.** (713) 995-5400  
9201 Clarewood, Apt. 84 # 162  
Houston, TX 77036
- BARLOW, Alice M., G.G.** (414) 735-0200  
2000 South Memorial Drive # 163  
Appleton, WI 54915
- BARNES, Elaine, G.G.**  
P.O. Box 587 # 164  
Leesburg, VA 22075
- BASE, Ronald L., G.G., M.G.A.** (714) 982-7300  
P.O. Box 1585 # 400  
Upland, CA 91786
- BECKER, Gary E., Assoc.**  
3642 King Street  
Alexandria, VA 22302
- BEESELY, C.R. "Cap", G.G., M.G.A.** (212) 704-0700  
580 Fifth Avenue # 393  
New York, NY 10036
- BELENKE, Burton, F.G.A., G.G.**  
300 Seybold Bldg. # 165  
Miami, FL 33132
- BENEDICT, T. William, G.G., M.G.A.** (203) 966-2200  
43 Bayberry Road  
New Canaan, CT 06840
- BERGER, Ildiko Viola, G.G.**  
20 East Selby Lane # 167  
Redwood City, CA 94063
- BERTHET, William Leslie, G.G.**  
10055 San Jose Blvd. # 336  
Jacksonville, FL 32217
- BIFFER, Howard N., G.G., M.G.A.** (914) 245-4670  
Lourdes Gemological Laboratory # 519  
Route 6 & Hill Boulevard  
Jefferson Valley, NY 10535

<b>BIRCH, Claire, G.G.</b> GME 1600 Howe Avenue Sacto, CA 95825		<b>CLEIMAN, Catherine G., F.G.A.</b> 2020 Glen Ross Road Silver Springs, MD 20910	(301) 587-3808 # 175
<b>BIXEL, Gregory C., Assoc.</b> 287 West Shore Plaza Tampa, FL 33609		<b>COHEN, Neil H., G.G., A.S.A., M.G.A.</b> 99 Pratt Street, Suite 211 Hartford, CT 06103	(203) 247-1319 # 141
<b>BONANNO, Antonio C., F.G.A., P.G., M.G.A.</b> 8600 Fenton Street Silver Springs, MD 20910	(301) 588-7770 # 124	<b>COKER, James D., G.G., M.G.A.</b> 2935 Fitzooth Drive Winter Park, FL 32792	(305) 678-7788 # 142
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(305) 922-9375 or 391-0884

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 **ACCREDITED GEMOLOGISTS ASSOCIATION****MEMBERSHIP APPLICATION**

*(Please type or print all information)*

- FULL MEMBERSHIP  
 ASSOCIATE MEMBERSHIP

FOR OFFICE USE ONLY: \_\_\_\_\_  
\_\_\_\_\_

NAME  Mr. \_\_\_\_\_  
 Mrs. \_\_\_\_\_  
 Miss \_\_\_\_\_

LAST

FIRST

MIDDLE

RESIDENCE: \_\_\_\_\_  
STREET/POST OFFICE BOX

PREFERRED MAILING: \_\_\_\_\_  
CITY

STATE/COUNTRY

ZIP

BUSINESS: \_\_\_\_\_  
STREET

PREFERRED MAILING: \_\_\_\_\_  
CITY

STATE/COUNTRY

ZIP

DIPLOMA(S) HELD: \_\_\_\_\_

DATE(S) CONFERRED: \_\_\_\_\_

SPECIAL AREA(S) OF INTEREST: \_\_\_\_\_

GEMOLOGICAL AFFILIATIONS: \_\_\_\_\_

SPECIAL AWARDS OR HONORS BOOKS: MANUSCRIPTS: \_\_\_\_\_

DATE \_\_\_\_\_ SIGNATURE \_\_\_\_\_

**SUBMISSION REQUIREMENTS**

- A. Application form filled out completely, marked FULL MEMBERSHIP or ASSOCIATE MEMBERSHIP; preferred mailing marked RESIDENCE or BUSINESS.
- B. Professional conduct code, signed. (Retain one copy for your files.)
- C. Dues fee of \$125.00 domestic; \$135.00 (U.S. Currency) Overseas. This includes a one time application processing fee of \$25.00 and a full years' dues. Make checks payable to: ACCREDITED GEMOLOGISTS ASSOCIATION.
- D. Photocopy of your Gemologist, Graduate Gemologist, or F.G.A. Diploma. Associate member applicants — photocopy of student letter of acceptance.

**ROBERT ROSENBLATT**

Chairman Admissions and Membership  
1703 Laird Avenue  
Salt Lake City, Utah 84108  
(801)582-8277



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THE ACCREDITED GEMOLOGISTS ASSOCIATION (A.G.A.) IS AN INTERNATIONAL NON-PROFIT ORGANIZATION DEDICATED TO PROFESSIONAL STANDARDS OF EDUCATION, RESEARCH, IDENTIFICATION AND EVALUATION OF GEM MATERIALS AND JEWELRY. ALL APPLICANTS FOR MEMBERSHIP ARE REQUIRED TO READ AND SIGNIFY THEIR ACCEPTANCE OF THE FOLLOWING CODE OF ETHICAL CONDUCT, AND INDICATE THEIR WILLINGNESS TO ADHERE TO THIS CODE.

## I. PROFESSIONAL CONDUCT

- A. It is incumbent on every member to refrain from giving any counsel or making any report on any gem or article with which he is not thoroughly familiar, unless (1) the client is aware of those limitations and/or (2) he consults with another who is competent to assess and evaluate the gem or article.
- B. A client should be counseled of the need for periodic reassessment of the value of his items, because of continued price fluctuations in the market.
- C. Every member agrees to make every possible effort to keep abreast of new developments in the field of jewelry and gemology.
- D. Consultations in performing gemological duties, including any reports, are confidential and any disclosures should only be made after obtaining written approval from the client.
- E. The gemologist is in a position of trust and, due to his professional knowledge and training, must accept the special nature of the relationship with his client.
- F. It is unprofessional practice to give off-handed opinions, which tend to belittle the importance of careful inspection, testing and analysis.
- G. It is unethical practice for a member to suppress any facts, data or opinions which he may be called upon to give in a court of law, or to overemphasize any facts, data or opinions so as to unfairly influence a decision or bias a case for either party.
- H. It is unethical practice to serve more than one party with respect to the same situation unless all parties previously agree to this.
- I. It is unethical to reduce a previously quoted fee in order to supplant another gemologist or appraiser after the other's quotation for professional services has been revealed.
- J. A member of A.G.A., aware of the questionable conduct of another member, has an obligation to report the matter to the Grievance Committee for appropriate action.
- K. Any conduct, practice, self-laudatory advertising, or other questionable gemological practice using misleading or inaccurate claims and promises detrimental to the establishment of public confidence in gemological work is considered unprofessional.
- L. The gemologist should have no interest or contemplated future interest in the purchase of items reported on, in order to avoid any suspicion of bias. The full revelation of pertinent facts is mandatory.

## II. GEM IDENTIFICATION AND APPRAISAL REPORTS:

- A. Should contain the results of a sufficient number of tests (e.g., R.I., S.G., U.V., examination with microscope, spectroscope) to establish the identity of the material in question, unambiguously.
- B. Should indicate (where feasible) special characteristics of the material examined, such as natural origin vs. synthetic or vice versa, or if material is dyed, assembled, reconstructed, irradiated, etc.
- C. Should utilize standardized grading criteria where available, and indicate the grading system used.
- D. Should avoid confusing terminology that tends to perpetuate incorrect gemstone names, or which can be misconstrued by layman as representing something other than that which is intended.
- E. Should be in writing only, with the gemologist retaining a copy of the report as a permanent record.
- F. Should indicate the purpose of the report (e.g., estate appraisal, replacement value, etc.).
- G. Should present a thorough qualitative and quantitative statement, including mention of special markings, hallmarks, age, historical significance, provenance, uniqueness, etc.
- H. Should present the truest possible value, along with a statement as to whether the stated value includes an increment for inflation and, if so, what that increment is.

## III. FEES

- A. It is recommended that fees are to be computed on the basis of a per hour rate or on the basis of a charge per item. It is consistent with professional practice to have a minimum fee, or that consistent with the experience of the appraiser or gemologist doing the work.

I HEREBY AFFIRM WITH MY SIGNATURE THAT I ACCEPT THE ACCREDITED GEMOLOGISTS ASSOCIATION CODE OF PROFESSIONAL CONDUCT TO BE VALID, AND I AGREE TO USE IT AS A GUIDELINE IN PERFORMING GEMOLOGICAL ACTIVITIES. I UNDERSTAND THAT THE A.G.A. MAY TERMINATE MEMBERSHIP OF ANY INDIVIDUAL WHO IS FOUND TO BE PERFORMING GEMOLOGICAL WORK INCONSISTENT WITH THE STANDARDS OF PROFESSIONAL CONDUCT SET FORTH ABOVE. I UNDERSTAND THAT MEMBERSHIP IS GRANTED ONLY TO ELIGIBLE INDIVIDUALS WHO ARE DULY ELECTED BY A.G.A., AND DOES NOT EXTEND TO BUSINESS ASSOCIATES UNLESS THEY ARE INDIVIDUALLY ELECTED TO MEMBERSHIP.

(Professional seal or stamp may be shown below)

Signature \_\_\_\_\_

Date \_\_\_\_\_

Address \_\_\_\_\_

(NOTE: Keep one copy, sign and date the other and return to A.G.A. with any fees).



ACCREDITED GEMOLOGISTS ASSOCIATION

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