AGA Update ACCREDITED GEMOLOGISTS ASSOCIATION

HOLIDAY ISSUE - DECEMBER ' 86

NEW MEMBERSHIP CATAGORY!

from THE BOARD

On 9-25-86, the Board of Directors approved the dues structure for the supplier and affiliate membership catagories.

Affiliate members are those who share an interest in gemology and AGA, but are not formally pursuing a course in gemology or do not hold an official title or degree. Membership for this category is to be \$75.00 per year and these people will be a non-voting status but receive all communications.

Supplier members are any firm with a related product to sell to gemologists. The supplier must be in good standing in the Jewelry community (references such as JBT will be checked), fill out an application and be approved by the committee on supplier members. Dues will be \$300.00 per year and

membership belongs to a firm, not an individual. It is an advertisable status. Firms who belong will receive all AGA communication, will be entitled to two 1/4 page ads free in AGA UP-DATES (the official AGA newsletter), and free booth space at our Tucson conference in February (first come-first serve). In addition, a subscription rate of \$100.00 per year allows dealers to list inventories on AGANET or in hard copy newsletters, with a \$5.00 per change of listing charge and a .10 cent per item list fee. brochure is being made and we nee ideas on promoting this new Please respond to catagory. Robert Rosenblatt or Neil Cohen as soon as possible.

ECONOMIC BACKGROUND

A SUMMARY FOR YOUR INFORMATION

The primary focus on the economy continues to be the trade deficit which has been the dominant factor in the generally

weak condition of domestic manufacturers. Despite the peaking in the relative value of the U.S. Dollar in February last year, the trade deficit has generally been in a range of \$12-\$15 billion a month. consensus forecast has the deficit continuing to narrow during the upcoming months. the reasons for the However, recent narrowing were temporary and do not provide the basis for further meaningful reductions The declines the past near-term. two months were because of less imports, primarily autos, and not a pick up in demand for U.S. made goods. Imported autos were falling during the period when U.S. manufacturers were offering financing incentives. Many expect the trend to reverse now that the promotions have ended. Without an upturn in exports, the trade deficit we will probably continue in the same range we have been experiencing.

The recent elections, especially with the Democratic controlled Senate, have raised the possibility of new trade protectionist measures. Reducing the trade deficit by tariffs and import quotas would be extremely negative for future economic These measures reward ineffecient U.S. producers and lessen the move towards cost-competitive production goals. The perceived domestic manufacturing gains would be temporary at best, and reduce the incentives for U.S. producers to become more efficient in their operations. The basic solution to the trade deficit issue must be accomplished through the

growth in U.S. exports. lowering of corporate tax rates will reward the efficient and profitable producers. efforts to stimulate trade world-wide rather than create artificial barriers would seem a positive direction. The reduction of the trade deficit by increasing exports is a positive factor for the U.S. economy without creating artificial inflationary pressures. sources feel import restrictions are inflationary and lead to negative political responses from our world trading partners.

The effects of continued weakness in the manufacturing sector is demonstrated by the following:

- Industrial production flat during September and October.
- Capacity utilization fell from 79.2% to 79.0% during October.
- Average work week for the manufacturing sector declined by 0.2 hours last month.

The consumer is still showing signs of being overextended with less ability to fuel further economic expansion. Sluggish economic growth has been responsible for creating a deteriorating financial position for most consumers. Unemployment has crept back to 7.0% and recent layoffs and personnel cutbacks announced by major corporations threaten to increase this figure even further. Annualized income gains have shrunk to under 2% during the past six months and ongoing wage settlements show this pattern will continue.

personal savings rate has fallen below 3% with installment-debt-to-income at historically high levels. The reality of this position was demonstrated last month as retail sales fell 5.0%. This was primarily a result of the loss of auto sales, but reflects the price consciousness and lessened buying power by the consumer.

Many economists are still of the opinion the possibility of damaging inflationary levels is remote. Gold prices which ran to about \$460/ounce last month have retreated to around \$390/ounce. The move upward was related to political unrest in South Africa and not economic events. Fuen with the removal of Yamani as oil minister for Saudi Arabia, no one seems overly concerned about major increases in oil prices. The OPEC cartel remains weak and the laws of supply and demand will be the primary determining factors controlling oil prices. The equilibrium price of oil remains in a range of \$14-\$17/barrel although a break below \$14 on a short-term basis would not be surprising.

Inflation, as measured by various indexes, is not showing signs of returning to disturbing levels. Producer prices rose 0.3% in October, but primarily as a result of auto prices increasing 4.7% as financing incentives were ended. Commodity prices, including farm prices which had been showing some strength, have again weakened. The commodities futures index, which had been almost even with spot prices, has fallen about two

points below the spot market within the past few weeks. This activity does not suggest the return of inflationary problems.

The Fed's September FOMC meetings indicated attention would be focused on potentially stronger economic growth leading to inflationary problems and also monetary growth relative to targets. The Fed also established monetary targets of 7% to 9% for M-2 and M-3 from August through December. Currently, M-2 and M-3 are both within the ranges. The Fed has the flexibility to remain accomodative given an economic scenario of continued sluggish activity. The direction of monetary policy is still toward stimulative measures. Some analyists expect another possible cut in the discount rate by year-end.

Reduced consumer spending and continued weakness in domestic manufacturing leads to further slowing in economic activity. The result should be further interest rate declines by breaking through the downside of the trading range which we have experienced the past six months. The negative aspects of the phasing-in process of tax reform adds credibility to the above.

Political Impact on the Economy

The political scene during the next two years will be formed not only by the Democratic controlled House and Senate, but by the potential damage President Reagan has suffered due to the

delivery of arms to Iran. The President's personal popularity was needed to push his agenda through a potentially hostile Congress. It is much too early to fully assess the outcome and the effects suffered by the Reagan Administration. positive aspect to the above is the potential challenge this represents to the President. These difficult situations may be the needed catalyst the President responds to in order to combat the "Lame Duck" role many analysts are expecting

A HOT ISSUE

by CORTNEY BALZAN AND ROD WAGNER

Many trade publications have featured articles on potentially radioactive gems that have been improperly treated and are being brought to market in a radioactive form. Reprinted intact is a letter from the Nuclear Regulatory Comission (NRC) which outlines the use of radiation treatment for products ultimately destined for the "consumer". In the literal translation, it is actually unlawful for us to sell gem or jewelry products treated by irradiation unless a liscence has been obtained from the NRC to do Since the NRC has not granted such a liscence to any person or company yet it could be assumed that we would be

breaking the law to sell gems treated by radiation.

Because of the development of "hot" Topaz found in this country, and the possibility of other gems having been treated for enhancement by "non licensed neutron treatment", AGA contacted suppliers and the NRC and ran several batches of tests on sample products, the results of which are listed below. We also contacted several research facilities and tested equipment for detection of radiation present in "hot gems". Innovative Creations of 3711 Whispering Lane, Falls Church, VA 22041, has agreed to provide AGA members with an extremely sensitive instrument for the detection of alpha, beta, gamma, and or x-ray emmisions from radioactive gems, mounted or The cost to members is loose. \$179.95. Send directly to Innovative. We have enclosed an order form as well as a brief explanation of the machine and the dilema by Richard Pettijon of Innovative. You will be receiving flyers and an update on the problem soon.

From the new arm of the research department we present the following results on a test of two lots of "irradiated" blue topaz. Keep in mind this is only on topaz and from known sources using proper treating procedures. What it shows is that the NRC is actually able to detect treatment by "irradiation" in any product including gems. You can bet if it's treatable we treat it whether it be topaz, pearls, diamonds or whatever!

FROM:

BALZAN'S GEM LAB

- RESEARCH

PURPOSE: Measurement of
Radioactivity in
2-Lots of London Blue Topaz
EQUIPMENT: Survey Meter and GELI
Radiation Detector

RESULTS AS FOLLOWS: Lot #1- Gross radiation reading indicate levels at about background count for this lot. (20-30 counts per minute.)

GELI DETECTOR RESULTS:

- 1. ACTIVATION PRODUCTS
 NUCLIDE PRESENT- SC-46, NA-22,
 and MN-54
- 2. FISSION PRODUCTS
 NUCLIDE PRESENT- CS-134, and
 TA-182

Lot #2- Gross radiation reading indicate levels at about background to slightly above background. (30-40 counts per minute.)

GELI DETECTOR RESULTS:

1. ACTIVATION PRODUCTS
NUCLIDE PRESENT- SC-46, NA-22,
ZN-65 AND MN-54
2. FISSION PRODUCTS:
NUCLIDE PRESENT- CS-134, AND
TA-182

COMMENTS: The two samples appear to be similiar. The presence of the radioactive Zinc in the second lot appears to be the only difference. The radioactivity levels in each sample indicate that the first lot is older than the second. The half life of

these Nuclide range from 83.9 days to 2.6 years so this would indicate the first sample could be as much as a year older than the second. The Nuclide present indicate that this material was enhanced by the use of Neutron Bombardment. The Activation products could ONLY have been produced by such enhancement. This type of treatment has not been licensed by the NRC for use in Jewelry. It is possible that they will license this material and current indications are that this material would pass the standards.

COMMENTS ON RADIOACTIVE GEMSTONES

by RICHARD R. PETTIJOHN

The irradiation of gemstones to produce more desirable colors sometimes also results in residual radioactivity. You owe it to yourself and your customers to avoid gemstones that have hazardous radioactive emissions.

Most of the activated unstable isotopes of trace elements in the gemstone decay very quickly with half-lives (the time it takes for the radiation level to decrease to one-half of the original level) of fractions of a second, seconds, minutes, or hours. Within a few days (many half-lives), these isotopes decay

to extremely low levels of emissions. The problem arises when an isotope having a half-life of days, months, or years, is activated. In this case the person or facility doing the gemstone irradiation must measure the gemstone's radioactive emissions and make the decision of whether to "hold the gemstone" while it decays to lower radiation levels (sometimes taking months or years) or to "release the gemstone" for sale to the trade or the public.

There are many thousands of carats of treated gemstones at irradiation facilities throughout the United States and other nations of the world that are "cooling off" in a radioactivity sense prior to their release for There is presently no sale. Nuclear Regulatory Commission (NRC) guidelines that specifically address the topic of irradiated gemstones. As a result, each person or facility in the gemstone irradiation business must adopt their own interpretation of the existing regulations.

The adopted release standard at some facilities is that each gemstone must not be more radioactive than two-times the natural background level, as measured with an end-window geiger counter. Other facilities have even lower radioactive release criteria while others may not have any criteria.

Until Federal Regulations are adopted and enforced, the gemstone industry must be on the lookout for radioactive gemstones

from sources that do not allow the radioactivity to decay sufficiently prior to release for sale.

The Radiation Alert Monitor 4 provides the gemstone trade with a low-cost sensitive instrument that detects alpha, beta, gamma, and/or x-ray emissions from radioactive gemstones--mounted or loose.

To detect gemstone radiation, the two switches should be positioned at the "X1" and "Audio" positions, respectively. The first step is to determine the Background Count rate Per Minute (Background CPM) at your location from natural and surrounding radiation sources. In most regions this will be primarily from cosmic rays and/or trace levels of uranium and thorium in the soil and building The background count materials. determination should be made in the same area that the sample measurements will be made, but far enough away from any potential radiation sources, such as televisions. watches with luminous dials, pottery, leaded glass, and the gemstones to be The user will notice tested. that over a timed period of a minute that 5 to 25 "counts" will be obtained, as indicated by a chirp sound and a corresponding flash of red light from the detector. This is normal and expected. The higher your elevation, the higher the background count rate from cosmic Add the counts for five rays. one-minute periods and divide the total by five. This is the average background count rate per

minute (Background CPM).

Each loose or mounted gemstone being evaluated should be held in position so that it is as close to the detector window (wire screen) as possible. one-minute count should be sufficient in most cases to determine if the count rate with the gem in front of the detector (Gem + Background CPM) is significantly greater than two-times the average background (Background CPM). A more accurate determination of (Gem + Background CPM) may be obtained by taking the average of five one-minute counts. The average count rate of radioactive emissions from the gem only (Gem CPM) is calculated by subtracting (Background CPM) from (Gem + Background CPM).

It is extremely tempting to balance the Radiation Alert Monitor 4 on a desk and set each stone on top of the wire screen that partially protects the end-window geiger tube. However, if this procedure is adopted, the user must be careful not to puncture the extremely thin geiger tube window with tweezer tips when taking stones off and putting them on the detector for analysis.

The Monitor 4 is calibrated for gamma emissions from the isotope Cesium-137, but also serves as an excellent indicator of the relative intensities for many other sources of ionizing radiation, as described in the more general Operation Manual. For health physics purposes, the intensity of radiation for gamma

and x-rays is measured in millirem per hour (mrem/hr). Alpha and beta radiation are measured in counts per minute and converted to mrem/hr using energy conversion factors.

The Cesium-137 gamma has an energy of 0.662 Mev and is a worldwide calibration standard. If we assume that all of the radiation coming from the gemstones (Gem CPM) is of this energy, then the Monitor 4 measures its dose rate directly in mR/hr or mrem/hr, since they are the same for gamma emissions of this energy. A (Gem CPM) measurement of 100 would in this case correspond to a dose rate of approximately 0.1 mrem/hr. is, a person wearing this gemstone for one hour would receive a radiation dose of approximately 0.1 mrem (Dose = Dose Rate x Time).

The average exposure individuals receive from background radiation in the United States is about 100 mrem/yr, but it is the lowest on the Atlantic Seaboard, about 65 mrem/yr, and higher in the Mountain States, about 125 mrem/yr.

The National Council on Radiation Protection and Measurement (NCRP) has stated that "even the smallest radiation doses carry some risk of both cancer induction and genetic effects. However, at the level of exposures from natural backgrounds, consumer products, etc., the cancer risk and the genetic risk are smaller for most members of the public than risks

arising from involuntary sources faced in everyday life such as transport, workplaces, pollutants, etc. Natural radiation risks are usually much lower than some of the more hazardous voluntary risks such as those of smoking, some sporting events, and certain risky occupations

The user is urged to consult the Bureau of Radiological Health at your State Department of Health for more information and guidance.

YEAR END INDIVIDUAL TAX PLANNING FOR 1986

a summary by: STAYNER,
FITZGERALD, VANCE AND CALL
A UTAH PROFESSIONAL CORPORATION CERTIFIED PUBLIC ACCOUNTANTS

The lower tax rates of the new tax law mean that most taxpayers will benefit from some year-end tax planning opportunities. The strategy of deferring income and accelerating deductions makes sense for the following reasons.

First, the tax deferred until 1987 generates a time value of money and second, by deferring income from 1986 to 1987, most taxpayers will benefit from lower rates. Accelerating deductions into 1986 makes the deductions

more valuable because of the higher rates this year.

However, this concept may not apply to everyone. If your 1986 taxable income is unusually low, or your deductions and losses are unusually high, substantially reducing your income; the opposite tactic might work best. It might be more effective to accelerate income into 1986 and defer paying deductible expenses until 1987. The only way to identify the right strategy is to make some projections with various alternatives.

Defer Receipt of Earned Income

If you are employed, defer receipt of your salary, bonus or commissions. If you are self-employed, postpone billing customers until near the end of the year, so payment is received after January 1. Be careful of "constructive receipt" rules. These rules apply when you have an unrestricted right to receive income and it is available to you.

Defer Interest Income

Purchase Certificates of Deposit, Treasury Bills, U.S. Savings Bonds, and other interest bearing investments that mature in 1987 and thereafter. You will pay taxes on the interest these investments earn in the year that they mature.

Defer Receipt of Employee

Benefits

You may avoid paying taxes on a distribution from a qualified pension or profit-sharing plans in 1986 immediately, if you roll it over to an IRA or another type of qualified retirement plan within sixty days. You will be taxed when the funds are withdrawn. The favorable ten-year forward-averaging provisions do not apply to distributions from IRA's, even if the amount rolled into the IRA would have qualified for forward averaging when it is distributed.

Last-Chance Deductions

Consider purchasing items, such as a boat, furniture, or a car, by the end of 1986 to get the sales tax deduction. Also, consider actual expenditures when figuring up your 1986 sales tax deduction and compare it to the sales tax table amount.

The charitable deduction for those who do not itemize will not be available after 1986.

Nonitemizers should consider making contributions in 1986. Itemizers should consider accelerating charitable contributions because of the lower rates after 1986.

Prepay Miscellaneous Deductions

In 1987 these expenses are deductible only to the extent they exceed 2 percent of your adjusted gross income. These expenses include continuing

education, subscriptions, union and professional dues, job hunting expenses, investment expenses, tax preparation and consulting fees, and safe deposit box charges.

Accelerate T & E Deductions

Better to pay travel and entertainment expenses in 1986 than in 1987 because only 80 percent of the costs will be deductible in 1987. And these deductions will be worth less because of lowering of the rates.

Accelerate Medical Expenses

In 1986 you may write off medical expenses that exceed 5 percent of your adjusted gross income. In 1987 the 5 percent floor is increased to 7.5 percent.

If you have already exceeded the 5 percent mark for 1986, you should consider paying your outstanding medical bills before the end of the year and hold off filing medical reimbursement claims until 1987. Credit card payments of medical bills will qualify as payment for the deductions.

If you are self-employed you should consider deferring medical insurance premium payments until 1987 when the new tax law allows you to subtract one-quarter of your health insurance premiums from your taxable income.

Prepay State Income Taxes

If you expect to owe additional taxes on your state tax return, authorize your employer to increase the amount of tax withheld for the rest of the year, or prepay the balance due in 1986 rather than paying when your file your returns in 1987.

Reduce Personal Interest

Since personal and consumer interest, other than mortgage interest on first or second homes, will not be fully deductible after 1986, try to reduce the interest you will pay on personal loans and credit cards after 1986. The deduction for personal interest is phased out gradually over the next four years. In 1987 you may write off only 65 percent of your personal interest, and by 1991 no personal interest will be deductible. should consider restructuring your personal debt with a home equity loan since mortgage interest is still fully You may refinance deductible. only up to the original purchase price plus the cost of improvements, unless the excess is used for medical or educational purposes.

Assume you bought your home in 1983 for \$85,000 and put in another \$5,000 of improvements. You can borrow up to \$90,000 and the interest will be fully deductible. The available funds from refinancing can be used to pay off outstanding auto loans and credit card balances or other

personal debt. However, the costs associated with refinancing, points, appraisal fees and title insurance offset the tax planning opportunity. Also, the points paid on refinancing must be deducted over the life of the loan, rather than in the year they are paid.

Capital Gains and Losses

Every investor should take a look at his or her portfolio with the changes of the Tax Reform Act of 1986.

The new law eliminates the favorable treatment of long-term capital gains. Investors may no longer exclude 60 percent of their long-term gains from taxation. So the top tax on long-term capital gains increases from 20 percent to 28 percent in 1987. And if you're in a bracket lower than 50 percent, the difference is even greater.

If you're considering selling a stock or other capital assets that you have held for more than six months, do so in 1986 rather than 1987 to get capital-gain treatment.

If you are in the later years of your life and believe that you may hold on to the stock until death, then you do not want to sell it in 1986 to lock in the long-term capital-gain deduction. That's because appreciation on property held at the time of death is not subject to income taxes, and the time of death is not subject to income taxes, and the tax basis of the property is

stepped up to its fair market value at the time of death. Consequently, the appreciation in the stock would not be subject to income taxes if held until death.

The new law leaves in place the \$3,000 limit on capital losses in excess of capital gains, but it does allow you to deduct long-term capital losses on a dollar-for-dollar basis rather than the old two for one rule.

Short-term capital gains should be deferred until next year because in 1986 these gains are subject to a maximum tax of 50 percent whereas in 1987 the top rate is 38.5 percent. On the other hand short-term losses should be taken in 1986, when higher tax rates make the deduction worth more. But make sure the short-term losses you accelerate to 1986 do not offset long-term capital gains.

Installment sales rules have changed under the new law. When you sell capital assets, such as a piece of land, the payments are often received over a number of years to defer recognition of the capital gain and delay paying the tax. But under the new law, sellers will lose the favorable long-term capital-gain deduction on installment payments that are made after 1986.

If this new rule affects you, you may want to accelerate in 1986 the payment of an existing installment note by selling it to a third party such as a financial institution, or

exchanging it for other property. When you do, the remaining gain is accelerated and taxed in 1986 when the more favorable capital-gain rules apply. Also, for installments sales in 1986, you should consider electing out of installment reporting to accelerate all of the gain in 1986.

Passive Activity Income

Starting in 1987 you may no longer use "passive losses" from tax shelters to offset income wages, salary, interest and dividends. You may deduct them only from passive activity income until the activity generates income or is disposed of in a taxable transaction. If you've invested in tax shelters still generating losses, you may want to invest in a profitable general partnership or small company that is an S corporation. operating net income generated from the S corporation or general partnership and passed through to you is considered passive activity income.

Rental Real Estate Losses

The new law provides for a \$25,000 limit on the deduction for rental property losses, and this limitation declines on a two-for-one basis for taxpayers with adjusted gross income over \$100,000. So you can't take losses if your AGI is more than \$150,000.

Due to the AGI phase-out and the \$25,000 cap on rental losses,

careful planning related to the timing of income recognition and deductions is necessary to realize the maximum benefit of your rental losses year after year.

Alternative Minimum Tax

The new law modifies the alternative minimum tax (AMT) provisions by broadening the income base. In addition the compression of the tax rates will subject more taxpayers to the AMT bite. Before tax planning strategies are implemented, you must assess the impact of the AMT, so that the benefit of the strategy is not diluted.

Income-Shifting Opportunities

The new law scales back the benefits of transferring income-producing assets to a minor child. Now, net unearned income that children under fourteen receive is taxed at the child's or parent's tax rate, whichever is higher. Since this provision is retroactive, any money or property given to a child under fourteen will be subject to the new rules.

The law specifically forbids the use of short-term trusts (Clifford trusts) as income-shifting devices. Now, income and deductions generated by the trust is considered part of the grantor's taxable income. The new rules apply to transfers made to a trust after March 1, 1986. Transfers to a trust before that date still operate

under the favorable old law--that is, the income is taxed at either the beneficiary's or trust's lower rate.

Some Income-shifting opportunities are still available and make sense. For one, you can give your children money to acquire U.S. Savings Bonds or to purchase an annuity from an insurance company. For another, it's a good idea to give appreciating asssets, such as growth stocks, to young children. The appreciation won't be taxed until the asset is sold. sale occurs after the child's fourteenth birthday, the capital gain will be taxed at the child's lower rates.

Generally the first \$1,000 of net unearned income is taxed at the child's lower rates. Therefore, you should conisder structuring your child's investments so that he or she recognizes only \$1,000 of net unearned income in a given year, with any excess deferred until he or she reaches fourteen.

Shifting income to children over fourteen still makes good sense. So consider establishing a savings account or stock portfolio in your child's name to help accumulate savings for a college education. These new rules on income-shifting won't affect employing your children in a family business. In fact, the child may use his or her standard deduction to shelter up to \$3,000 of earned income in 1988.

IRA'S and 401 (k)s

Beginning in 1987 you can't deduct your IRA contributions if you and your spouse is an active participant in another qualified retirement plan. There is an exception if your adjusted gross income is not more than \$40,000 for married couples filing jointly and \$25,000 for single taxpayers. But this exception is gradually phased out as your income climbs. Joint filers with an AGI of \$50,000 or more and single filers with \$35,000 or more may not make deductible contributions.

Since you have until April 15, 1987, to make IRA contribution for 1986, it makes sense to take advantage while you still can. Beginning in 1987 there is a \$7,000 limitation on the amount of pre-tax compensation you may defer in a 401 (k) plan. You may still increase your contribution for the balance of 1986, however, if your employer's plan allows it. This year you may accumulate up to \$30,000.

If you cannot make deductible IRA contributions, you might consider making nondeductible contributions, since the earnings still accumulate tax-free until However, remember withdrawn. early withdrawals other than the nondeductible contributions are subject to the 10 percent penalty in addition to tax. nondeductible contributions become part of the total IRA fund and may be withdrawn on a pro rata basis only.

The new law also changes the taxation of lump-sum distributions. After 1986 many people will no longer have the benefit of ten-year-averaging.

INDIVIDUAL TAX PLANNING FOR 1987 AND BEYOND

Since new lower tax rates will be fully effective in 1988, the acceleration and deferral planning ideas we've discussed are still applicable when planning your 1987 tax affairs.

THE COMPUTER
IS A TOOL
AND "STANDARDS"

by ROD WAGNER

Well, it is that time of the year again to start thinking about our conference in Tucson. This year we are having a hands-on workshop on computers and how to use them in your business for profit. There will be testimonials from our members who already use computers and how these tools have increased their productivity. Martin Rappaport will show how to use his computer network which has the ability to allow you to search for information on Diamonds. Donald Palmeri will talk about his experiences in desktop publishing. Joseph Tenhagen will tell about his experiences using AGMS. In addition to the above

information, we will be discussing the use of databases and spreadsheets in our industry. Artificial intelligence will also be demonstrated for gemstone identification. Desktop publishing uses for the appraiser and store owner will be Mail lists and ad discussed. preparation, along with using the accounting programs that are available for personal computers. There will be a discussion on data standards for the computerized gemstone world. we move forward in our technical abilities, new tools have come One of these upon the scene. tools is the personal computer and one of the best to come along is the Atari ST - This is NO GAME COMPUTER - It runs a wide range of very sophisticated programs including supporting the UNIX environment which is the standard operating system that AT&T Developed for all of its computer This inexpensive tool can do the job of a mini computer. The price for this machine is still coming down as the production increases and will soon be available in mass market The programs that the stores. ATARI ST supports are very similar to the programs that run One of the data bases on a IBM. I use on the Atari has the ability to store 2 billion records per file, 128 fields per file and 10 open files at a time. This is an incredible amount of information that can be uniquely addressed. It would take a lifetime to fill this data base if you typed at normal rates. The other programs that are available are just as powerful. The artifical intelligence

programs that are being developed for this system will have mass storage devices that can hold 500 million characters of information that is recallable in as little as three seconds. This will allow very sophisticated gemstone ID programs to be available to you at your office or lab. data that is going into these programs has to be gathered from gemologists working in the field and discovering new ways of detecting treatments and synthetics. If we can use our membership in the gathering of this data and maintain a data base that has this information available to our membership, then we have a valuable tool to offer to the industry. We have a chance to set standards for the use of data exchange between computers in the gemological As more information world. becomes available, the organization of this knowledge becomes more important. We have the ability to say how one should gather information and how to describe this information that he has recorded. If we all adopt the same definitions for terms, we will be able to effectively communicate with each other. world speaks many languages but with the help of a translator we can understand each other. Maybe the use of a standard system of definitions and the use of computers will help us all in our ability to make a living in the gemological world.

COMMUNICATION AND COMPUTERS

by ROD WAGNER

Computers are the newest electronic tool to come our way. We have all embraced the hand calculator as a indespensible tool but how many of you have embraced the computer in the same As the difficulty of the operation of a tool increases the use of the tool decreases. I don't know if that is a Natural Law or not but I have observed this to be true. The computer represents the ultimate in difficulty and at the same time is the most powerful tool ever invented. In order to fully use a computer one must spend a great deal of time learning very complex programing languages. Or have a computer that is powerful enough to do the complex manipulations for you from a menu. The new computers have enough memory and speed to allow this to happen. If you have a program that is menu driven (meaning the commands are listed in a menu fashion and you can select what you want done) you can have minimum knowledge of computers and still use them effectively.

This year in Tucson you will be able to see programs designed for the gemological field with the ability to select commands from menus. You should be able to walk away with a feeling that these new machines are easy to use and affordable to own.

The programs that will be running have been designed in a working gem lab and they fit all

the data storage and accounting functions required in day to day jewelry business. There are artificial intelligence programs running in the gem identification field. Translation programs for color grading gemstones and appraisal programs for printing finished appraisals. In our fields of interest we can use the computer to do some very time consuming tasks that will make our lives much easier.

For a business to be successful it must maintain certain operations. The following is a general list of those functions that a gemologist must perform in his normal routines.

- 1. Bookeeping
 - A. Accounts

Receivable

- B. Accounts Payable
- C. Billing
- D. Inventory
- E. Checking
- 2. Grading
- 3. Appraisals
- 4. Sales
- 5. Advertising
- 6. Networking

Now let us look at each of these tasks and see how a computer could help us in this task and make us more money at the same time.

No one wants to buy a tool and have it's use slow them down. If the computer can't make the job faster and easier then it isn't a good tool. Also the tool must not be so difficult to use that a person has to spend a great deal of time learning how to use it. With this in mind lets see what we have in the

market place to help us.

BOOKEEPING

Here the computer is a natural. It can easily keep track of your bookeeping records, print invoices, keep track of your inventory, write checks, and in general manage all your record keeping. The programs that perform this task vary in degree of difficulty of usage. The less you have to keep track of the easier it is to write a program to do it for you. A gemologist doesn't need to keep track of all the things a grocery store needs to keep track of in their operation. Most computer bookeeping applications are tailored to general accounting needs and will handle both situations however the more functions you have built in the harder it is to use the program. A simple accounting package can be programmed with a database language. This is a data base language program that allows you to construct a computer program that prompts you for the information you need to accomplish your task. After the program gets all the information it needs from you it then generates the reports or functions you requested it to perform. This type of program is very easy to use with all the difficult parts having been handled by the computer programmer designing the program. So what we have is a simple to use program that was written using a more difficult program. All of this means that a person without any knowledge of a computer can sit at a keyboard

and use a program right from the start in a very productive manner.

GRADING

The computer offers a real solution to some of our grading needs. We all have to do mathematical calculations when grading gemstones. The computer can easily do these for us and print the results in a useful format. Sometimes we need to look up information on a gemstone again all this information can be available on a computer. Identification of a gemstone can be made easier with artificial intelligence programs.

APPRAISALS

The computer allows you to gather the information you need for a appraisal by prompting for the required data. Then the computer can make all the necessary corrections and calculations and print a finished appraisal.

SALES

Data from sales is easily arranged into charts and graphs allowing you to make better business decisions. Inventory is automatically updated and you can have billing invoices printed.

ADVERTISING

Mailing and desktop publishing are two areas where the computer excells. Drawing and drafting programs make it very easy to construct effective ads and have them printed at fast printing centers. The ability to print

mailing labels by zipcodes and streets can give you the least expensive mailing rates.

NETWORKING

A year ago in Tucson the COMMUNICATION COMMITTEE was formed and the AGA went on line with their own electronic bulletin board. This has been a useful tool for electronic mail and general information on gemology. There are many other networks that also allow data exchange. This is the new communication tool and as more individuals get computers networks will emerge. AGANET is growing and as you decide it's direction we will provide more services for you. Networking can be a lot of fun. You have until MAY 1987 to log on AGANET and become a charter user.

This year at Tucson we will demonstrate examples of what can be done with computers and over the next few years we will discover new ways to use these tools. A person should be able to learn how to use one of the new systems in a hour and walk away with a feeling of confidence in his ability to run a computer. Of course this is only true if the computer has enough power to allow you to store on line help functions and instructions. The new 512k memory and the power of programs such as dbMAN allow just such programming ability.

What is needed now is for you to help in the design of new and more practical ways of harnessing the power we have in computers with the talent with have in the AGA. The last year

was a struggle for AGANET and the new COMMUNICATION committee. Many have requested information from me and I plead guilty in not responding quickly or to each and every inquiry. I beg forgiveness and hope you will be patient as I try to solve format and machine We should to machine problems. emerge from Tucson with a solid program for the next two years and I promise to be more responsive as time allows. got AGANET up and running, but not without some long nights and weekends. Those of you that helped during this trying time my thanks goes out to you. We now have Tucson coming up and I hope to take time there to meet with all of you who wish to help out this coming year with AGANET and the new DATA STANDARDS we are trying to put in place for the next growth stage. We will be doing all our publishing using computers and the new desktop publishing programs. This gives us a opportunity to publish articles and updates that are important to our future growth as a gemological organization. There are many ways to look at information and arrange it for practical uses. The computer is a tool that can do these manipulations at fantastic speed. For those of you that don't have computers yet we will attempt to meet your needs for this information by providing printed copies of data. If you have suggestions on lists of characteristics or other gemological information that you would like to see arranged in a certain fashion let us know. Make sure you log on to AGANET during your stay in Tucson this year and if you have any questions or problems we will try to fix them in Tucson.

NEW STANDARDS COMMITTEE FORMED

by ROD WAGNER

As we begin to use computers in our profession we will have to set some definitions in place in order to take advantage of their capabilities. When you have to describe an object for a computer you must use characters that the computer can understand. We have in the gemological world certain measurements we make on gemstones. These measurements are usually written in the same format so we can all understand them. Specific gravity and refractive indexes are common measurements we all make. How we record the results may differ a little but we all must be able to measure specific gravity and R.I. in a reproducible understandable manner and list the results in a common format. In order to use data bases in the gemological field we must all use the same terms and definitions. This new committee will compile and distribute to the membership a format that AGANET and AGA members can use to communicate gemological data. As we begin to compile our data base of gemological information we need help in all areas.

This committee can be a lot

of fun and can make some steps forward in our field. Right now is the time to set the data field formats for computers to use in their exchange of gemological knowledge. We all find how important it is to be able to identify new treatments and synthetics. This data base we are talking about assembling should have easily searched information in these fields. Some of this information is being discovered now by the working gemologists in our organization. We all ask what can the AGA give me for my membership ? Here is a chance for the AGA to give you a opportunity to be involved in the lastest in technology in our science. The AGA will in return give you updates on this knowledge as it is assembled and published on AGANET and with reprints from the Publications Committee.

We will be asking for help from the total membership to set these standards. As formats are set they will be sent to you to review and offer suggestions. After they have gone through that procedure we will offer publications with the data listed in the accepted formats for computer use. There will be some interesting discussions I am sure on the subject of color gemstone descriptions. We have all the knowledge we need available from our membership to arrive at a workable solution to this communication problem. If you have strong feelings on this subject you are welcome to join and be a part of this task of bringing order to the various systems that have been introduced and are currently in use in our industry. The duty of this committee is to set the definitions for the terms in use and how they compare to each other if possible.

CIE terminology has been determined for most of the systems by their inventors or manufacturers. This makes the testing and setting of definitions easier. We plan to have a meeting in Tucson to help organize this committee as the communication committee has a firm conviction that computers will make our lives much more enjoyable and profitable. Its priority is in setting these definitions in place as quickly as possible and depending on our members to help in the evaluation of these systems and there usefulness to the working gemologist. A finial note -Computers are only as good as those people who program them. We have a chance to be the programmers so to speak in the gemological field. Let's be the innovators in this area and put forth the definitions others will use in this field. If you have computer knowledge you are encouraged to be a part of this project. You know how important data bases and other computer tools are to your business help us show other members how to use these tools. For those of you without computers we will print listings as they would appear on a computer. If you have a idea of how you would like to see a listing of gemological knowledge let us know. We will be glad to try any ideas that will benefit the working gemologist in his

daily tasks.

HIGHLIGHTS ON TREATMENT

A recent letter from the Jewelers of America highlighted a selection on "Gemstone Treatment Disclosure - A 'Must' For Jewelers". This AUG/SEPT issue urged jewelers to make disclosure to avoid tarnishing the image of every individual retailer as well as the entire industry. They suggested a statement jewelers might use as follows:

GEMSTONE PURCHASERS SHOULD BE AWARE THAT NATURAL GEMSTONES ARE PROCESSED FROM THE TIME THEY ARE EXTRACTED FROM THE EARTH BY ONE OR MORE TRADITIONALLY ACCEPTED TRADE PRACTICES. ALL GEMSTONES HAVE PROBABLY BEEN SUBJECTED TO A STABLE AND POSSIBLE UNDETECTABLE ENHANCEMENT PROCESS. ALL RELEVANT INFORMATION WILL BE READILY PROVIDED TO THE BEST OF OUR KNOWLEDGE. PREVAILING MARKET VALUES ARE BASED ON THESE UNIVERSALLY PRACTICED AND ACCEPTED PROCESSES BY THE GEM AND JEWELRY TRADE.

For more information, contact Jewelers of America. Also Chairman of our Standards and Disclosure Committee, C.R. "Cap" Beesley, will present his progress and suggestions at our upcoming Tucson conference.

MGA LAWSUIT

In a LANDMARK decision today, the federal courts made judgement and awards in favor of the "MGA" and Accredited Gemologists Association versus Bruce and Gary Keno. The Keno brothers were removed from the MGA program after policing revealed violation of MGA policy that they had vowed and signed in contract to uphold. Soon after, they started their own Association which used the same "MGA" initials. No certification or testing was required and for \$50.00 anyone could get a piece of paper indicating they were an The Accredited Gemologist Association filed complaint and suit on behalf of the MGA program. After more than a year of battle and expense, it was shown that the Keno's were violating copyright/trademark laws and were ordered to stop using any reference to "MGA" as it related to the Master Gemologist Appraiser program of the AGA. We also received ruling in our favor to recover damages for a letter written by the Keno's published in National Jeweler where they indicated that the whole incident stemmed from their request to inspect the books of AGA where they were claiming mismanagement of funds. The courts found no such wrong doing on the part of AGA or it's officers and awarded AGA damages and the right to collect attorney fees. This was a long hard and

costly fight, but it should serve as an inspiration to us and the industry that we do have a right to protect ourselves from such misuse of standards and ethics built into programs we all worked so hard to design and pledged to support. Further, it will show the public that we do care about their welfare as well as ours....

Follows is the press release from the Chair of the MGA Committee:

Keno's "MASTER GEMOLOGY ASSOCIATION, INC." and "MGA" Ordered Cease and Desist

Fort Lauderdale, Florida... In the case heard November 5th in U.S. District Court in the Southern District of Florida: "AGA vs. Master Gemology Association, Bruce Keno and Cary Keno", Federal Judge Eugene Spellman found the Kenos and Master Gemology Association, Inc., guilty of trademark infringement against the AGA. Master Gemology Association, Inc., incorporated in 1985 in Florida by Bruce and Cary Keno of Fort Lauderdale, was enjoined in the court action and ordered to "cease and desist" using the name or the initials "MGA". According to Fort Lauderdale AGA attorney. Jeffrey A. Sarrow, the preliminary injunction stops any further use of the name and "MGA" titles sold by the Kenos to their unsuspecting members, and he will move to freeze all Keno and Master Gemology Association assets. There will be a hearing in February where Judge Spellman

will determine the amount and award damages to AGA. At that time, the preliminary injunction is also expected to become permanent.

In the months just prior to the trial, Bruce and Cary Keno disbanded the corporation so that Cary Keno could act in his own defense and that of the Master Bruce Keno Gemology Association. failed to show up at the trial, although in his deposition prior to trial, he admitted to misrepresenting himself on his AGA qualification application to gain admission to the Master Gemologist Appraiser certification program. Bruce Keno became certified in the AGA's Master Gemologist program in mid-1984 and was suspended in early 1985, during routine policing administered by the AGA's International Board of Examiners, for a serious ethics violation.

In his comments leading to the guilty verdict, Judge Spellman found that the use of the MGA designation and the Master Gemology Association is likely to cause confusion, mistake and deception among the general public and the trade, and further this wrongfully infringes upon the prior AGA trademark and the Master Gemologist Appraiser certification program and therefore violates the Lanham Trade-Mark Act.

The court also found that "the Kenos had knowledge of the MGA trademark and had duty to avoid the confusion". Further that "the Kenos wrongfully

intended to adopt a name and designation that was confusingly similar to MGA". The Judge further commented that the Keno's use of MGA was probably intended to deceive their own membership.

In a second suit against
Bruce Keno for libel as a result
of his "letter to the editor"
published in its entirety in the
July 1986 National Jeweler
Magazine, AGA was granted a court
entered defauly judgment and
finding of liability. An
upcoming non-jury trial in state
court will determine the amount
of compensatory and punitive
damages against Bruce keno.

In the Keno's suit against AGA and its directors for mismanagement, the case was "dismissed with prejudice", which is a demonstrable and wide sweeping a dismissal as the court can render.

According to Donald A. Palmieri, ASA, MGA, Chairman of the International Board of Examiners and Director of the Master Gemologist Appraiser certification program, "the legal costs for justice can devastate a small self-sustaining group like That seemed to be the plan ours. of the Kenos after Bruce Keno's suspension from the only self-policing jewelry certification program in Self-policing has existance. always been one of our greatest strengths and the cornerstone for public reliability and confidence in the work of a certified MGA. The random policing was explained to every MGA during their training and is applauded by

other appraisal groups and insurance companies as an expensive but reliable way to maintain the integrity of such a program". At present, there are 42 MGAs. Other MGAs have been suspended or revoked in the Program's four year history without litigation or other problems like the Keno affair.

Many of our MGAs have already complained that some of the Keno/MGA members have caused confusion in their areas. A complete list of currently certified MGAs follows. To avoid Further confusion concerning the valid certified MGAs, we would appreciate your publising the list in its entirety.

FOR FURTHER INFORMATION CONTACT: DONALD A. PALMIERI, ASA, MGA (412) 344-5500

BOARD OF GOVERNORS

TERRITORIES ESTABLISHED - WHAT REGION ARE YOU IN?

Under authority of the AGA Constitution, Article XIII, Board of Governors, the President has established sixteen geographical regions of AGA, and has mandated the election of a governor for each region, and has decreed certain responsibilities and authority to each governor as set forth below. The governors collectively constitute the Board of Governors with responsibility

and authority as set forth in the Constitution.

REGIONS

The several governors shall act within the following sixteen regions.

REGION 1: Pennsylvania, West Virginia, New Jersey south I-95, I-295, I-195

REGION 2: Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, Quebec, New Brunswick, Nova Scotia

REGION 3: Virginia, Maryland, Delaware, District of Columbia, North and South Carolina

REGION 4: Wisconsin, Illinois, Indiana, Kentucky

REGION 5: Florida, Georgia, Caribbean Area

REGION 6: Texas, Oklahoma, Arkansas, Louisiana, Chihuahua, Coahuila, Nuevo Leon

REGION 7: North Dakota, South Dakota, Nebraska, Kansas, Minnesota, Iowa, Missouri, Manitoba, Saskatchewan

REGION 8: Wyoming, Utah, Arizona, Colorado, New Mexico, Sonora

REGION 9: Nevada South of 37 degrees north, California south of line from 37 degrees and Nevada line to 35 degrees north and Pacific coast, Baja California

REGION 10: Africa, Europe, Latin America except as specified otherwise

REGION 11: Michigan, Ohio, Ontario

REGION 12: Alaska, Yukon, NW Territory, Washington, Oregon, Idaho, Montana

REGION 13: California and Nevada, except as specified above

REGION 14: Hawaii, Japan, Taiwan, Phillipine Islands, SE Asia, Australia

REGION 15: New York, New Jersey North of I-95, I-295, I-195

REGION 16: Tennesee, Mississippi, Alabama

DUTIES

Governors shall be responsible to the President, AGA, for the following duties within their regions:

- l. Growth development of the Association by recruitment, retention and advancement in the various membership categories.
- 2. Establishing and supporting chapters and cells of AGA to foster a sense of fraternity, support and availability among members and the leadership of AGA.
- 3. To require of each cell and chapter a monthly report of activity. To consolidate these reports and forward to each member in his Region and to the

Executive Director.

- 4. To hold one gemological event each fall, of such importance as to attract attendance from all of his regions.
- 5. Such additional duties as are specified in the Constitution.

EXTERNAL SUPPORT

The Executive Director will provide to each governor an agenda for each meeting of the Board of Governors, along with background papers. This agenda is to be in the hands of the several governors not less than seven working days before the meeting. Any item not on the agenda, or delivered to the governors less than seven days before the meeting may be considered only by an approving vote of 60% of the governors present.

QUORUM

A quorum of the Board of Governors is to be 50% of its membership

I HAVE THE FOLLOWINGS ITEMS FOR SALE

contact: JACK KEALSEY
RTE 3 BOX 529
BANNER ELK, N.N. 28604

(704) - 898 - 5885

496 Emerald Filter \$19.00 452 Mineralight UV UVGL-25 S/W and L/W \$139.00 327 GIA Mini-Diamond Master \$195.00 392 GIA Duplex II Refractometer and Liquid \$190.00 396 Polarizing filter \$12.00 Leveridge guage (some rust) and book \$140.00 Kassoy prong lifter PR711 \$14.00 2 sets of 12 each rubber diamond shapes (AGS), pad and ink \$50.00 Gold test needles, set of nine, two acid bottles and stone \$50.00 Conoscope, hand-held no charge. 2.67 and 3.32 S.G. bottles and liquids \$12.00 424 GIA Gem Dichroscope \$17.00 Gemprint, 1980, \$2,500.00 551 Light cube and transformer, rechargeable 6V. battery from Mini-Lab \$19.00 490 Gem prism spectroscope 468 Ultraviolet Viewing Cabinet \$72.00 416 Illuminator polariscope \$65.00 185 Colormaster \$1,975.00 500 Brush probe \$5.50 Mark V Gemolite \$1,200.00 240 Vertical Illuminator \$141.00 284 Color grader \$84..00 280 Overhead light source \$71.00 300 Two stone holders \$62.00 242 Carrying case \$88.00 520 Two tweezers, some rust 516 Five locking tweezers \$59.00 116 S.G. attachment for diamond balance \$9.50 Gem III Duplex refractometer (as in Mini and Maxi-Lab) w/4 filters \$100.00

Polaroid SX-70 Set: Camera, 1X, 2X, 3X adaptors, flash unit, microscope adaptor, case \$750.00 Brass calipers \$9.00 Stone and mounting guage \$4.00 75W Counter selling light \$200.00 420 Immersion Cell \$8.50 200 2X Adaptor lens \$60.00 Diamond cut demonstrator (Kaplan Model) \$165.00 2 Ring mandrels, (1) aluminum and (1) steel \$30.00 148 Diamond proportion analyzer \$160.00

GIA Catalog numbers (1983) and prices are used where applicable. The total cost will be reduced 10% to someone who purchases the entire inventory. (Note prices on Colormaster, Gemolite and Gemprint). Shipping costs extra. First come, first served. Offers for the total inventory take precedence.

INSURING
JEWELRY,
WELL WORTH THE
COST AND RISKS

by B.J. CALDWELL, PR Director, Accredited Gemologists Association

If you have ever lost a piece of fine jewelry you may be well aware of what your insurance policy covers, or does not. After the loss is not the time to find out.

Many insurance companies

offer a blanket coverage along with a home owners policy of \$500 to \$5,000 on fine jewelry. Generally, the lost item must be "stolen" and a police report made in order for a claim to be valid. If the item was just "lost", or so called "mysterious disappearance" many policies do not cover such a loss without a rider attached to the policy.

Since many insurance agents fail to properly inform their clients of the specifics for replacement of insured jewelry, it is up to the client to ask the pertinent questions:

- Why do I need an appraisal and who is qualified to perform one?
- Why doesn't the regular home owner's policy cover all jewelry?
- In case of loss, am I reimbursed in cash for the amount shown on the appraisal?
- In a replacement situation, can I choose the store to do the replacement of the article?
- Does my policy cover mysterious disappearance?
- Why do I pay insurance based upon the retail replacement value of my jewelry when if it is lost the insurance company wants to give me only a percentage of the retail replacement value?
- What is covered? Must it be a complete loss or is a partial loss such as one stone out of a ring covered? If jewelry needs repair and a loss occurs, then what?

These are a few very important questions to be answered before buying an

insurance policy on fine jewelry. Your agent should be able to answer these questions and any others you have.

A proper appraisal of jewelry is necessary to insure the item will be replaced with the same quality that was lost, as well as provide proper identification of the item. Choose an appraiser who holds a gemology certificate, and is recognized by appraisal organizations such as the American Society of Appraisers, the Accredited Gemologists Association, or the American Gem Society.

A regular home owner's policy will generally not automatically cover a large dollar amount of jewelry. A separate rider must be attached to the policy for this purpose. If you are covered by a home owner's policy without a rider, loss or mysterious disappearance jewelry is not covered unless the theft involves a police report. Even then, coverage is generally limited.

Most insurance policies state that the lost item will be "replaced" with a like item of equal value. Coverage is for replacement and not cash. If you want coverage that states that you will receive the dollar figure stated on the appraisal report, you can expect to pay a This is because higher premium. insurance companies are able to replace a lost item for less than the dollar amount shown on the appraisal report. Since jewelry losses are not rare, insurance

companies represent a large volume of business to the jewelry industry and are able to receive a discount on their purchases.

Often an insurance company has a specific jeweler that does the majority of their replacements; however, it may be possible to choose the jewelry store that you like to do business with.

In the majority of policies, partial loss is covered. However, normal wear and tear is generally not included. In the event of an accident where the jewelry has been damaged, repairs may be covered.

After you have obtained a qualified appraisal, shop different agents and companies for coverage on your fine jewelry. This will enable an agent to quote you premium prices. Adding a rider to your home owner's policy is the best way to obtain jewelry insurance. Separate insurance is expensive. Ask the agent about special rates for jewelry kept in safe deposit boxes full time, or part of the time.

Keep clear photographs of all items in your possession. Qualified appraisers will generally include photographs in their report. Find out how often your agent requires an updated appraisal. If he does not require updates, you may not be adequately protected, or you may be over-paying for insurance you don't need. Normally updates are required every three years. If you return to the original

appraiser, the update charge will be far less than a new appraisal.

Since retail markups vary from store to store, an inisurance appraisal evaluation should reflect an average of these markups taken from the closest geographic market to the origin of the appraisal. If the item being appraised was made by an artist, is one of a kind, or was sold through a famous establishment, an appraisal should accompany the item at the time of evaluation if at all possible.

*NOTE THIS ARTICLE HAS ALREADY BEEN PUBLISHED IN THE TUCSON BUSINESS JOURNAL AND IS SOON TO APPEAR IN GOODHOUSEKEEPING MAGAZINE. GOOD WORK B.J.!

LETTER FROM THE PRESIDENT

by NEIL COHEN

I would like to take this opportunity to thank all the members, committee chairpeople, regional governors, and directors who worked so hard to help this year. We had a tough year business wise and it dosen't promise to make any drastic overnight recoveries. I believe we made significant progress in many projects this year. We fought a long and hard court case in the MGA program and won. We started a new communications

committee and developed the first ever in house gemological bulletin board system. We made a new committee structure and initiated many projects that are still in mid-stream. We will have the BEST Tucson conference ever in '87 and I urge you all to attend. It will be a culmination of our hard work and provide members a chance to meet face to face and progress even further.

Many of our members have commented on our publications and most are very pleased with the new format. We still need member input to make our publications the best that they can be. Please let us hear from you on any interesting matter pertaining to AGA or our profession.

As you know elections ended and you will all be receiving the results. My reign is over and I have only good positive things to say about my experience with AGA. I hope to continue offering support to the organization and make a plea for all of you to do the same. Let us hear from you whether it be good bad or indifferent. It's your AGA. Make it great!

LETTER FROM THE EDITOR

Thanks to all the reporters who sent in article reviews for publication this year, as well as all of you who sent in information to be printed. It's

wonderful to get such diverse correspondence and we hope you will all continue. Without you our publications would not be at all the same and would be greatly lacking. Thanks again!

To those who sent in article reviews for this publication, they will appear in the next which is due mid January. Sorry but we ran out of room and time and felt you needed this information right away.

A MESSAGE FROM THE V.P.

by ROBERT ROSENBLATT

I would like to offer a wholehearted THANK YOU to all who spent so much time and effort on our various projects this year. As we come to the close of a hectic year, we look back on many accomplishments and some projects that didn't quite get finished. This edition of Update was done through my office with assistance from Publications. I think we all owe Dana Richardson a very special thank you for all her hard hard work on publications this year. Without her, we would not have survived! Thank you Dana. The reason this issue is so late is, for this one time, I took over as editor. I felt that this time of year was hard enough and Dana deserved to be off the hook for at least one edition. She has agreed to stay

on one more year as Chairperson of Publications. Please let her know what you think, good bad or otherwise and please "KEEP THOSE CARDS AND LETTERS COMING". By the way, Dana is about to become a new mother and unfortunately won't make Tucson '87.

That brings me to the issue of Tucson. You will find enclosed a "final" schedule for our TUCSON '87 conference. It will be the gemological event of the entire show as you can see. We will offer something for everyone. We have the best in the business coming at their own expense to present you with the best conference money can buy. We feel it is a very affordable price for what you get. Please read the schedule carefully and SEND IN YOUR RESERVATIONS TODAY!

Through the efforts of Jeff Hurwitz our treasurer, AGA is now able to accept membership renewal, payment and Tucson tuition by Visa or Mastercard. This is something we have been trying to put together for a long time. Thanks Jeff! Way to go.

We will be having our annual membership meeting and board of directors and regional governors meeting at Tucson. New committies will be formed and committe chairpersons will be assigned. If you have any interest in joining or chairing a committee please let me know right away. If you feel a new committee is needed to address a new issue please let me know. you have any issues effecting constitution, by-laws, or AGA policy please let me know,

especially if you won't be able to attend. AGA is yours and the officers can only represent you well if they hear from you. WE NEED YOUR IMPUT!

This entire issue of Update was produced on a personal computer. Our conference in Tucson will have special hands on workshops and thanks to our Chairman of Communications Committee, Rod Wagner, we have made special arrangements with ATARI to bring enough machines to Tucson to give real meaning and value to a hands on workshop. will be the management tool of the future that we will have access to today. Don't miss this chance to learn everything you wanted to know but were afraid to touch about computers.

You will notice an emphasis on treated or irradiated gems in this issue. There has been so much controversey around this issue we felt it justified some time and space. Although you have an order form for a radiation detector enclosed in this issue, we do not want to give the impression that it is the only detector on the market, and this is not an exclusive endorsement of only one product. In all fairness, of all the different models we previewed that had features with an application to our trade only one was in a price range under \$200. The one thing we all have is lots of VERY expensive equipment. one thing we don't need is a new · VERY expensive piece of equipment. This detector is portable, fairly functunal (takes alot of time to use the right

way), and very accurate, all at an affordable price. We will continue to research this topic and it will be discussed at greater length in Tucson. As new detectors become available, we will forward data on them. A special thanks to Cortney Balzan and Rod Wagner for their work with the Nuclear Regulatory Comission on this project.

As we approach a new year we see opportunity to deal with all sorts of new issues. Ethics in pricing and advertising, treatment disclosure, appraisal standards, communication standards, increasing profit, and many many more. What would you like to see us work on? What are you interested in? What should AGA be focusing on? What direction should we take? These questions are up to you. We have alot going on and WE NEED YOU to help. Let me make a plea to you all to get involved in AGA, tell a friend about AGA and lets continue to lead the way in our profession. I eagerly await your reply.

HAPPY HOLIDAY AND BEST WISHES FOR A GREAT SEASON!



UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

June 25, 1986

TO ALL NON-POWER REACTOR LICENSEES

Gentlemen:

SUBJECT: DISTRIBUTION OF PRODUCTS IRRADIATED IN RESEARCH REACTORS (GENERIC LETTER 86-11)

We have recently received several inquiries regarding products which are irradiated in research reactors and subsequently distributed to unlicensed persons. The inquiries were related to irradiations of gems and silicon chips, but other products may also be involved.

We are concerned that research reactor licensees may be irradiating and redistributing products containing induced radioactivity to unlicensed receivers who utilize or redistribute these irradiated products. Information provided to NRC in specific cases indicates that gems, silicon chips, and many other materials usually acquire relatively long-lived induced radio-activity when irradiated in a reactor. Although irradiation of products in a reactor is not of itself prohibited, 10 CFR Section 30.14 prohibits introduction of byproduct material into a product for distribution to an unlicensed person, unless the distributor has a specific license issued pursuant to 10 CFR Section 32.11 which permits such distribution.

The purpose of this Generic Letter is to correct any misunderstanding concerning the distribution of irradiated products to unlicensed persons. In accordance with 10 CFR 30.14, the distribution of irradiated materials, even with low levels of induced radioactivity, to unlicensed persons is prohibited unless the distributor of such materials is licensed by the NPC to do so. Furthermore, to measure these low levels of induced radioactivity very sensitive low background instruments are required, such as shielded sodium iodide or germanium-lithium detection systems.

In addition, we call your attention to subsection 3 of the enclosed NRC Policy Statement in the <u>Federal Register</u> notice of March 16, 1965 (30 FR 3462) regarding products which are toys, novelties or adornments. The staff considers gems to be adornments and has not granted licenses for distribution of irradiated gems or similar materials.

You are responsible for assuring that the distributors of any products you have irradiated in your reactor, and which have acquired induced radioactivity, are licensed to distribute these products in accordance with 10 CFR 30.14(c) and 30.31. If you directly distribute the irradiated products to unlicensed persons, you must obtain a new license to reflect this activity.

- 2 -

Applications should be addressed as follows:

U.S. Nuclear Regulatory Commission Director, Office of Nuclear Material Safety and Safeguards Division of Fuel Cycle and Material Safety Washington, D. C. 20555

Please note that the NRC has exclusive jurisdiction over reactors and distribution of radioactive consumer products. Agreement States do not issue this type of license.

This letter is for information only and does not require any response. Should you have any questions concerning this matter, please contact Harold Bernard at (301) 492-8529.

Sincerely,

Frank J. Mīraglia, Director Division of PWR Licensing-B

Office of Nuclear Reactor Regulation

Enclosure: As stated

MASTER GEMOLOGIST APPRAISERS (MGA)

ADAMS, Marshall, MGA
Marshall Adams' Gems
2364 North Del Rosa
San Bernardino, CA 92404
(714) 883-8463

ATLAS, David S., ASA, MGA
D. Atlas & Co. Inc.
732 Sansom Street
Philadelphia, PA 19106
(215) 922-1926

BALZAN, Cortney G., MGA
Balzan's Gemological Lab.
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