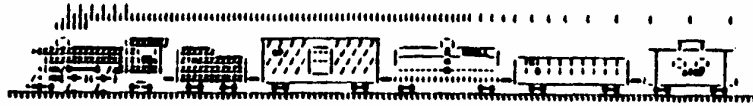




The OPAL EXPRESS

Published monthly by the
American Opal Society...



Volume 18, No. 12
DECEMBER 1986

Colleen Guerrette, Editor

POST-SHOW EDITION

HIGH TIMES...

The Show. It's at the same time over and beginning again. Even as we watched the final moments of take-down, followed by the turning of f of the lights, and even as the final shutting of the doors echoed quietly behind us, the cycle was already in motion for next year's production. It's like reincarnation, with a sort of personified Karma gathering up all the high moments and saving them for the actual show days. For with all the glorious and exciting preparation throughout the year, the peak moments are always at Show Time. This year was no exception.

Some High Moments

Although we have known long-time members Dick and Sharlene Shanahan for several years, via the mail, it was a special privilege indeed to finally meet them in person. Dick and Sharlene flew in from Sacramento to attend the Show.

Roy Kopman dropped by from Phoenix to say hello. As always, it was a pleasure to hear from Roy. A long-standing member of the AOS, Mr. Kopman also is a show participant in Phoenix next February.

Al Meador from Overland Park, Kansas, came out for the Show. Al has only been working with opal for five years and has become quite an opalophile, having built his own cutting and faceting equipment. It was a real treat to meet him.

Lynn and Elaine Loomis came all the way from Concord, Massachusetts, as is their annual custom. They visit, their daughter and attend the Show. What a pleasure to see them again.

The Jewelry Design Contest: This year the contest case was filled with exceptional pieces from our member participants. Taking home our new perpetual trophy was Noel Lamkin for her dazzling boulder opal pendant accented by emeralds. Second place was won by Dick Shanahan, whose elegant opal necklace induced numerous "oohs and ahs" from passers by. David Delo captured third place with his delicate (and coveted) pendant. Special thanks also to Joe Vezeau, Bob Halahan, Michael Muse and Ed Rockafeller. All the entries were truly masterful works of craftsmanship.

The Raffle: Lucky winners were Ed & Donna Lemoine of Yorba Linda and Josephine Murphy of Malibu.

ACCOLADES FROM THE PRESIDENT

There's no people like Show peoples!!! Those who helped set up and take down; those who displayed their wares; those who cheerfully greeted visitors; those who skillfully demonstrated their crafts; and those who willingly helped where needed. There are numerous names to name here and I've listed them below. A SPECIAL thanks to Andy Guerrette for his fine leadership and professionalism in coordinating his first Show. Andy has accepted the show chairman position again for 1987 and has already begun the planning.

Demonstrations: Edith Ostrander and granddaughter Christine; Don Andrews of the Faceter's Guild of Southern California; Michael Oase of Jewelry Tech Institute.

Displays: Joe and Joyce Vezeau; Hodson's of Scottsdale; Jack McClelland from the Faceter's Guild of Southern California; Jo Snyder; Art Risley; Michael Muse; Ed Rockafeller; Cyr's Minerals & Gems; Ida Proue; Jewett & Dorothea Pattee; and the AOS collection prepared by Ida Proue and Delores Proulx.

Setup and Takedown: Andy Guerrette, Colleen Guerrette, Scott Guerrette, Joshua Sadler, Jewett Pattee, Dorothea Pattee, Brian Franks, Harold Umberson, Brian Umberson, Karl Palas, Ken Despain, John Hall, Noel Lamkin, Joe Vezeau, Michael Muse, Art Risley, Dick Koch, Dolores Proulx, Ed Rockafeller, Ida Proue, Joyce Vezeau.

On behalf of the American Opal Society, I would like to thank all those who attended--members and visitors, buyers and sellers, Convention Center staff--for making "A Fantasy World of Treasures" a REAL and rewarding experience.

CHAPTER NEWS

Thirty-five people signed up as being interested in forming an Orange County Chapter. A meeting will be held in January to discuss plans. Anyone interested please write to the AOS, P.O. Box 3895, Downey, CA 90242.

Christmas Party

It's THAT time of year again, believe it or not. Time to think about Santa Claus and Rudolph the Red-Nosed Reindeer and red ribbons and greenery and tinsel and polka dot ties and toys and candy and shopping and bells and candles and wreaths and... and. . .THE FOUNDING CHAPTER'S ANNUAL CHRISTMAS MEETING AND POT LUCK. This year's festivity falls on Thursday, December 11 and will be held at the regular meeting place at 7:00 p.m. Please note that the time is one-half hour earlier than usual due to the dinner.

What to bring (besides your appetites): (1) your own place settings (plates, forks, knives); (2) your favorite entree (perhaps a casserole) if your last name begins with A-I; a salad or vegetable dish if your name begins with J-R; and a dessert if you happen to fall into the S-Z category. Of course, if you have a specialty dish you'd rather bring, by all means bring it. A great big hunky ham will be provided, as well as coffee and punch. Any questions please call the Christmas-meeting-and-pot-luck coordinator, Dick Koch, at 213-927-4372.

Also be prepared to vote for the candidates of your choice for the Founding Chapter officers and directors for 1987. A list of nominees is included somewhere in this issue of the newsletter.

Remember, that's Thursday, December 11, at 7:00 p.m. at the regular meeting place in Downey (a map is included on the back page).

YULETIDE GREETINGS TO ONE AND ALL

SHOW BIZ 1986 — 1987

The 1986 Opal and Gem Show is now history. This show was well received by both the dealers and the buying public. All went smoothly except for a couple of minor mishaps which could have been prevented but we live and learn. If the measure of success is the amount of requests for the 1987 show (which by the way is almost completely reserved at this date), then we were successful. AOS did not do very well this year at all because of unexpected additional expenses which not only erased any chance of obtaining funds for next years operating budget, but also drove us over \$1000 in the red. We cannot afford to do this next year since this was the second year in a row that income did not cover expenses.

The Anaheim Convention Center invited us back for our next show which will be in the exact same location as this year but in October instead of November. The show dates are the 24th and 25th which are the last full weekend in that month. I really would have preferred the same time in November but that was unavailable.

ATTENTION! Everyone who helped us set up and/or take down the tables and chairs, please tell us how many hours you worked as we wish to pay you for that time. We can't compete with your normal salary (since we are only paying \$5 per hour) but this will give you some compensation for your most valuable assistance. We are very grateful for everyone who gave of their time and efforts to make this a great show.

I will be sending letters to all the participating 1986 dealers in the coming weeks with more information about next years show.

--- Andy Guerrette ---

CLASSIFIEDS:

ESTATE SALE: 2 Highland Park opal cutting machines; one on metal stand. Both excellent condition. \$450 and \$400. 20" saw and enough assorted rocks to fill a shop. Saw \$800. Rocks negotiable. Various other items. Margaret 213-664-8718.

Impregnation, continued from last month

ago. With as little as 5% turquoise in some of them, many "reconstituted" turquoise stones should probably be labeled as "imitation." Nevertheless, they are the byproduct of successful experimentation with plastic stabilization of pure turquoise. Stabilization, it is often heard, makes turquoise tougher than the direct from-the-ground variety.

So not only does the presence of stabilized opal and turquoise represent a massive harnessing of chemical processing techniques, but perhaps the beginning of a preference for gem materials enhanced by them. Some purists worry that increasing dependence on high-tech processing for market readiness will create virtually unlimited supplies of many gem species and destroy the foundations of a fine goods market for them— especially if treatments are undetectable,

Such may soon be the case for rubellite, now that otherwise unusable tourmaline is being rehabilitated by a two-stage permanent process that involves the use of irradiation and polymers. Treaters are taking pale-pink, fracture-ridden tourmalines, many from California, irradiating them to turn a rich red, then applying an epoxy to seal and hide fractures. Although the sealant is detectable (with difficulty), the irradiation is not. Any mass-influx of the new bombarded/epoxied "rubellite" could panic the market, much as the introduction of undetectable irradiated-only rubellite did in 1982-83. Dealers fear this glut would quickly strip the value of fine natural rubellite to next to nothing. "Is rubellite the next blue topaz?" one asks.

Brave new whirl

The very pervasiveness of gemstone treatment has speeded up advances in the art and spawned a lucrative gem processing industry in America. Indeed, many of the most recent and sophisticated impregnation treatments are coming from this country. The new dual-process irradiated plasticized rubellite is made in Arizona. Success in Michigan with epoxy to cure cracks in opal has spurred experiments with this technique on similarly afflicted emerald. Of course, America has long been a hotbed for gemstone irradiation, starting back in the 1940s with cyclotron-coloring of diamonds. Today, two licensed linear accelerator facilities, one in California and the other in New Jersey, are responsible for most of the world's blue topaz. In fact, demand for this gem is so

IMPORTANT PATENTED PROCESSES APPLICABLE TO MODERN GEMSTONE TREATMENT TECHNOLOGY

Compiled and written by John I. Koivula

ISSUE DATE	PATENT HOLDER	PATENT NUMBER	ORIGINAL PURPOSE OF PATENTED PROCESS	PROBABLE APPLICATION IN GEMSTONE TREATMENT
9/7/48	M.H Barnes and E.L. McCandless The Linde Air Products Co.	U.S. Patent 2,448,511	To give both corundum (ruby and sapphire) and spinel, glossy, scratch and pit-free surfaces by using both heat and additional chemical agents.	To "glass fill" pits and cavities in the surface or pre-faceted rubies and more rarely sapphires. (Note: Could also be used on spinel.)
11/15/49	J.N. Burdick and J.W. Glenn Jr. The Linde Air Products Co.	U.S. Patent 2,488,507	Developing asterism in corundum as described in a patent concerning "synthetic star rubies and star sapphires and process for producing same."	Technology learned from this process is used to control the precipitation or dissolution of rutile in corundum, i.e., the formation or removal of asterism.
10/5/54	W.G. Eversole and J.N. Burdick The Linde Air Products Co.	U.S. Patent 2,488,640	Producing asterism in corundum crystals describes for the first time high-temperature diffusion treatment with the intended purpose of diffusing titanium oxide into the surface of corundum to create or improve asterism.	Using this technology heat treaters can improve as existing "poor quality" star ruby or sapphire or create a new, complete star where none existed before.
7/29/75	R.R. Carr and S.D. Nisevich Union Carbide Corp.	U.S. Patent 3,897,529	"Altering the appearance of sapphire crystals" describes, for the first time, diffusion color treatment of sapphire using cabochon-cut corundum crystals and powder mixes of alumina and titania with or without minor metal oxide coloring agents.	To diffuse color into pale or colorless pre-faceted cabochoned sapphires thereby improving the color appearance and potential value of the material. Color is only superficial. Also gives information applicable to the heat treatment of common "Geuda" sapphire.
4/13/76	R.R. Carr and S.D. Nisevich Union Carbide Corp.	U.S. Patent 3,950,596	"Altering the appearance of corundum crystals" describes diffusion treatment using titanium oxide powder and a powdered metal oxide coloring agent such as iron vanadium, chromium or nickel oxides. The colorant imparts color to the corundum crystal's surface.	Diffusion of color into surface of pre-cut sapphires.
8/2/77	R.R. Carr and S.D. Nisevich Union Carbide Corp.	U.S. Patent 4,039,726	"Altering the appearance of corundum crystals" describes diffusion using a major amount of alumina powder with minor amounts of metal oxide colorant.	Diffusion of color into surface of pre-cut sapphires.

Source: *Synthetic Gems Production Techniques* edited by L.H. Yaverblum, Noyese Data Corporation, and from *United States Patents* as listed above.

strong and waiting time at these plants so long that Los Angeles gem dealer Pete Flusser, Overland Gems, plans to build one of his own. Although it will cost several million dollars, Flusser isn't deterred. He intends to pay for his linear accelerator by servicing users from a wide range of industries. Gem Irradiation, he says, will account for 30% at most of his business.

Flusser isn't alone in diversification into gem treating. A flurry of calls from sellers of, among other things, irradiated topaz and heated Montana alluvial sapphire prompted Judith Osmer, the maker of Ramaura synthetic ruby, to hire herself out as a treater. Dealers instinctively figured that her expertise for growing gems would qualify her to treat them. Their hunches were right. Years as an aerospace chemist and crystal grower familiarized Osmer with the basic principles and procedures of gemstone treatment, the goal of which is very often the same as gemstone synthesis: creation of color in minerals.

It is probably more than coincidence that natural stone dealers like Flusser and crystal growers like Osmer have both taken up the same avocation of treatment. If nothing else, it is proof of a broadening crossover point between the realms of treated natural and entirely manmade stones. High-tech processing is something more and more natural stones share with synthetics. And they share this fact to such a degree that processing has become the gem world's unacknowledged common denominator.

"Natural no longer defines the status or condition of most gems," says noted appraiser Elly Rosen, "but merely refers to their non-laboratory origin." It isn't easy for jewelers to swallow the notion that "natural" is a state gems were born into but somehow shed on the way to market. In fact, it is a realization many jewelers are postponing for as long as possible. So despite the fact that America is the leader in advanced gemstone treatment technology, it is a laggard in accepting, let alone understanding, that technology. If anything, the gulf between treaters and jewelers is widening. A case in point:

In 1976, the Astrid Corp., a Hong Kong subsidiary of Swiss-based Golay Buchel, bought a Union Carbide patent for the surface-coloring of sapphires. The process, originally developed for use with synthetic stones, involved packing sapphires in various chemical powders, then heating them to very high temperatures to produce a shallow layer of

desired color - blue, yellow, orange, pink and even "padparadscha" pink-orange, depending on the compound used. The process is called diffusion and stones colored by it ore known as diffused sapphires.

When introduced here around 1980, Golay Buchel evidently believed its diffused sapphires would find an enthusiastic following among jewelry manufacturers and retailers. Instead, its skin-deep-color sapphires met with hostility. Indeed, they were cause for flash alerts and all-points bulletins from various gemological laboratories. To this day, diffused sapphires have found no market acceptance.

The flop of diffused sapphires illustrates the worlds-apart attitudes of treaters and jewelers. Treaters, who are essentially technologists, see what they are doing as collaborations with or improvements over nature. Jewelers, who are usually traditionalists, see the treater's concoctions as tamperings with or violations of nature. Even heat treaters in Bangkok, the leading center for heated corundum, deplored diffusion coloring. But for Golay Buchel, long a major distributor of synthetics, the process simply took heating of sapphire, by then universally practiced, one logical step farther and, at the same time, provided a very inexpensive, but pretty, treated sapphire.

The trouble was that Golay Buchel and the trade viewed treatment from opposite ends of the same continuum, one that led from man-made to natural. Diffusion sapphires shortened the continuum just at the time when jewelers were reeling from the first revelations of massive non-chemical heat treatment of corundum. Although diffusion coloring was simply an extension of normal heating, it seemed to beg more terrifying issues.

These issues, says Elly Rosen, are strikingly similar to ones that have haunted the art world for the past decade or so. In many ways, the continuum from natural to heated and then to diffused sapphire is like that from an original condition pointing to one that is partially touched up and finally one that is fully restored," he explains. "When does a natural sapphire stop being natural? When does a Rembrandt cease to be a Rembrandt? In the case of the Rembrandt, the courts were asked to answer the question. Will they have to do the same with gems?"

HIGH-TECH TREATMENT

A Gemologist's

Perspective

In his eight years with the Gemological Institute of America, research gemologist Robert Kane has become one of the world's leading experts on space-age treatments and synthetics. Given his extensive familiarity with high-tech gem enhancement and crystal growth methodology, Modern Jeweler decided to interview Kane about the latest advances in gemstone treatment and their implications for the future. What follows is a partial transcript of that interview.

MJ: What is the relationship between the work done in synthetic crystal growth to that of treatment?

REK: The most obvious examples of direct relationships are the diffusion treatments of corundum which are commercially practiced today. These processes were developed and patented in 1954 by Union Carbide for its Linde Division, initially with the aim of making or improving synthetic stars and, later, adding color by diffusion to faceted stones, as well as cabochons. And, of course, the heat-treated Verneuil synthetic rubies and sapphires with diminished curved banding and induced fingerprints can be considered to some extent a byproduct of the original research on synthetic crystal growth. Synthetic amethyst is another excellent example of the direct relationship between synthetic crystal growth and artificial treatment. In that both processes are necessary to produce the end product. Synthetic amethyst is not grown with a purple color; rather it is synthesized with traces of ferric iron located in certain sites within the quartz crystal structure, which usually produces a nearly colorless material. It is then irradiated to produce the purple amethyst color.

MJ: Where did the current commercial treaters get their knowledge?

REK: From many different areas. For example, the current processes for the dyeing of chalcedony in Idar Oberstein have been handed down and improved upon for several generations (dating back at least to the early 1800s). The skilled ruby and sapphire heat treaters of Thailand

MODERN JEWELER

have developed their techniques over the past few decades by trial and error, but also significantly through increased availability of scientific knowledge from technical literature. The plastic treatment techniques currently used for opal and turquoise are largely a by-product of research for the "plastic" industries.

MJ: A review of synthetic gem production techniques in Kurt Nassau's *Gems Made By Man and Gemstone Enhancement* indicates that treaters have much to learn—from work in the crystal growth area. As a research gemologist familiar with both crystal growth techniques and treatments, do you think treaters have tapped into all of the techniques and technologies available to them via patent inspections and/or study of scientific literature? Or has the potential of harnessing these techniques and technology barely been exploited?

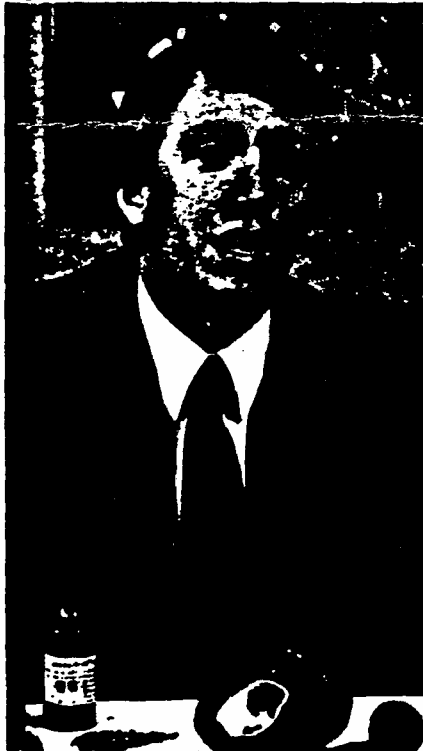
REK: To some extent these technologies have already been exploited, but perhaps only to a very small degree. Worldwide, there is a tremendously vast and rapidly growing body of knowledge of crystal growth techniques being developed primarily for industrial applications. Directly related to this research are investigations and advances in technology in other areas such as materials science, solid-state physics, quantum physical inorganic chemistry, etc. Scientists around the world are currently directing significant scientific activity toward the understanding of origin of color in minerals. Often this work is very sophisticated, almost to the level of atomic resolution. The trick is for the commercial gemstone treater, who is generally not a scientist, to somehow gather together this incredibly vast technical data base and glean from it information and technology that he or she can use in the practice of gemstone treatment—to transform theory into workable, practical terms. The information is available, one just has to know where and how to look for it and how to interpret it. For example, U.S. patents contain an amazing amount of very pertinent information on gem synthesis and treatment. Although photocopies of (U.S. patents are available to anyone for just a few dollars each, unless you know how to obtain the patent number, tapping this body of knowledge could be very difficult. However, there is a readily available book titled *Synthetic Gems Production Techniques*, edited by LI H. Yaverbaum, which contains some of these patents (around 175). Another specific example would be information published in the Russian scientific literature on the heat treatment of synthetic corundum carried out at the Academy of Sciences in the U.S.S.R. from 1940 through 1942. They even include photomicrographs of the

changes in inclusions before and after heat treatment,

MJ: I am intrigued by the idea that badly damaged corundum, beryl and quartz could be "restored" in flux or hydrothermal environments. Do you foresee a time when jewelers can offer a service to send stones to "corundum clinics"? Does treatment offer the jeweler a whole new dimension of gemstone repair? Is it worthwhile?

REK: Even with the very limited amount of work done in this area, I am very confident that if adequately researched, a remarkable potential for repairing fractured or even broken rubies and emeralds could be realized. I question, however, the economic feasibility of what you are suggesting in terms of offering jewelers a new service. Let's assume that a crystal grower wanted to conduct these very expensive experiments to satisfy his or her "scientific curiosity." If, in fact, he or she was successful, economic concerns would become immediate. Would someone want to first accept all responsibility for any accidental damage that could occur to the stone and, second, be willing to pay for the costs involved in having a crucible dedicated to only one stone for a few months? Perhaps if a large, very expensive ruby was severely damaged, it would be worthwhile. But how often would this occur? I can assure you that it would not be cost-effective to repair a chipped or broken small, badly "windowed" purple-red Thai ruby! Speaking of this type of

Robert Kane



technology, I have on several occasions visited a nuclear physicist friend in another country who has for several years been designing and building a very sophisticated and tremendously expensive high-temperature furnace. His hopes are that he can actually focus a beam of energy, creating temperatures around 2000°C (above the melting temperature of corundum) on a fracture or fingerprint in a ruby or sapphire and actually "heal" or remove it from the stone. The very thought of accomplishing this is quite astonishing! Will he succeed? Only time will tell. The point is that he is actively pursuing and investigating going beyond the frontiers of gemstone treatment technology as we know it today.

MJ: How much does more effective and profound usage of treatment technology depend on a change of attitude toward gemstone enhancement by the trade?

REK: Very little, if any. Let's be realistic about why many gemstones are treated: It is entirely economic; if more money can be made by treating gem materials, to either increase the value of an otherwise inexpensive material (such as transforming translucent to opaque milky white "Geuda" corundum from Sri Lanka into a beautiful transparent blue sapphire then worth hundreds to thousands of dollars per carat) or to greatly increase and stabilize the supply of an inexpensive gem material (such as the dyeing of chalcedony to imitate black onyx, which is relatively rare in nature), then gemstone enhancement will continue to be practiced. Contrary to the understanding of some, the artificial treatment of gem materials can hardly be considered a "new development." In the writings of Pliny, many gemstone enhancement techniques are discussed which are still in use today, almost 2,000 years later! I suppose, however, that if attitudes toward certain treatments, such as sugar-treated opal, plastic-treated opal, etc., were changed to a more positive viewpoint, then such materials could be marketed in much greater quantities than at present, providing that the alteration was accurately described and sold at a reasonable price.

ATTENTION !

Founding Chapter Members Only

The following nominations have been submitted for your approval and vote at the December general meeting. Please note that the positions of secretary and treasurer have not been filled as yet. There will be requests for nominations from the floor and we hope to fill all positions at that time.

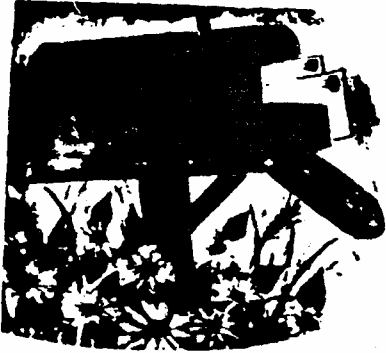
NOTE: ALL officers must also be board members.

President: Georgia Smith
1st V.P.: Bill Judd
2nd VP.: Joe Vezeau
Secretary: _____
Treasurer: _____

Board Members: Georgia Smith
Bill Judd
Joe Vezeau
Edith Ostrander
Della Judd
Harold Umberson

Please plan to attend the meeting on December 11, 1986 to elect your new officers.

LETTERS.



received some VERY supportive and encouraging mail and the following are some excerpts:

From Brian & Jolen Punches: "Thank you very much for inviting us to your show. We really enjoyed ourselves."

From Jo Snyder: "Planning and the successful execution of a large Show demands much time and thoughtful attention to detail. Aren't you feeling glad you succeeded so well..."

From Dick Shanahan: "I sincerely wish to thank one and all equally for such a large, well-displayed, and sharing show,.. My most sincere thanks to those unknown judges (to me) who felt that my opal in 14K gold neckpiece was deserving of your prestigious 2nd place design award; bless their hearts and souls, for their decision was not only a totally unexpected surprise and honor, but therapeutic as well. And another "Thank You" to The House of Tibara--Tim and Barbara Thomas--without whose information and urging, it's not likely that I would have become an associate member of this fine group of dedicated opalphiles." He also thanked John Hall for his gracious, friendly and informative chats, and Colleen and Andy Guerrette.

From Evans Supreme Gems: "...It's always a pleasure seeing our old friends in the Society, and everyone has always been very friendly, cooperative and helpful. We wish we could attend meetings, but look forward to seeing you all at the 1987 Show. Special thanks to Jewett and Dorothea, Andy and Colleen." Bob and Elma Evans.

Sorely missed this year: Bill and Della Judd; Jake and Rita Schmidt; Catherine and Jack Bieniek; Helen and Blame Milliron; Roy Savage; Pat Smallwood; Joe and Rose Huddle; Tom and Paula Parker; Mike Kowalsky; Julius and Denise Lippa; Roy and Retha Hellrigle.
We hope to see you all again soon....

***** BOARD REPORT *****

The November board meeting was used to recap the show and how to improve on what we did. This may mean quite a challenge for 1987 but this is what happened:

1. The secretary's minutes were submitted and accepted.
2. The treasurer was not present to give a report.
3. Dick Koch suggested a revision of the opal appraisal chart. Motion tabled until a future meeting.
4. Discussion on ways to generate income to support our educational programs.
5. Reviewed letters of appreciation from dealers, members and convention center.
6. The discount tickets presented at the box office represented 46% of our paid attendance. The breakdown was: show flyers 83%, post cards 12% and newspaper ads 5%.
7. Thirty-five people signed up to start the new Orange County chapter. They will have their first meeting in January.
8. Motion was made to accept the invitation from the Anaheim Convention Center to return next year on October 24th and 25th.
9. Ballots will be included in the December issue of The Opal Express for electing the corporate officers for 1987.
10. There will be no board meeting in December 1986. The next board meeting will be in January of 1987.

Editor's Note: The Board of Directors meetings are open to all society members. The meetings are at 7:30 P.M. on the third Thursday of every month at the Pattees residence. Call 213-425-2426 for directions.

DIRECTORY OF OFFICERS

Jewett Pattee, President, 213-425-2426	Ross Stambler, 213-693-6898
Dick Koch, 1st VP, 213-927-4372	Blaine Milliron, 213-632-9965
Bill Judd, 2nd VP, 213-923-4663	Harold Umberson, 213-693-7380
Dolores Proulx, Treas., 714-596-6396	Joe Vezeau, 714-523-1318
Dorothea Pattee, Sec., 213-425-2426	Andy Guerrette, 714-734-7484
Ida Proue, 714-596-6396	Larry Dobrin, 213-305-7674



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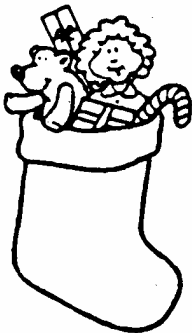


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