



OWNERS' NEWSLETTER

January 1985

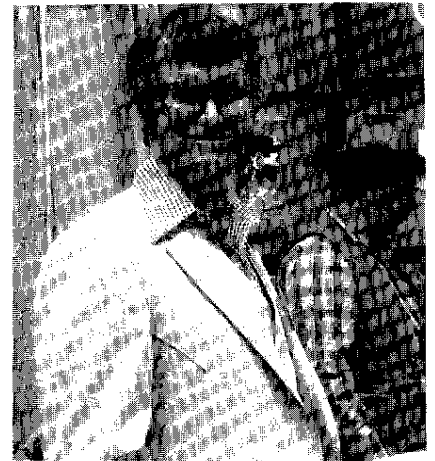
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Dear Ultra Tec Owner,

For those of you who are new Ultra Tec Owners, this is another in our periodic Newsletter, which are known for their irregularity of issue. I have come to like the name, "The Some Times." We got some complimentary comments on our last Newsletter and that felt good. When we do one of these Newsletters, it starts out with many more pages than we can send and then we cut and cut again. After we have read it for the fourth or fifth time, the words lose their meaning and there is no way of judging whether we have done a good job. So, the feedback is welcome.

NEWS OF SHOWS: The area of the country that seems to be most bustling with faceting activities these days is Texas. And, we have some interesting news from there.

At the Houston Gem and Mineral Show, which was held last September 7,8,9th, the winner of the Masters Level Faceting Trophy was Johnny Coultrup of Austin, Texas. Johnny is an Ultra Tec faceter and a member of the Texas Guild. The competition was the toughest kind--a single stone, with each participant cutting the same stone. The particular design was the Squared Circle Cut. As we have seen previously, this sort of single stone competition can result in very high scores as the expert participants give that one stone all of their concentration. Now Johnny Coultrup knew that, but nevertheless in a phone conversation with me some days before the show, he told me that he would win. And, he proceeded to do just that with the sort of score one would need to back up such a prediction--a score of 100. Johnny modestly points out the score was really 100 minus, since the judging sheet indicated that score with the comment there was a very minor flaw which was not even worth the subtraction of a fraction of a point. Now, if a judge can't figure out a way to deduct even a 10th of a point, then I consider it 100. But, whichever it is, that's a pretty fair score. Congratulations, Johnny!



Johnny Coultrup

Johnny Coultrup, incidently, is no stranger to faceting awards--he won two faceting awards earlier in the year at the South Central Federation Show in Waco, Texas.

Another award winner in a single stone competition was at the Faceters' Fair of the Faceters' Guild of Southern California and the winner was Jack McLelland of Long Beach, California. Jack is a member of the Guild and is a retired engineer who has been faceting for five years. Nor was this his first faceting award--you may remember

having seen pictures of Jack on these pages before. The winning cut was a trapizoidal twist design--a cut that Jack described as "tricky" (although he didn't have to tell me that after I looked at the winning stone). The cut was executed in a Smoky Quartz. In this competition the exact cut was not specified, but there were size specifications. Good job--and congratulations to you, Jack.



Jack McLelland

At the Southern California Show we offered a Special Award for Best Case. The award was won by a group case, one that was entered by seven facetors of the Tri-Valley Guild. The Tri-Valley Guild, incidently, is a group that cooperates with the Southern California Guild, and operates in an area extending from northern Los Angeles to Santa Barbara. The participants in the winning case were Annaliese Prestin, Dr. Lynn Barlow, Gary Scardone, Art Mills, Joseph Faitel, Peter Esau, and John Schryver, and we congratulate them all. Doing a cooperative case is something some of you out there might like to consider. We've seen several club cases and some years back a husband and wife team of Mr. and Mrs. Clark won the Ultra Tec award in San Jose. In view of all the stones needed, sharing the effort can make the job a little easier (and you have someone to blame if you don't get a high score).

I would like to repeat a thought from an earlier letter--we keep stressing "who won". What is important about competition, however, is not so much who wins, but rather that it is a learning experience for all of the participants. One learns from both the judging process and from the self discipline involved in getting ready. Competition can really help most people improve their skills, and it is that personal improvement that is most important. And no one ever laughs at a low score--even a low, low score. That is not to say you won't pace up and down while the judging is being done, but the whole experience is worth trying.

BIG SKY SHOW: In October the Big Sky Show, an annual Montana faceting shindig, was held in Great Falls. The Octobrill was the required cut in the Ultra Tec trophy competition, and the winner was Bob Kolski. Bob is a repeat winner and also won back in 1979. We told you faceting is habit forming.

LAST TIME'S NEW THINGS

DOWN INDICATOR LIGHT: We are pleased that there have been very favorable reports about this new item, and so we were planning to have a good supply at the San Jose and Tucson Shows).

Some very good facetors have told us they found the sensitivity of the LED to be extraordinary, as we had found in our tests. We really appreciated the feedback, incidently, since no matter how much testing we may give a new item, that testing can only represent a fraction of the use which all of you provide once the item is sold. Anyhow, we have had numerous favorable reports and no negative ones. Now that it has been on my machine for some months, I find it is hard to remember

getting along without it, an experience I am sure I share with most other users.

POLIFLOW: Here too, we have had only favorable reports. A number of facetors, including some prominent ones have confirmed the improvement obtained when using Poliflow in the polishing operation. Warm endorsements of the product's effectiveness have been received by none less than Basil Waterman of South Africa and John Cornwall of New York. That is certainly welcome news, as is any information which assists in effective polishing. The added cost to a facator is perhaps \$1.00 a stone, certainly insignificant if it improves your results. And, as one facator commented--it smells nice, too. As they say on TV--take home a six pack.

We have not gotten much feedback on the 96 Quadrant Gear that we announced in our last newsletter (probably, our late deliveries on that item--resulting from an original artwork error--was the cause of that). But, this letter's published design is a chance to point out how the use of that gear simplifies the faceting of a symmetrical design. An example illustrates this best. Step two on the pavilion now instructs (for the standard 96 Index Gear): Angle 44°, Index 4,12,20,28,36,44,52,60,68,76,84,92. With a 96 Quad gear what you would perform is Angle 44°, Index 4,12,20 in each quadrant. Now, that latter instruction is read and remembered without constant referral to the written numbers, and with much less likelihood of an error. To use the Quad gear the instruction requires no conversion, you just do what is written for the first quadrant, and then do repeats in each quadrant. It's easy.

THIS TIME'S NEW THING

TRANSFER FIXTURE: We do have one new item to announce--a special transfer fixture. Over the years Ultra Tec transfer fixtures went through quite a few changes. Each one of the designs had some particular nice feature, but also some drawbacks that led us to make a change. The one with the greatest longevity is the current one--opposed vee blocks machined from a single piece of metal--the so called "monoblock" design. Its virtue is its stability. It does not have some of those nice features that prior blocks had, however, and we have had pressure from facetors who liked one or another of the old features. What we have done is make a "limited edition"--a special transfer fixture that incorporates several features that the monoblock design does not permit.

One of those features is a moveable side so that the distance between the blocks can be set to accommodate the size of the stone. The new transfer block can be set to conveniently handle very small stones; going up to 1 1/2 inch diameter. The dovetail design permits rigid setting of the moveable block. This feature permits machining of the vee-grooves after assembly, optimizing the groove alignment.

Another feature--one that I have found most helpful--is the design of the fixed block. It is copied from a design we had about ten years ago (it was just as clever then, but inadequately appreciated). The fixed block is on stainless steel posts, three of them to assure rigidity. The block is aluminum which heats efficiently, while the stainless steel posts, poor conductors of heat, keep the block from cooling quickly. That means, if you are working with wax, the block and the dop can be brought to the wax-melting temperature, and the wax conveniently applied with no burning of wax, burning of fingers, or premature hardening of the wax. It removes the whole critical nature of the wax process, including the warming of the stone which will warm by convection since the heat-isolated block keeps the receiving dop warm, and cools gradually. (Indeed, I have found that feature has given me good wax adhesion even when I was preparing a "nest" of wax for final use of a cyano-acrylate, and I had done no preparation of the stone). To make it all easier there is a hole to insert a soldering iron tip so that the block can be warmed without a flame.

The opposed block, (the one on the dovetail), cools rapidly, connected as it is to the large mass of the aluminum base. So, if you use wax for dopping, this transfer block is exceptionally helpful. After transferring the stone to the receiving dop on the "hot side" and it all cools down, reverse the dop positions relative to the blocks and remove the old dop by again heating the "hot side" while the "cold side" keeps the new wax firm. Slick!

The attached page tells you more about it.

I stated before that this will be a "limited edition"--that is to say, we will produce enough to fill orders received during the next six weeks plus just a few more. I expect the people who have requested this sort of special transfer fixture will purchase it, but that the subsequent ongoing demand may not justify our stocking it. We will build them again, but it is hard to predict when. So, if you want one, don't wait.

TECHNIQUES AND MATERIALS

ABOUT ALUMINUM OXIDE: We have received questions asking why the price of Aluminum Oxide Powder varies so much from seller to seller (and ours is expensive). You probably have found that the price can range considerably with some material being three or four times the price of other material. What should be important to you, rather than price, is the quality of the material since the amount used is small.

The material we supply is categorized as "alumna" and the thing that distinguishes (and makes it expensive) it is its purity. The origins of that purity go back to the mine. There are only a few sources of bauxite (from which the aluminum is derived) which do not contain significant amounts of contaminating materials. Many Aluminum Oxides have as much as 10% foreign material content, most frequently Iron Oxide which is a good "scratcher". The particular material that we sell originates from European mines where particularly pure bauxite is obtained with absolutely negligible amounts of other material.

Also, our material is specially treated so it does not agglomerate. The tendency to agglomerate is a common source of scratches (there is a good discussion of this in Vargas, Faceting For Amateurs), and the added cost of the treatment to avoid agglomeration must be reflected in the price.

You will speak to people who will tell you that the cheaper materials are just as good. It is a debate that I mean to keep out of. We handle only what we can be assured is the best. For those who asked, that's the story.

Last time we wrote about a non-faceting use of the Ultra Tec, and here is another. LTC Richard Laritz, who does engraving, wrote us: "It is necessary that I sharpen my gravers. With your new chuck, I found that cutting off a dop and splitting it easily accomodated the graver and allowed for quick accurate sharpening on a 1500 grit Diamond Lap."

When we wrote about the Transfer Fixture we considered wax dopping--and here is a comment on working with wax dopped stones from Joe Kubata of Seattle: "One of the problems that occurs in faceting is that the stone has a tendency to shift a little in the process of polishing. This occurs especially with smaller stones being cut and also harder stones such as Beryls and Sapphires. This can be easily overcome by the use of an ice cube in a small pudding dish. The stone being faceted is cooled by the ice cube and the stone does not shift on the dop stick. Also, polishing is faster because you don't have to worry about building up heat to cause the stone to shift. The stone is cooled after each polishing strokes. The only caution I make is that if the user is using Dop Wax, be careful not to bump the stone as the wax would be brittle. Works fine."

Also on dopping--W. H. Augspurger of Monroe, LA commented that very small stones have an inadequate table surface area for dopping to a flat dop, and so he manages a slight conical preforming and uses a cavity dop, providing more ample support for the initial dopping.

The spaces on the Angle Vernier Dial are $.1^{\circ}$ increments, and (in answer to some questions) can be used for setting specific positions between the Index Gear tooth positions. There are some instructions that call for that sort of setting. If you use more than a rotation of that dial and want to return to the start-off central position, you need to do some remembering--or, you can mark a line (a scribed line is OK) on the block lining up with the edge of the rocker (the "rocker" is the part that rides the cheater screw).

Originally, this letter was planned to be out before Christmas so we could wish you all Seasons Greetings. Well, we've proven our consistency--it really is the Some Times. But--close enough from all of us to all of you, we do wish you a good New Year.

Sincerely, *Joe Rubin*

HAPPY
NEW YEAR!