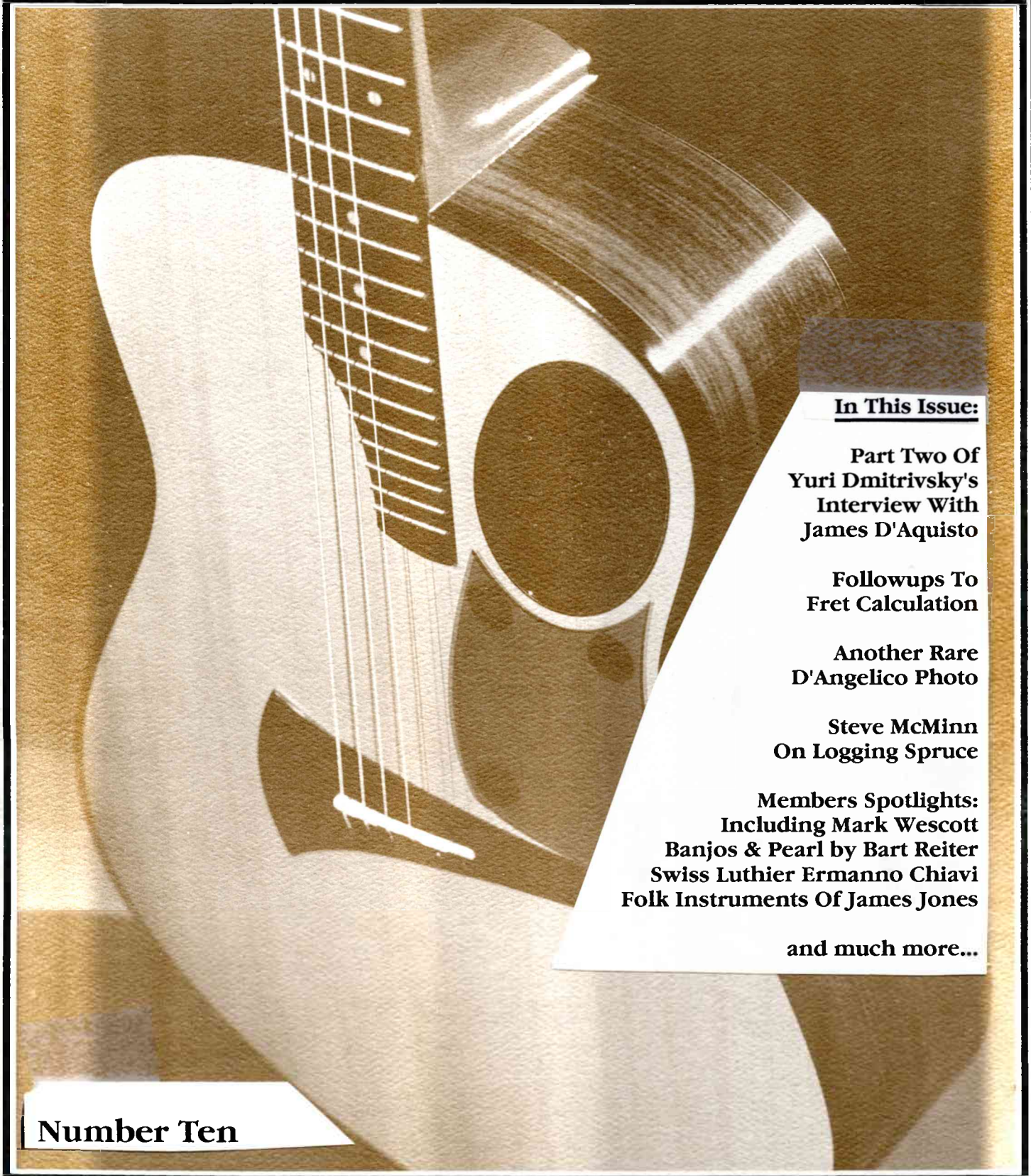
guitarmaker

The official publication of.....
• THE ASSOCIATION OF STRINGED INSTRUMENT ARTISANS •



In This Issue:

Number Ten

DEVOTED TO EXCELLENCE IN ALL STRINGED INSTRUMENTS

Association of
Stringed
Instrument
Artisans

PURPOSE

The Association Of Stringed Instrument Artisans, a non-profit trade organization under the provisions of Section 501 (c) (06) of the Internal Revenue Code, was established in 1988 to help provide a sense of community and professionalism to the field of stringed instrument making and repair. The goals of the association provide for but are not limited to: the establishment of a comprehensive database of resources, supplies and technical information; a means of providing multi-level education within the profession; assistance in marketing and promotion; health and insurance packages at group rates; a repair or service certification; an advertiser's marketplace; and the publication of informative newsletters and journals.

Annual Membership is $35.00 plus a first year processing fee of $15.00. Donations and subscriptions are not deductable as charitable contributions. (Application on inside of back cover)

A.S.I.A. Newsletter #10; December 1990

Association Of Stringed Instrument Artisans
14 South Broad Street
Nazareth, PA 18064

CALL FOR ARTICLES/PHOTOS

As a member generated publication, we greatly depend upon the submission of articles and photographs for use in our publications. Please do more than consider what part you can play in the "coming to fruition" of this association.

BOARD MEMBERS

If you have input, concerns or suggestions about the association, you are welcome to contact any of the board members to discuss your ideas:

James Rickard, President
600 Wildcat Hill Road; Harwinton, CT 06791
(203) 485-9809 shop

Duane Waterman, Treasurer
1027 S. Sierra Madre; Colorado Springs, CO 80903
(719) 473-8444 shop

William Cumpiano, Secretary
c/o The Luthier's Collaborative
31 Campus Plaza Road; Hadley MA 01035
(413) 253-2286 work

William Laskin, Vice-President
192 DuPont Street (rear); Toronto, Ontario, CANADA M5R 2E6
(416) 923-5801 work

Roger Sadowsky, Public Relations
1600 Broadway #1000B; New York, NY 10019
(212) 586-3960

Dick Boak, Editor; Exectutive Director
c/o Church Of Art, 14 South Broad Street; Nazareth, PA 18064
(215) 759-7100 home; (215) 759-2837 work

Yuri Dmitrievsky; Correspondant in Leningrad

Jon Natelson, Legal Advisor

HONORARY MEMBERSHIPS

Lifetime Achievement Awards

James D'Aquisto
Mario Maccaferri
Manuel Velazquez

Awards for Excellence in the Field

John Monteleone

COVERS

The front cover features the bold contemporary designs of Mark Wescott. His off center soundholes, graphite internal supports, and immaculate Schneider inspired appointments have launched him quickly into the spotlight. He has shared his basic biography with us which is featured in the **Member's Spotlight** section (Pg 4) of this issue. Photo by Mario Romo.

The back cover features an incredible miniature replica by northwest luthier Robert Steinegger, who is well known for his beautifully crafted Everly Brothers guitars. Recently he was commissioned to build a special "full sized" guitar for Paul McCartney. In spite of his success with big instruments, he continues his lifelong fascination with microscopic miniatures.

LETTERS

Dear Guitarmaker,

Only thing cookin' around here is work, work, and more work! Hope to travel back your way again soon (maybe for Symposium) but it's getting difficult getting away. Oh well, that's life. At least I got to spend a week on a genuine working ranch playing cowboy. Even got in on branding and fence fixing! Have a good 'un.

Don Teeter
2319 South Stiles
Oklahoma City, OK 73129
(405) 634-4930

Dear Guitarmaker,

Here it is... the long overdue renewal. I hate to admit it but money is still a problem here. Yes, I know I was supposed to move west and become rich and famous, but those are fickle things. Infamy may be a different matter, and one that I may indeed attain, perhaps for reasons that I would rather not have disclosed. Some of these reasons have to do with repairing guitars for the Puget Sound Guitar Workshop last July. Mike Tagawa's dog bit a postal person and so I took over his repair slot there. It's a very long story! But yes, I rubbed shoulders and hobnobbed with plenty of great musicians (and some not so great ones), and some people brought their guitars to me for the 1/2 price camp special fret job and psychological adjustment session. A very good time was had by all. Even the guitars!

I also attended (slinked into) the "other" convention. I tried to keep a low profile but was not terribly successful at it. Part of the problem was that I was passing out subversive A.S.I.A. literature. I was descended upon right about the time that my last piece of literature was "snapped up" by an interested party, so while they had an issue with me, they had no evidence. I was left feeling like an unwanted former girl friend at a wedding, or possibly worse... a member of the "EECC": the Evil East Coast Cabal!

Well I'm proud to be a member of the EECC. Perhaps I'll try to get more involved with you guys. I'd send pictures of my shop but it's rather "tiny", and short lived too. In January, I will be forced to relocate again. The landlord wants to enlarge the space and hence enlarge the rent, so I must enlarge my horizons. Yours....

Cat Fox
(206) 633-0252

Dear Guitarmaker,

I think Guitarmaker is an excellent choice of a name for the Association's publication and each issue is a delight. All are interesting. I find the Member's spotlight particularly enjoyable.

I have wanted to visit Duane Waterman's shop in Colorado Springs, but have missed him twice when visiting out there.

I guess I didn't really see the harm in your humor relating to Linda Manzer, but I thought your apology was great. Linda is an extremely talented professional... there's no question about that.

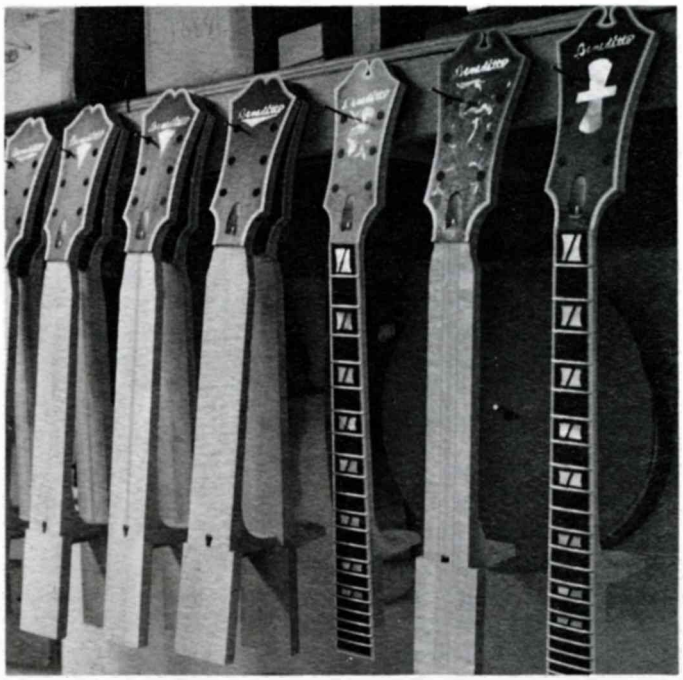
Wherever I go I am alert for luthiers and I always encourage them to join. I am mailing out an extra copy of "Guitarmaker" to a young fellow in Washington that I think might make a good member. Time keeps slipping by and I haven't been able to schedule a trip to Nazareth, but I am looking forward to Symposium 91 next June. Best regards,

William A. Richardson
158 Piedmont Street
Warrenton, VA 22186

Dear Guitarmaker,

Well, we have finally moved into our new home but are still tripping over boxes. After moving twice in six months, we think we are going to remain here until we're 90! (should we live that long after packing and unpacking...)

I found this photo that I took in our Florida shop. It looks like a mini factory, doesn't it?



An assortment of Benedetto necks, including the 7-string, the Manhattan, the Fratello, the Limelite, the Cremona and a custom inlayed neck... all waiting to become guitars.

We really enjoy reading Guitarmaker. I think it's really nice that you promote other luthiery newsletters, books, etc. Bob was recently in touch with Michael Dresdner about Hydrocote products, having been referred by Dan Erlewine. He's a really nice fellow and we're sure the water-based finishes are going to be the thing of the future. It's so nice to be back here where there's a so much more going on than in Florida. We are definitely looking forward to the next Symposium.

We especially wanted to let you know of our move and of our new mailing address:

Bob and Cindy Benedetto
Benedetto Guitars
RR1 Box 1347
East Stroudsburg, PA 18301
(717) 223-0883

EDITORIALS

There has been a lot of discussion this past month concerning the title of our publication and its perceived exclusion of violin makers, mandolin makers, banjo makers, dulcimer makers, bass makers, autoharp makers, etc. When the board of directors voted to change the name to GUITARMAKER, we knew that some people would be alienated, but after several months, when we had heard no negative comments, we thought everything was fine. It appears now that a few of you out there were just being polite by repressing your true feelings. You must not do that.

It is no doubt agreed that the bulk of us are guitar makers, but we sincerely do not want to exclude other related fields. We

are in fact "The Association Of Stringed Instrument Artisans". If we have "screwed" it up, we'll make it right. Please, tell us what you think. We'll publish your ideas, help you rally support, make appropriate changes immediately, and if necessary poll the membership during yearly elections.

Banjo maker Bart Reiter, who is featured in several other parts of this issue, has suggested a few sub-titles that work reasonably well in conveying the greater spectrum of interest beyond guitar:

• GUITARMAKER;
a journal of the fretted instrument making and repair profession...

• GUITARMAKER;
a publication encompassing fretted instrument construction...

• GUITARMAKER;
encompassing the field of fretted instrument building and repair...

• GUITARMAKER;
a journal for the stringed instrument builder and repairer...

We've given it a shot in this issue. Notice some of the subtle (and not so subtle) changes to our cover. If you think it's an improvement or a detriment, or if you have other ideas about what we should be, let us know. And remember, we are your publication. You do have a say!

MEMBER'S SPOTLIGHT

MARK WESCOTT

The cover of this issue is one of Mark Wescott's unusually beautiful steel string designs. Mark's guitars have been displayed at several of the Symposium's in Easton, PA and have been well received by fellow luthiers and musicians because of their obvious bold design approach and attention to detail.

Mark's approach to guitar building is one of innovative design that he attempts to base on the importance of sound and the interaction between the guitar and the player. The concept of "form follows function" is apparent when looking at his guitars. Keeping quality of sound and playability as the motivation for his work, Mark has continued to develop his guitars through a process of experimentation in structural design. By working closely with the guitar player and using his intuitive knowledge of design, he can come up with unique tools to create music.

Mark began his training as an apprentice in cabinet making and furniture restoration. His interest in guitars was a natural outgrowth of his being a member of a musical household in which there are numerous violins, violas, and cellos. Although surrounded by classical instruments, his enjoyment of guitar music led him to combine his woodworking skills and his background in the pursuit of guitar building.

In 1980 he attended the Charles Fox Research and Design School and built his first guitar under the guidance of George Morris. At this point, he refitted his cabinet making shop to accommodate his new interest in guitar making. In 1982 Mark attended Richard Schneider's Kasha Design Seminar and continued on in apprenticeship for one year. He was resident luthier for a period of three years at Lost Mountain Center for the Guitar in Washington state. It was there that he acquired a solid foundation in Radial Soundboard Bracing for classical guitars. He continues to use this as the basis for his steel string designs. He feels that it allows for a more direct relationship between the bracing and the bridge. His latest guitars reflect the continued growth of his steel string designs and his commitment to excellence.

Mark Wescott Guitars
301 West New York Avenue
Somers Point, NJ 08244
(609) 927-2486

Richard Schneider has been a driving force to field of stringed instrument artisanry for nearly three decades. His influence can be seen in many top notch makers including Steve Klein, Abe Wechter and Mark Wescott. He has developed the basic Kasha theory into a viable reality, and his commitment to teaching has perpetuated many different and unique approaches to those theories. Beyond that, Richard is a remarkable designer and craftsman. His bold detailing and aesthetic handling have added a new color and vitality to the often over traditional choices seen on most instruments.

For those who would like to correspond with Richard, contact:

Richard Schneider
Lost Mountain Center For The Guitar
P. O. Box 44
Carlsborg, WA 98324
(206) 683-2778

BART REITER

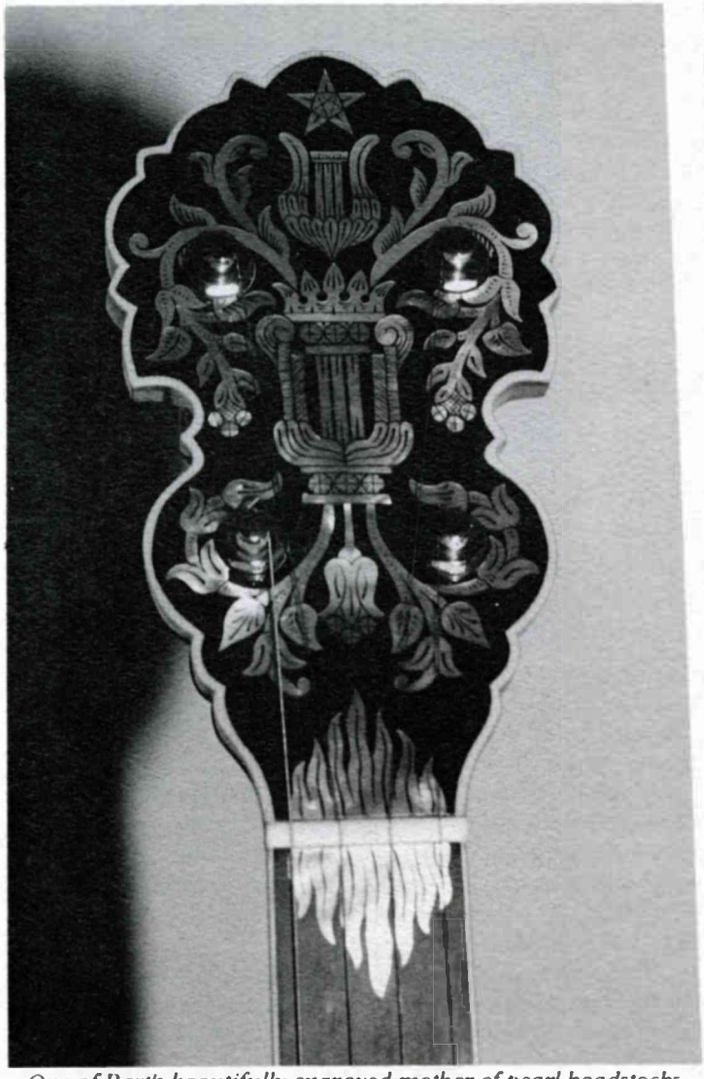
Bart Reiter is one of the more colorful figures in our business. He sent us a pack of information that was filled with good information. Bart makes about 150 banjos per year, working with only one part time assistant. He wholesales his instruments to a selected assortment of 30 key music stores at prices which enable the stores to make a reasonable profit. The high quality, straight forward design, and affordable price have insured a market for Bart's banjos, as long as he can keep up with the demand. Bart's sales reached six figures last year, a reality that is both exciting and scary for Bart, who was especially depressed about having to pay five figure taxes. He says it's a lot different from 15 years ago when he toiled in the basement of a rented house worrying about how to pay a $15 phone bill on time. To quote Bart:

"I think being a successful 'stringed instrument artisan' is 90% sound business practice and 10% craftsmanship. Most of what I do every day is dull, dusty, dirty, monotonous hard work. The reason I love this business is the people. I have business contacts and customers everywhere that are a pleasure to deal with. While on vacations I always visit these people and receive great meals and free lodging. I've never gotten a bad check and I've only been lied to once.

I especially like the community of banjo people. There's nothing to discuss about the acoustic properties of 7 mil mylar! It doesn't tap tone very well, so we can get on to the nuts and bolts subjects, favorite brands of beer, etc.. The banjo crowd is anachronistic (chronologically out of place). We're trying to perfect the technology of the 19th century as the world moves into the 21st century.

There were three people who influenced my direction toward instrument building. The first was Ed Sullivan for bringing the Beatles to TV. To play the guitar seemed to be the most exciting thing one could ever do. The second was my father, who was always working with tools around the house. He gave me my own tools, workbench and scrap wood, and guided me through many projects. The third influence was Charles Fox, who taught an excellent guitar building course that I attended in 1976. It was a high point in my life. A career with two of my favorite things, both wood and guitars, seemed impossible.

After struggling for a year to earn a living in my basement with insufficient capital, I took a job at Elderly Instruments in Lansing, Michigan. This busy music store kept me busy with too much repair work. This situation required that I learn to work at maximum speed and efficiency while maintaining high standards. Although there was little time to build guitars, I managed to produce a few every year. My guitars were slow to sell. It was



One of Bart's beautifully engraved mother of pearl headstocks.

terribly frustrating to watch my guitars collect dust on the wall of the store, competing with major manufacturers at discount prices.

I took advantage of the steady paycheck to get established. I bought a modest house and fixed it up. I built an 800 foot shop with a separate room and spray booth for lacquering. The shop filled up with Delta tools, just like the school shop in junior high. I saved money for the day the paychecks stopped.

One of the sales people at Elderly Instruments pointed out the lack of a basic open back banjo on the market. He insisted he could sell all I cared to make. A production situation didn't appeal to me or fit my self image at that time. This guy kept nagging me though, so I investigated banjo construction. It appeared to be perfectly suited to production. That summer's vacation was planned around trips to banjo makers to pick up tips.

The shaper and the cutter I was using to round over Fender style necks was perfect for banjos. A stack of stock cutters with a little regrinding would shape the end of the heel. All 22 fret slots could be gang sawed into the fingerboards at one time with a shop built machine. Rims could be glued up using a salvaged brake cylinder drum as a mold. A spindle sander manufactured nearby would contour the pegheads The first batch sold as fast as they hit the sales floor at Elderly. Another batch of a half dozen followed, then a batch of a dozen. By the end of the year, my first four months of banjo sales had equalled the previous four years of guitars.

Each year a new model was offered. My wife, a graphic artist, had a nice brochure printed describing them. I loaded up one of each and drove to the first Symposium in 1985. Several store owners expressed interest in selling my banjos. This made me think it would be worthwhile to develop a dealer network and wholesale these things. There definitely wouldn't be time for my job so I gave notice at Elderly Instruments. Finally I was a full time fretted instrument maker! Although the instruments were only banjos, I didn't care. The customers, suppliers, dealers and other makers are all a great group of people. Plus, banjos traditionally have some fancy engraved inlays, which adds variety to the dusty woodworking aspects of instrument building.

After a slow start the first year, things are going great. By eliminating repair work and limiting my work to Vega style reproduction necks and new banjos, the work flies out the door. The more one specializes the more you do it, and the more you do it the better you get at it. The monotony of it can get a little tedious at times, though. The last two years production has been twelve banjos a month and sales hit $100,000 last year.

I like selling my product wholesale to my dealer network around the country. A sale takes only a few minutes and I can get back to work producing income. The dealers handle selling the banjos to the players, answering questions, and taking care of minor adjustments. I would rather spend my days making banjos. Without the dealers, half the day would be spent at marketing.

Rims are made on a contract basis by a cabinet maker friend. This keeps him busy part time and allows me to do what I do best. Two articles appearing in Frets magazine favorably describing my banjos gave business a big boost. An occasional classified ad in Banjo Newsletter keeps the customers informed of my address and of any new models. About 1000 free brochures get mailed around the world every year. Word of mouth advertising is the cheapest and the best. You get it if you always give the customer a little more than they ask for. The product may sell itself.

It's becoming harder as the world changes to make a livable income as a self employed person. Being astute at applying sound small business practice may be more important than even achieving a high level of craftsmanship. Everything I heard about surviving in business turned out to be true once I tried it myself."

Bart's banjo production falls into two basic categories: open back, and internal resonator. Both styles seem to take their influence from the old style Vega "Whyte Laydie" as well as the

Bart in a rare relaxed moment wearing his "banjo hell" t-shirt accompanied by his lovely daughter and future partner, Eva.

Bacon "FF" models. The internal resonator models are offered with either two or eight tiny scroll cut f-holes. Bart's inlay (See Tips) and neck heel carving are impeccable, as is his taste for selecting materials with a feeling of vintage integrity. The retail prices run from $700 to $1700 with an assortment of reasonably priced options. For further information call or come see him and his banjos at Symposium '91. He's never missed one. And as Bart always says: "Greetings from banjo hell!"

Bart Reiter Banjo Company
5910 East Sleepy Hollow Drive
East Lansing, MI 48823
(517) 332-2860

JAMES KULICH

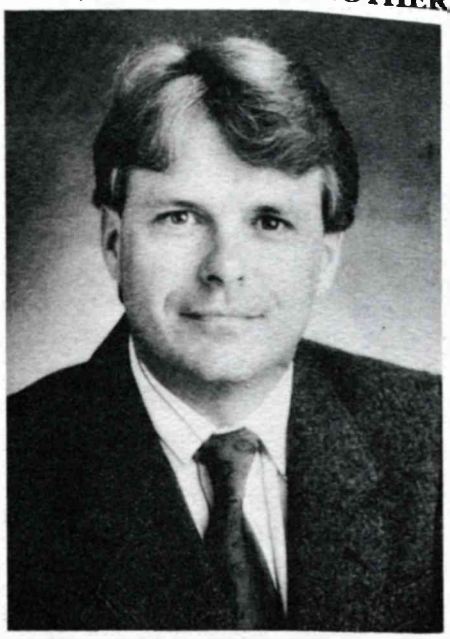
James Kulich has designed and is now marketing a new thin hollow body acoustic/electric cutaway guitar aimed at the ever increasing crossover guitar market. It seems that this type of instrument appeals to electric players who want an acoustic but are not willing to sacrifice the feel and electronic capabilities of their electric guitar. Acoustic players who want to plug in often seek an instrument like this because it still looks more or less like an acoustic, but lends itself to easy studio and stage use.

The "Kulich-Cameron" guitar is equipped with a Martin Thinline 332 pickup and is available with several optional features. For spec sheets or price information, please contact:

James Kulich Guitars
26 Durrin Avenue; Peekskill, NY 10566
(914) 737-3865
or through Vincetore's Guitars, Piano's & Organs
748 Main Street; Poughkeepsie, NY 12603
(plus the new store at the Dutchess Mall; Fishkill, NY)

The Kulich-Cameron Thinline Acoustic Electric Cutaway

BRUCE ROSS; CLINICAL HYPNOTHERAPIST?



We received a flyer from guitar maker, repairman, stringed instrument consultant Bruce Ross (formerly of Santa Cruz Guitar Company) informing us of his certification as a Clinical Hypnotherapist. The flyer explains hypnosis: how it works, what it feels like to be hypnotized, and what hypnosis is recommended for. It occurred to me (the editor) that hypnotherapy could be a great skill for a guitar maker. Imagine if you could catch one of your wealthier customers in a time of weakness, snap him into a deep sleep, and suggest the irresistible specifications of a dream guitar in (let's say) the $15,000 range.

"You won't remember any of this when you wake up, except that you will have an insatiable unquenchable thirst for my guitars, one after another, every conceivable shape and size, electrics, acoustics, classics, ukes, mandolins, for the rest of your life, or until your well runs dry, whichever comes first! Snap!"

Naturally, certification in Clinical Hypnotherapy requires greater ethical standards than that of the editor. If you want to quit smoking, or get rid of a phobia, or eliminate the nervousness of public speaking, call Bruce! Oh yes. Bruce is also available as a consultant to the field of stringed musical instrument making:

Bruce Ross
Clinical Hypnotherapist
California Certification No. 1152
(408) 459-9329

Members Spotlight Continued on Page 23.....

FOLLOW-UP

Dear Guitarmaker,

I would like to suggest some additions to the spreadsheet for computing fret distances which appeared in Issue #9. If you are using the Metric scale, the spreadsheet is easy to use. If, however, you are using inches (and don't have an expensive ruler layed out in 100th of an inch increments), you'll probably want to convert the spreadsheet value to the nearest 64th.

This can be done on the spreadsheet. I use a Symphony spreadsheet and will give the formulas using that notation. Other spreadsheets have analog functions.

Assume the value you want to transform into inch and 64ths is in cell C8:

Put the number of inches in cell F8:

@ROUND((C8-0.5), 0)

and the nearest 64th in cell G8:

@ROUND((64*(C8-F8)), 0)

In my spreadsheet, I calculate the distance from nut to fret with the following formula (^Fret means "to the power of Fret"):

Scale Length - (Scale Length * .9438743^Fret)

Using this method, it is not necessary to use previous fret calculations, so accumulation of errors is avoided.

This formula is based on the following derivation of the Rule 18:

Nomenclature: * means "multiplied by"

6 means "to the power of"

Let: S = Scale Length

F = Fret Number

Given: 12 intervals = 1/2 the Scale Length

Y is a constant:

S * Y^12 = (.5 * S)

Y^12 = .5

Y = the 12th Root of .5 = .9438743

The following formula computes the distance from the nut to any fret:

S - (S * .9438743^F)

X = the Rule 18 constant:

1st Fret = S / X = S - (S * .9438743)

S / X = S - (S * .9438743)

1 / X = 1 - .9438743

X = 1 / (1 - .9438743) = 17.817

I've also written a program to calculate fret distances, which runs on MS-DOS PC's. This program requires no special software, which may appeal to those who don't have access to a spreadsheet program. If anyone is interested they may correspond at the address below. Yours truly,

Elaine S. Hartstein
57-07 225 Street
Bayside, NY 11364
(718) 423-9675

Dear Guitarmaker,

One of the things I have concluded over the past few years is that we seem to have a compulsion to undervalue the intelligence of those who lived before our own lifetime. I believe this is related to the compulsion to redesign everything in an effort to create the ultimate world's best whatever-it-is, even before fully understanding that which we are redesigning. If we are realistic however, we must admit that the size and capacity of the head was established quite a few centuries ago, there is a limit to how much we can fit into it, and the technologies we enjoy today are not so much better as simply different.

With that introduction, which applies equally to many aspects of our trade as well as to others, I would like to add my two cents to the growing mountain of commentary on fretting formulas.

If you work out the rule of eighteen at its stated value of 18 in typical scale lengths, you will find that the necessary 3/32" (approx.) end correction (compensation) is automatically included and no further adjustment is necessary. Not only that but the whole thing can be very easily laid out with a straight edge and dividers, eliminating the need to clutter one's head with numbers.

I have relocated the bridges on a mind-boggling number of Mexican guitars because the need for end correction was (systematically you would think) ignored.

For what it is worth, here is the formula that I have used since I started. Where L = scale length, D = theoretical distance from saddle point to fret, and N = fret number:

$L \div (\sqrt[12]{2})^N = D$

In the practical useful form this is: log L - N(.025086) = log D, of course you still have to convert the results if you measure from the nut as I think most of us do. Don't forget to also add in the end correction. Since everyone's calculator or computer has slightly different features, I won't try to do anyone's homework for them on that account. Note that you can solve for any one fret if you so desire.

I had never seen a published formula for fret scales when I first figured it out 18 years ago, and I have only skeletal training in the mathematical processes involved. I still remember that day for the hours of mental strain, and for the sudden relief when it finally came to me.

Arnold M. S. Hennig
2200 S.W. 22nd Street
Oklahoma City, OK 73108
(405) 634-2025

TIPS FROM READERS

Bart Reiter included this helpful instructional information concerning pearl inlay techniques. First assemble the necessary tools and materials as follows:

- Cutting board
- Jeweler's saw
- No. 2 saw blades
- Small sharp awl or scribe
- Needle files
- Dremel moto or Sears rotary tool
- Router base attachment
- 3/64" or 1/16" carbide end mill or Dremel #113 bit
- White chalk
- Pearl or abalone stock
- X-acto knife
- Epoxy

Make several photocopies of the pattern or drawing you wish to reproduce. Cut up the paper copies into separate pieces of the pattern and glue them lightly onto the pearl stock with yellow glue. Make sure to inspect the pearl stock against a bright light to insure that there are no cracks, wormholes, or soft spots. A size "0" blade cuts .040" stock quite nicely and a size "1" cuts .050" pearl. These thicknesses work best for finer scroll and floral work. For larger pieces that will be engraved or work going into an arched fingerboard, .060" stock is a wise choice. A size "2" blade is needed to plow through this size. Fine detail is difficult to achieve, but the fact that it won't break from a drop to the floor is a definate advantage.

Clamp a 1/2" thick cutting board with a "V" notch in the end to the workbench or into a vise. Cut around the entire piece counter-clockwise if righthanded. Come back later into any areas too tight to back out of. The blades break so easily that you will need to have plenty on hand. Slice off the paper pattern carefully with a chisel or X-acto knife if you wish, but leave it on when doing complex patterns as a positioning guide. File the edges of the piece slightly with a needle file to remove any irregularities and to refine the shape.

Position the piece or pieces together on the surface to be inlaid. Dark woods such as ebony, rosewood, or walnut make the best background. Hold the piece firmly in place with your thumb. Trace around the outline of the pearl with a small, sharp awl or scribe. Rub white chalk into the scratch to make the image visible.

Chuck a Travers Tool Co. #20-504-003 carbide 2 flute 3/64" end mill in an old model 280 Dremel. The new model Dremels don't work with brittle carbide. Excessive spindle runout breaks the endmill immediately. The new Dremel flexible shafts are good though. A carbide end mill can last as a year in the model 280 Dremel. Set the router depth to the thickness of the pearl stock. First rout around the outline to just remove the scribed chalk line. Then clear away the waste in the middle. It is essential to connect a 2PSI blower tube to the router base to blow away the dust so that you can see what's going on.

Test the fit of the inlay. It should just drop in with a slight gap around the perimeter. If the piece is too tight it might break when removing it from the test fit.

Mix up some Conap K-22 epoxy, which is already jet black. Otherwise use clear K-20 epoxy and dye it the color of the background with a little sawdust or artists powdered pigment. Other epoxies seem to swell and shrink for months after the instrument is lacquered and muck up an otherwise smooth peghead surface. Any slow setting epoxy is fine for fingerboards. Fill the routed recess with epoxy and squish in the inlay. Fine pieces will crack if pushed too hard or into partially set glue. Warming the epoxy under a heatlamp for a minute will thin out stiffness on cold days. Over-warming will cause it to set way too fast. After the glue has cured for one to two days, sand off the squeeze-out and make the inlay flush with a belt sander and fresh belt. Sand out the surface to only 220 grit for good adhesion if the surface is to be finished. Otherwise sand out to 400 grit to create a dazzling finish.

For carbide flutes specified above contact:

Travers Tool Company
P. O. Box 1550
Flushing, NY 11354
(800) 221-0270

and for the epoxies mentioned:

Conap Epoxy Adhesives
14 El Dorado Drive
Allegheny, NY 14706
(716) 372-7211

If you have tips for our readers or if you need help with a technical problem, contact: A.S.I.A. "Tips" or "Q & A".

Q & A

Robert Tice has some questions he'd like answered. If you have answers, we'd love to publish them. Please send your replies to us at the A.S.I.A. address:

1. What fretwire should be used and what are the techniques used to reproduce the "Fretless Wonder" style fingerboards for the old Les Pauls?
2. What are the specifications for a tool to size bow hair hanks from bulk hair?
3. I've heard people recommend the use of soap for both violin pegs and bridge adjusters on bass viols. Could this be harmful because of the hygroscopic nature of soap?
4. Should the shafts of violin pegs be buffed with the emery wheel or not?
5. I've heard about a special reamer for rebushing violin peg boxes, but have not been able to find one. Where can they be purchased?
6. Some violins and especially cellos seem to be more prone to produce the first harmonic instead of the fundamental on certain strings when bowed. What causes this and how can it be corrected?

If you wish to help with these questions directly, please contact:

Robert Tice; Luthier
HCR #1, Box 465
Sciota, PA 18354
(717) 992-5695

SOURCES

EUPHONON CO.

Walter Lipton has been supplying luthier supplies for nearly twenty years. He has applied his extensive knowledge and experience as a guitar maker to his parts business. He carries a broad selection of tone woods, binding, inlay and marquetry, and bulk strings, as well as tuning machines and an assortment of tools. Because he is a very careful buyer, he generally has very high quality and hard to find materials available. His 16 page catalog is informative and educational. Walter categorizes various quality standards into a grading system that is understandable so that his customers know what they are (and what they are not) getting before they order. His finest quality tone woods are personally graded and signed. He works with his wife, Jude Parker, who cordially interfaces with the customers and handles most of Euphonon's administration. Note that Walter is seeking an employee in this issue's jobs available listing. For a catalog, contact:

Euphonon, Co.
Box 100
Orford, NH 03777
(603) 353-4882

BUFFING SUPPLIES?

Jim D'Aquisto called the editor in a panic. He had misplaced the address of one of his suppliers and was having no luck getting the phone number from information. I looked up the company name in the Thomas Register and called Jim back within minutes. He was so elated that he has offered to share the supplier's name with us. Jim says that this outfit carries terrific buffing and polishing supplies, especially hard to find wheels and compounds. For their catalog contact:

Matchless United Labs
801 Linden Avenue
Linden, NJ 07036
(201) 862-7300

NEW LUTHIER'S MERCANTILE CATALOG

The new Luthier's Mercantile Catalog is completed. It runs over 300 pages and is shipped in a tough 3-ring poly binder. Like LM's previous catalogs, this new publication goes far beyond simple descriptions of the items they offer. It is filled with technical tips and instructional articles by Richard Schneider, Don Musser, Bill Cumpiano, David Russell Young, Bill Woods, John Gilbert and many others. For those familiar with the old catalog, that information is all included and updated, plus much more has been added. The catalog is presented in an attractive, professional, fully illustrated and photographed fashion. It is certainly one of the most complete selections of luthier related material and information available.

To cover the cost of the catalog, Luthier's Mercantile charges $10, but they will credit all but $3 of that against an order. The $10 will include shipping anywhere in the United States and Canada. Please send an extra $5 to cover shipping for catalogs going overseas:

Luthier's Mercantile
P. O. Box 774
412 Moore Lane
Healdsburg, CA 95448-0774
(707) 433-1823
(800) 477-4437 Orders only please.

If you have a newsletter or catalog let us know. We'll review it!

INTERVIEWS

YURI INTERVIEW WITH JAMES D'AQUISTO 12/3/89; PART TWO
transcribed by William Cumpiano

Continued from Guitarmaker; Issue #9

D'AQUISTO: John D'Angelico was getting sick, and he couldn't work very well, so I was doing a lot of his work. A lot of his work. Finally, he died in 1964. He had a heart attack, a terrible severe heart attack, he (D'Angelico) died in his sleep. Which is good. Because he was a very good man.
YURI: And after that...?
D'AQUISTO: [a long pause] ...well, anyway...[another long pause] [with an unsteady voice]...after he... like I said, we helped each other... he was that kind of person. [Composing himself] So, anyway, after a few months he died. I was terribly afraid: I didn't know what to do.

So I would say that after maybe three or four months, the family said he wanted me to have the place. He said that it was mine. But he didn't leave it in a will. So I said okay, I'll take the place. The family gave it to me for practically nothing, like three thousand American dollars, which was nothing. All the machinery, even the string business. He was selling D'Angelico guitar strings. The string business was doing very well, perhaps thirty-five thousand dollars a year. I had no way of knowing this.

"....D'Angelico died in his sleep.
Which is good.
Because he was a very good man."

I had gotten married in 1956, I was already working for John for almost five years. I had two children when he died. The third had just born. I wasn't making very much money. Everyone else was making a hundred and fifty dollars a week, I was making sixty-five dollars a week. I was below-standard making a living, so I had to continue playing the guitar in night clubs and working in D'Angelico's. I used to work all night, sleep a couple of hours and then go to work in the morning to John's. So it was very hard for me.
YURI: I have seen several D'Angelico string packs. What are these?
D'AQUISTO: Well now, I'm going to tell you that. I didn't have a lawyer to do all these things and I told my parents that they wanted three thousand dollars to buy everything; the machinery, the string business, and the guitar business. So my family said, okay, we'll give you the money. I said, "no, mom," My father was old. He was retired, I said, "no, no, you better keep the money, I have a friend that will lend me the money, and I'll pay him back." So they said, "all right, fine. Be careful."

That friend was an attorney and he loaned me the money to buy the D'Angelico string business, the guitars, and the machinery. But I didn't know that he was out to take me for a fool. He wanted the string business for himself. That was where all the money was. So he made me sign papers. I trusted him, I thought he was my attorney. I signed everything to him. He owned everything. I had nothing. He took it all from me. The string business and everything.
YURI: And the guitar business?
D'AQUISTO: He took everything including all the machinery. He left me with just an empty place. I had to start all over again, but he got punished for what he did. He bought a new car with the

money from the string business, he got a severe heart attack and he smashed into a tree and he got killed. Only about a year or so afterwards. He got punished by the good Lord. He just punished him.

So I had to start from the beginning. I had to buy all new machinery. The D'Angelico string business went to HIS family, his wife. They took the business and it grew into millions of dollars. But because of what he did, they got punished too. Eventually their string business died and they sold it. They sold the D'Angelico name that they took from ME, for a hundred and fifty thousand dollars. And they eventually lost that also. Now GHS Strings has the D'Angelico name in Michigan. The name actually belongs to me, but all these people have that name, which I never had a chance to use at all. I had to establish my own reputation.

"They sold the D'Angelico name that they took from ME, for a hundred and fifty thousand dollars."

I made my first guitar in 1965. It was a copy of a D'Angelico New Yorker... an exact copy. I made about five guitars this way in the D'Angelico design. Finally I got frustrated because everyone was calling them D'Angelicos. So I changed the design. I made my own headpiece and changed the soundholes, I changed the pickguard. I did everything different. I retained the metal tailpiece until 1969-70. Then I made it ebony.

Little by little, people began to recognize my guitar and hear the difference in the sound. People liked it better than the D'Angelico, and it evolved. I kept improving and making changes using his ideas as the basis of what I did... keeping some things the same, but then with variations. I began to change, little by little, the braces and the shape of the guitar. Sometimes, depending on the guitar and whom I was making it for, I would change the neck angle. Sometimes I would change the headpiece angle for string tension or vary the angle of the pitch of the neck where it pivots.

"Little by little, people began to recognize my guitar and hear the difference in the sound."

The more I understand the instrument, I realize that by varying all these different things, the guitar can change in so many different ways. I experiment. With each guitar I make, I'm experimenting. Even though I sell it to someone, they don't realize that I'm experimenting, constantly changing it, trying different things. That's all. And LEARNING. Every day, I learn something different. It works out that way. So that's why I tell you if you have a good basic idea about the design of the guitar, as you build the first one, if you get depressed about it, it doesn't sound right, then you should make changes on that guitar. You don't put it aside and forget about it. Try and do like I do, with the tailpiece lengths, with the string tension, with the raising and lowering of the tailpiece, the bridges, and you will see that that guitar that didn't sound good in the beginning, now is sounding different, or better. Now you know the things to change and to experiment with yourself. Now you know the things which will allow the sound to come out. So when you go home, and you get those guitars, experiment with them. Just don't build something with strings on it: try to do something with a definite purpose, whether you want a loud, mellow, or bright guitar. That's it.

YURI: Usually you make between seven and ten guitars per year?
D'AQUISTO: Yes, it varies. Let's go in the shop. It's a mess, from me working in there. It's dust all over the place. You say, how does he work with this confusion? I work that way. It's how I feel comfortable. It's not like my house. My shop, that's where I let everything out [laughs].

Now, there's fifteen guitars on the floor. I have each neck made for a certain individual. I bend all the sides. Once I get all the necks made, I line them up, I stack them up, I leave them there, and I begin to work on the bodies. I may work on four or five bodies at a time. Each is a certain model for a certain person, a New Yorker, Excel, Avant Garde, Classical, it all depends on what they want, and I make the body accordingly.

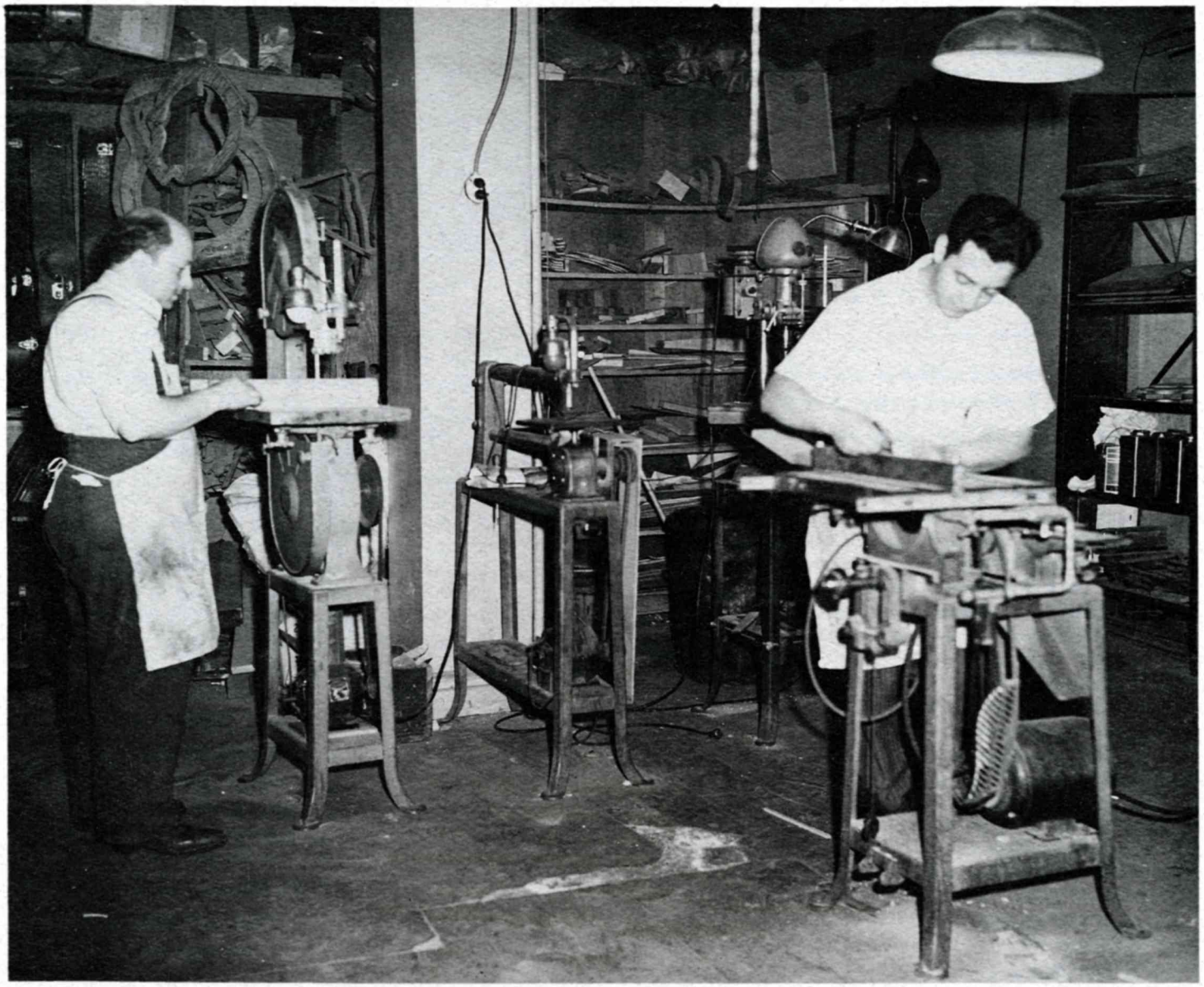
Then I take the neck that belongs to that body and I place it on the body. But naturally, there's not a guitar going out every month. It doesn't work that way. I may not complete a guitar for two or three months. I'll just be making the guitars. Finally, after three, four months, I'll finish four or five guitars at one time. And they'll go out. Then with that money that I make, I pay all my bills. Then for another two, three months, nothing comes in. So, I'm working again. So I don't make a guitar EVERY month. Like an artist: you have to work when you're inspired to work.

"So I don't make a guitar EVERY month. Like an artist: you have to work when you're inspired to work."

YURI: What does your working day look like usually?
D'AQUISTO: I use to work on a time schedule, when I was married. I was married. I have six children. I have grandchildren. But when I worked on a time basis every day, the guitars were different. The guitars were manufactured. Each one, I put my heart and soul into them, but they're not the same as the guitars I make now. Now I work when I feel I have the drive to work. When my mind is free to work. And I don't have to be happy to work. I could be very depressed but feel I could accomplish a lot in the shop. Your attitude and moods have a lot to do with what you're going to create. It's like writing a music script, or painting a picture, or writing a poem. Your feelings have so much to do with what your work is going to be.

That's how I work now. Now I feel the guitars. A lot of people feel the guitars I make today are much, much superior to the ones I made five years ago because I work this way now, I have the mentality, finally, to work this way.

That's what's wrong with this country: the idea that everything has to be on a schedule basis from nine in the morning to five at night, and then everything closes up, lock



This rare photo of John D'Angelico in his lower Manhattan studio is one of four original shots taken in November of 1942. You may recall the photo of D'Angelico carving a neck in Guitarmaker" Issue #8 (Page 7). Here D'Angelico (left) and his assistant at that time, Jimmy D'Alessio (right) are at work in their machine room performing various operations on necks with the bandsaw and tablesaw. The originals of these four photos are from the personal collection of A.S.I.A. member Tony Creamer of the Fretted Instrument Workshop in Amherst, MA.

down, people stop thinking. To be an artist in this country is very, very difficult. They put you in a situation where you have to think like a businessman. An artist can't be a businessman and an artist at the same time, because it doesn't work that way.

Even as far as paying taxes. They treat me like I'm a business. I have to pay taxes quarterly, like I'm a businessman, and it shouldn't be that way. It should be a special kind of situation where they should allow a person to be an artist here. To be free. Because all the character and class is leaving this country. For people like myself, there's no room to create here. They can come here to create, they think it's fantastic. But when they earn a lot of money, they have to put themselves in a business situation. It's a terrible situation: you can't create this way.

YURI: Do you work alone?

D'AQUISTO: Yes, I work alone.

YURI: And your business side?

D'AQUISTO: I do it all myself. It's very confusing. It doesn't go according to schedule. Sometimes I'm very behind because I have to do everything myself. Very difficult. Sometimes somebody may call and say, "Jimmy, you were supposed to send me that piece of paper with the order on it three, four months ago, I didn't get it yet," and I go, "oh, I forgot about it," and I go inside and it's on a little piece of paper that I was supposed to send. So, it's not run like a business. I can't think like a businessman. As far as having someone to come and work for me to do this, I can't always afford to have to pay them a minimum wage. If they come once a month, well, maybe that's ok. Now my daughters are finally coming in to help me to do things this way, and things are getting a little better. I made a little office in the back for myself. I bought a computer and they put things in the computer, which I never even occurred to me. I used to do everything with piles of paper, saved up paper here and there. And someone would ask "where's that piece of paper from 1988?" And I would have to look through all the papers, tearing things apart looking, and not being able to find anything. Finally now, I'm putting things into order where I can find everything.

At one time I was even in trouble with the tax people here.

Instead of paying my taxes, I bought this house. I was living in my shop. I was sleeping on the floor [chuckles]. You know I was destitute. I couldn't live at home because my wife and I had separated. She had the house with the children and I was sleeping in my shop. Finally, I got so frustrated. All the money that I had accumulated in that year I took, and instead of paying taxes with it, I bought this house. So the tax people said,"what did you do with that money?" And I said, "well, I bought a house for myself, so I can live like a human being. I was sleeping on the floor." So they charged me twenty-seven percent interest. I had to pay so much money: they punished me for not paying the taxes. Rather than live like a human being, [chuckles] I had to pay the taxes.

"Rather than live like a human being... ...I had to pay the taxes."

But I'm very fortunate. I'm a very lucky person, I understand this. I feel that anytime you're capable of doing something that's artistic and creative, it's a gift. Because when you die, when you leave, you're going to leave something behind that someone's going to respect and cherish. You're not going to leave a big bank account with a lot of money—that doesn't mean anything. You're going to leave something that people will respect. And that's why I feel very fortunate about my situation. And I thank the good Lord.

YURI: It is interesting to me that you have never done anything to promote your guitars, in the sense like companies do with endorsements. To pay artists to play your guitars.

D'AQUISTO: I never think of who is outside. Competition, or other people making the instruments. It's as if you were a runner, racing. The runner doesn't constantly look behind to see whose racing or how close people are. He's thinking of one point... to get to that point where he will be the winner. All he knows is that he's running straight... that he's not looking side to side, and that's how I feel about my instruments. I don't worry about who is making them as good, or better. You only make demands on yourself. And this way, you're more of a critic to yourself than any outside person could be. You demand more from yourself than anyone else can do.

"The decorations actually detract from the instrument because you spend more time thinking about THAT than the music that has to come out of the guitar."

So when you finally make your archtop guitars look at everything and get an idea of what you would like to create, and then worry ONLY about that. And that's all. That's the important thing. You may come up with concepts, with ideas that will surprise you. I may see one of your guitars someday and I'll say, "my God, this is fantastic. Look at this!" But it's something which you did yourself. Not by looking by what's around, but your own ideas. That's what's necessary.

I find myself paying less attention to certain things that I felt were so important years ago. Now I see myself paying attention to other things that are more important, and the instruments are getting better. Not the fancy cosmetic things, but the instrument itself. The decorations actually detract from the instrument because you spend more time thinking about THAT than the music that has to come out of the guitar. People forget about the MUSIC. This has to be played by someone. Someone has to like this instrument well enough to finally play it... that's when the instrument finally reaches it's purpose.

YURI: The perfection and beauty of instruments comes from this point, and not from any other.

D'AQUISTO: That's right. That's it. With all the imperfections, yet the instrument sounds unbelievable: it plays, it lends itself to the musician. That's that point that we're trying to achieve when we're building these things. Years ago I didn't think of these things. I know that, I can admit that now. I was thinking of D'Angelico and looking from side to side and wondering "is my guitar as good as John's guitar," and "are his guitars still better than mine." I constantly thought of it. Then I said, "I can't think of that any more, because if I think that way, I'll always stay in that same bracket." How do I get away from that? I race ahead of it, by not looking at it. And that's how finally I got ahead of the whole thing, by not even worrying about it.

YURI: Does Fender still make guitars of your design?

D'AQUISTO: They're made in Japan, those guitars.

YURI: Are you satisfied with the result?

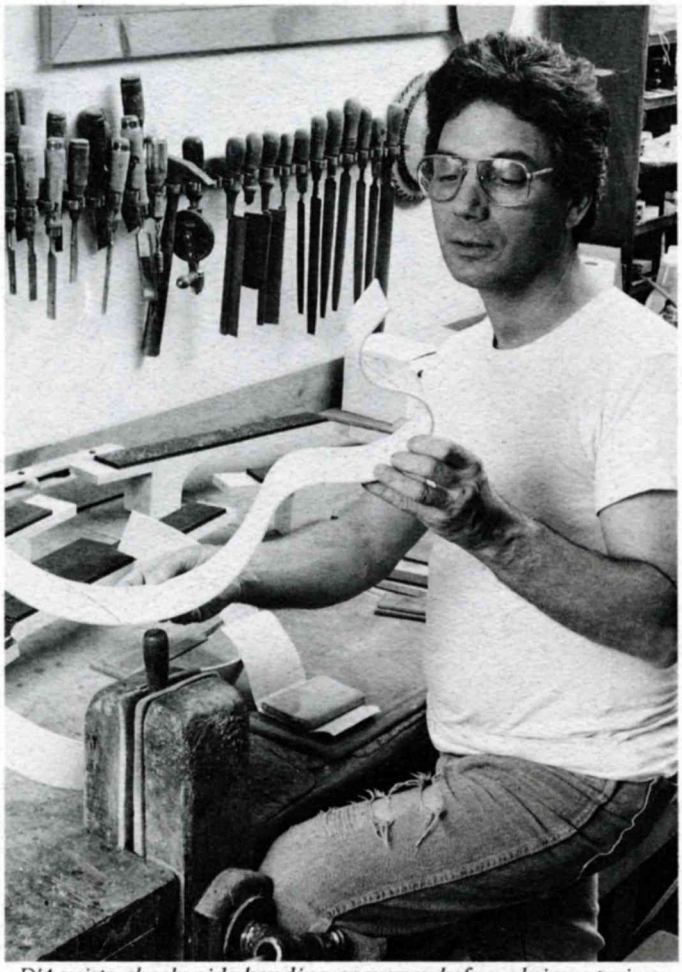
D'AQUISTO: Yes, I think they made a fantastic guitar. It's really a good instrument. Fender failed in selling the instrument the proper way. Anyone who played on the instrument was very satisfied, they loved the instrument, and if they wanted to buy it, they went into the stores, and the stores never had them. Fender wasn't selling the instrument. They didn't advertise properly. So now, hopefully, they're going to do it. To finally sell it the right way.

"I was thinking of D'Angelico and looking from side to side and wondering... 'is my guitar as good as John's guitar',"

YURI: I also saw an advertisement of Borys guitar...

D'AQUISTO: Roger Borys was a young fellow and he was making flat top guitars. He copied the Martin guitar mainly and he wanted to meet me. He finally decided he wanted to make arch top guitars. He was from Vermont, and there was a person in Vermont that I was close friends with. He was a very wealthy man. I had made him two guitars. He said, there's a young fellow up here that wants to make arch top guitars, and he'd love to meet you and talk about it with you. So, he said, would you do me a favor. Would you let him come down to visit you and show him around the shop. So I said ok. So Roger Borys came here and brought one of his guitars. His work was all right. It wasn't fantastic. It was a nice instrument. So I gave him some pointers, I showed him some things to do and he went back to Vermont and then this friend called again and said he'd pay me to come up and show Roger how to make the guitars and set up the shop for him. And would I design a guitar for him. So I said ok. I designed a guitar. Do you see the soundholes that he has? I designed those. The tailpiece that he has: I designed that. I designed almost the whole guitar except the headpiece. The headpiece was his own idea. I showed him how to brace the instrument, bend the sides, everything. I went up there a couple times, stayed there over a month until he finally got himself started.

Now he's making guitars and getting quite a few orders. I notice that anyone that I teach tends to completely forget the connection, the friendship. Something happens. They completely avoid me and I never hear from them again. They leave my life. They don't even send me a card. "How are you, Jimmy?" or a call once in a while, "how are you feeling" or something. Nothing. All



D'Aquisto checks side bending accuracy before gluing up rims.

of a sudden they're out to make a living, they're making guitars, and they're trying desperately just to stay in business, and there's no need for me any more. So they just push me aside and they go back to their lives and completely ignore me. It's happened with virtually every apprentice I've had. I could say almost everyone who is making arch top guitars has come to see me at one time or another, John Monteleone, Robert Benedetto originally down in Florida, Linda Manzer in Canada, every one of them, they all come to visit me.

"...if someone says he can tune the instrument before he puts the strings on it, how can he do that? It's not possible."

YURI: Do you think it's possible to know what a guitar will sound like before the strings are put on?

D'AQUISTO: I don't think so. Like I said, this is theory, leading to a point where you're making the instrument as sensitive as possible. But I can't tell in advance what the instrument is going to sound like, the character of the instrument. Understand? Once it's finished, and with the strings, NOW I say "ok, at least I know I'm in a category of what I wanted it to sound like." Mellow... treble... I know I'm in at least one of those two categories. Then, from that point I can customize or characterize that instrument. But if someone says he can tune the instrument before he puts the strings on it... how can he do that? It's not possible. You have to have the strings on to know the character. If you're standing in the midst of fifty people, how can you tell you're Russian if you don't start to talk?

YURI: Maybe it's a kind of personal trick.

D'AQUISTO: No. It's nothing. Pay no attention to that. It does not mean anything. If someone were to say that to ME, I would turn to them and say, "you're full of baloney. You cannot do that. It's impossible."

"If you're standing in the midst of fifty people, how can you tell you're Russian if you don't start to talk?"

After D'Angelico died, you have to understand, there was no one making arch top guitars. No one making customs that is. Only Gibson. Epiphone was ready to go out of business. There were Guild guitars, manufacturers, but no one was making custom guitars. All of a sudden, after about ten years of me working, all these arch-top guitarmakers started to produce, they started to come out of the dust. Now there are many interested in making arch top guitars because they realize the challenge. But I don't understand their purpose, their goal. What do they want to achieve? Do they want to become the best in the world? Do they want to produce the best-sounding guitar? Do they want to make a guitar so that some of the great players will play the instrument? What is their purpose? If it's just to achieve a certain point, to be the best in the world or something, it's all wrong. If it's to make a fine instrument, well, I can agree with that. But that is something that I think can't happen until they finally mature, mentally. Monteleone's work is very clean, very meticulous. Everything is fine. Okay, he's reaching a point where finally he's starting to REALIZE the instrument. The musical part of this thing. Not just the cosmetics, but everything.

There are many people that are out there that are completely off the track. They're not in the right stream of things. It takes many years to get to that point. It took ME years. I can't say that I understood everything right away. It didn't work that way. It took many years to understand and realize this.

They will be standing and waiting for me: "okay, if you're the best, let's see if you can outdraw me."

So, you have an advantage of being able to question it, like the student asking the professor why, what and how, and he's able to say this, this, this, and that, because he's been through the experience. Instead of wasting all this time experimenting, you know "if I do this, it's not going to work, so I won't waste my time with it." But that's just if the person is honest with you. I take pride in teaching the right way, by telling you "don't do it this way because it's not going to work." I won't lie to you and say,"don't do it this way because I don't want you to learn the right way," you see? With many luthiers you might ask, "can you give me some basic ideas of what's to be done," and they just turn and give you everything that has nothing to do with the real answers. It only has to do with guitars in general. Gibson, D'Angelico, everything that's already there that you can get for yourself. But if you ask how do YOU do this, they generally don't give you an answer. Then you know they don't want to tell anybody.

Continued on Page 21.....

TRANSCRIPTIONS

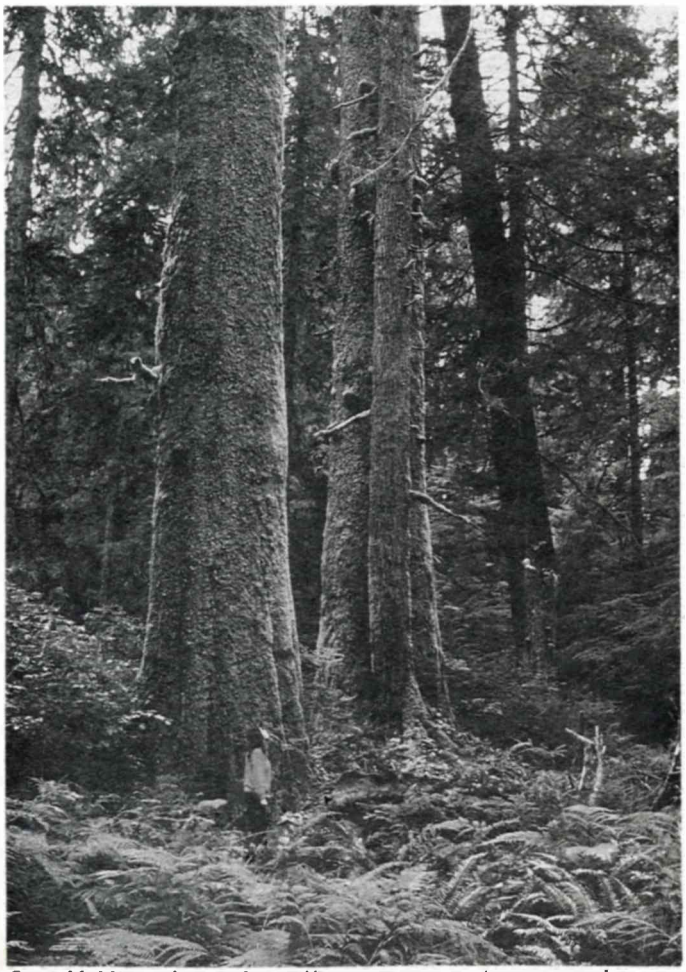
STEVE MCMINN; ON LOGGING SPRUCE
Paraphrased From His Symposium 89 Slide Presentation
Transcribed by Linda Manzer

Introduction by Dick Boak:

We have four slide presentations today of a more technical orientation, the first of which is Steve McMinn, who is one of the better and more reliable sources of spruce on the west coast. It's unbelievable that we have him here; he came a long way. He's brought with him all sorts of core samples and drillings and he's going to explain it all to you this morning. Please welcome Steve McMinn:

I'd like to talk about cutting Sitka spruce blocks specifically from a couple of windfall trees. My technique of sawing is somewhat unorthodox, so I'll address that process. Then I'd like to talk a little bit about what's going on with the Sitka spruce that remains and what the outlook is for the future of Sitka spruce instrument wood.

I use a lot of windfallen trees to produce guitar tops. One that I processed blew over on private land in Washington in '78. The end of it was quite oxidized because I cut into it and left it open over the winter. It was about 52" in diameter at breast height. Its interior was quite rotten which is why it blew over. Probably about a third of its volume was usable wood. So



Steve McMinn placing himself in true perspective among the immense Sitka spruce trees

Steve "bucks" a Sitka log that blew down in Washington state in 1978.

"bucking" it around (cutting it to cylindrical lengths) is about the first thing you do. The tree was about 500 years old with pretty constant 20 or so rings to the inch all the way to the heart. There was a split, a " ring shake" (concentric crack following an annual ring) around the core of the tree, maybe a foot in diameter. What you're always trying to do is to split out the biggest usable pieces that you can. So you're always trying to figure out where the knots and defects are. Sometimes a block or a round just takes itself apart, as this one did. You don't often get big clear pieces. The split pieces are usually quite free of knots on the inside. The sapwood on this tree was buggy because it had been down so long. You don't use the Sitka sapwood, so it can be split off from the rest of the log. By using a lot of wedges to split the whole outer piece of sapwood at once, you can split the whole outer arch off. It will come off as a round sheet about two feet in length in this case.

I processed another blow down in southeast Alaska. It was 300 to 350 years old, 52" in diameter at this point which is maybe 6 feet up. The bottom 120 degrees has some darkening where the light wood had started to decay. This tree was quite sound as a whole. It had been down, perhaps 15 years. It was over a stream, pretty much in the shade, quite straight and uniform with 12 to 15 rings to the inch, really a bright yellow color with quite a good luster. Taylor made quite a few guitars out of it and agreed to take the rest of it. The tree yielded quite a lot of good size blocks, which is what I like.

Blow downs are often completely uprooted exposing a

1978. Note the concentric ring shake in the unusuable heart of this log.

massive root wad which after a time develops a lot of vegetation and moss. The tree probably had not decayed much since it came down; I think most of the decay took place as it was standing. I split the section in half on a obvious split where it was probably checked. I split off the sapwood first to read the outside to see if there are any knot indicators.

I use a boring tool to take core samples from spruce trees. Most of what you do when you size up a tree is see whether or not it's a suitable tree for instrument wood. There are visual tests. You can study the top of the tree with field glasses. You can look under the bark to determine the tree's quality. With a boring tool you can drill in and pull out a core sample. You can read what's been going on in the life of the tree for the last 12-14 inches and see what kind of growth patterns it has. You can see if a tree has been booming along with 6 rings to an inch or if it's a uniform 20 to the inch, and you can slice that with a razor blade and see what kind of silk it's got, look at the color, study it with a hand lens, and so forth.

This log got complicated because it was over a creek. I ended up splitting off the top half to make a flat log over the creek. I ripped around the knot to take the top half off. We didn't want to get anything in the creek other than the pieces we were using as stepping stones to split on.

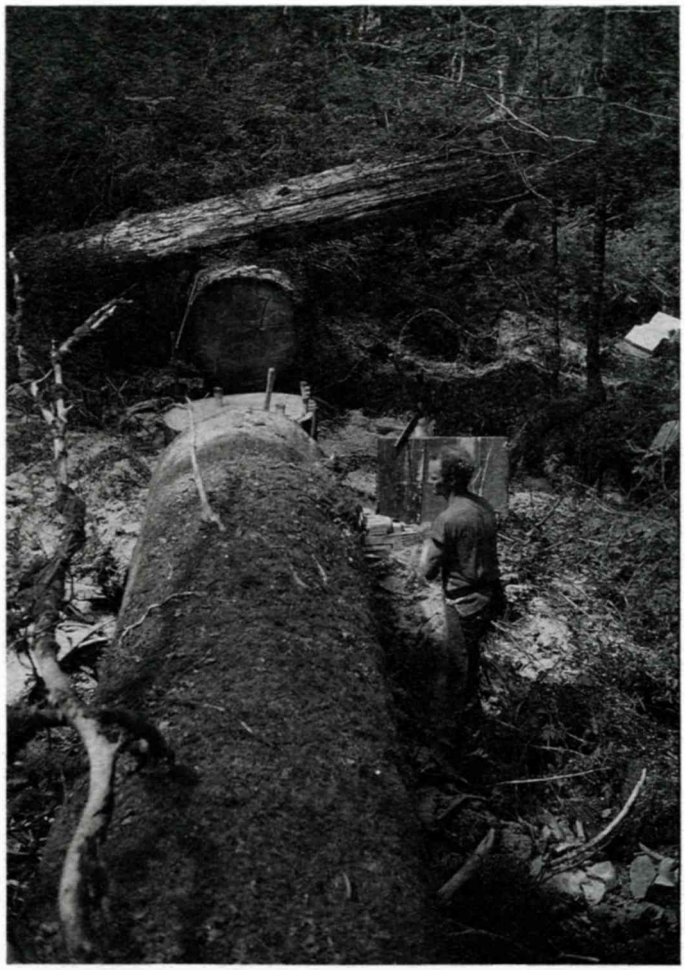
The end of this log was antiqued as we call it; covered in mud and covered with brush. There's spalt piles in there. They're all covered with brush too. I used to work for the park service on trail crews and when we were making bridges, we always had to make it appear as if we hadn't disrupted anything. And so I've gotten into furtive habits, even though this is all perfectly legal. I still feel that I should cover up everything I've done so that when someone comes along, they will say "gee, that looks nice."

Moving the blocks out to some kind of a road is one of the biggest ordeals. No matter how you size it up, there's a lot of toting. It helps if you have someone who has got a strong back and a weak mind. I have a friend named Leo who is just the perfect type for it.

Q: How far does Leo have to carry the blocks?

Steve: 150 yards or so, but the blocks are soaking wet. That's a 100 lb. block I'm sure. When I can, I move blocks by wheelbarrow or by cart. I've moved stuff up to 1/2 mile by bicycle, or by floating blocks down the river. Sometimes I use an overhead cable system. Sometimes when I am yarding short logs, I actually roll them out with pins in the ends with a truck winch. If I can do it, I fly them, but typically helicopter time in Washington is $420 an hour, and in Alaska it's about $550, so you have to have quite a substantial accumulation to make it worth flying. If you have something that would cost you $500 to move and you can do it in a day and a half, it's hard to justify it. although I prefer flying whenever I can. There's always a lot of toting involved even if you're using other methods.

Now I'd like to talk about another blow down in Washington. This one split perfectly straight. It's unusual to find Sitka spruce that split's that straight. The standards for #1 saw logs require that the logs have a twist of no more than 1 inch in 4. Piano wood people would take wood that is one inch in 15. That means that along the axis of the log the split line would actually go off at that amount. This tree has 1 in 50. I aim to get stuff



Sitka blowdowns often develop a lot of moss and vegetation.

that's 1 in 25 or so, that's pretty much my bottom limit.

Q: Any bears?

Steve: Sure. This is Washington. The bears are black bears so if you keep a clean camp, you're OK. In Alaska, you have to worry about brown grisleys and you have to be really careful about segregating your food and eating in some place other than where you're going to sleep.

Q: How do you locate these trees?

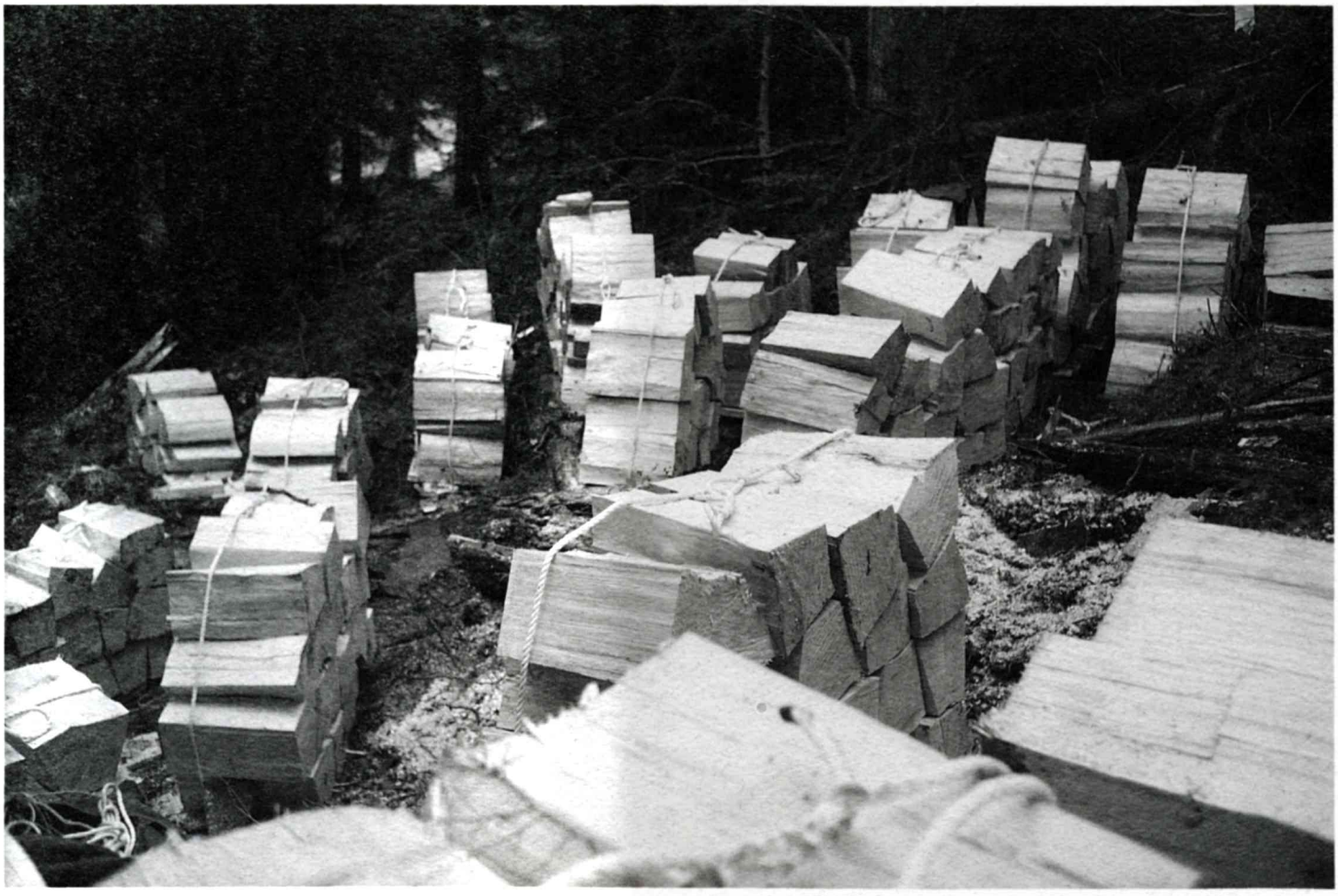
Steve: Talking around a lot, maps, finding out where logging is, looking at aerial photos, flying some, bicycling, hiking. Typically you want stuff close to roads or stuff that's boatable, so that limits you quite a bit. Although if you can afford to fly you can get farther out.

So that's how I take apart trees and now I want to talk about how I cut them up into tops. I take a typical spruce billet. Some of them might be a little bit difficult, especially if it has substantial bark in which case I'll go over it. My saw has a carriage that has V-wheels on one side, flat wheels on the other, a dogging (hold down) system that squeezes the block between two dogs (spikes). The back is fixed and there's an air cylinder that moves the other dog. The blade on the bandsaw is about 4" wide.

I use the laser beam to show me is if there's any twist in a particular billet that I am about to cut. I can view the side and determine how to get a guitar shape out of it without cutting off any more than I need to. So I align the block so that when I true

At left, Steve hand splits "bolts" radially from the ring shake that has developed in an annual ring near the heart of the log.

Below, "bucked" guitar top length cylinders of the log await the splitting process.



up the face, I'm not taking off any more than I need to. The laser also permits me to line up the back of the block, so that I'm as close to the quarter as I want to be, which is typically right on.

The laser also shows me where the saw is going to cut on the top of the block, so that I can figure out if I'm going to have to dodge pin knots, if I'm going to dodge some kind of defect, so I can get the best yield out of the piece.

I position myself so that I am viewing the cutting process from directly above. This way I can see the end of the bolt, the line going down the top of the bolt down the side, it's on the blade and then it's just splashing up on to the saw. What the laser line does is show me just where the saw is going to cut. There is no guess work so I can more accurately get on the quarter.

So I line up the first cut to true up a face. Then I make the second cut. I cut out wedges because I basically like the appearance of silk, and also because if you're right on the quarter you can isolate a pin knot in a 1/4" or 1/2" section. If you are sawing 10 degrees off quarter a tiny pin knot can ruin an inch and a half of a nearly perfect billet.

"If you are sawing 10 degrees off quarter a tiny pin knot can ruin an inch and a half of a nearly perfect billet."

So after I've cut a face, an L-shaped guide rests against the side of the block and it's exactly parallel to the travel of the carriage, exactly parallel to the blade and it's at a fixed distance, such that this distance is 2 or in some cases 3 tops wide.

Here it's an inch and a half at 9" height above the carriage. So if I flip that down, it'll be an inch. Depending on how big the tree is, I can stay on the quarter adequately. If it's over a 4' tree or if the tree has a flat side, I can stay on the quarter and cut wedges that would be three tops wide. If not I cut two top wedges.

So a series of wedges is cut from a block or "bolt". The split line is on the bottom of the wedge nearest the bark. That's the part that will, in my mind, be the seam. So there's no run out at all on the bottom edge. The run out is doubled on the top edge. So that's going to be on the outside of the guitar, concentrated in the lower bout where it is least important.

"I figure if there's any place on the guitar that you want the fibres to be as close to parallel to the surface as they can be, it's at the seam."

I do this because I hate to see dual light refraction in a book match, caused by the angle that occurs when you're using wood that's twisted. The Spaniards call it something like black and white. I figure if there's any place on the guitar that you want the fibres to be as close to parallel to the surface as they can be, it's at the seam.

Secondly, when you're cutting blocks, the outside of the tree has more recent growth. Most decay takes place from the inside and works to the outside. Typically there are all sorts of graduations between wood being unsound and perfectly sound. I always test blocks when I split them. I peel fibres off with my fingers to see if the wood is sound; I split off a little piece, break it to see if it's brash or if it tears, but even within that range, the outside is typically better. It's my theory that the wood that is on the seam is what you want to be the soundest.

After I've sawn the wedges, I edge them using another laser on the table saw. I try to edge them as close to a grain line as I can. But I'm not looking at the face of the board so I may be off a little. I'm usually within a 1/8" and often better than that. So I'll cut that edge using the laser as a guide to show me where the saw's going to cut. Of course I don't have my safety guard on it at this moment; it's always there otherwise though (actually it is).

I use a destaco clamp that presses the block forward against a #10 wood screw. After I've cut the edge which will be the seam, I flip the block around and I flip a fixture down into place which gives me whatever width I'm cutting for. (demonstrates) In Sitka I'm typically cutting at a fat 9" so that it'll shrink to 9". For classical I might cut it at 8 1/4" or close to that. The laser just shows me where I'm going to cut. I don't pay critical attention to it for this cut.

Q: Where is the laser?

Steve: It's behind where I stand when I'm running the table saw. It's above and behind me.

Q: The light can go around the blade.

Steve: Yes. It's above the blade enough so that it's shining down on it. It is behind but it's high enough up near the ceiling.

Q: What did you pay for the laser?

Steve: The lasers retail new for $900 but get discounted to about $750. You can buy them used for $350 and they have a tremendous life (like 20,000 hours) so for the types of things most of us do, a used laser is fine.

Q: Are there any particular health hazards that you know of in using the laser the way you do and what kind of precautions do you take?

Steve: The research I've done is minimal, I've talked to the 8 or so vendors in the Portland area who sell them. They get nervous and say "ah, ah, ah". What else are they going to say? The lasers do come in different classes. Very low power lasers are essentially harmless, like the kind at checkout counters that you can look right at it and it doesn't hurt you. The beam is spread out into a line, they do it by shooting it through a one millimeter diameter glass dowel and that's what spreads it into a line and the energy is so dissipated at that time that it's essentially harmless, particularly if it's a low power laser to begin with. The ones I use are very low power, about 5 milli-watts.

After cutting, I put the wedges up on sticks to dry. Most of the wedges are not very wedge shaped. After I've air dried the wedge shaped pieces to 14%, I bring them inside, joint the face, typically taking off about .020" just to smooth it up and to make sure it's flat. This also helps me see what's going on with the wood during sorting and inspection. I mark out the tops with a series of "V's" in a fashion prevents them from being mixed up, and then I resaw them. The "V-shaped" lines on the edge of the sets are there so that you can maintain the order of the pieces as

Completed hand split bolts or blocks are bundled outside awaiting the various sawing and resawing processes that produce matched tops.

they come off the saw. If you see how the lines are oriented, you can fit the flitch back together like a jig saw puzzle and keep the book matching in their correct sequence.

To resaw, I hand feed against a fence using the same saw. I make a series of cuts to the wedge. The leftover triangular piece to the right is actually wide enough to be a violin but I have stacks of violin wood, so that becomes brace wood. I also cut brace wood from scraps or pieces that have knots in them.

After I saw them I put them on sticks. I place about 150 sets to a stack and I can wheel those stacks around. If the wood is fairly dry, which I prefer it to be, then I move it right into my drying room, then I'll lower the humidity gradually to 40% and then I'll raise the temperature to 85°-90°F, put some fans on it and it comes down in a day usually to 7 to 10% if it's spruce. It takes a little longer if its cedar. I just keep it in there until the water stops coming out of my Sears dehumidifier.

Some of the tops I cut come from the old growth forests in the state of Washington. Almost all of the private lands (like 99%) have been logged off of all the old growth. The old growth that remains is on public lands, state lands, largely forest service; in Oregon some Bureau of Land Management property. There's approximately 10% of the original old growth left. Very little of that is spruce though. My "back yard" adjoins Forest Service land, public land. The Forest Service likes to build roads. They've got 360,000 miles of logging roads in North America.

Q: How do you get rights to get the spruce and cedar out?

Steve: I bid on them in Oregon and Washington. Much of the old growth that does remain is fragmented in small blocks. The forest service is charged with sustaining the yield of timber over the long term and they define it in different ways to meet that goal. Currently their definition is more like sustaining fibre than sustaining timber.

I pull some trees out of southeast Alaska. You see a lot of clear cutting up there. Some of the old trees are huge. I saw one that had 35,000 board feet in it. A lot of the best logs in the northwest go to export. You can't export round logs from the National Forest in Oregon and Washington (except Port Orford cedar) so it's largely private logs. In Southeast Alaska you can export round logs of red cedar and Alaska cedar but any other woods have to be canted.

Sitka spruce grows on a very narrow strip along the north pacific coast. It's often called tide-water spruce. Some of the most magnificent stands grew along the Columbia river and in this part of Washington. What's left of the Sitka in Washington is pretty fragmented. About 2/3 of the spruce that comes out of the states comes from Alaska and is going to disappear quickly because there just isn't any left to speak of outside of the parks in Washington. Vancouver Island has some great stands of Sitka as well. About 75% of that has been clear cut. The Canadians generally are much less concerned with environmental protection or sustained yield. There isn't any mechanism in place for public input or appeals of National Forest plans. They have a whole different system and they are way behind in their planting. They are also way ahead in their cutting. The Queen Charlotte Islands also have some very nice spruce.

There's a bit of spruce left on the Oregon coast here and there. A lot of this region burned 120-160 years ago, so there's a lot of spruce that isn't old growth there.

The best stands of spruce in the lower 48 states are along the Hoh, Queets, and Quinault rivers of the Olympic peninsula. I

live toward the bottom of the peninsula. Along the Ho River in Washington the spruce grows further up on the hills, or further up the sides of the valley than it does in Alaska. If you want to go see spruce in its native state, that's probably the best place. You can't cut any though and it's probably just as well. Spruce often starts to grow on rotting logs. In the Hoh rain forest in north west section of Washington, you can often see rows or colonnades of spruce trees. They typically get their start on one log that eventually rots out from underneath.

The Quinault River is a little bit south, looking into the park also. The forest is quite open under the canopy. There's a lot of ground cover but not much brush. There the trees don't go that far up the hill but it's an ideal environment for spruce along the shore.

"The trees up in Alaska don't grow very fast, which is part of the reason they are so good for instrument wood."

The biggest spruce in the lower 48 states is 51 feet in girth. It's quite lumpy, so there aren't many guitar tops in it. The top is out of it also. It has an impressive bowl (trunk) but it's not a beautiful tree.

Alaskan spruce grows primarily in the Tongass National forest up through the Chugach Natural Forest. The Tongass has quite a bit of land area, but most of it is scrubby timber and ice. A percentage of the spruce is growing in low volume stands, under 15,000 board feet per acre. Very little is actually in the high volume stands where the spruce prefers to grow... along the shores in the river bottoms. Roughly half of the best spruce has been cut since 1950 and the rest on the slate to be cut in the next few decades.

Forests in the Pacific northwest are typically replanted to replace the old growth that's been cut. It is usually quote-unquote, "genetically improved", so that it grows rapidly and gives a lot of high volume fibre and a lot of flake board.

Clear cutting in southeast Alaska often produces a vigorous regeneration of young spruce. They don't replant there because there are fewer species. The brush doesn't come back to overwhelm the young trees, so they usually leave a strip of trees that can seed the area that's been logged.

"It's very sad to me that the forests aren't being managed for production of quality wood."

The trees up in Alaska don't grow very fast, which is part of the reason they are so good for instrument wood. The young trees (under 100 tears) are knotty and quite small. The forest service intends to cut on a hundred year rotation so the new growth trees probably won't produce much wood large enough for instruments.

That's in contrast to the existing old growth trees that may well be 500 to 700 years old. It's very sad to me that the forests aren't being managed for production of quality wood. And one of the things I do when I buy trees or logs, is to always take samples of guitar tops around to show people how slow the wood grows, to talk about the quality of the wood, the quality that's necessary to make a guitar, to make a cello. And people are really interested. The foresters have generally been fed the tree farm ideology, where trees are like a row crop, plant 'em, cut 'em, plant 'em, cut 'em and they don't realize that after the third cutting things slow down a lot and that there is a need, and there are specific uses for old growth. One of the things I do when I talk to forest service types, (Bureau of Land Management types) is to talk about the importance of actually doing a sustained yield for quality wood. A 100 year rotation is probably no good, A minimum of a 250 year rotation with no clear cutting would be much better. Selective tree harvest of blow downs or trees that have passed their greatest annual growth increments; that's an answer. People are really receptive to that, because they don't hear that kind of thing much. I talked with the Deputy Supervisor of the Tongass one day when she came out to see some trees we were working on, and she was real interested. She said "We aren't managing for this."

I think that A.S.I.A. should put together some kind of a position statement on the importance of preserving or managing some forests for the type of wood that's necessary for instruments. I throw that out to you as a challenge. That's all! (applause)

Steve McMinn logs spruce for musical instuments in the pacific northwest.

JOBS OFFERED

WARMOTH GUITAR PRODUCTS

Warmoth Guitar Products has a job opening for knowledgeable manufacturing help. Furniture background is desirable. Must be experienced with production machinery set-up and maintenance. Must understand wood as a medium, be reliable and self-motivated. Send resume, references and wage requirements to:

Warmoth Guitar Products
6424 112th Street East
Puyallup, WA 98373
(206) 845-0403

SOUTH PLAINS COLLEGE

South Plains College, a public two-year institution supported by state and local funds, is currently seeking an individual to teach String and Fretted Instrument Repair. Salary will be commensurate with education and experience. The initial contract will be for nine months. The position becomes available as of August 16th, 1991. Bachelor's degree or equivalent experience required, Master's degree preferred. Experience should include extensive string and fretted instrument construction and repair. Applicant must be capable of museum quality restoration. Personal interviews will be scheduled with selected applicants. Submit SPC application, official transcript and resumè ASAP to:

John Hartin; South Plains College
1401 College Avenue; Box 53
Levelland, TX 79336
(806) 894-9611 Ext. 280

EUPHONON

Walter Lipton continues his search for a skilled guitarmaker to assist him in building steel string and classical guitars, and to perform a modest amount of work at Euphonon, Co., a small mail order luthier materials supplier. He seeks a mature responsible person, college degree preferred, sufficiently skilled to construct a guitar of comparable craftsmanship to a Martin. Contact:

Euphonon, Co.
Archertown Road; Box 100
Orford, NH 03777
(603) 353-4882

BOLT GUITAR COMPANY

Wayne Bolt and **Jim Dalla Palu** are setting up to produce electric guitars and are interested in an employee that is thoroughly familiar with electric guitar making. Contact Wayne or Jim at:

Bolt Guitars
(215) 799-5231

JOBS WANTED

Kevin Raiten is an experienced woodworker and carver who is seeking a job in musical instrument making. His desire is to work making guitars and basses. To date he has little experience with instruments, aside from a sincere desire to learn. Contact:

Kevin Raiten
Box 409; Crossroad
Surry ME 04684
(207) 667-6658

Gerald A. McCollam is an aspiring luthier interested in finding an apprenticeship or job opportunity in the New York City area. He has built two steel string guitars to date. Contact:

Gerald A. McCollam
83 Canal Street
New York, NY 10002

FREE CLASSIFIEDS

Phillip Tartaglia has changed his direction from building guitars to building furniture. He called us wanting to know whether he should cut up his guitar wood for furniture. He has about 30 fairly select **German spruce bookmatched tops** that he bought from Martin. They originally came from the Levin/ Goya factory in Gütenberg, Sweden so at this point they are nicely aged. He also has about 8 **Brazilian joined backs** from pre-1965 Martin seconds. He's asking $between $30 and $40 for the tops (dependant upon quantity taken) and $50 per back for the Brazilian (no sides). Contact:

Phillip Tartaglia
RR 2
Potsdam, NY 13676
(315) 265-2693

Don Alfieri of **Alfieri Guitars** has a limited supply of German spruce tops and struts available, plus Indian rosewood and African mahogany backs and side sets, and maple billets for electric guitar bodies and necks. Contact Don at:

Alfieri Guitars
9 Oak Drive
New Hyde Park, NY 11040
(516) 437-1377

COMING EVENTS

FOLK HEAVEN ?

The North American Folk Music & Dance Alliance will present their third annual conference in Chicago, IL from January 24th through the 27th, 1991. If you make instruments that appeal to folk musicians, you might find some potential customers there. Booth space is available for exhibitors. For further information contact:

The Folk Alliance
P. O. Box 5010
Chapel Hill, NC 27514
(919) 542-3997

TRADE SHOW DATES

WINTER NAMM - ANAHEIM 1991

NAMM ANAHEIM 1991 will be held at the Anaheim Convention Center in Anaheim, CA from January 18th through the 20th, 1991.

FRANKFURT MUSIKMESSE 1991

The International **FRANKFURT MUSIKMESSE 1991** will be held in Frankfurt, Germany; March 2nd through March 6th, 1991.

A.S.I.A. & the Church of Art proudly present:

•SYMPOSIUM '91•

THE NATIONAL EXPOSITION OF STRINGED INSTRUMENT MAKING AND REPAIR

JUNE 27TH-30TH, 1991

The Morris R. Williams Center for the Arts
Lafayette College, Easton, PA

For further information contact:
A.S.I.A.
14 South Broad Street
Nazareth, PA 18064
(215) 759-7100

All A.S.I.A. members will receive discounts to Symposium '91 and will be mailed applications before March 15th, 1991.

D'AQUISTO INTERVIEW

Continued from Page 13.....

I wasn't that way when beginners came to me, and asked me all the questions they asked me. I gave them direct and straight answers, they all got honest answers. They benefited by it. All of them.

Some people have brought their first guitars to me and they ask, "what do you think of it?" with such a terrible, terrible attitude. It is almost like a gun-duel. They will be standing and waiting for me: "okay, if you're the best, let's see if you can outdraw me." [laughs] It's such a funny situation! I tell them, "well, it's a nice guitar, but you can do better than this.

"I tell them, "well, it's a nice guitar, but you can do better than this."

And they get very annoyed with me, disturbed that I have told the truth. I could lie and say, "well, it's beautiful!" but instead I will say, "its ok but it's not what it's supposed to be. It's not a musical instrument. It's too full of decoration. It's too much of the wrong things, which I used to do myself. And they will say, "well, do you think you can hire me to be your apprentice?" and I will say no, because I know darned well that their idea is to work with me so that they can benefit and then go out on their own.

That's what I find with everyone that's come to me. When I worked for D'Angelico, it wasn't with the idea that some day I was going to make my own guitars. Understand? That I was going to be D'Aquisto Making Guitars. That's why I believe in fate. I worked with him until the day he died. But if he were still alive, I'd still be working with John D'Angelico. That's the whole purpose of it. It wasn't so I could learn then say, "well, good-bye John, I'm going to start making my own guitars."

"...the good Lord had to take D'Angelico off the earth in order for me to go out and make my own instruments."

But I don't put it down, I don't say, that's not right. When the students of Amati were studying violin making, it was the same idea. They studied violin making and then they went out to make their own instruments. With me, I just stayed and the good Lord had to take D'Angelico off the earth in order for me to go out and make my own instruments. That's why I'm doing things a little different from what's supposed to be happening. I'm not an ambitious, aggressive person. I wasn't ready to go out and start my own business. I was happy and content the way I was. So when he died I went on my own. Most of these other people want to learn for the purpose of making their own instruments.

"I don't know if apprentices come to help me or to help themselves and it's very difficult."

I can agree with that—as long as you're honest about it. So when someone says "can I be your apprentice, I'd love to work with you," it puts me in a position that it's hard for me to give an answer. I don't know if apprentices come to help me or to help themselves and it's very difficult. That's why I'm working for myself. Because I can't trust them: they say, "no, I want to work for you, I'll stay with you as long as I have to stay." Then when I finally get to depend on this person, they won't be there any more. They'll learn all my skills, everything that I know, and it's just for the taking. That's why I'll tell you what you can do, but as far as somebody working for me, I'm very afraid of it. Very afraid of it.

YURI: I understand.

D'AQUISTO: But I could use the help! You see, things are getting more difficult for me. I'm getting older, naturally, I can't move around the way I was moving around when I was in my twenties and thirties—even in my forties. I'm in my fifties now. I'm fifty-four years old and I feel tired. I can't work full days. I can't do everything the same. It would be very nice to have an apprentice or someone working for me. But putting myself in their position,

"That's why I got along so well with D'Angelico... I wasn't aggressive at all, and he liked that very much."

it's hard for them because they would love to make these for themselves. And they're justified, they're right in saying "I want to make my own guitars... why do I have to help D'Aquisto?" It's a very funny situation.

YURI: If I were your apprentice I would stay with you [chuckles].

D'AQUISTO: [laughing] But it's difficult. It's hard to put a person in that position.

YURI: I think it depends on the person...

D'AQUISTO: You're right. That's why I got along so well with D'Angelico. I wasn't an aggressive person, I wasn't aggressive at all, and he liked that very much. And it was almost like he had no

Continued on Page 22.....

family: he had brothers, he had a sister, but he wasn't married. He was a bachelor. He had no family at all. So, we were very close. Almost like a father and son. And we had good times, all day. We worked very happy, during the day, very happy. The music, everything was beautiful.

YURI: To me, your apprentice has to be part of your attitude about music and instruments and to be a part of your entire life. No?

D'AQUISTO: Right, right. For the guitars but also it has to be a mixture of everything. Very close. Music, mentality, emotion, everything.

"If you can make a guitar, you can make anything."

YURI: Not everybody is honored, because your fame is some kind of promotion for them.

D'AQUISTO: That's right. It would take a very strong person to be an apprentice with me. Very strong. Emotionally and mentally. Because they'd have a lot of things to have to cope with. When D'Angelico died, it was very hard for me to break the ties with that name. And it's still constantly, "oh you worked with D'Angelico." It's always that way. It was very hard for me to break into my own, into the mountain of my own. Now I'm D'Aquisto. So it would be very hard for an apprentice to work and break away from the ties of D'Aquisto. After a while it would become very frustrating. I know, I went through all that. I know it. Very much.

But sometimes I feel that people don't have to be simply making guitars. It could be a very young person, very gifted. You see, it wasn't the idea that I wanted to make guitars. It had nothing to do with it. This was a kind of a field, or craft, in which I felt I can use my hands, and I don't have to worry about school work, academics. Now I can just use my mentality for the craft of it. If it was guitars, if it was being a tailor, it was what I wanted to do. Now I was using my hands. So it would have to be a young person that couldn't handle the outside world. Someone that couldn't cope academically. But craftsmanship, the hands, the mentality, they would have to want that. That's the part that would be very important. If you can make a guitar, you can make anything. That's the kind of person that would be an apprentice with me; young enough that they would grow up with this art form like I did, at age seventeen, growing up with it into maturity and without the thought of making their own guitars. When a person reaches the age of thirty, they're automatically thinking of themselves, which is important. But to a young person it's not important. They would come every day to help, to be an apprentice and not even understand what that means. It just means, to help me. And that's probably never going to happen, who knows if that's ever going to happen? I don't know.

YURI: It's a pity I'm not young enough.

D'AQUISTO: [laughs] I get so many people calling now, it's unbelievable. Let's go out to the shop. Where are my keys? •

Part Three of Yuri Dmitrivsky's interview with James D'Aquisto will appear in a subsequent issue of GUITARMAKER.

MEMBER'S SPOTLIGHT

Continued from Page 7...

JAMES JONES

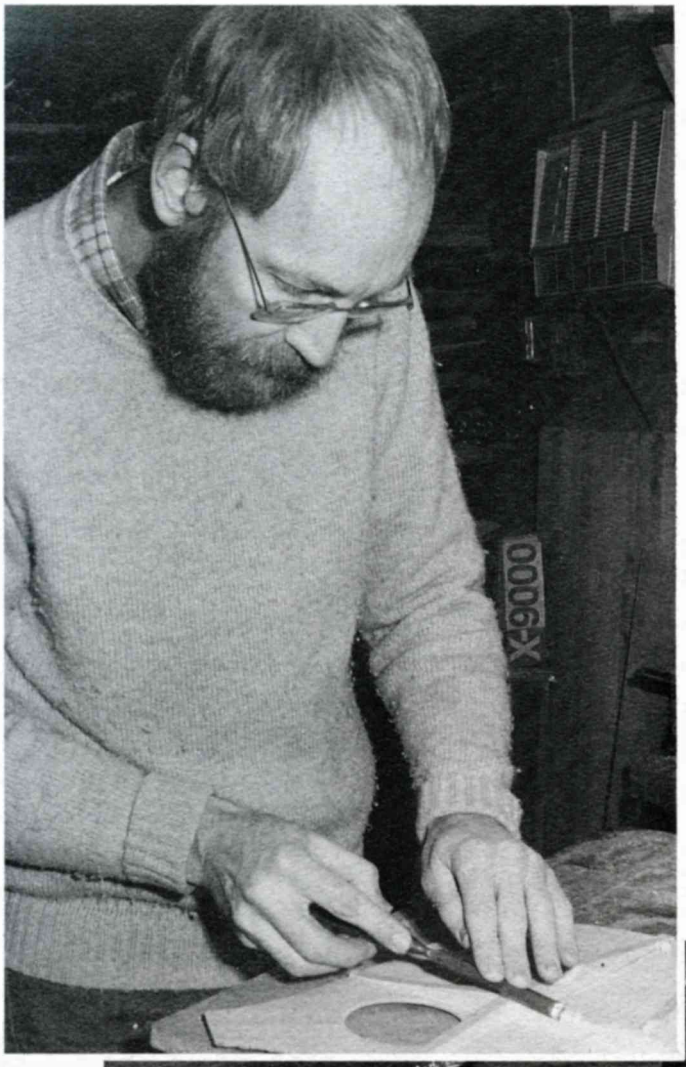
James Jones has been building hammered dulcimers and related stringed instruments for nearly twelve years. Like many crafts people, James learned instrument making almost by accident. After earning a bachelors degree in biology from Beloit College, he missed a chance to play pro basketball for the Dallas Mavericks because of another draft... by the US Army.

After service, he traveled and worked, ending up in Boston where he pursued a Masters of Fine Arts degree at Massachusetts College of Art. James became involved with a workshop program in a half-way house, which brought his art abilities to practical use. While in Boston, he also became proficient at the fiddle and enrolled in a workshop with a local woodworking master. He then felt ready to pursue a career in instrument making. He and his wife Karen, a weaving artist, moved to Bedford, Va. where they set up their respective studios. After their first child was born, space got tight and James bought an old leaky trailer to work in.

Now, with the help of a friend, James has a completed a new shop where he builds hammered dulcimers, aeolian wind harps, Irish bouzoukis, bodrans, bowed psaltries, guitars, mandolins, mountain dulcimers, violins, octave zithers, kalimbas, and African slit drums.

Though most of his time is taken up by instrument making and his family, James finds time to pursue his fiddle playing occasionally with Tim and Ann Sauls. This threesome was the core of the Roanoke based Hawthorne, a Scots-Irish band that has played in the area for years.

James' ability as a musician has influenced his skill as an instrument builder, though he doesn't play either the hammer dulcimer or the octave mandolin. "I simply try to make an instrument sound good and be aesthetically pleasing", he says. " I like things to have uniqueness. I don't like everything to be the same... visually or tonally. The most important ingredient in building is the ultimate user... the musician. A musical instrument is a tool for expression. So the player will ultimately decide if my



instruments are the appropriate tools that best express the sound they want."

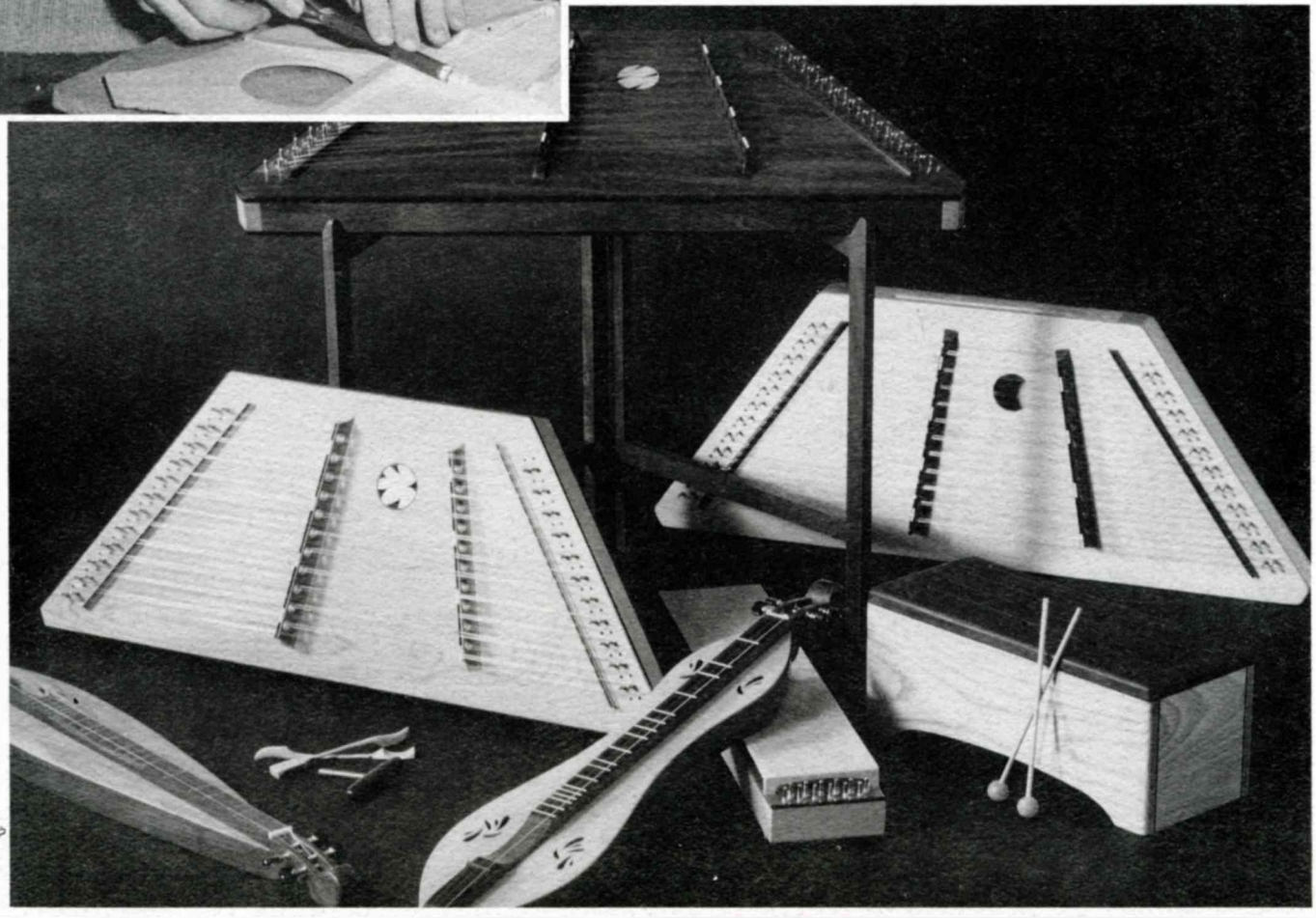
"I attended a week-long workshop with classical guitar builder Richard Schneider who told a story about a great violin player. The musician was asked to play two different violins, one an exceptional instrument, the other a student model Chinese fiddle. Afterwards the audience could not tell the difference because of what the player brought to each instrument. The violinist said he had to work like crazy to make the cheap violin sound good. With the other, he could just relax."

"That's what I try to do. Find the best people to access my instruments and improve the sound upon their judgment."

Aside from the artistry and uniqueness of James instruments, many key players appreciate his friendliness and accessibility. He markets his instruments at crafts fairs and at The Fret Mill in Roanoke where he also does some repair work. Ever since two positive reviews in Frets Magazine were published, his business has grown steadily. Players like Lucille Reilly, Anna Erb, Wes Chappell and John McCutcheon are among the long list of musicians that prize James' instruments. To inquire about Jones' instruments, contact:

James Jones
Rte. 5; Box 256
Bedford, VA 24523
(703) 586-6319

At left, James Jones carves the X-brace on one of his octave mandolins. Below is an assortment of James' craftsmanship, including three different models of hammered dulcimers, a tongue drum, two styles of mountain dulcimers,, an assortment of hand made hammers, and a bowed psaltrey.



See Jobs listing for a great opportunity with Warmoth!

MEMBER'S SPOTLIGHT

Continued from Page 23...

T. J. THOMPSON

If you read last issue you found out that T. J. Thompson, head repair person for Elderly Instruments, has joined forces with his old friend Eric Schoenberg of Schoenberg Guitars. Eric and T. J. will continue the evolution of the Schoenberg Soloist Guitars which are fabricated in collaboration with the Martin Guitar Co..

T. J. will still fulfill all of his duties at Elderly. Below, T. J. is pictured with two of his latest creations:

ERMANNO CHIAVI

Dear Friends,

First of all I would like to say how interesting I find your Newsletter and how much I find it of important value. As you suggested, I a sending you some information about my work and myself.

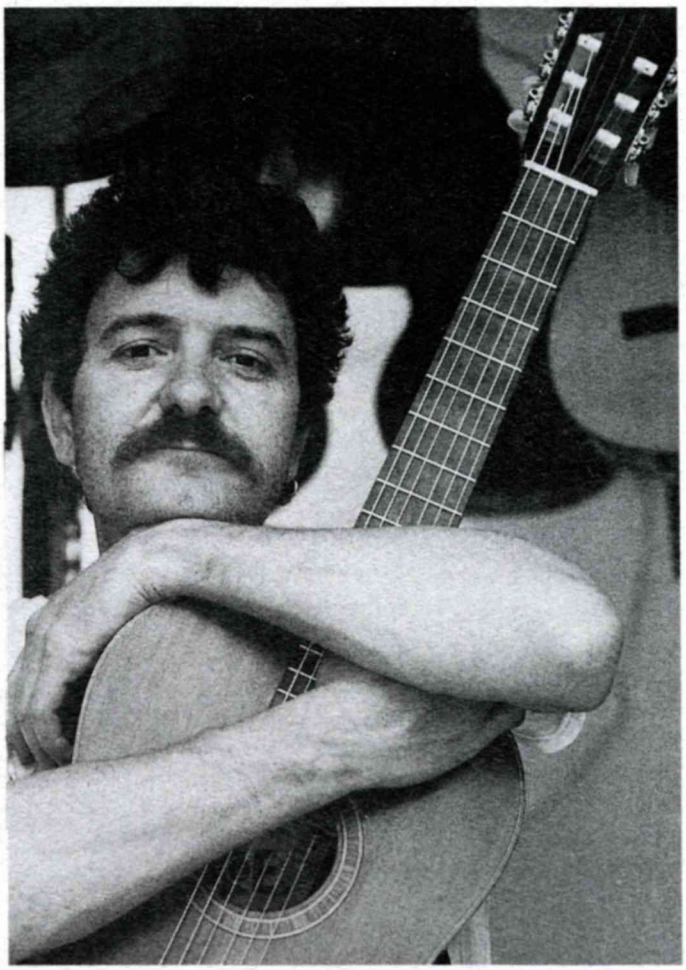
My name is Ermanno Chiavi and I was born in 1956 in Poschiavo (the Italian part of Switzerland). The fields of profession in which I have been educated and have worked include: elementary school teacher, taxi driver, "Kulturanimator", guitar player and carpenter.

I completed my apprenticeship as guitar maker in Frankfurt by guitar maker master Mrs. Brunswicker, and by guitar maker master Hannabach in Bubenreuth, Germany. My first workshop was located in Wolfshausen and since 1986, my workshop is in Zürich, Badenerstrasse 285.

I only build classical guitars. I build a Children's guitar which is available in scale lengths of 52, 58, or 60 centimeters. These are made in the manner of the German building construction (neck-body joint and head-neck shaft joint).

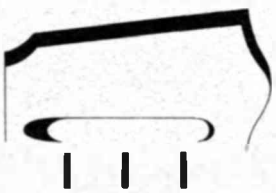
My Student Model is available in scale lengths of 63 or 65 centimeters. The same materials are used as for the children's guitars. If requested, the body can be made in Indian rosewood or flamed maple, and the fingerboard can be made of ebony.

My Master Concert Guitars are made in the manner of Spanish building construction. (neck-body joint as by Torres). Scale lengths are variable and adjusted to request. The head-neck joint is in the German manner of construction (splice joint). Soundboards are made of Swiss spruce or cedar. The body is offered in flamed maple, birds-eye maple, or Brazilian rosewood. Machine heads are "Roger" or "Reischel".



Swiss master luthier Ermanno Chiavi embraces his true passion.

All instruments are individually hand made and hand polished. I do repairs on all varieties of plucked musical instruments, as well as restoration of historical lutes and guitars. I look forward to hearing from you in your next newsletter:



Ermanno Chiavi
"Gitarrenbau"
Badenerstrasser 285
CH-8003 Zürich
Switzerland
Phone 01 451 20 34

We are interested in you. Please send your biography with photos of yourself, your shop, or recent work to ASIA Member's Spotlight.

A.S.I.A. AD RATES

Ad rates and sizes for inclusion in A.S.I.A. publications have been established. Members in good standing may deduct 20% (x .8) from the rates listed below. You may submit your printer ready artwork (or calling cards) to "A.S.I.A. Ads". We will provide assistance in preparing members ads at no extra charge. Sizes are as follows:

Full Page:	7.25" x 9.75"	$200.00
One/Half Page:	3.5" x 9.75" or 7.25" x 4.25"	$105.00
One/Quarter Page:	3.5" x 4.75" vertical only	$55.00
One/Eighth Page:	3.5" x 2.25" horizontal only	$30.00

ASIA BUSINESS

Dear Fellow Board Members and Members:

I am concerned that as a board, we take some positive action other than the publication of our newsletter for our members. The one which seems most do-able to me would be to offer some sort of a ASIA endorsement or accreditation. Because of the difficulty of testing people in a real time situation, Symposium '91 would be our best chance of implimenting this. We have six months to plan and that should be enough time. We obviously cannot do a wide range of testing, but we should be able to test for knowledge of guitar setup or the ability to install and dress frets. I believe the tests should be both physical and written. A testing fee could be used to pay for materials required and for a certificate of completion. I also believe this would encourage people to join ASIA and to attend Symposium.

Another item we have talked about is the offering of one page tech sheets with often needed information. The idea is a quick reference sheet of lasting value. If we could all think about a short list of topics, we could recruit several people for help in producing the information on each. I believe the board should approve the information, therefore we need to start soon. Bill Cumpiano has already started on a list of standard tunings for an assortment of stringed instruments. We should also develop a list of skills for which it would be possible to test. We must start somewhere and soon if we hope to accomplish anything tangible this coming year. My best regards,

Jim Rickard; President of the A.S.I.A. Board of Directors

PS My heart had been out of tune and not holding the beat. I am happy to report that all is well now with no complication and my rhythm is rock solid.

A Brief Report From The Editor

The response to the renewal of membership has been extremely supportive. Thanks to those of you who have renewed and for those who haven't, please help us to keep this evolution alive.

The recent change to recycled paper has been very well received by the membership. Thank you for your many supportive letters.

I filed the appropriate application with the postal service for a permit which would grant the association the use of special third class bulk mailing rates for nonprofit organizations. I regret that we have been denied this status due to the fact that our statement of purpose provides for "assistance in marketing and promotion" for our membership. We will, as a result, utilize standard third class rates which at still quite reasonable.

The bank account first opened by Michael Dresdner has been gradually phased out and a new interest bearing checking account has been established closer to the current official association address.

I would like to direct a special thanks to those members who are contributing to the publication in the form of articles, photographs, and transcription assistance. You are making my job much easier, and the quality of the publication has benefited greatly from your help. Has anyone out there noticed ?

Please begin spreading the word about Symposium '91. There is plenty of time to plan in advance to attend. Makers, repair people, store owners, collectors, authors, suppliers, enthusiasts, and instrument lovers are all invited and strongly encouraged to attend.

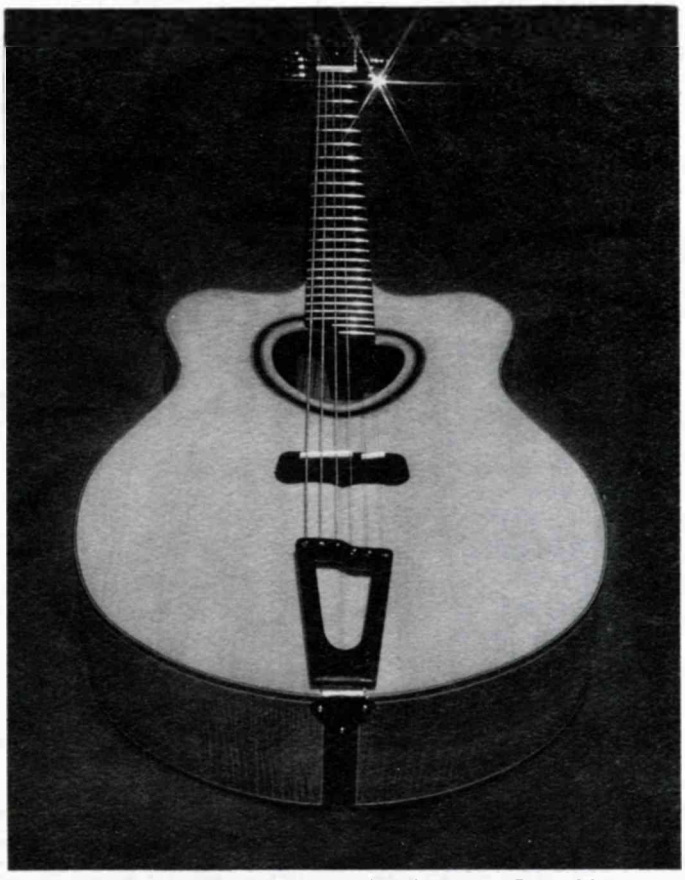
Our income is currently small compared to our expenditures. As a startup association, our first two years were greatly aided by the initial support of the founding "charter" members, as well as the income derived from the Symposium '89 Benefit Auction. We have used that money to develop the integrity and professionalism of the newsletter, which has evolved into what many feel is a viable and interesting journal, unique in its approach to our field.

Our fiscal year end financial statement is available to any member in good standing. That statement reveals that in our formative year we have spent nearly three dollars for every one we take in with our membership fees. The statement however, does not account for the renewal membership drive which began with Issue #8 (mailed well after the fiscal year end). It also does not take into account the fact that no Symposium was held this year and that an effective membership drive was not undertaken pending our third class bulk nonprofit postal status. There is enough money in the A.S.I.A. account currently, to publish two or three more substantial newsletters. Membership is expected to double during the next eight months, in part due to the promotional inertia of Symposium '91, and the Symposium Benefit Auction should go a long way to boost our future potential. For these combined reasons, I feel quite comfortable with our current situation and I look forward to our association's substantial growth in the future. Most sincerely,

Dick Boak; Editor & Executive Director

RICHARD MERMER

In Issue #9, **Richard Mermer** wrote an informative article entitled **Environmental Control In A Small Shop**. With the article he also sent a short bio, which we used as his by-line, as well as some photos of some of his guitar designs, but we simply ran out of room. Here's one of Richard's contemporary designs:



The upper bout of this unusual Richard Mermer flamed koa guitar has been reduced (cutaways), while neck/scale placement remains the same, resulting in a neck/body joint at the 16th fret.

THE LIGHTER SIDE

NOTHING FREE

by dick boak

I'd like to save you a great deal of embarrassment and money by relating an innocent but not so small blunder of mine. In one of my past jobs, I was the manager of Martin's wood products division and I used to get a lot of phone calls from people who wanted to sell me large quantities of exotic wood. It was always nice to find out exactly what these people had to sell and at what price, even if I wasn't really interested in buying any of their wood at the time. After all, it pays to know where all of these woods are from so that if a large inquiry should come in, etc.... It's especially nice to get free index card size samples of the various species that various places carry, for reference or for the ever expanding collection of wood samples that I prize in a very neurotic fashion.

I received such a call one day from Rio de Janeiro, Brazil of all places. The unusual thing was that this fellow spoke perfect English; no accent. We had a great talk at considerable expense to him I suppose. I found out that he and I had a common friend, and that he was from a small nearby town in Pennsylvania. He worked for a wholesale wood distributor in Brazil, and he had seen our ad in Fine Woodworking Magazine. I asked him about Brazilian rosewood and explained our desire to acquire clear high quality billets at a reasonable cost. Ha! I also asked him about Kingwood, Spanish Ceder, Jatoba, and many other Brazilian species that I was remotely familiar with.

Well... "Dean" and I became great friends. We sent a few telex messages back and forth, and though I really wasn't interested in anything but "Dalbergia Nigra", I led him on a bit and finally asked if he might send some "free" samples for me and my co-workers to look over. He telexed me right back to let me know that my little box of twenty samples was on the way at "NO CHARGE". I was thrilled.

Arrive they did in relatively record time, since Dean had sent them by air. I'm sure it cost him a few pesos. I loved the samples, though I'm convinced one of them gave me a rare skin rash that kept me itching for the better part of a month until I paid a small fortune to the local dermatologist to cure me with ultra violet rays. That wasn't the worst of it!

A few days after the samples had arrived, the head of Martin's shipping department called me. He wanted to know why I hadn't filled out a receiving report for the samples, as that is standard company procedure with other orders. I told him rather indignantly that the small box contained samples at no charge, and since there would be no invoicing involved, I felt it was a ridiculous waste of company time and paper to fill out a receiver.

Our shipping manager then informed me that the brokerage importation fee for my tiny two pound package was over a hundred dollars, and that there was no such thing as "free" if it was from anywhere outside the US.

My jaw dropped. I couldn't believe it. Some little guy in an air conditioned office got a hundred bucks to sign a couple of customs permits. Is the whole world corrupt? Did Dean set me up for this? Will I ever be able to hold my head up again? Will the shipping manager talk about me behind my back to my fellow workers? Is this rash contagious?

Illustration by John Bianchi

The saddest part is that his sample of Dalbergia Nigra was a complete bust. It was some other off species which is so typical, though I'm sure Dean thought it was the real thing. He'll probably sell a thousand feet to some poor fool for nine million pesos, and the poor jerk will itch for two months and not know why, and his wife will probably leave him in a state of complete bankruptcy.

I guess it's true. Never look a gift horse in the mouth. Never take a wooden nickel. Nothing is free in this world except for this advice, and wait until you get my brokerage bill!

This brief piece first appeared in ***American Woodworker*** *Magazine published by Rodale Press; reprinted with permission.*

GUITAR THROWING CONTEST !

Fred Zeagler of Zeagler's Music in Baton Rouge, LA held the first ever, to our knowledge, "US Guitar Throwing Contest". Contestants paid $10 to enter, which entitled them to three throws in either the electric or acoustic division. Apparently electrics travel further than acoustics. The longest distance was 89 feet for the pathetic mass of splinters and dangling resistors that won first prize (a new guitar of all things) followed by a healthy 56 feet for the poor imported acoustic mish-mash that sailed into the record books. No vintage pieces were thrown to date !

The promotion evolved out of what Fred refers to as "Drum Wars" (use your imagination). A.S.I.A. members will have the opportunity to challenge what we're now calling "Zeagler's Follys" at this summer's Symposium '91, as these are being added to the other questionable events that have graced prior Symposiums, including the guitar restringing contest and of course the now infamous mudslide bob-sled competition.

So you are urged to begin practicing in the back yard. We suggest old wheel rims to build up your stamina and technique !

MEMBERSHIP APPLICATION

The Association Of Stringed Instrument Artisans
14 South Broad Street
Nazareth, PA 18064

The Association Of Stringed Instrument Artisans, a non-profit trade organization under the provisions of Section 501 (c) (06) of the Internal Revenue Code, was established in 1988 to help provide a sense of community and professionalism to the field of stringed instrument making and repair. The goals of the association provide for but are not limited to: the establishment of a comprehensive database of resources, supplies and technical information; a means of providing multi-level education within the profession; assistance in marketing and promotion; health and insurance packages at group rates; a repair or service certification; an advertiser's marketplace; and the publication of informative newsletters and journals.

Initial Membership is $50.00
This includes a one-time $15.00 processing fee.
Annual renewal membership is $35.00
Please make checks payable to: "A.S.I.A."
Donations and subscriptions are not deductable as charitable contributions.

Please complete all of the information below:

Name _____

Address _____

City _____ **State** _____ **Zip** _____

Phone (home) _____ **Phone (work)** _____

Business Name (if any): _____

Please check all appropriate boxes below:

I am a:
- ❒ Builder
- ❒ Repairer
- ❒ Designer
- ❒ Author
- ❒ Vendor
- ❒ Music Store
- ❒ Manufacturer
- ❒ Consultant
- ❒ Musician
- ❒ Enthusiast
- ❒ Other: _____

of:

I am involved with:
- ❒ Acoustic guitars
- ❒ Electric guitars
- ❒ Basses
- ❒ Mandolins
- ❒ Banjos
- ❒ Violins
- ❒ Dulcimers
- ❒ Harps
- ❒ Early instruments
- ❒ Accessories
- ❒ Other: _____

I am a:
- ❒ Full Time Artisan
- ❒ Part Time Artisan
- ❒ Hobbiest

I derive _____% of my income from this field.

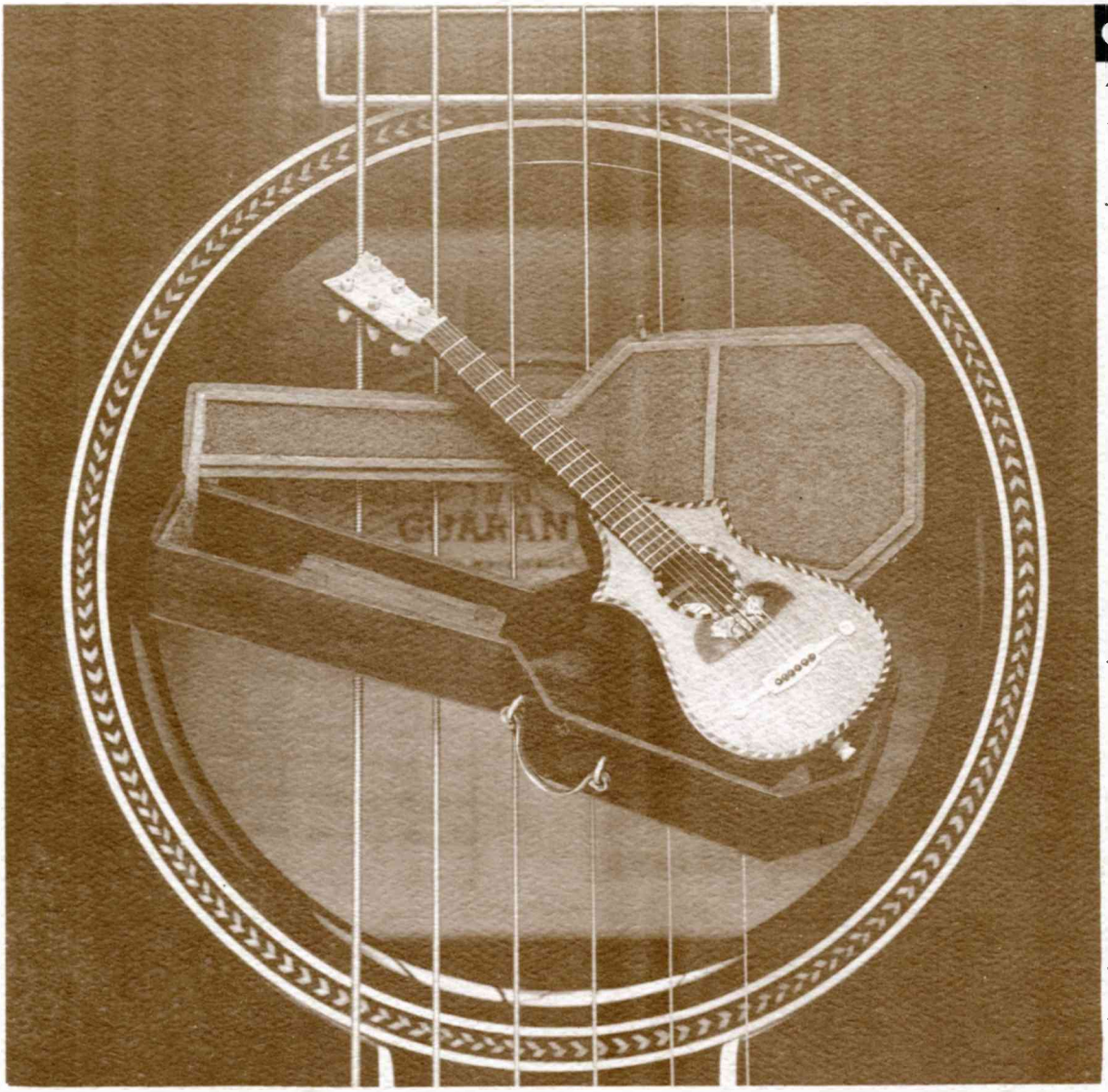
For A. S. I. A. Office use only:	

Other affiliations include: _____
List names of partners, music stores, companies, with which you are or have been directly associated

Comments: _____

Referred by: _____

this application may be photocopied



MINIATURE GUITAR
by Robert Steinegger
Photo by Tom Erlewine
Don't let the scale trick you. This baby guitar has been painstakingly reproduced to scale and photographed atop the strings and soundhole of an actual size Steinegger acoustic.

"If I should fall in storm or slumber
Please don't turn me into lumber
I'd rather be a Louisville Slugger
Swingin' for the seats, I'm gonna reach..."

From **When I Grow Up To Be A Tree**
by John Gorka

COMING SOON

The Fine Art Of
Installing Thinline Pickups
by Roger Sadowsky

Jim Rickard's
Luthier's Examination

Grit Laskin's
Guitar Armrest Design

Abraham Wechter's
Rear Block Access Window
And Electronics Panel

Bart Reiter's
Pearl Engraving Techniques
And Thoughts About
Banjo Maintenance

Duane Waterman
On Pore Filling

John Kitakis
Consistent Repair Pricing

Steve Mosher
On Graphite For Necks

Ray Mercer
Recent Projects
News From New Zealand

An Interview With
Classical Maker
John Gilbert

Jim Rickard's
Thickness Analysis
Of A Martin D-45 Top

Thomas Knatt
On The Relationship Of
Quality In Guitars
To Neck Angle

and much more.....

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