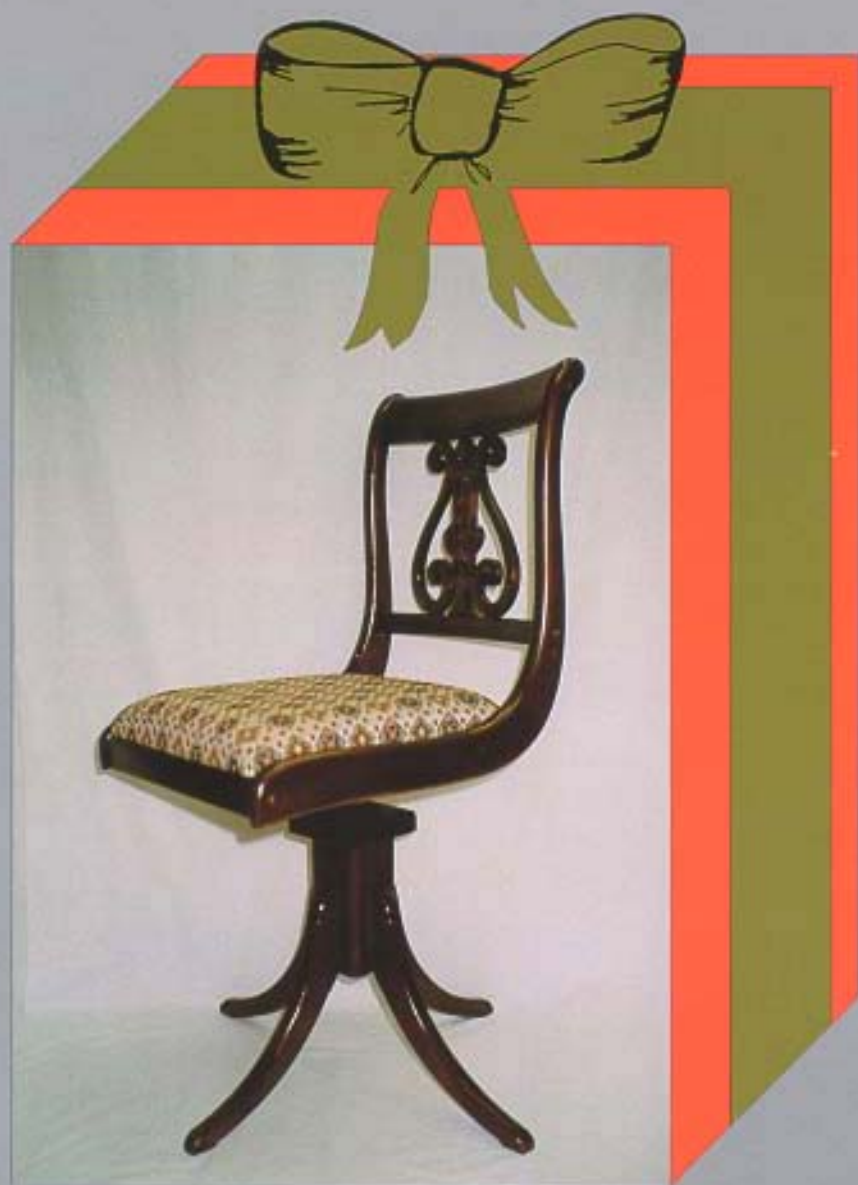


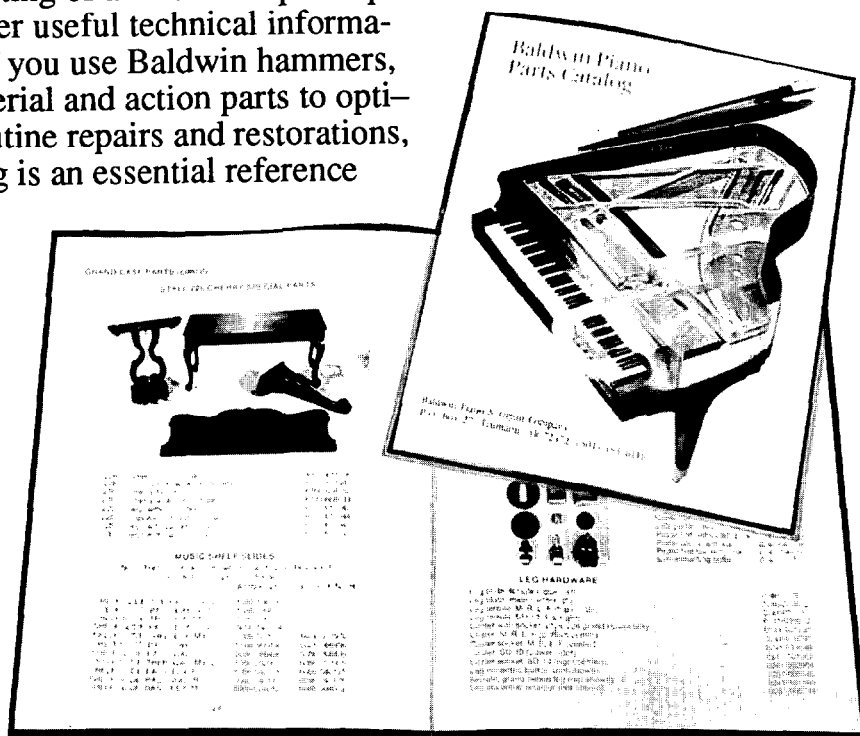
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**Journal**  
December 1992



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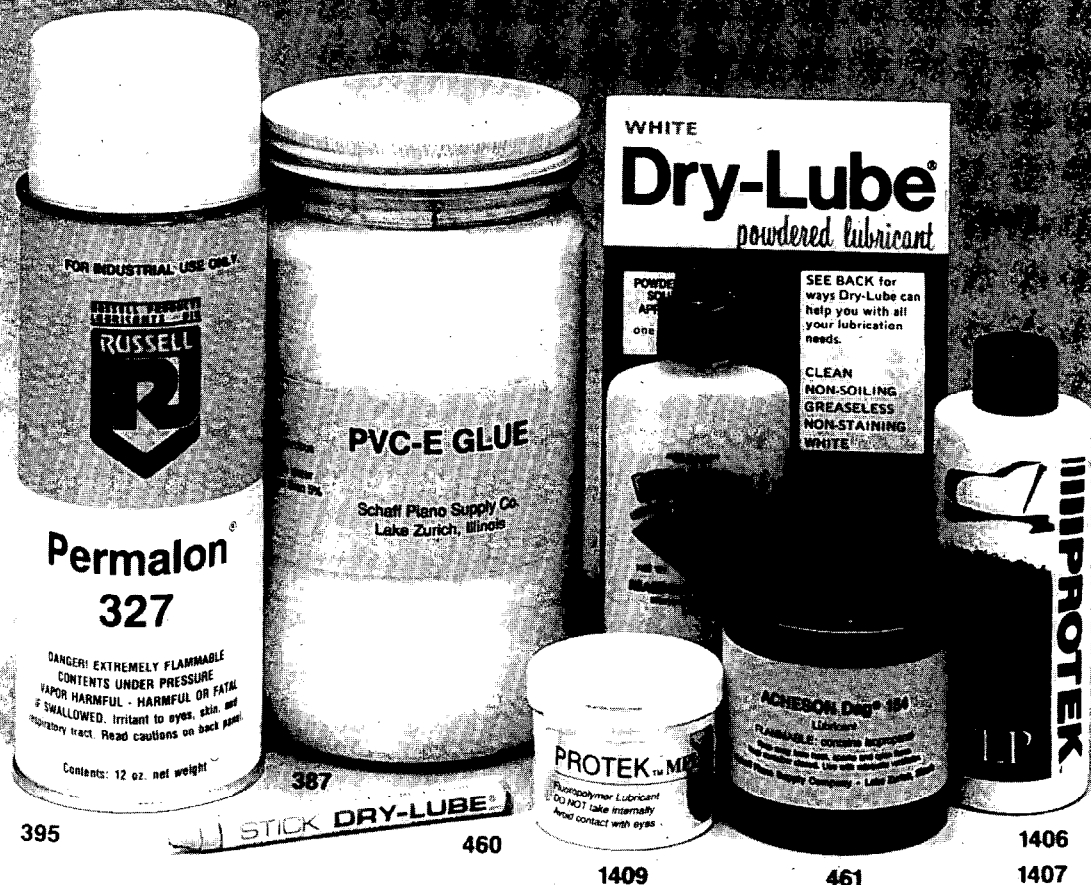
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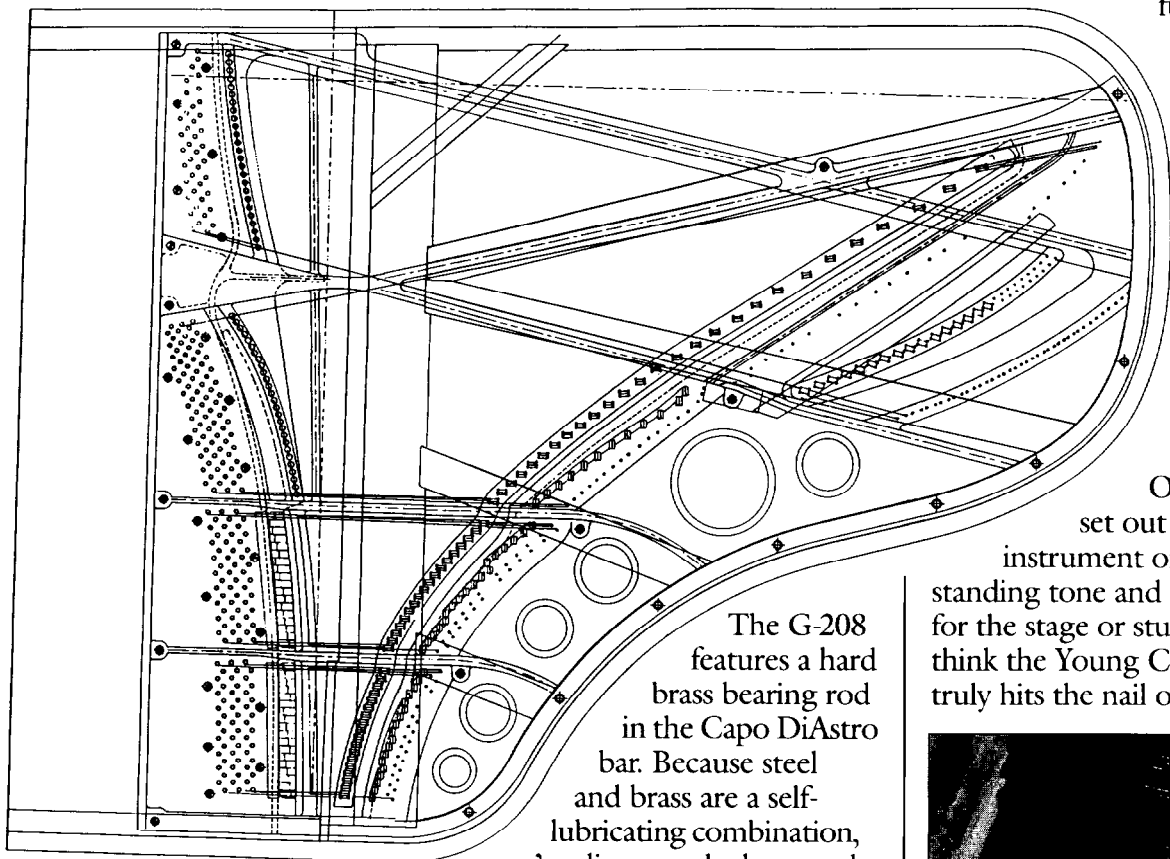


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stability, and offers a longer soundboard lifetime. We're so pleased with this new design, we're now incorporating it into all our grand pianos.

then terminated in equal length offering improved sustain, projection and clarity.

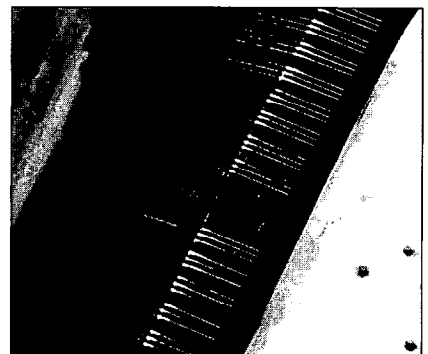
Together these innovations create an instrument with a rich, full sound, greatly improved response and a remarkable evenness of tone throughout the entire range of the keyboard.

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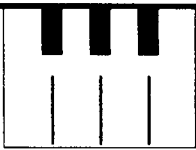


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## President's Message

**I**n this USA election year, we certainly heard a lot about the economy. One presidential candidate recommended renewal, another called for a complete overhaul, and yet another appealed for change. Politicians and political pundits in both the US and Canada expressed concern for the global economy, while the average citizen weighed the impact on the homefront and the checkbook.

Our PTG Mission Statement charges us "to improve the economic well-being of piano technicians." Clearly many of our programs are directly designed by us to help in our business and professional lives. PTG is strongly committed to education, and in tough economies it is important to work both smarter and harder; and so we are seeing strong attendance at regional and annual seminars as technicians learn in order to succeed. The new marketing products (brochures, bulletins, reminder postcards, client newsletters) are all designed to help RPTs attract and keep customers: we in PTG are willing to invest in the education of the consumer as well. Our outreach to the teachers, dealers, manufacturers and the general public through our public relations efforts (in newspapers, on television, at trade shows, at conventions) increases the visibility and status of the piano technician.

Are we doing all we can? No. Should we do more? Yes.

However, it is not easy to decide how to budget for our future. Which new programs should we choose? Should the Journal be ex-

panded or should we emphasize electronic communications? Would books or videos help our Associates prepare for the RPT exams? Our insurance options are under constant review: do members want us to continue to spend time on this? What new business aids would you actually buy?

Answers to questions like these would greatly assist Council, the Board and the Home Office staff in making decisions about budgets and program priorities. Consequently, PTG will start the new year by asking all members what they want from their professional association. Each member will be mailed a questionnaire in January asking for an evaluation of current programs and soliciting input on new ideas. The information gathered will be distributed in the 1993 Council agenda book, so the data will be put to use immediately to inform the decision-making process.

Please take the time next month to participate in this research project. Your preferences can be expressed directly. Tell us what you think the future should be for PTG; then, together, we can work on budgeting our time, talents, and money to reach our goals.

## BUDGETING

## FOR THE FUTURE





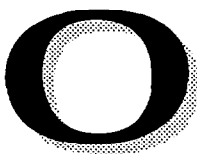
## Technical Forum

# WRAPPING UP 1992

& Venturing

Onward

Jim Harvey, RPT  
Editor



One of many problems associated with magazine deadlines is that a writer is often required to either project, anticipate, or make up the future, since any creative efforts are weeks away from the time that the finished product hits the streets. For example, this article is being written in the midst of the Presidential debates. I will not mention any endorsements or guesses as to the outcome of the election, since it will be common knowledge by the time you read this. I *will* be glad when these Pavlov-type symptoms subside. Every time I hear about "trickle down" this or that... But, it could simply be too much coffee intake on my part.

Many people use quieter moments of the holiday season to pause and reflect on the past year, and to contemplate what changes may be in order for the future. I'm dedicating this article to those same goals: the past year and the future direction of the *Journal*. So that it is not a total waste, I'll use actual letters from readers, and feather in my requests in as seamless a manner as possible.

---

### TAKING RECYCLING TO NEW HEIGHTS

---

This time last year, I solicited input from the readers about recycling. Apparently there was not a lot of interest in pursuing this subject, since I received only one response. Featured on this month's cover is that contribution, a beautiful example of what can be done with a lot of love and care. The photo is courtesy of Al Seitz of the Alaska chapter. It is a copy of an antique piano stool that Bill Smith's (our Golden Hammer award creator) wife found in a second hand store in Seattle. Al saw the stool at Bill's house, and thought it would be a good project for cloning. Al used a Steinway lyre that Bill made as the insert for the back of the stool. Al then

made parts of the stool from piano backs of which the pianos had already been scrapped. The turnstool hardware came from Paul Jansen.

My thanks to Al for sharing this with us. In truth, I coerced Al to take new photographs, since the original shots did not come up to the quality of the piano stool. Forgive me, Al. Now that your effort is part of the archives, I trust you'll agree that it was worth the trouble of making the pictures match your work. This certainly is far removed from my original idea of dissecting plastic soda bottles!

---

### UPDATE ON KEY LEADS AND TERMITES

---

You may recall my plea for *direct* help for a member who was in a quandary about termite infestation in a piano (February 1992 Forum). During the Sacramento convention, member Ray La Motta of the South Florida chapter (but who lives in the Virgin Islands) passed me an envelope containing a copy of a letter he had sent to Michael Lipnicki. Here are excerpts from that letter:

*In St. Thomas, U.S. Virgin Islands, as in St. Lucia, exist the same termite and key lead problems. I have discovered over the past 35 years that the best way to deal with termites is to get a professional exterminating company to gas the piano. They cover the entire piano with plastic sheeting. Then, through a tube they induce Vikane gas fumigant, which penetrates the entire piano in about 10 to 12 seconds, killing termites and every other living thing in the piano. It is harmless to the finish, felts and metal parts.*

*I have enclosed some literature and the business card of the company here. If you would like to call him, he said he will be glad to speak with you.*

*Most pianos can be restored. If the pinblock, soundboard and bridges are eaten, then I will not repair that piano. I speak of spinets and upright pianos. If the sides and keys, etc., are eaten, I do fix or replace them. Grand pianos I try to save. I*

use an epoxy and sawdust for color to fill large parts.

I believe that some termites are formed in the wood itself. I am not sure of this, but an experienced cabinet maker has shown me a good piece of wood with no signs of termites; he cut it in two and there were small termites inside. A mystery indeed.

As for the key and underlever leads, I believe that the salt and humidity contribute to their breakdown. You will note I mention underlever leads. In grand pianos, they, too, cause a problem. I do think replacement is the answer, even though I use a grindstone and carefully grind off the protruding parts. I believe that the heat melts the lead all the way through and rejuvenates it again.

I trust that my contribution to the termite and lead problems may help you in some way. Good luck!

Just another working example of the Guild's attitude of members helping members. My thanks to Ray for taking the time to help this member, and for sharing the information with the rest of us. He also gave me a copy of the same information he sent to Michael. After I read it, suffice to say, termite eradication is a matter best left to those who have the experience.

## CHRIS' PERSPECTIVES

Dear Jim,

I recently had the pleasure of attending Bill Garlick's seminar on crisis regulation. I found it both entertaining and informative. He is always an excellent speaker, and one that I enjoy listening to.

Fortunately his scenario does not represent a major source of business for most technicians. His words of wisdom do, however, have bearing on a much more common situation.

My practice is in the northeast and many of my customers own undistinguished grand pianos from just after the turn of the century. Most of these pianos have not been serviced in recorded history and many, I suspect, have never been regulated since their original sale. One glance at the hammers asleep on the rest rail easily identifies one of these pianos (with the exception of the occasional player grand).

These customers are often unaware that their instrument has slipped far below its best playability and haven't noticed the degradation since it has taken half a century to reach the present point of elephant touch. A little gentle questioning usually reveals that no one has ever suggested to them that anything might easily be done to improve their instru-

ment. The cost of a full 16-hour regulation would throw many of them into a swoon.

Regulation is one of those tasks that provides exponential rewards. The first hour's work reaps the most dramatic result and the last hour's work is the final touch for the most discerning player. For the above situation, the question is what is the minimum that can be done with a clear conscience and an intact reputation without the price being so high that the customer's response is "I'll think about it." Bill Garlick's dilemma was pure time and mine is cost, but the final constraint is the same: time.

I have found that my best response is really very little different from Bill's. I have found that if the dampers are passable, a great improvement can be made in about four hours. (Remember where I am starting from!) This cost seems to be below the psychological "is the piano really worth it?" barrier. Naturally I am happy to do a more comprehensive regulation if their instrument requires it and the purse allows it. To those that hesitate, I provide referrals of previous such mini regulations. These invariably do the trick.

Although it was not my original business plan, (wouldn't we all like to rebuild Steinways?) action upgrading has become a major part of my business, often by referral from other customers. It may

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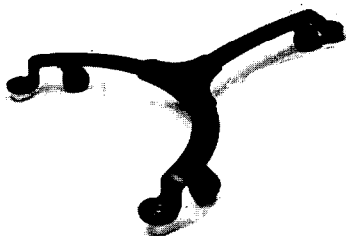


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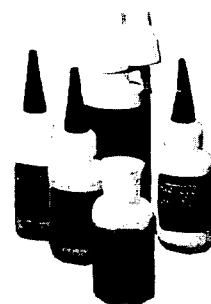
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not be the grand design that one would wish for a piano but the customer reaction has always been gratifying and they do not seem troubled that they have settled for second best results. They immediately feel the difference and appreciate that they have received service within their budget. I am always careful to explain the compromises that I have made in this reduced regulation.

For those of you that have attended Bill Garlick's seminar there is just one thing that I would add to his list: check the damper upstop rail. I nearly always find on older pianos that it has been displaced upwards by hard playing over the years and that this leads to a truly vile kick back feeling on the keys that is easy to remedy.

There is a lot of regulation out there waiting to be done and it is a satisfying way of enhancing one's income and reputation.

Chris Day  
Boston Chapter

No doubt Chris is referring to the same class as "The Panic-Stricken Regulation," reviewed by Bill Ballard in the November 1991 *Journal*. If this is true, I'll submit to Chris' perspectives on this and say "rats." I've yet to have the opportunity to see Bill's class, a situation I plan to correct shortly!

The *Journal* has been getting somewhat "back-heavy" lately, with discussions of bridges, boards, and blocks. This is understandable, since many people are having existing pianos restored instead of buying new instruments. To paraphrase Chris, "there's gold in them thar actions." Therefore, it's time to consider another series of articles on regulation. The last comprehensive coverage of this subject was the David Pitsch series years ago. While we could reprint that series, I would prefer starting over. Why? Consider, for example, the large attendance at most voicing classes. Assuming any two instructors agree on methods, each instructor will express themselves in a different manner. One instructor will make sense to some of the class, and not to others. Sooner or later, everyone is going to hear an instructor whose choice of words causes a light to click on.

So, the idea is not to try to improve on David's series, rather provide a different perspective on the subject. Any martyrs out there?

#### AND WHILE YOU'RE AT IT

In the past, the *Journal* has at least acknowledged historical tem-

peraments, discussions of pitch, and other matters that would not be considered mainstream. I'm reminded of, and referring to, the coverage from Owen Jorgensen and Jack Greenfield, among others. Recently, whether caused by the demands of artists, or simply an increased general interest, there has been more activity in this area. Just this week I saw a brochure from a leading manufacturer that features *Equal*, *Mersenne pure*, *Pythagorean*, *Meantone*, *Werckmeister*, and *Kernberger* on their new line of products. (In deference to Charlie Huether's newest campaign, I should point out that these temperaments were featured on a *digital piano*.) I personally have never heard of several of them, and (sorry) don't particularly care about *any* of them, other than equal. I have also received letters (and articles) which, while endorsing equal temperament, suggest exploring other methods.

We, as a group, have put a lot of energy into equal temperament, and establishing and maintaining A-440 hz. as the standard international pitch. But I'm trying to keep an open mind about the needs and interests of the readership, and *we* must keep an open mind to the varying needs of our clientele. College and university

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technicians are confronted with alternate methods regularly, to appease various staff members, guest artists, and orchestras. Would you like to see a separate area in the magazine, called "Different Strokes...", no, make that "Alternate Means and Methods...". I don't know! We'll worry about a title later. I would just like to see an indication of how much interest there is in this. As always, thanks in advance for your opinions.

## COMPUTERMANIA

### STRIKES —HARD!

Dear Jim,

I couldn't let your "editor's note," attached to the September Journal article by Larry Gardner on adapting MS Works for our business needs, go without comment.

As a recent "newcomer" to the computer world I am fascinated with the versatility of my simple "Works" program and its capacity to organize my business

life. I even consider myself to be a pretty good "hacker" at such an early stage in my computer development, having set up my databases, etc., without the convenience of a user's manual. I have even tried my hand at using Turbo, Word Perfect, Quattro, and various other "full-blown counterparts." These programs are so specific as to warrant entire classes at the community college in their basic uses!

I don't need to point out my every contention with your "notes," but the whole idea of contributing to the Journal is a free exchange of ideas and methods. Your attitude could easily intimidate the novice with all the "computerese," such as "flat-faced," and "relational" databases. Come on Jim, we don't work for major corporations! Just as an experiment, I have managed to get 1,250 names in my database file, and don't foresee "outgrowing the program's capacity." I would certainly keep such a file pruned to active customers and keep the rest in a separate "inactive file." This is with 1 meg of ram. Most new systems come with 2 meg these days.

It is understandable that such simplistic software can seem flat to someone who has acquired the level of computer sophistication as you, but they open an entire world to the uninitiated.

Admittedly, part of my frustration lies in the fact that I have wanted to do a class at regionals on exactly the subject Larry covered, including some word processing examples, and the simple checkbook program, Quicken. I believe that if technicians can see first-hand what the capabilities are for the computer in a work setting, more will be converted to its use. In my opinion, your note only serves to add confusion to the situation. It certainly left me confused!

Please take these criticisms in a positive way. I certainly don't mean to offend or slam the hard work you are doing with the Journal; rather, I mean to offer a voice to guide and suggest patience, for it is through gentle offerings that we are all able to learn.

John H. Minor, RPT  
Nebraska Chapter

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Anne Todd

Welcome to the world of happy hackers unanimous, John. No offense taken, although you did manage to grab the brass ring on this subject! As anyone who has talked to me for more than five minutes will attest, I'm guilty of being overzealous when it comes to computers; and particularly so when it concerns piano technicians and computers. I'm of the opinion that we should all be dragged, kicking and screaming, into accepting this wonderful piece of technology, especially considering today's competitive prices.

Using your letter as a "seed," I'll attempt to counter its significant points. If I confused you, it is likely I confused others. Since some of our readers will possibly receive a new box full of phenolic circuit boards (what I call mystery parts) for Christmas, this could be timely information. From this point, my comments are for the collective "you," not expressly directed toward you, John.

## COMPUTERS & SOFTWARE

The 'puter, as some of us affectionately call it, should be considered another tool, one to augment our businesses by eliminating or reducing much of the time-consuming, often redundant, and certainly difficult record management tasks. These one-trick ponies do only one thing — they crunch numbers. Specifically, their favorite diet is a bunch of 0's and 1's, but they manage to digest these numbers ever so well, and *usually* without complaining like their human counterparts.

I reviewed my comments following Gardner's MS Works article (September 1992 *Journal*), comments that I thought were positive (and pertinent) when I wrote them. Not that it would influence perceptions either way, but part of the confusion may have been due to the fact that the footnote pointers that tied my comments to key places in Gardner's text got lost in the "bit-bucket," some-

where between my machine and the home office. Since we're working with entirely different equipment, I'm sometimes amazed that *any* information (I almost said intelligence) gets transferred. In this instance, all of my footnotes ran together; the end result being that they seemed out of context to... anything!

Regardless of how it may appear, I was excited about featuring such an article (as I believe the author will agree), because we were past due for this type of material. The buzz words, such as "flat-faced" and "relational," were not indicators of my feelings towards the software. Neither did the terminology fall out of the sky. They are expressions used to describe generic differences in database management systems (DBMS). To support this, refer to page 269 of "*Running Microsoft Works*" by Charles Rubin, from Microsoft Press. (I would print it here except for the trouble of getting permission). Unlike many manuals that accompany software, I can highly

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recommend this *aftermarket* book for walking a user, in plain talk, through certain procedures.

Next, I do have knowledge of, and respect for, this software. So my intent was neither that of upstaging Gardner, nor showing any particular computer prowess on my part. Quite the contrary, I thought I was *supporting* Gardner's endorsement of Works for alternative, low-cost software, although my footnotes did include negative inferences.

Why did I mention the lack of relational characteristics in the software? Why the part about the amount of data stored being memory, rather than disk dependent? Why say anything at all? Many people, *especially* those new to "roll-your-own" data management software, are tempted to include everything they know about the client: the ages of the children and the names of the dogs (or vice-versa), the housekeeper's birthday, where the key to the house is hidden, and so on. This is not to mention copious notes about the condition of the piano, in which room it's located, and perhaps which corner of that room. While I'm being facetious to a degree, there are technicians with one or more of these tidbits of information floating around in their databases. It is not my intent to judge these practices; databases should be personalized, whenever possible, to reflect and support that particular person's needs.

My comments were targeted for those who, given this newly discovered potential power, want encyclopedic knowledge about any one client or piano. For those, I meant to imply that MS Works will cry "uncle" before it permits such activity. Simply put, one may elect to have some information about a lot of clients, or a lot of information about a few; to expect both from this otherwise excellent (and friendly) software is, in my opinion, optimistic.

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## WHAT IS YOUR TIME WORTH?

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Data entry is the most time-consuming part of *any* database. Even

if you enter the data yourself, the time required to input the average technician's client base outweighs the initial purchase price of any — yes, *any* software. And until one has experienced this, there is nothing quite like developing a perfect database (actually, none are ever really finished, so none are perfect) and spending untold hours entering all the information on, say, 993 of your 1146 clients, only to have a sudden queasy feeling come over you when the program indicates there's no room for additional entries. Some users keep a foam mallet near their machines for such times, to vent frustrations and to symbolically beat the computer into submission. I prefer instead to keep my pin-driving hammer nearby — the results are infinitely more symbolic.

Now, add to this already perplexing situation, the possible lack of sufficient computer savvy to transfer that (now costly) data to a more powerful program when the time comes — and it will. It has happened to too many people, too many times. Those people were the focus of my advice — *before* someone committed to that degree of labor intensity. Perhaps I didn't use enough words (or the right ones) to convey a complex subject in limited space. Perhaps I should have permitted everyone to find out for themselves.

Since I'm knee-deep in this subject (not the original intent), I may as well mention another, perhaps less-known integrated software program. Ironically, it is called "Lotus Works," from the more well-known spreadsheet company with the same name. Its user interface, while not striking, is functionally similar to MS Works, and it costs about the same. The principal differences, for purposes of this discussion, are those of power and performance (aka speed) in the database module. As mentioned, perhaps unclearly in my earlier attempt, the word processing module in MS Works permits the creation of a word processing document as long as disk space permits. This is useful for those who want to try their hand at creating their own James Michener

novels or *War and Peace* books. Conversely, Lotus Works imposes a memory-dependent document limit in its word processing module. In the database module, just the opposite is true: Lotus Works permits building *relational* databases as large as disk space permits, whereas MS Works imposes its memory dependency to this module. The two programs are exactly backwards in this regard.

The reason this is mentioned at all is that Lotus Works supports the importing and exporting of dBASE compatible files. This has become what could be considered an industry standard file format, since most "dedicated" databases will recognize it. This then permits a more transportable format, should the need arise.

Lotus Works features rudimentary word-processing features, but lacks WYSIWYG (pronounced "wis-e-wig," and meaning "what you see is what you get") on-screen character formatting. It is, at best, primitive, compared to the same module in MS Works. It's just a matter of getting one's priorities in order. Having been exposed to both programs, I would prefer one over the other depending on the task at hand. Does this mean I'm promoting Lotus Works? Nope. My client database is not maintained by either of these programs.

There is one more piece of similarly priced integrated software that I failed to mention, and that is *PFS*. Now. It has been mentioned.

I hope I have not bored the readers with this reply, or worse, created more confusion. The simple fact is: it is difficult to introduce subject-specific, but otherwise non-piano articles such as Larry Gardner's, without assuming *some* prior knowledge of the subject. Had Larry extended his coverage of basic database concepts, it would have filled the entire magazine, and still not covered everything. He was correct in starting and stopping where he did, since the *Journal* is not a computer magazine. (One might challenge *that* statement following this column, even *after* I cut 1 1/2 pages out of this reply). At the risk of additional confusion in the

future, I intend to continue publishing articles like Gardner's, as they become available, and pointing out any quirks that may be known to me. This is *my* way of sharing.

And now that I've seen an example of his writing, I hope that the next article we feature is from John Minor, and that he covers the merits of using *Quicken* in a small business environment. (Incidentally John, this has been a well-attended and well-received class at seminars. Go for it!)

My apologies to those who have sent submissions, questions, and other materials to me, but have yet to have their work published. It is only unpublished, not unnoticed! I really appreciate your efforts. It makes my job a lot easier. So as they used to say on radio, keep those cards and letters coming in!

From all of your officers, home office staff, feature writers, and myself: May you each enjoy a wonderful holiday season, and a brighter, *much* more prosperous New Year.

J



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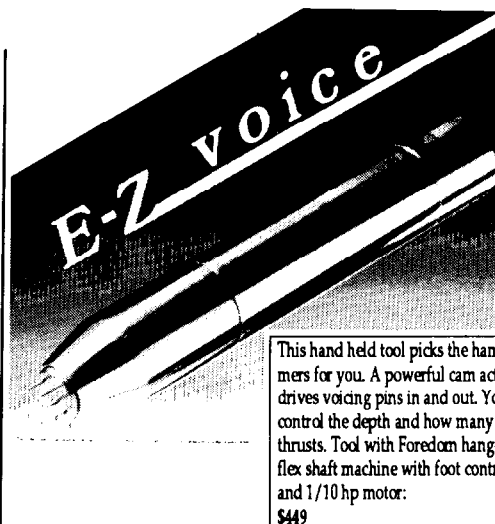
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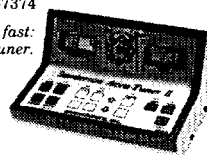
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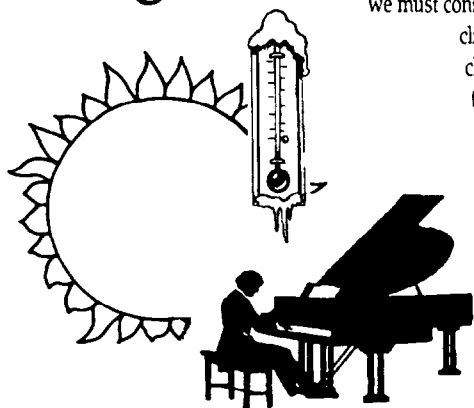
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## Tuner's Corner

# Heating & Cooling



## As Told by the Piano

**Daniel L. Bowman, RPT**  
Contributing Editor  
Richmond Chapter

**H**ow you field the question, "Why is this piano going out of tune so badly?" is one among several measures of your stature as a professional piano technician. Thorough troubleshooting of tuning stability problems will assure business to you for years. A good understanding of the characteristics of different indoor heating and cooling systems is an important part of the larger fund of information which professional technicians draw upon for this troubleshooting.

Notice that I said *part* of a larger fund of information. It's worth noting that a systematic approach to troubleshooting tuning stability problems calls for knowledge and expertise sufficient to cover at least the following points: structural integrity of the piano, tuning skill of the technician, and climate or atmospheric environment of the piano. Under climate we must consider outdoor climate conditions, indoor climate control systems, and in-the-piano climate control systems. Then we move on to discussing tuning frequency, and last, deal with owner expectations, which occasionally turn out to be totally unrealistic. This article deals with indoor climate control, and how different kinds of heating and cooling systems affect pianos.

This information is mostly derived from more than 30 years of experience (including 10 years as a practicing technician) with, and observations of, piano behavior in differing indoor climate situations. Literally, most of what

I now know about heating and cooling systems was "taught" me by the piano. Over the years, and specifically for this article, I have talked with several heating and air conditioning specialists and several superintendents of college and institutional heating plants. When three-quarters finished with this article, Klaus Fenner's articles appeared in the June and July 1992 *Journal*, dealing among other matters, with climate and tuning stability. My experience concurs completely with what he reports, including the way owners, dealers, and unwary tuners blame the piano for tuning instability when the real problem is either the tuner's skill or climate problems. The technician who knows solid tuning, and when it isn't, and who knows his or her way around indoor climate systems will find it much easier to stay in the driver's seat in these altercations.

## PRELIMINARY REMARK

Everyone knows that changing humidity is the chief villain causing the piano to go out of tune. But rate and amount of airflow over the piano govern how fast and persistently those humidity changes come to bear on the piano. Remember your laundry on the wash line and the difference a little wind makes in drying time? Thus, while discussing the various heating and cooling systems in this article, I will be repeatedly pointing to the role of airflow in the tuning stability equation.

## HEATING

As already acknowledged, humidity is the main atmospheric variable affecting the piano's behavior. But in winter the two variables, most easily accessible to home owners and institutional building superintendents in day to day living, are temperature and rate of airflow. First, it seems from my experience that, regardless of the type of heating system, the drying effect on the piano goes up disproportionately with temperatures above 70 degrees F. Pianos in living rooms and auditoriums kept at 68 degrees or less fare dramatically better than those in settings of more than 70 degrees. Second, rate of airflow determines how fast the changing humidity will effect the piano. Pianos are significantly more stable with heating systems that utilize convection driven airflow instead of fan forced airflow. In other words, the less airflow or air disturbance, the better.

The old style hot water radiators are almost ideal for the piano. Warm, not hot air, rises gently from the radiator while cooler air flows across the floor to and up through the radiator — no more air movement than necessary to distribute the warmth. There may be almost no air movement in some corners of the room but that is just fine for the piano — assuming that there is enough circulation of warmth to dispel any dampness, say, behind the piano.



Steam radiators found in old college and institutional buildings are convection driven and could, I believe, perform much like hot water radiators if *properly regulated*. But as I've known them, they often run too hot. Either the room's occupants or building supervisors do not know how to regulate the individual radiator valves or, those valves simply cannot be turned off or regulated in small increments. The result is runaway radiators and insufferable temperatures, open windows and running air conditioners in dead of winter, and pianos that seem impossible to keep in tune. I know of at least one grand piano in a college class room setting which was destroyed by runaway steam radiators.

Electric baseboard heating seems gentle to pianos. The air flow in these systems is rather slow, much like convection radiators. I suspect that the main reason why pianos do well with electric base board heat is the individual thermostats for each room. Families are more likely to turn the heat down in individual rooms when no one is there. This results in more moderate average temperatures for the piano.

Forced air heating systems present quite a different atmosphere to the piano from that of convection systems. The air is kept in comparatively brisk motion, thus, greatly increasing its drying effect. The air circulating systems of buildings constructed more recently are, in my experience, especially vigorous and efficient — no pockets of stale, unmoving air anywhere, zero institutional smells. The venting system, however, does sometimes give the alert piano owner a fighting chance to manage things. Airflow from nearby vents can often be redirected by the vent's louvers or with special deflectors attachable to the vents by magnets. Air flow can also be deflected from the piano by placement of other furniture.

It may be splitting hairs but I believe that forced air systems using warm air, such as heat pumps, have less undesirable effects on pianos than

hot air systems such as oil and gas furnaces. Interestingly, while I protest whenever I find a piano directly in front of, on top of, or next to a cold air return vent, these pianos are quite stable. Since I take the piano's "report" seriously, I conclude from this that by the time the circulating air approaches the cold air return vent, whether heating or air conditioning, it has been "neutralized" of its moisture transferring capacity.

Wood stoves are a case unto themselves. Their drying effect on pianos, furniture and people is famous, for two reasons. First, they are usually run at high temperatures, sometimes for prolonged periods, to force heat to the more remote parts of the house. Second, fans are sometimes used to force more air movement. One of the most disastrous heating setups for the piano is a nearby overheated wood stove, and one of those delightful, 4 or 5 blade ceiling fans overhead, to force all that cozy warm air back down to the floor and out into other rooms. The temperature is high, the humidity is low, the air flow is brisk to gale force! The piano's behavior in this setting is bizarre to the point of destructive.

In general the watch word for pianos in the heating season is moderate temperature and minimal air disturbance. And of course, if something can be done to reduce humidity extremes, do it.

### AIR CONDITIONING

The most important fact about air conditioners, from the piano's viewpoint, is that they do not dehumidify nearly as much as popularly believed. Wendell Eaton is right about this! The piano technician must be armed with the facts here because in the minds of most people, air conditioning is the solution to summer humidity. But people often fail to note the significance of certain symptoms; symptoms that point to very high humidity much of the time in many air conditioned homes and buildings — things like that musty, mildew smell in homes, particularly those

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with lots of carpet, sticking doors and windows, and that cool clammy feel in public buildings. Piano technicians have access to an extra bit of data pointing to high humidity in places where there are pianos. The piano cannot lie about high humidity. When the piano is grossly sharp, it simply *cannot be* due to structural failure or the tuner's lack of skill; it *has to be* high humidity. The piano's "report" must be taken seriously.

There may be two reasons why the public is misled here. First, everyone has seen the water pouring from air conditioner coils and has experienced the dehumidifying effect at least some of the time. But that amount of moisture condensation may be only a fraction of what has to happen for actually controlling humidity for levels suitable for the piano. Second, people are misinformed by those humidity gauges from the local hardware stores. Those gauges are grossly inaccurate at the lower and upper ends of the scale, precisely where the information is most important to piano owners. It requires expensive technology and some know-how to measure humidity accurately.

Air conditioners that are in proper working order do remove water from the air stream passing over the condenser coils. But a combination of factors, including atmospheric conditions and the way people operate the systems, often results in less than adequate dehumidification for piano welfare and people comfort as well.

First, the air conditioning system does not dehumidify at all unless the compressor is actually running. Compressor running time is shortened when its capacity is too large relative to the job. The oversized compressor runs in short intervals, getting the temperature down quickly, then shutting off. The system's air circulating fans may continue to run, leaving folks under the impression that the system is doing its thing. The end result is that the room or building may be cooled decisively, but not effectively dehumidified. Air conditioning technicians refer to this

problem created by an oversized compressor as "short cycling." The problem is that when a system is designed with compressor capacity to handle outside temperatures of, say, 98 degrees F, it will be oversized and short cycle when the outside temperature is 85 degrees F. This becomes quite problematic when, along with that moderate temperature of 85, the relative humidity is 95 percent. In that case, dehumidification is actually needed more than cooling, but the short cycling system cannot deliver.

Second, the system is often not allowed to bring the temperature low enough for really effective dehumidification, simply because people can't stand the chilly results. Then there are energy and environmental concerns, which also keep thermostat settings high and reduce compressor running time.

Third, outside air is often systematically brought into the room, auditorium, or building through "air handlers" (discussed below). I'm not convinced that the rate of this inflow is always matched to the capacity of the air conditioner. There is also infiltration of outside air through people traffic and opening doors. On a typical summer day this incoming air is very humid, and is now cooled by a compressor which may well be short cycling, with the result that the incoming air is not adequately dehumidified.

Recall that wood, as in the piano's soundboard, takes on moisture much faster than it gives it up. This means that any short period when the relative humidity spikes upward, whether caused by quirky functioning of an air conditioner or by nature in the absence of an air conditioner, will have a disproportionate effect. A short run of high humidity will cause more reaction than an equal or slightly longer period of lower humidity can correct. This would suggest that the practice of turning air conditioners on for short periods as for school and college assemblies and church worship services should be avoided. But of course, the institution may prefer the lesser expense of paying for more

tunings rather than leaving the air conditioner on all summer.

I am convinced that if one pays attention to symptoms like that perceptible clamminess in the cooled area and grossly sharp pianos, it will be clear that much of the time many air conditioner systems just mess around clumsily with humidity control. The real problem in all this is that typical air conditioning systems for home, school, church, nursing home, etc., are controlled by thermostats for temperature only. Whatever happens to the humidity is simply a side effect of the operation of controlling temperature. There is a separate, additional technology to air conditioning which enables the system to control and respond to both temperature and humidity. An engineer at Dunham Bush, Inc., (Harrisonburg, VA), a manufacturer of commercial and industrial air conditioning systems, explained one example of this technology. It involved the use of electronic sensors which measure absolute moisture content of the air (as opposed to relative humidity), compressor capacity to cool the air stream to whatever temperature is necessary to wring out the moisture, and heaters to re-warm the air stream to suitable levels for humans. Initial installation costs and subsequent operational costs make this technology impractical for the average home, school, church, or nursing home.

Don't forget, the system's circulator fans are extremely efficient in keeping the air moving, and the vent louvers may be playing the air directly on the piano, thus bringing any changing conditions immediately to bear on the piano.

The watch word for air conditioners is to take seriously any change in the piano's tuning and action centers as evidence that the humidity is not under control, and proceed with other measures such as Damp-Chaser equipment.

If an air conditioner is used as a device to reduce humidity, the room may have to end up considerably cooler than people comfort and

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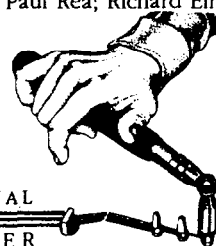
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## OPEN WINDOWS AND FANS

Bluntly, summer fresh air enthusiasts will not like the news in this section. People comfort and piano welfare often get in each other's way. In small homes with lots of family activity and no air conditioners, windows and doors simply must be opened. Big attic exhaust fans, various portable fans, and even those delightful ceiling fans mentioned above are used. The same is true for churches, schools and other institutional buildings. But all of that is bad news for the piano in two ways. First, it brings all that rapidly changing outside air directly into the piano's environment. Second, the briskly moving air accelerates whatever effect that particular humidity level would otherwise be having on the piano.

When are those open windows and fans most used? When the humidity is highest! Even when the

temperature is moderate, when the humidity is high, as on a "muggy" rainy summer day, just when minimal air flow over the piano is most important, people go for those fans and open windows. Not even the best Damp-Chaser equipment can keep on top of some of these situations. The practice of cooling the house by opening windows and running exhaust fans at evening or all night is another nasty trick on the piano. That delightfully cool evening and nighttime air is the most humid of the day. Remember, the wood in the piano's soundboard takes on moisture faster than it gives off moisture.

At times, perhaps much of the time, people comfort will have to take precedent over piano welfare, but not always. A little informed thinking can get good results. Once the owner or building superintendent is alerted to the role of air flow in tuning stability, many easy changes can be made in daily living patterns to greatly reduce the piano's summer agony. Certain doors and windows perhaps need not

be opened. Piano covers, including those drapery-like affairs on the backs of verticals in churches, or the dust covers inside grands can be used, and are known to enhance tuning stability. On one college stage I know of, there is a lightweight partition standing there for reasons I don't know. But it is perfectly situated to keep air from the large backstage door from swirling over the grand piano every time stage equipment is loaded and unloaded. In one professor's studio at the same college, a great improvement in tuning stability was achieved by simply moving the grand piano to the other side of the room, out of the straight line of airflow from the window (with a very low sill) to the door. Then there is the country church, a rather large, tall structure, where someone decided that some ventilation would be good. He or she found just the right windows to open and thus created a quite powerful flue effect through the whole building. I found this on a foggy morning; the whole interior of the building was miserably damp and the

electric organ and piano behaved as though they had been on a porch for several days. When I explained to a trustee how this ventilation was detrimental rather than helpful, the windows were closed and the piano and organ were soon back to normal.

I have wondered if perhaps one reason air conditioning gets credit for results in humidity control is that it puts a stop to this opening up the room or building to the "delightful" breezes of summer. I have also occasionally entertained the theory that pianos in the homes of people over 50 are more stable than those of people under 30 — older folks keep things more tightly closed and don't like drafts.

The watch word for pianos when cooling with open windows and fans is, keep it to a minimum. As much as possible, let the piano have its pocket of stale, unmoving air.

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## AIR INTAKE SYSTEMS

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When I first became serious about piano technology as a business, I was puzzled for some time with why the pianos in several different buildings — a church, a university music department building, a private high school, and a nursing home — all behaved in the same bizarre, fast-changing way. Their behavior as a group was quite distinct from all the other pianos I was servicing. What I discovered is an aspect to air circulation that every piano technician should be alert to. Modern buildings — school, church, institutional, hotel, etc. — are equipped with "air handlers" or "air exchangers," in addition to the regular heating and air conditioning systems. These bring in "fresh" air from outside. I was told recently that earlier concerns about energy conservation resulted in reducing inside/outside air exchange. But, more recently, concerns about "sick buildings" has resulted in government regulations requiring introduction of more outside air. These air handler systems are quite sophisticated and can be programmed

to get a complete change of atmosphere within the building in 'x' number of hours. If I am to believe what the piano in these settings is telling me, here is what seems to happen. In summer, hot humid air is brought in and cooled by air conditioners which frequently do not dehumidify adequately. The place gets cooler, but very humid. In winter, cold dry air is brought in and warmed up without humidifying it. The place gets warm, fresh smelling but very dry. Then comes moderate weather when neither heating nor cooling is needed. Suppose that the weather is rainy outside and conditions are "stuffy" inside; "fresh" but ever so damp air is brought in. These air handlers bring outside climate conditions to bear on the piano in minutes, rather than days or weeks, and the vigorous air flow of the system makes the moisture transfer between air and the piano's soundboard (in or out,) much faster and more extreme. Air handlers swing the piano back and forth between the driest conditions of winter to the most humid conditions of summer.

When I caught on to all this, I knew why my two most ill-behaved pianos, one a Steinway grand, the other a cheap console, are in nursing home chapels. Both these nursing homes have delightfully fresh atmospheres, zero urine smell thanks to the air handlers. Both have state-of-the-art heating and cooling systems. But, those poor pianos make it quite evident that not only is there no specific humidity control, but the efforts at controlling temperature and air quality result in faster humidity fluctuation and wider humidity extremes. Nursing homes are a good case study because patient care calls for very warm temperatures in winters and decisive cooling in summer (enter the possibility of short cycling air conditioners) and air quality control all year long.

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## WINTER HUMIDIFICATION

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Almost any effort at humidification during the heating season, whether with portable room

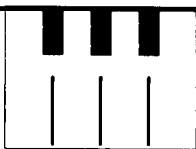
humidifiers or central humidifiers coupled into forced air systems, will, to some degree, help cope with tuning stability problems. However, if the aim is to keep the humidity in the piano's environment decisively at the recommended 42 percent, these systems are woefully inadequate. If you contrive to keep the relative humidity in your home at 40 percent when the temperature outside is 5 degrees F., you will almost certainly have major moisture condensation on windows, on walls, and even inside walls to the point of destructiveness. Technology for controlling winter humidity in institutional buildings such as libraries and museums is about as technically involved and expensive as that used with summer air conditioning.

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## CONCLUSION

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The heating and cooling systems of virtually all private and public places, small rooms and large buildings, where pianos are found, are designed and built to control and respond to temperature (thermostats) only. Whatever happens to the humidity, whether desirable or undesirable, is merely a side-effect of the operation of controlling temperature. Technology to keep room or building humidity decisively at levels suitable for piano welfare is impractical for most private and institutional piano owners. The sooner the piano owner and technician understand this, the sooner they can get to what *does work*. The workable solution to climate induced instability is in-the-piano climate control systems such as Damp-Chaser's equipment. (Hey Bob, my address is in the PTC membership directory.) Attention to air flow patterns is also necessary. Quality instruments such as concert grands should also be covered and/or kept in small climate controlled storage rooms.



*Good  
Vibrations*

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# DRILLING

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# TUNING

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# PIN

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# HOLES

Nick Gravagne, RPT  
Contributing Editor  
New Mexico Chapter

**D**rilling tuning pin holes in a new pinblock seems like such an easy thing for *you* to do. But when your green apprentice steps up to the drill press for his or her first attempt at the job, all of a sudden it doesn't seem simple anymore. So you begin pointing out the importance of spindle speed, feed rate of bit, how to achieve accuracy, and so forth. By the time you've finished explaining the fine points, the new pinblock has been taken off the drill press table, and a scrap piece of pinblock material put in its place for trial runs. Also, your apprentice, who thought that the job was simply a matter of switching on the automatic pilot and drilling a million holes into a piece of wood, has begun to wonder how it all got so complicated.

Well, it's really not *that* complicated, but neither is it simple. Pinblock drilling requires a setup which is carefully made and locked in, and constant concentration along the way to insure accuracy and consistency. Like zeroing in on unison tuning, every tuning pin hole should be approached as if it were the only hole to be drilled that day. Perfection is a myth, but aiming for it, within reason, usually results in fine work.....

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## THE SET-UP

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Let's assume that we're working at a drill press; i.e., we're not drilling the holes after the block and plate have been finally installed in the piano. A long auxiliary table needs to be made which easily attaches to the iron drill press table. My auxiliary table, which is made of 3/4 inch plywood and covered with hardboard, measures six feet long by one foot wide, and attaches to the smaller iron table with angle brackets and small c-clamps or vise grips. The brackets are the 90 degree flange-type, and attach to the underside of the auxiliary table with wood screws. The space between the brackets is obviously the width of the iron table. Attachment to the iron table is easily made by clamping the legs of the brackets to the iron table. Another method of securing the auxiliary table is with screws and wing nuts. The screws are counter-sunk at the top, and bolted to the auxiliary table from underneath. In any case, a hardboard "skin" covering the top of the plywood makes for a slick surface on which to maneuver the pinblock. Due to the length of the auxiliary table, supports may be necessary to prevent the entire setup, or the tables only, from tipping or rotating due to the weight of the pinblock (i.e., when most of the block sits off to one side or the other of the auxiliary table). Since my drill press sits on a bench it is convenient for us to use a small jack and/or blocks of wood for supports.

Parallel lines drawn on the hardboard surface will act as guides for the drill press operator. These lines, which should be spaced one inch apart, will be easier to see and use if the color alternates from black to red. Thus the operator must be conscious to maintain a more or less parallel condition between the stretcher edge of the pinblock and either a black or red line on the auxiliary tabletop.

In order to drill the tuning pin holes at a five degree back-lean from vertical, one edge of the auxiliary table

(that nearest the operator) needs to be raised by inserting and securing a wood strip between the auxiliary table and the iron table. Trial and error will reveal the required height of the wooden strip. To measure, insert a drill bit into the chuck and, with the aid of a protractor, raise the edge of the auxiliary table until an 85 degree angle can be read between the table top and the center line of the drill bit. Find or make a wood strip that will maintain that angle and attach it to the underside of the auxiliary table.

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## A COOL DRILL BIT

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Metal turning in hardwood at relatively high speeds creates a considerable amount of heat. As a result, not only will the metal bit expand, but it will also tend to glaze and cauterize the hole. The result: jumpy tuning pins and inconsistent tightness, along with prematurely burned up bits. Rig up something to blow a steady stream of air onto the working bit. Most of us use air compressors feeding some ingeniously devised nozzle. The drawback with blowing air is that chips must be blown onto both the shop floor and the operator's flannel shirt. This has led some rebuilders to devise methods of moving air across the drill bit through suction, as from a vacuum cleaner (e.g., Shop Vac). This way, not only is the bit cooled, but chips are cleared away at the same time. In any case, bit cooling and chip evacuation are noisy propositions, so wear either ear protectors or a Walkman (the "Eagles Live" works for me).

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## DRILL BITS

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The choice of drill bit size is determined by two criteria: the type of pinblock material and the judgement of the rebuilder/tuner as to what constitutes a nicely tunable tuning pin in all seasons. Opinions and preferences vary here, but most tuners abhor pins which are too tight. And five years down the road no one wants to find loose pins in a new block.

The most used and talked about pinblock materials are Falconwood, Delignit, Steinway's factory block and the Bolduc pinblock. The first two are multilaminate, heavily pressed beech (in excess of 20 plies in a 1-3/8 inch pinblock). Falconwoods are denser than Delignits. The second two contain five plies of quarter-sawn maple, and claim no special pressing for density. All of these blocks will maintain good tuning pin torque for the life of a well-maintained piano.

The recommended drill bit size for multilaminate blocks is the .272 inch (letter I); letter H is too tight, and letter J is a "maybe-too-loose" in the future. Steinway-type blocks, which include the Bolduc, require either a .250 inch (letter E), or a .257 inch (letter F). Some prefer to use three bit changes: E in the bass, F in the tenor/agraffe area, and a G in the higher treble.

Whatever your opinion and preference, trial combinations of drill bit size and waste material of the block in question should be made. When driving in the trial tuning pins remember to leave enough tuning pin exposed to allow for the plate web thickness and wire coil. Initial torque readings (as found by using a torque wrench) for multilaminate blocks are 15 foot-pounds, or 180 inch pounds. This is very tight, but well within the high side parameters of acceptability; the pin can be moved smoothly, and in small increments. Typically, after a day or two (and this is true of all pinblocks), the torque will have dropped. Multilaminates will drop down to 13 or 14 foot-pounds, or 156 to 168 inch-pounds, where they will stay for a considerable time, and the drop a bit more. Some tuners think this torque is too high for smooth and hassle-free tuning; others think it fine and preferable. One thing is certain, in new Steinways, Yamahas, and a great Feurich grand I recently tuned, torque is about perfect, but I have no complaint with higher torques provided that, in the settled piano, they are no higher than 180 inch-pounds. Not having worked enough with

Steinway-type blocks I cannot speak of initial torque readings. Talk to the manufacturers or distributors.

A note on using torque wrenches in strung pianos. If you are turning the pin clockwise (tightening), you must subtract 2 foot-pounds, or 24 inch-pounds, since the pull of the wrench must overcome the pull of the string. When turning the pin counter-clockwise you must add this amount since the string is aiding the wrench in this direction.

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### SPEED OF THE DRILL PRESS SPINDLE

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Most agree that a spindle speed of about 1000 rpm is correct. Speeds are set by adjusting the pulleys and belts in the head of the machine, according to schematics found in the pulley compartment. Having said this, however, I have a chart of spindle speeds which recommends a speed of 1800 rpm for a 1/4 inch bit in hardwoods. I find this to be too fast. Here again you may want to experiment to find a speed which seems comfortable, where the bit seems to effortlessly glide down the hole with only moderate pressure on the handle.

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### FEED RATE

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Apprentices have a tendency to "punch" holes rather than drill holes. A high-quality, high-spiral, polished and sharp bit will do all the work of creating a clean and uniform hole if the operator does nothing more than feed it into the wood at a uniform rate. Industry feed rates for all sorts of drilling and milling are usually stated as feet per minute or inches per second. To simplify, I have noticed that drilling a hole all the way through a 1-3/8 inch multilaminate block should take a minimum of five seconds, and more like seven, once the bit has begun to cut. In any event, danger signals of improper feed include the sound of a laboring motor, usually accompanied by the smell of

smoke and the evidence of charred wood chips. Look for even, steady, and clean chip ejection out of the bit flutes.

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### ACCURACY

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It is best to aim a drill bit at a dimple or punch mark, especially when drilling into an angled piece of wood. But even with punch marks, the bit has a tendency to dance and gyrate, eventually grabbing and drilling off the mark. The problem is worsened by the angle of the work. To insure accuracy, set the spinning bit a tad "uphill" of center and press it into the mark just enough for it to center itself. When the bit has danced and

gyrated for a second, it will have dug a small on-center crater. When you see this, drill away. Of course, proper positioning of the punch mark under the drill bit is important. This is made easier if clearance between the bit and work is set at about 1/8 or 3/16 inch.

Well, once the simple has been made complicated, it can be made simple again. Fortunately, in a short time, everything written above, and more, becomes second nature — even to young apprentices with laser-tech brains.

Next time we'll discuss tuning pins, and tuning the "too-tight" piano.

J

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"I'll be in the kitchen wrestling a beef brisket. Call me when you're done."

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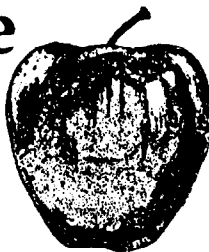
"Hello boys. Already it's three o'clock? Mr. Randy Guy, my very excellent piano technician, please meet the Smingish twins. On the right is Deltoid."

"Hello Deltoid. Do you have a piano at home?"

"We got lots. We have a Kimball consolable, Flexible Fandrich, Bad Joke pump organ, Baby Huey grand, Spotted Owl spinet, Self Actualized Piano Dish, Two Bit quarter grand, Squealing Feline Electronic Emulator, and seventeen air guitars for Dad. Mom sings Schubert in the shower."

"And on the left is Darnit. I'm sure Mr. Guy would like to know who services your pianos."

## Buffing the Apple



Mitch Kiel  
Marketing Committee



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"Boys, I think you should take home some of Mr. Guy's pamphlets. Tell your parents he is my personal piano technician and I have no other.

Please go hang up your coats while I say goodbye to him."

In perfect unison: "Yes Madame Cohenmeister. And tell him to stop kicking me."

"Randy dear, you're looking little thin. Take a bagel for a nosh. Mama always said, "Stay full to stay smiling." Bye-bye, bubeleh. And come voice my piano *before* you visit the twins. Life is too short to convert another tuner."

J

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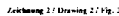
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### More on leverage

By Alan Vincent, Baldwin Piano and Organ Company USA. Reprint of „Piano Technicians Journal“, October 1990. By kind approval of Piano Technicians Guild, Kansas City, MO/USA.

In the last article, we discussed the basic principles of leverage and how these apply to the grand action. This month we will look further into leverage and the 5:1 leverage ratio within the grand action.

Most technicians are aware that, with a properly regulated action, an average key travel of .375" can result in a vertical hammer movement of 1.875". This is a 5:1 mechanical advantage as one unit of key movement results in five times that amount of hammer movement (.375  $\times$  5 = 1.875). The 5:1 ratio is also a statement of the overall leverage values of the action. Leverage ratios can be used to determine both vertical movement of the action parts and weight, but at this point, we will only be discussing the amounts of vertical movement of the action parts achieved through leverage. Any consideration of weight must include friction as an added variable. Weight, friction and the 5:1 ratio will be covered later.

The 5:1 ratio represents the beginning end of the leverage train in the motion. There are several different parts between the end of the key and the hammer. To illustrate the 5:1 ratio of the grand action, trace an initial input through the leverage train and out to the hammer. The movement at the hammer can then be compared from a given key movement and the velocity of the action determined.

In our article last month we discussed the average ratio of the average grand piano key 2:1 ratio; and the vertical lift at the cap of the movement of the front of the drawing one). Using .400" as a key down key travel) and .050" as aftertouch we

.350" as the amount of movement of the key needed to take the hammer to the point of let-off. After multiplying this by .5 (the output lever length, five inches, divided by the input lever length, 10"), equals the leverage ratio of .5), the vertical lift at the capstan would be .175" with a movement of .350" at the front of the key.

In order to analyse the change with the amplitude of the vibration, the lever arm and the hammer levels are involved in the lift of the hammer to the string. Upon inspection of a wippen, many different physical levels can be seen. The wippen can be divided into two parts: the upper wippen and the lower wippen. However, the lever arms of the wippen which lift the hammer to the string are more like imaginary lines. Drawing a line from the wippen capstan to the hammer flange center produces the capstan and the wippen heel will produce the lower wippen lever arm. A line from the flange center to the jackknuckle contact point will produce the upper wippen lever arm. The distance between the two lever arms of the wippen produce a V-shaped lever with the pivot located at the vertex (the wippen flange center). The angle between the two lever arms is the angle approximating the angle of the wippen, with the upper lever arm being the longer of the two and the angle between the two lever arms remaining fixed during the wippen stroke. The angle between the two lever arms is the position angle. The position angle is the only angle that changes when the end of the repetition lever contacts the drop screw. At this point, the upper wippen lever arm provides the repetition lever with the position angle. The new lever arms, one from the wippen flange center to the repetition lever flange center and

the other from the repetition center to the knuckle center line. This results in a new leverage configuration within the wippen and a different, overall leverage ratio within the action which is approximately 1:1. This leverage ratio would be in effect from the time the hammer reaches the drop position through the completion of the key travel.)

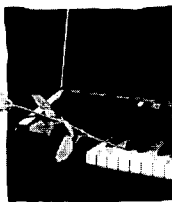
the average length of the upper wippen lever arm is about 3.75" and the lower 2.5". This gives us a leverage ratio within the wippen of 1.5:1 (3.75"/2.5"), the output lever length, divided by 2.5", the input lever length, gives us 1.5). The lifting force is being transferred from the key to the wippen via the capstan screw. Therefore the input is now at the wippen heel and into the lower wippen lever arm with the output being into the knuckle. When the wippen ratio of 1.5 is multiplied by the input at the capstan of .175", then the output of the wippen into the knuckle is found to be .262". Again, this is the total amount of vertical lift achieved by the wippen at the wippen/knuckle contact point. This now leaves us with one remaining lever in the grand action, the hammer flange.

To determine the leverage ratio within the hammer shank, again two measurements are considered. The first is the distance from the shank flange center to the centerline of the hammer molding. In modern grand pianos, this dimension varies from five inches to 5 1/2". For this example, the measurement of five inches will be used. The second leverage arm is the distance from the shank center to the jack/knuckle contact (see

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| <b>March 18-20, 1993</b>    | <b>Pacific Northwest Conference</b><br>Seaside, Oregon<br>Contact: Randy Potter, 61592 Orion Drive Bend, Or 97702 503-382-5411  |
| <b>March 18-21, 1993</b>    | <b>Pennsylvania State Convention</b><br>Holiday Inn-Bucks County, Trevoese, PA<br>Contact: Patricia Sierota, 102 Bridle Path Lane, Feasterville, PA 19053 215-364-2564  |
| <b>April 15-17, 1993</b>    | <b>Mid-South Spring Seminar</b><br>Memphis, TN<br>Contact: Vincent Mrykalo, 7046 Autumn Hill Lane, Bartlett, TN 38135 901-678-3772  |
| <b>April 23-25, 1993</b>    | <b>Florida State Seminar</b><br>Howard Johnson's-Daytona Beach, FL<br>Contact: Walter Pearson, 1128 State Ave., Holly Hill, FL 32117  |
| <b>April 24, 1993</b>       | <b>Los Angeles Chapter Seminar</b><br>La Canada Presbyterian, La Canada, CA<br>Contact: Jim Karukas, 3925 Big Oak Dr. #8 Studio City, Ca 91604 818-506-3077   |
| <b>April 30-May 2, 1993</b> | <b>Central West Regional Seminar</b><br>Collins Plaza Hotel, Cedar Rapids, IA<br>Contact: David C. Brown, 1719 Bever Ave. S.E., Cedar Rapids, IA 52403 319-362-0820   |
| <b>April 30-May 2, 1993</b> | <b>New England/Eastern Canada Seminar</b><br>Merrimack, N.H.<br>Contact: Bill Ballard, R.R. 3 Box 875, Putney, VT 05346   |
| <b>July 14-18, 1993</b>     | <b>36th Annual PTG Convention and Technical Institute</b><br>Milwaukee Hyatt, Milwaukee, WI<br>Council 13& 14<br>Classes 15-18<br>Contact: PTG Home Office<br>3930 Washington, Kansas City, MO 64111 816-753-7747 |

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# AUXILIARY

## E X C H A N G E

*Dedicated To Auxiliary News and Interests*

*Greetings from the President's corner:*

Since you will be reading this article during the Spirit of Giving and Rejoicing, I thought I would "give" you a little background and little known information about what it takes to present a national convention each year. You see, I have just returned from Milwaukee and the Convention Planning Committee meeting. No one knows, unless you are actively involved as an officer, what advance thought and planning goes in to this exciting week we share together in the middle of July. I certainly didn't. My hat goes off to all those people who are taking their time to give us such a great convention. And have you noticed, as I have, they seem to get better and better each year. The logistics are staggering. Now I know how General Eisenhower felt about the Normandy invasion! Much of this work is done behind the scenes. One of the marks of a well run convention is that it looks so easy to us, who come for a week of learning, friendship and fun.

First of all, the hotel has to have elevators large enough to accommodate all those pianos to be moved in and transported up and down elevators. That's why we have to have a large well-known hotel, and those usually cost more money to stay in. However, did you know that the more people who stay in the convention hotel, the better the cost reduction that we get? So please, everyone stay in the convention hotel. Besides, you are closer to all the action and the little meetings that go on in the hall and corridors. After all, isn't that why you come to gather all the information that you can and pick each other's brains for new ideas?

Now, where do the spouses come in? We can start right now in the

Fall of 1992 to budget our affairs and start the 1993 convention fund. If we make our desires known that we want to attend and meet all our friends, I'm sure the tuner/spouse will adjust his/her schedule and make room on their daily tuning plan to allow for that time off in July. After all, it is a business expense and can be written off on your taxes. And think of all the knowledge they will learn for their business. But we have to advertise and get excited about it.

Did you know that I have to pick the menu for all of you for the Auxiliary luncheon? Now, I can hardly decide for myself, let alone one hundred and fifty of you. So please don't cut my head off. I tried to think of all of you and your individual diets. We can provide for vegetarian meals if you let us know about it when you register, day one.

The Milwaukee Hyatt has a beautiful eight tier parking garage right next door. But better yet, this garage has an open parking lot in front of the garage for large vans and RV's. It's not too large though, so if you are coming late I would write ahead and have them reserve a place for your oversized vehicle.

We changed the auxiliary room several times but I think you will be pleased with the arrangement. Mr. Neie needed our first room for a classroom and that does come first. We have a large room, which should cover all of our events. I noticed that the hotel was not overly air conditioned as they have been in the past. They probably are cutting back as we all are. However, you must bring sweaters and jackets which you can remove just to on the safe side. There are wash rooms close by our room for our convenience.

The MECCA building, where all the exhibits will be displayed, is

joined to the hotel by an enclosed corridor over the street. Oh, yes, there are skywalks all over the downtown area. In fact, one need not go out in the inclement weather from one end of town to the other. We will see their new shopping area in the city which is just a few blocks away. They tell me those skywalks are air conditioned. (Ed's note: I appreciated them most in the middle of the winter when the wind blows off the lake at 25 mph.)

Please all of you get to know who Sandy Essary is from our KC office. You have no idea all the little details that she takes care of and what a great job she does to make everything run smoothly. Say a big "thank you" to her at convention.

There is one little negative about the Milwaukee Hyatt and certainly not a problem as far as the convention goes, but there is no swimming pool in the hotel. I am trying to work something out, so don't

panic yet. I know a few of us do like to swim our twenty laps before we start the day. Believe me, there could be worse problems. However, why don't you let me know if any of you would like to go to a baseball game. I'll try to get the Brewer's schedule and see if they are playing in town the week that we are there. I already know of one of our members who will be in line for a ticket!

As you read this now in the freezing snow and wind, plan on spending a cool summer by Lake Michigan. Please write to me now about any of your wishes and desires and maybe I can work something out now while there is still time. Please don't wait until the last minute. If there are baby sitting problems perhaps some of you folks who bring teenagers can let me know and we can network and put people together.

As most of you have to share the PTG Journal with your tuner/

spouse, may I bring this item to your attention. I have just taken in my mail for today and it includes the October issue of the Journal. Please read the article about the PTG Foundation written by Bruce Dornfeld. It explains some facts that I did not know. In fact, there are several articles in front of our pages that are very informative and it also covers highlights of the Sacramento convention. Try to read the Journal the first day it comes in the mail, before it disappears into the tuner's den! There are many items of interest for us all.

In closing, I'm already really excited about next summer's convention and I hope I have instilled some excitement in you too! Please make you plans early to meet us all in Milwaukee. You won't be disappointed.

*Phyllis Krahmer Tremper*

## **Meet The Board: Barbara Fandrich — Treasurer**

I was born, raised and educated in San Francisco so many years ago that the city wasn't even crowded then like it is now. And it didn't welcome visitors, either, like it does now. Tourists were objects of merit to us natives —ladies in their white shoes and men in summer shirts, shivering in our cool, foggy summer weather.

I've lived a lot of places since then, and have enjoyed variety in my lifestyle as well as various careers. Motherhood has been the most meaningful job I've ever had. Other jobs have remained interesting to me as long as they were challenging. Like working for a private eye in LA and like assisting the probate attorney in Portland, where I learned almost enough to practice law myself.

My careers since marrying Delwin in Portland 20 years ago have been the most interesting of all, though. First, I worked with him in his rebuilding business. Then I took a job as vice president of a publishing company in Sacramento because I was offered a salary high enough to support us, while Del studied piano design and engineering. Meanwhile, I

had a lot to learn in advertising and sales and that job stayed challenging and lucrative and led to my owning my own publishing company for several years.

Once Del became proficient in piano design, my reward was a move to Arkansas in 1986 as he went to work for Baldwin. That was a hard adjustment for me—leading behind family, friends and my flourishing business. I was fortunate though, to find a fascinating job as an editor for a company that wrote textbooks for big publishers, like McGraw-Hill.

Eventually, we moved back to Portland as Del became an independent piano designer and consultant to the industry. That led to a piano design project in the midwest, and a six-month relocation. When friends at the Philadelphia convention asked me "Where are you living now?", I could honestly answer, "At the Adam's Mark." Following the convention we returned to Portland and began to work on prototype Fandrich Pianos.

Soon we were fortunate to be able to set up our own manufacturing company. We searched for just the right place to do it and decided on an

interesting harbor town on the Washington coast. I work diligently in our little factory, applying all those skills I've learned over the years—and thinking fast when that doesn't cover it. All I can say now is "Wow, I had no idea it's so hard to build pianos!" I work as part of a three-way management team, supervising production and organizing a ton of paperwork.

My life is exciting as God gives the faith and energy to propel me through the 80-hour work weeks. I feel like a proud mama again, every time we stamp another serial number on a newly minted Fandrich piano.

I've very much enjoyed being Treasurer for the PTGA for the past four years, although it required a lot of patience on everyone's part to keep up with my various addresses. The Guild and Auxiliary have furnished some of my richest memories and best friendships and have been most rewarding. It's my fervent hope that pianos (the real, acoustic kind) will continue to be improved and make beautiful, uplifting, inspiring music, thanks to our loved ones and their valuable skills.

*Barb Fandrich*

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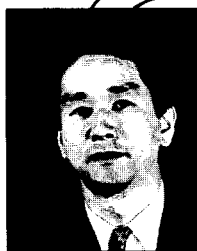
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*Kawai*

# Tech Gazette

Yamaha Piano Service

December, 1992



Kirk Ise



Bill Brandom



Andy Nishio



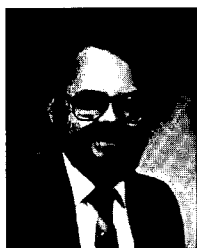
Ray Reuter



Hiro Mizuno



Rose Uvalle



Lloyd Whitcomb



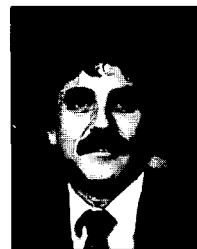
Greg Frank



Charlotte Romas



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# PIANO TECHNICIANS **Journal** UPDATE

FOR MEMBERS OF THE PIANO TECHNICIANS GUILD, INC.

## **"Member-Needs Assessment Survey"**

*Speak From Your Hearts and Your Minds...*

**J**ust about everyone would agree that research is invaluable in helping to make educated decisions. If a study is well-designed, executed properly and interpreted correctly, the findings are useful and moreover, immediately actionable. For example, from presidential elections to corporate mergers to new product introductions, research provides organizations and companies with the confidence to move forward in new directions.

Over the next several weeks, we will be designing an extensive questionnaire that will be mailed to each member of PTG in January. You should be aware that this questionnaire will take considerable time and effort to complete. There will be many questions which will seem obvious to you, but some will require soul-searching in areas you may not want to think about. In any event, it's critical that you are honest with your answers and don't censor your true feelings.

To ensure the findings will not be biased, the questionnaires will be sent directly to an independent research firm, rather than to Home Office or to a member of

PTG. In fact, the individual final questionnaires will not ever be seen by any PTG member or staff member. This is to encourage complete honesty since personal opinions will be completely confidential. The purpose of this study is to determine our feelings as a group, not as individuals.

It's an exciting project that will provide PTG with the groundwork to establish its priorities in the months and years to come. Because PTG will be basing many long-term decisions on these findings, we're taking extraordinary steps to ensure that this study is conducted in the most professional way possible and that the findings will be documented and reliable.

However, the extent to which we are able to use these findings is entirely up to you. Please fill out your questionnaire when you receive it. Take the time to answer everything from your heart as well as from your mind. From my experience, few organi-

zations value their members' opinions as much as PTG. This membership-needs assessment survey is your opportunity to voice your feelings and truly be heard as a group.

Next month, I'll provide you with some subjects to ponder in preparation for the questionnaire. Until then, keep an open mind and begin thinking about where we can go rather than where we've been.

**Glenn Schieke**  
Vice President,  
The Phelps Group

**...THE  
EXTENT  
TO WHICH  
WE ARE  
ABLE TO USE  
THESE  
FINDINGS IS  
ENTIRELY UP  
TO YOU...**

## ***Hurricane Andrew Update.....***

During this time of year, we traditionally commemorate our friendships and blessings. This year we have an additional cause for celebration: the compassion and generosity of the members of PTG demonstrated through the donations given to our victims of Hurricane Andrew. At last count, almost \$8500 was donated to the South Florida Chapter. The monies received were distributed to those members who suffered losses resulting from "Andrew."

Fortunately, the majority of the South Florida Chapter members were not in the wake of storm, but those who were suffered moderate to total destruc-

continued page 8

I could not understand why we were calling ourselves a chapter or why it was being called "Hang Loose" but I understand this is correct when traveling as a group.

Why "Hang Loose?" In Hawaii this is a saying which is used as being casual or have a good time. They also have a sign which is like a greeting. It's made by folding all your fingers down and straightening your thumb and little finger and shaking it.

We left the PTG convention and the Hyatt Regency Sacramento at approximately 9 a.m. Sunday, July 26, for San Francisco Airport and arrived in plenty of time. As we waited, we elected a chapter president, John Travis, a tour guide, Sid Stone, and a secretary, Ralph Long. We then held our chapter meeting, where Sid gave us a lot of questionnaires for technical purposes, which we attended to on the flight to Hawaii.

On arrival, we were greeted by the tour company and all received a fresh flower garland of mauve and white flowers. The mini-bus took us and our luggage to the hotel, where we unpacked and met in the lobby for a technical session.

Monday was left to our own devices, except for the technical, but a large contingent of us went out of town by coach to Aloha. This was good, and included a meal and drinks. The

costumes were bright and colorful and there were many traditional Polynesian dances.

Tuesday, we toured the island from our area, Waikiki, which is part of Honolulu. There were many beautiful beaches and volcanic mountains, which pro-

duce approximately 200 inches of rain per year in the rainforest area. They have a blow hole as we do in England, but with a difference: the mountains are ridged with many waterfalls and they have the largest wind turbine in the world, approximately 360 feet in diameter with other smaller turbines nearby. The island of Hawaii is self-

sufficient for its water supply and very little filterization has to be done because water filters through the volcanic rock. Various kinds of fruit grow in profusion, pineapples being the number one fruit, as well as bananas, watermelons and others whose names I cannot remember.

Early Wednesday, we went to another island, Maui. Some of our party who had been here before said that this was a beautiful island. I must agree, this is a tropical paradise for those who have time to appreciate it. But to get here, we had to be up for departure at 6:45 a.m.

Maui is just 28 miles from Hawaii and just a 28-minute flight. We arrived at our hotel on the northwest edge of the island, in a town called Lahaina. The hotel is right at the edge of the beach, and it is lined with all manner of flowers, palm trees and hibiscus

bushes with red, yellow, orange and pink flowers. The temperature is hot and humid, in the 80s at a guess, and pineapples grow in profusion. Aren't they sweet and juicy?

The economy on both islands is good, mainly from tourism. This is their number one industry, and not many shops are empty. Most are open from seven in the morning until 10 p.m. at night — we complain about our shops in England being open from 9:00 to 5:30. Even banks are open later. It is hard to describe this island, it is so beautiful on this west side. On the east side the volcanos cause the island to be very wet. I understand that there is an average rainfall of 350-400 inches per year. This is a real tropical forest. I understand that it is outstandingly beautiful, with flowers in profusion. I must admit that for myself, I have enjoyed swimming in warm sea water. Also paragliding, dinner on board a boat on the sea, a helicopter flight around the beauty spots of the island that are accessible by road, waterfalls, ravines, beaches accessible only by boat, and a half-moon volcanic island that rose out of the sea many years ago.

The Lahaina Shores Hotel is a self-catering hotel, each room with all that is required — a sink, cooker, large fridge and all utensils in each room. A fresh-water swimming pool and a jacuzzi with hot water are between the hotel and the beach. We dined in nearby restaurants and seem to have gotten all our technical lectures fitted in also. Taking into consideration that we seemed to cram in so much, I am surprised we did so well with our technicals.

We traveled to Kauai on Friday. What a noticeable difference as we came in to land — black lines of lava, minimal growth, hardly any beaches but wonderful surf. This island has the only active volcano. I did not see this for myself, but one of our team, Yat-

## "HANG LOOSE" CHAPTER

### FINDS TROPICAL ISLAND PARADISE FOLLOWING PTG SACRAMENTO CONVENTION & INSTITUTE

Lam Hong, said he was able to photograph it by plane. Some of the party took an all-day trip around the island and here again, the east side is the wettest, with rain an average of 360 days out of 365. It is hard to imagine that at Kona where we stayed they average approximately two inches per year. What a difference! The Hilton Hotel looks like a modern cruise line boat with palm trees and other exotic trees and bushes all round, a beautiful swimming pool and, just on the other side of the wall, volcanic rock into the sea. The sea breakers are breathtaking, six feet high and rolling over into massive foam. The hotel also had a seawater lagoon which is filled up by the waves from the sea. Now, can you imagine being able to sit outside and have your evening meal winter and summer, never dropping below 70° Fahrenheit.

In England, it can go as low as 15° and as high as 98°, so you can see why I call this paradise. In England, many people do keep seawater tropical fish but to see them in their own natural environment is another thing altogether. Five of us went snorkeling near the lava rocks for almost an hour and a half. It was wonderful, and makes me appreciate creation all the more. Most of it is a

rugged environment, but oh, how beautiful and it is all there for man to enjoy.

People were coming to the town from all over the world for the big-fish championships. We did see one about six feet long, but I was told this was small.

Before leaving for the airport on the last day, we had our final technical. A lot of useful information was given, which I am sure will benefit all of us. I doubt that I will ever be able to participate again in the Hang Loose Chapter, but it has been a wonderful experience for my wife and me, and so, to all who read this article, "Aloo-ha!"

*Ralph Long, RPT  
Honorary member of Los Angeles and  
SE Pennsylvania Chapters,  
residing in England*

#### **Thoughts From Sid Stone, RPT**

The technical sessions in Hawaii were designed to produce discussion among the 12 technicians who represented over 300 years of piano service. This made the sessions interesting as well as informative, even for John Travis, who has been in the piano service business 64 years.

continued page 4

## **HOT OFF THE PRESS!**

### **Technical Bulletin #4**

## **Voicing**

This new edition in the "Technical Bulletin" series describes voicing, explains the difference between tuning and voicing, what is good tone, how the technician voices a piano and also explains to the customer indications that their piano may need voicing.

Consistent with the three previous technical bulletins in style and format, this two color (purple and black) edition provides a graphic depiction of a properly shaped hammer in contrast to a hammer which has been worn.

Like Technical Bulletins 1-3, Pitch Raising (blue), Regulation (red) and Humidity Control (green), Voicing may be used as a stand alone marketing tool or as one in the set of four.

To order your complete set or to add to your series, call PTG Home Office at 816-753-7747. Visa and MasterCard are accepted. Please have your membership number ready to place your order.

# **Trade Relations Committee Report**

**Jack Wyatt, RPT**

Recently, at the North Carolina State Convention in Charleston, South Carolina, Mr. Maurice Fox, Mr. Rusty Patterson and Mr. Harold Fox, dealers in the Charleston area, were invited to meet with committee members, Jesse Williams, myself and National Vice President, Leon Speir. Although Mr. Fox was the only dealer able to attend, the meeting was most informative and productive in gathering information that will be useful to members of PTG.

Through previous telephone conversations with all the dealers in this area, it became apparent to me that they were

more than willing to cooperate with the PTG in any way possible. All agreed that promoting the sale and use of pianos was to our mutual advantage.

In this spirit, Mr. Harold Fox offered his store for the local chapter to use for their meetings and asked for a PTG membership application to join the Guild as an Associate.

Participating PTG members and local chapter members were very encouraged with the attitude and response they received from Mr. Fox. SE RVP Gina Carter will continue to follow the progress made to help insure future chapter success.



Instead of giving a brief summary of each of the 10 technical classes held, time and space will allow for only a few.

A lengthy discussion was held on the subject, "How can we as individual members promote PTG to the public?" First, we must realize the golden opportunity to talk about PTG in the home, over the phone and in social gatherings.

**In The Home** — One unusual suggestion is to have on our billing letterheads, our name, followed by the initials, RPT. If the customer does not ask what RPT stands for, we say, "Make the check out to my name. You don't have to add RPT. That stands for Registered Piano Technician. I am a member of the Piano Technicians Guild." You could talk about PTG, but don't overdo it. Let them know in a subtle way that they are fortunate to have you as their tuner (you become their technician after you have gained their confidence and they are willing to listen to needed service beyond tuning.)

**Over The Phone** — We all get shoppers who want to know how much we charge for tuning a piano. Your answer to that is determined by your need and disposition.

Scenario #1: You need their business. Delay stating your tuning fee by asking questions about the piano: make, style, age, last service date, and was it serviced by a PTG member? This opens the door to educating them on the benefits of having an RPT member of the Piano Technicians Guild service their piano.

Scenario #2: You do not need their business. Sometimes we want to get rid of the shopper as quickly as possible, in which case we can tell our tuning fee and hang up. If we are in a particular mood, we may just want to teach the shopper a lesson in value. All the necessary services we perform are taught at PTG seminars and

conventions. A well-trained piano technician may find the cause and remedy of a particular problem in just a few minutes, where it may take a novice an hour or more. The customer could end up paying more to an untrained technician.

One member of the Hawaii group told of a piano store manager who boasted of having the lowest tuning rates in the area. However, when he sent a tuner out on a house call, that tuner had to find enough repairs, adjustments, cleaning, etc., to equal twice the basic tuning fee. So it may not be a good idea to get the cheapest tuning.

At the Hawaii seminar, we had two distinguished speakers. Ralph Long gave us an interesting account of servicing pianos in England. Ralph says that he tunes all "birdcage" pianos up to standard A-440 pitch. In America, we run across many American-made uprights that cannot be brought up to pitch. The reason the English antique pianos can be brought up may be in the scaling — also the tension of the string as it stretches around the tuning pin. If it is not moved over a period of many years, it becomes weaker at that point and breaks when stretched ever so slightly. On the birdcage pianos, the pitch lowers over the years more than our old uprights, thus putting the strain on a slightly different part of the string.

Our other expert described the conditions of pianos in the islands and the peculiar problems encountered. He had a lengthy discussion on the number one problem, termites. Most of us can be thankful we don't have that problem.

We discussed what chapters are doing to reclassify Associates to RPTs. In Southern California, according to Dan Evans, there is a program of regular training seminars for administering the Tuning and Technical tests. The Golden Gate Chapter is sponsoring a seminar in

October titled "Piano Tuning 101 — Preparing for the Tuning Examination." Golden Gate also has an RPT who will give private tutoring for the Technical Exam, and a CTE for private tutoring for the Tuning Exam. What is unusual about this is there is a "no pass, no pay" clause. This is the way it works: if an Associate member of the chapter signs up for the next test, and he or she does not pass, the money is refunded. The checks for the tutoring fees are made out to the chapter, with the tutors receiving a hearty round of applause.

*Sid Stone, RPT  
Golden Gate, CA Chapter*

**PLEASE NOTE:** The following member was inadvertently omitted from the October Update listing of 25-year members:

Norman Duckworth  
*Vancouver Island, BC*

## Membership Status

Northeast Region	862
Northeast RPT's	524
Southeast Region	649
Southeast RPT's	383
South Central Region	322
South Central RPT's	203
Central East Region	635
Central East RPT's	392
Central West Region	390
Central West RPT's	246
Western Region	634
Western RPT's	383
Pacific NW Region	395
Pacific NW RPT's	231
Total Membership	3,896
Total RPT's	2,362



# Anatomy Of A National Technical Institute

**T**he purpose of these little articles, which will appear from time to time, is to keep the membership informed about how our yearly technical institute is put together, what is involved, what some of the problems are and, hopefully get some innovative suggestions. I believe that it might be a good idea to start by explaining how this so called "Institute Committee" came into being.

Originally the President used to appoint an institute director for the upcoming convention. In most cases the choice was good and excellent technical institutes were produced. The system was fine but it had its draw backs. Each new institute director had to learn "the business" and often lack of experience became a costly proposition. In search for a better system with built in continuity, board came up with the Institute Director Committee. These institute directors would alternate and serve at board's discretion.

Seems that the formula was right and less mistakes were made. It also seems that certain chores became routine. With this more sophisticated system more attention could be paid to programs and variety. Incidentally, variety and programs are the newest key words in our technical institutes. There are only so many things we can do with pianos. We can buy them, sell them, tune them and voice them, they can be refinished and appraised, built and rebuilt and ultimately even destroyed. Naturally, there are

many ways of performing all these operations and that is what we try to show in our technical institute.

No doubt, pleasing everyone is impossible, but we have to try to make most convention registrants happy. We have to try to engage the best possible instructors. That means not only

people who know the subject well but also are capable of conveying the information properly. Needless to mention that at times that means taking chances with "new" instructors. It may sometimes also mean turning down an instructor or a suggestion for a class. Now would probably be

a good time to explain that we plan our technical institutes years in advance. It is not unusual for an institute director to discuss a class with an instructor two years before a convention. Naturally, not all of the planning takes place that early but certainly plenty of thinking is done way before the actual scheduling.

One of the reasons for this series is to get some input from the readers. Please understand that not all suggestions can be used, but certainly they will all be considered and studied carefully. We also work quite well as a team. When you write to any of us we send copies to the rest of the committee. Incidentally, Gary Neie is the institute director for Milwaukee in 1993.

The responsibility of the institute director is mainly the technical institute. That includes rounding up instructors, putting together the program and schedul-

ing classes. Obviously there is more to it than meets the eye. He has to deal with pianos, room size and room setup as well as many other problems too numerous to mention. It often takes a lot of guessing to estimate how many will attend certain classes — and consequently if the estimate is wrong — classrooms are too small or the wrong class may be assigned to certain classrooms.

## *Organizing the Convention*

As we have been operating in recent years, there is a planning meeting which generally takes place in September or October. The voting members of this committee are generally the top officers of the Guild (President, Vice President and Secretary/Treasurer), the RVP of the region where the convention will take place, the institute director, the President of the Auxiliary and the host chapter chairman. Obviously we have the executive director, the convention coordinator and often others.

At this meeting almost all decisions have to be made. That is not an easy task and often involves long discussions. It is at that meeting when decisions are made whether we are going to have a closing luncheon or not, regional meetings during an institute period, which evenings should be released for various parties, etc. Be assured that decisions are based on statistics and registrants suggestions. Often such decisions are not easy to make since various interests are represented at this meeting. For example, the institute director may want to utilize all available class periods for the Institute, while an RVP and/or others may want to see regional meetings during an institute period.



By Ernie Juhn, RPT  
Long Island-Nassau, NY

# In Memory....

**Walt Thatcher**  
September 15, 1919  
September 22, 1992

Walt Thatcher, the founder of the St. Louis Chapter Newsletter (The Gateway Tuner) died of cancer on September 22, 1992. Walt was a fine technician, loved writing and did both quite well. He was a good person and worthy of trust.

I suggested to Dorothy Thatcher that Walt's own words from the newsletters might be the best way to remember his presence in the Guild.

*"Fairwell"*

"This is the final edition of "News and Gossip". Our subscribers who have time remaining will receive a refund—a stipend to be sure, but fair is fair...It has been educational and I have enjoyed it all. Many thanks to the other editors who were kind enough to send copies of their letters. They are very professional."

## *On Human Character*

"In each human heart are a tiger, a pig, an ass, and a nightingale. Diversity of character is due to their unequal activity."—*Ambrose Bierce*

"The trouble with the guy who talks too fast is that he often says something he hasn't thought of yet. You never get a second chance to make a good first impression."

Walt, your wit, humor and your high standards in your personal and professional ethics will live on with all of us that you touched. Thanks to Earl Duffey for the loan of the newsletters.

—*Bill Reichert*

**Melvin J. Light**  
October 13, 1923  
July 8, 1992

Melvin J. Light, organ builder/technician, piano technician, pianist, organist, and choir director died suddenly July 8, 1992 at his home of a heart attack at the age of 68. Mr. Light was born to Floyd and Cecilia (Grieg) Light in Reese, MI. He began developing an interest in a career in music at a young age.



Melvin Light

While in the army (WWII) he continued his piano and organ studies at the Sherwood Music School (Chicago) and at the Trinity College of Music (England). He later studied for three years at the Juilliard School of Music and received a Bachelor of Music Degree from Aquinas College in 1954.

For 24 years (1959-1983) Mr. Light was employed at the UM School of Music as a technician responsible for tuning and maintaining organs (17) used by students and faculty member. He maintained the Frieze Memorial Organ in Hill Auditorium and also built five organs for the school of music. He retired in 1983 at age 59.

From 1948 until his death Mr. Light remained active as an organ builder/technician. In Grand Rapids, MI, he built an organ with 1400 pipes in the Chapel at Mt. Mercy Academy. His interest in the work of Robert Noehren subsequently led him to employment at the University of Michigan (UM).

Melvin Light also maintained an ongoing career in

continued page 8

# DATES & DEADLINES

**December 4, 1992**  
*1993 Exhibit contracts to mail*

**December 24-25, 1992**  
*Christmas—Home Office Closed*

**December 31, 1992**  
*Deadline for nominations to Awards Committee Chair*

*New Year's Eve—Home Office Closed*

**January 1, 1993**  
*New Year's Day—Home Office Closed*

**January 4, 1993**  
*1993 Annual Dues Officially Due*

**January 8-9, 1993**  
*Tuning & Tech Exams-Southern California Area Examining Board*  
*Contact: Carl Lieberman*  
*310-392-2771*

**January 11, 1993**  
*Tuning & Tech Exams-Northern California PTG-Skyline College*  
*Contact: Neil Panton-415-854-8038*

**January 16, 1993**  
*Tuning & Tech Exams-Northern California PTG-Sacramento*  
*Contact: Neil Panton-415-854-8038*

*Tuning & Tech Exam-Puget Sound Chapter for PNW Region.*  
*Contact: Jim Snyder-206-863-0068*

**January 22-23, 1993**  
*Mid-year Board Meeting, Kansas City, Missouri*

**January 31, 1993**  
*Unpaid membership dues delinquent*

**February 1, 1993**  
*1993-94 Officer nominations due to Nominating Committee Chair*

*Proposed Bylaw changes due to Bylaws Committee Chair*

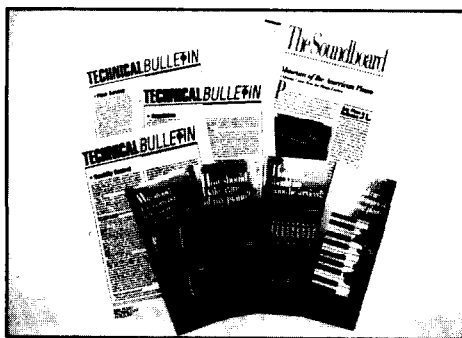
# PROMOTE PROPER PIANO CARE WITH PTG BUSINESS AIDS

## Brochures

The six-page, stapled brochures are 2-color, printed on glossy-coated paper, and measure 9" by 3 3/4". Formats are consistent among all brochures. The three brochures intended for customers feature a description of PTG and RPTs on the final inside page. **\$35/100, \$150/500**

## Why should I be a member of the Piano Technicians Guild?

This brochure answers typical questions from potential members of PTG. It describes membership categories, RPT



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exams, benefits of membership and includes our Mission Statement. A form is included to request a membership application of further information. Chapter officers as well as individual technicians should have these. *There is no charge for this brochure.*

## How should I take care of my piano?

Written with the average piano owner in mind, this brochure covers such topics as finish care, regulation, voicing, humidity problems and tuning needs. Basic rules of piano care are spelled out, along with advice to seek professional piano care from an RPT member of the Guild. This is an excellent brochure for individual clients and for bulk displays in piano stores and music studios.

## How often should my piano be serviced?

This brochure begins with a brief description of factors affecting maintenance frequency (climate swings, placement in the home, quality of manufacture), then presents quotes from ten piano manufacturers outlining their specific service recommendations. This is an essential tool when answering the perennial question, "How often should my piano be tuned?". The manufacturer quotes lend credibility to your advice.

## The special care and maintenance of the teaching piano.

Proper maintenance is especially important to piano teachers, who must provide their students with a responsive

action and a musical tone at correct pitch.

This brochure describes tuning needs, regulation and voicing as well as their relation to the student's ability to perform. An excellent business builder with teachers, it includes such topics as "What should my regular maintenance program consist of?", "How should I go about selecting a piano?" and "How do I find a qualified person to service my teaching piano?"

## Technical Bulletins

The technical bulletins are written for the customer who is considering a particular maintenance option. They provide detailed information on specific topics in a question-and-answer format. The attractive, single-page documents are printed on heavy ivory card stock in 2 colors, punched for a three ring binder. 8 1/2 x 11. **\$20/100, \$90/500**

## Bulletin #1: Pitch Raising

This bulletin emphasizes the importance of keeping a piano tuned to A-440 for best sound and proper ear training. It explains how climate and neglect affect pitch and why the technician must perform a pitch raise before doing a fine tuning.

## Bulletin #2: Regulation

Topics covered are "What is regulation and how does it affect my piano's performance?", "How often is regulation needed?", "What are the signs that my piano needs regulation?", the difference between regulation and tuning and information on reconditioning and rebuilding. Space is included for your comments. This bulletin features a detailed diagram of a grand and vertical action.

## Bulletin #3: Climate Control

Topics include, "How does humidity level affect my piano's tuning?", "What is relative humidity?", "What can be done to minimize humidity problems?" and "How will humidity control benefit my piano?". A chart is provided for recording relative humidity levels and pitch data. Together with an accurate hygrometer, this bulletin helps you in diagnosing climate-caused stability problems and recommending solutions. Clients receive educational material on the effects of climate as well as documentation of their specific problem.

## Client Newsletter:

### "The PTG Soundboard"

Used to keep in touch with clients and provide them with interesting information, the newsletter projects a positive image of piano playing and conveys your commitment to your customers. The first issue of "The PTG Soundboard" contains articles on the recent trend of adults starting to take piano lessons, the benefits of piano playing to child development, and how to find a qualified technician, along with photos, a quiz and trivia. Printed on textured paper with attractive typefaces and design, 2 color. 4 pages. 8 1/2 x 11. **\$28/100, \$115/500**

*These new brochures, technical bulletins, and the client newsletter educate the public about a wide range of piano services and the benefits of proper maintenance. They promote PTG as a source of qualified technicians, and their professional appearance projects quality onto your business.*

*All products provide a space for your business stamp or label.*

## How to Use These Products

- Get your chapter to order in bulk to take advantage of quantity discounts. Different titles may be combined to meet the 500-copy price break.
- Provide appropriate brochures to your clients at every service call. Stamped or labeled with your business name, they can also be handed out whenever you are asked for a card.
- Provide brochures in bulk to piano stores, along with a holder for countertop display.
- Provide piano teachers with a supply to give to their students.
- When proposing a special service (such as regulation), offer clients the appropriate technical bulletin to provide them with additional information on their problem. This positions you as a provider of quality information, building your credibility and reputation.
- Send selected clients "The PTG Soundboard" newsletter along with their service reminder card or as an implied "thank you" after each job.

## Three Ways To Order...

### TO ORDER BY PHONE

Call 816-753-7747  
8:30 - 5:00 (CT) M-F

### TO ORDER BY FAX OR BY MAIL

Write your order on an 8 1/2 x 11 sheet. Include: your name, shipping address, PTG member number, Visa or Mastercard number and expiration date

SHIPPING:  
Items are shipped in minimum orders of 100. For each 100 items ordered, a \$2 shipping fee will apply.

Items listed sold only to RPTs.

Fax it 24 hours/  
7 days a week to:  
**816-531-0070**

Mail it to:  
**PTG Home Office  
3930 Washington  
Kansas City, MO 64111-2963**

To receive a free sample packet:  
Send \$3.00 to cover shipping and handling to the Home Office address printed above.

## *In Memory continued...*

instrument maintenance and performance in the surrounding community that continued after his retirement until the time of his death. Throughout his life, Melvin Light enthusiastically studied all aspects of the organ, including building, literature and lore. His primary interest was in the work of E.M. Skinner concerning the tonal and mechanical preservation of these instruments. In 1976 Mr. Richmond H. Skinner, son of E.M. Skinner, asked Mr. Light and his wife, Janice, (who is also an organist), to prepare for publication his father's manuscript *The Composition of the Organ*, which was then published in 1981. Mr. Light's affiliations included membership in the American Guild of Organists, Ann Arbor Chapter, the Organ Historical Society and the Piano Technicians Guild, Detroit-Windsor Chapter.

He is survived by his wife, Janice (Ruth) Light; two children, Steven F. Light and Julie M. Mitchell, all of Ann Arbor; two brothers, Robert J. and Norman G., his sister Cecilia Westhoven; his mother-in-law, Mrs. W. L. Ruth; and numerous other family and friends. A Requiem Mass was celebrated on July 11 at St. Matthew's and St. Joseph's Episcopal Church, with the Reverend Joseph A. Harmon officiating. A memorial service was also held on July 17 (in accordance with Mr. Light's wishes) at the First Presbyterian Church in Ann Arbor. Many close and long time friends participated in the celebration of this memorial service. Dr. Donald Bryant, Marilyn van der Velde, and Sally Carpenter presented the music while the Rev. William H. Hillegonds, the Rev. Ward H. Clabuesch, the Rev. James Trippensee, and Mr. John C. Schultz participated in presenting the service.

A fund in memory of Melvin Light has been established

for the renovation of the E.M. Skinner organ at St. Matthew's and St. Joseph's Church. Contributions to the memorial fund may be sent to: St. Matthew's and St. Joseph's Episcopal Church, Melvin Light Memorial E.M. Skinner Organ Renovation Fund, 8850 Woodward Avenue, Detroit, MI, 48202.

## *Andrew continued.....*

tion. The most severe, unfortunately, was our member and his family from Homestead who lost their home, furnishings, car, and business and had to relocate to another area of Florida. Several suffered major damages to their homes and shops, some but not all of which was covered by insurance. In addition to the physical damages, many members lost a minimum of two weeks work (and in some cases, much more) while digging out from the debris and waiting for water and electricity to be restored. As we know, approximately 35% and up of the southern most area members' businesses no longer exist, and in the case of Homestead 100% is destroyed. Hopefully, it will not take too long for the destroyed pianos to be replaced. While the normal six months repeat business will probably be adversely affected, almost everyone is getting back to normal.

In addition to the individuals and chapters who responded so generously, I want to acknowledge the other Regional Vice Presidents and the members of the Chapter Services Committee who so quickly helped spread the word of our fund drive. All of these people instantly and with no expectation of personal recognition offered their help. When I called Colette Collier to ask for Chapter Services' assistance, she immediately volunteered to act as repository so that an accurate record

could be kept for the South Florida Chapter and so that this task would not fall on their shoulders. These acts by all of our people epitomize the embodiment of PTC brotherhood and sisterhood. I am more than ever proud to be a member of this organization!

Gina Carter, RPT  
SERVP

Dear Friends,

On behalf of the South Florida Chapter, I would like to thank our dear friends who contributed to the Hurricane Andrew Relief Fund. We would like to especially thank Colette Collier who coordinated the efforts. The money went directly to our members who were hurt as a result of the storm.

I also really appreciated all the calls of concern from many members including our President, to inquire about our condition. It provided a tremendous uplift and moral boost as well as financial help to get us through this devastating situation. This really showed the crux of PTC, the love, concern and caring of our members. We are truly a unique and beautiful organization.

Bob Mishkin, RPT

## **Bylaws Amendment Proposals Due By February 1**

Proposals for amendments to the PTC bylaws, regulations and codes may be submitted to the Bylaws Committee by chapters, PTC committees or by the PTC Executive Board, but they must be received by February 1, 1993.

All proposals should be sent to committee chairman:

Danny Boone  
9707 Timberview  
Waco, Texas 76712.