



<http://my.ptg.org/tucson/home>
<http://tucsonpianotuners.net/home.htm>

Chapter News

Tucson Chapter (857)
Piano Technicians Guild, Inc.
Tucson, Arizona

April

2019

Tucson Chapter Meeting **Wednesday, April 17, 2019** **Hachenberg & Sons Piano** **4333 E. Broadway Blvd.**

**Located on the north side of Broadway Blvd.,
west of the Broadway/Swan intersection.**

5:30, refreshments; 6:30, meeting

Meeting Topic: Voicing

Kirby Tucker and Randy Prentice, presenters

Randy has a video of André Oorebeek demonstrating some voicing techniques and strategies. Oorebeek is an Amsterdam technician, well-known for his voicing expertise and skill. After the video, Kirby and Randy will do some actual voicing.

Hands on, on an actual piano with actual piano hammers!!

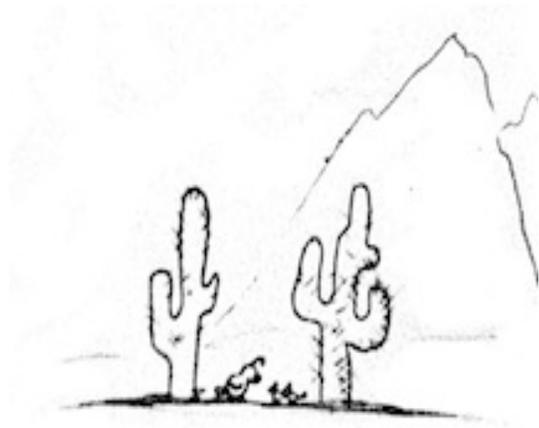
PTG Annual Convention and Institute

Coming to Tucson, Arizona!!

July 10-13, 2019

Starr Pass Resort, Tucson, AZ

<http://my.ptg.org/2019convention/home>



Notes from the last chapter meeting February 13, 2019

Tech Topic: Tuning Bob Conrad, presenter

Since Bob is going to be presenting at this year's PTG convention, we wanted to give him a chance to try some things out on us. So, we just let Bob talk and talk, for which Bob is really grateful. He told me he learned a lot from doing the chapter technical, and he thanks all for being there and being a good audience. But he tells me now his class at the convention will probably be quite different. We'll just have to go to his class there to find out. He's even talking about making each class different.

For the uninitiated, Bob's presentation at our last meeting may have been a bit baffling. By uninitiated I refer to technicians who have not talked with Bob about how he has come to do things. Bob and I have had several long conversations about his methods, and I'm starting to understand, but there's a learning curve. This summary won't be able to fully explain Bob's methods, but it might be a good start.

1. Direct-interval tuning: Dr. Al Sanderson who invented the Accu-Tuner describes how the device can be used to directly measure intervals. By setting the Accu-Tuner at the coincidental partial of an interval, you can determine the width of the interval (directly) in terms of cents. Years ago, Bob began using direct interval tuning to measure intervals and

use it in his tunings to learn how his technical and aural tunings measured up, literally. For Bob, this started a career and decades-long project of measuring and recording tunings of actual pianos, not just an interval here and there, but what the overall numbers meant in a piano tuning.

2. Mapping: Bob calls his systematic approach to finding the "targets" to use for the tuning, "mapping". His mapping determines the locations of every A on the piano, including A0 and A7, as well as the D3, E3, and D4 and E4. To oversimplify it, all his targets are determined by both aural and technical methods using direct-interval tuning with an Accu-Tuner. These best sounding, or best compromise, settings are written down so they can be used for creating the tuning.

Just as in aural tuning, mapping begins with the temperament octave. For Bob, this is the A3/A4 octave. Once the Prime octave settings for A3, D4, E4, and A4 are known, they are written down, so they can be used as the basis for the tuning and for the expansion of the tuning both above and below the prime octave.

After measuring the locations of the 2nd, 4th, and 8th partials of A4, tuning A3 as a pure 4:2, and then measuring the resultant width of the A3/A4 2:1, Bob's first goal is to map the width of the A3/A4 octave. Mapping the A3/A4 octave is done by using a combination of the width of the octave and the widths of what he calls the upper (D4/A4) and lower (A3/E4) prime 5ths. After the prime octave is mapped, the tuning is expanded using mapping techniques to find good sounding locations for each A on the piano.

Determining all the A locations may sound familiar to ETD tuners, but it's not the same. Bob's mapping methods and routines for finding his tuning target's locations are custom and 'manual'. Bob decides by both aural and technical methods where each of them should be. Only after all the A targets are known (including the settings for D3, E3, and

Bob, Continued next page

Bob, Continued

D4, and E4) are all of those targets used for creating the tuning in Bob's spreadsheet.

With an FAC tuning when most people "measure" the FAC numbers, they enter their measurements into the ETD and the ETD creates a tuning by filling in between the A's. The ETD can do this because it is a computer with a sophisticated algorithm that can take a few data points and extrapolate them to calculate and create the rest of the tuning. The software-type programs generally do even the measuring for you and then create the tuning based on its own measurements.

From those few measurements a complete theoretical, mathematical piano "tuning" is created. However, pianos don't always match up to those sets of numbers. Close, but no cigar, so to speak. Bob recognized this fact and wanted to measure things himself, using his ear and his measurements to create an actual aural/electronic result that didn't rely on extrapolation and algorithms but on his own direct measurements.

3. Templates: Bob's templates are not like the ones found in other ETDs. His templates are used for mapping, not for tuning. His templates are used to determine how his target locations sound. With his templates, he can tune notes, specifically the 5ths, within the octaves to confirm the locations of the A targets. Bob started mapping and tuning and storing the final results for each piano that he tuned. Yes, believe it or not, Bob's "templates" are taken from actual pianos and from what Bob has learned from pianos over decades of recording his tunings. He found that instead of letting the machine create a mathematical tuning, he could use his templates to tune and rely on all the information to do a better job that was based on real pianos. His method is difficult to understand, but suffice it to say that he finally found a way to bring it all together with graphics that tap into his templates and make his process easier. The important thing to remember is that his work relies on direct-interval measurements and real pianos, not math.

Bob wants to give credit to his creative partner in this tuning system. Chuck Littau is another piano technician and a good friend from Kansas City. They have known each other for many years. Chuck is an outstanding computer guy and a master of the Excel spreadsheet. Chuck created the spreadsheet for creating the tuning using the mapped-targets notes.

Their impressive spreadsheet contains all of their tuning ideas. Even the locations of D#4 and D#3 are incorporated into the tuning created within the spreadsheet. Bob says the location of D#4 establishes the shape of the prime octave's tuning curve. When the prime 5ths are 'balanced' the shape of the prime octave curve is correct for that piano. (When mapping the prime octave, the width of the prime octave is determined using the prime 5ths in addition to the octave. However, the mid-point in the octave is D#4. But once the locations for D4 and E4 are known, the location for D#4 can easily be seen as the half way point between those 2 notes). Bob says, mapping D#3 in the 3rd octave is also really cool. He said being able to independently map D#3 is very helpful for finding a good fitting tuning curve for the tenor area that often contains many scaling issues. Bob says, "Being able to accurately place those two D#s in the tuning is unique to this tuning system."

4. The Accu-Tuner: Lest you think that any ETD will work for Bob's methods, think again. The hardware, engineering, and design of the most recent Accu-Tuner is the only ETD capable of handling what Bob is doing. It alone is capable of providing the highest level of tuning accuracy and reliability. Bob claims that the Accu-Tuner combined with the Littau-Conrad Spreadsheet is an amazing combination of tuning tools for the mature piano tuner/technician.

Chapter Minutes

Tucson Chapter meeting
February 13, 2019
Hachenberg & Sons Piano
4333 Broadway Blvd., Tucson, AZ
Richard West, chapter secretary

The regular meeting of the Tucson Chapter (857) was called to order at 6:15 by President Kirby Tucker. Chapter members present included Bob Anderson, Bob Conrad, Mike Erickson, Neal Flint, Sarah Hong-Soto, Jack Phelps, Kirby Tucker, and Richard West. We welcomed one guest: D Evans.

Minutes from the May meeting were read and approved. **Old Business:** No action was taken. **New Business:** There was brief discussion about possible uses of the Tucson Visitors Bureau at the convention this summer. And there was some discussion about an April chapter meeting. No action was taken. Richard West ask about certified piano appraisers. He had received an email question about a person needing an "official" appraisal. No one knew if anyone in the Tucson area had official status to make appraisals that insurance companies would accept. No action taken. Our chapter treasurer, Bob Anderson reported that we have \$2,087.48. Richard West asked if we had enough to meet annual expenses and whether our dues increase was making a difference in the chapter. Bob reported that we were meeting expenses including sending a delegate to Council the past three years. No action was requested. Bob Anderson brought some copies of old PTG Journals for anyone who was interested in having a copy. There was a question about whether there is a discount for taking only the electronic version. No one had an answer. (NOTE: I emailed Kathy Maxwell at the home office and she said there is no discount for choosing only the electronic

version of the Journal. RW) Sarah Hong-Soto, Jack Phelps and Richard West reported on the upcoming grand regulation class. A concern was expressed about having minors at any chapter event, since there was a minor who attended the verbal regulation class. There were no problems, but there was a concern that we had no chapter policy regarding the issue. A motion was made by Bob Anderson and seconded by Jack Phelps to require that minors be accompanied by a responsible adult. Motion carried.

Meeting adjourned: 6:55

Upcoming meeting discussion items:

1. Insurance
2. Projector
3. Election of Officers
4. Steinway letter
5. Alternate meeting sites

Phoenix Chapter News

Phoenix Chapter Meeting
Tuesday, April 2, 7pm
Stilwell Pianos
1941 W Guadalupe Rd #115, Mesa, AZ

Robert Springer will be teaching the class: "Capstans and key leads, move it and lose it." We'll look at what's physically involved to move the capstan line, what to consider, and how to decide where to move it. There will be plenty of pictures from two case studies of capstan relocations and very little math. Robert promises more pictures than equations!

We'll also discuss and hopefully arrive at a chapter decision on how to vote for the national PTG president, something we discussed briefly at the last meeting. Please make plans now to attend the meeting, OK?

Convention Specials

1) First-time convention attendee?

PTG members can save \$300 on 2018 registration! Only available when you register by calling 913-432-9975 and ask for the First-Timer Rate.

2) New PTG member?

Use your \$200 off coupon for your 2018 registration. Only available when you register by calling 913-432-9975 and tell us that you have a new member coupon.

2019 NAMM Convention in Anaheim

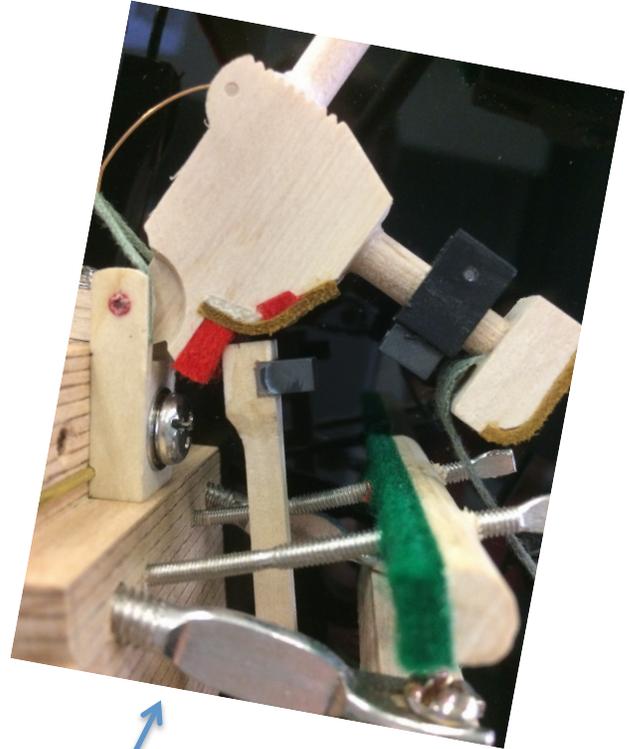
A few Tucson folks attended the National Association of Music Merchants convention in Anaheim in January. It was the first time for Richard West. He was impressed, but once is probably enough for him. Lots of people!



Kirby Tucker and Mark Hachenberg



Kirby Tucker and Richard West



A beautiful Mason and Hamlin hybrid vertical piano

A magnet to aid repetition in an upright

An acrylic grand case with lighting that changes from minute to minute

Introduction to Grand Regulation

Saturday, April 6, 2019

9:30 am–5:30 pm

Location: Hachenberg Piano

4333 E. Broadway Blvd., Tucson, AZ 8571

Class content: Richard West will be using the 37-Steps procedures as explained in the book *Grand Regulation Curriculum, color version* Workbook which is available from the PTG home office. Each participant will have a one-note grand action model to regulate. A grand piano will be available for demonstrations of some steps (bedding the key frame, for example). Some special attention will be given to bending damper wires.

Resource book: Richard suggests purchasing the book, *Grand Regulation Curriculum, color version*, Workbook. This book is available at the home office for \$20 (members), \$30 (non-members). **To purchase a workbook contact Kathy Maxwell at the home office:** Kathy@ptg.org

Participants will need to bring basic regulation tools. A complete list of tools is given in the resource book.

REGISTRATION INFORMATION:

- Provide your name, address, phone, and email.
- Fees will be collected when you arrive for the class (cash or checks made out to "Tucson Chapter PTG").
- There will be an additional "late" fee of \$10 for persons who have not pre-registered before class time.
- Minors must be accompanied by a parent or guardian.

To register by email: Email registration information to Sarah Hong Soto at: hong290457@gmail.com

To register by regular mail: Mail registration information to: Sarah Hong Soto, PO Box 43905, Tucson, AZ 85733

Fees: \$25 (Associate members of PTG)

\$90 (Non-members)

Free (RPT members of PTG)

Questions? Contact Sarah Hong Soto via email: hong290457@gmail.com or call her at (520) 477-2040.

Tucson Chapter Officers

President: Kirby E. Tucker, RPT
10226 E Mary Dr.
Tucson, AZ 85730
520-954-0951
ktucker1022@yahoo.com

Treasurer: Robert A. Anderson, RPT
5027 E Timrod St
Tucson, AZ 85711
520-326-4048
randerson79@cox.net

Vice President: Randy A. Prentice, RPT
PO Box 13308
Tucson, AZ 85732
520-749-3788
prenticepiano@gmail.com

Secretary: Richard E. West, RPT
642 E. River Walk Drive
Oro Valley, AZ 85737
520-395-0916
440richard@gmail.com