

A Remembrance

As often happens on this particular day nearly every year, I sat at a piano marking the passage of time and events in the small silences between the keys. Much has happened since that other November 22nd half a lifetime ago. The difference today is that instead of dwelling on the echoes of momentous, somber announcements in tinny voices emanating from the speaker above the blackboard in an eighth-grade English class in 1963, I am more in the present, amazed and grateful to be here.

Today I could think only of another gently accented New England voice, that of Al Sanderson, a/k/a "Doc," pronouncing emphatically over and over so we'd understand, "Inharmonicity, inharmonicity!" Presently I realize with a start how very much that voice has taught us, and how it will, sadly, nevermore be heard live. Most of all this day, I reflected on the profoundly positive impact his life has had on those of us inhabiting this small world of piano work. Yesterday, Dr. Albert E. Sanderson was laid to rest, having not outlived cancer.

I doubt I could have continued tuning pianos much after 1990 had it not been for the use of one of Dr. Sanderson's inventions, the Accu-Tuner. Piano tuning is hard enough work, but if you abuse your hands for years as I did, you too can wind up with carpal tunnel syndrome and carpal-metacarpal joint destruction, where you can't pull up your underwear without intense pain in the thumb. Playing octaves, tuning strictly aurally, is out of the question. The Sanderson Accu-Tuner, and its electronic progeny, saved my bacon. The surprising thing, though, is that after I started using it, the work was easier, faster and better, even without pounding the octaves as I had been doing. What a great tool it was and is! And who can say how many other careers were and continue to be built upon it?

I first met Dr. Sanderson one-on-one when I volunteered to have my tuning tested. At that time, around 1979 I think, he and Jim Coleman, Sr. were traveling around the country visiting chapters and collecting data on a new testing procedure they had invented, in order to adjust scoring parameters. I tuned a strip-muted KG2, and he measured it. I remember being very pleased with myself that I had scored 100% on temperament, and that he had said I was the only one to date using an F# temperament to have done so. I was immediately hooked on the man and his methods. Here was objective evidence that I knew what I was doing, which was so much more satisfying than the more subjective evaluation I'd gotten some four years before.

Many classes and tuning exams later, Rick Baldassin, then tuning editor of *The Piano Technicians Journal*, asked me to write a series of articles on the tuning exam, now available from PTG as the core of *The Tuning Exam: A Source Book*. In researching back issues of the *Journal* in preparation for this task, I soon came across what may be the first introduction of Al Sanderson to the *Journal* readership, which I hope you will find as enlightening now as it was to me then. Reading the January, 1975 *Journal*, page 10, we find that a reader had posed a question to technical editor Don Galt in November 1974

concerning the fact that the pitch note will sound different in relation to the tuning fork, depending on whether the fork is held in air next to the ear or is grounded on the piano. "Tune string to fork held to ear and check with fork touched to piano and string is always sharp" the questioner wrote. "But when I touch the fork to the piano and tune the string to that, then test by holding the fork to my ear, the string sounds in tune."

The following paragraph is what caught my attention. Don Galt wrote, "Now another reader, new to these pages as a writer, undertakes to solve this problem. He is Albert E. Sanderson, a newer member of PTG, who holds the position of lecturer in applied physics at Harvard University, Division of Engineering and Applied Physics. Dr. Sanderson writes thus:

"There is a simple explanation for the paradox described in your column for November under the heading 'Transferring Pitch to the Piano.' This paradox is actually a striking demonstration of the existence of inharmonicity in the partials of piano strings. The explanation is as follows.," Dr. Sanderson went on to explain not only what had puzzled the questioner, but also gently but firmly corrected Don Galt's own assertion that you could check the accuracy of pitch transfer with an equal-beating M10 test to the fork and A4, which Dr. Sanderson pointed out makes the fundamental of A4 slightly flat. "A more accurate method," he wrote, "is to drop the test an octave, using the 17th instead of the 10th. The coincident partials of a 17th are the fifth partial of the lower note and the fundamental of the upper note, which is just what you want. This 17th test should agree exactly with your octave test because both use the first partial of the upper note, and both set the unison at 440 Hz. rather than 880 Hz." Thus did our world become acquainted with Al Sanderson, and the M17 test for pitch transfer.

Somewhat prophetically, Don Galt concluded this section of the January, 1975, "Tuner-Technicians' Forum" with these words: "Dr. Sanderson's comments quoted here are very much appreciated. I expect we will hear from him again."

As indeed we did. I cannot think of a single person more profoundly influential in the advancement of both the art and the profession of tuning in the last several decades than Al Sanderson. Rest in peace, Doc!

by Michael Travis, RPT