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TRUMPET TECHNOLOGY MICHAEL ANDERSON, COLUMN EDITOR

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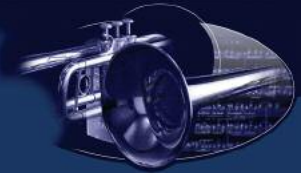
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TRUMPET TECHNOLOGY

MICHAEL ANDERSON, COLUMN EDITOR



Trumpet Technology is an expansion and refinement of ITG's previous column titled *Web Site Reviews*. This column will continue to examine Internet locations of interest to trumpet players. It will expand to examine developments in the technology associated with trumpet. Ideas and suggestions should be directed to: Michael Anderson, Wanda L. Bass School of Music, Oklahoma City University, 2501 North Blackwelder, Oklahoma City, OK 73106 USA; website@trumpetguild.org

TUNING TACTICS

BY CHASE SANBORN

"It is taken for granted that any brass player appearing before an audience will at least play in tune."

Rafael Méndez

While it may be taken for granted by the audience, playing in tune should never be taken for granted by the brass player. There is always room for improvement. Your daily practice regimen should incorporate work on intonation just as it does range and technique. In this article, I'd like to discuss the use of two powerful tools for improving intonation: drones and electronic tuners.

Drones

A *drone* is a sustained reference pitch. Listening to a drone as you practice markedly improves your ability to hear and control subtle variations in pitch. Every note you play forms part of an interval relative to a key center established by the drone. Pitch discrepancies are revealed with crystal clarity. The stability of pure intervals exerts a powerful gravitational pull. The overall effectiveness of the practice session is enhanced through increased mental focus and the meditative aspect of the drone. Even absolute beginners will benefit from listening to the drone as they learn how to produce the first notes on the instrument or the mouthpiece. They hear the pitch they are striving for, a key factor in successful brass playing.

You can generate drones with a keyboard or electronic device, or find them pre-recorded on several CDs. The *Tuning Tactics* CD provides root-fifth drones in every key. The root-fifth combination establishes a key center more precisely than a single pitch.

Tuners

An electronic tuner reveals a lot about your own sense of pitch and the intonation quirks of your instrument. By learning which notes on your instrument tend to be sharp or flat, you instinctively move in the right direction when playing in an ensemble. A tuner can indicate if you tend to play on the high side or the low side of the pitch, and can help you find the best position for the tuning slide.

Bear in mind, a tuner is a tool, not a crutch. It should be used to train the ear, not replace it. To train the ear, the visual aspect of the tuner must be connected to an aural reference. In other words, if the tuner says you are sharp, you must hear the pitch that you are sharp relative to. I am a big fan of the *Cen-*

terPitch tuner because it responds only to the vibration of your horn; it is unaffected by other sounds. You can use *CenterPitch* in an ensemble, to get an accurate indication of your own pitch "in the heat of the battle," or in the practice room while listening to the drone. The combination of aural and visual information is highly effective allowing you train your ear, hone your technique, and map out the intonation tendencies of every note on your instrument.

Using a tuner in an ensemble setting is controversial. Many of us have experienced a player who sits in an orchestra unwilling to budge, because his tuner says he is "in tune." This attitude is antithetical to a positive group playing experience. There is no right or wrong frequency for a specific note. It depends on the pitch of the other musicians and the harmonic function of the note. Only your ear can determine whether you are in tune. Occasional glances at *CenterPitch*, however, can assist your ear and keep you in touch with the pitch of your horn. This is very helpful when dealing with temperature variations, mutes, or changing instruments. It is a boon when you can't hear yourself, or are surrounded by out-of-tune players; the visual confirmation of your pitch allows you to relax and focus your sound, improving your overall intonation and relieving your chops. A key concept is that the tuner *does not tell you whether or not you are in tune*. It tells you where the pitch of the horn lies, and may help you to move in the right direction. In the end, the ear is the final judge. The tuner just makes suggestions.

When using *CenterPitch* in combination with a drone, start with eyes closed. Play each note where you hear it most in tune. Then open your eyes and refer to the display on *CenterPitch*. Adjust your pitch if necessary, and pay attention to the difference in sound. Go back and forth several times between where you heard the pitch and where *CenterPitch* says it is most accurate. Fine-tune your ear. Be aware of intervallic tuning adjustments; *e.g.*, major thirds should be played 14 cents lower than equal temperament. (A complete chart of interval adjustments is provided in *Tuning Tactics*.)

Tuning Tactics Tips

- You don't have to make time specifically to work on intonation. Simply integrate the drones and *CenterPitch* into your daily practice routine. The heightened mental focus trains your ear and increases the overall effectiveness of your practice session.

- Always tune by ear before looking at the tuner. If you are not sure where to place your note, tune it purposely flat, then bring the pitch up slowly until you feel you have gone past the optimum point. Go back and forth, zeroing-in on the spot where it sounds most in tune. You may be surprised by how accurate your ears are.
- When buzzing your mouthpiece or a rim visualizer, the drone keeps you on pitch and encourages careful, accurate buzzing. *CenterPitch* works well with a buzz aid or *BERP*; the visual display allows you to observe and improve buzzing accuracy. For beginners, *CenterPitch* verifies that you are playing the right note. The note name is clearly displayed, transposed for the instrument.
- When playing the horn, lower the volume of the drone to a subliminal level, so that it does not interfere with the connection between you and the instrument, yet still guides your ear. Focus on the tone quality and look for the resonant center (slot) for each note, then adjust pitch.
- Utilize slides or alternate fingerings to shift the pitch of the horn, rather than bending the note too far away from the resonant center. For example: third space C, played as the third of an A-flat chord, may sound more in tune (lower) with 2/3 fingering. Likewise, top line F, played as the third of a D-flat chord, may sound more in tune with the 1/3 fingering. You really get to know your horn.
- While sustaining a note, try to hold the *CenterPitch* display steady with no flickering. This requires excellent breath control. You see every “hiccup” in the airflow. This dramatically improves the effectiveness and the interest of playing long tones, and provides a way to track improvement.
- Listen to the drone while playing a lyrical etude. Place each interval as accurately as possible.
- Play jazz lines over a drone. The pitch center stays constant as you work your way through the harmonic structure.
- Practice finger patterns with the drone playing in the back-

ground. As you concentrate on your fingers, your ear connects the digital patterns to a key center.

About the author: Chase Sanborn is a jazz trumpet player currently based in Canada. He is a mainstay of the bustling Toronto music scene and a member of the jazz faculty at the University of Toronto. Chase’s instructional books, CDs, and DVDs (*Brass Tactics / Jazz Tactics / Tuning Tactics*) have garnered worldwide praise for their insightful and entertaining approach to playing and teaching music. Chase Sanborn (<http://www.chasesanborn.com>) is a Yamaha Artist. 