Piccolo Can Make or Break Your Band: Artistry in the High Register

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I. Introduction
• Importance of the piccolo in band: it’s always heard!
• The piccolo should be assigned to a strong player who has special affinity for the instrument. Don’t force a student to play piccolo who has not mastered the flute.
• In the old days, there was no specialized teaching of the piccolo. In recent decades, there have been advances in piccolo making, pedagogy, repertoire, and exposure of the instrument through competitions and publications.
• Ability on the piccolo can lead to more performing opportunities.
• Older band music was written for piccolo in D-flat. If your band has old parts, you must transpose up a half step. D-flat piccolos are no longer made.

II. Differences between flute and piccolo
• Air speed increases with higher pitch; thus, piccolo requires much faster air, but not a large volume of air.
• As sopranos use a faster vibrato than basses and violins a faster vibrato than cellos, the piccolo uses a faster vibrato than flutes.
• In the band, the flutist’s main role is to blend with others; on the other hand, the piccolo is usually a solo voice.
• Differences in construction result in a different scale and require use of special fingerings (see below).

III. Selection of an instrument
• Basic types of piccolos
  i. Metal, cylindrical-bore instruments (good for marching band).
  ii. Wood, conical-bore instruments (good for concert band, orchestra, chamber music, and solos).
  iii. Plastic piccolos, combinations of a wood or plastic body with a silver head, and composite.
• Options
  i. Consider a split-E mechanism.
• Brands

<table>
<thead>
<tr>
<th>Student piccolos (under $2000)</th>
<th>Mid-priced piccolos ($2000-$4000)</th>
<th>Artist models (over $4000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armstrong</td>
<td>Bulgheroni</td>
<td>Braun</td>
</tr>
<tr>
<td>Boston Legacy</td>
<td>Burkhart and Phelan</td>
<td>Burkart</td>
</tr>
<tr>
<td>Dean Yang</td>
<td>Hammig</td>
<td>Hammig</td>
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<tr>
<td>Emerson</td>
<td>Sankyo</td>
<td>Haynes</td>
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<tr>
<td>Gemeinhardt</td>
<td>Roy Seaman</td>
<td>Keefe</td>
</tr>
<tr>
<td>Jupiter</td>
<td>Trevor James</td>
<td>Nagahara</td>
</tr>
<tr>
<td>Pearl (Grenadite)</td>
<td>J.B. Weissman</td>
<td>Powell</td>
</tr>
<tr>
<td>J.B. Weissman</td>
<td></td>
<td></td>
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<tr>
<td>Yamaha</td>
<td></td>
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</tr>
</tbody>
</table>
IV. Care and maintenance of the piccolo and the player

- Wood piccolos are susceptible to cracking. Never play one below 65° Fahrenheit. Warm the instrument gradually by placing it in contact with your body or hands.
- Because the tone holes are small on the piccolo, water blocks them more often than on the flute. Always have gumless cigarette paper on hand to dry out clogged tone holes.
- Swab frequently. Use a “piccolo flag.”
- For doubling, use an instrument stand with a solid base (Blayman) or a Flute Saver.
- An essential accessory to piccolo practice is a pair of earplugs, especially if you practice high, loud passages. Audiologists supply high-end earplugs.

V. Tone

- Warming up
  i. **Never** start your day with high C’s on the piccolo.
  ii. If possible, play the flute before you play the piccolo.
  iii. Choose a warmup that takes you gradually from the low to the high register. Play slowly, legato, with a beautiful tone and vibrato; listen for good intonation:

  [Musical notation image]

- Embouchure
  i. Avoid buzzing lips: point lips forward, avoid pulling back in the corners (no smiling!), keep lips relaxed, and rely on a fast airstream.
  ii. Piccolo is held a little higher on lip than flute.
  iii. Blow more across rather than into the instrument.

- Purity and Beauty of Tone
  i. Don’t be shy.
  ii. Undertone is an acute problem.
• **Timbre**
  
  i. Emphasize a transparent, open (dare we say unfocused) sound; avoid too many harmonics or a laser-beam focus.
  
  ii. Use an open vowel as in “you” and avoid “ee” as in “seed.”

• **Vibrato**
  
  i. Fast vibrato (average of professionals is 6-7 cycles per second).
  
  ii. Narrow vibrato.

VI. **Intonation and blending with other instruments**

• Tune the band from the bottom up; the piccolo can’t play in tune unless lower voices are true.

• A little adjustment makes a big difference in high frequencies.

• The piccoloist must compromise between equal temperament and stretch tuning (piano tuners tune highest notes sharp, which influences how we hear high pitches).

• The piccolo most often plays in octaves with flutes or in unison with E-flat clarinet. Seat the piccolo between the flutes and clarinets, next to the E-flat clarinet.

• A cold piccolo plays flat.

• Airspeed should remain constant between loud and soft playing. The embouchure acts as a valve to adjust airspeed for different dynamics.

• The intonation tendencies of individual piccolos differ more than those of flutes. Typically, the following notes are flat on piccolos:

\[ \text{\includegraphics[width=0.8\textwidth]{flat_notes.png}} \]

The following notes are typically sharp:

\[ \text{\includegraphics[width=0.8\textwidth]{sharp_notes.png}} \]

• Ways to adjust pitch:

<table>
<thead>
<tr>
<th>If a note is flat</th>
<th>If a note is sharp</th>
</tr>
</thead>
<tbody>
<tr>
<td>roll the piccolo out</td>
<td>roll the piccolo in</td>
</tr>
<tr>
<td>raise your head</td>
<td>lower your head</td>
</tr>
<tr>
<td>use lips and jaw to blow upwards</td>
<td>drop your jaw and bring the upper lip down</td>
</tr>
</tbody>
</table>
• Top Ten Ways to Practice Intonation on Piccolo

10 Watch the needle on a tuner as you practice.

Warnings: This does not take into account mean-tone tuning in chords with winds or “stretch” tuning in upper register; also, it does little to develop one’s ear.

9 Play along with a recording.

Warning: Many recordings are not well in tune!

8 Record a passage. Play along with your recording on the piano, listening for notes that are not in tune with the harmonies. Alternatively, record the harmonies first and then play the melody.

Warning: Piano must be in tune.

7 Play along with accompaniment software such as SmartMusic. If accompaniment is not available, write it out in a music notation program such as Finale or Sibelius, and use the play back mode.

6 Write the piccolo part into music notation software. Play along while using the playback mode.

Warning: computers use equal temperament.

5 Concentrate on the perfect intervals (unisons, octaves, fourths, and fifths).

Extract the main intervals of a passage. Play along with a tuner on a pedal tone.

4 Play along with a tuner drone on a key note of the passage (usually the tonic or dominant).

3 Record a passage on flute, then play along with the recording on piccolo. Alternatively, play in octaves with another flutist.

2 Record a passage on piccolo, then play along with the recording on flute.

1 Sing (preferably solfège), then play.

VII. Special Fingerings

• To adjust for intonation or to facilitate technique.

• Avoid “1 &1” B-flat whenever possible; this fingering is dull in tone and flat in pitch; use thumb B-flat or lever.

• Keep pinky off for top B-flat, B, and C. Use the pinky to “extend the tube” of the piccolo on high C: place the finger on the end of the piccolo without covering the hole.

• For better response, add right hand second and third fingers to high A-flat.

• These fingerings help bring flat notes up to pitch when playing softly:

<table>
<thead>
<tr>
<th>Pitch</th>
<th>Left Hand</th>
<th>Right Hand</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2</td>
<td>1 2 3</td>
<td>1 2 3</td>
<td>low D-thumb</td>
</tr>
<tr>
<td>B2</td>
<td>Th/1 3</td>
<td>1 2 4</td>
<td>low E-L2</td>
</tr>
<tr>
<td>C3</td>
<td>1 2 3</td>
<td>1 3 4</td>
<td>Low F-thumb+R3</td>
</tr>
<tr>
<td>C-sharp3</td>
<td>2 3</td>
<td>2 3 4</td>
<td></td>
</tr>
<tr>
<td>D3</td>
<td>Th/ 2 3 4</td>
<td>2 3 4</td>
<td></td>
</tr>
<tr>
<td>E3</td>
<td></td>
<td>add 1st or 2nd trill key</td>
<td>1st trill combined with R2 2nd trill with R3</td>
</tr>
<tr>
<td>F-sharp3</td>
<td>Th/1 3</td>
<td>2 3 (no pinky)</td>
<td></td>
</tr>
</tbody>
</table>
• Other sources for fingerings:

VIII. **Selected excerpts from the band repertoire**

• Second movement, “Song,” meas. 21-31: a lyrical solo in octaves with alto saxophone.
• Issues: breathing, beauty of tone and vibrato, intonation, and dynamic control.
• Recommended practice: rehearse with saxophone and practice with drone on E.

• Issues: shaping the line for a dramatic sweep, breathing, beauty of tone and vibrato, intonation.
• Recommended practice: rehearse with saxophone and play with SmartMusic.

C. Goldman Edwin Franco, *Chimes of Liberty March* (1922)
• Second time through Trio is a piccolo obbligato equal to Sousa’s *Stars and Stripes*
• Issues: double tonguing, tongue and finger coordination, use of trill fingerings to facilitate technique, airspeed and embouchure flexibility in high register, heroic high B-flat or “chicken out” ending?
• Recommended practice: use ear plugs! Slur eighths before adding tongue; practice on flute.

D. Sousa, John Philip, *Stars and Stripes Forever March* (1897)
• Issues: Quick on-the-beat trills (mordents), E-flat trill fingering (both L 2 & 3), high A-flat fingering (add R2 & 3), crisp style, maintain a steady tempo
• Recommended practice: memorize!

E. Grainger, Percy, *Lincolnshire Posy* (1937)
• Third movement, “Rufford Park Poachers,” is a study in mixed meters, detailed nuances, and intonation
• Version A is usually preferred (to avoid the much maligned alto clarinet in Version B); piccolo doubles solo B-flat clarinet in triple octaves; canonic answer is E-flat clarinet and bass clarinet.
• Ending has piccolo doubling E-flat clarinet in perfect 12ths answered by oboe and bassoon.
• Recommended practice: Use metronome at around eighth=132-160. Use alternate fingering for high C. Practice with a tuner on a C or F drone. Rehearse with each soloist separately and then with all four, in rhythmic unison and then in canon.
• Fourth movement, “The Brisk Young Sailor,” features a virtuoso flourish for piccolo, flutes E-flat clarinet, and B-flat clarinets.
• Issues: fingering technique, fullness of low register, breathing, and emphasizing the main notes.
• Recommended practice: use thumb B-flat; no pinky in first two bars. Practice one beat at a time. Rehearse with flutes and clarinets.

IX. Recommended study materials
Raphael, Nan. *In the Limelight: Piccolo Solos and Technical Passages from the Symphonic Band Repertoire* (Flute.net Publications).

X. For more information
• Print resources
  *Flute Talk* Magazine: includes “Lets Talk Picc” column.
  *The Flutist Quarterly*: the official magazine of the National Flute Association.
• Online resources
  Christine Beard: [http://www.piccolohq.com/](http://www.piccolohq.com/)
  Niccola Mazzanti: [http://www.piccoloflute.it](http://www.piccoloflute.it)
  The National Flute Association: [http://www.nfaonline.org](http://www.nfaonline.org)