

***Sample pages from ...***  
Brad Edwards

# ***Bass Trombone Craft***

***A musical approach to building  
tone and technique***

Bass Trombone

ii.

## Foreword:

As I write from the perspective of a professional bass trombone player in the second decade of the twenty first century, it could be argued that the bass trombone is experiencing its golden age. Not only are many of the great established masters of the instrument still very active, but many extremely gifted young players are making their mark with performances and recordings that are artistically breath-taking, inspiring more musicians to study bass trombone. Often times, trombone festivals will have just as many bass trombone participants as tenor trombone participants. This current fever pitch of popularity of the instrument has happened in a relatively short period of time.

Although the earliest known mention of the bass trombone dates back to 1541 with Neuschel's mention of the "*Grosse-*" or "*Quart posaune,*" many would consider the real birth of the modern instrument to be the mid twentieth century. In the late 1930's, the bass trombone started gaining some popularity in the United States, and the first players began to specialize on the instrument. In previous years, some trombonists did play bass trombone, but it was considered a doubling instrument that was played only in the orchestra and there were practically no full-time bass trombone players. Charles Gerhard, a member of the Philadelphia Orchestras from the mid 1930's was the first full-time bass trombonist. A 1970's interview with Allen Ostrander, bass trombonist of the New York Philharmonic, described the playing "scene" and the attitude towards bass trombone players in the early 1900's. It gives us real perspective on the current popularity of the instrument:

Nobody specialized on bass trombone. In fact in Europe even today, when there is an opening in a section, everyone moves down and they get a new first player. Once, when the Vienna orchestra played in New York, I went to meet them, and every one of them claimed he was first trombone! Nobody would admit that he played second or bass. People used to switch around. Back in the early thirties in New York, Haines was bass in the Philharmonic, and there was a bass trombone at the Capitol Theater and Radio City Music Hall. Wankoff was the Met opera, and the man who did stage work did contrabass trombone parts. Leo Shapiro did all the bass trombone work around town (New York) and played tenor half the time to make a living. That's how little there was. They didn't have F attachments. A conductor didn't want to see one, even on small bore horns.

In the 1950's, Ed Kleinhammer, bass trombonist of the Chicago Symphony Orchestra, had the Conn Instrument Company add a second valve to his bass trombone. This was a huge event in the history of the development of the bass trombone because it immediately increased the technical ability of the instrument in the trigger range. Players of every style, including jazz, were affected by the complete chromatic capability of the bass trombone. The addition of the second valve led the way for the creation of more challenging solos and more interesting ensemble parts for bass trombone.

At that time, there were no methods for the bass trombone and practically no solo material. Allen Ostrander wrote the first bass trombone method in 1948 but could not get it published until 1966:

Once you got out of school you didn't play solos. They play a few in Europe but nothing in the United States. On bass trombone you just didn't play solos in those days. One of the first things really written for bass trombone was the Spillman Concerto. I was instrumental in getting it published and did I have to talk my head off to get a publisher to put the money into it! In fact in '48 when I went to publish my first method, publishers asked, "How many bass trombonists are there?" I didn't know so I wrote the Conn Co. They said they had sold 500 in the whole country. No publisher could print for so few prospects.

These days, thoughtful and innovative bass trombone pedagogical material is definitely desired and needed. Because of the virtuosity of parts and ability of young players, it is definitely necessary for the modern trombone teacher to have more than a superficial knowledge of the bass trombone, its options and idiosyncrasies, even if that teacher is not a specialist on the instrument. Although the tenor and alto trombone have many one-volume complete methods that focus on them, there have been very few written for the bass trombone. With Brad Edwards' new book, "Bass Trombone Craft," the teacher and player have a method that can take a young bass trombone player from the basic introduction of the valves all the way to true mastery of the instrument. Written from the perspective of a professional tenor trombone player and using original etudes, the book introduces and focuses on every aspect of bass trombone playing, all in one volume. It is a welcome and needed addition to bass trombone pedagogy material that should be a staple of every teacher's curriculum.

**Denson Paul Pollard, DMA**

**Bass Trombone, Metropolitan Opera Orchestra**

**Bass Trombone Teacher, Juilliard School and Mannes School of Music**

**September, 2012**

## **Acknowledgements:**

As Paul Pollard pointed out in his foreword, my perspective is primarily that of a tenor trombonist. I have won auditions and held some small positions on bass trombone, including the Cedar Rapids Symphony and the Arlington Symphony, but tenor is still my “bread and butter.” As I worked to create this bass trombone companion to the tenor trombone version, I wanted very much to create a book that was a true bass trombone approach and not just another transposition. To that end, I played through everything on bass trombone as I was writing it. There are unique sections and etudes/exercises in this book which do not appear in the tenor version.

I also sought assistance from a number of fine bass trombone specialists to make sure I wasn't veering off course. In addition to Dr. Pollard, I would like to thank Gabe Langfur and Dan Satterwhite for reviewing portions of this book. Gabe is the bass trombonist of the Rhode Island Symphony, a lecturer in bass trombone at Boston University and an Artist Representative for the S.E. Shires Co. in Boston. Dan is the bass trombonist of the Florida Symphony/Florida Grand Opera Orchestra and teaches bass trombone at Lynn University and the Brevard Music Festival. I'd also like to thank Chuck DePaolo of Ensemble Publications and Hickey's Music for his bass trombone insights, especially with regard to valve notation and the importance of using the second valve alone.

I am especially grateful to my wife, Martha, who recently described herself as a “book widow.” Finally, I'd like to remind my cat that my time on the laptop isn't really a good time for affection (and it isn't smart to sleep right behind my rolling chair... sorry about that!).

Brad Edwards  
September, 2012

## About This Book:

Why write another technique book? I've seen many books of technical studies but have yet to encounter one that builds technique in a way that is both methodical and musically satisfying. Technique only has value in serving a musical goal. Another concern with many of the existing technical studies, such as the revered Arban's Method, is that they were originally written for other instruments and don't always address the specifics of our instrument, such as alternate positions or optimal tessitura. A number of tenor trombone books have been adapted for bass trombone with varying degrees of success.

My goal:

**Create musically satisfying material specifically designed to build bass trombone technique.**

*Bass Trombone Craft* is designed as a progressive method targeted to high school or college trombone students but can also be useful for professionals as well.

*Bass Trombone Craft* represents the conclusion of a 'trilogy' of sorts:

1. Lip Slurs
2. Simply Singing for Winds
3. Trombone Craft

These books are meant to complement each other in helping bass trombonists build a solid, well-rounded technical and musical foundation.

## How to Use this Book:

Here are some general guidelines:

1. Technique serves the musical goal. With any of these studies, make a *musical* statement. Be a performer, not a machine.
2. Tension is the enemy. Don't just play fast and tense; be very aware of your tension level. Seek to play effortlessly.
3. Be Patient. Start slowly and build up. Don't choose a tempo that leads to a sloppy outcome. It takes as long as it takes.

## **Table of Contents:**

### **Part One**

#1.0 Tech Builder: Getting to Know Your Valves .....	1
#1.1 Two Pieces in B-flat Major .....	3
#1.2 Tech Builder: Getting Ready for E-flat.....	4
#1.3 Two Pieces in E-flat major.....	5
#1.4 Tech Builder: Using Natural Slurs in Legato .....	6
#1.5 Two Legato Pieces.....	7
#1.6 Tech Builder: Getting Ready for F.....	8
#1.7 Two Pieces in F major.....	9
#1.8 Tech Builder: Chromatic Scales .....	10
#1.9 Tech Builder: Preparing for C and G.....	11
#1.10 Two Pieces in C major .....	12
#1.11 Two Pieces in G Major.....	13
#1.12 Intervals: Expanding Patterns up to One Octave.....	14
#1.13 Tech Builder: Preparing for A-flat.....	15
#1.14 Two Pieces in A-flat Major.....	16
#1.15 Rhythm Builder: The Dotted Eighth-Sixteenth Rhythm .....	17
#1.16 Two-Line Tunes: Dotted Eighth-Sixteenth Rhythms .....	18
#1.17a Memorize This: Flowing Major Scales (edited).....	19
#1.17b Memorize This: Flowing Major Scales (unedited) .....	21
#1.18 Rhythm Builder: Varied Sixteenth-Note Pick-Ups .....	22
#1.19 Two-Line Tunes: Varied Sixteenth-Note Pickups.....	23
#1.20 Tech Builder: Preparing for D-flat.....	24
#1.21 Two Pieces in D-flat Major .....	25
#1.22 Intervals: Accuracy on the Overtone Series.....	26
#1.23 Memorize This: Major Arpeggios.....	27
#1.24 Two-Line Tunes: Major Arpeggios.....	28

**Table of Contents (continued):****Part Two**

#2.1 Two Pieces in D Major .....	29
#2.2 Memorize This: Major Scales in Rapidly-Changing Keys .....	30
#2.3 A Piece in Two Keys: A-flat and A major .....	31
#2.4 Rhythm Builder: Eighth-Note Syncopations.....	32
#2.5 "Two-Line" Tunes: Eighth-Note Syncopations .....	33
#2.6 A Piece in Two Keys: E-flat and E Major .....	34
#2.7 Rhythm Builder: 6/8 Syncopations, Quarter Note Triplets, Half Note Triplets ....	35
#2.8 "Two Line" Tunes: Syncopations Using Triplets.....	36
#2.9 Memorize This: Natural and Harmonic Minor Scales .....	37
#2.10 "Two-Line" Tunes: Natural and Harmonic Minor Scales .....	38
#2.11 Tech Builder: Accuracy with Leaps .....	39
#2.12 Tech Builder: Building Valve Technique .....	40
#2.13 Two Line Tunes: Valve Facility .....	42
#2.14 Memorize This: Melodic Minor .....	43
#2.15 "Two-Line" Tunes: Melodic Minor .....	45
#2.16 Memorize This: Minor Arpeggios .....	46
#2.17 Two-Line Tunes: Minor Arpeggios .....	47
#2.18 Rhythm Builder: Sextuplets.....	48
#2.19 Two-Line Tunes: Sextuplets.....	49
#2.20 Tech Builder: Chromatic Scales Using Sextuplets .....	50
#2.21 "Two-Line" Tunes: Two-Octave Scales .....	51
#2.22 Memorize This: Dominant 7 <sup>th</sup> Chords .....	52
#2.23 One-Line Tunes: Dominant 7 <sup>th</sup> Chords with Syncopation .....	54
#2.24 Concert Piece in E-flat .....	55
Duet Part.....	56

**Table of Contents (continued):****Part Three**

#3.1 Two Pieces in C Major .....	57
#3.2 Rhythm Builder: The Dotted Rhythm in 6/8 .....	58
#3.3 Two-Line Tunes: Dotted Rhythms in 6/8 .....	59
#3.4 "Two-Line" Tunes: Two-Octave Scales with Syncopation .....	60
#3.5 Tech Builder: Preparing for Added Sharps/Flats.....	61
#3.6 Two Pieces in G-flat Major.....	62
#3.7 Two Pieces in B and F-sharp Major .....	63
#3.8 Rhythm Builder: Beat Subdivisions .....	64
#3.9 "Two-Line" Tunes: Beat Subdivisions.....	65
#3.10 Memorize This: Two-Octave Arpeggios.....	66
#3.11 Three Short Pieces with Two-Octave Arpeggios .....	67
#3.12 Rhythm Builder: Metric Challenges.....	68
#3.13 Two-Line Tunes: Metric Challenges .....	69
#3.14 Tech Builder: Broken Arpeggios .....	70
#3.15 "Two-Line" Tunes: Broken Arpeggios.....	71
#3.16 Tech Builder: Developing Accuracy in the High Range.....	72
#3.17 Two Line Tunes: High Range Security.....	73
#3.18 Tech Builder: Improving the Lower Pedals.....	74
#3.19 Two-Line Tunes: Improving the Lower Pedals .....	75
#3.20 Tech Builder: Diminished 7 <sup>th</sup> Chords.....	76
#3.21 Three Short Pieces with Diminished 7 <sup>th</sup> Chords.....	77
#3.22 Tech Builder: Dissonant Leaps.....	79
#3.23 Two Fanfares.....	80
#3.24 Concert Piece.....	82



**Table of Contents (continued):****Appendix 1: Developing the Legato Tongue**

App 1.1: First Exercises .....	83
App 1.2 Integrating with Slide Movement .....	84

**Appendix #2: Double-Tonguing**

App 2.1: Developing the "kah" Tongue .....	85
App 2.2: Developing the "taka" Alternation with Some Slide Movement .....	86
App 2.3: Gliding Through Positions .....	87
App 2.4: Two-Note Patterns .....	88
App 2.5: Speeding Up and Slowing Down .....	90
App 2.6: Longer Patterns .....	91
App 2.7: Scale Patterns .....	92

**Appendix #3: Triple Tonguing**

App 3.1: Developing the Triple Tongue .....	94
App 3.2: Gliding Through Positions .....	96
App 3.3: Scale Patterns .....	97

**Appendix #4: Pattern-Building**

App 4.1a: Vade Mecum (edited) .....	98
App 4.1b: Vade Mecum (unedited) .....	100
Table of Major Scales - stepwise sequence .....	102
App 4.2: Major Scales - stepwise sequence .....	103
App 4.3: Major and Melodic Minor Scales, Two Octaves .....	112
App 4.4: Two-Octave Major and Chromatic Scales .....	116
App 4.5: Varied Scale Patterns .....	120
App 4.6: Varied Arpeggio Patterns .....	123
App 4.7: Patterns from Selected Repertoire .....	127

**Appendix #5: Interval Accuracy**

App 5.1: Centering Leaps .....	133
App 5.2: Octave Scales .....	134
App 5.3: Expanding Scales .....	135
App 5.4: Interval Practice from Selected Repertoire .....	137
App 5.5: Wide Leaps in Legato .....	141
App 5.6: Varied Fifths .....	143
App 5.7: Varied Leaps .....	144

**Table of Contents (continued):****Appendix #6: Developing the High Range**

Introduction .....	145
App 6.1: Glisses and Slurs .....	147
App 6.2: Glissando Scales .....	148
App 6.3: Arpeggios .....	150

**Appendix 7: Tone and Tuning**

App 7.1: Opening Up the Sound.....	151
App 7.2: Working with a Tuner.....	152
App 7.3: Working with a Drone .....	154
App 7.4: A Variation on the Remington Long Tones.....	155
App 7.5: Expanding Scales .....	156
App 7.6: Tonic-Dominant Patterns in Different Musical Contexts.....	157
App 7.7: Tuning Fifths and Octaves Over a Drone .....	159
App 7.8: Tuning Major Thirds Over a Drone.....	160
App 7.9: Drone Melodies .....	161
App 7.10: Chord Progressions (two players) .....	165
App 7.11: Two-Voice Chorale: “Nun Danket all Gotte” .....	166
App 7.12: Two-Voice Bordogni Reductions .....	167

**Appendix 8: Tenor and Alto Clef**

App 8.1: Getting Started with Tenor Clef.....	172
App 8.2: Reading Bass as Tenor Clef Down an Octave .....	174
App 8.3: Alto Clef for Bass Trombone .....	176

**Appendix 9: Flow Exercises (sing, buzz, play)**

Introduction .....	178
App 9.1: Neighbor Tones.....	179
App 9.2: A Singing Scale Pattern .....	180
App 9.3: An Octave Neighbor Tone Pattern .....	181
App 9.4: Arpeggiating a Tonic-Dominant Progression .....	182
App 9.5: Diatonic Intervals .....	183
App 9.6: Quartal Intervals .....	184
App 9.7: Ten Other Flow Patterns .....	185

About the Author.....	186
-----------------------	-----

11.

### #1.9 Tech Builder: Preparing for C and G

#### Centering the B

The B natural tends to be a problem with centering and pitch. Much of this trouble arises from incorrect slide placement. Although the different valve versions will be used most often, don't give up on the B in 7th position. Too many young bass trombonists start to think that, because they have all those valves, they no longer need to bother with the longer positions. This is a mistake.

Three staves of musical notation in bass clef, 4/4 time. The first staff shows a sequence of notes with fingerings 6, 7, 6, 7, 1. The second staff shows notes with valve markings V, V, V, 1, Γ, Γ, Γ. The third staff shows notes with valve markings V, Δ, Γ, Δ, Γ, Δ, 7, Δ, Δ.

#### Valve Choices

Three staves of musical notation in bass clef, 4/4 time. The first staff is marked *legato* and includes valve markings V V Δ Δ, *simile*, Γ Γ Δ Δ, *simile*, and Γ Γ V Δ. The second staff is marked *simile* and includes Δ Δ V Δ Δ, Δ V V V Δ, Δ V Γ V Δ, 6, and 6. The third staff includes valve markings V, V, Γ, Γ, Δ, and V.

#### Etude

Two staves of musical notation in bass clef, 4/4 time. The first staff is marked *mp* and *f*. The second staff is marked *mf* and *p*. The tempo is marked *♩ = 76*.

17.

### #1.15 Rhythm Builder: The Dotted Eighth-Sixteenth Rhythm

Few rhythms are performed incorrectly as often as the dotted-eighth sixteenth. The most common error is a "one-size-fits-all" sixteenth note which ends up being too fast in slow tempos and too slow in fast tempos

#### Basic rhythm exercise

Try this at a variety of tempos. Make sure the sixteenth note is accurate.

♩ = 63-104

Two staves of music in bass clef, 4/4 time, with a key signature of one flat. The first staff contains two measures of eighth-note pairs (dotted eighth, sixteenth) followed by a quarter rest. The second staff contains two measures of eighth-note pairs followed by a quarter rest.

#### Accuracy Duet

Have a partner play the bottom line to ensure accuracy.

♩ = 63-104

Two staves of music in bass clef, 4/4 time, with a key signature of one flat. The top staff features eighth-note pairs with triplet markings (3) above them. The bottom staff features eighth-note pairs with triplet markings (3) below them. The music is divided into four measures.

#### Etude

It is often harder to maintain accuracy on longer strings of dotted rhythms.

♩ = 104

Four staves of music in bass clef, 4/4 time, with a key signature of one flat. The music consists of continuous eighth-note pairs (dotted eighth, sixteenth) with dynamic markings: *mf*, *mp*, *f*, *p*, *mf*, *cresc.*, and *f*. Slurs and hairpins are used to indicate phrasing and dynamics.

19.

### #1.17a Memorize This: Flowing Major Scales (edited)

It seems there are two schools of thought with double valve usage:

1. Make the most of the natural valve slurs ("You've got two valves, use them")
2. Avoid extensive valve changes; legato tongue more, ("Keep things simple")

It is possible to find excellent players following either approach. For that reason, I have also provided an unedited version of these scales (#1.17b).

For some of the scales below, you will find two versions of the same scale: (a) and (b). One has greater valve changes and one has fewer. Try both, consult a good teacher, and make your best choice based on your instrument and your teacher's recommendations.

*mp*

*simile (still legato, same dynamic shape)*

(a)

(b)

*simile*

(a)

(b)

**#1.17b Memorize This: Flowing Major Scales (unedited)**

For those of you who would rather see a version of these scales without any valve markings, here you go. Mark in what you plan to use. Don't forget to play musically!

You might also want to use this page to "quiz" yourself on positions.

$\text{♩} = 66$

*mp*

*simile (still legato, same dynamic shape)*

*simile*

## #2.1 Two Pieces in D Major

a.  $\text{♩} = 88$

b.  $\text{♩} = 112$

See also: Blume/Fink 36 Studies, #1i; Bollinger Valve Technique, pp.16-17; Gillis 70 Progressive Studies, #13, #33

35.

## #2.7 Rhythm Builder: 6/8 Syncopations, Quarter Note Triplets, Half Note Triplets

### Basic Rhythm Exercise

Use a metronome!

♩ = 88

a.

b.

### Developing the Quarter Note and Half Note Triplets

The trick to placing the second and third notes of these longer triplets is simply to know where each note falls in relation to the beat. Some fall as triplet pick-ups to a downbeat ("ba-oom") and others fall as the triplet after the downbeat ("oom-ba"). Notice in the Basic Rhythm Exercise above that letter "a" is the same as a quarter note triplet and letter "b" is the same as a half note triplet.

Use a metronome!

♩ = 88



39.

## #2.11 Tech Builder: Accuracy with Leaps

Simple rule: if you miss a note, you must slow down. Make sure those bottom "money" notes are rock solid.

♩ = 72-120

a.

Musical exercise a: Bass clef, 4/4 time, key signature of two flats. The exercise consists of two staves. The first staff contains a sequence of eighth notes with rests, and the second staff contains a sequence of eighth notes with rests, including some beamed eighth notes.

b.

Musical exercise b: Bass clef, 4/4 time, key signature of three sharps. The exercise consists of two staves. The first staff contains a sequence of eighth notes with rests, and the second staff contains a sequence of eighth notes with rests, including some beamed eighth notes.

c.

Musical exercise c: Bass clef, 4/4 time, key signature of one flat. The exercise consists of two staves. The first staff contains a sequence of eighth notes with rests, and the second staff contains a sequence of eighth notes with rests, including some beamed eighth notes.

d.

Musical exercise d: Bass clef, 4/4 time, key signature of three flats. The exercise consists of two staves. The first staff contains a sequence of eighth notes with rests, and the second staff contains a sequence of eighth notes with rests, including some beamed eighth notes.

For additional practice, look at the exercises in Appendix #5, "Interval Accuracy."

51.

### #2.21 "Two-Line" Tunes: Two Octave Scales

Slide positions are not indicated. Look these through and mark some in. For additional scale practice, see Appendix #4: Scale Pattern-Building.

**a.**  $\text{♩} = 84$

**b.**  $\text{♩} = 104$

**c.**  $\text{♩} = 54$

**d.**  $\text{♩} = 80$

57.

### #3.1 Two Pieces in C Major

$\text{♩} = 100$

a.

*mp* *p* *mf* *f* *mp* *mp* *cresc.* *mf* *mp* *cresc.* *f* *mp*

$\text{♩} = 84$

b.

*f* *p* *mp* *f* *cresc.*

See also: Aharoni New Method, #93, #105; Blume/Fink 36 Studies for Trb. with F Attachment, #13, #14, #29; Bollinger Valve Technique, pp.20-21; Bordogni/Ostrander Melodious Etudes for Bass Trb. #22; Gillis 70 Progressive Studies, #6, #15, #20, #60; Tyrell 40 Advanced Studies (for tuba), #6, #10, #13



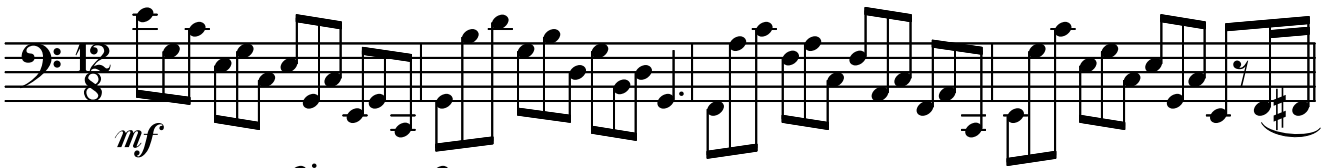



71.

### #3.15 "Two-Line" Tunes: Broken Arpeggios

You can practice these fast and sloppy or slow and accurate. Which do you think yields more benefit?

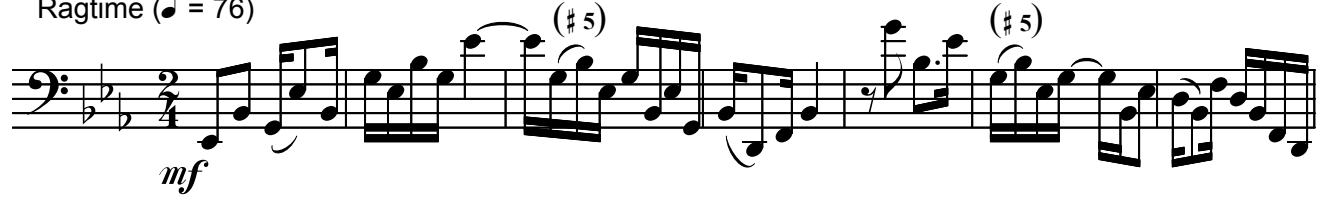
Irish Jig (♩. = c.80)

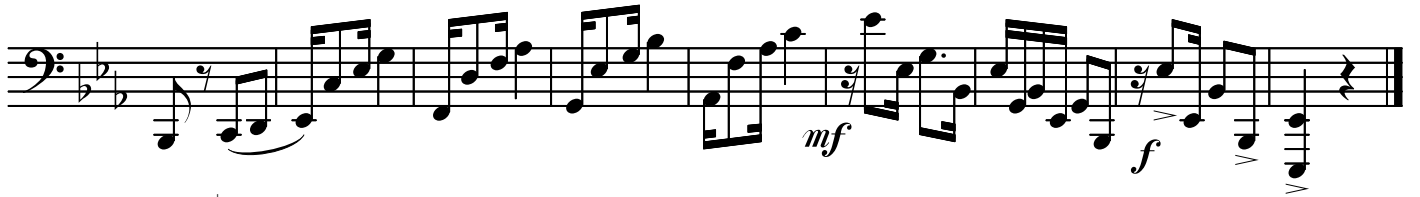
a.  *mf*

 *f*

The first line of music for the Irish Jig is in bass clef, 12/8 time signature, and starts with a mezzo-forte (*mf*) dynamic. The second line continues the piece with a forte (*f*) dynamic.

Ragtime (♩ = 76)

b.  *mf*

 *mf* *f*

The Ragtime piece is in bass clef, 2/4 time signature, and starts with a mezzo-forte (*mf*) dynamic. The second line features a forte (*f*) dynamic and includes two instances of a sharp fifth interval, marked with a '#5' above the notes.

Waltz (♩ = 144)

c.  *mf*

 *mf*

 *mf*

The Waltz piece is in bass clef, 3/4 time signature, and starts with a mezzo-forte (*mf*) dynamic. The second and third lines continue the piece with a mezzo-forte (*mf*) dynamic.

Swing (♩ = 120)

d.  *f*

 *mf* *ff*

The Swing piece is in bass clef, 4/4 time signature, and starts with a forte (*f*) dynamic. The second line begins with a mezzo-forte (*mf*) dynamic and ends with a fortissimo (*ff*) dynamic.

75.

### #3.19 Two-Line Tunes: Improving the Lower Pedals

Some passages are marked in octaves. This is mostly done for ease of reading. It may also help to play those upper octaves to clarify the pitches for your ear. These pieces roughly parallel the tenor trombone version of Trombone Craft #2.13.

The musical score consists of four main sections, each with two staves of music:

- Section a:** Tempo  $\text{♩} = 80$ . The first staff starts with a dynamic of *f* and includes slurs and accents. The second staff starts with *mp* and ends with *f*.
- Section b:** Tempo  $\text{♩} = 63$ . The first staff starts with *mf*. The second staff starts with *mp* and ends with *f*.
- Section c:** Tempo  $\text{♩} = 96$ . The first staff starts with *mf*. The second staff starts with *p* and ends with *f*.
- Section d:** Tempo  $\text{♩} = 84$ . The first staff starts with *f* and includes slurs and accents. The second staff starts with *mp* and includes slurs and accents.

The score is written in bass clef with various time signatures (4/4, 6/8, 3/4) and includes dynamic markings (*f*, *mp*, *mf*, *p*) and articulations (accents, slurs).

### Appendix #2: Double Tonguing App 2.5: Speeding Up and Slowing Down

The slowest notes should be slower than your fastest single tongue. The exact number of notes isn't important. The main thing is to achieve a smooth change of tempo. Slowing down is trickier than speeding up. Keep the speed change smooth.

a. **D G D G**

b. **D G D G**



### Appendix #3: Triple Tonguing App 3.1: Developing the Triple Tongue

Put the "kah" on the third note of the triplet, not the second. This makes the downbeat stronger.

♩ = 108-144

a.

T T T T      T T K T      T T K T T K T

T T T T      T T K T      T T K T T K T      *simile*

Don't try to go too fast. Make the notes clear and even.

♩ = 108-176

b.

T T K

c.



103.

Appendix 4: Scale Pattern-Building

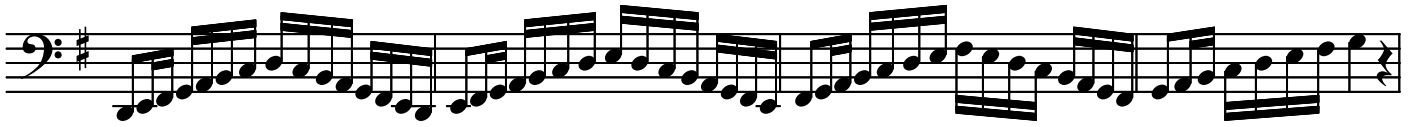
App 4.2: Major Scales - stepwise sequence

♩ = 60-88

1. F



2. G






Appendix 4: Pattern Building, App 4.5: Varied Scale Patterns

These can be especially useful for building valve technique. Start slowly and build gradually.

"Low Triplets"

d. 



123.

**Appendix 4: Pattern Building**  
**App 4.6: Varied Arpeggio Patterns**

"Chord Sequence"

a.

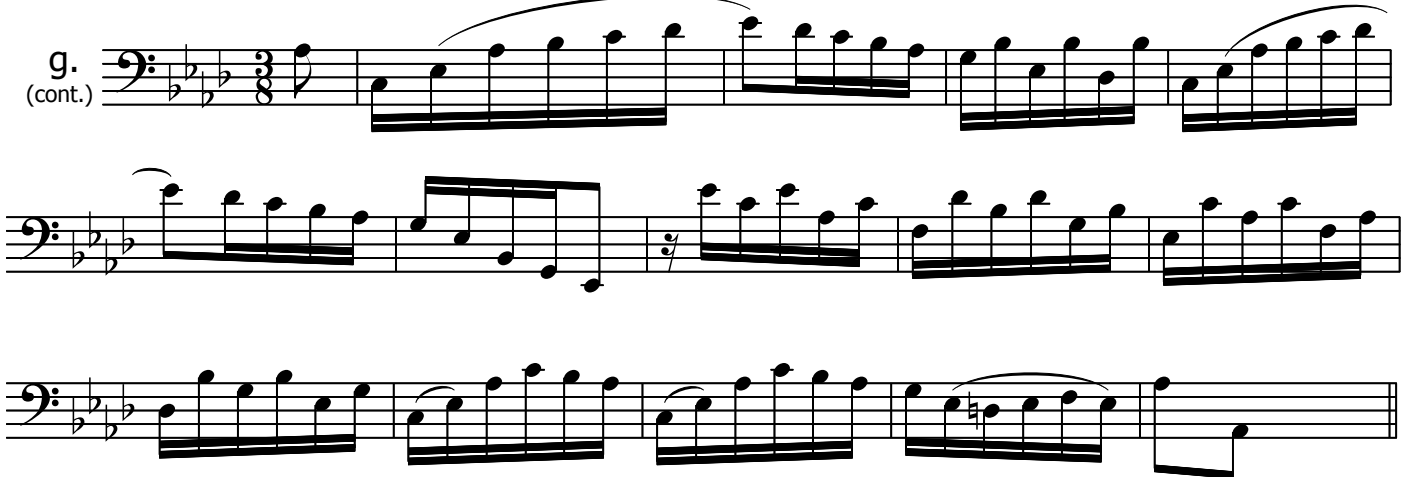
Play first in D-flat, then D

131.

Appendix 4: Pattern-Building, App 4.7 Patterns from Selected Repertoire.

Play first in bass clef (A-flat), then in tenor down (E-flat)

g.  
(cont.)



Play first in bass clef (B-flat), then in tenor down (F)



C.P.E. Bach, Flute Sonata

Play first in bass clef (C), then in tenor (G) [B-flat will become F natural]

h.



Continued on the next page...

Appendix 5: Interval Accuracy, App 5.4: Interval Practice from Selected Repertoire.

Telemann, Flute Fantasia No. 2, Mvt 1 (adapted)

d.

The musical score is written in bass clef with a 3/4 time signature and a key signature of one flat (B-flat major). It consists of ten staves of music. The first staff begins with a 'd.' marking. The music is primarily composed of eighth and sixteenth notes, often beamed together. There are several measures with rests, particularly in the 5th, 6th, and 10th staves. The piece concludes with a double bar line at the end of the 10th staff.



### Appendix 7: Tone and Tuning App 7.3: Working with a Drone

As you detune, you will hear "beats." Faster beats mean you are farther out of tune. Gliss slowly enough that you can really hear the beats change. Listen for that moment when the two notes lock into place.

Free in tempo

Student

Teacher/  
Drone

*slow gliss*

*slow gliss*

*simile*

4

5

4

**Appendix #7: Tone and Tuning**

**App 7.6: Tonic-Dominant Patterns in Different Musical Contexts**

Each example presents a simple tuning exercise followed by a musical passage stressing the same structural notes. Be expressive and mindful of solid intonation. These can also be done over a tuning drone.

**C major** **Maestoso**

**B minor** **Adagio**

**D-flat major** **Lebhaft (lively)**

**D minor** **Con forza**

## Appendix 7: Tone and Tuning

### App 7.9: Drone Melodies

These lyrical melodies provide good intonation practice when played along with a tuning drone. Each melody is intended to go over a Perfect 5th drone but can also work over a unison or octave drone. It is possible to create tuning drones electronically or along with a (very) patient partner. As of 2012, my website, BoneZone.org, has a set of tuning drones that work will with these etudes.

a.  $\text{♩} = \text{c. } 76$

b.  $\text{♩} = \text{c. } 76$

I didn't include dynamics because these can be done in a variety of ways. Make them musically interesting.

### Appendix 7: Tone and Tuning

#### App 7.11: Two-Voice Chorale, "Nun danket alle Gott"

This page is also identical to the tenor version of Trombone Craft. Play these slowly enough to really hear the intonation!

a.

This can be done in A or in A-flat. The small accidentals in parentheses are for the key of A major.

b.

c.

d.

## Appendix 7: Tone and Tuning

### App 7.12: Two-Voice Bordogni Reductions

These duets have a variety of applications. They can stand alone as simple duets to provide intonation practice or the bass line can work as an accompaniment to the corresponding "Rochut" etude.

If you wish to play along with the existing "Rochut" etude, you will find references to line numbers: L1, L2, etc. As of 2012, Carl Fischer has released a newer version of these vocalises. The new edition sometimes places the music on different lines. In the line number references below, the small italic numbers (*L1*) refer to the older edition. The larger, bold numbers (**L1**) refer to the newer edition. This new edition sometimes includes additional measures rest or even doubles certain measures. Those changes are marked with an asterisk.

Based on Bordogni/Rochut #2 (originally Bordogni, Vol. 1 #2)

a.

*ff* *L2* **L2**

*L3* **L3** *L4* **L4**

*L5* **L5** *L6* *L7* **L6**

*L8* **L7** *L9* *L10* **L8**

*L11* **L9** *L12* **L10** *L13*

## Appendix 8: Tenor and Alto Clef

### App 8.2: Reading Bass as Tenor Clef Down an Octave

Many trombonists like to read bass clef etudes as if they were in tenor clef and then transpose them down an octave. Thus the music is transposed down a perfect fourth (up a fifth then down an octave). This places these etudes into a comfortable middle to low range. This transposition has been especially popular with the Bordogni vocalises (also known as the Rochut etudes).

A passage written like this ...

...becomes this if you pretend it's in tenor clef:

Because the notes are transposed up a perfect fifth by the clef change, the key signature must also change. You have to **TAKE AWAY ONE FLAT (OR ADD ONE SHARP)** to obtain the correct key signature. Transpose that second example down an octave and it falls into a very nice register...

With only two exceptions, all the accidentals can be read as they appear. The exceptions: B-natural in bass clef becomes F-sharp when transposed. B-flat in bass clef will transpose to F-natural...

Result when  
transposed:

Printed: ♩ = 120

a.

## Appendix 9: Flow Exercises (sing, buzz, play)

The essential thing when you play any instrument is to keep your "singing mind" awake. As Arnold Jacobs put it, be a great singer in your mind and let your instrument reflect this. Pick any tune and sing or buzz it before playing it on your instrument. Don't worry if it doesn't feel the same as when you play; that's not the important thing. Instead, focus on how you want it to sound. By going back and forth between your instrument and singing/buzzing, you can develop a more natural singing approach without focusing too much on mechanics.

When buzzing, take a deep relaxed breath and buzz with an easy sound. Don't force. A good buzz is a happy balance between the extremes of tight/constricted and loose/airy. In legato, keep a nice steady stream of air flowing. You can get feedback by holding tissue paper or a pinwheel in front of the mouthpiece (an incentive spirometer is also useful for this). I prefer not to tongue when buzzing legato.

Here is a useful trick: as you are taking the mouthpiece out or putting it back into the trombone, use that 'transition time' to sing a few notes. This is very good for the ear.

Near each sing/buzz/play line you will see chord changes that can be played on the piano. If you have a keyboard available, play the chords while singing or even while buzzing. Hearing those chords provides an excellent reference to train your ear.

The patterns presented are relatively simple. You can be creative and make up your own patterns. A wonderful exercise is to simply play a chord on the piano and then make up melodies that fit within that harmony.

At times, these patterns may not fit within your vocal range. For female voices, simply sing up an octave as needed. However, continue to buzz/play in the printed octave. For male voices, learn to use your falsetto or "head voice" to extend your range higher without straining.

These kinds of patterns can also be useful in a warm-up or warm-down routine.

I have written another book, Simply Singing for Winds, which is a large collection of simple tunes, most of which are ideally suited to this "sing, buzz, play" approach.

**Appendix 9: Flow Exercises (sing, buzz, play)****App 9.3: An Octave Neighbor Tone Pattern**

Make use of natural slurs whenever possible. Any glissandi should be quick and unobtrusive. Although this is notated in 6/8, it should not be played too quickly.

Sing                      1x Buzz; 2x Play

6/8

Sing                      1x Buzz; 2x Play

6/8

Sing                      1x Buzz; 2x Play

6/8

Sing                      1x Buzz; 2x Play

6/8

Sing                      1x Buzz; 2x Play

6/8