# You Are Only As Good As Your Last Breath: Improving Brass Pedagogy

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Dr. Marc Reed currently serves as Music Department Chair and Director of Brass Studies at Fort Lewis College in Durango, Colorado where he teaches applied trumpet and horn, brass ensembles, brass methods, and courses in jazz and popular music. He is the column editor of the International Trumpet Guild Journal's Trumpet in the Wind Band Column, Co-Principal Trumpet of the San Juan Symphony Orchestra, and is an artist/clinician for the Bach Trumpet Division of the Conn-Selmer Corporation.

Reed has presented clinics at the 2009 Iowa Bandmasters Association Conference, 2011 Alabama Music Educators Association Conference, 2011 Midwest Band and Orchestra Clinic, 2012 Florida and Colorado Music Educators Association Conferences, and will present clinics at the 2013 International Trumpet Guild Conference, 2013 Texas Music Educators Association Conference, and 2013 Iowa Bandmasters Association Conference. He has published several articles on brass pedagogy and is a contributing member of the ITG Journal's Recording Review and Book Review staffs. He annually serves as a Conference Reporter for the ITG Journal. Reed can be heard on over a dozen recordings on the DJ Music, Mark, Kalvier, and GIA Windworks labels.

Previous faculty appointments include the University of Alabama at Birmingham as Assistant Professor of Trumpet and Assistant Director of Bands, Waldorf College as Assistant Professor of Music and Director of Instrumental Activities, Drake University as Artist Teacher of Trumpet, and The University of North Texas as a Doctoral Trumpet Teaching Fellow. He was also the Applied Trumpet Instructor at The Colony High School, Griffin Middle School, and Lakeview Middle School in the Lewisville, Texas Independent School District, for five years. He has also taught at Blue Lake Fine Arts Camp as Faculty Trumpet Instructor.

Reed holds a Doctor of Musical Arts Degree in Trumpet Performance and Brass Pedagogy from the University of North Texas, Master of Music Degree in Trumpet Performance from The University of North Texas, and Bachelor's Degrees in both Music Education and Trumpet Performance (with a jazz emphasis) from Drake University. Dr. Reed studied trumpet with Keith Johnson, John Holt, Richard Giangiulio, and Andrew Classen. He was a three-year member of the North Texas Wind Symphony, directed by Eugene Corporon. He studied wind conducting with Eugene Corporon, Dennis Fisher, and Sue Samuels.

Reed was born and raised in central Iowa. He resides in picturesque Durango, Colorado with his wife Katherine, who is the Director of Instrumental Music at Durango High School, and their two Vizsla dogs Penny and Wrigley.

# **Improving Brass Pedagogy**

# Issues and Myths

- Phrases to avoid
  - o Breath from the diaphragm
  - Support the wind
  - o Keep a tight abdomen
  - o Push the wind
  - o Breathe through your nose
- Bad embouchure habits
  - o Stretching the lips
  - o Smiling while playing
  - o Puffing the cheeks
- Syllable shifting
  - o Change for different registers
    - "ah-ee" for ascending
- Avoid thinking about pivoting
  - o A natural pivot does occur
  - o A conscious pivot is distracting

# The Breath

- Why is teaching the breath so important?
  - O Air is to the wind player as gas is to an automobile
  - We use only 11% of our total lung capacity for daily activities
  - o Amount of lung capacity is determined by various factors
    - Age
    - Height
    - Sex
  - See chart that follows

## **Lung Capacities**

			20 25 30 35 40 45 50 55 60 65 70 7
	20 25 30 35 40 45 50 55 60 65 70 75 80	4'	2.1 2.1 2.0 2.0 1.9 1.8 1.8 1.7 1.6 1.5 1.4 1
		4' 1"	2.2 2.2 2.1 2.1 2.0 1.9 1.8 1.8 1.7 1.6 1.5 1
	1.8 1.8 1.7 1.7 1.6 1.5 1.5 1.4 1.3 1.2 1.1 1.0 0.9	4' 2"	2.3 2.3 2.2 2.1 2.1 2.0 1.9 1.8 1.7 1.6 1.5 1
1"	1.9 1.8 1.8 1.7 1.7 1.6 1.5 1.4 1.3 1.3 1.2 1.1 1.0	4'3"	2.4 2.4 2.3 2.2 2.1 2.1 2.0 1.9 1.8 1.7 1.6 1
2"	2.0 1.9 1.9 1.8 1.7 1.7 1.6 1.5 1.4 1.3 1.2 1.1 1.0		
' 3"	2.1 2.0 1.9 1.9 1.8 1.7 1.6 1.5 1.5 1.4 1.3 1.1 1.0	4' 4"	2.5 2.4 2.4 2.3 2.2 2.2 2.1 2.0 1.9 1.8 1.7 1
4"	2.1 2.1 2.0 1.9 1.9 1.8 1.7 1.6 1.5 1.4 1.3 1.2 1.1	4' 5"	2.6 2.5 2.5 2.4 2.3 2.2 2.1 2.1 2.0 1.8 1.7 1
5"	2.2 2.2 2.1 2.0 1.9 1.9 1.8 1.7 1.6 1.5 1.4 1.2 1.1	4' 6"	2.7 2.6 2.6 2.5 2.4 2.3 2.2 2.1 2.0 1.9 1.8 1
6"	2.3 2.2 2.2 2.1 2.0 1.9 1.8 1.7 1.6 1.5 1.4 1.3 1.2	4' 7"	2.8 2.7 2.7 2.6 2.5 2.4 2.3 2.2 2.1 2.0 1.9 1
7"	2.4 2.3 2.3 2.2 2.1 2.0 1.9 1.8 1.7 1.6 1.5 1.3 1.2	4' 8"	2.9 2.8 2.8 2.7 2.6 2.5 2.4 2.3 2.2 2.1 1.9 1
' 8"	2.5 2.4 2.3 2.3 2.2 2.1 2.0 1.9 1.8 1.6 1.5 1.4 1.2	4' 9"	3.0 2.9 2.9 2.8 2.7 2.6 2.5 2.4 2.3 2.1 2.0 1
'9"	2.6 2.5 2.4 2.3 2.2 2.1 2.0 1.9 1.8 1.7 1.6 1.4 1.3	4' 10"	3.1 3.0 3.0 2.9 2.8 2.7 2.6 2.5 2.3 2.2 2.1 1
' 10"	2.7 2.6 2.5 2.4 2.3 2.2 2.1 2.0 1.9 1.8 1.6 1.5 1.3	4' 11"	3.2 3.1 3.1 3.0 2.9 2.8 2.7 2.5 2.4 2.3 2.1 2
' 11"	2.8 2.7 2.6 2.5 2.4 2.3 2.2 2.1 1.9 1.8 1.7 1.5 1.4	5'	3.3 3.3 3.2 3.1 3.0 2.9 2.8 2.6 2.5 2.4 2.2 2
	2.8 2.8 2.7 2.6 2.5 2.4 2.3 2.1 2.0 1.9 1.7 1.6 1.4	5' 1"	3.4 3.4 3.3 3.2 3.1 3.0 2.8 2.7 2.6 2.4 2.3 2
1"	2.9 2.9 2.8 2.7 2.6 2.5 2.3 2.2 2.1 1.9 1.8 1.6 1.5	5' 2"	3.6 3.5 3.4 3.3 3.2 3.1 2.9 2.8 2.7 2.5 2.4 2
2"	3.0 3.0 2.9 2.8 2.7 2.5 2.4 2.3 2.2 2.0 1.9 1.7 1.5	5' 3"	3.7 3.6 3.5 3.4 3.3 3.2 3.0 2.9 2.8 2.6 2.4 2
3"	3.1 3.1 3.0 2.9 2.7 2.6 2.5 2.4 2.2 2.1 1.9 1.7 1.6	5' 4"	3.8 3.7 3.6 3.5 3.4 3.3 3.1 3.0 2.8 2.7 2.5 2
4"	3.2 3.2 3.1 2.9 2.8 2.7 2.6 2.4 2.3 2.1 2.0 1.8 1.6	5' 5"	3.9 3.8 3.7 3.6 3.5 3.4 3.2 3.1 2.9 2.8 2.6 2
5"	3.3 3.2 3.1 3.0 2.9 2.8 2.7 2.5 2.4 2.2 2.0 1.9 1.7	5' 6"	4.0 3.9 3.8 3.7 3.6 3.5 3.3 3.2 3.0 2.9 2.7 2
6"	3.4 3.4 3.2 3.1 3.0 2.9 2.7 2.6 2.4 2.3 2.1 1.9 1.7	5' 7"	4.2 4.1 4.0 3.8 3.7 3.6 3.4 3.3 3.1 2.9 2.8 2
7"	3.6 3.5 3.3 3.2 3.1 3.0 2.8 2.7 2.5 2.3 2.2 2.0 1.8	5' 8"	4.3 4.2 4.1 3.9 3.8 3.7 3.5 3.4 3.2 3.0 2.9 2
8"	3.7 3.6 3.4 3.3 3.2 3.1 2.9 2.8 2.6 2.4 2.2 2.0 1.8	5' 9"	4.4 4.3 4.2 4.1 3.9 3.8 3.6 3.5 3.3 3.1 2.9 2
' 9"	3.8 3.7 3.5 3.4 3.3 3.1 3.0 2.8 2.7 2.5 2.3 2.1 1.9	5' 10"	4.5 4.4 4.3 4.2 4.0 3.9 3.7 3.6 3.4 3.2 3.0 2
10"	3.9 3.8 3.7 3.5 3.4 3.2 3.1 2.9 2.7 2.6 2.4 2.2 1.9	5' 11"	4.7 4.6 4.4 4.3 4.2 4.0 3.9 3.7 3.5 3.3 3.1 2
11"	4.0 3.9 3.8 3.6 3.5 3.3 3.2 3.0 2.8 2.6 2.4 2.2 2.0	6'	4.8 4.7 4.6 4.4 4.3 4.1 4.0 3.8 3.6 3.4 3.2 3
	4.1 4.0 3.9 3.7 3.6 3.4 3.3 3.1 2.9 2.7 2.5 2.3 2.1	6' 1"	4.9 4.8 4.7 4.6 4.4 4.2 4.1 3.9 3.7 3.5 3.3 3
1"	4.2 4.1 4.0 3.8 3.7 3.5 3.4 3.2 3.0 2.8 2.6 2.3 2.1	6' 2"	5.1 5.0 4.8 4.7 4.5 4.4 4.2 4.0 3.8 3.6 3.4 3
2"	4.3 4.2 4.1 3.9 3.8 3.6 3.4 3.3 3.1 2.9 2.6 2.4 2.2	6' 3"	5.2 5.1 4.9 4.8 4.6 4.5 4.3 4.1 3.9 3.7 3.5 3
3"	4.5 4.3 4.2 4.0 3.9 3.7 3.5 3.3 3.1 2.9 2.7 2.5 2.2	6' 4"	5.3 5.2 5.1 4.9 4.8 4.6 4.4 4.2 4.0 3.8 3.6 3
4"	4.6 4.4 4.3 4.2 4.0 3.8 3.6 3.4 3.2 3.0 2.8 2.5 2.3	6' 5"	5.5 5.4 5.2 5.1 4.9 4.7 4.5 4.3 4.1 3.9 3.7 3.
5"	4.7 4.6 4.4 4.3 4.1 3.9 3.7 3.5 3.3 3.1 2.9 2.6 2.3	6' 6"	5.6 5.5 5.4 5.2 5.0 4.8 4.6 4.4 4.2 4.0 3.8 3.
6"	4.8 4.7 4.5 4.4 4.2 4.0 3.8 3.6 3.4 3.2 2.9 2.7 2.4	6' 7"	5.8 5.6 5.5 5.3 5.2 5.0 4.8 4.6 4.3 4.1 3.8 3.
7"	4.9 4.8 4.7 4.5 4.3 4.1 3.9 3.7 3.5 3.3 3.0 2.7 2.5	6' 8"	5.9 5.8 5.6 5.5 5.3 5.1 4.9 4.7 4.4 4.2 3.9 3.
8"	5.1 4.9 4.8 4.6 4.4 4.2 4.0 3.8 3.6 3.3 3.1 2.8 2.5	6' 9"	6.1 5.9 5.8 5.6 5.4 5.2 5.0 4.8 4.6 4.3 4.0 3.
9"	5.2 5.0 4.9 4.7 4.5 4.3 4.1 3.9 3.7 3.4 3.2 2.9 2.6	6' 10"	6.2 6.1 5.9 5.7 5.6 5.4 5.1 4.9 4.7 4.4 4.1 3.
10"	5.3 5.2 5.0 4.8 4.6 4.4 4.2 4.0 3.8 3.5 3.2 3.0 2.7	6' 11"	6.4 6.2 6.1 5.9 5.7 5.5 5.3 5.0 4.8 4.5 4.2 4.
11"	5.5 5.3 5.1 5.0 4.8 4.6 4.3 4.1 3.9 3.6 3.3 3.0 2.7	7'	6.5 6.4 6.2 6.0 5.8 5.6 5.4 5.2 4.9 4.6 4.4 4.
	5.6 5.4 5.3 5.1 4.9 4.7 4.4 4.2 3.9 3.7 3.4 3.1 2.8	7' 1"	6.7 6.5 6.4 6.2 6.0 5.8 5.5 5.3 5.0 4.7 4.5 4.
1"	5.7 5.6 5.4 5.2 5.0 4.8 4.5 4.3 4.0 3.8 3.5 3.2 2.9	7' 2"	6.8 6.7 6.5 6.3 6.1 5.9 5.7 5.4 5.1 4.9 4.6 4.
2"	5.9 5.7 5.5 5.3 5.1 4.9 4.7 4.4 4.1 3.9 3.6 3.3 2.9	7' 3"	7.0 6.8 6.7 6.5 6.3 6.0 5.8 5.5 5.3 5.0 4.7 4.
3"	6.0 5.8 5.6 5.4 5.2 5.0 4.8 4.5 4.2 3.9 3.6 3.3 3.0	7' 4"	7.2 7.0 6.8 6.6 6.4 6.2 5.9 5.7 5.4 5.1 4.8 4.
4"	6.1 6.0 5.8 5.6 5.4 5.1 4.9 4.6 4.3 4.0 3.7 3.4 3.1	7' 5"	7.3 7.2 7.0 6.8 6.5 6.3 6.1 5.8 5.5 5.2 4.9 4.
5"	6.3 6.1 5.9 5.7 5.5 5.2 5.0 4.7 4.4 4.1 3.8 3.5 3.1	7' 6"	7.5 7.3 7.1 6.9 6.7 6.4 6.2 5.9 5.6 5.3 5.0 4.

Estimated vital capacities for **females** in liters. Follow height (in left column) and age (at top, in five year increments). Based on a formula from the American Thoracic Society

Estimated vital capacities for males in liters. Follow height (in left column) and age (at top, in five year increments).

Based on a formula from the American Thoracic Society

Excerpted from *Arnold Jacobs: Song and Wind*, by Brian Frederiksen. p. 114-115. Used by permission.

# **Breathing Goals**

- A free-flowing and relaxed breath is most desirable
  - o Tension is the brass player's worse enemy
- Two basic syllables
  - "Oh" for inhalation
  - "Toh" for exhalation
    - Stress a warm breath
    - A good breath has a yawn-like quality
- Circular motion
  - o Conceptualize as one circular motion
  - Clock imagery
    - Start at twelve and inhale as you move counterclockwise
    - Begin exhaling at six and continue back towards twelve
- Student struggles?
  - Wind patterns may help

## **Breathing Checklist**

- Breathe from the bottom up
  - o RH on stomach, LH on rib cage
    - RH moves first, LH moves last
- Breath across tongue, not roof of mouth
  - o Strive to make cold spot on back of the throat
- Tension can come from
  - Tightness in chest
  - Constriction in throat
  - o Arching of the tongue
  - o Teeth being too close together
- Shoulders should remain neutral
- No unnecessary movement
  - This is wasted energy
- Air is released, not forced

### **Breathing Exercises**

- In/out for various counts
  - 0 4/4
  - 0 2/4
  - 0 1/4
  - 0 1/4
  - o 1/etc...
- Paper in front of face
  - o 1) Hold paper close to face
  - o 2) Blow paper with steady airstream
  - o 3) Keep paper elevated for as long as possible
  - o 4) Start close to face and gradually move further away
- Paper on binder/stand
  - o 1) Adjust stand to height of student's face
  - o 2) Paper on binder; half on/off
  - o 3) Blow paper off of the stand
    - Careful not to force
- Air through the instrument
  - Seal around mouthpiece or leadpipe
  - o Shows how easily air will move through the instrument
  - o Reinforce warm, moist air
- Fog
  - o Hand
  - o Bell of instrument
  - Mirror
- Pinwheel
- Tube
- Bag

### Other Breathing Advice

- Breathe in-style and in-tempo
  - o Slower for adagio
  - Faster for allegro
- Internal breaths are just as important as the initial breath
  - O You Are Only As Good As Your Last Breath
- Breathing too much?
  - Can cause hyperventilation
  - o Causes tension by adding good air on top of good air
- Try to expel most of the air in lungs before breathing again
- Exhale before breathing; this ensures a fresh, full breath
- Work on breathing exercises at the onset of every practice session or rehearsal

## Singing

- Why sing?
  - o Instruments emulate voice
  - o Clear indicator of what is in the mind
  - o Sing as instrument sounds
    - Full
    - With the desired articulation
      - Toh, toh, toh...
      - Tah, tah, tah...
  - Gets horn off face
- The mind's instrument
  - o Comprised of most beautiful sounds one has ever heard
  - Goal setter
  - o Comes from?
    - Teachers
    - Colleagues
    - Live performances
    - Student's own playing history
    - Recordings
  - o Helps to develop relative pitch

## **Buzzing**

- Is the foundation of the sound
  - Brass players sing from their lips
- The instrument is amplification
- Eliminates instrument
  - o No resistance means that air depletes faster.
    - Thus, full breaths are a must
  - o Frees performer from inborn pitch tendencies of instrument
  - Allows focus on sound
    - No fingers and/or slides
- Substitute for instrument practice
- Enhanced by buzzing devices (all retail under \$20. Windsong Press Limited carries a wide array for buzzing and breathing devices. www.windsongpress.com)
  - o B.E.R.P. (Buzz extension resistance piece)
  - o Buzz aid
  - o Buzz clip
  - o Embouchure visualizer

### Mouthpiece Tunes

- Mary Had a Little Lamb
- Twinkle, Twinkle, Little Star
- Yankee Doodle
- Silent Night
- *Happy Birthday*
- Hot Cross Buns
- Camptown Races
- Amazing Grace
- Danny Boy
- Aura Lee (Love Me Tender)
- O Christmas Tree
- God Bless America
- My Country 'Tis of Thee
- America
- Star Spangled Banner

- Ode to Joy
- Work Song
- Joy to the World
- I've Been Working on the Railroad
- I'm a Little Tea Pot
- Somewhere Over the Rainbow
- Auld Lang Syne
- 'Tis a Gift to be Simple
- Away in a Manger
- *Hail to the Chief*
- Greensleves
- Rudolph The Red Nosed Reindeer
- Taps
- Take Me Out to the Ballgame
- London Bridge is Falling Down

# Mouthpiece Melodies

compiles by Arnold Jacobs

A Bicycle Built for Two A Hunting We Will Go All Through the Night Alouette Alphabet Song America the Beautiful Angels We Have heard on High
As the Caissons Go Rolling Along Auld Lang Syne Aura Lee Away in a Manger Baa, Baa Black Sheep Battle Hymn of the Republic Billy Boy Blow the Man Down Blue Bells of Scotland Brahms Lullaby Can Can Camptown Races Clementine Deck the Halls Dixie Do, A Deer Down in the Valley Farmer in the Dell First Noel For He's a Jolly Good Fellow Frosty the Snowman God Bless America God Rest Ye Merry Gentlemen Good King Wenceslas Goodnight Ladies Go Tell Aunt Rhodie Go Tell It On the Mountain Grandfather's Clock Greensleeves Hail, Hail the Gang's All Here Happy Birthday Hark the Herald Angels Sing Here We Go Round the Mulberry Bush This Land is Your Land Hickory Dickory Dock Hogan's Heroes Home on the Range Home Sweet Home Hot Cross Buns How Dry I Am How Much Is That Doggie I'm a Little Teapot I'm a Yankee Doodle Dandy It Came Upon the Midnight Clear

Itsy Bitsy Spider

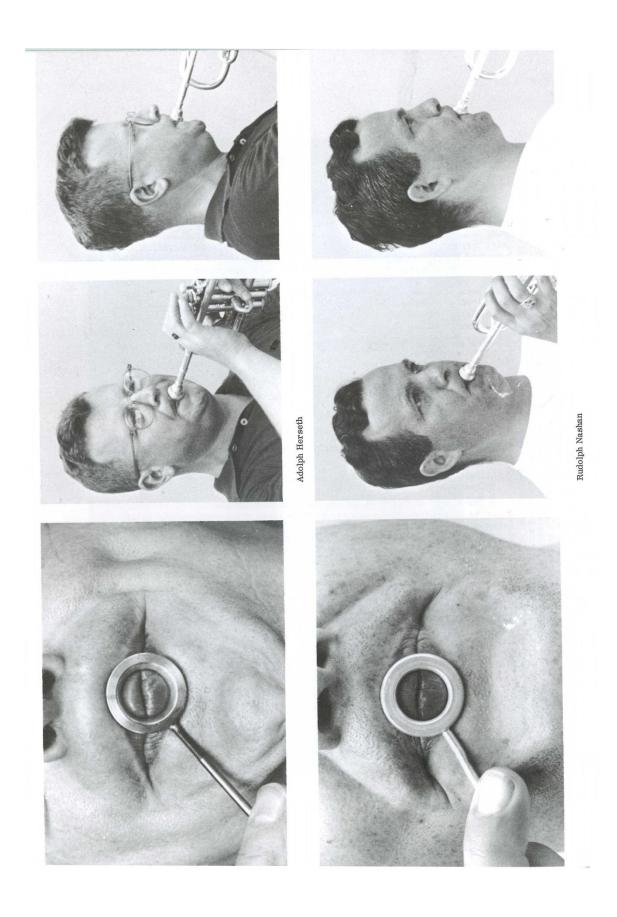
Jesus Loves Me

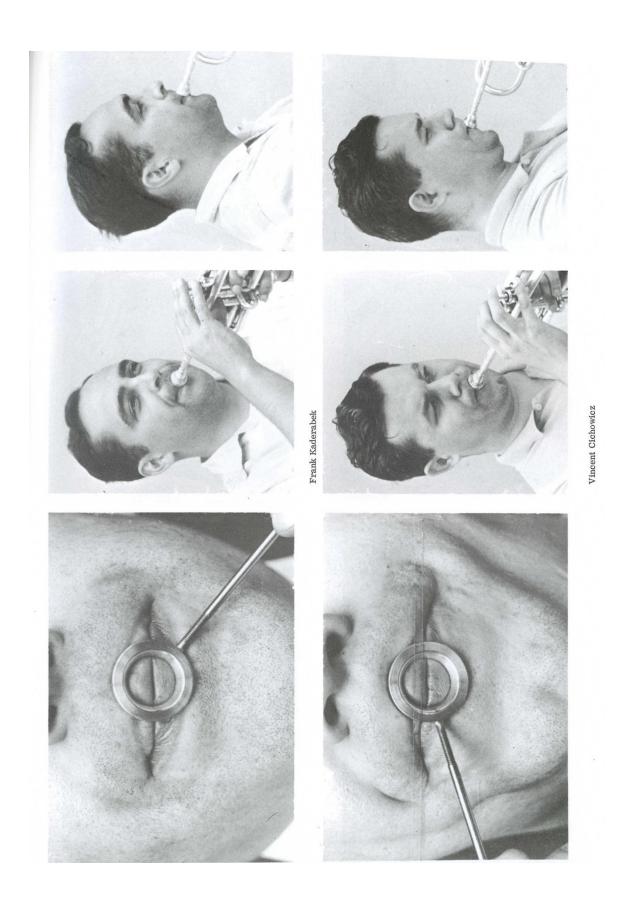
Jimmy Crack Corn Jingle Bells

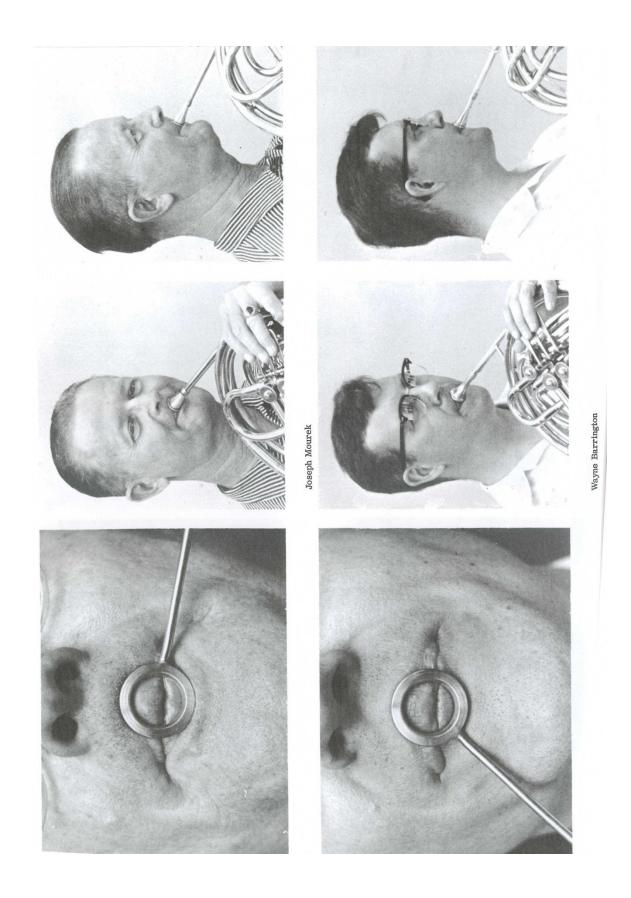
Joyful, Joyful We Adore Thee Joy to the World Kum Ba Yah Lightly Row Little Liza Jane London Bridge is Falling Down Long, Long Ago Marines Hymn Mary Had A Little Lamb Merrily We Roll Along My Darlin' Clementine Muffin Man O Come All Ye Faithful O Little Town of Bethlehem Oh Susannah Old Folks at Home Old McDonald Old Gray Mare On Top of Old Smokey Onward Christian Soldiers Pop Goes the Weasel Prayer of Thanksgiving Red River Valley Ring Around the Rosie Rock of Ages Row, Row, Row Your Boat Rudolph the Red Nosed Reindeer She'll be Comin' Round the Mountain Shoo Fly Shortnin' Bread Silent Night Skip to My Lou Street of Laredo Swanee River Sweet Betsy from Pike Swing Low, Sweet Chariot Take Me Out to the Ballgame Taps Ten Little Indians This Old Man Three Blind Mice Twinkle, Twinkle Little Star We Gather Together We Three Kings We Wish You a Merry Christmas What Child Is This? When Johnny Comes Marching Home White Christmas Yankee Doodle Yellow Rose of Texas I've Been Working on the Railroad You Are My Sunshine Zippity Doo Dah

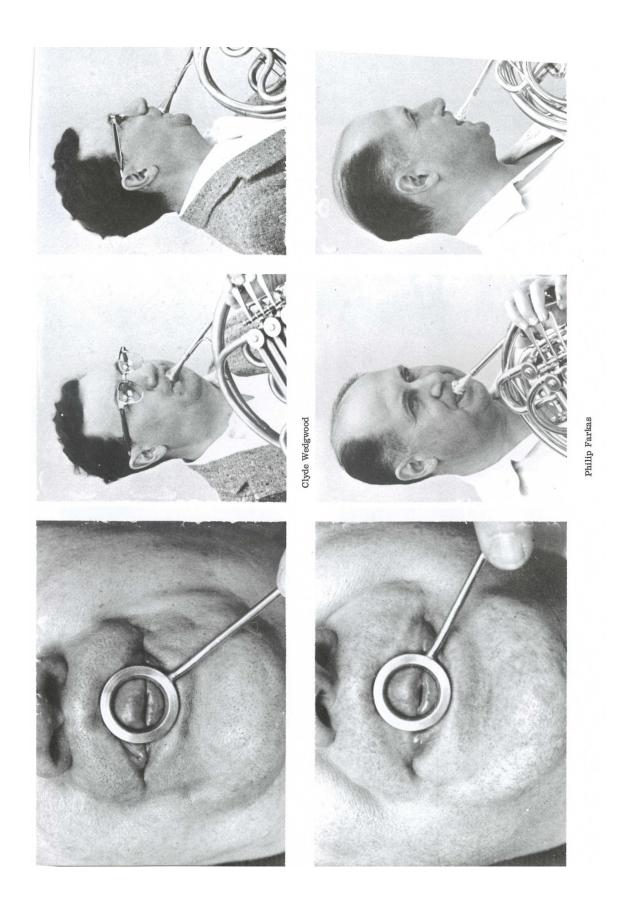
# **Embouchure**

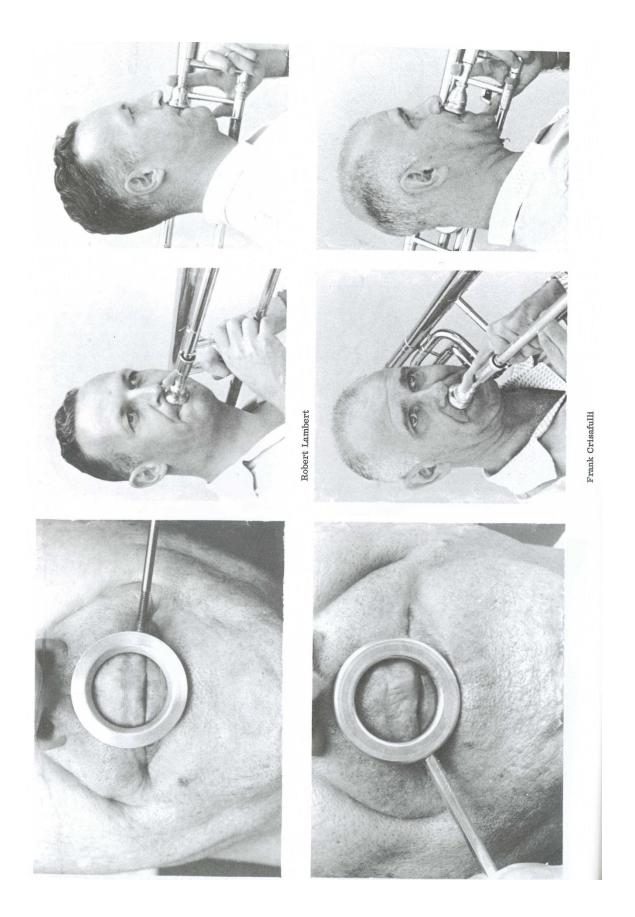
- Problems
  - Most are caused by deficient airflow
- Function
  - Centers pitch
  - Creates timbre
  - o Responds to air column
- Is tissue
- A good embouchure
  - o Is supple and responsive
  - Is strong but not rigid
    - Think palates, not Mr. Olympia
  - o Is initiated by air
- Is different for each person, yet fine ones often share similar traits
  - o Firm corners
  - o Flat chin (v-shape)
  - o Slight pucker
    - Important not to stretch the lips outward or smile
  - o Lack of air pockets (anti Gillespie)
  - o Similar instrument angles
  - o Minimum pressure
    - The idea of using no pressure is false
- Photographic examples from the 1959-1960 Chicago Symphony Orchestra Brass Section
  - o Excerpted from *The Art of Brass Playing*, by Philip Farkas. p. 25-31. Used by permission.











### Beginner Mouthpiece Placement

- Mouthpiece should sit in the center of the lips
  - o There should be equal top vs. bottom lip (higher for horn)
  - Will shift to fit each individual over time
- Lip function
  - o Top lip is the buzzer
  - o Bottom lip buzzes sympathetically
- Getting the first sound
  - o 1) Free buzz without the mouthpiece
  - o 2) Free buzz and add the mouthpiece while buzzing
  - o 3) Mouthpiece buzzing

## Articulation

- Is to the brass player as diction is to the singer
  - o If one can speak, one can articulate
- Common articulations
  - o Tu
- For staccato and marcato
- Does not stop the air, simply interrupts it
- o Du
- For legato
- Be careful as some will try to omit the initial attack
- Variations
  - There are countless variations that are determined by musical nuance

### Improving Articulation

- Sing
- Sound is
  - o 90% air, 10% tongue
- Cichowicz wind patterns
  - Best remedy for tonguing issues
  - o Emphasizes and reinforces a constant wind stream
  - Shows balance between wind and consonance
- On Instrument
  - o Articulate rhythm on a stationary pitch
  - Slur the passage
    - Shows air flow needed to navigate the passage
- Check fingers or slide technique
  - o Poor technique could impede good articulation

## Final Thoughts

- Be positive
  - Negativity is a cancer
  - Try to avoid chastising players for missed a notes
    - Breads tentative playing
- It is better to say too little than too much
  - o If in doubt, contact a brass player (or me<sup>©</sup>)
- Goals of brass performance
  - o Always play with a beautiful sound
    - If it does not sound beautiful, no one wants to hear it
  - o All brass playing choices should be based on musical <u>not</u> physical decisions

## **Suggested Reading**

## General Brass Pedagogy

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\*Each instrument has its own professional organization whose mission is to foster its respective discipline. Memberships are reasonable, and include published and online journals that have a wealth of pedagogical information.

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