"MAKE YOUR BEST SOUND"
"ALWAYS LOOK YOUR BEST"
"IT ONLY COUNTS ON THE MOVE"

MANDARINS

METHODS & TECHNICAL MANUAL

2019

MA19 – BRASS MANUAL

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INSTRUMENTATION

The Mandarins brass section will consist of 79-80 members in: 24 Trumpets, 16 Mellophones, 8 Trombones, 16 Euphoniums and 15-16 Tubas. All of these spots are available each year. NO ONE, regardless of experience, is guaranteed a spot. Returning members must demonstrate a continued growth and development in order to be considered for membership.

MANDARINS PLAY EXCLUSIVELY ON JUPITER INSTRUMENTS

Trumpets: Jupiter XO Professional Trumpet 1602SR (Reverse Lead Pipe)
Mellophone: Jupiter Mellophone JMP-1100MS
Euphonium: Jupiter Marching Euphonium JEP-1100MS
Tuba: Jupiter Marching Tuba JTU1100MS

IN 2019 Mandarins will be adjusting instruments and the model numbers above could change.

All of these instruments are provided by the Mandarins to **MEMBERS ONLY** and are available for purchase following each season. If you wish to purchase a certified used instrument from the Mandarins, please visit the corps' website at www.mandarins.org. You can find additional information about these and other Jupiter Brass and Woodwind Instruments at http://jupitermusic.com/.

MOUTHPIECES

MANDARINS PLAY EXCLUSIVELY ON HAMMOND MOUTHPIECES

This allows for a more uniformed sound from player to player and section to section. **You are NOT required to purchase this mouthpiece prior to the audition.** If you would like additional information about Karl Hammond Mouthpieces, please visit www.karlhammonddesign.com.

In order to achieve the most uniform section sounds, we have selected specific mouthpieces for the Mandarins brass team. Exceptions will be made only if approved by the brass caption head and your section technician(s). You are responsible for bringing your own mouthpiece to all camps and summer move-in once a contract is received. You will be able to purchase this mouthpiece directly from the Mandarins.

TRUMPETS: Hammond 4ML or 5ML (TBD during audition / winter camps)

MELLOPHONES: Hammond 5mp or 6mp (TBD during audition / winter camps)

EUPHONIUMS: Hammond 12ML or 12XL (TBD during audition / winter camps)

TUBAS: Hammond 30XL

ATTENDANCE / ASSIGNMENTS / CONTRACTS

YOU ARE EXPECTED TO ATTEND ALL SCHEDULED CAMPS.

To be a member in good standing at the Mandarins, attendance at all scheduled camps is required. We base part of our decision for you to join the Mandarins on your availability at our camps. We understand that school events may interfere with winter camps. However, it is expected that you work diligently to minimize the impact on the Mandarins camp weekends.

Assignments / Private Lessons with our staff will be required throughout the winter camps and audition process. Your participation in these assignments and private lessons are crucial to your involvement with the corps and maintaining your contract. Failure to turn in assignments on time and to our expectation can affect your contract.

CONTRACTS

At the Mandarins we offer contracts for each of our members. These contracts are a binding agreement between you and the corps. This agreement guarantees your membership in the Mandarins Drum & Bugle Corps as long as you maintain your end of the agreement.

To maintain your end of the agreement you must attend all camps (or have or be excused by the brass caption head for any absence), be current on all assignments, private lessons (both musically and visually), current on all financial responsibilities with the corps and in general be perceived as being a good upstanding member of the Mandarins.

Contracts can be rescinded at any point the staff and administration sees fit and appropriate measures will be taken. If **YOU** choose, whether through your actions or deciding this activity isn't right for you; you could forfeit all monetary payments to the drum corps.

REQUIRED REHEARSAL MATERIALS

CONTRACTED MEMBERS of the Mandarins brass team are required to bring the following materials to **ALL CAMP REHEARSALS** and **ALL SUMMER REHEARSALS:**

MOUTHPIECE: Audition / Winter Camp results will determine what kind of mouthpiece you will need.

TUNER / METRONOME: All members of the Mandarins brass team must own a tuner. It must be the following tuner – **Snark HZ-1 Clip on Tuner.** This tuner is required to be attached to your bell during rehearsals. The brass staff will let you know when to remove it.

BREATHING TUBES: All members of the Mandarins brass team must have a **WHITE ½ inch PVC Coupler** – breathing tube – with them at **EVERY** brass rehearsal.

MUSIC STAND: Please bring your own folding music stand (with your name clearly labeled) to all brass rehearsals (winter season). You will not need your music stand during move-ins and tour.

THREE-RING BINDER: (with clear sheet protectors): all music handouts (exercises, show music, and non-show music) must be kept in your three-ring binder. Any document you would need as a quick reference should be kept in your three-ring binder.

PENCIL: It is extremely important that every brass ensemble member have a pencil at all times. Notes should be taken at every rehearsal, especially when rehearsing with the arrangers. Write **EVERYTHING** down! The more details you document; the more details you will remember.

GLOVES (Black Mechanix): Gloves must be worn when handling Mandarins brass instruments. You will go through many gloves during the season. It is important that your gloves remain in good condition and are replaced as necessary. Gloves that are dirty or that have acquired holes are **NEVER** acceptable.

BLACK TOWEL: The black towel is used to protect your instrument when placed on hard surfaces, especially outdoors.

BASEBALL CAP: Your cap must cover the top of your head and must shade your face, your eyes and your chops. When rehearsing inside, hats are optional and at the discretion of the caption head or section tech.

TENNIS SHOES / TRAINERS: You will be moving at all rehearsals. Thus, tennis shoes are required at all times. Sandals, shower shoes, flip-flops, bare feet, etc. are never acceptable.

CLOTHING: You must wear clothing that will allow you to perform excessive movement such as sweats, shorts, t-shirts, etc. **NO JEANS!!!** Again, you will be moving at all rehearsals.

WATER BOTTLES: The approved water jug is a Coleman 1-Gallon Jug (RED)

THE BUCKET LIST

The “Bucket List” is a consistent 6-step warm-up designed to prepare and enhance the brass ensemble on a daily basis. It is a series of steps in which the performers prepare themselves for rehearsal days and the performances. Everything involved with the exercises in the Bucket List directly transfers to the performance on the field.

1. Air w/ feet

- 9-count Air, 7-count Air, etc.

1. Long tones w/ feet

- 9-count Tones, 7-count Tones, etc.

2. Long tones into Slurs w/ feet

- G-C-C lip slurs
- Flow Studies
- Clarke Studies – if completely slurred

3. Lip Slurs w/ feet

- 2-note Lip Slur
- 3-note Lip Slur
- 4-note Lip Slur
- 5-note Lip Slur
- 7-down Lip Slur
- Little Hills Lip Slur
- Big Mountains Lip Slur

4. Articulations w/ feet

- 8 Staccato 8th Notes
- Tim’s ‘Ticulations
- Clarke Studies – if using articulations

5. Music

- Ensemble Tuning
- Excerpts from our Repertoire

AIR TECHNIQUE

Great breath control is an important key to maximizing one's ability to play a brass instrument. Keep the following concepts in mind while playing:

TIMING OF THE BREATH

The timing of the breath is of the utmost importance. The breath will occur a FULL BEAT before the attack of the note. Tempo will dictate whether the "full beat" is interpreted as a full quarter breath, dotted quarter note, or half note. Failure to utilize this technique will result in significant timing problems. At certain tempos, we may employ a 2 count breath. A 2-Count breathe will be utilized on an as-needed basis.

TAKE IN MORE AIR

To achieve maximum breath control, breathe deeply into the lungs. As the diaphragm (the strong, doughnut shaped, involuntary muscle under the ribs) pulls downward, room is created for the expansion of the lower back, abdomen, and ribs. The chest should then expand, once the capacity of the lower torso is reached. One should inhale to the point where the body feels relaxed and full of air.

STAY RELAXED

To maintain a state of relaxation, the shoulders and the upper back must not be tense so that the breathing passage is never constricted while inhaling or exhaling. Keep the throat open so there is no resistance or audible friction. The only sound accompanying the inhale should be a very soft "hoe." When done correctly, one should feel a cold spot develop on the back of their throat.

AIR IS IN OR OUT

Air **NEVER** stops while playing. Air is either going in or out. Be mindful not to "cap" the breath. Capping occurs when the air is stopped after inhalation. Visualize the lungs as giant bellows that are constantly expanding and contracting.

RELEASE POINTS

Releases should be approached through the initiation of a short inhalation. Using a contraction of the throat and jaw should never be used to release a note. Using the tongue to stop a note will rarely happen, unless the music calls for an articulation with a tongue-stop. Simply breathing inward on a predetermined count will create a defined release. A uniform timing of the breath will ensure uniform timing of the release throughout the entire ensemble.

STAGGER BREATHE

To create a seamless sound, we utilize a technique called *stagger breathing*. By staggering the points of breathing throughout the ensemble, we can create an impenetrable wall of air or tone.

When performing air exercises with the instrument, it must be in the **correct playing position** while using the **correct playing embouchure**. As the air is blown through the instrument, the player should **use different valve combinations**. To challenge the performer to use more air in their playing, we will have the player press the valve's half way down to create more resistance – "*half-valving*.

There is a difference in the **speed** of air based on the **range** that is being played:

Faster air for higher notes
Slower air for lower notes

There is also a difference in the **amount** of air when the player changes **volumes:**

More air for the louder notes
Less air for the softer notes

Air exercises should have different volume levels as well as different ranges. A key point is to always have **CONSISTENT, MOVING** air.

Breathe and play. One's internal subdivision (mental metronome), the breath, and the beginning of the note are all one through-line. **TIMING STARTS WITH THE SUBDIVISION AND THE BREATH!** In other words, if we are to play together on beat one, we all need to take a breath on beat four; the accuracy of the timing on beat four will be unified if every member of the ensemble is subdividing in their head before (and while) they breathe.

Whenever an attack is early, it can usually be traced back to improper or poorly timed breathing. Late attacks typically result from "capped breaths" (stopped air between in and out) or poor timing. The performer must **ALWAYS** breathe and play with his or her feet to stay in time with the ensemble.

DO NOT:

- Close the jaw upon the release
- Choke the air with your glottis (closing your throat)
- Use your tongue to stop a note (individuals who use the tongue to release are detectable by anyone who listens)

A clean release will ring for a moment even after the air has been released. Strive to make the note ring!

BREATHING EXERCISES

While performing the following exercises, the player should be concerned with filling up his or her lungs completely while maintaining relaxation. In normal everyday situations, humans use about 20-25% of their lung capacity. In playing a wind instrument, we strive to push that towards 90%.

The proper breath should allow an outward expansion of the midsection of the body. This is easiest to see in the stomach area, but the expansion should also be felt in the side as well as the back. Once the lung capacity is full, the focus should switch toward releasing all the air out. It is important to completely empty the lungs, because the lungs will start to store carbon dioxide. If the air is not released to its natural point, carbon dioxide will build up and begin to decrease the player's lung capacity – causing unnecessary stress, tension, dizziness, and exhaustion.

When you begin these exercises, take in as much air as possible, and release ALL of the air through the horn; again, **THIS IS ESSENTIAL**. You should concentrate on taking **ALL** of the counts to perform each portion of the exercise. If four counts are given to take in air, the player should take all counts to do so, then turn the air around, moving it out. This will take away any dead time that is similar to holding your breath. There should be no hitch in the breathing process. This will give the player the greatest efficiency with regards to the use of air when playing.

These exercises should be done with and without the instrument. In both cases, relaxation is a key factor towards producing a proper air-stream; the avoidance of tension will allow for a more effective use of the air-stream. It is important with all the exercises that you try to imitate the way you play in a performance situation as closely as possible. Simply playing through the exercises without a thought of application is not effective and will form bad habits.

There are many different kinds of breathing exercises and techniques that we will utilize throughout the winter, spring, and summer (such as sizzling and the Breathing Gym). All exercises will develop and improve your air support.

EMBOUCHURE DEVELOPMENT

Most professional brass musicians practice with the mouthpiece on a regular basis. The benefits of mouthpiece buzzing include: being able to isolate embouchure and tone production problems, improved aural skills, and less lip fatigue.

The first notes we will play every day will usually be on the mouthpiece. There will be much attention placed on how you produce that sound and its overall quality. The mouthpiece, embouchure, and air support combine to create the true instrument; the tubing of the brass instrument merely resonates your buzz. The quality of sound on the mouthpiece directly correlates to the player's tone quality when the mouthpiece is added to the instrument. Therefore, developing a dark and resonant sound on the mouthpiece should be a priority for all brass players.

There are numerous articles written about embouchure development for each of the instruments. We strongly recommend that you find and research these articles so that you may apply the information to your specific instrument. You should also continue to reinforce the embouchure work that you may have done with your private lesson instructor.

Remember, the first rule is **ALWAYS SOUND GOOD**. This requires focus on producing the most resonant, dark, and warm tone as possible.

Here are some basic embouchure rules that can be applied to all brass players:

The corners of the mouth need to be firm and strong. Close to unmovable.

- The middle of lips should be firm yet pliable. We cannot restrict airflow through the lips.
- The mouthpiece should be placed as close to perpendicular on the lips as possible – not too upstream or downstream.
- Both lips should have enough flesh on the mouthpiece to allow for a full and robust buzz.
- Always bring the mouthpiece to the same place on your lips.
- The jaw should always be open – especially in the lower register.
- The teeth are apart.

There should always be a dark, open “Oh” sound. If the sound is bright and tinny, open your jaw more and firm up the corners. Be sure to check that the mouthpiece is not forced against your lips. Again, be certain that the corners are locked and that there is **ALWAYS** excellent breath support.

In addition to warm-up exercises, mouthpiece playing will help improve accuracy discrepancies in the show music. **Every player in the ensemble should be able to play any part of the show music on his or her mouthpiece.**

BENDING PITCHES

When practicing on your own, or even during a warm down, we **DO** recommend bending/sliding as a technique to gaining true flexibility. It is important that when you slide between pitches or when bending pitches, that your corners stay firm, and that the “M”-muscles in the upper lip stay engaged. The bending or sliding of the pitch lies solely on the rolling in-and-out of the bottom lip and the type of air being used.

When playing flexibility exercises on the mouthpiece, target the exact pitch. Sliding will cause intonation problems, along with serious timing problems, because players arrive at the pitch at different times.

WHEN WE HAVE 76 PLAYERS TRYING TO PLAY TOGETHER, WE NEED TO “NAIL” EVERY PITCH WITH NO SLIDING.

You may be asking yourself, “How do I play large interval leaps without sliding?” Answer: **AIR VELOCITY** and tongue elevation while buzzing in the mouthpiece.

In other words, if a player’s air moves at 50 mph for middle “C”, then it should move at 100 mph for a high “C”. Every pitch should have a specific air velocity that will help you find the pitch-center rapidly and efficiently. On the other side of this concept, do not slow down the air too much in the lower range, as the pitch will go flat and the tone will be thin.

FOGHORN

"Foghorn" is an exercise that involves removing the tuning-slide of a brass instrument and inserting only one end of the slide back in. The difference between the foghorn and the mouthpiece is that with foghorn, there is more resistance and there are breaks between ranges. For example, going from a lower pitch to a middle pitch, you go through a break (similar to a slur). The following rules apply to foghorn:

- **Breath attacks are used.**
- **Define the pitch you will play – every instrument will be different.**
- **Try to match that pitch every time you come back to it.**
- **Work to minimize any "shaking" sin the sound.**
- **Work to minimize any "air-in-the-sound" in your tone quality.**
- **Use as much air as possible and play at a solid forte level at all times.**
- **No pressure should be placed on the embouchure.**

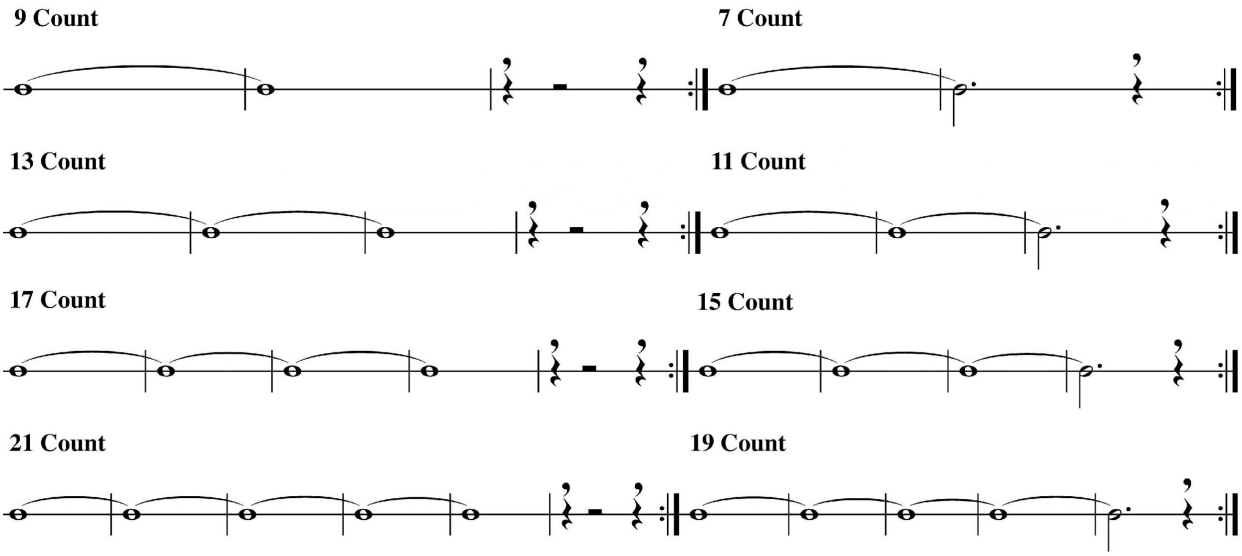
SINGING

All instruments produce sound that imitates the human voice. Singing is an important tool for developing great ensemble tone quality and intonation. The brass section will sing frequently, and we will have a very serious approach to the technique of singing. The resonance and breath support necessary for singing are quite similar to proper brass playing. When singing, we use the "radio announcer" voice, the voice that seems to project a great distance.
Here are some guidelines for all singing exercises:

- The throat should be open.
- The face should be relaxed.
- The mouth shape should be oval like – the longer part of the oval from nose to chin.
- The same approach to breathing, air support, and direction of air with your wind instrument, applies to singing.
- Everyone should always be listening to match the pitch.
- We will use different vowel sounds, including humming.
- We will train you to use audiation, and often check the pitch before, during, and after singing.
- We will work on and be able to sing every exercise in the technique book, chorales and show music.

LONG TONES

There are several benefits from playing long tones every day. Along with mouthpieces work, this allows the muscles in your face to loosen up and helps you to become comfortable with instrument. Primarily, this is an opportunity for the player to concentrate solely on **tone quality, breath support, and intonation.** Without the distraction of rhythms and notes, the player can focus on playing in tone with his or her section and throughout the ensemble. Long tones are essential toward establishing a solid center of pitch for the warm-up. Balance and blend are key factors to this portion of the warm-up. Players should be listening for intonation, blend of tone, intensity, as well as quality of sound.

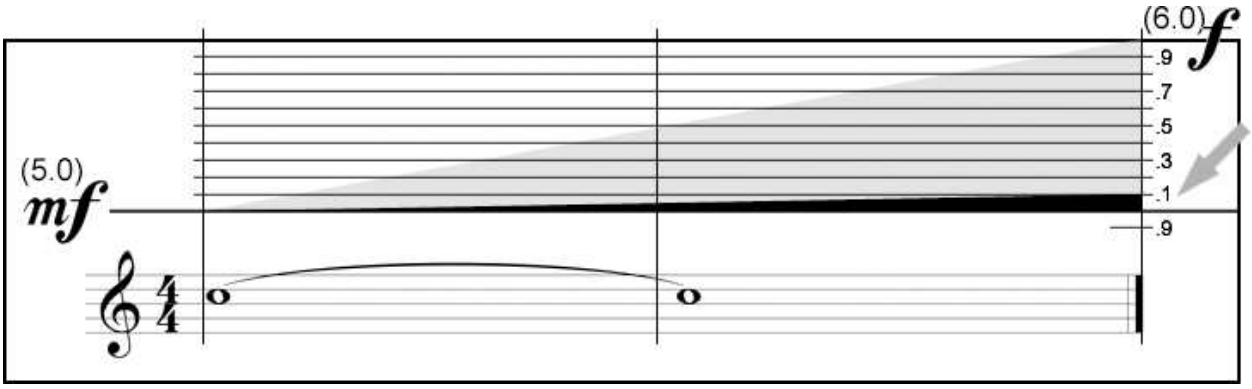


Rules in Ensemble Breathing:

- Subdivide in your head
- Always move your feet in time
- Use a full count to breathe
- Full deep breaths (never shallow breaths)
- Support to the release
- Release by taking a short breath in (reverse the air)
- Air is going In or Out, one motion – never “cap” or pause the air

GOING TO .1 (POINT ONE)

The concept of **"going to .1 (point one)"** was designed to prevent decay at the end of a note due lack of air support. Take a look at the example below – the "9-count tone". The amount of space between *mezzo-forte* (5.0) and *forte* (6.0) is 1.0. If there were a crescendo assigned to this long tone, then the numerical value would be **5.0 to 6.0** (indicated by the gray zone). However, since there is no crescendo, the numerical value would be .15 (indicated by the blackzone). This creates consistent **support to the end of the note** without decay (falling to 4.9 or less).



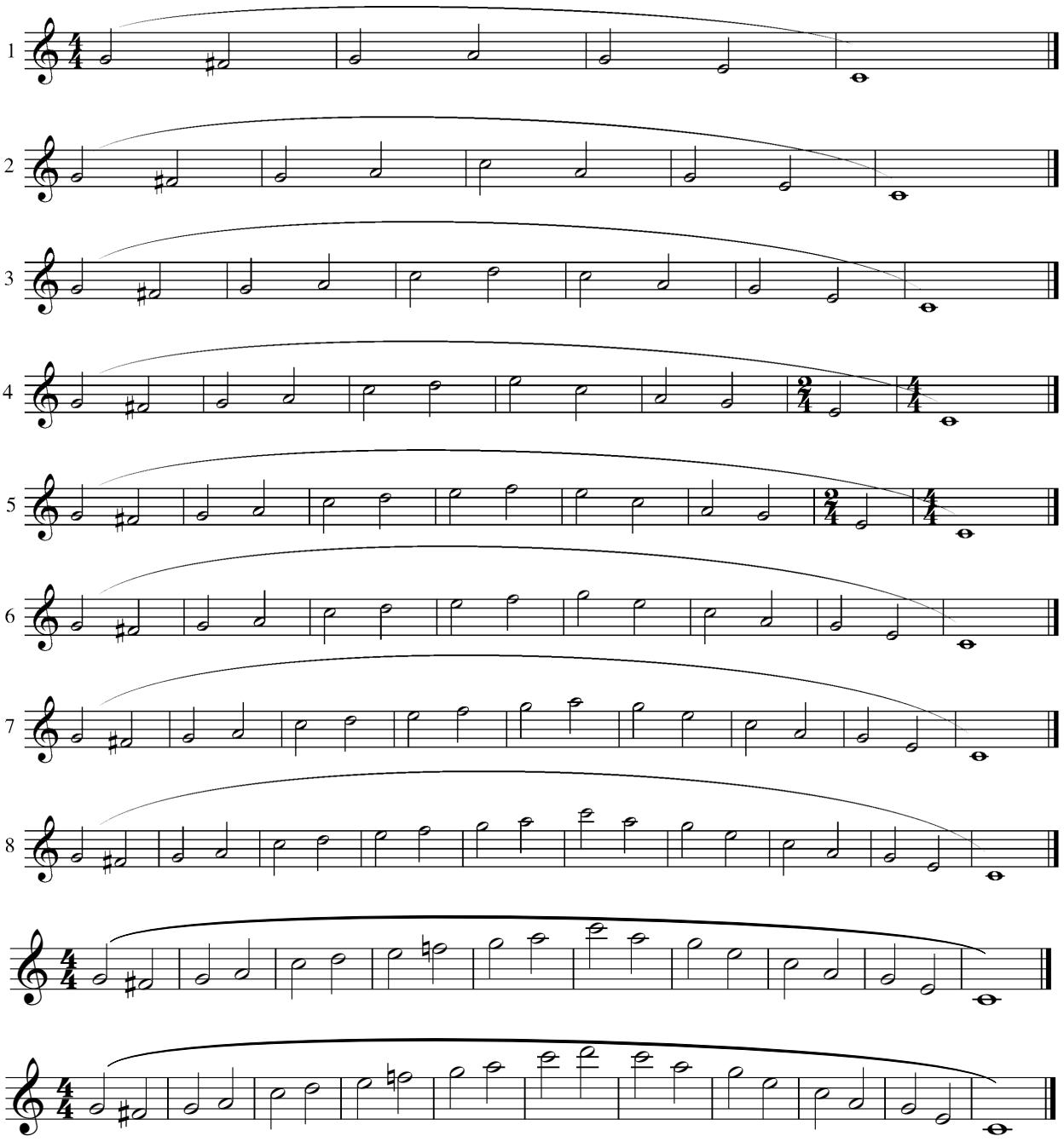
FLOW STUDIES

The flow studies are another staple in the Mandarins fundamentals package. This exercise will allow the member to focus on creating the most smooth and characteristic sound possible. Based on the exercises of Vincent Cichowicz, these lines begin with small intervals and progress to larger intervals, allowing the performer to create a block sound that is even throughout all registers.

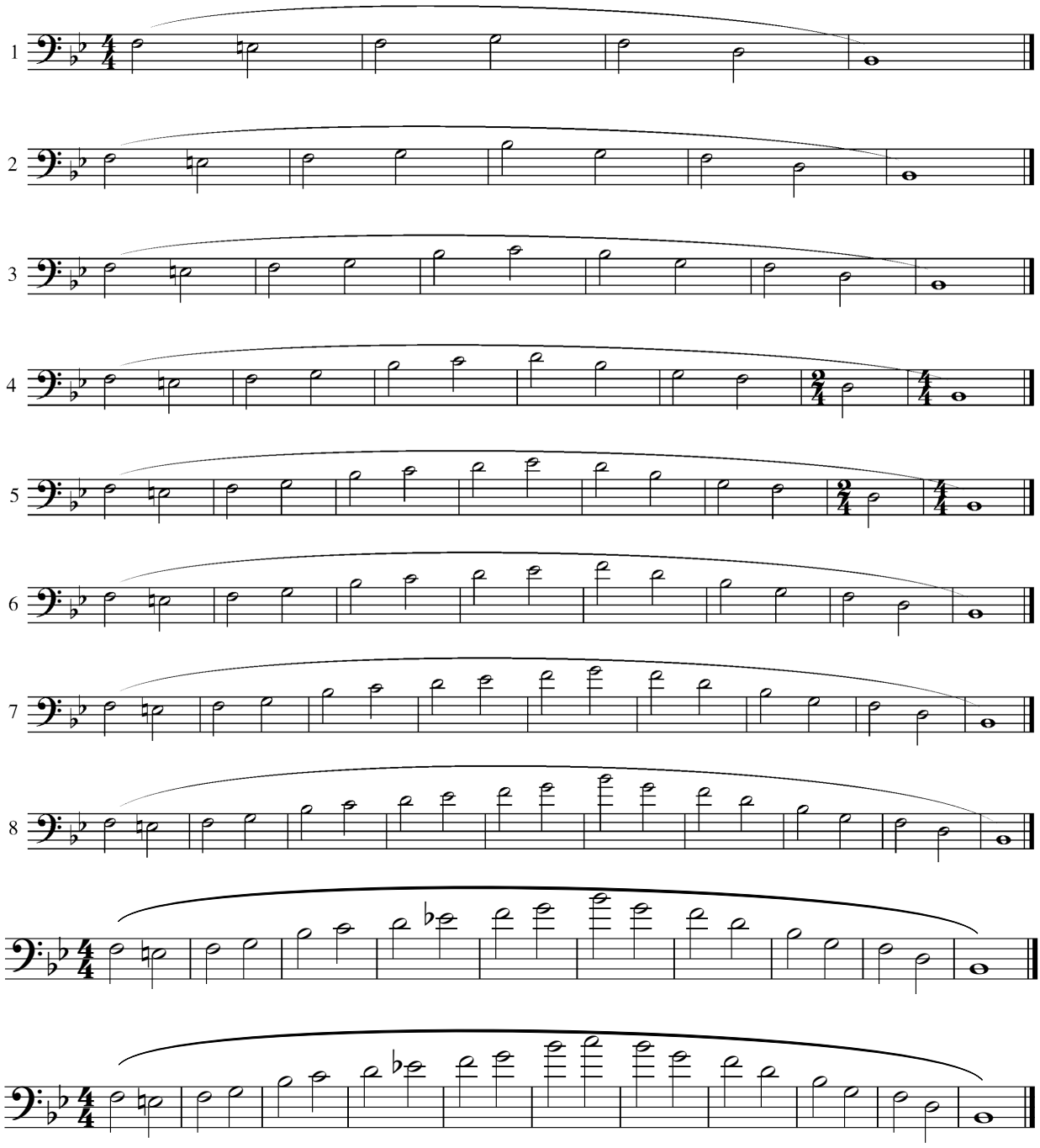
The exercise can be transposed down to work on lower register playing. In addition, by adding notes to the middle of each line, the upper register can be expanded.

The performer should strive to create the most resonant and even sound possible. This even sound occurs when all notes produced are equal in tone, volume, and energy. Dynamics can also be added to the exercise to place additional responsibilities on the player. However, in the initial stages, the performer should work to create a constant and unchanging sound with no dynamic change.

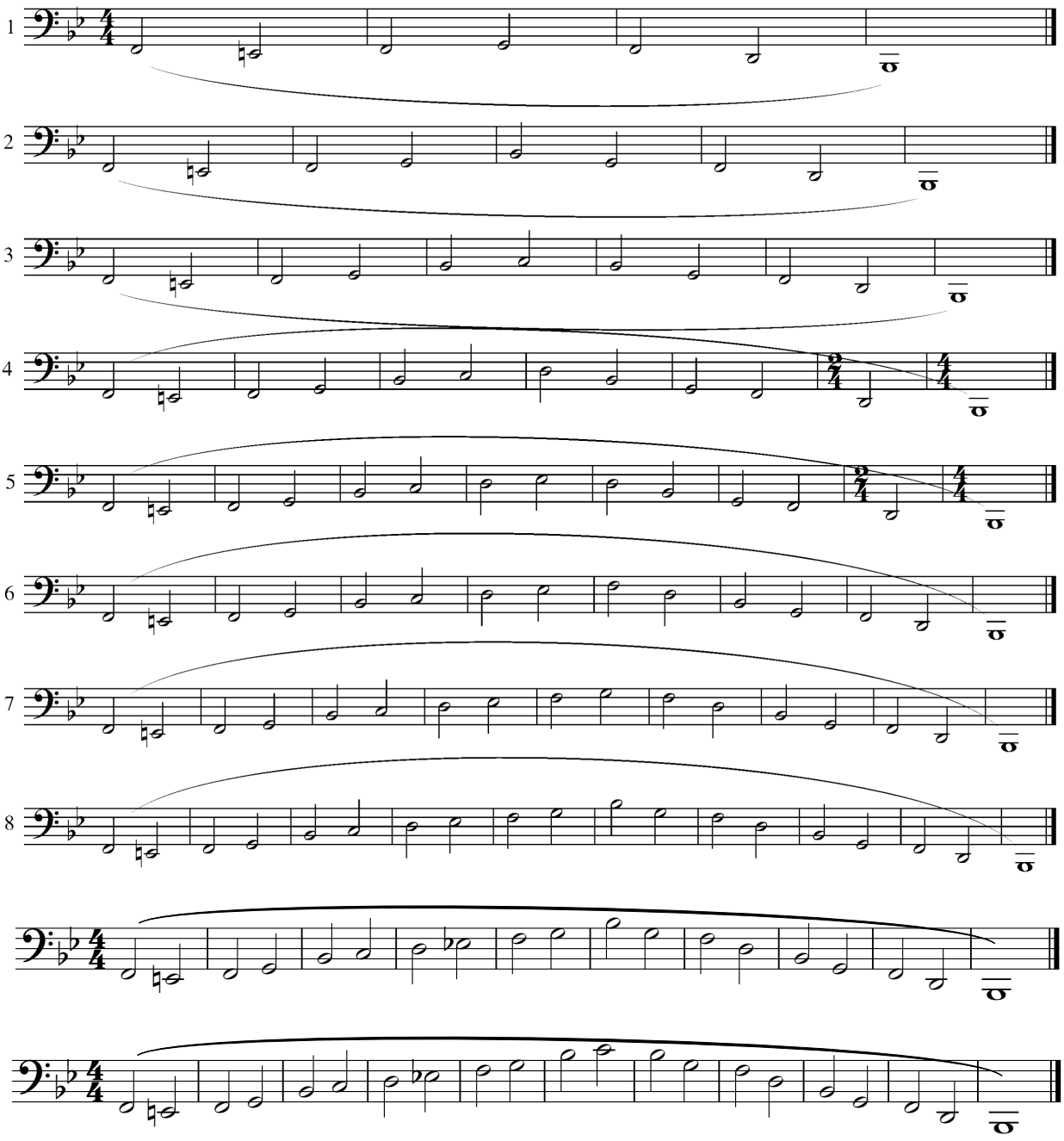
FLOW STUDIES – High Brass



FLOW STUDIES – Euphonium / Trombones



FLOW STUDIES – Tubas



LIP SLURS / FLEXIBILITY

Lip slurs play a huge part in the development of any brass player's flexibility. The ability to move fluidly from partial to partial while maintaining accurate pitch is essential. Providing a consistent air stream throughout the musical line will allow the player to attain this fluidity. The exercise should not be thought of merely as an exercise, but rather as a musical phrase. Each musical line should have purpose, movement, and arrive at a destination.

With the Flexibility Exercises remember these important guidelines:

- Always take a full count breath before you play
- Always take a step out on the first note
- Every double bar line is a step out
- Down 3 half steps (1&2) and back up
- Finish the exercise by halting your feet and sustaining the last note
    - Low C/Bb for "G-C-C", "5-note", and "Big Mountains"
    - Middle G/F for "2-note", "3-note", "4-note", and "Little Hills"
    - Middle C/Bb for "7-down"

FLEXIBILITY EXERCISES – High Brass

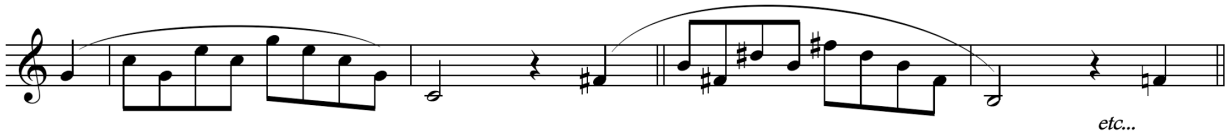
"G – C – C"

"2 note"

"3 note"

"4 note"

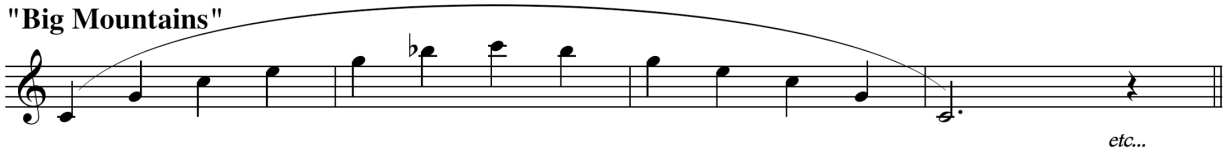
"5 note"



"7 down"

"Little Hills"

"Big Mountains"



FLEXIBILITY EXERCISES – BARITONES

"G – C – C"

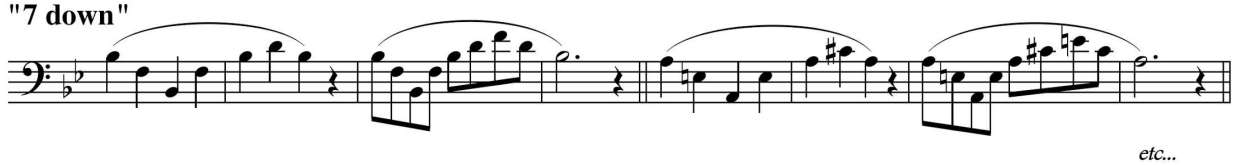
"2 note"

"3 note"

"4 note"

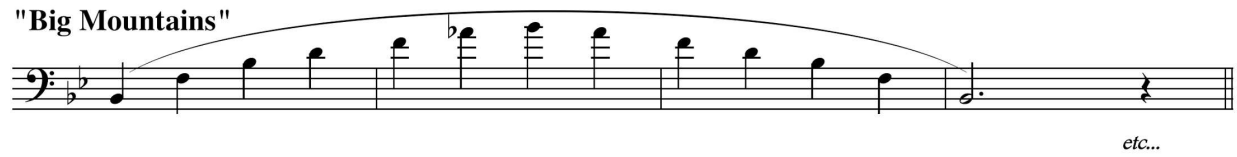
"5 note"

"7 down"



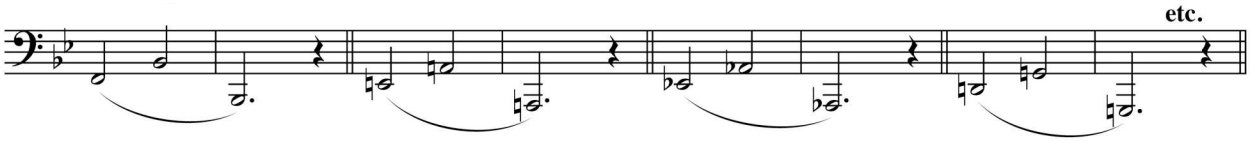
"Little Hills"

"Big Mountains"



FLEXIBILITY EXERCISES – TUBAS

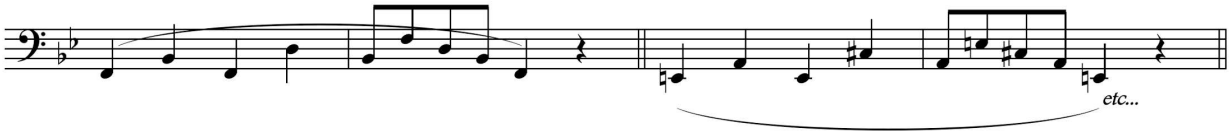
"G – C – C"



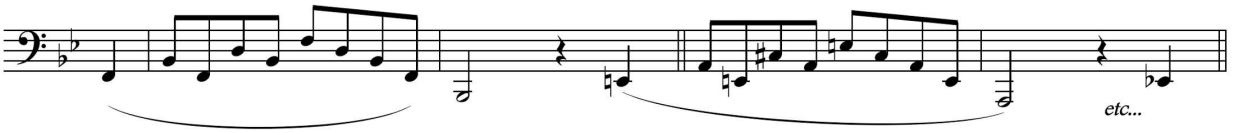
"2 note"

"3 note"

"4 note"



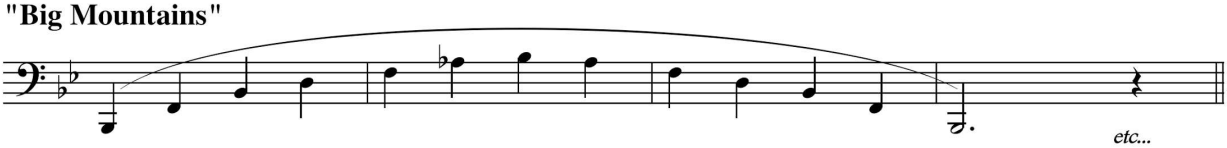
"5 note"



"7 down"

"Little Hills"

"Big Mountains"



ARTICULATION & STYLE

The relationship and balance between the tongue and the air stream is the key to proper articulation. It is important to understand that the tongue cannot articulate properly if there is not enough air support. It is also important to know that the clarity of the articulation should not be hindered by tempo, technique, note length, volume, or range.

Articulation should be executed with no explosion in the attack. Every note should be started with the sound “dAh” in mind (notice the lowercase *d* and the uppercase *A*). Each player should strive for less tongue in the sound and focus on providing more tone. Remember, **THE AIR STREAM SETS THE VIBRATION INTO ACTION, NOT THE TONGUE!**

Articulation is the front of the note. Style is the back of the note.

With the exercise below, you should practice not only with staccato, but also with legato, accent, accent legato, accent staccato, and marcato.

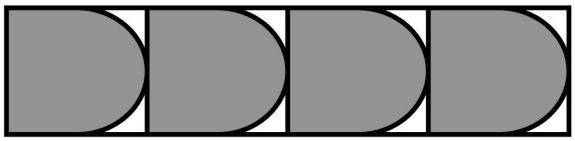
Always step out on the first note
Every double-bar line is a step out
Down 3 half steps (1&2) and back up
Finish the exercises by halting feet and sustaining concert Bb

8 Staccato Eighth Notes

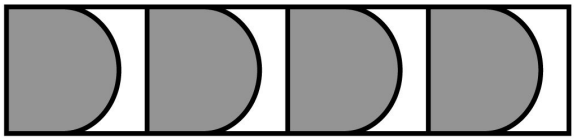
Articulation Visualization

Style/Length	Symbol	Visualization
Connected		

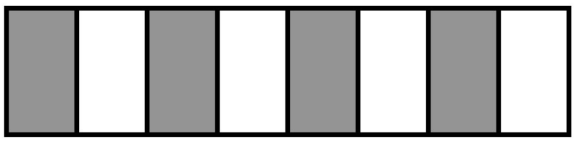
def. – There is no decay and the notes touch.

Long Lifted		

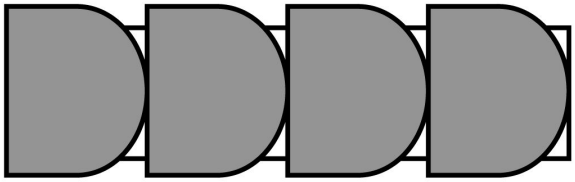
def. – There is a slight decay and the notes touch.

Lifted		

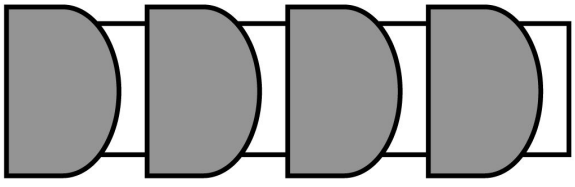
def. – There is a slight decay and a small space.

Detached		

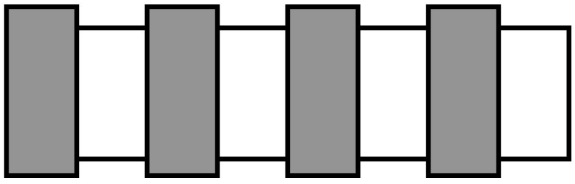
def. – There is no decay and the length is half of the note it is attached to.

Accented		

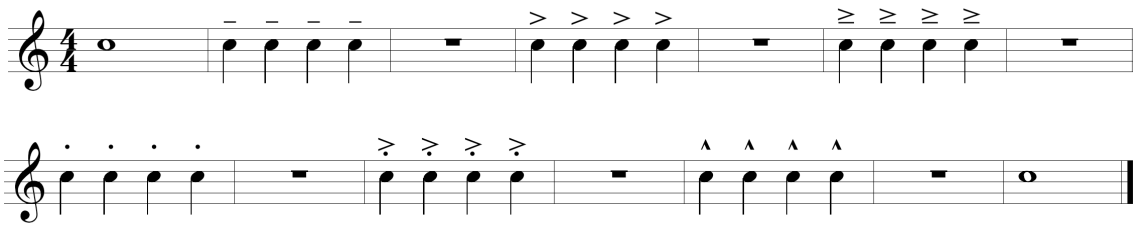
def. – The beginning of the note is slightly louder, there is a slight decay and the notes touch.

Lifted Accent		

def. – The beginning of the note is slightly louder, there is a slight decay and a small space.

Roof-Top Accent		

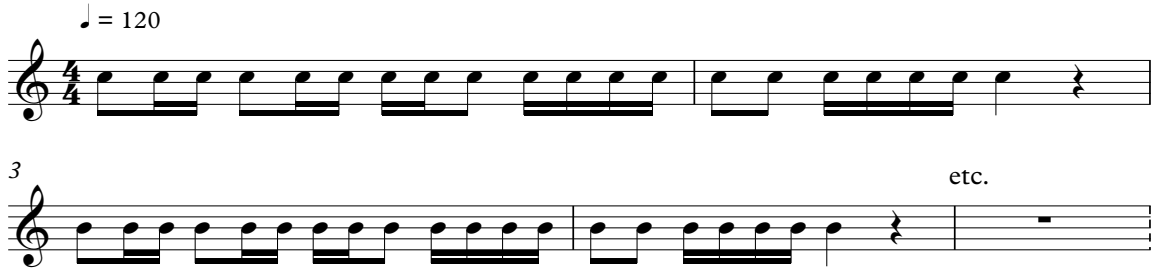
"Tim's Ticulations"



The exercise **"Tim's 'Ticulations"** is an articulation exercise used to differentiate between the styles of notes. The exercise is used not only for playing different articulations, but also for singing different articulations. Use the Articulation Visualization Key to get an understanding of differences.

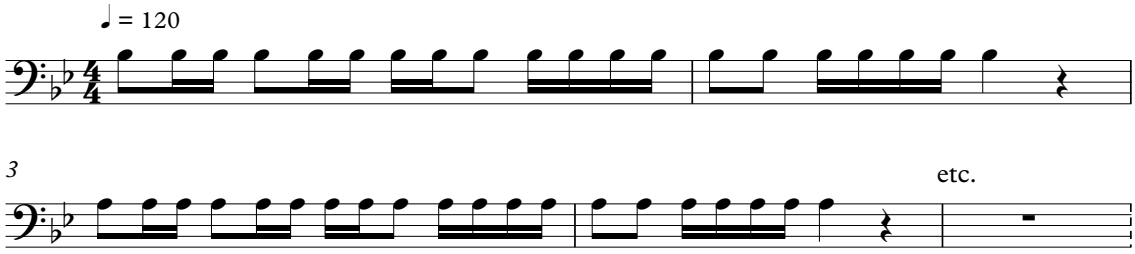
Articulation Exercise(s)

Trumpet



Mellophone

Euphonium / Trombone



Tuba

Trumpet

Mellophone

Euphonium / Trombone

Tuba

Always practice with a metronome
(you must own one)

VOLUME

Power and quantity of sound are trademarks of great brass ensembles. This type of playing requires a constant monitoring of the player's tone quality and intonation. The key to playing loud is relaxation. An ugly, "spread" tone is often the result of tension and forced breathing. You must stay "open" to maximize the amount of air involved during the inhalation to produce a large and flowing "fff" exhale. The corners of the mouth must be kept firm to support the large volume of air pouring through the aperture. Visualize the lips wrapping around the air stream when playing at fuller dynamic levels. Great care should be taken through the building of volume over a given period of time. Playing loud with a round, beautiful sound is a goal that will require great concentration over a long period of time.

Dynamic Marking	Number	Definition
pppp	**1**	This is the softest volume you can play with a full supported sound.
ppp	**2**	
pp	**3**	
p	**4**	
mp	**5**	
mf	**6**	
f	**7**	
ff	**8**	
fff	**9**	
ffff **Full Volume**	**10**	This is most extreme volume you can play while creating a great sound. The sound will have lots of brilliance and have an edgy sound.

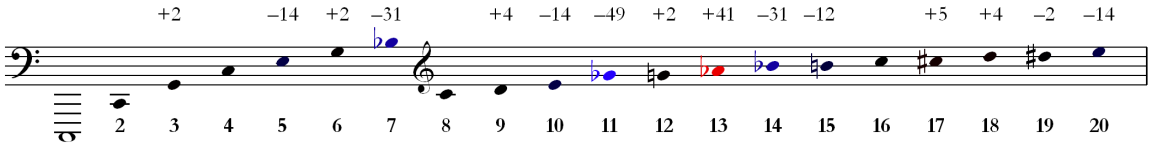
PITCH / INTONATION

All brass instruments have various inherent intonation deficiencies. As a brass ensemble, we need to be aware of what deficiencies exist, and how we can correct them with our playing. We build our system of tuning through the matching of overtones, which are by definition, never out of tune. Overtones will ring when the pitches coming out of the horns are in tune. For example, when the baritone section "locks in" on an open "Bb", usually the "F" above can be heard quite clearly even though there are no performers playing it.

As all the voices become more in tune with each other, entire chords can be heard ringing above the brass ensemble. In addition to working with a tuner every day, our singing, mouthpiece, long tone, and relative pitch exercises will help you develop your ears for tuning chords and unison notes. Always practice with a tuner. (You must own one.)

Always practice with a tuner.
(you must own one)

Harmonic Series



As the ensemble becomes more in tune and each individual become more in tune with the other performers, entire chords can be heard ringing above the brass ensemble. In addition to working with a tuner everyday, our singing, mouthpiece, long tone and relative pitch exercises will help develop your ears for tuning chords and unison notes.

If you play the same note in two different chords, you almost always have to do something different to each note in order to keep it in tune:

1. Recognize what part of the chord you are playing. Is it the root, third or sixth?
2. Listen with **BIG EARS.** Know all of the parts and how your part fits into the ensemble.
3. **CRESCENDO** the moving lines (especially the descending passages).

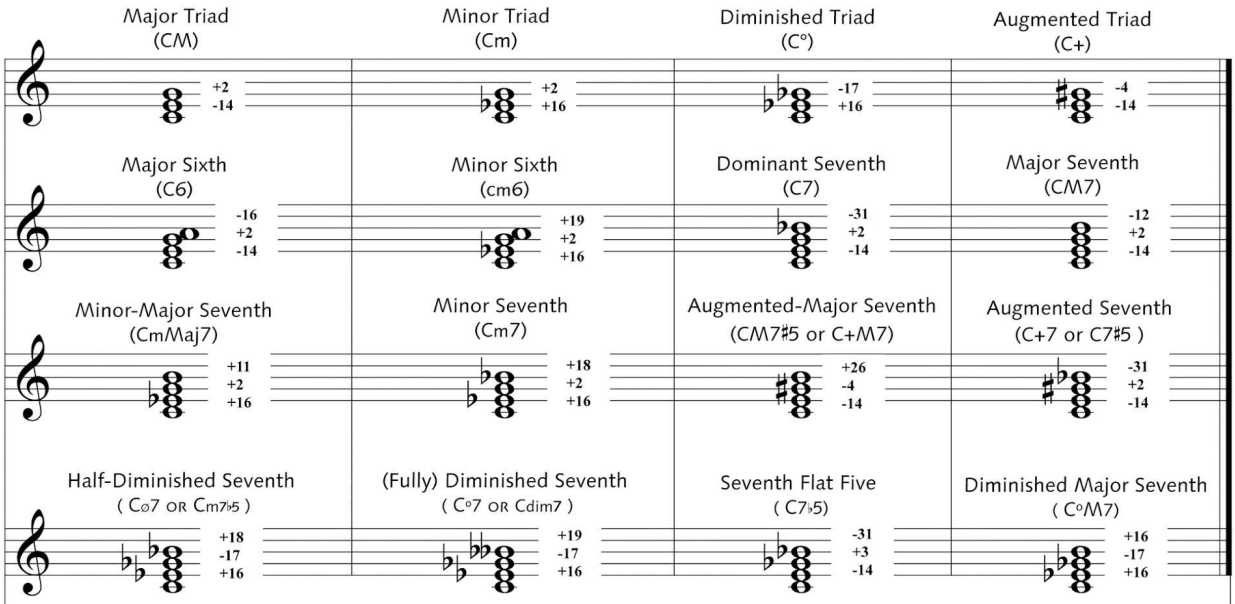
It is your responsibility to understand which interval you are playing in regards to the ensemble musical structure. You should always be researching your part as well as the entire score. Take the time to know how your part fits in with the other parts. If you understand not only your part but also all the parts of the score, you will then be able to maximize your abilities within the ensemble as well as improving the brass ensembles success.

There are also many natural intonation problems when dealing with the structure of chords. Below is a list of intervals (from the root of the chord) and the adjustments needed for each interval to be played in tune:

Chord Adjustments

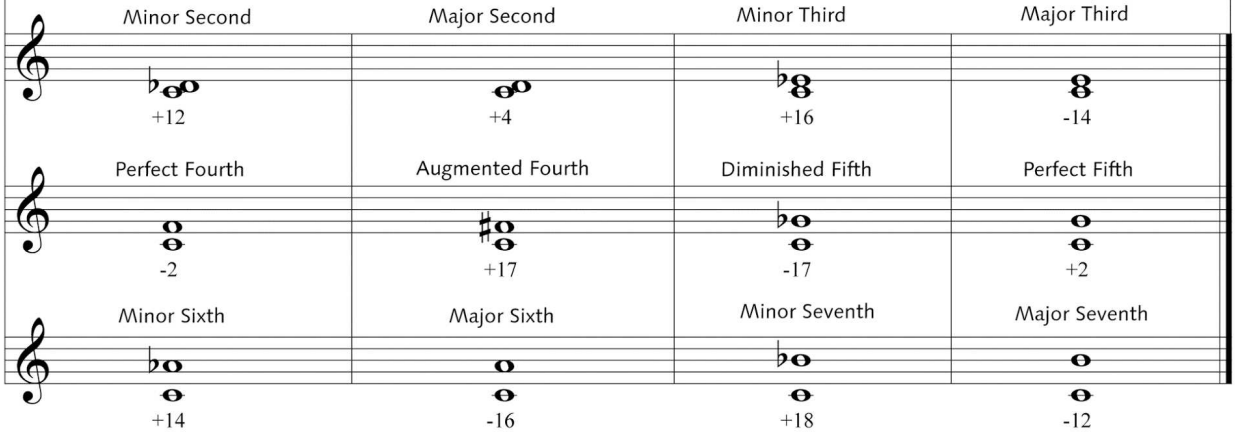
in Just Intonation

The following adjustments are based on the root of the chord (in this case, "C") which is an equal-tempered pitch. The adjustments (given in cents) indicate the difference necessary for that note to be in tune with the chord (as opposed to the given equal tempered pitch). The adjustments are applicable to all chords, regardless of starting pitch*



Intervals

and their deviations from Equal Temperament



**Note that some intervals have multiple adjustments, dependant on their function in a chord.*

BALANCE / BLEND

The first criterion toward achieving great balance and blend is perfect intonation. If one note in a chord is played out of tune, then balance cannot be achieved properly. The second criterion is to always know who has the moving line, and who has the melody. This is achieved by keeping your ears aware of the parts being played around you. The third criterion is a combination of balance, support, and playing in a manner befitting a soloist. Each part in an ensemble is unique in its own way. We as good brass players know when to support a given line, create balance within that line, or project an important line with a full supported sound.

When trying to achieve good balance and blend:

Ask yourself, **"Am I in tune with the ensemble?"** First listen to intonation in your section and then branch out to other sections, always keeping in mind that you should listen down to the bass voice. If you are supporting a moving line, ask yourself, **"Am I playing louder than that line?"** Finally, ask yourself, **"Am I playing within the other sounds, balancing my sound against it with a rich, supported, full bodied tone?"**

Balance and Blend requires the performer to listen very closely. There are 3 levels of listening required if you are to become a greatly balanced brass section:

LEVEL ONE LISTENING focuses on the sounds, volume, style, etc of his or herself. Self- awareness is an important key toward higher level playing.

LEVEL TWO LISTENING focuses on the sounds, volume, style, etc of the other members in each respective section.

LEVEL THREE LISTENING focuses on the sounds, volume, style, etc of all instruments in the ensemble.

BOPPING

Bopping is a technique that is used to improve timing and perfect uniform articulation and tone production. Bopping is executed by reducing every note down to a staccato eighth note.

Additional rules to bopping are as follows:

- **Everything is performed at the dynamic of p (piano). Unless dictated by a staff member.**
- **Slurred passages are played full duration to the end of the slur.**
- **Tied notes are to articulated and not sustained. The tied note will not be played after the first articulation.**
- **Make sure the throat is open and relaxed.**
- **No "Dit" articulation should be heard.**
- **Only "dAAh." Sounds.**
- **Keep all notes open-ended.**

PEDAL TONES

Pedal tones are an important part of our brass program and should be a part of every brass player's daily ritual. When playing pedals, listen carefully to the pitch. Make sure that your corners stay somewhat firm in the pedal register.

The effective use of pedals in your warm-down and practice routine will:

- **Soothe your embouchure.**
- **Provide greater command of your instrument.**
- **Aid your attack confidence.**
- **Develop better lip vibration.**
- **Create a bigger sound in all registers.**
- **Develop endurance.**

STAGGER BREATHING

When listening to long sustained chords from a brass ensemble, you will notice that the best ensembles sustain these chords without holes in the sound. This "wall of sound" is created by utilizing a technique called stagger breathing. Essentially the wall of sound is created by each performer in the brass ensemble following this simple process:

1.Know when you are going to breathe & commit to the breathing.

- ***i.*** *You must commit to the breath even if you are not running out of air.*

2.Don't breathe at the same time as the person(s) next to you.

- ***i.*** *2 or more people in the same proximity breathing at the same time creates holes in the sound.*

3.Fade out.

- ***i.*** *A rapid, one beat decrescendo.*
- ***ii.*** *Don't allow the pitch to drift out of tune.*
- **iii.** *Don't allow your tone to change.*

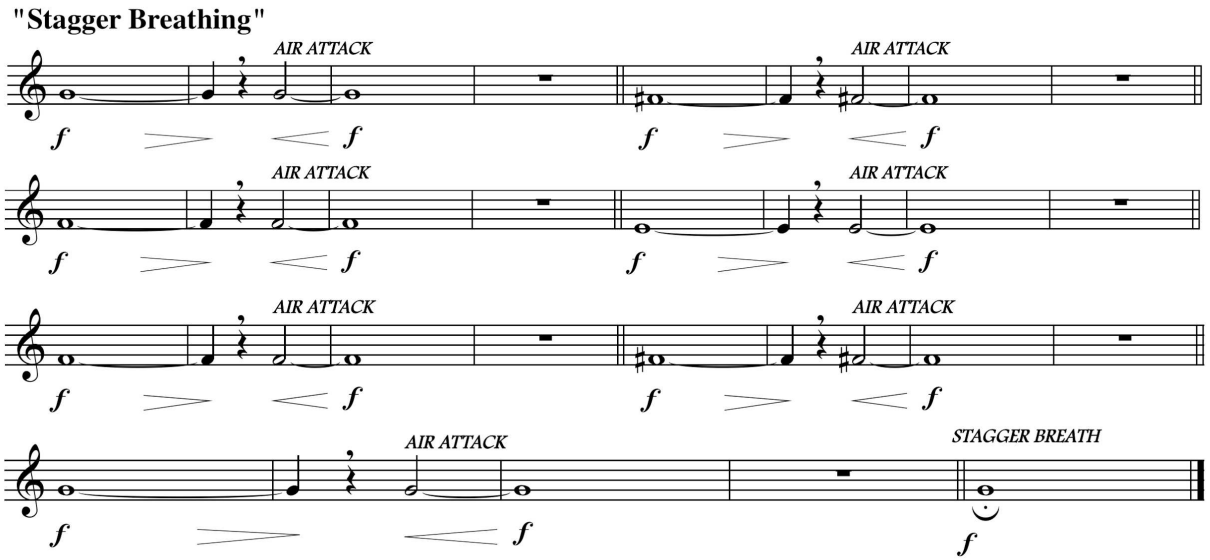
4.Breathe.

- ***i.*** *One beat to take in a full breath.*
- ***ii.*** *The breath should immediately follow the decrescendo; no gaps between the end of the decrescendo and the full breath in.*

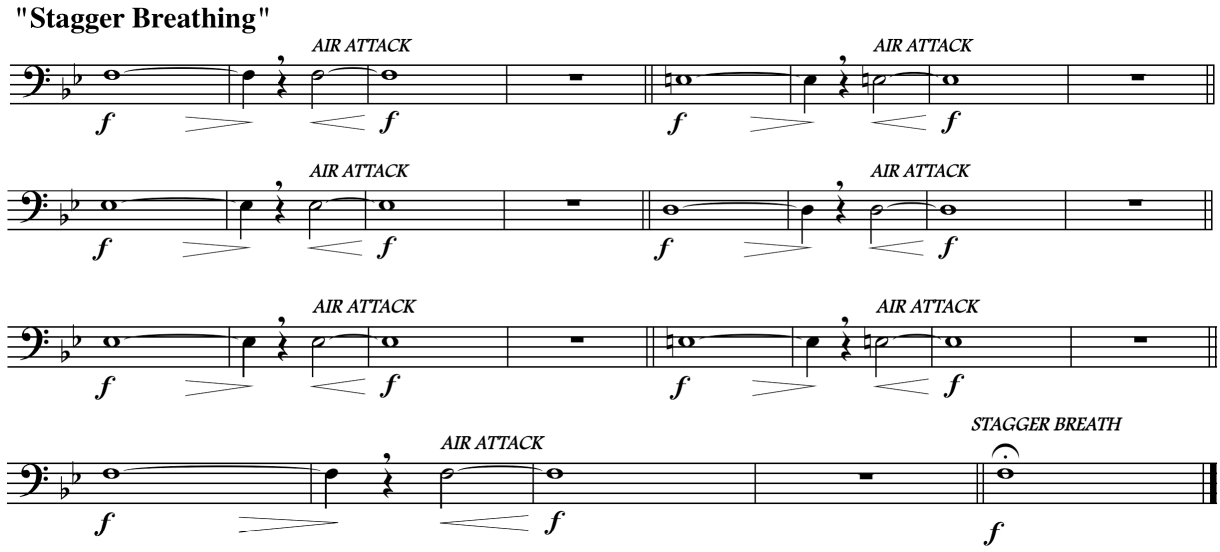
5. Fade back in.

- ***i.*** *A rapid, one beat crescendo from a niente – no gaps between the end of the breath and the beginning of the crescendo.*
- ***ii.*** *Do not rearticulate the front of the note – "ah" articulation.*
- ***iii.*** *Be in-tune and in-tone all the way through the crescendo*

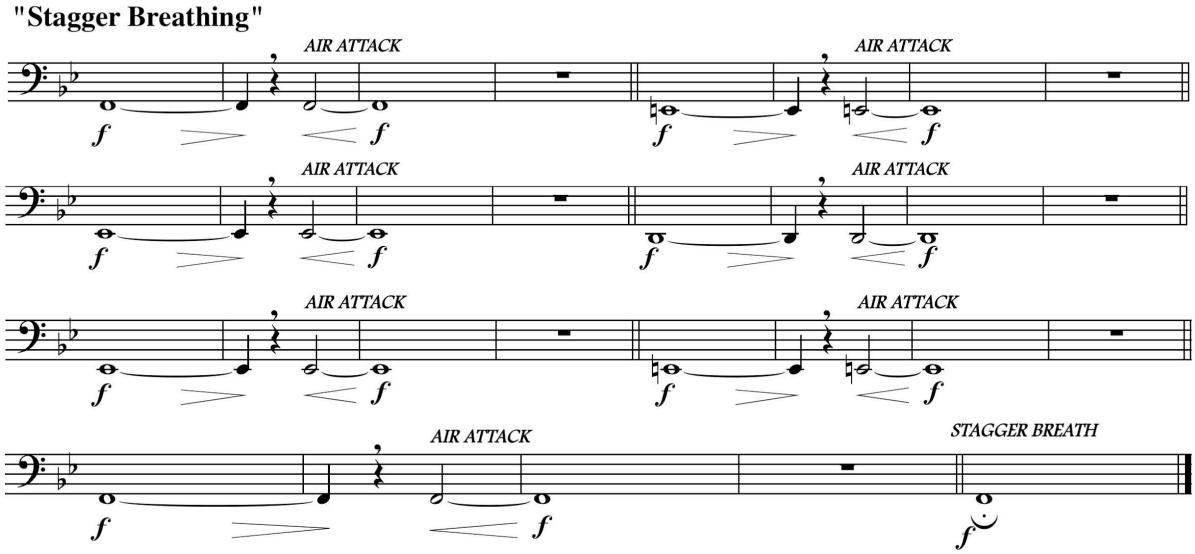
STAGGER BREATHING – High Brass



STAGGER BREATHING – Euph / Trombone



STAGGER BREATHING – TUBAS



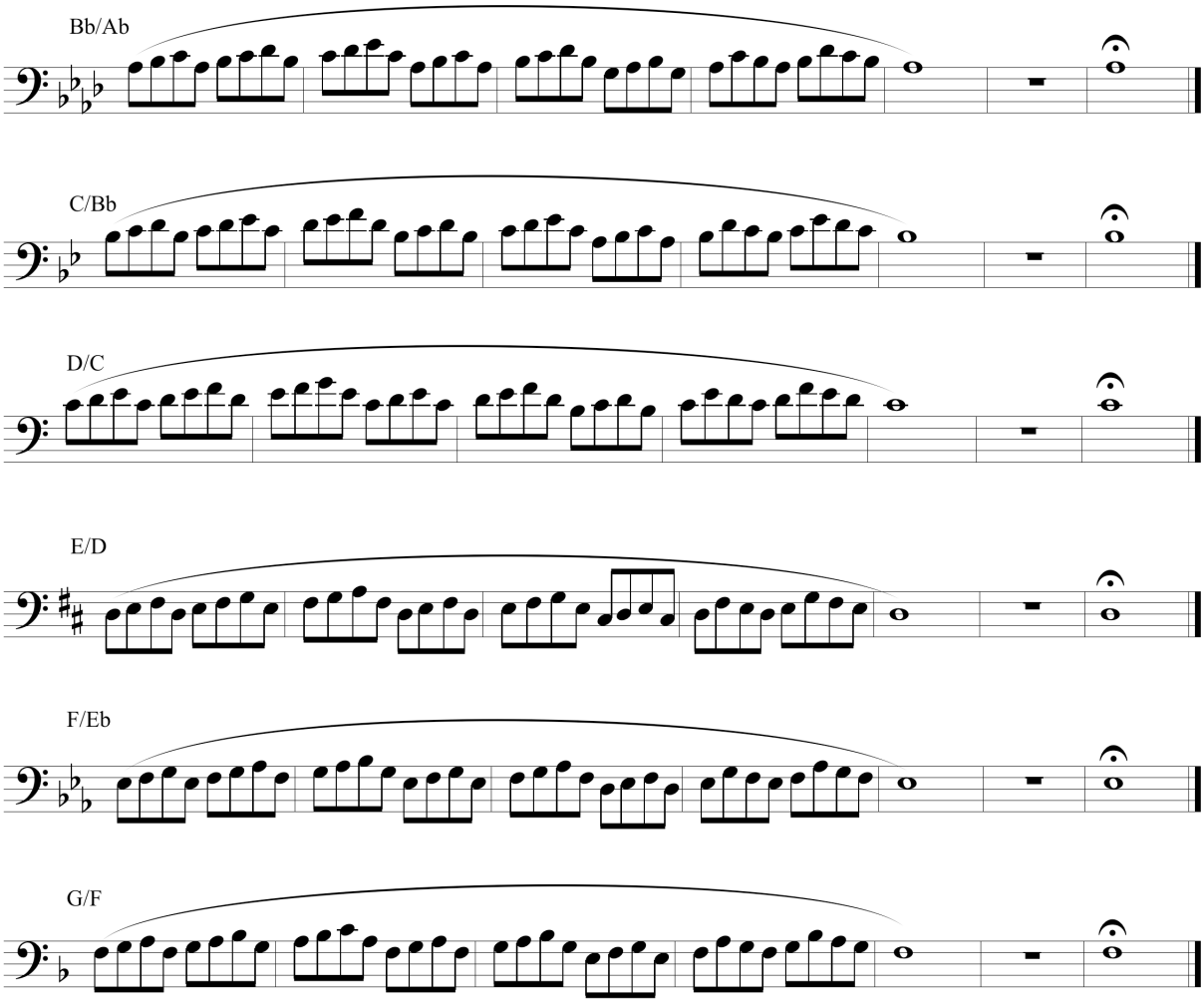
FINGER TECHNIQUE

When playing all musical passages, we recommend pressing the valves down with authority, while keeping a relaxed feel in the wrists and fingers. Do not lose control of the valve on the way back up. The fingers should be rounded and the tips should press the valve straight up and down. If a player pushes the valves on an angle, the valves will stick and make technical passages unplayable.

Taken from the Herbert L. Clarke technique book, this scale pattern can be used for multiple purposes. The exercise can be used for tone development, finger dexterity improvement, overall flexibility, range development, articulation work, and various combinations. As with every exercise, high-level tone production must be constant, regardless of which performance aspect is being addressed.

CLARKE STUDIES – High Brass

CLARKE STUDIES – EUPHONIUM / TROMBONE



CLARKE STUDIES – TUBAS

Tuning Tendency Chart

B♭ Instruments - Notes listed are concert pitch

Use a second sheet for other octaves. Make sure you and your instrument are warmed up before tuning your instrument. Your instrument must be In-Tune on middle B♭ / C before working with this chart. Always refer to the chart at the right to see just intonation for chord tones and then compare to your instrument tendency. For example: You are playing the Major 3rd in the chord - however your tendency is +15 on that note - then you would need to lower your pitch to be accurate.

Unison	0
Minor 2nd	raise 11.73 ▲
Major 2nd	raise 3.91 ▲
Minor 3rd	raise 15.64 ▲
Major 3rd	lower 13.68 ▼
Perfect 4th	lower 1.95 ▼
Tritone	raise 3 ▲
Perfect 5th	rasie 1.95 ▲
Minor 6th	raise 13.68 ▲
Major 6th	lower 15.64 ▼
Minor 7th	lower 3.91 ▼
Dominant 7th	lower 31.17 ▼
Major 7th	lower 11.73 ▼
Octave	0

Tuning Tendency Chart

C Instruments

Use a second sheet for other octaves. Make sure you and your instrument are warmed up before tuning your instrument. Your instrument must be In-Tune on middle $B^{\flat}$ / C before working with this chart. Always refer to the chart at the right to see just intonation for chord tones and then compare to your instrument tendency. For example: You are playing the Major 3rd in the chord - however your tendency is +15 on that note - then you would need to lower your pitch to be accurate.

Unison	0
Minor 2nd	raise 11.73 ▲
Major 2nd	raise 3.91 ▲
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Major 3rd	lower 13.68 ▼
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Minor 6th	raise 13.68 ▲
Major 6th	lower 15.64 ▼
Minor 7th	lower 3.91 ▼
Dominant 7th	lower 31.17 ▼
Major 7th	lower 11.73 ▼
Octave	0