Armando Ghitalla "For The Beginner"

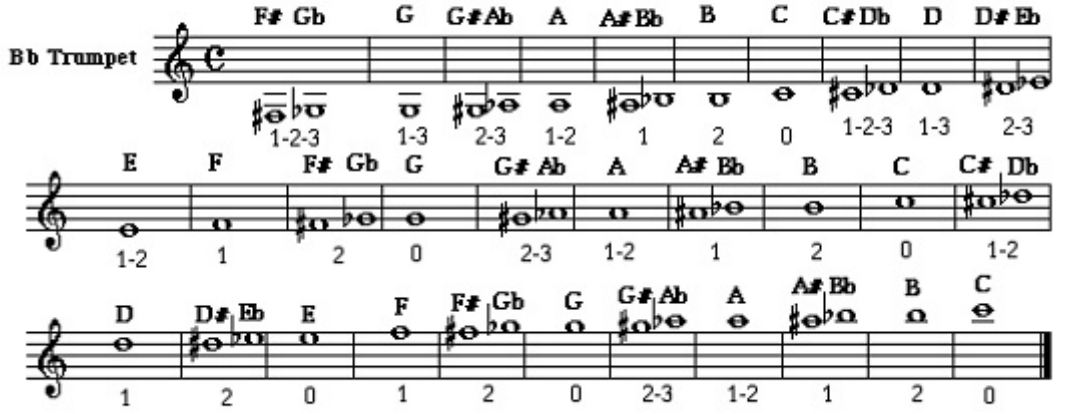
Good endurance, range, and tone equal an embouchure with potential. It is not so much what it looks like, but what it produces.

Beginners:

1. Without the trumpet or mouthpiece, have the beginner roll the lips inward as if saying the letter "M". Take care that no red part of the lip shows and there is no rolled lips between the teeth. The teeth are virtually closed.
2. Blow an airstream through the center of the lips without unrolling them. Saying piiip or peeeeep with the air can sometimes facilitate this action.
3. After this is accomplished, the teacher places the mouthpiece on the students lips during the "M" formation, about half upper, half lower.
4. The student holds the mouthpiece (no buzz) that was accomplished through the rolled lips.
5. We then join the trumpet to the mouthpiece, with instructions on how to hold the trumpet, and the same airstream exercise will produce a G on the second line or higher. Certain points may need to be checked here if no sound comes forth. The airstream from the "M" position is crucial and some pressure is required so that the rim of the mouthpiece holds the embouchure in place while the lips relax enough to vibrate. The sounded note G or higher indicates the necessary innate tension required in a good embouchure. Nothing lower than this G should be attempted for three to five days in order to set the embouchure.
6. Long tones are encouraged to strengthen the lips. The player then works down to low C after the first three to five day setting has taken place. The lips will unroll and find a more flexible setting as the player extends the range in both directions. I have found this beginning rolled setting so much more successful than starting with unrolled lips which produces a low C as the first note. Too many range and endurance problems result from this unrolled beginning lip position.
7. When it comes time for scales, I have found that the best thing to do is give the student the hardest scales first. Scales with five, or more flats are sharps, make the student work hard. It is very important not to tell the students that these are hard scales. After learning the hardest scales first, the rest will be easy.

Basic Trumpet Fingerings

(There may be other fingerings for a note besides those listed here. For example, any note fingered "1-2" may also be fingered "3", although the pitch will be slightly off.)



Alan Wise "Setting Up Solid"

Put the mouthpiece on your top lip first and bring it down, this gives you better flexibility, greater range and better sound. First, take the horn and lift the bell so it is pointing slightly toward the ceiling, it can be as little as a half inch above level, just as long as it helps you to bring the horn to your embouchure from above. Next, you need to make that "MMM" sound to make sure the center of your lips are together. Then set the mouthpiece on you embouchure so that it meets your top lip without contacting the bottom. Lower the mouthpiece so it contains both lips. This makes the top lip, a non-moving surface, the anchor point.

Play a long tone concentrating on keeping the anchor point on the top jaw. I recommend using a mirror regularly to check the correctness of your set up. The horn always comes down to play, it never comes up. Set your embouchure and keep the horn pointing towards the ceiling and play a long tone on the pitch of fourth line E. This also helps to keep the throat open, and then you can't choke.

Embouchure Development-Clyde Hunt

It is with humility and even a bit of embarrassment that I offer to you, dear trumpeter, yet another method book - generically known as `how to blow the trumpet''. For I am reasonably sure that: (A) I have no unique exercises. (B) I have no access to previously unknown ``truths''.(C) I am not the originator of any of these principles. (D) All players with a very great range play in essentially the same way, so that the only unique aspect of this book is the manner in which the information is presented. I had the good fortune, a few years back, to gain access to the trumpet literature ``stacks'' at the Library of Congress. There I was able to examine virtually all of the method books which dated from well into the nineteenth century, through the early 1980's.

However, I did leave the library with a much better idea of which questions are the important ones. I was especially intrigued by authors who attacked each other's premises, but seemed to me to be wholly in agreement! In other words, they did not disagree on ``how to do it'', but their explanations seemingly clashed. I began by compiling a list of ``the most often mentioned parameters'', and proceeded to again go through each book in an attempt to see what the author had to say on the matter. The results of that compilation are available within these pages.

In this trumpet player's guide I have attempted to define, describe, and label those "questions'' which did not seem to be addressed in previous publications. At least they were not explained in a way which made sense to me. What this guide offers, I hope, is a unique personal approach which consists of: (A) A defined terminology to codify and label the parameters of brass playing. (B) A consistently programmed series of exercises which will address both the callisthenic and some of the musical needs of the player. (C) A demo CD or cassette. The essence of good teaching lies with the articulation of information in a manner which the student is likely to understand. This means that the teacher should make every effort to say the same things in as many ways as possible. One never knows which one will ``ring the bell''. It is my sincere hope that some aspect of this guide might trigger the ``aha'' situation within the student. You, dear reader, will have to be the judge of the extent to which I have succeeded.

When we return to that golden age of trumpet playing, the Baroque Age (1600 -1750), we find a close parallel with todays high register artists. Altenburg clearly states that his ``uncle could warble like a robin red breast up to the thirty second partial'' on the old eight - foot clarin trumpet. The thirty-second partial is roughly equivalent to ``double C'' on today's 4 - foot trumpet (C4) Michael Haydn requires a C4 on the piccolo trumpet in A, and there are A's, and numerous E's, F's, and G's (on the Bb piccolo trumpet) sprinkled throughout the Brandenburg Concerto #2 of J.S. Bach. The old trumpets were played in the high register, eighth through thirty second partials, out of necessity. Only in this register can an approximate diatonic scale be sounded.

It is the author's premise that all good players play essentially the same way, but due to human variation both physical and mental, no single approach will be effective for all players. I have further hypothesized that the greatest stumbling blocks to teaching ``what to do'' while playing are : (A) A lack of scientific evaluative techniques. (B) A lack of standardized terminology, and (C) the difficulty of trying to externalize, or verbalize, a process which is essentially internal. In other words, most disagreements regarding playing techniques are a result of several differing verbal descriptions of the same process. It is much akin to the proverb of the blind men who gave conflicting descriptions of an elephant based upon the examination of a particular appendage of the animal.

The range of the trumpet, as well as that of all other brass instruments, is contingent upon the chops of the player. To this end, we brass players have to devote considerable time to the physical development of our embouchure. I doubt that anyone can promise that any amount of practice will enable everyone to play the above-mentioned seven octave range, any more than we can guarantee that every jogger will eventually be able to run the four-minute-mile. It is not given that all should be able to do so! But I can promise that everyone who seriously and conscientiously follows the regimen prescribed in this book will be able to improve his range and endurance considerably.

The high register will not capitulate to casual practice - but it will yield to those who correctly persist!

(Q) Not having any personalized instruction from my youth to rely upon, I began surfing the web to see what I could learn about embouchure development. I've been experimenting with 3 of the more popular approaches to see which one sounds best and feels most natural for me - at this point I'm leaning towards a Maggio, or at least some reasonable facsimile thereof. Before I invest untold hours in attempting to develop a particular embouchure, I would very much appreciate any experience/opinion you may have on embouchures for someone with my peculiar physical features - specifically a very narrow face combined with a mild under bite.

A very appropriate question. As you may, or may not, know I believe that all good players play in essentially the same way - EXCEPT for the extent to which individual physical characteristics dictate certain modifications.

The differences which I glean from the many "methods or procedures" are LARGELY a difference in (1) NOMENCLATURE (not to mention perceived meanings of that nomenclature) and the difficulty and necessity of verbally describing an internal, unmeasurable, invisible process. (Whew!!) There are people with "websites" who would LIKE to have you believe that all is "cut and dried". Many people fail to see the forest - because they are focusing too extensively upon a single parameter of that complex structure known as the embouchure. I make it a policy neither to recommend nor belittle the publications/writings/beliefs of my colleagues. HOWEVER - beware of those who give "logical," "self-assured" descriptions - but, alas, are not particularly adept at "doing it"!!

The most important thing is to be "working" in a manner which appears to be bringing results. FOR YOU! As always, the real truth is best evaluated by reading everything you can get your hands-on. You will see certain "truths" begin to emerge.

Now, to your question re. some of the universally agreed -upon principles: (1) Get the pedals going - LOUD, firm, in-tune (Tone "quality" is secondary (for these purposes)

(2) Arpeggio's, scales which require you to move from the pedal register, ever higher into the normal register - WITHOUT stopping to "reset" or even, "breathe". AND VISE-VERSA. "Look to develop your foundation before attempting to erect a skyscraper" - Sail The Seven C's

(3) Read #2 again!

(4) Get things "flowing" in the low to pedal register, no tongue. As things improve, begin to add the "tongue". (another problem to be solved!)

(5) If you want ALL registers to "sound" equally well, you will HAVE to spend equal time on all!!! Excessive mouthpiece pressure is universally destructive - the nemesis of brass players!.

(Q)While I've developed the facial muscles to buzz reasonably well without the aid of a mouthpiece, when I attempt to capture the buzz by bringing my mouthpiece (Bach 7C) in contact with my lips, I have a ton of leakage around the sides (unless I apply undue pressure) .

(A)Makes sense - you are going to have to apply more pressure to stop the "peripheral buzzing".

(Q) I'm thinking some of this may be due to the relatively small radius presented by my front teeth, but I'm not ready to jump to any conclusions just yet. Have you ever seen a decent trumpet player who had an under bite? Yes!

(Q) Are there any special measures needed for this?

(A)If it is too severe, you can have your mouthpiece "bent" so you won't be inclined to "throw-back your head". Hoping that this all makes some sense, somehow. Keep 'Em Flying!

Hi Clyde,
I am just starting to play again after a fifteen year layoff...and am having great fun but...I want to get good again. Really good. I am 40 and was a lead trumpet player in the military (Marines) back in the seventies. Since starting to play again in November I have gotten pretty good again but kind of "hit the wall". I guess my question is, should I seek instruction and by whom? Or can I just continue to practice and practice (maybe the wrong things?)

Hello John,
Yes - there are certain basic (also predictable and familiar) limitations which often prevent a very good player from becoming a "world class", or "astounding" player.

One of the big problems, is being constantly surrounded by the mediocre! So many potentially brilliant, young players are content to simply play well enough to get by!!!! That is, to be the equal of, or better than, those with whom they are surrounded. The above are, I believe, surmountable - If you truly understand that YOU are the answer.

"Think not, that you can become an uncommonly good player by practicing the commonplace"!! You must be head and shoulders above the pack!! But the REAL race is with yourself, not with others! - Clyde Hunt

The Ultimate Warm-Up for Trumpet By: Michael Droste

A. **Practice Schedule**

You need to practice on the average at least 40 minutes per day including weekends. Depending upon your goals, your practice time will vary.

B. **How long is the Ultimate Warm Up**

The Ultimate Warm Up is half of your practice time. If your practice session is 40 minutes, then the warm up is twenty minutes and if your practice session is two hours, then your warm up time is 1 hour.

C. **How to practice**

You should always practice with a metronome. Use it with every practice session. Use the metronome on every piece of music; exercises, etudes and pieces.

1. Go to the hardest parts of the piece
2. Just play through the notes to get the feeling of the music
3. Set the metronome on a low setting where you can easily play the passage
4. Play and master that passage (play at least ten times with no mistakes)
5. Increase the metronome speed
6. Repeat steps four and five until two metronome clicks PAST the written tempo.
7. Tape record your playing, Is your sound warm and rich in tone and pleasing to the ear?

Use the metronome to keep a steady beat OR an underlying subdivision of the beat. Always play with and use your metronome, you won't believe how out of time you are until you use one!

D. **After the Ultimate Warm Up**

Continue with assigned etudes or exercises from your private instructor. You should also be concentrating on the major literature for your instrument!

The Ultimate Warm Up

Part 1. **Getting Your Air Moving**
Set your metronome to 60 bpm for these warm-ups. Air is the secret to great tonguing, range and tone production. It is THE most important aspect of playing any wind instrument. Think of your air as a continual stream of water flowing through your kitchen faucet. Always constant never stopping!

Air Tips!
-Low notes require a greater volume of air to produce a great tone. Imagine making an 'ah' sound in your never stopping.
-High notes require fast air. Imagine saying an 'e' sound in your mouth and directing the air super fast into a small straw! Always constant never stopping.

Part 2. **Lip Buzzing**
Set your metronome to 60 bpm for these warm-ups. For these exercises try to get a nice full, rich sound that is full of tone. What is done here is amplified by the mouthpiece and horn. Do not spend more than 5 minutes on this section. Go for the most beautiful sound that you can create. Listen to yourself, tape record your playing. Is your sound full, rich, warm, musical, and pleasing?

Part 3. **Mouthpiece Work**
Set your metronome to 60 bpm for these warm-ups. Hold the mouthpiece with the thumb and forefinger at the end of the mouthpiece. This is to keep you from putting pressure on your embouchure. The key is to keep the air constantly flowing. Go for a great sound! Listen to yourself, tape record your playing. Go for a warm, rich sound with a lot of tone. What you produce now is simply amplified by your instrument. If your sound is thin,

this is the place to devote more work and energy. Play the exercises in a relaxed fashion, not loud or soft, but with a nice full tone slowly moving higher and lower as directed.

Part 4. **Long Tones**
Set your metronome to 60 bpm for these warm-ups. Again, the key is to keep the air constant, always flowing. Go for the most beautiful sound that you can create. Listen to yourself, tape record your playing. Is your sound full, rich, warm, musical, and pleasing? You can make beautiful music by simply playing long tones, it is possible!

Part 5. **Tonguing**
Set your metronome to 80 bpm for these warm-ups. The key is to keep the air constantly flowing. Think of the kitchen faucet analogy again, while the faucet is constantly flowing, imagine flicking a butter knife quickly through the stream of water. The butter knife quickly separates the and the stream of water continues never stopping. The air flows on, but is lightly separated by the tongue. When playing these warm-ups use different syllables for tonguing. Use as directed: da, dee, do, ta, tee, to. Go for the most beautiful sound that you can create. Listen to sound, tape record your playing. Is your sound full, rich, warm, musical, and pleasing?

Part 6. **Flexibility**
Set your metronome between 60 and 80 bpm for these warm-ups. Another key to playing the trumpet is flexibility. The ability to move from 2nd valve F# to 2nd valve B quickly and smoothly is essential. Along with other valve combinations, these simply have to be mastered. The key for successful lip slurs is to keep the air constantly flowing. When doing the extended slurs change the air flow! The low notes require a greater volume of air to produce a great tone. Imagine making an 'ah' sound in your mouth and directing the air into a large tube. Always constant never stopping. The high notes require fast air. Imagine saying an 'e' sound in your mouth and directing the air super fast into a small straw! Always constant never stopping. Go for the most beautiful sound that you can. Listen to yourself, tape record your playing. Is your sound full, rich, warm, musical, and pleasing?

Part 7. **Phrase Studies**
Set your metronome between 60 and 80 bpm for these warm-ups. These studies are meant to make your playing as musical as possible. Sing the music, yes sing it! Imagine the most beautiful voice singing the passage in your mind. Now go to the music and reproduce exactly what you hear in your mind; exactly! This is why musicians play and practice! Why play the trumpet if you are not receiving a musical experience? Music is feelings and emotions, play your music this way and you'll never want to stop. Go for the most beautiful sound that you can create. Listen to yourself, tape record your playing. Is your sound full, rich, warm, musical, and pleasing?

<u>Doc Severinsen "Warm Ups"</u>

I accept and adhere to the use of long tones. They serve to "set" the embouchure immediately and strengthen it as well as demanding the proper flow of air; as well as vitalizing the lips. The entire warm-up should be as musical as you can make it, hence more enjoyable. While practicing, be sure to bang your valves down! In this case, speed, facility, and artistry are born of the willingness to put in some very laborious and painstaking work. As beginning, the principle of mouthpiece buzzing, done briefly, may be very helpful in energizing the lips.

For your embouchure, form a certain degree of tension outside the corners of the mouth, firmly, but comfortably, so that the lips and vibrating area remain fully relaxed.

Lew Soloff "Warming Up"

Think of practicing, as a way to train your body and muscles to prepare yourself for whatever you have to play. The kinder you are to your muscles the more consistently responsive they will be. If you've conditioned yourself properly in your practice, you're going to be fine without warming up at all.

For my warm up I buzz my lips for short periods of time, maybe seven to ten seconds at a time. I buzz for maybe two or three minutes in seven to ten second spurts, just getting used to the feeling. I then play slurs on my mouthpiece, and other musical exercises for at least 15 to 20 minutes a day. When I pick up my trumpet, I mainly play slurs, and stay away from hard tonguing. The most important things are flexibility and the resonance of the tone. After I've done my basic work, I then play scales to build up my range. Play scales starting on a low F# one octave at medium volume. Then take the mouthpiece of your lips, reset, and then play the G scale, etc. with the same relaxed feel. Don't strain to push your limits. Ideally, you should practice in a very relaxed way, so that when you get on a job, part of the relaxation of the practice will stay in your mind.

Randy Brecker "Warm Up Techniques"

A. Warm Up relatively softly and take it easy, rather than kill your chops right away.
1. Tap your feet. Get your muscles all moving at the same time.
2. Always keep your mouthpiece in contact with your embouchure.
3. Really blow through the horn, but keep the air steady.
4. Breathe only through the nose to reduce the muscular activity it takes to play the horn. This also strengthens the chops.

B. The most important thing with any warm up is to start in the mid-register and work both higher and lower. Don't play any of this too loud. As soon as you feel the slightest bit wasted, stop.

C. People have various ideas and philosophies about breathing, but really it's no more then remembering to take a big breath.

Armando Ghitalla "Lip Conditioning"

Lip Buzzing: Form the embouchure and buzz without the trumpet. It is important to realize that we do not play the trumpet in the same way that lip buzzing is performed. When lip buzzing, we increase lip vibration by contracting the muscles. This causes an adverse affect on the high register if the same muscle contraction is done while playing the trumpet. The advantage of lip buzzing is that it strengthens lip muscles in the embouchure area faster than any other exercise.

Try it for ten minutes a day. Range is not important during lip buzzing. Follow the lip buzzing with ten minutes of mouthpiece buzzing, using your regular embouchure.

Donovan Bankhead-Reducing Pressure

Here is my take on the whole "using too much pressure" thing. If you don't like it, fine, do something else.

Using too much pressure is just part of a viscous circle. Generally, we use too much pressure because other aspects of our playing are inadequate. Usually those areas are proper breath support and embouchure development. Bob Odneal once told me why we use pressure: Because it works, to a degree. He went on to explain that the lips are like a Glazed donut (ala Homer Simpson "Hmm...donuts") that is squished between two pieces of plate glass. What happens to our beloved donut? The hole in the center becomes smaller because the dough has been flattened. The donut gets flattened outward as well as the hole getting smaller.

Our lips are the same way. They are flexible fleshy material being "squished" between a brass mouthpiece and your teeth (two very hard surfaces). The aperture (the hole between our lips that occurs when we blow through our embouchure) becomes smaller as more pressure is added. The problem with using this extra pressure is that it damages our lips and causes cuts, swelling, bruises, and even in some cases loose teeth!

So, what is the answer you ask? We must learn to control the aperture via the muscles surrounding the lips and face rather then controlling the aperture via our biceps :) This is done by utilizing the corners of the mouth to tighten and make the aperture smaller. I've found that "pinching" the lips together doesn't work well as the sound tends to get smaller and harder to control. The corners method allows the blood to flow through the lips by letting us use less pressure. Notice how I said "let us use less pressure". Properly using our corner muscles alone will not automatically reduce mouthpiece pressure. We must add one more ingredient:

Air flow.

Air flow has been argued to be the most important aspect of trumpet playing, and I would agree. If you have a mediocre/bad embouchure, but great air support, then you will be an okay player. If you have a terrific embouchure and lousy air support, you will be a lousy player. The hard part is that it is hard to have a terrific embouchure and lousy air support, the two tend to go hand in hand :) My idea of our breath support system is that it is one in which the lungs function only to draw in as much air as possible as quickly as possible and to expel that same breath as quickly as possible. So, when I breath I allow the lower stomach to expand, then when I play, I suck it in like I'm trying to appear skinny :) This is has some links to the Bobby Shew "wedge" breath, but without all of the extra tension. Not to say that the wedge breath doesn't work, but for general playing, it isn't necessary (IMHO).

Once these things are properly in place, we are ready to reduce the pressure. This is done just by making a conscious effort to reduce the pressure on our chops. Often times it is now realized that when playing with proper air support and aperture control we don't _need_ all of that pressure. We only need enough to keep the air from escaping from around the mouthpiece.

Allen Vizzutti "Practicing"

A. Divide **Practice Session** into three parts.

1. **Warm Up**. When your lips get stiff, Rest.

a. Start by buzzing the mouthpiece. Hold onto the mouthpiece shank (this is to ease the pressure) Do a gliss. You may have a gap in your range, so work on fattening up the sound.

b. Put the mouthpiece in the horn and play long tones on the Dominant 7th chord
1-3-1, 1-3-5-3-1,... Play this in all twelve keys.

c. Remember to bang the valves down.

2. **Studies**. Work on a study each day. Every two days learn a new scale. Try something hard or new for five to ten minutes. Create situations that require endurance when practicing.

Use your air!

3. Practice something you enjoy. Something musical.

B. Set a constant time each day for your practice session.

AVOIDING BAD HABITS By: Mark Van Cleave

When you practice, you develop muscle memory or reflexes. These reflexes are what you draw from when performing or playing music. When you are playing music, you do not have enough time to think about all of the physical mechanics involved. You can only think about the music...what you sound like.

The reflexes that you draw on while playing are developed during the practice session. Everything that you play builds reflexes...good ones and bad ones. While practicing, you must be careful not to build undesirable reflexes. Practicing while tired (mentally or physically) can lead to bad habits or reflexes being learned. Unlearning a bad habit takes much longer than learning a good habit.

Remember:

How you practice is how you will play. If you practice forcing the upper register because you are tired, you will only be learning how to force out high notes (not play them). When you are tired or distracted - DO NOT PRACTICE! Wait until you feel like practicing. Do not make your practice session a bad experience by forcing yourself to practice. When practicing something as difficult and challenging (mentally and physically) as range, the opportunity for developing bad habits is very good. You must concentrate even harder than with normal (safer) practice. Never practice past when you feel physically comfortable. If your chops need a break...take one. Know when to stop!

There are many Trumpet Jocks out there that can play the trumpet well but cannot play any music that is worth hearing. It is easy to get caught up in the business of high notes or the higher, faster, louder syndrome. Try to remember that ultimately the trumpet is part of the MUSIC business (not the trumpet business). The creation of good music should be your ultimate goal.

Smart Practice Mark Van Cleave

One of the biggest problems with developing trumpet players is the way they neglect to use all of the tools they have to accomplish their goals.

The mind is the most powerful resource for learning or developing skills that any trumpet player has. Yet most players practice by playing through a prescribed set of exercises. When they are finished, they are done practicing for the day. No thought went into how or what they were trying to improve.

Once programmed with the correct information, the brain can not only calculate how to best perform the desired task, but also has the ability to control the body and make necessary physical adjustments without having to consciously. It is important to remember that the brain is a very powerful computer, and is capable of tremendous feats. Although, the greatest computer is only as good as the software that you are running and is completely dependent upon the quantity and the quality of information programmed into it. Without this quantity and quality of information, even the most powerful computer is rendered completely useless. All the information in the world cannot help you if you are unable to recognize when you are producing the correct end results.

Without the necessary information (how the trumpet works), your brain has no idea how to make the correct calculations or physical adjustments in order to help you. You would be playing a game of trial and error. Just aimless blowing. Not the most efficient way to develop a skill. Without a clear idea of the end result, if you were to achieve it, you might not even recognize it. And then, back to the drawing board.

One of the most important aspects of developing as a trumpet player is to have a very clear idea of exactly how you want to sound. For this, you must listen very carefully to great players that you admire. Without a goal, it is impossible to reach one.

Breathing
Hatha Yoga breathing by Rich Szabo

Before we can improve our breathing we must remember that the process existed long before we did - we have nothing to teach it. What we have to do is to prepare ourselves to receive its revitalizing strength by removing any obstacles that might hinder its good effects. Proper breathing depends on our eliminating tension, correcting bad habits, wrong mental and physical attitudes; the moment we get rid of these obstacles it will come into its own and bring us vitality and good health.

The corsets of 1900 are no longer in fashion, but there is still more than one item of clothing which prevents us from normal breathing - leather belts for men, girdles and bras for women. These must be as flexible as possible

if they are not to hinder respiration. But the physical obstacles are even more daunting: the hard tense stomach which encumbers every breath, imprisoning the personality; the rib-cage as inflexible as a breast-plate; the diaphragm immobilized by the wind - itself caused by spasms - which has accumulated in the alimentary canal. The first step is to relax all these muscles, which when permanently tense are designed more successfully than any corset to prevent normal breathing; and this is why relaxation is the open door to yoga.

Priority given to exhalation

In the act of respiration, Westerners give precedence to the in-drawing of the breath. Yoga, on the other hand, maintains that all good respiration begins with a slow and complete exhalation, and that this perfect exhalation is an absolute prerequisite of correct and complete inhalation, for the very simple reason that, until a receptacle is emptied, it cannot be filled. Unless we first breathe out fully it is impossible to breathe in correctly.

Normal respiration therefore, begins with a slow calm exhalation carried out by relaxing of the inspiratory muscles. The chest is depressed by its own weight, expelling the air. This out breath must be as silent as every other action involved in breathing (you should not hear yourself breathe), and because it is silent, it will also be slow. At the end of the expiration the abdominal muscles help the lungs to empty to their fullest extent, by means of a contraction which expels the last traces of tainted air. The spongy make-up of the lungs does not allow them to be emptied completely - there is always a residue of impure air in the lungs. We must attempt to minimize this "residue" because with the fresh air provided by inhalation it makes up the actual air we breathe. The more complete the exhalation, therefore, the greater the quantity of fresh air to enter the lungs, and so the purer the air in contact with the alveolar surfaces.

The total volume of air which the lungs are able to contain is known as "the vital capacity". A more apt term cannot be imagined, and innumerable techniques have been thought up aimed at increasing this capacity. Before we can contemplate this improvement we must make use of what we already possess by carefully exhaling. Yoga recognizes three separate forms of breathing - diaphragmatic, intercostal, and clavicular. Complete yogic breathing combines all three, and constitutes the ideal technique.

Diaphragmatic breathing

The majority of men breathe in this way. The diaphragm subsides while the breath is drawn in, and the abdominal region swells. This is the least faulty method of breathing. The base of the lungs fills with air, and the rhythmic lowering of the diaphragm produces a constant, gentle massage of the whole abdominal content, and helps these organs to function correctly.

Intercostal breathing

This is achieved by raising the ribs through dilating the thoracic cage or chest wall like a pair of bellows. It is a form of breathing which fills the middle section of the lungs, allowing less air to enter than the abdominal respiration, and more important, involving far more effort! This is 'athletic' respiration. When combined with abdominal breathing it ventilates the lungs satisfactorily.

Clavicular breathing

Air is introduced by raising the collar-bone and shoulders. In this way, only the upper part of the lungs receives any fresh air. It is the least satisfactory method of breathing and is often characteristic of women.

Complete breathing

Complete yogic respiration incorporates all three methods, integrated into one single, full and rhythmic movement. The method is best studied while you are lying on your back, here is a brief description of the various phases:

1) Empty the lungs entirely.

2) Slowly lower the diaphragm allowing air to enter the lungs. When the abdomen swells filling the bottom of the lungs with air...

3) ...expand the ribs without straining, then...

4) ...allow the lungs to completely fill by raising the collar-bones.

Throughout this procedure, the air should enter in a continuous flow, without gasping. No noise must be made for it is essential to breathe silently!

It is of the utmost importance to concentrate the mind entirely upon the action of breathing!

When the lungs are completely filled, breathe out, in the same sequence as when inhaling. Now breathe in again in the same way. You may continue for as long as you wish. It should not induce any discomfort of fatigue. You can practice it at any time of day, whenever you think of it, at work, walking, any time; breathe consciously and as completely as possible. Gradually you will acquire the habit of complete respiration, and your method of breathing will improve as you go on. It is essential to reserve daily, for a few minutes' practice, a special time convenient to yourself (the morning when you wake up is a good time, and so is the evening before going to sleep).

Whenever you feel tired, depressed or discouraged do a few complete breathing exercises; your fatigue will disappear magically, your mental balance will be re-established and you will set to work again with renewed will.

Inspiration like exhalation must be silent, slow, continuous and easy. Do not blow yourself up like a balloon or tire! Breathe easily without straining. Remember that the ideal respiration is deep, slow, silent, easy. Those engaged in sedentary work are liable to accumulations of blood or to develop congestion in one organ or another. The slowing down of the bloodstream produces wear and premature aging in the organism. With complete breathing, the bloodstream in our organs is prevented from slowing down to the point where it stagnates and degenerates from "stream" into "marsh".

Complete Yogic respiration

Remember, Inhalation is made up of three partial phases:

a) Diaphragmatic or abdominal breathing induced by lowering and flattening the dome-shaped diaphragm.

b) Intercostal breathing brought about by expanding the rib cage.

c) Clavicular breathing from the top of the lungs, produced by raising the upper part of the thorax.

Each of these phases has its own merits, but yogic inspiration is only complete when all three are done in conjunction. How can this breathing be learned? Before attempting to combine them - that is to say before we can achieve in one single, smooth and continuous movement complete and easy filling of the lungs, thereby supplying them with reviving air, and expanding the pulmonary alveoli (all 70 million of them) - we must learn to dissociate the three phases. First of all we practice breathing from the diaphragm.

Diaphragmatic breathing

In order to learn to breathe correctly from the diaphragm - easily completely and naturally - it is wise to practice it lying down, since it is then easier to relax the muscles of the abdominal wall, which serve to hold us upright when we are sitting or walking. Later you will be able to breathe from the diaphragm whenever required - even when walking or running.

To insure complete comfort it is often a good idea to place a cushion under the knees: this diminishes the lumbar arch. Do not lie on too soft a surface, because although it is possible to breathe from the diaphragm when in bed, it is even better to do the exercises on some firm support - such as a rug laid on the floor.

When practicing it is a good idea to close the eyes: this helps to increase concentration.

Before you begin, be sure to breathe out completely a few times; either by giving a few sighs, after which you pull in the stomach thus contracting the abdominal muscles, in order to get rid of any remaining air, or, if alone in the room, by emitting the sound OM. This obliges you to breathe out slowly and completely - and since the sound should be uniform, you will be able to expel the remainder of the air at the rate required. sound a long and sonorous OOOOOOOMMMMMMMMM, vibrating the MMMMMMM inside the skull, and concentrating meanwhile upon the various muscles of which the abdomen is composed. After a few long, slow, deep exhalations there is an automatic tendency to breathe in more deeply from the stomach. We are going to try to accentuate this tendency as far as possible.

It is important to empty the lungs thoroughly, thereby getting rid of the greatest amount of air. This piston-like structure is however not rigid, and unlike that of a motorcar is not flat, but convex rather like the lip of a casserole dish. The diaphragm has a rather rigid, flat central section - the aponeurotic - and is surrounded by a girdle of peripheral muscles whose contraction determines its downward movements: the diaphragm muscles are among the strongest in the human body, or perhaps we should say, they are designed to be the strongest, because their owner alas, may allow them to atrophy. We can also understand why complete relaxation is only possible once the lungs are emptied without forcible exhalation - because at that moment the diaphragm muscles are at rest.

Absolute relaxation, therefore can only exist during those few seconds of respite which we allow when we hold our breath with the lungs empty.

Having completely emptied the lungs and held the breath for a few seconds, you will soon realize that your breathing is attempting to start up on its own - therefore relax your stomach and allow the breath to flow. As air enters the lungs, the stomach expands and rises, because the dome of the diaphragm has flattened, and not because the muscles in the abdominal region have contracted. People believe, often in all good faith, that they

are “breathing from the stomach”, because they are flexing their abdominal muscles. In fact, the latter should be relaxed, and must remain so throughout the inhalation. The lungs gradually fill with air from beneath. the inhalation will be slow, easy and unquestionably silent. If you do not hear yourself breathing it means that your respiration has acquired the correct slowness. If audible it means you have inhaled with much too haste.

It is essential to breathe in as well as out through the nose.

the stomach should rise gently like a balloon being blown up, and the muscle structure should remain supple: should you wish to control the movement you may place your hand on your stomach near the navel, at the same time resting the elbow on the floor. In this way it is easy to follow the expanding movement of the stomach. While this is going on, place the other hand against one side so that you can ensure that the ribs remain completely still, and so realize that the abdominal and thoracic breathing are completely separate.

Should your ribs still move while the stomach is rising, they should be immobilized by girding the thorax with a belt placed near the lower part of the sternum, in the pit of the stomach. Fasten the belt when the lungs are empty, to the required girth. While you breathe in the breathing and your diaphragm will be forced to flatten and your stomach to expand.

While you are breathing in, you should be conscious of what is going on in the warm depths of the thorax; you will soon find you are conscious of the movements of the diaphragm, and you will be able to separate the two phases and dispense with the belt.

Breathing from the ribs

We are now going to learn thoracic or costal breathing.

As its name implies, this is the action of expanding the thorax which leads to the inflation of the lungs by conducting air into them. This time we work sitting in a chair or on the ground, it does not matter which. Empty the lungs completely and keep the abdominal muscles contracted: in this way it becomes impossible to breathe through the stomach. Throughout the inhalation you should keep the stomach contracted in order to prevent any breathing through the diaphragm.

Needless to say those who used the belt to keep the ribs from moving, should remove it for learning thoracic breathing!

Place the hands on the sides a few inches away from the armpits, in such a way that the palms can feel the ribs. Point the fingers to the front. Breathe in, attempting at the same time to push out the hands as far as possible with the ribs, that is, not in front of you but towards the sides. After a few attempts, you will feel the exact position.

You will notice clearly a greater resistance to the entrance of air than you did during the abdominal breathing, which allowed entry to the largest volume of air with a minimum of effort.

Despite the resistance a fairly large quantity of air will enter during thoracic breathing.

Breathe about twenty times from the ribs only.

Clavicular or high breathing

In this type of breathing, you must attempt to raise the collar-bones while the air is being inhaled.

Immobilize the abdominal muscles, in the same way as you did when you were learning thoracic breathing, and keep the hands upon the sides in the position described previously. Now try to allow the air to enter by drawing the collar-bones up towards the chin, without however raising the shoulders, which will anyhow be almost impossible if the hands are kept on the sides.

You will feel air entering, but you will also be aware that a very small quantity does so, despite a considerable greater effort than involved in thoracic breathing.

This is the least efficient way of breathing, but woman habitually do it. If you watch women breathing, eight out of ten will show no signs of breathing other than a distinct raising of the collar-bones, while their brooches or necklaces rise and fall. this is a form of breathing also used by nervous subjects and those suffering from a degree of debility or anxiety. It is only useful or to be tolerated when it is integrated onto complete yogic breathing, and only takes on meaning when it is preceded by the other two phases of this breathing.

Learn complete Yogic breathing

Yogic breathing as we know, incorporates the three types of partial respiration.

In the first stages of learning, it is best to lie flat on the back. Begin by breathing slowly and deeply from the stomach, and, when you feel that it is impossible to raise the stomach any further, expand the ribs, and allow still more air to enter the lungs. When the ribs are fully extended, raise the collar-bones so that yet a little more air can enter. By this time you are filled to the brim with air! Avoid any tensing of the muscles of the hands, face and neck, particularly in the last stage (clavicular) of the breathing. The three movements, as we have already pointed out, should be done in a "chain link" system, keeping them entirely separate and visible to the outside observer.

FAULTS: Having allowed the stomach to fill with air by flattening the diaphragm, people sometimes cut short the entry of air at that moment, drawing in the stomach in order to allow the air to rise (or so they think) to the apex of the lungs.

Donovan Bankhead- Breathing Exercises

The breathing exercises that I use are very basic. They are designed to remind us what it feels like to move air properly. If you would like to gain a better insight on this, I strongly recommend you get the book "Brass Playing is No Harder Than Deep Breathing" by Claude Gordon. This book is a terrific resource, and as such is a valuable investment.

Anyway, back to the exercise. When inhaling, relax your gut (go ahead, let it flop out there!), and breath in fully in a relaxed manner. Now release this air. This should have the same ease of motion as if you had just got through running 3 miles as hard as you can. If you were to do this, your body would have one thing on it's mind, get the air in and out as quickly and as efficiently as possible. So, when playing the trumpet, you should inhale and exhale just like that. The same exhalation you would do as if you were out of breath. I will usually do about 5

breaths like this, to get the feeling of it. Then, I take my mouthpiece and exhale through the shank end of it (I'd recommend you wipe it off first). Do this about 4-5 times and make sure you are still breathing the same way you were in the first exercise. Next, I would exhale through the cup side of the mouthpiece (again, about 4-5 times). Finally, I put the mouthpiece in the horn and exhale through the horn (4-5 times). After this, any time that I feel I am "putting the brakes" on the air stream, I stop and repeat some of these breaths.

I generally will then go into some type of long-tone routine. However, I generally will start these tones with a "HAAA" attack rather then a tongued attack. You must always realize that the air is what starts the note, not the tongue. The tongue should just clean up the entrance.

Four Fundamentals of Troubleshooting for Brass Players

Bobby Shew, 1997

1) **FEELING OF THE LIPS**

No brass player will have much success if they do not feel some degree of ease and comfort when they put the instrument to their lips. The primary purpose of a responsible, workable warm-up is to ensure this comfort thru producing a "familiar" feeling. Naturally, a younger player's feelings will not have had as much of a "track " so the familiarity factor is considerably less profound. There have been numerous systematic opinions as to what kinds of "exercises" should be played in order to accomplish this warmed-up condition. Most all of them produce a result of some, although not as consistent as one might hope for on a daily basis.

Setting the instrument aside at first, we have learned thru the medical and sports training professions, that a simple "fluttering or flapping" of the lips and cheek muscles acts as a form of massage and increases the blood flow into the muscles. This helps "clean" the muscles of residuals such as lactic acid, etc. that accumulate from previous playing periods. It also helps provide oxygen and blood sugar to the muscles, both of which are necessary in order for the muscles to function at their best. This "muscle preparation" should be done for anywhere from a couple of minutes up to perhaps 5-10 minutes, depending upon the individual as well as the desired condition for whichever playing situation one is preparing for. A few rest periods intermittently placed will help settle and will also help you OBSERVE the improving condition. Naturally, someone preparing to play lead trumpet in a jazz ensemble would want a slightly different result than someone preparing to play in a concert band or symphony . BOTH, however, could be achieved by starting with the flutter. The differences would be when the person moves on to actually playing ON THE INSTRUMENT, the final step in the warm-up. A middle step which I feel is very important, is to do a bit of mouthpiece buzzing after the fluttering and prior to the playing on the instrument.

2) **ABDOMINAL SUPPORT OF AIR**

This is one of the areas of brass playing that causes a great deal of confusion. Much discussion about the importance of the diaphragm has sent many a player down the road to confusion, inability, and bleeding lips. The upper part of the torso contains a large FAMILY of muscles that all have been designed to function in a teamwork fashion specially when we do something requiring FORCED EXHALATION, i.e., blowing out candles, spitting something out of our mouth, OR BLOWING ON A WIND INSTRUMENT.

There are 3 layers of abdominal muscles from the groin to the sternum (breastplate); are 2 layers of muscles (inner and outer) in between the ribs; there are back muscles from the lumbar region upward to the shoulders; there is the diaphragm just below the lung sacs; and there are muscles coming-down diagonally from behind the ear which connect to the top of the rib cage . When a person does a "forced exhalation", the entire family is activated as a "one-family" movement. They ALL simultaneously increase their tension levels in order to raise the internal compression level (PSI) in the lung chambers. This moves the air FASTER which is one of the first necessary things that must occur when a player moves "upward" in the register. The area that the player needs to become aware of is NOT in the diaphragm but in the center of the abdominal muscles, approximately near the navel. The body has a natural way of centering itself if you only just try to blow suddenly as if spitting a piece of rice or blowing out a candle. By learning to control the variance of tension, either isometric for holding a compression level or by tightening and relaxing the degrees of tension based upon what you are playing, one discovers that it is really the abdominal support that controls the air. This ab support certainly influences the diaphragm but it is NOT the diaphragm alone that moves the air. It is the FAMILY of muscles, all guided by the abdominal centering.

3) **APERTURE CONTROL**

Easily the most misunderstood aspect of brass playing is what is "supposed to be happening" with the lips and embouchure in general when we play. For years we have been told that our lips are supposed to be buzzing at all times when we play any notes. In fact, the lips must vibrate but NOT in the close configurations
as when we do lip buzzing. The air, once compressed, must have a pathway to be released in a controlled manner from the body.

The air actually initially aims at the surface of the top lip, hopefully as far forward as sensibly possible. When it moves at a high velocity, it causes the lip to vibrate from the impact of the air hitting it. The air doesn't just go past the lip, it "spins" into an eddy (a kind of whirlpool) which "bounces downward" as it spins out of the eddy and this downward movement activates a vibration on the surface of-the-bottom lip which also then spins into another eddy. These are called vortices (vortex is singular) and they are the basis of a "sympathetic vibration" occurring between the two lips...which IS WHAT PRODUCES SOUND.

The closer you put your lips together, the softer, smaller, thinner, or more "pinched" your sound will be. When you open up the size of the aperture, the first thing you will notice is the freedom of the movement of the air, then the opening up of the sound. Once the aperture is opened, the player must also increase the tension in the ab support to increase the air flow which in turn must fill the larger gap in the aperture opening. This forces the player to USE THEIR AIR which IS the more efficient way to play. All people ever taIk about is AIR but then the confusion hits when they try to explain how it works and what the player is "supposed to be doing". Soft, delicate playing requires that the player close the aperture down as the airflow is also diminished but understand enough to know that when you "shift gears or hats" as a player into a more demanding situation such as playing lead trumpet, the key is to balance the support and air flow
with the aperture. These aperture muscles need to be developed properly as well. The best exercise I know for

this is lip buzzing as long as the player doesn't start to confuse the tightly pursed lips necessary in lip buzzing with what is necessary and different when actually playing. Lip buzzing also must not be done in long hard sessions. It is best done conservatively, usually 30 second sessions done around 10 times a day, alot less to NONE on busy playing days.

4) **SELECTION OF CORRECT MOUTHPIECE**

The use of an improper mouthpiece equates with trying to drive nails with a screwdriver. We were all told at an early age to "do everything on one mouthpiece" and "avoid those mouthpiece traps". Well, I'm here to tell you that I TRIED that...for years and years. I kept believing that someone knew what they were talking about . After all of the years in this business, playing on so many bands, sitting next to so many great and famous players, I saw a different attitude about equipment. People were always "looking for the magic mouthpiece"....BUT, they WERE LOOKING !! The activity of investigating, trying, asking questions about, whatever....it's a great adventure and you eventually really can learn some very important things about WHAT and HOW to use in the area of mouthpieces, perhaps different for different situations. Some MAJOR classical players whom I know use different pieces for different horns such as "C", "Bb", PICCOLO, etc. Some players switch mouthpieces occasionally even on one trumpet just to help improve the way they play a certain style of music. Sounds SANE to me...sorta, 'THE RIGHT TOOL FOR THE JOB"!!

You can really help your young students by being more encouraging, positive, realistic, and INFORMED about making adjustments in equipment. Simply, if a kid is playing in your concert band, wind ensemble, or orchestra, it's recommended that he or she play on a lower compression (deeper cup) mouthpiece. It helps produce sounds that fit the music better and it makes the student feel greater ease in playing the style correctly. If the same kid plays in your jazz big band, suggest they find a high compression (shallower) mouthpiece which helps that player access not only into the upper register, but to just get quicker response from his or her efforts. This translates as ease of playing . Naturally, the "sensible" thing to do is to try to get a mouthpiece with a similar rim and inside diameter for both situations. This is pretty easy to accomplish as long as the student is playing on a standard, stock piece. It doesn't always have to be precisely EXACT, just close...."in the ball park"! The younger students won't so much notice nor be adversely affected by slight differences whereby a pro will much more likely be more sensitive to minute differences...but not always!

Don't be afraid TO TRY!! Better to explore and discover than to keep your head and mind buried in the sand of tradition (and mis-information). GOOD LUCK!!!

Bill Knevitt "The Truth About How To Play Double High C On Trumpet"

Trumpet playing is an athletic activity, thus development on the horn must be physical in nature.

1. **Breathing Exercises**.
   A. Wind power is the force with which the air moves.
   B. Fill up from the bottom to the top so you are full. Take a big comfortable breathe.
   Exercise. 1. Stand against a wall with your shoulders back and chest up.
   2. Breathe in slowly through your nose until you are full, with the chest up.
   3. Let the air out through your mouth, but Do Not let the chest drop.
   4. Repeat this for five breaths, and gradually work up to ten.
   5. Practice several times a day until it becomes natural.
   Exercise 2. 1. Take a big breath with the chest up, blow a note in the middle register. 2. As you begin to run out of air, keep the chest up and blow stronger.
   3. Continue blowing even after the note has stopped sounding.

4. Keep the chest up and push until all of the air is gone.
5. Do this on the last note of each exercise, start w/12, then add each day.
6. Never do this on a note above a middle C.

Rest between each exercise at least as long as you play.

Keep the wind-flow constant. Have the feeling of blowing the air through the horn. Blow stronger as you go higher. The high notes are not really higher, they are farther away. The action of the tongue in whistling is exactly the same action you must produce when you play the trumpet. Think "Taw" on low notes, and "Tee" on high notes. There is a different level of the tongue for every note on the trumpet. To strengthen the embouchure muscles practice long tones, flexibility exercises, and interval studies.

Claude Gordon "Control Of Air And Wind Power"

Air: Air will only go into your lungs.

1. Stand Up
2. Take a big breath, fill up from the bottom to the top so that you feel full.
3. Do not lift your shoulders up. (you can't get air into them)
4. When you are full of air, hold it but relax. Count slowly out loud to ten in a calm natural tone.
5. Next, let the air all out, but do not let your chest drop. Fill up again.
6. Keep repeating this until you are tired. Gradually, you will develop the diaphragm and back muscles for proper use.

Be sure to rest as much as you play. Whenever you are tired, Rest. Always take a big full breath. This will save your lip muscles. Trumpet playing is a form of athletics, keep yourself in good physical condition. Keep in training like any athlete. Concentrate when you practice. Keep your mind on what you are doing. Discipline yourself. Be sure to understand the purpose of your practice, the value of each routine, and what you are developing is important for you to know. Do not get angry at yourself. When you get angry, you stop thinking; and when you stop thinking, you stop playing. A minimum of seven days should be spent on each exercise, you may spend more if necessary.

Bill Adams "Clinic" Airflow

Basic production of tone should be the goal toward which we always work. The basic problems of playing the trumpet neeb to be considered at all times. I believe that we maintain the sound, that we maintain our freedom of tone and our relaxation with copious amounts of air. The sound or tone should always float in the breath. As the air flows through, it supports the embouchure and is quite responsible for its position and its relaxation and for the resilience of the mouth. The flowing air is the means for the relaxation of the tongue and its articulations. The flowing air is the means by which we can relax the tension in the areas of the glottis, the epiglottis, the back of the tongue, the larynx, and the abdominal wall. I believe that 90% of all playing is mental and the last ten percent of the physical will be divided into nine percent breath and one percent embouchure. I really believe that the acceleration of the air has tremendous value as to the releasing of the necessary tensions that make it possible for long time endurance and a beautiful sound.

If we keep our minds on a beautiful sound, on accelerating the air through the sound but not forcing the sound, and forget the embouchure, many problems will disappear. "Through analysis comes Paralysis", don't over analyze your playing. Be sure to blow through the horn. The most important thing to do is make sure that we get enough air in so that our chest is fully expanded.

Releasing the Musician Within, Mark Van Cleave

As a trumpet teacher, I have always pondered over this question: Is it possible to increase a persons innate musicianship or musical potential. While in College, I recorded recitals as a way of making a little extra money. This afforded me the opportunity to listen to many more recitals and performances than I would have normally attended. Some good, some not so good. Many of these were trumpet recitals.

One of the things that I noticed was that the trumpet and brass recitals, for the most part, were not as polished as many of the other instruments. Many of the these trumpet recitals would end in disappointment for both the performer and listener alike. For a brief moment I thought: "Wow! I wonder if trumpet players are just less musical." This thought lasted for about ten seconds. Then it hit me: "It's not that trumpet and brass players are innately worse musicians than woodwind, string, piano, or vocal performers. It's just that when you play the trumpet (or any brass instrument for that matter) it is more difficult to get the music that resides inside your head to be realized on the other end of the bell." Unfortunately, this is where it really counts. Nothing else really matters. It's all about how you sound.

I can't tell you how many performances of the Haydn trumpet concerto I have heard when you can hear the fear of God in the first note; "I hope I can hit that high E flat on the top of the second page." This fear turns into a form of anxiety that affects every note and every breath, nearly taking away any chance the player has of ever hitting the E flat. So much thought goes into the potential disaster at the top of the second page that all of the music has been forgotten. No thought of phrasing, tone, or music enters the performers mind .....at this point, it's all over. Even if they manage to get the high E flat to sound, all of the music before and after this elusive note has been sacrificed and the performance has been ruined.

In spite of the mechanical breakdown that destroyed the following performance, it is rare that it is ever recognized by teachers as part of the poor musical performance. Many trumpet and brass teachers that concentrate on these physical or mechanical aspects of playing end up being regarded as chop doctors or high note specialists that have little to do with music. I have discovered through my own teaching experience that there is a very important order of priority when it comes to what skills are necessary to produce a musical performance. This order of priority starts with the most basic of mechanical skill and ends with musical interpretation.

If you can't even hit the elusive high E flat, there is no way that you will ever make music playing the Haydn concerto. When you have developed the skill necessary to hit this note consistently, this is when you can actually start thinking about making music, not just hitting notes. If the skills have not been developed, the music can never be released. Even if you have a great musical mind, it is not enough to produce a great musical performance. A great race car driver could never win a race if he always drove junkers.

The quality of the performers mechanical skill determines the percentage of the musical mind that can be released. Back to the original question; I'm not sure exactly how to increase someone's innate musical potential, however, I have found that by concentrating on developing mechanical skills you can increase the percentage of the music inside your head that can be released during a performance. Many teachers and schools push music and literature at the student in an attempt to improve the students musicianship. I'm not sure that this approach alone produces anything other than a well rounded and educated listener.

Learning to release the musician within requires a combination of both carefully developed mechanical skill and innate musicianship. Remember: A great performance is one that combines both mechanical skill and a keen sense of musicianship. ....It is not the trumpet business, it's the music business!

Efficiency through Resonant Intonation, Mark Van Cleave

The Idea of playing efficiently is one of the most sought after skills that seems to elude brass players. The whole idea of not having to work hard to produce the results you want is pervasive in every part of our society. How can I get what I want without working for it! .....or at least working as little as possible. When it comes to playing a brass instrument, the idea of how to get the best sound per grunt ratio is very important, being able to play well without paying a high price physically.

So, back to the title: Efficiency through Resonant Intonation. What is Resonant Intonation? Intonation is the player's ability to match the pitch of his/her instrument to the pitch of the instruments around them. Resonance refers to the acoustical phenomenon that occurs when the resonant frequency of an object or space (in this case: the volume of air inside the instrument) is stimulated. Resonant Intonation refers to the act of playing in tune with your instruments resonant frequency. Matching the pitch you produce with the pitch that the instrument wants to produce (because of where you have it tuned.) I like to call this the Shower Effect.

The Shower Effect is what happens when you are singing in a shower stall. You happen to find one note that really jumps out at you. When this happens you have just matched your intonation (or pitch) to the resonant frequency of the shower stall (the resonant space.) The efficiency that I am talking about is the result of being in tune with the shower stall's resonant frequency or tuning. At this point, you are not only producing a sound as a result of singing, but you are also deriving benefits from the shower stall's enhancement or resonance. The sound per grunt ratio has just improved!
Now that you have an Idea about what I'm talking about .....what does this have to do with brass playing? When a player tunes his/her instrument, that's exactly what is being tuned. Just the instrument! Playing in tune is not a given, just because your horn has been tuned properly (A-440). You can play in tune (A-440) with your instrument tuned correctly or incorrectly! You can bend the pitch almost a full half step either direction without touching the tuning slide. Good intonation is a result of learning to hear when you are in tune and when you are not.

I have worked with many high school bands that spend (what seems to be) hours tuning each player's instrument. Even if all of the horns are (technically) in tune, there is little or no chance that they will actually play in tune unless the individual players can recognize when they are in tune to begin with. Good intonation resides in the players own ears, not in the default tuning of the instrument!

The problems arise when your horn is tuned to, let's say, A-436. You now have to bend the pitch sharp in order to match the A-440 tuning of the ensemble. You are in tune with the other players but you are no longer playing in tune with your instrument. Your instrument wants to resonate the A-436, but you force it to produce the A-440 by over tightening the embouchure or whatever. This is not only less efficient physically, but also less efficient from the resonance standpoint of the instrument. You do not get the instrument to work with you as a team. You are now fighting the acoustical properties of the instrument. You have set the instrument's tuning to resonate at A-436, but you produce A-440. This new pitch (A-440) will not generate as much resonance as A-436 will. Playing this way will not result in the Shower Effect!

After working as a trumpet tester at the Vincent Bach factory, I realized that (by design) most trumpets play in tune at about the same tuning slide setting. If the horn is designed and manufactured well, the tuning will be very consistent from horn to horn. If I notice a trumpet player with the tuning slide pulled too far out or pushed too far in for that particular instrument, I can already tell that their tone will not be as big or vibrant as it could be. I also know that they will be working a bit harder than they need to be which will result in endurance and production problems.

If I notice that a student has tuned his/her instrument in a manner that is inconsistent with the horn's design, I change the tuning, placing the tuning slide in the correct position for the instrument. Then make the player adjust his/her pitch to the horn. You can check the horn's tuning by popping the mouthpiece with your hand. You will notice that you get a pitch. This is the pitch that the horn wants to produce. This is the pitch that should be matched to the ensemble. This is the pitch that (if matched by the player) will produce the most resonance and result in a bigger and easier to produce sound.

While playing on the road, I would sometimes be running late for the show's down beat. I would end up jumping onto the bandstand seconds before the start of the show. No time to warm up. No time to think. And, inevitably, I would just grab the horn out of the case and start blowing. It wouldn't be until intermission (1 1/2 hours later) that I would actually be able to catch my breath and figure out which end is up. By intermission, I would notice that my chops felt very fatigued and out of sorts. After a couple of minutes, I would realize that, in fact, I never tuned my horn! I had just played the entire first half with my tuning slide pushed all the way in! The unusual thing was that I was playing in tune the entire first half. What had taken the real beating was my chops. All of the unnecessary tightening and pitch bending had really tired my face. Also, the increased effort needed to produce a big sound (because of not triggering much resonance inside the horn) increases the grunt per note ratio. After correctly tuning the instrument, the second half would always be a breeze in comparison. Tuning properly is one of the best ways to immediately increase endurance.

So, to sum all of this up: You can tune your instrument, you can tune your ears, and you can tune your ears to your instrument. When you are producing the pitch that your instrument has been tuned for, you gain resonance as well as ease of operation or efficiency. Playing in tune with your instrument is what I'm talking about. You should tune your horn to the ensemble and yourself to the horn.

How To Find The Center Of The Horn's Pitch:

Pitch: While playing a long tone, bend the pitch up and notice the tonal change that occurs. Bend the pitch down and notice that the tonal change is not the same as when the pitch is bent up. A sharp note has a distinct tonal change that is different to the tonal change of a flat note. These tonal colorations are good to listen for when checking resonance. Even subtle changes in tone color can guide you back to the exact center of the pitch, and to greater resonance. Learn to hear pitch shifts by tonal colorations.

Resonant Oral Cavity: While playing the first note in the exercise below (G), open and close your teeth slightly. A "WA - WA" sound or movement. You will hear that as the teeth are closing, the sound changes to a tighter, pinched sound. As you open the teeth, the sound becomes thin. You will also notice that somewhere in the middle, the sound jumps out of the horn. You have just matched the resonant properties of your oral cavity with those of the horn. This is the point of greatest resonance.

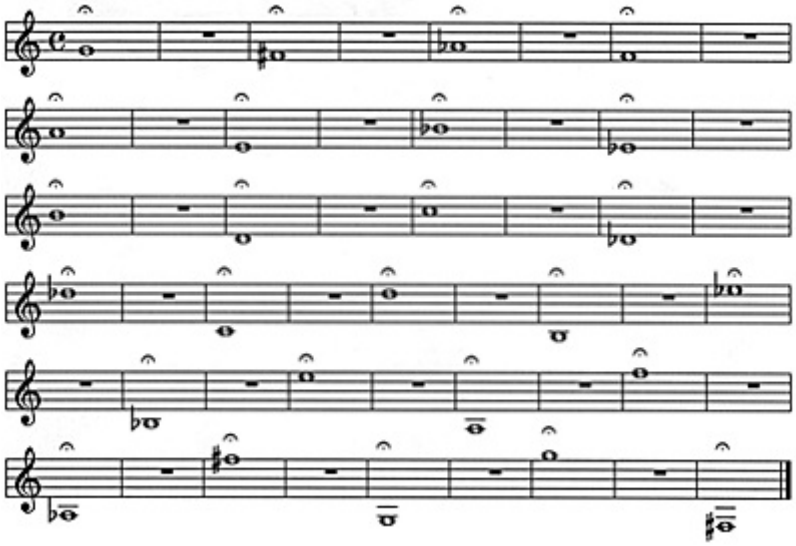
Example:

Play the same G. Find the center of sound. Now lock your embouchure and do not let it move. While your embouchure setting is locked, slowly play down chromatically. Do not change anything (be honest) ... Jaw, air, mouthpiece pressure, horn angle, etc.. Listen to the tone quality as you go down. You will notice that by the time you have reached low C, the tone has thinned out as well as the volume of sound (resonance) has also been reduced. This is because your oral cavity is resonating a G and you are trying to play a low C. You have to adjust your oral cavity for every note.

When making adjustments, you will want to match both the resonant setting of your oral cavity and the pitch you are producing with the horns tuned pitch in order to produce the maximum resonance.

Long Tones: On each long tone, find the correct oral cavity setting by physically adjusting the opening between the teeth, as well as by the sound. Listen for the center of the sound. Memorize this sound (tone color). Once you have found the center of each long tone, hold this sound and memorize the setting. Repetition will turn these settings into reflexes.

Long Tone Exercise #1:



Trumpet Method info.

Advanced Long Tones:

When you played the first G in the first long tone exercise, you had to do a certain amount of assuming that you were in tune with the horn. In the advanced long tone exercises, you will compare the pitch of the target note with the pitch of surrounding notes. This will give you a better idea of the horns tuned pitch. The closer you can get to the horns tuned pitch, the more resonant your sound will become.

As in Long Tone Exercise #1, The first long tone here is G. This is the target note. When playing these exercises, blow through each phrase as if you were only playing the target note. Blow evenly, do not gun or blast out the top notes. Listen to the notes surrounding the target note for pitch and sound quality. This will help you find the center for the target note. The last note should be held just as you would a normal long tone. Memorize this set. Keep the air relaxed and even.

Things to listen for:

1. Tone quality. As in Long Tone Exercise #1, listen carefully to the tone color. It is possible to hear a single note and to determine if the player is sharp or flat to the horn by tone alone. Learn to make physical adjustments based on the sound.

2. Intonation. Your best sound will occur when you are playing in tune with the horn. Tune the horn carefully and then play to the horn's intonation. If you are playing low D or C sharp (or any other bad note on the horn),

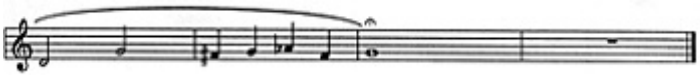
you will have to change the resonant frequency of that note by moving a slide or slides in order to play in tune with A 440.

3. “Clicks.” When moving from note to note you are changing the harmonic slot to be resonated. Push the valve down quickly, and listen for a “click” between each note. These “clicks” are easier to hear when playing slurs, but listen carefully and you will learn to hear them even when you are using the valves. These “clicks” also tell you that you are playing in the center of the harmonic slot.

Advanced Long Tones #1.

1. Big breath.
2. Relaxed exhale.
3. Compare pitch of ssurrounding notes to help determine the target note’s exact center of the harmonic slot.
4. Push valves down very quickly.
5. Listen for “clicks” when changing notes.
6. Blow through each phrase as if you were playing a single long tone. Do not blast out top notes.
7. Hold last note until you reach “negative air.”

(The G is the “target” note or long tone note.)



Play this Advanced Long Tone exercise in the same order as in Long Tone Exercise #1.

<u>Mouthpiece Buzzing Confusion, Nick Drozdoff</u>

Shedding Some Light On A Slightly Misunderstood Topic

Aside: This article is possibly a little controversial. Good. I hope to get a few people a little worked up. I’ll probably be one of the ones getting worked up! However, it is important understand what is going on. Please, if you don’t understand the discussion below, use my email links to contact me. Also, if you find egregious mistakes, don’t let me get away with them! I welcome the intellectual give and take. The italics below represents reader induced corrections.
Mistaken Statements Made By Trumpet Teachers Who Haven’t Had The Time To Consider Physics A Little More Carefully:

I have been intrigued by a statement of physics made by many good trumpeters/teachers. I have heard two fine

players who teach trumpet make the following claim: when you play a note on trumpet and try to sustain the tone while removing the mouthpiece from the horn, the note should stop because of the removal of the feedback from the horn. In fact, one of these teachers even claims that one shouldn't actually be able to properly sustain a tone on a mouthpiece when it isn't in the horn!

This is not quite right. What we have here is a incomplete understanding of physics.

What in fact happens is this: as the mouthpiece is removed from the horn while you are still playing the note, the feedback is indeed removed, thereby removing the support of resonance. What this physically means is that now you have no "slots" or notes that will pop out discretely. You can play a continuum of pitches for a rather wide range. It is also harder to play due to the fact that, without resonance, it is "all you" or your lips making the tone. The horn is no longer helping. The mouthpiece, by itself, acts as a tiny "megaphone" of sorts. There is no reason whatsoever that you shouldn't be able to sustain a tone while doing this. You will need to concentrate in order to maintain the tone as this resonant support disappears.

It might feel a little funny for some players to feel the feedback suddenly disappear. OK, it might feel more than just a little funny and they may unconsciously stop the lips from vibrating by opening the aperture between the lips too much in the process. This will stop the note, but it is the player allowing the note to stop as a result of the resonance being removed. Again, you will need to concentrate on maintaining a focus of the aperture and the muscles will work harder, but this is not impossible to do.

Here is a quote from a reader who wanted to shed some light on all of this. "Think for a moment of the analogy of pushing a swing - it takes very little effort, exerted at the right time, to keep the swing oscillating with a fairly high amplitude. This is because the mass and the rope length combine to form a resonant system, which helps us out. Now imagine manually trying to lift the person and the swing up and down at the same rate. Even if you don't try to lift them as high (buzz softer than you play the trumpet) it is still much more work." (name withheld pending permission) The analogy that I might use would be a mass on a spring bobbing up and down. We don't have to use much effort to keep it bobbing up and down at the resonant frequency as long as the spring is there. We do, however, need to exert more effort to keep the mass bobbing up and down manually at the same frequency. However, it is not impossible to do, just tougher.

In physical analysis of the spectrum of resonance produced by trumpets a device is used to energize the horn electromechanically. The device is called a salpignometer. They were used by the likes of Arthur Benade and William Cardwell, both expert acousticians and physicists on brasswinds. In the best device the horn is energized by a transducer that places a membrane over the mouthpiece sealing it (closed end resonance). The membrane is exposed to a chamber that is driven by a small speaker. The sound pressure level is controlled by a small feedback loop and voltage controlled amplifier. If the mouthpiece is removed from the horn while this device is playing it, it doesn't suddenly stop producing a tone. It simply stops resonating. The tone continues, but it is only a "mouthpiece" tone. Now as, explained, the device is designed to do this. You're lips are not. The feedback control loop maintains the tone as you remove the mouthpiece from the horn. In the case of your lips, your ears and the physical feel provide the feedback control loop which will enable you, with a little concentration, to maintain the tone. You make the necessary adjustments to do so. The device simply tells the amplifier to the speaker to turn up or down, as the case may be.

Another Statement That Needs Clarification:

Another mistaken statement made by some trumpeters is that there is a pressure node at the mouthpiece while they are playing. This is impossible!

The problem is, many people don't understand what nodes and an antinodes are. It would help to clear that up.

A pressure node is a region in which the air pressure is constant. It is the same as the ambient pressure in the room. A pressure antinode is a region in which the pressure is not constant but in fact is wildly changing from below ambient pressure to above ambient pressure. It is doing so at the frequency of the pitch being produced.

Now let's consider what the lips are actually doing when playing a trumpet. When one produces a note they start by putting the lips up to the mouthpiece. The lips are initially closed and the horn is sealed at one end (closed end resonance). The player then increases the air pressure in the mouth behind the lips. He/she does so with the muscles around the ribs and the abdominals (it was pointed out by a reader that the diaphragm only functions on inhalation, NOT expiration, hence this correction). Depending on the muscular tension holding the lips together, the pressure reaches a point at which the lips burst open, releasing a burst of air, a high pressure pulse, into the trumpet. Again, due to the muscular tension in the lips, they slam shut because pressure drops suddenly in the mouth. The lips are now held closed again, the pressure builds up and the process repeats again.

Now, it shouldn't be a big jump to realize that a pressure antinode is present at the mouthpiece. The air pressure is varying wildly from a high pressure produced when the lips burst open to a low pressure caused by Newton's laws when the lips are closed.

A pressure node is always present in the vicinity of the bell. I say in the vicinity because different notes reflect from different points in the horn, but that is the subject of another essay.

In Conclusion

I have a great deal of respect for the musicians who have occasion to make such mistakes. What bothers me is that they occasionally inadvertently influence students erroneously. If they are indeed true academics and intellectuals, they should be willing to accept correction and modify their positions. They should be glad to actually know that they can make statements based on correct information giving credence to their academic positions. In short, there is nothing to be lost by getting it right. Bruised ego notwithstanding, that must, of necessity, include me. By heeding the well thought out comments on the part of readers and peers I hope that I have been enabled to improve this page and not be allowed to inadvertently participate in erroneous influence myself.

Donovan Bankhead-Increasing Range

Many trumpet players are very concerned (perhaps overly concerned) with increasing their range. What follows is my take on this subject.

First of all, range is not the "be all, end all" of trumpet playing. Don't get me wrong, I love a great Maynard or Bill Chase solo as much as the next guy, but there is alot more to playing the trumpet then just how high you can play. In my experience I've found that the more I "obsess" on range, the worse it gets. There are several possible explanations for this, some are:

Neglecting other important items such as breathing, coordination and technique definitely has an effect on range.

By "obsessing" or over focusing, we are too critical of ourselves while we are playing (for more info on this, I recommend you get the book "The Inner Game of Music" by Barry Green and Timothey Galway).

IMO, it is not advisable to increase range at the expense of everything else. As a matter of fact, for many people it is not feasible. I look at range as a benefit to overall correct practice. I try to keep from thinking in terms of high range, low range, etc. A high note is played the same way a low note is played, only with some changes in embouchure and air. One is not harder then the other.

The exercises I use are exercises that I believe work for me. You may find that they also work for you. Or, you may find that they definitely do not work for you. Just read them, try them, and if they don't work, don't use 'em! :)

One of the exercises I do is one that helps to teach you how to play the upper register with control. Those of you who always get the feeling that you are "blowing your lips open" or that you can't get your aperture focused may find this exercise to be very beneficial. Basically, it's an exercise that I got from Bob Odneal. It is basically an expanding scale exercise that you play very, very quietly, like a whisper. However, you must play it with a clear, focused sound. The scales I use for this are from a version of the "Bill Adam Routine". You can get them here. Also, I've made a soundfile of me rushing through them. It's just to give you an idea of what they should sound like. I should warn you, I recorded it after a _very_ long day of playing and teaching, so the quality is not the best. It should be good enough to give you an idea of how it's supposed to go. At the end I play something at a forte level so that you can get an idea of the dynamics.

High Notes—James Morrison

I have been asked a similar question many times, here are my thoughts. The developing of more "chops" especially in the high register is a topic that is talked about more than any other by trumpeters. I guess that's understandable because not only does it feel great to be able to play high but it also sounds so good. The best advice I can give is that you have to do a lot of playing, the sort of playing that exercises the muscles you use to play high. Remember that like all the muscles in your body the muscles in your embouchure respond to regular exercise that "pushes" them a little further each time. The other main thing about high playing is AIR. The delivery of huge amounts of air under pressure is what makes that big fat sound up high that we all want. You can't deliver air like that if you are tense, so you have to take in the breath in such a way that you stay relaxed and then "push" the air out with increasing force as you go up. REMEMBER, start relaxed, usually when people take a "big" breath they tense their muscles (especially in the upper body) and raise their shoulders etc. You must remain very loose if you are to get a really good breath and then gradually increase the "pressure" as you use the air. The best way to feel what this is like is to blow all the air out of your lungs and then wait a few seconds until you really feel that you "need" air. Then just relax - you will get the deepest most relaxed breath you have ever had, this is the way it should feel every time you take a breath to play. If you start playing this way you should very soon increase your range as the extra air control you'll have will make available to you a more "accelerated" airstream that causes the trumpet to go UP!

Breathing – Bud Brisbois

"The main two things that I stress and firmly believe in are: 1. Breathing, knowing how to breath and knowing how to set the air and 2. Building the proper muscles here(chops) as opposed to destroying everything here(chops). There are so many fine trumpet players around the country and the world these days, I've found by watching them play that there are two things that they all do exactly alike. First of all, they have a strong anchor or corners and they all take similar types of breath and they support their sound with their air almost identically no matter who the player is. Say, a Doc Severinsen, or a Bud Herseth, or just about anybody and all of the strong trumpet players that I work with in LA.

"What I would like to do is explain the breathing technique that I use and believe in and then explain the building of this and explain some of the other problems that most young trumpet players seem to have when building an upper register.

"First of all, the main and most important thing and not stressed enough upon by teachers is the importance of breathing, learning how to breath, knowing how to set the air and giving yourself a strong foundation for building or getting a good strong sound. I am a firm believer, I'll preface all of this by saying that there isn't any good trumpet player who doesn't start from the bottom up instead of the top down on his instrument. Any brass player that feels he can start high and then build a good low register, I find wrong, I tried it myself and it didn't work. It only worked so far, then I really had to build a good foundation. I believe that you have to learn your breathing, your instrument from the bottom up instead of from the top down.

"I was just talking to Roy Cummings (long time trumpet professor at the University of Washington) last night and he said something that I guess I have said ever since I have been doing clinics and that is that in order to have good consistent playing in all registers of the horn, you build a foundation just like you would build a building. I have used the same analogy that Roy brought up last night, you never start building a building with the 13th floor and then build the 12th and 11th. You build a good firm foundation, strong foundation and build up and learn your horn from the bottom up. The scales, the techniques and everything else and you build your range gradually, knowing that every step of the way what you do, how to do it and build the proper muscles. I also will draw parallels to an athlete, a good strong miler in track, doesn't go out the first day of spring training and try to run the fastest mile, he builds up slowly and tries to develop the muscles instead of trying to break the record the first day, he gradually builds and builds and builds the particular muscles that he uses in his body and we do the same thing as trumpet players. So, your not going to wake up one day and all of a sudden have the trumpet licked and know how to play high. You build low and build the proper muscles and build the proper range that you can build as an individual with the strength and the tools that the good lord gave you to build. Some of us can play higher than others, but we can all build a good consistent range, not everybody can play a double C, but they can play higher with more consistency, more accuracy, more penetration if they build properly as opposed to the player that just builds wrong. Now, I will try to show you, I wore this shirt today, my skinny shirt, because it will show you what happens in the middle part of me, if I had a sport coat on I don't think you could see. Because I have developed this breathing technique that I will go through to a point where it doesn't even seem hard, sometimes I'll be playing a high note and it doesn't even seem like I'm even doing what I'm saying I'm doing, but I do, do what I'm about to tell you.

"Now first of all, taking a good breath, not what we call a Superman type breath or a He-man type breath, but a good strong fill this area of your body type breath, not to the point where your straining everything, but a good one. Taking it in through the mouth and filling this cavity in here. Now there are different books out calling it by technical terms, but I call it the diaphragm, which is not supposedly the correct term, but I call it the diaphragm, not a breath like Superman, this type thing up here (high chest), because that does nothing, you can't support, you can't build, you can't put any concentration on the air if you just take it up here. You fill this area

in here and you fill it ALL. You don't fill just half of it but you fill it all, but you don't take the type of breath where your really straining. But a good one, and through developing you develop this area in through here. So we take our air and put it here. With this type of a breath, then we put support or what I call compression on the air, we put pressure on the air once we get it down here. Now, the pressure that I put on whether it be in the low register or the high register, we take a breath we put pressure on the air and then we attack the note. But we have set up everything here first before we attack the note. So we take our breath, (plays strong middle C), I put a certain amount of compression for the middle C. As I go lower, maybe a little less compression, as I go higher I use more compression on this area. If I hit a high C I will have air compression and I will explain that in just a minute. (plays strong high C). Now that is a high C and you don't see all kinds of strain or anything, but there is more compression or more strain or more concentration on the air down here, to hit that note. Now to get this sensation for what I call the compression on the air, it's a gripping of the air from all sides, it isn't pushing out, pulling in, it's a sensation, a feeling of taking the air and setting it with everything we have around here. Now it sounds like I'm squeezing and I'll tell you about that later too. It's not a constricting of anything in here, but it's a feeling of putting pressure on the air down here, pushing it from all sides, from the bottom up, from the top down, from the front in, from the back, so it's all concentrated, so your putting pressure on it from all sides. So the higher you go, the more of this pressure you put on the air. The only way that I can explain this sensation is that if someone were to come up to you and you were just standing there relaxed and all of a sudden they double up and are going to let you have one, right in the stomach your going to go (breathes in and tightens) place tension, but it isn't a tension of pushing out and pulling in, it's a tension that happens everywhere around the air to prepare for that blow, so your feeling the sensation of gripping all around here and that is the sensation you get when you grip this air. Now the higher you play, the more of this gripping of this air that you get or that you put on the air so that the air has more compression, if you have a can of compressed liquid of whatever you have and you feel this ssssss if there's more pressure, pounds per square inch, that ssssss is going to have more intensity. That is the same intensity that you are going to have as you go higher, you put more of this compression on the air. You grip the air with the muscles that you have. Now it takes time to develop these muscles, it doesn't happen as I say overnight. But this is the compression of the air. You take the proper air and you put the compression on it. As you're in the low register, you still put compression on it but as you go higher, you put more of this compression. So we start in the middle register ...(plays strong middle G, G, "a little more compression and a B", B, "a little more compression and a D", D, "a little more and a G", double G) now that's a high G, now most of you, to hit that high G if you were ever going to hit one, which is a good 5th above a high C which is probably a high note for most of you, you'd be pulling in with this arm, about as hard as you possibly could, tensing up here, not taking in any air, not supporting from here, and we get (plays a squeezed high C) or something like that. The mouth squeezed and nothing happened, but if we take a good breath, support it and put compression on it, the proper compression for that note. (strong high C) we have a note that projects, we have it all from down here, and good solid corners and we project the note, we can do just about anything we want to on it, we can put vibrato on it, we can fill it up, we can play it soft, we can play it loud, (plays high C, C with vibrato, G, double G and tongues 8th notes) it's all from down here, everything we do is from down here, the compression. As we go lower we relax the compression, but we don't relax, we still have tension, we just decrease the tension as they say, not relax it. As we go higher we put more of this compression or tension on the air. Like gripping it.

"Now as we are developing this breathing and tension or muscles in through here, because this little thing (mouthpiece) isn't going to do much for us. Oh, by the way by developing and utilizing this compression and building the muscles here, we put our pressure here(stomach) as opposed to here(chops), so we are utilizing less pressure here(chops). I am a firm believer in using a certain amount of pressure, because your not going to get the sound you want if you don't use some. But we don't use a lot of pressure, our pressure is down here(stomach), this a pressure tank. I don't care how strong you are, this dog gone thing(chops) just isn't going to take it, so we put a pressure here(stomach) (plays high C) it's all coming from here(stomach). Just a certain amount of pressure, just in order to maintain the mouthpiece there and not kill ourselves. (plays D, high D,

double G) I'm not killing anything but down here(stomach) and not busting anything up here(chops). Now if we have good support, and we have good compression down here(stomach), we don't need it from here(chops). We leave this(chops) with the least amount of pressure that we can get by with so it vibrates very easy and all of our pressure is here(stomach). Now watch me put pressure for the double G, before I hit the note (plays double G), (again), it's all from down here(stomach). By developing all of this area down here(stomach), we alleviate the pressure and also can breathe totally relaxed in here(throat and neck, upper body). So the note sings out, we don't squeeze, we don't have tension. The only tension we have is here(stomach) and we build these corners, right here so that we with compression in the corners here we alleviate everything here(chops) and we are just free to function like it's supposed to.

"Now we build these(chops) as well as these(stomach) muscles through lip flexibility exercises, right back into your Arban's or whatever you want through flexibility exercises and breathing and with the compression. That gives us nothing but flexibility, a sound that will sizzle all over a band of any kind and it gives us endurance and everything else. I'll try to play a two octave arpeggio (plays G, B, D, High G, B, D, double G, and down) I'm setting, taking a breath, hitting a G in the staff, hitting it, putting more compression on it, tightening up here as I go higher, as I get to the top, this is good and tense, this as all of the compression as I come down. It takes a lot of time to develop this it just doesn't happen fast. The only thing I think of consciously is thinking of playing everything as open throated as I can , and not thinking of EEE. Every time I thought EEE, I felt pinched. So even as high as I'm trying to play I think Ahhh, so I'm open, Always. EEE just seems to pinch the sound. I'm thinking of the concentration here and here. I try to think of everything as open and as relaxed as I can. You have so much support that you can do whatever you want. (plays G to double G arpeggio). As I get up to the high G, the tension increased here, the compression increased here. With me it isn't as visual as with most players, because I just put it in one spot. And I've got it in one spot so much that I don't crunch down to hit a double G. It looks fairly evenly relaxed when I hit a G, but I'm working like a son-of-a-gun in here when I am playing a G, and there is total concentration on the air. (plays arpeggio again, then up a step) I went up to a high double A, still with the same intensity and feeling, just a little bit harder here and here then for the G. Maybe just a little more intensity, but the throat was open with an Ahh sound. That's the only way I could play the A and put vibrato on it. If I was thinking EEE, it would have the tendency to go sharp on me as I squeeze. As I said I am speaking about what works with me and all of the players I work with. They don't think vowel sounds, they just think open and relaxed and a big round sound with an edge. And it's all developed here and here.

"I am a firm believer in physical exercise. There are a lot of players that don't believe, but they are a lot bigger then I am, maybe even 50 pounds bigger. For me I do work out, sit ups, push ups, running in place, it's a very grueling ten minute workout that I've done for the last ten years. It's very exhausting and it gives me the strength that I need, because I'm just not a very big guy. I'm bigger then say Doc Severinsen , he has a yoga technique, where as mine is calisthenics that I do four or five times a week, it's very exhausting and it's taken again a long time to develop. It keeps strength in here that's incredible then I augment that with one other pushup exercise. I go between two chairs and let all my weight go down and touch with my legs bent, let my knees touch the floor and then go all the way back up. I've worked that up to 35 or 40 of those. And that keeps everything extremely strong in the back and everywhere else. Even though your using it here, you need to keep everything else strong and use every muscle in your body to increase the intensity. The exercise helps me to increase my endurance. Like tonight I will play some extremely long phrases and I will be playing in the upper register, and stay there, and when I come off, I can go right back up again, it won't be that I go up and get stuck, I can go anywhere if I'm strong.

"I have had tests done on me to measure my pressure, I don't use as much as players who can't play as I high as I can. I've had tubes in my mouth as I play double C's and G's above, I just don't muster up as much compression, it's just my air. My concentrations in such a compact area and I know exactly what to do with that air and I've done it for so long that I only use what is needed, so I don't over strain anything. We had a 2 hr.

rehearsal for the show tonight and I was playing as strong and higher at then end then when we started. For most guys their level goes down, but for me I play stronger, louder, higher as I get going. Sure I start to get fatigued, but I snap back because I'm in shape. For me the physical exercise is very important.

"If I were to think of all of these little tiny things that go on or supposedly take place, I'd drive myself crazy. I don't think of things in terms of degrees, it's a feeling, a sensation, it's building. Now if your going to do lip slurs, which are the best builder for here in the world along with building this part, your going to get a sensation. It's a basic idea and basic feeling. (plays shake, and flexibility exercise) As we go higher I pull a little bit more, focusing on the muscles. It's a matter of building the tension and your muscles.

"I can't stress the lack of importance of this little thing here (mouthpiece) everybody gets caught up with it. It doesn't matter as long as you have the proper breathing and compression. It's a mental block that people get into. If your building everything else correctly, it will take care of this (chops). I don't care if you've been sleeping all night and get up first thing and play a high C, it's not practical, but you can if you have everything else functioning.

"I do pivot a little, but I don't stress it. I don't really think about it. It works for me but I don't know about everybody else. It all boils down to what works for any particular player. I avoid movements of the horn as much as possible.

"I can't stress enough to work on lip flexibility. Play a scale from middle C to low C, then middle C to high C, slurring it all, repeat it several times, then change keys, or just expand the scale both up and down. Concentrate on your breathing and the compression of air. It's what works for you, the pivot included (plays G arpeggio 1 octave, then down to low G to demonstrate slight horn tilt) It becomes a natural feeling with the slight pivot and not something awkward. I think of opening up in the low register, just singing the note out to get a full sound, support your low register just like the upper register. We put more concentration on the air when we go higher, but we still focus the airstream as we go lower.

"I can't stress enough, quit getting hung up on unimportant things, just worry about what counts. Build the things that we all have to have, then you can worry about the small things.

"The best breathing exercise I have ever known, and this works within a week. Stand in front of a mirror, without a shirt on. This takes one week, ten minutes a day. Put your hands high on your sides and take a breath and try to push your hands out as far as you can. Then count slowly as you release your air (1, 2, 3, ...) as soon as you completely out of air, take another huge breath. Make sure you are watching yourself in the mirror. The first day you may be able to get up to 15 or 16, by the end of the week, your up to 25, 30, 35, 40, some up to 50 and 60. This is the normal way to breath and take in air, and so few of us really know how to do it. I didn't know how to do it until I went to see this Dr. to help my singing. That is the proper breath to take. Now as I said before, we don't take in that huge of a breath to play trumpet. We don't take in as much air as we possibly can, take the air in to fill what we just developed. Repeat this for ten minutes a day.

"The sensation when we are playing trumpet, that is the area that you fill. That has put the air in the proper space, so at least we know how to breath properly. Now the compression on the air, that is the thing the sensation that I told you was coming up. Bang, we put tension all around the air. We are taking the breath in properly, we know how to put the tension on it, if you want to build strength in this area, you can get all of the information in a cheap book, called the Royal Canadian Air Force exercises. That is the 10 min. exercise I just showed you. I do it the first thing in the morning, so I don't procrastinate all day long and then give up.

"I probably use more air in the lower register then up high, it's just the intensity of the air that is important. It's

the pressure behind the air that is important. I really don't use a lot of air now that I think about it. It's just what's behind the air, the compression. (plays high C). Driving it forward, keeping the compression, keeping it open and having it really sing out the best I can. With everything working together. When I got louder, I pushed a little bit more air through the horn.

"My equipment fits me only, it doesn't fit anybody else. Play what works for you, don't worry about what other people play. This set up fits me.

"Hey how you doing, here's another good trumpet player that just walked in the door. If you get a chance, go out and hear him. He was beautiful last night. Freddie Hubbard."

"The warm up that I use, is always in the low register with long tones and low lip flexibility exercises. Making sure we warm up all of our muscles. The only way to play up high is to be completely limber. Start in the low register, then mid, mid-high, then above. Playing legit exercises and resting in between. If you rest, you give the blood a chance to circulate again, instead of breaking down the muscles and never giving them a chance to rest. I tend to use the St. Jacomes book when I'm at home. I just make sure that I rest in between each section of my warm-up and practicing. I never do pedal tones, the only time I did they just about destroyed the rest of my playing. So they don't work for me, but you might be different.

"A question from Freddie Hubbard about switching mouthpieces on flugel and trumpet and adjusting the bore size, he was "getting sick of it." I don't recommend it Freddie, I don't know too many guys that do it. Different mouthpiece makers are coming out with different backbores where you can screw the same rim on. But that might work, but I find that when I switch from flugelhorn to trumpet I used to have a heck of a time going from flugel to trumpet or from Bb to piccolo, because the feeling here (chops) was murder. The feeling was just not right, I just wasn't getting the same resistance from it. So what I did, was I had Bob Reeves who makes mine do some adjusting to my mouthpieces and it all started working much better.

"I have to go out and get some dinner before the concert tonight, so if there aren't any more questions, I guess that's all.....

Donovan Bankhead-Increasing Endurance

Before we get started on this topic, I would highly recommend that you read the articles I wrote on range, pressure, and breathing first. This article makes the assumption that you are familiar with the ideas presented earlier. Before we can work on increasing our endurance, it is important that our trumpet playing "machine" is functioning properly. If not, it would be like trying to tune up a car that is in need of new spark plugs, cables, distributor cap, etc. without replacing these parts. You can adjust the timing, but it really isn't going to help much.

Also, after writing this article, I'm not really happy with the way I've worded it. So, I will probably re-write it in the near future. If you have any questions or suggestions, email me. I certainly don't want there to be any confusion.

Assuming that we are breathing correctly and our embouchure is set up correctly, their are two main things that we can do to increase our endurance. They are:

Lighten up on the mouthpiece pressure
Support your airflow with the lower abs and back

In order to lighten up on the mouthpiece pressure, we must rely on the strength of the muscles in our corners. I believe this topic was covered adequately here. Supporting our sound with the lower abs and back is an easy thing to do that really will help your endurance. It is imperative that you be careful not to constrict your throat while doing this. Let me dissect this support function into two sections: The abs, and the back.

The Abs

I'm of the opinion that when most people say "support with the diaphragm", they really mean the abs. Extensive studies have shown that the diaphragm cannot be willingly controlled anymore then the heart can be made to "beat". Generally, when you here people say "support with the diaphragm" they mean to suck in your stomach so as to support the release of the air stream (or at least, that is what it means to me). IMO, this is the correct way to exhale. When taking a full breath, your lungs will fill and cause your chest and "gut" area to expand. It is only natural that when exhaling, these areas should "collapse". By collapse I don't mean let them sag. I mean you should suck in your stomach like you are trying to impress members of the opposite sex :) This will compress the lungs from underneath, allowing a smooth, powerful release of air.

The Back

As for the support of the back, this one is pretty simple. When really blowing, I "flex" the muscles in the back that cause you to sit up as tall as you can. These muscles help support the air by compressing the lungs from the back side.

Jim Manley once said to me that after a long gig, his face wasn't tired, but his abs and back muscles would be tired like in after a long, grueling work out. After adopting these ideas, I understand where he is coming from. Your trumpet playing endurance will increase, and you may even feel some soreness after using these muscles.

John H. Lynch: "A New Approach To Altissimo Trumpet Playing" 1984

Embouchure: 1/3 top, 2/3 bottom, bottom lip is curled in. Lips are pressed vertically together by lip muscles, and they are pushed against the mouthpiece rim in a "pucker" fashion.

Grip And Horn Position: Left index finger lays on top of the third valve slide, remaining fingers lay below the slide. Thumb normal (around valve casing). This grip is to alleviate pressure on the embouchure, and place the bulk of the weight on the bottom three fingers.

Horn Angle: >20 up for below low C
0 for low C to high C
>20 down for above high C

Air Flow: Until the altissimo range is mastered, practice exceptionally loud (FFF). Practice very loud and hold long tones out as long as possible. When tired, rest about 10 seconds before continuing. Practice with the throat open, think "Ahhh." Never hold back your airflow. Raise the tongue in the mouth, think "EEE." Constantly focus on exhaling air smoothly. Rest proportionately to the amount of time you play. Keep a positive attitude and never believe that something can't be done.

Practice: Approximately 30 minutes a day. Practice usable material, never become too familiar with a particular exercise. Practice exercises one octave higher then they are written; to strengthen your upper register.

Walt Johnson: "Double High C In Ten Minutes" 1981

Embouchure: Continue your current embouchure, but at the same time develop a second embouchure. For your second embouchure the top lip stays the same. Draw the lower lip in so that the "red" of the bottom lip practically disappears. The mouthpiece is placed on the same spot on the upper lip.

Grip: Utilize the "pistol grip." Left index finger rests on third valve slide. Remaining fingers support the weight of your horn.

Practice: Keep your throat open. Start of practicing slowly . Adjust second embouchure until it feels right.

Air Flow: Keep your throat open as if you are yawning, both when inhaling and expanding. Don't use syllables to shape your throat. Use a yoga breath three step process:

1. Breath in from groin area, take a small amount of air into your lungs while only the groin or lower abdomen is expanded.
2. Take more air into the lungs and expand only the diaphragm area below the rib cage.
3. Fill the remainder of your lungs while expanding your rib cage and upper chest.

Squeeze air from the bottom up. Physical fitness increases your "lung squeezing" muscles

Practice: Play as many repetitions as possible, softly with even sound. Focus on muscle memory in the high register. Hear the note. Start with a proper warm up and proper rest, until mastery of the second embouchure occurs, never over exert your muscles. Gradually incorporate a wide range of dynamics into your long tone exercises. Alternate practicing hard one day and easy the next. Be sure to rest as much as you play.

Jerome Callet "Superchops" 1986

Embouchure: Both lips are drawn inward and thickened by the bunching upwards of the chin and relaxing of the mouth corners. As range ascends bring your bottom lip up and over your top teeth. On a double C the top of the bottom lip is up on the upper gum line, above the top teeth. The chin follows and supports the lower lip. Very little air enters the trumpet to play loud double C's.

Air Flow: Blow very hard up to the lips, the gradually close off the air flow as ascending into the high register. Tip of the tongue must strike the inner part of your lips through the open teeth. Never arch your tongue. When

inhaling, do not raise the chest, shoulders, or arms. Inhale the breath allowing the air to expand the upper stomach area from the belly up. It is how you use your wind power, not how much air capacity you have.

Practice: Attempt no high notes until everything else is solid. The faster you run out of air, the more correctly you are playing the superchops method.

Cat Anderson "Trumpet Method" 1973

Warm Ups: Warm up very softly. Practice the same routines daily, stressing long tones.

Practice: Very important to rest as much as you play. Practice very slowly using the same routines.

Arturo Sandoval "Brass Playing Concepts" 1991

Breathing: Inhale through your nose. Exhale from the bottom up. Always work on expanding your lung capacity.

Lip Buzzing: Learn to buzz with the lips. Practice all exercises with buzzing first.

Warm Ups: Begin softly with your mouthpiece alone. Only when you are fully relaxed should you advance to the high register. Focus on ascending and descending arpeggios.

Tongue- low range "Ahh"
mid range "E"
high range "HEEE"

Practice: Open your throat, and work on strong pedal tones, remember to keep the same embouchure as when you are playing normally.

Rick Baptist "Playing Lead Trumpet"

In the art of playing lead trumpet, play it the same way each time. A lead trumpet player should be very consistent with his interpretation of the music. Concentrate and give 100% every time you put your horn to your mouth. Focus your attention to what's on the page and let your musical talents carry you through it. It is very important to listen to as much big band jazz as possible, in order to work on your style.

Mark Minasian- The Bill Adam Routine

Well, here it is: Bill Adam's daily maintenance routine (or at least my version of it). Use caution and common sense in adding these exercises to your practice routine. If you really want to understand the routine and Adam's approach to the trumpet, you really should study with Bill Adam or one of his students. Adam's approach is very individualized and can't be adequately described in such a public forum. Again, to get an understanding of the routine, get together with Adam or his students and learn first hand.

First, there is no such thing as a single routine that Bill Adam merely hands out to his students. These exercises are assigned and modified as necessary to aid in the development of the individual student. My routine combines exercises assigned by Bill Adam and from my previous teachers (Richard Winslow and Dan Keberle, both Adam students).

Most Adam students have made their own subtle variations on the routine so that it works best for them. If you are truly interested in the Adam approach to trumpet playing, you really should take some lessons from either Bill Adam or one of his many students teaching across the country. Remember what Bill Adam used to tell me: "If this exercise works, then fine. If it doesn't, DO SOMETHING ELSE." As with all exercises, use common sense while practicing.

BUZZING THE LEADPIPE

In Bill Adam's article about trumpet pedagogy, Bill Adam states "I know there has to be a certain amount of mouthpiece buzzing to warm up the resilience that we have to have here. But if we can set the mouthpiece and tube in vibration, the embouchure is much more relaxed. What we're trying to do is to get the air through that horn with the least amount of tension and the least amount of muscle."

To buzz the leadpipe, remove the tuning slide. On a Bb trumpet, the mouthpiece/leadpipe should resonate at approximately an F (Eb concert) at the bottom space on the staff. Cornets and higher keyed trumpets will resonate at different pitches as the pitch is determined by the length of the tube. Hear the pitch in your mind (can you sing the pitch?), take a full, relaxed breath, place the mouthpiece to your lips and blow. Think about accelerating the air through the leadpipe and of letting the air blow the embouchure into place. The sound should be a resonant, reedy buzz. Focus on creating a resonant buzz, not an airy sound. I typically will buzz the leadpipe about a dozen times, or until I feel my embouchure responding to the breath in a relaxed manner.

LONG TONES

These are sustained tones starting on 2nd line G and expanding higher and lower. Hold each pitch as long as

comfortable at a volume of mf to f. Hear the sound you desire in your mind before you play. Take a full relaxed breath and blow, accelerating the air through the horn. Keep your mind focused on the sound you desire and let your body adapt as it attempts to achieve your goal. Rest after each tone. The tones follow the pattern: G, F#, G#, F, A, E, Bb, Eb, etc. The exercise ends on high G and low F#. For advanced players, start on 3rd place C and expand chromatically in the same manner. This pattern will end on low F# and high F#.

CHROMATICS (Clarke's Technical Studies, First Study)

Start with exercise 13 and expand into the higher and lower registers. The pattern is 13, 12, 14, 11, 15, 10, etc. Play the exercises at mf to f and repeat as many times as comfortable. REST after each exercise. Don't extend any of these exercises to the point where you are running out of air and tension creeps into your chest. If you are a developing trumpet player, do not play so high that you have to strain for the notes. Always play with the most beautiful, full tone possible. To again quote Bill Adam, "Any time we play Herbert L. Clarke exercises, it's a good idea to think of the acceleration of the air. Play the first note with a fermata, accelerate the air through the trumpet, and when you start to use the valves, continue to accelerate the air so the tone stays free. Go slow enough so the notes themselves are being blown and so that there is no muscle restriction that will diminish the sound: keep the sound good and full!"

DAILY DRILLS AND TECHNICAL STUDIES by MAX SCHLOSSBERG

SCHLOSSBERG #6

Crescendo into the 2nd note, continue to accelerate the air as you articulate the 3rd note and diminuendo into the 4th note. Rest. Repeat one half step lower. Rest. continue down to low G-F#-F #-G. Use regular fingerings throughout.

SCHLOSSBERG #31

Use the first half of each exercise (G-C-C, C-E-E, E-G-G, G-C-C) going through all seven valve combinations. Let the acceleration of the air take care of the vibration of the lips. Think of accelerating the air to the point where the next pitch falls free. All notes should feel like they are on the same level.

SCHLOSSBERG #13

All exercises should be extended down to the 1st harmonic (low C, B, Bb etc.) as is done in the first exercise. On the exercises starting on higher harmonics, continue slurring down to the 1st harmonic. If the high G is comfortable, try the study 8va (starting on high C) and slurring down to the first harmonic. Remember to REST AT LEAST AS MUCH AS YOU PLAY!!!

SCHLOSSBERG #14

Play at comfortable mf-f. If the high G does not pose any problems, continue, 8va.

SCHLOSSBERG #15

Play at comfortable mf-f. Start each exercise on the 1st harmonic, slurring through successively higher

harmonics. This exercise is written out in Mark VanCleave's first text, available through Charles Colin publications. Remember To REST, REST, REST!!!

SCHLOSSBERG#17

Single tongue as written. Then repeat as 8th notes (EE, CC, GG, etc.), triplets (EEE, CCC,GGG, etc.), and 16th notes (EEEE, CCCC, GGGG, etc.). Remember to take a full, relaxed breath and think of accelerating the air through the horn.

I sometimes supplement my routine with Schlossbergs 23, 25, 27, 95, 97,99 and 100.

EXPANDING SCALES

This is a range extension exercise. It starts simply and expands into the high and low registers. Only go as far as comfortable. Never strain for high notes. Remember to think of accelerating the air through the horn as you play. REST AT LEAST AS MUCH AS YOU PLAY!!!

Play a G Major scale starting on 2nd line G and ascending to 4th space E and back to G. Slur the entire scale.
Play a one octave F# Major Scale from F# to F# and back.
Play an F Major Scale from F to high G and back.
Play an E Major Scale from E to high G# and back.
Play an Eb Ma jor Scale from Eb to high Bb and back.
Play a D Major Scale from D to High C (yes, C natural) and back.
Play a 2 octave Db Major Scale up and back.
Play a C Major Scale from low C to high D and back.
Play a B Major Scale from low B to high D# and back.
Play a Bb Major Scale from low Bb to high Eb and back.
Play an A Major Scale from low A to high E and back.
Play an Ab Major Scale from low Ab to high F and back.
Play a G Major Scale from low G to high F# and back.
Play a three octave F# Major Scale up and back.

ARBAN PRODUCTION EXERCISES

Arban Complete Conservatory Method, First Studies. Pages 13-16. Exercises 11 through 27.

Sing, slur then tongue each exercise. Sing each exercise to prove you truly hear the melody. Pay close attention to intonation. Really nail each pitch.

Whether you slur or tongue, the air moves the same. Slur the exercise to develop your sense of follow-through of the air stream. Finally tongue the exercise, blowing as you did when slurring.

GETCHELL 1ST BOOK OF PRACTICAL STUDIES

Sing and then play each exercise. When you have worked through the entire book, start over, but this time do it in C transposition. Each time you finish the book, start over on a higher transposition. Remember to sing then play each exercise. Really hear the pitches!! Think sound, not names on notes, transposition intervals, keys, or fingerings.

Mr. Adam had me sing EVERYTHING I played for him. I still follow this procedure as an ongoing challenge to improve my ability to truly hear the music in my mind before, or as I play it . Ultimately, one should be able to look at any piece of music and hear it in one's mind at sight.

1975 CLINIC ADDRESS-by Prof. William A. Adam

In everyone's life, many obstacles present themselves. These have to be overcome by positive thinking and by positive approach to the problem at hand.

We need to make sure that our own self-image is true and honest. I should like to recommend to you a book written by Maxwell Maltz called Psychocybernetics. It contains "down on the farm" philosophy that can help a man create his self-image and give him a tremendous insight into his own life. Sometimes, we are acting and thinking positively, but not always toward our own fundamental goals. So we must work on our "true self-image."

I believe that playing the trumpet is one means of growing mentally and of continuing to grow, of seeking the truth, and of meeting all challenges that we have to meet. Basic production of a beautiful tone should be the goal toward which we always work. The basic problems of playing the trumpet need to be considered at all times.

Some of my approaches to problem solving may seem different to you. I believe that we maintain the sound, that we maintain our freedom of tone and our relaxation with copious amounts of air. The sound or tone should always float in the breath and be covered by the breath. As the air flows through, it supports the embouchure and is quite responsible for its position and its relaxation and for the resilience of the mouth. The flowing air is the means for the relaxation of the tongue and its articulations. The flowing of air is the means by which we can relax the tension in the areas of the glottis, the epiglottis, the back of the tongue, the larynx, and the abdominal wall. Truly the trumpet is a wind instrument and is dependent upon the breath as a source of motive power.

As I have matured, my thoughts have changed about the percentages in a well balanced sound system. Many years ago, I felt that the mind was probably responsible for fifty per cent of the playing of the trumpet, and the other fifty per cent was divided equally into twenty five per cent for the embouchure. A few years later I still had retained the thought that the mind was responsible for fifty per cent, but the breath had increased to forty per cent and the embouchure had decreased to ten per cent. Today I believe that ninety per cent of all playing is mental and the last ten per cent of the physical will be divided into nine percent breath and one per cent embouchure. I really believe that the acceleration of the air has tremendous value as to the releasing of the necessary tensions that make it possible for long time endurance and a beautiful sound.

The mind is the creator of concepts and attitudes that produce the physical activity necessary for proper trumpet playing. Wrong concepts can also make playing more difficult. We are capable of one thing at a time with considerable ease. When we have to be concerned with two things at a time, playing becomes more difficult, and when we are confronted with three things, it just literally becomes impossible. If we keep our minds on

a beautiful sound, on accelerating the air through the sound, on not forcing the sound, and forget the embouchure, many problems will disappear.

The brain is divided into many different parts and many different lobes, and some of these sections are used as computers for recalling our feelings and sensations. We have to remember that any time we let our minds go completely into the analytical portions of the brain in the front lobes, we have all but stopped the activity of the breath. Our concentration is on analysis, and now the breath is second in importance and we have actually impeded the breathing apparatus. One famous trumpet player once said that through Analysis comes Paralysis.

Many diverse thoughts can upset one's concentration on his sound production, such as difficult reading passages, when one becomes so intent on reading the notes he has all but stopped blowing. Sometimes anxiety over a very high or a very low note takes our concentration from our blowing. Many thoughts can stop the activity of the motive power, which is the thing we are really after.

We know that the shape and length of the trumpet makes the trumpet sound possible. When the molecular action within the air within the trumpet takes place, the fundamental and certain overtones are activated at different intensities, and we produce what is known as "trumpet tone". Sometimes we think we blow the sound out of the trumpet, and we must blow through the sound and not "at" it. To illustrate, we can put our mouthpiece in a trumpet and we can tap that mouthpiece with the palm of our hand, and we can actually produce a pitch that is Pedal C. We can put the second valve down, tap the mouthpiece and get other Pedal tones.

We have seven different bugles. When we activate the air within the instrument we set up what is known as "nodes and anti-nodes." Nodes are points of maximum compression, and anti-nodes are the areas where no molecular activity takes place that creates vibrations necessary to make the trumpet sound. The sound stays within the instrument, and what does occur is the transfer of sound to the air. Sound travels about 1,120 ft. or 1,130 ft. per. second on a normal day, and faster on a hot day. When you blow your horn in cold weather, you feel the pitch is flat. What really is happening is that the air is vibrating slowly because of the cold temperature. On a warm day, you feel the pitch is sharp, because the air is vibrating faster. The sound is not something that we are going to blow out of the horn, but something that we are going to blow through.

Now that we have discussed what sound is, I shall progress to our breathing, or the motive power of sound.

It is very important to move the air through the tubing and through the tone. When we take a breath, it is advisable to take a full one. This is in itself difficult if one has tried to analyze his breathing. Many books have been written about what muscles we move to take a breath and about when we should take a breath. I believe that any time we get our minds mixed up in analyzing muscle action, we're not concentrating on actually blowing the instrument.

So I have devised a little system that I use for the breathing apparatus, and I think it works very well. To illustrate, take a breath. Breathe naturally, just take in air. Most of us are lazy: we are not in the habit of taking a full breath, and so we do get into trouble. I ask you now to put your hands over your head – and imagine your mouth is between your hands and your hair. Take a breath, naturally, and notice that the air is quite high in your body.

Now place your hands under your chin, take a breath, imagining your mouth between your chin and your hands, and you will feel that your air starts lower in your body. Now put your hands down at the base of your sternum

bone, take a breath, and note that just because of your imagination, your air has started to fill up further down, enabling you to take a full breath.

Books written about Yoga discuss full breath. If we practice Yogi, we always breathe through the nose. To attempt another illustration, each of you breathe slowly through your nose, just as slowly as you possibly can. Notice your air starts at the bottom, then comes high and higher and higher. Our breath, or air, fills up like a glass of water. I believe that the most important thing we have to do is to make sure that we get enough air in so that our chest is fully expanded.

Our breath fills higher and higher and then at the very top there is a recession of the abdominal wall. This is a natural thing, and I think should be left alone. In other words, we should not activate muscles in order to get our air in. We should do with the exercise what has to be done. Imagine now that the mouth is the terminal. When you take a quick breath, you can fill up completely.

Now the taking of the breath, of course, is one important facet, and we must remember that we have to remain very relaxed. If we have to muster strength to get our air in, we're getting into the area of strife, because tension sets in. Any time we have tension in our system we are running into problems getting that air out.

Now we shall go on to the embouchure. I am convinced that the most workable embouchure is one that has the area behind the mouthpiece in a state of resilience and quite relaxed. At the mouth area outside the corners of the mouth there is firmness, but not a real tightness, and this feels like a warm tension. The trumpet muscles, or the buccinator muscles, are the muscles we utilize when we are getting ready to spit. The muscles should form a passageway for the air to be accelerated through the lips and through the horn. If we can retain the resilience and relaxation of the embouchure, we make it possible for our air to get through the lips and the horn without too many restrictions. The more we can cut down on the resistance of the air stream, the better the tone will be, and also the easier the horn will play.

There has been much talk about buzzing the mouthpiece on the lips. I agree with some of these theories, when they do what they say they will do. However, I have often found that when we just buzz and purse the lips, the lips become too tense. If we can buzz the mouthpiece without getting tension behind the lips, we're in good shape. But more often than not, there is a tension behind the buzz, and I've tried to devise something that's more relaxed.

I have utilized old lead pipes. To try my exercise, first buzz your mouthpiece. Note that there is a certain amount of tension with that action. Now instead of buzzing your lips, just think of not pre-setting the embouchure in any way, shape or form, but just place the mouthpiece in the lead pipe and think of moving your air through that tube. Does that seem easier than buzzing the mouthpiece?

I know there has to be a certain amount of mouthpiece buzzing to warm up the resilience that we have to have here. But if we can set the mouthpiece and tube in vibration, the embouchure is much more relaxed. What we're trying to do is to get the air through that horn with the least amount of tension and the least amount of muscle.

If we can create the sensation that we are actually blowing the embouchure in place, this will take care of a lot of our thinking problems, such as "Is this or that muscle tight enough?" Sometimes the more we think about the embouchure and its position, the more difficult it becomes to produce a resilient sound. When a student is moving the air through the sound, I find that endurance and flexibility will follow.

With the buzzing apparatus, we get into reaching for higher and lower notes with the lips themselves, and this

reaching causes tension that is difficult to get rid of. Trying to cure this reaching problem by studying the embouchure actually produces worse results than the problem we had in the first place.

I believe too that when we are reading notes, it is essential that as soon as we see these notes on the page, we actually hear the pitch and blow through the pitch. Do not think of the note name (F, for example), but concentrate solely on the sound. REALLY HEAR THE NOTE!

Some teachers endorse changes in the embouchure of many of their students. Bad habits can result from drastic embouchure changes. For example, to play the high register, I feel it is not wise to set the lower lip under the top lip. Nor is it wise to strengthen the mouth tremendously. These practices can lead us into problems with tense air which causes the static area to become tight and can cause the chest and the abdominal wall to get tight.

When we are ready to play the trumpet, we should be thinking of blowing. We should not be thinking of other ideas or methods that are supposed to make the blowing easy or correct. If we do, we won't get the air out.

As we practice, we will see that tension can be released through the mouthpiece. Release all the tensions, take a full breath, and just play, and learn to blow the embouchure into position. We can do a great deal to release the excess tensions that are connected with the embouchure.

Sometimes a student will see that, for example, he must play from G to C. He sees that the note goes up so he feels he has to do something with the embouchure. But if he will accelerate the air through the instrument, or through the sound that he's playing through the horn, to the point where the next note falls free, he will feel like that note is on the same level. He can let the air acceleration take care of the vibration of the lips.

Another source of tension is the mechanics of fingering. For example, imagine a cornet soloist playing in the park band. At the beginning of his solo, he will play a few warm, beautiful notes; but as soon as he gets into a technical passage, his sound diminishes. He has lost his beautiful sound because his mind is into the technical aspect of playing rather than on the blowing of the horn.

Any time we play Herbert L. Clarke exercises, it's a good idea to think of the acceleration of the air. Play the first note with a fermata, accelerate the air through the trumpet, and when you start to use the valves, continue to accelerate the air so the tone stays free. Go slow enough so the notes themselves are being blown and so that there is no muscle restriction that will diminish the sound: keep the sound good and full!

Several years ago I discussed embouchure with a member of the Berlin Philharmonic. He told me he compares it to the carburetor of an automobile. You cannot adjust the carburetor when the car is not running and gasoline is not flowing through it. Likewise, you can think about your embouchure and look at it in front of a mirror, but we cannot adjust the embouchure until we have the air flowing through it, until we have the sound. Then any necessary changes, which would help the embouchure, are made after we have the beautiful sound.

There are hundreds of problems that exist with the embouchure; I will discuss one, the easiest one to watch. Some people have a tremendous smile, with their muscles pulled back, as in a smile. It leaves the center of the embouchure without any resilience and without any relaxation. The mouthpiece is pressed against the teeth, and of course, the player would have a very poor sound and a tight range.

There are exercises that we can do to keep our minds off the embouchure. We can have a student play, for example, from G to F without any valves. Ask the student if his facial muscles want to "climb up" or "come

in". Playing the notes can solve a problem. We have "adjusted the carburetor while the automobile was running."

There are many additional facets of successful playing that I shall discuss at a later time.

Some Thoughts On The Trumpet

The trumpet you hold in your hand is a mute one. It can only do what you make it do. The sound that comes from your trumpet is the sound of the condition you are in....Cat Anderson

Learning to rest is very important, because without rest you are not lip building, but lip destroying....Federico Cervantes

The best way to strengthen your lip is to play any trumpet exercise and then rest the same length of time it took you to play the exercise. Resting is very important....Allen Vizzutti

Basic Rules: Take a big breath. Blow full and firm. Blow stronger as you go higher. Never attempt a high note without a full big breath of air. Think "EEE" as you go up. "Aw" as you descend.

Don't think of high notes as higher up, think of them as farther in front of you....Don Jacoby
If you can play a double C, fine. But if you can't swing it don't mean shit....Don Jacoby

Keep your entire upper body totally relaxed. (Throat, Neck, Shoulders)
When warming up, begin softly to allow the blood to circulate. Produce a good sound.
There is no perfect way to play, we each play the way that is right for us.

Getting Back In Shape- Bryan Goff

Several years ago, I was a very active long distance runner. I diligently kept a running diary, logging the number of daily miles and other information about intensity and other information such as running injuries, as I trained to beat my previous best time in the weekly Saturday morning 10K races. I also trained for and completed a marathon and one 50K (about 31 miles) race. I voraciously read books and magazines about running, physiology, and training philosophies. I must say that during that time, I probably discovered at least as much about the physical aspects of blowing a trumpet as I did about running.

Although the ultimate goal in playing the trumpet is to produce a creative musical experience, the first step is to attain a mastery of the physical control of producing the instrument's characteristic tone.

The building of range and endurance and the mastery of tone production on the trumpet is a regime of physical training almost identical in principle with that of other physical disciplines such as long distance running or weight lifting. This observation was made many years ago in a trumpet method book titled 37 Weeks to a Double High C. In the book's preface Spaulding points out that to cause a muscle or group of muscles to grow stronger, one must first stress that muscle, then secondly, the muscle must be given time to recover and grow stronger. There is an important physiological principle here, that when we stress a muscle, it will try to rebuild itself stronger than it was previously. But -- and here is the most important point -- we must give the muscle adequate time to rebuild.

Recovery Time

How much time is necessary for recovery? Weightlifters, Spaulding states, stress one group of muscles on even days and the other muscle groups on odd days, thereby allowing each muscle to have a full 48 hours of recovery time. In following that same principle, he prescribes, in his range-building method, that the trumpeter must play only every other day, thereby allowing the embouchure a full 48 hours to recover and rebuild slightly stronger than it was previously.

Although it is impractical for most students or professionals to adhere to a totally day-on, day-off routine, I have long advocated to my students a practice of heavy-day, light-day, to whatever extent possible when we are trying to build our strength, range and endurance. This, of course, would apply if we are trying to get back in shape after a summer holiday or other occasions where we haven't kept up the condition of our "chops" to the extent that we would like.

Play - Rest

A second suggestion regards equal amounts of playing and resting within our practice session. This advice has been given in various trumpet method books for more than a century. My proposal is that this advice should be applied to very short durations of blowing; it doesn't mean to blow constantly for a half-hour then rest for a half-hour. Rather, in some of our "tone development" exercises it could mean segments as short as playing 10 seconds - resting 10 seconds.

Dynamics - Range - Articulations

Our tone development exercises should include, to some extent, all dynamic levels, the entire range, and mixed articulations. Our day-to-day playing is never at only one dynamic level, therefore our building exercises shouldn't always be at the same dynamic level. In The Trumpeter's Supplemental Guide Bill Pfund recommends 60% at soft levels, but 20% at medium levels and 20% at forte and fortissimo levels. I totally agree. We can't expect to survive a Sousa march or a Mahler symphony if we have practiced only at mezzo forte levels. I recently heard an idea (from some West Coast brass players, I believe) that tongued exercises are much more effective for quickly getting back into shape than are non-tongued exercises. That's an interesting idea, but one with which I have yet to try extensively.

Listen to Your Body

This admonition is one that I have heard hundreds of times in my running experiences, and one that I learn to appreciate even more as my age increases. The simple fact is that one formula cannot fit everyone or every situation. For example, play 10 seconds - rest 10 seconds may be fine on a pianissimo third-space C, but totally unrealistic on a fortissimo high C. We do need to practice some loud high C's, but in this case playing 5 seconds - resting 15 seconds may help prevent us from mashing our lip. We strive to train and condition the lip, not beat it into submission! Remember that in a recovery phase of our conditioning, we must be building correct playing habits. If you feel that you need an extra 20 seconds of recovery time, take it! Even when we are not in a recovery mode, we must constantly strive for the reinforcement of correct tone production habits. Our practice period is the time that we must reinforce these correct habits because in rehearsals and performances we generally tend to revert to whatever works (excessive tension, mouthpiece pressure, etc.) to get the job done.

Does your lip feels stiff and unresponsive? You may need to take some extra rest. This may be just a few additional seconds of rest between the repetitions of the passage you are "woodshedding" or it may mean that

you need to divide your practice today into 10 minute segments, rather than your usual half-hour segments. You may need to interject 5 minutes of short pianissimo mid-range tones. Does your lip feel bruised? You may need to take an unplanned break for several hours. Should you try a warm compress? Should you try ice? My point, as you can see, is that you should not submit to a formula for success but rather, you should listen to the signals that your embouchure is giving you and make adjustments which are appropriate for you.

Age

A final word regards the need for making adjustments as one ages. Because my late summer performance activities are generally light, I often find myself in a "getting back in shape" mode at the beginning of our academic year. I have experienced a breakdown of my chops quite similar to breakdowns I've experienced with a return to running after a layoff. With my running, I would carefully increase the length of my runs, taking care not to increase the mileage too soon. After a few weeks of constantly feeling stronger, a hamstring or a quadricep may start to hurt. Even more common would be a joint problem - usually the knee or ankle. In my playing, I'm always careful to very gradually increase the amount of daily playing - I usually time my playing with a stopwatch to be certain of an ever-so-gradual increase. However, despite the utmost of care, after 4-5 weeks of increased endurance, range, flexibility and control I have still experienced "breakdowns" which usually start with ever-increasing stiffness of the embouchure, accompanied by a lack of responsiveness and of course a decrease in endurance. When these "breakdowns" occur, they are usually quite a surprise, because up to that point my building process had been quite good. Perhaps it has been my experiences in running which taught me to "listen", in this case to my embouchure, to make adjustments in my daily routine which have successfully carried me through those tough times.

I feel that the important thing is, as Jim Fixx suggested in his book The Complete Book of Running, published twenty years ago, Listen To Your Body. Well, Trumpeter: Listen to your chops. Be flexible in the daily expectations of yourself and realize that you may need to modify your plans to accommodate the physiological limitations your body.

Long Tones vs. Lip Slurs

We trumpet players have two types of calisthenics exercises which are quite different in nature and are used for differing purposes: long tone exercises and lip flexibility exercises. The first type is not necessarily a single long tone, but may be an interval study with several tones and is characterized by the fact that it usually does not cover a wide range and does not rapidly alternate between notes. The latter type, of course, does emphasize the rapid alternation on intervals. In addition to the common "lip slur" exercises with which we are all familiar, exercises such as Clarke's Technical Exercise No. 3 would also qualify under this category.

Daily practice on long tones can help to develop:

- range
- endurance
- power

Unfortunately, this type of exercise can also contribute to a lack of flexibility, a brittle tone quality, and decreased response, especially at soft dynamics.

Daily practice of lip flexibility studies can help to develop:

- flexibility throughout the range of the instrument
- improved response
- improved soft dynamics
- warmth of tone quality

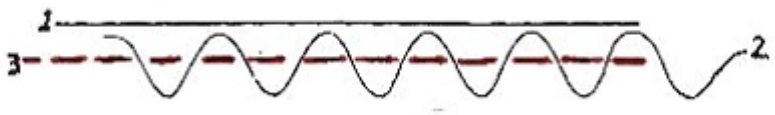
Because both of these two types of exercises produce dissimilar results, trumpeters should not restrict themselves to only one type of daily tone study. It is important for the trumpeter to establish a daily practice schedule which includes a "tone study" maintenance routine containing a good balance between Long Tones and Lip Slurs. A fine example of this balance can be found in How Brass Players Do It by John Ridgeon. He describes the exercises as "Building Exercises" and "Flexibility Exercises". Because both of these two types of exercises produce dissimilar results, trumpeters should not restrict themselves to only one type of daily tone study.

Vibrato

Vibrato is an important expressive device - essentially one of only three elements (along with dynamics and tempo) that trumpet players have available to change the tension level which outlines the shape of a musical phrase.

On some instruments, vibrato is the fluctuation of loudness or intensity, affected by changes in the air stream. However, on the trumpet it is primarily a fluctuation of pitch, not loudness, created primarily by either the hand or lip. Hand vibrato pulls the mouthpiece away from the embouchure, causing the pitch to drop. Lip vibrato (which might be more accurately called "lip-jaw-tongue" vibrato) is much more commonly used and involves a combination of a loosening of the embouchure, opening the jaws, and lowering the tongue. Thinking the syllable "yaw" (as in yawn) is useful and produces the correct effect without having to think about each physical element. Thus the syllable for a tone with vibrato would be "yaw-yaw-yaw-yaw-yaw".

For a brass player, it is a simple matter to lip a note down below the pitch center as much as a quarter tone or more, but it is difficult to lip a note even a slight amount upward. Furthermore, the physical aspects of lipping a note down generally open up the tone quality, whereas lipping a note up tends to produce a pinched sound. Thus, the trumpeter's vibrato will basically be a lowering of the pitch. Because the vibrato will flatten the overall intonation center (the median between the highest and lowest points of pitch fluctuation) the trumpeter's instrument will need to be tuned slightly sharp as a compensation. Note that I differentiate between the player's tone center (the pitch where the trumpeter is blowing straight through the tone, without favoring up or down) and intonation center. The following example diagrams the median intonation center of a trumpet vibrato.



1. Trumpet's tone center, without favoring high or low 2. Sine wave vibrato shape 3. Median intonation center

The shape of the vibrato should resemble a smooth sine wave as in the above example. The speed will be 5-6 vibrations per second. Any slower will seem wobbly, and faster will sound like a quiver in the tone.

I suggest that trumpet students practice exercises specifically designed for developing vibrato habits, so

physical actions become a part of the individual's subconscious musical reflexes. (I give some of my vibrato exercises on a separate Trumpet Topic page). To include 10-15 minutes of vibrato exercises in the daily warm-up routine would fulfill a painless double-duty. If done on a daily basis, a student could probably expect a nice vibrato to develop within 3-4 months.

The most common vibrato problem I see in young college students is when the tone is held primarily at the upper pitch level, dipping only briefly to the lower level as illustrated in the following example. This give a jerky quality to the vibrato and sounds like "eeeeee-aw-eeeeee-aw-eeeeee-aw-eeeeee".

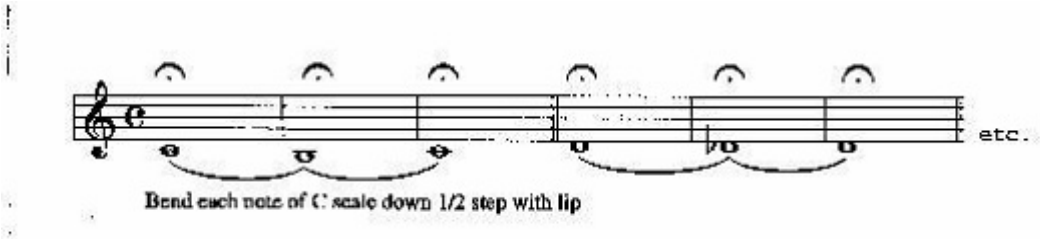
The second most common problem is when the player's vibrato commences on each individual note rather than being a continual expressive device culminating in the climax of a phrase. Some students tend to swell louder as well as widening the vibrato on every note.

Both of these problems are caused by the natural musical instincts of students subconsciously trying to match a vibrato they have heard in professional players. For that reason it is very helpful if the student has a teacher giving them private attention to provide a good vibrato model and to be certain they are developing good vibrato habits.

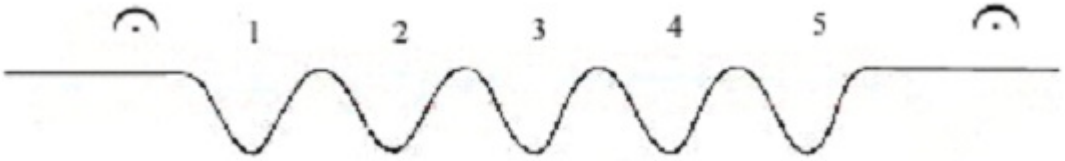
Vibrato Exercises

One of my other Trumpet Topics covered the subject of trumpet Vibrato. I would now like to share some exercises which I have used with students to work on vibrato. The studies can be used to help develop a vibrato by those who have not previously played with vibrato, and can also be used by players to gain greater control of their vibrato, or to help break old habits which have produced undesirable vibrato characteristics. I suggest incorporating these exercises at some point in the warm-up routine.

The first stage is to simply gain control of bending the pitch down and then back up. Play the following exercise 1 or 2 times daily for about a week. On a C scale, try to bend each pitch down a half-step by the lip (actually the combination of lip-jaw-tongue)



The second stage is to develop a control of the alternation between holding a steady tone, and that of bending the pitch in rhythm. Play the following exercise on each note, up and down, of a C scale and an F scale for about two weeks. The "dips" in the pitch should have a tempo of about 2 per second, and should bend down at least a quarter-step.



This won't sound like a vibrato yet - it is too slow and too wide. This exercise is simply designed to gain a feeling of the difference between holding a tone steady and moving the pitch in rhythm. Notice that it is written as a group of five dips. Five is the number of vibrations per second of our vibrato as applied to actual music.

The next stage is to gain a control of playing the vibrato at the proper speed of 5 vibrations per second. Apply the following exercise to each note of a scale during the daily warm-up routine. This exercise is similar to the one above; each of the quarter notes should receive five "dips". Continue to make the amplitude of the vibrato extremely wide so you can hear whether the rhythm is steady.

This exercise should be practiced daily for about 2 weeks before attempting to apply vibrato to musical examples. Even after the player starts to apply vibrato to music, I would suggest continuing to use this exercise daily as part of the warm-up to ensure solidifying rhythmic control.

The next stage is to apply these vibrato "5's" to specific pitches in actual musical examples. Pick lyrical examples with a mixture of whole, half and quarter notes. Apply a specific number of dips to the whole and half notes. Continue to make the amplitude extremely wide. This will still will not sound like a beautiful lyrical vibrato yet, it is just an exercise to gain rhythmic control. The player should practice this "applied vibrato" for a few weeks. After this point the musicianship of the player will generally take over and a lovely, controlled vibrato will begin to appear in their playing.

Buzzing

During a clinic I was presenting some time ago to trumpet students, someone asked me if I advocated mouthpiece buzzing. "Not really", I replied. Then after thinking about it, I had to admit that I actually buzz my mouthpiece about 15 minutes every single day! I guess that it is such a part of my daily routine that I didn't even think about it.

I keep a mouthpiece in My Car, and I start buzzing as soon as I round the corner, buzzing on and off all the way to the School of Music, where I do my daily warm-up. On days that I warm-up at home I usually start on my trumpet, and now after thinking back , it occurs to me that my chops usually felt better after those warm-ups that were preceded by the mouthpiece buzzing.

I usually buzz chords rather than long tones, because I feel that moving around is better for loosening the embouchure than "locking in" on a long tone. I usually progress upward chromatically until it feels slightly uncomfortable, then progress back down. For variety I may go around the circle of 5ths. (If I were to keep a

tuner in the car, it would be interesting to test my pitch accuracy by checking how close I am the starting pitch after I complete the entire circle).

I made a cassette tape of some rhythm section backgrounds (swing, rock, samba, etc) with my Band-in-the-Box program which now makes my buzzing a bit more interesting (but draws some strange stares when I drive with the top down). Jim Thompson, trumpet professor at the Eastman School, has also released a nice cassette and booklet called "Buzzing Basics" which is published by the Atlanta Brass Society Press at michael_moore@atlmug.org.

There are other useful benefits from mouthpiece buzzing, but as a pre-warmup I think it is very good. If you haven't done so, I suggest that you spend a few minutes buzzing just your mouthpiece prior to your usual warm-up.

Warmup Philosophy:

Long Tones vs. Moving around

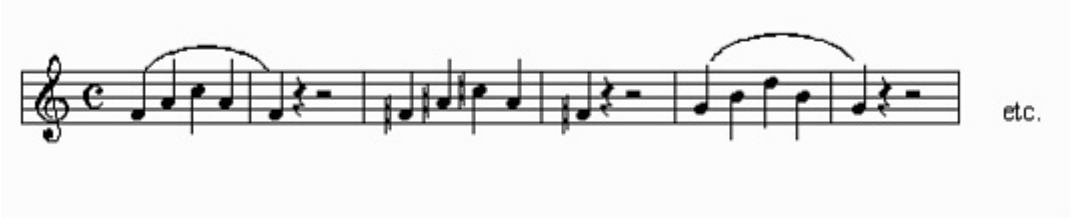
One of my other Trumpet Topics pages included a description of the virtues of Long Tones vs. Lip Slurs. Something that I should have also mentioned in that description is that long tones tend to reinforce.

For example, if you are in the process of making an embouchure change, you will probably want to initially lock in on your new embouchure by playing simple exercises consisting primarily of long tones. You will want to establish the new embouchure by playing exercises which you are certain will reinforce that new feeling and not cause you to slip back into your old embouchure, as might be the case with exercises which rapidly move around between high and low registers.

I believe that my Warm-Up is that period which, in addition to stretching -- loosening -- getting the circulation going -- etc., I am really trying to "find my embouchure".

I rarely feel that my first tone of the day is my best. Therefore, why would I want to start off my day by playing exercises such as Long Tones, which would tend to reinforce a less-than-optimum embouchure setting? I believe that it makes much better sense to start off my day with exercises that move around just a bit, allowing me to find that "perfect spot".

If you have been used to starting your day with Long Tones, see how you feel this week starting off with just a few minutes of very simple chord exercises, as in the following example:



Buzzing:
Beyond the Warmup

I recently discussed the advantages of mouthpiece buzzing as a "pre warm-up". I would also like to mention some further advantages to incorporating buzzing into one's practice routine, both with and without the mouthpiece. It's interesting to observe that buzzing is a technique which is rarely mentioned in most method books, however it is remarkable how many brass instrument teachers and professionals strongly acknowledge and advocate buzzing.

Mouthpiece buzzing

Mouthpiece buzzing exercises are good for attaining good concepts of air flow because the mouthpiece gives much resistance than the trumpet does, allowing for a free, relaxed feel while blowing. Furthermore, the embouchure tends to be very relaxed when buzzing the mouthpiece. When playing an ascending line via a glissando, the embouchure can remain much more relaxed than it does when "reaching" for the next overtone when playing on the instrument itself.

Mouthpiece buzzing can also be a good ear-training technique. Next time you encounter a passage that is particularly difficult to hear, play through it slowly on the trumpet, then try playing it slowly with just the mouthpiece. Play some of the difficult intervals on the instrument, then try to match the pitches on the mouthpiece. Add one note at a time, alternating between the trumpet and mouthpiece alone. When you return to playing the entire passage on the trumpet, you will see that your accuracy has been greatly enhanced.

Lip Buzzing:

Lip buzzing, without the mouthpiece can be a very good exercise for developing an "awareness" of proper embouchure formation. Lip buzzing is particularly good for working on embouchure focus. When focusing, or drawing in the embouchure as you ascend to higher pitches it is particularly important, however, to be certain that your lips always remain relaxed - not tense.

Lip buzzing exercises are good for working on embouchure strength because you can concentrate on developing fast vibrations (i.e. high pitches) without relying on the mouthpiece to maintain proper lip formation or even worse, using mouthpiece pressure to hit the hit notes. For this purpose lip buzzing can be even more beneficial than mouthpiece buzzing.

Edward Tarr once told me that if you can't buzz the pitch, you can't play it. While he probably didn't literally mean this, it is certainly likely that if you can buzz the pitch with your lips alone, you certainly should be able to play it.

Like many practice techniques, it is probably wise to not go overboard with excessive daily buzzing exercises. However, I do think that you will find that mouthpiece buzzing and lip buzzing can prove to be useful auxiliary exercised in your practice routine.

Duration and Spacing of Practice Sessions

I have been asked to address the subject of "the practice session", relative to length, number of daily sessions, and spacing of the sessions. This is a subject I often bring up with my FSU students as I try to help them with

their time management, and advise them on attaining the most efficient use of their practice time.

Duration

The question of "how much should I practice each day" simply doesn't have one correct answer, simply because we are human beings and there are an incredible number of variable factors. I hope it doesn't sound glib for me to say I believe that it is extremely important for you to practice the correct amount, then to say that I can't tell you how much the correct amount really is.

Because of the physical demands of brass playing, the amount of individual practice on days which include rehearsals and/or performances will naturally be less than on days with light schedules. Sometimes my students have as much as 5 hours of rehearsal in one day. In that instance, they may be lucky to just have enough lip to get in a careful warm-up. One may want to do only light playing on the day before an important performance; however, several days prior to that performance it may be desirable to put in fairly long hours of playing as a final conditioning.

So, the total amount of individual practice will vary greatly depending on the situation and the individual. I will say that we should generally plan on a minimum of two hours of total daily playing time. Much less than that, after time, will result in less than desirable tone quality, range, endurance, and flexibility.

Number and Spacing of Practice Sessions

We will accomplish much more in our practice sessions if we feel like we are at our best, physically. If I practice for two solid hours, I really don't feel that I am accomplishing nearly as much in the final half-hour as I was right after I completed my warm-up. I realize that it is difficult to schedule several practice sessions each day, but I strongly feel that several 30-45 minute sessions are by far more productive than a single, long practice session. If only 2 or 3 daily practice sessions are possible, try to make the final one the shortest, when you are most tired. My suggestion for a 2 1/2 hour day of practice is:

play 45 minutes: warm-up, tone studies and fundamentals
----------wait 1-2 hours
play 45 minutes: technique and repertoire practice
----------wait 1-2 hours
play 30 minutes: technique and repertoire practice
----------wait 1-2 hours
play 30 minutes: tone studies and fundamentals

I want to stress that it can be just as bad to overdue it as it is to not practice enough. As with any physical activity, excessive stress on our embouchure can cause a breakdown which may require lengthy recovery time or even long term damage. Probably my best advise regarding practice session duration is to carefully "listen to our chops". They will tell us when we've played too much, as well as telling us that we need to keep going a bit longer.

Lip Slurs for the Week

Have you been doing your lip flexibility exercises on a regular basis?

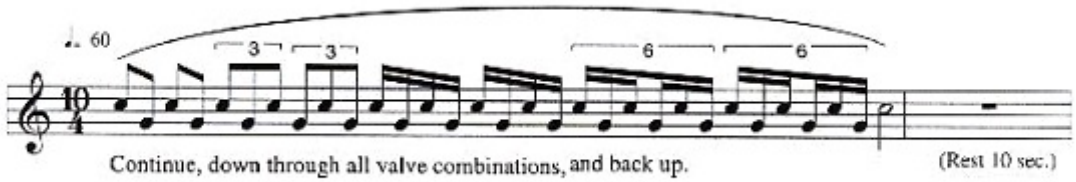
So often we tend to say that we have a few "set exercises" that are always included in our daily routine, but when we think back over the past couple of weeks' practice sessions, we may realize that some of those

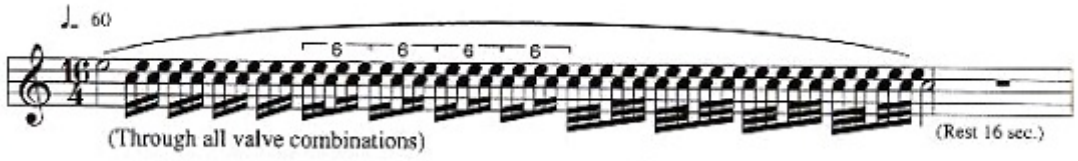
exercises have been practiced rather sporadically (for me, single tonguing is most often ignored). Lip flexibility is another frequently overlooked exercise for may people. The best policy is to schedule these exercises at a specific point of the daily practice routine, usually sometime during the warm-up period.

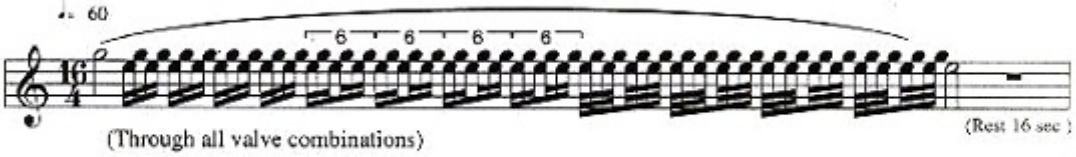
Below is a progression of three lip slurs which I have found to be very useful, not only for myself, but for my students, as well. You know the routine - go down chromatically through all valve combinations and back up. Those who cannot attain the upper register in a relaxed manner, might find it easier to start at the bottom (1-2-3 valve combination) and work your way up, as high as you can comfortably do so.

I hope you find this to be a very beneficial 20 minutes (18 min. 12 sec. to be exact) in your daily routine.

Remember: every day!







Lip Trills

Lip trills differ from lip "shakes", both in sound and in the technique of execution. When I speak of a shake, I am referring to that technique that is primarily used in jazz music, a slurred figure in the upper register similar to a trill but usually alternating between notes whose interval is usually greater than a major second - that is, an interval wider than just a single scale-wise step. The interval is often a third, and by some trumpeters it is even wider - for example in many of the older recordings of Maynard Ferguson. In my experience with playing shakes, I have a feeling of controlling the pitches primarily with my air, assisted by an up-down jaw motion. I concentrate on using very strong air support, and using considerably more air to go to the upper note.

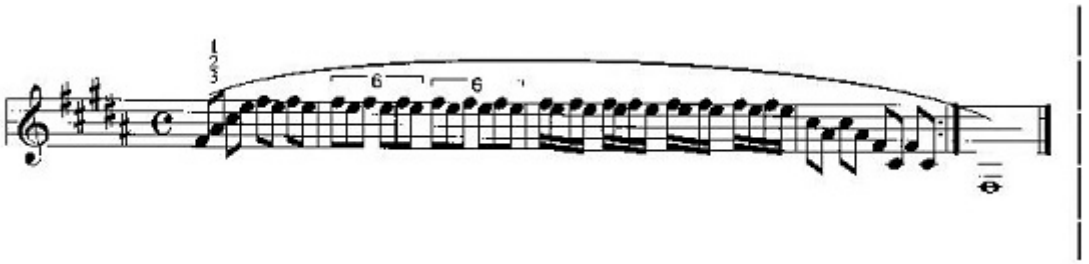
Lip trills, by contrast, are always stepwise - the alternation between two pitches of a major second. The speed

of the lip trill is usually faster than that of the shake and it should sound as smooth as a normal, fingered trill. Because the notes must occur between overtones that are a step apart, the lowest lip trill possible is between E and F-sharp at the top of the staff (fingered 1-2-3).

The feeling I have when playing a lip trill is totally different than when I play a shake. Although I do use good, steady, adequate air support on a trill, the quantity of air is usually much less than that of a shake. The most important thing, I feel, is to have a feeling of focusing very "far forward" - I would say clear out on the front tip of the lip, whereas with the shake I feel that the motion is further back in the oral cavity. Try whistling a high note, then whistle a trill - that little fluttering quiver is approximately the same sensation as a lip trill. You can bully yourself through a shake by using your strength and power (and probably should do so, to get the right style), but a lip trill must be performed with flexibility and finesse. With a shake I feel that my air stream is a fat column of air, but with a trill I feel that it is fast, intense, but small ribbon of air.

Following is an exercise which I wrote for the purpose of working on lip trills. Start with this 1-2-3 fingering and work your way up chromatically after you are comfortable with each successive pitch level. Start at a tempo of about quarter-note = 126 and try to work up to 184 or faster.

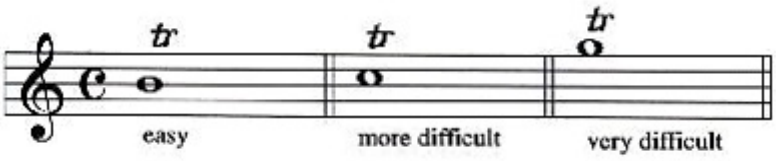
Remember to play lightly, with finesse, and to feel yourself focusing your tone "far forward".



Trills: Pitch Focus

Some trills are easy, some trills are more difficult, and some trills are nearly impossible to execute cleanly. In the following example the B-natural to C trill is very easy. The C to D trill is more difficult because the pitch must be focused, by the lip, at a pitch center between those two notes. If your pitch center is focused below that "slot", some B-flat's may find their way into your trill. (Extending the 1st valve slide a bit will bring the pitch of D closer to C and the pitch of B-flat further away from C, and will improve the accuracy of the trill).

In the third example, however, it is almost impossible to find the "slot" between G and A. This is one of those trills where the player must actually move back and forth between the two pitches with the lip. (And to make matters worse, the player must perfectly synchronize that lip movement with the finger movement)!



One well-known instance of this G-A trill comes at the end of the first movement of the Hummel Concerto, when performed on B-flat trumpet. One good solution to the problem, of course, is to perform the work on E-flat trumpet, however this option not always possible for many students. A lip trill may be viable for some

players, but by the end of the movement, fatigue may prevent many players from executing a lip trill with dependability. Therefore, the only solution may be to practice this trill enough to be able to coordinate the lip and finger movements.

Following is an exercise I wrote for a high school student of mine which seemed to help her develop this lip/finger coordination in preparation for her performance at our state solo contest. The first few measures require only a small amount of lip movement, but as the exercise ascends, more and more lip movement is required to focus the pitch of the "trill" and, of course, this lip movement must be coordinated with that of the fingers. Because the notes start slowly the lip/finger coordination is easy at first, but the coordination becomes more critical by the time we are playing sixteenth-notes.

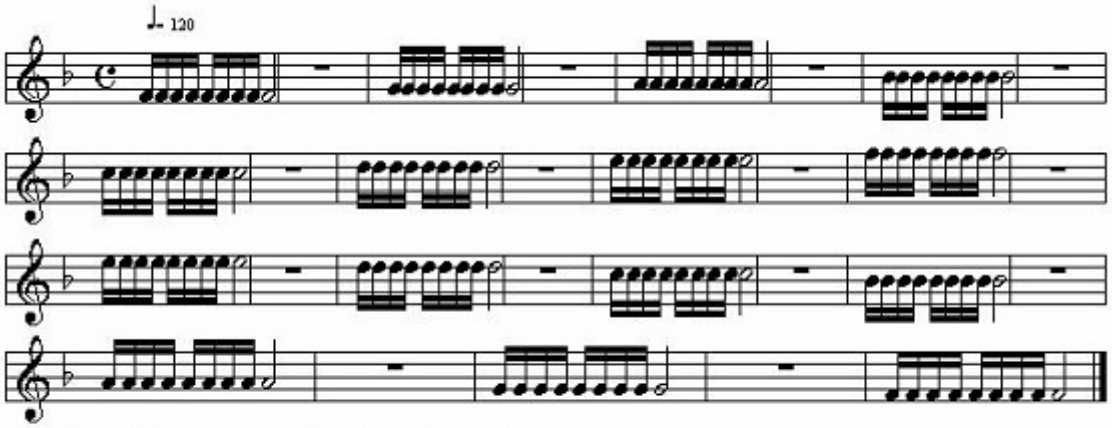
Continue, up by half-steps, to:

Improved Single-tonguing
in 15 Minutes per day
Part 1

This Trumpet Topic page is the first of a series of postings related to improving one's single tonguing. Like so many of our trumpet techniques, great improvement can be seen in our single-tonguing if we simply discipline ourselves to devoting just a few minutes every single day to the development or maintenance of this technique.

In the next few weeks I will be making some suggestions which I hope you will find helpful in improving your (or your students) single tonguing. Meanwhile, why don't you get started by simply incorporating the following basic exercises into your daily practice routine. The exercises should only take about 10 minutes or so each day. I suggest that you first go through your own warm-up routine, then play these exercises before you proceed with the rest of your practicing. Be sure that you always practice these tonguing exercises with a metronome because the prescribed tempo will eventually be a big key in pushing your improvement.

1.

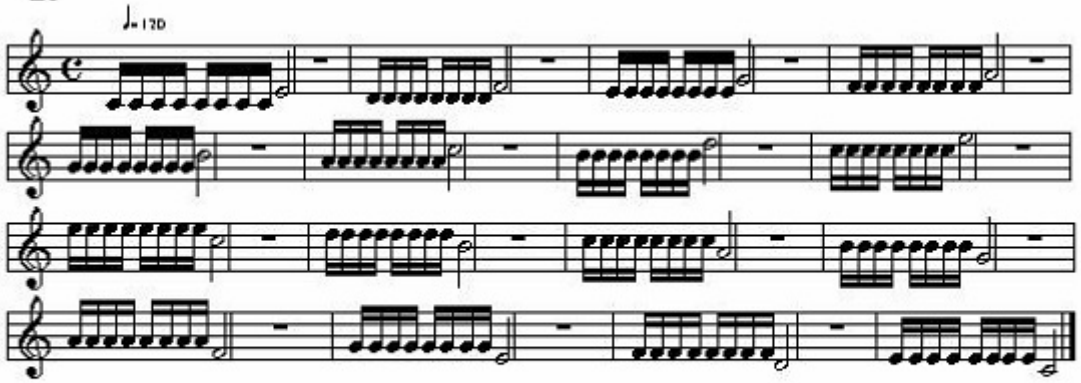


Repeat this exercise on the following scales:

E major, F-sharp major, E-flat major
G major, D major, A-flat major

Rest briefly, then continue with the second exercise:

2.



Repeat this exercise on the following scales:

C-sharp major, D major, E-flat major
E major, F major, F-sharp major, G major

Take another brief rest, then continue with the following exercise. This exercise is for trumpet in C, so transpose it up a step if you are playing on a B-flat trumpet:

3.

Repeat these six measures 10 times (1 1/2 minutes total)

Scales

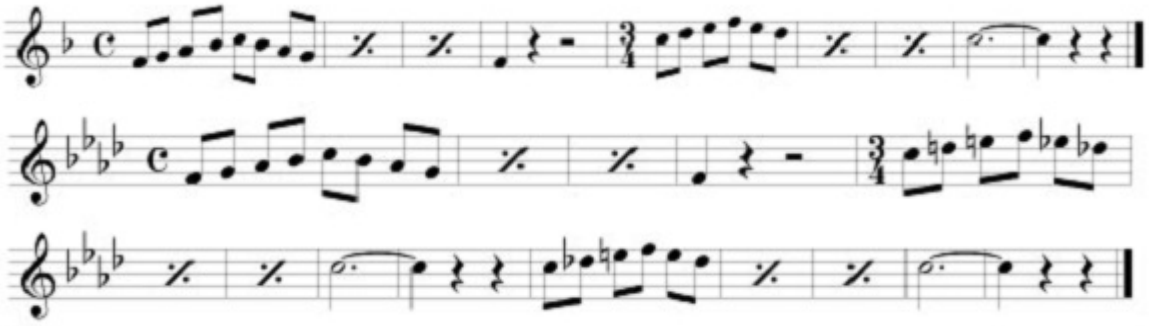
Scales, ugh! I'm certain that is how many of my students feel about playing their scales. However, probably nobody (no, not even those students) will deny that the mastery of scales is one of the most important building blocks in the fundamentals of almost all of the music which we play.

Scales are easy. Really! Learning scales is a simple motor skill where, with enogh correct repetitions of an action, that action is stored in the brain as a habit. The keyword here is correct repetitions. The brain cannot tell the difference between correct and incorrect scales. When we play a scale with a couple of wrong notes, the brain simply stores that as another action which we have performed, potentially building the beginning of a "bad habit". To store the correct scale pattern as a habit we might have to play the scale 2 or more times correctly to cancel out the one time when we played it with an error.

In tabulating the total number of correct repetitions, we might think of it as positive and negative numbers: a correct repetition counts as +1, whereas an incorrect repetition counts, not as a zero but as a -2.

Therefore, it is extremely important to avoid making mistakes. This seems like such a self-evident truth, yet how does one totally avoid making mistakes?

First, play slowly enough that you don't outrun your ability to play perfectly. Start at a slow tempo and do not try to pick up the tempo until you are certain that you can do so without missing any notes. Use music at first. Ultimately your scales should be memorized. However, if you attempt to play by memory too soon you may be guessing at the notes and you will make mistakes, giving reinforcement to the wrong patterns.
Try practicing short patterns derived from scales which will indirectly help reinforce the full scale patterns. Clarke's Technical Studies are good for reinforcing scale patterns. Also, following is an exercise which I call half-scale patterns which I find helpful with my students here at FSU:



Remember, the total number of correct repetitions is the key to reinforcing the accurate performance of the scale patterns.

Getting in Shape

From The Brass Player Summer 1994, by Barbara Milo

I believe it is safe to say that the majority of the brass players on this planet are not playing as much as they would like to. It seems that once we leave school our playing opportunities become fewer and fewer. We have all listened to the lucky few who are top level pros and really do play all the time. Their technique and savvy are dazzling. For most of us, however, the chance to play may consist of a community band or orchestra and some special seasonal events. These "gigs" may last only a few weeks at best.

For must of us there can be a lot of time between playing jobs and before we know it months can pass without playing or practice. There are many people with professions and jobs outside of music who like to play and really are good instrumentalists. These people make up the fabric of most groups. Staying in shape to play can present some problems for those who play infrequently or seasonally. It seems a shame that people stop playing at all because they feel they can't play the way they used to or they don't have time or they just don't play often enough to stay in shape. If this is happening to you don't blame yourself. These periods of idle time can happen to anybody and therein lies the difficulty of maintaining oneself in reasonable playing condition. It is unrealistic to assume that we are going to be able to play as well as we would like to after being benched for a while. I know from personal experience that nobody wants to embarrass themselves by being out of shape. If you feel that instrumental fitness could be your goal or you haven't played for a while or feel dissatisfied with your playing, some of the following ideas may help you. I have found this "rehab' program works very well for me when I need to get myself ready to play.

Give yourself time to prepare. If you haven't played for a few months it will take you a few weeks to get ready. I suggest six to eight weeks but you can adjust this to suit yourself.

Set up a practice schedule. Establish a time a couple of times a week when you will not be disturbed for any reason for one full hour. Use a metronome set at a slow temp, e.g. adagio about 72 beats per minute. Start in your low and middle registers and play long tones, slurs, scales, arpeggios and rhythm patterns at tempo. Use some easy technical exercises and go slowly. Don't be tempted to increase the tempo or register for two weeks. Don't be impatient. Remember, this is rehab and it takes time to adjust. You are bringing your entire system into focus to do a specific activity. Your muscles may get sore. You may feel tired or get a headache. You can have tension in your neck and back and your teeth and sinuses may ache. No pain, no gain! Courage! This too shall pass. You are working on your sound as well as sharpening up your reflexes, your eyes, your ears and your concentration all at once. There are a lot of things happening and you can expect to have some physical effects.

By the third week you can increase your tempo to andante about 108 beats per minute and begin to push into your upper register. I just add the upper octave to the scale and do ascending slurs and arpeggios. The following week you can add some simple etudes or tunes to your technical exercises. Still using your metronome concentrate on clean attacks and releases, good tone, dynamics and phrasing. Playing in tune is hard to work on when you practice alone. You can use a tape of the play-along type to get your intonation together.

Weeks four through eight you can continue to increase your temp slowly and work on the technical exercises. Always warm up slowly. You can play longer now and should work toward endurance. Extend your practice time. A good rule of thumb is two hours of practice chops equal one hour of playing chops.

You should select pieces to practice that are compatible with the type of music you will be performing. Practicing in the style of the group can help you get in character with the music. It really is important to be

comfortable and familiar with the literature you will be playing. Nobody enjoys feeling out of place in a musical setting.

As you get close to your playing gig you may want to practice at the time you will be playing. You are bound to play differently at eight A.M. than at eight P.M. regardless of how much you practice. It is good to consider the time of day.

If you follow this basic program I have outlined it should get you in shape to play well enough to hold your own in a section or group. As with any rehab program the keys to success are time and routine. Give yourself plenty of time and once you start, keep on going. Don't get discouraged! Your playing will improve slowly, your endurance will become greater, you will feel better physically and be comfortable with your horn. Best of all you will feel at home with music and enjoy playing again. That is a promise.

LIP TRILLS

Many aspiring trumpet players have over the years been stuck when it comes to performing a correct "lip trill" or "shake". They hear guys like Maynard Ferguson play with wide and fast lip trills and wonder "how in the world can I do that????"

From the Jimmy Maxwell book "The First Trumpeter":

The "shake", the lip trill, you name it, it has many names as it has interpretations, but the production is basically the same. It can be put in the category of jazz ornaments and like all jazz ornaments it should not be used too often or it becomes trite and gives the band a ragged, unorganized sound. Used sparingly it sometimes contributes to the excitement of a swinging arrangement but I believe it to be much more effective in a live performance than it is on records or broadcasts. When it is being played on records or broadcasts, it has to be done carefully and in a well rehearsed manner or it will just give the band a rough sound, but in this careful presentation, it is apt to lose much of the impact that spontaneity would lend to it. So, it is a dilemma. The solution, of course, is to do it in an organized manner as seldom as possible. In "live performances" the interaction of the band with the audience often leads to displays of peaking emotions and on this happy occasion the shake can be very effective.

It is my theory that the shake, like most ornaments of jazz, was originally un-planned, perhaps a mistake, but had some quality of excitement about it that led to imitation. the first shake that I ever heard was done by Louis Armstrong who had a strong emotional vibrato. He was playing the final chorus of "When You're Smiling", a simple thrilling rendition of the melody in the upper register. Because of the closeness of the harmonic series above the staff, a tone apart, and because of the intensity of his vibrato, he went into a brief shake on some of the notes and in my opinion, that is where the shake was born. There may have been earlier examples that I don't know of; it doesn't matter, that is where I learned it and it wasn't until then that I heard anyone else do it. I heard a great many after that and played a great many myself. Louis often lapsed into shakes particularly in his later career but I believe that he rarely did them deliberately, and of course, that is the best way to do them.

Deliberate or accidental, the shake has been with us for over fifty years as a standard fixture in the catalogue of devices, and has caused aspiring shakers frustration and anxiety to say nothing of bruised lips in their search for expression. So here are some words of advice from someone who learned the shake from the master, before he knew it could be done without hurting.

FIRST: Learn lip trills in the lower register and learn to do them with lip, jaw, or tongue motion avoiding the use of changing pressures as much as possible. Do not go to the extremes of fighting the use of pressure as this could delay all progress; just concentrate on the use of tongue, lip, and jaw.

SECOND: Learn to trill in all of the harmonic series starting with F#, bottom space. Learn all seven positions starting with 1-2-3 and work upwards.

THIRD: Use the metronome! Start at a comfortable speed and increase the speed on notch at a time to your limit. Do this on all fingerings in all the series possible for you.

FOURTH: "Lip" as sharp as you can when practicing these exercises, this is very important. These exercises should be worked up to four notes per tick at 120. If you find that you are too tired to continue above the staff, try starting on a higher harmonic, after you have gotten to a fairly good speed on the lower notes. Quarter Note=80

FIFTH: When you can trill up to high C (from high Bb to C) start a trill on the top line F# (1-2-3) lipping up and keeping your lip in a fixed position. Push the trumpet toward your mouth and relax, push and relax, go as fast as you can and as slow as you can. Try to have control at all speeds.

Remember, lip up between the notes to be played, hold the lip fixed, trill using the up and down movement of the jaw or the flapping of the tongue as in whistling, then go to the hand shake. The wider interval, the "Basie" trill, is done by a lip action and is different, easier, then the fast trill of a tone or a major minor third.

Lip the pitch high (a bit sharp) and keep your lips there. Don't lip so high that your tones is distorted. Say the syllables "ta-ee-ya-ee". These syllables are not much help in the lower registers but you will form the habit of using them. They will be very helpful in the high registers. The tongue motion should cause a slight up and down movement of the jaw deliberately so if you don't get immediate results, discontinue the deliberate jaw motion. Don't resist it if it is natural. It should go without saying, but unfortunately often needs to be said, use plenty of air support. That means to literally "push" the air through the horn don't just let it dribble out.

CASUAL DOUBLE HIGH "C" is a method I have been developing since 1990. It is the easiest way to play the trumpet I have seen in my 35 years of playing the instrument. I began to develop my own approach after a lesson and phone conversations with JEROME CALLET. His ideas opened my eyes to an easier way to play. The embouchure is formed in a way as not to let the lips be stretched! When the lips are pulled back at the corner, the center thins out and becomes easily crushed by too much mouthpiece pressure.

During my practice, the aperture is so tiny that the air feels as though I have a tiny length of thread in my mouth and I am pulling it out between the lips. This is what provides the focus that is used to produce the upper notes on the trumpet!

1. The number one hint that I can pass along is to practice as softly as you can with the minimum pressure that you can play with.

2. Form the embouchure by saying the letter "M-----", this slightly rolls the lips in. Let it happen and don't roll in too much.

3. Warm up, not down! I start on a 1st space "F" and SLUR up 5 notes of the "F" major scale and back down as soft as possible. It is a tiny sound that I am producing at this point! Pppp I rest equal time and then I do the same thing, adding one note at a time until I reach my highest note using minimal pressure.

4. Hold the trumpet with the lightest grip possible and don't use the finger hook with the right hand. On the left hand, I have the little finger and the one next to it under the third valve slide.

5. You don't need to play with a huge air stream, just a super-intense one! When I play my loudest and largest high notes, I am using a very concentrated air steam. Playing this way allows you to be able to play longer phrases.

6. The easier that you can play trumpet, the more music you can make out of the notes. If you are working hard just to produce the pitch, how musical can it be? Let it flow.

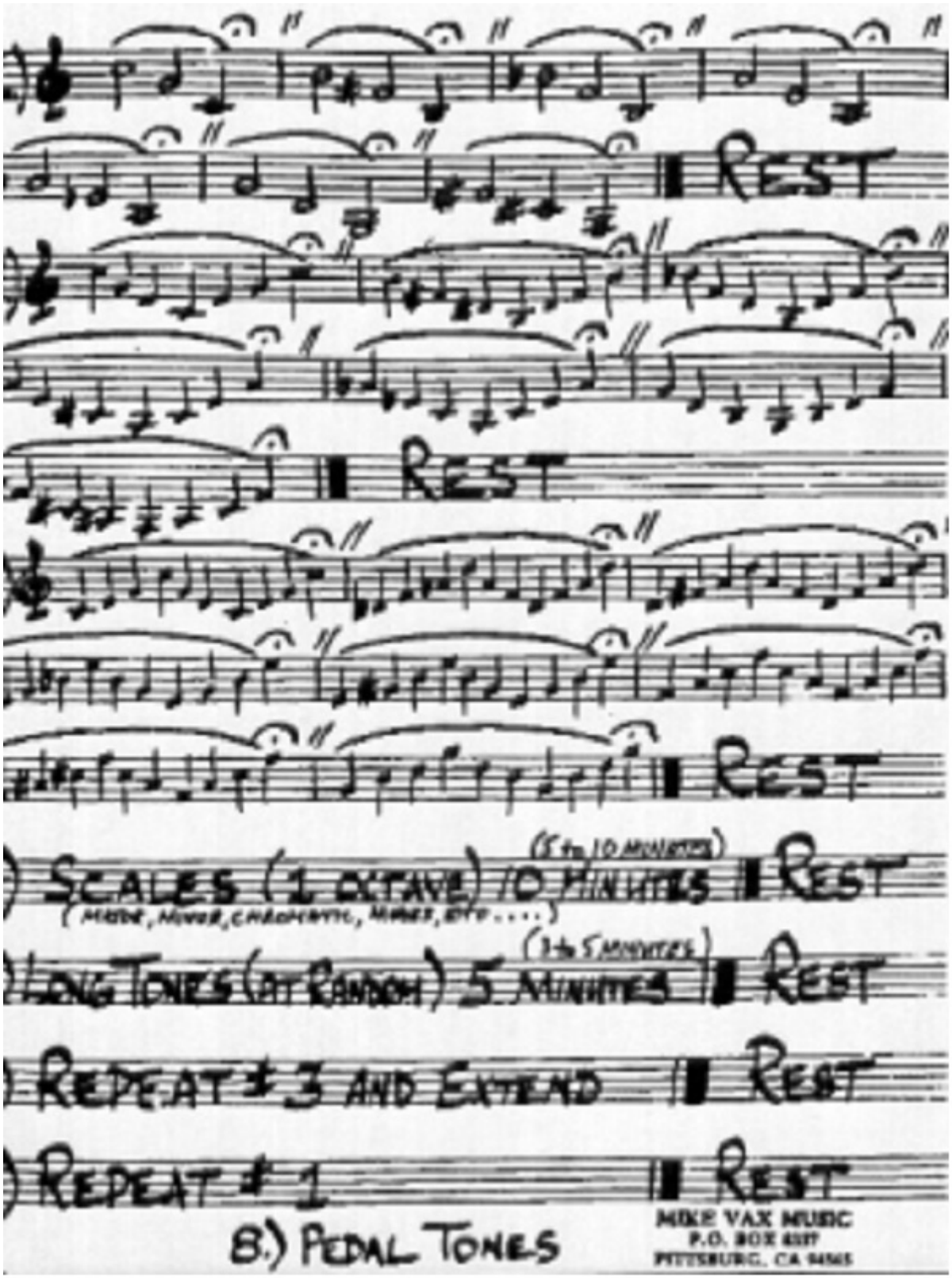
Trumpet Methods Notes (10/26/99) - pg 1.

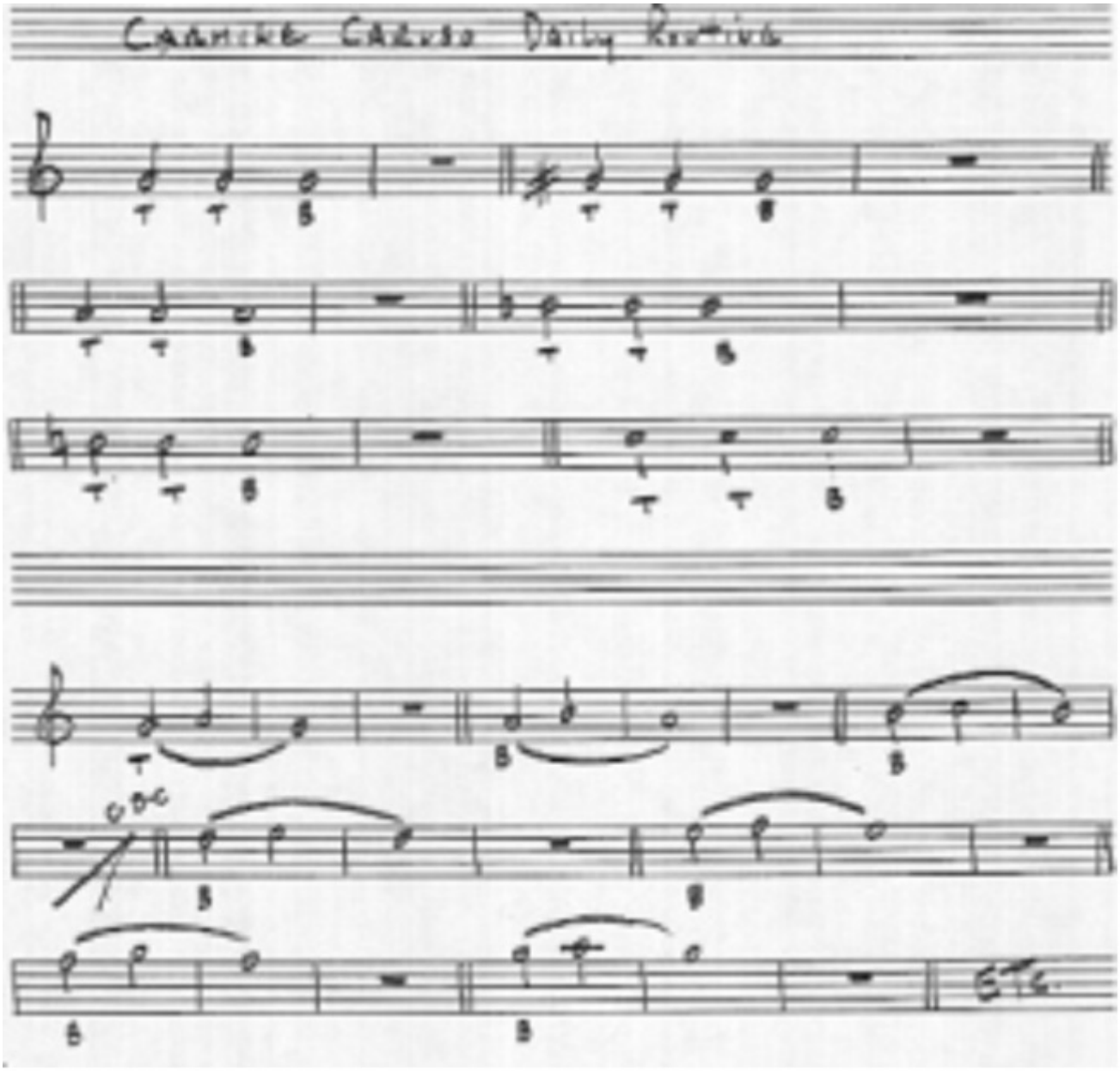
Book Title or Essay	Author	Comments/Notes
1. Embouchure Design	Nick Drozdoff	uses lip, visualizer ring, and MP buzzing, as well as playing leadpipe and false scale routines. Advocates following: · minimum MP pressure location · 50/50 rest/play cycle · aperture control · tongue arch for vowel sounds (EEEE ascending) · pedals done correctly · breathing/air (similar to Shew)
2. Sail The Seven C's	Clyde Hunt	uses series of tongued and slurred exercises grouped in phases of progressively higher ranges. Advocates following: · low MP pressure · buzzing · pedals · air (jet propulsion) · constantly adjusting embouchure · 50/50 rest/play cycle · compress air stream with vowel sounds (TEE ascending)
3. (internet notes)	Bobby Shew	uses resonant intonation. Advocates following: · feeling of lips · aperture control for full, open, sound which matches resonant properties of oral cavity with the horn. · lip buzzing for muscle development, but **NOT** same buzz as when playing horn. · yoga breathing for abdominal air support · efficiency vs. relaxation
4. Brass Playing No	Claude Gordon	learn, develop, and apply the natural physiological forces as

Harder Than Deep Breathing		they relate to the basic elements that make the trumpet work. Advocates following: · wind power and control (air). · pedals (only if done correctly). · tongue (`Aww' and `Eee' sounds). · air does the work; tongue channels the pitch · MP placement 2/3's top lip. · **NO** MP or lip buzzing. · set embouchure & practice correctly to develop muscles of lips and face. · 50/50 rest/play cycle

Book Title or Essay

	Author	Comments/Notes
		5. The N0 Nonsense Trumpet From A-Z
	Clint Pops McLaughlin	practice lyrical phrasing, tonal fullness, projection (focus), tonguing (all types), breathing. Advocates following: · proper technique for the particular embouchure employed · breath control (just enough to play the phrase) · tongue arch and pivot 6. Maximizing Practice Vols I, II
	Mark Van Cleave	Develop *controlling* the embouchure and aperture. Maximize "range of motion" in embouchure (low/loud to high/soft) during practice. Advocates following: · adjustment of R.O.C. for best sound · playing isometric exercises to strengthen corners (reduce MP pressure) · tongue arch and pivot · practice skills: sound, flexibility, fingers, single tonguing 7. Trumpet Isometrics
	Leon Merrian	All facial muscles must be developed to strengthen embouchure (isometricized). Advocates following: · lips together, corners firming, forward motion into horn, more `hissing' while ascending · tongue releases air (not striking) for articulation


REST
REST
REST
SCALES (1 OCTAVE) (5 to 10 MINUTES) 10 MINUTES
REST
LONG TONES (AT RANDOM) (3 to 5 MINUTES) 5 MINUTES
REST
REPEAT # 3 AND EXTEND
REST
REPEAT # 1
REST
8.) PEDAL TONES
MIKE VAX MUSIC
P.O. BOX 4317
PITTSBURG, CA 94565


Caruso Daily Routine
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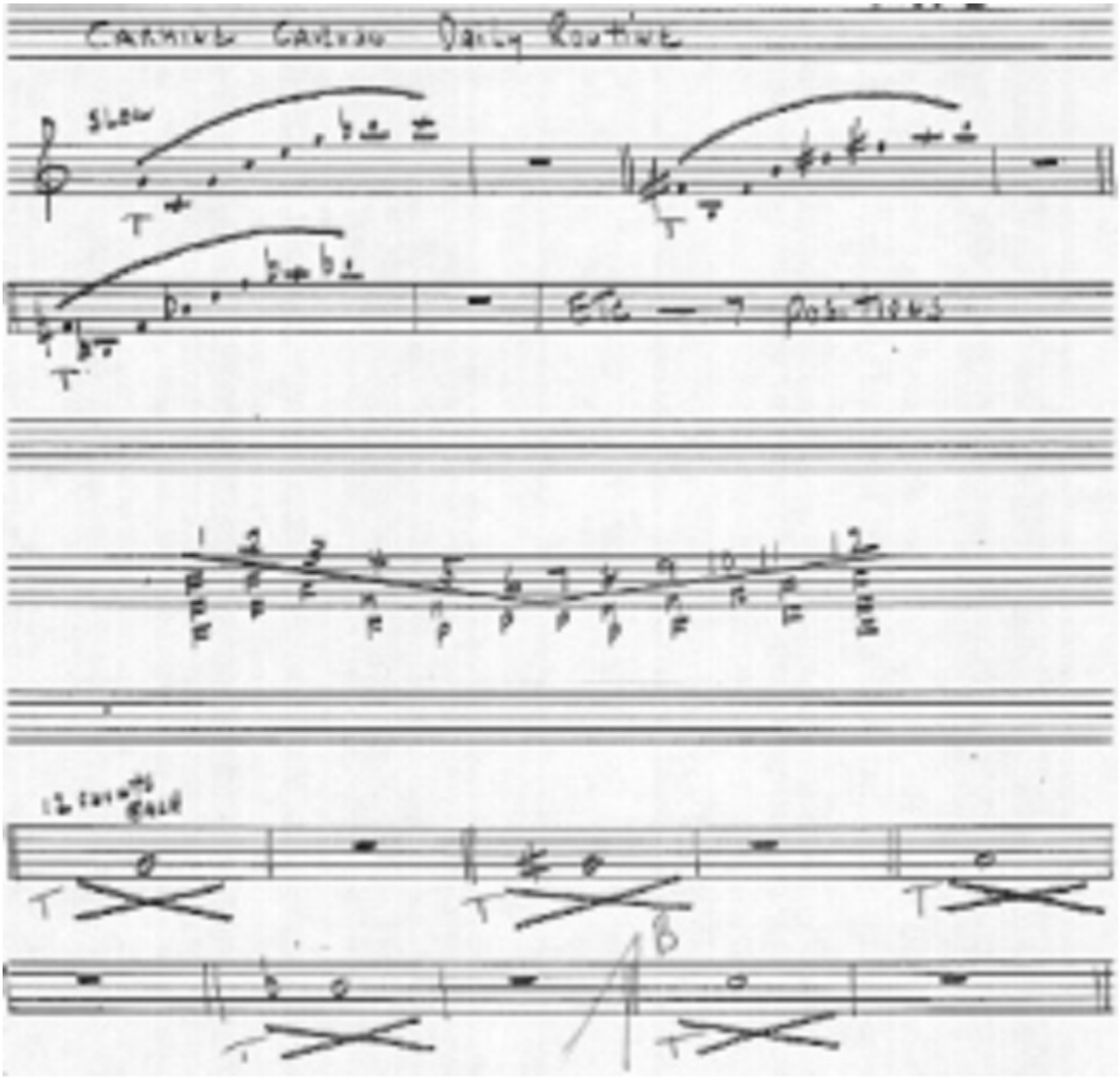
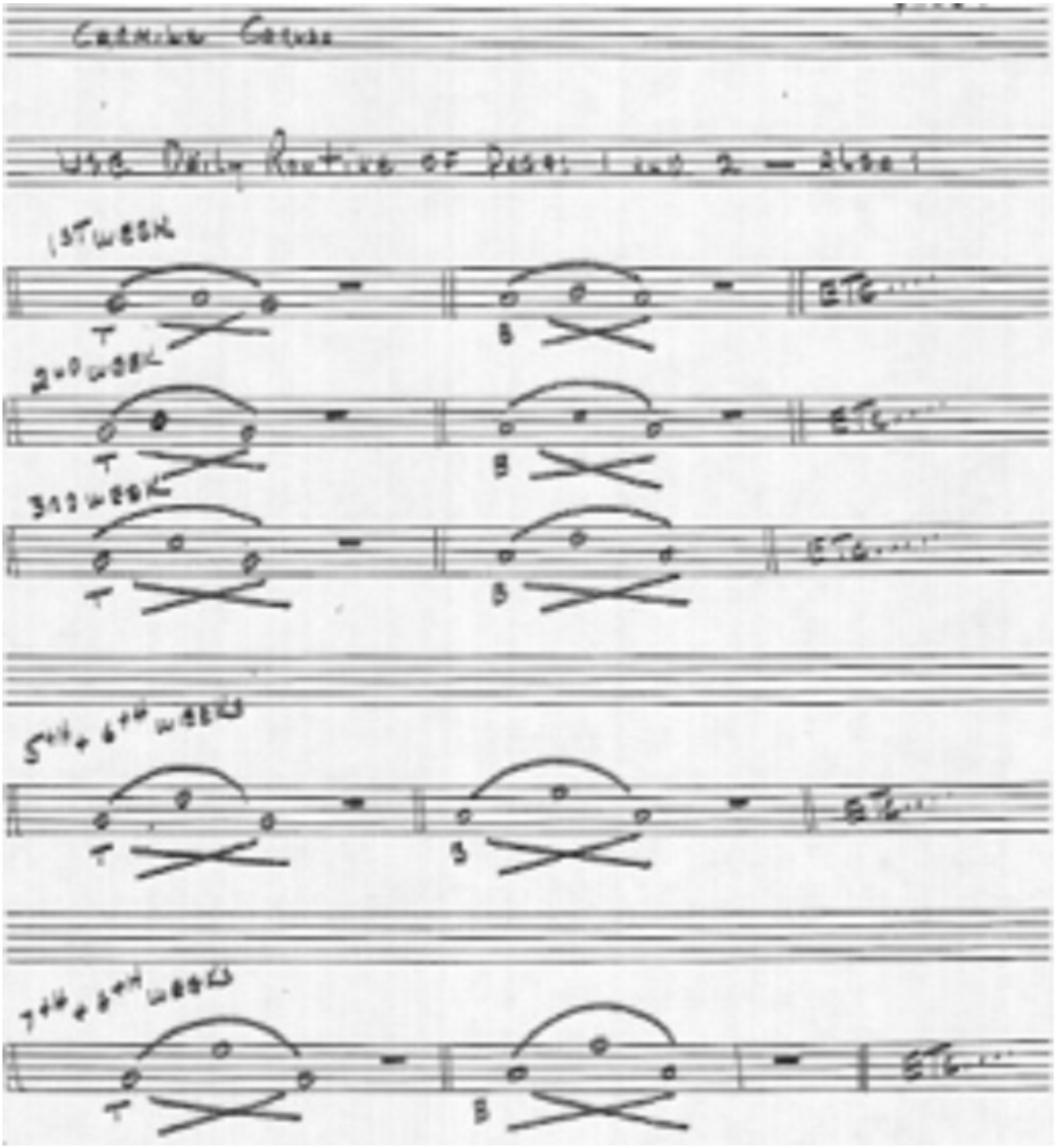

Carmine Caruso Daily Routine
slow



Getting More Out Of A Practice Session, by Mike Vax

Why Warm up?

We use many sets of muscles in playing a wind instrument and , like an athlete, we must warm those muscles up. In order to perform at our best, we must be ready for anything that comes along, both physically and mentally.

When we warm up, we are preparing our muscles and our mind to react properly to the physical changes that must happen in order to get a good sound, create flexibility, articulate notes properly, make use of the entire range of the instrument, and feel like we are really in control of the whole situation.

When we warm up properly, we have a much better chance to play more consistently. We will usually have ore endurance, more even sound all over the horn and we will also have a less chance of hurting ourselves while playing the horn, A warmed up embouchure has much less chance of becoming over fatigued, or worse yet, injured.

Warming Up Properly

To gain the best effects from a warm up, you must "cover all the bases". When everything is taken care of in a warm up period, then you will be truly ready to accept whatever challenges come up in any and all playing situations. There are five areas to cover in any warm up. You must at least touch on all these areas in order to get in a successful warm up. you must also use your head and really think about everything you do. Don't let mistakes happen, just because you are not concentrating enough.

Five Areas of Warming Up

1) Air/diaphragmatic area-keep the thought in your head of blowing through the horn, not just into it.

2) Chops (Embouchure)-flexibilities (lip slurs) and long tones

3) Tongue-Scales and Arpeggios

4) Fingers-Scales and Arpeggios

5) Brain (think about what you are doing-use it all the time)

Use of Mouthpiece for Warming Up

I carry a spare mouthpiece in my car, so that I can "buzz" on my way to a job, or just as a general course of action when I am driving. I do not "buzz" every day as a regular part of my warm up, but I really believe that it is far superior to no warm up at all! I know quite a few great trumpet players who do start every day on the mouthpiece for a few minutes before moving to the horn, if that works well for you, be sure to do it. You can actually do some of the same things on the mouthpiece that I have in my regular warm up for the horn.

Rest

If I am in a practice room for one hour, I will have probably played around 35-40 minutes or so and rest between each exercise played. The time that you rest is just as important as the time that you play. That time can be used to study what you have just played or what you are about to play, or to see if there is anything that you need to go back over and "take apart" to correct any mistakes, When you are through with one exercise, study the next on before you play it. Look at the key signature, time signature, tempo marking, and repeats, the phrasing, etc.-then play the exercise, You will build up your endurance much more this way than by trying to "kill" yourself for a straight hour or more and ending up with sore strained muscles.

Use Your Head

You must always think about what you are doing when you practice! It takes complete concentration! it takes getting "inside" the music you are working on.

1) Select parts that are giving you trouble and isolate them. I use a quote from mathematics here: "The lowest common denominator". This could even get down to one or two notes that are giving you trouble. go over and over these notes slowly until they are comfortable and speed them up gradually. (A metronome is of extreme importance when practicing like this.) then put the whole phrase back together.

2) Learn to realize when something has gone right and analyze what you just did that made the passage come out really well. Go back and try to re-create that same feeling and experience. Don't allow negative thoughts, such as "I can't play this part" to enter your mind.

3) As you practice, decide ahead of time if you are going to play all the way through without a stop, or if you are going to correct mistakes as they happen. You must practice both ways to get the most out of your time spent. Closer to performance time you must be able to play all the way through a piece without stopping, even if a mistake happens, By practicing through any errors or "cracks" (while maintaining concentration) you will be preparing of anything that might happen in a performance situation.

Slow, Slower, Slowest

the most successful musicians are the ones who have finally realized that slow practice is the best way to become a great performer. If you practice too fast, you just learn mistakes, this can be very frustrating in the long run. remember that our brains work just like a computer. if you feed it wrong information, it will output the same wrong information until corrected.

Use That Air!

A wind instrument will not work effectively without the proper use of air! (That could be why they are called wind instruments.) whether you are trying to play higher, lower, louder, softer, faster, slower, etc.- you must always support your sound properly.

The Three C's

1) Confidence- the faith in ourselves to know that we can play anything that is put in front of us. This doesn't necessarily mean that we can sight read everything, but with the proper amount of practice we can achieve our goal of playing anything that we must for any performance!

2) Control- the ability to play all over the horn with a good sound. This takes lots of air, as well as flexibility and long tone practice.

3) Consistence- the ability to play all over the horn with a good sound and good articulation. This takes lots of air, built up by the practice of scales, arpeggios, technical studies and etudes.

Daily Practice is a Must

If you want to become really proficient on a musical instrument, you must practice at least a short amount of time as many days out of the year as you possibly can. You may not be able to get in the same number of minutes or hours every day and that is fine, but don't put off practicing until tomorrow just because you don't have a full hour or two. A half hour is better than nothing.

Try to set a realistic goal for the amount of time you would like to practice every day. Figure out what is a reasonable amount of time for your schedule and try to stick to it every day. Plan your practice schedule week by week. Sit down on Sunday and plan a practice time for every day that week. (It doesn't have to be the same time each day.) Then stick to that plan just the same as if it were a class or a job. Probably the minimum amount of time for a serious student to give to the horn is at least one hour a day (not including warm up time). If you really want to be a first chair and an all state player, it should be closer to two hours a day.

Do Some Sight Reading Every Day

Sight reading, like everything also, takes practice! You can read exercises, school pieces, solos, jazz tunes out of a fake book or anything you can get your hands on. Drum rhythm books are very good to use (just pick a single pitch to play and read the rhythms). The more rhythmic patterns that one can recognize at sight, the better the sight reading will be. Actually, many good sight readers are really "rereading" figures. They have seen these figures many times before and these people recognize the figures each time they come up in a new piece. Knowing musical theory will also help your sight reading. if you can recognize chords and scales within the context of what you are playing. you'll have to do less "note by note" reading. You'll also be able to better coordinate your ears with eyes. brain and fingers. Another useful idea is to be able to read ahead of what you are playing at the moment. This takes real practice, but again, many great sight readers are able to do this. Start this type of practice by reading very easy pieces or etudes and just keep your eye one measure ahead of what you are playing.

The End Result to Work for is a Musical Performance

Becoming a real musician goes way beyond just being a good player. The true musician strives for complete understanding of the music. as well as real communication with the other musicians and the audience. Everything must be seen and played in the music: dynamics, articulations, phrasing. etc. The notes are just the beginning! The music must also be interpreted so that it is stylistically correct, played with conviction. phrased properly and performed with emotion. True musicians really put themselves into the feeling and spirit of their performance.