# Trumpet Players Guide

Copyright 2004 www. BbTrumpet.com Clint 'Pops' McLaughlin Trumpet Player's Guide: By: Clint 'Pops' McLaughlin http://www.BbTrumpet.com pops@BbTrumpet.com

This section was the brain child of my friends in Norway, Rune Aleksandersen and Ole J. Utnes. They requested a guide for comeback players. And I let them post this on the net.

### Embouchure:

The lips need to be moist, or the air stream will separate them and there will be no sound. This moisture causes surface tension, which facilitates the buzzing process. The air blows through the lip aperture.

The higher or softer that you play the smaller the lip aperture is. The lower or louder that you play, the larger the lip aperture will be. High notes need a lot of lip compression and abdominal pressure, not mouthpiece pressure.

Lip compression is something all teachers make mention of. Their advice is, tighten up to play high. They don't tell you that this compression is lip against lip, like when you squeeze your thumb and forefinger together to grab something. It's this lip pressure that you need to fight the air stream and soar into the sky.

Excessive mouthpiece pressure against the lips will separate your lips by pushing them apart. This lowers your range and causes a poor, thin tone, sluggish technique and less endurance.

Points to remember:

- **1**. Good posture. Chest, arms and head up.
- 2. Relax jaw and open throat.
- 3. Teeth 1/2 inch apart. Jaw forward.
- 4. Pull the mouth corners in toward your lips.

- 5. Roll both lips in slightly. You want a hint of an inward curl.
- 6. Let the lips touch and expose to air. Say "M".
- 7. Buzzing firmness before placing mouthpiece.
- 8. Place mouthpiece gently on lips.
- 9. Little mouthpiece pressure.
- **10**. Breathe and blow. Don't hold it in.
- **11**. Pivot to keep mouthpiece lined up with air stream.

**12**. Lip compression will give you upper register. Lip against lip.

**13**. Relax the chops. Back off the pressure and make the air work.

14. Always set for a g on top of the staff. The lips can easily relax 2 octaves to get to low g and high g is only an octave away.

**15**. Always set chops, place mouthpiece, blow.

Problems:

Nine times out of ten if your upper register does not speak it is because your lips are too tense. Most people do not play in the upper register because they depend on their mouth corners and mouthpiece pressure to create tension.

All we want is to resist the air by rolling the lips in (slightly). This can not be seen nor is it like a sax or clarinet embouchure. We create a one way valve. Only in this case we are blowing the air against the valve the wrong way. This causes a great deal of resistance with a very little tension.

Therefore a double c is now played with high c tension and a lip curl in.

**1**. Take two pieces of paper hold them so that the top piece and the bottom piece touch but do not overlap. Now blow see how the paper does nothing to resist the air. We need to make the paper (lips) strong enough to resist the air.

2. Take the same two pieces of paper and let the top overlap the bottom. Now blow. Again they offer no resistance. If we put the mouthpiece in front then mouthpiece pressure WILL create resistance.

3. Take the pieces and put them together so that they both curl out away from you. Now blow. Again there is no resistance. We will put the mouthpiece in the way to let mouthpiece pressure create resistance.

4. Take the paper and put them together so that they curl in toward you. Now blow. There IS now built in resistance. It needs no mouthpiece pressure, or years and years of lip ups to build a mass of muscle. The air does the work for you.

Relax and make the air work for you. If your sound is thin and weak you are using too much pressure. To get a brighter sound roll your lips in, or direct the air stream behind your upper teeth.

To get a darker sound, roll your lips out, direct the air stream down, or make a more oval lip aperture by drawing the corners in slightly.

Too flat a lip aperture will produce a bright, hard sound. You will not be able to play softly and will have air in your tone. No matter what embouchure you play, make the air do the work, relax your chops, back off the pressure and use the right equipment for the job.

If you need a dark sound, you need a deep cup and wide bell flare.

Don't forget to set your chops for the g on top of the staff every time you play. This prevents lots of problems from ever forming. Plus it makes leaps and range overall easier.

Remember you will need to play more low A's and G's in public than high A's or G's. Practice your low register and make it sound good.

Mouthpiece placement:

This question gets asked over and over. And although it seems like an important one; it is basic common sense that answers it.

Place the mouthpiece in the center of your lips. Use 50% top lip and 50% bottom lip. Now if it feels better to you a little off to one side of center that's fine. If it feels better to use a little more top or bottom lip that is also fine. However you want moderation as far as mouthpiece placement goes.

This goes for the distribution of mouthpiece pressure as well; it should be 50-50.

Grip used to help break the habit of too much mouthpiece pressure. Grabbing the bottom of the valve casing helps (more mental than physical) to transfer some horn weight to the lower lip.

Stevens would have a player put his horn into playing position and then move it away from the lips until they separated from the mouthpiece. Then he would have you lock the elbows in place. To play you had to push your face into the horn instead of the other way around.

Well you will not push as hard this way (mental). In fact you can't push as hard this way. This is one way to break the problem with pressure.

Pressure causes lip separation, swelling..... Besides it holds the notes in. A player can be more responsive if using a (relaxed) setup.

Air usage:

The diaphragm is called an involuntary muscle. It works without us thinking about it. It works when we are asleep. It can MAKE us sneeze or cough.

We can however, exert some control over it. We CAN hold our breath, take a breath when we want, take a short gasp or a long deep breath. In as much as trumpet playing IS AIR and breath control then working on this major source of our breath is vital.

There are several Yoga exercises that are excellent as is timed breathing while walking or jogging.

The airway must always be open both in inhaling and in playing. One problem is posture. I've seen many experienced players slumped over while jamming. I've seen them with their heads down and their arms against their ribcage. If we give this its proper importance then we see that these things WILL lead to a closed throat, shallow breaths and poor support.

If the jaw is pushed forward slightly this will cause the throat opening to be larger than it normally is. Try it. Move the jaw forward slowly and check if you can feel your throat open up. Think of the affect that can have on your tone. The more forward jaw position will also make your lower lip take on more of the workload. This increases endurance (after you get used to it). Notice that I said more forward. Stevens demanded an even tooth alignment. I advocate moving it until the throat opens. This will be different for every player.

Another key feature in maintaining an open airway is a pivot. You could write hundreds of pages about this. But that's already been done. In a nutshell by raising or lowering the bell of your horn while you are playing you can maintain a more open airway and clearer tone. As you play higher and lower notes the air stream will slightly move in the mouthpiece.

If we can keep it lined up with the throat hole the sound is better. The SLIGHT bell movement will produce an opposite movement or realignment of our lips to the mouthpiece. Now which way do you move the bell?

Try this test. Play a low g 1-3. Move the bell up then move it down. One way should improve the sound. When you move to a lower note from now on always pivot this direction. The opposite direction will aid the upper notes. This is a good movement whenever you have to leap between notes.

The tongue arch has been used for years in order to play higher notes. Most people arch to the point where the sound quality is affected. Instead of arching up to eeee try aaaaa.

This is a more open sound yet it still compresses the air slightly. After all the tongue arch cannot give you an extra octave. It is merely used for rapid note movement. The abdominals compress the air for your range. As for the tongue arch using a long aaaaaa sound instead of an eee gives a more open mouth position and therefore a fuller sound. If you are playing 3 octaves over high r# then you use whatever is needed to stay there.

As for a specific vowel for below middle c, middle c to Eb... that is not strictly the case. All lip trills, slurs and leaps are accomplished in part by using a tongue arch. If you have maxed out your tongue motion at Bb below high c how do you plan to continue going up? The tongue arch is like an elevator it should help you to compress and thereby speed up the air to achieve higher notes. Surely if you did practice out of the Irons book this was apparent. So you start out on the low c to second line g and lip slur back and forth. Both of these notes are below middle c yet a tongue arch is useful in speeding up the exercise.

Likewise if you are playing a high g and want to slur up if you are already in the extreme eeee position where do you go? My suggestion is to attempt to substitute a long aaaa when possible and save the extremes for a reserve.

Have you ever had to play 1 note by itself to fill out a chord in a song? What about 3 or 4 measure phrases?

These do not require as much air as a full 8 measure phrase. At the end of a very short phrase an inexperienced brass player will feel a need to exhale before he or she can take a breath. If this over breathing continues for any length of time the player will sometimes turn red or gasp for air. No you didn't run out of air for playing however, your body really likes to have oxygen in your lungs. What has happened is you took a full breath and used less than half. Now when you take a full breath you only replace half of the stale oxygen deprived air in your lungs.

As this continues you end up gasping for air. Does this sound familiar?

Over breathing really is a kind of self suffocation (in the extreme). The exception was taken for high notes. Well here WE may be using different standards. Some people consider g on the staff to be high while others are referring to an octave or so over that. In this extreme upper register over breathing becomes more apparent. Have you seen people get dizzy, lightheaded, or blackout? They were over breathing. I know some people say if you release the pressure really slowly it will not happen.

If you did not over breathe and have so much leftover air under pressure it would not happen either. Timed breathing is another aspect of playing. Some people always take a deep full breath. When playing in the upper register this creates tension. The upper register takes air compression and speed but not air mass. The low notes need the full breaths. Try a half or quarter breath before you play your next high g. This will allow your muscles to do their job.

Practice:

ALL trumpet students ask the question. "What should I practice?"

**1**. You should practice what you can NOT play. After all; practice is for improvement.

2. Play legato songs. Everybody can play a March style. The song style is what makes the trumpet a musical instrument.

3. Light, soft, smooth and connected tonguing; being as close to slurring as possible. If we work on the hard stuff then the easy things take care of themselves.

4. Sight reading. Nobody likes it but you can't play without that skill.

5. Transpose for c trumpet. Play out of the church Hymn book.

As far as method books go the Arban, Clarke Technical Studies and Williams are a great start.

<<<< The Max Schlossberg Daily Drills will give you a good workout as well. To go through it do 1 exercise and skip 9. Go from cover to cover.

Play exercises # 1, 11, 21, 31, 41... to the end. The next day play 2, 12, 22, 32, 42..... The book is played through 3 x times a month that way and everything is covered. >>>>

### Mouthpieces:

Although there are a lot of great mouthpiece companies out there I suggest Schilke. The mpcs are arranged by size and that makes it easier in case you want to change the size or cup depth.

I would say start with a Schilke 14. It should cost you \$ 30 in mail order.

When to change mouthpieces is dictated by the sound and by flexibility. If you have trouble going from low d to low g as a lip slur then you might need more cup to let more lip vibrate.

You want to increase in steps so that you don't overshoot where you need to be. That would have an adverse affect on endurance and range.

As for playing more than one mouthpiece; the easiest way is to always use the same rim and cup diameter. Even then you need to practice on each mouthpiece that you intend to play. If you change the rim or diameter then you need 4 or 5 times as much extra practice as you would if you didn't change the rim.

There are several reasons why you might choose to play more than 1 cup depth / shape / backbore. These have to do with making playing easier. With the proper practice you can learn to change your tone color.

This change can be done by slightly rolling out your lips or making your lip aperture more rounded or even by adjusting your air column (resonance freq.).

If you need more immediate results a deeper cup or even one with some v shape will help.

Mouthpieces come in sizes like shoes do. Lips come in different sizes as well. Besides lip size the strength of the embouchure also comes into play. Professionals play mouthpieces of ALL sizes.

Jake used to say that if your mouthpiece had a hole at each end, air could blow through and you sounded good then FORGET IT.

AS Jake said "Mouthpieces big fat deal."

Trumpets:

When you start back some of you will still have your old horn and some will pick up one at a yard sale. This is fine. For quite some time the horn will not matter; as long as there are no valve problems. Although at some point you may start looking at other trumpets.

No design will make you play any better. Jake played a Conn and WOW.

No design will make you play higher. Maynard played a Conn 38B and now a Holton. They are very unlike each other in internal design.

Years ago Conn came out with a heavier than normal horn. Lots of people jumped on the band wagon.

Then Schilke started making lighter than normal horns. They even went with very thin walled bells. People jumped on the band wagon. Bach, Holton, Yamaha etc made light weight horns.

Then Monette made a heavy horn. Then they made an even heavier horn. People jumped on the band wagon. Courtois, Taylor etc are making very heavy trumpets ala Monette. Now Monette has started making lighter horns.

What is the big deal about horn weight? Well

A lighter weight horn will respond to the buzz faster. It even takes less of an impulse to create the sound. This leads to a horn that will change registers faster than a normal weight horn.

The lightweight horn vibrates more and loses some of the energy before it exits the bell.

The heavy weight horn is less prone to vibrate and lose energy. It does however tend to be less flexible than a light weight model. (All we are talking about is weight.)

The lead pipe can be adjusted as can the bell to affect carrying power or response. The energy loss is most noticeable at the front third of the lead pipe. This loss is less and less as it goes through the instrument. As for a darker or bigger sound the bell is responsible for most of this aspect of the horn.

If we had a lightweight body, a very thick and heavy receiver, and a thick soft bell (copper) then most of these problems would not exist. It would not lose much energy, it would be responsive and it would have a full dark sound.

Then we could let the lead pipe design and bell design, complement the horn rather than NEED them to over come a problem.

Horn elements:

- **1**. Schilke adjusted tapers to affect intonation.)
- 2. Bell tapers offered by: Bach 6 tapers Blackburn (changes daily) Calicchio 4 tapers Lawler 8 Schilke 3
- 3. Weights: lightweight, normal, heavy horns and the Monette.
- 4. Bells they use 3 grades of brass, bronze, copper and sterling silver.

5. Lead pipe tapers:
8 for Bach
7 for Blackburn
10 for Calicchio
An adjustable gap receiver for Max

6. How about bore sizes? 438, Constant taper .445, .450, .453, dual .453-.459, .459, .460, .462, .463, .464, .465, .468, .469, .470, constant taper.470, .472 these are all used on Pro model horns.

The sound is also affected by the diameter of the bell as compared to the wavelength of the pitch. This affects the dispersion of the wave. Every internal gap, solder joint, has an affect.

**Physical needs:** 

There are a few basics that may help in this decision. A player that creates his or her own resistance by using the Stevens Embouchure, Super Chops or a variation like the Costello, or Screamin needs a horn that is free blowing in order to fully take advantage of the embouchure.

Players that use the Farkas tend to do better if their horn or mouthpiece creates some resistance for them. Remember that the mouthpiece also has the ability to create resistance through a small throat bore size or a tight backbore.

All in all the choice of what horn is for you depends on your build, embouchure, musical needs, taste in sound and nobody can tell you what is best for you. You owe it to your self to play everything.

As for quality trumpet makes I can recommend:

Calicchio (Is being bought by John Duda in Tulsa, OK. He worked with Dom years ago.)

Callet (Made by Kanstul)

Kanstul (A quality horn for less money than custom horns. Discounts available on this line.)

Schilke (Is being bought by another maker I hope they keep the quality.)

Wild Thing by Flip Oakes. This is what I play. http://www.flipoakes.com

These instruments are the BEST never any problems or rejects. Other companies have had some quality control problems and I can't recommend them.

## Tonguing:

There are 3 types of triple tonguing. The TTK in the Arban book, TKT,KTK (alternating) in the James Burke "New Directions in Tonguing" book and the rolling Ta-Da-Ga taught in Jacoby's book "Jake's Method".

TTK - TTK, TKT-KTK, & Ta Da Ga are different concepts of tongue usage. These are 3 prevalent triple tonguing concepts.

Whereas changing Tu-Tu-Ku into Ta-Ta-Ka, or Da-Da-Ga, or Di-Di-Gi is merely using different syllables. These 4 examples all fall under the Arban TTK.

For the Burke double-triple they would be (Tu-Ku-Tu—Ku-Tu-Ku), (Ta-Ka-Ta—Ka-Ta-Ka), (Da-Ga-Da—Ga-Da-Ga) and (Di-Gi-Di—Gi-Di-Gi).

These represent lighter syllables and are quicker to use. The shorter the tongue has to move the faster the tonguing can be. I wrote them in order from heaviest - slowest to lightest - quickest.

The stroke involving the forward part of the tongue is Tu, Ta, Ti, Da and Di. The stroke that involves the middle of the tongue is Ku, Ka, Ki, Ga and Gi.

The rolling tongue needs to be Ta Da Ga - Ta Da Ga or Ti Di Gi.

So while there are 3 concepts there are alternate syllables to adjust for style of sound or speed.

The alternate syllables work on double tonguing as well Tu-Ku, Ta-Ka, Da-Ga or Di-Gi.

The same set of syllables is useful in single tonguing also. Tu, Ta, Ti, Da and Di. The Ta and Da are the most useful.

To work on speeding up tonguing skills use softer syllables like ta, da or di. Also work with a metronome. Start at 1/16 notes @ 1/4 = 60 beats per minute. Every 15 - 20 seconds speed up 10 beats per minute. Make a note of the problem speeds and work on these. Do this with single, double and triple tonguing.

Tone:

How do I get that full tone? Well there are 5 factors involved in that.

**1**. The most important factor is AIR. The trumpet is a wind instrument. The effortless intake of a great deal of air is the start. The effortless delivery of that air is the second half. Air is 70 - 90 % of the tone.

2. An Alert mind is vital in order to always be on. That is always be in charge of what comes out. Never go through the motions. That is not only a waste of time, but it is also an insult to the artists and craftsmen who laid the groundwork for us to play quality instruments and beautiful music.

Always be on.

3. Your ears are the next in importance. Not just hearing your own sound but also the sound of GREAT PLAYERS. We have to know what a great sound is to ever hope to get one.

4. A close aperture embouchure is vital to prevent that 5th grader airy sound from being our sound. Your lips should be touching. If the tone is a little bright draw the mouth corners in toward the center of your mouth. This will make an oval aperture and a pleasant sound.

5. Practice. Play everything with feeling and emotion. If scales are played right they can bring tears to your eyes. If they are played poorly they will bring tears to your eyes. ;-)

# Endurance:

The ability to play with a full tone and powerful range for hours is a great asset for any trumpet player. To do this we must go to the basics.

1. Air and economy of abdominal pressure.

2. Close embouchure setting. Set for a g on top of the staff always.

3. Learning to use a lip cushion by pushing the entire embouchure forward toward the mouthpiece.

4. Backing off of the mouthpiece to lip pressure. The lips are to resist the air not the mouthpiece.

5. Playing 3-5 times a day. With each practice session lasting from 20-40 minutes of REAL work. Non stop work.

6. Patience

Range:

Every aspect of playing that is important in the lower and middle register is also important above the staff. i.e. tone, phrasing, smooth slurs, clean tonguing.

We learn these by playing music like the Concone studies.

Well if you want those same skills in the upper register then play music in the upper register. A month of playing those same Concone studies an octave up will do more for your playing than a year of arpeggios, scales, pushups or anything else. Yes it is HARD to do. It is NOT fun and since you will not perfect it in a day or two then you don't get that "Feeling good about yourself as you hit your first squeaky high r."

The arpeggio approach builds muscle but not control, not tone, no tonguing skills; it stiffens and causes a loss of flexibility. But it does make you "FEEL good" after all you can see that you moved a note. The arpeggio / scale exercises are all gross muscle building. These will help you to pound out a high note at the end of a chart but they will not help you to play musically up there. They were designed to take you to a certain point and no further. Even the names imply their goals Stevens Costello triple high c. double high c in 10 minutes. Double high c in 27 weeks. They shoot for the student to be able to \_\_\_\_\_\_ hit \_\_\_\_\_ a certain note.

My goal is for you to play it.

Let's look at how most people develop their range. From low c to g on the staff they played scales, etudes, SONGS, etc.

From high c to double c they played arpeggios holding the top note.

So the lower register was developed by making music and it IS musical. While the upper register was 'developed' by making noise and it is NOT musical. I hope that my point is clear. Arpeggios, scales and slurs are only for power. To make music you must play music.

Let me expand on playing musically in the upper register. I've known players who developed range by arpeggios only. It works to a point. They worked on it as weight training. (Every other day.) The problem was that they increased the stiffness in their lips to a point where they lost flexibility. This approach also easily leads to requiring an embouchure shift. Think about it as you play your 1 octave arpeggio or even a scale the starting note gets higher and higher. You take a breath and play the next series. You take another breath.... There is an almost overwhelming desire to make subtle changes on each breath. Here is a test. Start on high c and play an arpeggio up then play it down to low c.

Was it slow to respond or of a poor tone quality? Then you are playing with an embouchure shift. There are some ways to avoid this.

Always set your chops for a g on top of the staff. It is only an octave to high g and only an octave and a half to low c.

When you do practice arpeggios or scales up for range always play them back down to low c or below on the same breath. This will help you to learn to play all registers with one embouchure.

The reason to play simple songs one or two octaves up is to learn to play musically. Even if it is Mary had a little lamb there IS phrasing. Take a group of melodies that you already have i.e. Concone (legato or the lyrical Studies), Hering 32 etudes, old H.S or Jr. High solos, all-region music, Beethoven transcriptions.

Play each exercise 2 times the first time as written and the second time 8va. I used all of these plus The Lazarus Method for Clarinet.

Hey clarinet parts move around and if you practice this stuff no lead book will ever throw you.

So you say that you have tried all of this yet still the notes don't come out.

Then you are not letting the sound out. There are several ways that this can happen.

Too much lip compression will roll the lips in so far that the air can NOT come out.

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Too much pressure on your top lip can pin it and again hold in the sound.

Finally Too much lip curl will prevent the notes from coming out.

The difference in embouchure set between low c and second line g is almost none. After all it is only a fifth.

So why do people make faces and strain when going from high c to high g. It too is only a fifth. Very little difference in embouchure setup just more airspeed.

< As Jake used to ask all of his students.> "Where's your head?"

I hope that WE can always answer. "Right where it ought to be."

Meaning 100% applied to making music every time we touch the trumpet. Always On.

Good luck.

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