

Thoughts on Tuba by Barton Cummings

In 1959, a very astute and wise gentleman by the name of Edward Keeley handed me a silver-plated, top action, three valved, upright bell Eb Tuba made by Pan American. This is when I began my study of the tuba. Since that time, I have been able to enjoy an exciting and varied career which has taken me from a small New Hampshire town to what has amounted to a World Tour as a tuba player. I want to share some of what I have learned throughout those years concerning the tuba and its family. There are some very distinct differences in the instruments that comprise the tuba family and I would like to address the various members of this esteemed and noble family.

The question of what tuba is best: *BBb*, *CC*, *Eb*, *F*, or maybe a *Sousaphone*, was one that arose on numerous occasions at clinics and master classes. The answer is not as complicated as it might at first seem. For those who are professional tubists or preparing for that career, the choices are rather easy to make. For those who are going to play for fun and recreation or are teaching or preparing to become music educators, the answer is not quite so easy.

THE TUBA FAMILY: comprised of the following members, this group of instruments are sometimes referred to as *Basses*, *Bombardon*, and *Tubas*. Sometime, we may discuss the proper name for them, but for now, it is more important to learn the differences and similarities between them.

TUBA IN BBb: This is the most popular tuba in use today. To be sure, many tubists do use the *CC* and one might be hard pressed to choose which is the more popular, but common sense dictates that with the number of elementary and secondary school music programs, the Tuba in *BBb* is the clear winner. This tuba comes in a variety of bore sizes, valve number and configuration and is suitable for practically any musical situation.

TUBA IN CC: For many years this tuba was the province of the advanced students and professional performer. Gradually, it has become nearly as popular as the *BBb*, although it is not found in most music education programs at the elementary and intermediate levels. It is suitable for most any musical situation. It is built in numerous bore sizes, valve numbers and shapes.

TUBA IN Eb: This model tuba has enjoyed a tremendous surge in popularity and is now found almost as often as its cousin, the Tuba in *F*. It is an instrument that is suitable for solo performing, chamber music and in many orchestral and band situations. It too comes in a variety of sizes and valve combinations.

TUBA IN F: Used primarily by advanced college students and professionals, this tuba is very popular amongst soloists and orchestral musicians. Because it has a smallest center of sound it is not often found in bands. To be useful, this tuba must have at least five valves and more often, is found with six.

TUBA IN C: This is commonly called the "French" Tuba, and is an instrument that is in the key of *C* and has a range an octave higher than the *CC*. It is an instrument that very few tubists use outside of France, where it is being slowly replaced by the large tubas. It is used, on rare occasions by tubists to play certain parts such as *Bydlo* and some of the *Berlioz* tuba parts.

SOUSAPHONE: This was, for years and years, the primary bass brass voice found in schools and bands, including the bands of Sousa, Pryor, Conway and others. Many well known players would perform solos on this instrument. It was built in both Eb and BBb and had three or four valves depending on the manufacturer. Today, it is built in BBb, although some manufacturers offer Sousaphones keyed in Eb and in Europe, CC. There are even Sousaphones built with rotary valves. This instrument is made in both metal models and is constructed from fiberglass with certain parts of the instrument made out of metal. If possible, I recommend that one stay with the metal instrument rather than the fiberglass one.

CONVERTIBLE TUBA: This is an instrument that has become popular with school bands because it attempts to solve two problems by providing an instrument that is useful in both concert and marching situations. Unfortunately, this is not an instrument that I can recommend because it has numerous problems such as leaks around the in and out tubing where the mouthpiece fits. This instrument requires two different mouthpiece entrances. If you are a music educator in dire financial straits, this may be an alternative, but be very careful in choosing the particular model you purchase. It would be far more prudent and economically sound to purchase a fine Sousaphone. The next question that is often asked concerns the number of valves needed on the tuba. Most all teachers and players now agree that the minimum number of valves for any tuba is four. However, the expense of a four valved tuba may preclude its use by the youngest elementary students and in this case, three will be the obvious number.

FINISHES: Tubas are plated in four types of finishes and it is an important consideration when purchasing an instrument. In general, it is best to purchase a tuba that is plated in a **Clear Lacquer**. This finish is more durable and longer lasting than others and is a brilliant gold in appearance. To be sure, it is certainly acceptable to buy a tuba plated in **Sliver Plate, Gold Plate** or just a raw **Polished Brass**. However, it must be remembered that when any finish is polished a certain amount of plating is removed and that eventually this loss of finish will require the replating of the instrument. This loss of plating is more pronounced in the silver and gold plated instruments.

VALVES: Brass instruments have two types of valves available. **Piston valves** operate just as one would expect. They go down and up by means of a spring. **Rotary valves** rotate from left to right and are now the most popular valve type found on tubas. Neither type has advantages or disadvantages over the other. It is a personal choice to be made by the player. The placement of the valves may present some concern amongst players. In general, most players prefer the front action style, although depending on the manufacturer, some tubists will find themselves using the top action. Neither system is preferable over the other, although there are those who believe that the piston valve is more fussy and requires more care because it is not enclosed in the same way as the rotary valve.

BELL: Tubas offer three choices in bell design. One can choose a **fixed upright bell**, a **removable upright bell**, or a **removable bell forward**, commonly called the "*recording*" bell because it was the choice of early tubists who were working in recording studios and need a more focused and directional sound. For those who choose one of the removable bell models, it is easy to see that one could have access to two different bells. It is generally believed that the upright bell instrument gives a warmer and more pleasing quality of sound. Again, it is a matter of personal choice and the type of playing one will be doing.

BORE: Bore size is of concern, especially to the younger players. It is not unusual for youngsters to begin their study of the tuba as early as the fourth or fifth grade. It is obvious, that at this age, a youngster is not going to be as physically able to negotiate the larger models of instruments and therefore a smaller, more accessible instrument will be preferred. For the intermediate and older

individual, a medium to medium-large bore will be preferred. It should be mentioned that tubas are **conical** bore instruments as opposed to **cylindrical** bore instruments such as the trumpet.

MOUTHPIECE: They are such a controversial area, that I will only say that Bill Bell had the philosophy that the mouthpiece that came with an instrument was good enough. This may or may not be true, but it is a good place to start, especially for beginning students. For more advanced student and professionals, it will be a matter of pick and choose, trial and error and the recommendations of teachers and colleagues. There are some terms you should know about mouthpieces that will help you make a good choice.

- **Cup Volume:** Simply stated, this is the inside of the mouthpiece. You can have a small or large or somewhere in between measurement. In between is the best choice because a small cup volume will produce thin and weak notes, while one that is too large will cause the sound to be muddy and unclear.
- **Rim - Outer and Inner:** It is important that the *outer rim* not be too thin or too thick and the *inner rim* should be a compromise between rounded and sharp.
- **Throat:** We are speaking of the whole or entrance at the bottom of the cup. The deal, if one exists, is an entrance that is round and graduated.
- **Shank:** This is the long part of the mouthpiece that fits into the *mouthpiece receiver*. It is important to make sure that this part fits properly into the mouthpiece receiver to avoid intonation and response problems.

general, the mouthpiece should be one that feels comfortable on the embouchure and one that allows for quick, easy response and allows the player to negotiate all of the musical requirements necessary.

My recommendation for the measurements of an excellent mouthpiece are:

- **Cup Diameter:** 1-9/32"
- **Cup Depth:** Medium to Medium-Deep
- **Rim Shape:** Fairly wide and rounded

MUTING THE TUBA: While not all tubists will need a mute, those who do need to know that there have been great improvements in mute design and types available. It must be remembered that muting as such is not done to soften the sound or dampen the sound. Muting is a special effect that is done to change the timbre or color of the sound. True, there are mutes such as the ***Whisper/Whispa*** kind that in fact is a mute that allows one to warm-up and practice without creating a disturbance to those in close proximity. When choosing a mute, it is a wise move to pay close attention to the intonation differences and response differences as they may be significantly altered.

PURCHASING A TUBA: This is an area which can present certain difficulties. For the first time buyer, it is wise to call upon the services and advice of a professional artist/teacher, should one be available. If not, then perhaps there is a college or university nearby where one could check with the brass teacher or band/orchestra conductor. If none of the above is possible, one must rely on the advice of their local music dealer. This is risky, because like all retailers, music dealers receive "specials" from manufacturers to promote certain models. In some cases, this is fine, in

others, it is not because there may be problems inherent in these particular models, thus making them poor choices for purchase.

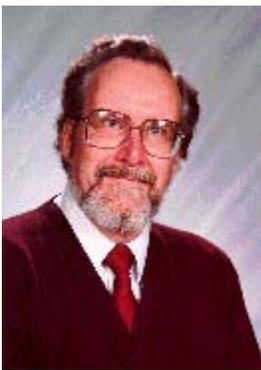
Regardless, there are protective measures that can be taken to alleviate some of the burden of making choices. The following checklist is provided to assist buyers.

1. Can the tuba be picked up and held comfortably with both feet flat on the floor and the head, arms and hands held in the correct position? Can the valves, movable slides, and water keys be reached and negotiated while holding the tuba?
2. Are the in and out tubes tight? When air is blown through the tuba, are there any sounds indicating leaks?
3. Are the valves free in movement? Are they noisy and loose? They should be quiet and tight. Are the valve casings adequate?
4. Are there any blemishes, discolorations, nicks and/or scratches or unplated sections in the finish?
5. Are the bracings, connectors and water keys securely fastened? Are they correctly placed and do they provide adequate protection for slides and other tubing?
6. Is the key of the instrument correct?
7. Are the open tones in tune and are there any noticeable intonation problems?
8. Does the instrument price include a case? This is important as tuba cases are very costly.
9. A stock mouthpiece should be included with the tuba. If it is not with the tuba, request one.
10. Ask the dealer if there are any complimentary items such as valve oil, polishing cloth, mouthpiece brush and so forth included with the purchase. Most dealers are willing to provide these items as a matter of courtesy.

Above all, it is best to proceed slowly and take time to make this decision. Do not accept the first tuba you try. With the cost of tubas these days, one cannot afford to make a poor decision.

I hope those of you who have read this very brief article have found it interesting and helpful. At a future time, I hope to address other aspects of tuba playing and teaching. If you are interested in more detailed information on the tuba, check out my book, **TIPS TO THE TUBA** (published by Cimarron Music & Productions) and **THE CONTEMPORARY TUBA**. For those interested in the tuba, check out **THE TUBA SOURCE BOOK** (published by Indiana University Press). While not a "method" book, it is certainly the most comprehensive source of information on the tuba ever written.

BARTON CUMMINGS



Barton Cummings enjoys a distinguished international musical career. Recognized as an author, composer, conductor, educator, and performing artist, he has pursued these activities successfully for more than thirty five years.

His consistent and scholarly writing have produced three books, more than four hundred articles, scores of reviews and several editorship

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positions. His work is constantly cited in articles, books and dissertations by other authors.

The music of Barton Cummings has been performed throughout the world by such prominent artists and ensembles as Mark Nelson, Mary Ann Craig, Fritz Kaenzig, Janet Polk, David Deason, Bowling Green State University Euphonium-Tuba Ensemble, the Colonial Tuba Quartet, the Meridian Arts Ensemble Brass Quintet, the Tokyo Bari-Tuba Ensemble, University of Michigan Euphonium-Tuba Ensemble, and the Walnut Creek Concert Band. Recordings of his original and transcribed music can be found on Channel Classics, Crystal Records and Mark Records.

As a conductor, he has worked with such groups as the University of New Hampshire Orchestra, D'Albert Summer Orchestra, Greenville (Mississippi) Symphony Orchestra, Concord (CA) Concert Band, Golden Hills Touring Concert Band and Theater Concord (CA). He currently serves as Music Director and Conductor of The Walnut Creek (CA) Concert Band.

Mr. Cummings has been involved with music education from kindergarten through grade 12 and spent many years as a college and university teacher. He has held positions at Delta State University (Mississippi), Point Loma College of San Diego, San Diego State University and with several California Community Colleges including Diablo Valley College, Napa Valley College and Solano Community College.

An early pioneer in redefining the role of the tuba as a solo instrument, he has been responsible for commissioning more than four dozen compositions for the instrument. His recitals, solo appearances and recordings on the Capra, Coronet and Crystal labels have been critically acclaimed worldwide.

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