

Marching Percussion Information and Technique Manual



Introduction

Thank you for your interest in The Pride of MSU marching percussion ensemble. This manual is a “one stop shop” for technique and approach for those interested in being a marching member of PPE (Pride Percussion Ensemble). The information provided has been put together by myself and some very good friends that are all at the top of their game when it comes to marching education and instruction. The methods and approaches outlined in this manual are certainly not the only way to do things but I think you will find the concepts very universal and beneficial to your growth as a player and performer.

Try your best to apply all the concepts and technique to the exercises that will come with this manual but remember no one, not even vets, are expected to have all of these things mastered on day one. Please print out, read, and have a copy of this manual on hand for auditions as your staff will refer to the information often.

I look forward to meeting all of you in person. If you have any questions feel free to send an email and we will do our best to get you an answer.

Keep Drumming!

Chad Schaedler - Chad.schaedler@gmail.com

Default Approach/Stroke Types

We approach the drum in an aggressive manner. We want to play through the drum. By this I mean that we want to play with a lot of velocity while still remaining relaxed. Imagine a drumhead 2 inches below the real one, and try to hit that lower one. Notice this does not inherently demand tension. We focus on volume, which is a product of the weight of a stroke, and height, which can be independent of that stroke weight. I can play louder at 4 inches than many can play at 7 inches. Therefore we seek to match heights, but we do so with sensitivity to stroke weight and therefore volume. Then we match heights without sacrificing volume.

Every stroke will initiate from a wrist turn with the head of the stick moving first. Even when playing 28", a wrist turn will lift the head before the arm rise follows. This wrist turn is essential in every stroke played. However, do not restrict your arms and try to use only wrist. As your wrist turns, your arm should naturally move. Use all three muscle groups – arms, wrists, and fingers – for your advantage to produce every stroke. The arm, wrist, and finger muscles must all be present to allow you to execute any type of stroke at any time with ease.

Many teachers refer to the rebound stroke used in 16 on a hand (or 8s, or whatever you call it) as a legato stroke. Many teachers also refer to the way we stop the upward return of the stick (such as in a tap-accent exercise) as a staccato stroke. We want to get away from these ideas for one simple reason: the idea of a staccato stroke by definition entails an excessive amount of tension. These are things that I have picked up from some very great people I have taught within the DCI and WGI activity, and it seems to have come from Tom Float (and to me by some of his students and his students' students I have taught with). My twist on the idea is this...we want the sticks and the drums to resonate freely, as they were designed to do, so we want to minimize the "bad tension."

If you stand in a doorway and push out with your arms against the walls, you are flexing muscles without a range of motion. This is an isometric contraction. However, in order to swing a bat, you contract muscles and they are allowed to move. This is called an isotonic contraction. We want to minimize the isometric contractions, which are responsible for many of the wrist and finger injuries drummers experience. This is commonly and perhaps erroneously referred to as "tension." This is a difficult concept, and we will discuss it in depth at auditions and throughout the season. Suffice to say that we will not "stop" the stick close to the head by using isometric contractions (clapping the fingers to squeeze the stick to the palm). You should think of every stroke as a rebound stroke. Some just rebound higher or lower than others, and some just start higher and lower than others. The spirit of this is all borrowed from L.H. Stevens' *Methods of Movement*. Here are the three types of strokes we will use:

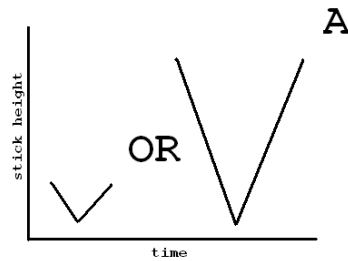
Rebound Stroke:

The stroke starts at any given height, strikes the head, and returns to the starting point. There is no restriction on the way down or on the way back up. Because of this ability of the stick to move freely and smoothly, the stroke is often called "Legato Stroke". The stroke should feel exactly like the two names imply: relaxed, smooth, and should be very much like bouncing a ball.

When bouncing a ball, the only energy used is through sending the ball down toward the ground. The ball and the ground work together to send the ball back to the starting point. The same approach should be taken when playing a rebound stroke. Use energy to send the stick from the desired starting point down into the head, and allow the stick and the head to send back to the starting point.

Velocity, the amount of speed used to initiate the motion, is the key having great sounding rebound strokes. The stick must have a great amount of velocity, from a quick wrist motion, to rebound fully. Please notice that the velocity comes from a "quick wrist motion", not squeezing the stick into the

palm. The sticks should always be able to vibrate and “breathe” fully in your hands. If the sticks are vibrating, the drum will vibrate and help get the fullest sound and best tone quality possible at any dynamic. Normally, the path of the stick is straight up and down. In diagram A, the paths are spread apart to see the starting point, contact point, and the ending point of a rebound stroke.



That was the definition of a “pure” rebound stroke. It is strongly encouraged that the idea of “pure” rebound is mastered by the player before continuing on to “controlled rebound”.

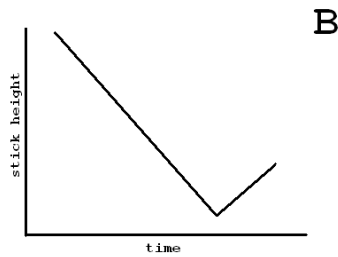
A rebound can be used at all dynamics and stick heights. However, at the “low end” (usually between 1 inch and 3 inches), a “pure” rebound is not enough to create the desired resonance and quality of sound. A little more “pointed” sound is usually desired. The sound is created by an even faster velocity of the stick, which would send the stick higher than the original starting point on the way back up. If the next stroke is the same volume, the stick will need to be “controlled”. This control happens by not allowing the wrist to continue to turn past the original starting point and not allowing the fingers to open up. The most important aspect to understand about the “controlled rebound” is that you are not introducing tension into the hand by “squeezing” the stick. Instead, they are just not allowing the stick to turn up past the desired ending point. Relaxation is still the key to getting a great sound.

Down Strokes:

Down Strokes are most commonly found as an accented note followed immediately by an unaccented note. However, there are many other places in the music where one would find a down stroke to be appropriate such as: going to “tacet” position from playing a passage and a decrescendo, which is simply a gradual series of down strokes that feel very legato in nature. For our purposes, this discussion will mostly be in regards to playing from an accent to a tap.

Naturally, if you play a note at forte, the stick will want to rebound back up to the original starting point. If we are playing a forte accent followed by a piano tap, then we need to control the stick on the rebound. This is a down stroke. This control happens after the head of the stick strikes the head. On the way back up, the stick is simply stopped at the new height. The stick is stopped by not allowing the wrist to turn past the new, lower height and the fingers may slightly cushion the stick from extra motion. It is critical that the stick is not “squeezed” into a stopping position. Tension should be almost nonexistent in the hand.

Often, because the stick wants to naturally return to the starting position, which is farther from the playing surface than the lower height, the lower note has a tendency to be played “early”. This is a very common mistake. If we are playing eighth notes, the stick must travel a smaller distance for the tap in the same amount of time that it traveled for the accented note. This is what causes the tap to be early. One must pay very close attention to deliberately place the tap after an accent perfectly in time. Again, it should be understood that relaxation is the most important aspect of getting a great sound.

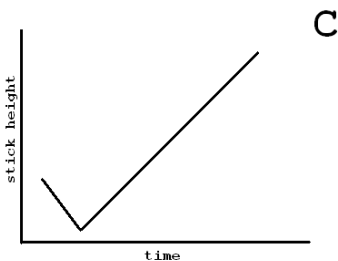


Up Strokes:

Up Strokes are usually found as an unaccented note followed immediately by an accented note. However, there are many other places in the music where one would find an up stroke to be appropriate such as: going from “tacet” position to playing anything and a crescendo, which is simply a gradual series of up strokes that feel very legato in nature. For our purposes, this discussion will mostly be in regards to playing from a tap to an accent.

If the stick is turned up to 3 inches to play a tap, the stick naturally will only rebound to the original height of 3 inches. If the next note played is an accent, then a significant amount of velocity needs to be used in the up motion and back down into the drum. The new velocity is applied after the tap first strikes the drum. The accent, after a tap, must be approached with a high amount of energy to make sure that it “sounds” in tempo.

Many of the unwanted rhythmic tendencies are more likely in up strokes as compared to down strokes. If starting with a tap, many players may accidentally let the first attack “fall in” early, or “stab” it in from the tacet position. The wrist should always turn up, no matter what height, to ensure the accurate placement of the tap. Another major tendency is that the first accent after a tap might be “late”. The reason for this is that the stick only wants to return to the original, low starting height. Most players that have this specific problem are not adding enough velocity to the accented note on the way up from the tap. Once again, it is important to remember to approach up strokes with relaxation in mind.



Arm Movement

We allow the arm to move in a natural manner. Some teachers want your elbow at a certain position. We seek to minimize unnecessary tension, so we allow the elbow to move. You cannot, however, try to “make” the arm move...it must move in reaction to wrist turn and forearm use. Think Newton...every action has an equal and opposite reaction. We simply seek to allow that to happen as reasonable.

How You Feel When you Play

As you play, you should always go for a relaxed physical sensation. The stronger a player you are and the more chops you possess, the more efficient you become, hence the more relaxed you are. Physical relaxation also pertains to your brain and state of mind. No matter what the musical or physical responsibility at any given time, and through practicing GOOD habits and utilizing the descriptors above, you are setting yourself up for success by having peace of mind and a strong mental approach to your playing which sets you up to be more consistent in playing clean. When you play, you should also be breathing comfortably. Learning to breathe naturally while playing anything regardless of difficulty will result in a more relaxed, healthy sound and approach.

Snare Drum Technique

Implement Grip

A great quality of sound and approach to the drum starts with the grip of the stick. In order to produce a full, resonant tone from the drum, it is important that your hands maintain a relaxed grip around the stick at all times, allowing the stick to resonate in your hand. If you hold the stick too tightly, you dampen the stick's natural vibrations and "choke off" much of the sound, leaving you with a very thin quality of sound. Also, the brunt of the impact from the stick striking the drum will be transferred directly into your hands, which can lead to unnecessary injury. Always let the stick "breathe" in your hands.

Right Hand

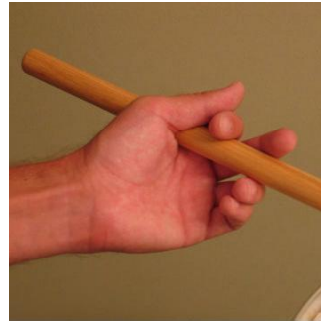
The fulcrum point is located between the thumb and the index finger. This is the point from which the stick pivots in your hand. This pivot point should be located at the optimal balance point of the stick, which is usually found around 1/3 of the length of the stick. The rest of the fingers should be wrapped naturally around the stick. They should be loose and relaxed but can never leave the stick. In order to employ the fingers properly, the stick should lay through the fleshy part of your palm opposite your thumb. Lastly, the palm of your hand should not be flat to the drum (German grip) nor should the thumb be completely on top of the stick (French grip). The crease created between the thumb and the index finger should be turned to an approximate 45degree angle. This offers the best benefits from both the German grip (full wrist turn) and French grip (easy engagement of the fingers).



Left Hand

The fulcrum point is again located between the thumb and index finger, with the thumb sitting on top of the index finger between the first and second knuckle. This connection must always be maintained while the thumb and index finger stay relaxed. There are common tendencies to push down or flex up the tip of the thumb – avoid these by keeping the thumb relaxed. The stick will rest

on the fourth finger just past the first knuckle near the cuticle. The pinky should stay attached to the fourth finger in a relaxed position and the middle finger will rest beside the stick with the fingertip being slightly on top of the stick. Please be aware that the middle finger should simply be “along for the ride” and not used to generate a stroke by applying pressure in any way. All fingers must remain relaxed in a curved position at all times. Any unnatural straightening or flexing of the fingers simply causes unwanted tension that will ultimately inhibit your performance. As in the right hand, the palm should be turned at a slight angle. Mike McIntosh uses a good analogy: Your palm should be turned up enough so that if it were raining, water would hit your palm and drain off. If your palm is turned up too much, the water would collect – not being able to drain off. If your palm is not turned up enough, your thumb would block the water from even touching your palm.



Playing Position

A proper playing position begins with finding an appropriate drum height. This can be done using the left hand as a starting point. With your arms relaxed by your sides, raise your left hand from the elbow until your forearm is parallel to the ground. With your stick in your hand and the bead of the stick in the center of your drum, put the width of two fingers between the rim of the drum and your stick to establish the proper drum height. This will give the stick a slight downward angle with your wrist being higher than the bead; yet still allow the meaty part of the bead to make contact with the drum. Next, simply raise your right hand to the drum, matching the fulcrum point of the right hand to the fulcrum point of the left hand, making sure the stick angles down to the drum are the same. Be careful to match the actual fulcrum points and not the hands in elevation. When playing traditional grip, most of the right hand is on top of the stick and most of the left hand is under the stick so you will actually hold your right hand higher than your left to match the fulcrum points. Simply put, to generate the same sound from each hand, first each stick must strike the drum from the same pivot point.



The beads will always remain in the center of the head, resting a ½ inch apart and a ½ inch off of the head. It is absolutely essential for the beads to remain in the exact center of the drum at all times. If your sticks are not striking in the same location of the drum they will not produce the same sound hand to hand.

Looking down at the drum, the “V” created by the sticks should be approximately a 90degree angle. The same concept of symmetry used earlier to match angles will be used here as well. Again, the left hand makes a good starting point. Think of your left hand as a natural extension of your arm by keeping a straight line from the tip of your thumb through to your elbow, with your elbow hanging a few inches from your side. The half of the “V” your left stick creates should be mirrored by the right stick. Avoid any awkward bends in your right wrist by keeping your fulcrum point on a straight line through to your elbow as well. Please note that matching the right stick angle to the left will push your right elbow farther out from your body than your left elbow. Don’t take this too far however – you don’t want unnecessary tension in your shoulder and/or upper arm.



Quad Technique

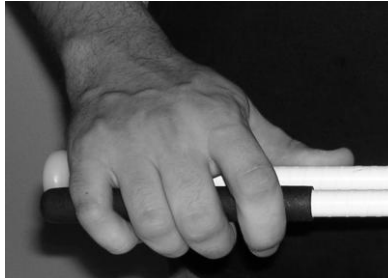
Matched Grip

The fulcrum point is located between the thumb and the index finger or middle finger. This is the point from which the stick pivots in your hand. The rest of the fingers should be wrapped naturally around the stick. They should be loose and relaxed but can never leave the stick. In order to employ the fingers properly, the stick should lay through the fleshy part of your palm opposite your thumb. Lastly, the palm of your hand should not be flat to the drum (German grip) nor should the thumb be completely on top of the stick (French grip). The crease created between the thumb and the index finger should be turned to an approximate 45degree angle. This offers the best benefits from both the German grip (full wrist turn) and French grip (easy engagement of the fingers).



Sticks In

When you are not playing, the sticks will be brought in to this position. Notice that the thumb is behind the mallet and the mallet head or “bead” is lined up with the end of the other mallet. This will be the same for both hands, and will be the same no matter what implement we use until you are told otherwise.



Movement

Regarding movement around the drums: “we play many drums the way we play one drum.” You’ll be hearing this a lot. You can improve yourself anytime you see a difference (any difference) in the way you approach the drum on the move from when you play the same passage on one drum. **Attack** these differences, because they allow more room for error and complicate your life as a tenor drummer.

When playing sweeps, one must understand that movement around the drums does not change the technique in the hands. The arms are used merely as a transportation device for the wrists. The technique used on one drum is applied to all drums, with the arms simply moving the hands and wrists to the correct playing area. This is another one of those “make or break” techniques that must be understood or learned to be a member of the quad line.

Wrist Turn Consistency

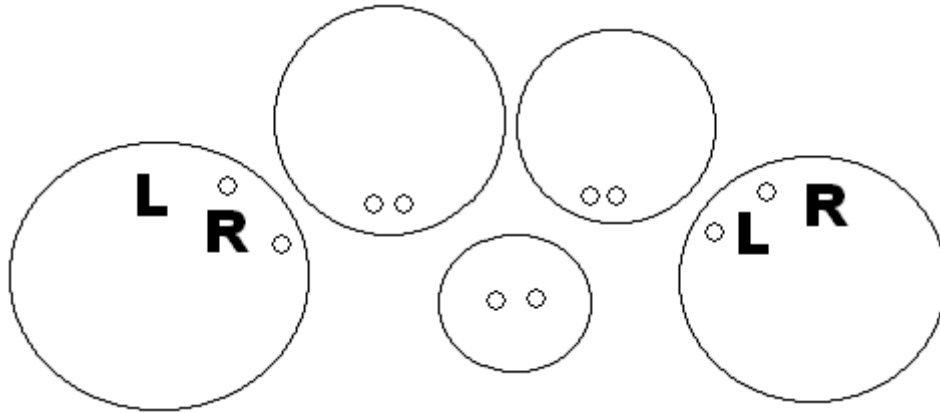
One of the things quad drummers do not usually do very well is consistent wrist turn while moving between drums. You should turn your wrists straight up and down. Many students will turn their wrists outward in preparation for a moving stroke (such as a sweep or scrape). This is a **BAD IDEA**. Turning our wrists out or over forces us to learn an infinite number of techniques. Instead, we should play around the drums as we would on one drum. You would never turn your wrists out like this on drum 2, why would you ever do it during an around passage?

Listening Responsibilities

The listening situation within a tenor ensemble is crucial. The listening duties are assigned throughout the line and each individual has their own responsibilities. In an arc situation, the pulse comes from the snare line and each section listens in to the center to play together as an ensemble. In the “arc,” the player closest to the snare line has the responsibility to listen to the end snare player next to them and play with them with a quality of sound and pulse that matches the rest of the ensemble. The other players in the tenor line listen to the player next to them towards the snares, down the line. In certain drill sets on the field, this will change and will be addressed accordingly.

Playing Zones

Below is a diagram of the regular playing zones of the drums.

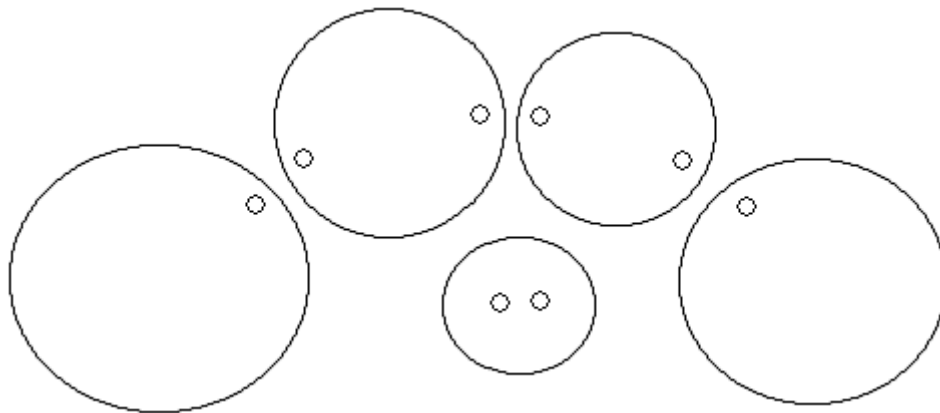


Each circle is the point of impact of each mallet. I've given an L for left and an R for right to notate the stick positions on drum 3 and drum 4. We want to impact the head on one concentric circle, like a timpanist. We want to be off center, approximately 2 inches from the rim, or 1.5 inches from the bearing edge. This area produces the most resonant sound and is ideal for projection and tone. The six-inch drums are played just off of center as well. These are the zones for playing on more than two notes or just a single note on one drum.

Here are some photos of the playing areas on the drums:

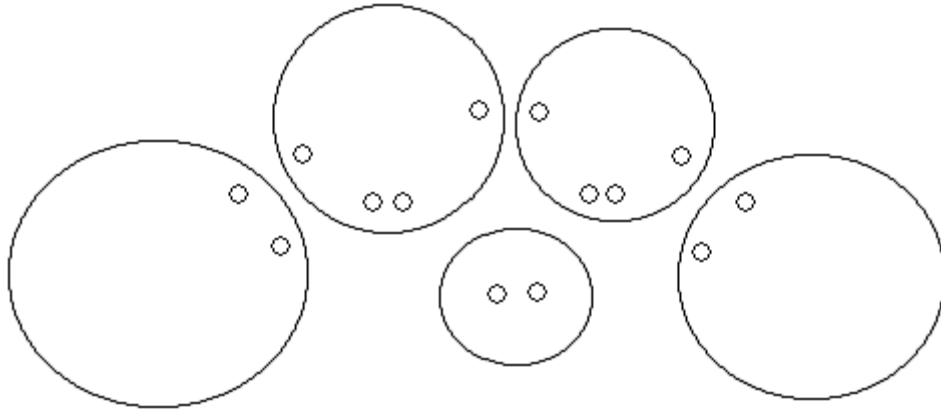


When playing sweep or scrape patterns, the sweep playing zones are as follows:



These zones are in the same concentric circle as the regular zones. If the drums are tuned correctly, these zones should produce exactly the same tone as the regular zones. They also help us limit the amount of work we have to do to play sweeps...clearing the dreaded rim! When you play a sweep

pattern with sweep zones, you literally have to relearn the pattern. It's like adding another 6 drums to the set. However, you'll find that after an initially confusing period you will gain muscle memory in the same way you do in the regular zones. If you are doing your job, when we change heads you will have scuff marks in these areas and these only, no extra scuff marks from errant sweeps, etc.:



This can be done, but only if you are committed to learning these zones and always put forth the effort to play in them.

Cross Overs

One of the reasons people enjoy quad drumming is the “cross over.” You will be called upon to play notes that require your hands to intersect. The important part is knowing where to cross them. For instance, if you are crossing between two drums that are adjacent (right next) to each other, you will do a “stick cross.” That is, the sticks will intersect each other at or in front of the fulcrum. If you need to cross over to two drums that are not next to each other, you will perform an “arm cross.” Your arms will intersect and your wrists will be clear of each other to turn up.

Skanks (Muffled Shots)

One of the many fun things to play on quads is the “skank.” This is a rim shot that is muffled immediately or after a brief period of resonance. The key is to muffle the drum uniformly and effectively. Use three fingers to press hard into the CENTER of the head, and hold the fulcrum firm while doing so:



Bass Line Technique

The role of the bass drummer is one that requires many levels of accountability in the following: Individual performance, percussion ensemble and full ensemble responsibilities. The bass line consists of five individuals with exact interpretation of rhythm, space, volume, touch, sound quality, and flow. All of these elements combined create a seamless individual bass line with all of the qualities desired for perfect blend, balance, and articulation.

The bass line, within the full marching battery, serves as a foundation for all of the sounds around it. It is the “bass voice” of the drum line “choir”. While intensifying impacts, adding volume, and doubling other voices in the ensemble, it can also serve as a soloistic voice. All of these aspects will be utilized in their fullest potential.

Along with being the unyielding support of the marching battery, the bass drum section also plays a major role within the entire music ensemble. Providing rhythmic and spatial reference points along with volume, impact, and motion are just some of the main character traits of an effective and impressive bass line. Ensemble cohesion often depends on exact clarity in all fundamental aspects of the bass line.

Goals

By defining five key physical requirements of playing the bass drum, the bass line as a whole will reach levels of performance at the highest level. Exact uniformity in technique, touch, sound quality, rhythmic and dynamic clarity are the main ingredients required to establish the perfect sound. There are two aspects of these that must happen simultaneously: Individual accountability and full bass line interdependence. With all of these in place, the bass line will function as a single voice, unnoticeably performed by a quintet.

Grip

The grip used is very similar to that of snare drum match grip, except the hands are rotated so that the wrists are vertical instead of horizontal. The thumb and index finger form a “fulcrum” on the mallet. If one were to drive a nail through the thumbnail, it should come out the index finger. This should cause any gap between the thumb and the third knuckle of the index finger to disappear. The rest of the fingers should be wrapped around the mallet very naturally. It’s very important to not introduce tension in the hand. This grip should be approached with relaxation in mind.



Playing Position (Tacet)

The head of the mallet must be placed in the center of the head 1/4 of an inch from the playing surface. The mallet should be either parallel, or slightly turned in toward the surface. The hand/arm should be as close to the rim as possible without coming in contact with it. There should be a natural, slight angle between the top of the forearm and the highest point of the hand (the thumb). The elbows should rest near the player’s body, but not be touching. The upper arm should hang in a very relaxed, natural position. At no time should the player have tension anywhere from the shoulder muscles on down the arm through the hands. The forearm should be parallel to the ground. The carrier and bass

drum stand will be built to your body specifics to make these requirements possible. There should be about a 45 degree angle with the ground.



Bass Drum Stroke

Approach to the Drum: Relaxation is the key. There must not be any tension when approaching the drum. Wrist turn is different on bass than it is on snare or tenors, which is more “hinge-like”. The plane (straight line) made by the forearm and the back of the hand does not break as much as in horizontal playing. Instead, the entire forearm rotates on an imaginary axis that begins at the elbow, travels through the center of the arm and ends in the space between your middle and ring fingers. It is also very similar to turning a doorknob. Swiveling, and making circles with the path of the mallet are not desired at all. The mallet needs to follow one arching path from point A to point B and back. The player should focus on letting the head do the work to rebound the mallet back to the desired height on continuous legato strokes and should not restrict this rebound motion as it will inhibit the resonance. The arm needs to move very naturally. As the drum is struck, the elbow will naturally move away from and then back toward the player’s body. This must not be restricted, but at the same time don’t force this elbow movement. Restricting and forcing will produce a poor quality of sound (less resonance). Fingers will be incorporated at lower dynamic levels and in more dense rhythmic passages. Less dense passages at mid-dynamic ranges will be played mostly with wrist turn and the natural rotation of the arm.



Prep Stroke: 99% of all music is space. What we do with the mallet in the space before and after striking the drum can and will greatly affect the sound produced. The preparation of a stroke should begin approximately half of a count prior to the moment the note is sounded. For example, when playing a note at 16”, the mallet reaches 16” away from the head approximately one 16th note before the mallet hits the drum. This all happens in a fluid motion and the stick should never stop while playing in most circumstances. The motion should be more like a bouncing ball; fluid

and not stopping between direction changes, and less like a windshield wiper in a stop and start jerking motion. After the final stroke in a series, the mallet will stop in the resting position, but not until it has briefly and naturally rebounded off the drum. There will be certain circumstances where the extremes of tempo and dynamics will require a modification of this rule.

Diddles: The prep for diddles (double right or double left hand strokes) begins in the same way as a single stroke by reaching the height half of a count prior to the execution. The only difference when playing diddles, is that after the first stroke the mallet naturally rebounds and the bottom three fingers manipulate the stick to move quicker to play the second note. The fingers must be used for the second note because the muscles used are smaller and quicker than those used for the first note.



Interpreting 2's, 3's and 4's:

Making sure that the members of the bass line all understand how to interpret 2's (ex. 16th notes), 3's (ex. 24th notes, half of a sextuplet), and 4's (ex. 32nd notes) is crucial to their success. Here are four general rules that must be applied in the order presented.

1. The first thing that must happen when approaching 2's, 3's and 4's is that the figure is started in the precise point in time that it is written to begin sounding. If the figure starts on the "&" of the beat, then the player needs to make sure that this happens first. If he/she plays a "3" perfectly spaced, not too open or too closed, and it is balanced and blended perfectly with the other players but the starting point of the figure is misplaced slightly in time, all chance of smoothness and continuity of the musical phrase are lost. This is the most important aspect that the player must think about first.

2. Once the player starts playing his/her figures at the point that they begin, the next step is to make sure that the rhythm played after the starting point is correct. The tendency that most players have is to play the rhythms too closed. Most don't put enough space between each note. One can't begin to worry about making sure that all the notes within the figure are speaking at the same volume if the rhythm is not correct, let alone worry about blending with the other players. If the player is playing their figure on the downbeat, it is more difficult to properly space out the rhythm than if it was started on the "&" because there isn't a strong beat after it to play to. When starting on the "&" the figure usually continues up to the next downbeat, which is where the foot hits as well. It's more difficult to play to the "&" because there isn't usually a strong musical emphasis on it, so spacing it out can be a guessing game for some. We don't do that. If the player has problems with this, which many do, they must play some exercise that has an eighth note following the figure that starts on the downbeat. If he/she gets used to how it feels to play to that eighth note, when it is taken away they will have a greatly improved chance of playing the figure rhythmically correct the first and every time.

3. Once the figure is started in time and played with the correct spacing, the next skill to master must be articulation. To get each note to speak clearly, the player must slightly crescendo each one. When a bass drum is struck it has a resonance that can last up to 1½ to 3 seconds until it completely dies away. If someone is playing a "4", the attack of the second, third, and fourth notes will be slightly covered up by the resonance of the note played before it. So if the player plays all four notes at exactly the same volume the articulation will sound muddier the farther away from the drum a listener gets. So, we play 2's, 3's, and 4's with a slight crescendo through each figure. From farther away it's almost

completely unnoticeable. Using this technique allows each note to be clearly heard over the constant resonating head and it helps smooth out the musical phrase. The worst habit many bass drummers acquire is accenting the first note of the figure because they are so focused on starting it at the correct point in time. It's good that they are so attentive to starting the figure correctly, but interpreting it with an accent on the first note is completely backwards from the way we interpret it.

4. Once the bass drummer has mastered starting the rhythm in the correct place, spacing out the rhythm correctly, and articulating the right way, he/she can now begin to notice how they are blending in with the bass line around them. One cannot really begin to analyze how they are playing with the other musicians until all 5 of them have mastered the first 3 steps. Balance and blend is not possible at the highest level unless the more basic skills are second nature to the players. If the first 3 steps are mastered, now we do small adjustments to certain phrases to make sure that each player is contributing musically to the entire ensemble.

Cymbal Technique

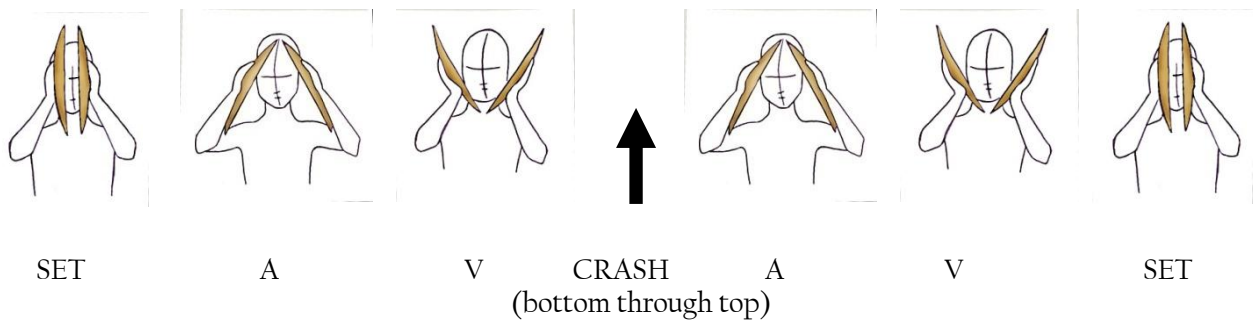
Sound Production

The single most important aspect of cymbal playing is sound production. The visual effect the cymbal creates, while extremely important, is secondary. At the point of attack using a standard crash, the cymbals should NOT meet exactly together “edge to edge.” This will result in what is called an “air-pocket” which is a momentary vacuum that locks the cymbals together and kills most of the sound. To create a full crash sound, apply a flam technique. At the instant of attack, the bottom edges of the cymbals meet first, followed by the top edges. Unlike an actual flam, there should be no audible “grace note.” Using this sound quality technique, a full sound should be produced.



To begin, your arms from the shoulder to the elbow should be level to the ground. From the wrist to the elbow should be approximately at a 45-degree angle towards each other. Wrists are bent to allow for the cymbals to be parallel. The cymbals should be 2-3 inches apart with the knots of the cymbals in line with your eyes. **See “visual applications” for more information.* To prepare for the crash, open the cymbals up to an “A.” To do this, straighten the wrist to create a flat line from the tip of the fingers all the way to the elbow. Then, break the wrist back so the cymbals form a “V.” This is where the first

crash or “grace note” happens at the bottom of the cymbals. The crash hits bottom then pushes through to the top and opens back up to the original “A” position. To finish, open back up to the “V” and snap back to set. (set, AVAV, set = one crash) The snap to set should happen two counts after the crash (ex- crash on one, snap back on three).



This same “flam” technique should be applied to the orchestral position. In this instance, switch the “bottom to top” impacts to “heel of the palm to finger tips.” Otherwise, the AVAV visual technique is the same with the left arm using slightly less motion. For the orchestral, cymbals should be parallel to

each other but at a 45 degree angle from the ground. The knots of the cymbal should line up with the center of your body both horizontally and vertically (your belly-button).

This information for crash technique is applied, with slight modification, to crash chokes. You will only use the first three positions – AVA. From the “A” position after the crash, bring the cymbals into your *Latissimus dorsi* (muscle that connects your shoulder and chest/underarm). Your cymbals should return from this dampened “A” position to the set position two counts after the crash (ex- choke on count one, out on count three). Experience with any other cymbal sounds is not necessary but strongly encouraged. These may include, but are not limited to: slide chokes, scrapes/zings, sizzles, taps, bell-taps, high-hats/hinge chokes, and cymbal rolls.

Visual Applications

The cymbal player is a big contributor to the overall visual program. Good posture is a necessity for playing and executing visuals well. When holding your cymbal at your sides in the “attention” position your shoulders should be relaxed and down. Keep your pelvis in line with your center (abs) and shoulders. Your arms should have a natural bend held firmly enough to control the cymbals. Your elbows should stay turned slightly outwards, not in towards your body. Keep the cymbals parallel to each other and approximately 2 inches from your sides.



For cymbal players, the most basic visual element is the cymbal flip. To complete a “flip-up” you must start with your cymbals parallel to each other at your side. Keep your back straight, shoulders back and relaxed, and head up with your focus and weight slightly forward. A cymbal “flip” involves one simple rotation of the wrist: the thumb pushes back behind you and rotates the cymbal around to the front. Your arm should come forward and up simultaneously. Do not allow your arms to take a pathway to the side. To complete the flip you stop your cymbals parallel in front of your face, 2-3 inches apart, with the knots of the cymbals in line with your eyes. Be sure to account for “tunnel vision” when the cymbals are that close to your face. What may look like parallel is actually flared out to the front. To force the cymbals to be parallel you must be able to see the inside far edge of the cymbal. A “flip down” is the exact reverse of the flip up. Pay careful attention to locking the cymbals in the attention position when flipping down. Practice these two elements slowly and work your way faster. An accurately done cymbal flip should happen instantaneously.

Physical Conditioning



Playing cymbals is one of the most physically demanding assignments in the marching percussion ensemble. In order to perform comfortably it is important to develop strength and flexibility in those muscles that are most frequently used. Help prevent muscle cramps, wrist sprains, tendonitis and other injuries by stretching and applying strength training to your preparations for

auditions. Remember, while push-ups are an excellent way to develop cymbal strength, no exercise compares to actually holding and playing the cymbals for extended periods of time. If you are not currently a part of a music program, see if your school or band director will allow you to borrow cymbals and practice on campus.

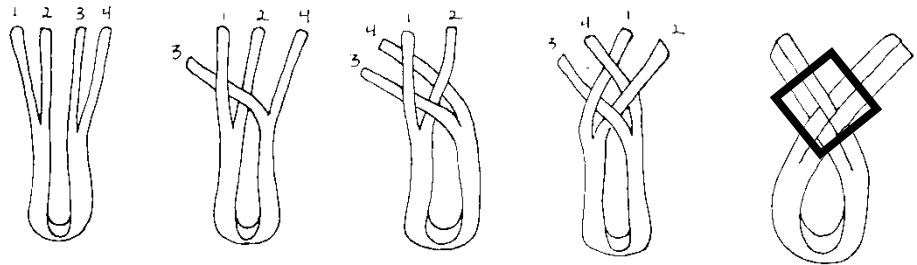
Technique for Auditions

For auditions we will ask you to use whatever technique you are most comfortable with. Apply any new information from this hand out as necessary – ESPECIALLY the information on Sound Production. In addition, pay special attention to your posture. For the visual performer it is essential that you keep a straight back with relaxed shoulders. Timing and musicality will also play an important role in the audition process.

Tying Cymbal Straps

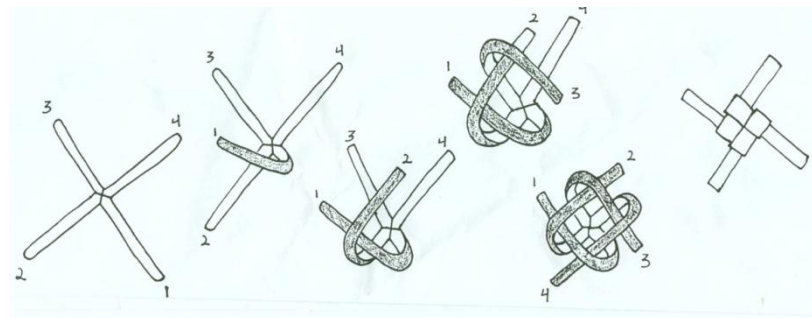
Strap Size Adjustment

This simple weave is important for comfort in playing cymbals. It will keep the strap from bunching and it will allow it to lie comfortably across the web between your pointer finger and thumb.



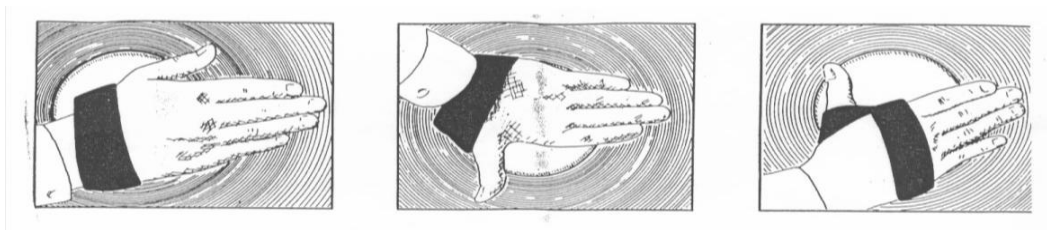
Cymbal Knot

It's very important your cymbal straps are tightly tied. Keeping the straps tight on your hands is the best way to maintain control of the cymbal. After tying, you should be able to hold the cymbal in a "ride" position and have the cymbal pads or bell firmly touching the palm of your hand.



The Garfield Grip

1. Hold the cymbal in a vertical position and put your hand through the strap up to the wrist.
2. Turn the hand so the palm is facing away from the pad of the cymbal.
3. Rotate the entire hand downward and turn the palm toward the cymbal until it touches the pad. The strap should rest at the base of the thumb and forefinger.



From "Marching Concepts" by Thom Hannum

Front Ensemble

Technical Approach

The attached technical packet should help you develop and refine your skills as a keyboard percussionist. All keyboard percussionists in the Missouri State Front Ensemble will be using two mallets as well as four mallets with the Lee Howard Stevens technique described in his book *Method of Movement for Marimba*. If you do not already own this book it is highly recommended in order to really dig into the technical approach. The following information is some excerpts from the book and will be applied to the included exercises.

The Grip

The mallets are held hanging loosely, with the two outside mallets gripped with the pinky and ring fingers, and the inside mallets cantilevered between the flesh of the palm at the base of the thumb and the tip of the middle finger. Interval changes are accomplished by moving the inside and outside mallets independently of one another, as described in Stevens' book, *Method of Movement for Marimba*. As the interval widens, the inside mallet rolls between the thumb and index finger such that the index finger moves from underneath to the side of the shaft, and the middle finger becomes the fulcrum of the cantilever. The outside mallet is moved principally with the pinky and ring fingers, although the first section of the middle finger follows along and remains in light contact. When properly used, this grip causes no tension on the hand muscles.

The Essential Strokes

The *piston stroke* is an essential component of Steven's technique. With this stroke, the mallets start in the up position, strike the bars, and then return to the up position. The mallets are propelled completely by the wrist, and there is no prep stroke. When changing notes, the piston stroke is modified so that it starts above the first note and ends above the second note, ready to strike.

Strokes are further divided into four categories of motion:

- ***Single Independent*** strokes involve moving the inside or outside mallets singly, pivoting around the shaft of the unused mallet.
- ***Single Alternating*** strokes are used in single note patterns to be played by the same hand, alternating the inside and outside mallets.
- ***Double Vertical*** strokes are used in playing double notes simultaneously by the same hand.
- ***Double Lateral*** strokes are used for fast, rhythmically adjacent notes to be played by the same hand.

This method of striking the bars is designed for accuracy and momentum efficiency, since it attempts to eliminate all wasted motion. The piston stroke consolidates the preparation for each stroke into the recovery of the previous stroke.

Dynamic Levels

It is important that we are all on the same page in terms of height approach to dynamics that are written in both the music and exercises. We will take a literal approach with our height system meaning 3 inches is 3 inches and if you can use a ruler to learn what 3 inches looks and feels like in your hands. It is important to remember to always strive for the best quality of sound while striking the board with velocity and strength. We can all produce different sound levels at different heights.

Blend and balance will come in time but a great starting point is making sure you are always producing the most sound you can while using proper technique.

Use the corresponding height level with dynamics:

p - 3 inches
mp - 6 inches
mf - 9 inches
f - 12 inches
ff - full out

Other Front Ensemble Instrumentation

Creating the best percussion ensemble while making sure everyone has an educational experience is always the main goal. Equipment limitation along with the musical composition doesn't allow for everyone to play a keyboard at all times. As a member of the front ensemble you will need to be prepared to also play tympani, drum set (split among a few different instruments), crash cymbals, synth/piano, among many other various concert percussion instruments. Come prepared to dive into any part given to you and we will mix it up from tune to tune.