



**2010 TROOPERS  
DRUM AND BUGLE CORPS**

**PERCUSSION TECHNIQUE AND  
EXERCISE PACKET**

Hello everyone!

Thanks for your interest in the Troopers Drum and Bugle Corps Percussion Section! We are hard at work on this upcoming season and can't wait to meet each and every one of you. Please RSVP on the Troopers website for only ONE of the audition camps so we know that you will be joining us. A full audition calendar and camp schedule can be found on our website: [www.troopersdrumcorps.org](http://www.troopersdrumcorps.org)

You can RSVP for an audition camp through the following link:  
<http://members.troopersdrumcorps.org/rsvp.htm>

Here is how the audition process will work for the 2010 season:

We will be holding audition camps on November 20-22 and December 18-20. All percussion camps will be held in Wyoming. There will be NO Satellite camps for percussion due to logistical nightmares that are associated with equipment and housing. We understand that this is an inconvenience for some of you, so here is what we are doing this year to help you out....we are asking that you come to only ONE of the audition camps. The camps in November and December will cover the exact same material, so there will be no need for you to come to both. School conflicts and band performances can be worked out on an individual basis by contacting the caption head. Once we have seen you at one of these camps, we will either ask you to come back in January or not. Those that will be asked back for the January camp will then continue an audition process on a monthly camp basis until we have filled the percussion section with predetermined numbers in each sub-section. We hope to have the percussion section finalized by the March camp.

There will be marching and playing portions of audition camps. Please be prepared with appropriate shoes, clothing, etc. Again, if there are legitimate conflicts with camp attendance, please notify the caption head for assignments.

Those that are offered contracts for the group are required to attend ALL camps until move-ins. School conflicts and band performances will be worked out on an individual basis. **YOU HAVE TO ATTEND CAMPS FOR THE STAFF TO EFFECTIVELY EVALUATE YOU FROM MONTH TO MONTH!!!**

Please email the corps office (not an instructional staff member) for any questions regarding finances, flights, locations, etc.

Again, please keep checking the website for information. We will be posting percussion specific information throughout the winter season. Thanks again for your interest in the Troopers Drum and Bugle Corps Percussion Section!

Kevin Welborn  
Troopers Drum and Bugle Corps  
Percussion Caption Head

## THINGS TO BRING TO CAMP:

- Sticks/Mallets (Whatever you are comfortable with will work fine for auditions)
- Practice Pad
- Warm Clothes and Athletic Clothes (We will be marching, so make sure you have tennis shoes, athletic pants/shorts, etc)
- Pencil and Notebook (Please bring a notebook in addition to any music binder you construct. It will be a good idea to take notes throughout the camp.)
- A GREAT ATTITUDE!!!

## WHAT WE ARE LOOKING FOR IN THE MEMBERSHIP:

Hard working individuals

Individuals who have a desire to learn and the ability to turn constructive criticism into positive results

Individuals who are willing to make sacrifices for the greater good

Physical strength and mental toughness

Individuals who can get along with the people around them

Individuals who trust their fellow members and their staff

Individuals who have a great sense of humor

A desire to show greatness through humbleness, and sincerity through commitment

## **AUDITION EXPECTATIONS**

You will be evaluated on the techniques and exercises mentioned in this packet along with the standards mentioned above. There are some exercises that will be taught to you upon your arrival to camp, as well. Be flexible and don't freak out!! We will ask that you play individually. This will be done both in private and during rehearsals. Stay calm and relaxed!! This is not done to embarrass you, but rather help your understanding of the concepts that are being taught and to see what you have already prepared.

# **BATTERY TECHNIQUE OUTLINE**

## **MUSICALITY**

The goal at the Troopers is to provide you with the best *musical* experience possible. In order for that to happen, we focus on...you guessed it...MUSIC! Although “flam chuga doos” and “cheese cha rat traps” are fun to play, we want to see how well you adapt to the technique and its application to music. Even though “chops” are definitely needed and appreciated, focus on applying these technical guidelines within the music. We understand that some of the information may be new to some of you, but as long as you remain flexible, that is all we ask.

## **DYNAMICS/HEIGHTS (both “inch” and “degree” systems are approximations)**

**Piano (p) – 3 inches or 0 degrees**

**Mezzo piano (mp) – 6 inches or 22.5 degrees**

**Mezzo forte (mf) – 9 inches or 45 degrees**

**Forte (f) – 12 inches or 67.5 degrees**

**Fortissimo (ff) – 15 inches or 90 degrees**

*\*Degrees refer to the angle of the drum stick to the playing surface.  
All other dynamic levels will be addressed and defined as needed.*

This dynamic system is used only as a guide. The music will always determine if any adjustments need to be made to this default system.

## **SOUND AND TOUCH**

Strive to achieve the most full, round sound at every dynamic level. The sticks should feel heavy in your hands. This is achieved by staying as relaxed as possible from the neck down to the fingers. The stick/mallet should resonate in your hand as much as possible at all times. The amount of “pressure” will vary depending on the musical dynamic, tempo, etc. By default, we will always strive to never squeeze the stick.

You may be asked to play with a heavier or lighter touch at any given dynamic level, depending on the musical situation. This basically boils down to how much pressure you are putting on the stick, along with the articulation style (staccato, legato, etc.)

## **PLAYING MOTION/STYLE**

We stress efficiency of motion. Strokes will be primarily made by turning the wrist. However, this does not mean that the arm or fingers will not be involved in our stroke. The arm provides weight to the stroke, which enhances the sound. The fingers are used depending on sticking patterns, tempo, height, etc. The music being played will determine what percentage of each will be used. Focus on letting the stick breathe in your hands. The fingers should not be too open and away from the palm, nor should they be “super-glued” to the inside of your palm. Again, allow the music being played to determine what happens.

The upstroke, or lift of the stick, will be something that we work on quite a bit. Without getting into too much detail, focus on allowing the stick to lift at a natural time before you attack. Remember, at higher dynamic levels, the forearm has to move, along with the wrist, to incorporate its weight into the stroke. This is something that we will demonstrate and talk about frequently.

## **PLAYING IN TIME**

Always incorporate a metronome (or recordings of your favorite music) into your practice routine. Playing correct rhythms IN TIME is very crucial in our attempt to communicate effectively with the audience and with each other. Practice things very slow to make sure that you are not practicing bad habits!!!

**ALWAYS BE VERY ANALYTICAL OF YOURSELF. WATCH YOURSELF IN A MIRROR, CLOSE YOUR EYES AND LISTEN, RECORD YOUR PRACTICE SESSIONS, ETC. IT HELPS!!!!**

## **DEFAULT STROKE TYPES**

Stroke Type #1 = FULL REBOUND STROKE – This stroke is executed at any height that requires the next stroke to be the same height. This stroke starts and ends at the prescribed height with one continuous motion of the stick(s). (Higher dynamics will generally require a higher velocity of the stick.)

Stroke Type #2 = CONTROLLED REBOUND STROKE – This stroke is executed from any height that requires the following stroke to be at a lower height. Focus on not squeezing the stick for controlled rebound strokes. Simply do not allow the wrist to turn back up to the higher level.

Stroke Type #3 = UPSTROKE – This stroke is executed from any height that requires the following stroke to be at a higher height. The actual ‘upstroke’ is made only *after* the desired sound is achieved at the lower height.

## **GRIP (Snares and Tenors)**

Right Hand (Tenors, this will apply to both right AND left hands for obvious reasons)

- The arm should be at a slight angle down to the drumhead.
- The top of the hand should be slightly sloped down and outwards.
- The butt of the stick should be visible. Do not tuck the stick under the wrist.
- The thumb is placed on the side of the stick. We will talk about the fulcrum being between the thumb and middle finger for most playing situations. The ring and pinky fingers will cradle the stick. All fingers will be very relaxed and follow the natural shape of the hand (notice how your hand is shaped when it is by your side).

Left Hand (Traditional)

- The stick should rest at the base of the thumb and forefinger.
- The pad of the thumb should rest on top of the first knuckle of the first finger. The thumb should not be pointing up or down. Again, notice how your hand is shaped when it is by your side. Strive to keep the same shape. Avoid pushing down with the thumb.
- The stick should rest on the cuticle of the ring finger. This DOES NOT mean to push up on the stick with this finger...that would choke off the sound of the stick and cause too much tension.
- The middle and pinky fingers maintain the natural curve of the hand.
- Avoid making a fist with you left hand, as well as having straight fingers. We strive to keep the hand in its most natural state.

## **PLAYING POSTION**

### **SNARE**

We tilt the snare drums slightly to create a more efficient use of the left hand. This tilt resembles the angle of the left stick. Relax your arms by your side, with sticks in each hand. Lift from the elbows until your wrists are pretty close to the height of your waist. The right forearm will have a slight downward slope to eliminate tension. With the heads in the center of the drumhead, the sticks should form a 90 degree angle. The top of the right hand should be slightly angled down and to the right to create a natural hand position. The top of the left thumb should be facing up and in line with the forearm. Avoid pushing the elbows out, as well as letting them compress in towards your body. How far the elbows are away from your body when you have your hands relaxed by your side will be the same in this position. The heads should be as close together as possible and as close to the playing surface as possible, without touching it. Because of the slight angle of the sticks down towards the drumhead, there should be a space approximately the size of 1-2 fingers between the stick and the rim.



## TENORS

Relax your arms by your side, with sticks/mallets in each hand. Lift from the elbows until your wrists are close to the height of your waist. Both forearms will have a slight downward slope to eliminate tension. The top of each hand should be angled down and to the outside to create a natural hand position. Avoid pushing the elbows out, as well as letting them compress in towards the body. How far the elbows are away from your body when you have your hands relaxed by your side will be the same in this position. Because of the slight angle of the sticks/mallets down toward the drumhead, there should be a space approximately the size of 1-2 fingers between the stick and the rim.



\*Take note of the stick angles in these “open” positions; when playing on the same drum, beads should be very close together.



For tenor players, maintaining a vertical stroke is very important. The forearms and upper arms are free to move around the drums so that you can strike each playing “zone” directly, rather than swiping at it with a glancing blow. This is why it is very important to practice EVERYTHING on one drum before attempting to move around the drums. Focus on NOT playing in the center of the heads, but rather an inch to an inch and a half from the bearing edge of the drum. The playing zones will be defined and demonstrated in more depth during the audition process.

## **BASS DRUM**

### **Grip Breakdown**

#### **1. The Fulcrum**

The Fulcrum is located between the thumb and forefinger. The thumb should be opposite the forefinger forming a 'cross'. The main contact points on the mallet are the thumb, forefinger, and middle finger. The thumb and fingers will remain on the mallet at all times.

#### **2. Wrist Angle**

- The wrist should be at its natural angle, as if hanging to the side of the body.
- Do not 'pull in' or 'push out' the base of the wrist

#### **3. Mallet Head Placement**

- Both mallet head should be placed in the direct center of the drum head.
- Rotate the wrist inward so that the head of the mallet is just off the surface of the drum

#### **4. Mallet Angle**

- Bend from the elbows, so that the forearms are parallel to the ground.
- The angle of the wrist should be slightly more than 45 degrees.
- The elbows may move in front of or behind the body, depending on the size of the drum.



- The natural wrist angle should not be affected.

### **Stroke Breakdown**

#### **1. Play from the Wrist**

- A rotary motion created as the hand, wrist, and forearm move in unison.
- Avoid 'lifting' the arm/forearm. Feel the motion of the stroke being initiated from

#### **2. Path of the Mallet**

- The mallet head should travel in a straight path into and away from the drum head.
- This motion incorporates a slight wrist break as the forearm rotates.

### **3. Adhere to Dynamic Levels**

- Specified heights should be consistent from right to left hand.
- Do not overplay attacks or releases.

### **4. Control of the Opposite Implement**

- The mallet should return to the starting position when playing is finished.
- The non-playing mallet should remain in the proper starting position.

# PIT TECHNIQUES AND EXERCISES

## Two Mallet Technique

### *The Grip:*

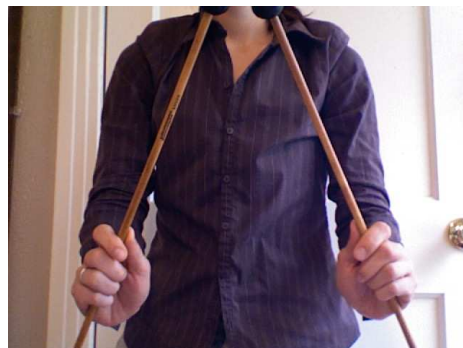
- The fulcrum should rest more towards the back of the hand. The pinkie and ring fingers securely wrap around the stick with the tips of the fingers touching the palm.
- The thumb and index finger lightly connect on the stick forming a plus sign. The index and middle fingers should not curl all the way around the stick.
- Hand position is almost identical to snare drum matched grip.
- Everything should be relaxed. NO SQUEEZING!

- The motion should look natural, controlled, and relaxed.



### *The Stroke:*

- Rest/Natural position is up and above the keys you are about to play.
- Each stroke uses a piston motion (straight up/down).
- Each stroke should take the same amount of time to descend and ascend, like dribbling a basketball.
- All motion begins with the wrist, however the arm can be added to augment the volume of sound.





Try to break the habit of squeezing with the index and thumb and releasing the back fingers.

*Additional Comments and Practice Suggestions:*

The concept of this technique is based on relaxation, control, and natural motion. By using a fulcrum with the back fingers, the index finger and thumb are no longer responsible for bearing most of the weight and can focus more on controlling the mallet from moving side-to-side. If you are not familiar with using a back fulcrum, I would suggest practicing on a drum pad (with mallets) only using the pinky and ring fingers (see the 1<sup>st</sup> picture at the top of page 1). Once you feel comfortable with this, lightly connect the thumb and index fingers so they form a plus sign. It is important that the pad of the thumb connects with the 1<sup>st</sup> knuckle of the index finger and not further above or below. This may be difficult because some people have longer or shorter fingers, but try to get it close. It is also important that the index finger does not wrap all the way around the mallet because this causes tension, and tension limits motion. Try to keep the natural gap open between the thumb and index finger. If you find that you are squeezing a lot with your index and thumb, check the back fingers to make sure you are not releasing your fulcrum.

The hand position for two-mallet grip is almost identical to matched grip. Palms face the ground with the thumbs slightly turned out. Because everyone is different, the best way to find how your wrists naturally turn out is to hold them down by your side as if you were walking down a hallway. Try to mimic this rotation of your wrists as you raise your hands to playing position above the keys. The wrists should be straight from side-to-side and from top and bottom.

Every stroke should begin and end above the keys. This piston motion should be quick and fluid. Please try to avoid stopping the motion of the mallet after it has struck the bar. Each stroke, whether it is fast or slow, should look like dribbling a basketball: the ball immediately returns to the hand after striking the floor. Every stroke should be initiated by the wrist to ensure note accuracy. It is natural for the forearm to follow the motion of the wrist, but not for the wrist to follow the motion of the elbow (i.e. don't lock your wrist and move from the elbow). As you shift from note to note, make sure you center your body between your hands (i.e.

never lean awkwardly to reach a note). Also make sure you slide your arms horizontally and don't twist your wrists.

Bar placement will vary from instrument to instrument and depends on tempos. As a general rule, strike slightly above the resonators on all the natural bars of the marimba. Depending on tempo, strike slightly below the resonator of all the marimba accidentals. Use the edge of the bar when it becomes too fast and uncomfortable to reach for the resonator. For vibes and xylophone, always try to hit directly over the resonator, except in fast passages. When playing scalar passages, be sure that the mallet heads are parallel to each so that both mallets hit the exact same spot of every bar. Some people tend to place one mallet above the other causing an inconsistency in sound.

The best advice for practicing is to stand or sit in front of a mirror! Sometimes it is best just to practice with mallets, a drum pad, and a mirror in order to focus on your stroke and grip. Please focus on the consistency of a smooth piston stroke as the stroke determines the quality of sound you will achieve from the bar. Practicing ridiculously slow tempos often reveals bad habits and allows your muscles to memorize the way the technique should feel like. Practice eight on a hand, but alternate the hands on the last rep. Watch carefully to see if you maintain a piston stroke when you begin to alternate your hands (even the mallet not being used should remain up).

## **Four Mallet Technique**

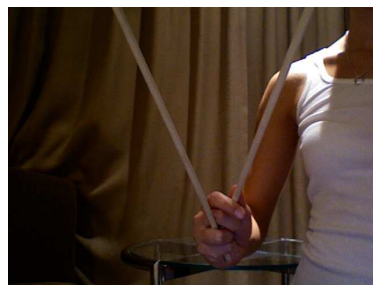
### *Stevens Grip (Marimba & Vibes): Holding the Mallets*

- The base of the inside mallet should tuck into the fatty muscle below the thumb. The mallet should rest on the 1<sup>st</sup> knuckle of the index finger. The index finger should remain naturally curled, not squeezed.
- Lightly rest the thumb on top of the mallet so it makes a "+" with the 1<sup>st</sup> knuckle of the index finger.
- Place the middle finger at the base of the inside mallet to keep it anchored to the palm.
- Curl the ring and pinky fingers around the bottom of the outside mallet. Make sure the fingertips touch the inside of the palm. About 1/8 in. should stick out the back.
- The outside mallet should be wedged just below the middle knuckles of the middle and ring fingers. Keep these fingers firm, so the outside mallet won't droop.

### *Stevens Grip: Hand Position*



- The thumb should turn up, but slightly in. Make sure the mallet heads are horizontally even.
- The wrists should be straight from side-to-side (i.e. no curves).
- Playing position begins with the wrists extended as far up as possible (don't over do it).



### *Additional Comments and Practice Suggestions:*

It is important to first feel comfortable holding the mallets before you attempt to play with them, otherwise you will be building bad habits. Practice holding just the inside mallet and letting it hang naturally between the fat of the thumb and the curve of the index finger. As you start to play, you may notice a tendency to try to squeeze the index finger. Let it curl naturally and stay relaxed, otherwise you will limit your ability to shift intervals later on. Make sure the thumb is also relaxed; tension in the fingers always hurts more than helps and often can lead to serious problems like tendonitis. Use the middle finger to put pressure on the base of the inside mallet. This will keep the inside mallet from sliding out of the hand, especially during interval changes, and it will take a lot of pressure off the index finger.

Once you feel comfortable holding the inside mallet, switch to just holding the outside mallet. It is very important that these fingers are firm enough where the tips touch the palm, but not so tight that you feel pain or cut off the blood flow. It is also important that the outside mallet doesn't slip into the webbing of your fingers where the skin and muscles are more delicate. Keep it closer to the middle knuckle where your fingers are stronger and can hold the mallet more securely. Make sure you don't have too much stick sliding out the back of the hand or else you'll limit the length of the outside mallet. Ideally, no one should be able to see the mallet coming out of your hand if they are looking from the side.

Hand position is always a difficult task to explain because, again, everyone's hands are different. The most important aspect is to find the position where your wrists are straight from side-to-side and the mallet heads are horizontally even. Your thumbs will not be perfectly straight up; they should angle in slightly. When checking the level of the mallets, make sure you also check that your ring and pinkie fingers are still firm. Relaxing these fingers can cause the outside mallet to droop. Also, if the inside mallet is tucked too far down into the palm (anywhere from the middle of the palm or lower), it will pop up quite a bit higher than the outside mallet. As rule, always check to make sure your wrists are straight first and then fix your fingers.

One of the best qualities of the Stevens Grip is its diversity of motion. It is also why Stevens Grip is one of the hardest techniques to learn. We will focus on three or four of the strokes included in *Method of Movement* by Leigh Howard Stevens: double verticals, single independents, single alternating, and double laterals. Double verticals describe the kind of motion when both mallet heads strike at the same time. To achieve this stroke, start with you wrists up (remember not to move your wrist other than straight up and down and don't

overdo it). Check to make sure that your wrist is straight, your fingers are firm, and the mallet heads are even. Release your wrist and allow the mallets to drop at the same time. Watch that mallets move straight down and don't wiggle on the way down or on the way back up. Sometimes it's also a good idea to try a dead stop (deliberately pressing the mallets into the bars) to make sure that they both hit at the same time. As you practice your double stops, make sure you only use your wrist and not your elbow. Note accuracy is hard enough without adding in extra larger muscle groups.

Single independents describe the motion of one mallet moving independently from the others (i.e. using just mallet three or alternating the inside mallets). Unlike Double verticals, single independents require rotational movement only, not vertical movement. The mallet in motion rotates like turning a doorknob in either direction (counter clockwise for the inside mallet and clockwise for the outside mallet) while the unused mallet pivots in space. Practice holding the inside mallet in your palm while slowly rotating the outside mallet (i.e. the kind of slow you see on ESPN play by plays). Don't be afraid to let mallet rotate above the unused mallet and visa versus for the inside mallet; the unused mallet will naturally hang lower. You may have so sit next a wall and hold the outside mallet against it to practice rotating the inside mallet.

While single independent strokes don't involve more than one mallet at a time, single alternating strokes are caused by a rocking motion between both mallets. Single alternating strokes depend on speed because if the motion is too slow, the stroke will turn into two independent strokes. Single alternating strokes are also based on rotational movement rather than vertical movement. When using alternating strokes, it is important that both mallets return to the starting height otherwise the stroke will look like a teeter-totter.

For now, we will only focus on these three stroke types. It is important that you go very slow and are patient to try to find the correct motion. Practice with one hand at a time (one mallet at a time for independent strokes), use a mirror, and go slow! It is more important that you focus on the motion than the notes at first, so any flat surface will do (my favorite is the floor in front of the TV). The same stroke principles from two-mallet technique apply here as well, so be sure that you are always using a piston stroke motion.

## **Timpani Technique**

### *The Grip:*

- Hold the mallets like matched grip with the thumbs slightly turned out.
- Try to slide all the way to the back of the stick.
- Make sure there is a “+” between the thumb and 1<sup>st</sup> knuckle of the index finger.
- Keep the fingers light and relaxed. The stick should cradle in the curves of the back fingers.



### *The Stroke:*

- The motion initiates with the wrist, but is always followed by the entire motion of the forearm.
- All strokes begin and end above the timpani head.
- Strokes should move straight up and down but may differ in speed.
- Always play light on the head even at louder volumes.
- Make sure the motion mimics the sound of the music.



### *Additional Comments and Practice Suggestions:*

The timpani grip we will use is pretty similar to American grip, although we may make some exceptions depending on the sound we need. American grip basically resembles matched grip for snare drum, although the fingers are much more relaxed and loose. Unlike a marimba or snare drum, a timpani head is much more delicate and sensitive to touch. Therefore it is easier to hear tension in the sound. Imagine the timpani head is like a layer of Jell-O: if you hit it with enough force, Jell-O will splatter everywhere. But if you use a wider range of motion with your wrist and forearm, which adds more weight, combined with a slower speed, you won't destroy the Jell-O. Because the head is much more delicate and the playing position is much larger, it is actually an advantage to use your forearm in addition to your wrist. The timpani stroke largely depends on the kind of sound you want. Although the mallet will always end up, the speed of the mallet may be slower or faster depending on if the timpanist is trying to achieve a legato or staccato sound. The most important thing to remember is not to overplay this instrument.

When playing rolls our technique may shift more towards a French grip. The position of the hands may stay the same but the back fingers will work more to increase the rocking motion of the mallet. Remember to keep it light. Roll speed depends on the size of the drum and the volume of the roll. Generally the louder the roll, the faster the roll speed and the larger the drum the slower the roll speed.

Playing position also depends on the sound you want. Although we are generally looking for the most resonant sound with the purest fundamental, we may look for something dryer and closer to the center of the head at times. In order to find the correct playing position on the head, play quarter notes beginning at the very edge of the head (near the collar) and work your way towards the center. Listen for when you hear a clear, warm, and resonant sound. This sound will vary from drum to drum, so repeat this step for all your drums.

## **Comments On Exercises and Auditioning**

Although exercises and technique are an important aspect to playing music well, they represent only a part of your total performance and musicianship. Exercises are not just a method for warming up the muscles in your arms and hands; they should also serve to challenge your mental focus and strengthen your knowledge of the instrument and music theory. Therefore, we may play one exercise many different ways (i.e. forwards, backwards, with the left or right hand, chromatically, circle of fourths, etc.). With this in mind, you should be prepared to do the following in your audition and the preceding camps:

- Know and be able to play all 12 scales
- Know the Circle of Fourths
- Know the Circle of Fifths
- Be able to play all exercises in the circle of fourths, fifths, and chromatically
- Apply the technique concepts to your exercises
- Present a short solo that demonstrates your musicianship (four mallet is preferred but two mallet is also acceptable)

Like in any audition or job application, we will be looking at more than just how you play. Success in an ensemble also means being able to enjoy and appreciate whom you work with. We are looking for people who have personality, work hard, respect for the teachers and people they work with, and have a positive attitude. Best of luck in your audition, and I look forward to working with all of you!