Welcome to the percussive world of the Bluecoats drum and bugle corps! The following pages cover everything including equipment, amplification gear, applied techniques and mallet, stick, head and cymbal choices.

We hope you find the information in these pages useful for your percussion programs! Please print out and use as you wish!

The Bluecoats 2007 Percussion Staff:

Michael McIntosh - Percussion Designer
Tom Rarick - Percussion Designer
Ray Ulibarri - Percussion Caption Head
Bret Kuhn - Percussion Consultant
Tim Maynard - Snare Technician
Chad Schaedler - Snare Technician
Eric Ridenour - Tenor Technician
Adam Clay - Bass Technician
Chris Sakowski - Bass Technician
Brad Palmer - Front Ensemble Technician
Allen Justus - Front Ensemble Technician
Kyle Forsthoff - Front Ensemble Technician
Josh Unger - Visual Technician
Michael Laird – Visual Technician

The Bluecoats proudly endorse the following companies:

For a COMPLETE PERCUSSION ENSEMBLE “HOW TO” packet by Michael McIntosh, please visit:

www.midwestmarching.com
www.southwestmarching.com

The packet covers percussive arranging, orchestration, timing and ensemble tips and is an invaluable tool for young percussion arrangers and band directors alike!
The Hybrid Series

The Bluecoats New Snare Head

The Hybrid marching snare batter head blends two unique high-tensile fibers to achieve only the positive attributes that corps, instructors, and players are looking for. To answer the high-tension requirements demanded by modern drum corps activity, one fiber was chosen for its extreme durability. As a result of its innate strength, this fiber produces the additional benefit of enhanced attack and projection. The 2nd fiber, however, was chosen for its flexibility and stretch. Its elastic nature allows the head to flex under the impact of sticks—producing a significantly softer feel. The inherent “give” in the batter head allows the air column inside the drum to be moved with greater ease, resulting in a more pronounced snare sound, resonance, sensitivity and dynamic range.

<table>
<thead>
<tr>
<th>Grey Hybrid™ Batter</th>
<th>Description</th>
<th>Retail $</th>
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<tr>
<td>SB13MHG</td>
<td>13” Hybrid Snare Batter – Grey</td>
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<tr>
<td>SB14MHG</td>
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<table>
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<tr>
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<td>13” Hybrid Snare Batter – White</td>
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</tr>
<tr>
<td>SB14MHW</td>
<td>14” Hybrid Snare Batter – White</td>
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</table>

Drum Corps and marching bands have long chosen to use Kevlar bottom heads due to their durability despite a preference for a more open and sensitive sound. Traditional polyester bottom heads, despite their positive sound characteristics, stretch out too quickly and need replacement frequently. The Hybrid snare side offers the best of both worlds. By imbedding high-tensile fibers in an open weave pattern between two ultra-thin layers of clear film, the Hybrid marching snare side head produces the sound and sensitivity of a polyester bottom with a resistance to stretch that is closer to Kevlar.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Description</th>
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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 and allow the stick to resonate in your hand. If you hold the stick too tightly, you dampen the stick’s natural vibration and “choke off” much of the sound which results in 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.
**Left Hand** (for Traditional Grip)

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. 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.

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**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. 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 and making sure the stick angles are the same. 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.
At the Bluecoats, there are two common stroke types that we employ when playing the snare drum: legato and marcato strokes. Before we define each of these more specifically, there are some key points that apply to both of these stroke types.

Every stroke will initiate from a wrist turn with the bead of the stick moving first. 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.

**Legato Strokes**

The legato stroke is often referred to as the rebound stroke because when using this stroke the player should allow the stick to “rebound” (bounce) off of the drumhead. The player makes the initial effort to throw the stick toward the head, with the drum naturally rebounding the stick back to the upstroke position. The key to playing legato is not restricting the rebound of the stick. The motion of the stick should never stop – it is always moving either toward or away from the drumhead. All fingers should remain on the stick at all times, but they should not hold the stick against the palm inhibiting the rebound. The arms, hands, and fingers remain relaxed, naturally moving with the motion of the stick.

**Marcato Strokes**

We define a marcato stroke as a “controlled rebound” stroke. When playing marcato, you restrict the rebound of the stick by using the muscles in your fingers to stop the stick after the stick has come in contact with the playing surface. The fingers, instead of traveling with the natural rebound motion of the stick, provide resistance against the stick motion to keep it from rebounding. Your grip should be relaxed and make sure to maximize efficiency by only using enough energy to get the job done.
How You Feel When You Drum

As you play, you should always strive 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 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. 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.

Recommendations on Equipment and Tuning

At the Bluecoats, we use Yamaha MTS 14” snare drums for their superior tone, articulation, and durability. The drums are outfitted with EVANS White Hybrid snare batter heads and EVANS MX5 snare side heads. We have chosen the MX5 resonant head for its excellent response and stretch resistance. It also has an internal dampening ring, which reduces unwanted overtones and decreases the need for external muffling. We also use Randall-May carriers and Stadium Hardware stands.

We use both the Innovative Percussion FS-MM and AS-MM marching snare sticks. The FS-MM, our general use stick, provides an excellent feel and full-body sound. For particular musical passages, we use the AS-MM which are slightly smaller in size and provide a brighter articulation. We have used the new IP rubber tips on our AS-MM’s. The AS-MM is also a great choice for younger players making the switch from concert sticks to marching sticks.

In order to achieve an articulate, yet characteristic snare sound, we like to tune the bottom heads a half-step higher than the top heads. This provides us with a desirable blend of attack from the top head with snare response from the bottom head and allows the shell to be a part of the sound. Because of the large number of snare drummers in the line, we do clip several snare guts from the strainer to keep the overall snare sound from being too “wet” or snare heavy. However, we don’t recommend this for a line with a fewer number of players.
The Role of the Tenor Drums

The role of a Tenor drum is to provide the tenor voice in the percussion choir. The tenor drum voice serves as a unique timbre that can support or enhance the Winds. Being tonal in nature, the tenor drums lend themselves easily to doubling melodic contours and adding contrapuntal texture. Each individual must be accountable for their individual performance and awareness of their responsibilities to the percussion ensemble and full ensemble. As a line, the tenors must simultaneously achieve a uniform approach to touch, flow, rhythm, space, and technique (marching and playing). The line must function as a single entity.

Grip

The grip that we use is the basic matched grip. The fulcrum consists of two points of contact created by the thumb and the index finger gripping the implement approximately a third of the way from the butt of the stick. The fulcrum should be firm enough to keep the stick/mallet from moving, but relaxed enough to allow the stick/mallet to resonate. The top of the hand should be slightly turned from flat to a 45-
degree angle. The fingers should maintain contact with the stick at all times, cradling it in the “bed” of the palm.

**Playing Position**

The bead of the mallet should rest approximately $\frac{1}{2}$ inch above the surface of the drumhead, sloping down at a 10-degree angle. The bead should rest approximately $1\frac{1}{2}$ inch from the rim. Default tacit position is defined as sticks split over 1 & 2. Stick movements prior to playing will be defined according to the music. The “T’ed” up approach will be used for the outer drums. Notice that the beads are equidistant from the rim.

The elbow should rest near the player’s body, but not touching. At no point should tension enter the arms, shoulders, neck, or face.

When traveling from A to B, maintain an arc, never pulling the elbows back. When moving to the 6” & 8” drums, the elbows pull back while keeping the shoulders soft and low.

Height of the drum must always facilitate the marching technique and free motion of the legs. Remember – relaxation is the key. Height of the drum is important to maximize relaxation and eliminate tension.
Stroke

Approach to the drum: Relaxation is the key. There must not be any tension when approaching the drum. A one drum mentality is applied to movement and motion around the drums, meaning: legato remains legato, marcato remains marcato, multiple bounce stroke remains a multiple bounce stroke, and whip stroke remains whip stroke. Parts should first be learned on one drum to ensure quality of sound, rhythmic accuracy, and muscle memory sensation. Applied to the around, all of these aspects should remain, most importantly, the muscle memory sensations. Stay as relaxed moving around as you would playing on one drum. Shoulders should remain stationary, low and relaxed during difficult scrape passages and crossovers. A good guideline to go by: 70% wrist and 30% finger. Keep in mind; this guideline is tempo and volume conducive.

The Metronome

Consistent tempo is an important part of being a percussionist and the metronome can help you achieve this. However, the metronome should be used as a guide for playing in time and not as a crutch. Using the metronome with half notes instead of quarter notes will increase your tempo awareness. Most of our tempo responsibilities include either playing with a met or playing with another person. It is recommended to practice both.

Recommendations on Equipment and Tuning

The Bluecoats use Yamaha MQ-8200 Field-Corps Series marching toms. High schools may want to try the lighter less expensive MQ-6200. We actually use a six drum configuration of one of each 6”, 8”, 10”, 12”, 13” and 14” tom. Other combinations may consist of two 6” toms and either 10-12-13-14 or 8-10-12-13 inch configurations. The smaller drums have less presence in the ensemble but may be the right balance for small bands and students of small physical stature. We use Randall-May carriers and Stadium Hardware stands.

At the Bluecoats we also use Innovative Percussion sticks and mallets. We currently are using the IP TS-2 Multi Tom Stick the features a round nylon bead that offers a fuller sound than sticks but more articulate than a mallet. We also use the aluminum shaft FT-4A Multi Tom Mallet and FS-MM marching snare drum stick. For High Schools I recommend the TS-2 Multi Tom stick and the FT-1AH, the latter being more durable and suitable for younger players.

As far as tuning the Multi-Toms there are numerous schools of thoughts and approaches. A good rule of thumb is good separation between the drums with thirds and fourths being preferred. At the Bluecoats we use a BbM9 chord with Bb on the 14”, D on the 13”, F on the 12”, A on the 10”, C on the 8” and F on the 6”. We find this series of pitches desirable because they blend well with the Bb instrument.
The Role of the Bass Line

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 can 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 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 ensemble awareness. With all of this 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 matched grip, except the hands are rotated so the wrists are vertical instead of horizontal. The thumb and index finger form a “fulcrum” on the mallet. This should not be a gap between the thumb and the third knuckle of the index. 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.

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.

2. The next step is to make sure the rhythm played after the starting point is correct. The tendency that most players have is to play the rhythms too closed. Sometimes, 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 is not as strong of a 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.

3. 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”. From farther away it’s almost completely unnoticeable. Using this technique allows each note to be clearly heard over the constantly 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.

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.

Recommendations on Equipment and Tuning

We prefer the sound of Yamaha 8200 Series Field-Corps Bass Drums. They have a deep, resonant sound and a forceful attack. We use the following sizes: 18”, 20”, 24”, 28”, and 32”. For high school, we recommend: 18”, 20”, 22”, 24”, and 28”. Using a smaller 26” as the bottom bass drum will significantly thin out the tone production and limit the lower range of the tuning, so we recommend only considering that option if a thinner sound is what you desire, if you do not have a student that can physically carry the 28”, or if you have an indoor winter percussion group or indoor venue. We also use Randall-May carriers and Stadium Hardware stands.

We recommend using Evans 10mm single-ply MX1 Marching Bass head. It is equipped with a unique tone damping system that enhances articulation and focuses the low-end. A series of felt damping arcs can be manipulated for indoor or outdoor marching. This product is wonderful because you do not have to spend hours gluing foam to the heads or the shell to muffle the overtones.

We recommend using Innovative Percussion FBX Bass Mallets. We use sizes FBX-1 through FBX-5, but with the smaller drum sizes used in high school, we recommend the following: Bass 1: FBX-1, Bass 2: FBX-1, Bass 3: FBX-2, Bass 4: FBX-3, and Bass 5: FBX-4. If you purchase mallets that are too big for the drum size, then you can get a very “thuddy” sound.

We tune our drums to a major chord. Between basses 1 and 2: minor 3rd, 2 and 3: Major 3rd, 3 and 4: Perfect 4th, 4 and 5: Perfect 5th. This gives the bass line a nice intervallic relationship between all the drums. For an indoor percussion setting, we recommend trying to spread the intervals in the top 3 basses further to perfect 4ths since the pitches more easily run together in a “boomy” indoor venue.
Percussion Gear and Mallets

**Marimbas**
4.3 & 4.5 octave Yamaha Acoustalon and Rosewood
Mallets: IP1003, FS250, FS250, IP2002, IP702

**Vibraphones**
3 octave Yamaha Gold Bars
Mallets: IP1006, AA25, FS320, IP 706

**Xylophone**
3.5 octave Yamaha Acoustalon
Mallets: FS550, IP902, IP903, IP904, IP1007

**Glockenspiel**
3.3 octave Yamaha/Deagan
Mallets: ENS460R, IP903, IP550, IP902

**Timpani**
Yamaha Symphonic Series 20”, 23”, 26”, 29”, 32”
Mallets: CT1, CT2, CT3, CT4
Heads: Evans Strata Series

**Drumset**
Yamaha Oak Custom 20”X16”, 16”X14”, 12”X9”
Sticks: IP5B, BR1
Heads: Evans G1 coated, J1 Etched, EMAD coated

**Snare Drums**
Yamaha 14” X 5.5” Copper
Yamaha 14”X 6.5” Maple
Yamaha 13” X 4.5” Birch
Sticks: CL1, IP5B
Heads: Evans Strata Series

**Concert Bass Drum**
40” X 22”
Mallets: CB1, CB4, CG1
Heads: Evans Strata Series
Cymbals

ORCHESTRAL AND HAND CYMBALS
- 18" K Constantinople suspended*
- 20" K Constantinople suspended
- 20" K Constantinople special selection med heavy pair
- 20" K Constantinople vintage orchestral medium light pair
- 18" K Constantinople medium light pair*

CRASH/SPLASH
- 6" A custom splash
- 8" A splash brilliant*
- 10" K splash brilliant
- 9" K custom hybrid splash
- 11" K custom hybrid splash
- 14" K dark crash thin
- 15" K custom dark crash*
- 18" K Constantinople crash
- 19" K custom hybrid crash
- 18" K dark crash medium thin*

HI-HATS
- 14" K mastersound hihats*

RIDES
- 20" K custom hybrid ride
- 22" K dark medium ride
- 20" K custom dark ride*
- 20" A custom sizzle ride

SPECIAL EFFECTS
- 16" A custom efx
- 18" A custom efx
- 18" Z custom china*
- 14" K mini china
- 17" K custom dark china
- 18" A backbeat ride
- 19" K custom hybrid china
- 22" A swish knocker w/8 rivets*
- 14" ZXT trashformer

GONGS AND CROTALES
- crotales – high 8va
- crotales – low 8va
- Gong Sheet
- 40" tam tam gong*

*-Recommended all around good cymbal for purchase at the high school level
The Bluecoats Front Ensemble

**HEAD ORDER**

**Timpani:**  
4 of each: EST22, EST25, EST28, EST31, EST34

**Bongo:**  
3 sets: EB0709 - bongo head combo

**Concert Bass:**

- 6 - CB4014S  
  Strata 1400 batter
- 6 - CB4010S  
  Strata 1000 resonant

**Concert Snare Drums:**

- 6 - CT14S  
  Strata 1000 batter
- 4 - CS14S  
  Strata 700 batter
- 2 - B14GCS  
  Orchestral batter
- 3 - S14GEN30  
  Strata 300 resonant
- 6 - S14GEN20  
  Strata 200 resonant

**Drum set:**

- 3 - B14G1  
  G1 snare batter - 14”
- 3 - E14J1  
  J1 snare batter - 14”
- 2 - B12G1RD  
  PC snare reverse dot - 12”
- 2 - E12J1  
  J1 snare batter - 12”
- 5 - S14H20  
  Hazy 200 snare side - 14”
- 5 - S12H20  
  Hazy 200 snare side - 12”
- 4 - B12G1  
  12” G1 coated tom batter
- 4 - B14G1  
  14” G1 coated tom batter
- 2 - E12J1  
  12” J1 coated tom batter
- 2 - E14J1  
  14” J1 coated tom batter
- 5 - TT12G1  
  12” G1 tom resonant
- 5 - TT14G1  
  14” G1 tom resonant

- 3 - BD20EMADCW  
  20” EMAD coated batter
- 3 - BD20RGC  
  20” EQ3 resonant frosted

Min - EMAD dampeners
4 - AF Patch
The Bluecoats ELECTRONICS Guide

Front Ensemble Amplification Set-Up

- Yamaha 01V96 Digital Mixing Console*
- M-Audio Octane 8 Channel Pre-amp and A/D Converter*
- Furman M-8L Power Conditioner*
- dbx Driverack Z60 Complete Equalization and Loudspeaker Management System*
- Yamaha P5000S Power Amplifier*
- CBL Performer Series 18 Channel Snake
- Yamaha CM15V Speaker System*
- Yamaha CM118V Sub-woofer*
- Planet Waves XLR Mic Cables
- Audio Technica Pro 37 Microphones
- Shure SM57 and 58 Vocal Microphones
- Audio Technica ATM 25 Dynamic Microphone
- Audio Technica Clip Mics (Kit Toms)

“Digital Aerobics” Set-Up

- Apple G4 Powerbook
- Propellerhead Reason Digital Sequencing Program
- M-Audio Firewire Solo
- Samson S-Phone Headphone Mixer/Amp
- Gator BRB-3U 3-Space Portable Soft Rack
- Yamaha Studio Headphones
- Planet Waves Firewire Cable
- 10 ft Planet Waves Stereo Cable
- 10 ft Planet Waves ¼” to ¼” Cable
- Planet Waves Headphone Extension Cable
- 50 ft. Speak-on Speaker Cable

*Equipment used for both sonic applications