

**Haslett Viking Marching Band
Master Handbook**

2021 EDITION

WYSKO ET AL.

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About this book

What is this book?

The book aims to be a Master Handbook, including all the information necessary to be a successful leader in the Haslett band program. *Don't let the size of this book scare you!* It simply serves the purpose of having the information necessary when needed. Although it would be highly beneficial to have the full content of this book understood and read, it is also meant for quick reference for information when it is needed.

Chapter 2 of this book aims to stand as a *Manual of Style*, a way to define how performers in the band execute maneuvers on the field, defining a ground-truth definition for each fundamental. I am adapting the term “Manual of Style” from Wikipedia’s main styling guidelines documentation. If you are familiar with the “Fun with Fundamentals” document, you are familiar with the intention of this chapter. This chapter aims to be a revamped, updated, formalized version with full, complete information for every fundamental and marching maneuver, fleshed with figures and diagrams for full comprehension and definition. This chapter should ideally be updated from year to year to adjust for additions or changes.

The source code for this book—including instructions for contribution, as well as credits and other information—is available at <https://github.com/wyskoj/haslettvmbdocs>.

The latest, most up to date version of this book is viewable at <https://wyskoj.github.io/haslettvmbdocs>.

The first edition of this book, the 2021 EDITION, was written from March 2020 to .

Note: this book contains some opinions. If you disagree and feel you need to tell me, email me at jacob@wysko.org.

Credits

- Jacob Wysko — D.M., A.S. '20 — Lead Author, Graphics Design, Score Engraving
- Simon Kwilinski — Clr. '20 — Section specific info (Clarinet)

Chapter 1

The Field & Where to Be

1.1 Field Anatomy

Most marching that happens while being a member of the band will occur on a football field. This chapter will demonstrate how to understand the field to be most familiar with it.

1.1.1 Terminology

The standard high school football field can be described using some vocabulary (a labeled football field is demonstrated in Figure 1.1 on the following page):

Field A rectangular section of ground dedicated to playing football. But in our case, it's for marching!

Yard line A physical, vertical line that runs across the entire height of the field.

Hash A horizontal line that runs across the entire width of the field, dividing the field into thirds. The **home hash** is closest to the home sideline, and the **away/visitor hash** is closest to the away sideline. There are physical, small, horizontal sections of this line where the hash meets the yard line (see Figure 1.2 on page 8).

Sideline A physical, horizontal line that runs across the entire width of the field, defining the upper and lower edges of the field. The sideline next to the press box or tower is the **home sideline**; the sideline on the opposite side of the field is the **away/visitor sideline**.

End zone A physical, vertical line that runs across the entire height of the field, defining the left and right edges of the field. When facing the press box from the field, the right and left end zones are defined by the right and left sides of the person.¹

Tick A mark on the practice field, usually orange, spaced 90 inches apart spanning the height of each yard line. These marks are only found on the practice field for reference.

¹If the home sideline is north, then the right end zone is east and the left end zone is west.

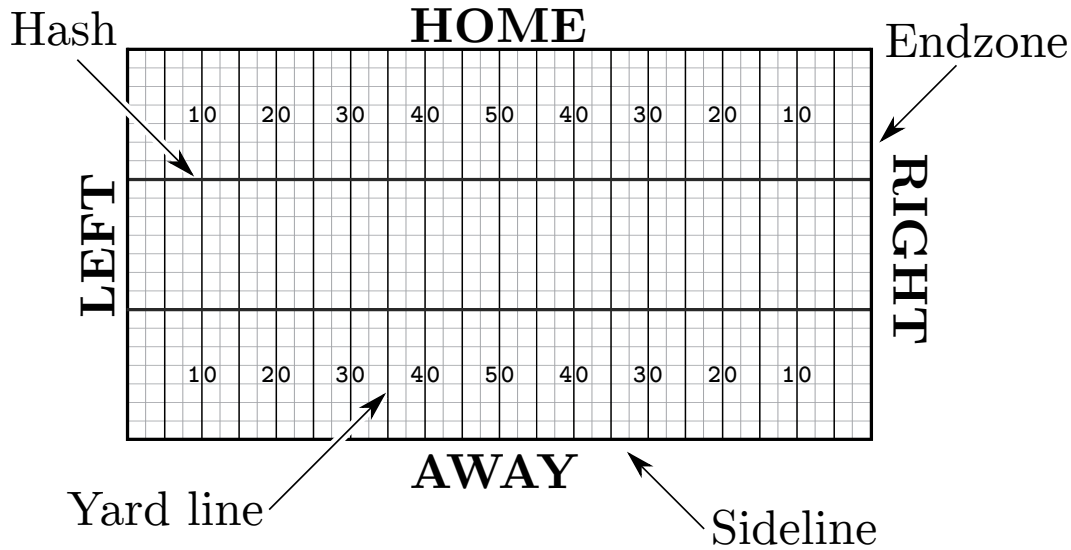


Figure 1.1: A standard football field. The grid represents four 8:5 steps.

1.1.2 Layout

The football field is 100 yards across and 52.5 yards tall. It is divided by 15 yard lines starting from the left end zone and moving towards the right end zone. Each yard line has a distance of 5 yards in between. Every other yard line is labeled by its distance from the nearest end zone (e.g., 10 yards, 20 yards, etc.). The middle yard line is marked 50 yards.

The football field is divided into three sections vertically, making three “rows,” divided by the hashes. The home hash sits 17.5 yards south from the home sideline. The away sideline is 17.5 yards north of the away sideline, effectively making the distance in between hashes also 17.5 yards.

The term “back field” refers to the part of the field closest to the away sideline (typically between the away sideline and away hash). Although the term “front field” can refer the the part of the field closest to the home sideline, it is not used as often.

The part of the field in between the left sideline and the 50 yard line is called “field left.” The part of the field in between the right sideline and the 50 yard line is called “field right.”

A standard field is demonstrated in Figure 1.1.

1.1.3 Markings

The field is marked in several ways to help performers find their location on the field (a diagram is available in Figure 1.2 on the next page).

- The yard lines and end zones are marked by solid, white, vertical lines spanning the entire height of the field.
- The sidelines are marked by solid, white horizontal lines spanning the entire width of the field.

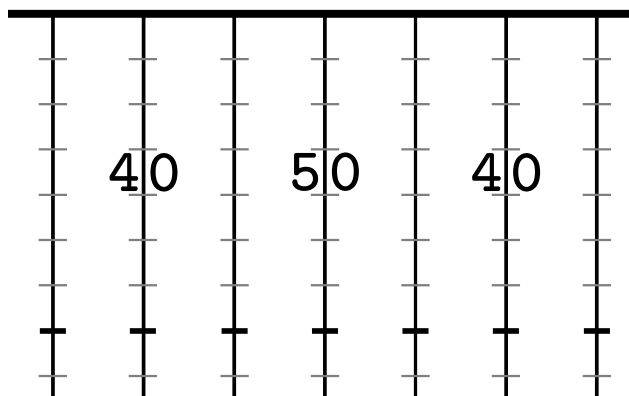


Figure 1.2: A small section of the practice football field, with the markings displayed. Gray lines represent orange tick marks. Solid ticks represent hash lines. Solid horizontal line represents sideline. Solid vertical lines represent yard lines.

- Every 90 inches (7.5 ft), starting from the sidelines, (4 * 8:5 steps, see Subsection 2.3.2 on page 27 for details), a short, horizontal, orange “tick mark” is drawn. These lines represent 4 even 8:5 steps.
- In lieu of an orange tick mark at the hashes, a short, horizontal *white* “tick mark” is drawn. These are 630 inches (52.5 ft) from each sideline.

It should be noted that *only on the practice field will orange ticks be available for reference*. Actual performance fields (e.g., Jamie Jent Stadium, etc.) do not have orange ticks, although all other markings are present. So, it is important to use the orange ticks when learning, but you must be comfortable without them too!

1.2 Interpreting Your Dotsheet

The DOTSHEET is a personalized slip of paper that defines where you are in each set of the show. Each performer will get a unique dotsheet. This section will demonstrate the terminology, abbreviations, and some examples of interpreting the sheet.

1.2.1 Terminology

Show The performance that you will be presenting this year!

Drill A show consists of drills. Usually each song in the show correlates to each drill.

Set A specific point in time in the show that defines where each performer is. A show can consist of many sets, usually close 20. You will have to know where you need to be for each set!

Coordinate/Dot The specific “x/y” location that the performer is to be at in a set.

Form A loose term to define a group of performers on the field. Forms can last throughout the whole show, or may only last for a set.

1.2.2 Dotsheet Layout

In Figure 1.3 is a portion of a dotsheet from the 2018's *Pure Michigan* show.

Drill: Get Ready Performer: Wysko X S3 ID:19			
Set	Move	Right-left	Visitor-home
#15A	0	right: 2.25 stps inside 40 yd ln	5.0 stps behind Home hash (HS)
#16	32	right: 2.0 stps inside 25 yd ln	0.25 stps in frnt of Home hash (HS)
#17	48	right: 3.0 stps inside 20 yd ln	on Home hash (HS)
#18	80	right: 1.0 stp inside 40 yd ln	3.5 stps behind Home hash (HS)
#19	20	right: 1.25 stps outside of 50 yd ln	1.75 stps in frnt of Home hash (HS)

Figure 1.3: A portion of a dotsheet from the 2018's *Pure Michigan* show.

The dotsheet consists of four columns:

- Set — The current set number. A set can also have subsets (#15A is a subset of #15).
- Move — The number of beats that elapse since the last set.
- Right-Left — The X coordinate of the performer.
- Visitor-Home — The Y coordinate of the performer.

The right-left and visitor-home columns use a special type of notation to define distance.

- The format for right-left notation: **[On 50 yd ln/[left/right]: [(x) steps [inside/outside] of/on] (x) yd ln]**
- The format for visitor-home notation: **[On home sideline/On home hash/On visitor hash/On visitor sideline/(x) steps [in front of/behind] [Home sideline/Home hash/Visitor hash/Visitor Sideline]]**

1.2.2.1 Examples of Notation

Here are some examples of right-left notation:

- If the coordinate was “Right: 2 steps inside of 40 yd ln” find the right 40 yard line, and take two 8:5 steps towards the 50 yard line. This is the X-coordinate of the set.
- If the coordinate was “Right: 3 steps outside of 25 yd ln” find the right 25 yard line, and take three 8:5 steps away from the 50 yard line. This is the X-coordinate of the set.
- If the coordinate was “Left: 2.5 steps inside of 35 yd ln” find the left 35 yard line, and take two and a half 8:5 steps towards the 50 yard line. This is the X-coordinate of the set.
- If the coordinate was “Left: 3.75 steps outside of 45 yd ln” find the left 45 yard line, and take three and three-quarters 8:5 steps away the 50 yard line. This is the X-coordinate of the set.

- If the coordinate was “On 50 yd ln” find the 50 yard line. That was easy!

Here are some examples of visitor-home notation:

- If the coordinate was “5.0 stps behind Home hash”, find the home hash, and take five steps away from the press box/tower. This is the Y-coordinate of the set.
- If the coordinate was “0.25 stps in frnt of Visitor hash”, find the visitor hash, and take a quarter step towards the press box/tower. This is the Y-coordinate of the set.
- If the coordinate was “2 stps behind of home sideline”, find the home sideline, and take two steps away from the press box/tower. This is the Y-coordinate of the set.
- If the coordinate was “On visitor sideline”, find the visitor sideline. That was easy!

1.3 Charts

Shows use CHARTS, specially designed diagrams that allow leaders, Instructors, and Directors to understand sets in the show and how they should appear, how long they last, and extra special instructions.

Typically, charts are provided to Drum Majors, Instructors, and Directors, sometimes to Section Leaders.

1.3.1 Understanding the Charts

A set from 2019’s *Planes, Trains, and Automobiles* is seen in Figure 1.4 on the following page. Analysis of this figure can help demonstrate its components and improve understanding.

- The chart shows the entirety of the field with performers labeled and positioned. Each “X” represents a performer. Near each performer, their ID is connected by a line. The color of the “X” represents the section this performer belongs in (in this chart, drumline is gray, low brass is blue, upper woodwinds are green, saxophones and mellophones are yellow, trumpets are red, Drum Majors are navy, and color guard is pink).
- The field is divided into a grid. Each square of the grid represents exactly 1 step. Solid blue lines represent a 4-step grid. Light blue lines represent a 1-step grid. Solid black vertical lines represent yard lines. Horizontal dashes splitting the yard lines are hashes (see 1.1.2 on page 7). The field is orientated so that the audience/press box is above the field—how a performer on the field would view it.
- Black dots represent the positions of performers in the previous set.
- At the bottom of the field a text box contains crucial information. In plain English, this box describes “what you need to do in order to get to this spot on the field.” It can be easy to misinterpret instructions in the box as marching to be performed once at this spot.
 - MEAS. — The measures that are played up to the shown position.
 - (n Cts.) — The number of counts n from the previous set. Set #1 has no counts (no cts.).

- Marching instructions
 - * FM/BM — Forwards/backwards march. See Subsections 2.3.2 on page 27 and 2.4.1 on page 30.
 - * ADJ — Adjust. May or may not be an integer ratio step size. See Subsection 2.5.3 on page 34.
 - * MT — Mark time. See Subsection 2.2.1 on page 21.
 - * CLOSE & HOLD — Feet stay still.
 - * HORNS UP/DOWN — Horns up/downbeat. See Subsection 2.1.3 on page 19.
 - * Charts may have custom instructions depending on the intended style.
- In the top-right of the page, “Set #6 Count: 284 Move: 120” is found. These refer to the current set number, total number of counts into the song this set is aligned at, and the number of counts from the previous set, respectively.

Chapter 2

Fundamentals

This chapter of the book will present each fundamental in ideal chronological teaching order, in full detail.

The Wiktionary definition of “fundamental” [1]:

A leading or primary principle, rule, law, or article, which serves as the ground-work of a system; an essential part

As such, the fundamentals of our marching band are the skills demonstrated on the marching field that are used in complex maneuvers and are found in a marching show.

This chapter of the book provides an enumeration of styles; the descriptors and text provided in the section shall be treated as definition. If definition changes, the book shall change to reflect this.

2.1 The Basics

These are the most rudimentary fundamentals that the band shall absolutely be comfortable with and can execute with perfection.

2.1.1 Attention

ATTENTION is the most rudimentary fundamental of any, since the band will be holding this position for the majority of the time. Therefore it is most absolutely necessary the band can do this perfectly.

The goal of *holding Attention* is to allow the band to appear uniform when arranged together, whether it is on the practice field practicing fundamentals, on the field marching a show, walking at an *Attention Walk*, or marching in *Parade Block*. When the band is not uniform, it is simply unappealing to look at; noticing a person swaying side to side, itching their leg with their foot, or looking around, can break the aesthetic of a marching band.

It is also important to realize the word choice of “attention.” If you are holding Attention, you are also *paying attention*! If a leader gives you a command while you are holding Attention and you fail to respond to the command, we’ve broken the purpose of Attention!

All commands and instructions will be performed when the band is holding Attention.

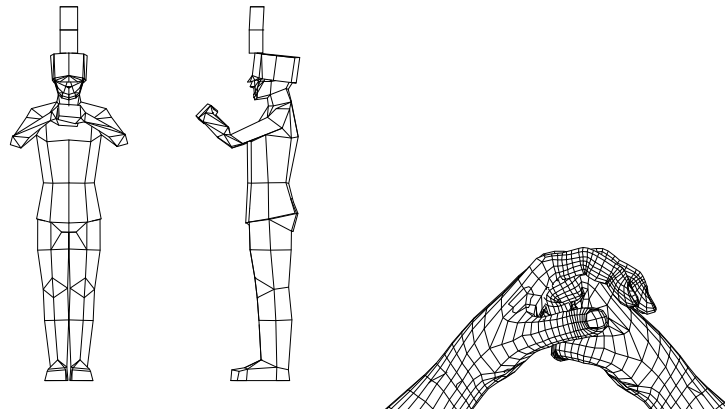


Figure 2.1: The “imaginary trumpet” Attention pose.

2.1.1.1 The Attention pose

These descriptors demonstrate Attention with no horn for the standard wind player (the “imaginary trumpet” Attention). This pose is demonstrated in Figure 2.1.

Feet placed side by side, toes and heels together, toes pointing forwards.

Legs slightly bent, just enough that knees are not locked, pointing forwards.

Hips level and providing even weight distribution to both legs.

Torso straight and tall, core engaged.

Shoulders relaxed, but back, square, and even.

Arms extended forwards, elbows pointing out and down, relaxed, forming a 90° angle.

Hands right hand forms a fist, right thumb resting on tops of index and middle fingers, left hand wrapping around, left thumb resting on top of fist, at eye level.

Head looking slightly up at 15° angle, neck relaxed.

For each instrument:

Flute/Piccolo/Clarinet The horn should be held vertically, with the hands positioned in normal playing position, arms extended outwards. The mouthpiece should be just above eye level.

Saxophones The saxophone should be positioned horizontally, resting on the stomach with the help of the neck strap. The hands should be placed in normal playing position.

Trumpets/Mellophones/Trombones The horn should be held vertically with the bell facing down, close to eye level, with hands positioned in normal playing position.

Baritone The baritone should be held with the right arm, holding against the torso, bell facing forwards. The left arm should be down, relaxed, but in place and holding a fist.

Sousaphone The sousaphone should be appropriately worn, with the neck and mouthpiece angled down.

Snare/Tenor Drum The sticks should be held together in opposing directions, with the right hand stick closest to the body.

Bass Drum The mallets should be held against the rim of the drum on the side closest to the body.

Flag The flag should be held vertically with the left hand near eye level, grabbing the cloth of the flag and holding it to the rod. The right hand should hold the rod near waist level.

Important aspects of Attention:

- This position should be comfortable and easy to pose. If you are experiencing exhaustion, relax your shoulders, unlock your knees, and keep your weight distribution even between both legs.
- When holding the “imaginary trumpet” or other instrument that requires you to hold your instrument out in front of you (all except saxophones, baritones, sousaphones, drum line, and color guard), do not tuck your elbows. If you were to draw a line from your wrists down to your elbows and extend that line outwards, it should hit the ground away from you, on either side.
- Absolutely NO TALKING. How can you pay attention to your leader if you are talking to the people around you? The main point of not talking is to maintain a mental attention to the leader.

Tips for learning how to hold a good Attention:

- To know if you are holding your arms out far enough, check to see if someone can easily “sneak in for a hug.” You are not holding a proper Attention if your arms are too extended or not extended enough.
- To know if you are holding your head at the correct angle, place your hand in an “L shape.” Place your index finger under the bottom of your chin and your thumb in between your clavicles. You can also imagine pointing your head to the tops of the trees.¹
- If you imagine your hips are a bucket of water that is 99% full, and you don’t want to spill any water, you must keep your hips level to do so.
- Imagine you are being pulled from the top of your head by a string, extending your spine all the way and up onto your toes. Hold this position, then *only* move your ankles so your feet are now flat on the ground. This should show how your back and torso should be positioned to maintain a good posture.

¹I can’t recommend using the tree method, since your distance to a tree can affect the angle, and you probably won’t have a tree to reference when you are marching a show on the field. However, if you can perfect the angle while on the the practice field and memorize that angle, it may just work for you.

2.1.1.2 Falling into Attention

To “fall into Attention” means to begin holding the Attention pose and be ready for instructions. The band can either fall in synchronously or asynchronously (all at the same time or all at different times). Attention is the only command that can be called when the band is not in form.

Synchronously The band shall immediately fall into Attention when a leader shouts:

BAN 'TEN HUT!

The timing of the syllables forms three even quarter notes of a 4/4 measure, landing on beats 1–3. The band shall then respond and fall into the Attention pose and await further commands:

HUN!

The band’s response shall land on beat 4 of the measure.



Asynchronously The band shall, as quickly as possible, fall into Attention when a leader states one the following:

Fall into Attention!

Fall in!

The band does not provide a response when falling into Attention asynchronously.

2.1.1.3 Legal commands while at Attention

Attention is the most basic state the band can be in, so any other command can be called while the band is at Attention.

2.1.1.4 Attention Walk

When the band can’t be in step due to reasons, the band can ATTENTION WALK. To attention walk, simply walk at attention. This means every part of the body should appear to be holding Attention except for the legs. This also means the head should remain forward with the chin up, just as it is in Attention. Attention Walk is not a march, so the upper body will bounce (see Subsection 2.3.2 on page 28 for details on the upper body while marching).

2.1.1.5 Relaxed Attention

Seldom does the band ever hold a RELAXED ATTENTION, but when it is done, it is used for extended periods of time of holding attention. Times upwards of 10–15 minutes and more warrant Relaxed Attention. The most prominent example of this is during Homecoming as the couples walk through the aisle the band forms in Jamie Jent Stadium.

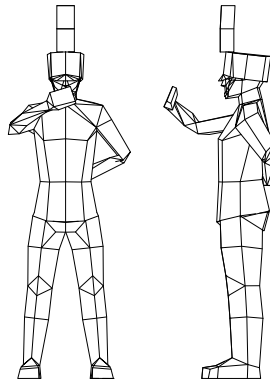


Figure 2.2: The “imaginary trumpet” Parade Rest pose.

2.1.2 Parade Rest

PARADE REST is the next most important fundamental to learn, since it is another basic pose that does not involve any movement and is often used next to Attention.

The goal of Parade Rest is to allow the band to remain uniform, while also resting. It requires less work to hold than Attention. Parade Rest is used commonly when the band is waiting for an event to happen, so that the band can return to Attention and continue marching. For example, while waiting for the clock to strike 00:00 for halftime, the band will hold Parade Rest to appear uniform while not specifically being in formation.

2.1.2.1 The Parade Rest pose

These descriptors demonstrate Parade Rest with no horn for the standard wind player (the “imaginary trumpet” Parade Rest). This pose is demonstrated in Figure 2.2.

Feet placed shoulder-width, or slightly greater, apart, toes pointing forwards.

Legs slightly bent, just enough that knees are not locked, pointing forwards.

Hips level and providing even weight distribution to both legs.

Torso straight and tall, back straight, but relaxed.

Shoulders relaxed.

Arms left arm reaching behind back, right arm holding same pose as Attention.

Hands right hand maintains Attention pose. Left hand is placed in the small of the back, fingers straight and together, thumb resting next to index finger, hand horizontal to ground, horizontally centered in back.

Head looking slightly up at 15° angle, neck relaxed.

For each instrument:

All wind instruments The left arm will follow the pose as defined previously. The right arm will maintain its instrument specific pose. The left foot will spread to be balanced shoulder-width apart.

Drum line The arms rest to the side holding the sticks, feet apart.

Flag The flag is held parallel to the ground, feet apart.

Important aspects of Parade Rest:

- This position should be comfortable and easy to pose. If you are experiencing exhaustion, relax your shoulders, unlock your knees, and keep your weight distribution even between both legs.
- The left hand should form a “blade” and be placed in the small of the back.
- The right arm does not move. It does not come closer to the body. It should still be extended in the same manner as Attention. Just imagine your left arm is invisible, but still there to accompany the right arm.

Tips for learning how to hold a good Parade Rest:

- To find the perfect foot placement, position your feet so that they are directly underneath your armpits. This is an equivalent for those who spread too far when prompted on “shoulder-width.”

2.1.2.2 Going in and out of Parade Rest

The band “falls into” Parade Rest asynchronously and “moves to” Parade Rest synchronously. The band can only move to Parade Rest when at Attention and horns are down, or out-of-state.

Going in synchronously The band shall immediately move to Parade Rest when a leader shouts:

BAN PA 'RADE HESS!

The timing of the syllables forms a dotted eighth, followed by a sixteenth, then two quarters. The band shall then respond and fall into the Parade Rest pose and await further commands:

HUN!

The band’s response shall land on beat 4 of the measure.



Transitioning To transition from Attention to Parade Rest, the left arm should quickly snap from its position in Attention to Parade Rest. The left foot should also move out the left, landing just under the armpit/shoulder. The right foot never moves! By doing this, your center of mass will move to the left.

Falling in asynchronously The band shall, as quickly as possible, fall into Parade Rest when a leader states one the following:

Fall into to Parade Rest!

If a whistle is blown with a long-short pattern, the band will fall to Parade Rest, although this may differ depending on context. If a whistle is blown, then falls in pitch, then rises back to the initial pitch, the band is expected to fall into Parade Rest. The band does not provide a response when falling into Parade Rest asynchronously.

Going out of Parade Rest There is only one legal command the band can follow when holding Parade Rest: Attention. If any other command is given while the band is at Parade Rest, the band is expected to respond with:

AS YOU WERE!

The timing of the syllables forms a dotted eighth, a sixteenth, followed by a quarter, starting on beat 4.²



2.1.3 Horns Up/Down

What is the point of a marching band if our instruments are always down? The band always puts its horns up and down together.

To put the HORNS UP means to raise the instruments to the normal playing position to begin playing.³ Likewise, to put the HORNS DOWN means to move back to Attention with the horns out of the face.

2.1.3.1 The horns up position

When holding the imaginary trumpet, the only part of the body that moves is the arms and the hands. The hands are placed at or above eye level, while maintaining a 90° angle at the elbows. The hands bend slightly at the wrist so that the left thumb that is resting on the right fist is facing towards the face.

For each instrument:

Flute The flute is held horizontally in a normal playing position.

Clarinet The clarinet moves down (contrary to any other instrument) to reach the mouth for normal playing position.

Saxophone The saxophone is lifted up vertically to a normal playing position. The neck strap should be adjusted to the saxophone “comes” to the player, and not vice versa. The saxophone should be pushed forwards with the right hand to not rest against the stomach.

²This often becomes simplified to two eighths, followed by a quarter.

³Clarinets move down to reach playing position. How antithetical.

Trumpet/Mellophone/Trombone The horn is rotated and lifted to come to a normal playing position. The angle of the horn should be $\sim 15^\circ$ above the horizon line.

Baritone The baritone is grabbed with the left hand and brought up to a normal playing position.

Sousaphone The neck and mouthpiece is rotated to come to the mouth of the performer for a normal playing position.

Snare/Tenor Drum The sticks are held with appropriate grasp and point 45° inwards from center.

Bass Drum The mallets are extended outwards so the head of the mallets are positioned in the center of the drum head.

Flag The flag is raised.

It is important to note that for wind instruments, the mouthpiece of the instrument should not be in contact with the mouth; it only makes contact when playing. Trying to bring the horn up and directly into your mouth in a short, snappy move may not be good for the health of your mouth!

2.1.3.2 Moving the horns

The transition of moving the horn should be short and snappy.

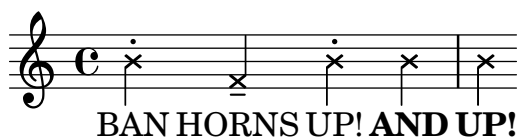
Horns up The band will only transition to horns up from a command or a whistle pattern. The band will move to horns up if the following command is given:

BAN HORNS UP!

The timing of the syllables forms three even quarter notes of a 4/4 measure, landing on beats 1–3. The band shall then respond and move to the horns up position:

AND UP!

The timing of the syllables forms two even quarter notes, starting on beat 4, landing on beat 1 of the next measure. The band will also move to horns up if three short whistles are given, indicating the beginning of a song. The band should respond with the previous response.



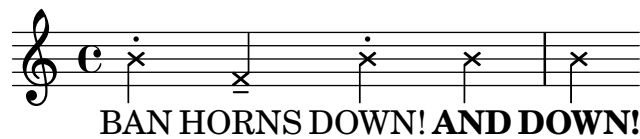
Horns down The band will transition to horns down (normal attention) from a command or the end of a song. The band will move to horns down if the following command is given:

BAN HORNS DOWN!

The timing of the syllables forms three even quarter notes of a 4/4 measure, landing on beats 1–3. The band shall then respond and move to the horns up position:

AND DOWN!

The timing of the syllables forms two even quarter notes, starting on beat 4, landing on beat 1 of the next measure. The band will also move to horns down at the end of a song. The response should start on the closest beat 4 to the end of the song, where the response would not overlap playing.



2.2 Adding Movement

Once the band has learned the basics, it is now possible to teach skills that involve more complex motions.

2.2.1 Mark Time

The band can MARK TIME while in place to establish a maintenance of rhythm. It is visually appealing if the entire band is marking time synchronized.

2.2.1.1 Marking Time

Marking time involves one main motion: the bending of the knee. This motion will happen to both legs. This is demonstrated in Figure 2.3 on the following page.

- The toes of the foot are to remain planted on the ground, from the very end of the toe, to just before the arch of the foot. The heel of the foot is to raise up and be above the ground about the diameter of a tennis ball (30^0). The knee should bend outwards from its position, already unlocked and slightly bent. Everything from the waist up should remain absolutely motionless.
- To mark time, alternate moving the leg to this position and back to normal Attention leg. As you move your left foot down, raise your right foot, effectively alternating between each leg.
- The most important aspect of marking time is keeping your upper body motionless. If you were to imagine having a glass of water resting on the top of your head, you would not want to spill any of the water out of the glass. To do this, engage your core and maintain stability in your upper body.

To mark time “in time,” you will alternate your feet to the beat. Your left foot will always raise on beats 2 & 4, and your right foot will always raise on 1 & 3. You can also think of this as lowering your left foot on beats 1 & 3 and lowering your right foot on beats 2 & 4.

2.2.1.2 Starting and Stopping a Mark Time

The band starts marking time when a leader shouts:

MARK TIME MARK!

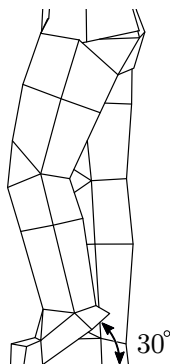


Figure 2.3: The raised leg position in a proper mark time.

The timing of the syllables forms three even quarter notes of a 4/4 measure, landing on beats 1–3. The band shall then respond and begin marking time by raising the left foot:

AND!

The band's response shall land on beat 4 of the measure. Once the band has lifted the left foot, this is treated like a pickup measure to the mark time. The band shall remain marking time, and on beat 4 of each measure, shout the measure number multiplied by 4 (or simply, the current net beat number):

(1) (2) (3) FOUR! (5) (6) (7) EIGHT! (...)

This pattern will repeat indefinitely. If a mark time is interrupted by another maneuver or command, the count resets.



The band stops marking time when a leader shouts:

BAN READY HALT!

The timing of the syllables forms a quarter, sixteenth, dotted-eighth, then a quarter. The band shall then respond, place the right foot down, and lift the left foot:

LOCK AND CLOSE!

The band's response begins on beat 4 and is two eighth notes, followed by a quarter, landing on beat 1 on the next measure. The left foot is finally placed down on beat 1. See Subsection 2.3.3 on page 29 for more information.



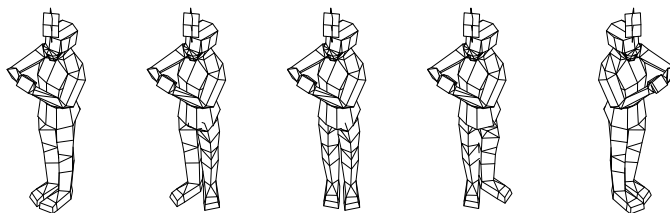


Figure 2.4: The proper left turn maneuver.

2.2.2 Slow Turns

SLOW TURNS are used to gradually rotate performers from facing one direction to another. They are less common than Flankings and are primarily used in fundamental block to rotate the band. However, they can appear in a show. Slow turns will always occur when at Attention.

2.2.2.1 Left Turn

The band begins a LEFT TURN when a leader shouts:

LEF TURN HO!

The timing of the syllables forms three even quarter notes of a 4/4 measure, landing on beats 1–3.

- The band does not do anything on beat 4 of this measure.
- On beat 1 of the next measure, the left foot is moved to be rotated 45° to the left. The left foot should pivot around the heel. The upper body should not rotate.
- On beat 2, the right foot rotates about the heel to match the orientation of the left foot.
- On beat 3, the left foot rotates another 45° to the left, resulting in a net rotation of 90° .
- On beat 4, the right foot rotates another 45° to the left, matching the orientation of the left foot. The upper body “unlocks” from facing forwards and quickly rotates to the left to match the direction of the feet. The band finally responds on beat 4:

LOCK!



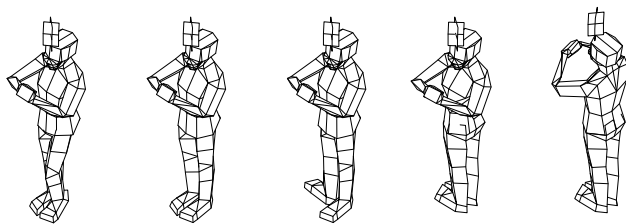


Figure 2.5: The proper right turn maneuver.

2.2.2.2 Right Turn

The band begins a RIGHT TURN when a leader shouts:

RIGHT TURN HO!

The timing of the syllables forms three even quarter notes of a 4/4 measure, landing on beats 1–3.

- The band responds on beat 4 of this measure, picking up the left foot (like a mark time):

AND!

- On beat 1 of the next measure, the left foot is placed on the ground.
- On beat 2, the right foot rotates about the heel 90° to the right. The upper body should not rotate.
- On beat 3, the left foot rotates 90° to the right, matching the orientation of the right foot.
- On beat 4, the upper body “unlocks” from facing forwards and quickly rotates to the right to match the direction of the feet. The band finally responds on beat 4:

LOCK!



2.2.2.3 About Turn

An ABOUT TURN is a 180° rotation, rotating counterclockwise. The band begins an About Turn when a leader shouts:

A 'BOUT TURN HO!

The timing of the syllables forms three even quarter notes of a 4/4 measure, landing on beats 1–3, with a sixteenth appoggiatura before beat 1.

- The band does not do anything on beat 4 of this measure.
- On beat 1 of the next measure, the left foot is moved to be rotated 90° to the left. The left foot should pivot around the heel. The upper body should begin rotation, but will not rotate greater than 90° CCW until beat 4.
- On beat 2, the right foot rotates about the heel to match the orientation of the left foot.
- On beat 3, the left foot rotates another 90° to the left, resulting in a net rotation of 180° .
- On beat 4, the right foot rotates another 90° to the left, matching the orientation of the left foot. The upper body quickly rotates 90° to the left to match the direction of the feet. The band finally responds on beat 4:

LOCK!



2.2.3 Facings

FACINGS are only typically used in fundamental block. They allow the band to be rotated rapidly. They are similar to Flankings, which are much more common. Facings only occur with a given command:

BAN [LEF/RIGHT] HASTE!

The timing of the syllables forms three even quarter notes of a 4/4 measure, landing on beats 1–3.

- On beat 4, the band then will then rotate by pivoting on both feet and rotating the upper body.
 - If the band is Facing to the left, the band will pivot on the heel of the left foot and the ball of the right.
 - If the band is Facing to the right, the band will pivot on the heel of the right foot and the ball of the left.
 - This rotation is quick and snappy as the upper body rotates at the same time as well.
- On beat 1 of the next measure, the foot that is backwards of the other moves forward to match the position of the other.

The band responds with:

HUN TWO!

The response begins on beat 4 as the feet pivot, then ends on beat 1 as the feet come together.



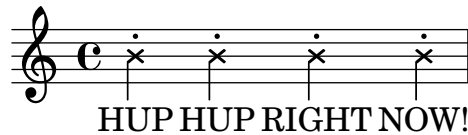
2.3 Moving to new places

All of the previous fundamentals only take place in one spot. Now, we discuss basic traveling skills. Note that the following fundamentals are not directly given via commands, but are given through a set of instructions (e.g., “mark time 4, forwards march 4”).

This also introduces *instruction giving*, contrary to command giving. When command giving, the band immediately responds and does an action when a command is given. In instruction giving, the band is given a series of commands, given time to process them mentally, then the band is given a command to begin.⁴ So, instruction giving is appended by a command. When the band has been given instructions, the leader will shout to start the instructions given:

HUP HUP RIGHT NOW!

The timing of the syllables forms four even quarter notes of a 4/4 measure, landing on beats 1–4. Depending on what the band’s first move is, they will have a different response, but will always give back a response.



2.3.1 Lock-Push

The LOCK-PUSH begins movement by allowing a stationary performer to begin traveling forwards.⁵ The Lock-Push is colloquially called the STEP-OFF.

The Lock-Push is comprised of two separate parts: the “lock” and the “push.” This is demonstrated in Figure 2.6 on the next page.

- On the first beat, the feet need to be together at the standard Attention pose. The performer will be stationary at this point, so the only action necessary is if the performer is marking time (which they will then just Lock and Close).

⁴When I say “instruction giving,” I’m referring to delivering a set of maneuvers for the band to perform (e.g., “mark time 8, forwards march 8, and close”) instead of more generic commands (e.g., “16 beats to go back to set 1”).

⁵The band Lock-Prep-Steps when going backwards. See Subsection 2.4.1 on page 30 for details.

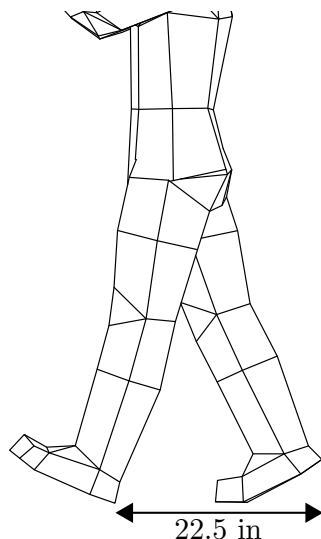


Figure 2.6: A proper step off, where the left heel is 22.5 inches in front of its initial position.

- On the second beat, the left foot will extend outwards 22.5 inches⁶ and only the heel of the foot will touch the ground. It is important to note that the toes of the left foot should be raised upwards. The right foot will begin to roll up onto the ball. It is important to keep the upper body stabilized (the left foot should touch, not pound or punch the ground).
- **Always start with the left foot!**

The band shouts when doing a Lock-Push:

LOCK PUSH!

The response is two even quarter notes.

Tips for learning a good Lock-Push:

- Imagine there is a sticky note on the bottom of your foot that says “Hi Mom!” In order for your mom to see the note from the stadium seats, you have to raise your toes as high as possible so she can see the note.

After performing the Step-Off, you will move directly into a continued Roll Step!

2.3.2 Roll Step

The ROLL STEP is the most rudimentary and fundamental way to travel the field. It allows the band to move with a standardized look. This section will focus on an 8:5 (8 steps for every 5 yards) step size. It is common to call the culmination of roll stepping and other maneuvers “marching.”

⁶As denoted later, various step sizes exist and this description implies an 8:5 step size.

Once you have initiated a Step-Off and your left foot is in front of you, roll through the entire left foot as you pickup your right foot and place it 22.5 inches in front of your left foot, only placing down the heel. Then as you roll through your entire right foot, pickup your left foot and place the heel 22.5 inches in front of your right foot. Alternate feet and you are Roll Stepping! It's like walking, but rolling through each step at a fixed distance with no upper body movement.

We march with step sizes of 22.5 inches, because 8 of these specifically defined steps will allow you to travel exactly 5 yards. We can also march with different step sizes. See Subsection 2.5.3.1 on page 34 for more details.

Important things to remember:

- The entire upper body shall remain **motionless** throughout the Step Off and Roll Stepping. Your core will need to be engaged to maintain this stability. Squeeze your buttocks. Imagine there is a glass of water on your head and you can't spill any of it. You should not move your upper body at all!
- Rolling through each foot is important for maintaining stability. Imagine there is a tube of toothpaste on the ground and you have to use your entire foot to squeeze it out from back to front.
- The height of your toes must remain as high as possible, just like in the step-off. This will help you with the rolling action.

Why should we keep our upper body still? It is vital that your upper body remain motionless while marching because you are also playing an instrument while doing this! Imagine if you were to march a show while bouncing up and down, your tone would go up and down too! Multiply that by 100 people in the band and now we can't agree that $A_4 = 440\text{Hz}$.

2.3.2.1 Guiding

GUIDING is one of the most important fundamentals to execute, since it allows the band to appear uniform. The idea of guiding is to keep forms straight. For example, when in fundamental block, you are in a row with everyone else in your section, and it is not going to look good if everyone is slightly offset from each other. Instead of a straight line, we have a wavy line!

The way to fix this is to guide. By guiding, you keep your body in line with the person on your right. You will usually guide to the person on your right, although this depends on context. If you are in a form where there are also people in front of you, you will also guide forwards, making sure you are in line with the person to your right and the person in front of you. Imagine keeping your shoulders on an imaginary axis that is perfectly in line with your guides.

Responses in Fundamental Block When marching in fundamental block, the band will shout responses when hitting subdivisions of marching lengths. The response varies depending on the direction of travel:

- When traveling parallel to the sideline
 - Half way between yard lines (when the right foot is placed down):

HALF!

- On the yard line (when the right foot is placed down):

HIT!

- When traveling perpendicular to the sideline

- Every fourth step, the beat number:

FOUR! EIGHT! [...]

Marching an 8:5 parallel to sideline for 10 yards:

0	1	2	3	4	5	6	7	8
.	L	R	L	R	L	R	L	R
LOCK	PUSH	.	.	HALF	.	.	.	HIT

9	10	11	12	13	14	15	16	17
L	R	L	R	L	R	L	R	L
.	.	.	HALF	.	.	.	LOCK AND	CLOSE

Marching an 8:5 perpendicular to sideline for 10 yards:

0	1	2	3	4	5	6	7	8
.	L	R	L	R	L	R	L	R
LOCK	PUSH	.	.	FOUR	.	.	.	EIGHT

9	10	11	12	13	14	15	16	17
L	R	L	R	L	R	L	R	L
.	.	.	TWELVE	.	.	.	LOCK AND	CLOSE

Different responses vary depending on the step size. See Subsection 2.5.3.1 on page 34 for responses with different step sizes.

2.3.3 Lock and Close

When the band ends its maneuvers, they will LOCK AND CLOSE. The Lock and Close will always end a maneuver and put the performers feet idle and stationary. It consists of two parts: the “lock” and the “close.”

- The “lock” occurs with the right foot and “locks” the foot in place. For example, after roll stepping, the right foot will lock down in place where the performer will stand after marching. After marking time, the right foot locks down on the ground and does not lift back up.
- The “close” occurs with the left foot and “closes” the feet together. The left foot will lock next to the right foot to close the distance between the feet.

The response forms three even eighth notes:

LOCK AND CLOSE!

The response begins on the lock of the right foot and ends with the close of the left foot.

2.4 Changing Directions

Now that we can move forwards, mark time, and start and stop, let's find out how to move backwards.

2.4.1 Backwards March

The BACKWARDS MARCH allows performers to move backwards, unlike roll step which is forwards. A different technique is used for marching backwards.

As it was important for rolling through each step for a forwards march, it is important to remain on the balls of your feet for a backwards march. Backwards march is colloquially called “drag toes” since that is what the technique entails.

- When marching backwards, always be on the balls of your feet. Your heels should not touch the ground in any capacity.
- Bend your knees slightly more than the unlocked position for attention to absorb some shock from dragging your toes on the ground. Your upper body should not move at all, just like a roll step.
- As you move your feet back for each step, imagine tickling the blades of the grass on the ground: your feet should have contact with the ground, but not be so forceful as to inhibit movement. If you were backwards marching in sand, there would be two, straight, parallel lines in the sand where your toes dragged.
- It is common for those who are first beginning learning how to backwards march to undershoot the distance and fall short of the destination behind them. It is important to take bigger steps—bigger than you probably think you need to—to reach your destination.

The band does a “Lock Prep Step” when beginning a backwards march, similar to the Lock-Push when forwards marching (this is demonstrated in Figure 2.7 on the following page):

LOCK PREP STEP!

The response forms three even quarter notes.

2.4.2 Rock and Roll

The ROCK AND ROLL allows performers to switch from going forwards to backwards, or going from backwards to forwards, without stopping.

- To switch to going backwards from marching forwards, at the time of the rock and roll, the right foot will be placed down like a normal roll step. However, when the foot is placed down, the weight of the body is going to roll through the foot and move to the ball of the foot, then the left foot is raised to be on the balls, effectively placing the performer in a perfect backwards march position.
 - It is important to roll all the way through the right foot. You can imagine an imaginary pane of Plexiglas positioned vertically at the point where you want to rock and roll: roll all the way through the right foot so you can kiss the pane of glass.

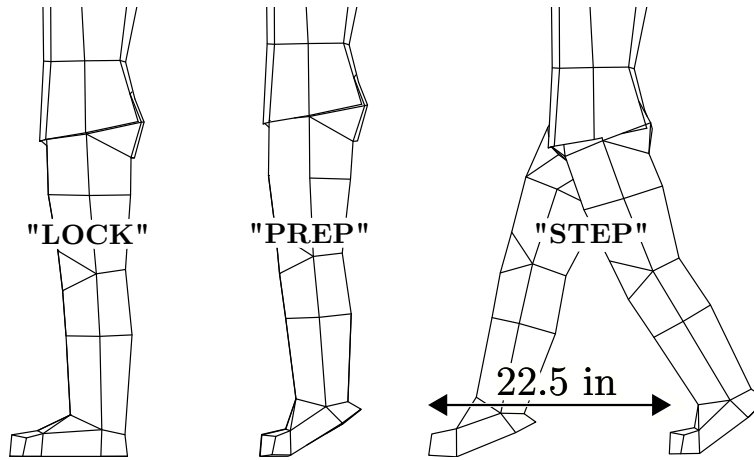


Figure 2.7: The proper “Lock Prep Step” movement, as notated.

- Once rolled through the right foot, it is necessary to not linger in this position, and immediately begin moving backwards to regain momentum. However, it is important that the full weight of the body rolls through the right foot and moves forwards as much as possible.
- To switch to going forwards from marching backwards, at the time of the rock and roll, the right foot will be placed down like a normal drag toes step. However, when the foot is placed down, the weight of the body is going to roll through the foot and move to the heel of the foot, the the left foot is lowered to be on the heel, effectively placing the performer in a perfect roll step position.
 - It is important that the full weight of the body move back as far as possible, then begins moving forwards to gain momentum and begin a forwards march.

The band shouts when doing a rock and roll:

ROCK AND ROLL!

The response forms two eighth notes, followed by a quarter.

2.4.3 Flankings

FLANKINGS rotate performers from moving in one direction to another, but unlike Slow Turns, Flankings only need one beat to turn and happen while roll stepping, or when ending a roll step.

2.4.3.1 Flanking Left

When performing a left flank, the body will quickly pivot on the ball of the right foot and on the heel of the left foot. The foot anchorage and rotation is exactly the same as a Facing. The rotation of the body will occur on the upbeat of the beat (the “and” of the beat). The upper body should rotate quickly and snappy. Typically, the Flank will be 90 degrees, but it is possible to only rotate partially to achieve a shorter rotation angle.

2.4.3.2 Flanking Right

The procedure for flanking right is similar to flanking left, except an added “cheat step” is used. The right foot, when flanking, should be placed on the ground half way of the total expected rotation. This will help with an easier body rotation snap. When flanking, the left foot will not be pivoted on, but will rather be swung around and be placed for the left foot step.

The band shouts when doing a hip flank:

AND ONE!

The response forms two eighth notes.

2.4.3.3 Backwards Flanks

Sometimes, the band will have to perform a BACKWARDS FLANK, where performers must change direction from or to a backwards march.

For example, when marching field left, parallel to the sideline, traversed home (traversing explained in Subsection 2.5.1), a backwards flank to the left would put the performer’s body facing the sideline, marching backwards (back field). It is a backwards flank because the march direction after the flank was backwards.

The other type example is starting with a backwards march. For example, when marching backwards perpendicular to the sideline, a backwards flank to the right would put the performer’s direction of travel field right in a forwards march. It is a backwards flank because the march direction before the flank was backwards.

It is not common for a backwards march backwards flank into a backwards march, but can be seen (for example in Subsection A.1.1 on page 72).

To backwards flank, simply place the left foot in the new direction of travel on the downbeat of the flank. There is no spinning on the heels and balls like there is in a normal flank.

2.5 Final Steps

These fundamentals are the final icing on the cake and allow performers to move themselves in any direction or fashion on the field.

2.5.1 Traversing

TRAVERSING is marching one direction while having the upper body face a different direction, up to 90° left or right. It is common to “traverse home” to allow the band to march one direction and point the instruments towards the home sideline for best sound quality.⁷

Traversing involves rotating the upper body so that it is facing one direction, while marching in another. Therefore, it is important to traverse correctly to reduce the amount of strain and tension caused on the spine.

⁷When the horns are not facing the audience, the sound travels in a different direction and an effective high-cut/low-pass is applied. This is sometimes taken advantage of in shows (taking the sound away for a while can cause tension, the putting the horns back home is release), but most of the time the horns are traversed home to maximize high-end.

Traversing involves two directions: the MARCH DIRECTION, and the FACING DIRECTION. The march direction is the direction the performer is marching. This could be forwards, backwards, or any angle in between. The facing direction is the direction the upper body is facing while marching. It is possible for the facing direction to be anywhere within the range of -90° to $+90^\circ$ from the direction of the marching direction.⁸ It should be noted that performers will never march backwards when the facing angle is 90° of the marching angle (they will forwards march instead).⁹

To rotate the body to the desired facing direction, the hips should rotate half way to the desired angle, then the upper torso should rotate another half, resulting in the shoulders above having a net rotation of the desired facing rotation. For example, if you needed to traverse 90° , your hips will rotate 45° , and the upper body will rotate another 45° , resulting in a 90° rotation of the upper body.¹⁰

To healthily rotate the upper body, imagine pushing the shoulder behind forwards, instead of pulling the forwards shoulder back. It is also important to retain a proper posture and provide lower back support to reduce strain and soreness.

Beginners will experience that they will “drift” or march oblique to their intended marching path if they are traversing. It is simple as just practicing to overcome this habit and remain on track. Extra attention must be given to the feet to achieve this. It may be helpful to overcompensate when first learning traversing to effectively remain the correct path.

2.5.2 Hip Switch

Performers perform a HIP SWITCH (also known by its response TO THE REAR) when alternating from forwards marching to backwards marching—and vice versa—without changing velocity (i.e., heading in the same direction). An example of when this may be used is traverse marching in a circle. If the performer must always face towards the home sideline and march in a circle, they will have to hip switch on either side of the circle so that they can remain marching in the correct direction without turning the upper body more than 90° .

- The hip switch can be thought of as a 180° flank. When doing a hip switch, you will always pivot on your right foot, and your left foot will swing around. The movement, like all others, is short and snappy. After bringing the left foot around, it will either go directly into a roll step position or drag toes position, depending on the orientation the performer is about to march.

The band shouts when doing a hip switch:

TO THE REAR!

The response forms two eighth notes, followed by a quarter.

⁸To march oblique angles, inverse the march direction (Hip Switch, explained in Subsection 2.5.2).

⁹A rare exception exists to this rule: performers must march backwards while traversed at 90° when immediately preceded by a forwards march with the same facing angle (Rock and Roll). Since it is impractical to one-eighty on one beat while maintaining a traversal, a backwards march is needed until the facing direction changes.

¹⁰Some instructors will suggest the thirds rule: divide the angle into thirds and apply each third to your knees, hips, and shoulders, effectively turning the entire upper body by the full angle. I disagree with this method since it often tends to intensify error and increase erroneous tortuousness. By offsetting the knees, this induces nonideal kinematics and effectively curves the actual marching path away from the target.

2.5.3 Adjusted Step Size

A performer's step size will not always be a perfect 8:5 (i.e., 8 steps for every 5 yards). Certain forms in the show's chart may have performers moving at a different speed (by changing step size, the performer's speed is inherently changed¹¹). To account for this, performers will have to march with an ADJUSTED STEP SIZE. This means that the distance in between each step will change. In an 8:5, the step distance is 22.5 in. For a 16:5 (16 steps for every 5 yards), the step distance is 11.25 in.

To adjust from marching in one step size to another, simply begin taking smaller/larger steps at the time of adjustment to begin marching at the new step size.

It should be noted that step sizes may not always be "neat"; step sizes of 6.28:5 and 31.415:5 are perfectly valid step sizes.

2.5.3.1 Marching Responses

When marching at an adjusted step size, the response for marching in fundamental block varies depending on the step size. In this section, the responses for 16:5, 6:5, and 12:5 are defined:

	Parallel to sideline	Perpendicular to sideline
16:5	QUARTER! HALF! THREE QUARTERS! HIT!	FOUR! EIGHT! [...]
6:5	HALF! HIT!	THREE! SIX! [...]
12:5	QUARTER! HALF! THREE QUARTERS! HIT!	THREE! SIX! [...]

It is important to realize that in 6:5 and 12:5 step sizes, the foot that is placed down as the response is shouted alternates. For example, in 12:5, the responses for marching parallel to the sideline for 5 yards:

0	1	2	3	4	5	6
.	L	R	L	R	L	R
LOCK	PUSH	.	QUARTER	.	.	HALF

7	8	9	10	11	12	1
L	R	L	R	L	R	L
.	.	THREE QUARTERS ¹²	.	.	LOCK AND	CLOSE

And marching 6:5 for 5 yards:

0	1	2	3	4	5	6	1
.	L	R	L	R	L	R	L
LOCK	PUSH	.	.	HALF	.	LOCK AND	CLOSE

¹¹Given the performer remains in normal step time (does not move to half time or double time) and the tempo is constant, etc.

¹²The vocal response for "three quarters" begins on beat 8.5 in this example.

Figure 2.8: A demonstration of the Box.

2.6 Making Shapes

2.6.1 Box

A good way to practice flankings and roll stepping is with a BOX. A box consists of three turns, four sides, and can be in variable size and direction. For example, some valid boxes:¹³

BoxL4 “Box Left 4” — Box with left turns, each side is 4 steps long

BoxR8 “Box Right 8” — Box with right turns, each side is 8 steps long

Consider the example of a BoxR8 (pronounced “Box Right 8”). This means that the band will take right turns, and march for 8 steps on each side before turning. The band will lock-push¹⁴ and begin marching forwards for 8 steps. After 8 steps, the band will Flank right, and take another 8 steps. The band will Flank right again and take 8 more steps. Finally, the band will flank right again and take 8 more steps. The last step before finishing the box is a cheat step. The band finishes in the same direction as they started, so, the final step is a flank to rotate back to the initial direction. The cheat step helps achieve this.

If the box had a length of 4 instead of 8, simply only take 4 steps instead of 8. If the box was “left,” simply take left flanks instead of right flanks.

2.6.1.1 Traverse Box

Boxes are good for practicing flankings and roll stepping. While we practice those fundamentals, we can also practice traversing with TRAVERSE BOXES. Traverse boxes are just normal boxes, while also traversing in one direction the whole time.

The traverse direction is chosen arbitrarily, as long as the direction can be traversed to at the beginning (cannot traverse home sideline when facing away).

One side of the traverse box will be backwards marching, one side will be forwards marching, and two sides will be traversing.¹⁵

For example, if the band was facing field left, traversing to the home sideline, and doing a traverse box left:

- The first edge of the box will be a forwards march while traversing home (upper body rotated right).
- The band will then backwards flank and march backwards the second edge of the box.
- The third edge of the box will be a forwards march while traversing home (upper body rotated left).

¹³Boxes in fundamental block will always be square and have an even side length.

¹⁴If the band begins this box command from a non-stationary position (e.g., marching, another box, etc.), the band will not stop and immediately begin the maneuvers for this box.

¹⁵As mentioned in Subsection 2.5.1 on page 33, performers will never march backwards when traversing at a 90°. They will forwards march while traversing the appropriate direction.

- The final edge of the box will be a forwards march. The final step will return the feet to the initial direction ending the traverse box.¹⁶

2.6.1.2 Adjusted Boxes

Just like how traverse boxes are good for practicing traversing, having boxes at adjusted step sizes can help with practicing adjusted steps. It is also fun to have the band do a box at one step size, then immediately have the band do another box at a different step size.

Examples of how adjusted boxes are labeled:

BoxR6@6:5 “Box Right 6 at a 6:5”

RoxL18@12:5 “Box Left 18 at a 12:5”

2.6.1.3 Diagonal Boxes

DIAGONAL BOXES are an exotic form of Boxes and are not typically practiced during Fundamental Block nor seen in a show. Essentially, a Diagonal Box is a normal box, but scaled and rotated 45°. These special types of boxes were seen in 2017’s *Not So Little Baby Show* as “diamond cutters.”¹⁷

A left Diagonal Box 8 takes 8 steps towards the position 8 8:5 steps to the left and 8 8:5 forwards. Because of this, Diagonal Boxes will never have an integer ratio step size; it will be a factor of $\sqrt{2}$.¹⁸

The Pythagorean theorem states that, given a right triangle with legs A , B , and hypotenuse C , $A^2 + B^2 = C^2$ [2]. Because of this, it is possible to calculate the actual step size. In this example, C represents the length of the march in steps, and A , B represent orthogonal imaginary legs composing this triangle.

$$\begin{aligned} A^2 + B^2 &= C^2 \\ 8^2 + 8^2 &= C^2 \\ \sqrt{128} &= 8\sqrt{2} = C \end{aligned}$$

Therefore, a left Diagonal Box 8 has a hypotenuse length of $8\sqrt{2} \approx 11.314$ steps = $\frac{8\sqrt{2} \cdot 22.5 \text{ in}}{36} = 5\sqrt{2}$ yards.¹⁹

This means that Diagonal Boxes inherently have longer side lengths. Because the number of steps hasn’t changed, the step size is greater. This is demonstrated in Figure 2.9. This

¹⁶The final step of rotation is variable and is inconsistent from year to year. Most years, this rule applies, but did not during the 2020 season. Consult current Drum Majors and Directors for clarification.

¹⁷Say this word in front of any 2018–2021 graduate and watch them cry.

¹⁸Except when you scale the distance by a factor of $\sqrt{2}$. But this is *never* done.

¹⁹This is also easily calculable when assuming the diagonal of a square with side length x is $x\sqrt{2}$, also proven by the Pythagorean theorem.

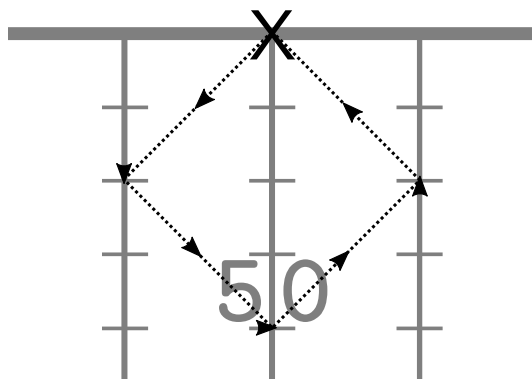


Figure 2.9: The path taken in a left Diagonal Box 8 at approximate 6:5 steps. The “X” represents the start and end position. Like normal Boxes, Flanks are performed at the corners.

can also be calculated:

$$\begin{aligned}
 & \text{steps : yards} \\
 & 8 : 5\sqrt{2} \\
 & 8 * \frac{1}{\sqrt{2}} : 5\sqrt{2} * \frac{1}{\sqrt{2}} \\
 & 8\sqrt{2} : 5 \\
 & \sim 5.657 : 5
 \end{aligned}$$

Therefore, the step size for a Diagonal Box is slightly larger than a 6:5 (six steps for every five yards, see Subsection 2.5.3).

Examples of Diagonal Box notation:

DBoxL8@(6:5) Diagonal Box Left 8 at an approximate 6:5 (actual step size 5.657:5)

DBoxR16@(12:5) Diagonal Box Right 16 at an approximate 12:5 (actual step size 11.314:5)

Guiding in a diagonal box

Chapter 3

Blocks

This chapter will cover the technicalities and details of the several blocks the band forms, including Fundamental Block and Parade Block.

3.1 Fundamental Block

FUNDAMENTAL BLOCK is used to group all the members of the band together on the field. The purpose of Fundamental Block is to allow for the teaching and practicing of fundamentals.

3.1.1 Layout

The band has mostly kept sections in the same place from year to year. The general layout is found in Figure 3.1 on the next page.

Each section begins consists of “lines.” A line is a row of performers that begins on the home sideline and extends towards the home hash (or further). A section leader or other veteran should be the one marching on the sideline, so that the general accuracy of the line is maximized. For each performer in each line, there is typically 4 steps of distance in between (an orange tick).

3.2 Parade Block

PARADE BLOCK is used to allow the band to move together in a standardized position. This position is commonly used to travel to a stadium, during Homecoming Parade, etc.

3.2.1 Layout

The instruments in Parade Block are typically in the same sections from year to year. The general layout is found in Figure 3.2 on page 40. Some things are to be noted:

- The Figure only represents a general layout. Year to year, adjustments are made to preserve symmetry with variable section sizes.
- Tenor Saxes are often merged with Alto Saxes if the section is small enough to merge.

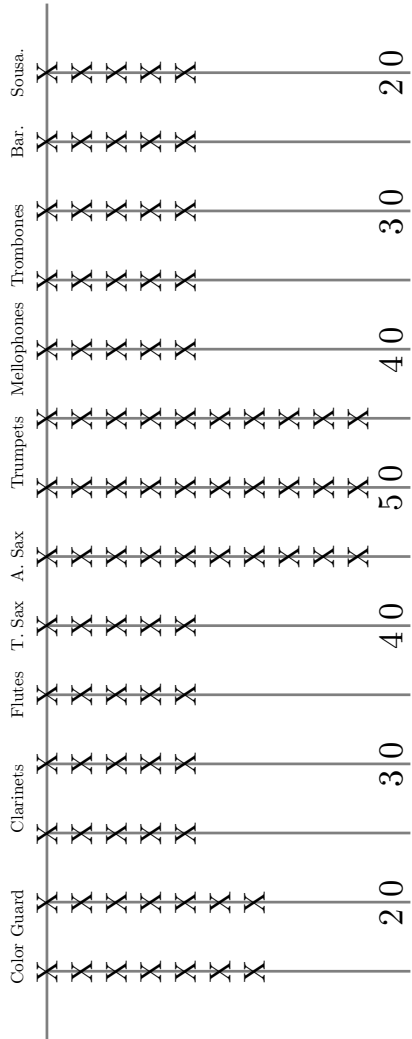


Figure 3.1: The general layout of Fundamental Block.

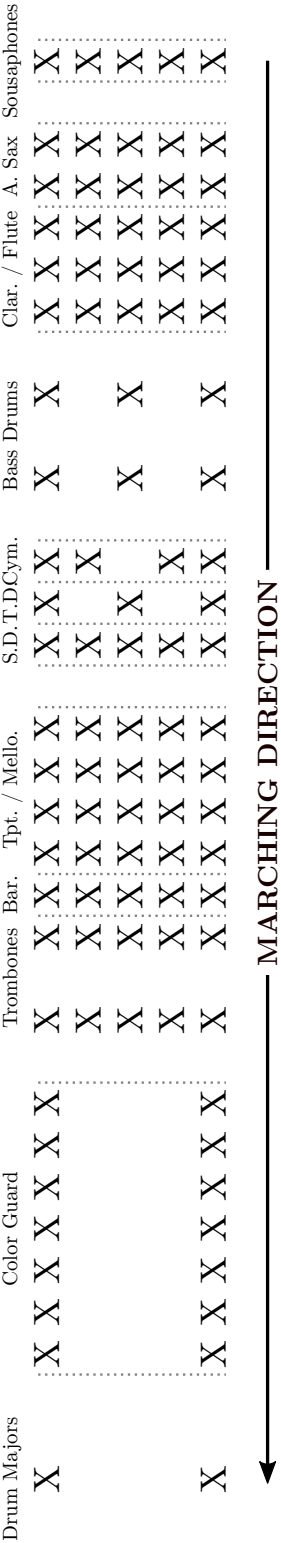


Figure 3.2: The general layout of Parade Block.

3.2.1.1 “Squish”

Sometimes while in Parade Block, the band has to fit within a restricted width. Examples of this include doorways, sidewalks, etc. When “squished,” rows are divided and stacked, effectively making the parade longer, but more narrow.

Those near the front of the parade will be the first to know that the parade must squish. They commonly will yell “squish!” and those behind them yell it subsequently, effectively sending the message to the very back of the parade.

3.2.2 Marching

Most of the time while in Parade Block, the band will be marching in time because the cadence is playing (see Subsection 3.2.3 for more information). The band should march in time with the current song or cadence. Remember, even though we may not be on the field, this should still be a roll step to ensure a good playing quality.

3.2.2.1 Turns

Turning in Parade Block requires special attention to maintain the form. Because the block consists of “rows” the whole row must maintain a row shape throughout the entire turn. To do this, special marching is done:

The individual on the inside will march the least distance while turning, while the individual on the outside of the turn will march the most. Why is this? Imagine each band member is marching on quarter circles (this is demonstrated in Figure 3.3). Since the circle furthest away from the epicenter of the circle has a larger circumference, the member that follows that path must march proportionately further.

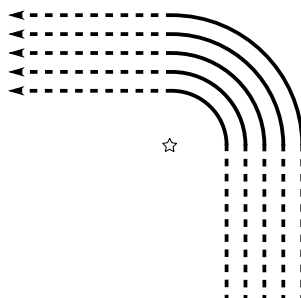


Figure 3.3: Members on the inside of a turn in Parade Block have a shorter distance to march compared to those further away from the epicenter (star) of the turn.

3.2.3 Cadences

While in Parade Block, there are several cadences that the band recites while marching.

3.2.4 Flashes

While in Parade Block, instruments are held a special way and are flashed during the cadences.

3.2.5 Taps

While in Parade Block, the Center Snare will play TAPS. These are played so that every member in the band is marching at the same time.



Before Circa 2015, a different rhythm was used for the taps (we will refer to this rhythm as **LEGACY TAPS**). The Legacy Tap rhythm is sometimes used when in different situations or when the Center Snare becomes fatigued from playing Taps for an extended period of time.



Chapter 4

Drum Majors

Maybe you're a Drum Major who was recently appointed and you're looking for all the knowledge you can get relevant to your new job title. Great! Maybe you're an aspiring Drum Major who's looking to audition and wants to know everything they can to successfully achieve the role and be a kickass Drum Major. Great! This section will cover everything I can possibly think of that you'll need to know, all the way from before the audition, to appointing next year's Drum Majors.

There is a lot to know to and do while being Drum Major; the role is the catalyst that allows the band to perform together. Drum Majors are not everything for a successful band; Section Leaders are also there to coach and lead the band. It's important to heed the importance of Drum Majors, but they are not the entirety of the leadership in the band.

Taking on the role of Drum Major is not an easy task; there are many aspects and facets of fulfilling the duty to always be aware of, attend to, and keep in mind. Be sure you are capable of handling this responsibility before you are certain you want to be a Drum Major. I don't want to discourage you, though. I believe anyone—with the right amount of effort, work, and dedication—can successfully carry out the position.

This chapter is meant to stand by side of the Performing Arts Clinic, Mace Day Clinic, other leadership workshops, and coaching by Dave and Mike. This chapter includes as much information as I can think of and include, but is not a substitute for a formal Drum Major clinic experience.

4.1 The Audition

To become a Drum Major, you have to go through THE AUDITION. This step allows for only the best of the best¹ to be appointed to the role. The audition process typically takes place the Monday before the Spring Concert in May. Directors make their decision that night and the results are revealed publicly at the end of the concert.

It is common for freshmen and sophomores to audition for Drum Major to be more prepared for their junior year audition, when they would be appointed the role.

¹ "If you're in band, you're the cream of the crop! If you're a senior in band, you're the cream of the cream of the crop!! If you're a Drum Major, you're the cream of the cream of the cream of the crop!!!" – Rachel Linsmeier, Fmr. D.M., Spartan Marching Band

4.1.1 The Panel

The audition is moderated by THE PANEL. The panel usually consists of the following individuals:

- Directors (Dave Gott and Mike Larsen)
- Color Guard instructor (Jennifer Brooks)
- Assistant principal
- Current Drum Majors

4.1.2 The Audition Process

The audition is divided into four sections, each evaluating and testing a different aspect and subject of being a Drum Major:

1. Delivering commands for 60 seconds
2. Teaching a drill in 60 seconds²
3. Conducting the Star Spangled Banner
4. Interview

The Audition is typically divided by step, then by contestant. So, all contestants will deliver commands for 60 seconds, back to back, then they will teach a drill for 60 seconds, back to back, etc.

4.1.2.1 Delivering Commands

For 60 seconds, deliver commands (e.g., mark time, horns up, etc.).

During this first section of The Audition, those who are auditioning for section leader are lined up in several rows in the band room. The Drum Major contestant will give commands to this section of the band for 60 seconds while clapping, demonstrating their ability to confidently deliver accurate and suitable commands, as well as their clapping ability.

What will the panel be looking for?

- Command variety
 - If all you do in the 60 seconds is left and right turns, this isn't demonstrating the full ability of your delivery. Judges will be noting your variety of commands to see how comfortable you are delivering them.
- Confidence in delivery

²Due to the COVID-19 pandemic, 2020's audition was held on Zoom, and as such this was replaced with teaching a fundamental for 60 seconds for that year's audition.

- Stumbling over words, laughing and smiling, breaking the tempo of clapping, and other insecurities are a sign of timidity. Be confident in what you are about to deliver with strong vocals and clear diction. See Section 4.10 on page 65 for guidance on this.
- Good recovery if mistake is made
 - Don't fret too much if you make a mistake, just keep clapping and deliver the next one. In the real world (on the field), you are likely to make a mistake, and that's fine, as long as you can quickly recover and move on.
- Consistent tempo
 - Being able to keep a consistent tempo throughout the duration of your deliveries is important since keeping tempo is vital for conducting. Being able to keep a consistent tempo demonstrates your ability to keep the beat.
- Good tempo changes
 - If you feel comfortable with clapping and delivery, you can stop halfway through the duration, pick a new tempo, and begin clapping and giving deliveries at the new tempo. This shows that you are able to adjust and adapt to tempo changes which are possible to happen in a show.
- Strong claps
 - It's quite important that Drum Majors be able to give consistent, strong claps to keep a tempo. Being able to demonstrate that you can produce a loud, solid clap and repeat it for a tempo is vital. See Subsection 4.7.1 on page 63 for information on this.

4.1.2.2 Teaching a Drill

Given a drill (e.g., forwards march, left flank, etc.), analyze and study the drill for 30 seconds. Then, for 60 seconds, teach the band how to execute the drill. Finally, have the band execute the drill with no aid.

During this section, the contestant will take 30 seconds and analyze the drill given to them. After this, they will teach the section leader contestants the drill and have them perform it.

What will the panel be looking for?

- Confidence and clarity in teaching
 - It's important to know what you are going to say to the band to make sure you teach it well. Stumbling over words will only hinder your use of time.
- Wise use of time (being efficient)
 - Use the full 30 seconds for analysis and 60 seconds for teaching and don't waste time in those allotted seconds.
- Being prepared for obstacles

- Often times in the band room, there will not be enough space to complete the full drill. Being prepared for this to find a solution is important if it arises.
- How well the band executes the drill after the elapsed time
 - Ultimately, the main point of this exercise is to see how well you can teach the information to the band and how well they can perform it at the end of the allotted time. Be efficient, be clear with your words, and use your time wisely.

4.1.2.3 Conducting the Banner

Conduct the Star Spangled Banner.

In this section, contestants will conduct the Star Spangled Banner. The section leader contestants will sit in the band room and sing their part while the contestant stands and conducts the song. The contestant is expected to have a proper entrance and exit, following Drum Major fundamentals.

What will the panel be looking for?

- Perfect 3/4 conducting
 - It's important to master the 3/4 conducting pattern to conduct the banner. Although it is not common that you will have to conduct 3/4 anywhere else, it is important for this section of the audition.
- Confidence
- Recovery when losing the beat
 - It can sometimes happen that you'll lose the beat and you'll need to get back on track. If this happens, keep circling your hands until you find beat 1, then continue conducting.
- Banner specific conducting
 - When conducting the Banner, there are several cues and motions that are important to indicate: boom-crashes, trumpet cues, and fermatas (learn more about this in Subsection 4.3.5 on page 54).
- Facial expressions (laughs and nervous smiles can indicate timidity)
 - When conducting, it's important to have the correct facial expression for what you're conducting.

4.1.2.4 Interview

Answer questions from the panel.

In this final section of The Audition, contestants will answer some questions from the panel, usually one question per judge.

The panel is not going to ask a specific question (e.g., what is this specific value or date, it's not a quiz), but rather open-ended questions to gather your thoughts and determine how you may react in a situation.

There will be four seats that you can sit in during the interview. Make sure you pick the correct one!... well, I don't really know why Mr. Gott likes to do this. I think it's less about which seat you pick, and more about how quickly you pick a seat. Or maybe it's just to psych you out.

4.1.3 After the Audition

The next day at 7 AM, all Drum Major contestants will meet with the directors to learn the outcome of The Audition.

If you're chosen, congratulate the other contestants and acknowledge their hard work! Look forward to working with them throughout the season, and accept any help they provide and be sure to delegate tasks to them throughout the season. You'll also be working with the current Drum Majors after the school day to learn enough to conduct the fight song.

If you weren't chosen, it's okay. It wasn't meant to be. Have a positive attitude moving forward and look for any way to help the new Drum Majors. They will be sure to delegate to you!

Keep it a secret throughout the day until they announce it officially at the concert!

4.2 Leadership

"Leadership is inspiring and encouraging others to achieve their full potential."

– Dr. Matthew Arau

One of the most important aspects of being a Drum Major of the band is LEADERSHIP. Of course, this is important, but it's also easy to just say "it's important" and not go into detail on how to actually apply leadership to the experiences the band will face during the season.

Leadership is all about being the driving force to make change in a group. Everything that you do as Drum Major that helps the band learn something new, get better at something, or change their attitude is leadership. It's what makes the group want to get together every day for the season and keep striving to get better.

In this section of this chapter, I want to talk about all the things you want to specifically implement, as well as avoid. Without great leadership, we can't have a great band.

This section **heavily** adapts from [3, 4].

4.2.1 Traits of Good Leaders

There are ways to describe good leaders. These traits—adapted from the United States Marine Corps Principles of Marine Corps Leadership—should be applicable to good leaders that have a positive impact on their band [5]:

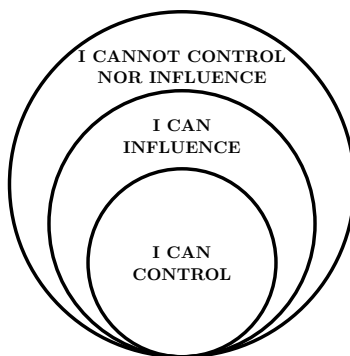


Figure 4.1: The Spheres of Influence

- | | |
|-----------------|-----------------|
| • Justice | • Enthusiasm |
| • Judgment | • Bearing |
| • Dependability | • Unselfishness |
| • Integrity | • Courage |
| • Decisiveness | • Knowledge |
| • Tact | • Loyalty |
| • Initiative | • Endurance |

I could sit here and tell you how I think each word applies to good leaders, but that defeats a bit of the point. If you yourself go through the above list and think about how you could apply each trait to yourself, you set yourself up for success by planting an image in your mind of yourself as a good leader.

For example, I have a really tough time making decisions—especially over the stupidest, most minor stuff you could think of—and the role of Drum Major really taught me how to make a quick decision and stick with it. Trying to make decisions and having DECISIVENESS will be beneficial for the season (since you’ll be faced with many problems and situations).

4.2.2 Spheres of Influence

While being a Drum Major of the band, there are inevitably going to be some situations that you think you have no say or control in. Sometimes this is absolutely true. There are things that you will have direct control over, things you have a say in or can influence, and things you absolutely have no say or control over.

The spheres are demonstrated in Figure 4.1 [6].

Think now of a few things of each category. I’ll give an example for each sphere:

I can control How wisely I use my time

I can influence How others feel about something

I cannot control nor influence How many hours I have in the day

You may find that it is easier to think of things that are in your control or your influence. This shows that your voice is powerful and can be used to help a situation.

4.2.3 Delegation and Support

When you're in a leadership position, you're part of this hierarchy including yourself and everyone else in the band. There are people with a higher role and people with a lower role.³ For example, as Drum Major, you are leading all the Section Leaders, the band managers, as well as all band members.

And, of course, the directors are at the top of the hierarchy. They have the most say, but thinking back to the spheres of influence, you still have influence of those who are above you.

You will also get support from others in the band. Whether it's a simple question or you need help resolving a complex situation, you will typically look to someone above you for help and advice when you are not able to form a decision yourself.

You will also be delegating tasks. If someone comes up to you and asks you do something that you know a Section Leader or band manager can do, you might delegate the task to them. I personally suck at delegating and ended up doing a lot of stuff, but you might find it easier. For example, as Drum Major, you might delegate tick painting to band managers so you can focus on preparing for what you're going to cover in the next section.

It's actually super important to give others who don't have the "desk plaque" tasks to do. It helps give them a sense of leadership and makes them feel responsible for a part of the band.

Now, this isn't to say that you should be handing all tasks you have to do to someone else. It's important to realize which tasks are important to delegate and which to take responsibility over.

Another good person to delegate to is your co-Drum Major. If they aren't immediately busy, give them tasks presented to you if you are busy.

A general hierarchy can demonstrate the order of leadership in the band shown in Figure 4.2 on the next page.

4.2.4 Further Reading

I'm not an expert on leadership. I can only provide to you what I have learned throughout my tenure as Drum Major. I can't prep you for every situation that may arise, unfortunately. But, I hope the previous subsections in this section have helped a bit in getting a good understanding of how leadership is important to *our* band specifically.

If you want more leadership resources, I can recommend to you Dr. Matthew Arau, Assistant Professor of Music at Lawrence University in Appleton, Wisconsin. During the summer of 2019, Ethan and I attended a leadership workshop presented by him. He gave us a ton of useful knowledge that helped me prepare for the season. If you contact him looking for the resources he provides, I'm sure he'd be more than happy to provide you as many resources as possible to help you succeed.

³A person's role shouldn't override how you treat them, though. *Treat everyone fairly.* This is important to remember.

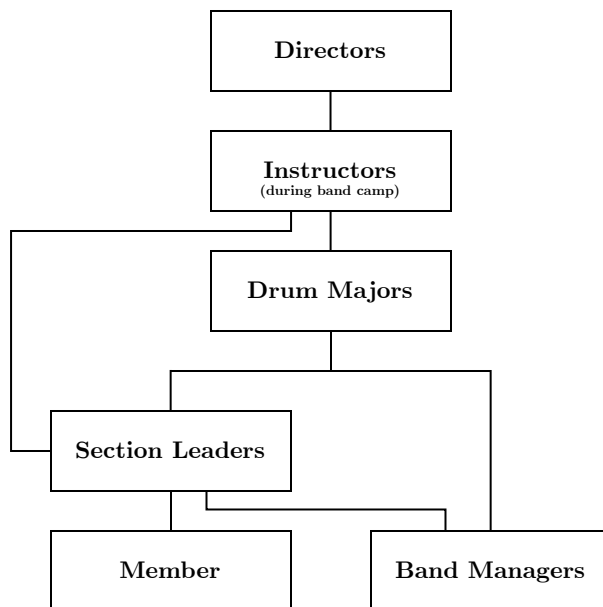


Figure 4.2: The general hierarchy of leadership in the band.

4.3 Conducting

Another grave aspect of being a Drum Major is CONDUCTING. To put simply, conducting is making sure everyone is on the correct beat while playing and marching. In this section, I hope to provide a start to finish walk-through on how to become efficient at conducting.

4.3.1 Keeping the Beat

There exist prerequisites to conducting that you must be comfortable with before you will be able to conduct. You must be able to count to four in a musical fashion (i.e., counting from one to four to a given tempo). This entails more than you may perceive at face value: the most important part of this being able to do this while not having a metronome.

Try this example to see what I'm poorly trying to say. Get a metronome and set the tempo to $\text{♩} = 100$. Snap your fingers, clap, or make some audible motion, in sync with the metronome for about 4 bars (i.e., 16 beats). Then, have someone mute the metronome, but leave it running. Keep the beat for another 4 bars without being able to hear the metronome. Have the person unmute the metronome when the metronome has clicked for 4 bars. Did your 17th clap line up with the 17th click of the metronome? Uh, oh. Looks like you've got some work to do.

That's okay. Even the best and most experienced drummers can't 100% of the time keep a tempo for an extended period of time. But, there exists one simple trick that will allow you improve this ability.

Subdivide.

Subdividing will allow you to remain the beat in your head for much longer and more accurate than if you were not to. Here's how you do it.

Instead of counting “one, two, three, four” as quarter notes in your head, try counting “one e and ah two e and ah three e and ah four e and ah” as sixteenth notes in your head. By subdividing and counting the sixteenth notes instead, your brain has less discrepancy between each note and can therefore more reliably keep the tempo constant.

When you count “one, two, three, four,” your brain has to guess how much time to wait in between each word. As this duration increases, the less accurate this is. By reducing the amount of each time before you say the next word, you increase that accuracy.

If the tempo is rapid and counting sixteenths is not practical, count eighths instead.

4.3.2 Getting Started

To begin, we’ll learn how to conduct a simple 4/4 pattern with no specific Laban elements.

When conducting, we indicate the beat by “hitting” a specific 3D coordinate on each beat with the hands. In between each beat, we move the hands in a different direction, ultimately looping as the measures repeat.

Where do we “hit” on each beat? On a specific point on the Ictus (/ˈɪktʊːs/; IHK-toos⁴), a specific point in 3D space. Let’s find out how to find this position.

4.3.2.1 Finding the Ictus

This method will help you find your Ictus.

First, extend your arms all the way forward, like a zombie. Then, tuck them all the way back, like a T-Rex. Then, find the sweet spot in the middle where they rest nicely. You can imagine spreading a table cloth in front of you; the plane where this feels natural is close to your ictus. Figure 4.3 on the following page shows an example of an ictus. Why don’t I say just follow what’s presented in the diagram? It’s a little bit different for everyone depending on their height and arm length.

There are a few more important things to remember while holding the ictus position. The fingers should be held together; not clenched, but not spread apart either. The shoulders should be relaxed, back, and rested while the arms are parallel to the ground. The ictus shouldn’t be too high or low, near chest height. Also, the hands do not necessarily have to be close to each other. They should extend forward from the shoulder and should not point in nor out.

See [7] for more tips and techniques.

4.3.2.2 Adding the 4/4 Pattern

All the motion that happens during conducting happens while not on the beat. For example, if you were to take a picture on every beat, exactly on the beat, of a Drum Major conducting, all of your pictures should look the same. The arms and hands should be in the same position every time on the down beats.

I will teach you the the Down-In-Out-Up Pattern. A diagram is shown in Figure 4.4 on page 53 [8].

The first beat is a simple down beat: raise the hands, then hit the ictus using wrist motion. The hands should bounce off this beat back upwards.

⁴The Wiktionary entry for Ictus states that the singular pronunciation is /ˈɪktʊːs/; IHK-təs, but I’ve only ever learned it as defined in the prose.

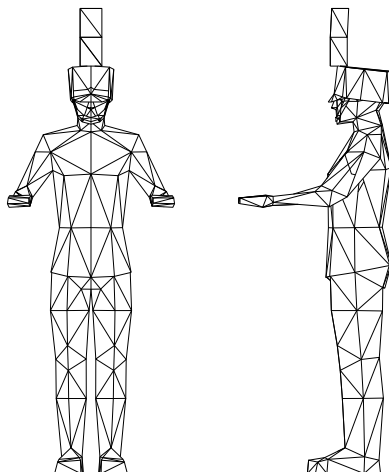


Figure 4.3: An example of a good ictus.

The second beat hits the ictus again, but bounces towards the center of the body, upwards at a 45° angle.

The third beat hits the ictus and bounces away from the body, again upwards at a 45° angle.

The fourth and final beat again hits the ictus and bounces up vertically, ready to hit the next beat, which is the first beat in the pattern.

What parts of the arms move? It's important to define what parts of the arm move, and how much they should move.

Shoulders There should be little motion here. The shoulders may raise slightly when bringing the hands up high.

Elbows The elbows should not bend much, again only a little with extreme motion.⁵

Wrists 90% of the motion should happen here. Optimal use of the wrist allows you to precisely define where your ictus is.

Fingers Don't move or bend your fingers.

4.3.3 3/4 Pattern

The 3/4 pattern is seen in the Star Spangled Banner, the Haslett High School Alma Mater, and any other 3/4 song. The pattern is simple, simply remove beat two from the Down-In-Out-Up pattern from Subsubsection 4.3.2.2 on the preceding page. Therefore:

The first beat is a simple down beat: raise the hands, then hit the ictus using wrist motion. The hands should bounce off this beat back upwards.

⁵If this peaks your interest, you may want to study inverse kinematics.

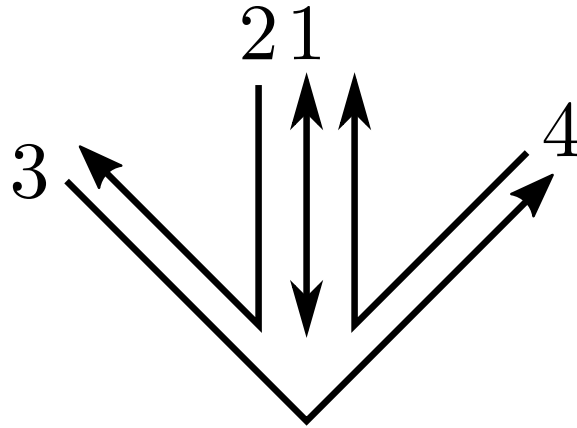


Figure 4.4: The Down-In-Out-Up conducting pattern.

The second beat hits the ictus and bounces away from the body, again upwards at a 45° angle.

The third and final beat again hits the ictus and bounces up vertically, ready to hit the next beat, which is the first beat in the pattern.

4.3.4 Laban Elements & Efforts

We can describe the style and efforts of conducting using LABAN ELEMENTS. These are simply descriptors that define characteristics of conducting.

Lists and tables in this subsection are approximately verbatim from [4].

All the presented concepts exist on a spectrum.

- **Time** (not tempo, but speed of gesture within any tempo)
 - *Sustained* — Taking time, leisurely, using every moment you have to get from A to B, measured, no acceleration between beats, prolonging, lingering
 - *Quick/Sudden* — Urgent, hasty accelerates to and from each beat, snappy, rapid
- **Weight** (force of gesture)
 - *Light* — Using a fine touch, airy, delicate, gentle
 - *Strong* — Impactful, vigorous, powerful, smashing
- **Space** (focus and direction of gesture)
 - *Direct* — Channeled, zeroing in, pinpointing, concentrated, lingering on beat plane, cueing individual
 - *Indirect* — Flexible, unfocused, moves away from beat plane or in a non-linear fashion, cueing ensemble
- **Flow** (mixes with the other three elements: combinations of space, weight, and time create various placements on the spectrum from free to bound)

- *Free* — Easy flowing, abandoned, relaxed muscles, swinging an object before flinging it away, ready to move
- *Bound* — Controlled, holding back, active muscles, tightening of one’s chest in a state of fear, ready to stop

Using the Laban elements, LABAN EFFORTS are derived and consist of combinations thereof. Laban efforts demonstrate different “feelings” when conducting, depending on the music. These are described in Table 4.1 on the next page.

4.3.5 The Star Spangled Banner

Conducting the STAR SPANGLED BANNER involves knowing a successful 3/4 conduct and adding additional flairs that correspond to certain times in the score. Review Subsection 4.3.3 on page 52 for information on 3/4 conducting first.

Conducting the Banner includes one special conducting technique, as well as two generic techniques:

- Boom-crash
- Section (trumpet) cue
- Fermatas

4.3.5.1 Boom-crash

In the arrangement of the Star Spangled Banner played by our band, there exist BOOM-CRASHES that are heard throughout the song. Drum Majors conduct these sounds in the song specially.

The boom-crash consists of two parts: the BOOM and the CRASH. They both correlate to two different moves done to indicate them.

Boom-crashes are conducted on beats 1 and 2: boom on beat 1 and crash on beat 2.

Boom The boom is a quick and firm—but not intense—punch to the conductor’s chest with the right hand. On beat 1, instead of conducting the downbeat, the right hand makes a fist and is placed on the chest. This punch shouldn’t knock back the conductor, but is firm and not floppy. The fingers of the fist will rest on the upper chest, knuckles pointing up and left. This is demonstrated in Figure .

Crash After “booming,” the right hand is quickly released and the hand is opened, extending outwards and upwards, on beat 2. The palm shall be face up at its final position. Immediately after the crash, the right hand is brought back to the third-beat position. This is demonstrated in Figure .

Name	Time	Weight	Space	Metaphors
Flick <i>Staccato</i>	Quick/Sudden	Light	Indirect	Removing an insect off a dress Brushing your shoulders off Touching a hot stove Throwing a Frisbee
Dab	Quick/Sudden	Light	Direct	Painting dots on a canvas Typing Tapping on a window Throwing a dart
Slash <i>Marcato</i>	Quick/Sudden	Strong	Indirect	Cracking a heavy whip Fencing Swinging a baseball bat Casting a fishing line
Punch <i>Accent</i>	Quick/Sudden	Strong	Direct	Boxing Slamming your fist on the table Throwing a hat on the ground
Float	Sustained	Light	Indirect	Cradling a soap bubble Treading water Spraying air freshener
Glide	Sustained	Light	Direct	Smoothing clothing wrinkles Ice skating Spreading butter Reaching to shake hands Erasing a whiteboard
Wring	Sustained	Strong	Indirect	Wringing a soaking wet towel Twisting off a bottle cap Hula hooping with a heavy hoop
Press	Sustained	Strong	Direct	Squeezing a lemon Pushing heavy furniture Lifting a car Pushing a child on the swings Ironing clothing

Table 4.1: Laban Efforts

4.3.5.2 Trumpet cue

The TRUMPET CUE cues the trumpet fanfare in the B section of the Banner. This cue is simple and easy to perform.

On beat 1, place the right hand outwards, palm up, fingers together, and hold this for two beats. On beat 3, bring the right hand back to the third-beat position. This is demonstrated in Figure .

4.3.5.3 Fermata

The FERMATA is used to hold the band on one note for an extended period of time. There are two parts to a fermata, the HOLD and the CINCH.

Hold To hold the fermata, place one or more the hands near the ictus with the palm up. Use one hand (usually the dominant) on the first fermata and use both hands for the last fermata.

Cinch To cinch, take the extended hand (or both)—with the palm up from the hold—and invert it by making a counterclockwise circle with the hand. Once the hand is inverted (the palm is now facing down), “cinch” the note by quickly pinching with your fingers and thumb and continue the motion after the circle, quickly halting. This is demonstrated in Figure .

4.4 Teaching

When the freshmen step foot on the field for this first time, they will know absolutely nothing about marching.⁶ It is your job—alongside the section leaders and veterans—to teach them how to be expert marchers by the end of the week of band camp.

Therefore, it is vital to have effective teaching to ensure each member of the band knows all fundamentals, including marching and playing.

You don’t have to do all the teaching; section leaders and veterans are there to teach too. But you have to be the initiative and lead for ensuring everyone knows what needs to be known.

In this section I will provide as many procedures, routines, and tips for teaching topics to the band.

4.4.1 Gradual Release

GRADUAL RELEASE is a method for transferring information from yourself to the band, gradually releasing aid as they progress (as the name suggests) [9]. Figure 4.5 on the next page demonstrates this through a diagram.

The two triangles show the amount of teacher support (which is you!) and student responsibility. You read this chart by going from top to bottom. You’ll notice that the triangles are divided into thirds. Each third is “I DO,” “WE DO,” and “YOU DO.” And those represent how you will move your knowledge of the skill to the student.

We start with “I DO.” You will begin by naming and demonstrating the fundamental. You’ll talk about what the fundamental is, as well as when you will use this and giving some

⁶Well, they will probably know something about marching through sectionals, but you should assume that they know nothing to begin with.

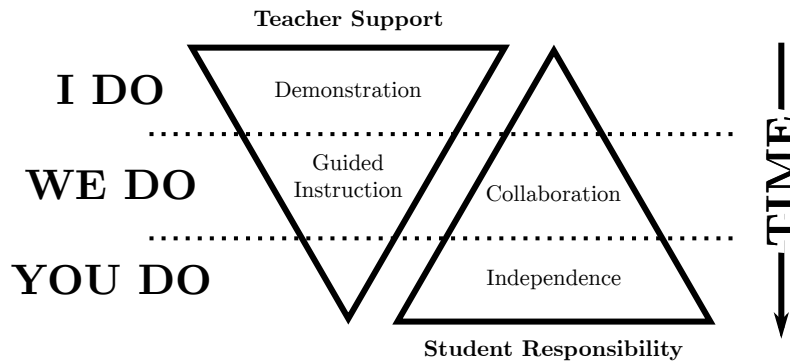


Figure 4.5: The Gradual Release teaching strategy.

context. Then you can do a demonstration (often, you'll want to use a veteran or a Section Leader as the model). Start with the end product. So, if you're teaching how to stand at Attention, start by showing a proper Attention, so that the learner knows approximately what they will look like once they've learned it.

Once you've shown what it should look like, then you'll want to break it down step by step, piece by piece, to explain the details of the skill. Go through and explain each part. If you're teaching a stationary fundamental, break it down into the parts of the body. If it involves movement, like moving to Parade Rest, you'll want to do this for each move.

Once you've broken it down, let them try it. Don't give any guidance yet. Just let them try it on their own and start to get comfortable with it. This is the most important step, and is also the most forgotten. You can feel free to keep demonstrating it to help them try it.

So by now, we've talked about what you're teaching, what it looks like, each component of it, and now they're trying it on their own.

While they're trying it, notice what they're doing right and wrong. Pay attention to a few specific areas that you'll want to address. Once they've had some time to get comfortable, give some feedback and talk about what they're doing well, and what they need to fix to make it perfect!

Ultimately, the step-by-step strategy is:

1. Name it
 - (a) Explain what the fundamental is called
 - (b) Explain why and when it is used
 - (c) Provide context when this would be used
2. Demonstrate it
 - (a) In real time, as the final product will appear
 - (b) Set a goal that the learner can aim for
3. Break it down
 - (a) Explain each detail of the fundamental

- (b) Explain as much as possible in as few words as possible
- 4. Let them try it
 - (a) The most important and most easily forgotten step
 - (b) Let them try the fundamental on their own, optionally give an exercise to do to practice this, but give no feedback yet
- 5. Observe & analyze
 - (a) Notice what needs to be fixed and how to address this
 - (b) Focus on areas that need improving
- 6. Give feedback
 - (a) Give good, specific, feedback, including praise for good behaviors and corrections where necessary
 - (b) Instead of explaining what not to do, explain what to do to improve
 - (c) Ask rhetorical questions instead of directing

4.4.2 Giving and Receiving Feedback

No teacher is perfect. But, listening and interpreting feedback from the band is going to help you a long ways. Also, giving your feedback to those learning will increase their understanding.

4.4.2.1 Giving Feedback: The Feedback Sandwich

Pointing out what others are doing well is helpful, but not all that helpful because it does not address what is not well, and therefore needs to be improved. Using the FEEDBACK SANDWICH can allow you to provide both types of feedback while boosting the learner's confidence [10, 11, 12].⁷

The concept is simple:

1. Give feedback on something good they are doing
2. Give feedback on something they could improve on
3. Reinforce first good thing, or note something else they are doing good

Here are a couple of examples of good feedback sandwiches:

Hey, great foot angle while marking time! Just make sure you aren't moving your head while you do it. Your mark time is getting better, keep it up!

Great job on the backwards march; your heels never touched the ground! But make sure you're careful you're not undershooting the yard line, that can be tricky. Great job keeping your upper body stable as well.

⁷The efficacy of the feedback sandwich is disputed [13, 14, 15], but through personal experience I found it to be beneficial. [14] provides some good guidelines for correct correcting, but these procedures are best suited for a more professional workplace environment where staff have time to prepare what they are going to say. But when you're on the field, you need to serve up that sandwich fast (you're not going to create a meeting and schedule conferences with each member and explain to them their feedback that way) and get the feedback to them as soon as possible so they can learn most efficiently.

There are some other factors to think about before you give feedback:

- Is is the appropriate time and place? Give feedback immediately if you notice a wrong behavior in a fundamental (stepping off on the right foot) and delay lengthier feedback and provide it when it is appropriate to do so. Do you give the feedback in public or in private? Think about the situation and determine when it is appropriate (it's not a good idea to tell someone they are misbehaving in the middle of a set, unless you deem it is emergent).
- Before you begin giving feedback, organize your thoughts so you have a clear message. A clear, precise set of feedback goes much further than "yeah, looks good but you could fix a couple things..."
- Emphasize the positive without being patronizing. This is important but also tricky to do. The best way I found to do this is to be casual as you provide the feedback (i.e., don't sound like you're reading off of a script).
- Follow up later to see how things have changed.

4.4.2.2 Receiving Feedback

Chances are you may have never taught a large group before. Or maybe you have for a really long time and feel comfortable doing it. Either way, you must be accepting of feedback as well. The band will tell you if they don't understand. It's up to you to interpret and parse that feedback and translate it into action you will do to help the band learn better.

If you are looking for feedback, just ask a member of the band. You can ask for general feedback, or a specific question such as:

- What is one thing that I do that you would like me to continue doing?
- What is one thing that you wish I would do more of?
- What can I do to help you be more effective and successful?

4.4.3 Teaching Fundamentals

The majority of what you will be teaching is fundamentals. Therefore, you absolutely must be 100% confident in fundamentals yourself! Spend lots of time before camp practicing teaching your friends, family, or anyone else who is willing to be your guinea pig and master delivering information to them. Pick someone who has no idea how to march and teach them everything you know.

Why should you practice teaching on someone who has no clue what marching is prior to your practice? When you teach on someone who knows the subject too (e.g., your co-Drum Major), they already know how to hold Attention, etc., and cannot forcibly make themselves forget how to do something.

4.4.3.1 The Formula for Effective Teaching

Much of what is presented in [16] has nothing to do with the topic of teaching a marching band, but Price's points of teaching are actually applicable and I will adapt what Price presents and apply it to teaching a marching band.

Effective teaching = Result + Practice + Clarity + Delivery

Let's discuss each component of this sum and how it applies in context.

Result The RESULT is the end product. It's the goal that you and the rest of the band want to achieve. That's why whenever you start teaching fundamentals, you want to state what that end goal is. Teaching the band a bunch of fundamentals without really telling them why you're teaching them might not make a whole lot of sense in the mind of a freshman. You might explain why we learn and practice fundamentals, how they're used in the show, and what the show actually is! You absolutely have to paint this picture in the heads of the freshmen to begin the path.

Practice Before you begin teaching the band, you have to PRACTICE teaching the fundamentals to someone else. Why? Let's imagine the scenario where you don't. It's day 1 of band camp. 100 people are standing on the field in front of you and you have no idea what you are going to say. You're making words up on the spot, making a ton of mistakes, and confusing the freshmen. Practice before camp so you know specific details you want to point out, mistakes you want to avoid, and precise wording you want to say.

Clarity

"Any fool can make something complicated. It takes a genius to make it simple."
– Woodie Guthrie

Much like previous statements, wording is key. If you can't properly state the thoughts you are trying to present, your presentation is going to go off key. You might start explaining something one way, then realize what you're explaining is incorrect, effectively wasting time. Plan and choose your words and thoughts carefully. Try to explain the most amount of information in the simplest and fewest words possible.

Delivery As Price states, it's important to be yourself. Have some fun while doing this! Make a joke here and there to make sure you don't bore or scare your audience. Keep it interesting and switch out Drum Majors teaching every once in a while.⁸

It's also important to teach each fundamental in 60 seconds. This does not mean the band has to be an expert in 60 seconds, but the initial information dump has to be done in 60 seconds (i.e., steps 1–3 from 4.4.1 on page 57).

4.4.3.2 Giving Pushups

There is a time and place for giving pushups. Giving pushups right after teaching the freshmen a new fundamental is not the time, nor place. Don't.

Give pushups when the band is expected to have a fundamental mastered and fails to perfect it. For example, if anyone breaks Attention on day 3 (since *everyone* knows the expectations for Attention), give them pushups. The band should have Attention mastered by lunch on day 1.

At the end of the day, follow the golden rule: *Don't be a dick.*

⁸You could do what Ethan and I did before camp and decide who was going to teach which fundamentals.

This may sound harsh, but I really mean it. You're a leader, not a boss. If someone is struggling at mastering a fundamental, don't give them pushups. Instead, work with them to improve it. Give feedback, demonstrate examples, and employ other leaders to help the individual master the fundamental.

Remember, pushups are a form of discipline. Use common sense when you need to discipline someone, and when you shouldn't.

4.5 Managing Yourself & Relations

It's important that while you are fulfilling your duties as Drum Major, you regularly check in on yourself as a human being. Failure to do so results in mid-band camp crashes and self-care depletion.

4.5.1 Stress Management

Here's the truth: being a Drum Major is stressful. Like, really stressful. However, I am going to present to you the tips I wished I had known before starting my tenure that helped me manage stress and continue throughout the season (especially band camp week).

- “*I have all the time I need.*” During the week, it will feel like there is so much to do with everyone pressuring you with no time to do it. Repeating this simple mantra can help you ease the nerve and remind yourself that getting worked up is only going to decrease your effectiveness. Take it one hour at a time.
- It's really important to get good sleep during each night of band camp. Since stress can cause poor sleep [17], it's super important to take the extra effort to go to bed early.
- Simple breathing exercises are known to help reduce anxiety levels [18]. Simply take in a breath for three seconds, hold for three, and exhale for three, three times. This can help you reduce your anxiety and stress levels on the field quickly and help you focus.
- It's perfectly fine to know where your limits are. No one has the right to define where your limits are and it is your responsibility to take a break when your limits are being crossed.⁹ Let your co-Drum Major take over for a while and allow your mind to reset.
- Don't take yourself *too* seriously! You're a member of the band first, Drum Major second. Just because you're Drum Major doesn't mean you can't have fun while doing it too! Make the effort to relax and be yourself when appropriate.
- Get to know the rest of the leadership team, as well as the freshmen. Getting to know them increases your relations with them and can reduce the “acquaintanceshipness” of your communications.
- There will be some situations and scenarios that will be presented to you that you will have no idea how to solve or make a decision on. It may be best to find someone better suited for the situation to give their input.

⁹Is the role of Drum Major likely out of your comfort zone? Yes and this is good. I'm not really referring to this here though. I'm more referring to anxiety and panic attack situations.

- Delegate! Don't try to take on every single thing instructors and directors throw at you. Find the band managers, section leaders, or members without a desk plaque to delegate to.

4.5.2 Empowering Losing Candidates

Chances are you and your co-Drum Major weren't the only contestants in the audition. This means that there are people in the band who did not get the title of Drum Major that they really wanted. Empower these individuals to hopefully change their thinking towards a positive attitude.

These are great people to delegate to. Make them feel responsible for some part of the band by assigning tasks to them and holding them accountable. There are still millions of ways they can make an impact on the band without the desk plaque.

4.6 Fundamentals for Drum Majors

Drum Majors have specific poses for several fundamentals. In this section, Drum Major specific fundamentals are defined.

4.6.1 Attention

Feet placed side by side, toes and heels together, toes pointing forwards.

Legs slightly bent, just enough that knees are not locked, pointing forwards.

Hips level and providing even weight distribution to both legs.

Torso straight and tall, core engaged.

Shoulders relaxed, but back, square, and even.

Elbows bent slightly at 15° so that hands rest just below waist.

Arms rested down to the sides.

Hands form fist, not super tight, but not relaxed, middle finger should rest on the seam of pants, just below waist.

Head looking slightly up at 15° angle, neck relaxed.

4.6.2 Parade Block Strut

The STRUT Drum Majors do while leading Parade Block usually changes from year to year, so I won't provide a specific description for any one strut. But there are some guidelines to follow:

- The mace should be slammed into the ground, on the right side of the Drum Major, on every beat 1 of each measure while in the cadence.
- Always be in sync with your co-Drum Major. Switch mace movement styles at the same type. There should be no more than 1 yoctosecond between the impact of your and your co-Drum Major's mace!

- At the end of the day, it doesn't really matter exactly what movements you perform, just make sure it is the *exact* same thing your co-Drum Major is doing. Follow these rules and you are fine!

4.6.3 180° Flank

The 180° FLANK rotates the Drum Major around, facing the other direction. The move for this is simple: on beat 4, place the toe of the left foot behind the right foot. On beat 1, pivot on both feet and turn the body 180° CCW. The upper body should remain motionless relative to the spin.

4.6.4 Roll-off

4.7 Keeping Time

When in Fundamental Block with the drum line, the Center Snare is there to assist you in keeping a metronome for the fundamentals. However, not always this will be at your convenience and you will need to keep the time yourself. There are several strategies to doing this, including clapping.

4.7.1 Clapping

It is important to clap correctly to maximize the amplitude of the sound produced by striking the fingers and palms of your hands together.

When clapping, you should not move your non-dominant hand. Your dominant hand should always go to the non-dominant hand. Slightly cup your non-dominant hand, as to make a small pocket of air when striking the palm with the fingers of the dominant hand. The thumb of the dominant hand should be slightly separated from the fingers and will rest below the wrist of the non-dominant hand on impact.

Note that the fingers of the dominant hand and part of the thumb are the only parts that touch the non-dominant hand; with reference from the tips of the fingers to the wrist, the last part that should touch lies around the metacarpophalangeal joints.

Figure 4.6 demonstrates the ideal clap pose.

Once you have a clear, crisp clap, practice clapping to a metronome and keeping time. Then, take the metronome away after a while and practice keeping the beat without reference.

4.7.2 Gock Block

The GOCK BLOCK is a percussion instrument which is a modern, hard plastic version of the wood block [19]. While the term “Jam Block” is also used to refer to this instrument, “Gock Block” is used in the context of marching band.

The Gock Block is often used in lieu of the clapping of the hands when a Center Snare is not available.

To use the Gock Block, hold the handle with the left (non-dominant) hand, positioning the thumb underneath the adjustment screw.¹⁰ Hit the raised portion near the top of the

¹⁰The specific placement of the thumb here reduces the chance of striking the thumb with the drumstick. Ouch!



Figure 4.6: The ideal placement of hands at the moment of impact in a good clap (assuming the right hand is the dominant hand). Note the palm of the dominant hand does not touch the palm of the non-dominant hand.

gock block with the big end of a drumstick at a 45° angle. Hit it like you absolutely hate it!!

4.8 The Whistle

As Drum Major, the WHISTLE is a powerful tool that allows you to do several things in many contexts and scenarios. In this section, I will cover the fundamentals of blowing the whistle, as well as where it will be used and what patterns to sound.

4.8.1 How to Blow the Whistle

Blowing the whistle is much similar to that of playing a wind instrument (since it is a wind instrument). Air pressure must be built in the lungs before a sound should be made. Use the tongue to stop the flow of air into the whistle by placing it on the opening of the whistle. Quickly release and repress the tongue on the mouthpiece of the whistle while maintaining air pressure to create a “tweet.” With practice this will sound more natural.

It is possible to manipulate the pitch of the tone by lowering and raising the air pressure into the whistle. This is used in different patterns to indicate messages.

4.8.2 Whistle Patterns

Playing the whistle in different patterns can send different messages. In this subsection I will list each pattern and its meaning(s).

- (X) tweets
 - X minutes remaining
- Four tweets

- Commences a song
- Four minutes remaining
- Falling in pitch, rising in pitch
 - Moves the band to Parade Rest
- Long-short
 - Commences movement or activity
 - Releases the band from Attention
- Long
 - Emergency stop of drill

4.9 The Salute

Drum Majors will perform a SALUTE before each performance of a show. Since this is 100% directed by you and your co-Drum Major, I will not provide instructions for any specific salute. But, I will provide some tips that I learned while designing ours, as well as guidelines you should follow:

- Don't do anything outside of your comfort zone. In general, this sounds like bad advice, but it is great advice in the context of your salute. Anything outside of your comfort zone makes you prone to messing up and making a mistake—not ideal. Choose some mace fundamentals that both you and your co-Drum Major are comfortable with and design your salute around that.
- You and your co-Drum Major must always be in sync during the salute. Now, this does not mean that you both have to do the same thing (staggered movements might look cool) at the same time, but your internal tempos must absolutely be synchronized. Sudden motions must occur at the same time.
- Prop spins—when done incorrectly—can become out of sync very quickly. Again, not ideal for a salute. If you have issues syncing your prop spins, keep them to a minimum, or don't do them at all.
- If you have issues staying in sync, try gently counting out loud during the salute so your co-Drum Major can hear you and align themselves with you. Don't shout too loud though, or the audience will be able to hear you.

4.10 Delivering Commands

It is a common misconception that Drum Majors are simply shouting well they DELIVER COMMANDS like “LEFT TURN HO!” In fact, command delivering is a skill and requires practice. It's important to deliver commands effectively to maximize efficiency and ensure it is audible and understandable by all.

“BAN 'TEN HUT!”	/ˈbænɪ ˌtɛnɪ ˈhʌʔɪ/
“BAN PA 'RADE HESS!”	/ˈbænɪ pəˌˌreɪdɪ ˈhɛsɪ/
“BAN HORNS UP!”	/ˈbænɪ ˌhɔːrnsɪ ˈʌpɪ/
“BAN HORNS DOWN!”	/ˈbænɪ ˌhɔːrnsɪ ˈdaʊnɪ/
“MARK TIME MARK!”	/ˈmɑːrkɪ ˌtaɪmɪ ˈmɑːrkɪ/
“LEF TURN HO!”	/ˈlɛfɪ ˌtɜːrnɪ ˈhoːɪ/
“RIGHT TURN HO!”	/ˈraɪʔɪ ˌtɜːrnɪ ˈhoːɪ/
“A 'BOUT TURN HO!”	/ˈʌˌˌbaʊʔɪ ˌtɜːrnɪ ˈhoːɪ/
“BAN LEF HASTE!”	/ˈbænɪ ˌlɛfɪ ˈheɪsɪ/
“BAN RIGHT HASTE!”	/ˈbænɪ ˌraɪʔɪ ˈheɪsɪ/
“HUP HUP RIGHT NOW!”	/hʌpɪ hʌpɪ raɪʔɪ naʊˌ/

Table 4.2: Drum Major commands with IPA notation.

4.10.1 Dropping and Transforming Consonants

If you read Chapter 2 of this book, you’ll notice when I wrote leader commands that it seemed I misspelled some the words (e.g., I wrote “BAN” instead of “BAND” and “LEF” instead of “LEFT”). This is not on accident. When delivering commands, it’s important to drop the end consonant on many words to enhance clarity.

To get a good idea of what I’m saying, try shouting “BAND 'TEN HUT” like a Drum Major would and emphasize the /d/ at the end of “BAND.” You’ll probably notice that you “choke” or “stutter” because you have to get your mouth ready again for the /t/ at the beginning of “TEN.” To eliminate this problem, we simply drop the end consonant of the preceding word.

For a word like “HUT,” dropping the /t/ is not ideal, because it then becomes “Huh.” To avoid this, we replace the /t/ with a glottal stop /ʔ/ (the stopping of air in “uh-oh”). Therefore, “HUT” ends with no contact of the tongue to the teeth, but rather the airway in the throat closing. This is not always the case, though. In “REST,” we simply remove the /t/, not replacing it with /ʔ/.

/r/ often becomes /h/ to turn it from a rounded to a harsh phoneme to allow it to travel farther on the field [20]. Therefore, “REST” becomes “HESS.”

IPA examples are seen in Table 4.2.

4.10.2 Inflection

We can give more emphasis and clarity on sounds by uttering them at different pitch levels. For example, in “BAN 'TEN HUT!”, the inflection is HI LO HI. This helps improve how well it can be heard across the field and provide more distinction.

Table 4.2 presents most all commands with inflection marks (ˈ and ˌ).

4.10.3 Pitch, Support & Volume

Again, when delivering commands, we must always be thinking about what is going maximize the effective travel distance of our delivery. The standard pitch at which you yell can affect this.

It is common for those with a deep voice (typically males) will need to raise their neutral speaking pitch to achieve this. The LO level of delivering may then rest around the common

speaking pitch. Likewise, those with a higher voice (typically females) will need to lower their voice. The HI level may then rest around common speaking pitch.

When delivering commands, it's also important to maximize your volume, while also not damaging your vocal cords. An effective Drum Major shout relies more on diction and pitch more than volume, although still necessary. Commands will travel long distances when supported with enough air. Just like playing a wind instrument—building air pressure before playing—it is necessary to build pressure to ensure a well supported delivery with the diaphragm [20].

It's also important to know what you are going to say before you say it. This seems obvious, but is obvious when not considered. Cutting yourself off halfway through a delivery not only may confuse the band, but can also show that you're not confident in what you're going to say. If you accidentally start delivering the wrong command, commit to it and fix the error after you are finished. The band may not even realized you delivered the wrong command. If you commenced a drill ("HUP HUP RIGHT NOW!"), you can emergency stop it by blowing a long whistle tone. Instruct the band to revert to the initial position.

Also know when it is appropriate to shout for delivery. If you are on the box (speaking into the microphone), you don't need to shout at full velocity. I recommend just loud-talking this to distinguish from normal banter, but not so loud you're damaging equipment or eardrums. See Section 4.11.1 for more info.

4.11 Using Equipment

4.11.1 Talking on the Box

During band camp—and later parts of the season during school—you'll use the BOX (not to be confused with a marching Box), also called the "mic" or "microphone" to help amplify yourself and allow the entirety of the band to hear you. It's important to use the box appropriately as to not annoy or detriment the band.

When you're wearing the headset, you must be careful of *EVERYTHING* you say. Because **EVERYONE can hear EVERYTHING you say**, no exceptions. When you need to say something to your co-Drum Major, a specific member of the band, or anyone else, be sure to turn off your transmitter before you begin talking.

This is important for two reasons. There are some things that the whole band does not need to hear. While you're telling a freshman that their feet need to be together at Attention, that freshman probably does not want the whole band hear you tell them that at an amplified volume that carries up to 1000 feet away. Turn the transmitter off. Also, you probably don't want the band to hear your remarks and other comments. When discussing with your co-Drum Major, turn the transmitter off. Only the things you want the band to hear need to be amplified.

Also, just be careful about what you say. As Drum Major you are expected to maintain a level of dignity and appropriateness. But, like every other Drum Major out there, you're human and want to say what's truly on your mind. Pay extra attention to what you say while you are amplified and keep remarks in your head.

While you're on the mic, you can talk at a relatively normal volume. Don't deliver commands at full volume, just slightly louder than normal to distinguish from normal words (see Subsection 4.10.3).

4.12 Studying

When you're a Drum Major, it is probably a good idea to know what you are going to teach the band. Therefore, it's an important idea to study necessary information before band camp. There are three main things you should analyze and familiarize yourself with before attempting to instruct the ensemble: the charts, the scores, and the fundamentals. Having a firm understanding of these three facets will help you throughout the week and continuing into the school year. I've talked previously about teaching fundamentals and the prep work needed in order to properly teach this to the band (see Subsection 4.4.3.1 on page 59), so I will focus on the charts and scores for this section.

4.12.1 The Charts

Studying the charts will help you become more familiar with how the band should appear on the field and how the show is structured. For example, if a member comes up to you not knowing where they should be in a certain set, having a firm understanding of not just how to read the chart, but the details and forms of this year's chart, will help you help them out quicker and get them on their dot. Lots of freshman have a hard time understanding how to read their dotsheet (see Section 1.2 on page 8 for specifics on this), so knowing the chart to confirm their position is handy.¹¹

Also, having the charts memorized will help you during rehearsal. Much of the time spent at band camp—when not practicing fundamentals, rehearsing music, or eating bagels and popsicles—is spent drilling the sets of the show, constantly going back and forth between sets. Knowing the measures and counts of each set—as well as what the band looks like in each set—can help speed up rehearsal, especially when Mr. Larsen says, “go back to set 12,” and everyone goes, “which measure?” You studied the charts, you know which measure it is!

4.12.2 The Scores

Besides the visual appearance of the band on the field, the next most important feature of a marching band is the music. To have great music, everyone must know and be able to play their part well. So, what part do Drum Majors learn? Everyone's part! Knowing the scores will help you on the field.

Having a strong command of the scores will indicate to you which parts and sections deserve the most attention and when. For example, during 2019's *Planes, Trains, and Automobiles*, different songs required different conducting and cues depending on the song. *Low Rider* had heavy a trombone section, so it was important to cue trombones and conduct more specifically (since the trombones had the lead, or melody). *Crazy Train*—again with a big trombone section—had special cues for tenor drums. The tenors played really interesting fills during some phrases in the song so it was important to emphasize it and cue it every time. Learning the scores goes hand-in-hand with learning the charts: knowing the measure numbers for sections in the song will be beneficial.

¹¹During my freshman year, I was on the wrong side of the field for probably 30 minutes when we first started dotting the first set until I realized “left” meant “left.” The lesson to learn is this: don't assume freshmen know what they are doing; you don't want to make them feel lost—but have confidence in their ability to learn!

4.12.2.1 How to study the scores

An approach can be applied to analyzing and studying scores [21]:

1. Mark time signatures, tempos, dynamics, modulations, fermatas, etc. with a highlighter. Use different colors for each.
2. Listen to recordings of the pieces and highlight the melody or focal element (which can change instrument, so do this bar by bar). Use a new color.
3. Highlight areas to conduct differently or specially, including cues, crescendos, decrescendos, fermatas, etc. Use a new color.
4. Translate your notations and markings into conducting styles. Use Laban elements and efforts to sculpt how you'll conduct each section. In the score, write down specifically how you'll execute this (exact efforts).

4.13 Events & Meetings

Chapter 5

Drum Line

Chapter 6

Color Guard

Appendix A

Drill Repository

These drills are available to use for practicing certain fundamentals. Presented are both computer generated drills, and some specially designed drills. The goal of the computer generated drills is to allow drum majors to present new content to the band, having an available resource at hand on the field.

Here are the definitions for abbreviations used in these drills:

Abbreviation	Meaning
F	Forwards march
B	Backwards march
MT	Mark time
RR ¹	Rock & roll
LF	Left flank
RF	Right flank
X	Arbitrary number
Box[L/R]X	Box
@X:5	Step size

A.1 Designed

A.1.1 Ian's I

This drill was presented by former Michigan State's Spartan Marching Band Drum Major Ian McNabb during the 2019 Drum Major Clinic.²

The drill makes an "I" shape and should be done while traversing forwards. This drill is best taught by teaching the first line, then appending the second line, and so forth until the whole drill is marched in one go.

FX, LF, FX, RR, BX, LF, BX
FX, RF, FX, RR, BX, RF, BX
BX, LF, BX, RR, FX, LF, FX
BX, RF, BX, RR, FX, RF, FX

¹Rock and roll is assumed and not written in computer generated drills.

²Ethan will tell you he came up with the name but I'm 100% positive I came up with it.

A.1.2 Rockin' Multiples of 2

This drill helps performers practice Rock & Rolls by marching forwards, then backwards, decreasing the march distance each time.

FM8, RR, BM8

FM6, RR, BM6

FM4, RR, BM4

FM2, RR, BM2

A.2 Generated

The generated drills are at various difficulties, getting increasingly harder with difficulty.

*Note: the generated drills assume an infinite field, so make sure there is enough space to complete the drill.*³

Generated drills were made using a custom program written by Jacob Wysko. See Appendix C on page 80 for more information.

The lengths of each fundamental in each drill is dependent on the step size and difficulty. The generation rules are in Table A.1.

Step Size	Beginner	Easy	Medium	Hard	Expert
8:5	4, 8	4, 8	4, 8, 16	2, 4, 8, 16	2, 4, 6, 8, 16
16:5			8, 16	8, 16	4, 8, 16
6:5				6, 12	3, 6, 12
12:5					6, 12

Table A.1: The allowed lengths for drills.

A.2.1 Beginner

The list of drills in Table A.2 on the next page lists every possible drill that follows the following set of rules:

- Possible fundamentals: March
- Possible step sizes: 8:5
- No double forwards/backwards marches
- 1–2 fundamentals
- Adheres to Table A.1

³Or, don't and throw off the band for elimination block (since the band should respond AS YOU WERE if they cannot complete the drill)!

[FM8@8:5]	[BM8@8:5, FM4@8:5]
[FM4@8:5]	[FM4@8:5, BM4@8:5]
[BM8@8:5]	[FM8@8:5, BM8@8:5]
[BM4@8:5]	[BM4@8:5, FM4@8:5]
[FM8@8:5, BM4@8:5]	[FM4@8:5, BM8@8:5]
[BM8@8:5, FM8@8:5]	[BM4@8:5, FM8@8:5]

Table A.2: *Beginner* drills.

A.2.2 Easy

The list of drills in Table A.3 lists every possible drill that follows the following set of rules:

- Possible fundamentals: March, flank
- Possible step sizes: 8:5
- No flanks coming from or going into a backwards march⁴, no starting or ending with a flank
- No double forwards/backwards marches
- 2–3 fundamentals
- Adheres to Table A.1

[BM4@8:5, FM8@8:5]	[FM4@8:5, RF, FM8@8:5]
[FM4@8:5, LF, FM8@8:5]	[BM8@8:5, FM4@8:5]
[FM4@8:5, BM8@8:5, FM8@8:5]	[BM4@8:5, FM4@8:5, BM8@8:5]
[FM8@8:5, RF, FM8@8:5]	[BM4@8:5, FM4@8:5]
[FM4@8:5, BM4@8:5, FM4@8:5]	[FM4@8:5, BM4@8:5, FM8@8:5]
[FM8@8:5, LF, FM4@8:5]	[FM8@8:5, BM4@8:5, FM4@8:5]
[FM8@8:5, BM4@8:5, FM8@8:5]	[FM8@8:5, BM8@8:5, FM8@8:5]
[FM4@8:5, BM8@8:5]	[FM8@8:5, BM4@8:5]
[FM4@8:5, BM4@8:5]	[FM8@8:5, BM8@8:5, FM4@8:5]
[FM8@8:5, LF, FM8@8:5]	[FM4@8:5, BM8@8:5, FM4@8:5]
[BM8@8:5, FM8@8:5]	[BM4@8:5, FM4@8:5, BM4@8:5]
[BM8@8:5, FM4@8:5, BM4@8:5]	[BM8@8:5, FM8@8:5, BM4@8:5]
[FM4@8:5, LF, FM4@8:5]	[BM8@8:5, FM8@8:5, BM8@8:5]
[BM4@8:5, FM8@8:5, BM4@8:5]	[BM4@8:5, FM8@8:5, BM8@8:5]
[FM4@8:5, RF, FM4@8:5]	[FM8@8:5, RF, FM4@8:5]
[BM8@8:5, FM4@8:5, BM8@8:5]	[FM8@8:5, BM8@8:5]

Table A.3: *Easy* drills.

⁴This is doable and is allowed in *Hard* and *Expert* difficulties.

[BoxR8@8:5, BM16@8:5, FM16@8:5, BM16@8:5]	[BM4@8:5, BoxL16@8:5, FM8@8:5, BoxL8@8:5]	[BoxR8@8:5, BoxL8@8:5, FM8@8:5]
[FM8@8:5, BM8@16:5, BoxR8@16:5, BM8@8:5]	[BoxR4@8:5, BoxL16@8:5, BM4@8:5]	[BoxR4@8:5, BM8@16:5]
[FM4@8:5, LF, BoxL16@8:5]	[BM8@16:5, BoxL4@8:5, FM4@8:5, BoxL16@8:5]	[BoxR8@16:5, BM16@16:5]
[BM16@8:5, BoxL4@8:5, BoxR16@8:5, BoxR8@16:5]	[BoxL8@16:5, BoxR8@8:5, BoxL16@8:5, BoxR16@16:5]	[FM8@8:5, BoxR8@16:5, FM8@8:5]
[BM16@16:5, FM8@16:5]	[BoxL8@8:5, BM8@16:5, BoxL16@16:5, FM8@16:5]	[BoxR16@8:5, FM4@8:5, BM8@8:5]
[BM8@16:5, FM8@16:5, BM16@8:5]	[BM4@8:5, FM4@8:5]	[FM4@8:5, RF, BM16@16:5]
[BM16@16:5, FM8@16:5, BM4@8:5]	[BM8@16:5, FM8@16:5]	[BM16@16:5, BoxL8@8:5]
[BoxR16@8:5, BoxL4@8:5]	[BM4@8:5, FM16@8:5, BoxL8@16:5, FM8@16:5]	[FM8@16:5, RF, BoxR16@16:5, BM16@8:5]
[BoxL16@16:5, FM16@16:5]	[BoxR4@8:5, BM4@8:5, FM8@16:5, BM8@16:5]	[FM16@8:5, BoxR8@16:5, FM16@16:5]
[BoxL8@16:5, BoxL4@8:5]	[BoxR8@16:5, BM16@16:5, FM8@8:5]	[BoxL16@16:5, FM4@8:5, LF, BoxR16@8:5]
[BM8@16:5, FM8@16:5, BoxR16@16:5, BoxR8@16:5]	[BoxR16@8:5, BM16@8:5, FM16@8:5, BM8@16:5]	[BM4@8:5, BoxR8@16:5]
[BoxR4@8:5, BoxL4@8:5, BoxR16@8:5, BM8@16:5]	[BoxR16@16:5, BoxR16@16:5, BM16@8:5]	[BoxR16@16:5, BM16@16:5, FM16@16:5, BoxL8@8:5]
[BM16@8:5, FM8@16:5, BM16@16:5]	[BoxL4@8:5, BoxR8@8:5, FM16@16:5, BM8@16:5]	[BM8@8:5, BoxL4@8:5]
[BoxL8@16:5, FM8@16:5, BoxR16@16:5]	[BoxR4@8:5, FM16@8:5]	[BM16@16:5, FM16@16:5, BoxL8@16:5]
[BoxL16@16:5, FM16@16:5, LF, FM8@16:5]	[BoxR16@16:5, FM16@16:5, BM8@16:5]	[BoxR16@16:5, FM4@8:5]
[FM16@16:5, LF, BoxR16@16:5, BoxR4@8:5]	[FM8@8:5, BM8@16:5]	[FM8@8:5, BM4@8:5]
		[BoxL16@16:5, BoxL8@8:5, BM16@16:5]
		[BoxL8@8:5, BoxL8@16:5, BM8@8:5]

Table A.4: *Medium* drills.

A.2.3 Medium

The list of drills in Table A.4 lists 50 unique drills that follows the following set of rules:

- Possible fundamentals: March, flank, box
- Possible step sizes: 8:5, 16:5
- No flanks coming from or going into a backwards march, coming out of a box, no starting or ending with a flank
- No double forwards/backwards marches
- 2–4 fundamentals
- Adheres to Table A.1

A.2.4 Hard

The list of drills in Table A.5 on the following page lists 20 unique drills that follows the following set of rules:

[BoxL12@6:5, BM12@6:5, FM6@6:5, BM6@6:5]	[BoxR8@16:5, FM4@8:5, BoxR16@16:5]	[FM16@8:5, LF, BM2@8:5] [BoxL8@16:5, BoxR12@6:5, BoxL16@8:5]
[BoxR8@16:5, FM6@6:5, BoxL8@8:5]	[BoxR8@8:5, BoxR16@16:5, BoxL12@6:5]	[BoxL12@6:5, BM16@16:5, LF, BoxR16@16:5]
[FM16@16:5, BoxR16@16:5, BoxL12@6:5, BM8@8:5]	[BoxL8@16:5, BoxR6@6:5, BM8@16:5]	[FM8@8:5, BM16@16:5, FM12@6:5, BM8@16:5]
[BoxL16@8:5, FM6@6:5, BM16@8:5, BoxL6@6:5]	[BoxR8@8:5, BM16@8:5, BoxR4@8:5]	[BM8@16:5, BoxR12@6:5, BM4@8:5]
[BM16@16:5, FM8@8:5, LF, BoxR8@16:5]	[BoxL8@8:5, BoxR16@8:5, BoxR8@8:5, BM6@6:5]	[BM2@8:5, BoxR2@8:5, FM8@8:5]
[BoxL12@6:5, BoxL16@16:5, BM16@8:5]	[BM12@6:5, FM16@16:5, BoxL12@6:5]	
[BoxL8@8:5, BoxL6@6:5, FM6@6:5]	[BoxL16@16:5, BoxR2@8:5, BoxL6@6:5, BoxL16@16:5]	

Table A.5: *Hard* drills.

- Possible fundamentals: March, flank, box
- Possible step sizes: 8:5, 16:5, 6:5
- No flanks coming out of a box, no starting or ending with a flank
- No double forwards/backwards marches
- 3–4 fundamentals
- Adheres to Table A.1

A.2.5 Expert

For the toughest nuts to crack!! The list of drills in Table A.6 on the next page lists 20 unique drills that follows the following set of rules:

- Possible fundamentals: March, flank, box
- Possible step sizes: 8:5, 16:5, 6:5, 12:5
- No flanks coming out of a box, no starting or ending with a flank
- No double forwards/backwards marches
- 4–5 fundamentals
- Adheres to Table A.1

[BoxL8@16:5, BoxL6@8:5, FM12@12:5, BM12@12:5]	[BoxR4@16:5, BM12@6:5, LF, BM12@6:5, BoxR4@16:5]	[BM16@16:5, RF, BoxR8@16:5, BoxR4@8:5]
[BoxL12@6:5, BoxL4@16:5, FM4@16:5, BoxL16@16:5, BM6@12:5]	[FM12@6:5, LF, FM8@16:5, BoxR16@16:5, BM4@16:5]	[FM16@8:5, LF, FM3@6:5, BoxR6@6:5]
[FM16@16:5, LF, BM12@12:5, RF, BM8@16:5]	[BoxL6@12:5, FM6@12:5, BoxR6@6:5, BM8@8:5, BoxL3@6:5]	[BoxR12@6:5, BM12@12:5, BoxL16@8:5, FM2@8:5]
[BoxL8@8:5, BoxR6@12:5, BoxL6@12:5, BoxL16@8:5, BoxL16@16:5]	[BM4@8:5, FM6@6:5, RF, BoxR2@8:5]	[BoxR12@12:5, BoxR16@16:5, BoxR8@16:5, BoxL16@8:5]
[FM6@12:5, BM12@12:5, FM12@6:5, RF, BM4@16:5]	[FM16@16:5, BM6@6:5, RF, FM2@8:5, BM12@12:5]	[BM6@6:5, RF, BoxR12@6:5, BoxL16@16:5]
[FM6@12:5, BoxL12@6:5, BM2@8:5, FM4@8:5, BM16@8:5]	[FM16@16:5, BoxL6@12:5, BoxL8@8:5, BoxL8@16:5]	[BoxR4@8:5, BoxL4@16:5, BoxR8@8:5, FM6@12:5, BoxR8@8:5]
	[BM2@8:5, FM6@12:5, BM12@12:5, BoxL12@6:5, BoxR12@12:5]	[BoxR16@8:5, FM3@6:5, RF, BoxL12@12:5]

Table A.6: *Expert* drills.

Appendix B

Tutorials

Need to know how to do a specific thing? I might have a tutorial written here on how to do that thing!

B.1 Painting ticks on the practice field

Since the measurements of the field are known, it is possible to systematically and accurately draw ticks on a plain field (only the sidelines and yard lines have been drawn).

1. Collect materials.
 - (a) Several cans of invertable aerosol marking spray (“Can”), orange and white
 - (b) 15 garden spikes (“Spike” a.k.a. tent nails, etc.)
 - (c) Measuring tape (“Tape”), at least 17.5 yards in length, ideally with loop large enough to attach to a Spike
 - (d) Rope, twine, or other cable (“Rope”) ideally at least 67.5 yards in length
2. Drive a Spike into the ground at the intersection of the 50 yard line and the home sideline (“**A**”). Attach the Tape to **A** and drive Spikes at 90 inch intervals (7’ 6”) directly south (along the 50 yard line) for a total of 8 Spikes, using the Tape as measurement. The final Spike should then be 17.5 yards away from the sideline.
3. Repeat step 2 at the left end zone (the Spike on the sideline is not necessary here).
4. Tie and secure one end of the Rope to **A** and loop it around the next Spike directly south of **A** (“**B**”), then extend the Rope to the left end zone and loop it around the corresponding Spike directly west of **B**. Secure the rope and place it as low as possible to the ground.
5. Spray tick marks at each yard line (but not the end zone) using orange Cans along the Rope. A tick mark is a horizontal (east to west) line, about a foot (12”) long and is centered across the yard line.
 - (a) For the line exactly 17.5 yards away from the home sideline, use a white Can instead of orange to indicate the home hash.

6. Unloop the Rope from **B** and loop around the next Spike south. Repeat step 5.
7. Repeat step 6 until the line 17.5 yards away from the home sideline is painted (use a white Can on this line, see step 5a).
8. Remove the Spikes from the left end zone and drive them into the ground in the same positions at the right end zone.
9. Repeat steps 4–7, working with the right side of the field instead.
10. Remove Spikes from the 50 yard line, except the one on the home hash. Repeat step 2, **A** is now the spike at the intersection of the 50 yard line and the home hash.
11. Repeat steps 4–9.
12. Remove Spikes from the 50 yard line, except the one on the away hash. Repeat step 2, **A** is now the spike at the intersection of the 50 yard line and the away hash.
13. Repeat steps 4–9.

Appendix C

DrillGen

DRILLGEN is an Android app I developed in January and February of 2021. You can download it from the Play Store at this link: <https://play.google.com/store/apps/details?id=org.wysko.drillgen>.

I developed it for one main reason: allowing Drum Majors and other leaders to quickly gather a resource to teach the band. It's often times that throughout the part of the marching season that overlaps with school, fundamental block warm up can become boring and invoke disinterestedness in the band. This is not ideal since engagement should be kept high to help maintain motivation. DrillGen may help this by allowing Drum Majors to quickly present new material to the band. This way, the same drills aren't repeated every day and the band can improve their ability by working on challenging material.

C.1 How to Use DrillGen

DrillGen is designed to be used with ease, allowing for the generation of drills with as little as three clicks.

C.1.1 Screens

C.1.1.1 Generation

The Generation screen lists every generation parameter and option, allowing you fully customize the generated drills.

Fundamentals Select the types of fundamentals to be included in the generation set.

Length For each drill, DrillGen picks a random number in this range to be the number of fundamentals¹ in the drill. Set the range of this slider to adjust the range.

Advanced maneuvers Enable/disable more challenging moves.

Allow backwards flanks When enabled, allows DrillGen to place flanks before or after a backwards march.

¹That is, the number of "segments" of a drill (e.g., "FM8, BoxL4, MT4" has three).

Allow backwards march after box When enabled, allows DrillGen to place backwards marches immediately following a box.

Allow flanks into mark times When enabled, allows DrillGen to place flanks immediately following a mark time.

Step sizes & lengths Select which step sizes the drill can contain, and the available lengths (i.e., distance traveled) for each drill.

Settings Parameters related to the setup and display of drills.

Assume infinite field When enabled, DrillGen will not consider the possibility of the band marching off the field—not something the band can do. When disabled, extra settings appear configuring DrillGen to know where the band currently is.

Distance from sideline The distance—in steps—the from the sideline of the closest person.

Current direction The current cardinal direction of the band.²

Flank to original direction after box Some years, this rule applies, some years it does not (see Footnote 16 on page 36 for info). Setting shouldn’t make a difference if “Assume infinite field” is enabled.

Display implied rock & rolls (RR) When enabled, rock & rolls will be displayed—where appropriate—in the drill. Note: drills may be longer than specified in the length slider if this settings is enabled, since rock & rolls are calculated and added after the generation phase.

Hide @8:5 for drills with only 8:5 When enabled, does not display “@8:5” on drills that only have 8:5 marching.

Generate Final settings for generation.

Unique drills When enabled, DrillGen will make sure no duplicate drills are returned. If there do not exist enough drills simply because the parameters are narrow, DrillGen may not be able to fulfill the generation length request.

Count Returns this number of drills.

This screen—at the top in the action bar—allows for preset loading. I’ve loaded DrillGen with a number of presets, from “Beginner” to “Expert.” Use these presets to quickly load in all settings for generation given a certain difficulty.

C.1.1.2 Enumeration

Following pressing “Generate,” the ENUMERATION screen is shown, listing each set of drills DrillGen generated. Each drill is written in shorthand and is indexed.

C.1.1.3 Enunciation

Following pressing on a drill in the “Enumeration” screen, the ENUNCIATION screen is displayed. This screen lists the fundamentals of the selected drill in plain English, allowing for quick and easy reading. Each fundamental—in English—is also accompanied by its shorthand representation.

²DrillGen assumes the home sideline is an east-west line north of the away sideline. Therefore, “North” points towards the home sideline.

C.1.1.4 History

The HISTORY screen appears when pressing the History button from the main “Generation” screen. Here, each instance of generation is displayed, along with the number of drills in that generation set, including the timestamp.

C.2 Effectiveness

DrillGen is best used when challenging the band. The app allows you to generate drills at varying levels of difficulty, so presenting “medium” up to “expert” drills to the band can help the band practice essential fundamentals.

Start the session by warming up the band with a few simple drills. Either come up with some on your own or generate “beginner” or “easy” drills in the app. Ensure that the band has their attention on you and is ready to continue the rehearsal focused. Then begin to increase the difficulty. It is best to give the band drills that challenge them, but aren’t impossible to complete. Practicing on that fine line between too easy and too hard yields most effective results and will allow the band to improve their skill most efficiently.

I would generate the day’s drills with the app before the rehearsal. While the app is responsive and can generate drills with any set of parameters and customization options, generating them on the fly may not be ideal. By generating before rehearsal, this allows you to review the to-be-presented drills and become familiar with them yourself first. You may find that once you get on the field and start presenting the drills, the band finds it too easy or too hard—that’s okay. The app generates a set of drills, so try and pick a different drill in the list that seems easier or harder.

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