

# CCSD Standard Major Scale Sheet -- Band

Mallet Percussion

Middle School 1 octave required, High School required as written

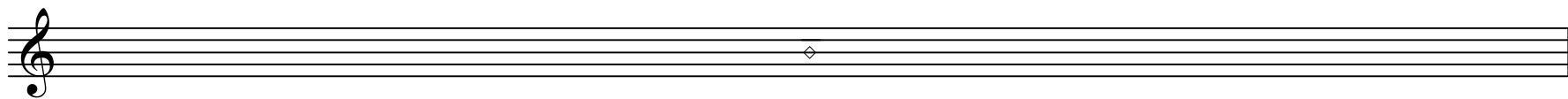
♩ = 120

The image displays six staves of music for Mallet Percussion, each representing a different concert instrument. The staves are labeled on the left as Bb Concert, F Concert, C Concert, G Concert, D Concert, and A Concert. Each staff begins with a treble clef, a key signature (one flat for Bb, F, and C; one sharp for G; two sharps for D and A), and a common time signature (C). The music consists of a major scale melody. The first measure of each staff contains a series of sixteenth notes, followed by a series of eighth notes, and then a series of quarter notes. The melody is marked with a forte (f) dynamic. The staves are arranged vertically, with Bb Concert at the top and A Concert at the bottom.

# Major Scales, pg. 2

Mallet Percussion

The image displays seven musical staves for mallet percussion, each representing a different major scale. The scales are: E Concert, B Concert, Gb Concert, Db Concert, Ab Concert, Eb Concert, and Chromatic. Each staff begins with a treble clef, a common time signature (C), and a key signature with three sharps (F#, C#, G#) for the concert scales. The E Concert scale starts on E4, B Concert on B3, Gb Concert on Gb3, Db Concert on Db3, Ab Concert on Ab3, and Eb Concert on Eb3. The Chromatic scale starts on C4 and moves stepwise through all 12 chromatic notes. The notation includes various rhythmic values such as eighth and sixteenth notes, often beamed together in groups. Dynamic markings like *ff* (fortissimo) are present throughout. The Chromatic scale includes triplet markings (3) above and below the notes.



# PERCUSSIVE ARTS SOCIETY INTERNATIONAL DRUM RUDIMENTS

ALL RUDIMENTS SHOULD BE PRACTICED: OPEN (SLOW) TO CLOSE (FAST) TO OPEN (SLOW) AND/OR AT AN EVEN MODERATE MARCH TEMPO.

## I. ROLL RUDIMENTS


### A. SINGLE STROKE ROLL RUDIMENTS


1. SINGLE STROKE ROLL \*   
R L R L R L R L

2. SINGLE STROKE FOUR   
R L R L R L R L  
L R L R L R L R


3. SINGLE STROKE SEVEN   
R L R L R L R  
L R L R L R L


### B. MULTIPLE BOUNCE ROLL RUDIMENTS

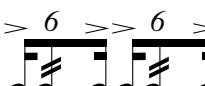
4. MULTIPLE BOUNCE ROLL 

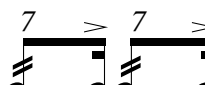
5. TRIPLE STROKE ROLL   
R R R L L R R L L L

### C. DOUBLE STROKE OPEN ROLL RUDIMENTS


6. DOUBLE STROKE OPEN ROLL \*   
R R L L R R L L

7. FIVE STROKE ROLL \*   
R R L L L R R L

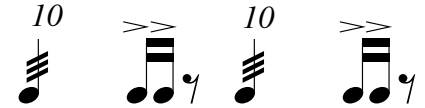
8. SIX STROKE ROLL   
R L L R L R R L  
L R R L L R R L

9. SEVEN STROKE ROLL \*   
R L R L L R R L  
L R R L L R R L


### 10. NINE STROKE ROLL \*

  
R R L L L R R L

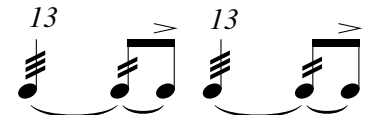
### 11. TEN STROKE ROLL \*

  
R L R L R L R L  
L R L R L R L R


### 12. ELEVEN STROKE ROLL \*

  
R L R L R L R L  
L R L R L R L R

### 13. THIRTEEN STROKE ROLL \*

  
R R L L L R R L

### 14. FIFTEEN STROKE ROLL \*

  
R L R L L R R L  
L R R L L R R L

### 15. SEVENTEEN STROKE ROLL

  
R R L L L R R L

## II. DIDDLE RUDIMENTS

### 16. SINGLE PARADIDDLE \*

  
R L R R L L R L

### 17. DOUBLE PARADIDDLE \*

  
R L R L R R L L  
L L R L L R R L


### 18. TRIPLE PARADIDDLE


  
R L R L R R L L  
L L R L L R R L

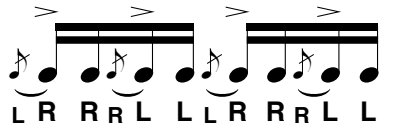
### 19. SINGLE PARADIDDLE-DIDDLE

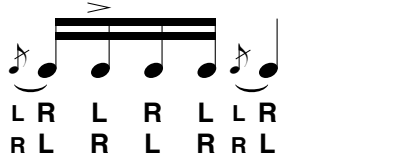
  
R L R R L L R L  
L L R L L R R L


### III. FLAM RUDIMENTS


20. FLAM \*   
LR RL


21. FLAM ACCENT \*   
LR L R RL R L


22. FLAM TAP \*   
LR RRL LLR RRL L

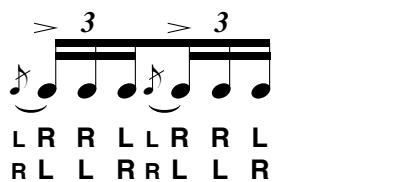
23. FLAMACUE \*   
LR L R LLR  
RL R L RRL

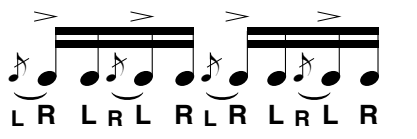
24. FLAM PARADIDDLE \*   
LR L R RRL R L L


25. SINGLE FLAMMED MILL   
LR R L RRL L R L

26. FLAM PARADIDDLE-DIDDLE \*   
LR L RRL LRL R L LRR

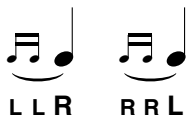
27. PATAFLAFLA   
LR L RRL LR L RRL


28. SWISS ARMY TRIPLET   
LR R LLR RL  
RL L RRL L R


29. INVERTED FLAM TAP   
LR LRL RLR LRL R

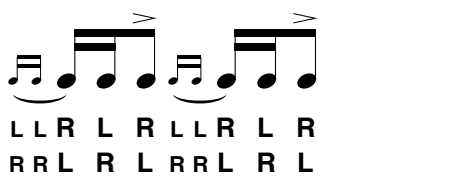
30. FLAM DRAG   
LR L L RRL R R L


### IV. DRAG RUDIMENTS


31. DRAG \*   
LLR RRL


32. SINGLE DRAG TAP \*   
LLR LRRL R

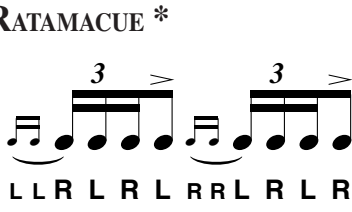
33. DOUBLE DRAG TAP \*   
LLR LLR LRRL RRL R

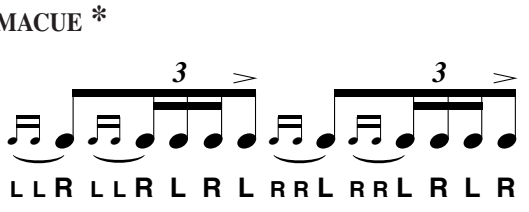
34. LESSON 25 \*   
LLR L R LLR L R  
RRL R LRRL RL

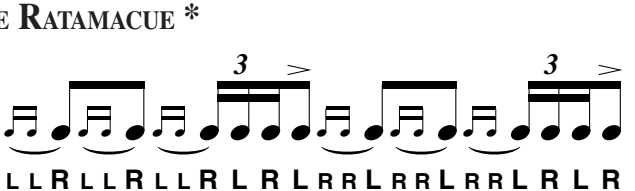
35. SINGLE DRAGADIDDLE   
RRL R RLLR LL

36. DRAG PARADIDDLE #1 \*   
R LLR L R R LRRL R L L

37. DRAG PARADIDDLE #2 \*   
R LLR LLR L R R LRRL RRL R L L

38. SINGLE RATAMACUE \*   
LLR L R L RRL R L R

39. DOUBLE RATAMACUE \*   
LLR LLR L R L RRL RRL R L R

40. TRIPLE RATAMACUE \*   
LLR LLR LLR L R L RRL RRL R L R

Northern Arizona University  
College of Arts and Letters  
School of Music

### **Percussion Techniques I**

MUP 108 (1 hour credit) 9:35-10:50 a.m.; T/TH, Room 146

Dr. Steve Hemphill, Instructor

Phone: 928/523-3739; E-Mail: [steven.hemphill@nau.edu](mailto:steven.hemphill@nau.edu)

#### **Syllabus for Fall 2006**

**COURSE OBJECTIVES:** The primary aim of this course is to present technical, pedagogical, bibliographical, and historical information in the area of percussion studies, and to provide both performance and micro-teaching (including individual and group teaching) experiences in percussion for the preparation of the music education student toward the career of music educator in primary and secondary schools.

**COURSE DESCRIPTION:** The course will be divided into four major units. These include snare drum, keyboard percussion, timpani, and auxiliary percussion (band /orchestra concert percussion). Emphasis will be placed upon the student's ability to model correct performance techniques for the instruments listed above.

**TEXTS:** *Teaching Percussion* by Gary D. Cook, Thomson Schirmer, 2006 (3<sup>rd</sup> edition), and *The Orchestral Snare Drummer* by Anthony Cirone, Belwin Mills. All students are required to maintain a notebook for lecture notes, handouts, tests, catalogs and all reference materials. The notebook will be submitted for evaluation by the instructor. The notebook must be a hard cover, 3-ring binder, with unit dividers, and ownership clearly displayed both inside and out. All notes must be typed (12 or 14 point font). The student also will purchase a course packet before the second class meeting.

The student will require snare drum sticks (type must be approved) and a practice pad with stand (provided by the School of Music) for the duration of the snare drum unit. Requirements will be discussed in class.

**EVALUATION METHOD:** Performance competency must be displayed in the four instrumental areas (snare drum, keyboard percussion, timpani, and auxiliary percussion) through individual juries at the end of each unit. In addition, written examinations will be given covering both text and class lectures. It is possible that some competency tests may be scheduled outside of the scheduled class time (depending upon class size, but always in accordance with student schedules and convenience). The student's cooperation is very much appreciated. Final grades will be based upon the percentage of the total points accumulated: the combined competency tests and percussion ensemble concert attendance will make up forty-five percent of the final grade, reading and observation assignments (including class participation) will make up ten percent of the final grade, while the combined written tests and course notebook will make up forty-five percent of the grade. Letter grades are based upon one percent increments (A=90-100%, B=80-89%, C=70-79%, D=60-69%).

**ATTENDANCE:** Due to the lecture and participation format of the course, grades will be adversely affected by poor attendance. Therefore, attendance is mandatory and a record of attendance will be maintained. Excused absence must be documented (e.g., institutional excuse, medical evidence, explanatory note of a family emergency). An excused absence allows a student to make up missed work. Unexcused absences will prohibit the student from making up

**Reading Assignments**  
**Gary D. Cook: Teaching Percussion**

<u>Due Date</u>	<u>Assigned Pages and DVD Viewing</u>
<b>General Considerations and Prerequisites</b>	
Aug. 31 (Th)	pp. xxi-xxvii (Introduction) AND pp. 1-13 (Chapter 1 up to <i>Organization of the Beginning Percussion Program</i> ) VIEW: DVD-1 Chapter 1 – Classification of Instruments
Sept. 7 (Th)	pp. 11-23 (to end of Chapter 1) VIEW: DVD-1 Chapter 1 – Tone Production
<b>Basic Percussion Technique Through the Study of the Snare Drum</b>	
Sept. 14 (Th)	pp. 24-43 (Chapter 2 up to <i>Basic Drumming Technique</i> ) VIEW: DVD-1 Chapter 2 – sections 1-11 (through “Accents”)
Sept. 21 (Th)	pp. 44-78 (to end of Chapter 2) VIEW: DVD-1 Chapter 2 – sections 12-19 (start with: “Buzz”)
<b>Multiple Percussion</b>	
Sept. 28 (Th)	pp. 79-92 (Chapter 3 – complete)
<b>Keyboard Percussion</b>	
Oct. 5 (Th)	pp. 93-107 (Chapter 4 up to <i>Keyboard Percussion Technique</i> ) VIEW: DVD-1 Chapter 4 – sections 1-4 (through: “Reading”)
Oct. 12 (Th)	pp. 107-127 (up to <i>Multiple Mallets</i> ) VIEW: DVD-1 Chapter 4 – sections 5-6 (“Four Mallets...”)
Oct. 19 (Th)	pp. 127-156 (to end of Chapter 4)
<b>Timpani</b>	
Oct. 26 (Th)	pp. 157-188 (Chapter 5 up to <i>Articulation Considerations and Musical Expression</i> ) VIEW: DVD-1 Chapter 5 – sections 1-8 (through: “Basic Stroke”)
Nov. 2 (Th)	pp. 188-214 (to end of Chapter 5) VIEW: DVD-1 Chapter 5 – sections 9-16
<b>Bass Drum, Cymbals, and Accessories</b>	
Nov. 14 (Tue)	pp. 215-234 (Chapter 6 to <i>Tambourine</i> ) VIEW: DVD-1 Chapter 6 – sections 1-5 (through: “Triangle”)
Nov. 21 (Tue)	pp. 234-252 (to end of Chapter 6) VIEW: DVD-1 Chapter 6 – sections 6-8
<b>Musical Interpretation of Percussion Parts</b>	
Nov. 30 (Th)	pp. 425-453 (Chapter 10 – complete)

**MUP 108 Percussion Techniques I**  
**Marching Percussion Adjudication Observations**

Observer: JEANIS W. JONES Date: 10/7/06 Observation # 7  
(Indicate identifiable problems and general observations— check all that apply)

Name of Drumline/Band: St. Joe HS Field Time: 3:00  
Number in Battery: 8 Number in Pit Ens: 7 Number of Winds: \_\_\_\_\_  
Segment Numbers Breakdown: Snare Drums 2 Tenors 2 Bass Drums 4  
Cymbals 0 Other: Type 0 & Number \_\_\_\_\_  
Number of Keyboards in Pit: Xylophone 2 Bells 1 Marimba 1 Vibes 1  
Chimes 1 Crotales 0 Other: Type \_\_\_\_\_ & Number \_\_\_\_\_  
Other Pit Instruments:  Concert Bass Drum  Timpani  Gong/Tam-tam  
 Suspended Cymbal (number identified 3)  Drumset  Ethnic Drums  
 Auxiliary Perc.: list as many instruments that can be identified \_\_\_\_\_

Pit Set-up: Proximity and Sightline Angle to Drum Major:  Good  Poor  
Most Instruments Positioned:  Parallel to Audience  At An Angle to Audience  
Each of the Following Pit Ensemble Keyboard Percussion Instruments Was Difficult to Hear:  
 Xylophone(s)  Bells  Marimba(s)  Vibraphone(s)  Chimes  
 None; All Were Easy to Hear  
The Pit Ensemble:  was Rhythmically Precise with the Battery  was Rhythmically In  
Front (in Tempo) of the Battery  was Rhythmically Behind (in Tempo) the Battery  
 Watched the Drum Major  Listened Back-Field (not watching the Drum Major)  
The Snare Drum Grip/Technique Used Was:  Matched Grip  Traditional Grip  
Number of Drums (Type) in Tenor Arrangement:  Quints  Quads  Tri's  
Other: \_\_\_\_\_

Rhythms Were Precise and Synchronized Within the Percussion Ensemble:  
 Consistently  Usually  Occasionally  Rarely  
The Battery Balance, Regarding Volume, With the Winds Was:  Consistently Too Loud  
 Usually Too Loud  Occasionally Too Loud  Usually Just Right  Usually Too Soft  
The Bass Drum Section:  Was Balanced from Drum-to-Drum  Was Balanced within the  
Battery  Was Balanced with the Winds  
Tuning/Muffling of the Bass Drums Was:  High & Muffled  Low & Muffled  
 High & Open  Low & Open  Mid-range and Muffled  Mid-range and Open  
The Battery Was Synchronized (Ensemble Precision) With the Winds:  Often  Usually  
 Occasionally  Rarely  
The Percussion Writing Enhanced the Winds/Overall Effect:  Consistently  Usually  
 Occasionally  Rarely  
Staging:  Battery Remained in a Closed/Tight Design  Battery Was Spread Far Apart  
 Battery Often Was In Front of the Band  Battery Often Was Centered Near The  
Middle of the Band  Battery Often Was Positioned Well Behind the Band  
Ensemble Problems Between Battery & Winds Were:  Few  Many  Dome-Related  
The Drumline/Pit Performed a Feature (Solo without Winds):  Yes  No  
Styles Performed:  Swing  Pop  Rock  Latin  Patriotic  Ballad  March  
 Broadway/Movie  Other \_\_\_\_\_  
Identifiable Show Theme: \_\_\_\_\_  
The Drumline & Pit:  Displayed Professionalism  Displayed Intensity  Displayed Spirit  
 Displayed Mature Musicianship/Expression  Displayed Showmanship  Displayed  
Strong Tempo Control

Describe One Effective Cymbal Visual OR Stick Visual OR Postural Visual:

None

Please Write Any Other Observations on a Sheet of Paper and Attach to this Document.



**MUP 108 Percussion Techniques I**  
**Marching Percussion Adjudication Observations**

Observer: PAUL W. WARE Date: 10/7/06 Observation # 2  
(Indicate identifiable problems and general observations—check all that apply)

Name of Drumline/Band: CASA GRANDE UNION Field Time: 3:15  
Number in Battery: 16 Number in Pit Ens: 8 Number of Winds: \_\_\_\_\_  
Segment Numbers Breakdown: Snare Drums 4 Tenors 3 Bass Drums 5  
Cymbals 4 Other: Type \_\_\_\_\_ & Number \_\_\_\_\_  
Number of Keyboards in Pit: Xylophone 1 Bells 1 Marimba 1 Vibes 2  
Chimes 1 Crotales 0 Other: Type CONCERT SNARE & Number \_\_\_\_\_  
Other Pit Instruments:  Concert Bass Drum  Timpani  Gong/Tam-tam  
 Suspended Cymbal (number identified 0)  Drumset  Ethnic Drums  
 Auxiliary Perc.: list as many instruments that can be identified \_\_\_\_\_

Pit Set-up: Proximity and Sightline Angle to Drum Major:  Good  Poor  
Most Instruments Positioned:  Parallel to Audience  At An Angle to Audience  
Each of the Following Pit Ensemble Keyboard Percussion Instruments Was Difficult to Hear:  
 Xylophone(s)  Bells  Marimba(s)  Vibraphone(s)  Chimes  
 None; All Were Easy to Hear

The Pit Ensemble:  was Rhythmically Precise with the Battery  was Rhythmically In Front (in Tempo) of the Battery  was Rhythmically Behind (in Tempo) the Battery  
 Watched the Drum Major  Listened Back-Field (not watching the Drum Major)

The Snare Drum Grip/Technique Used Was:  Matched Grip  Traditional Grip  
Number of Drums (Type) in Tenor Arrangement:  Quints  Quads  Tri's  
Other: 6 (HDEX?)

Rhythms Were Precise and Synchronized Within the Percussion Ensemble:  
 Consistently  Usually  Occasionally  Rarely

The Battery Balance, Regarding Volume, With the Winds Was:  Consistently Too Loud  
 Usually Too Loud  Occasionally Too Loud  Usually Just Right  Usually Too Soft

The Bass Drum Section:  Was Balanced from Drum-to-Drum  Was Balanced within the Battery  
 Was Balanced with the Winds

Tuning/Muffling of the Bass Drums Was:  High & Muffled  Low & Muffled  
 High & Open  Low & Open  Mid-range and Muffled  Mid-range and Open

The Battery Was Synchronized (Ensemble Precision) With the Winds:  Often  Usually  
 Occasionally  Rarely

The Percussion Writing Enhanced the Winds/Overall Effect:  Consistently  Usually  
 Occasionally  Rarely

Staging:  Battery Remained in a Closed/Tight Design  Battery Was Spread Far Apart  
 Battery Often Was In Front of the Band  Battery Often Was Centered Near The Middle of the Band  
 Battery Often Was Positioned Well Behind the Band

Ensemble Problems Between Battery & Winds Were:  Few  Many  Dome-Related  
The Drumline/Pit Performed a Feature (Solo without Winds):  Yes  No

Styles Performed:  Swing  Pop  Rock  Latin  Patriotic  Ballad  March  
 Broadway/Movie  Other \_\_\_\_\_

Identifiable Show Theme: \_\_\_\_\_

The Drumline & Pit:  Displayed Professionalism  Displayed Intensity  Displayed Spirit  
 Displayed Mature Musicianship/Expression  Displayed Showmanship  Displayed Strong Tempo Control

Describe One Effective Cymbal Visual OR Stick Visual OR Postural Visual:

CYMBALS CRASHED THEN ROLLED CIRCLED BY THE HANDS ENTERED AT ANGLE OF 90 DEGREE HELD AROUND WIFE TWISTING WRIST.

Please Write Any Other Observations on a Sheet of Paper and Attach to this Document.

## **MUP-108 Course Pack Contents:**

- Title Page
- Course Pack Contents
- Basic Stroke Types for Snare Drum
- Rudimental Snare Drum Solo (Snare Drum Playing Test – part 2)
- Evans Tuning Tips – Seating the Head
- Snare Drum Study Guide
- Snare Drum Performance Test Form

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- Sight-Reading for Keyboard Percussion (3 pages)
- Sight-Reading: A Methodical, Daily Routine (2 pages)
- Two Mallet Exercises & Warm-ups (7 pages)
- Selected 4-Mallet Marimba Exercises & Warm-ups (6 pages)
- Marimba Etude: Largo (Keyboard Playing Test)
- Keyboard Performance Test Form
- Vibe Clinic (3 pages)
- Study for Chimes
- Keyboard Percussion Study Guide (2 pages)

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- Timpani Tuning: Melodies for Interval Association
- Timpani Tuning: Ear Training Procedure
- Sinfonische Metamorphosen: Marking Timpani Parts
- Tips for Fitting Ludwig Timpani Heads
- Timpani – Replacement Head Selection Table
- Timpani Etude (Timpani Playing Test)
- Timpani Performance Test Form

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- Auxiliary Percussion Etude (Auxiliary Percussion Playing Test)
- Auxiliary Percussion Etude Set-up Diagram
- Auxiliary Percussion Unit Performance Test Form
- Auxiliary Percussion Unit Performance Test Form (for class use)
- Tambourine Head Replacement

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- Unusual Percussion Considerations: Concert Band Literature, Grades 2-5 (2 pages)
- Percussion Instrument Needs for the High School
- Sticks, Mallets & Beaters
- The Percussionist's Tool/Repair Kit
- Common Foreign Percussion Terms
- 14 Common Performance Issues for Percussion Students (4 pages)
- Selected Internet Percussion Resources
- Course Survey (MUP 108 – Percussion Techniques I)

Total Pages = 56 (including title page & contents)

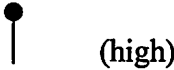
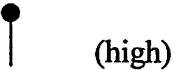
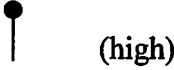


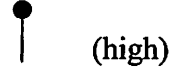


# Basic Stroke Types for Snare Drum

Steve Hemphill

The four stroke types described below are used in the development of the percussionist's hand technique and are systematically applied to the rudiments of snare drum performance.

The reason for this "stroke-type" approach is three-fold:

- 1) SPEED DEVELOPMENT
- 2) DYNAMIC CONTROL (multiple dynamic plateaus)
- 3) EASE OF LEARNING AND TEACHING

<u>STROKE TYPE</u>	<u>BEGINNING HEIGHT</u>	<u>ENDING HEIGHT</u>	<u>VOLUME</u>
<b>Full</b>	 (high)	 (high)	Loud
<b>Down</b>	 (high)	 (low)	Loud
<b>Up</b>	 (low)	 (high)	Soft
<b>Tap</b>	 (low)	 (low)	Soft

*It is necessary to complete the following steps in determining which type of stroke is appropriate for each rudimental pattern:*

- 1) Before choosing the stroke types to be used, determine the general volume of all notes in the pattern.
- 2) Determine the specific volume of the first note in the pattern in one hand. (A loud dynamic will require a full or down stroke; a soft dynamic will bring the choice to an up or tap stroke.)
- 3) Determine the specific volume of the next note that is to be played by the same hand. (This will finalize the decision of exactly which stroke type to use: a loud note followed by a loud note will require a full stroke; a loud note followed by a soft note will need a down stroke; a soft note followed by a loud note will require an up stroke; and a soft note followed by a soft note will use a tap stroke.)

Generally, accents are considered loud notes and non-accented notes are soft volume notes. The following example shows the results of this decision-making process:

## THE PARADIDDLE

(D = down stroke, U = up stroke, and T = tap stroke)



# EVANS TUNING TIPS

## *Seating the Head*

By Bob Gatzen

**ATTENTION!** Improper installation can permanently damage a new drumhead. Please, carefully follow this procedure to ensure maximum performance and extended playing life of the head.

### STEP 1: PREPARATION

- Prepare your drum. Use a clean dry cloth to wipe off the hoop and bearing edges, removing stick shavings, dust, and any build-up that may have formed. Be sure to remove and debris that falls into the drum.
- Place the head onto the drum and spin it around the bearing edge to ensure clean contact.
- Tighten the tension rods until they make contact with the hoop.

*DO NOT APPLY PRESSURE TO THE HEAD YET.*

### STEP 2: TUNING UP

- Following the “opposite lug sequence” (see illustrations), begin tensioning by turning each key rod 1 complete revolution. Repeat this procedure, then continue the tensioning sequence using smaller increments ( $\frac{1}{2}$  turn). Tension the head to approximately the pitch of an average tuned snare drum. (NOTE: pitches will vary in relation to the size of the drum you’re tuning. A moderate to high amount of tension should be applied, but use caution. Excessive tension can cause damage to the head.)
- Tap around the circumference of the head listening for high and low spots. Tension up the low areas in an effort to maintain evenness in pitch. It is not always possible to maintain perfect evenness, and it may be helpful to select one rod at a time, detune, and then bring the rod back up to pitch while tapping the edge. Listen closely to detect any improvement in the evenness of the overall sound.

*TUNING TIP – Always tune below, then up to desired pitch.*

### STEP 3: HEAD STRETCHING

- Place the drum on the floor or table (to isolate the sound of the top head). Tap the head *dead center* with the tip of your finger. Listen... then hum or sing the pitch and remember it.
- Place your palm in the center of the head and, with your other hand on top, apply a firm amount of downward pressure using your arms. Listen to the pitch again, and remember the original pitch you hummed. If the pitch has lowered, tension the head up to the original pitch and repeat the procedure.

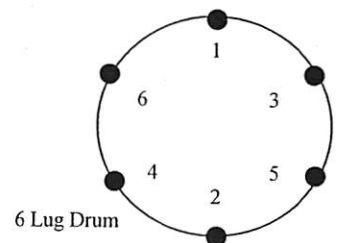
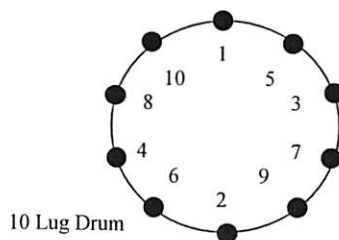
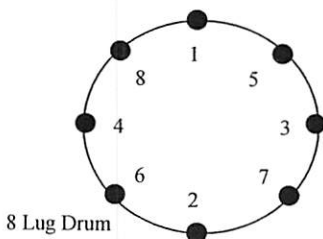
### STEP 4: DETUNING/TUNING UP TO PITCH

- Begin detuning, using the “opposite lug sequence” procedure until each key rod releases itself from the hoop. Then tweak each key rod back down again, making contact with the hoop.
- Moving clockwise, tension each key rod in very small increments ( $\frac{1}{4}$  turns) until the head begins to resonate.
- Again, check for high and low spots. Tap the center for overall pitch (which will become clearer the more evenly the head is tensioned). Attempt to find the *lowest possible pitch* the head will resonate at.

*TUNING TIP – Be aware that certain tension rods can be more effective than others to even out the sound of the head. Experiment!*

- Turn the drum over and tune the bottom head to approximately the same pitch as the top (batter) head. The overall sound of the drum begins by setting the pitch of the batter head and then getting the bottom head close to that pitch.

*TUNING TIP – For maximum resonance and clarity, the bottom (resonating) head should be tuned to the relative tuning area of the batter head.*



Good luck, good drumming, and thank you for purchasing Evans products.

For more information on tuning, refer to: *Tuning, Sound and Design* (DCI Music Videos/Warner Bros. Publications) by Bob Gatzen.

**PERCUSSION TECHNIQUES I**  
**Snare Drum Study Guide**

- Be able to discuss the four stroke types, how & why they are use (in specific terms)
- Be able to name the rudiments, know how many are used today, know how rudiments are categorized (and how many categories there are); consider the history of the rudiments, and be able to notate rudiments with correct stickings (below the notes), accents, and stroke types (above the notes)
- Discuss the grip including: history, matched vs. traditional; function of fingers and wrist; fulcrum design and placement; arms
- Discuss when & where the snare drum is struck (exact points on the head in relation to volume) and what angle of stick to head surface is used & why
- Discuss the roll: types & uses
- Discuss the pedagogy of rolls, including sequence of roll types and sequence of steps
- Discuss parts of the snare drum, including names, what they are made of and how they function
- Discuss common sizes of snare drums used in schools today
- Discuss how to set up a snare drum: angles, height (and how this is determined), type of stand used
- Discuss how the fundamentals of producing an even-sounding multiple-bounce (buzz) roll (including 3 steps regarding evenness)
- Discuss the four steps in the process of stick selection (in their proper order)
- Discuss drum head types: manufacturers, models of thickness (in order), and other pertinent information
- Discuss tuning of the snare drum heads, the process involved, and pitch relationships between heads
- Discuss when & how the snare tension adjustment screw is used in performance
- Discuss the pedagogy of the double stroke roll

**SIGHT-READING  
FOR KEYBOARD PERCUSSION**  
An Outline for a Multi-faceted Approach  
by Steve Hemphill

Sight-reading is a most important skill in achieving success as a professional musician. Frequently, it is also the most underdeveloped skill among student percussionists. My own frustrations as a student pursuing these skills encouraged me to organize a goal-oriented approach to sight-reading at the family of percussion keyboards.

Developing the skill of sight-reading requires:

- patience
- focused concentration
- repetition
- and clearly outlined goals

Several factors influence this goal:

- a relaxed finger-oriented grip & stroke type
- eye movement control
- Kinetic orientation at the keyboard
- aural recognition of intervalic relationships
- a confidence built upon successful experiences

General technique:

- finger-oriented technique, using the "full" stroke
- one technique is better than alternating between two (fingers vs. wrist)

Four concepts of eye movement:

1. Eyes stay on music (philosophically/literally)
2. When a look at the keyboard is necessary (e.g. large leaps), use only an "unfocused" glance which is less than one second in length of time. This is the "bounce" technique.
3. Eyes must constantly move forward (experiment: 3" x 5" card covering part(s) of the measures - using a metronome)
4. Read note groups, not note-to-note (use scale fragments, triadic arpeggios, sequences, etc.)

Music stand placement:

- low - short distance for eyes to move to bars, good for peripheral sight
- high - poor peripheral sight, but better 2-point sight line (music to conductor - ensemble communication) and more reliance upon Kinetic orientation/memory. Better posture, less muscle stress. Recommended.
- place stand at center of instrument or in central area of the portion of instrument played (if music is studied ahead of time).

*Handwritten notes:*  
LOOK AFTER STROKE  
STAND LOW - OKAY  
"HIGH" - MUSCLE  
MUSCLES KEY STRESS  
PER PERIPHERALS  
"NOTE GROUPING"

HEIGHT IS PROPORTIONATE TO MOVEMENT  
KITCHEN THER  
GREEN STUDIOS

Relationships of vertical speed to lateral motion:

- experiment: roll on "c" - push player up the scale
- experiment: roll on "c" - up the scale with eyes closed/light off
- intervalic "feel" - distances

Looking at the keyboard:

- the eyes will do whatever is demanded of them!
- "Bouncing" technique - pick a spot on a wall & move eyes to palm (placed near stomach)
- less than a second of elapsed time - unfocused (glassy or day-dreaming stare, mostly peripheral)
- eyes "magically" bounce back to the same place in the music (you don't have to hunt for your place in the music) - this technique must be practiced
- use "snap-shot" sighting of instrument (just enough time for a flash-bulb) of 4" to 6" sections: use "landmarks" (e.g. C#-D#, F# lower corner, A# upper corner), no need to see lower "manual" of bars
- do not watch mallet strike bar (you have already turned back to the music)
- avoid moving head or neck; only the eyes

Music theory:

- knowledge of music "theory" helps to see note groupings
- [analogy to sight recognition: a photo of a family with a person following this description - short blonde hair, glasses, mustache, dimple on left cheek -- that's my brother! - no way]
- many pianists (e.g. accompanists) read many measures in advance - you can develop this ability too

Aural Intervalic Recognition (Ear Training)

- hear intervals in the "mind's ear" before you play it (without looking)
- easy to do w/Mozart, difficult w/contemporary music
- if a note is missed, make a physical adjustment without looking (exercise: sixteenth-notes on octave "c's", 1 up/3 down)
- professional horn players and fretless string players (e.g. violin) must do this well

Repetition:

- sight-read every day (10 minute minimum)
- begin w/easy music from repertoire of any instrument (suggestions: Telemann, Haydn, Handel, Mozart, Quantz, Scarlatti, some Bach)
- if music library is available, check out enough music for a 2-week sight-reading program, then return and check out more
- even more fun are duets - forces players not to stop
- experiment w/playing duets w/recorded tapes of parts self-produced earlier
- the more you sight-read, the better you become

### Experiments:

- using a bed sheet covering the entire keyboard - the player is compelled to rely upon "Kinetic touch"
- making a sight-reading "bib" (coat hanger & cardboard) - to block any sight of the keyboard
- study the music away from the instrument, making decisions about exactly where it is necessary to glance at the keyboard, then mark those points in the music with some recollection device (e.g. ^)... allow the eyes to move away from the page only at those points so indicated

### Summary:

- decide that acquiring sight-reading skills is a high priority
- schedule sight-reading in every practice session
- practice eye movement concepts, study theory, try some experiments
- goal setting and attainment are necessary to development
- know that sight-reading skills are basic to musicianship and professional success



**KEYBOARD SIGHT-READING**  
A Methodical, Daily Routine  
Steve Hemphill

Approach the practice room as if it were an academic classroom. The musician is both the student and the teacher (but one should focus on the role of the teacher, as if teaching a “third party”).

Needs for the “Classroom:”

- Goals
  - Remain looking at the music, not at the keyboard
  - Keep eyes moving forward (read “in the future,” play “in the present”)
  - Read note-groupings and entire measures, or groups of measures (avoid note-to-note reading)
    - Identify general and theoretical aspects of composition
      - Rhythm
      - Musical Line Contour
      - Intervals
      - Scale Fragments
      - Musical Sequences
      - Triads & Arpeggios
      - Chord Progressions
  - Achieve accuracy through kinetic orientation and technical approach
  - Perform with steady pulse, avoiding stops
  - Play musically (read all printed indications: dynamics, phrasing, etc.)
  - Produce a fine musical tone from the instrument consistently
  - Remain relaxed
- Lesson plan (prescribed activities for the allotted time)
- Outcome assessment (recording, journal of activity including a metronome schedule)
- Materials (books, appropriate sight-reading music)
- Tools (metronome, sight-reading bib, electronic hat/head-tilt indicator, bed-sheet)

Teach Self Methodically and Sequentially:

- Begin with easy music, moving incrementally toward more demanding music
- Begin with slow metronomic division, moving incrementally toward faster tempi
- Before playing, scan music for key signature, time signature, tempo indication, style, repeat markings (and other “road-map” indications), dynamics, reoccurring accidentals, stickings (if applicable), etc.
- Identify the most difficult passage or phrase; then set a beginning tempo which is appropriate and/or that can accommodate the difficult section (without slowing down)
- Always maintain a steady tempo

Divide “Classroom” (Practice Room) Activities into Various Components/Units (create interest):

- Training
  - Books
    - George H. Green. *Instruction Course for Xylophone: A Complete Course of Fifty Lessons*
    - Elden “Buster” Bailey. *Mental and Manual Calisthenics*
    - Gordon Stout. *Ideo-Kinetics: A Workbook for Marimba*

- Exercises and Activities
  - Use of metronome, promoting solid pulse
  - Covering notes/measures in advance with index card (integrated with metronome), promoting forward eye movement
  - Use of bib, inhibiting peripheral vision, encouraging kinetic aspect
  - Use of bed-sheet, inhibiting peripheral vision
  - Use of darkness (turn lights out), inhibiting peripheral vision
  - Use of electronic hat, indicating eye/head movement toward instrument (baseball cap installed with mercury switch, beeper, 9-volt battery)
- External Preparation
  - Design flashcards (single measures, extracted from various method books, from simple to complex)
  - Sing/hum along when reading two-mallet marimba studies (encourage intervallic identification)
- Sight-Reading Materials
  - Two-Mallets
    - Raynor Carroll. *Ten Progressive Etudes for the Marimba*
    - Howard Zwickler. *Tone-row Exercises for Mallet Percussion*
    - John Bergamo. *Style Studies*
    - Pasquale Bona. *Rhythmical Articulation*
    - Morris Lang. *14 Contemporary Etudes for all Mallet Instruments*
    - Morris Goldenberg. *Modern School for Xylophone, Marimba, and Vibes*
    - Goldman & Smith. *Arban's Complete Conservatory Method for Trumpet* and other materials from the wind and string instrumental methodology
  - Four-Mallets
    - James Moyer. *Four-Mallet Method for Marimba*
    - Luigi Morleo. *120 Four-Mallet Studies*
    - Bart Quartier. *Image: 20 Children's Songs for Marimba*
    - Karen Ervin Pershing. *Contemporary Etudes for 3 & 4 Mallets*
    - Max Neuhaus. *Graded Reading Exercises for Four Mallets*
    - Ramon Meyer. *Multiple Mallet Studies for Marimba*
- Duets
 

Organize a schedule with another percussionist (or several) for duet sessions; or record (use of tape, video, or mini-disc recorder) oneself performing one voice of the duet, then play the second duet voice over playback of original voice.

  - Karen Ervin Pershing. *Mallet Duets for the Student & Teacher: 18 Sight-Reading Duets Playable on One Marimba*
  - Karen Ervin Pershing. *Contemporary Mallet Duets: 12 Two-Mallet Duets for the Intermediate Player*
  - Everett Gates. *Odd Meter Duets: for All Instruments in Treble Clef*
  - Georg Philipp Telemann. *Six Canonic Sonatas for Two Flutes*
  - Morris Lang. *15 Bach Inventions: Especially Arranged and Transcribed for All Mallet Instruments in Duet Form*
  - Carl Poole. *Jazz for Juniors: 15 Progressive Duets Designed to Develop Interpretation of Dance Music*
  - Carl Poole. *Jazz for Seniors: 15 Progressive Duets Designed to Develop Interpretation of Dance Music*
  - Other duet materials from the wind and string instrumental repertoire



9 Double Lateral

(\*Practice the 6-note pattern of each measure before applying them to the arpeggio.)

8 Arpeggios Using Double Lateral Sequential Stickings (all keys)

7 Single Independent Evolving into Double Lateral Strokes (one wrist rotation for every two notes in each hand)

3 4 2 1 3 4 2 1

**10 Double Lateral**

1 2 3 4 1 2 3 4      4 3 2 1

**11 Single Independent and Single Alternating**

1 2 3 4 2 3 4 3 2 4 3 2

**12 Independent Roll Exercises**

A) 1 2 3 4 3 2      B) 3 4 3 2 1 2      C) 4 3 4 1 2 1

B) 2 1 2 1 2 1 2 1 (anchor)

(anchor) 3 4 3 4 3 4 3 4 3 4

A) 1 2 1 2 1 2 1 2 (anchor)

(anchor) 4 3 4 3 4 3 4 3

13

F) 1 2 3 4 3 2 etc.

etc.

E) 4 3 4 3 4 3 4 3 4 3 2 1 2 1 2 1

D) 3 4 3 4 3 4 3 2 1 2 1 2 1 2 1

**14** A)

4 3  
1 2

B)

3 4  
2 1

**15**

3 4

1 2

Repeat with intervals reversed.

**16** **Combination Single Independent/Double Lateral**

3 4 1 2 3 4 2 4    3 2 1 4 3 2

2 3 4 1 2 3 4 2    4 3 2 1 4 3 2

etc.

(simile)

**Percussion Techniques I**  
**Keyboard Playing Test**

Name \_\_\_\_\_ Date \_\_\_\_\_

**I. Scales and Exercises (From 29 Exercises) [25%]:**

COMMENTS

- Exercise #\_\_\_\_, Key of \_\_\_\_.
- Exercise #\_\_\_\_, Key of \_\_\_\_.
- Exercise #\_\_\_\_, Key of \_\_\_\_.
- Exercise #\_\_\_\_, Key of \_\_\_\_.

**II. Keyboard Solo [25%]:**

- Pasquale Bona "Largo" (#75)

**III. Technique (The Model) [50%]:**

- Low Wrists
- Fulcrum Placement & Use
- Finger/Wrist Use Proportions
- Use of Full Stroke
- Point of Contact with Bars
- Rolls (including smooth note connections)

TOTAL \_\_\_\_\_



## **Vibe Clinic**

By Steve Hemphill

### **Vibraphone**

- Four Mallet Grip for Jazz Vibes – Gary Burton – a cross-stick grip with the outside mallets hand on top of inside mallets (within the palm)
- Pedaling Technique: quick upward foot motions; “after pedaling”
- Mallet Dampening (4 types)
  1. Regular Dampening: quickly and silently slide mallet head from node toward center of bar while simultaneously striking new note
  2. Follow Dampening (adjacent notes only): one mallet plays scale-like passage while other mallet “follows” with a sliding motion using slight downward pressure—timing exactly with sound of new note
  3. Slide Dampening (adjacent notes only): the striking mallet also dampens the previously played note by immediately sliding (upon contact in an L-shaped fashion) from the struck note to the last-played/adjacent note using a “down-stroke” motion (almost a “dead stroke”)
  4. Finger Dampening (naturals to *b/#* only): use little finger (or knuckle) to dampen natural bar when simultaneously striking a *b* or *#* which is aligned with the natural
- Grace notes: play with a “dead stroke” technique, leaving the mallet head pressed into the bar
- Double stickings: use doubled left and right hand sticking to reduce motions between manuals (naturals vs. *#s* and *bs*); example—*Eb* major scale would use the following sticking: *Eb* (Left), *F* (Right), *G* (R), *Ab* (L), *Bb* (L), *C* (R), *D* (R), *Eb* (L)
- Mallet placement on 4-note chords: use the ends of the bars (the portion) of the bar on the outside of the node (where the suspension cord passes through the bar). This can be useful not only on the *bs* and *#s*, but also on the naturals—striking the bar end away from the player, when striving to reduce awkward and difficult arm/wrist angle changes.
- Developing “orchestrated” voices on the vibraphone—producing a transparent quality with musical contrast and expression:
  1. The melody line (top voice) is played with the heaviest weight (loudly)
  2. The bass line (bottom voice) is played with the second heaviest weight (moderately loud)
  3. The harmony (inner chordal voices) are played with the lightest weight (quietly)Note: There are many exceptions to this approach in vibraphone music.  
Example: *The Waltz King* (from “Music of the Day—a collection of original compositions for solo vibraphone; Kendor Music, Inc.) by Bill Molenhof

### **Vibe Books**

1. *Vibraphone Technique: dampening and pedaling*, David Friedman; Berklee Press Publications
2. *A Musical Approach To Four Mallet Technique for Vibraphone, Vol. I* (and Vol. II), David Samuels; Excelsior Music Publishing Co.
3. *Contemporary Mallet Method: An Approach to the Vibraphone and Marimba*, Jerry Tachoir; Riohcat Music

(Vibe Clinic, page 2)

4. *Jazz Mallets: In Session*, Arthur Lipner; Row-Loff Productions

5. *The Vibes Real Book*, Arthur Lipner; MalletWorks Music

- Collections:
- 1) *Music of the Day*, Bill Molenhof; Kendor
  - 2) *Vibe Songs*, Bill Molenhof; Belwin Mills
  - 3) *New Vibe Madness*, Bill Molenhof; CPP Belwin
  - 4) *Solo Vibraphone Collection*, Marlène and Jerry Tachoir; Riohcat
  - 5) *Design for Vibraphone and Piano*, Jerry Tachoir; Riohcat
  - 6) *Solo*, Gary Burton; Creative Music
  - 7) *Mirror from Another*, David Friedman; CPP Belwin
  - 8) *Place to Visit*, Arthur Lipner; MalletWorks Music

### Resources

1. Steve Weiss Music: 2324 Wyandotte Road, Willow Grove, PA 19090; Phone 215/659-0100; Fax 215/659-1170
2. Jamey Aebersold Jazz: PO Box 1244, New Albany, IN 47151-1244; Phone 1-800-456-1388; Fax 1-812-949-2006; <http://www.jazzbooks.com>

Example of "Orchestrated" Balance:  
 from *The Waltz King*  
 by Bill Molenhof (edited by Steve Hemphill)

Vibes

The image shows two systems of musical notation for Vibes. Each system consists of two staves. The top staff is in treble clef and the bottom staff is in bass clef. The time signature is 2/4. The first system has four measures. The second system has five measures, ending with 'etc...'. Annotations include: a double asterisk (\*\*\*) above the first measure of the first system; an asterisk (\*) above the second measure of the second system; a double asterisk (\*\*) above the third measure of the second system; an 'x' above the fourth measure of the first system; and double asterisks (\*\*) below the fourth measure of the second system.

Balance: play melody notes (top staff) at forte level; play bass notes (downbeat notes in lower staff) at a mezzo-forte level; play harmony notes (lower staff--2nd eighth-notes and half-notes) at a mezzo-piano level.

\* Mallet placement on Ab and F: play both notes on the end of the bars - outside of the notes.

\*\* Use "dead-stroke" for grace-notes (only use on 2nd grace-note in measure 4).

x = Mallet dampen ("Follow Dampening") between these notes.

Pedal at each bar line. Avoid gaps in sound (use "after-pedaling" technique).

# STUDY FOR CHIMES

## Class Percussion I

Chimes

NAU Percussion Studies

The musical notation consists of two staves. The first staff is in 4/4 time and contains eight measures. The notes are: G4 (quarter), A4 (quarter), Bb4 (quarter), C5 (quarter), Bb4 (quarter), A4 (quarter), G4 (quarter), and F4 (quarter). The dynamics are: *f* (first measure), *p* (second measure), *pp* (third measure), *pp* (fourth measure), *pp* (fifth measure), *pp* (sixth measure), *pp* (seventh measure), and *pp* (eighth measure). The eighth measure has a fermata over the note. The second staff is in 4/4 time and contains eight measures. The notes are: G4 (quarter), A4 (quarter), Bb4 (quarter), C5 (quarter), Bb4 (quarter), A4 (quarter), G4 (quarter), and F4 (quarter). The dynamics are: *pp* (first measure), *pp* (second measure), *pp* (third measure), *pp* (fourth measure), *pp* (fifth measure), *pp* (sixth measure), *pp* (seventh measure), and *pp* (eighth measure). The eighth measure has a fermata over the note. A hairpin crescendo is shown below the second staff, starting from the second measure and ending at the eighth measure.

Use exercise with various tempo indications. Execute with two chimes mallets, followed by execution with one chime mallet. If two faces of hardness are available on the same chime mallet, change from a hard surface to a soft surface at the end of measure two.

## **PERCUSSION TECHNIQUES I**

### **Keyboard Percussion Study Guide**

- Be able to describe proper physical technique for playing; wrist position, mallet position, type of stroke required (most frequently used), wrist to finger use ratio.
- Describe the node as it relates to acoustics and as it relate to the marimba.
- Describe the resonator and its function.
- Describe differences between xylophone and marimba; consider physical differences, acoustic differences, range & transposition, and other tangible differences.
- Describe the advantages of synthetic materials used for marimba and xylophone bars, including the names of these materials.
- Discuss playing spots on keyboard bars and the technical concerns related to location. And specifically, address the placement of mallets for rolls. Identify anti-node and its ramifications.
- Discuss weight of stroke as it relates to technique and lift; include the use of “down strokes.”
- Discuss the technical production of rolls and the use of wrists, fingers, and forearm (if any) in that production.
- Identify the specific ranges (including highest and lowest notes) and transpositions for all five types of keyboards: marimba, xylophone, vibraphone, orchestra bells, and chimes.
- Identify the specific ranges (including highest and lowest notes) and transpositions for all five types of keyboards: marimba, xylophone, vibraphone, orchestra bells, and chimes.
- Discuss the different types of mallets appropriate for use on all keyboard instruments, including advantages and disadvantages, and for what types of literature/performance. Also, include discussion of mallet handles (e.g. rattan, fiberglass, dowel).
- Identify the specific ranges (including highest and lowest notes) and transpositions for all five types of keyboards: marimba, xylophone, vibraphone, orchestra bells, and chimes.
- Discuss how and when the study of keyboard percussion instruments should begin in public school programs or within private instruction.
- Identify the different types of mallet dampening used in association with vibraphone technique.

(Keyboard Percussion Study Guide, page 2)

- Discuss rationale for placement of keyboard percussion instruments in the large ensemble in relation to acoustic properties (including logistics).
- Discuss the use of roll speed on keyboard percussion instruments in terms of intensity, expressiveness, and note release.
- Identify/describe the various types of four-mallets techniques/grips, the versatility of each and which should be taught. Include Traditional, Musser, Burton, and Stevens.
- Describe eye movement in relation to keyboard percussion sight-reading skills.
- Discuss storage, care & maintenance of keyboard instruments and potential pitfalls regarding student behavior.
- Discuss emphases regarding the content of study for the beginning student. Include solos, scales & exercises, ensemble music, and sight-reading.

**Timpani Tuning:  
Ear Training Procedure**

1. Introduce each interval individually, both ascending and descending, with the student singing aloud
2. Give beginning pitch; then provide a short, random sequence of 3-4 note intervals, singing aloud at every step
3. Give beginning pitch; followed by short interval sequence to be sung silently, with the last pitch sung aloud (sustain until piano plays correct pitch - match intonation)
4. Give beginning pitch; followed by medium interval sequence (5-7 notes) silently, the last pitch sung aloud - match with piano
5. Give beginning pitch; followed by long sequence (8-10 notes) silently, the last pitch sung aloud - match with piano
6. When teaching young students, run the sequences silently with the final pitch played on piano and observe the facial expressions to check accuracy (the student does not sing aloud)
7. Give a time limit to each sequence by way of conducting a predetermined number of measures rest (at first symmetrical meter, then mixed meter)
8. Follow steps 1, 3, 4, 5, and 7 with music being played (live or via stereo) in the background
9. Practice sequences mentally followed by the physical application of pitch (last) to an appropriate drum .

## Timpani Tuning: Melodies for Interval Association

### ASCENDING

- minor 2nd: *Jaws; Ode to Joy* (Beethoven's 9<sup>th</sup> Symphony); chromatic scale
- Major 2nd: *Do-Re-Mi; Country Roads; Can-Can; Silent Night; London Bridge; Happy Birthday*; major scale
- minor 3rd: *Brahms' Lullaby; Edelweiss; What Child Is This* (Greensleeves); *Georgia*
- Major 3rd: *Marines' Hymn; When the Saints Go Marching In*; major triad
- Perfect 4th: *Here Comes The Bride; There's No Business Like Show Business...; Reveille; Taps; Mexican Hat Dance; Oh Tauxnumbaum; The Farmer in the Dell; Jeopardy Theme*
- Tritone: *Maria* (West Side Story); *The Simpson's Theme*
- Perfect 5th: *Twinkle, Twinkle Little Star; 2001 Space Odyssey; Star Wars Theme*
- minor 6th: *Theme from Love Story; The Entertainer* (notes 4-5)
- Major 6th: *My Bonnie Lies Over the Ocean; NBC; It Came Upon A Midnight Clear*
- minor 7th: *There's A Place For Us* (West Side Story); *Have You Driven a Ford, Lately?* (TV Commercial);
- Major 7th: *Bali-Hai* (musical, notes 2-3); *Star Trek TV Theme*
- Octave: *Somewhere Over The Rainbow; When You Wish Upon A Star; The Weather Outside Is Frightful* (Let It Snow...); *Take Me Out To The Ball Game*

### DESCENDING

- minor 2nd: *Joy To The World; Habenera* (Carmen—opera); *God Bless America; Für Elise*; chromatic scale
- Major 2nd: *Mary Had A Little Lamb; Three Blind Mice; Mambo* (Westside Story)
- minor 3rd: *The Star Spangled Banner*; "bridge" section from *Over The Rainbow; This Old Man*
- Major 3rd: *Swing Low-Sweet Chariot*; Beethoven's 5<sup>th</sup> Symphony (Opening); *Sentimental Journey; Summer Time*
- Perfect 4th: *I've Been Working On The Railroad; Old Mac Donald; Born Free; Oh My Darling; O, Come All Ye Faithful*
- Tritone: *European Siren*
- Perfect 5th: *Feelings; Flintstones* (TV cartoon theme)
- minor 6th: *Theme from Love Story*
- Major 6th: *Nobody Knows The Trouble I've Seen; Over There; Music of the Night* (Phantom of the Opera)
- minor 7th: *Opening theme from An American in Paris* (George Gershwin)
- Major 7th: *I Love You* (Cole Porter)
- Octave: *Scherzo* from Beethoven's 9<sup>th</sup> Symphony (or simply invert an ascending octave)

Improve the list with selected melodies that are familiar, specifically, to the individual student. Melodies will only help the student if he or she is very familiar with them. This list should be offered to a student only after assigning the student to find as many melodies for himself/herself as possible. Folk tunes and nursery rhymes are excellent sources, with lasting melodies.



# TIMPANI ETUDE

Northern Arizona University MUP 108

Steve Hemphill

G, Bb, C, F

Allegro Moderato  $\text{♩} = 92$

The musical score consists of seven staves of music. The first staff begins with a dynamic of *ff* and a *sub.* marking. The second staff includes a handwritten note "10 MUP 108" and two *X* markings. The third staff features a dynamic of *ff*, a *dd* marking, and a section labeled "Change to F, Bb, D, F". The fourth staff contains a dynamic of *f* and a triplet marking. The fifth staff includes a dynamic of *ff* and a *sub.* marking. The sixth staff features a dynamic of *ff* and a *sub.* marking. The seventh staff includes a dynamic of *ff* and a *sub.* marking. The score is marked with various dynamics (*f*, *ff*, *fp*), articulations (*acc.*, *sub.*), and technical markings (*X*, *L*, *3*, *4*).

X = cross-stick.

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# Timpani Study

(Marking Parts)

Pauken

Allegro (♩ = 108)

The musical score consists of ten staves of music, each with a treble clef and a 2/4 time signature. The staves are arranged vertically and contain the following elements:

- Staff 1:** Starts with a trill (tr) and a dynamic marking of *ff*. It includes a first ending bracket and a fermata.
- Staff 2:** Features a dynamic marking of *f* and a fermata.
- Staff 3:** Starts with a dynamic marking of *p cresc.* and includes a first ending bracket.
- Staff 4:** Includes a dynamic marking of *mf*, a marking for *(Gr. Tr.)*, and a first ending bracket.
- Staff 5:** Features a dynamic marking of *pp* and a first ending bracket.
- Staff 6:** Includes a dynamic marking of *f*, a trill (tr), and a first ending bracket.
- Staff 7:** Features a dynamic marking of *f* and a first ending bracket.
- Staff 8:** Includes a dynamic marking of *f* and a first ending bracket.
- Staff 9:** Starts with a dynamic marking of *mf* and includes a first ending bracket.
- Staff 10:** Features a dynamic marking of *f* and a first ending bracket.

Throughout the score, various drumming patterns are indicated by numbers (1, 2, 3, 4, 6, 8, 9, 10, 16) and letters (A, B, C, D, E, F, G, H) placed below the notes. The music includes trills, first ending brackets, and fermatas.

## TIPS FOR FITTING LUDWIG TIMPANI

Both Remo and Ludwig timpani heads are available. It is important to note that each manufacturer uses a different method of sizing. This is further complicated by the fact that Ludwig timpani have been manufactured using two different styles of head. The following information should be helpful in putting together a timpani head order.

### **Regular Collar Heads – pre 1981**

Ludwig timpani manufactured before 1981 take “regular” collar heads. Regular collar heads pull sharply down, close to the bowl perimeter, with the chrome-plated counter hoop fitting closely around the bowl. *Regular collar heads measure approximately one inch larger than the bowl diameter.*

### **Extended Collar Heads – post 1981**

Extended collar heads, used on Ludwig timpani manufactured after 1981, extend approximately one inch beyond the bowl perimeter, with the chrome-plated counter hoop being about two inches greater in diameter than the bowl. *Extended collar heads measure approximately two inches larger than the bowl diameter.*

### **Sizing Remo Heads (recommended)**

Remo heads are sized by the actual diameter of the head. Regular collar timpani take Remo heads one inch larger than the bowl size. Extended collar timpani take Remo heads two inches larger than the bowl size.

### **Sizing Ludwig Heads (not recommended)**

Ludwig heads are sized according to the size of the timpani. A 26” Ludwig timpano head is made to fit a 26” timpano. In fact, the actual head measurement will be somewhat larger. To clarify, a 26 inch Ludwig timpano head will fit a 26 inch bowl but will not measure 26 inches. It will measure approximately 27 inches for a regular collar head and approximately 28 inches for an extended collar head.

## **REMO TIMPANI HEADS**

The size of timpani head is determined by the diameter of the bowl itself. Measure the old head from the outer edges. If this measurement exceeds the bowl size by more than 1¾ inches, an *extended collar* head is needed. When ordering, mention the make and the model of timpani concerned. “Hazy” heads are recommended.

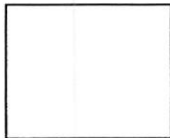
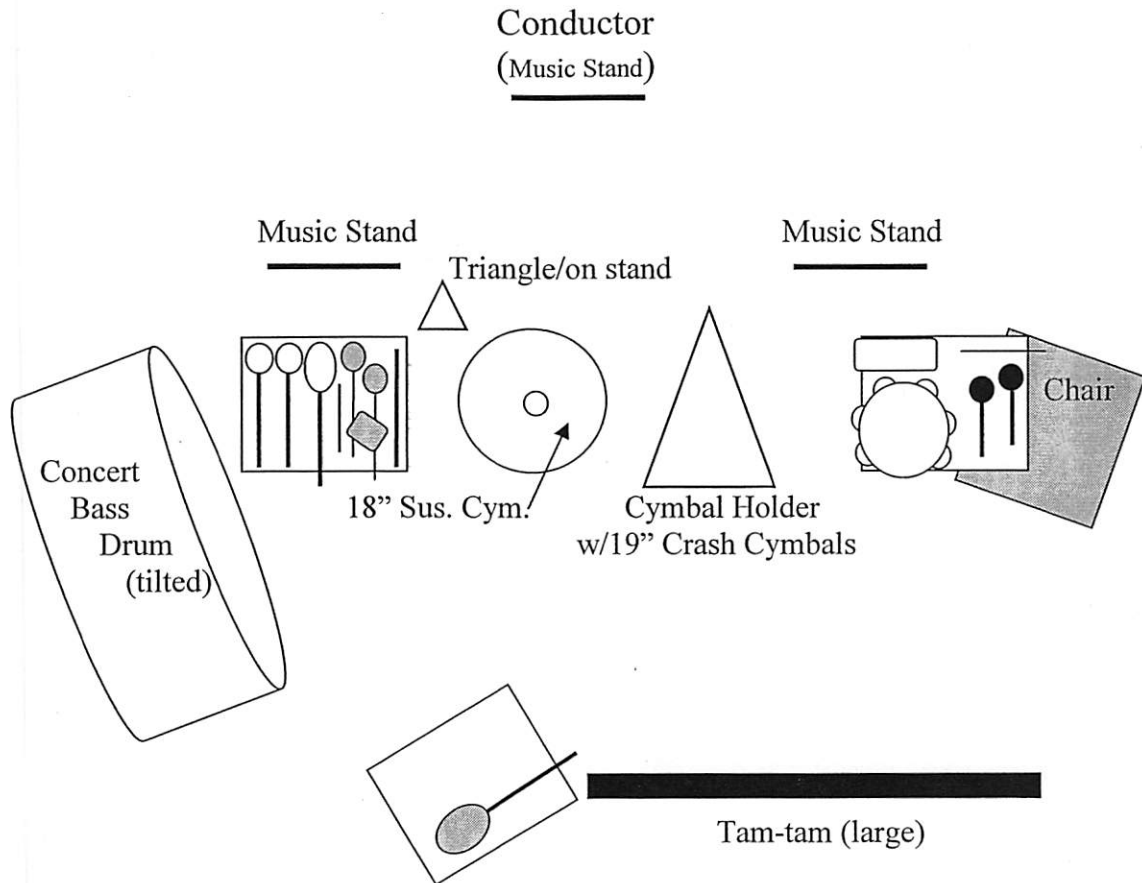
**Word of Caution:** Care must be taken when removing old timpani heads. Many pedal-type models of timpani (i.e. Ludwig, Yamaha) have tuning mechanisms which are spring loaded. The pedal will move to the toe-down forward position – do not try to hold it back (unless you “block” the pedal in a central position with a piece of wood or similar object). Also, do not adjust the balancing spring tension. It is recommended to use a small dab of Lithium grease or Vaseline Petroleum Jelly on the threads of the tension rods for lubrication. Be sure to clean the bearing edge of the bowl with denatured alcohol or similar chemical. It should be smooth to the touch. If possible, apply a very thin film of clarinet cork grease to the bearing edge (or use a high-grade Teflon tape) before replacing the head. Avoid use of paraffin wax for purposes of rim lubrication.

**TIMPANI - REPLACEMENT HEAD SELECTION TABLE**

Bowl Size Diameter	IN. CM.	18" 45.7	20" 50.8	22" 55.9	23" 58.4	24" 60.9	25" 63.5	26" 66	27" 68.6	28" 71.1	29" 73.7	30" 76.2	31" 78.7	32" 81.3
<b>MANUFACTURER</b>														
ADAMS	Professional Symphonic		2200 2300		2500 2600			2800 2900			3100 3200			3400 3500
CLEVELANDER			2200			2600		2800			3100		3300	
GOODMAN Chain		2000	2200	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	
GOODMAN* Dresden					2508 2500*		2712 2800*		3008*	3100				
GP PERCUSSION			2300			2608		2808			3108			3500
HINGER Dresden or Cable			2300	2500	2600		2800			3100			3400	3412
JENCO Dresden or Rotary					2608		2708	2808			3008	3300		
KOLBERG				2308		2600		2800			3100		3300	
LIGHT, WALTER After 1986								2808						3400
LIGHT, WALTER** American Drum/Dresden					2600		2800	2800		3100	3108	3300	3300	3500
LUDWIG RINGER And Double Ring Suspended Bowl		After 1981	2200		2500			2800			3100			3400
LUDWIG** Pedal and Hand (Including Ludwig & Ludwig, Leedy & Ludwig, W.F.L. Ludwig Co.)		Pre 1981	2010*		2404	2500	2600	2700	2800	2900	3000	3100		
PEARL					2500			2800			3100			3400
PREMIER				2308		2600		2800		2900	3100	3100	3300	3300
GUNTHER RINGER Dresden			2208		2500		2708			3008		3200		
ROGERS			2200		2500			2800			3100			3400
SLINGERLAND					2404		2600	2700	2800	2900	3000	3100		
STOTZ Cable Timpani			2300	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500
YAMAHA			2200		2500			2800			3100			3400

# AUXILIARY PERCUSSION ETUDE

## Set-up Diagram



= Trap or Stick Tray (Manhasset Music Stand, Tilted 90°)

- Large Triangle Shape = crash cymbal holder for quick change (keep in low position)
- Trap Tray at BD (on left) = 1 pair BD rollers; 1 general BD beater; 1 triangle beater; 1 pair yarn suspended cymbal mallets; BD mitt; 1 SD stick (old stick for striking suspended cymbal)
- Trap Tray on Right = tambourine (grip area overhanging tray edge); woodblock; 1 pair castanets; 1 medium rubber mallet for woodblock
- Trap Tray at Tam-tam (bottom) = holds large tam-tam beater (2 or 3 puck core)
- Chair is for one foot placement supporting castanet performance (or use short stool)
- Cover all 3 trays with black towels
- Place BD mitt on cymbal mallet handles in an "open-mouth" position for quick entry
- Apply wax (raw bee's wax) to the tambourine head's outer edge for finger roll execution

## PERCUSSION TECHNIQUES I

### Auxiliary Percussion Unit

Player:

Bass Drum					
Triangle					
Suspended Cymbal					
Crash Cymbals					
Woodblock					
Tam-tam					
Tambourine					
Castanets					
Total					

Player:

Bass Drum					
Triangle					
Suspended Cymbal					
Crash Cymbal					
Woodblock					
Tam-tam					
Tambourine					
Castanets					
Total					

Player:

Bass Drum					
Triangle					
Suspended Cymbal					
Crash Cymbals					
Woodblock					
Tam-tam					
Tambourine					
Castanets					
Total					

## TAMBOURINE HEAD REPLACEMENT

1. Soak head in lukewarm water for ½ to 1 hour (often requires much less time than this). Head should become soft and pliable (similar to a wet dish rag).
2. While head is soaking, use medium grade sandpaper to sand the top edge (bearing edge) of the shell until all old glue is removed.
3. Remove head from water (after appropriate soaking time) and wipe off excess water with paper towel.
4. Apply a liberal amount of Elmer's or carpenter's glue to sanded edge, spreading the glue evenly around the rim.
5. Place the wet head on top of the glue-coated edge, centering the head so about 1 inch extends past the edge of the shell on all sides.
6. Stretch a giant rubber band over the head and rim, attaching the head to the shell. At this point, you may need assistance in holding the head in place. If rubber band is unavailable, try tying a string securely around the rim of the tambourine.
7. Pull out the slack in the head by pulling the edge of the skin until taut.
8. Leave the tambourine in a humid place to slowly dry. Do not leave in a very dry place. If necessary, cover the head with a damp towel.
9. When dry, remove the rubber band and trim excess skin with an exacto knife or single-edged razor blade. Be careful!
10. Add tacks if so desired. (Optional)

Tambourine Head Replacement Kit available from:

**Grover** Pro Percussion, Inc.  
38 Montvale Ave., Suite G-25  
Stoneham, MA 02180  
Tel. (617) 438-4600  
Fax (617) 438-6611

## COMMON FOREIGN PERCUSSION TERMS\*

<u>ENGLISH</u>	<u>ITALIAN</u>	<u>FRENCH</u>	<u>GERMAN</u>
<del>Antique Cymbals</del>	Crotali	Crotales	Antiken Zimbeln
<del>Arvi</del>	Incidine	Enclume	Amboss
Bass Drum	Gran Casse	Grosse Caisse	Grosse Trommel
Castanets	Castagnetta	Castagnettes	Kastagnetten
Chimes, (Tubular Bells)	Campane, (Campanelle)	Closhes	Glocken
Orchestra Bells	Campanelli	Jeu de Timbres	Glockenspiel
Cowbell	Cencerro	Cloche a'Vache	Almenglock, Anglock.
Cymbals	Piatti, Cinelli	Cymbales	Becken, Tellern
Field Drum	Tamburo Militare	Tambour Militaire	Militar Trommel
<del>Guro (Gourd)</del>	Raspe	Rape	Raspel
Timpani, (Kettledrums)	Timpani	Timbales	Pauken
<del>Marimba</del>	Marimba	Marimba	Marimbaphon
Percussion	Percussione	Batterie	Schlagzeug
Snare Drum	Tamburo	Caisse Claire	Kleine Trommel
Tambourine	Tamburo Basco	Tambour de Basque	Tamburin, Schellentrommel
Tenor Drum	Tamburo Rullante	Caisse Roulante	Ruhrtrommel
Whip	Frusta	Fouet	Holzklapper
Woodblock	Cassa di Legno	Bloc de Bois	Holztrummel
Xylophone	Xylofono	Xylophone	Holzharmonika, Strohfidel

\* For further information: Lang, Morris and Spivack, Larry. Dictionary of Percussion Terms.  
New York: Lang Percussion Company

## MISCELLANEOUS FOREIGN TERMINOLOGY

<u>ENGLISH</u>	<u>ITALIAN</u>	<u>FRENCH</u>	<u>GERMAN</u>
Suspended Cymbals	Piatto sospeso	Cymbal suspendue	Becken hangend
2 Cymbals	a 2, a due	a l'ordinaire,	gewöhnlich,
<del>hit with ...</del>	due piatti	avec plateaux	mit tellern
Mallet	colpo con ...	frappee avec ...	mit dem ...
Stick (or)	Mazza	Mailoche	Klopfer
Wood Stick	Bacchetta	Baquette	Schlagel
<del>Brush (Wire)</del>	Bachetta di Legno	Mailoche de Bois,	Holzschlagel
<del>Timpani Mallet</del>	Verge Scovolo	Tampon	Stahlburste
hard	Bachetta di Timpani	Brosse	Paukenschlagel
soft	dure	Mailoche de Timbales	schwerer
Let Ring	molle	dur	schwerer
<del>dampened</del>	Lasciare Vibrare	douce	weicher
muffled	secco	Laissez Vibrer	Klingen Lassen
<del>muffle off</del>	con sordino	etouffe	dampfen
<u>at the edge</u>	coperto	sons voiles	abdampfen
	velato	sourdine	bedeckt
	modo ordinario	voilee	gedampft
	senza sordino	naturel	gewöhnlich
	all' estremita	sans sourdine	dampfung ab
		au bord	Am rand



**Unusual Percussion Considerations  
Concert Band Literature  
Grades 2-5**

**Exceptional section writing: Karel Husa (V-VI)  
David Maslanka (II-VI)  
Fisher Tull (IV-V)  
Vincent Persichetti (IV-V)  
Daniel Bukvich (II-V)  
Francis McBeth (II-V)**

<u>Composer</u>	<u>Title</u>	<u>Grade</u>	<u>Percussion Considerations</u>
McBeth, Francis	<i>Canto</i>	2	playing on timpani bowls
Adler, Samuel	<i>Little Night &amp; Day Music</i>	3	bowed vibraphone
Brant, Henry	<i>American Debate</i>	3	section is placed antiphonally
Chattaway, Jay	<i>Mazama</i>	3	animal bells on straps, roto-toms, flexatone
Erb, Donald	<i>Stargazing</i>	3	slide whistles, prepared tape
Reed, H. Owen	<i>Heart of the Morn, The</i>	3	unusual timbral combinations, sizzle cymbal
Strauss, Josef	<i>Feuerfest</i>	3	solo anvil
Susato, Tielman	<i>Battle Pavane, The</i>	3	antiphonal cymbals
Arnold, Malcolm	<i>Grand, Grand Overture</i>	4	3 vacuum cleaners, floor polisher, rifle shots
Arnold, Malcolm	<i>Prelude, Siciliano, &amp; Rondo</i>	4	maraca part (independence)
Bach, Johann S.	<i>O Mensch...</i>	4	4 part writing for keyboard percussion
Bach, P.D.Q.	<i>Grand Serenade</i>	4	bells and whistles, rifle, crasho grosso
Bennett, David	<i>Symphonic Songs</i>	4	"peep"
Bukvich, Dan	<i>Maine Vigils</i>	4	ice bell, 5 triangles, muted drums, brake drums
Bukvich, Dan	<i>Symphony #1</i>	4	"gong" drums, brake drums
Chance, John Barnes	<i>Incantation &amp; Dance</i>	4	whip, section soli
Chance, John Barnes	<i>Variations on Korean</i>	4	muted timpani
Duffy, Tom	<i>Crystals</i>	4	crystal glasses, hoses, lion's roar, water gong
Konagaya, Soichi	<i>Japanese Tune</i>	4	O Daiko, Shime Daiko, cymbals
Margolis, Bob	<i>Color</i>	4	crystals, sizzle cymbal
McBeth, Francis	<i>Beowulf</i>	4	garbage can lids
Schuman, William	<i>When Jesus Wept</i>	4	field drum solo
Tull, Fisher	<i>Introit</i>	4	percussion soli; exceptional section writing
Tull, Fisher	<i>Jargon</i>	4	percussion ensemble feature
Tull, Fisher	<i>Passing Fantasy, A</i>	4	crystals, hoses, bowed vibraphone, flexatone plays a melody
Walker, Gwyneth	<i>Match Point</i>	4	uses tennis balls on battery perc
Williams, Clifton	<i>Concerto</i>	4	percussion feature

(Unusual Percussion Considerations: Concert Band Literature, Grades 2-5, page 2)

Adams, John	<i>Short Ride in a Fast Machine</i>	5	2 synthesizers, crotales
Barnes, James	<i>Variations on Paganini</i>	5	section solo
Barnhouse, C.L.	<i>Battle of Shiloh</i>	5	pistol shots
Bedford, David	<i>Sea and Sky...</i>	5	4 crystals
Bedford, David	<i>Sun Paints Rainbows...</i>	5	8 whisky bottles, tuned with water level
Chance, John Barnes	<i>Symphony #2</i>	5	timpani solo
Gould, Morton	<i>West Point Symphony</i>	5	marching machine
Gregson, Edward	<i>Sword &amp; the Crown, The</i>	5	antiphonal bass drums, timpani, hung handbells, multiple bell trees, mark trees
Hanson, Howard	<i>Laude</i>	5	antiphonal timpani
Hart, Paul	<i>Cartoon</i>	5	lots of bells and whistles
Maslanka, David	<i>Golden Light</i>	5	crotales, Indian drum, 3 triangles, bass drum with mounted cymbal, temple blocks pitched at Ab, Bb, & C
McTee, Cindy	<i>Circuits</i>	5	4 almglocken
Orff, Carl	<i>Carmina Burana</i>	5	2 pianos, 3 sets of bells, 2 players on timpani, beer steins, 2 sets of xylophones
Peck, Russell	<i>Cave</i>	5	exceptional section writing (10 players)
Reed, H. Owen	<i>La Fiesta Mexicana</i>	5	exceptional section writing
Schuman, William	<i>Be Glad Then, America</i>	5	timpani solo
Tull, Fisher	<i>Sketches on a Tudor Psalm</i>	5	exceptional section writing
Williams, Clifton	<i>Symphonic Dance, #3</i>	5	ratchet solos
Chavez, Carlos	<i>Sinfonia India</i>	6	ancient Indian instruments
Husa, Karel	<i>Apotheosis of the Earth</i>	6	exceptional section writing
Husa, Karel	<i>Music for Prague</i>	6	exceptional section writing
Margolis, Bob	<i>Terpsichore</i>	6	you name it (e.b.t.k.s.)

## PERCUSSION INSTRUMENT NEEDS FOR THE HIGH SCHOOL

### Keyboards:

Xylophone (3½ octaves)  
Orchestra Bells (2½ octaves)  
Chimes (C-F or C-G)  
Marimba (4 1/3 octaves minimum)  
Vibraphone

### Timpani:

4 drums (32"-29"-26"-23")

### General:

36" bass drum (on ring "suspended" stand)  
snare drum (6½") (also a 5")  
field/tenor drum  
2 sizes of suspended cymbals  
3 pairs of crash cymbals (16"-17"-19")  
(select from "Viennese" and "German")  
tam-tam (30"-36" Wu Han "Chau")  
4 graduated concert tom-toms  
temple blocks (set of 5)  
tambourine (2)  
triangle (2)  
castanets (Epstein)  
trap table(s)

### Latin Percussion:

2 congas w/stands (quinto and conga sizes)  
timbales  
cow bells (2 sizes)  
bongos (plastic heads)  
claves  
guiro  
maracas  
shakers (afuché and tubos)

### Jazz Band:

drumset w/cymbals (4 or 5 piece)

### Marching Percussion:

include marching snares, quads (or quints), graduated bass drums (4-5), marching cymbals

## MUP 108 PERCUSSION TECHNIQUES I

### Sticks, Mallets and Beaters (School/Band Ownership Recommendations)

- 1 General Bass Drum Beater (Vic Firth/Gauger TG03-Oval Head; Gauger TG02-Legato; or Gauger TG01-General)
- 1 Pair Bass Drum Roll Mallets (Vic Firth/Gauger #4-Rollers)
- 1 Tam-tam Beater (home-made with hockey pucks –1, 2, or 3 Epoxy-cemented together, drill hole for dowel handle- 7/8” or 1,” add friction tape for rounder shape and cover with 4-ply yarn)
- 1 Pair Chime Mallets (yellow Plexiglas hammers from hardware store)
- 3 or 4 Assorted Pairs of Matched Triangle Beaters (Stoessel #1, 2, 3; Black Swamp STB #1, 2, 3; Grover Percussion TB #2, 3, 4; or home-made from Drill Rod purchased from hardware store)
- 1 Pair Hard Xylophone Mallets (Vic Firth M133-medium poly, light; Vic Firth M134-medium hard urethane; or Mallettech ORR39)
- 1 Pair Hard Bell Mallets (Vic Firth M141-medium hard nylon or Mallettech ORR48)
- 1 Pair Medium-Soft Yarn Mallets for Marimba and Suspended Cymbal (Vic Firth *American Custom* M2-medium hard; Musser M-008 [yellow]; or M-208 [yellow])
- 3 Pair Assorted Timpani Mallets (Vic Firth T1 General, T2 Legato, and T3 Staccato) or other

### Sticks and Mallets for Student Percussionists (Student Ownership Recommendations)

- 1 Pair Concert Snare Drum Sticks (Vic Firth SD1-General or Regal Tip/Calato “Saul Goodman-A”)
- 1 Pair Drum Set Sticks (Vic Firth SD4 Combo)
- 1 Pair Wire Brushes (Vic Firth HB Heritage Brush or Regal Tip/Calato 561A)
- 1 Pair Medium-Soft Yarn Mallets for Marimba and Suspended Cymbal (Vic Firth *American Custom* M2-medium hard; *American Custom* M3-medium mushroom head; Musser M-008 [yellow]; or M-208 [yellow])
- 2 Pair Medium-Hard or Hard Vibe Mallets (Vic Firth M25-Gary Burton model)
- 2 Pair Medium Marimba Mallets for 4-Mallet Studies (Vic Firth M114-Robert Van Sice Model, medium, rubber core)
- 3 Pair Assorted Timpani Mallets (Vic Firth T1 General, T2 Legato, and T3 Staccato) or other
- 1 Pair General Purpose Snare Drum Sticks for Suspended Cymbals, Cowbells and Miscellaneous Percussion (Vic Firth SD9-Driver)

For the younger students, consider Vic Firth *Education Packs*—developed with a “step-up” approach:

- **EP1** – a Vic Firth stick bag equipped with a pair of SD1 snare drum sticks, a pair of M5 medium rubber mallets, and a pair of M14 soft poly mallets for xylophone.
- **EP2** – a Vic Firth stick bag equipped with a pair of SD2 snare drum sticks, a pair of M3 mallets-medium mushroom head, a pair of M6 hard Phenolic ball mallets for xylophone/bells, and a pair of T3 *American Custom* staccato timpani mallets.

### Important Companies:

Innovative Percussion (IP)  
Grover Percussion

Mallettech  
Black Swamp

Vic Firth  
Adams (Duff)

Pro-Mark  
Cooperman

# THE PERCUSSIONIST'S TOOL/REPAIR KIT

## Tools

- Flat & Phillips screwdrivers
- 6" pliers
- needle nose pliers
- 6" adjustable Crescent wrench
- hammer
- knife
- wire cutters
- multiple hex wrench set
- wood & metal files
- punch
- scissors
- razor blade
- masking & duct tape
- fine & rough sandpaper
- steel wool (fine)
- mole skin
- white (Elmers) glue
- wood "super" glue
- large rubber bands

## Additional Tools

- hacksaw
- 7" vise-grip
- drill with bits
- pipe wrench
- 4" Crescent wrench
- rubber hammer
- woodsaw
- cord or string
- electrical extension cords

## Replacement Parts

- string for snare drum
- cable or gut for gong
- cable or Venetian blind cord for chimes
- cymbal stand pads
- plastic/rubber tubing for cymbal stand sleeves
- miscellaneous nuts and bolts; wing nuts
- yarn; needle & thread
- piano felt
- unwaxed dental floss

## Cleansers

- old clothes
- cymbal cleaners
- Lemon Oil Furniture Polish (all natural: no silicones, Linseed oil, synthetics, or wax)
- chrome cleaner
- household oil (3-in-1) (VIBES BUTTERFLIES PEDAL)
- lubricant (WD-40)
- petroleum jelly (Vaseline)
- glass cleaner (Windex, etc.)
- rags (medium heavy duty & very soft)
- paper towels (LOTS)
- pipe cleaner/swaps (Q-Tips)
- mineral spirits (TISSE PAPER)
- Liquid Wrench
- rust remover (Naval Jelly)
- WHITE LIQUID GREASE (ALL THREADS)
- GARDERS TAPE

**14 COMMON  
PERCUSSION PERFORMANCE ISSUES  
FOR HIGH-SCHOOL ENSEMBLES**

by Steve Hemphill

As one has the opportunity to observe a music festival or similar educational event for music students, it is quite common to identify reoccurring issues that diminish what otherwise would be considered strong performances. Although the following items of discussion reflect the writer's observations at a recent festival of high school percussion ensembles, similar observations can be made at many solo and ensemble, band, and orchestra festivals. Included here for consideration are a few suggestions, in general terms, that may help to strengthen the percussionists' contribution to any ensemble performance.

1. **Prevalence of a "down stroke" technique (the implement starts from a high position and remains low to the playing surface after contact) resulting in dull, thuddy percussion sounds.** One may observe the absence of "lift" or relaxed follow-through of the percussionist's stroke, lacking in both tonal resonance and a full-bodied sound from the instruments. The tone that is produced is a noisy, percussive sound with prominent contact "tick" If "down stroke" technique is developed and applied in the marching percussion program, one should identify the need for a technically different, less harsh approach to indoor concert performance.
2. **Playing (producing the sound) at an inappropriate location on the instrument for basic tone production (with the exception of desired tonal interpretations or special effects).** One can observe students playing on the nodes (where suspension strings pass through the bars on keyboard instruments), attaining a very dull, non-resonant tone. Playing too near the edge on timpani, tom-toms and timbales, will produce a thin sound with high overtones. The opposite issue, playing too near the center on snare drums, timpani, tom-toms, timbales, and bongos, will produce a dull, thuddy tone lacking in resonance. With the exception of the special playing areas relating to timpani performance (typically two to four inches from the edge), most "drums" can be played just off center and still achieve a resonant sound quality. Also, playing suspended cymbals at or near the edge will achieve more fundamental pitch and "darkness" in quality.
3. **When performing very loud volumes, the arms, wrists and hands over-extend to a very high position, well away from the instrument being played and out of correct position for good tone production and effortless technical execution.** Often, a percussionist's sound is not controlled: playing areas are inconsistent, the quality of tone suffers, and musical phrasing becomes almost non-existent. With hands and arms out of position, general accuracy can become lost regarding note placement in time (the rhythmic precision is degraded), while the ensemble suffers and becomes less refined. The sound, in general, can be too harsh and heavy for the instruments' capabilities, where tonal qualities are distorted. It is recommended that players use lower stick and mallet heights, perhaps at the same time using faster

strokes (a higher velocity of stroke speed), with plenty of lift. This type of stroke, when appropriate, might be described as a “hot” stroke – a quick and immediate lift following the produced sound.

4. **The angle of sticks or mallets to the instrument’s playing surface is too great. The result is a reduction in tonal resonance, while adding contact noise to the instrument’s tone.** In addition, the large stick-to-instrument angle reduces rebound qualities of the instrument, adding extra effort required by the performer to execute technique. It is recommended that percussionists keep the angles of sticks and handles of mallets as parallel to the playing surface as possible, with hands low to the instrument. This can be accomplished by raising instruments to a height which allows for an ease of technical execution and for the improvement of tonal qualities. Percussion programs should acquire “concert height” stands for snare drums and use blocks under wheels to raise keyboard heights or make use of height adjustment mechanisms.
5. **Inappropriate mallets are used on percussion instruments, failing to produce a tone most commonly associated with fundamental sound production excellence.** A few typical scenarios might include concert bass drum or suspended cymbal played with timpani mallets; tam-tam played with bass drum beater; extra-hard (compressed felt) mallets used as a general implement to play timpani; marching sticks used to play concert percussion instruments. Mallet cores should be compatible (in weight, size, mass, and construction) with the instrument played, allowing for a full sound spectrum, especially fundamental frequencies, to be heard.
6. **Evidence of lapses in ensemble precision.** Students should strive to be consistent with the accurate and continuous use of mental subdivision of pulse/beat. This requires mental preparation, training and practice. Students should develop a strong understanding of a specific counting method, especially when dealing with quarter-note and half-note triplet figures (based upon eighth-note triplet subdivision). Percussion students can achieve improved subdivision accuracy by practicing rhythmic etudes while counting aloud.
7. **Evidence present of exaggerated body movement for the support or reinforcement of the execution of steady time (i.e. a drumset player’s head and torso “bobbing” up and down).** Percussionists should avoid excessive and distracting movement, potentially interfering with performance interpretation and accuracy. Once again, the performer should internalize the pulse-drive, as much as possible, as both a mental activity and a feel.
8. **Basic feet positions and movements for percussion keyboard players are not logical or efficient.** A percussion student should begin with a weight distribution that is even (usually with feet approximately shoulder-width apart) and avoid crossing the feet when moving laterally. Players should lean to one leg (changing weight distribution) or use a side-stepping motion for effective positioning at the keyboard. Consideration may be given to moving the feet (one slightly forward and one slightly

back), in addition to the use of hip rotation, for effectively reaching the raised bars (sharps and flats) with a single mallet of a four-mallet set. Generally, the percussionist should try to keep feet movement to an efficient minimum. Awareness of extraneous noise created by the movement of feet is always an important element of performance.

9. **The percussionists rarely look at the conductor.** Percussionists should develop the habit of looking directly at the conductor a moment prior to a new musical entrance, when entering after a lengthy rest, when entering with a solo passage, or when a change of instrument occurs. This action can promote trust, confidence, and a strong musical rapport with the conductor through consistent eye communication (giving weight to entry reassurance, agreement of musical placement and dynamic, and the general promotion of chamber music-related skills and understanding). If the ensemble is not conducted, the student should be comfortable enough with his or her own part to glance occasionally at other performers, promoting familiarity with all parts of the ensemble.
10. **Performer's visual contact with the conductor is insufficient and/or misaligned, regarding both the percussion instruments played and the music stand placement.** Music stand placement (direction and height) should be consistent in all conducted ensembles. Player, instrument, and music stand should face directly at the conductor whenever possible. When playing a hand-held instrument (i.e. triangle, tambourine, wood block), it is recommended that the height of the music stand should be positioned to contribute to good performance posture, and to ensure an appropriate three-point sight line (alignment) of instrument, music, and conductor. The hand held instrument should be held at chest or neck height. When playing other percussion instruments (i.e. bass drum, keyboard percussion, timpani), the music stand should be high enough to ensure a two-point sight line of music and conductor. Music stand placement should not be so high that the performer can not see the conductor's ictus (lowest point of the conducting gestures used).
11. **Extraneous noises from the percussion section are audible to the audience.** Identifiable causes include stick and mallet retrieval, preparation of hand-held instruments (especially tambourine and sleighbells), interchanging instruments, and moving between stations of performance. It is recommended that noises be eliminated by using appropriate trap tables and stick trays (horizontal tops of music stands); by purchasing black hand-towels or making special stick tray covers; by being aware and practicing the use of caution when manipulating instruments; and by reducing feet noises when moving about the section.
12. **Foot-tapping is audible and visible by audience members.** The elimination of this habit, or reducing it to a level that is unnoticeable, should be a primary performance goal. Instructors can encourage students to internalize pulse and incorporate time-keeping exercises in the students' preparation for lessons or performance.



- 13. Performers can be seen chewing gum during rehearsals or performances.** This activity can be seen as a distraction by audience members (as well as being perceived as amateurish) and should be eliminated from the musical venue. In addition, for young performers, the activity actually can interfere with musical timing and concentration.
- 14. Members of the ensemble can be seen talking during applause.** Musicians should remember to respect an audience and acknowledge their appreciation of the performance by directing attention to the audience at the end of a performance. Learning the important aspects of refined stage presence should not be overlooked.
-

## Selected Internet Percussion Resources

### Percussion Instruments & Drumheads

[www.adams.nl/](http://www.adams.nl/)  
[www.blackswamp.com](http://www.blackswamp.com)  
[www.custommusiccorp.com](http://www.custommusiccorp.com)  
[www.evansdrumheads.com](http://www.evansdrumheads.com)  
[www.groverpro.com](http://www.groverpro.com)  
[www.innovativepercussion.com](http://www.innovativepercussion.com)  
[www.interstatemusic.com](http://www.interstatemusic.com) - TRACY PERKINS  
[www.kamanmusic.com](http://www.kamanmusic.com)  
[www.larkinam.com](http://www.larkinam.com) LARKIN IN THE MORNING (GARE EARLY STUFF)  
[www.lonestarpercussion.com](http://www.lonestarpercussion.com)  
[www.lpmusic.com](http://www.lpmusic.com)  
[www.ludwig-drums.com](http://www.ludwig-drums.com)  
[www.marimba1.com](http://www.marimba1.com)  
[www.pearldrums.com](http://www.pearldrums.com)  
[www.percussioncenter.com](http://www.percussioncenter.com)  
[www.percussionsource.com](http://www.percussionsource.com)  
[www.remo.com](http://www.remo.com)  
[www.sabian.com](http://www.sabian.com)  
[www.steveweissmusic.com](http://www.steveweissmusic.com)  
[www.tocapercussion.com](http://www.tocapercussion.com)  
[www.vicfirth.com](http://www.vicfirth.com)  
[www.wwandbw.com](http://www.wwandbw.com)  
[www.yamaha.com/band](http://www.yamaha.com/band)  
[www.zildjian.com](http://www.zildjian.com)

### Percussion Music

[www.alfredpub.com](http://www.alfredpub.com)  
[www.bedford.net/honeyrock](http://www.bedford.net/honeyrock)  
[www.c-alanpublications.com](http://www.c-alanpublications.com)  
[www.drop6.com](http://www.drop6.com)  
[www.equilibri.com](http://www.equilibri.com)  
[www.percussionmusic.com](http://www.percussionmusic.com)  
[www.rowloff.com](http://www.rowloff.com)  
[www.southernmusic.com](http://www.southernmusic.com)  
[www.studio4music.com](http://www.studio4music.com)

### Organizations

[www.pas.org](http://www.pas.org)  
[www.menc.org](http://www.menc.org)  
[www.mtna.org](http://www.mtna.org)  
[www.iaje.org](http://www.iaje.org)  
[www.music.org](http://www.music.org) (CMS)  
[www.cbdna.org](http://www.cbdna.org)  
[www.nationalbandassoc.org](http://www.nationalbandassoc.org)

DANIEL ROBERT "MUSIC'S REPOSITORY"

2

NORTHERN ARIZONA UNIVERSITY  
SCHOOL OF PERFORMING ARTS

MUP 354 – MARCHING BAND - FALL 2006  
12:40-2:40, MWF

**INSTRUCTORS:**

Dr. Daniel Schmidt Director of Bands Bldg. 37a, Rm. 180 928.523.7680 <a href="mailto:daniel.schmidt@nau.edu">daniel.schmidt@nau.edu</a>	Dr. Carson L. Vermillion Associate Director of Bands Bldg. 37a, Rm. 180a 928.523.4224 <a href="mailto:carson.vermillion@nau.edu">carson.vermillion@nau.edu</a>
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**PREREQUISITES:** None, open to all students

**COURSE DESCRIPTION AND GOALS:** The existence of the Marching Band at NAU is to provide students with the opportunity to continue music making beyond the high school level. We feel that it is important to provide students with a musically stimulating activity that promotes a continued appreciation of the art of music. Simultaneously, the NAU Marching Band will strive to serve the music department, the university community, athletic department, and the student body through the highest level of performance.

**COURSE STRUCTURE /APPROACH:** The course will meet as an ensemble in the NAU Skydome unless otherwise noted by the Directors. Required performances and events are scheduled throughout the semester and are listed in the NAU band handbook.

**All students enrolled have received a Band Handbook. The Handbook contains all information regarding grading, schedule, expectations, policies, and procedures. Additionally, all students enrolled have signed an agreement stating that they will honor these expectations.**

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*NORTHERN ARIZONA UNIVERSITY*  
POLICY STATEMENTS

**SAFE ENVIRONMENT POLICY**

NAU's Safe Working and Learning Environment Policy seeks to prohibit discrimination and promote the safety of all individuals within the university. The goal of this policy is to prevent the occurrence of discrimination on the basis of sex, race, color, age, national origin, religion, sexual orientation, disability, or veteran status and to prevent sexual harassment, sexual assault or retaliation by anyone at this university. You may obtain a copy of this policy from the college dean's office. If you have concerns about this policy, it is important that you contact the departmental chair, dean's office, the Office of Student Life (523-5181), the academic ombudsperson (523-9368), or NAU's Office of Affirmative Action (523-3312).

**PERCUSSION TECHNIQUES I**  
**Snare Drum Performance Test**

Name TRAVIS W VALEY Date 11/6/06

**TECHNIQUE**

- B+ Grip Correctness *choke-up a bit / little finger drop*
- A Position (Height) of Drum
- A- Playing Spot *- sticks too far apart*
- B+ Arm/Wrist Position *- watch rotation*

**RUDIMENTS**

- A- Multiple Bounce Roll *smooth out (little slower/louder)*
- B- Double Bounce Roll *no buzz*
- A- Rudiment #1 (*flam accent*)
- B+ Rudiment #2 (*flam tap*)
- A- Rudiment #3 (*paradiddle*) *- all wrist*

**ETUDE (The Orchestral Snare Drummer: Page 37, No. 39)**

- A Steady Tempo *too close to edge*
- A- Correct Rhythms *use fingers*
- B+ Dynamics
- B+ Correct Stroke Types
- A Alternating Sticking
- A- Accents *of*
- C+ Roll Quality/Accuracy *- really fast hand speed - use longer buzzes, 7's - open (no buzz) slower heads*
- A- Flams
- B- 4 Stroke Ruffs

**RUDIMENTAL SOLO (Freitag)**

- A- Steady Tempo *no buzz*
- B Correct Rhythms and Rudiments
- B+ Appropriate Accents *none*
- C+ Appropriate Rolls *roll speed, 7's, etc*
- B Correct Stickings and Stroke Types

**COMMENTS**

*body language?*

Grade B+

Northern Arizona University  
College of Arts and Letters  
School of Music

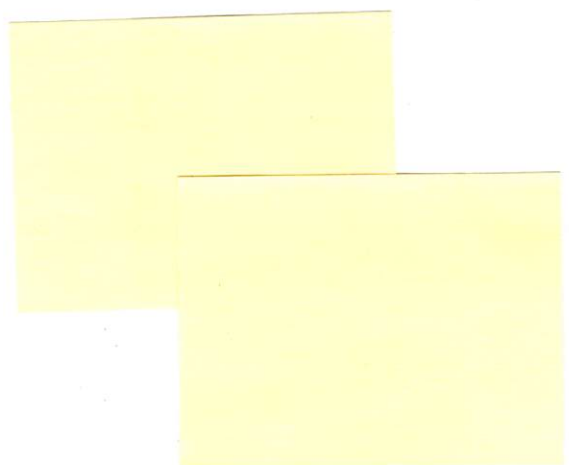
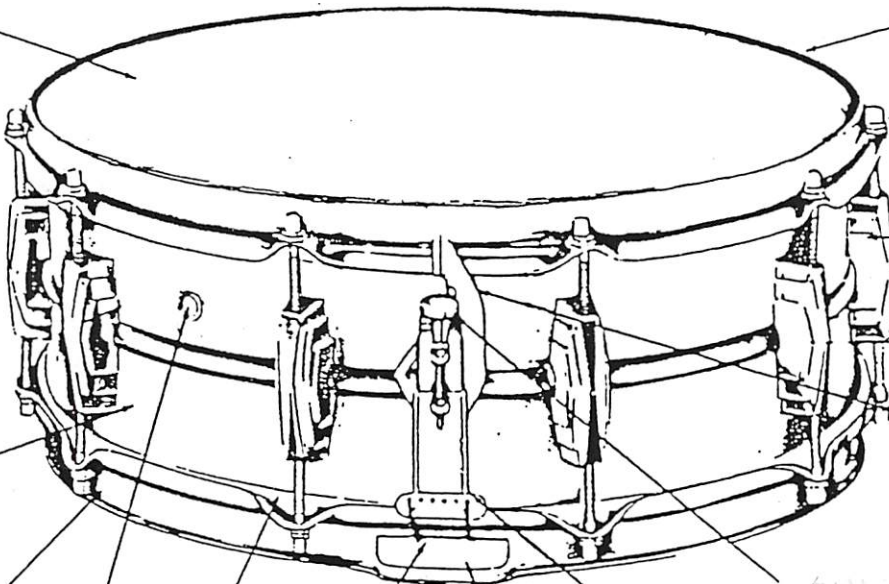
**Percussion Techniques I**  
**MUP 108**

**SNARE DRUM PARTS TEST**

Name FRANK W. WALEY

Date 9/7/06

Parts of the Snare Drum



## SNARE DRUM

How to select sticks: Questions to ask and how to test them.

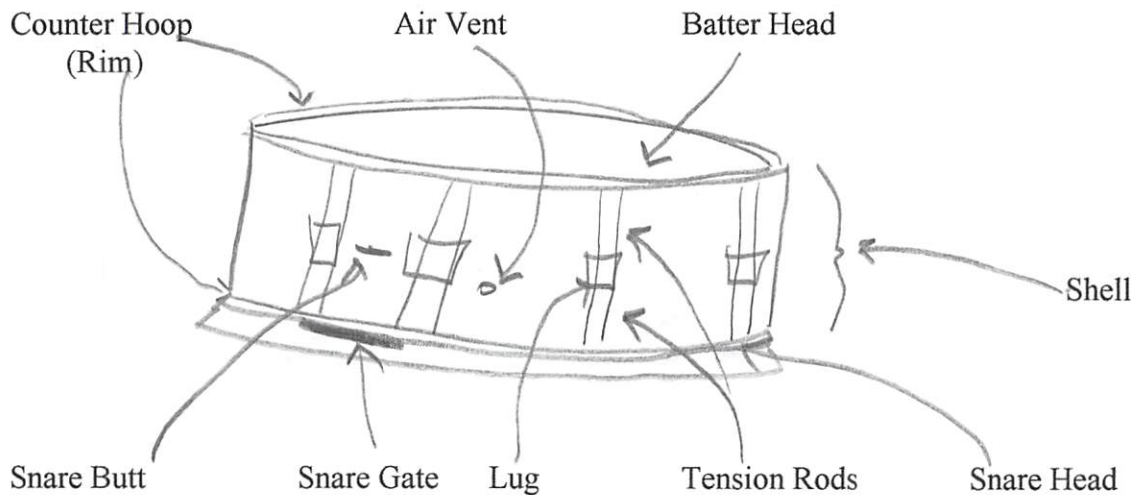
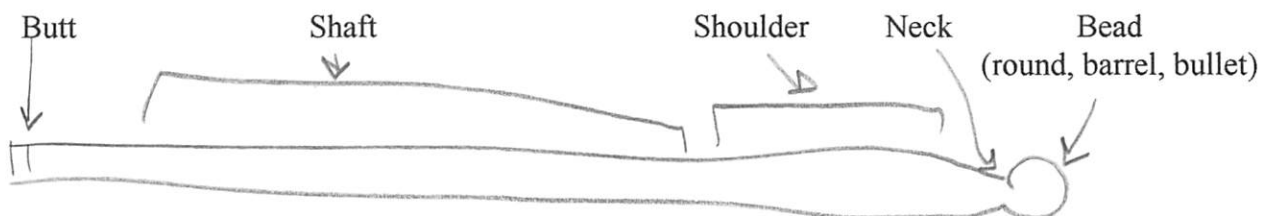
1. Are the warped?  
Roll on a flat surface.
2. Are the sticks the same weight?  
Place stick in the palm of hand and bounce around. Judge carefully.
3. Is the weight of the stick evenly distributed?  
Hold the end of the stick at the butt lightly and bobble up and down. The stick should not be too tip heavy.
4. Are the pitch's of the 2 sticks the same?  
Hold one stick tightly in one hand, strike with the other stick while rotating and bouncing

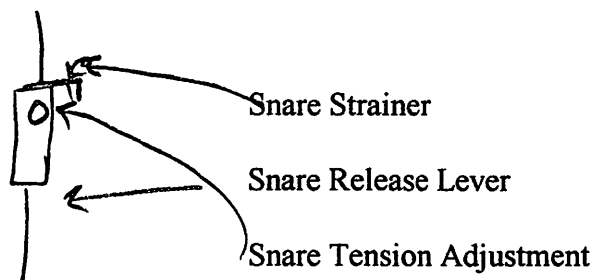
Good sticks to use:

1. Vic Firth SD1
2. Pro Mark A

Percussion Arts Society: [www.pas.org](http://www.pas.org)

Parts of a stick:





A typical high school snare drum should have **10 lugs**

### History

Snare drum originated in the 1700's.

The drums had **calf skin** heads.

They also bared a tack pattern with **Crests** and **Coats of Arms**.

In the Revolutionary War, Fifes and Drums were used

In the Civil War, Fifes were replaced with bugles, but drums stayed.

1. Those who played drums and that time were and average of **12 years old**.
2. If you left your drum more than **12 feet** away from you, you would be **court marshaled**.
3. Drums were used for standard **marching, calling for food, executions, and entertainment**.

Rudiments were created during the time of the Civil war.

Many rudiments together made compositions.

After the war, the only jobs a drummer could get were:

1. Performing for silent movies
2. Performing in Vaudeville

**Heat will tighten the drum** making the drum sharper.

**Loosen** the snares for loud passages, **tighten** the snares for soft passages.

### Where should the drum be?

1. The snares should be perpendicular to your waist, or vertical to where you are facing
2. Strainer should be right in front of you, maybe slightly to the right
3. The leg of the drum stand should be to the right of your foot.

### STROKES

**Fulcrum** is the **Pivot Point** and should be relaxed.

**Long Roll**: Diddles go faster and faster creating a roll.

**Pronation strokes**: Like waving "bye bye". Wrist goes up and down.

**Rotation strokes**: Wrist rotates left and right.

**Beads**: should be 1 inch apart from each other, 1 inch off the drum in "ready" position.

#### 4 Stroke Types

1. Full Stroke (loud) Full motion of wrist. Start "up", strike, and end "up"
2. Up Stroke (soft) Like a check mark. Start "down", strike, and end "up"
3. Down Stroke (loud) Start "up", strike, and end "down"
4. Tap (soft) Starts "down", strike, and end "down"

The **premise** is to look ahead in music and see what notes are **loud or soft** and know what stroke **types** to use.

**EXAMPLE:**

**Paradiddle** starts with an accented loud note, but the next note is soft, therefore one must use a down stroke. Thus, the para diddle pattern is \*Down stroke, up stroke, tap, tap\*

A **flam** is just an upstroke in one hand and a down stroke in the other. The down stroke hits first.

A considerable amount of time should be spent on just doing flam's.

One should also spend a considerable amount of time working their weaker hand to sound even with the other hand.

Street beats are just a collection of rudiments.

**Natural Sticking:**

The dominant hand plays the beats and &'s, while the weaker hand plays the E's and A's.

**Mylar** is a typical material for drum heads. The head is held by the flesh hoop and must be tucked in. Mylar is crimped and glued in the flesh hoop. Keep it out of the rain!

Keep **skin heads** out of school!

3 types of Remo brand Heads.

1. Diplomat (lower head) thin thickness
2. Ambassador (Batter head) medium thickness
3. Emperor (Marching bass drums) thick thickness

#1 and #2 are good for orchestras and bands.

Coated heads are good. Keep up on latest trends.

NO DOTS. NO OIL. NO SELMER. NO LUDWIG.

Play from 1 inch from middle of the snare to avoid and anti node. Nodes are at the bearing edge.

One could screw the lugs at the nodes of the shell.

Keep the stick as parallel to the head as possible. The stick will produce a bigger sound. Set up tom toms flat in a drum set for this reason.

Rebound properties are greatest when the stick is parallel with the head.

Longer sticks with bounce/buzz more.

When teaching, teach the **Multiple Bounce Stroke** first.

It's the easiest to start and get a good concept of, but hardest to master.

The 2<sup>nd</sup> sound must be the same quality as the first.

To get a good idea of this, bounce the stick of the snare drum freely with a loose fulcrum.

Then pull the middle finger in and firm up the fulcrum until the sound is achieved.

If that doesn't work, have the student start with a dead stroke, and then loosen the grip up. THINK "OOOH(mild) to AHHH(relaxed)".

Idiophones: Self Vibrating (Marimba)

Aerophones: Produce sound with air through the instrument (Slide whistle)

Membranophones: Drums with a head. Produce sound when struck. (Snare, Timpani)



**When performing the double stroke roll.**

When producing the buzz roll, roll the thumbs out to achieve evenness.

80% buzz on head

20% recoil

Listen for **Density, Volume, and Texture** of the roll. You may use SOME arm to soften the attack.

Don't **snap** the recoil.

Eliminate **pulse**.

If the passage calls for a loud double bounce roll, **pull up** on your middle or ring finger.

Keep all your fingers **close together**.

**Overlap** the buzz with both hands while playing.

When learning, always **start slow** and work on **evenness** of playing.

Check pattern is the rhythm, or **subdivision** of the roll. Example, If 16<sup>th</sup> notes sound too slow and 32<sup>nd</sup>s are too fast, try sextuplets.

For advanced players, if basic subdivision doesn't work, try **5's, 7's, 9's, and 11's**.

A good way to practice these subdivisions:

Quarter note = 68

4/4 time

1. Quarter notes for 1 measure

5. 5's

2. Eighth notes for 1 measure

6. 6's

3. Triplets

7. 7's

4. Sixteenths

8. 32<sup>nd</sup>s

The musical score consists of seven staves of music in treble clef, 2/4 time signature, and a key signature of one sharp (F#). The notation includes various rhythmic values such as eighth and sixteenth notes, rests, and slurs. Performance markings include *rit* (ritardando), *cresc* (crescendo), *p* (piano), *f* (forte), and *mf* (mezzo-forte). The piece concludes with the tempo marking *Largo*.

Largo

2-Mallets

# Marimba Etude

# Two-Mallet Exercises & Warm-ups

Marimba

Steve Hemphill

1) 

Play through all keys, major and minor; reverse sticking.

2) 

Play through all keys, major and minor - ascending chromatically; reverse sticking.

3) 



Play through all keys, ascending chromatically.

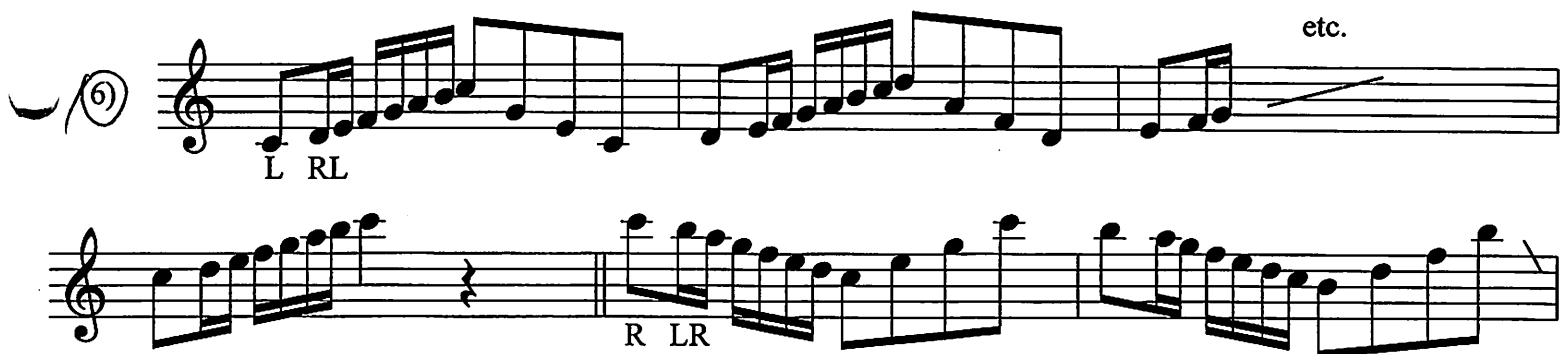
4) 



Play through all keys, ascending chromatically.

5) 

Play through all keys, major and minor - ascending chromatically.

6) 

Play through all keys, major and minor.

7) 

Play through all keys, major and minor - ascending chromatically.

8) 

Play through all keys, major and minor - ascending chromatically.

9) 

Play through all keys, major and minor - ascending chromatically.

10) 

Play through all key roots. Repeat ascending 2, then 3 octaves.

Utilize other intervals with this study (i.e. minor 3rds, perfect 4ths, etc.)

17

Play through all keys - ascending chromatically.

14

Play complete range of instruments.

13

Play through all key roots - ascending chromatically.

12

Play through all key roots - ascending chromatically. Also play through 2 and 3 octave ranges.

11

5

Musical staff 1: Treble clef, ascending eighth-note scale with slurs and 'etc.'

Musical staff 2: Treble clef, ascending eighth-note scale with slurs and 'etc.'

Musical staff 3: Treble clef, eighth-note scale with slurs and 'L R'

Musical staff 4: Treble clef, eighth-note scale with slurs and 'etc.'

Musical staff 5: Treble clef, eighth-note scale with slurs and 'etc.'

Musical staff 6: Treble clef, eighth-note scale with slurs and 'R L'

Play through all keys - ascending chromatically.

Musical staff 7: Treble clef, eighth-note scale with slurs and 'etc.'

Musical staff 8: Treble clef, eighth-note scale with slurs and 'L R'

15

9  
Return To Beginning Position

etc.

R L

(20)

This section contains four staves of music. The first staff begins with a diagonal line and the word "etc.". The music consists of eighth-note triplets. The second and third staves continue this pattern. The fourth staff ends with a circled measure number (20) and the letters "R L" above it.

L R

(19)

This section contains three staves of music. The first staff starts with a double bar line and a fermata. The music features sixteenth-note patterns. The second and third staves continue this pattern. The third staff ends with a circled measure number (19) and the letters "L R" above it.

(81)

This section contains two staves of music. The first staff starts with a double bar line and a fermata. The music features sixteenth-note patterns. The second staff continues this pattern and ends with a circled measure number (81).

7  
Play through all keys - chromatically.

24)

Play through all keys - ascending chromatically.

(23)

Play through all keys - ascending chromatically.

L R L R  
L R L R  
L R L R

22)

21)



etc. etc.

Legato Rolls

(28)

Play through all keys, ascending chromatically.

etc. etc.

RLR

LRR

(27)

Play through all keys, ascending chromatically.

etc. etc.

R L R R L R L L

(26)

etc. etc.

L R

(25)

## MARIMBA

You **do** have control over the sound that is produced!  
All other countries' marimbas have buzzing properties.

1. Spider Membrane
2. Cigarette paper

Marimbas' have open resonators which are open tubes below the bars. **THEY AMPLIFY**  
If you take a pipe that resonates a pitch, cut in  $\frac{1}{4}$  and add a cap to the tube. It will produce the same pitch.

EXAMPLE.....

A=220 beats a second... 1128ft/second (speed of sound) divided by 220 = 5.12 feet. Then, if you cut that to  $\frac{1}{4}$  its size to 1.2 feet and add a cap, you will have a perfect, smaller resonator.

The cap can be tuned to a 32<sup>nd</sup> of an inch, then you can hit the cap lightly for fine tuning.

**DON'T TOUCH THE BARS!**

Skin puts oil and dirt on the bars that can dampen the bars quality.

Node: 0 amplitude. Where the string goes through. 60%Finger, 40% wrist.

Xylophone: If one strikes at the node, one would hear an octave and a 5<sup>th</sup> above the struck note.

Marimba: If one strikes at the node, one would hear 2 octaves above the struck pitch.

The proper playing spot is  $\frac{1}{4}$ " out from the anti node, or dead center, on the "white keys" and  $\frac{1}{4}$ " in from the anti node on the "black keys" Made out of Honduran Rose wood.

Encourage students to listen to recordings of pro marimba players.

Striking the notes -Keep head up, use kinesthetic approach.

If wrist lacks fines and is strictly mechanical and too committed, you're like a "flat footed boxer" and can't move lateral very well. It's like running with boots.

One would want 60% finger and 40% wrist in the strokes.

**NO DOWNSTROKES! ALL FULL!!**

Accept in jazz vibes.

Xylophone and Marimba differences:

Can't tell be looking. M's Are never less than 4 octaves

M 4.5 goes to A-F, 4.6 goes to A-E X's are about 3 $\frac{1}{2}$  octaves

The 4<sup>th</sup> octave transposes guitar The 5<sup>th</sup> octave transposes cello

Might need a 5 octave for band or orchestra.

M's: Strike the node and hear 2 octaves above that pitch

Z's: Strike at the node and hear 1 octave and a 5<sup>th</sup> above that pitch

Z's are played with harder mallets. The bars are made from the hard, inner wood of a tree.

M's are played with softer mallets. Bars are made from less dense wood from the outer tree.

**\*Resonator only amplifies\* Beveled cut and long resonators are only cosmetic\***

M's are concert pitch, they sound as written, or as the notes on the page.

X's sound 1 octave above what is written. 3 $\frac{1}{2}$  octaves F-C

Orchestra bells sound 2 octaves above what is written.

Vibraphones are 3 octaves. (F-F) Can be 4.

#### Care and Maintenance

M's should be oiled with furniture polish with no preservatives or additives.

Can be propped up with 2x4's and furniture stoppers.

You can put fishing line on the bars so they don't jump. 3" is bad. 4" is good.

When transporting M's and X's, go straight down the ramp, don't twist.

Kalian (synthetic)

Wont go out of tune, harder to break, quality is poorer.

#### GRIP

Similar to snare drum, maybe 1/3 less thumb. About 85% of the weight should be use when striking the bar. 100% is to dull gives a finger orientation. HOT HOT HOT!

\*Like a hot beach and sand\* is staccato. "how can I get away from the note"  
"finish the stroke" no windshield wiper.

The little finger should reach out and touch the bar.

When rolling, if the next pitch is lower, lead with the left hand. Higher, right.

Left hand will lead most of the time.

Faster rolls for higher notes.

Play in same spot going up a scale. LIFT! 85%

#### VIBRAPHONE

Used a lot in jazz (slow Vibrato) and contemporary. Cost \$500-\$900

It originated in organ lofts in the 1920's.

Get a toothed belt Yamaha with a touch plate

Electronic discs are on top of the resonators (butterflies)

Rods can get bent, keep them oiled. Its hard do replace a rod.

Lionel Hampton: Fast vibrato in 50's and 60's

Musser fiberglass mallets. Unbreakable. Bend pitch

\*Aluminum Alloy bar\*

#### PEDALING

After pedaling: strike note, then pull the pedal.

-Do not touch floor with pedal. Have it slightly open, not dry and closed.

No overlapping sharps or flats. FLAT PLANE. Make a minimum clearance.

Always pull over a door frame.

\*Regular mallet dampening:

Touch the node and slide in when you strike the other notes.

Don't go passed center. Strike. Touch. Slide.

\*Follow Dampening:

Note are next to each other. Play a G, have mallet on the F, and just slide over.

\*Slide Dampening:

Adjacent notes. Down and up. Used in jazz. Loud.

\*Finger Dampening

Only do it to sharp or flat. As the hand moves to strike the sharp or flat. stick finger out to dampen the "natural" note.

## BELLS

Bells should be closer to you. The pitch is higher than all the other mallet instruments.

The are used to "highlight" other parts.

Hard mallets are preferred

Might need to muffle with arms.

Brass mallets are too hard and bright. Sousa.

Brass can dent the bars.

Aluminum have no body. DON'T USE

## TIMBALES

Strike with bell mallets.

2 track system: keep mallets separated up and down board.

1 track system: lift with full strokes.

Mallet repair

Elmer's glue.

If hole is too big:

Put glue on your finger. When 1/2 way dry. Thread it.

Boil it to get the head off if the handle is broken.

## CHIMES

Closest to audience.

Mallets: Get a Plexiglas hammer from a hardware store. Glue end with moleskin.

Don't use leather on mallets. Its inconsistent.

Some chimes are open to begin with, some are closed. Always check and strike when open.

Use 2 hands so you don't have to look. Use second hand as a reference.

Play on the caps.

Straight or slightly angle when playing.

LV: Let Vibrate.

### 4 Mallet Techniques

1) Stevens: Used for classical, 4 mallet marimba solo lit. (Method of Movement. 590 exercises)

2) Burton: Used on Vibraphone. Its backwards to traditional. Outside mallet is now on top. Its not a spring action. 2 ways to open and close: Back fingers, thumb and forefinger.

3) Musser: Similar to Stevens, but thumbs are out. DON'T DO IT.

4) Traditional: X sticking. Forefinger pushes apart with thumb and forefinger. X like a bird.

### 4 Mallet Techniques

1) Single Independent: 1" off the bar, pivot, outside or inside.

2) Single Alternating. Inside mallets alternate

3) Double Vertical: Both mallets play at the same time.

4) Double Lateral: V shaped motion (sequence roll)

Giff Howerth: Simply 4. Leigh Stevens: MOM

Percussion Techniques I  
TIMPANI PERFORMANCE TEST

Name Travis

Date 11-14-06

I. Tuning

- Speed
- Accuracy (Beginning)
- Accuracy (Changed 31" and 26")
- Striking With Finger
- General Technique

A  
A-  
A-  
A  
A

Comments:

Bb - bit b; others good  
F good; D slightly b

II. Technique

- Proper Timpani Set-up (Positioning)
- Grip and Hand Position (Thumbs Up)
- Stroke Type (Lifting)
- Playing Spot (2-3" from edge)
- Rolls (Smooth Single Strokes)
- Fp Rolls
- Dampening Technique (Placement/Fingers)
- Sticking Appropriateness
- Cross-Sticking Technique

B+  
A  
B+  
B+  
B  
A  
B+  
A-  
C

Some down strokes / from elbow

23" - very deep

- spread fingers avoided

III. Musicianship

- Steady Tempo
- Correct Rhythm
- Correct Drums (Right/Wrong Notes)
- Dynamics
- Correct Note Values (Dampening)
- General Knowledge of Work

A-  
A-  
B+  
B+  
A-  
A-

3 wrong notes  
Some dampening missing

Avoid rim shots

Grade A-/B+

## TIMPANI

Softer mallets are made of German felt. Harder mallets are made from American felt.

TIMPANI- Italian, Latin. Plural of Timpano. Flock of Timpani.

Most Important!!: Pitch!

Ear training should be done at a young age and is VERY helpful

PAULKEN- German timpani

TIMBALES- French and Spanish Timpani

Always use copper bowls. NO FIBERGLASS.

Apple Round: Project VERY well. Very bright.

Parabola: Don't project well. Dark. Semi-flat bowls.

Line all metal on metal contacts with moleskin.

Caste Spider is Good.

Pedals

Ratchet

Balanced Action

Counterclockwise loosens the spring, clockwise tightens it.

Between lip and hoop is the collar.

Store Heads at Medium High range.

RANGES

32" D to A (Perfect 5<sup>th</sup>)

29" F to C# (Augmented 5<sup>th</sup>)

26" Bb to F (Perfect 5<sup>th</sup>)

23" D to A (Perfect 5<sup>th</sup>)

American Set Up. Large timpano on left of player.

Traditional Set Up. Large timpano on right of player.

Do not lift from the counter hoop, Lift from tension rod strut. Make sure heel doesn't drag.

Have a meeting with parents to establish timpani respect.

Play towards rim to get some resonance.

No double stroke rolls! Only Single!

Mallets

Felt can be American or German.

American: tightly woven like piano felt.

German: Loose, less dense, less durable.

Felt comes in slabs and are about \$200. Inner of sheet is soft.

Mallets have a wood or hard compressed felt.

3 types of mallets. 1) Hard 2) Medium 3) Soft

Start with a "Staccato" hard mallet. Then get a medium. Then get a soft.

If on a 2 drum budget, get the 2 middle ones, then bottom, then top.

Use a tuning fork to tune in schools, not a patch pipe..

-Have students sing a pitch out loud. Start with a pitch and have tests on it.

-Timpani: NO FUNDAMENTAL

-5<sup>th</sup> and 12<sup>th</sup> is heard a lot.

-Timpani tuning is just a big match game.

## DON'T TOUCH THE TIMPANI!

- 1) Oils collect on the head. Less reverberation. Less resonance
- 2) Mallets turn brown and compact because of oils.
- 3) Sound is produced when you touch the heads.

Keep mallets in 3 different stacks

Covering timpani, wood on plastic is not so good. Get lightweight covers.

Don't let the covers touch the ground.

Timpani were brought from Turkey during the Crusades.

## 2 Schools of timpani playing

-Cloyd Duff: All the fingers on the stick. The arm is crooked (light bulb). And the mallets are parallel. Cleveland Philharmonic for 39 years with Frank Zell.

-Saul Goodman: Pivot on back of the thumb. Middle and ring finger control the movement. Wrist is straight. No choking up. NY Philharmonic for 41 years. VERY Finger orientated.

Thumbs up: French grip

Back of hand up: German grip

What kind of mallet??

Bamboo is lighter. Good for Duff style. Have 6-8 inches apart

Heavy ones are good for Goodman. Close together.

For perfect tuning. The Head, flesh hoop, counter hoop, much be perfectly round.

Playing spot is 2-3½ inches from edge.

Tension rods should have square bolts.

- 1) Bowl must be truly round.
- 2) Hoop must be perfect thickness all around.
- 3) Head must be a perfect plane.
- 4) Flatness and roundness must cope.

Most of the vibrations are on the opposite edge. Center is the anti node.

90 degrees for muting and lightly.

-One can stand to play, but must sit for technical passages. When you stand, you must always look for a playing spot. Sitting is very consistent and playing spots are good.

-Place 26's and 29's right next to each other. Elbows to the side. Find the perfect spot.

-Pivot at the waste for sticking.

-Full Strokes ALL THE TIME.

-Bring the drum to you, not you to the drum.

-Bottom drums don't project very well, so play into it more.

-No shields in front of any percussion instrument.

## PLAYING SPOT

-Start in the edge and work to middle to find a good sound.

-Middle is thud. Edge is high in 5<sup>th</sup>s and 12<sup>th</sup>s. Bright and tinny.

-Tap in playing spot lightly to tune. No sticks. No flick. Heel all the way to the floor. Only one tap to start and one to fine tune. The head doesn't settle when going down from high.

# AUXILIARY PERCUSSION ETUDE

Bass Drum, Triangle, Suspended Cymbal, Crash Cymbals,  
Wood Block, Tam-tam, Tambourine, Castanets

S. Hemphill

$\text{♩} = 72$  Bass Drum *no*

*f* *p* *3* *p*

*(p)* *ff*

*to triangle* *f* *to suspended cymbal* *2* *pp*

*w/yarn* *w/stick* *w/yarn*

*p* *f* *p*

*to crash cymbals* *2* *p* *f*

*to wood block* *2* *ff*

*to tam-tam* *mf*

*to tambourine* *pp* *mf* *mf*

*(finger\*)* *(shake)* *to castanets*

*p* *ff*

*f* R RLR RLR RLR

\* Use finger roll technique followed by shake roll technique.



## PERCUSSION TECHNIQUES I

### Auxiliary Percussion Unit

Name \_\_\_\_\_

Date \_\_\_\_\_

#### Technique

Bass Drum

Triangle

Suspended Cymbal

Crash Cymbals

Woodblock

Tam-tam

Tambourine

Castanets

#### Musicality

Steady Tempo

Dynamics/Accents

Rhythms

Rolls

Extraneous Noise

Knowledge of Music

COMMENTS:

Grade \_\_\_\_\_

## BASS DRUM

### 4 Zones of Playing.

- 1) Cannon Shot, strike in dead center of the drum. Dead shot. Hard mallet
- 2) 2" off center. Low fundamental. Rattling and buzzing from other instruments is good.
- 3) 6" off center. Loose fundamental.

### 4) Outside

- Play drum with head facing conductor or slightly angled. Never share a music stand.
- Keep mallets as low as possible.
- 36" x 18" is good.. So is 40" x 20"
- Stuff cotton in springs. -Use white lithium grease for tension rods.
- Use moleskin on metal to metal or wood to metal.
- Always use a suspended bass drum from a stand. Don't tighten T rods too much.
- Make sure mallets are equidistant from center. Play at 90 degrees from center. (L)
- The batter head is higher than the resonating head. Play with a perpendicular stroke
- Good rep for bass drum: -Mahler 3 -Rite of Spring -Old 60's marches

## CYMBALS

The strap suspending the cymbal should be palm length. Cost \$800-\$900

- 1) Fold strap in half and pair up each strap.
- 2) Smooth side and rough side
- 3) Fold strap like a box.

Cymbals are snowflakes. No 2 are alike. Most are machine spun.

To choose 2, find 2 with a different fundamental. ½ step to a minor 3<sup>rd</sup> apart.

Bowl on top is (bell, dome, crown)

Ziljian was founded in 1623. Sabian split from Ziljian. Bothers got in a fight.

A is Very cupped. (suspended)

K is flat (crash)

-Made out of Zinc, Nickel, Copper, Brass.

High schools should have an 18" or 19" Viennese cymbal from Ziljian. (crash)

Germanic Cymbals:

Thick and clangy. High fundamental. Very bright

Viennese Cymbals:

Middle thickness and a full sound

French Cymbals:

Thin and splashy or washy. Low and dark fundamentals.

PLAYING ENVELOPE

- 1) Attack
- 2) Sustain
- 3) Decay
- 4) Release

Think of

- a) brightness
- b) darkness
- c) quickness
- d) musicality

-High cymbal in right hand

-Gravity fall. Leave at a slight V shaped angle

-2 contact points. F-Lam

-Don't pass the cymbals

-Keep thumb high and pull knot out

-Let go on contact. Cymbals play themselves

-Quieter is more parallel. Loud is wide

-Let them sizzle

-Hard to control volume if thumb isn't out  
-Soft playing, edge to edge is okay

-Play in a circular motion for a zshang sound  
-Check knots often

-Leaving in position is an equal sound  
-Dangle down for long lasting

-Mickey Mouse ears change the timbre.

### TRIANGLE

Play  $\frac{1}{4}$  from the tip of beater.  
Always buy beaters in pairs  
Suspend with 12 lb. fishing line & hardware clamp.

Steessel Style is good  
Most pitch at top. Most overtones on bottom  
Play with thumbnail to face.

Grover 6" about \$38-\$50. Abel is good as well.

Keep 3 point sight line. Music. Conductor. Instrument  
When striking, use no arm motion. Only wrist and thumb.  
Tie the fishing line very close to the clamp.  
Use 2 loops. If one breaks, the other will catch it.  
Use the ring finger to dampen.  
For rolls, twist wrist facing up and use fingers to roll. All fingers in.

### WOODBLOCK

Buy a 3" x 3" $\frac{1}{2}$  x 9" Vaughn Kraft (Very good)

Made out of Mahogany. LP percussion has the jam block. Get the large, plastic, red one.

Might need to in a band setting (high and low)

\$30-\$60

Thumbs and middle finger suspend it. Use a 3 point sight line.

And it to see the top and how deep you are

Strike at the nearest  $\frac{1}{3}$  to the slit and middle of the block.

Use a medium soft rubber mallet to blend and round sound.

Strike at mouth level. 45 degrees toward you.

Don't buy LP laminates. Grover and Blocks are good as well.

### CASSANETES

No LUDWIG! Get Black swamp or Epstein. Cost \$85-\$95.

Embra is High

Madro is Low.

Ebony, rose or blood (best) wood are good.

Play the high one in the right hand.

Play downward

Forefinger on the side

Forefinger  $\frac{1}{8}$ " from carving

Knots facing up

Foot on Chair, but not too high.

Don't play flat

Double stroke roll

Stretch elastic band a little.

Samson and Delilah is good rep.

### SUSPENDED CYMBAL

Get an 18" Hand hammered orchestral suspended cymbal.

Suspend cymbal at stomach height

Play at 4&8 or 5&7 o'clock.

Roll at the edge of the cymbal. Less "puh" and more lows with a thick sound.  
Loud, speed up a little. Crescendo unevenly.  
Go into the deep notch of the thumb. Blend cymbals together

## TAMBORINES

*spelling*

Plat at a 45 degree angle for the driest sound. Have thumb on top to play.  
Use goat skin. NO PLASTIC.  
Get a 10" for school, buy a 12" head to recover it. Don't change the head on a rainy day.  
The heads will droop when wet. Soak head in water to change.

Bass Drum must be kept moist in heat with calf skin

Only buy a double row or shingles, parallel or off set.  
3 TYPES OR METAL

- 1) German silver (Highs and ringy) GOOD!
- 2) Beryllium Copper
- 3) Phosphor Bronze (darker) GOOD!

Combo's of goods are good.

Get a Grover or Black swamp. Cost \$90-\$140  
Grover sells a replacement head kit. But you need 4 hands.

## JINGLES:

Could get some with pings in them. They are shaped like flanges )(  
To dry up the sound, take pliers, go to center of shingle and twist  
Or take pliers at a tangent angle and twist/crank up.

Hold tambourine in your weak hand. Strike with 3 fingers like a claw.  
If passage is too fast, you "knee-fist" the passage.

## Finger Rolls

Put wax on outer 1/2 inch of edge. The middle finger does the roll.  
Brace at your thumb. Fly all the fingers out.  
Play at about a 75 degree angle Start at 90, pull back a little

## TAM-TAM

Mallets use 3 hockey pucks, 2, or 1. You need a drill press to do it  
For 3 pucks, use a 1" handle For 2 or 1, use a 7/8" handle.