Sara Erb
Reed-Making Handout

Reeds

Reed Making Goals

1. **Stable pitch and flexible range**

I seek for my reeds to be multifunctional. I do not try and design a "high note reed" or a "low note reed." Yes, there are techniques that can be done (such as thinning the back of the reed to make the low register easier) to make these preferences possible, but I have found that the differences in cane are often enough to tell me whether a reed will work better for one purpose or another. Far more important to me are: is this reed in tune without overcompensating with embouchure or abs, and does this reed have the standard range I need from it (usually low Bb to high D)?

2. **Good Response**

Questions to ask: does the reed respond well? Do I have to strike it hard with air/tongue?

3. **Sound/Tone quality**

This comes last. Not because it is not important, but because when I do not like the sound of a reed, it is usually because of an imbalance caused by one of the above factors. Adjusting based on objective qualities usually fixes a sound issue.

Specifics:

Shape	Sakakeeny/Van Hoesen (SVH)
Top Wire Measurement (from butt)	25 mm
Middle Wire (from butt)	16 mm
Bottom Wire (from butt)	6 mm
Collar (from butt)	27 mm
Full length of reed when clipped	54 mm (no shorter than 53 mm)

First Day Scrape Measurements:

Blade Measurements (mm):

Tip: .25	13 mm: .65	22 mm: .80
5 mm: .40	18 mm: .70	27 mm (back): .90-1.00
9 mm: .55		

Average Final Scrape Measurements:

Tip: .18	22 mm: ~.70
5 mm: .40	27 mm (back): ~.90-.95
9 mm: .50	
13 mm: .60	
18 mm: ~.65	

These numbers are **general guidelines,** not rules of law. Each piece of cane will differ a little! What may be best for one piece may be too much on another. Crowing the reed constantly and testing it on the instrument is a vital part of the first day and break-in process.

Basic Troubleshooting

Tests: F major scale from low F, half notes, quarter = 50, with tuner. Observe pitch.

Articulation – quarter = 50-60, sixteenth notes from low F to low Bb

Quarter = 50-60, sixteenth notes from high Bb to D

General Thoughts:

1. Reed too hard (requires too much energy to play, is sharp, feels resistant)
    a. Check the tip opening. If tip is too open, **gently** press on the back of the reed on each blade to close the opening a little. Wires may also be adjusted.
    b. Measure the tip area (first 13 mm) on each blade. If they are not at the desired measurements, scrape them to the proper measurements. If the tip is at the desired measurements, check the middle and back.
    c. Look at the channels. If there is little channel work or an imbalance, scrape to balance the blades.
2. Reed too weak (plays flat, insecure high register, feel too easy to play)
    a. Check if any wires are loose. Tighten them if they are not tight enough.
    b. Check aperture. If it is too small, use pliers to gently round out the top wire until aperture is slightly more open.
    c. If reed is still weak, consider clipping.
3. Leaking air
    a. Check how reed fits on bocal. If reed does not fit snugly on bocal, ream a little bit until it does
    b. If leaking persists, put on a fourth wire below the bottom wire.
4. Buzzy reed
    a. Check rails. If they do not taper evenly or are overly heavy, thin them **very little at a time**.

REMEMBER: Be patient with it in the first few days as it adjusts, then demand that it give you what you want from it. Good intonation, good range, good articulation all make a good reed.
Resources:

Ewell, Terry. “A Pedagogy for Finishing Reeds for the German-System (Heckel-System) Bassoon.” *The Double Reed* 23, no. 3 (2000): 99-108.

**Sakakeeny, George. *Making Reeds Start to Finish with George Sakakeeny*. Reedebooks, 2013. Apple Ebooks. (Mandatory for my students to have)

Schillinger, Christin. *Bassoon Reed Making: A Pedagogic History*. Indiana University Press, 2016.

Handouts by Billy Short, Barry Stees

Collegiate Reed Making Curriculum Overview:

	Fall Semester	Spring Semester
Freshmen	101 – learning my style, establishing proper finishing technique. In one-on-one settings or small groups, based on number of students Required: 10 finished reeds and journal entries, reflections on Sakakeeny readings	102 – Introduction to machines (profiler, tip profiler), further technical practice, emphasis on finishing Required: 20 finished reeds and journal
Sophomore	103 – continuing in technical development Required: 20 finished reeds and journal	104 – continuing in technical development Required: 20 finished reeds and journal
Junior	Regular 30-minute sessions with me, continuing to develop technique and style Required: 24 finished reeds and journal	Regular 30-minute sessions with me, continuing to develop technique and style Required: 24 finished reeds and journal
Senior	Project: researching and studying a style unfamiliar to you Required: **in addition to 12 reeds in your style**, 12 finished reeds in the new style you have studied, journal entries with each, and a 3-4 page reflection on your experiences with the style; journal entries	Regular 30-minutes sessions with me, continuing to develop technique and style Required: 24 finished reeds and journal
Graduate	**Year One:** Regular 30-minute sessions with me to assess your style, knowledge, and skills. Required: 36 finished reeds and journal	**Years 2+:** Time with me as necessary

Bassoon Reed Journal Name:

Reed Number: Wrapping Type: Color:

Type of cane: Shape:

Wire Measurements (from butt, in mm):

Top Wire:

Middle Wire:

Bottom Wire:

4th Wire:

Notes on Blank Construction:

_____

_____

_____

Blade Measurements (in mm):

	Twist up	Twist down
Tip:	_____	_____
5 mm:	_____	_____
9 mm:	_____	_____
13 mm:	_____	_____
18 mm:	_____	_____
22 mm:	_____	_____
27 mm:	_____	_____
Back:	_____	_____

Full length of reed butt to tip:

Notes/Observations on measurements:

Notes on Finishing Process:

Playing Characteristics:

Performances Used for:

_____

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