

## **“Playing the Bassoon from the Bottom Up!”**

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### **Low D**

- The tendency for this pitch is to be sharp.
- A great test note for evaluating a bassoon reed – should be in tune and resonant.
- Can bring the pitch down by adding the low B-flat key (it’s tricky, but it works!)

### **Low E**

- The tendency for this pitch is to be slightly, to very sharp.
- Adding the lower resonance key with the LH pinky will assist in bringing the pitch down.

### **Low F#**

- This pitch can be played by the right thumb (back of the boot joint) or the right pinky (front of the boot joint).
- On some bassoons (Fox, for example), the front F# is pitched slightly lower.
  - The front F# is wonderful for melodic playing – slightly warmer and not as bright.
  - Front F# must be used when being approached from a note using the back Bb key on the boot joint (Bb usually being the prime suspect) to avoid two movements with the right thumb.
- Back F# is the standard fingering for technical passages.
- A wonderful muted fingering for this note is: LH: thumb (WK), 1, 2, 3 / RH: 1, 2, 3, thumb on back F# and E, and pinky on low F and front F#.

### **Low Ab**

- This pitch can be played by the right thumb (back of the boot joint) or the right pinky (front of the boot joint).
- The vast majority of the time, back Ab is used unless it is approached from a note using the right pinky (low F, front F#)

### **C# in the staff**

- This pitch can be slightly, to very unstable depending on the bassoon and the bassoonists reed.
- This instability manifests itself in the pitch during loud dynamics and an extreme loss of resonance.
  - This is due to three factors: 1) the tone hole for this note is too small, 2) the reed could be too long, and 3) it is in the wrong place on the instrument!
- Before doing any adjustments to the reed, test the reed on third space E. If that E is stable, you will need to add the low E key (back of boot joint) to stabilize the pitch.

### **Eb in the staff**

- This is one my main “test notes” on a bassoon reed.
- This note has three fingerings that are commonly used:
  - LH thumb (WK), LH first finger, LH third finger
    - This is my standard fingering on my bassoon. If this fingering can play an Eb in tune, where the pitch does not shoot up in pitch, then the front of the reed has been scraped correctly.
  - LH thumb (WK), LH first finger, LH third finger, RH second finger, RH back Bb key
    - This fingering can bring the pitch down if the Eb is sharp, but I find this fingering to be a bit bright on many bassoons.
  - LH thumb (WK), LH first finger, LH third finger, LH pinky on top resonance key, RH first finger, RH back Bb key
    - This is an excellent fingering to play an Eb that is soft and in tune.

### **E in the staff**

- This is another of my main “test notes” on a bassoon reed.
- A quality bassoon reed should be able to play an E in the staff at all dynamic levels with any type of tonguing style.
- If the E sinks in pitch, further adjustment is required unless the reed is very new.
  - New reeds often stabilize over a period of a few days with a moderate amount of playing. If the reed still cannot sustain an E after a few days, then the reed will have to be adjusted (see “Reed Adjusting” handout).

### **F in the staff**

- This note is bright and sharp since it is an open hole note. Dropping the jaw slightly will help to mitigate these effects.

### **Half Hole Notes – F#, Gb / G / G#, Ab**

- These notes require special attention to enable clean technique “over the break”.
- The half hole, played by the LH index finger, acts as an octave key for these notes, and brings the bassoon up to the next harmonic series.
- The half hole is operated by gently rolling the LH index finger towards the floor, away from the hole.
- All of these notes require use of the LH thumb whisper key. In fact, anytime this half hole is opened, regardless of the note and register, the whisper key should be engaged.
- Due to the complicated nature of the acoustic design of the bassoon, each of these three notes have very specific fingering requirements.
- Due to the half hole in the LH, these notes have a bit of resistance that require a bit of a “push” to enable clean beginnings and slurred intervals.

### **F# in the staff**

- This requires the largest half hole of the half hole pitches in this register.
- This note can crack if the half hole is not the proper size.

- F# can be played with the RH thumb (back of boot joint) or the RH pinky (front of boot joint) exactly like the F# one octave below.
- The same muted fingering also works in this register.
- This note can be bright and sharp, so increasing the size of the oral cavity will help those two side effects.

### **G in the staff**

- This requires a “true” half hole, slightly smaller than that of F#.
- This note is very sharp unless one of the LH resonance keys is opened by the LH pinky.
  - The actual tone hole needed for this G to be in tune is located further up the tenor joint, resulting in a sharp pitch.
- I usually use the top resonance key, but the bottom one works on many bassoons as well. Players with smaller hands will likely gravitate towards the top resonance key.

### **Ab on top of the staff**

- This note requires almost a ¼ hole for maximum stability. It can be a very sensitive pitch on many bassoons.
  - This note is my personal nemesis! I’ve cracked it more times than I can count! Be sure that the reed aperture is not too closed when articulating this pitch.
- No additions with the LH are needed for this pitch.

### **Flick Keys/Speaker Keys/Octave Keys/Snip Keys, etc.**

- There are five pitches that require the use of these keys operated by the LH thumb on the tenor joint: A, Bb, B, C, and D (beginning with the top line on the bass clef).
- These keys can be found on the tenor joint of the bassoon and all are operated by the LH thumb:
  - **D**
  - **Bb/B/C**
  - **A**
  - **C#**
  - Whisper key
  - Some bassoons may not have all of these keys – see **Octave Key Technique**
- These keys have several names (see above), but they actually function as *octave keys* for these specific pitches.
- When teaching the use of these keys, it is very important to stress that they are part of the fingering. If these notes are taught without these keys, it is very difficult (but not impossible) to integrate them into a bassoonist’s technique.
- Disciplined use of these keys will solve a host of technical problems created by some of the acoustic idiosyncrasies of the instrument. It is worth the investment of time and effort!

### **Octave Key Technique**

- These octave keys are needed in the following situations:
  - When A, Bb, B, and C are articulated
  - When slurring up to A, Bb, B, C, and D

- When slurring down to A, Bb, B, and C
- The only exception to this rule is when slurring from a half hole note to the pitches listed above. In that case, the octave key is not required as the half hole acts as an octave key bringing the bassoon up to the next harmonic series.
- Some bassoons, especially found in secondary schools, will not have a high D key (fourth key above the whisper key in the LH). In that instance, it will be necessary to legato tongue any slurred intervals up to D.
- Each of these keys are used for a specific pitch (see below the keys operated by the LH thumb on the tenor joint).
  - **D**
  - **Bb/B/C**
  - **A**
  - **C# key**
  - **Whisper key**
- For ascending and descending slurred intervals using the whisper key.
  - Begin the process by lifting the LH thumb off of the whisper key. Provided that the bassoon and the reed are in good working order, and if the oral cavity size does not change, the beginning pitch you are on will not jump up or down an octave.
  - In a relaxed motion, depress the specific key associated with that pitch until it hits the “bumper” and completely opens up the tone hole. This motion should be done to create the requested rhythm on the page.
  - Once the upper note speaks, the key can be released for the duration of the pitch, or released if that is the player’s preference.
  - Most often, particularly in ascending slurs, a change in voicing is needed to facilitate the slur.
    - A, Bb, B, C and D are flat in pitch and require a vowel shape of “Ee” inside the oral cavity when slurring to the top note.
    - In addition, this register of the bassoon is a bit more resistant, so the abdominal muscles will need to support the ascending interval as well.
- For all other ascending and descending slurs, a relaxed motion of the LH thumb depressing the octave keys will result in a smooth interval with no interruptions.
- For articulated pitches involving the octave keys (A/Bb/B/C), the motion of the tongue touching the reed and the opening of the key must be simultaneous.
  - For repeated articulations on a specific note, holding the octave key down is the best solution.

### **C# above the staff**

- This note can be bright, as well as sharp on many bassoons.
- Making the oral cavity larger can “tame” this note a bit.
- Be sure to use the standard fingering, although the “short” fingering also works well in soft passages: LH: 1,2,3, thumb on C# key and low D key

### **D above the staff**

- This note is flat on many bassoons – voicing this pitch correctly will fix this issue.

### **D#/Eb above the staff**

- This pitch is usually flat and can be adjusted with the correct voicing.
- The standard fingering works well in most instances, but sometimes it is difficult to accomplish wide slurs to this pitch.
- For wide slurs, try eliminating the first finger on the RH from the standard fingering.

### **E above the staff**

- Beginning with this pitch, and every note above E, the LH pinky should hold down the top resonance key.
- The standard fingering works well in most instances, but sometimes it is difficult to accomplish wide slurs to this pitch.
- For wide slurs, try eliminating the first finger on the RH from the standard fingering.

### **F above the staff**

- This is the most resistant note on the bassoon.
- In order to cleanly begin an “F”, the aperture of the reed may need to be close somewhat, along with an “Ee” voicing.

### **F# above the staff**

- Due to the technical complexity of this note, I use as many as four different fingerings depending on the context.
  - “French” F# - has the best sound, is flatter in pitch, and very resonant
  - “Scale F#” – best for scales and other intervallic passagework
  - “Thumb Bb F#” – necessary for descending passages from upper C, B and Bb; also good for technical passages.
  - E-F# trill – only used for this particular trill

### **G above the staff**

- Adding the LH whisper key will stabilize this pitch since it uses a half hole in the LH index finger.
- This note requires an open oral cavity to bring the pitch down.

### **G#/Ab above the staff**

- Just like the octave below, a ¼ hole in the LH index finger works the best.
- Adding the LH whisper key will stabilize this pitch since it uses a half hole in the LH index finger.
- This note requires an open oral cavity to bring the pitch down.

### **A above the staff**

- This note is acoustically very weak, so an open oral cavity is necessary to bring the pitch down and create a loud dynamic.

### **Bb above the staff**

- The standard fingering works best with this pitch.
- If your bassoon cracks when playing this pitch, or if there are difficulties with ascending slurs, lifting the RH index finger from the standard fingering can help.