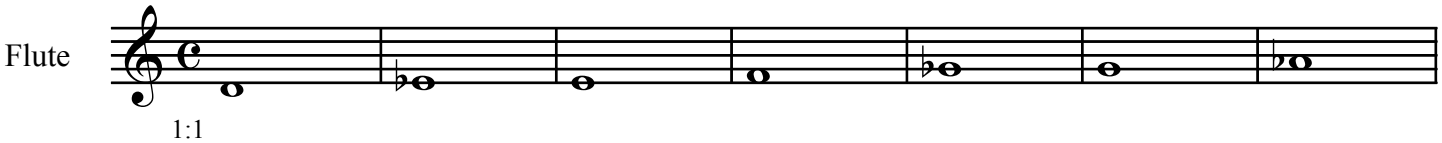
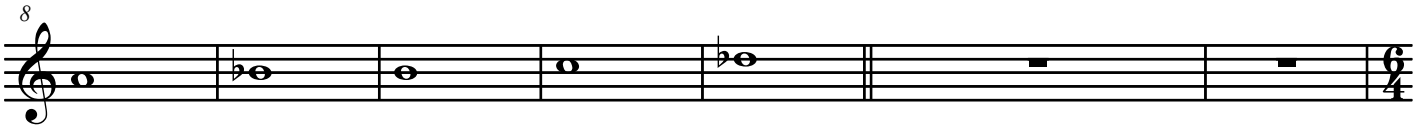
Overtone Exercises for Flute

Marc Adler

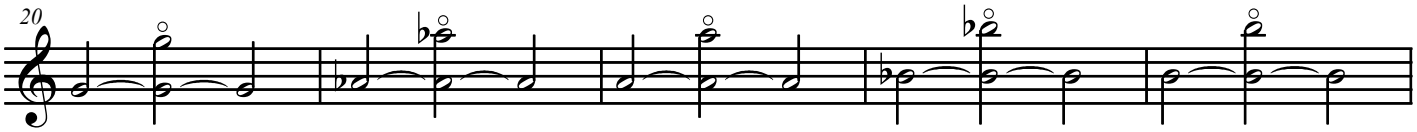
Play these exercises slowly in the manner of long tone exercises. Transpose and play both ascending and descending as well.

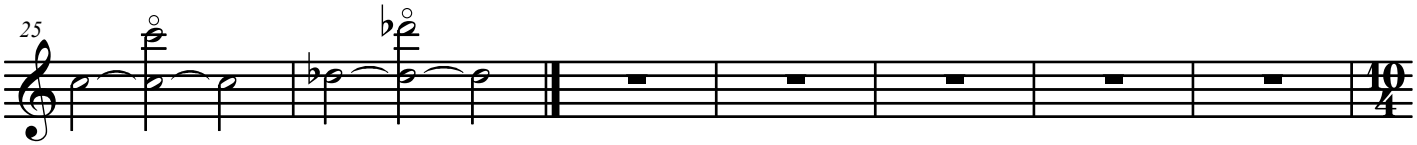
1st Partial: Primary Fundamental Pitches -. These pitches will be used to produce the 2nd and 3rd partials. Ratio of cycles: 1:1. Low B, C and Db will be used for partials 4 and 5 introduced later.



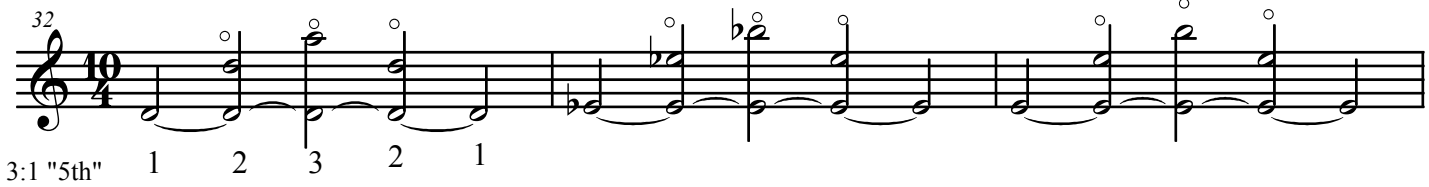


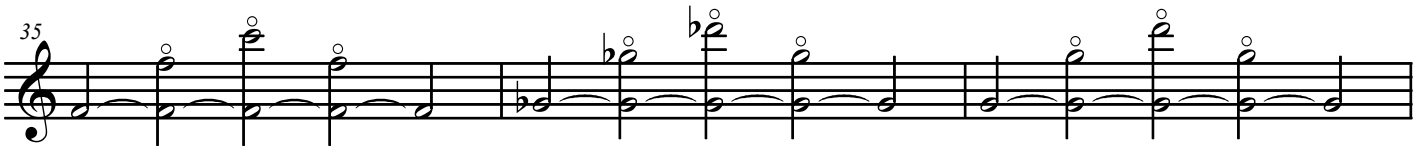
2nd Partial: Using only the lips [do not change fingerings] make the "jet stream" of air leaving the lips smaller and the next partial in the overtone series will sound an octave higher. Partials are often spoken of in terms of number of cycles per second and their relationship to the fundamental. The relationship between the first and second partial is 2:1 with the second partial an octave higer than the first and with double the number of cycles per second.

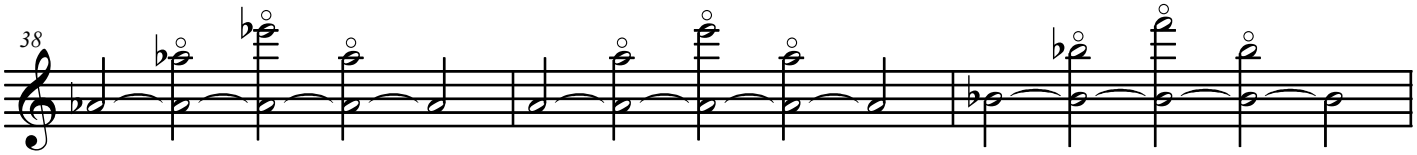


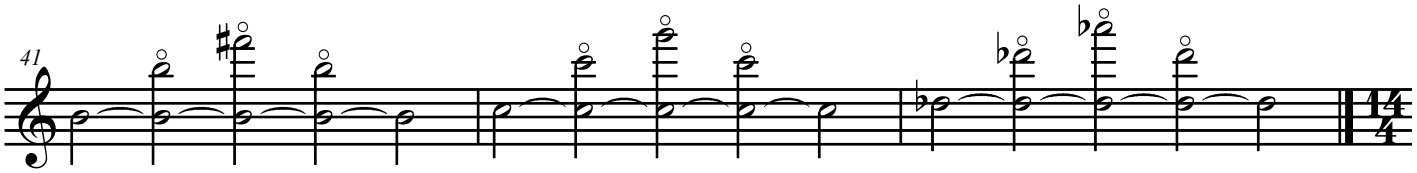


3rd Partial: Similar to the manner in which you achieved the second partial make the air stream leaving the lips more focused and concentrated to produce the third partial - which will sound a perfect fifth above the second partial and a 12th above the fundamental. Ratio to fundamental is 3:1.

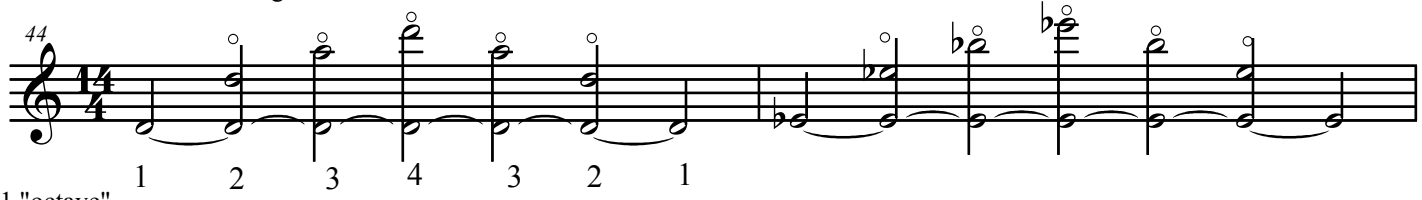




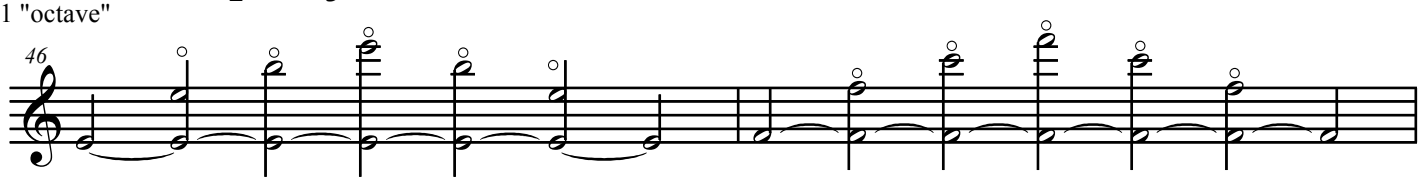


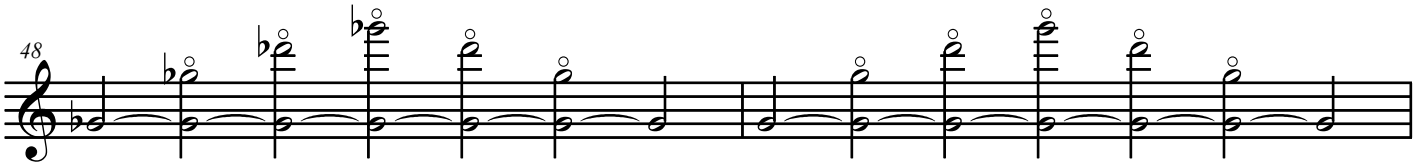


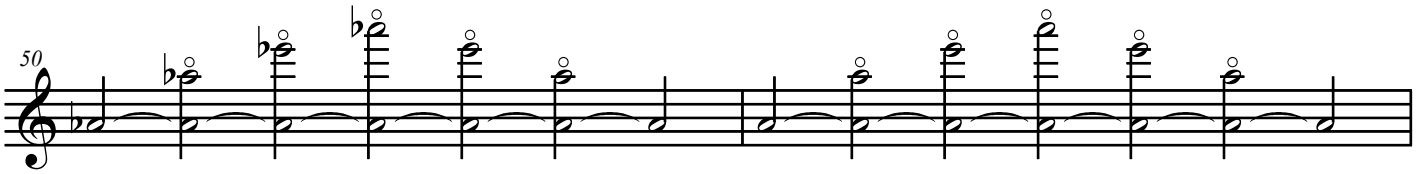
Fourth Partial: Sounding two octaves above the fundamental. Ratio to fundamental is 4:1

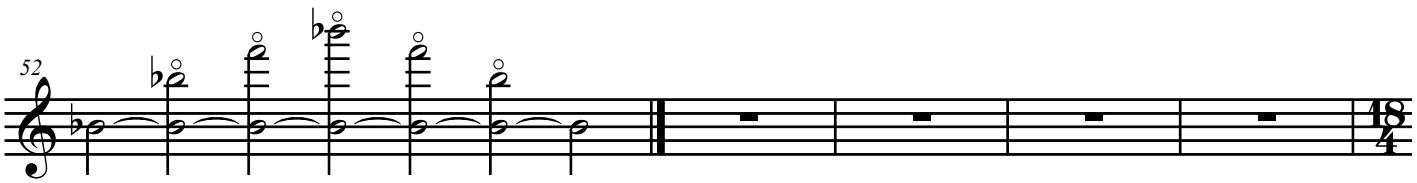


4:1 "octave"

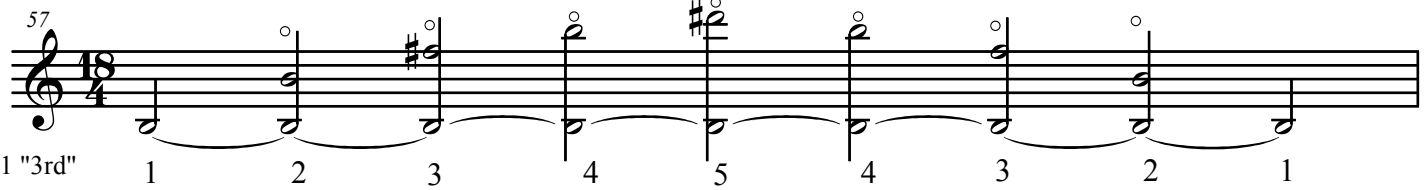




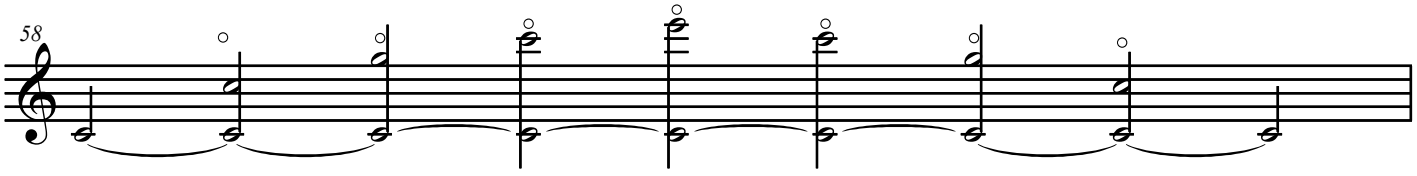


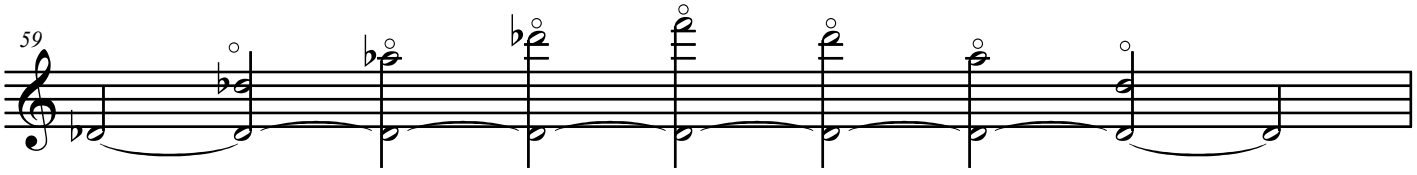


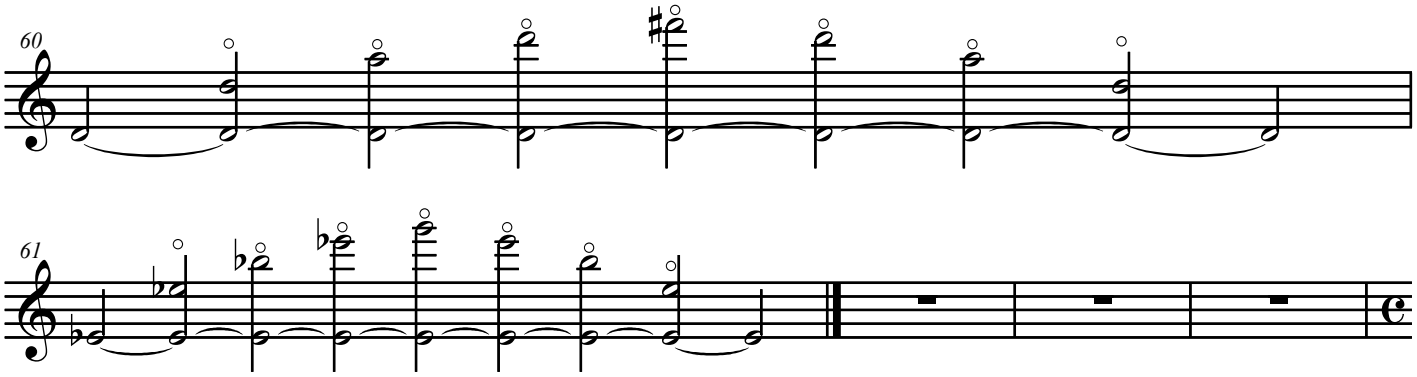
Fifth Partial: Sounding two octaves and a major third above the fundamental. Ratio to fundamental is 5:1.



5:1 "3rd"

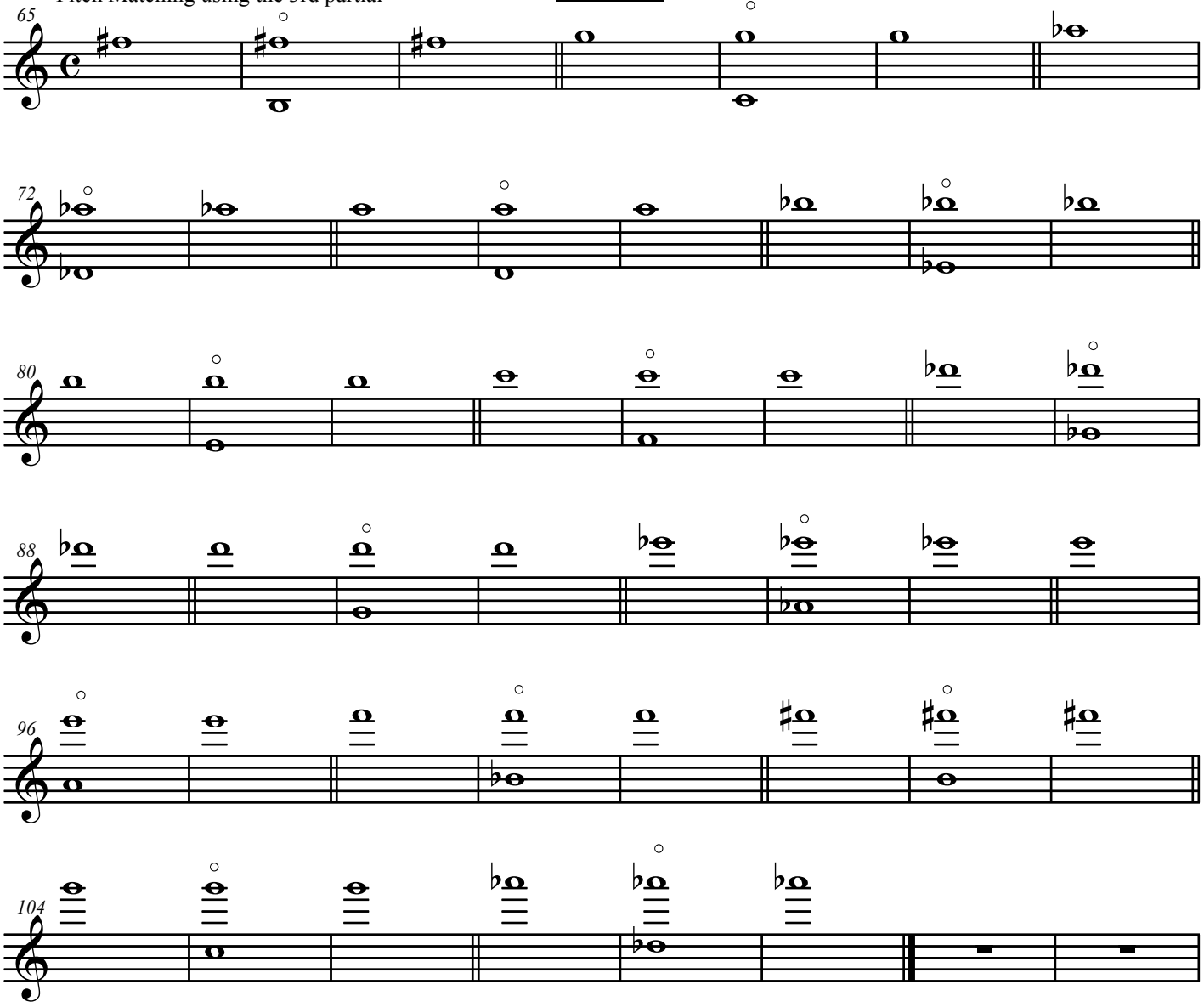




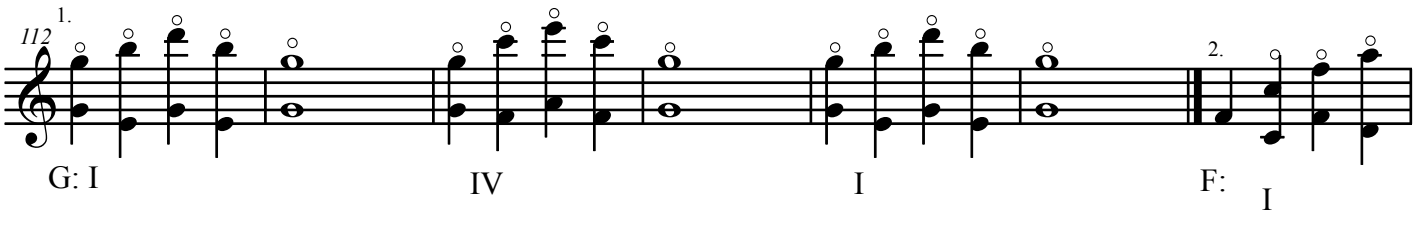


Pitch Matching using the 3rd partial

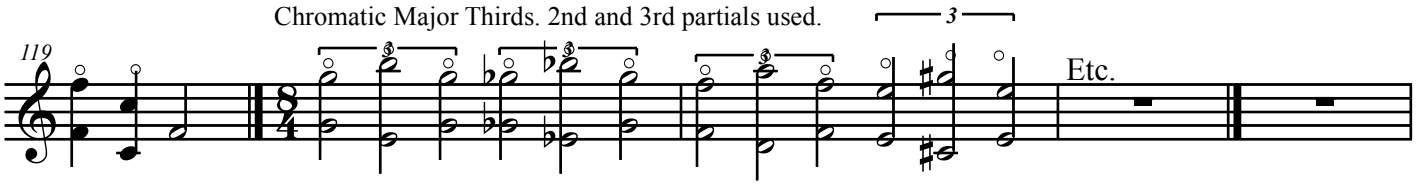
Exercises



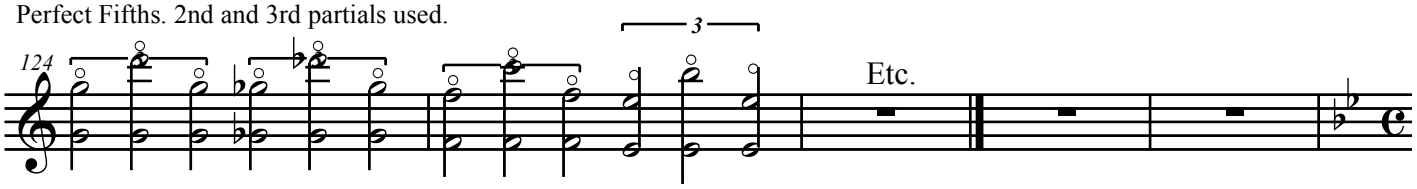
Triads. Transpose to other keys.



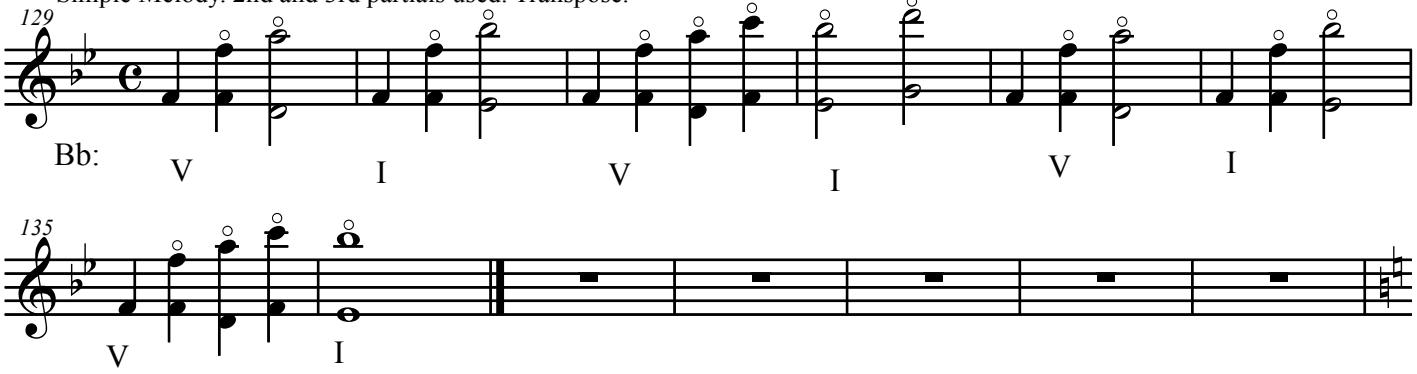
Chromatic Major Thirds. 2nd and 3rd partials used.



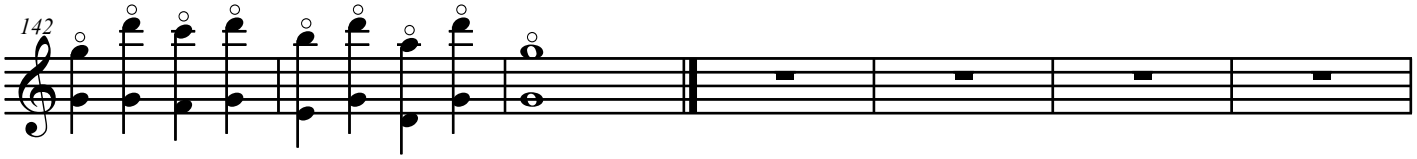
Perfect Fifths. 2nd and 3rd partials used.



Simple Melody. 2nd and 3rd partials used. Transpose.

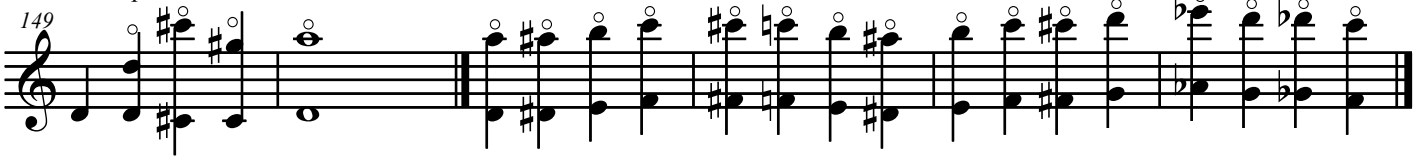


Repeating Root. 2nd and 3rd Partials used. Transpose to other keys.

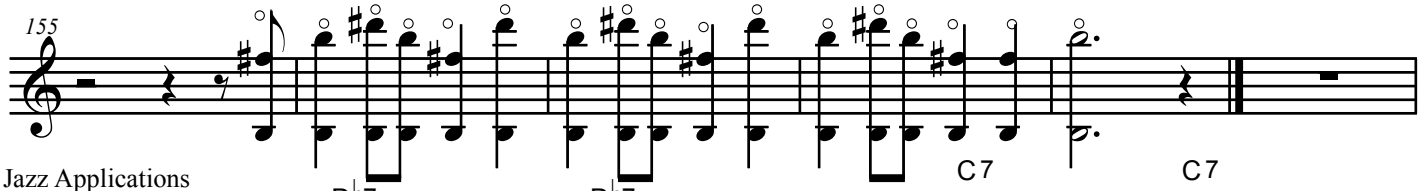


Major 7th and Tritone. 2nd & 3rd partials used.Transpose.

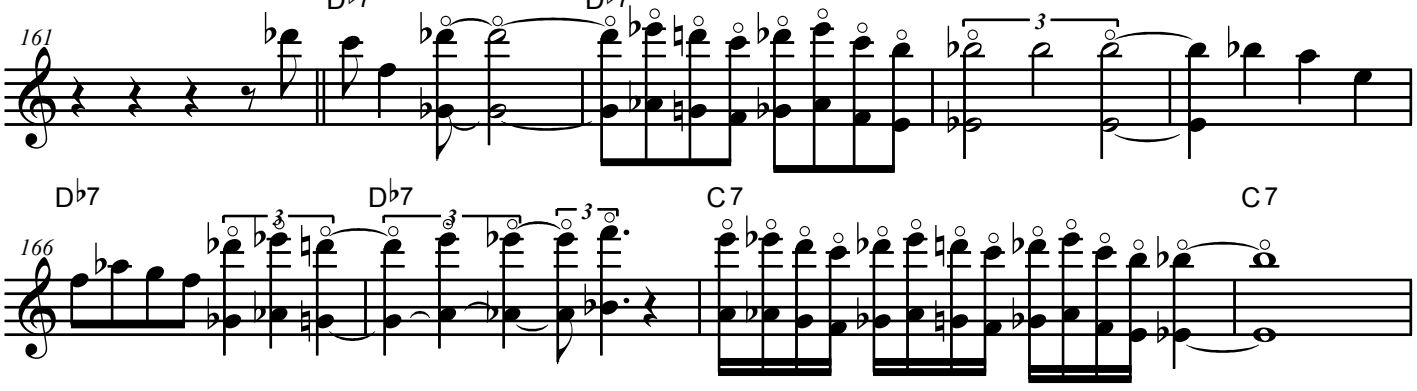
Chromatic Exercise. 3rd partial only used. Continue pattern.

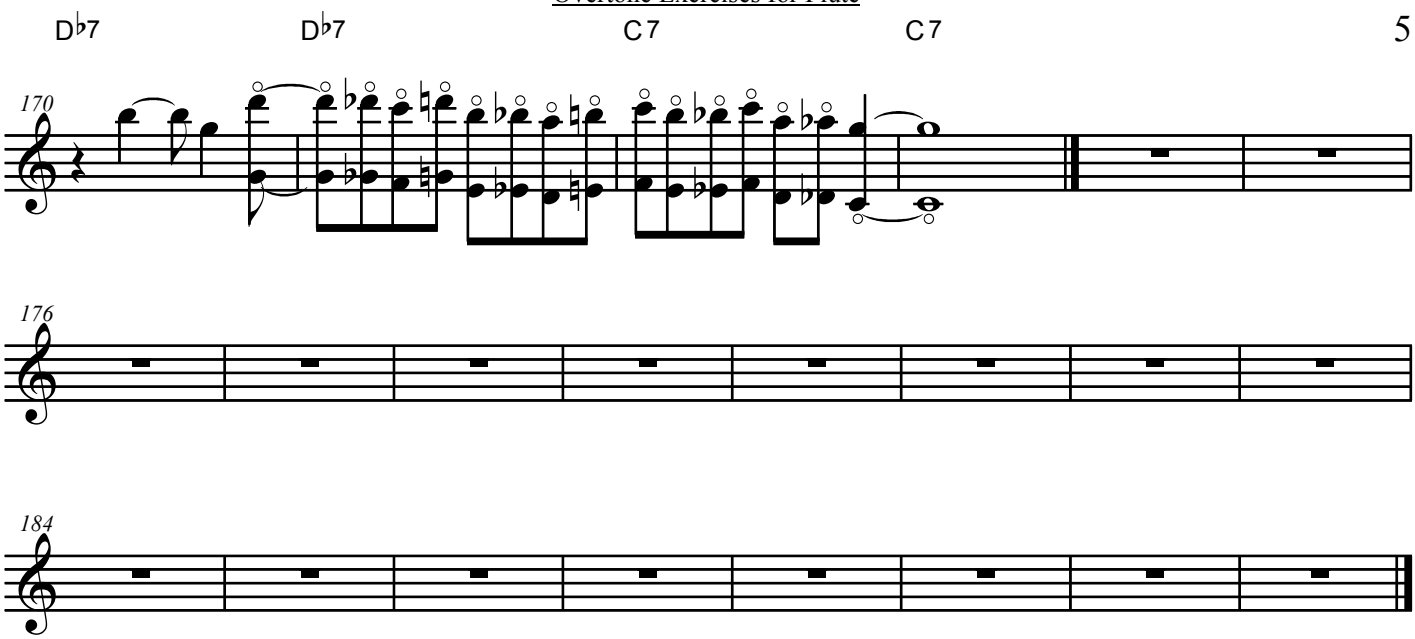


Bugle Call. 3rd, 4th & 5th partials used. Transpose to C, Db, D and Eb.



Jazz Applications





Additional Sources:
1. Wye, Trevor. *Practice Book for the Flute; Book 4: Intonation & Vibrato.* London: Novello & Company. 1983.
2. *supra: Book I Tone.*
3. Dick, Robert. *Tone Development Through Extended Techniques.* New York: Multiple Breath Music Company. 1986.