

Overtone Exercises for Flute

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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.

Flute

1:1

8

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. Partial 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 higher than the first and with double the number of cycles per second.

15

2:1 - octave

20

25

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.

32

3:1 "5th" 1 2 3 2 1

35

38

Musical staff 41-44. Treble clef, 4/4 time signature. Measures 41-44. Notes: 41: G4, A4, B4, C5; 42: D5, E5, F5, G5; 43: A5, B5, C6, D6; 44: E6, F6, G6, A6. Fingerings: 41: 1, 2, 3, 4; 42: 1, 2, 3, 4; 43: 1, 2, 3, 4; 44: 1, 2, 3, 4. Dynamics: p, mp, mf, f.

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

Musical staff 44-45. Treble clef, 4/4 time signature. Measures 44-45. Notes: 44: G4, A4, B4, C5; 45: D5, E5, F5, G5. Fingerings: 44: 1, 2, 3, 4; 45: 3, 2, 1. Dynamics: p, mp, mf, f.

4:1 "octave"

Musical staff 46-47. Treble clef, 4/4 time signature. Measures 46-47. Notes: 46: G4, A4, B4, C5; 47: D5, E5, F5, G5. Fingerings: 46: 1, 2, 3, 4; 47: 1, 2, 3, 4. Dynamics: p, mp, mf, f.

Musical staff 48-49. Treble clef, 4/4 time signature. Measures 48-49. Notes: 48: G4, A4, B4, C5; 49: D5, E5, F5, G5. Fingerings: 48: 1, 2, 3, 4; 49: 1, 2, 3, 4. Dynamics: p, mp, mf, f.

Musical staff 50-51. Treble clef, 4/4 time signature. Measures 50-51. Notes: 50: G4, A4, B4, C5; 51: D5, E5, F5, G5. Fingerings: 50: 1, 2, 3, 4; 51: 1, 2, 3, 4. Dynamics: p, mp, mf, f.

Musical staff 52-56. Treble clef, 4/4 time signature. Measures 52-56. Notes: 52: G4, A4, B4, C5; 53: D5, E5, F5, G5; 54: G5, A5, B5, C6; 55: D6, E6, F6, G6; 56: A6, B6, C7, D7. Fingerings: 52: 1, 2, 3, 4; 53: 1, 2, 3, 4; 54: 1, 2, 3, 4; 55: 1, 2, 3, 4; 56: 1, 2, 3, 4. Dynamics: p, mp, mf, f.

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

Musical staff 57-58. Treble clef, 4/4 time signature. Measures 57-58. Notes: 57: G4, A4, B4, C5; 58: D5, E5, F5, G5. Fingerings: 57: 1, 2, 3, 4; 58: 1, 2, 3, 4. Dynamics: p, mp, mf, f.

5:1 "3rd"

Musical staff 58-59. Treble clef, 4/4 time signature. Measures 58-59. Notes: 58: G4, A4, B4, C5; 59: D5, E5, F5, G5. Fingerings: 58: 1, 2, 3, 4; 59: 1, 2, 3, 4. Dynamics: p, mp, mf, f.

Musical staff 59-60. Treble clef, 4/4 time signature. Measures 59-60. Notes: 59: G4, A4, B4, C5; 60: D5, E5, F5, G5. Fingerings: 59: 1, 2, 3, 4; 60: 1, 2, 3, 4. Dynamics: p, mp, mf, f.

60

61

Pitch Matching using the 3rd partial

Exercises

65

72

80

88

96

104

Triads. Transpose to other keys.

112

G: I IV I F: I

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

119

Perfect Fifths. 2nd and 3rd partials used.

124

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

129

Bb: V I V I V I

135

V I

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

142

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

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

149

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

155

Db7 C7 C7

Jazz Applications

161

Db7 Db7 C7

166

Db7 Db7 C7 C7

Overtone Exercises for Flute

D \flat 7

D \flat 7

C7

C7

5

170

176

184

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.