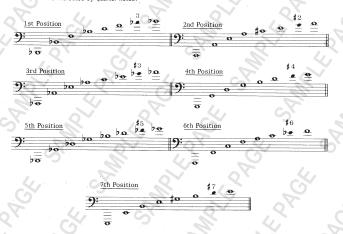
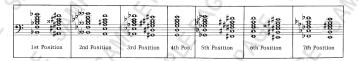
Overtone Series Chart

Here is a table showing every note that may be produced in each position on the trombone. All of the tones possible in any one position are known as harmonics, overtones or sometimes as the "Bugle Call" series since each of the seven positions may be regarded as a separate bugle. When we combine the tones of the seven positions or bugles we may construct scales and play melodies. In other words, the trombone has become a true musical histrument capable of joining the other instruments in the orchestra, band or brass ensemble. The seventh overtone or "partial" is out of tune, or flat, so it must not be played in first position. In the other six positions it must be sharpened or slightly raised in pitch by drawing in the slide, shortening it a small distance, using the ear as judge. These controversial seventh harmonics are indicated by quarter notes:



Condensed Overtone Chart

Pedal (fundamental) tones and seventh partials have been omitted for clarity. At the same time, the overtones are given enharmonically — in flats and sharps. Positions for all notes on the instrument may be determined from this table.







New tone, low C, complete B_{ρ}^{\downarrow} scale, studies using 1, 2, 3, 4, and 6 positions, 3/4 time, Alternate Positions. Duet.





"Warm up" studies and introduction of complete lesson plan including scale studies, chromatics, combination of three types of slurs, new notes and rhythms, études, songs, a solo, duet and trio.

At this point attention must be called to the importance of a proper warm up. The lips will have developed sufficiently so that a tone may be sustained without quavering or "breaking off," The student must practice playing long tones striving for the purest sound possible. Take a full deep breath, begin the tone softly in the middle register, make a crescendo by increasing the flow of air and then a decrescendo holding the tone until it dies away. "Long tones" were first introduced in Lesson 10.

