

# EUGENE ROUSSEAU SAXOPHONE HIGH TONES

*A Systematic Approach to the Extension of the Range of  
All the Saxophones: Soprano, Alto, Tenor and Baritone*

SECOND EDITION

Étoile Music

*A Division of*  
LAUREN KEISER MUSIC PUBLISHING

# TABLE OF CONTENTS

|   |        |
|---|--------|
| PREFACE TO THE FIRST EDITION .....            | iv     |
| PREFACE TO THE SECOND EDITION.....            | iv     |
| FOREWORD .....                                | v      |
| FINGERING CHART FOR THE NORMAL RANGE .....    | vi     |
| <br>GETTING STARTED .....                     | <br>1  |
| The Embouchure .....                          | 1      |
| The Harmonic Series .....                     | 1      |
| Closed Tube Exercises .....                   | 2      |
| Acoustics and Venting .....                   | 7      |
| Vent Key Exercises .....                      | 12     |
| Overblowing Sixths .....                      | 14     |
| Venting with RSK4 .....                       | 15     |
| The Modes of Overtones .....                  | 22     |
| Bridging the Registers .....                  | 26     |
| Combining Modes for Practical Solutions ..... | 31     |
| Beyond the Sixths .....                       | 34     |
| <br>FINGERING CHART FOR THE HIGH TONES .....  | <br>37 |
| Soprano .....                                 | 37     |
| Alto .....                                    | 39     |
| Tenor .....                                   | 41     |
| Baritone .....                                | 43     |
| <br>HIGH TONE EXERCISES .....                 | <br>47 |
| Chromatic Patterns .....                      | 47     |
| Major Scales: One Octave .....                | 51     |
| Major Scales: Extended Range .....            | 52     |
| Major Arpeggios .....                         | 56     |
| Minor Scales, Harmonic: One Octave .....      | 57     |
| Minor Scales, Harmonic: Extended Range .....  | 58     |
| Minor Arpeggios .....                         | 63     |
| Minor Scales, Melodic: One Octave .....       | 64     |
| Minor Scales, Melodic: Extended Range .....   | 65     |
| Whole-tone Scales .....                       | 69     |
| Augmented Arpeggios .....                     | 70     |
| Diminished (Octatonic) Scales .....           | 71     |
| Diminished Arpeggios .....                    | 73     |
| Patterns in Thirds .....                      | 75     |
| Pentatonic Scales .....                       | 76     |
| <br>ARTICULATING THE HIGH TONES .....         | <br>79 |

# PREFACE TO THE FIRST EDITION

The possibilities for differences in the kinds of expression utilized in playing the saxophone are perhaps as varied as the range of capabilities exhibited by the instrument's countless performers. That the saxophone, this youthful member of the wind family, is already well established as an instrument of enormous potential goes almost without saying. The list of esteemed saxophonists throughout the world, encompassing all manner of musical styles and tastes, is immense, and growing steadily. Musical literature for the instrument includes original and transcribed works from virtually every era of musical history, with the contemporary composers—happily, to an increasing degree—continually discovering its abundant resources.

Among the many facets of the saxophone's evolution is the one to which the present book addresses itself, namely harmonics or overtones—those high tones above the normal range. A keen and widespread interest has for many years been exhibited by players, teachers, and composers in the extension of the saxophone's range upward, beyond the normal one. Indeed, the author himself shares in this interest, which has been the mainspring for the pages that follow.

Eugene Rousseau  
April, 1978

# PREFACE TO THE SECOND EDITION

Since its first appearance more than two decades ago, *Saxophone High Tones* has become a reference work for many saxophonists. Beyond that, however, it has continued to be a subject to which the author has given much time and reflection in encountering many students of the instrument, not the least of whom is the author himself. The teaching-learning process is ongoing and, as Marcel Mule often told his students, "*On n'arrive jamais.*" (One never arrives.)

As might be expected, this second edition includes many more fingerings. More important, however, is the classification of fingerings, their derivations, characteristics, and implementation. The expression, "If you can play one saxophone you can play them all" was some years ago accepted as common wisdom. Increasingly, teachers and players are learning that this is simply not true. Therefore, although the alto is played and studied more than the other members of the saxophone family, attention is given in this volume to the differences among the soprano, tenor, and baritone.

The ability to exhibit fluency in playing above the saxophone's normal range is no longer a frill, nor is it an option; it is a necessity. The journey of learning is a continuum, without, as Maître Mule has said, an arrival point. It is the sincere hope of the author that these pages will help in making the high tones journey an illuminating one.

Eugene Rousseau  
September, 2000  
Minneapolis

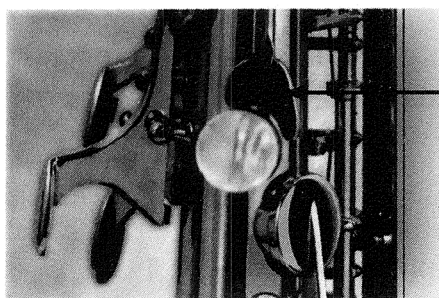
# FOREWORD

Since the publication of its first edition in 1978, I have often referred to Eugene Rousseau's valuable work, *Saxophone High Tones*. It is an indispensable pedagogical tool for students at the Paris Conservatory. I find in *Saxophone High Tones* a successful synthesis of the study of natural harmonics (overblowing), and the study of special fingerings, which allows the player to adapt to all sorts of playing situations. Moreover, the series of range exercises offers a practical means of putting these newly acquired skills into practice.

With the results of still more research on the acoustical aspects of the extended register, as well as numerous additional proposed fingerings, this second edition gives me everything I could wish for. I extend my warmest thanks to Eugene Rousseau for this brilliant contribution to the teaching of the saxophone.

Claude Delangle  
Professor of Saxophone  
Paris Conservatory

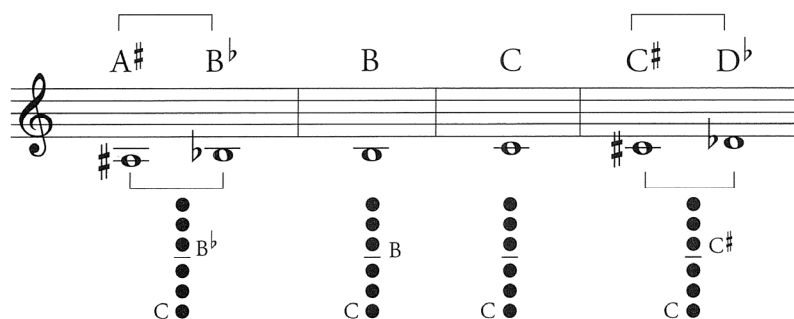
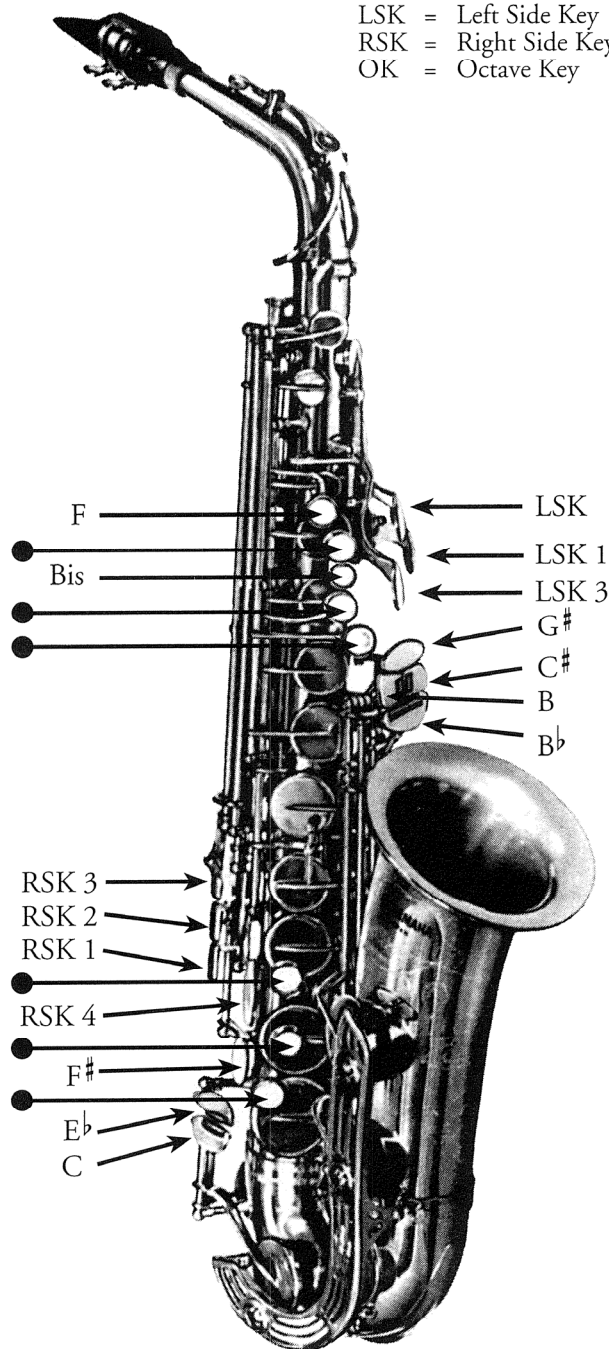
# FINGERING CHART FOR THE NORMAL RANGE



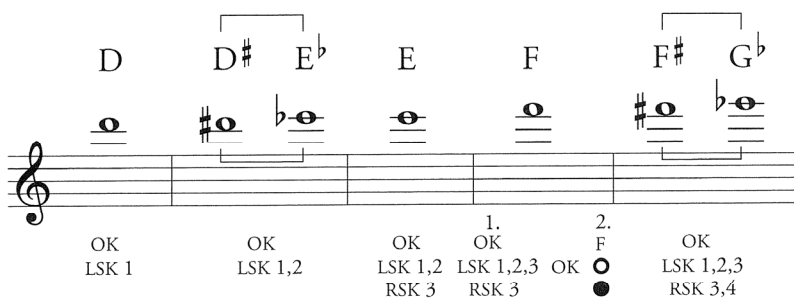
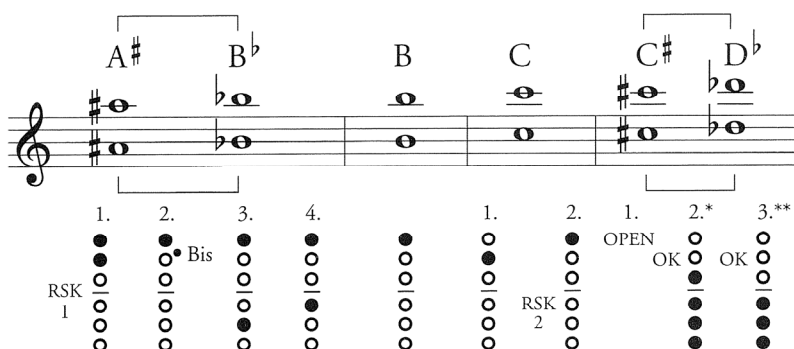
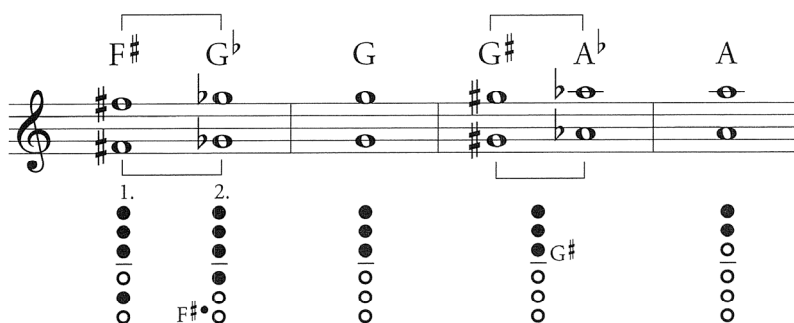
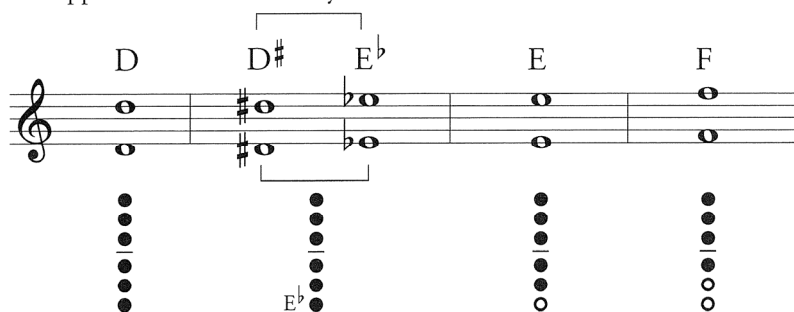
OK

Left Thumb

LSK = Left Side Key  
RSK = Right Side Key  
OK = Octave Key



Fingerings shown are for lower notes.  
For upper notes add octave key.



\* Only for lower octave  
\*\* Only for upper octave

# GETTING STARTED

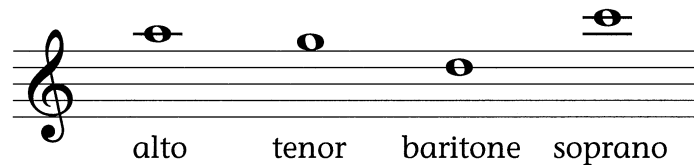
## The Embouchure

The requisite for accomplishing harmonics or overtones on the saxophone is a good tone. In turn, the accomplishment of a good tone on the saxophone, as on all wind instruments, depends upon a proper embouchure.

While the scope of this book does not include those elements of playing normally associated with beginners, it is nonetheless essential that one have a thorough understanding of the fundamentals of the saxophone embouchure before attempting to achieve any high tones above the normal range of the instrument. These fundamentals are as follows:

1. Curl lower lip slightly over teeth.
2. Keep chin in a natural position.
3. Form an “oo” shape (as in saying coo) with the mouth and lips.
4. Form a circular shape with the mouth (the lower lip should appear somewhat bunched).
5. Place mouthpiece alone in the mouth with top teeth resting solidly on the top of the mouthpiece.
6. The round “oo” shape should now give solid support all around the mouthpiece.

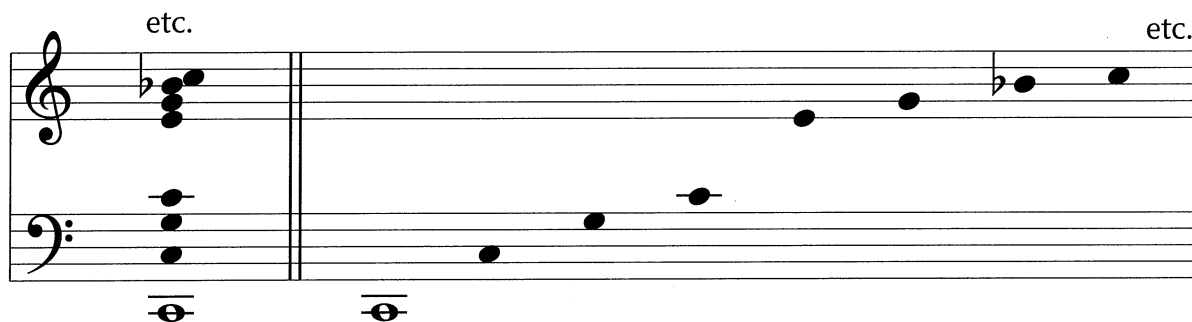
The Test to determine the proper amount of mouthpiece needed in the mouth as well as the strength of the roundness and bite is to blow on the mouthpiece alone to attain the *concert pitch* shown below. Always play this test at *fortissimo* level.



If the pitch produced on the mouthpiece alone is higher than indicated in the staff above, direct the air stream down, remembering always to keep the embouchure solid. If the pitch on the mouthpiece alone is too low, direct the air stream up. In either case never loosen the embouchure, which should remain solid at all times, while the air does its job properly.

## The Harmonic Series

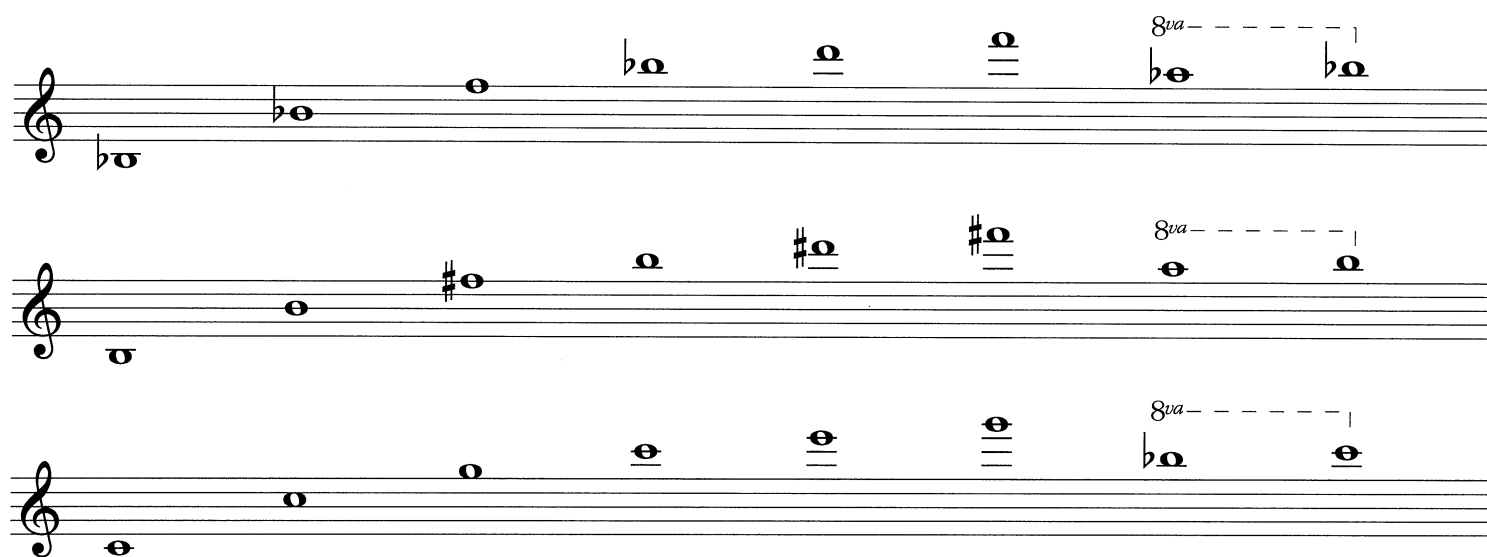
Each tone produced on a wind instrument is comprised of several tones, a phenomenon known as the harmonic series. Although not heard as the principal tone, some harmonics are present in varying degrees of strength when the principal tone is sounded. The main tone, or fundamental tone, is the strongest of these several tones and is the pitch that is heard. Each of the other tones is called a harmonic, or overtone—terms quite familiar to any saxophonist interested in high tones above the normal range.



By changing the embouchure and air pressure it is possible to bypass the fundamental, thereby causing one of the harmonics to be heard as the main pitch. For this purpose the saxophone embouchure needs to be stronger than normal (a stronger circle), with *slightly* more reed exposed within the mouth. This should be realized by a very slight forward movement of the jaw rather than taking more mouthpiece into the mouth.

The air pressure must be increased as the higher harmonics are attempted—the effect being a smaller quantity of air put to use. This technique will equate with a higher pitch on the mouthpiece alone, following the testing procedure described on page 7.

The following series of tones, the harmonic series, may be practiced on all the saxophones in the manner indicated. It will be evident that (1) the harmonics work less well as one ascends to the higher fundamentals—B, C, C $\sharp$ , etc.—and (2) the closed tube harmonics are more difficult on the soprano, owing to its short tube.



## Closed Tube Exercises



The image displays ten staves of musical notation, each beginning with a treble clef. The notation includes a variety of musical symbols: eighth notes, quarter notes, half notes, and whole notes, often beamed together. There are numerous accidentals, including sharps (#) and flats (b), placed before notes and below the staff. Some staves feature diamond-shaped symbols (possibly ornaments or specific notation) below the notes. The staves are arranged vertically, and each ends with a double bar line and repeat dots. The overall style is that of a formal musical score.



The image displays eight staves of musical notation, likely for guitar, arranged vertically. Each staff begins with a treble clef. The notation includes various musical symbols such as eighth notes, quarter notes, and half notes, often grouped with beams. Fingering numbers (1-4) are placed below the notes. Some staves include sharp (#) and flat (b) accidentals. The notation is organized into measures by vertical bar lines, with repeat signs (double dots) at the end of each staff. The staves show a progression of musical exercises, including scales and arpeggios, with some staves featuring more complex patterns like triplets or specific interval training.