

WORKING ZONE

SCALE AND INTERVAL
EXERCISES FOR TUBA
(AND OTHER BASS CLEF
INSTRUMENTS)

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FOREWORD BY PETRI KESKITALO

WORKING ZONE

CONTENTS

<i>FOREWORD BY PETRI KESKITALO</i>	P. 5
<i>INTRODUCTION BY LAURI & NICOLAS</i>	P. 6
<i>HOW TO USE THIS BOOK</i>	P. 6
CHAPTER 1 - DAILY PRACTICE	P. 7
Focus on your sound, intonation and dynamic control	
CHAPTER 2 - SCALES	P. 12
Stay acute during scale practicing with the system “One scale a week”	
CHAPTER 3 - INTERVALS	P. 69
Get familiar with different intervals	
CHAPTER 4 - “FLOW INTERVALS”	P. 97
Expand your ambitus and minimize embouchure movements	
CHAPTER 5 - EXTRAS	P. 107
Breathing exercises, buzzing, lip trills, etc.	
CHAPTER 6 - FINGERINGS	P. 118
Full fingering charts for all different tubas	
REFERENCES	P. 136
List of recordings, books, basic practice and etude material	
“TOOLBOX” BY PETRI	P. 138
Common thoughts on playing and practicing	

If you have questions or comments please feel free to contact us:

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For online material; scales presented in a different way, fully developed intervals or extra exercises that couldn't fit in the book, scan the QR Code. Wherever you see it, means some related material is available online!

This is an evolving digital content, so check the updates regularly.



<http://workingzone.fennica.digital/>

FOREWORD

When I started playing tuba as a youngster, I was unmotivated and lacked interest in scale practicing.

It took quite a long time, before I started to understand the meaning and the importance of scales in music. The following list is the sum of things I learned during the years...

FIVE REASONS TO PRACTICE SCALES:

1. For a musician, it is essential to have a good sense of internal time. One of the best ways to improve this is to practice scales. With and without a metronome.
2. Most music is made of scales, they are like building blocks. Scale practicing will help you not only to understand scales, but also other things like chords, key signatures, modulations and how everything is connected..
3. It will help you to improve intonation, articulation, fingering technique and equalize tone quality, throughout the whole register.
4. Your sight-reading skills will get better.
5. You will get material for improvisation. (This list could probably go on forever, but at this very moment I feel that this is enough...)

In addition to scales, this book also covers two other important subjects: intervals and chords. I want to emphasize two things about practicing the material in this book.

Firstly, consider everything as music. Always prefer playing music instead of playing just notes. Secondly, be patient, start slowly and gradually go for faster tempo.

I am grateful for having this opportunity to write this foreword and "Toolbox" for this book. My former students Lauri and Nicolas have done a great job and "Working Zone" is a valuable addition to existing books on scales, intervals, chords and tuba playing.

Finally, scale, interval and chord practicing does not have to be your most favorite thing to do, but the importance of it should not be underestimated. And you never know, maybe after a while when you get more into it, you may accidentally even start to like it! Anyway, that is what happened to me...



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Teacher of tuba, Sibelius Academy
Helsinki, 24.11.2018

INTRODUCTION

“Working Zone” is the area where you make personal progress. In “Working Zone” the things you practice are not too difficult or too easy, but they are challenging enough. Regular, dedicated and focused practicing in the “Working Zone” will improve your playing skills.

The idea for this book has evolved over time. We got inspiration from our teacher Petri Keskitalo, from masterclasses and from brass and music literature. We wanted to gather, combine and clearly explain, what in our opinion are the most important things to practice. We both had the same idea, but not the energy to make it alone. So we are grateful for having achieved this book together!

Find your “Working Zone” daily. Work there slowly and systematically. Be patient. Focus on practicing the things you really need to. Try always to be aware why you are doing what you are doing.

Finally, we are very grateful to Petri Keskitalo for helping us to finalize and correct a certain amount of things. Also a special thanks to Miika Jämsä, Teemu Salmi, Annika Granlund, Jenna Karjalainen, Jari Eskola and people in Fennica Gehrman, Paul Aksman, Niklas Larsson, Liisa Ohtonen and our wives Marjo and Saara for the support.

Lauri Nicolas

HOW TO USE THIS BOOK?

The written music is basic material. It is meant to be practiced as written and with variations. These variations can be found on the separate page titled “Patterns”.

Keep the “Patterns” page next to the book to remind you of playing with various:

- articulations
- dynamics
- rhythms
- tonguings (single, double, triple)
- octaves
- tone colors

Examples on how to use the “Patterns” page can be found on pages 14-15 (scales), on pages 70-71 (intervals) and on pages 112-113 (Patterns, more directions and examples). Examples of patterns are just a rough idea of what you can do. You can and should also create your own patterns.

In order to be versatile and to feel comfortable playing high, low, pp, ff, and master various articulations, it is very important to keep challenging yourself during your daily practice. Practice the same thing as long as you can stay focused. The day you switch to “auto-pilot” is the time to do something differently. Everything in this book is also meant to be played on your whole range. Transpose it one, two or three octaves lower and higher!

CHAPTER 2

SCALES

The seemingly large amount of scales (one a week) is there to keep basic practice diverse. The scales were selected at random. You can learn them by heart if you like, but you don't have to. Use the "Patterns" page to make variations and practice basic rhythms or tonguing exercises just as shown on pages 14 & 15.

Sticking to "One scale a week" will force you to stay acute during scale practice. Enjoy different harmonics, challenge your solfeggio, sight-reading and fingering abilities, or practice the one you need to get familiar with. Practice them up and down to your "Working Zone"!

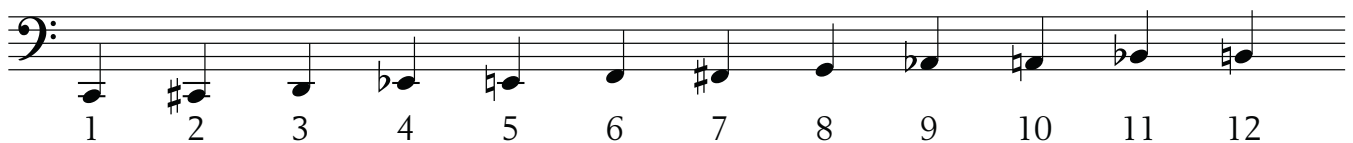
For more scales:

Herman Rechberger -

"Scales and modes around the world"

- Fennica Gehrman

or ianring.com/musictheory/scales



	1	2	3	4	5	6	7	8	9	10	11	12
English	C	C#	D	E♭	E	F	F#	G	A♭	A	B♭	B
German	C	Cis	D	Es	E	F	Fis	G	As	A	B	H
Latin	Do	Do#	Re	Mi♭	MI	Fa	Fa#	Sol	La♭	La	Si♭	Si

English: # is "sharp", ♭ is "flat"

German: # is "is", ♭ is "s"

Latin: # is "dièse", ♭ is "bemole"

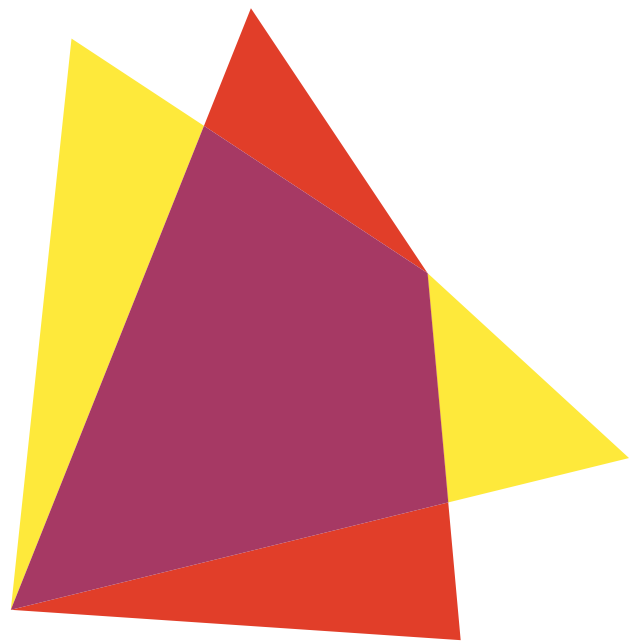
Latin is for Italian, French, Spanish etc. pronunciation of # and ♭ changes slightly.

AUGMENTED INVERSE / SIX TONES SYMMETRICAL

A musical score consisting of 15 staves, each representing a different pitch class. The staves are labeled on the left as C, G, D, A, E, B, C \flat , F \sharp , G \flat , C \sharp , D \flat , A \flat , E \flat , B \flat , and F. Each staff contains a sequence of 12 notes, one for each pitch class, arranged in a specific order. The notes are written in a bass clef. Some notes are marked with an 'x' (e.g., B \flat in the B staff, C \sharp in the C \sharp staff, and D \flat in the D \flat staff). The notes are: C: C, D \flat , E, F, G \sharp , A, B, C, D \sharp , E, F \flat , G; G: G, A \flat , B, C, D \sharp , E, F, G, A \sharp , B, C \flat , D; D: D, E \flat , F \sharp , G, A \sharp , B, C, D, E \sharp , F, G \flat , A; A: A, B \flat , C \sharp , D, E \sharp , F, G, A, B \sharp , C, D \flat , E; E: E, F \sharp , G \sharp , A, B \sharp , C, D, E, F \sharp , G, A \flat , B; B: B, C, D \sharp , E, F \times , G, A \sharp , B, C \times , D, E \sharp , F; C \flat : C \flat , D \flat , E \flat , F \flat , G, A \flat , B \flat , C \flat , D \flat , E \flat , F \flat , G \flat ; F \sharp : F \sharp , G, A \sharp , B, C \times , D, E \sharp , F \sharp , G \times , A, B, C \sharp ; G \flat : G \flat , A \flat , B \flat , C \flat , D, E \flat , F \flat , G \flat , A \flat , B \flat , C \flat , D \flat ; C \sharp : C \sharp , D, E \sharp , F \sharp , G \times , A, B \sharp , C \sharp , D \times , E, F \sharp , G \sharp ; D \flat : D \flat , E \flat , F \flat , G, A \flat , B \flat , C \flat , D \flat , E \flat , F \flat , G \flat , A \flat ; A \flat : A \flat , B \flat , C, D, E, F \flat , G, A \flat , B \flat , C, D \flat , E \flat ; E \flat : E \flat , F \flat , G, A \flat , B, C, D \flat , E \flat , F \flat , G, A \flat , B \flat ; B \flat : B \flat , C \flat , D, E \flat , F \flat , G, A \flat , B \flat , C \flat , D, E \flat , F \flat ; F: F, G, A, B, C, D, E, F, G, A, B, C.

LIST OF SCALES

- 14-15 Explanations for scale practice
- 16 Augmented Inverse /
Six Tone Symmetrical
- 17 Asian / Hungarian Minor Inverse
- 18 Balinese / Pelog
- 19 Bebop Dominant
- 20 Blues
- 21 Chromatic
- 22 Diminished Blues $\flat 9$
- 23 Dromos Houseini
- 24 Eight Tone Spanish /
Spanish Phrygian
- 25 Enigmatic
- 26 Half-Whole Step / Octatonic /
Dominant Diminished
- 27 Harmonic Major / Ethiopian
- 28 Harmonic Minor
- 29 2. mode of Harmonic Minor /
Locrian Natural
- 30 3. mode of Harmonic Minor /
Ionian Augmented
- 31 4. mode of Harmonic Minor /
Altered Dorian / Romanian Minor
- 32 5. mode of Harmonic Minor /
Phrygian Dominant / Spanish Romani
- 33 6. mode of Harmonic Minor /
Aeolian Harmonic
- 34 7. mode of Harmonic Minor /
Ultralocrian / Superlocrian Diminished
- 35 Kokin-joshi / Hexatonic In-sen
- 36 Leading Whole Tone
- 37 Lydian Minor
- 38 Major / 1st mode of Major / Ionian
- 39 2nd mode of Major / Dorian
- 40 3rd mode of Major / Phrygian
- 41 4th mode of Major / Lydian
- 42 5th mode of Major / Mixolydian
- 43 6th mode of Major / Aeolian /
Natural Minor
- 44 7th mode of Major / Locrian
- 45 Major Augmented
- 46 Major Locrian
- 47 Major Pentatonic
- 48 1st mode of Jazz Minor /
Melodic Minor
- 49 2. mode of Jazz Minor /
Mela Natakapiya
- 50 3. mode of Jazz Minor /
Lydian Augmented
- 51 4. mode of Jazz Minor / Overtone
scale / Lydian Dominant / Acoustic
- 52 5. mode of Jazz Minor / Major-Minor /
Hindu
- 53 6. mode of Jazz Minor /
Minor Locrian / Half Diminished
- 54 7. mode of Jazz Minor / Altered /
Super Locrian
- 55 Minor Pentatonic
- 56 Minor Romani
- 57 Neapolitan Major
- 58 Nine Tone
- 59 Petrushka
- 60 Prokofiev
- 61 Prometheus (Scriabin)
- 62 Prometheus Neapolitan
- 63 Shostakovich
- 64 Tritone / Raga Indupriya /
Messian Truncated Mode 2
- 65 Two-Semitone Tritone /
Messian Mode 5
- 66 Whole-Half Step / Diminished
- 67 Whole Tone



MAJOR 2ND / MAJOR 9TH

1

Musical notation for exercise 1, first staff. Bass clef, 6/8 time signature. The staff contains six measures of music, each starting with a whole note followed by a half note. The notes are: G2, Bb2; G2, Bb2; G2, A2; Gb2, Bb2; G2, G2; G2, Bb2.

Musical notation for exercise 1, second staff. Bass clef, 6/8 time signature. The staff contains six measures of music, each starting with a whole note followed by a half note. The notes are: G#2, G2; G2, G2; Gb2, Bb2; G2, G2; Gb2, Bb2; G2, G2.

2

Musical notation for exercise 2, first staff. Bass clef, 6/8 time signature. The staff contains six measures of music, each starting with a whole note followed by a half note. The notes are: G2, G2; G2, A#2; Gb2, A2; G2, G2; Gb2, Bb2; G2, G2.

Musical notation for exercise 2, second staff. Bass clef, 6/8 time signature. The staff contains six measures of music, each starting with a whole note followed by a half note. The notes are: G#2, G#2; G2, G2; G#2, A2; Gb2, A2; G2, G2; Gb2, Bb2.

3

Musical notation for exercise 3, first staff. Bass clef, 6/8 time signature. The staff contains six measures of music, each starting with a whole note followed by a half note. The notes are: G2, G2; Gb2, Bb2; G2, G2; Gb2, Bb2; G2, G2; Gb2, Bb2.

Musical notation for exercise 3, second staff. Bass clef, 6/8 time signature. The staff contains six measures of music, each starting with a whole note followed by a half note. The notes are: G#2, G2; G2, G2; Gb2, Bb2; G2, G2; Gb2, Bb2; G2, G2.

4

Musical notation for exercise 4, first staff. Bass clef, 6/8 time signature. The staff contains six measures of music, each starting with a whole note followed by a half note. The notes are: G2, G2; G2, A#2; Gb2, A2; G2, G2; Gb2, Bb2; G2, G2.

Musical notation for exercise 4, second staff. Bass clef, 6/8 time signature. The staff contains six measures of music, each starting with a whole note followed by a half note. The notes are: G#2, G#2; G2, G2; G#2, A2; Gb2, A2; G2, G2; Gb2, Bb2.

5

Musical notation for exercise 5, first staff. Bass clef, 6/8 time signature. The staff contains six measures of music, each starting with a whole note followed by a half note. The notes are: G2, G2; Gb2, Bb2; G2, G2; G#2, A2; Gb2, Bb2; G2, G2. The word "etc." is written above the staff.

6

Musical notation for exercise 6, first staff. Bass clef, 6/8 time signature. The staff contains six measures of music, each starting with a whole note followed by a half note. The notes are: G2, G2; G2, G2; G#2, G#2; G2, G2; Gb2, Bb2; G2, G2. The word "etc." is written above the staff.

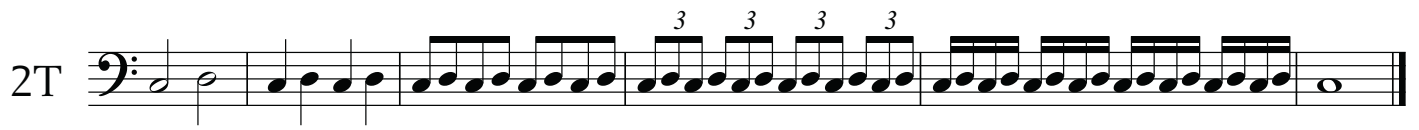
7

Musical notation for exercise 7, first staff. Bass clef, 6/8 time signature. The staff contains six measures of music, each starting with a whole note followed by a half note. The notes are: G2, G2; G2, G2; G#2, G#2; G2, G2; G#2, G#2; G2, G2. A left-pointing arrow is above the final note.

8

Musical notation for exercise 8, first staff. Bass clef, 6/8 time signature. The staff contains six measures of music, each starting with a whole note followed by a half note. The notes are: G2, G2; G#2, G#2; G2, G2; G2, G2; G#2, G#2; G2, G2. A left-pointing arrow is above the final note.

1T 

2T 

3T 



4T 



5T 



6T 



Fingering Chart for 5 Valves F Tuba (short)

	0	2	1	12 3	23	4 13 125	24 123 235	45 124 135	245 234 1235	1245 345 134	2345 1234	12345
P. 16												
P. 15 -12 cents												
P. 14 -31 cents												
P. 13 +41 cents												
P. 12 +2 cents												
P. 11 -49 cents												
P. 10 -14 cents												
P. 9 +4 cents												
P. 8												
P. 7 -31 cents												
P. 6 +2 cents												
P. 5 -14 cents												
P. 4.												
P. 3 +2 cents												
P. 2												
P. 1												

PATTERNS; MORE DIRECTIONS AND EXAMPLES

As explained in pages 6, 14-15 and 70-71; the pattern page is a collection of variations to practice on basic material. These variations should be applied and used according to your current need.

The 1st page of the detachable Pattern page is a resume of playing parameters to be used combined or single: rhythms, articulations, dynamics, sound colors.

Page 2 contains material / ideas to use in daily practice and left pages form intervals.

Page 3 is a small collection of patterns to apply on scales.

Page 4 contains variations for the right interval pages.

Learn to combine rhythms / articulations / dynamics / sound colors according to what you need. You do not have to combine all of them. You can focus on one articulation style and add more parameters when you start to master it.

It might be easier to do a combination of articulation / dynamic / soundcolor by imagining the music:

- Long forte pesante notes
Prokofiev: Romeo & Juliet - Dance of the Knights
- Forte "leggiero portato":
Brahms: Symphony 2 - Finale
- Piano Choral style:
Tchaikovsky: Sympony 6 - Finale
- Find your own examples

More examples of pattern combinations:

Page 8. Daily practice "crescend to forte from nothing"

Musical notation for Page 8, Daily practice "crescend to forte from nothing". The notation shows five measures of music in bass clef. Each measure starts with a fermata over a whole note, followed by a crescendo hairpin leading to a fortissimo (ff) dynamic. The notes are: G2, F2, E2, D2, C2. The pattern repeats with the same notes in the next five measures. The notation ends with "etc.".

Page 8. Daily practice "forte 3 beats, piano subito"

Musical notation for Page 8, Daily practice "forte 3 beats, piano subito". The notation shows five measures of music in bass clef. Each measure starts with a fermata over a whole note, followed by a forte (f) dynamic for the first three beats and a piano (p) dynamic for the last two beats. The notes are: G2, F2, E2, D2, C2. The pattern repeats with the same notes in the next five measures. The notation ends with "etc.".

Page 8. Daily practice "repeated separate soft articulations"

Musical notation for Page 8, Daily practice "repeated separate soft articulations". The notation shows five measures of music in bass clef. Each measure starts with a piano-piano (pp) dynamic and a fermata over a whole note, followed by a series of quarter notes with separate articulations. The notes are: G2, F2, E2, D2, C2. The pattern repeats with the same notes in the next five measures. The notation ends with "etc.".

Page 25. Enigmatic Scale "3 up, mp dynamic, staccat to and Walkyrie-rhythm"

Musical notation for Page 25, Enigmatic Scale "3 up, mp dynamic, staccat to and Walkyrie-rhythm". The notation shows a scale in bass clef starting with a mezzo-piano (mp) dynamic. The scale is: G2, A2, B2, C3, D3, E3, F3, G3, A3, B3, C4, D4, E4, F4, G4, A4, B4, C5. The notation ends with "etc.".

Page 58. Nine Tone scale "4x16th, *ff*, single tonguing articulation, Bruckner sound "

ff etc.

Page 18. Balinese scale "1 breath, slow, *p*, legato, soft bordogni style"

p etc.

Page 42. Mixolydian scale "4 down, triple tonguing, light and focus on clarity"

etc.

Page 80. Perfect 4th "cresc to the lower note, *p* to *ff*, with accent, big, dark & wide sound"

p < *ff* *p* < *ff* *p* < *ff* *p* < *ff* etc.

Page 84. Perfect 5th "from the bottom, 6 up, *ff* to *pp*, legato vocalizing style"

ff ————— *pp* *ff* ————— *pp* etc.

Page 76. Minor 3rd "Single tonguing, comfortable dynamic, focus on clarity"

etc.

Page 78. Major 3rd "double tonguing, focus on clarity"

etc.

etc.