All carillons of the 17th and 18th century are tuned in the meantone tuning (just tuned major thirds of 386 cents and fifths of 696 $\frac{1}{2}$ cents).

For carillons there are two tone scales in that time, one based on b (organ note) and the other on cis (cornet note). There are also transposing carillons, mainly on fis and gis. These notes are connected with each other by meantone fifths (b-fis-cis-gis).

This means that there is only one note which never changes its value, namely b-21 $\frac{1}{2}$ cents (249,8935 Hz). The consequence is that it is impossible to use the idea of a normal a. The same holds for organs in the mean tone tuning. It is only allowed to speak of the normal a in the equal tempered tuning which is in use since the 18th century. In this tuning all semitones have a value of 100 cents.

The average notes of ten Hemony-carillons based on measurements of these carillons.

с	b-21 ½	fis-25	cis-28 ½	gis-32
cis	bis-46	fisis-49 ½	cisis-53	gisis-56 ½
d	cis-28 ¹ / ₂	gis-32	dis-35 ½	ais-39
es	d-11	a-14 ½	e-18	b-21 ½
e	dis-35 ½	ais-39	eis-42 ½	bis-46
f	e-18	b-21 ½	fis-25	cis-28 ½
fis	eis-42 ½	bis-46	fisis-49 ½	cisis-53
g	fis-25	cis-28 ½	gis-32	dis-35 ½
gis	fisis-49 ½	cisis-53	gisis-56 ½	disis-60
a	gis-32	dis-35 ½	ais-39	eis-42 ½
bes	a-14 ½	e-18	b-21 ½	fis-25
b	ais-39	eis-42 ½	bis-46	fisis-49 ½

The first colom gives the relative notes, that means the notes of the key board.

The second colom gives the notes, in our notation, of Hemony-carillons based on b-21 $\frac{1}{2}$ cents. These note is connected on the keyboard as C.

The third colom on fis-25 cents; the fourth colom on cis-28 $\frac{1}{2}$ cents; the fifth colom on gis-32 cents.

The following notes can be found in these carillons: b-21 $\frac{1}{2}$ / bis-46 / cis-28 $\frac{1}{2}$ / cisis-53 or d-11 / dis-35 $\frac{1}{2}$ / disis-60 or e-18 / eis-42 $\frac{1}{2}$ / fis-25 / fisis-49 $\frac{1}{2}$ / gis-32 / gisis-56 $\frac{1}{2}$ or a-14 $\frac{1}{2}$ / ais-39

Dr. André Lehr National Carillon Museum NL-5721 WC Asten E-mail: alehr@iae.nl 26.9.1999