

Piker

solo piccolo

(or flute, or any appropriate wind instrument)

for margaret lancaster

Larry Polansky

Notes

Piker was written for Margaret Lancaster, for the Bonk Festival, March, 1998. It was composed between September, 1997, and January, 1998.

Practice tapes are available for all movements except *I Know You!*.

The order of pieces is determined by the performer, but *Daughter of Piker* should be last, *Piker* third, for example:

You're a Piker!
You're no Piker!
Piker
I Know You!
Daughter of Piker

or

You're no Piker!
I Know You!
Piker
You're a Piker!
Daughter of Piker

You're No Piker!, *Piker* and *Daughter of Piker* are based on the harmonic series and (*You're a Piker* and *Piker*) its rhythmic structure. *You're a Piker!*, *I Know You!* and *Daughter of Piker* are based on Shaker songs.

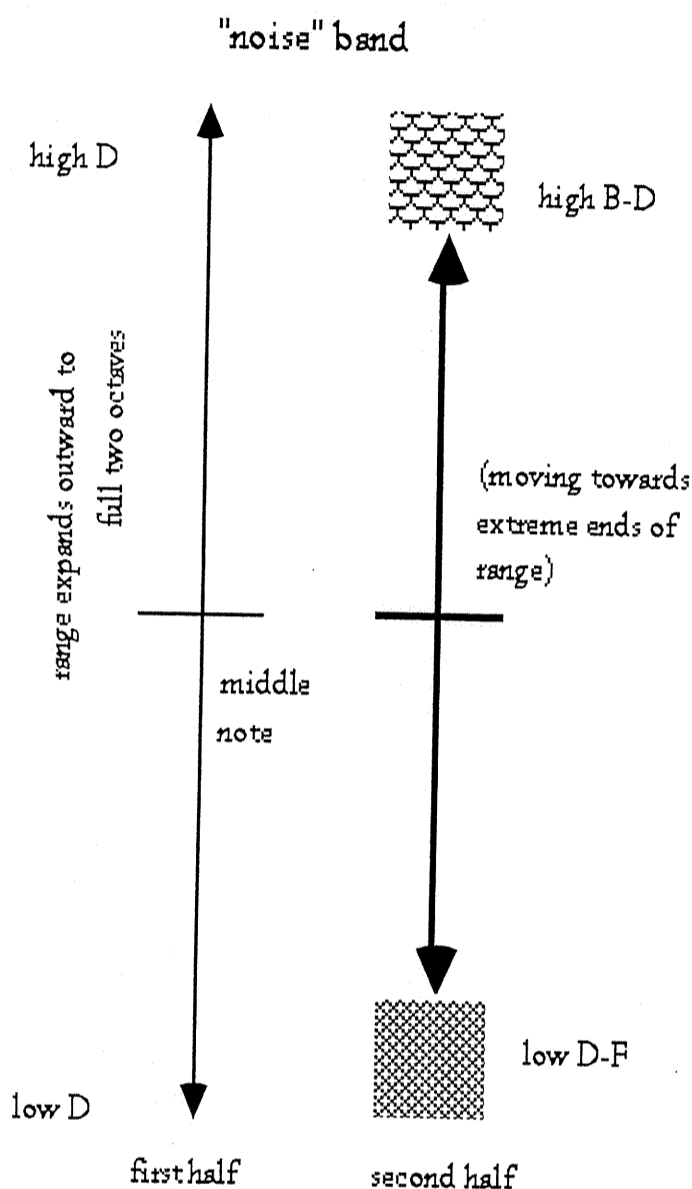
Although written for piccolo originally, the piece, or individual movements may be played by flute, or any wind instrument with the appropriate range. Transpositions of entire movements may be made for this reason (the absolute pitch of movements is not important).

You're No Piker!

The intonation is from the harmonic series on D, harmonics 4-17. A practice tape is available from the composer. The pulse should be between mm. 85-120.

You're a Piker!

Based on the Shaker tune, "Hop Up and Jump Up," an experiment in melodic streaming. At the beginning of the piece, all notes are equally loud. The actual beats of the Shaker tune (marked in the score by arrows) are gradually accented, more and more, as the piece progresses. All other notes decrease in volume to quite soft at the end.



You're a Piker!

noise band evolution

1/3/98

Polansky

5 repeats of the tune,
with the probability
of a non-melody note
being silenced increasing
slightly over time

(Thanks to Philip Corner for advice.)

Piker

Accidentals only affect pitches they immediately precede (or are on top of). Intonations for all pitches are close as possible to those of the harmonic series on E. A simple approximation of this would be to play the B \flat a quarter-tone flat, the C a quarter-tone sharp, the D's a sixth-tone flat, and the G#'s a little flat.

The piece is loud, but should start out a bit softer and build up in both density and volume.

Piker uses the pitches 4-17 (E through high F) of a harmonic series on E. Each "line" (on the first two pages) is one "measure," or more precisely, each line should be exactly the same duration. This duration is determined by how fast the performer can play the final pattern — as fast as possible. The tempo should be somewhere between 4-10 seconds per line.

Each pitch is part of a "grupetto" whose value is related to its harmonic number. Although not notated as a set of grupetti (for visual reasons), the "feel" of the

piece is a gradual buildup of a 17:16:15:14 ... 8:7:6:5:4 rhythmic pattern. For most of the piece, while the pattern remains incomplete, the "even rhythmic feel" of each pitch should be brought out. For example, the Bbs should always sound as part of an even 11 against the duration of the line, and likewise for all other pitches/grupetti. A chart showing the rhythmic alignment of the pitches in the harmonic series (4-17) is given on the following page.

Each measure adds some new pitches to the overall rhythmic pattern. When a pitch enters, it is accented heavily. These accents are crucial. New pitches should be *much louder* than the other notes.

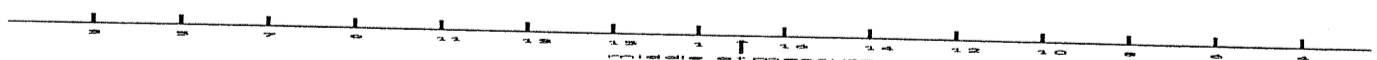
Rhythm and pitch entry

The grupetti relate to pitches (and harmonic series number) in the following way:

(low) E	4	Bb	11
(low) G#	5	(high) B	12
(low) B	6	C	13
(low) D	7	(high) D	14
(higher) E	8	D#	15
F#	9	(highest) E	16
(high) G#	10	F	17

The entry of the pitches into the pattern follows a few simple procedures. Pitches enter from the "midpoint" of the series outward starting with 11 (Bb), ending with 4 (E) and 17 (F)), and start from the middle of the measure or just before. That is, odd numbered grupetti begin on their "beat" preceding the midpoint of the measure. For example, the C (13) begins on the 7th beat of the 13-tuplet (and begins 6/13ths of the way through the measure, as marked in the score). Since no pitches occur on the first beat (that would be a chord), there are, not taking into account simultaneities (see below), $n-1$ beats for harmonic n .

Successive entries for each grupetto are made from the "outside in," starting at the end of the measure, and alternating back and forth until $n-1$ pitches are present (where n is the number of the grupetto). This is shown below in the pattern for 17 (F):



Measures are indicated by measure numbers (above the clef, as usual), by which harmonic is beginning in that measure (to the left of the staff), and by which harmonic has completed its accumulation in that measure (at the end of the measure, below the staff).

When a new pitch enters on a beat a pitch is already present, the new pitch takes over. In this way, the final pattern does not contain every pitch of every grupetto (there would be chords on all common multiples). The first beat is a rest for each pitch: the final patterns start on the second of the 17-tuplet (note that there are 16 beats in the pattern for 17 above).

The pitch/rhythmic structure of *Piker* is directly analogous to the placement of natural harmonics on an open string, except that higher composite numbers are not necessarily, because of the order of entry, replaced by lower factors (that is, on a string, only two fourth harmonics are playable).

Optionally, some other instrument might mark the downbeat of each line (to help get the rhythmic regularity desired) by playing a chord composed of some subset of the pitches currently present, or just a low E. A resonant gong or soft tam-tam might also be appropriate, or something of the performer's own design.

The end: Once the pattern is complete, the performer freely alternates, for a short time, between that pattern and any one of the gruppetti. The gruppetti are exactly the same length as the pattern, but isolate a given pitch and its rhythm from the combined pattern. This alternation should be done perhaps 5-10, times, and obviously, not all of the individual gruppetti need to be played. The piece ends with the final pattern played once, loudly.

I Know You!

A morph between the two Shaker tunes, "O the Simple Gifts of God" and "Little Trumpet." Whenever possible, "...Simple Gifts..." should be legato, "...Trumpet" staccato. The final time through "...Simple Gifts..." should be soft, expressive, and the performer may decide the way of phrasing the different sections.

Daughter of Piker

Based on the Shaker tune "Love, More Love." Play the tune 4 times, each time using a different set of intonations for the melody. The intonations are indicated below the melody in terms of the degrees of the harmonic series on A, C#, and E (in the first score), and in cents deviations from 12-ET (on the second, "cents deviations" score). The final, fourth time through the melody is again in A.

The intonations are as follows, in terms of their deviations from tempered tuning:

melody note:	A	B	C#	D	E	F#	G#
on A:	0	+4	-14	+51	+2	-59	-12
on C#:	+27	-45	-14	-9	+73	+38	-12
on E:	+53	+4	-57	-29	+2	+6	-12

The harmonic series equivalents are:

melody note:	A	B	C#	D	E	F#	G#	
on A:	1	9	5	11	3	13	15	
on C# (5/4):	13	7	1	17	5	11	3	(*5)
on E (3/2):	11	3	13	7	1	9	5	(*3)

(e.g. The C# in the E series is computed as $13/8$ above $3/2$, or, brought to within one octave, $39/32$, which is 57¢ flat of an equal-tempered major third on A).

This retuning results in "modal" changes to the melody. For the A series, D# is closer to D. For the C# series, E is closer to D. For the E series, A is closer to A#, C# midway between C# and C. Note that all three modes "pivot" around one pitch, G# ($15/8$), which, because it is a only multiple of 5 and 3, is common to the three harmonic series.

Play the melody quietly, slowly and sweetly with liberty.

Thanks

Thanks to douglas repetto for tremendous help with the practice tapes and scores for *Piker* and *You're No Piker!*, David Fuqua typeset the scores for *Piker*, *I Know You!*, and *You're No Piker!*. Ted Runcie helped check *Piker*. Thanks to Sam Torrissi for finding some important typos in the notes on the tuning.

LP, Lebanon, January 15, 1998

(rev. March 19, 1998; July 3, 1998; Nov. 2, 1998; Feb. 15, 2000)

PIKER RHYTHMIC TEMPLATE

This musical score, titled "PIKER RHYTHMIC TEMPLATE", consists of 14 staves, numbered 4 through 17. Each staff begins with a treble clef. The notation is as follows:

- Staff 17:** Features 14 pairs of beamed eighth notes, each pair consisting of a natural note and a flat note.
- Staff 16:** Features 14 pairs of beamed eighth notes, each pair consisting of a natural note and a flat note.
- Staff 15:** Features 14 pairs of beamed eighth notes, each pair consisting of a sharp note and a natural note.
- Staff 14:** Features 14 pairs of beamed eighth notes, each pair consisting of a natural note and a flat note.
- Staff 13:** Features 14 pairs of beamed eighth notes, each pair consisting of a natural note and a flat note.
- Staff 12:** Features 14 pairs of beamed eighth notes, each pair consisting of a natural note and a flat note.
- Staff 11:** Features 14 pairs of beamed eighth notes, each pair consisting of a flat note and a natural note.
- Staff 10:** Features 14 pairs of beamed eighth notes, each pair consisting of a sharp note and a natural note.
- Staff 9:** Features 14 pairs of beamed eighth notes, each pair consisting of a sharp note and a natural note.
- Staff 8:** Features 14 pairs of beamed eighth notes, each pair consisting of a natural note and a flat note.
- Staff 7:** Features 14 pairs of beamed eighth notes, each pair consisting of a natural note and a flat note.
- Staff 6:** Features 14 pairs of beamed eighth notes, each pair consisting of a natural note and a flat note.
- Staff 5:** Features 14 pairs of beamed eighth notes, each pair consisting of a sharp note and a natural note.
- Staff 4:** Features 14 pairs of beamed eighth notes, each pair consisting of a natural note and a flat note.

YOU'RE NO PIKER

Piccolo

Foot

fff *decresc.*

fff

foot constant loudness for whole piece

ff *(decresc.)* *f* *(decresc.)*

ff *f*

mf *(decresc.)*

mf

p *(decresc.)*

p

pp

First system of musical notation. It consists of a grand staff with three staves: a treble clef staff, a piano staff, and a bass clef staff. The treble staff contains a melodic line with a 9:8 triplet and a 'brief silence' marking. The piano staff contains a 7-measure chordal pattern. The bass staff contains a rhythmic accompaniment of eighth notes.

Second system of musical notation. Similar to the first system, it features a grand staff with treble, piano, and bass staves. The treble staff has a 9:8 triplet and dynamic markings of *ppp* and *f*. The piano staff has a 7-measure chordal pattern and *ppp* markings. The bass staff has a rhythmic accompaniment.

Third system of musical notation. It continues the grand staff format. The treble staff features a 9:8 triplet and dynamic markings of *ppp* and *f*. The piano staff has a 7-measure chordal pattern and *ppp* markings. The bass staff has a rhythmic accompaniment.

Fourth system of musical notation. It includes a grand staff with treble, piano, and bass staves. The treble staff has a 9:8 triplet and dynamic markings of *ppp* and *f*. The piano staff has a 7-measure chordal pattern and *ppp* markings. The bass staff has a rhythmic accompaniment. A note above the system indicates '(2-3x till end)'. The treble staff also has a 9:8 triplet.

Fifth system of musical notation. It features a grand staff with treble, piano, and bass staves. The treble staff has a 9:8 triplet and dynamic markings of *ppp* and *f*. The piano staff has a 7-measure chordal pattern and *ppp* markings. The bass staff has a rhythmic accompaniment. A note above the system indicates '(each time louder, till as loud as possible)'. The treble staff also has a 9:8 triplet.

You're a Piker!

("Hop up and jump up")

Very fast, strong

The musical score consists of ten staves of music, each starting with a measure number (1, 4, 7, 10, 13, 16, 19, 22, 25). The music is written in a single treble clef with a common time signature (C). The first ending is marked with 'I.' and the second ending with 'II.'. The score is heavily annotated with downward-pointing arrows, indicating specific rhythmic accents or fingerings. The melody is characterized by rapid sixteenth-note runs and frequent chromatic alterations. The key signature changes from one flat (B-flat) to two flats (B-flat and E-flat) during the second ending. The piece concludes with a final cadence on the tenth staff.

28

31

34

37

40

43

46

49

52

55

58

Musical score for guitar, measures 61-79. The score is written on a single staff in treble clef. It consists of seven lines of music, each starting with a measure number (61, 64, 67, 70, 73, 76, 79). The notation includes various rhythmic values (quarter, eighth, and sixteenth notes), rests, and accidentals (sharps, flats, and naturals). Above the staff, numerous downward-pointing arrows indicate fingerings for the notes. Some notes are marked with a 'y' symbol, likely representing a natural harmonium or a specific playing technique. A 'v.' (vibrato) marking is present above measure 68. The piece concludes with a double bar line at the end of measure 79.

(LP, Lebanon, revision 1/28/98)

PIKER

Accidentals only affect those notes that they immediately precede or that they are directly above

11

(5/11)
b

2

10

(1/2)
b

3

12

(1/2)
b

4

9

(5/9) b

5

13

(6/13) b

6

8

(1/2) b

7

14

(1/2) b

8

7

(4/7) b

9

15

(7/15) b

This musical score is written for guitar and consists of 20 systems of staves. Each system contains two staves: a treble clef staff and a bass clef staff. The notation includes various rhythmic values, accidentals (sharps, flats, naturals), and dynamic markings such as accents (^) and slurs. The score is divided into measures, with some measures containing multiple notes. The systems are numbered 2 through 20. At the end of each system, there are annotations indicating the number of notes that have been 'done' (played or recorded). The annotations are as follows:

- System 2: 10 done, 11 done
- System 5: 9 done
- System 12: 12 done, 7 done
- System 14: 6 done, 8 done
- System 16: 4 done, 13 done
- System 19: 14 done

Additional annotations include measure numbers (2, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20) and specific markings like (1/2), (2/5), and (8/17) above certain notes. The notation is dense, with many notes beamed together in groups.

21

22

15 done

23

24

25

16 done

26

27

28

17 done

29

(Complete)

I KNOW YOU!

Fast, with rhythmic and expressive liberty
Ornament freely, like a folksong

Source, I

II

III

IV

Arrival

1.

2.

*On the beat grace note, almost like two eighths.

**Before the beat grace note.

Daughter of Piker

("Love, More Love")

(cents deviation score)

A:0	-14	0	-14	41	-14	4	0	2	2
C#:39	-14	39	-14	-9	-14	-43	39	72	72
E:53	-45	53	-45	-29	-45	4	53	2	2

A:-53	4	0	-12	2	2	0	0	0	0	4	-14
C#:-9	-43	39	-12	72	72	39	39	39	39	-43	-14
E:6	4	53	-12	2	2	53	53	53	53	4	-45

A:4	-12	4	0	-14	0	-14	2	2
C#:-43	-12	-43	39	-14	39	-14	72	72
E:4	-12	4	53	-45	53	-45	2	2

A:2	0	0	-14	2	2	-53	0	0	0	2	41
C#:-14	39	39	-14	72	72	-9	39	39	39	72	-9
E:-45	53	53	-45	2	2	6	53	53	53	2	-29

A:-14	2	41	-14	4	4	0
C#:-14	72	-9	-14	-43	-43	39
E:-45	2	-29	-45	4	4	53