City Research Online

City, University of London Institutional Repository

Citation: Evans, F.M. (1996). Aural image and the language of electroacoustic music. (Unpublished Doctoral thesis, City University London)

This is the accepted version of the paper.

This version of the publication may differ from the final published version.

Permanent repository link: https://openaccess.city.ac.uk/id/eprint/8271/

Link to published version:

Copyright: City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

Reuse: Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

City Research Online: http://openaccess.city.ac.uk/ publications@city.ac.uk

François EVANS

Manches en bois... manches de joie

For electroacoustic chamber ensemble.

1989

City University
Library Information Services
Northampton Square

François EVANS (1965 -)

MANCHES DE JOIE

(1988 - 1989)

M A N C H E S D E J O I E

(Joysticks)

-Syllogisme Concerté

Dedié a M. Stewart COPELAND

Par François EVANS

(1988 - 1989)

I. Premisse Majeure:

Manches en bois ...manches de joie

II. Permisse Mineur:

e pe ape gape Agape ...l'Avenir de l'Amour

III. Conclusion:

l'Abbatement

I N S T R U M E N T A T I O N

Clarinet in Bb doubling Bass Clarinet

Yamaha WX7 MIDI wind controller
connected to Roland MKS-80 or similar
analogue VC synthesiser

Trumpet in Bb with cup mute to hand

Drum kit (Bass drum, Snare drum, Hi-Hat,
Floor Tom, Low Tom, Medium Tom,
High Tom, Crash and Ride cymbals).

Akai S900 (or similar) Sampler controlled
by MIDI keyboard doubling Piano

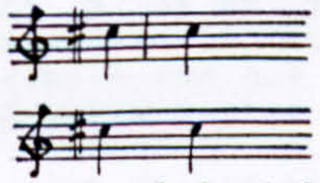
Violoncello

Sound Diffusionist

PERFORMANCE INSTRUCTIONS

GENERAL

Accidentals apply only to the notes they precede unless tied or directly repeated. Barlines cancel commitments.

eg.  = C♯, C♮

= C♯, C♯

The score is headed with a tempo suggestion of ♩ = 80-116.
The piece should be played as fast as practically possible.

CLARINET IN B♭ DOUBLING BASS CLARINET

L - - - - - R Pass bell of instrument from Clarinet microphone on left to that on the right.

YAMAHA WX7 WIND CONTROLLER

The controller should be connected via MIDI to a Roland MKS-80 synthesiser module or similar analogue VC synthesiser.

Chords in the score should be played arpeggiated.

The symbol ⊟ represents the relative level of a footpedal connected to the frequency controller in the VCF.

⊟ represents a low setting

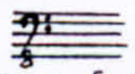
⊟ represents a medium setting

⊟ represents a high setting

These symbols are arranged in the score connected by arrows to show pedal action over time.

low. . . .to. . . . . .high. . .to. .low

The player should try to be subtle with this effect. The full range of the pedal need not necessarily be used.

The clef  denotes that the player play one octave lower than written for ordinary bass clef.

P B = Pitch Bend. Use the pitch bender.

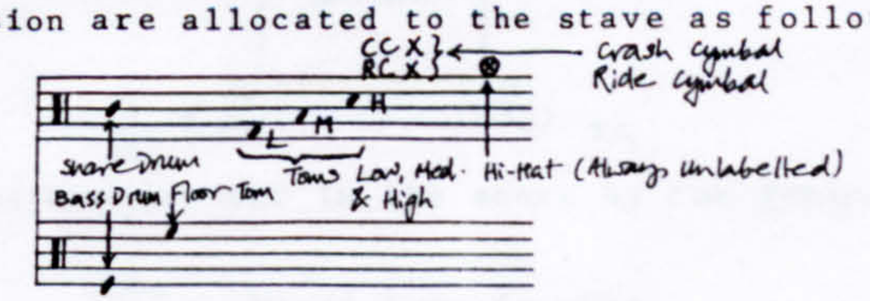
The pitchbend range of the instrument should be set to the interval of a Major 7th at maximum deflection of the pitchbend controller.

VIOLONCELLO

= Play highest note possible.

DRUM KIT

Percussion are allocated to the stave as follows:



Hi-Hat articulations are notated as follows:

	Hi-Hat Open	Hi-Hat Closed
Striking	⊙	⊗
Without striking	○	×

On Hi-Hat, as "⊙" to "×" forms a natural gesture, the two symbols when they occur concurrently are joined by an arrow thus: ⊙→ ×

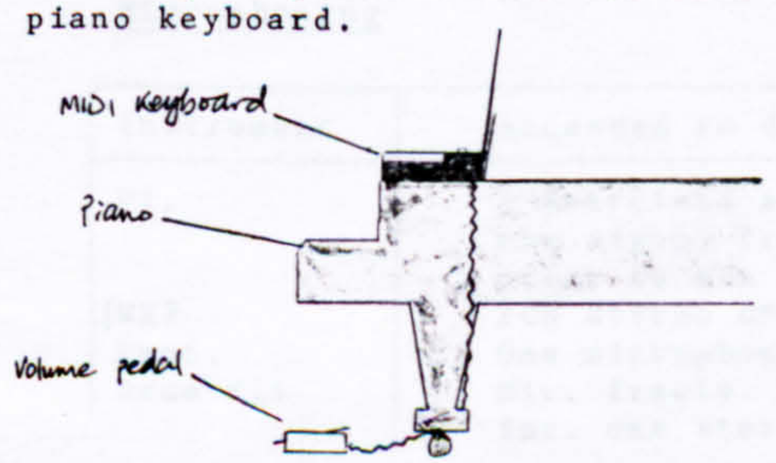
On Snare Drum, = Rim Shot

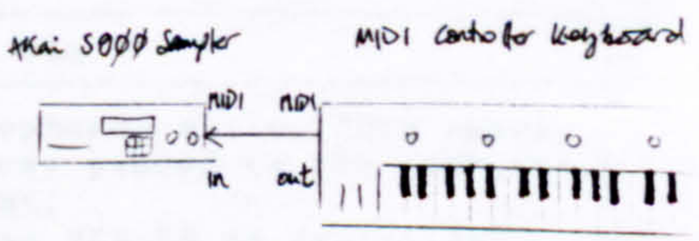
Medium-sized Snare Drum sticks should be used together with brushes where stipulated.

As one of the two soloists in the movement, the Drum Kit holds a special place. It is important visually and preconceived in the idea of the piece that the Drum Kit and Cymbals be clean and polished so that they shine and gleam before performance.

AKAI S900 SAMPLER DOUBLING PIANO

The equipment should be arranged as shown with a pressure and velocity-responsive MIDI controller keyboard set atop the piano keyboard.





Once the supplied S900 disk has been booted up, the MIDI controller keyboard will respond by playing one set of samples across the keyboard when the keys are struck softly and another set when the keys are struck hard.
Those notes in the score to be played softly are each labelled with an "S", those to be played hard are marked either with an accent sign ">" or an "H". The player should experiment first with the keyboard to regulate how hard a touch will deliver a "soft" sample and how hard a touch a "hard" one.
Unlabelled notes follow the last articulation-type noted.

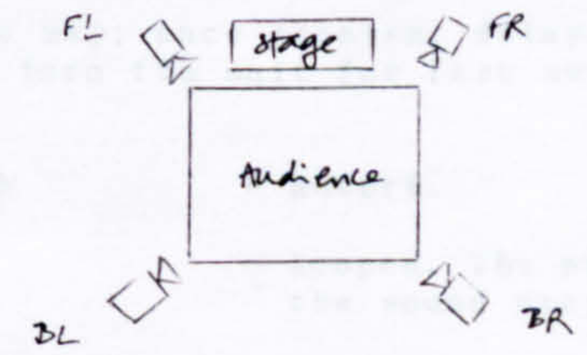
A volume pedal should be connected to the MIDI keyboard to control dynamics from the instrument. Please note: dynamics written into the s900 part should be regulated using this volume pedal and not by succumbing to the temptation to play harder on the keys which may result in an unintended sample being triggered.

As a guide to tessitura; C3 on the MIDI keyboard is equivalent to middle-C on the piano.

Sections for piano are headed "Piano", those for S900, "S900".

SOUND DIFFUSION

The speaker system intended for the piece is quadrophonic:



Speakers are denoted in the score by the symbols:

FL	Front Left Speaker
FR	Front Right Speaker
BL	Back Left Speaker
BR	Back Right Speaker.

Arrows , etc. denote labelled changes over time.

= Infinity

= Zero

Thus:

= Increase from zero

= Decrease from infinity (Max.)

Mixing Desk

The mixing desk needs at least 16 input channels and the instruments should be miked as follows:

Microphoning

Instrument	Accessed to desk via
Cl.	2 Nearfield microphones set c. 70cm apart, the signal from one panned to the left, the other to the right.
(WX7	2CH Stereo OP from MKS-80 or equivalent.)
Trpt.	One microphone only needed.
Drum Kit	Mic. freely. Minimum 3 microphones inc. one stereo pair. (See note below)

(Microphoning Cont.)....

(S900	2CH Stereo OP from the unit.)
Piano	2CH Stereo pair set above the strings.
'Cello	One microphone only needed.
= 9 Microphones minimum required.	

The third Drum Kit microphone, used only for the very last note of the piece is to be set near the centre of the Crash Cymbal.

Reverberation etc.

Certain sections require that selected microphone signals be fed through a digital delay line/multi effects unit eg. a Roland DEP-5, Yamaha SPX-90 etc. "Tweaking" the patch-types required is left to the diffusionist/s as parameter settings will depend on circumstances. Some suggestions have been given below....

On page 14, the reverb. unit is used to produce a natural echo for the S900. Suggested control settings for this patch are as follows:

Initial delay	2500 ms
Feedback	c. 75%
Feedback phase	+ ve
Modulation width	Set for minimum
Modulation speed	-
Output mix	Set initially for 60% straight, 40% delayed.

During rehearsals of this section, find the feedback level setting necessary to allow the echos to ring on until the point marked in the score (c. 54 s @♩ = 80). -This will of course depend on the final tempo at which the ensemble decides to play the movement.

Page 27 of the score describes feeding the B.Cl., WX7, Trpt. and Piano through a bathtub reverb setting and playing with the faders and the Aux send's to make the instruments sound as if they were appearing and disappearing slowly up and down metallic rabbit holes

By "bathtub" reverb., I refer to "hard" reverb. or "cardboard tube" reverb.; the type of reverb one experiences in a small space with extremely hard surfaces. Reverb. unit settings should be turned to the following starting point and the patch "tweaked" according to taste. High frequencies should be emphasised on the effects unit's equaliser to colour the sound with a metallic edge.

Starting point for bathtub reverb.:

Initial delay	c.30 ms
Feedback	c.75%, but avoid runaway feedback
Feedback phase	+ ve
Modulation width	Set for minimum modulation
Modulation speed	-
Output Mix	Start with 50% straight, 50% delayed.

Avoid setting the feedback control setting too high on this patch as this will affect the sound unsubtly. Be subtle also with the output mix control. It may be interesting to experiment with a tiny bit of modulation speed to add a little shimmer to the basic sound.

Needless to say; once choosen, delay effect settings should be programmed into the unit for fast switching during performance.

Rvb = Reverb.

↙ = Looped. The previous section looped by the sound projectionist with the DDL.

François Evans
september, 1989

François EVANS: I. Manches en bois . . .manches de joie (1989)

People have often questioned me about the title of this piece ...what does it mean ? "Manche" in French can mean a number of things: handle, joystick, sleeve and even the English Channel. I had originally intended the piece to be called Joysticks , a word holding for me connotations of pleasure and percussiveness, and that brings to mind the image of a kaleidoscope of slender wooden sticks spinning at high speed through the air and making controlled patterns that develop according to strict, predetermined rules. Literally translated into French, the word "joysticks" becomes "manches" and loses the "joy-" part of the word and so, with a little license; "manches sans joie" became "manches de joie".

"Manches en bois" is the first of a set of thee movements, the second and third of which are currently in preparation.

All the pitch material for the piece is derived from a small bamboo stick mobile with eight short sticks dangling from it, each of which when struck rang with a prominent dyad.

The movement is organised in four sections; A, B, C and D that run in the piece ABCDABCDAB. Each section is based on three or four chords that are all related to the original material from the stick mobile and that vary each time they reappear; ABCDA'B'C'D'A"B".
Section A' involves a cadenza for 'cello in which the instrument tries to take on all the material from the other instruments in the equivalent A section, while the other instruments colour its frenetic line with tiny resonances. The same happens for the drum kit in section D' as it tries, single-handedly to reproduce D, this time accompanied by a wash of brightly coloured pulses.

I thought it would be a nice idea to let the stick mobile speak for itself in the piece. The S900 is programmed with layers of different samples from the mobile that are transposed and articulated by the pianist following the set harmonic material. In this way, the mobile could be thought of as immitating itself, in a rather synthetic way.

The piece is dedicated to the rhythmatist, Stewart Copeland.

Premier Mouvement et Premisse Majeure:

Manches en bois ...manches de joie

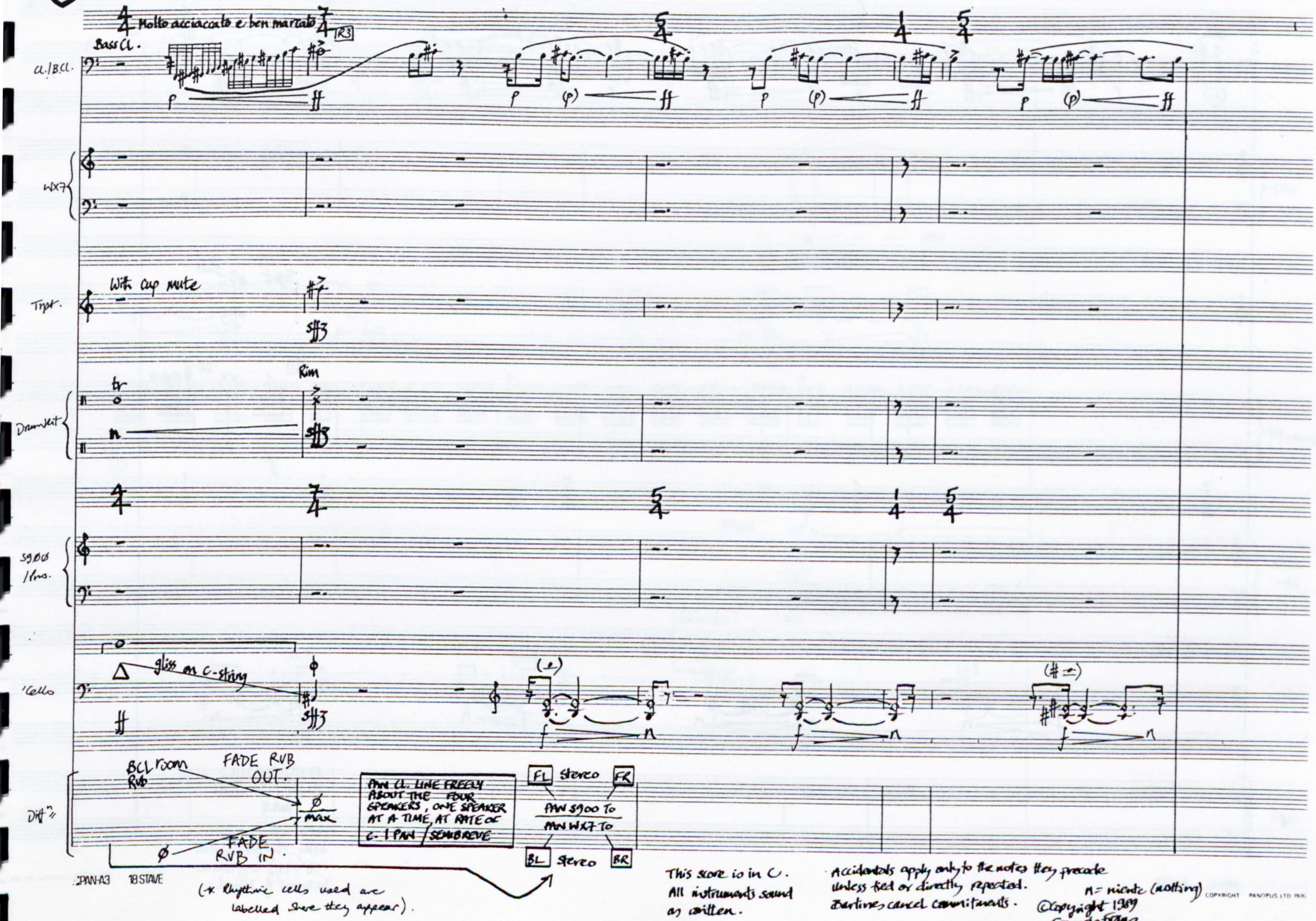
e

♩=84-116

R2 → 7,8,8,1,8,8 . . .
K2 → 2,8,2,1 .

I. Manches en Bois . . . .

François Evans 1989



PAN-A3 18 STAVE

(* Rhythmic cells used are labelled where they appear).

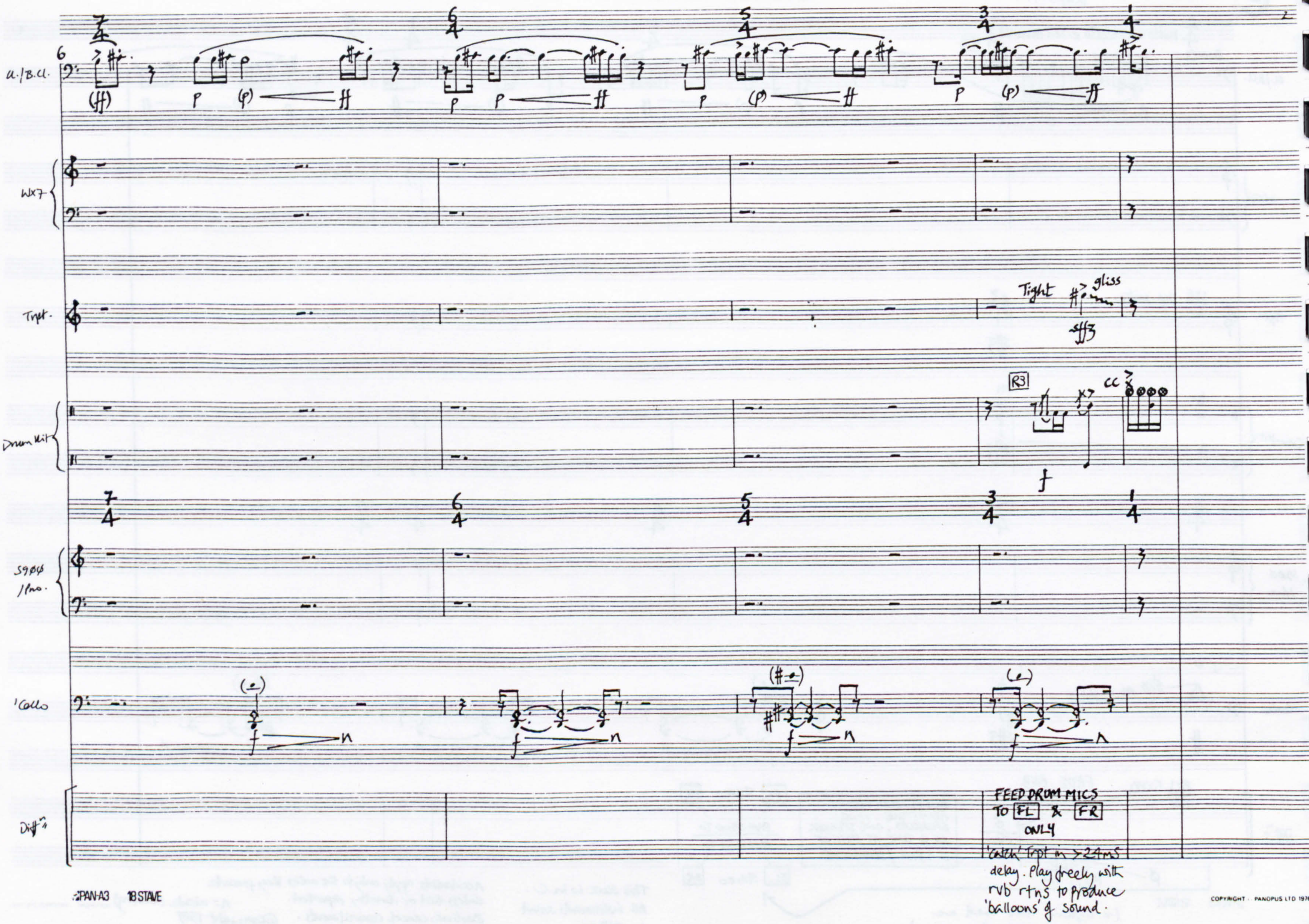
This score is in C. All instruments sound as written.

Accidentals apply only to the notes they precede unless tied or directly repeated. Barlines cancel commitments.

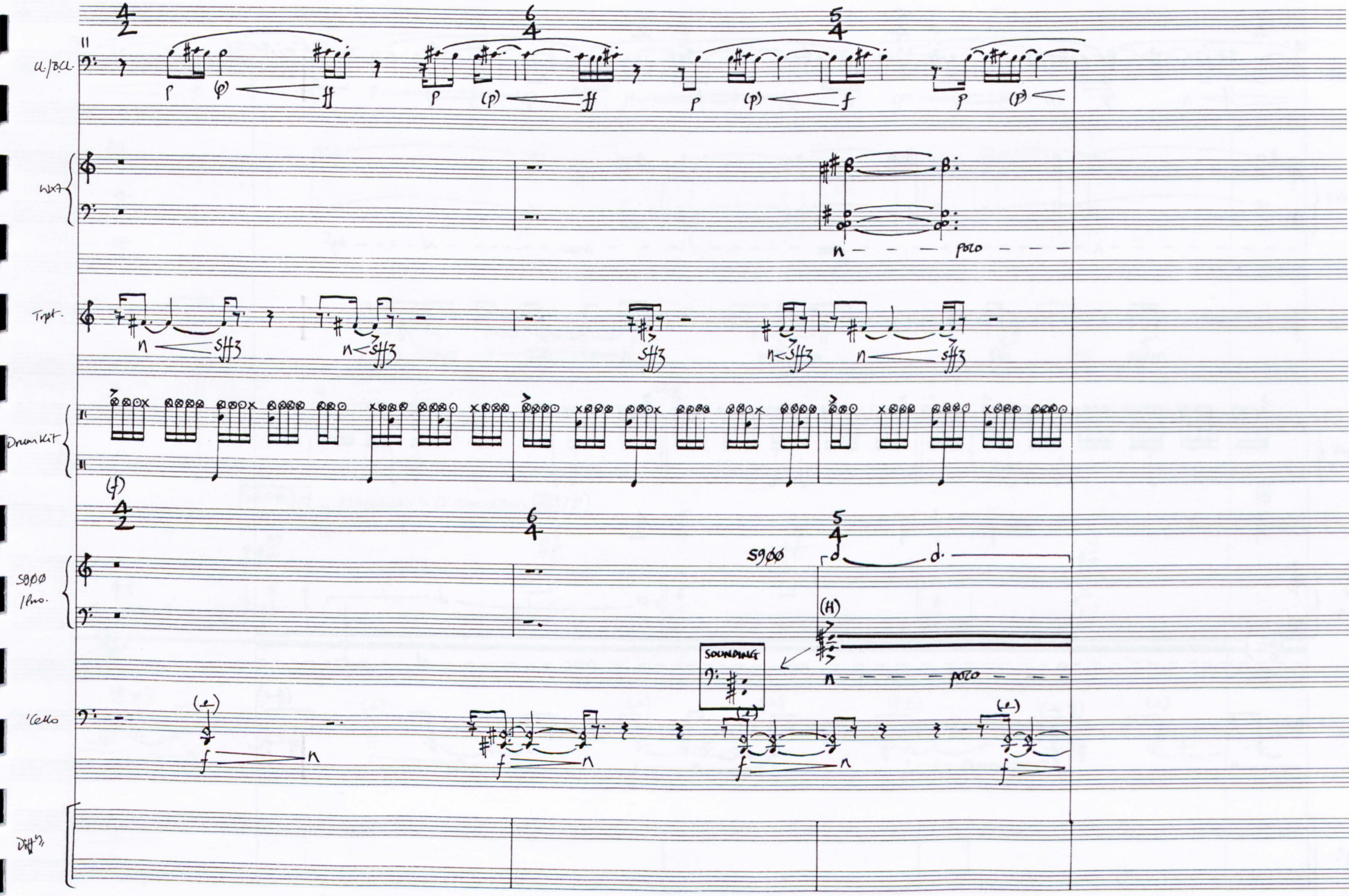
n = niente (nothing)

©Copyright 1989 François Evans

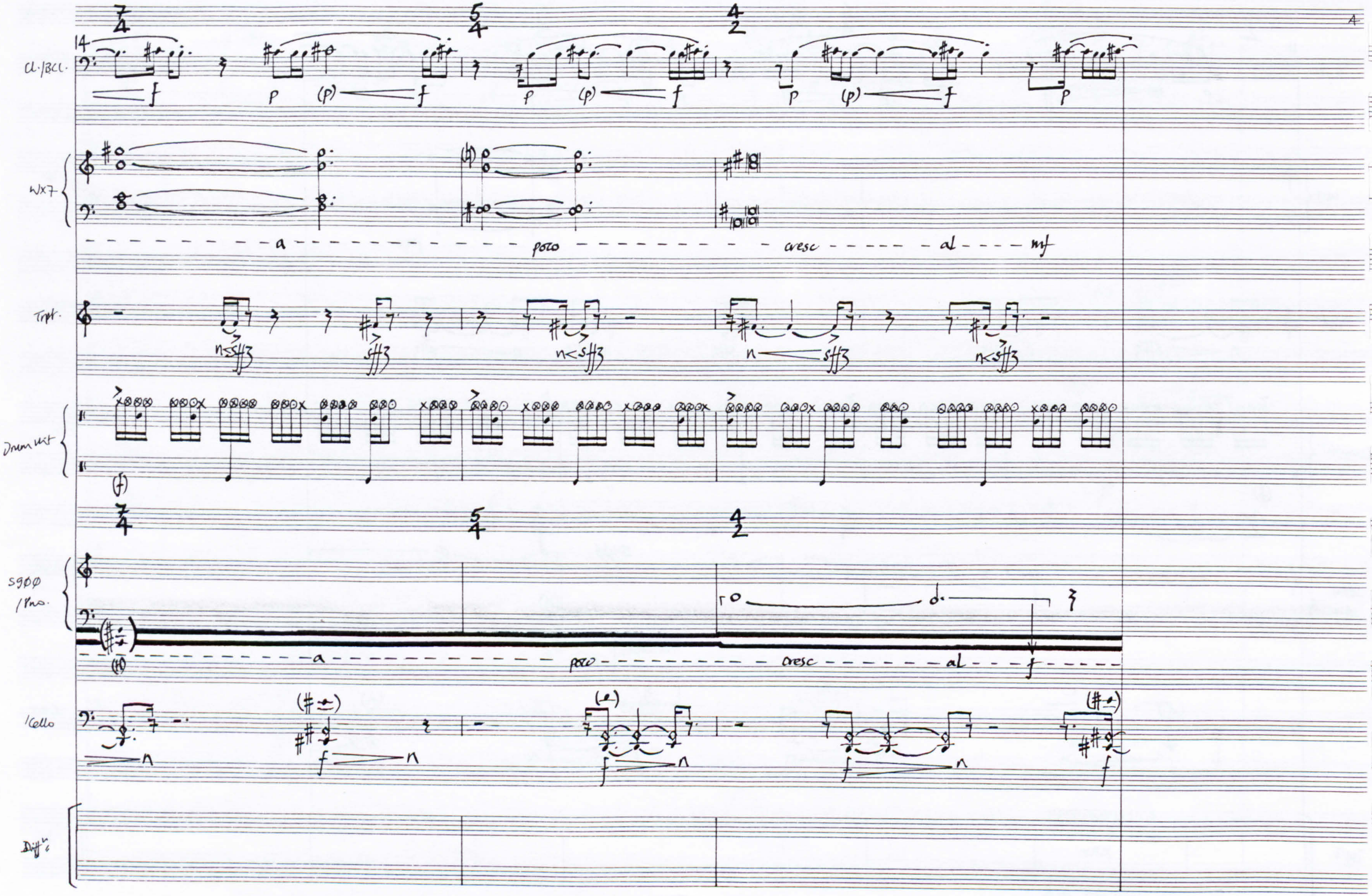
COPYRIGHT PANOPUS LTD 1976



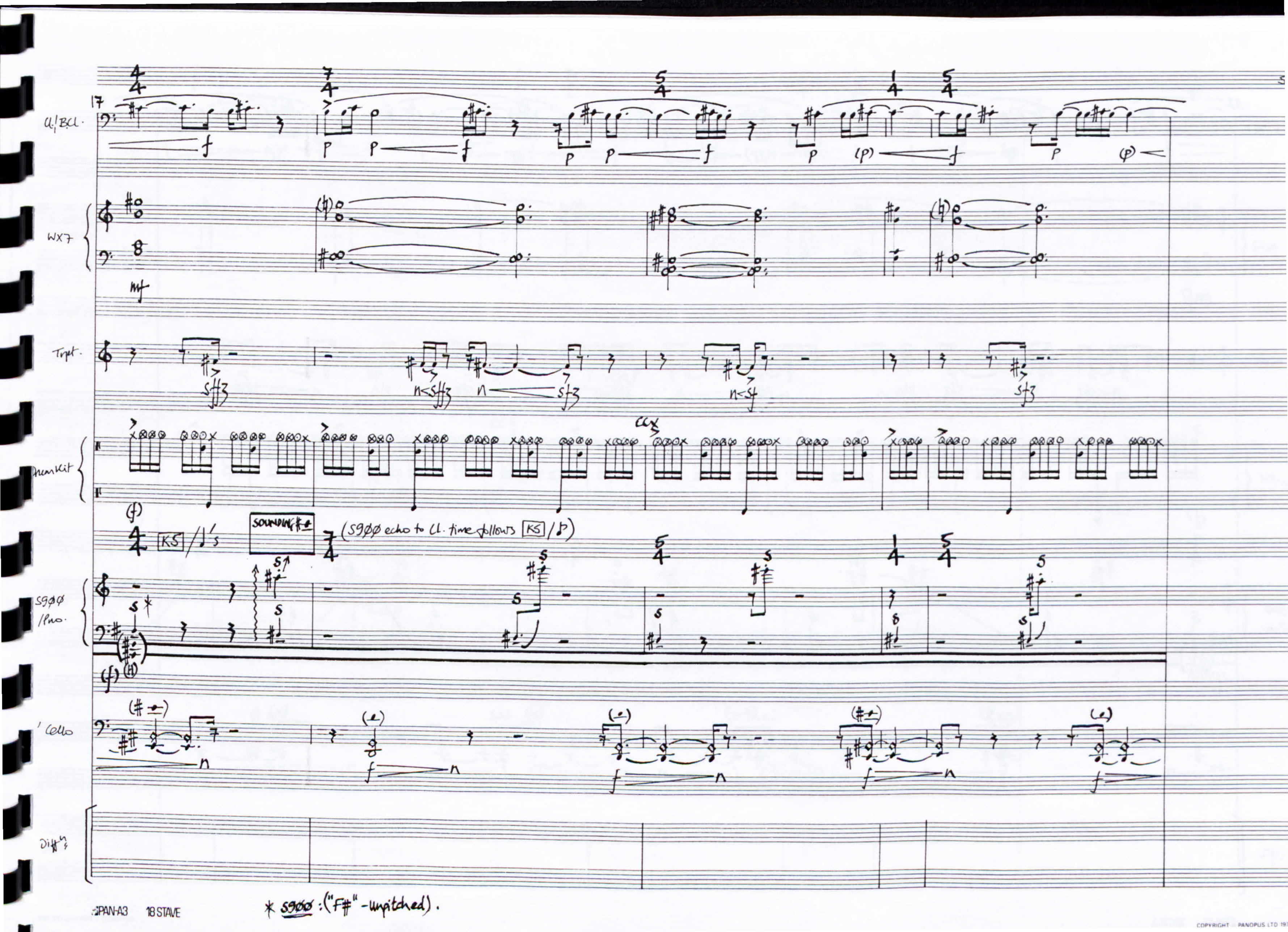
COPYRIGHT · PANOPUS LTD 1976



COPYRIGHT © PANOPUS LTD

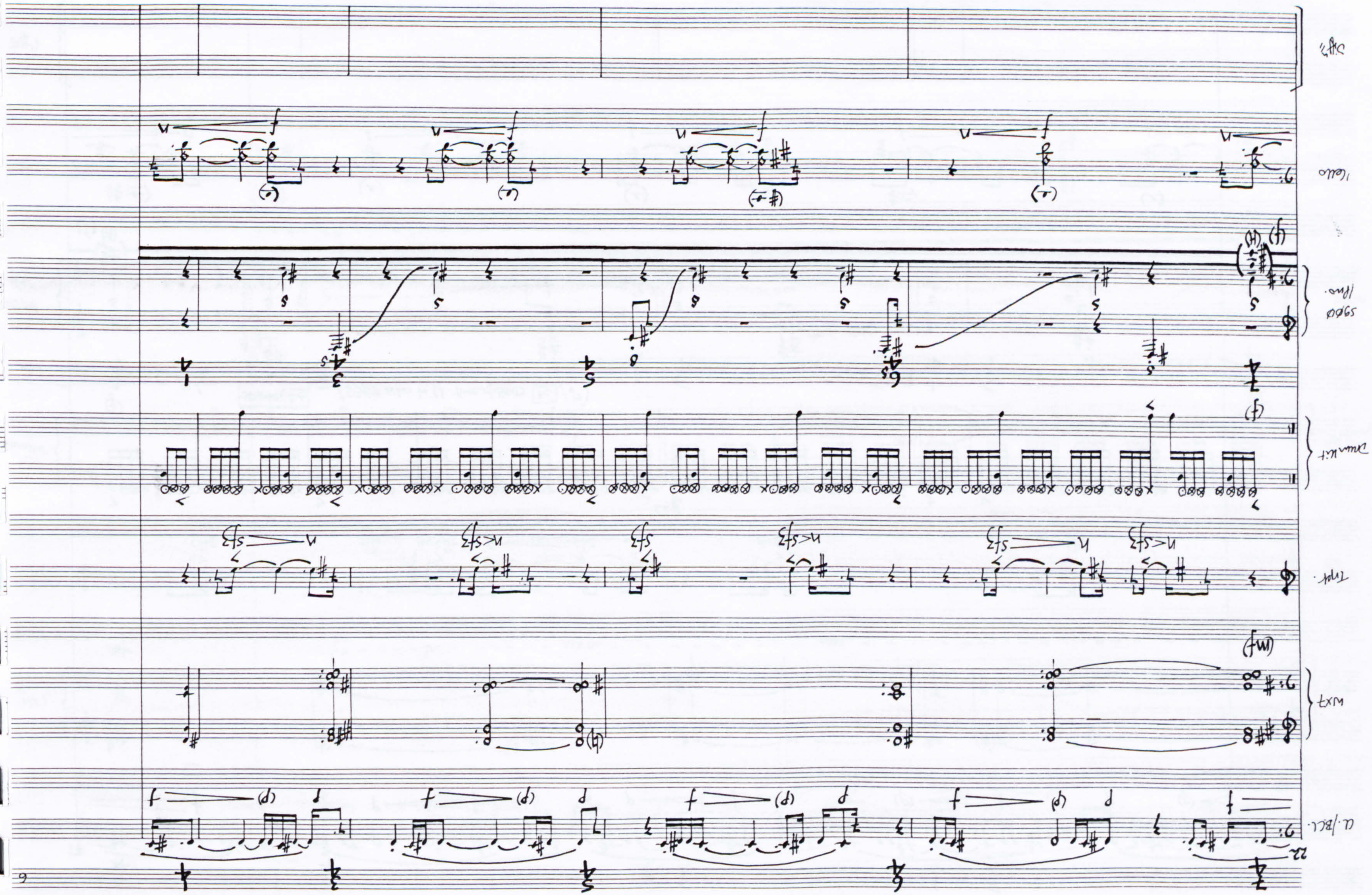


COPYRIGHT © PANOPUS LTD 1976



* S900 : ("F#" - unpitched).

COPYRIGHT PANOPUS LTD 197



COPYRIGHT © PANOPUS LTD 1976

27

Cl./BCl.

WX7

Trpt.

Drum Kit

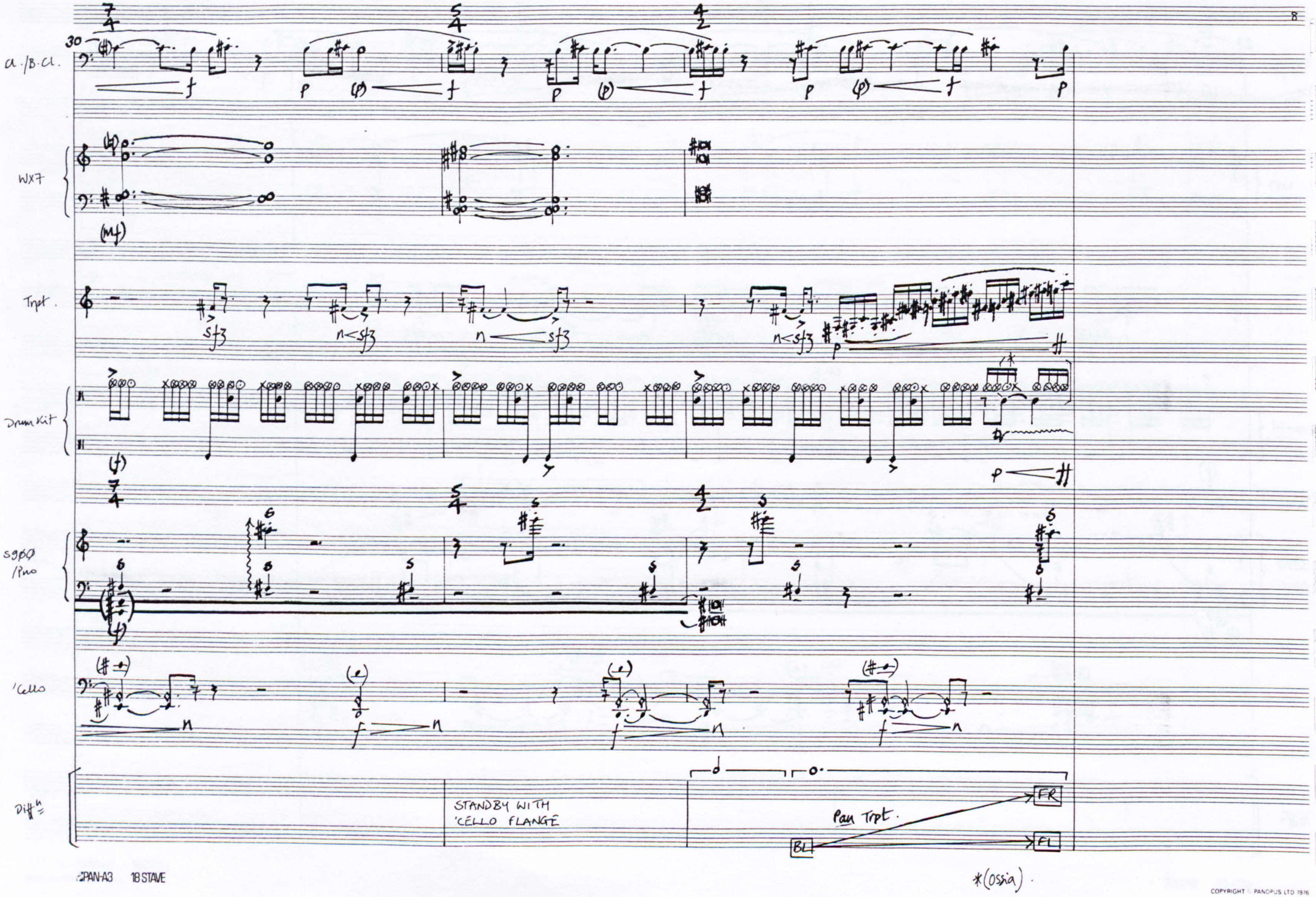
S900
IPno.

'Cello

Dbass

PAN-A3 18 STAVE

COPYRIGHT © PANOPUS LTD 1976



COPYRIGHT © PANOPUS LTD 1976

h

R3 → 8, 1, 1, 7, 2, 1, 1
K5 → 3, 5, 3, 5, 3, 3

33

u

WITH STRONG ATTACK TRANSIENT & ENV. RELEASE QUITE LONG

WX7

Stridente

Trpt

Relentlessly

Perc

SOUNDING

SOUNDING

dim

SOUNDING

S900 Pno

'Cello

- Short echoes on trpt.

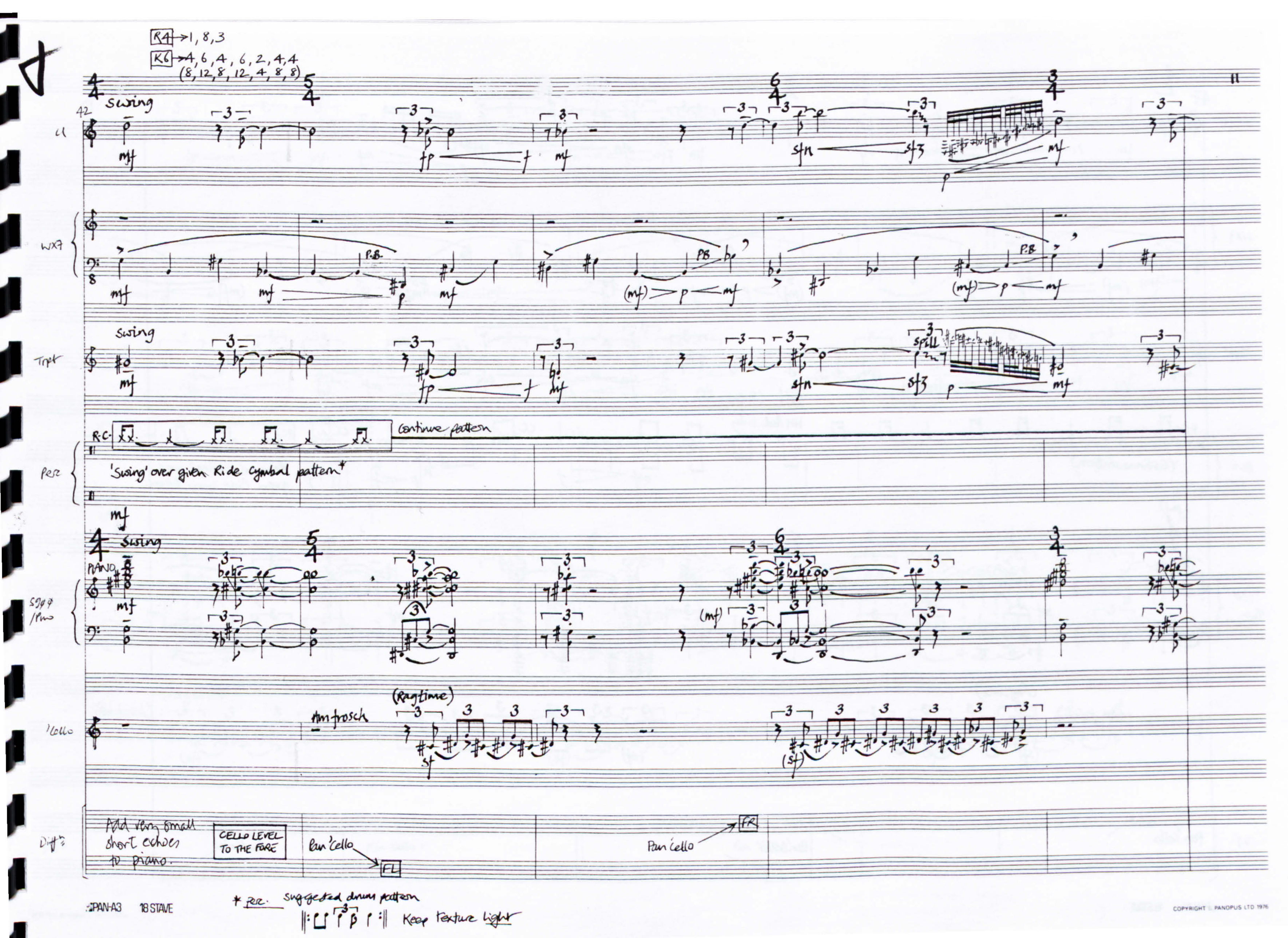
Diff^ns

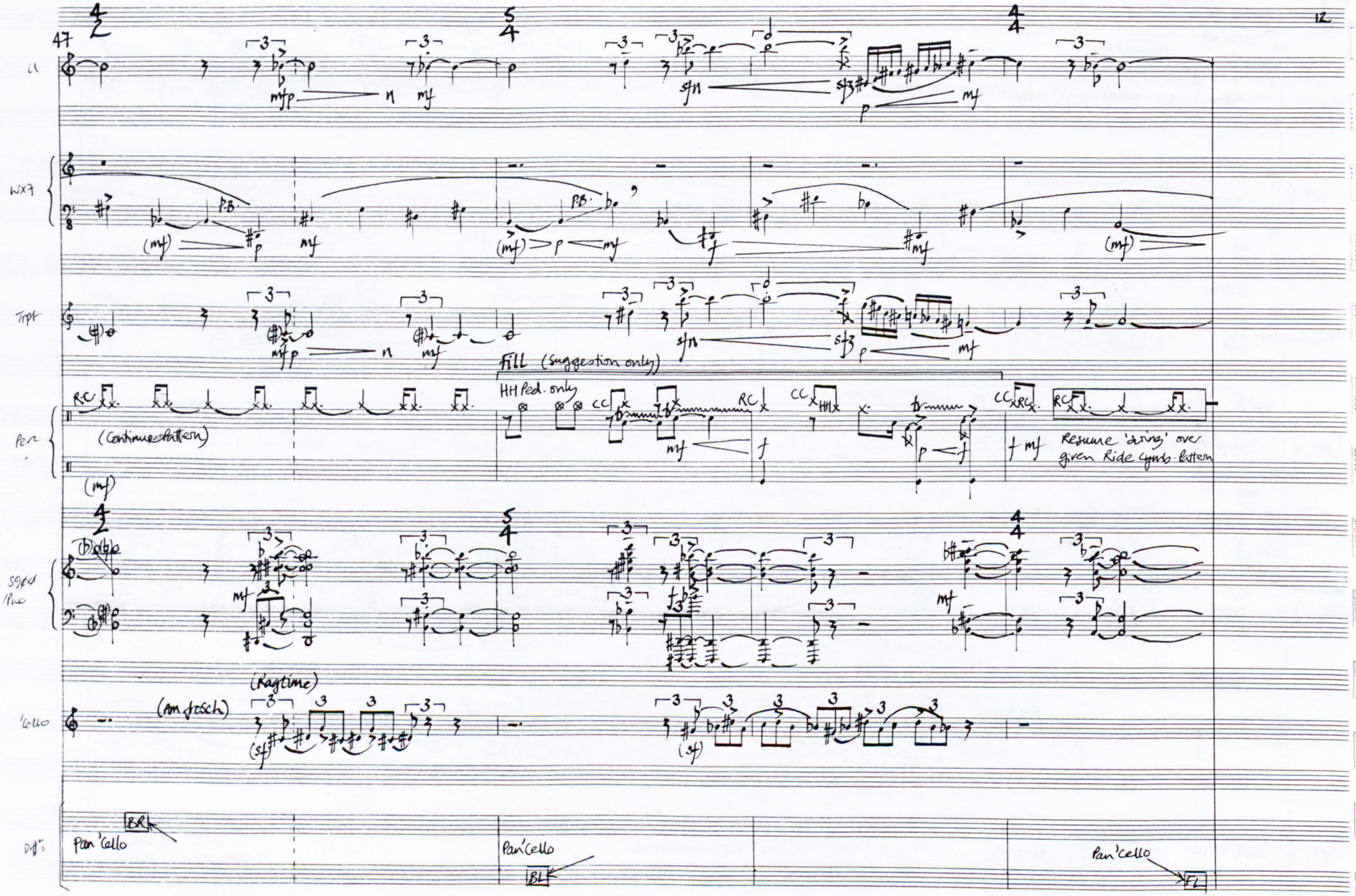
- Flange 'cello sound.

* Pitch Bend

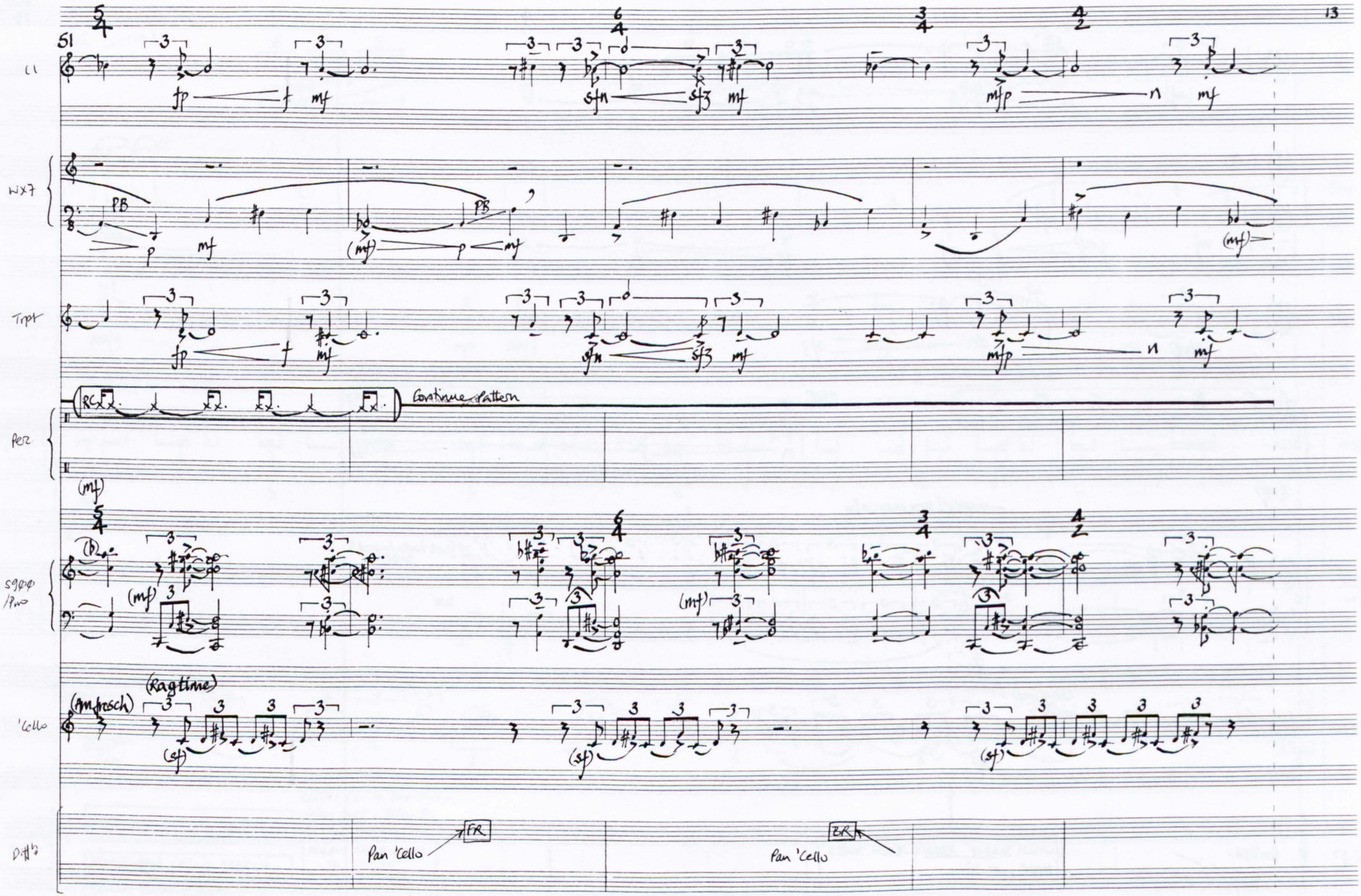
COPYRIGHT © PANOPUS LTD 1976

PAN-A3 18 STAVE
COPYRIGHT © PANOPUS LTD 1976

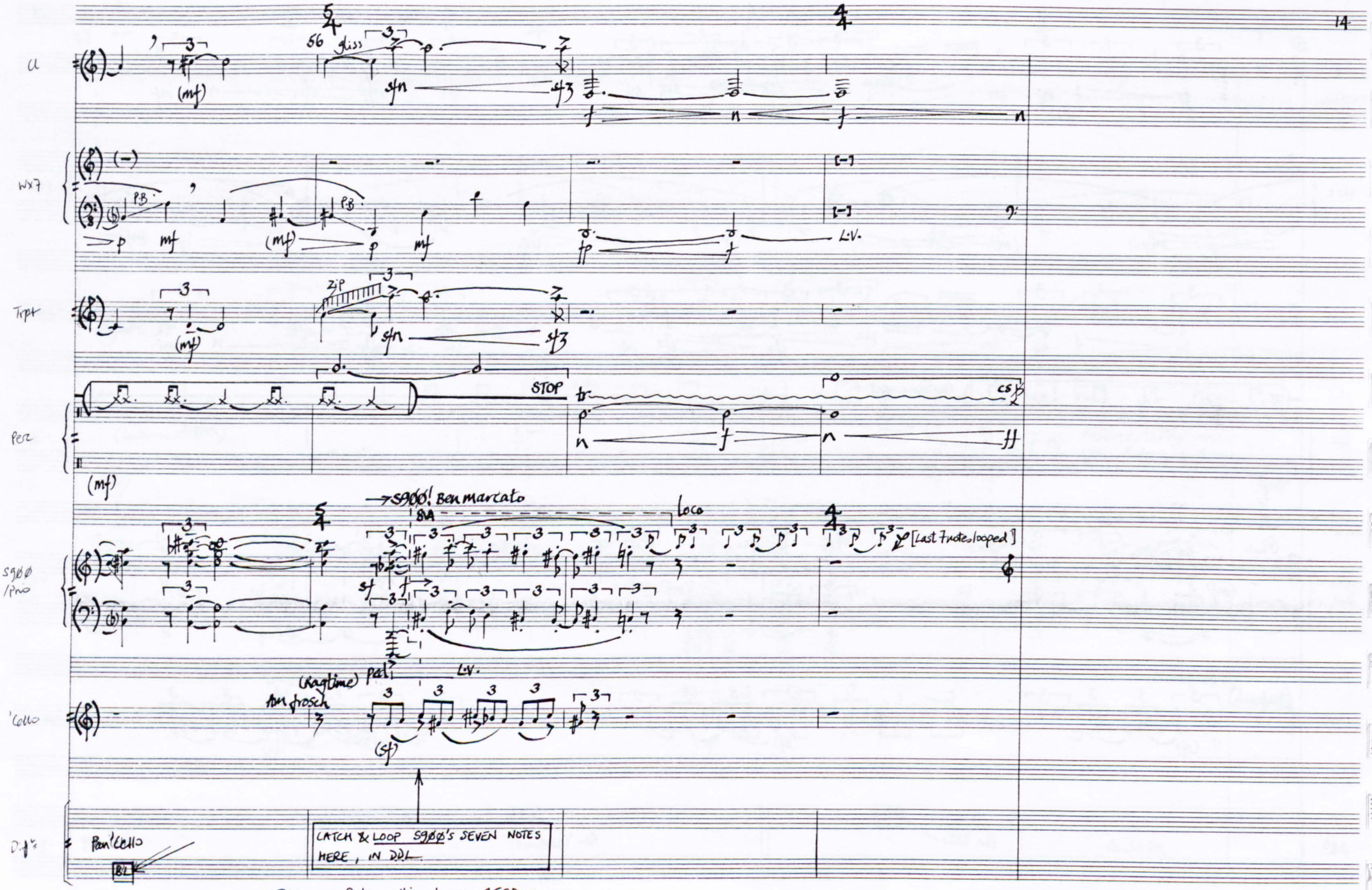

R4 → 1, 8, 3
K6 → 4, 6, 4, 6, 2, 4, 4
(8, 12, 8, 12, 4, 8, 8)
11
42
Swing
Cl
WX7
P.B.
Trpt
Spill
R.C.
Continue pattern
Perc
'Swing' over given Ride cymbal pattern*
PIANO
Sgg/Pno
'Cello
Am frosch
(Ragtime)
Diff^n
Add very small short echoes to piano.
CELLO LEVEL TO THE FORE
Pan 'Cello
FL
FR
* Perc. suggested drum pattern
Keep texture light
PAN-A3 18 STAVE
COPYRIGHT © PANOPUS LTD 1976



COPYRIGHT © PANOPUS LTD 1976

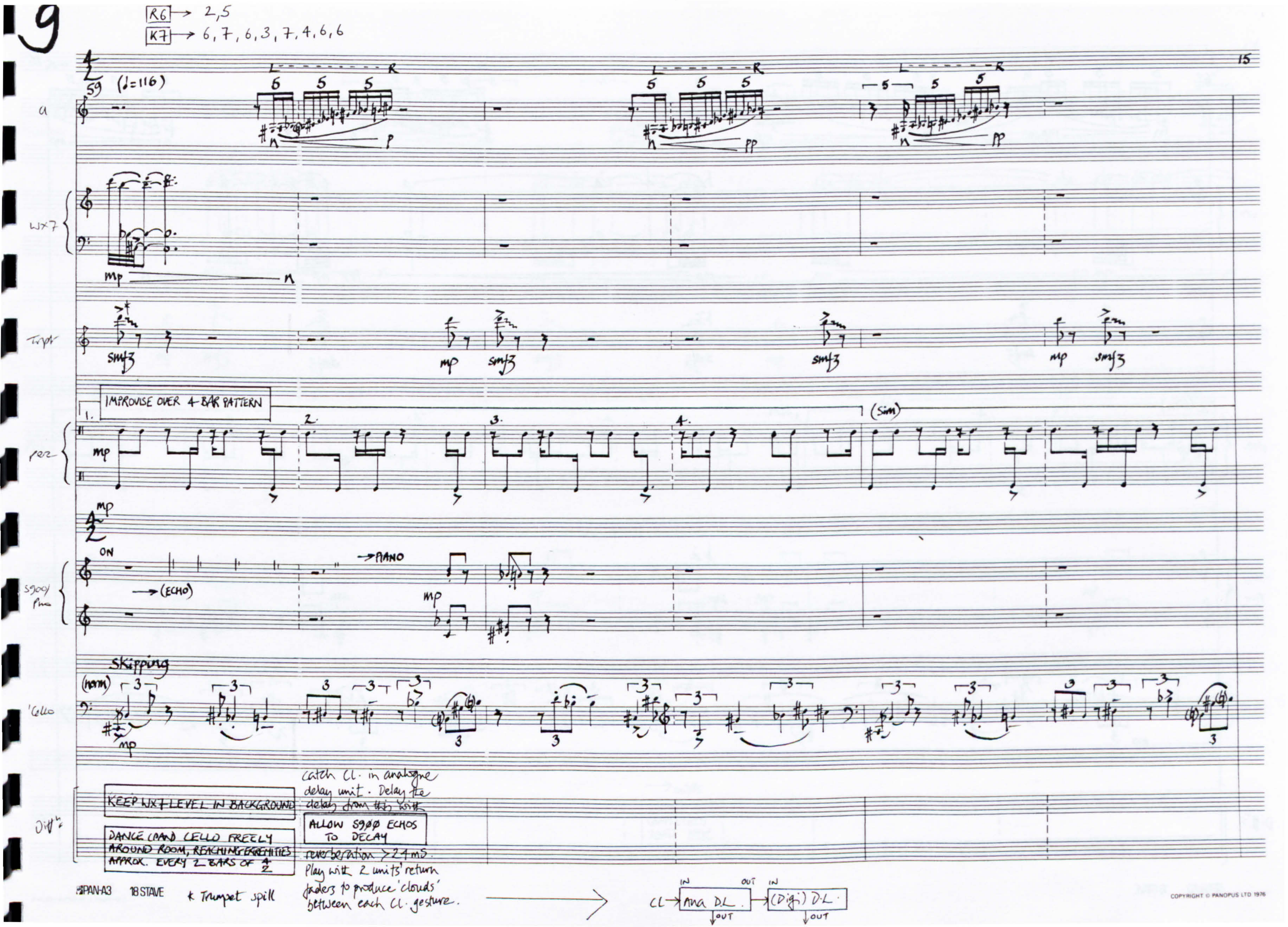


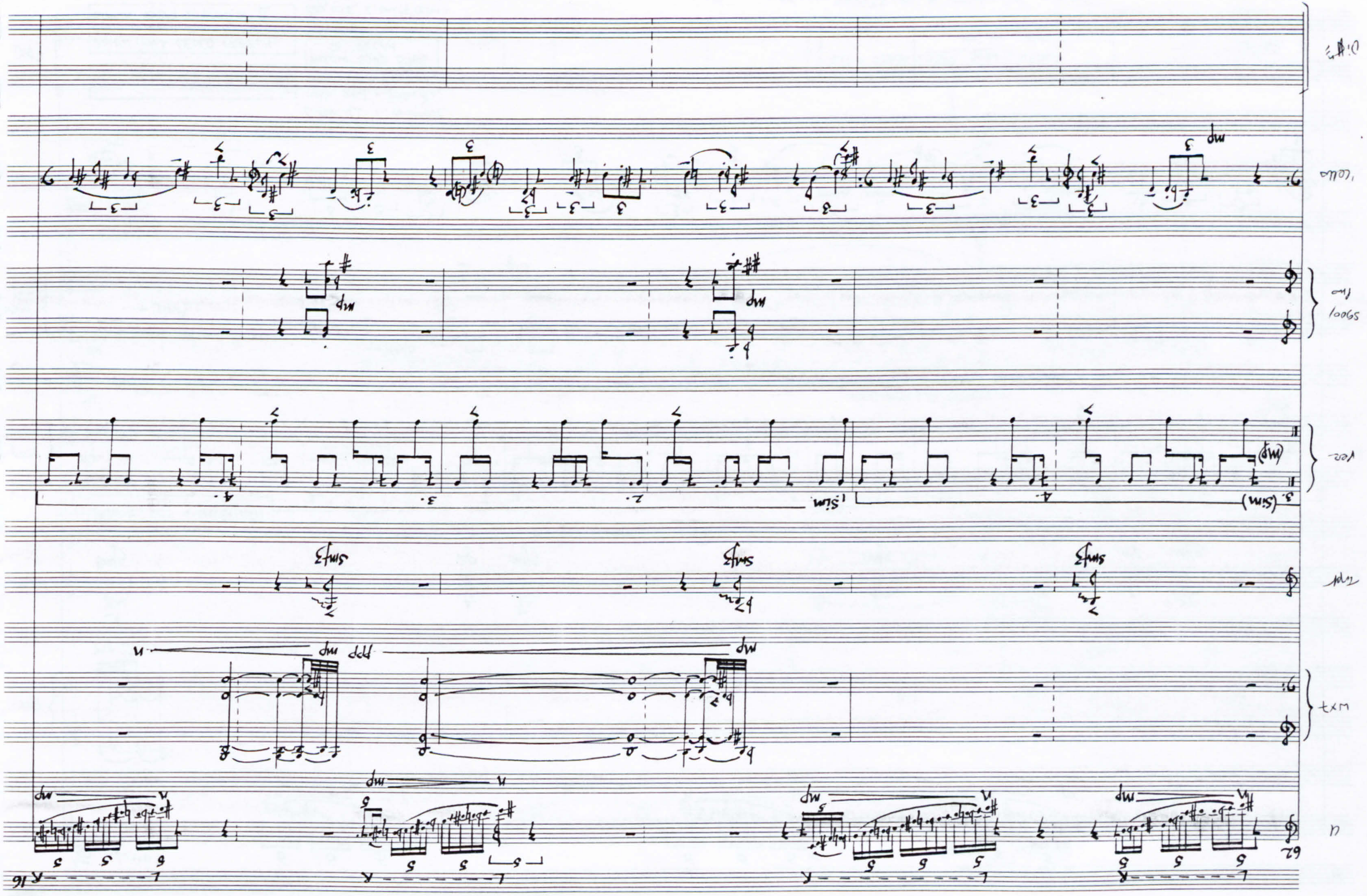
COPYRIGHT PANOPUS LTD 1976



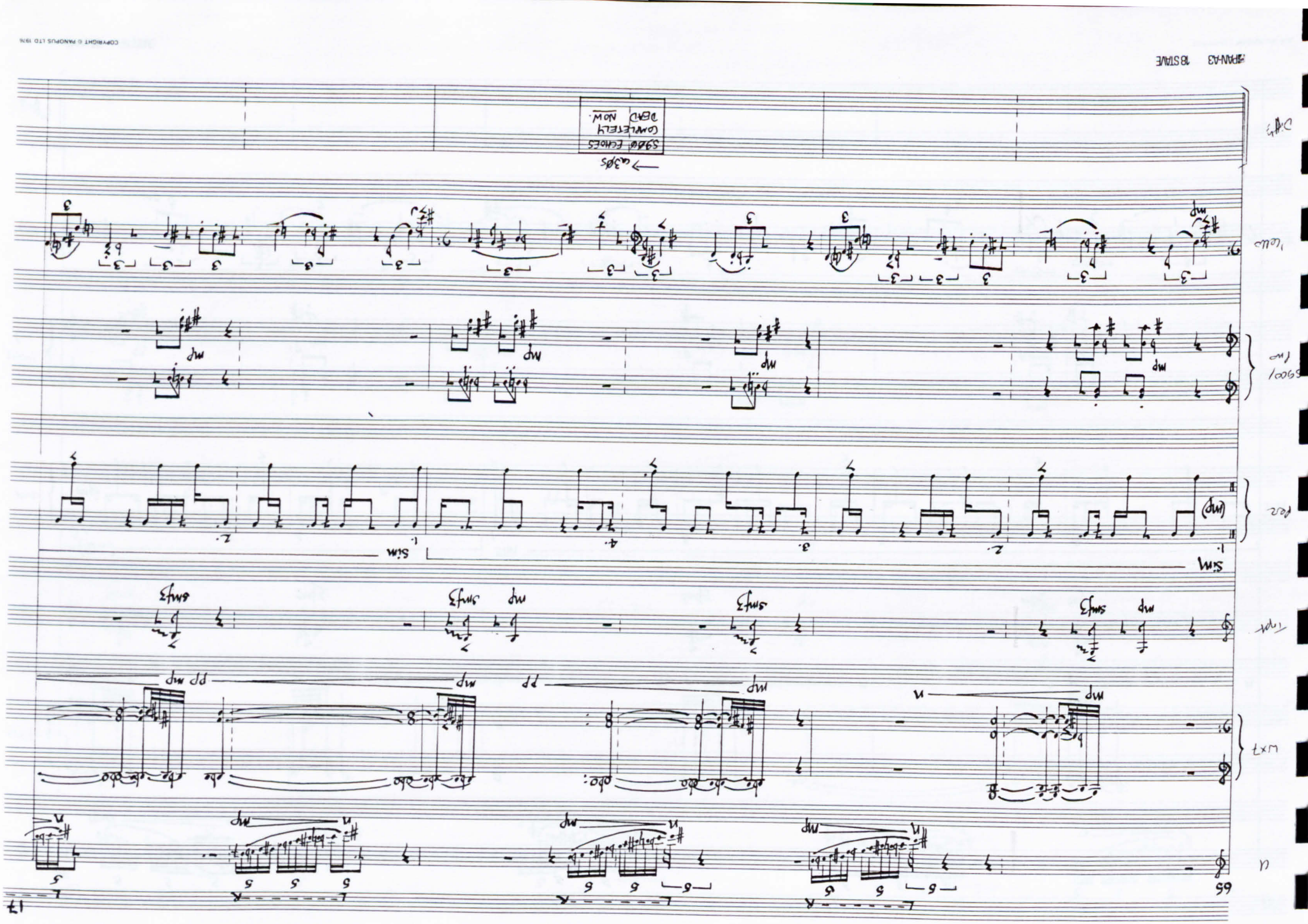
* Diffusion: Delay setting to ca. 2500ms. Set feedback such that echoes take ca. 54s to decay completely.

COPYRIGHT PANOPUS LTD 1976


9
R6 → 2,5
K7 → 6,7,6,3,7,4,6,6
15
59 (♩=116)
a
WX7
Trpt
IMPROVISE OVER 4 BAR PATTERN
(Sim)
per
ON
→ (ECHO)
→ PIANO
S900/Pno
Skipping
(norm)
'Cello
KEEP WX7 LEVEL IN BACKGROUND
DANCE (PAN) CELLO FREELY AROUND ROOM, REACHING EXTREMITIES APPROX. EVERY 2 BARS OF 4/2
catch Cl. in analogue delay unit. Delay the delay from this with
ALLOW S900 ECHOS TO DECAY
reverberation > 24 mS.
Play with 2 units' return faders to produce 'clouds' between each Cl. gesture.
* Trumpet spill
CL → Ana D.L. → (Digi) D.L.
IN
OUT
PAN-A3 18 STAVE
COPYRIGHT © PANOPUS LTD 1976



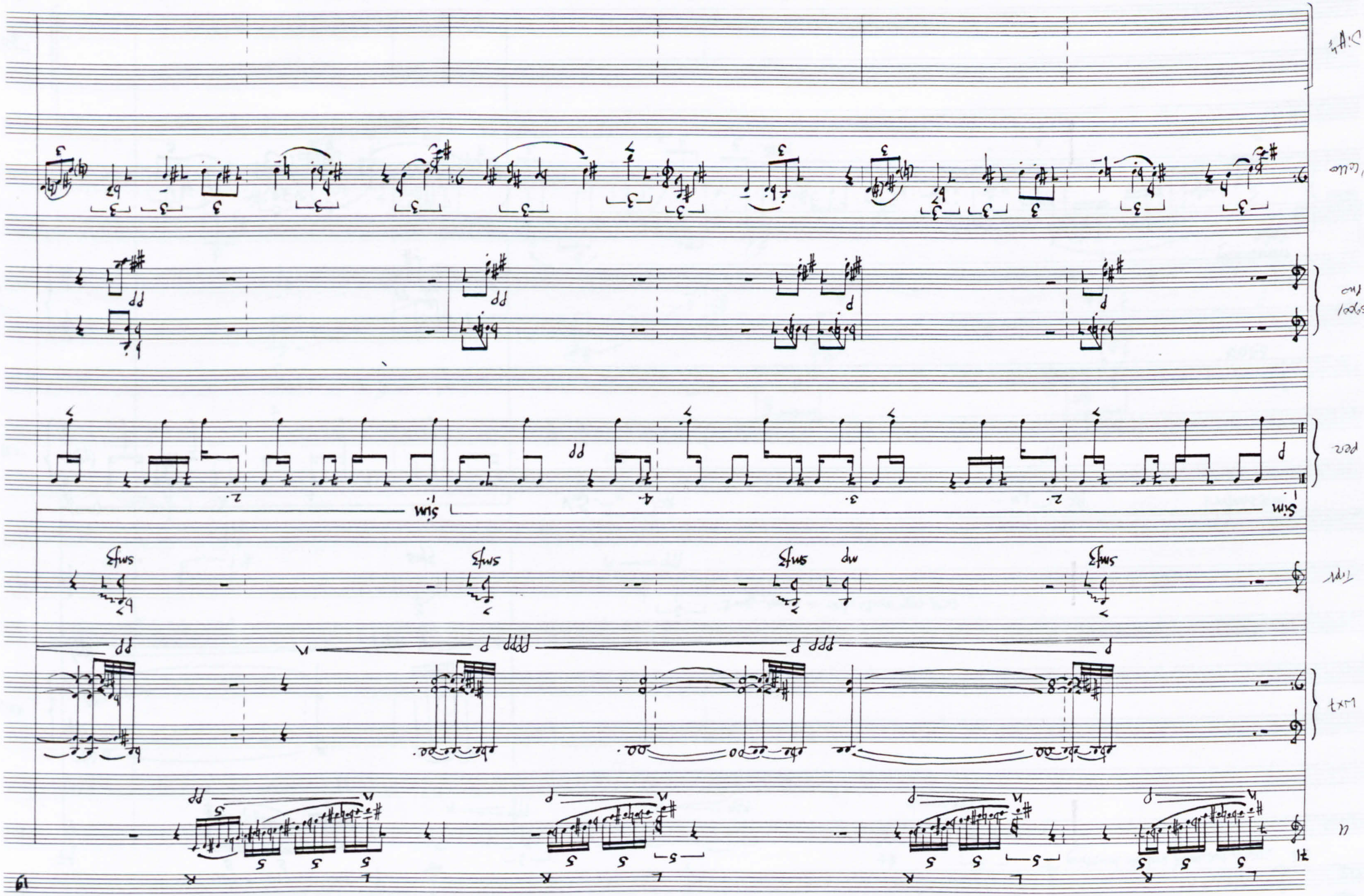
COPYRIGHT © PANOPUS LTD 1976



Diff
Cello
Sim
Tpt
txm

COPYRIGHT © PANOPUS LTD 1976

18

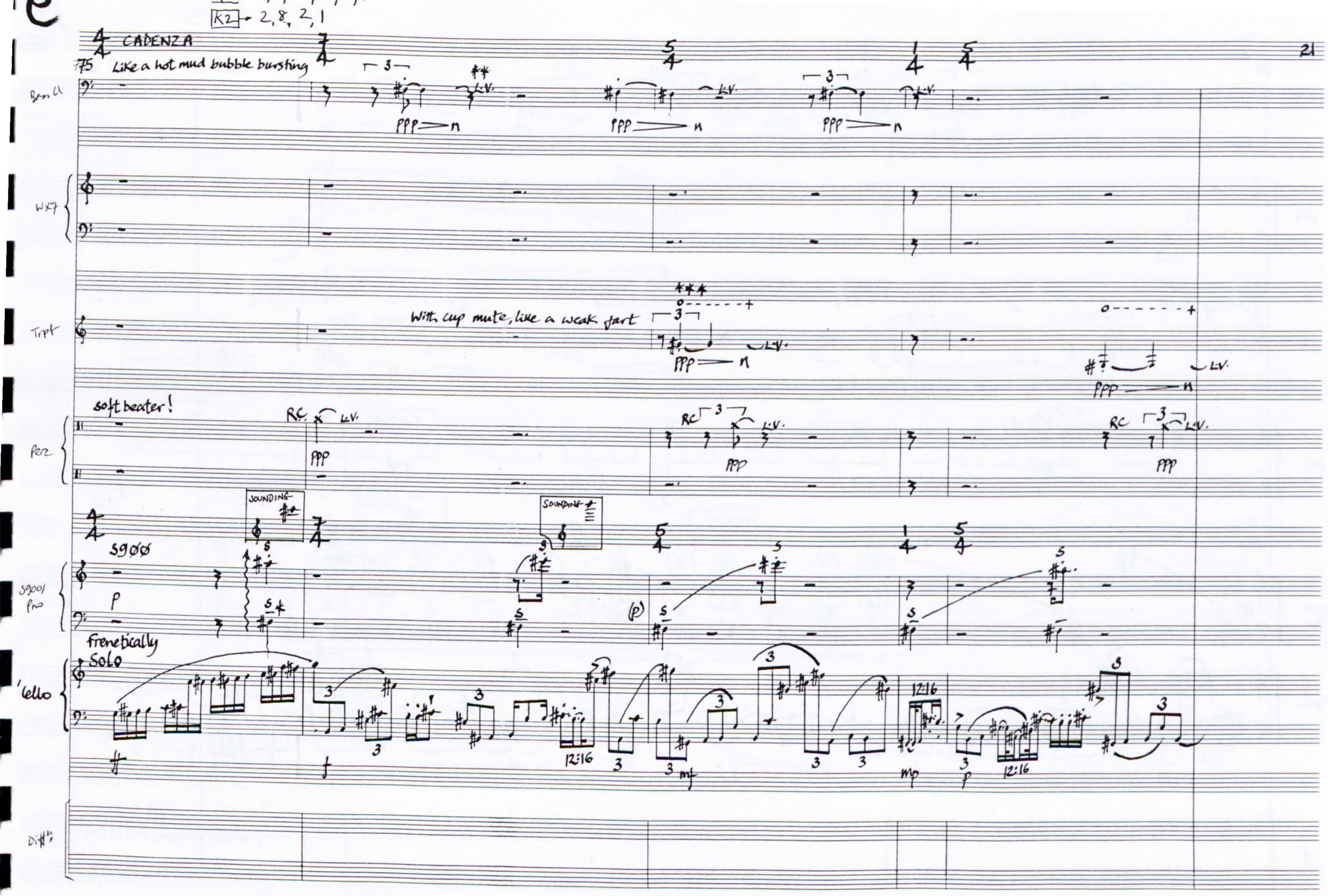


COPYRIGHT © PANOPUS LTD 1976

COPYRIGHT © PANOPUS LTD 1976

20

V.S.

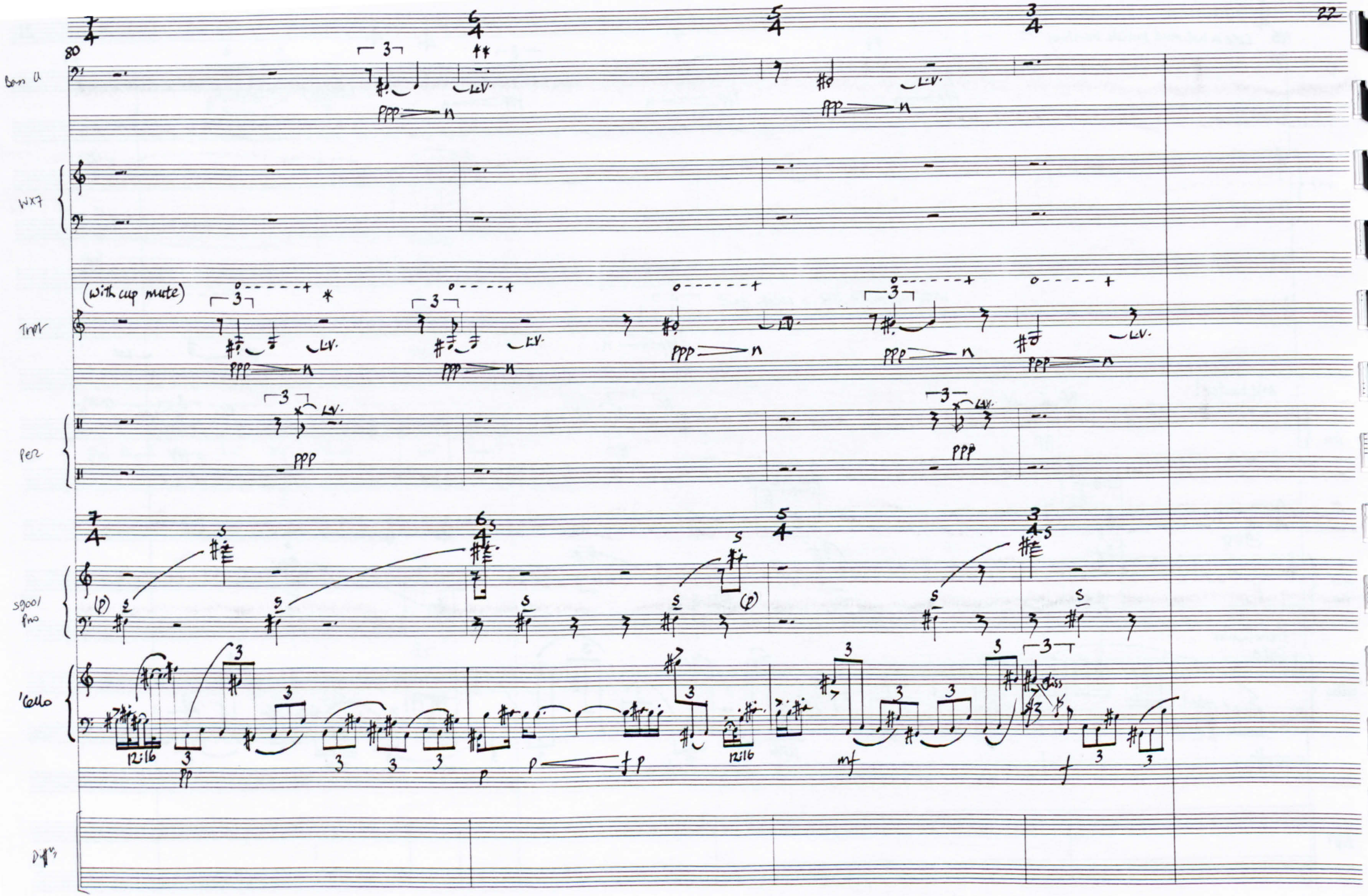


* S900 ("F#" - Unpitched).

** BCl. Tail off the sound with a breath tone.

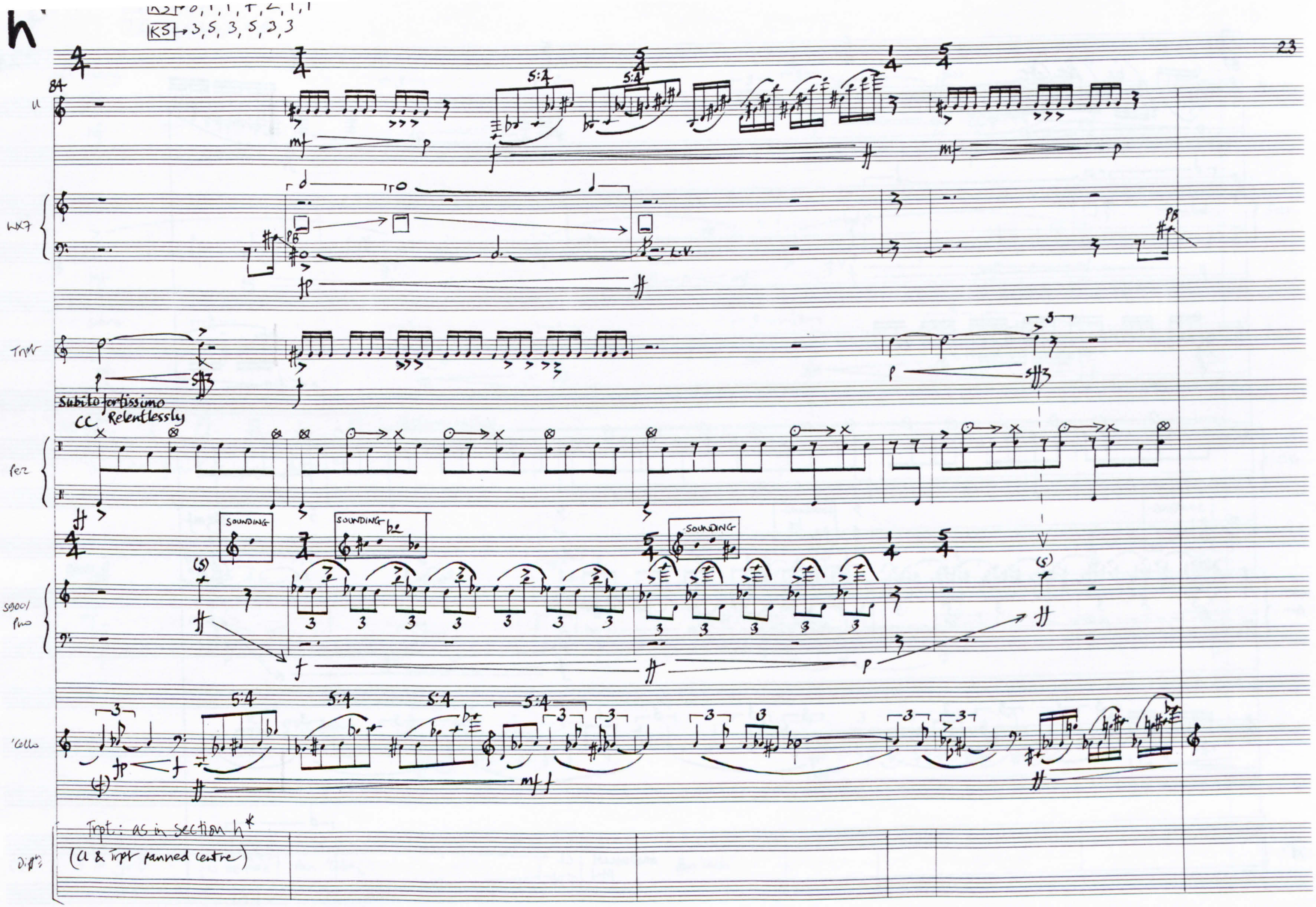
*** Trpt Gradually cover front of mute as tiny breath expires. Tail off the sound with a breath tone.

COPYRIGHT © PANOPUS LTD 1976



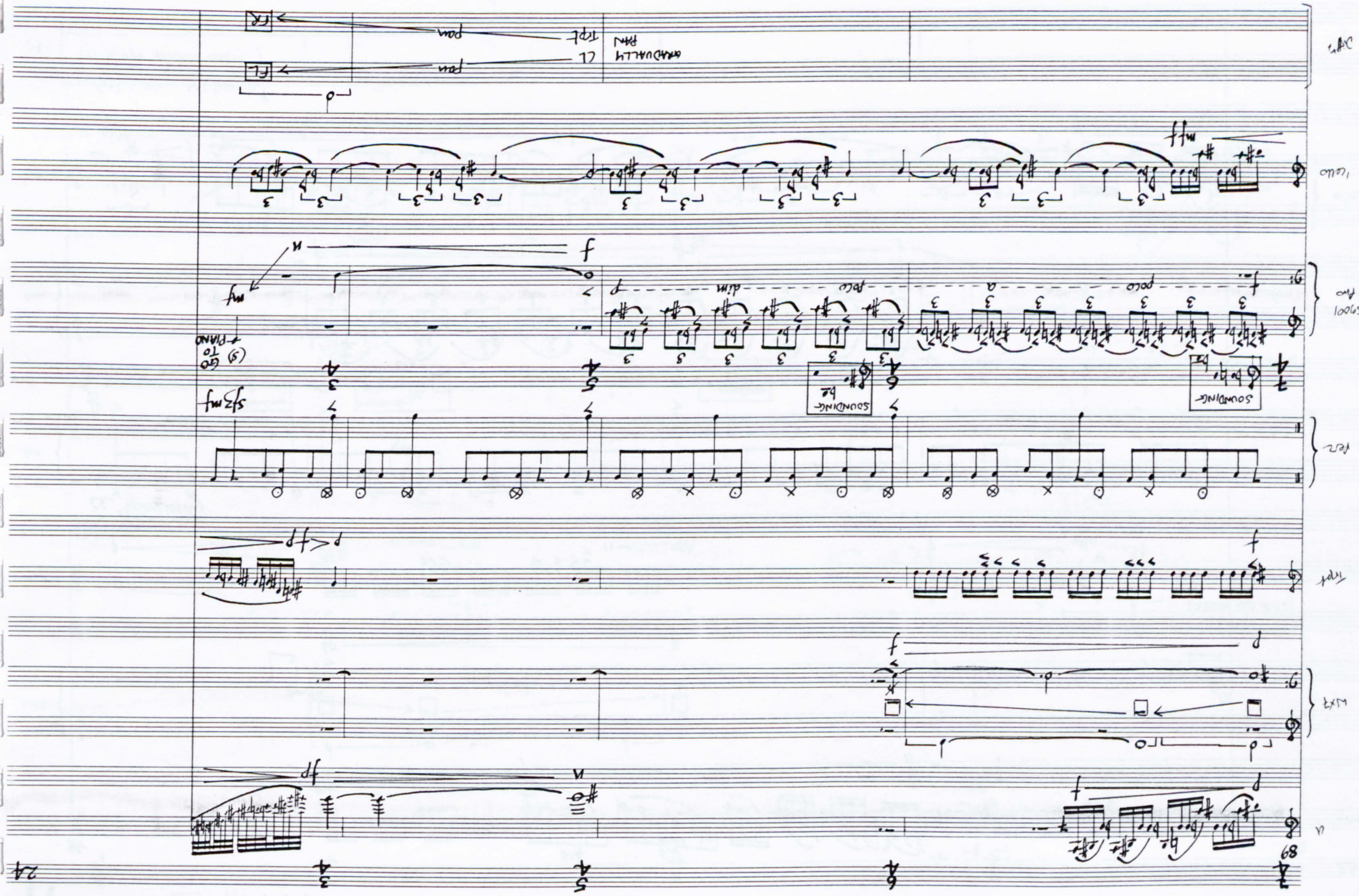
* Trpt. see note on previous page.
** B.Cl. see note on previous page.

COPYRIGHT © PANOPUS LTD 1976



* see bar 33.

COPYRIGHT © PANOPUS LTD 1976



COPYRIGHT © PANOPUS LTD 1976

K4 → 1, 8, 3

K6 → 4, 6, 4, 6, 2, 4, 4

Swing

mf

3 gliss

sfz

p

WX7

PB

(mf) > p < mf

Tmpt

Spill

RC.

Continue pattern

"Swing" over given Ride Cymbal pattern*

Sgoo/ Pno

PIANO

Am Grosch

(Ragtime)

'Cello

Trpt delay rtns to zero.

CELLO LEVEL TO THE FORE

Pan 'Cello

FL

FR

Dlys

* Perc.: Suggested Snare drum pattern

PAN-A3 18 STAVE

COPYRIGHT © PANOPUS LTD 1976

JPAN-A3 18 STAVE

COPYRIGHT © PANOPUS LTD 1936

9'

R6 → 2, 5
K7 → 6, 7, 6, 3, 7, 4, 6, 6

4/2 CADENZA

101

Switch to bass clarinet!

Bass Cl (𝄞)

(ppp poss)

Continue Pattern

WX7

Continue Pattern

ppp poss

Trpt

12:8

Continue Pattern

(ppp poss)

Solo 24:16

ppp poss

Per

CC RC HH

SNARES OFF

15:8

f p f p f p f p f p mf

4/2 (Piano)

Pno

poco a poco dim n

ppp poss

'cello

ppp

Diff^n

FL FR
Pno Pan Insts to CL
WX7 Trpt
BL BR

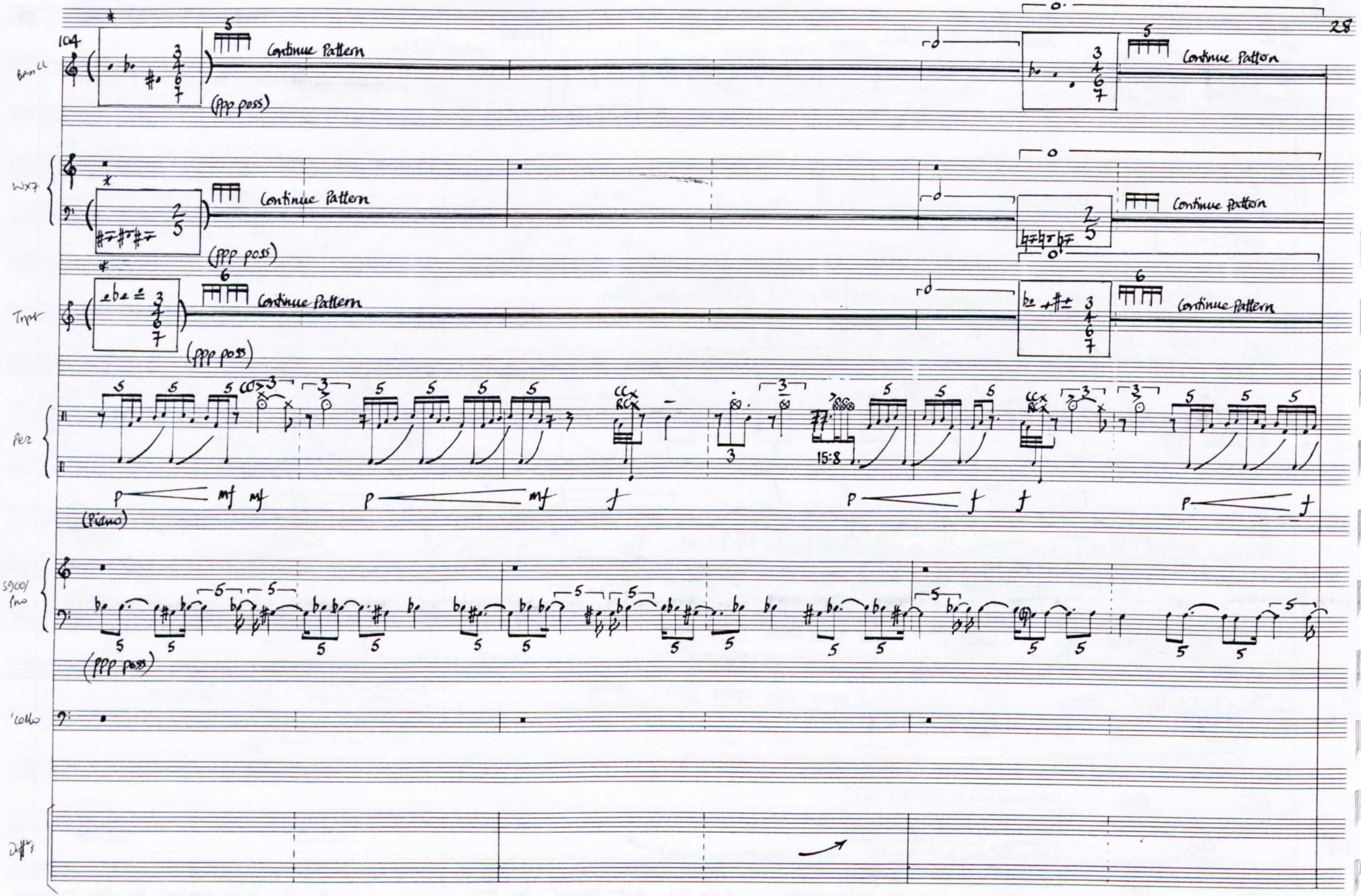
GRADUALLY VARY LEVELS OF B.CL, WX7, Trpt. & Pno. INVERSELY WITH AMOUNT OF PLATE REVERB. PER INSTRUMENT CHANNEL. PLAY WITH THE SOUNDS AS IF THEY WERE SLOWLY APPEARING AND DISAPPEARING DOWN METALLIC RABBIT HOLES AT DIFFERENT TIMES.

(Arrows are only guidelines)

** Trpt.: Choose a pitch and a number from those given. Repeat the pitch that number of times. Repeat process playing continuous sextuplets.

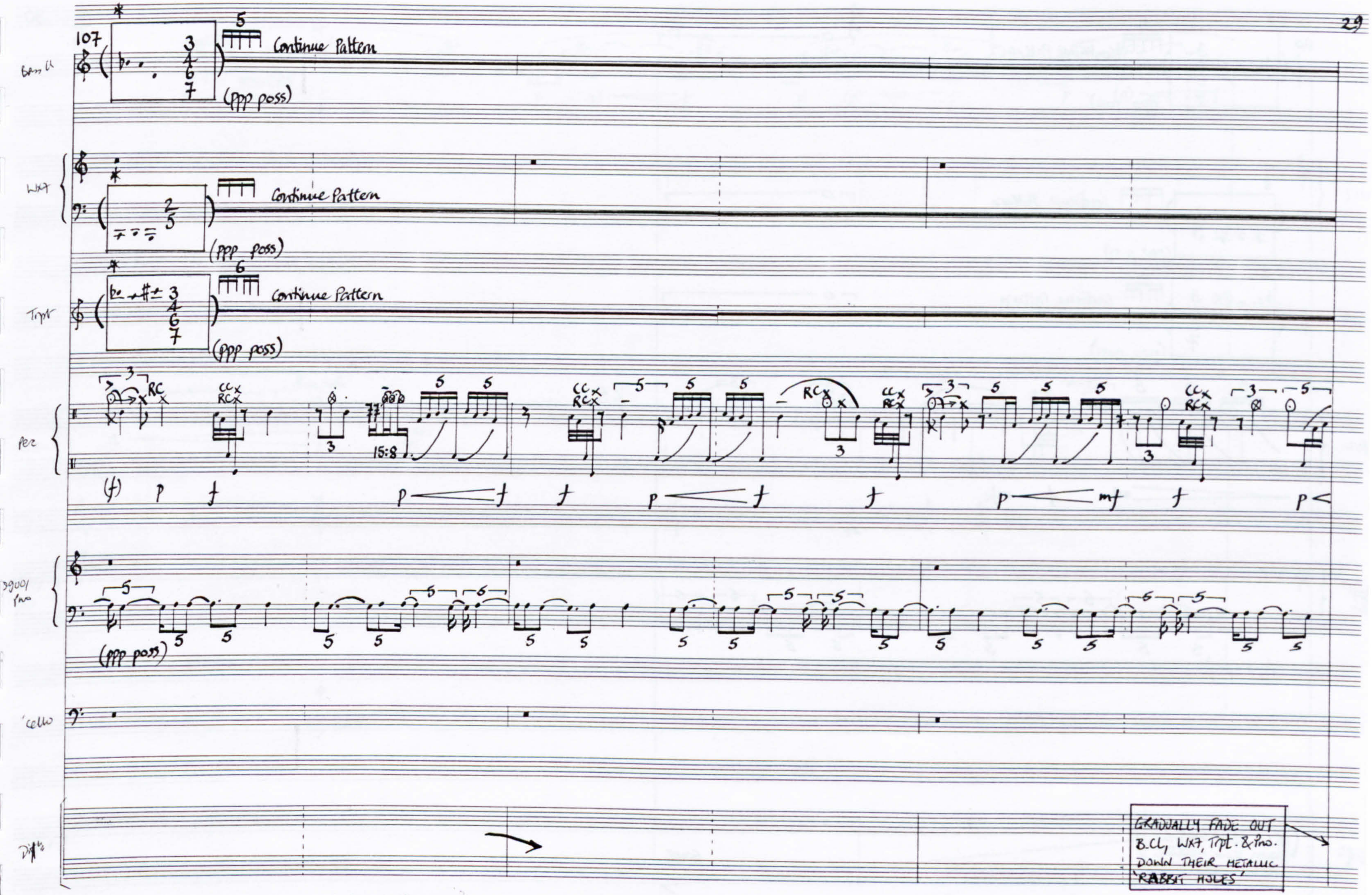
*** B.CL. As for trumpet, but play continuous quintuplets.

* WX7 As for trumbet, but play continuous semiquavers.



* See notes at bottom of p27.

COPYRIGHT © PANOPUS LTD 1976



PAN-A3 18 STAVE

* see notes at bottom of page 27

COPYRIGHT © PANOPUS LTD 1976

Bass Cl

110

Continue Pattern

(ppp poss)

WX7

Continue Pattern

(ppp poss)

Trpt

Continue Pattern

(ppp poss)

Perc

V.S.

mf t mf

Elpno/ Pno

(ppp poss)

'Cello

Diff's

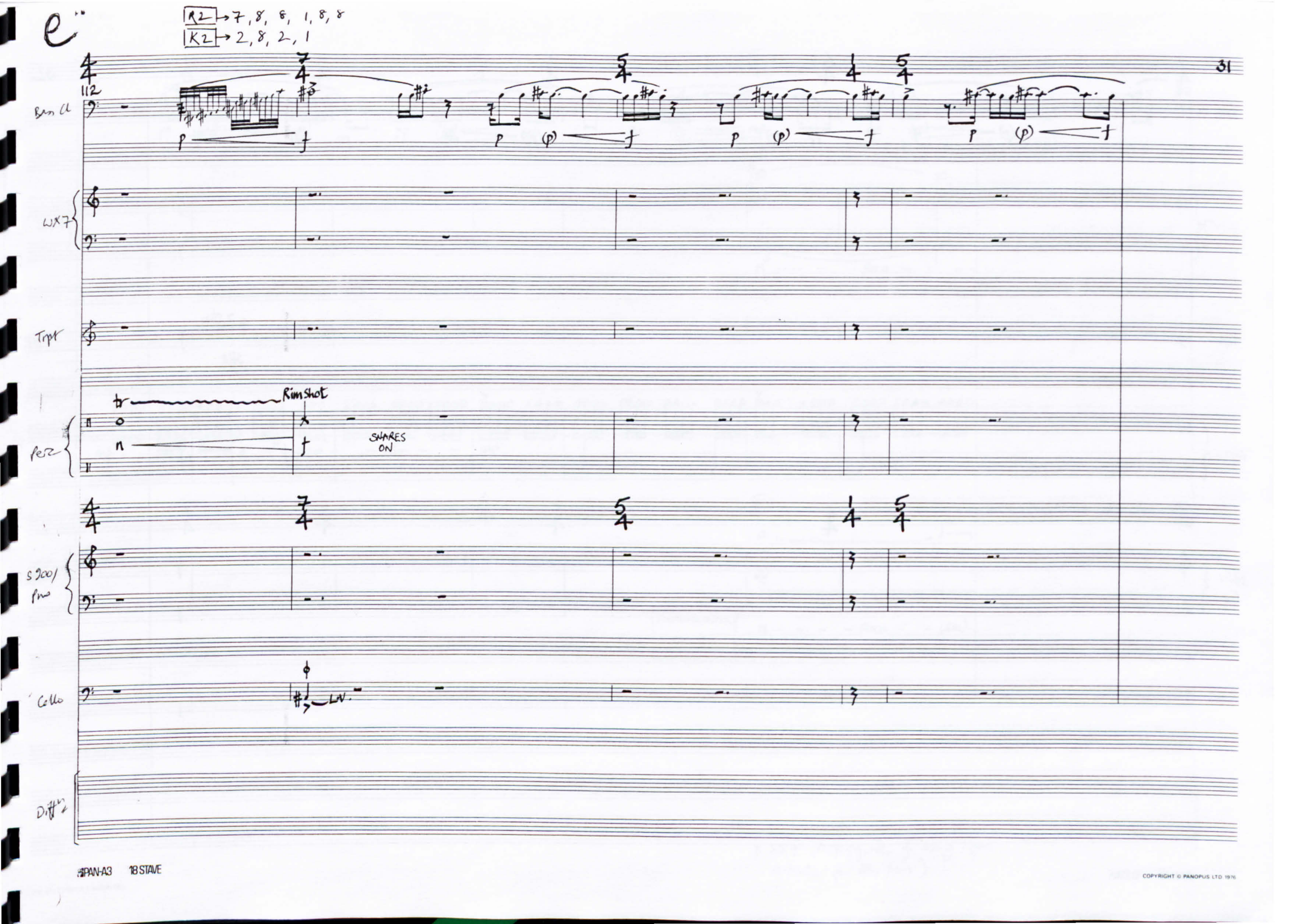
Fade out
B.Cl. WX7 Trpt. & Pno. down their metallic rabbit holes

GONE.

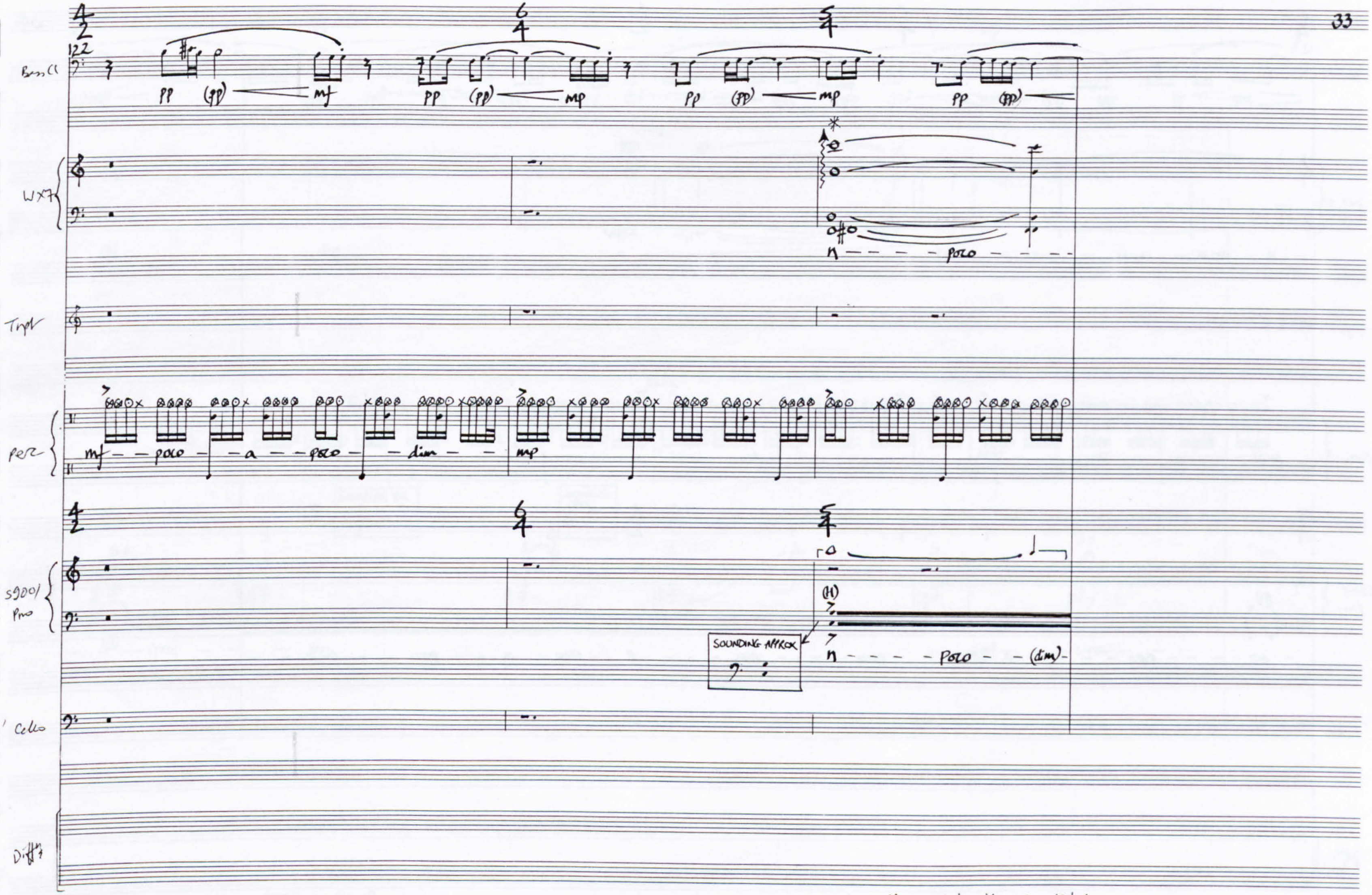
PAN-A3 18 STAVE

* see notes at bottom of p27

COPYRIGHT © PANOPUS LTD 1976


e
R2 → 7, 8, 8, 1, 8, 8
K2 → 2, 8, 2, 1
31
112
Bass Cl
WX7
Trpt
Rimshot
Perc
SNARES ON
S900/Pno
Cello
LV.
Diff^n 2
PAN-A3 18 STAVE
COPYRIGHT © PANOPUS LTD 1976

COPYRIGHT © PANOPUS LTD 1976



* WX7 (Arpeggiate if using Kybd controller for this part).

COPYRIGHT © PANOPUS LTD 1976

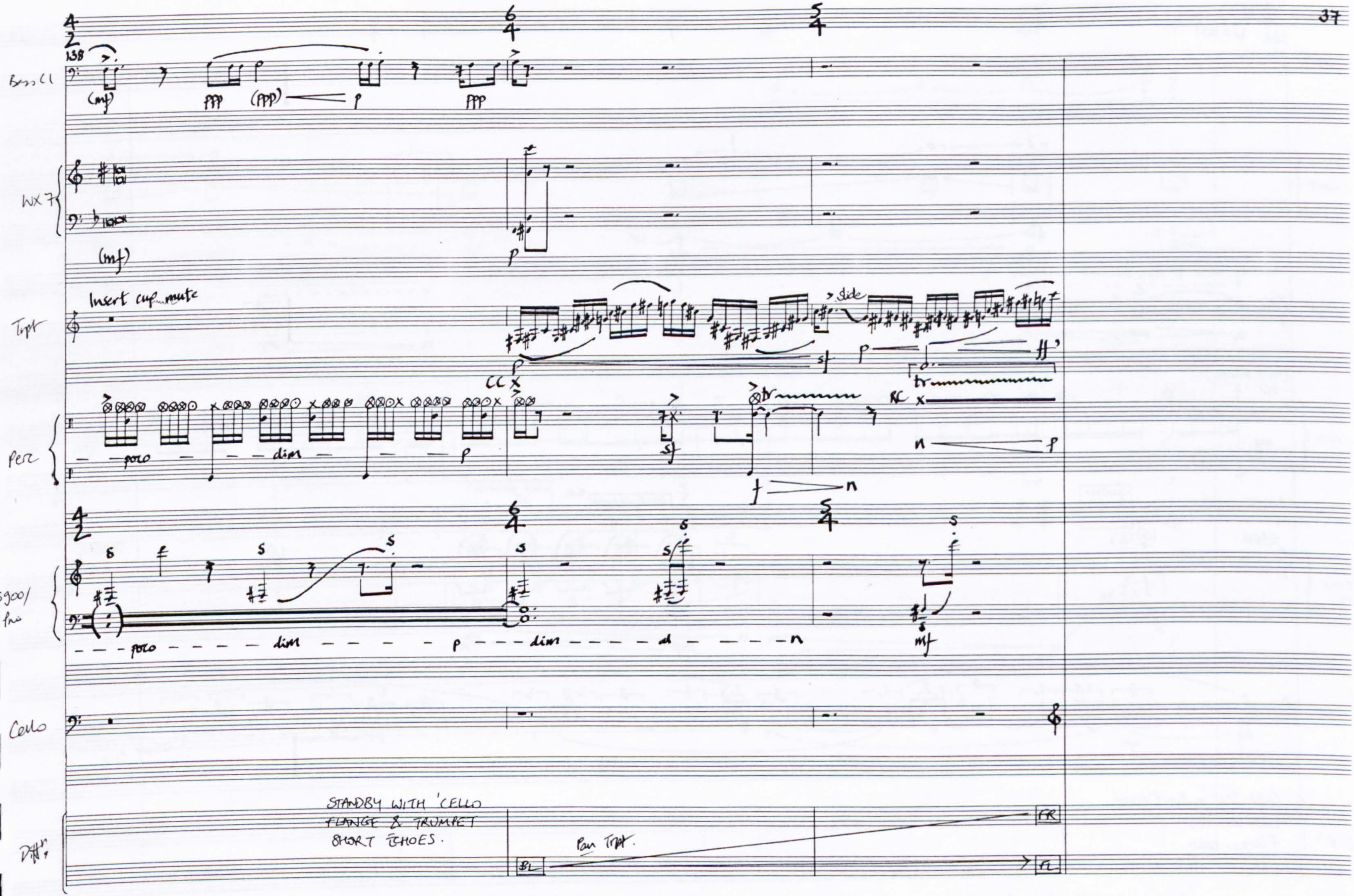
COPYRIGHT © PANOPUS LTD 1976

34

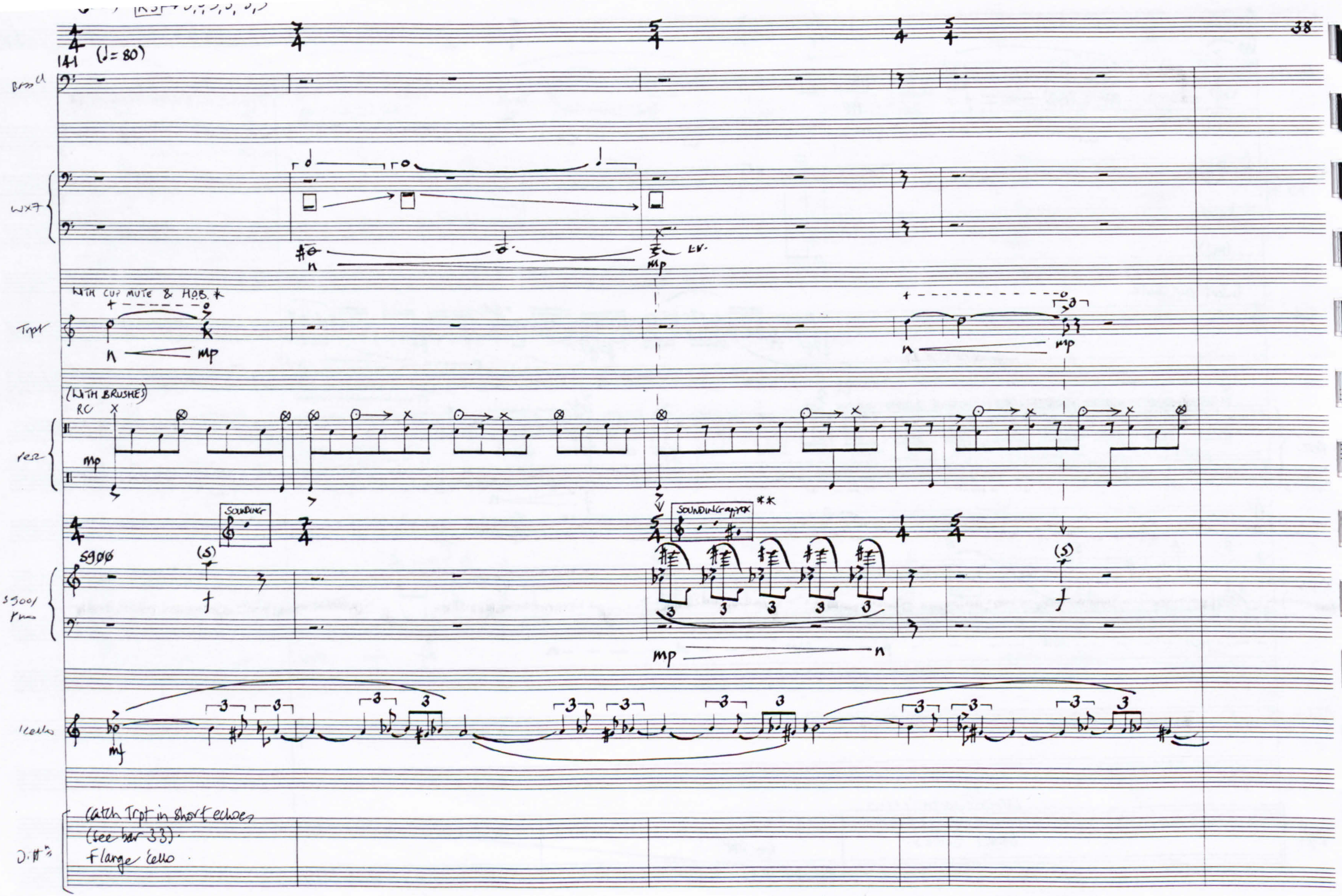
COPYRIGHT © PANOPLUS LTD 1976

35

COPYRIGHT © PANOPUS LTD 1976



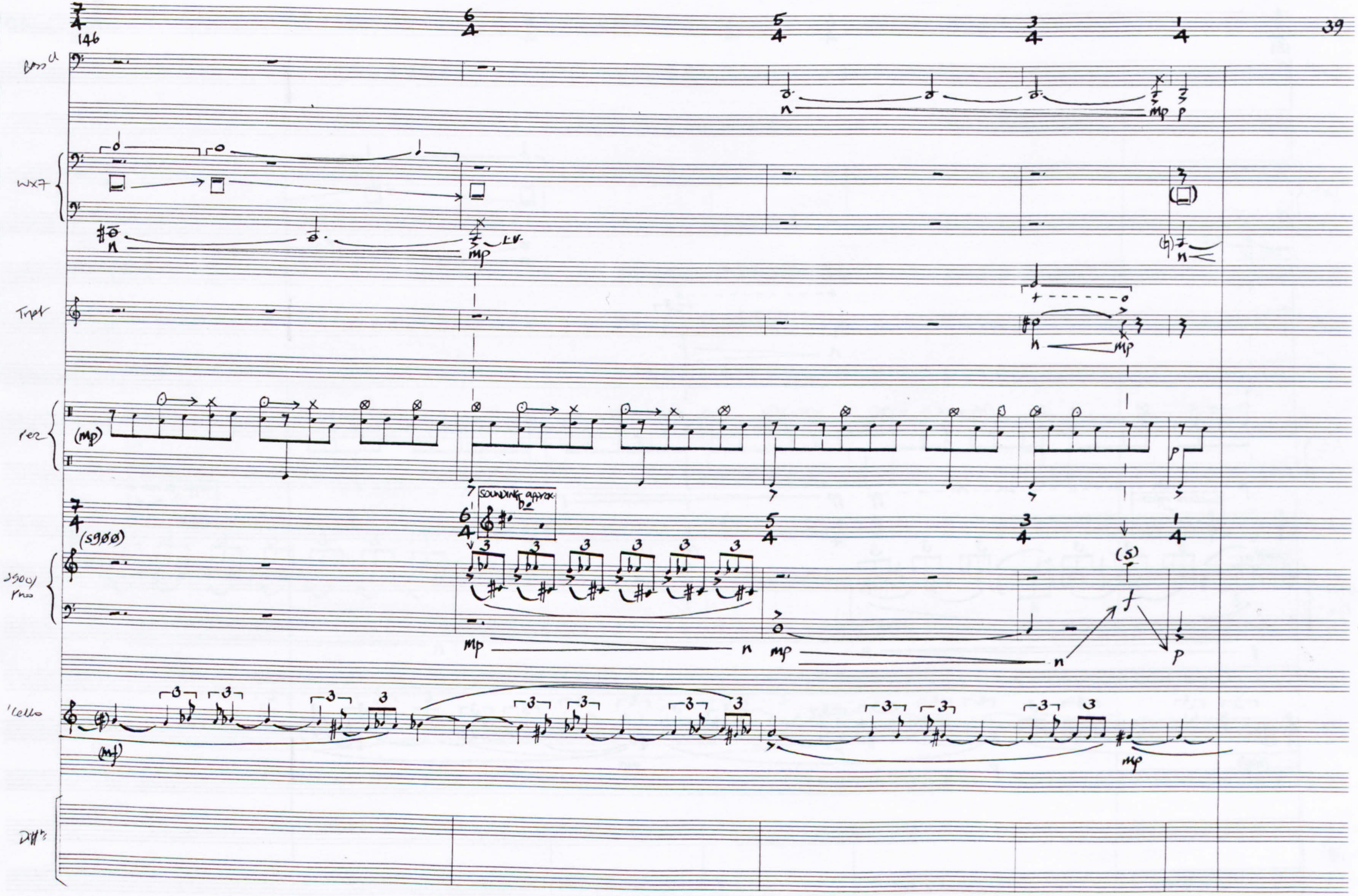
COPYRIGHT © PANOPUS LTD 1976



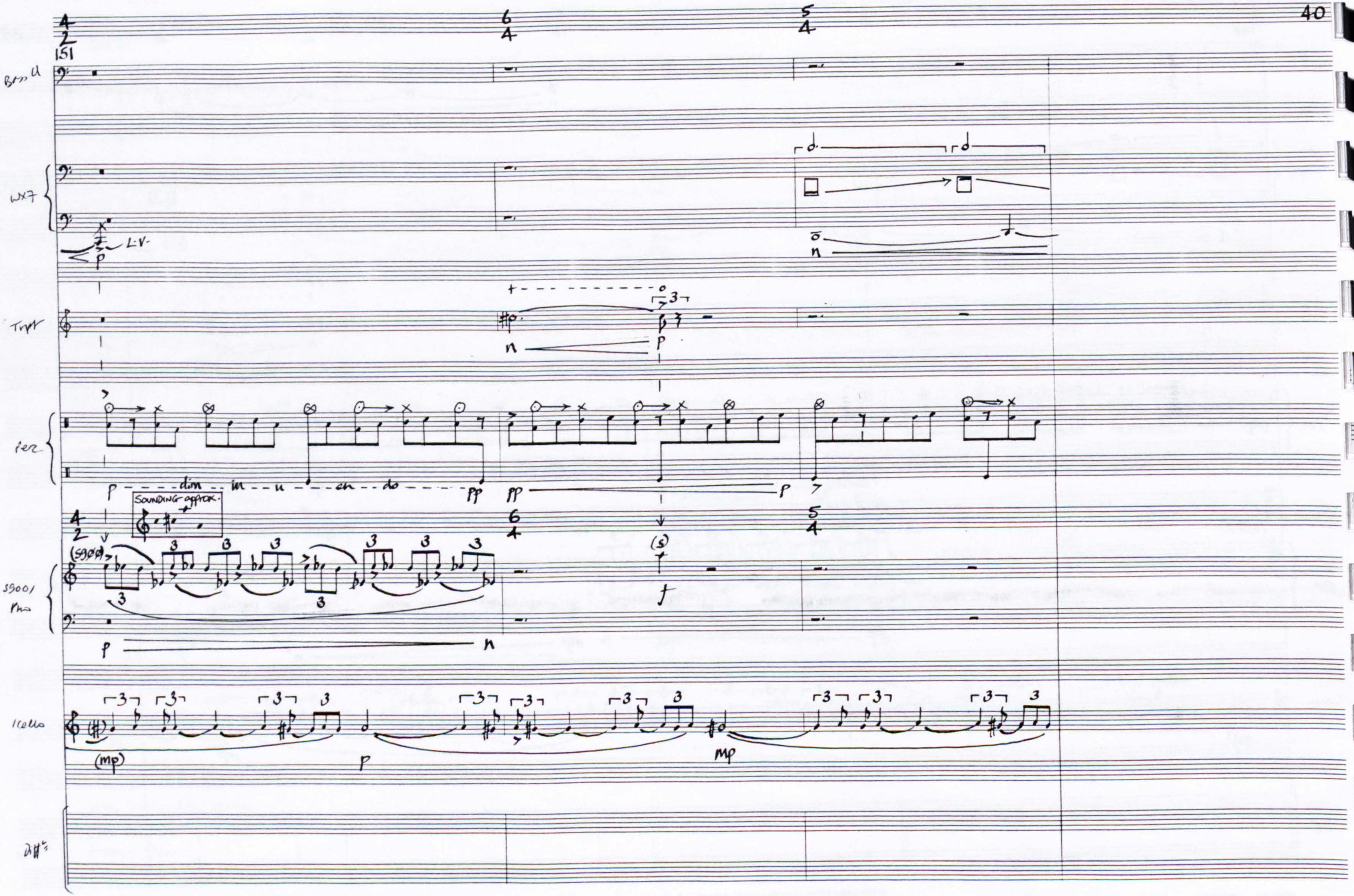
* Trpt. Gradually uncover hand from over cup mute in bell.

** These boxes show pitch sounding, but not necessarily in the correct octave.

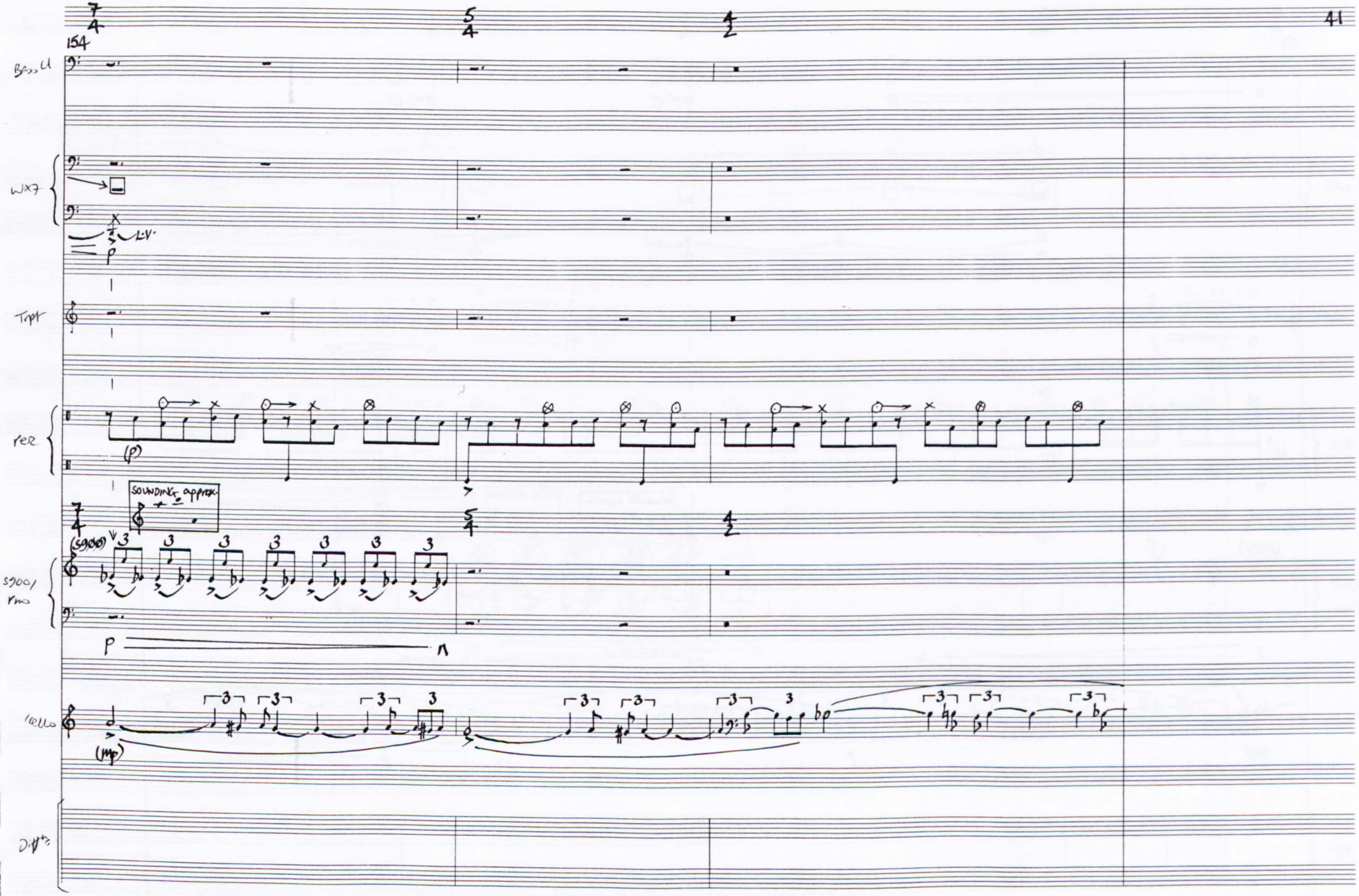
COPYRIGHT © PANOPUS LTD 1976



COPYRIGHT © PANOPUS LTD 1976

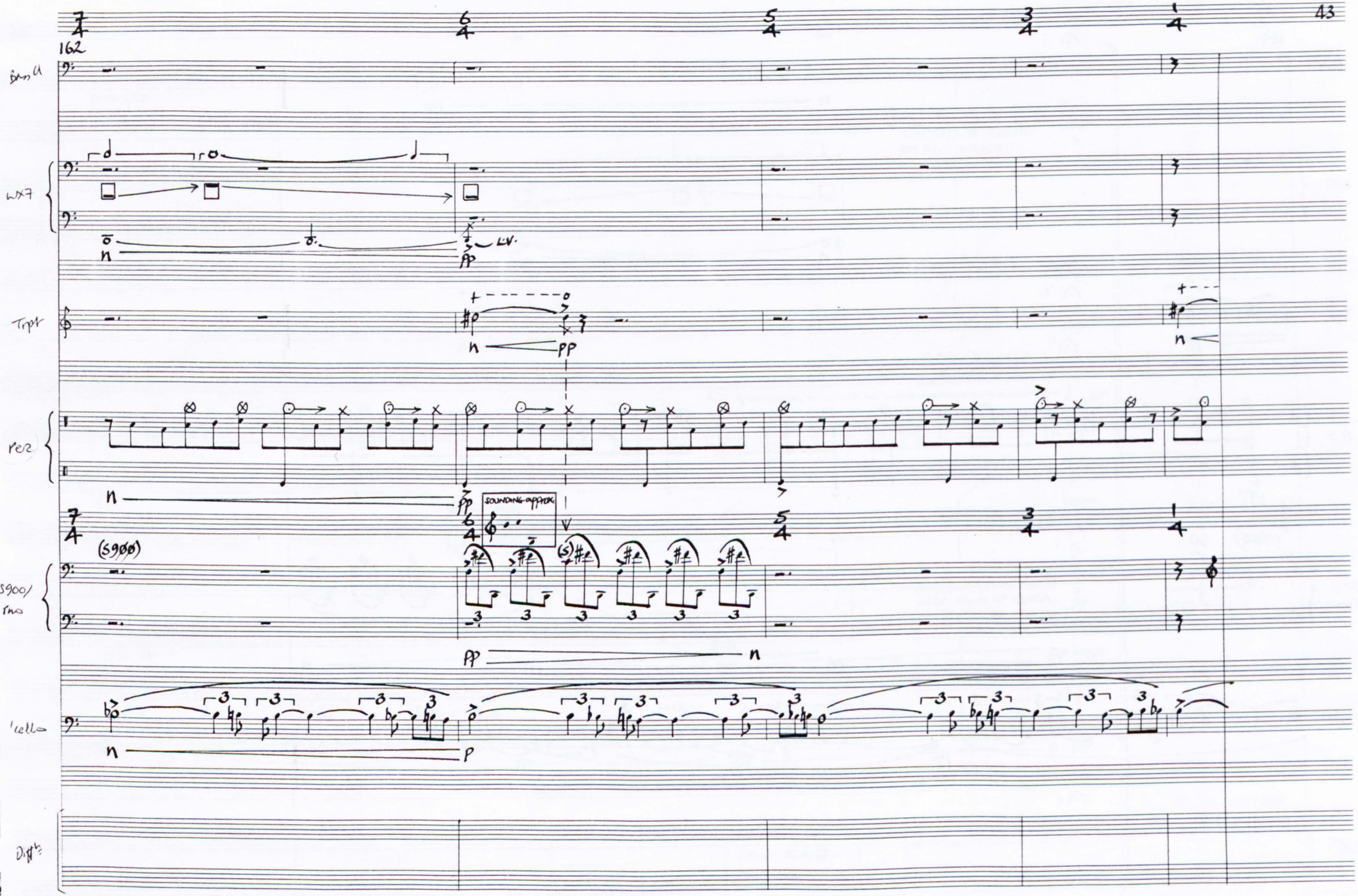


COPYRIGHT © PANOPUS LTD 1976

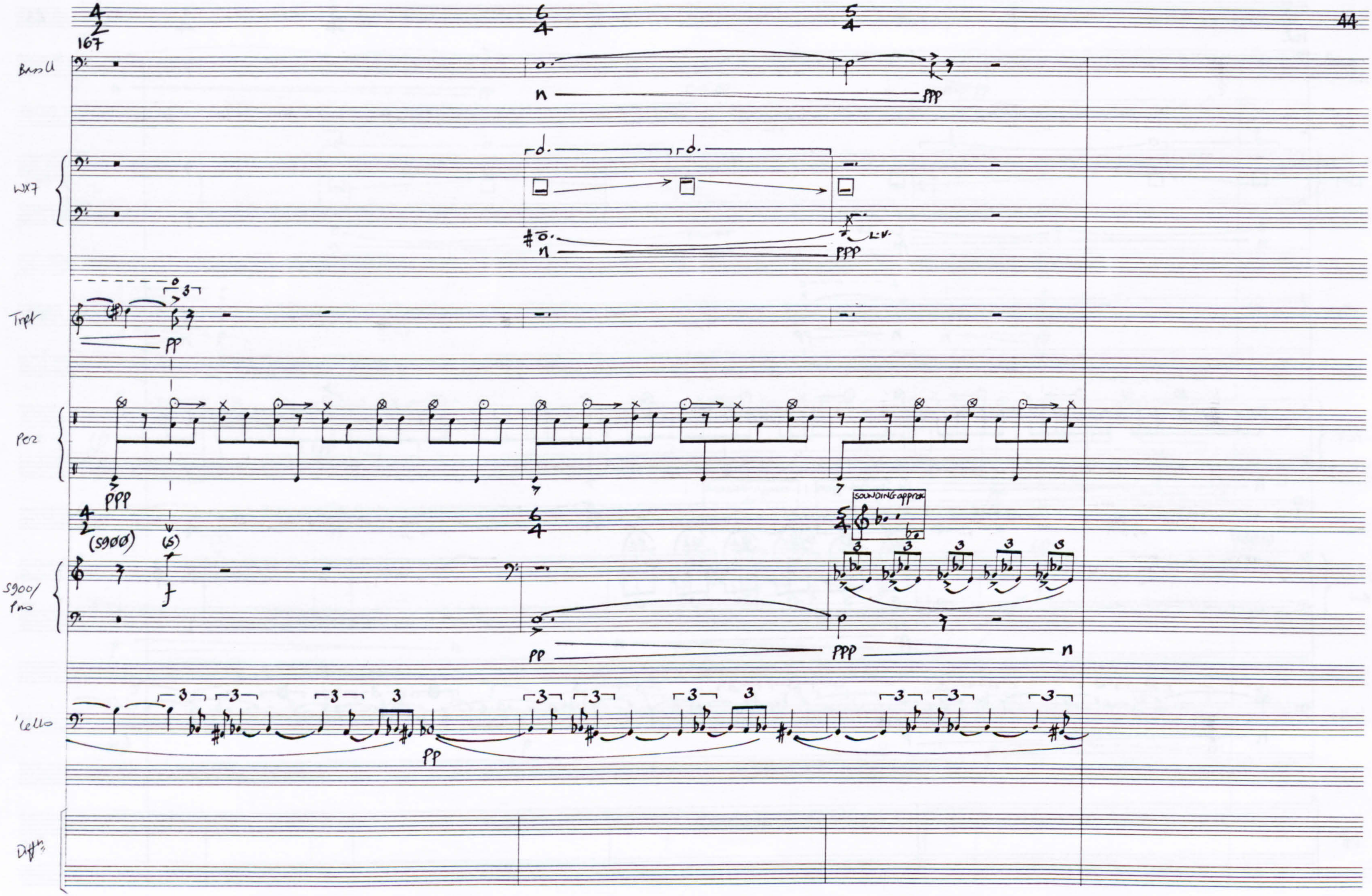


COPYRIGHT © PANOPUS LTD 1976

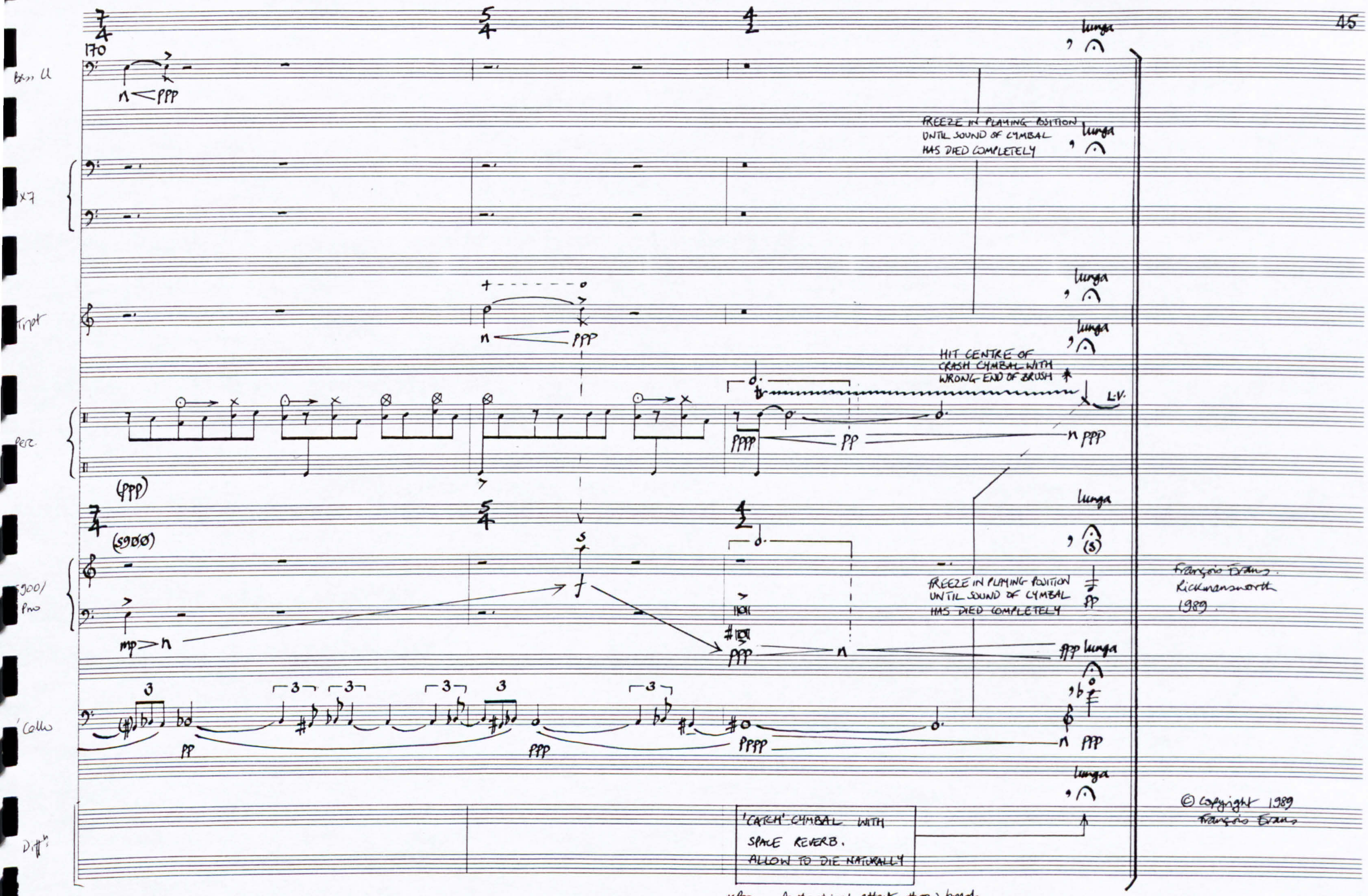
COPYRIGHT © PANOPUS LTD 1976



COPYRIGHT © PANOPUS LTD 1976



COPYRIGHT © PANOPUS LTD 1976



François Evans. Rickmansworth 1989.

© Copyright 1989 François Evans

*Perc. As theatrical effect, throw brush into air to spin, catching it for the last note. Freeze after strike until note has completely died.

COPYRIGHT © PANOPUS LTD 1976