OPEN UNIVERSITY LIBRARY — PROGRAMME SEQUENCE LIST

Title : Earth Structure.

Contributors : M.J. Pentz (introduction)
Russell Stannard
Ian Gass

CU S100/22
Tape No. 6LT/10007
Project No. 00520/1122
Date Recorded 19.5.1970.
Form VTR
551.22

Producer: Nat Taylor — 1ST TX 28.6.71.

Seq.	Time	Footage	Sequence List	Sound Cue
	51"		M.J. Pentz introduces the unit.	
	1'34"		R.Stannard introduces his discussion on P and S waves in earthquakes with a brief definition of the two kinds of waves (compressional and transverse waves)	
	2'32"		Animated diagram showing compressional (P) waves	Stannard, R
	3'26"		Animated diagram showing transverse (S) waves.	
1/	4'17"		Aerial shot of portion of the San Andrès fault. Standard points out some details.	551.870978962
	10'43"		Stannard uses a model of the San Andrès fault connected to 3 large springs to simulate S waves and P waves. A mixture of S and P waves is simulated with the model and shown on a diagram. Stannard shows that the intensity of each depends on the angle from the fault line at which the reading is taken.	fault line direction
	13'04"		Pentz introduces Ian Gass	well, the question.....
2/	14'04"		Gass discusses the effect of P and S waves on the earth. He has with him 3 seismometers which are connected to an oscilloscope. As Gass taps on the table from various directions, the shock tracings are seen on the oscilloscope screen.	551.22028 Gass, I
	15'13"		Gass shows traces from an actual earthquake. He explains the difficulty of interpreting such complex tracings.	
	16'15"		Gass shows tracings taken of a simpler earthquake on which a definite pattern can be seen. P waves precede S waves.	
	17'01"		Animated diagram shows tracings taken from stations (3) at various angles to the fault.	
	19'48"		Gass with a half earth globe. On it he shows the maximum angle of S wave travel from an area of earthquake- (103°) From a number of these S wave readings the earths core can be defined. (The area through which S waves cannot travel.)	551.11

OPEN UNIVERSITY LIBRARY PROGRAMME SEQUENCE LIST

Continuation

Seq.	Time	Footage	Sequence List	Sound Cue
	21'02"		Gass inserts an inner core into the globe, simulating the earths inner core. He explains how through a series of P Wave readings the size of the inner core can be determined.	
	23'30		The low velocity layer of the earths crust is shown in a diagram and its nature explained by Gass.	551.14
	24'12"		Movement of the outer crust over the mantle with a low velocity zone sandwiched between is shown in an animated diagram. Gass explains the origin of volcanoes in the low velocity zone.	
	24'42"		Aerial shots of volcano with credits over.	551.21