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9 Technical rept.

(SDCS)

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SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
NTS Event 'ESROM', 04 February 1976.

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K.J. Hill, M.S./Dawkins, R.R./Baumstark ~~and~~ M.D. Gillispie
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)		

SDCS EVENT REPORT NO. 85

NTS Event "ESROM", 04 February 1976

Using SDCS stations and LASA, the epicenter location and magnitudes become *"ESROM" EVENT are reported.* *for*

Origin Time	Lat.	Long.	m_b	M_s
14:40:01.6	37.1N	116.0W	5.4	4.8

All SDCS stations were operational during this period.

The programs used for LASA, NORSAR and ALPA data recovery are presently undergoing modifications. Information for LASA short-period is reported from their Teleseism Event Report. The long-period array beam recovery for these stations will be resumed upon completion of these modifications.

Short-period signals associated with this event were recorded at all SDCS stations and LASA. All SP channels at HN-ME had polarity reversals; to correct this, mathematical inversions of the data were performed. Horizontal SP channels at all SDCS stations were rotated.

Long-period signals were recorded at all SDCS stations. All LP channels at HN-ME and the LP radial channel at RK-ON had polarity reversals; to correct this, mathematical inversions of the data were performed. Horizontal LP channels at all SDCS stations were rotated.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response).

ACCESSION for	
NTIS	Write Station <input checked="" type="checkbox"/>
DOC	Dist. Station <input type="checkbox"/>
BRAND/STG	<input type="checkbox"/>
JUSTIFICATION	
BY	
DISTRIBUTION/AVAILABILITY STATE	
EVAL. APPROVAL/RECAL	
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STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES		ELEVATION METERS	INSTRUMENTATION	
		DEG	MN SECS		SHORT-PERIOD	LONG-PERIOD
ALPA	Alaska	65 14	00.0 N 147 44 36.0 W	626	None	31300
CPSO	McMinnville, Tennessee	35 35	41.4 N 085 34 13.5 W	574	6480 V 7515 H	SL210 V SL220 H
FN-WV	Franklin, West Virginia	38 32	58.0 N 079 30 47.0 W	910	KS36000	KS36000
LASA	Billings, Montana	46 41	19.0 N 106 13 20.0 W	744	HS10	7505A V 8700C H
HN-ME	Houlton, Maine	46 09	43.0 N 067 59 09.0 W	213	KS36000	KS36000
NORSAR	Kjeller, Norway	60 49	25.4 N 010 49 56.5 E	379	HS10	7505A V 8700C H
RK-ON	Red Lake, Ontario	50 50	20.0 N 093 40 20.0 W	366	18300	SL210 V SL220 H
WH2YK	White Horse, Yukon	60 41	41.0 N 134 58 02.0 W	855	18300	SL210 V SL220 H

Note: The orientation of the radial instruments at FN-WV is assumed to be 16° + 5° based on empirical data (event recordings). Rotation, where performed, is referenced to this azimuth and may be questionable.

HYPOCENTER DETERMINATION

INPUT FOR EVENT 4 FEB 76
 14:40:00.0 37.000N 116.000W 0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CALC	REST		
LAO	14 42 53.3	0.1	0.3	12.0	34.3
RK-ON	14 44 45.6	-0.2	-0.4	21.0	42.3
CPSO	14 45 21.9	0.0	0.2	24.5	84.4
WH2YK	14 45 39.3	-0.0	0.0	26.5	339.0
FN-WV	14 46 00.0	-0.2	-0.1	28.8	75.9
HN-ME	14 47 08.0	0.3	0.0	36.5	60.3

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LONG.	DEPTH (KM)	SDV	IT	STA
14:40:07.3	37.275N	115.945W	36. CALC	0.2	4	6
14:40:01.6	37.144N	116.034W	0. REST	0.3	2	6

CALC			REST		
1	.	0	1	.	0
0	.	0	0	.	0
0	0.	3 2	0	0.	3 2
.
0	0.	0 0	0	0.	0 0
0	.	0	0	.	0
0	.	0	0	.	0

CHI2 COVERAGE ELLIPSE; 95 PER CENT CONF..LEVEL, SDV= 1.79
 MAJOR 68.2KM. MINOR 41.1KM. AZ= 35 AREA= 8809 SQ.KM. REST

DATA SUMMARY

INPUT FOR EVENT 4 FEB 76
 14:40:00.0 37.000N 116.000W OKM.

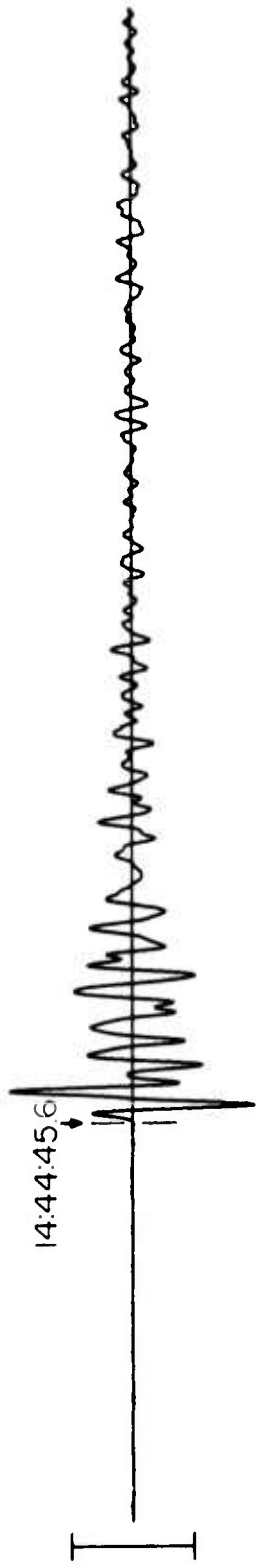
STA.	PHASE	ARRIVAL		INST	PER	A/T	MAGNITUDE		DIR	DIST
		TIME					MB	MS		
LAO	EP	14 42	53.3	SAB	99.9	9999.				
RK-ON	EP	14 44	45.6	SPZ	0.9	1384.	5.94			21.0
RK-ON	LQ	14 52	21.0	LPT	14.0	49.				
RK-ON	LR	14 53	33.0	LPZ	12.0	215.		4.77		21.0
CPSO	EP	14 45	21.9	SPZ	1.1	385.	5.69			24.5
CPSO	LQ	14 53	33.0	LPT	18.0	190.				
CPSO	LR	14 55	17.0	LPZ	15.0	365.		5.07		24.5
WH2YK	EP	14 45	39.3	SPZ	0.8	38.	4.73			26.5
WH2YK	LQ	14 54	52.0	LPT	21.0	142.				
WH2YK	LR	14 57	02.0	LPZ	17.0	171.		4.78		26.5
PN-WV	EP	14 46	00.0	SPZ	1.1	67.	5.13			28.8
PN-WV	LQ	14 55	49.0	LPT	19.0	210.				
PN-WV	LR	14 57	44.0	LPZ	17.0	205.		4.89		28.8
HN-ME	EP	14 47	08.0	SPZ	1.1	234.	5.62			36.5
HN-ME	LQ	14 59	52.0	LPT	17.0	203.				
HN-ME	LR	15 02	18.0	LPZ	14.0	178.		4.93		36.5

ORIGIN	LAT.	LONG.	DEPTH (KM)	MAG	SDV	STA	LP MAG	LP SDV	LP STA
14:40:07.3	37.275N	115.945W	36. CALC	5.39	0.51	5	4.83	0.1	2
14:40:01.6	37.144N	116.034W	0. REST	5.42	0.49	5	4.83	0.1	2

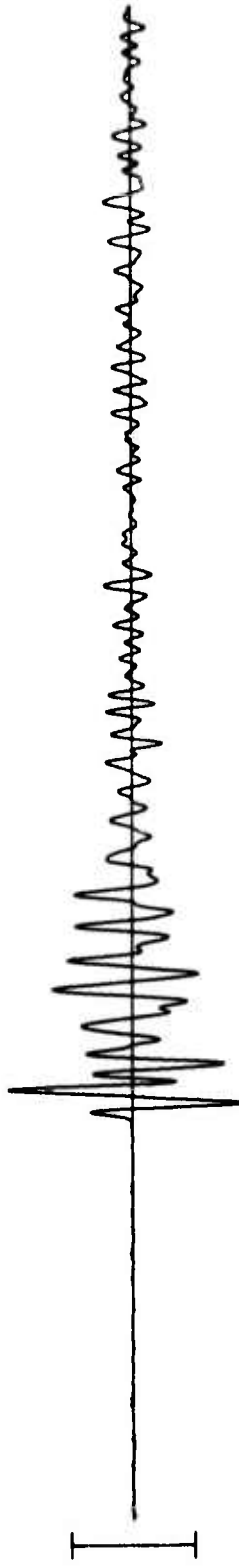
Average long-period magnitude (M_s) is based on Rayleigh wave observations in the period range of 17 to 23 seconds per cycle.

RK-ON 04 FEB 76

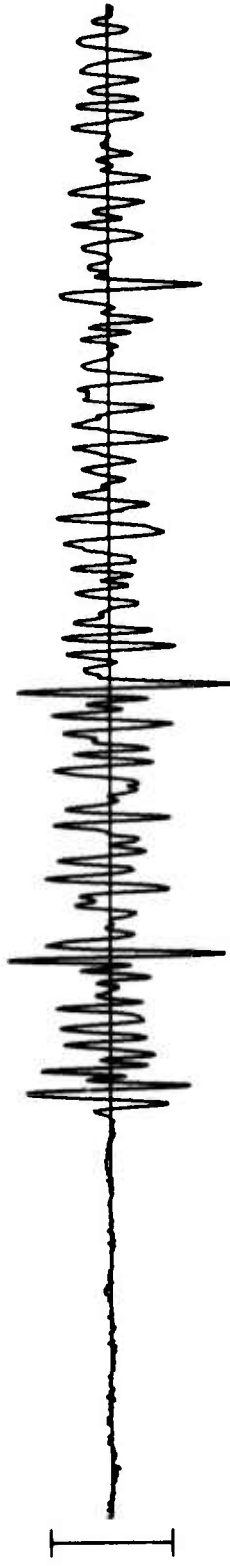
SPZ
802.04 MU



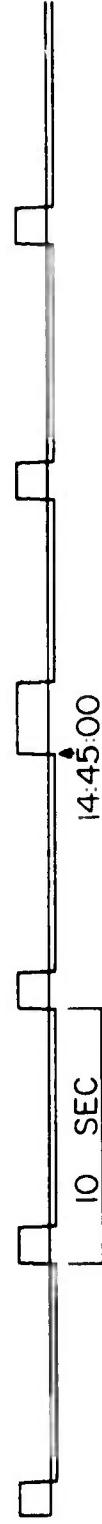
SPR
587.21 MU



SPT
145.50 MU

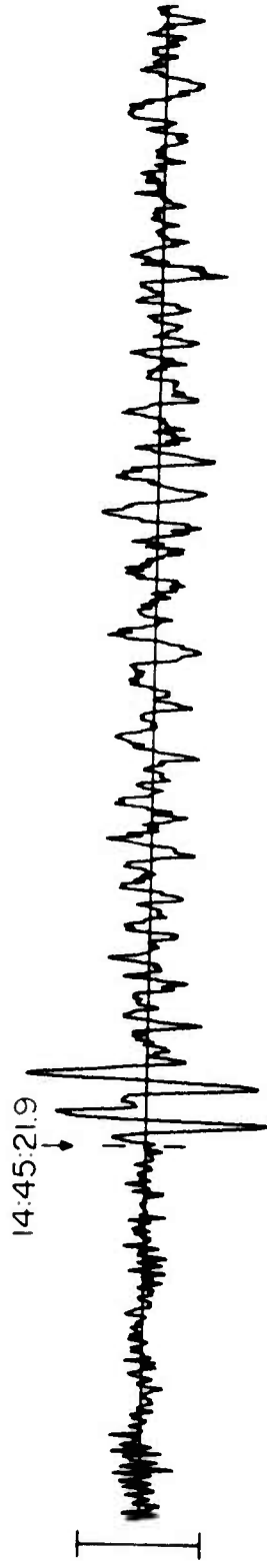


TIME



CPSO 04 FEB 76

SPZ
195.93 MU



SPR
49.70 MU



SPT
53.07 MU



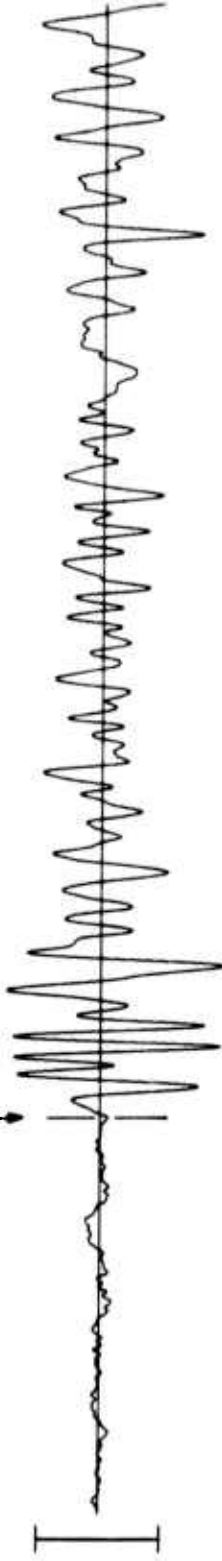
10 SEC

WH2YK

4 FEB 76

14:45:39.3

SPZ
30.36 MU



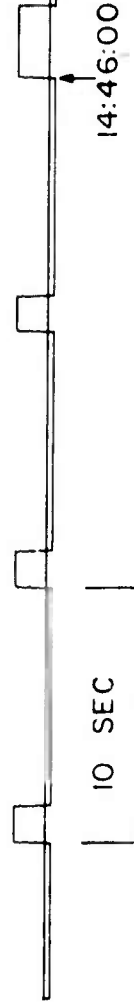
SPR
18.96 MU



SPT
15.50 MU



TIME

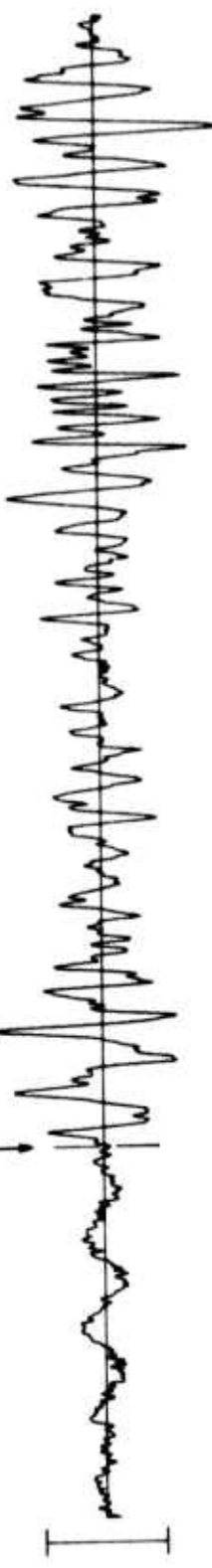


FN-WV

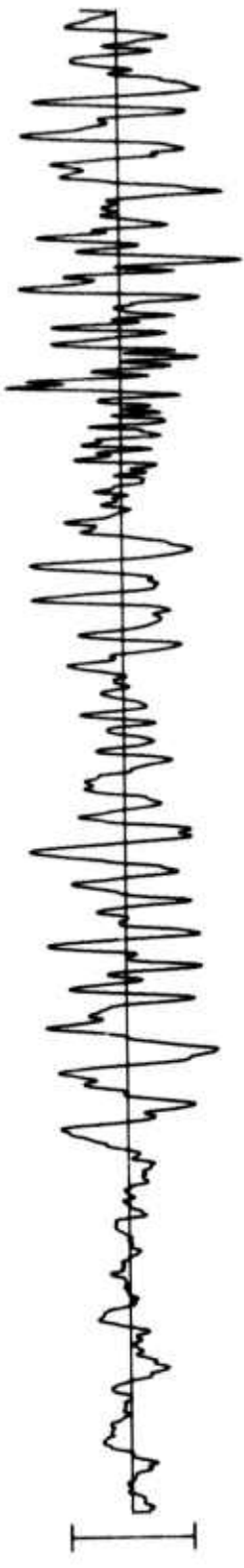
4 FEB 76

14:46:00.0

SPZ
41.87 MU



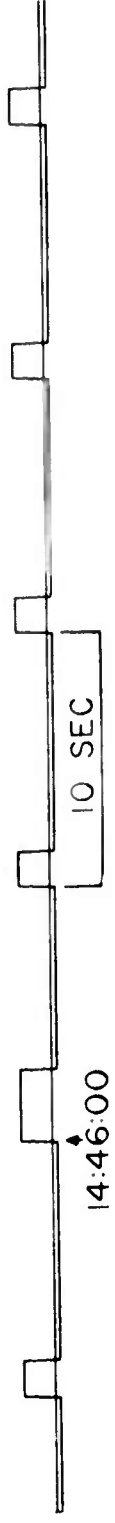
SPR
24.38 MU



SPT
23.26 MU



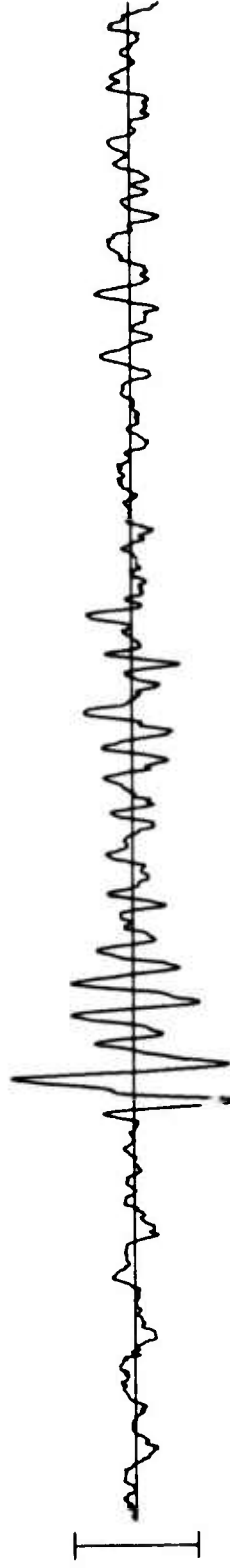
TIME



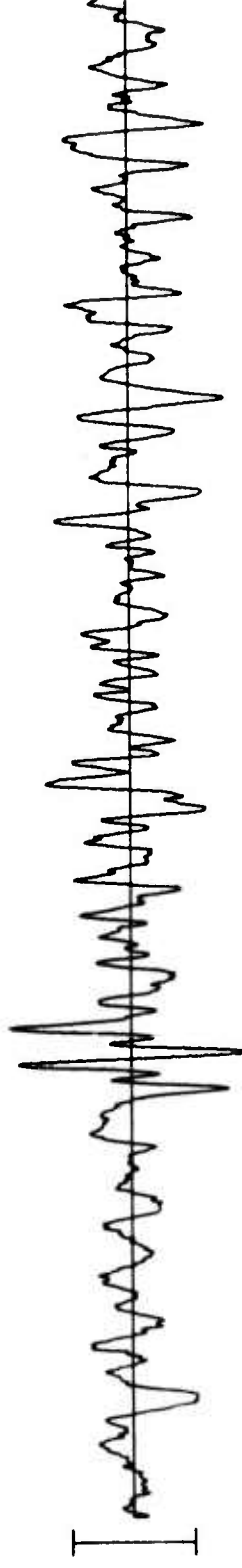
HN-ME 4 FEB 76
14:47:08.0



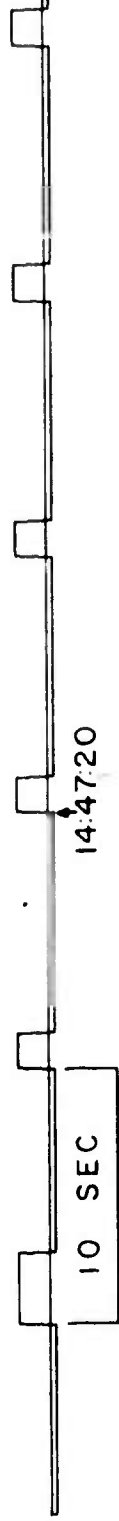
SPZ
146.35 MU



SPR
82.23 MU



SPT
36.83 MU



TIME

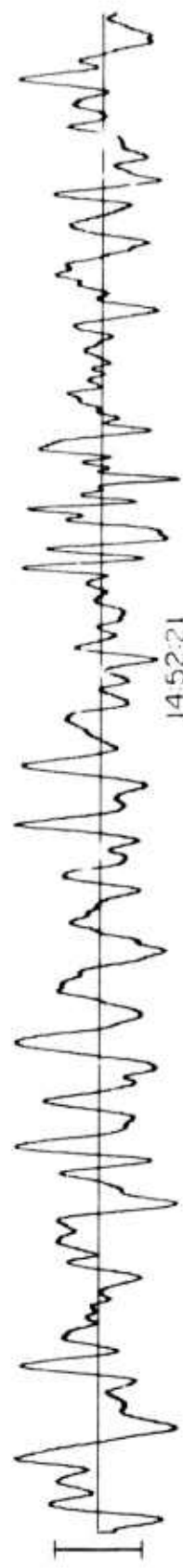
RK-ON 4 FEB 76

14:53:33



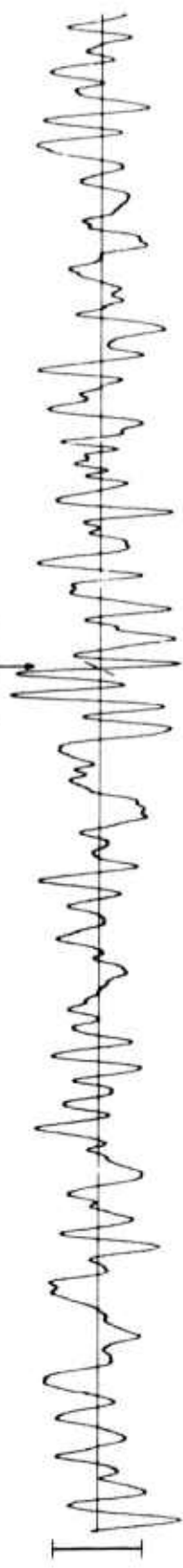
LPZ
737.57
MU

14:52:21



LPR
467.74
MU

14:50:00



LPT
185.23
MU

TIME

2 MIN



CPS0 4 FEB 76

14:55:17



TIME

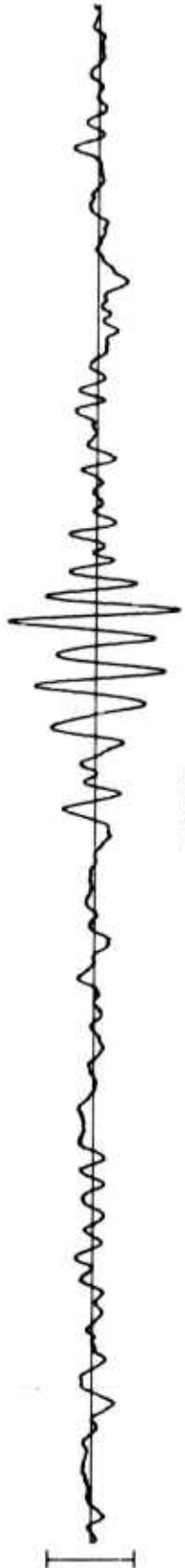


WH2YK 4 FEB 76

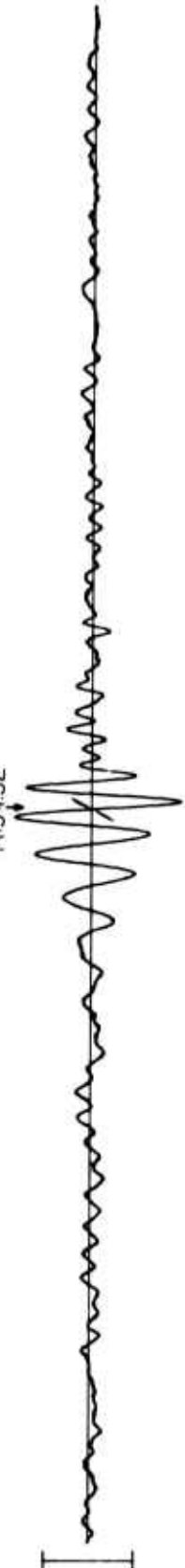
LPZ
1333.32 MU



LPR
1018.32 MU



LPT
1802.10 MU

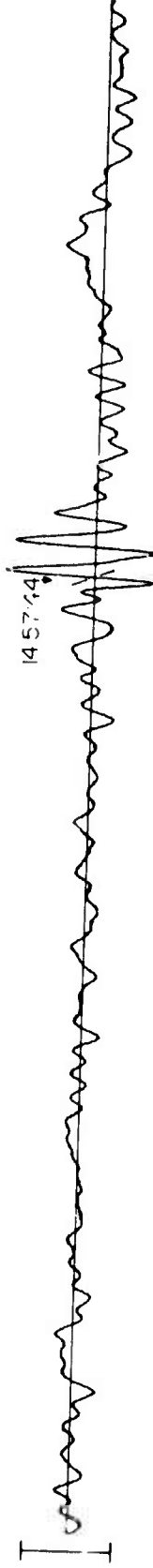


TIME

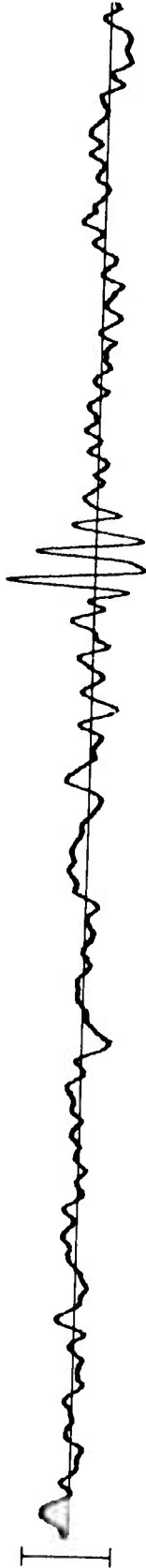


FN-WV 4 FEB 76

LPZ
1492.16 MU



LPR
1237.15 MU



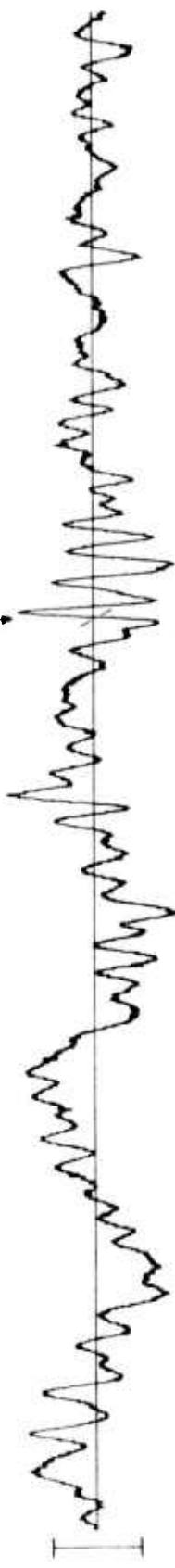
LPT
1803.39 MU



TIME

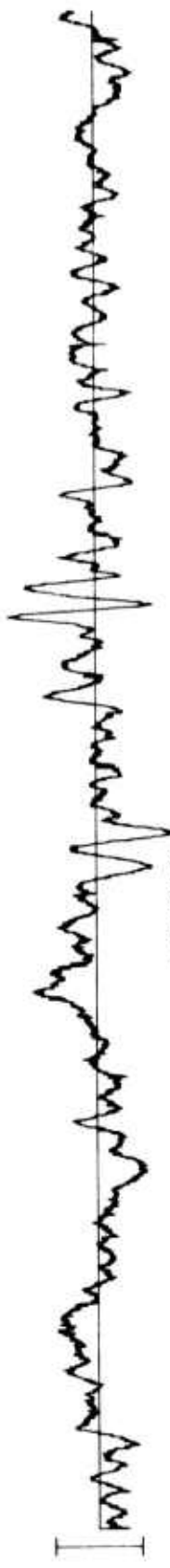


HN-ME 4 FEB 76



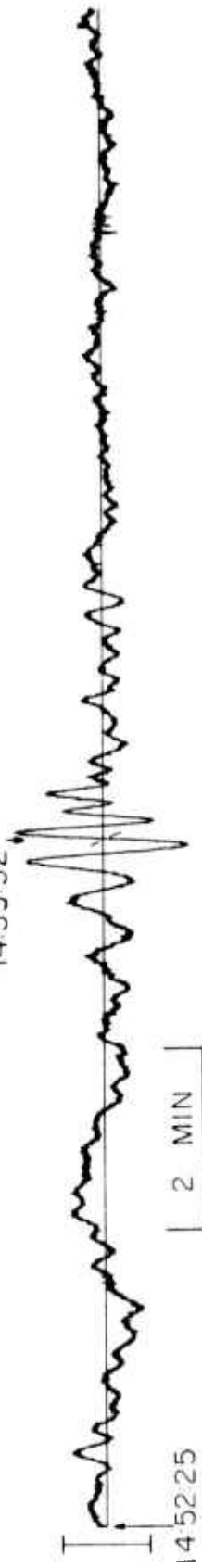
15:02:18

LPZ
751.17
MU



14:59:52

LPR
825.02
MU



2 MIN

14:52:25

LPT
1254.26
MU