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SPECIAL DATA COLLECTION SYSTEM EVENT REPORT.
NTS EVENT 'MIZZEN', 3 JUNE 1975

J. R. Woolson, et al

Teledyne Geotech

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23 September 1975

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SDCS-ER-75-22

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**SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
NTS Event "MIZZEN", 3 June 1975**

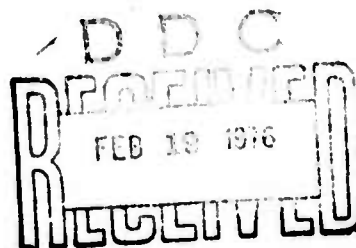
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Alexandria Laboratories
Teledyne Geotech, 314 Montgomery Street, Alexandria, Virginia 22314**

September 1975

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SDCS Event Report No. 22

NTS Event "MIZZEN", 3 June 1975

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the above event. Published epicenter information from seismic observations is:

	Origin Time	Latitude	Longitude	m_b	M_s
NORSAR	14:40:07	38 N	116 W	5.6	N/A
LASA	14:40:01	37.0N	116.0W	5.3	N/A

Using SDCS stations, LASA and NORSAR, the epicenter location and magnitudes become

	14:40:02	37.2N	116.0W	5.4	4.3
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Short-period signals associated with this event were recorded at all SDCS stations, LASA and NORSAR.

Long-period signals were recorded at all SDCS stations, LASA, ALPA and NORSAR. The LP vertical channel magnification at HN-ME is unknown due to calibration problems. The gains of the horizontal LP instruments at RK-ON are unknown due to erratic calibration amplitudes. The long-period array beam data for LASA was not recoverable.

Details of the program used to obtain beamed vertical, radial and transverse long-period data at LASA, ALPA and NORSAR are in the process of being reviewed. Vertical beams are probably valid while horizontal beams are questionable.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response) with the exception of LASA and NORSAR short-period plots. LASA SP scaling factors are millimicrons per inch. Scaling factors are not reported for NORSAR short-period.

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	525	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	18300	SL210 V SL220 H
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	853	18300	SL210 V SL220 H

HYPOCENTER DETERMINATION

INPUT FOR EVENT 3 JUN 75
 14:40:00.0 37.000N 116.000W 0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CALC	REST		
LAC	14 42 52.7	-0.1	-0.0	12.0	34.4
RK-ON	14 44 45.8	0.1	-0.0	21.0	42.3
CPC	14 45 21.8	-0.0	0.2	24.5	84.4
WH2YK	14 45 39.4	0.1	0.3	26.4	339.0
FN-WV	14 46 00.0	-0.1	-0.1	28.7	76.0
HN-ME	14 47 08.1	0.4	0.2	36.5	60.3
NAC	14 51 32.5	-0.3	-0.6	73.2	24.2

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LONG.	DEPTH (KM)	SDV	IT	STA
14:40:05.9	37.268N	115.951W	25. CALC	0.2	3	7
14:40:01.7	37.172N	116.024W	0. REST	0.3	2	7

CALC			REST		
1	.	1	1	.	1
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= 1.69
 MAJOR 61.5KM. MINOR 37.9KM. AZ= 31 AREA= 7321 SQ.KM. REST

DATA SUMMARY

INPUT FOR EVENT 3 JUN 75
 14:40:00.0 37.000N 116.000W 0KM.

STA.	PHASE	ARRIVAL		INST	PER	A/T	MAGNITUDE		DIP	DIST
		TIME					MB	MS		
LAC	M EP	14 42	52.7	AB	1.2	137.	5.94			12.0
LAC	LR	14 47	48.0	LPZ	13.0	??				12.0
RK-ON	EP	14 44	45.8	SPZ	0.9	1064.	5.83			21.0
RK-ON	LR	14 53	24.0	LPZ	15.0	173.		4.68		21.0
CFC	EP	14 45	21.8	SPZ	1.1	387.	5.69			24.5
CFO	LQ	14 53	30.0	LPT	22.0	26.				
CPC	LR	14 55	17.0	LPZ	16.0	313.		5.01		24.5
WH2YK	EP	14 45	39.4	SPZ	0.9	42.	4.77			26.4
WH2YK	LQ	14 54	53.0	LPT	20.0	21.				
WH2YK	LR	14 57	04.0	LPZ	17.0	119.		4.62		26.4
FN-WV	EP	14 46	00.0	SPZ	1.1	45.	4.95			28.7
FN-WV	LQ	14 55	20.0	LPT	24.0	22.				
FN-WV	LR	14 58	11.0	LPZ	18.0	171.		4.81		28.7
ALPA	LR	15 01	35.0	LAB	17.0	19.		3.90		33.7
HN-ME	EP	14 47	08.1	SPZ	1.0	203.	5.56			36.5
HN-ME	LR	15 02	27.0	LPZ	19.0	??				36.5
NAC	EP	14 51	32.5	AB	1.2	140.	5.73			73.2
NAO	LR	15 22	39.0	LAB	21.0	11.		4.03		73.2

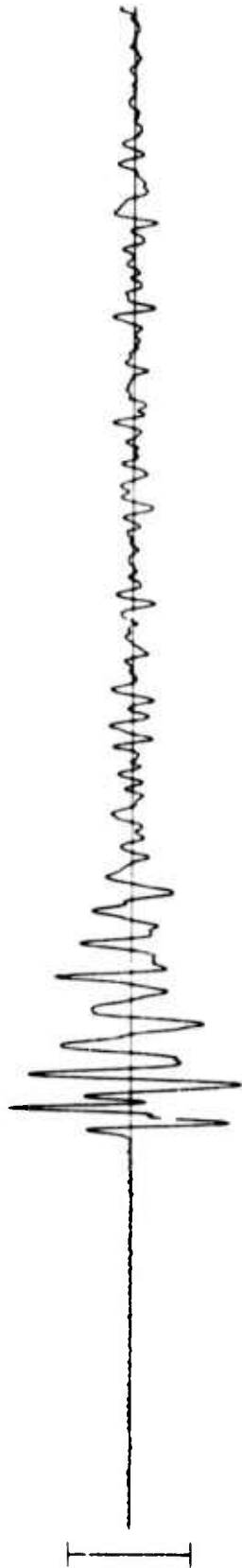
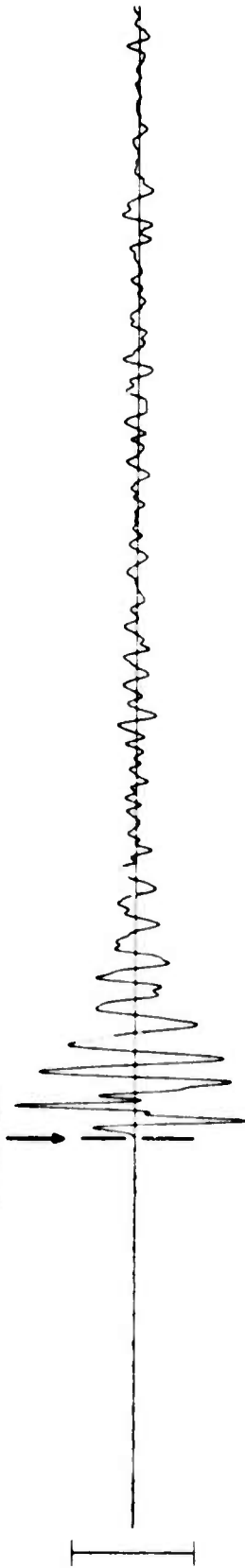
ORIGIN	LAT.	LONG.	DEPTH (KM)	MAG	SDV	STA	LPMAG	LPSDV	LPSTA
14:40:05.9	37.268N	115.951W	25. CALC	5.39	0.46	6	4.34	0.4	4
14:40:01.7	37.172N	116.024W	0. REST	5.42	0.45	6	4.34	0.4	4

Short-period magnitudes (m_b) used in averaging are restricted to those recorded at distances between 20 and 110 degrees from the epicenter.

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 3 JUN 75

14:44:45.8



14:45:10

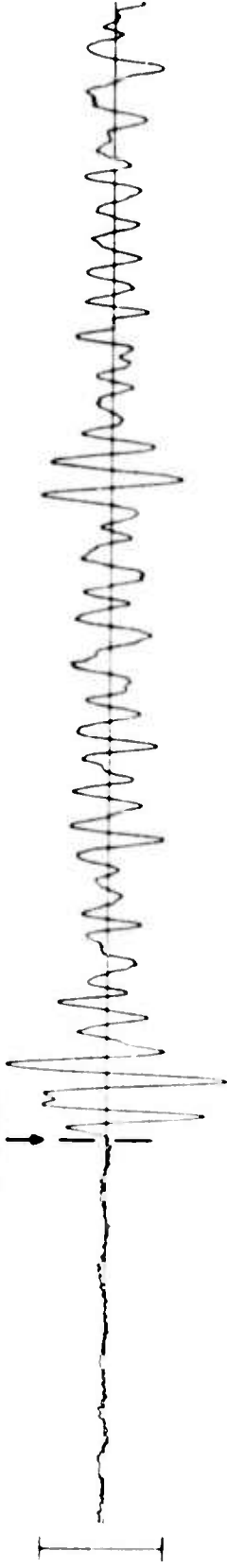
10 SEC

5.

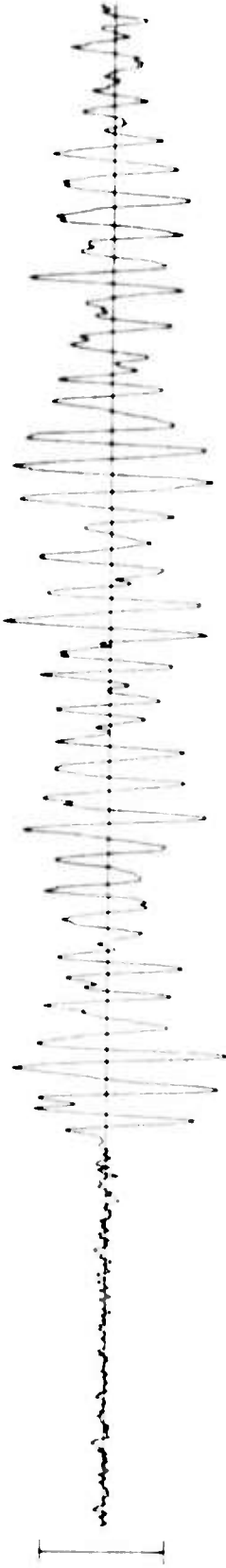
CPSO 3 JUN 75

SPZ
208.77 Mμ

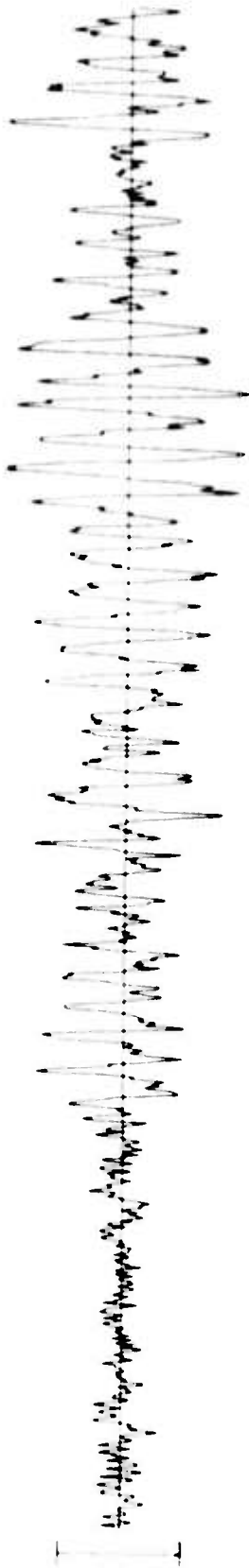
14:45:21.8



SPR
40.33 Mμ



SPT
50.78 Mμ



TIME



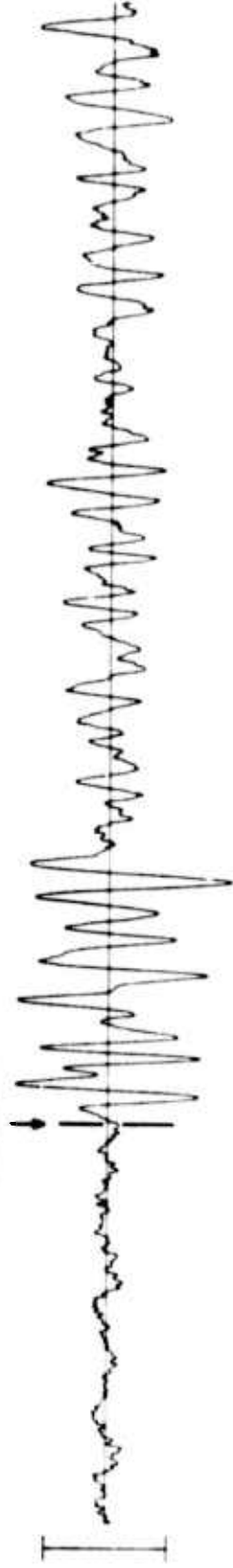
10 SEC

14:46:00

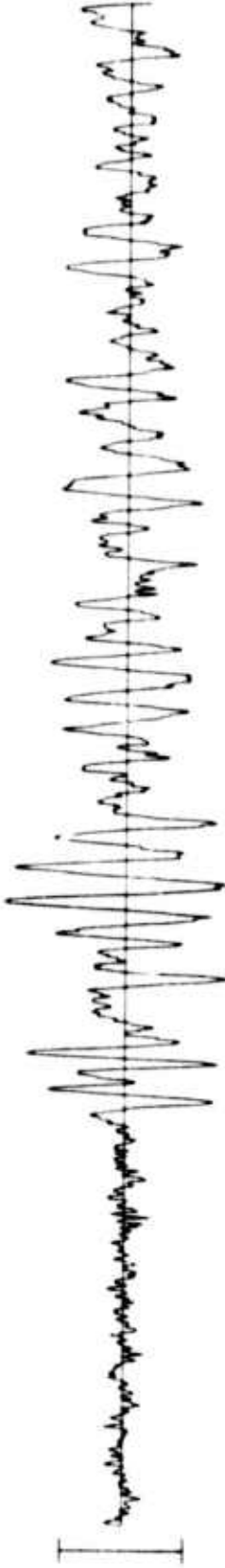
WH2YK 3 JUN 75

14:45:39.4

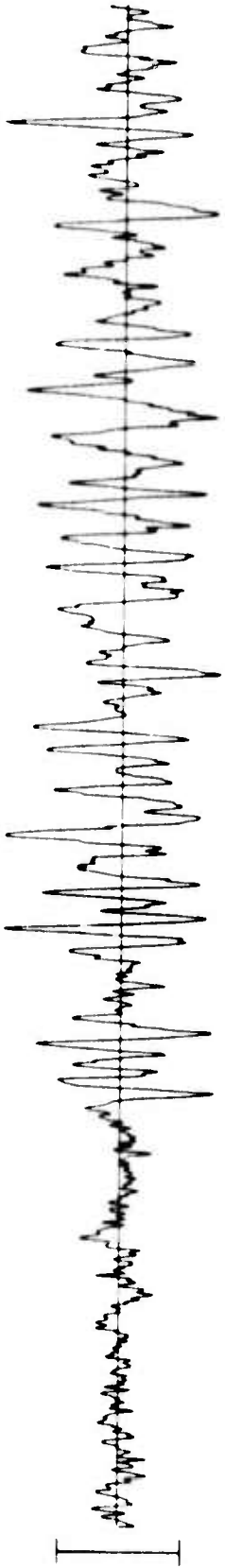
**SPZ
32.85 Mμ**



**SPR
20.90 Mμ**



**SPT
13.58 Mμ**



TIME



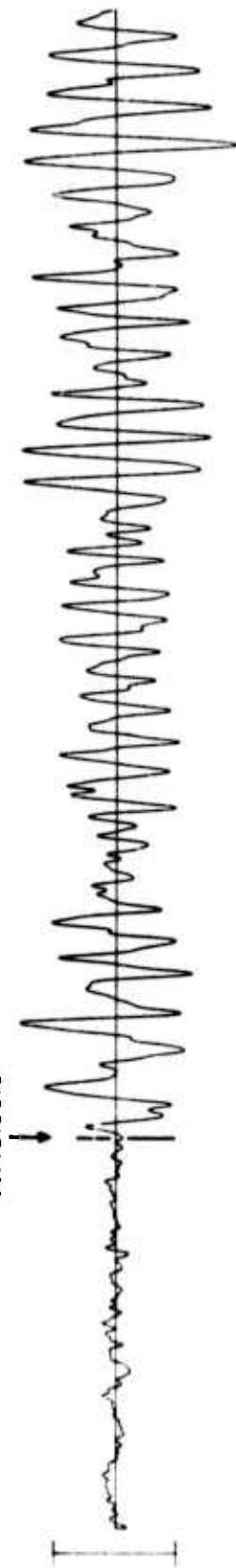
10 SEC

14:46:00

FN-WV 3 JUN 75

SPZ
32.57 Mμ

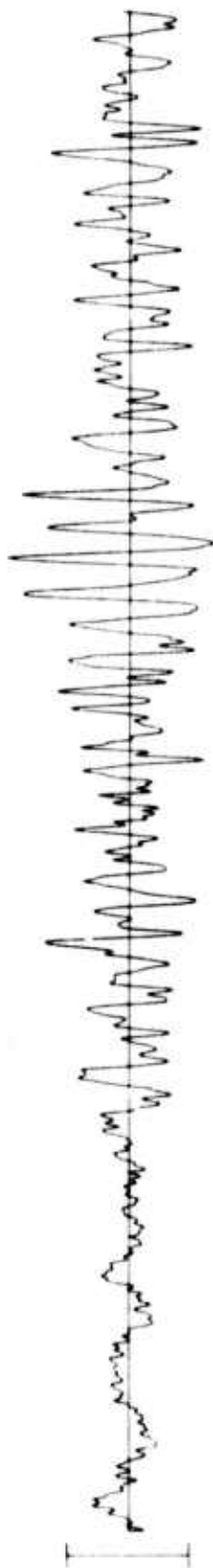
14:46:00.0



SPR
21.19 Mμ



SPT
23.99 Mμ



TIME



14:46:10

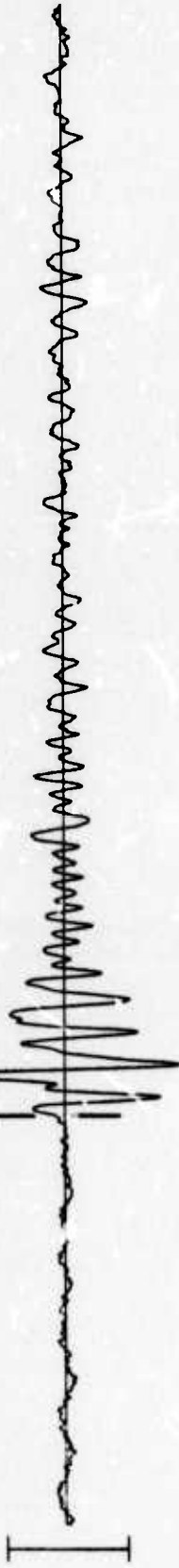
10 SEC

8.

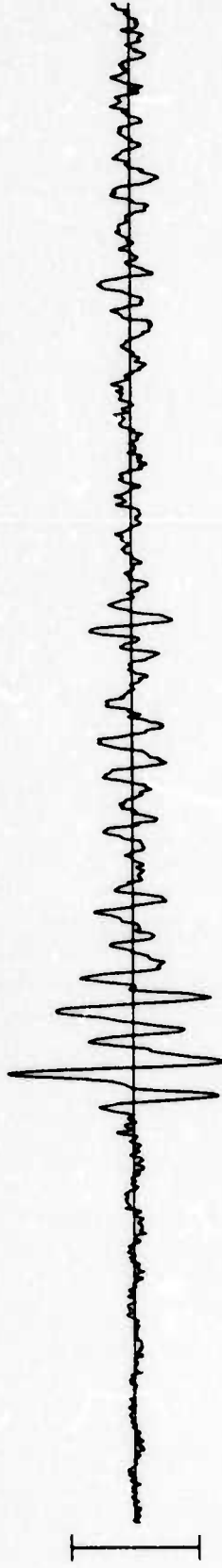
HN-ME 3 JUN 75

14:47:00.1

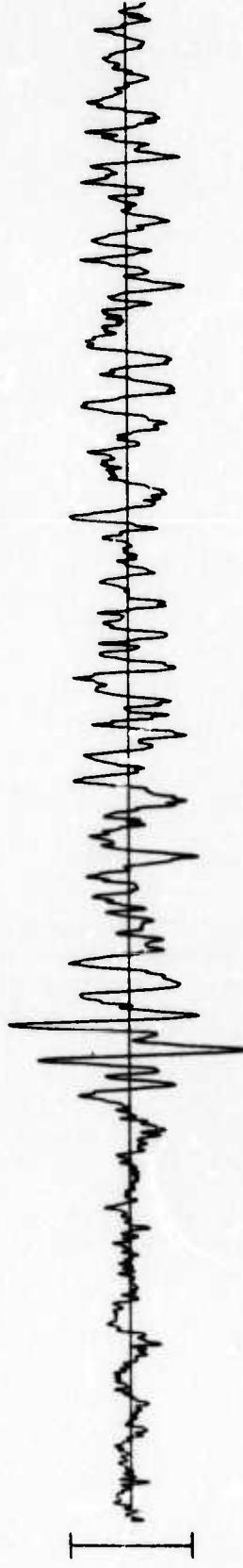
SPZ
107.18 MHz



SPR
87.00 MHz



SPT
32.53 MHz



TIME



14:47:00

10 SEC

1 3 JUN 1975
2 14 40 0 37.0N 116.0W
3 14 42.52.0 LAO P

LASA

OG D 5.0 40 CALIFORNIA-NEVEDA BORDER
35.1 1.1 8.2 12.1 220.7

EPX 25428

BP-B 0.6-2.0 HZ

ABN 10

14:42:42.0

AB 96

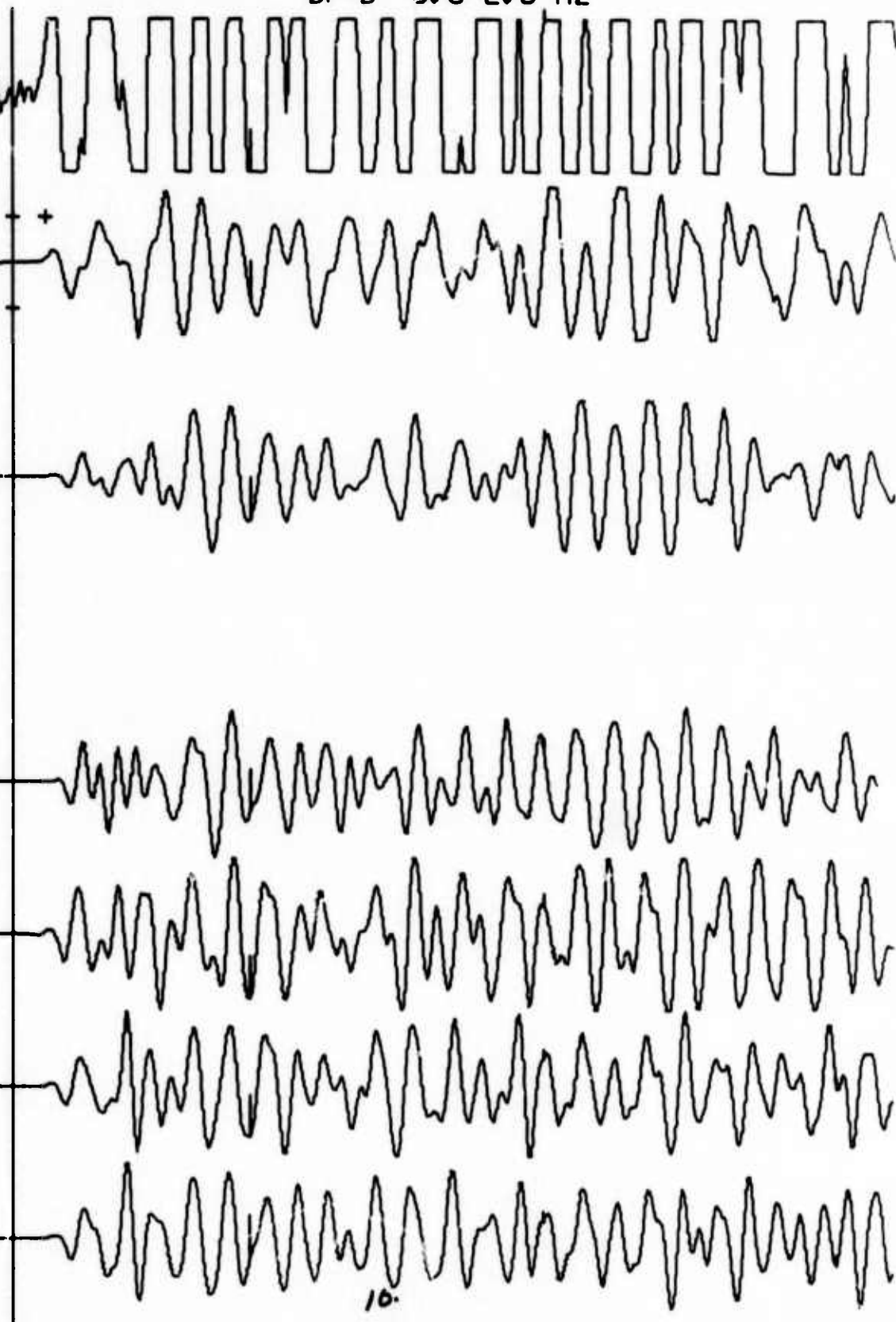
FAB 92

PAB1 64

PAB2 50

PAB3 51

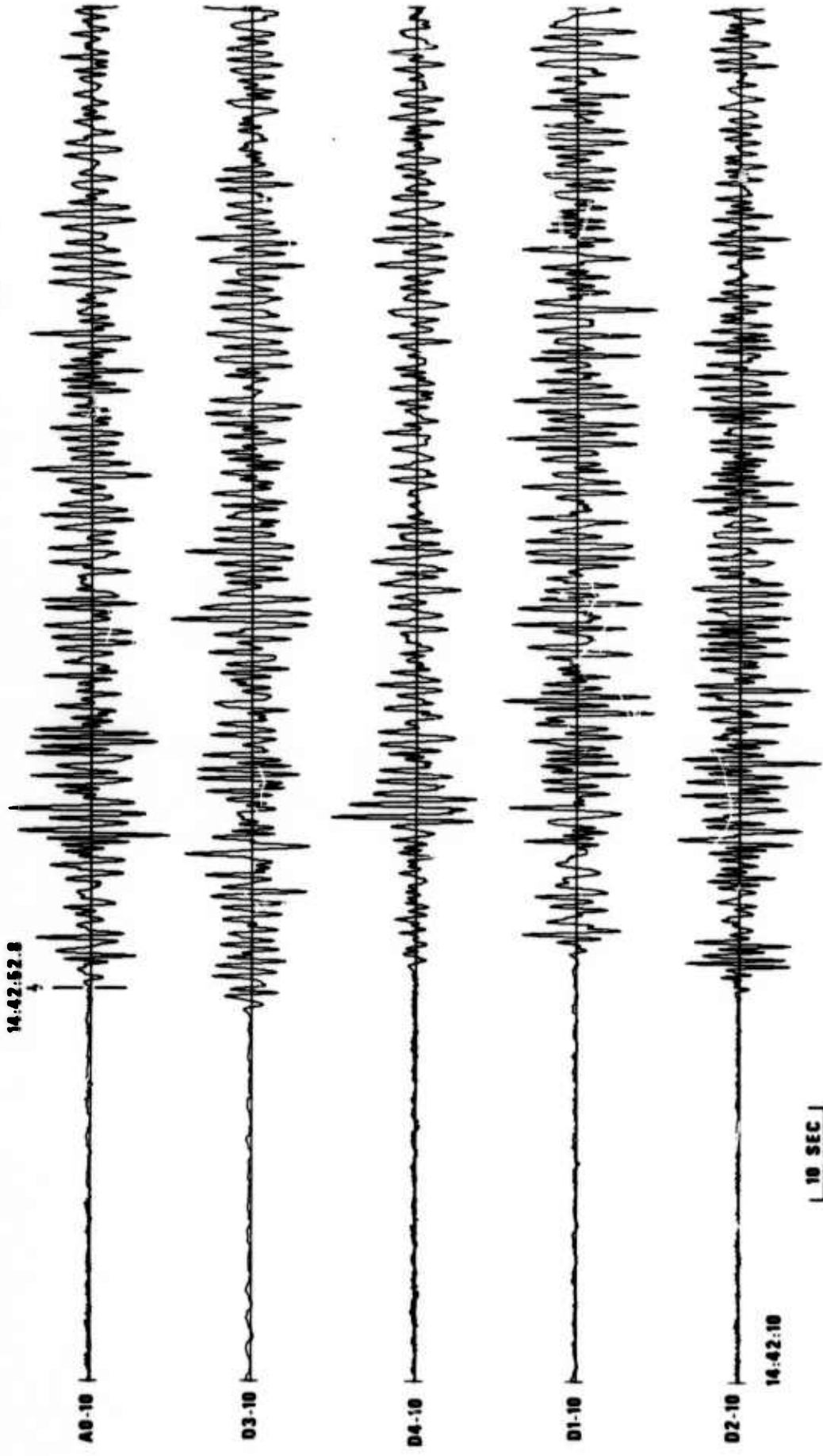
PAB4 54



10.

10 SEC

LASA (INDIVIDUAL SHORT-PERIOD INSTRUMENTS) HIGH-GAIN SENSORS 3 JUN 75



(NO AMPLITUDE DETERMINATIONS MADE DUE TO UNRESOLVED SCALING PROBLEMS)

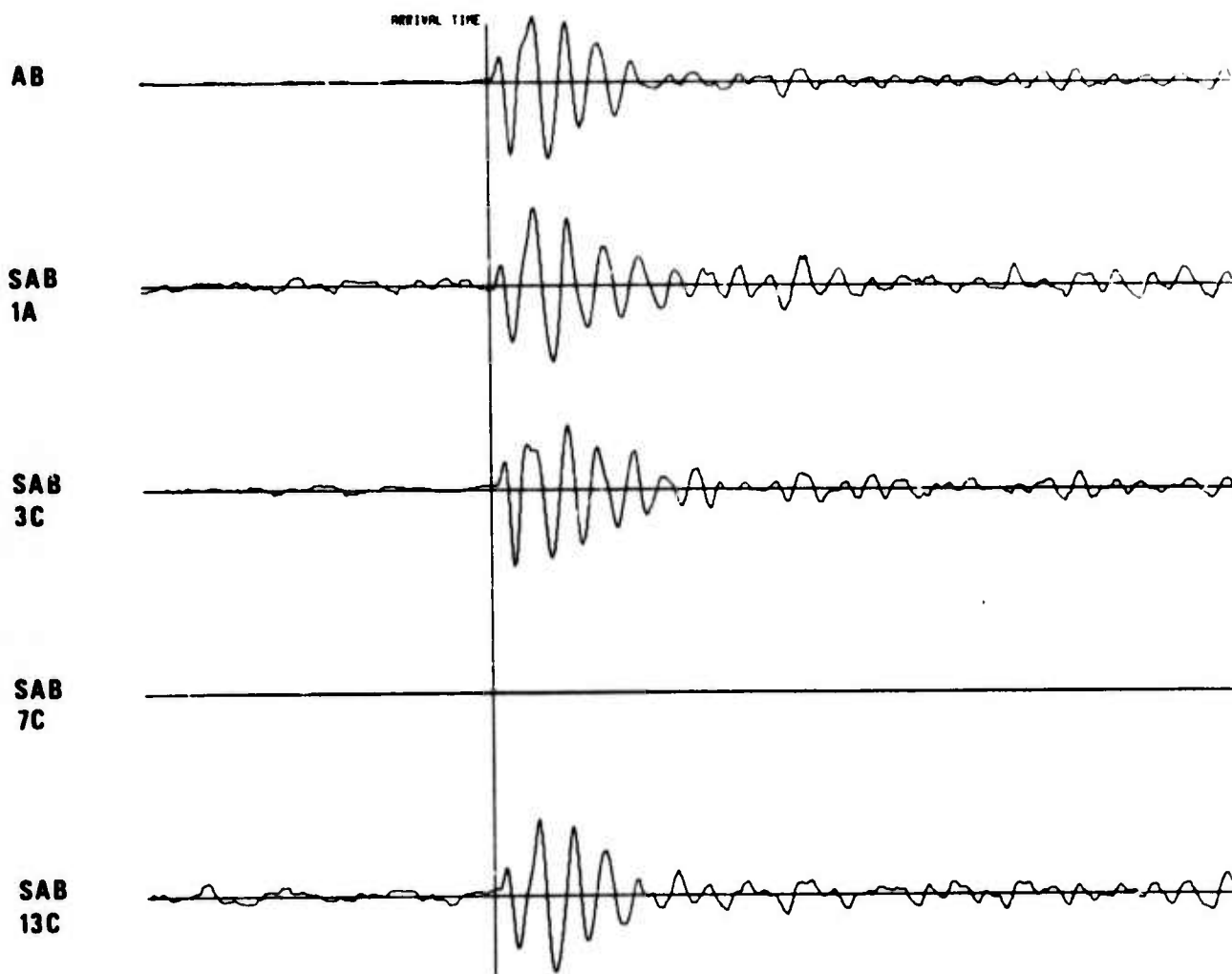
NOFSAR EVENT FILE

1975 JUN 3

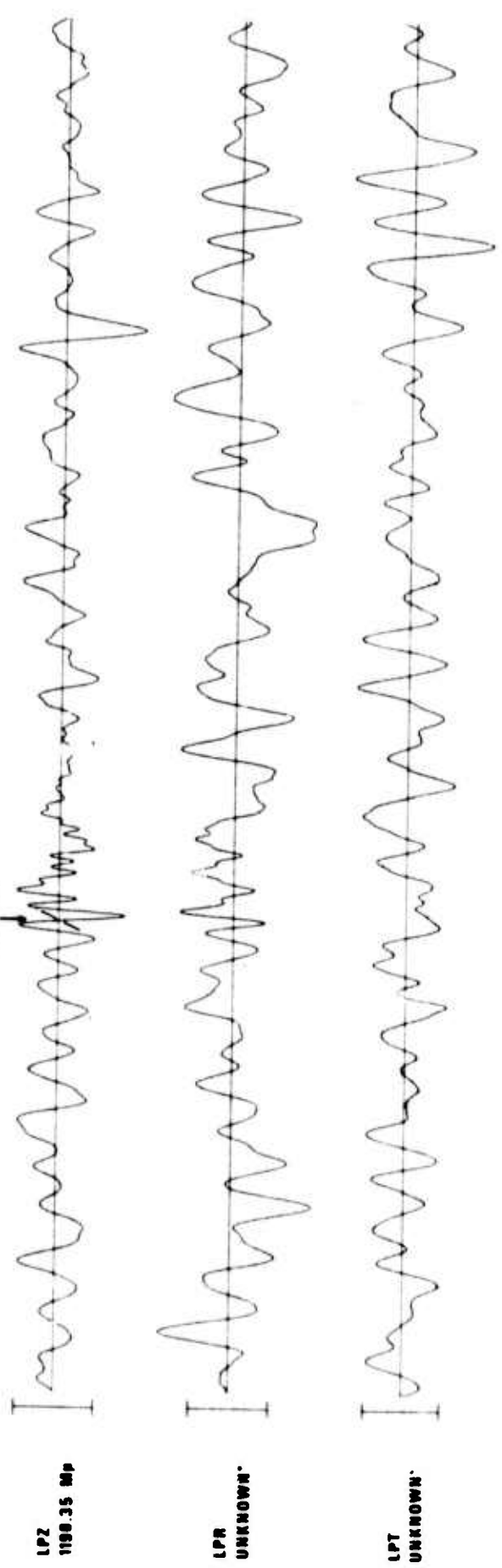
EPX NO. 1440 ARR. 14.51.32.4 38.2N 115.6W 5.4MB 33KM

DIST = 72.1 AZI = 318.2 AMP = 56.4 PER = 1.3 UMETH 2

SCALE = 5 SECONDS



RK-ON 3 JUN 75



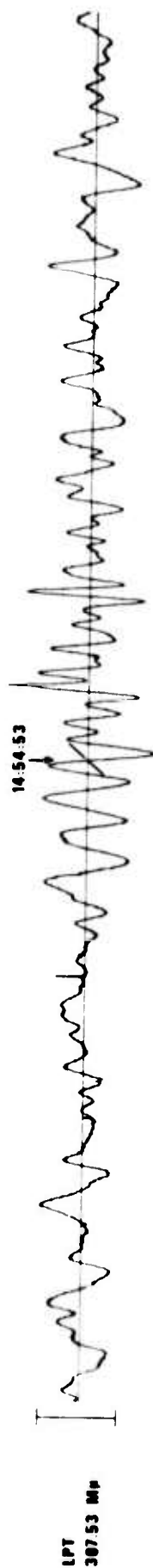
LPT 1180.35 MP
14.93.24
LPT UNKNOWN
LPT UNKNOWN
TIME
2 MIN
erratic calibrations

CP-SO 3 JUN 75



14.

WH2YK 3 JUN 75



FN-WV 3 JUN 75

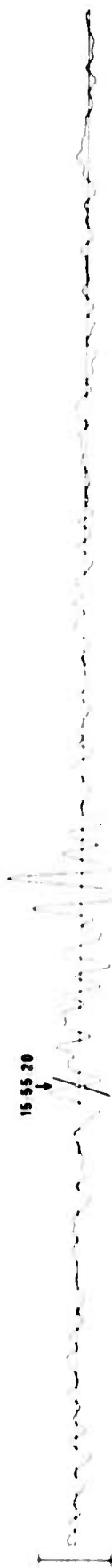
LPZ
1303 57 MHz



LPH
1057 52 MHz



LPT
732 54 MHz



2 MIN

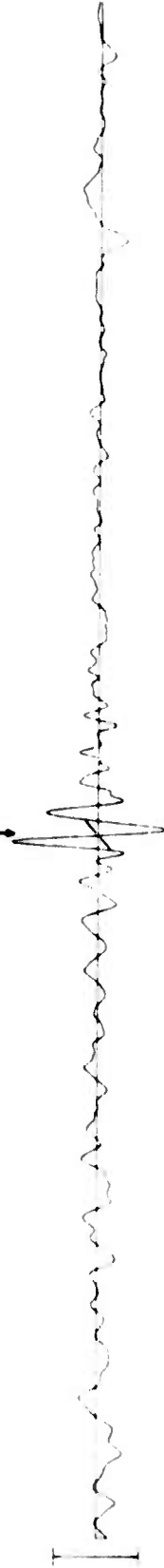
FLATTENING CAUSED BY
SIMULTANEOUS PULSING
ON HORIZONTAL INSTRUMENTS

16.

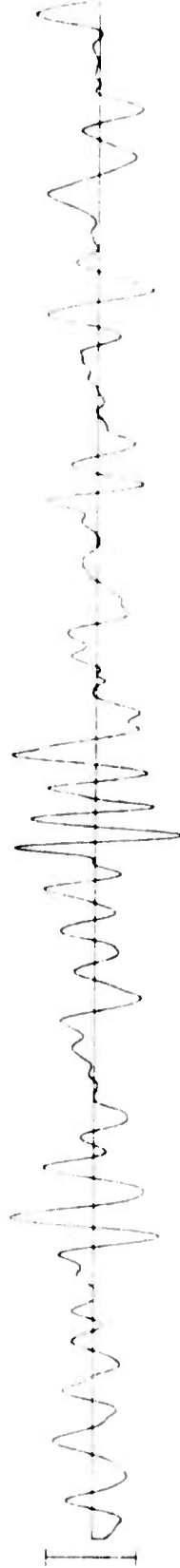
HN-ME 3 JUN 75

LPT
UNKNOWN

15:02:27



LPT
1100.09 MP



LPT
359.07 MP

14:54:56

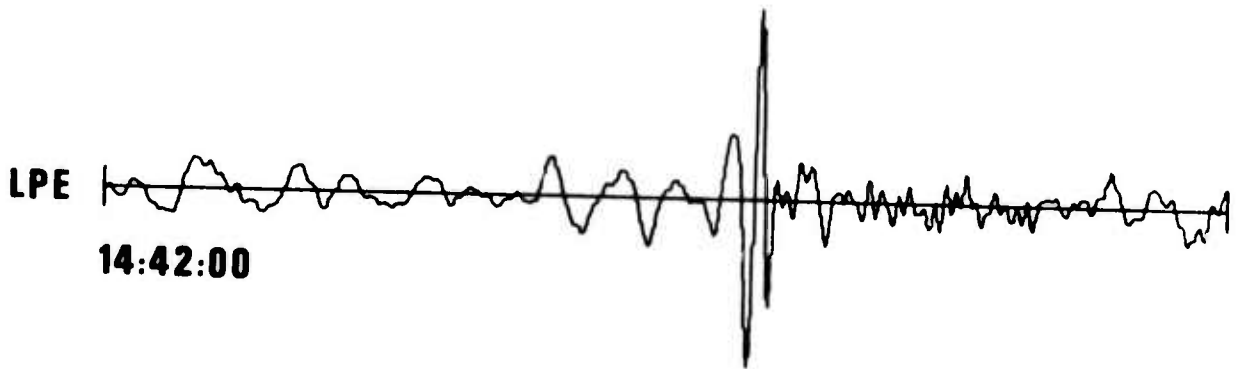
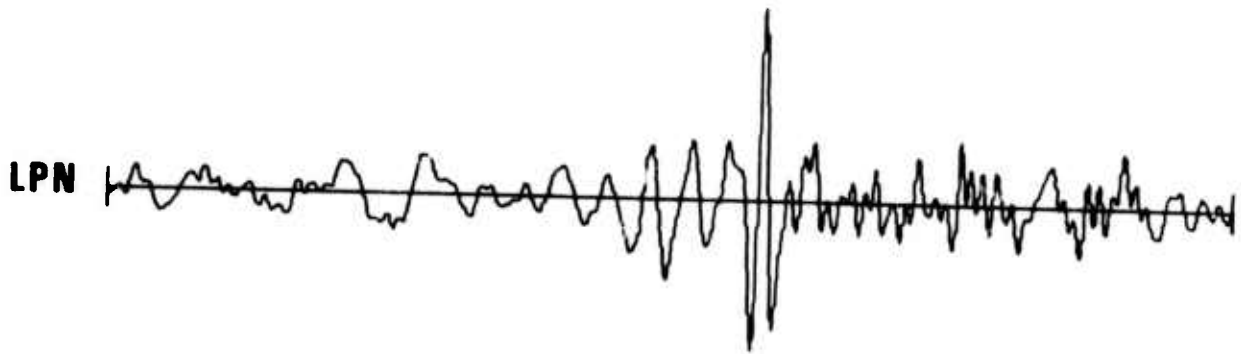
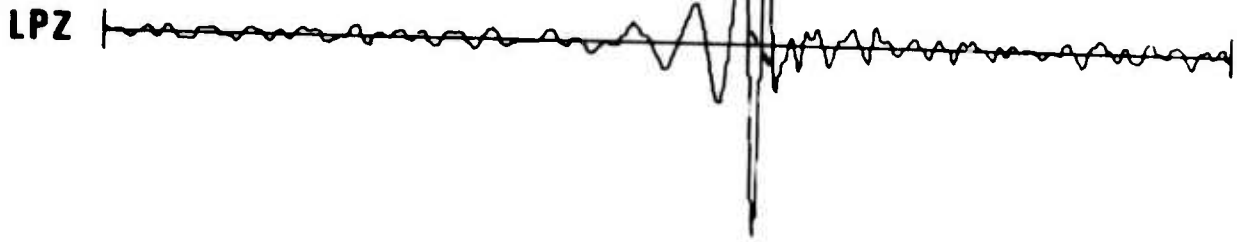


2 MIN

*CALIBRATION QUESTIONABLE

LASA C4 HIGH-GAIN SENSORS 3 JUN 75

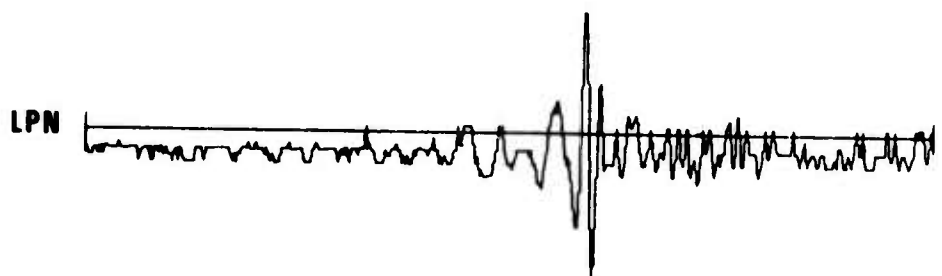
14:47:48



2 MIN

LASA C2 SUBARRAY PADDED SENSORS 3 JUN 75

14:47:48



14:42:00

2 Mik

(NO AMPLITUDE DETERMINATIONS MADE DUE TO UNRESOLVED SCALING PROBLEMS)

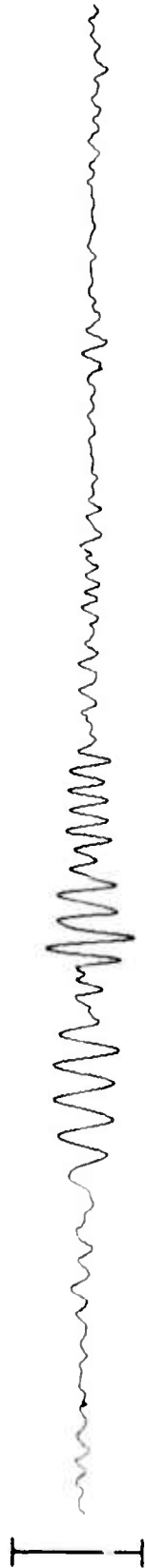
ALPHA LONG-PERIOD BEAMS 3 JUN 75

LP VERTICAL
301.63 M μ

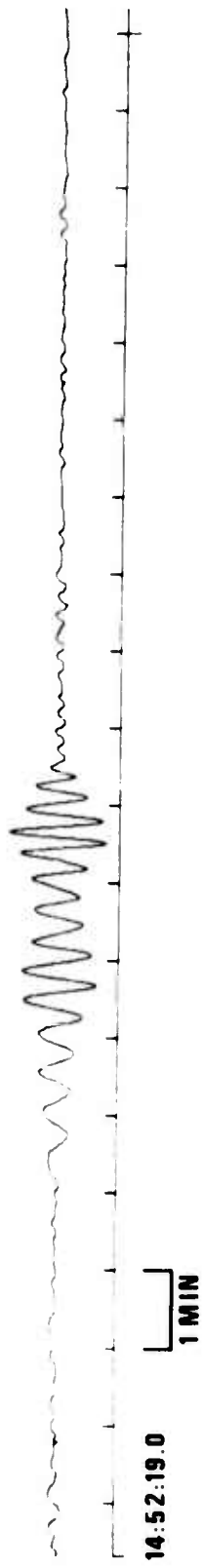
15:01:35



LP RADIAL
420.12 M μ



LP TRANSVERSE
720.06 M μ



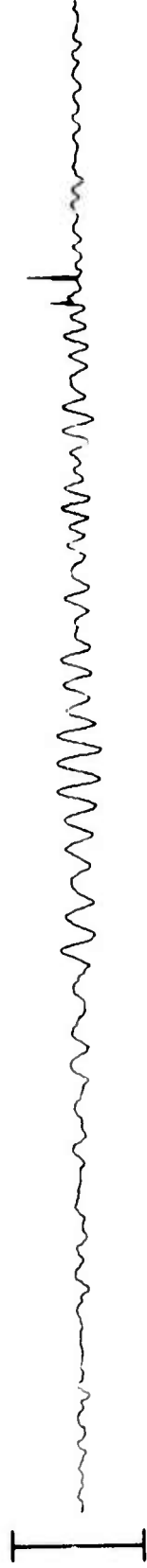
NORSAR LONG-PERIOD BEAMS 3 JUN 75

15:22:39

LP VERTICAL
305.08 MHz



LP RADIAL
414.05 MHz



LP TRANSVERSE
453.47 MHz



15:12:34.0

1 MIN

21