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SPECIAL DATA COLLECTION SYSTEM (SDCS) EVENT REPORT,  
MEXICO, 23 APRIL 1975

TELEDYNE GEOTECH

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**SPECIAL DATA COLLECTION SYSTEM EVENT REPORT  
Mexico, 23 April 1975**

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**February 1976**

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SDCS Event Report No. 35

Mexico, 23 April 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	11:14:45	16.9N	103.4W	6.0	N/A
LASA	11:14:43	15.3N	097.9W	6.3	N/A
PDE	11:14:48	16.4N	098.9W	6.0	6.2

Using SDCS stations, LASA and NORSAR, the epicenter location becomes

11:14:49	16.5N	098.9W	6.2	6.1
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All SDCS stations were operational except FN-WV, which was not operational due to maintenance. The NORSAR short-period waveforms were not recoverable, P arrival obtained from weekly summary.

Short-period signals associated with this event were recorded at all operational SDCS stations, LASA and NORSAR. The time correction at WH2YK is not known. Long-period signals were recorded at CPSO, RK-ON, HN-ME, and WH2YK. Long-period array data were not recoverable.

SDCS long-period horizontal channels were not rotated to orientations radial and transverse to this event location due to signal clipping.

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		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
FX-WV	Franklin, West Virginia	38 32 58.0 N 079 30 47.0 W		910	KS30000	KS30000
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		306	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 23 APR 75  
 11:14:45.0 16.899N 103.000W 0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CALC	REST	REST	REST
CFC	11 19 48.3	-0.5	-0.5	22.4	29.6
IAC	11 21 05.0	0.4	0.1	30.7	350.2
RK-CN	11 21 38.3	-0.3	0.1	34.5	5.9
HN-ME	11 22 19.1	0.9	0.7	39.2	34.5
WH2YK*	11 24 24.0	31.9 *	31.2 *	51.1	338.2
NAC	11 27 25.3	-0.4	-0.3	85.0	27.6

67 HERRIN TRAVEL TIME TABLES

CRIGIN	LAT.	LCNG.	DEPTH (KM)	SDV	IT	STA
NO CCNVERGENCE ON CALC RUN						
11:13:48.2	15.231N	99.219W	342. CALC	0.6	16	5
11:14:49.2	16.522N	98.947W	0. REST	0.5	3	5

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

CHI2 COVERAGE ELLIPSE; 95 PER CENT CCNF..LEVEL, SDV= 1.26  
 MAJOR 93.1KM. MINCR 61.5KM. AZ= 14 AREA= 17993 SQ.KM. REST

DATA SUMMARY

INPUT FOR EVENT 23 APR 75  
 11:14:45.0 16.899N 103.000W OKM.

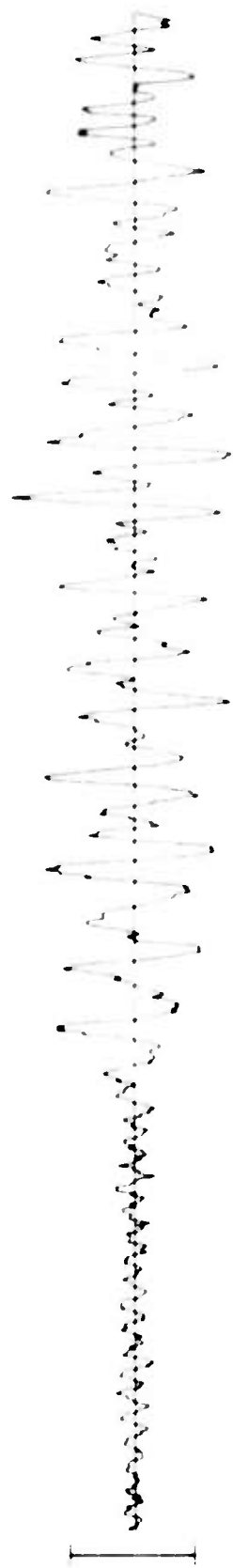
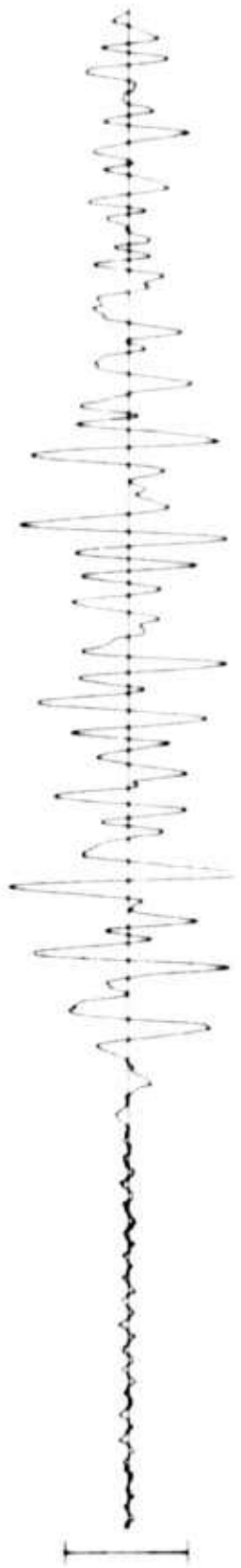
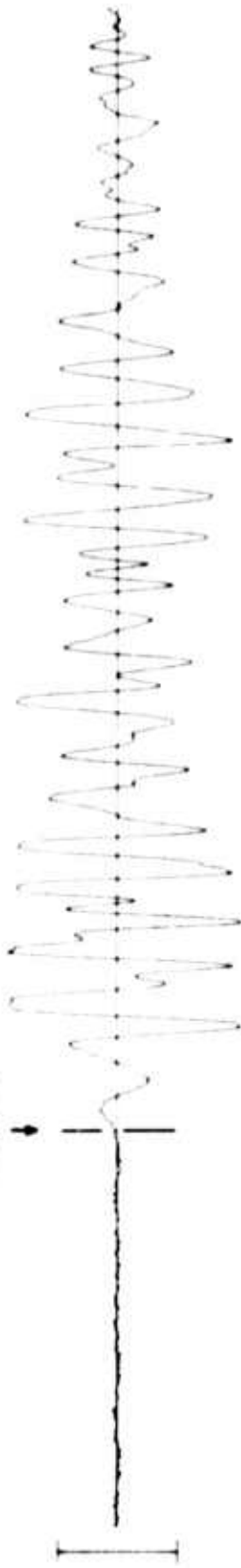
STA.	PHASE	ARRIVAL		INST	PER	A/Z	MAGNITUDE		DIR	DIST
		TIME					MB	MS		
CFC	EP	11 19	48.3	SPZ		??				
CPC	LR	11 33	36.0	LPZ	21.0	1500.		5.65		22.4
LAC	EP	11 21	05.0	AB	2.1	1987.	6.67			30.7
RK-CN	EP	11 21	38.3	SFZ	1.5	332.	5.92			34.5
RK-CN	LR	11 36	22.0	LPZ	19.0	4684.		6.33		34.5
HN-ME	EP	11 22	19.1	SFZ	1.5	418.	5.72			39.2
HN-ME	LQ	11 35	34.0	LPT	35.0	742.				
HN-ME	LR	11 40	41.0	LFZ	21.0	1009.		5.72		39.2
WH2YK*	EP	11 24	24.0	SPZ	1.1	63.	5.20			51.1
WH2YK	IR	11 44	53.0	LPZ	17.0	5853.		6.60		51.1
NAC	EP	11 27	25.3	AB	1.8	506.	6.40			85.0

ORIGIN LAT. LONG. DEPTH (KM) MAG SDV STA LPMAG LPSDV LPSTA  
 11:14:49.2 16.522N 98.947W 0. REST 6.18 0.43 4 6.07 0.5 4

IP MAG. (REST)= 6.07 4 STA., SDV= 0.46 SE= 0.21, DIFF= 0.11, QUAL= 5.16

**CP-S0 23 APR 75**

11:19:48.3

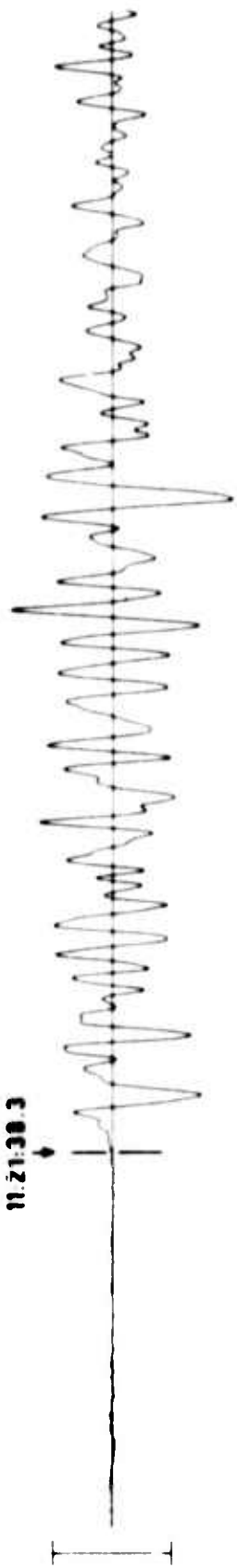


10 SEC

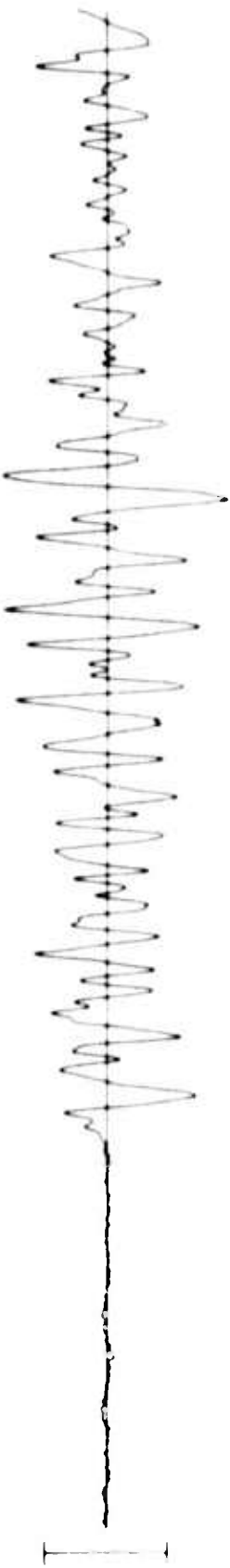
11:20:00

**RK-ON 23 APR 75**

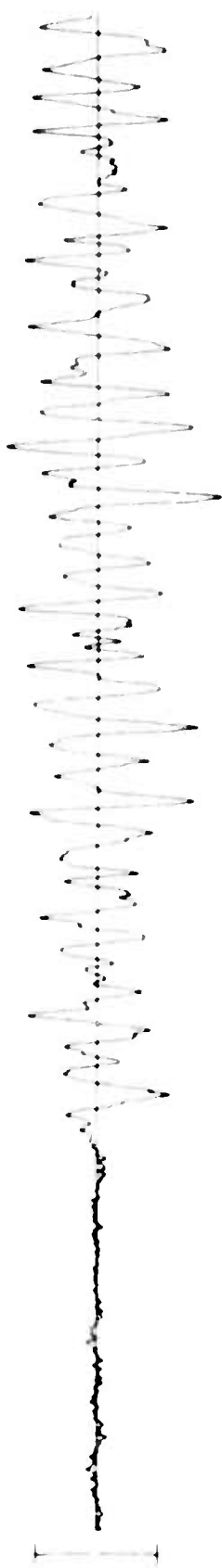
**SPZ**  
**145.4** **MP**



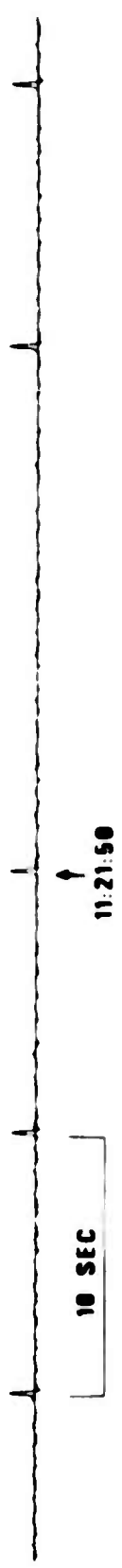
**SPR**  
**69.0** **MP**



**SPT**  
**45.3** **MP**



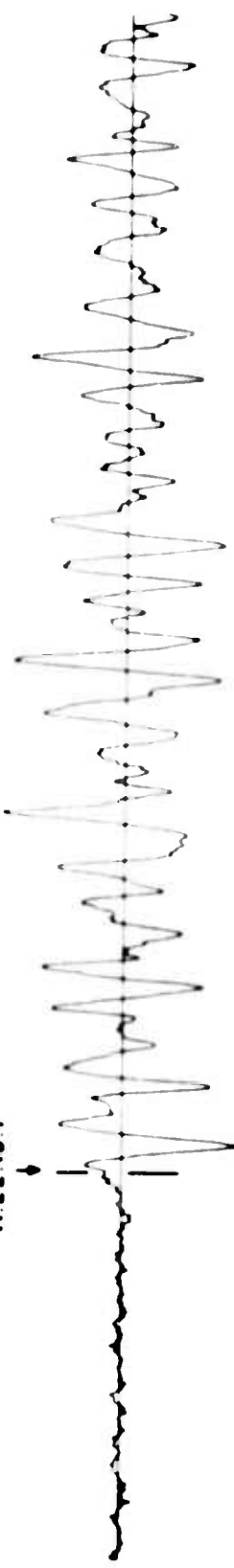
**TIME**



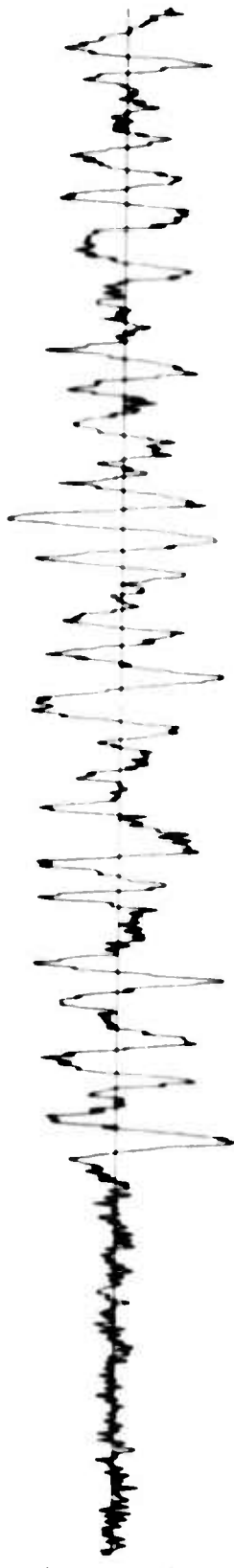
**HN-ME 23 APR 75**

11:22:19.1

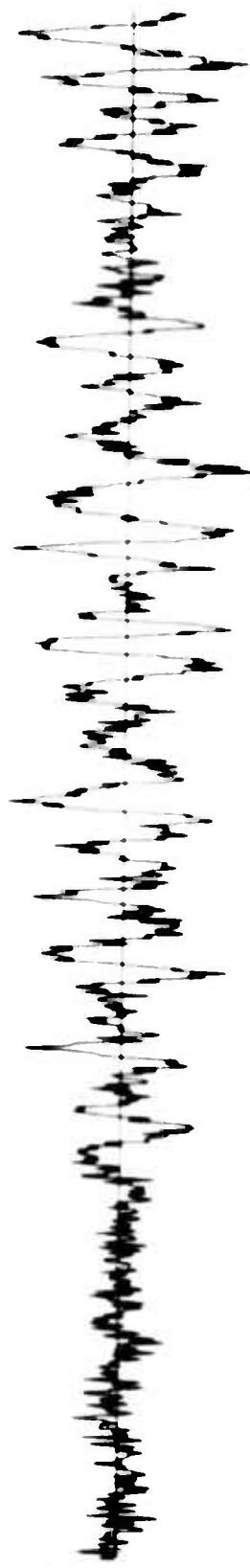
SPZ  
133.46 MP



SPR  
59.84 MP



SPT  
42.71 MP



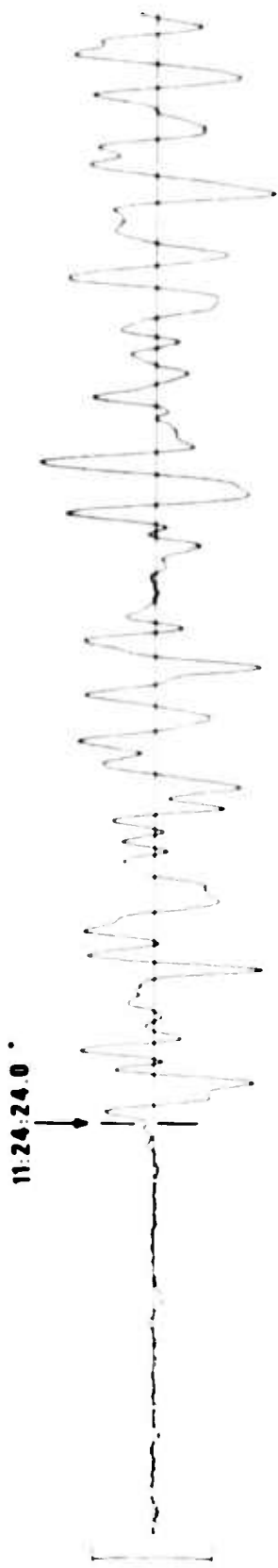
TIME

10 SEC

11:22:30



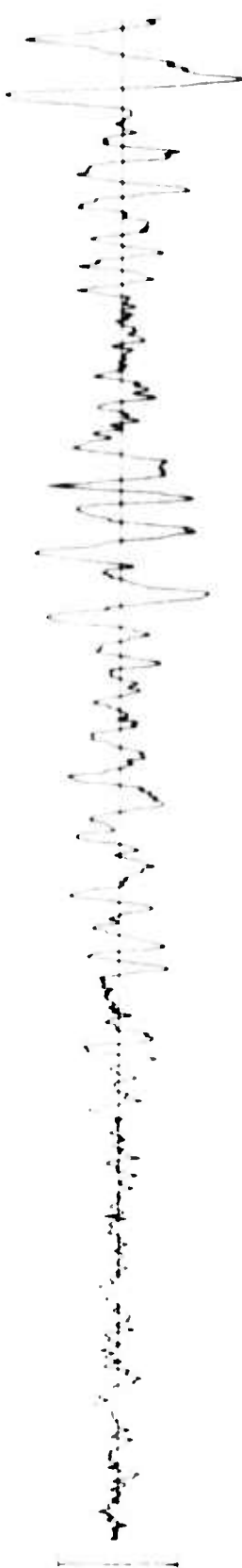
WH2YK 23 APR 75



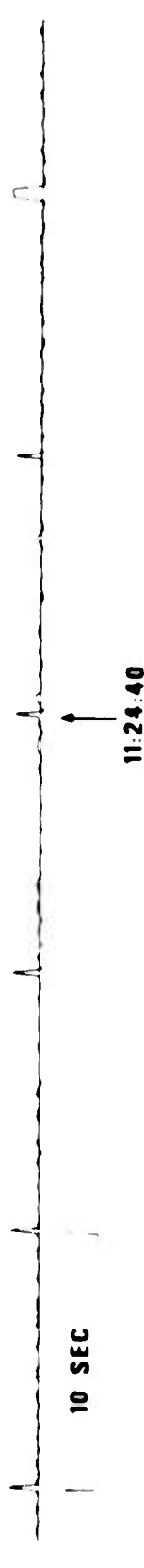
SPZ  
46.45 MHz



SPR  
37.08 MHz



SPT  
18.75 MHz



TIME

• TIME CORRECTION UNKNOWN

LASA

1 23 APR 1975

2 11 15 36 21.1N 99.4W 330 C 5.4 523 CENTRAL MEXICO

3 11 21 5.2 LAO P 187.7 2.1 12.2 26.0 165.4

EPX 44461

BP-B 0.6-2.0 HZ

ABN 65

11:20:55.2

AB 330

FAB 140

WAB 130

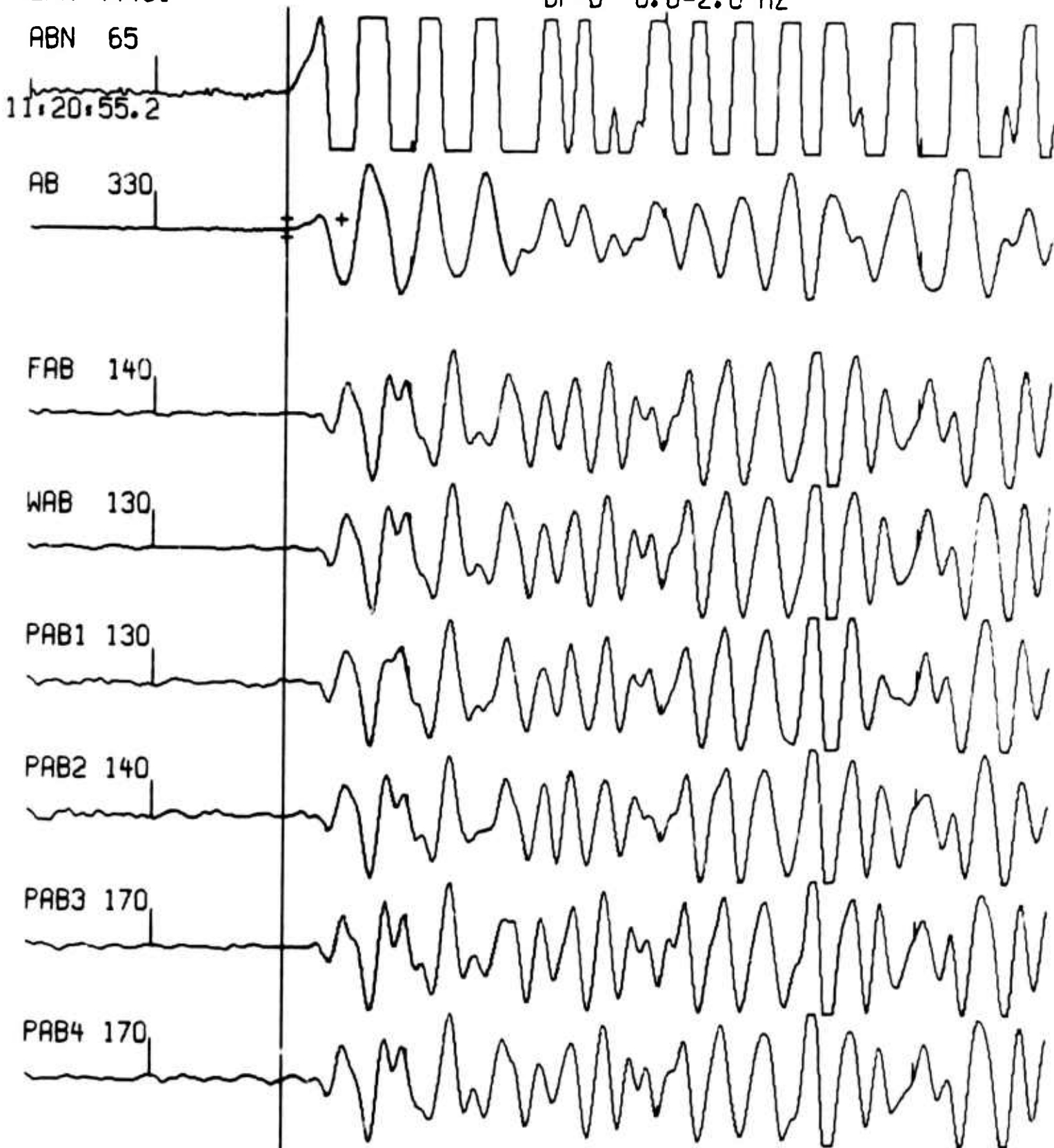
PAB1 130

PAB2 140

PAB3 170

PAB4 170

10 SEC



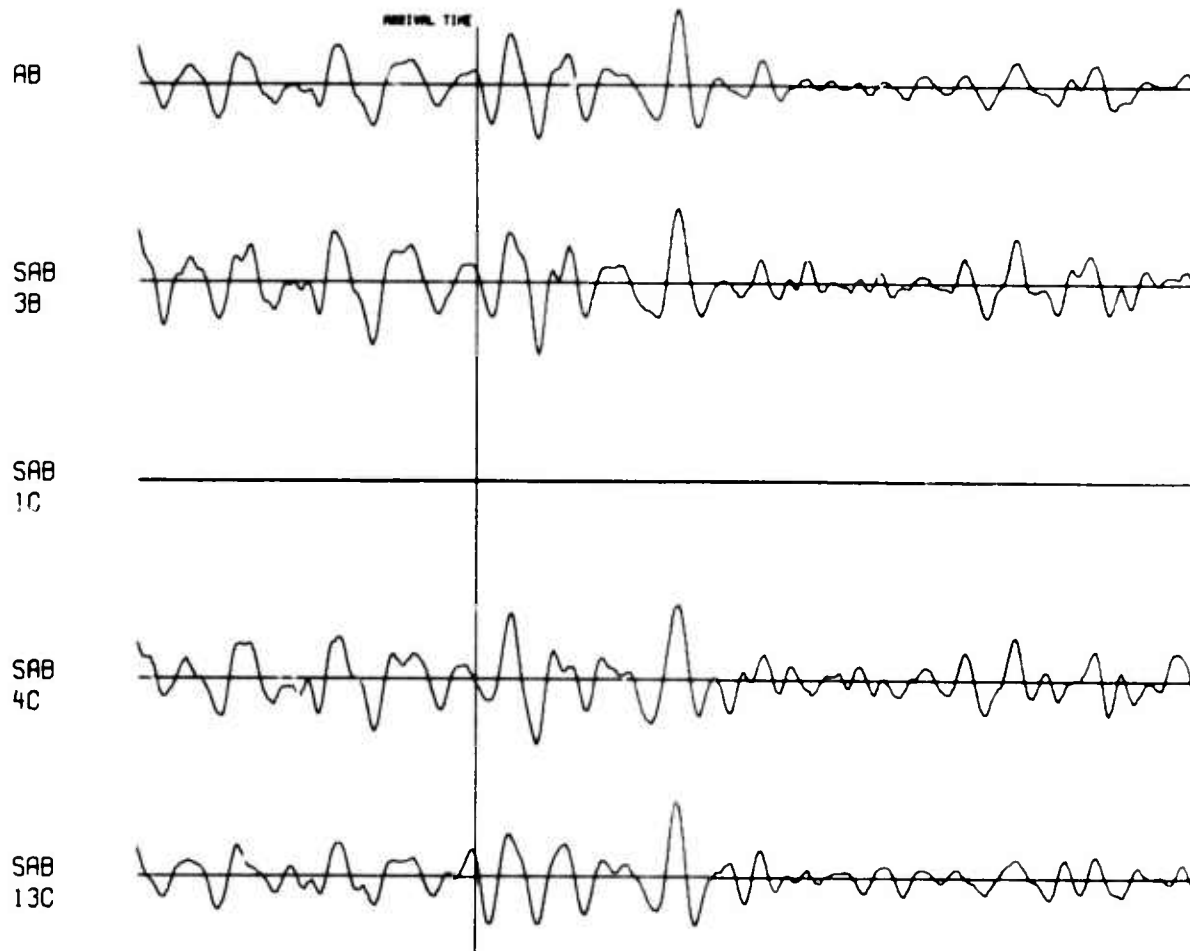
NORSAR EVENT FILE

1975 APR 23

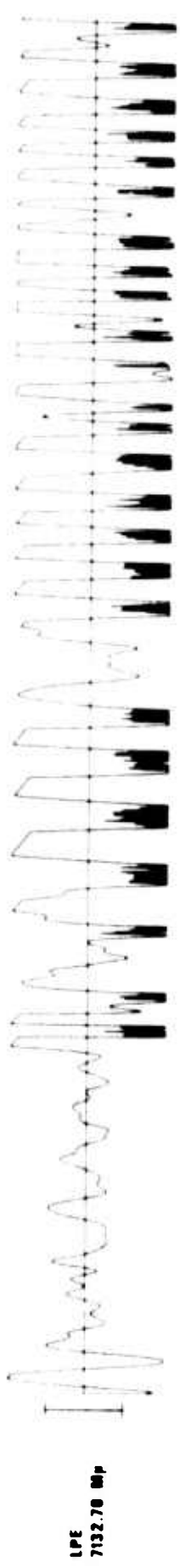
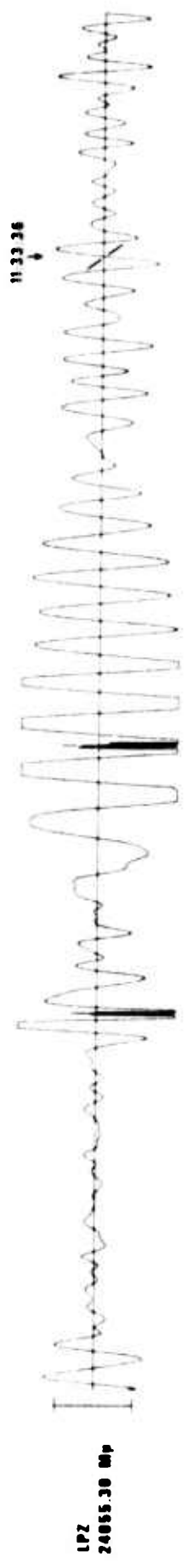
EPX NO. 84650 ARR. 11.27.42.7 16.9N 103.4W 5.3MB 33KM

OIST = 86.6 AZI = 299.0 AMP = 48.3 PER = 1.7 UMETH 2

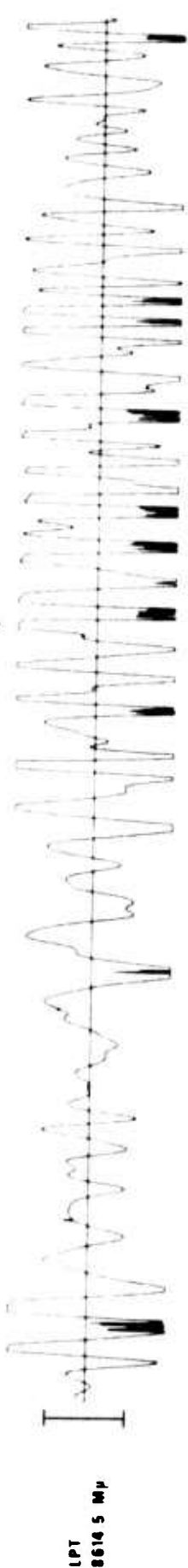
SCALE  = 5 SECONDS



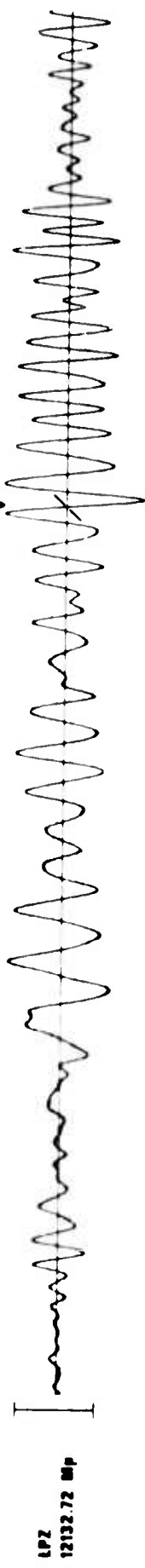
CP-SO 23 APR 75



RK-ON 23 APR 75

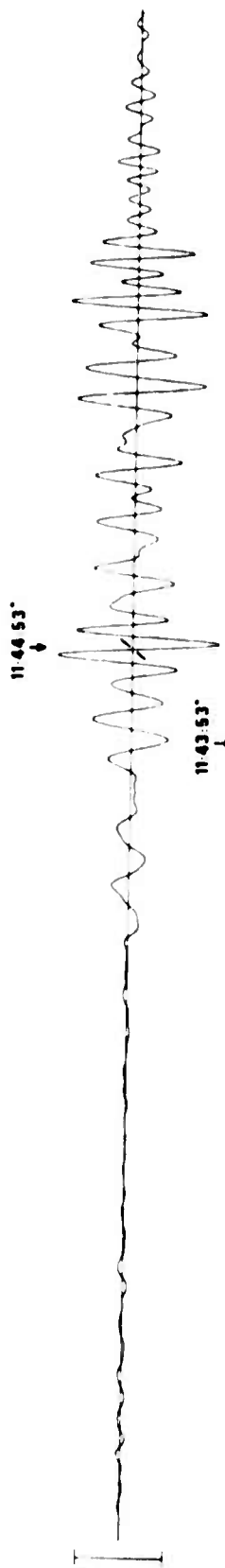


HN-ME 23 APR 75



WH2YK 23 APR 75

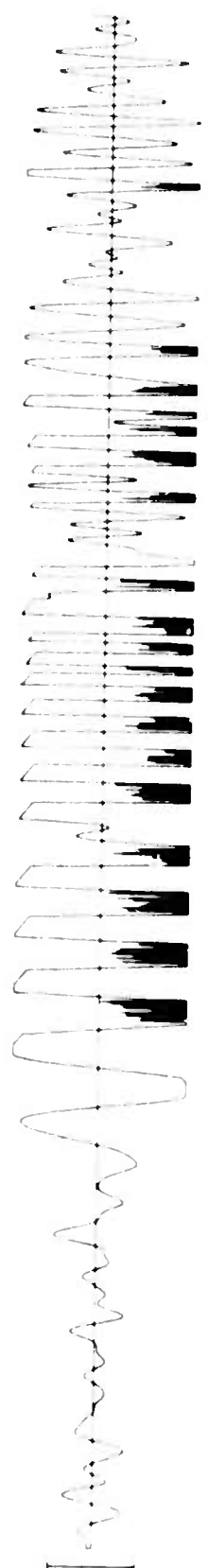
LPZ  
42762.14 MP



LPH  
40000.72 MP



LPT  
5793.20 MP



TIME



11:45:00

\*TIME CORRECTION UNKNOWN