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SPECIAL DATA COLLECTION SYSTEM EVENT REPORT:  
KOMANDORSKY ISLANDS REGION, 15 AUGUST 1975

K. J. Hill, et al

Teledyne Geotech

Prepared for:

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23 December 1975

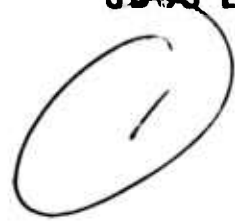
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SDCS-ER-75-42



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**SPECIAL DATA COLLECTION SYSTEM EVENT REPORT**  
**Komandorsky Islands Region, 15 August 1975**

**K.J. Hill, M.S. Dawkins, and R.R. Baumstark**  
**Alexandria Laboratories**

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

**December 1975**

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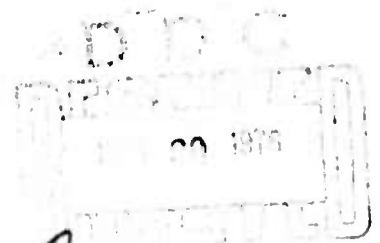
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1 JAN 73

EDITION OF 1 NOV 65 IS OBSOLETE

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

SDCS Event Report No. 42

Komandorsky Islands Region, 15 August 75

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:

	"P" Arrival	Origin Time	Latitude	Longitude	$m_b$	$M_s$
NORSAR	07:38:47.7	07:28:23	55 N	168 E	5.7	N/A
Hagfors	07:38:50.5	07:28:13	53 N	161 E	5.9	6.7

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

07:28:17.6 54.5N 167.3E 5.7 6.7

All SDCS stations were operational during this period.

Short-period signals associated with this event were recorded at all SDCS stations, LASA and NORSAR.

Long-period signals were recorded at WH2YK, CPSO, HN-ME, FN-WV, and LASA. At RK-ON the LP system was inoperative. The horizontal LP channels at HN-ME were not rotated because the LP transverse channel was inoperative. At CPSO the gain of the LP radial channel was unknown. Horizontal channels at WH2YK and FN-WV were not rotated due to signal clipping. NORSAR and ALPA long-period array data were not included because of program recovery problems.

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	55	41.4 N 085 34 13.5 W	574	6480 V 7515 H	SL210 V SL220 H
FN-WV	Franklin, West Virginia	38	52	58.0 N 079 30 47.0 W	910	KSS6000	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	579	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  $316^\circ \pm 5^\circ$  based on empirical data (event recordings). Rotation, where performed, is referenced to this azimuth and may be questionable.

HYPOCENTER DETERMINATION

INPUT FOR EVENT 15 AUG 75  
 07:28:28.0 55.000N 167.000E 0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CALC	REST		
WH2YK	07 34 32.4	0.0	-0.1	30.6	54.7
LAC	07 37 28.5	0.1	-0.0	52.1	60.5
FK-CN	07 37 51.0	-0.2	-0.1	55.2	49.7
NAO	07 38 47.7	-0.0	-0.1	63.5	347.4
HN-ME	07 39 25.6	-0.1	0.1	69.3	37.6
CPO	07 39 33.8	-0.5	-0.5	70.7	55.6
FN-WV	07 39 37.4	0.6	0.7	71.1	49.6

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LCNG.	DEPTH (KM)	SDV	IT	STA
07:28:06.6	54.294N	167.086E	-61. CALC	0.3	7	7
07:28:17.6	54.536N	167.263E	0. REST	0.3	3	7

CALC			REST		
1	.	0	1	.	0
0	.	5	0	.	5
0	0.	0 1	0	0.	0 1
.	.	.	.	.	.
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= 1.03  
 MAJOR 160.4KM. MINOR 39.0KM. AZ= 15 AREA= 19672 SQ.KM. FST

DATA SUMMARY

INPUT FOR EVENT 15 AUG 75  
 07:28:28.0 55.000N 167.000E 0KM.

STA.	PHASE	ARRIVAL		INST	PER	A/Z	MAGNITUDE		DIR	DIST
		TIME					ME	MS		
WHZYK	EP	07 34	32.4	SPZ	0.9	115.	5.42			30.6
IAC M	EP	07 37	28.5	SAB	1.6	1941.	6.69			52.1
FK-CN	EP	07 37	51.0	SPZ	0.8	137.	5.64			55.2
NAC	EP	07 38	47.7	AE	1.4	453.	5.30			63.5
HN-ME	EP	07 39	25.6	SPZ	0.7	27.	5.10			69.3
HN-ME	LQ	08 06	32.0	LPR	21.0	9999.				
HN-ME	LR	08 13	18.0	LPZ	19.0	4855.		6.65		69.3
CPC	EP	07 39	33.8	SPZ	1.6	638.	6.40			70.7
FN-WV	EP	07 39	37.4	SPZ	0.7	45.	5.25			71.1

CRIGIN	IAT.	LCNG.	DEPTH (KM)	MAG	SDV	STA	LPMAG	LPSDV	LPSTA
07:28:06.6	54.294N	167.086E	0. CALC	5.69	0.56	6	6.65*****		1
07:28:17.6	54.536N	167.263E	0. REST	5.69	0.55	6	6.65*****		1

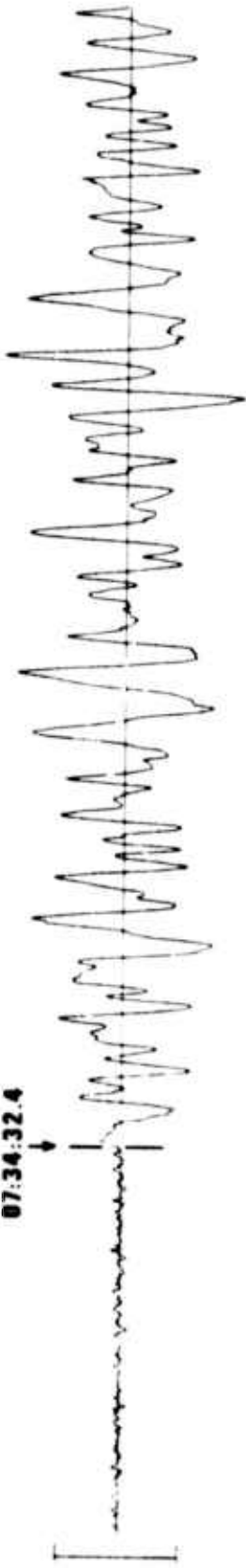
IAC NOT USED IN CALC RUN SP AVG. MAG.  
 LAO NOT USED IN REST RUN SP AVG. MAG.

LAO NOT USED IN SP AVERAGE MAGNITUDE CALCULATION BECAUSE ITS MAGNITUDE EXCEEDED THE SDV PARAMETERS OF THE HYPOCENTER PROGRAM.

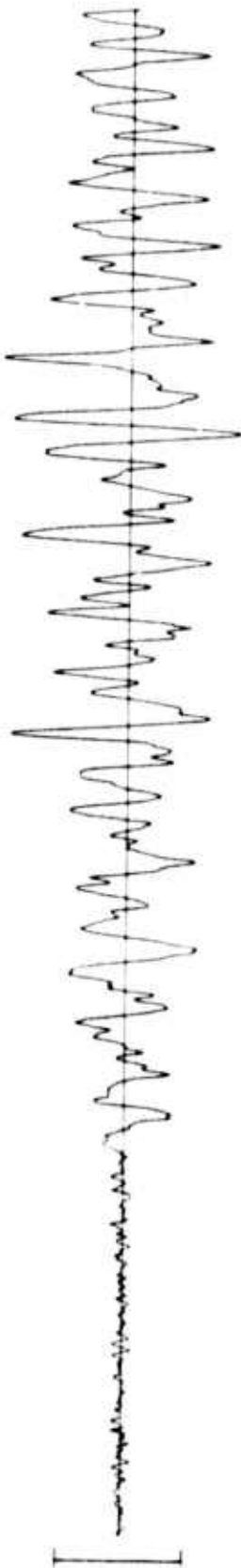
WH2YK 15 AUG 75

S77  
125.69 MHz

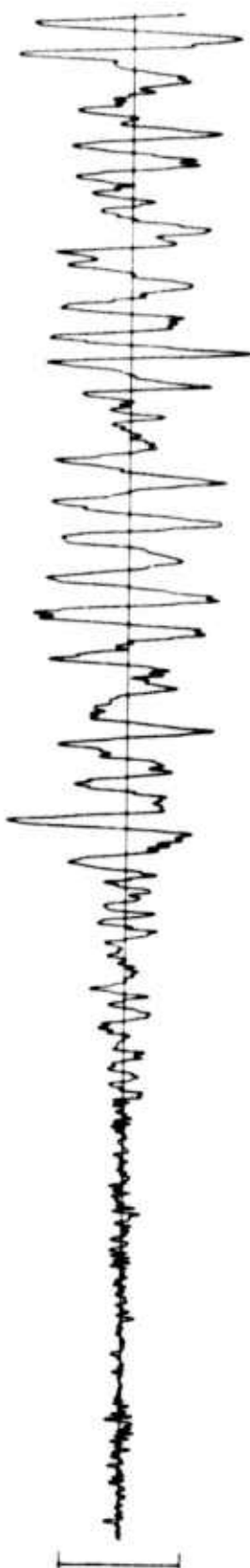
07:34:32.4



SPR  
86.95 MHz



SPT  
75.89 MHz



TIME



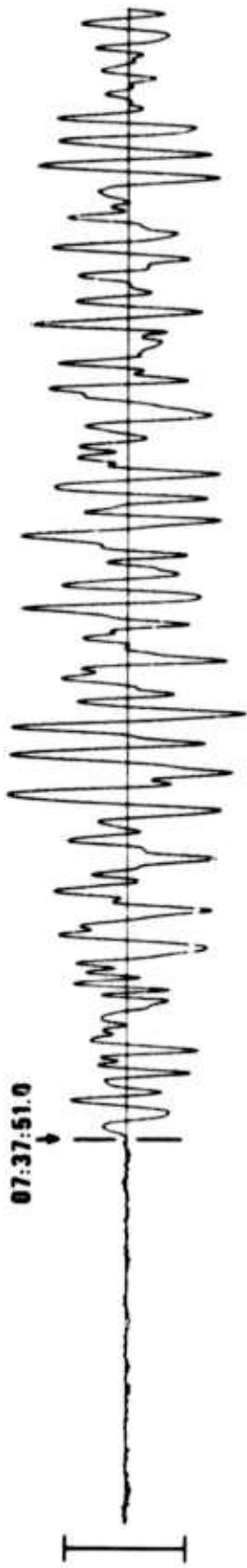
10 SEC

07:35:00

5<

**RK-ON 15 AUG 75**

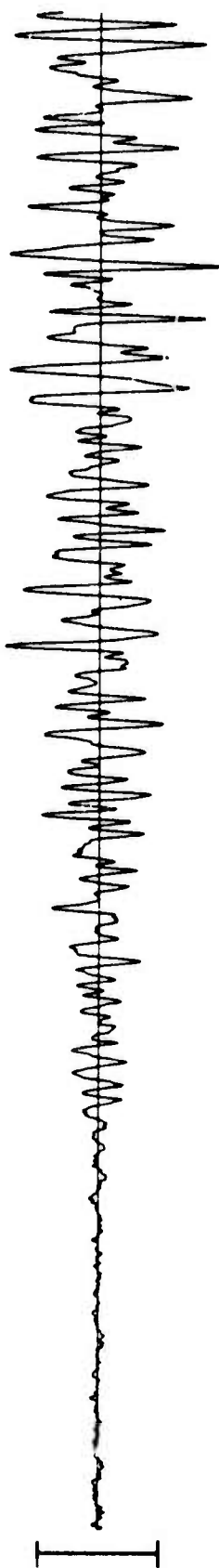
**SPZ  
218.78 MP**



**SPR  
113.12 MP**



**SPT  
72.89 MP**

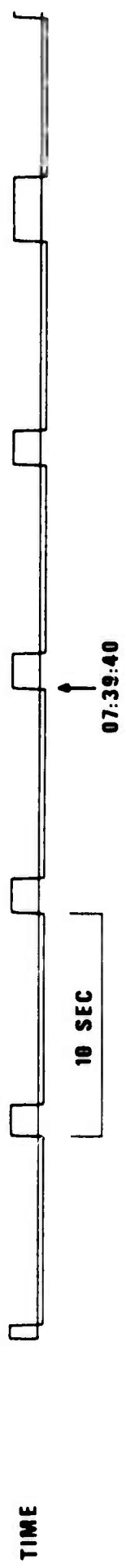
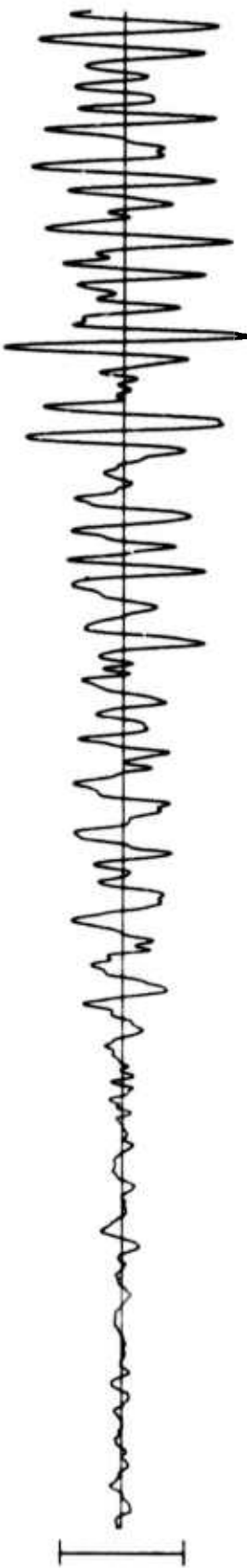
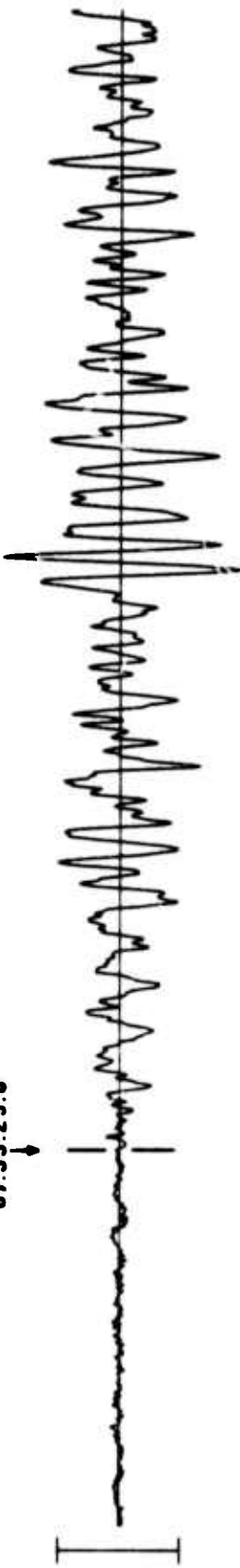


**TIME**



**HN-ME 15 AUG 75**

07:39:25.6

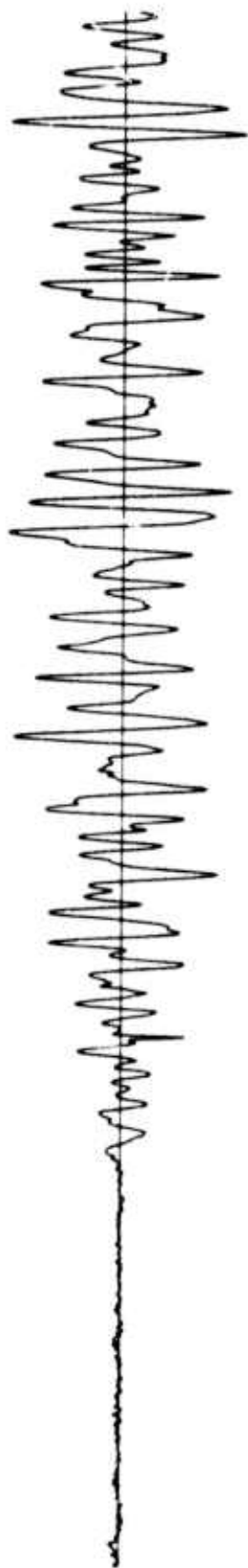


CPSO 15 AUG 75

07:39:33.6



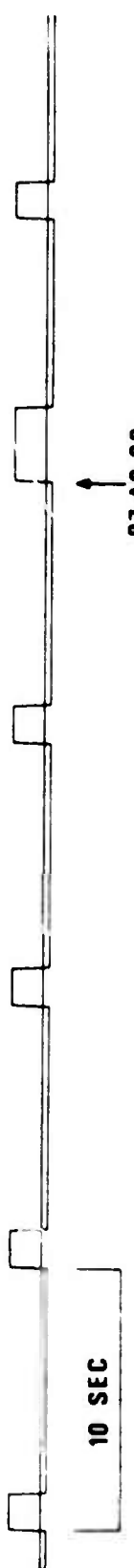
SPZ  
252.01 Mμ



SPR  
78.54 Mμ



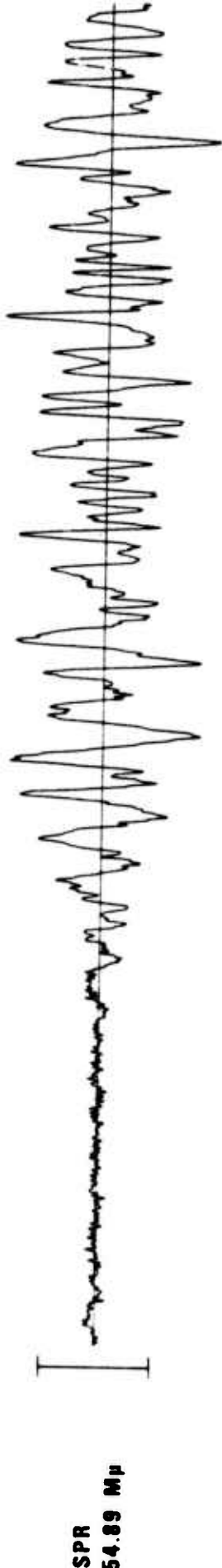
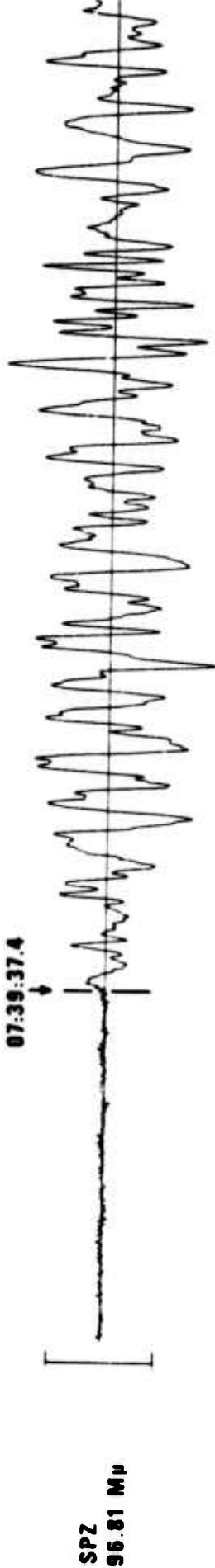
SPT  
47.43 Mμ



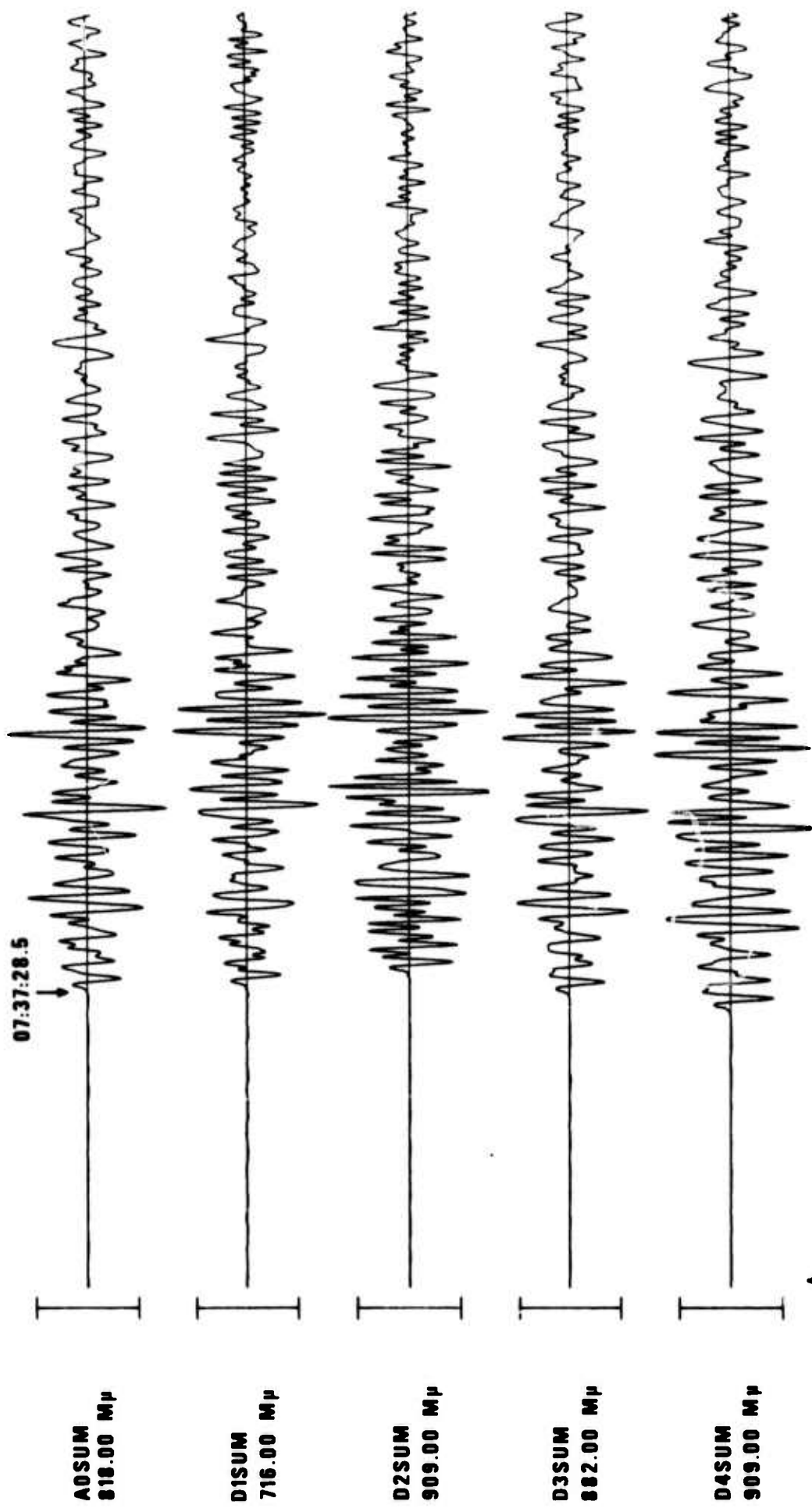
TIME

07:40:00

**FN-WV 15 AUG 75**



LASA INFINITE VELOCITY SUBARRAY SUMS 15 AUG 75



↑ 07:37:00.4  
20 SEC



HN-ME 15 AUG 75

08:13:18

LPT  
4403.77 MP



08:06:32

LPT  
49496.47 MP



LPT  
INOPERATIVE



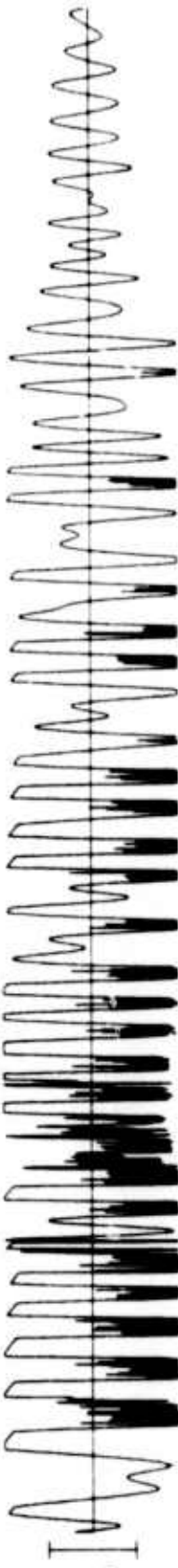
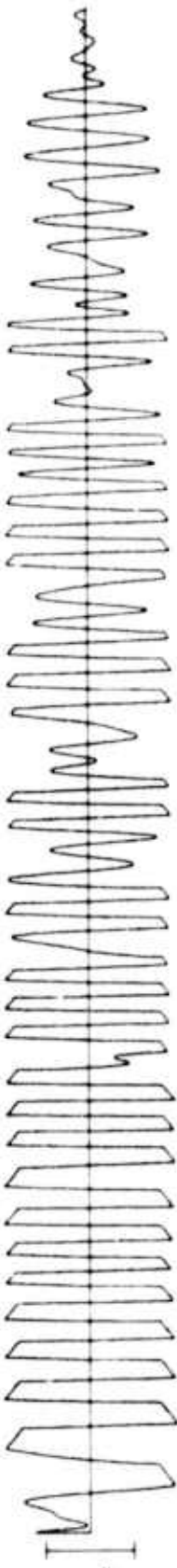
TIME



2 MIN

08:10:00

WH2YK 15 AUG 75



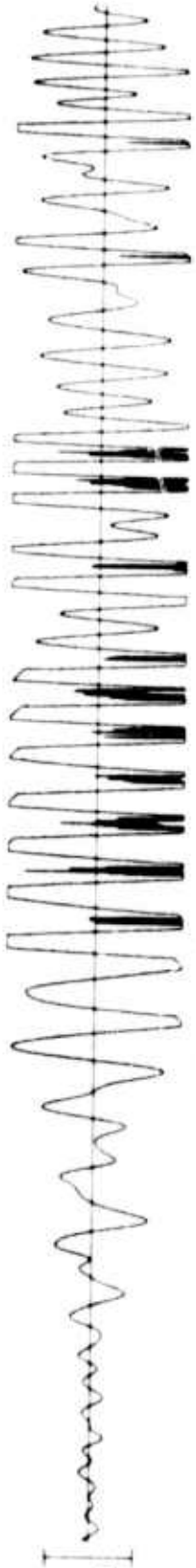
TIME

2 MIN

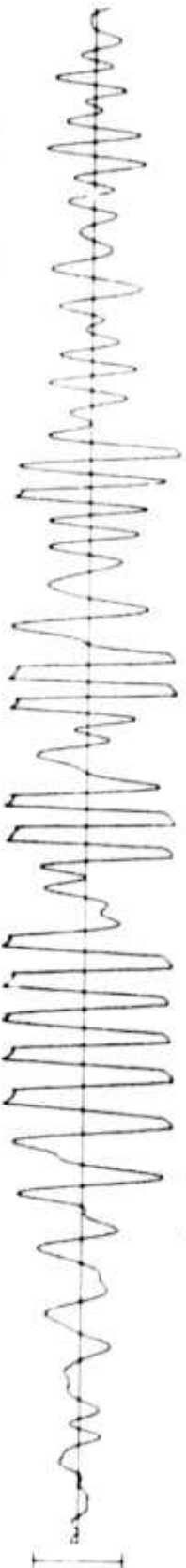
07:50:00

CPSO 15 AUG 75

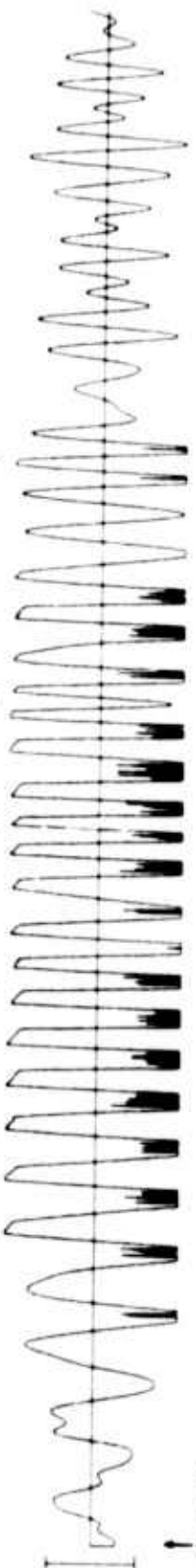
LPZ  
20303.4C MHz



LPN  
UNKNOWN



LPE  
26256.25 MHz



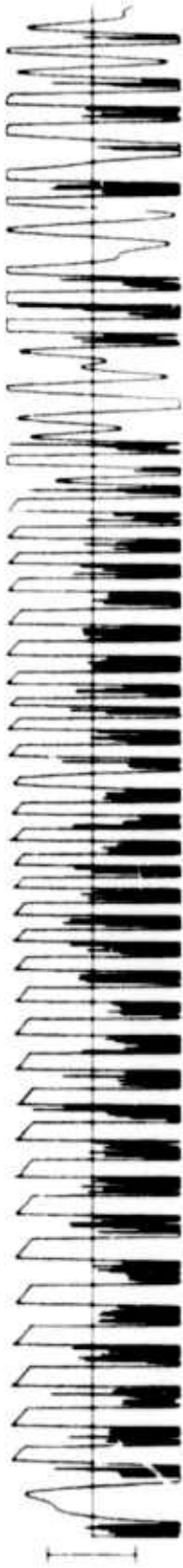
↑  
07:58:40

2 MIN

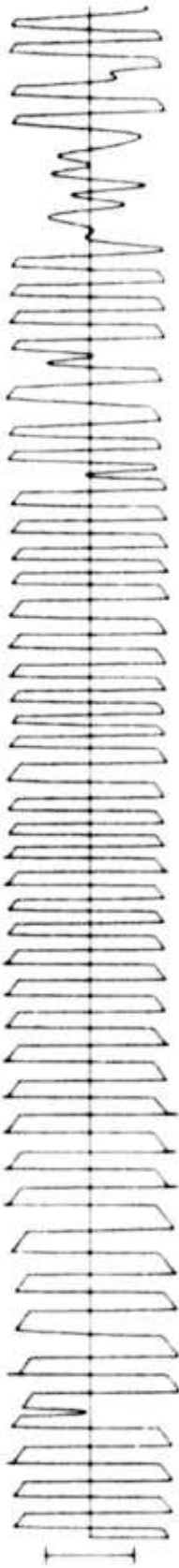
\*CALIBRATION INVALID

FN-WV 15 AUG 75

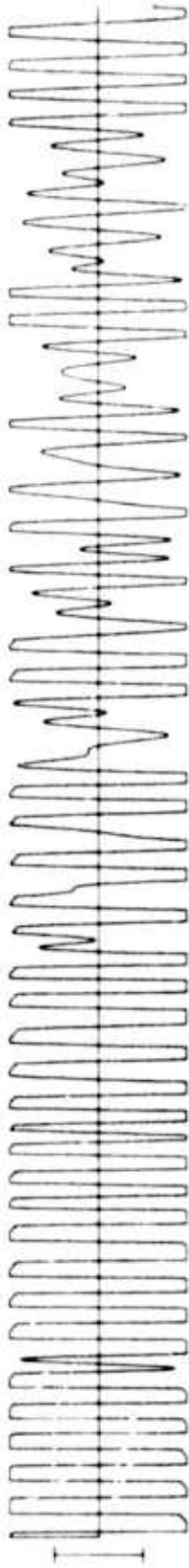
Lpz  
4760.64 MHz



LPR  
5084.00 MHz



LPT  
6533.31 MHz



TIME



2 MIN

00:15:00

LASA LONG PERIOD C4 SUBARRAY 15 AUG 75

