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SPECIAL DATA COLLECTION SYSTEM (SDCS) EVENT REPORT,  
BAJA, CALIFORNIA, 28 JULY 1975

K. J. Hill, et al

Teledyne Geotech

Prepared for:

Air Force Technical Applications Center

28 January 1976

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Baja California, 28 July 1975**

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Alexandria Laboratories**

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

**January 1976**

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312 Montgomery Street, Alexandria, Virginia 22314**

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SDCS EVENT REPORT NO. 63

Baja California, 28 July 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:

	"P" Arrival	Origin Time	Lat.	Long.	$m_b$	$M_s$
NORSAR	15:38:33.4	15:26:17	26 N	112 W	5.5	N/A
PDE		15:26:17.9	25.4N	109.6W	4.8	N/A

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

15:26:13.3 25.3N 109.9W 5.4 5.0

HN-ME was not operational for this period.

Short-period signals associated with this event were recorded at WH2YK, CPSO, RK-ON, FN-WV, LASA and NORSAR. WH2YK was not used in average SP magnitude calculations because the gain of the SP vertical channel was questionable. Horizontal SP channels at WH2YK, CPSO, RK-ON, and FN-WV were rotated.

Long-period signals were recorded at WH2YK, CPSO, RK-ON, FN-WV and LASA. Horizontal LP channels at WH2YK, FN-WV and CPSO were rotated. Horizontal LP channels at RK-ON were not rotated because the LP transverse channel was effectively inoperative at signal arrival time. ALPA and NORSAR long-period array data were not recoverable.

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
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	855	18300	SL210 V SL220 H

Note: The orientation of the radial instruments at FN-WV is assumed to be 316° + 5° based on empirical data (event recordings). Rotation, where performed, is referenced to this azimuth and may be questionable.

HYPOCENTER DETERMINATION

INPUT FOR EVENT 28 JUL 75  
 15:26:00.0 23.992N 112.000W 0KM.

STA.	ARRIVAL	RESIDUALS		FIRST.	AZ.
		CAIC	REST		
IAC	15 31 03.8	-0.2	-0.2	21.6	7.0
CFC	15 31 22.4	0.6	0.4	23.3	58.1
FK-CN	15 32 09.3	0.3	0.4	28.4	21.9
FN-WV	15 32 12.3	-0.7	-0.8	28.9	55.3
WH2YK	15 33 43.4	0.0	-0.2	39.4	340.8
NAC	15 38 33.4	0.1	0.3	81.8	25.2

67 HERFIN TRAVEL TIME TABLES

ORIGIN	LAT.	LCNG.	DEPTH (KM)	SDV	IT	STA
15:26:04.9	25.104N	110.027W	-48. CAIC	0.4	4	6
15:26:13.3	25.271N	109.945W	0. REST	0.5	3	6

CAIC				REST			
	1	2		1	2		
C	0	0	1	0	0	1	
C	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0

CHI2 COVERAGE ELIPSE; 95 PER CENT CONFD..LEVEL, SDV= 1.34  
 MAJOR 91.5KM. MINOR 37.5KM. AZ= 22 AREA= 10770 SQ.KM. REST

DATA SUMMARY

INPUT FOR EVENT 28 JUL 75  
 15:26:00.0 23.998N 112.000W OKM.

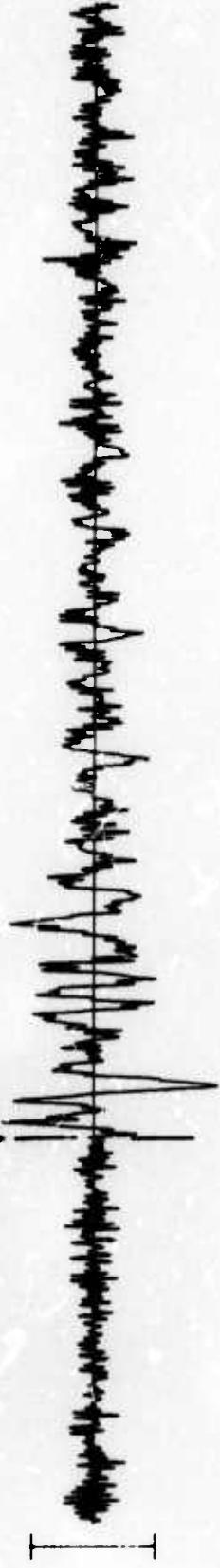
STA.	PHASE	ARRIVAL		INST	FEB	A/T	MAGNITUDE		DIF	DIST
		TIME					ME	MS		
IAC	EP	15 31	03.8	AE	1.5	589.	5.63			21.6
IAC	IQ	15 38	22.0	IFE	19.0	804.				
IAC	IR	15 39	53.0	IFZ	17.0	431.		5.09		21.6
CFC	EP	15 31	22.4	SEZ	1.2	287.	5.46			23.3
CFC	IQ	15 39	32.0	IFT	17.0	1944.				
CFC	IR	15 41	19.0	IFZ	17.0	730.		5.35		23.3
FR-CN	EP	15 32	09.3	SEZ	2.0	59.	5.07			28.4
FR-CN	IQ	15 41	42.0	IFR	22.0	309.				
FR-CN	IR	15 43	56.0	IFZ	14.0	1621.		5.78		28.4
FN-WV	EP	15 32	12.3	SEZ	1.6	41.	4.91			28.9
FN-WV	IQ	15 42	07.0	IFT	23.0	357.				
FN-WV	IR	15 43	22.0	IFZ	21.0	192.		4.86		28.9
WH2YK	EP	15 33	43.4	SEZ	0.6	9999.				
WH2YK	IQ	15 48	01.0	IFT	19.0	322.				
WH2YK	IR	15 50	54.0	IFZ	17.0	111.		4.76		39.4
NAC	EP	15 38	33.4	AE	2.2	242.	5.56			81.8

ORIGIN	IAT.	ICNG.	DEPTH (KM)	MAG	SDV	STA	IPMAG	LFSDV	LPSTA
15:26:04.9	25.104N	110.027W	0. CAIC	5.41	0.43	5	5.02	0.3	4
15:26:13.3	25.271N	109.945W	0. BEST	5.41	0.42	5	5.02	0.3	4

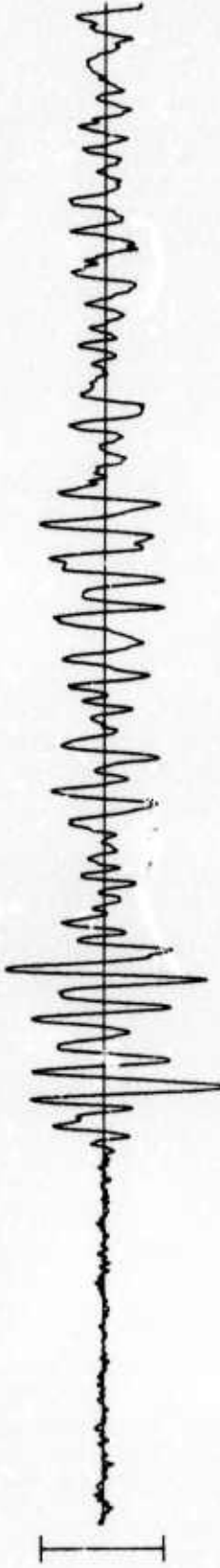
**CPSO 28 JUL 75**

15:31:22.4

**SPZ**  
157.85 MHz



**SPR**  
40.84 MHz



**SPT**  
19.09 MHz



**TIME**

10 SEC

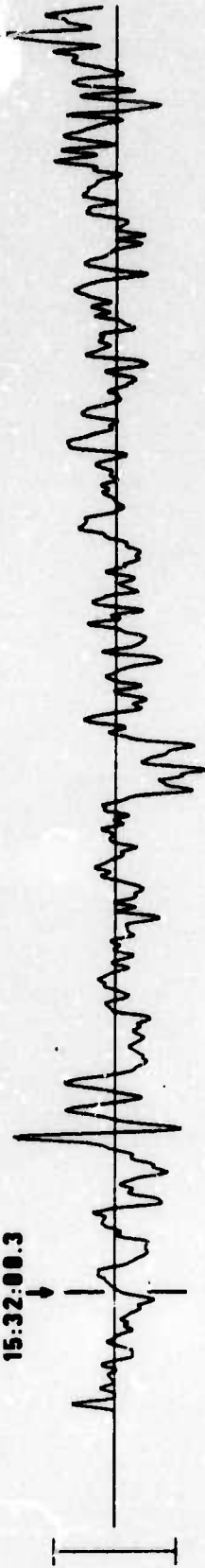
15:31:30



**RK-ON 28 JUL 75**

15:32:00.3  
↓

**SPZ**  
**37.84 MP**



**SPR**  
**10.74 MP**



**SPT**  
**12.73 MP**



**TIME**

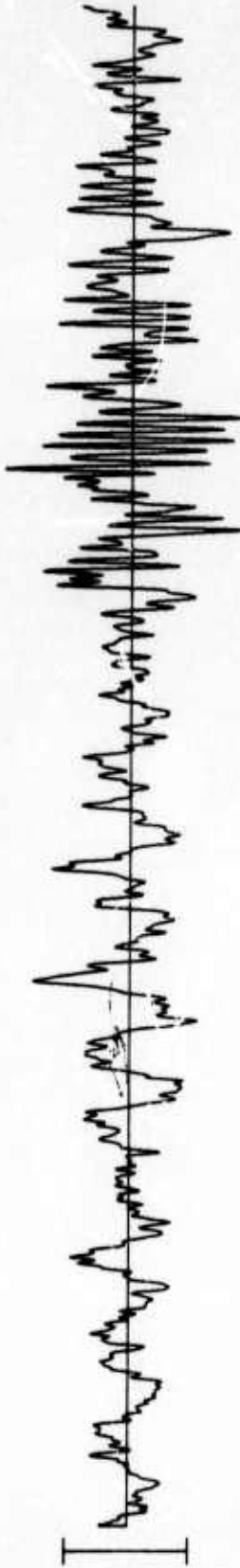


**FN-WV 28 JUL 75**

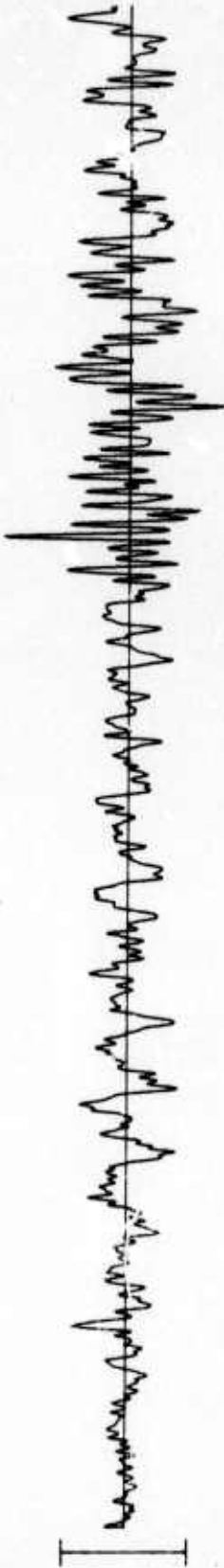
**SPZ  
13.89 MHz**



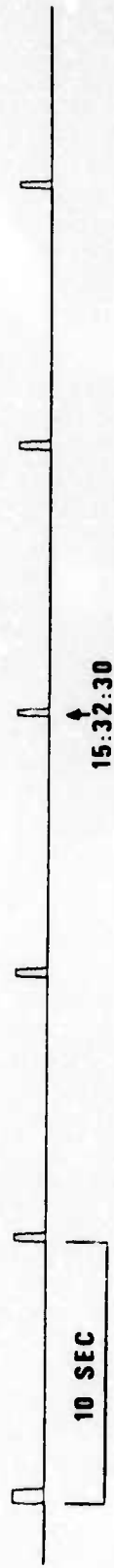
**SPR  
15.44 MHz**



**SPT  
17.95 MHz**



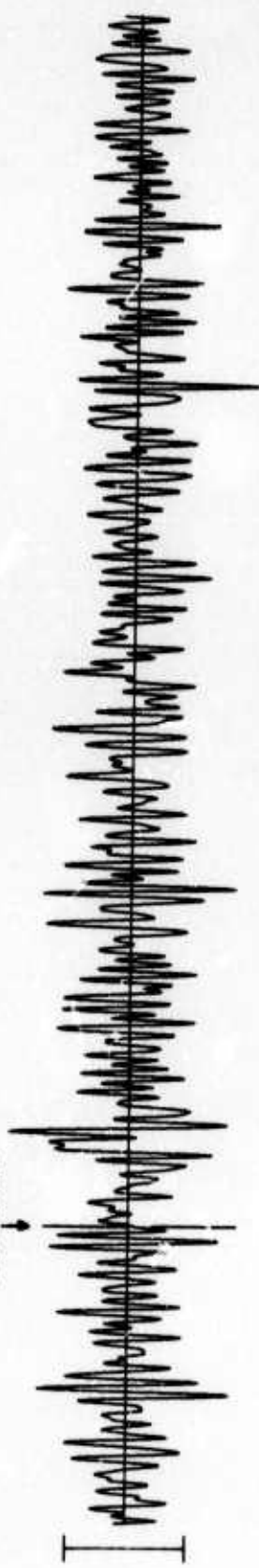
**TIME**



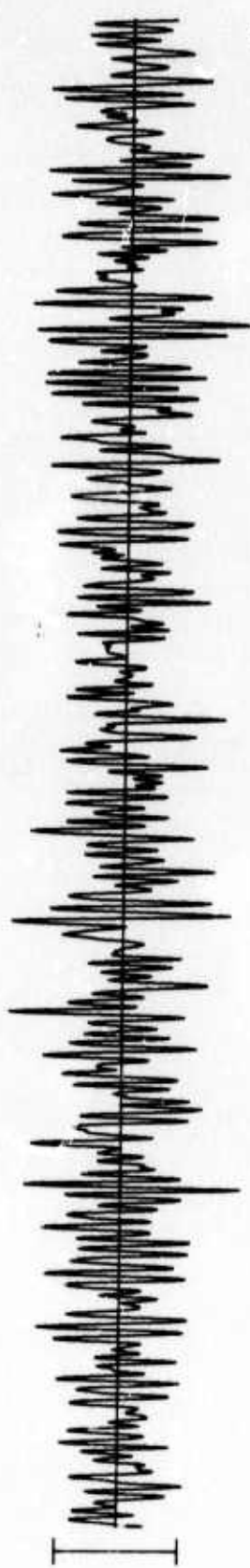
8

WH2YK 28 JUL 75

15:33:43.4



SPZ  
12.68 M $\mu$



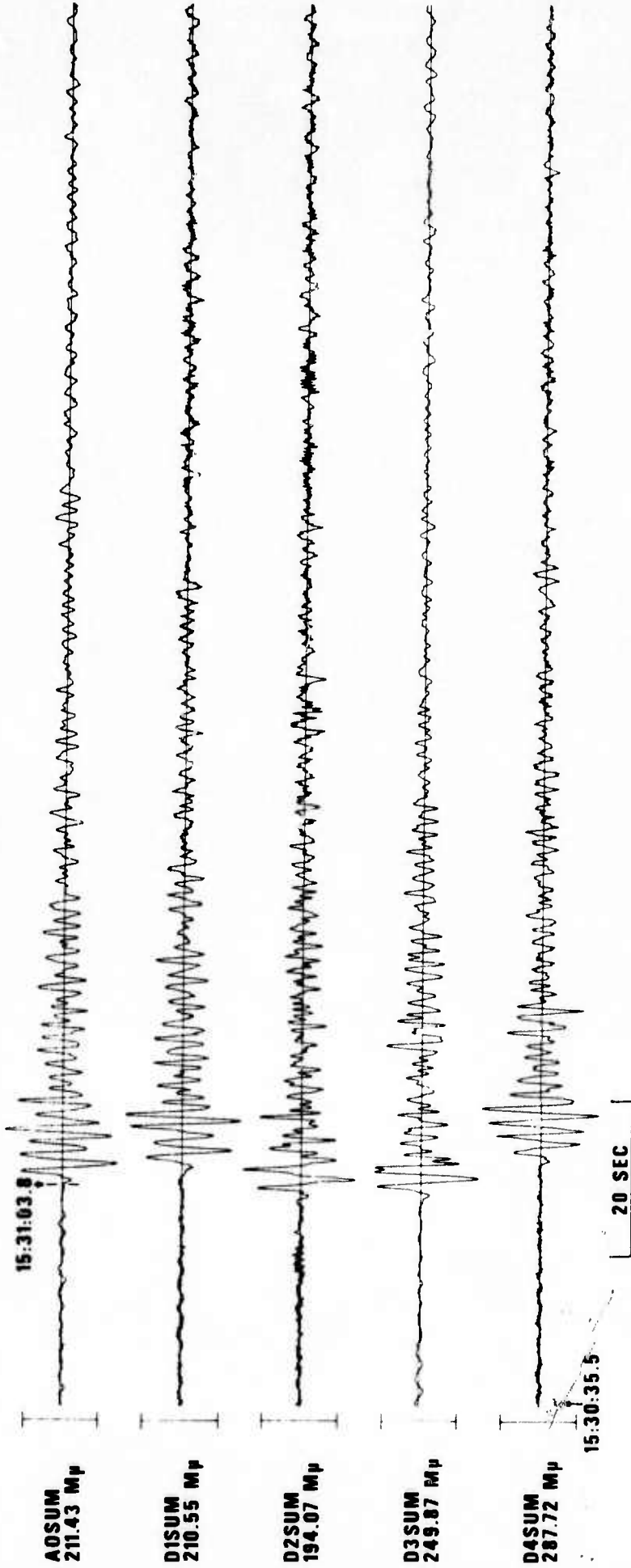
SPR  
9.08 M $\mu$



SPT  
10.58 M $\mu$

10 SEC

LASA INFINITE VELOCITY SUBARRAY SUMS 28 JUL 75



NORSAR EVENT FILE

1975 JUL 28

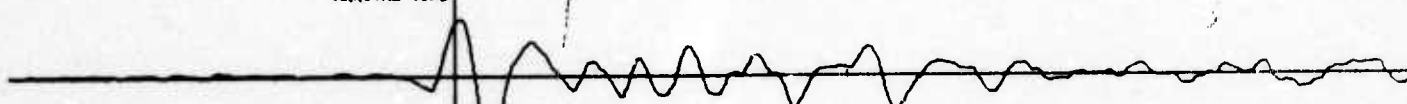
EPX NO. 60470 ARR. 15:38:34.8 18.1N 1153W 4.9 MB

AZI = 45.1 AMP = 11.7 PER = 1.7

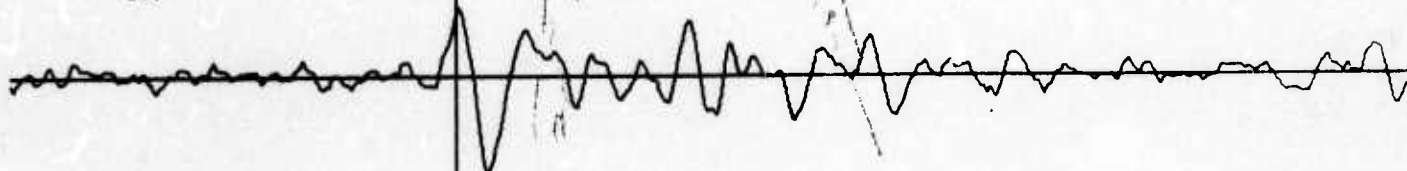
—|—| = 5 SECONDS

AB

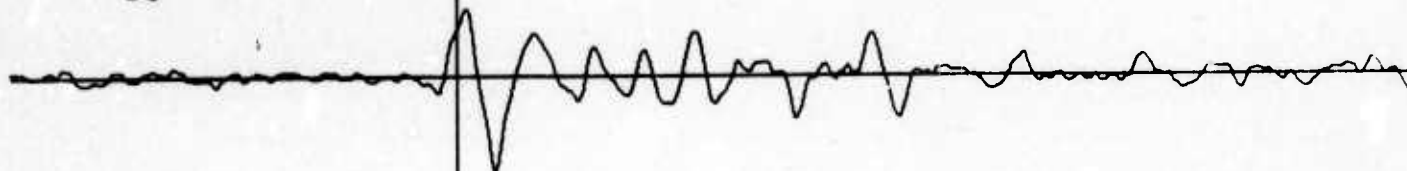
ARRIVAL TIME



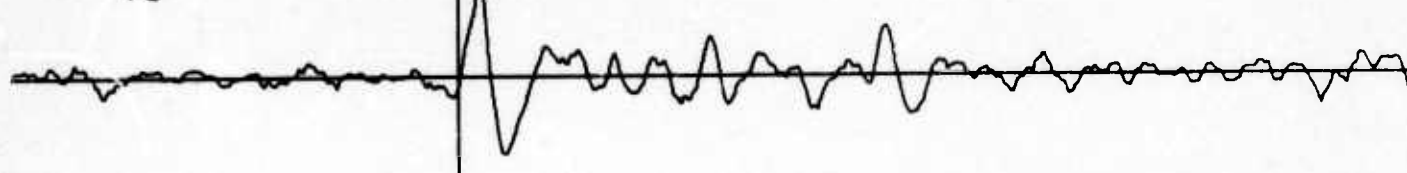
SAB  
1A



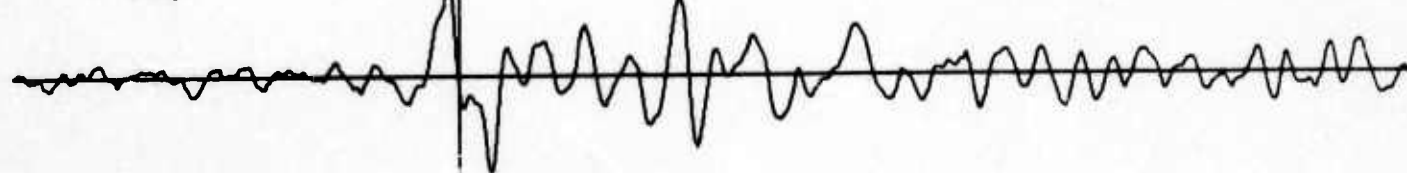
SAB  
3C



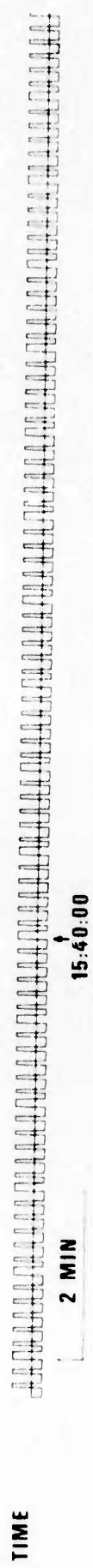
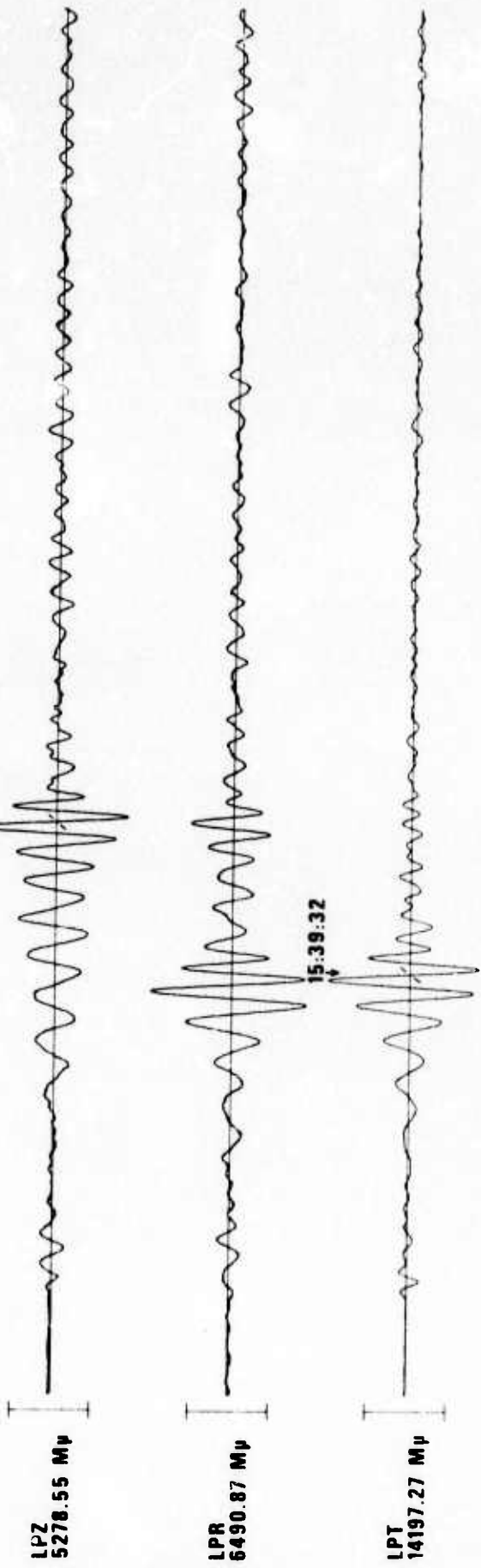
SAB  
7C



SAB  
13C

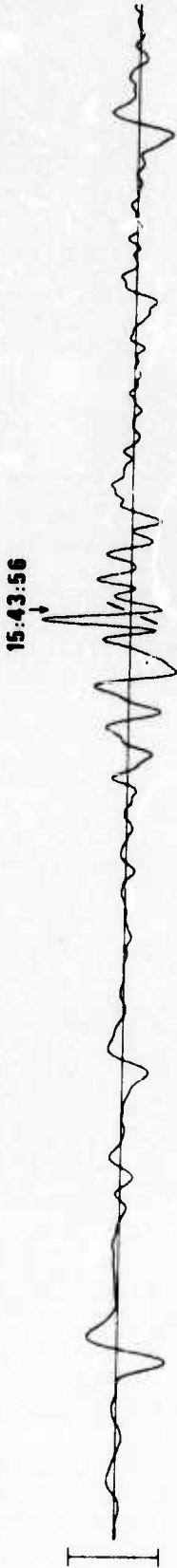


CPSO 28 JUL 75

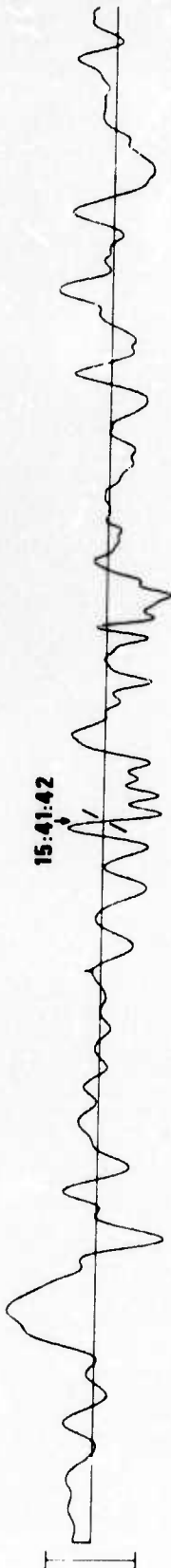


RK-ON 28 JUL 75

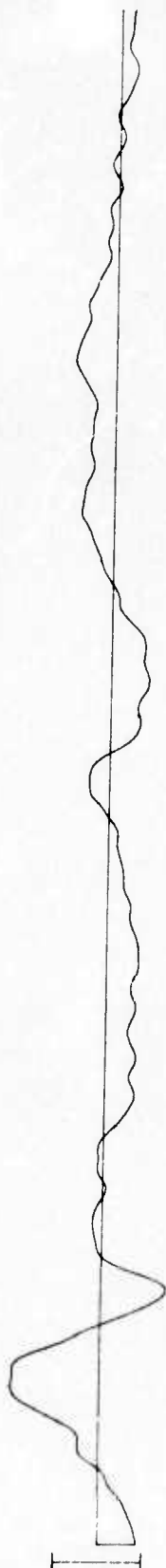
LPZ  
8468.00 MHz



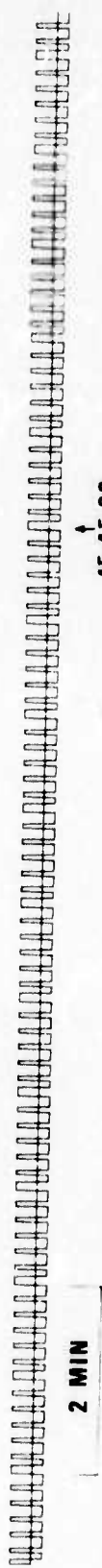
LPR  
6698.58 MHz



LPT  
QUESTIONABLE

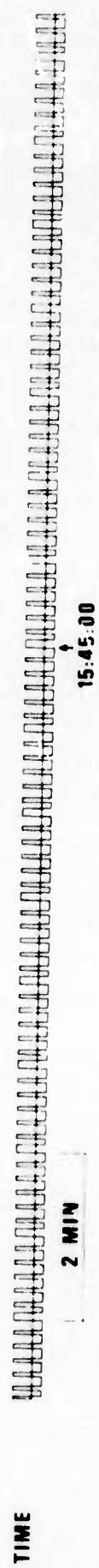
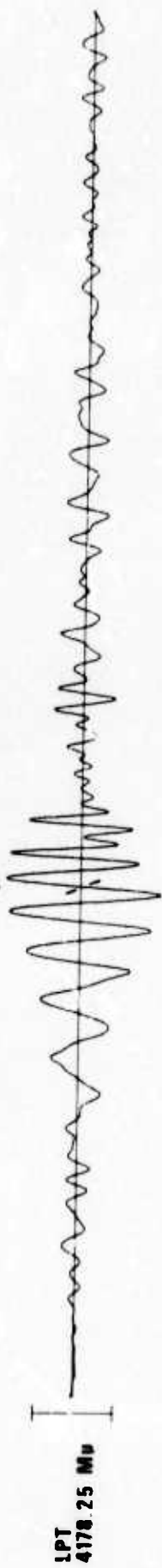
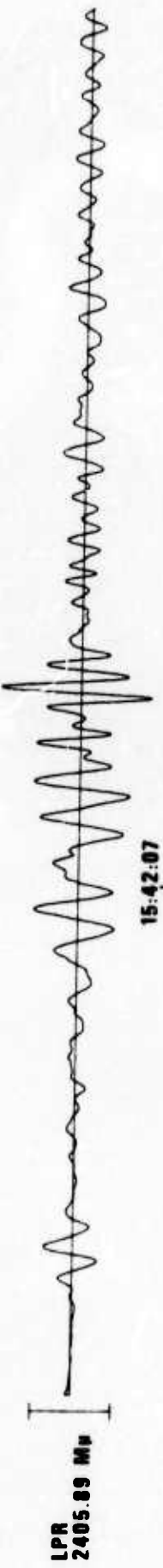


TIME

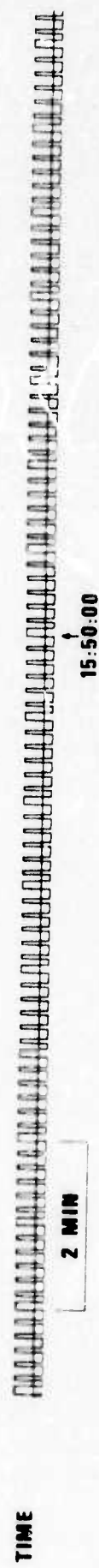


\*INSTRUMENT NOT RESPONDING PROPERLY

FN-WV 28 JUL 75



WH2YK 28 JUL 75



LASA LONG PERIOD C4 SUBARRAY 28 JUL 75

