

① LEVEL II

ADA064285

DDC FILE COPY

**SPECIAL DATA COLLECTION SYSTEM (SDCS)
NTS Event "BULKHEAD", 27 April 1977**

G. R. Naylor & M. S. Dawkins

Alexandria Laboratories

Teledyne Geotech, 314 Montgomery Street, Alexandria, Virginia 22314

December 1978

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED.

Sponsored by

The Defense Advanced Research Projects Agency (DARPA)

ARPA Order No. 2551

Monitored by

AFTAC/VSC

312 Montgomery Street, Alexandria, Virginia 22314

DDC
RECEIVED
FEB 6 1979
B

79 01 25 040

Disclaimer: Neither the Defense Advanced Research Projects Agency nor the Air Force Technical Applications Center will be responsible for information contained herein which has been supplied by other organizations or contractors, and this document is subject to later revision as may be necessary. The views and conclusions presented are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the Defense Advanced Research Projects Agency, the Air Force Technical Applications Center, or the US Government.

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER SDCS-ER-77-136	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) SPECIAL DATA COLLECTION SYSTEM (SDCS) NTS Event "BULKHEAD", 27 April 1977.	5. TYPE OF REPORT & PERIOD COVERED Technical <i>rept.</i>	6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) G. R. Naylor & M. S. Dawkins	8. CONTRACT OR GRANT NUMBER(s) F08606-78-C-0007	9. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS WARPA Order-2554 VI/8709
9. PERFORMING ORGANIZATION NAME AND ADDRESS Teledyne Geotech 314 Montgomery Street Alexandria, Virginia 22314	10. CONTROLLING OFFICE NAME AND ADDRESS VELA Seismological Center 312 Montgomery Street Alexandria, Virginia 22314	11. REPORT DATE 18 December 1978
11. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) Defense Advanced Research Projects Agency Nuclear Monitoring Research Office 1400 Wilson Blvd., Arlington, Virginia 22209	12. NUMBER OF PAGES 8	13. SECURITY CLASS. (of this report) 12/10p.
14. DISTRIBUTION STATEMENT (of this Report) APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED.		
15. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
16. SUPPLEMENTARY NOTES		
17. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
18. ABSTRACT (Continue on reverse side if necessary and identify by block number)		

405601

Abstract
SDCS Event Report No. 136

NTS Event "BULKHEAD", 27 April 1977

The report also contains

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the ~~above~~ ^{BULKHEAD} event. ~~Published~~ ^{Abstract} epicenter information from seismic observations ~~is~~.

	"P" Arrival	Origin Time	Latitude	Longitude	m_b	M_s
LASA	15:02:53.2	Origin time and location not published.			5.6	N/A
NORSAR	No bulletin published.					
Hagfors	15:11:40.7	15:00:03	37N	115W	5.7	N/A
SDAC/VELA		14:59:59.5	36.8N	116.0W	5.3	N/A

All SDCS stations were operational at this time. RK-ON data were retrieved from the digital field tapes, which recorded positive short- and long-period signals. HN-ME also recorded positive short- and long-period signals, and the data were retrieved from the analog back-up system. All other SDCS stations are at NTS, and clipped. Horizontal channels for RK-ON and HN-ME were rotated.

No waveform data were recoverable from the SDAC/VELA detection processor.

LASA data are reported from the LASA Data Center Teleseismic Report, and Hagfors data are from their bulletin.

Scaling factors on plots are millimicrons at 1 Hz for SP and 0.004 Hz for LP (not corrected for instrument response).

ACCESSORY	
NTIS	Value Section ☒
DOC	Self Section ☐
UNANNOUNCED	☐
JUSTIFIED	☐
BY	
DATE	
Dist.	
<i>A</i>	

STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES DEG MN SECS	ELEVATION METERS	INSTRUMENTATION	
				SHORT-PERIOD	LONG-PERIOD
HN-ME	Houlton, Maine	46 09 43.0 N 067 59 09.0 W	213	KS36000	KS36000
RK-ON	Red Lake, Ontario	50 50 20.0 N 093 40 20.0 W	366	18300	SL210 V SL220 H
OB2NV	Nevada Test Site	37 13 31.0 N 116 03 28.0 W		18300	N/A
YF-NV	Nevada Test Site	37 04 06.0 N 116 00 07.0 W	1271	18300	N/A
YF4NV	Nevada Test Site	37 04 29.0 N 116 02 12.0 W	1244	18300	N/A
LASA	Billings, Montana	46 41 19.0 N 106 13 20.0 W	744	HS10	7505A V 8700C H
NORSAR	Kjeller, Norway	60 49 25.4 N 010 49 56.5 E	379	HS10	7505A V 8700C H

PREDATA -- TRAVEL TIME PREDICTIONS --

27APR INPUT FOR EVENT 27 APR 77
 15:00:00.0 37.000N 116.000W 0KM.

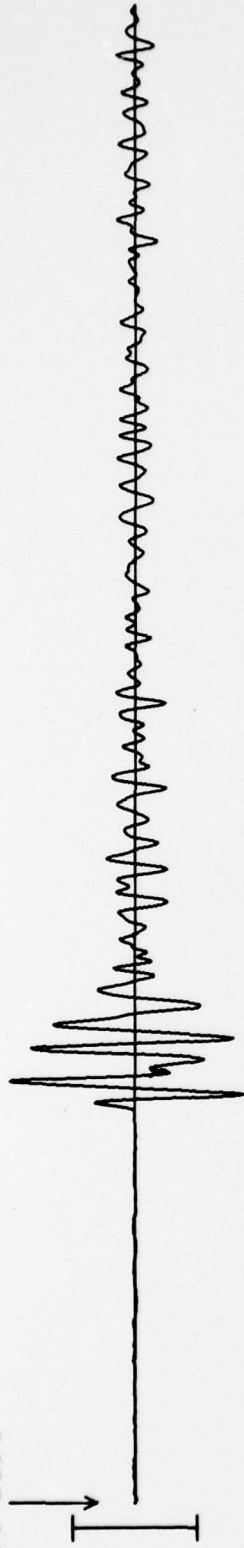
STA.	TIME	SURF(CKM.) TRAV.TIME	DIST DEG.	KM.	EVT-STA	STA-EVT AZI
YF-NV P	15 00 01.3	0:01.3	0.07	7.5862	358.678	178.677
YF4NV P	15 00 01.5	0:01.5	0.08	8.9117	338.538	158.516
OB2NV P	15 00 04.3	0:04.3	0.23	25.4909	348.443	168.408
LAO P	15 02 52.8	2:52.8	12.11	1346.3806	33.872	220.403
RK-ON P	15 04 45.4	4:45.4	21.10	2346.6204	41.990	237.640
HN-ME P	15 07 06.8	7:06.8	36.58	4067.1921	60.108	273.026
NAO P	15 11 32.3	11:32.3	73.31	8151.6133	24.170	318.013
HFS P	15 11 40.7	11:40.7	74.76	8312.8984	23.524	320.323

67 HERRIN TRAVEL TIME TABLES

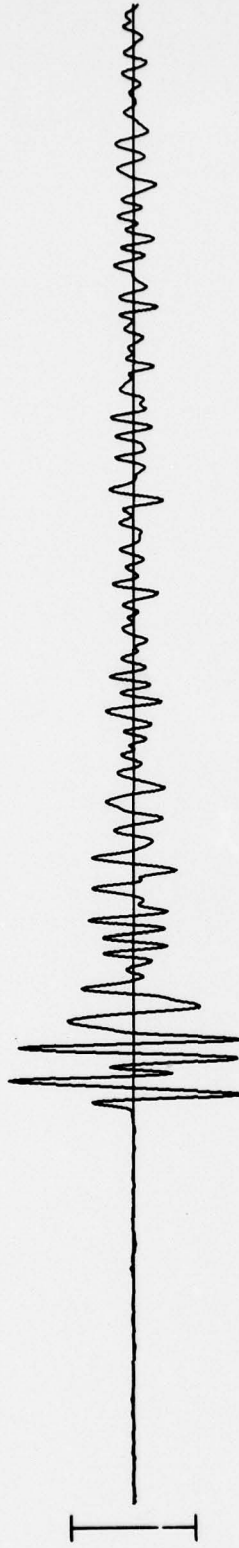
SURF			
	0	.	2
C	.		0
0	3.	2	1
:	:	:	:
0	0.	0	0
0	.		0
	0	.	0

RK-QN 27 APR 77

15:04:30.0



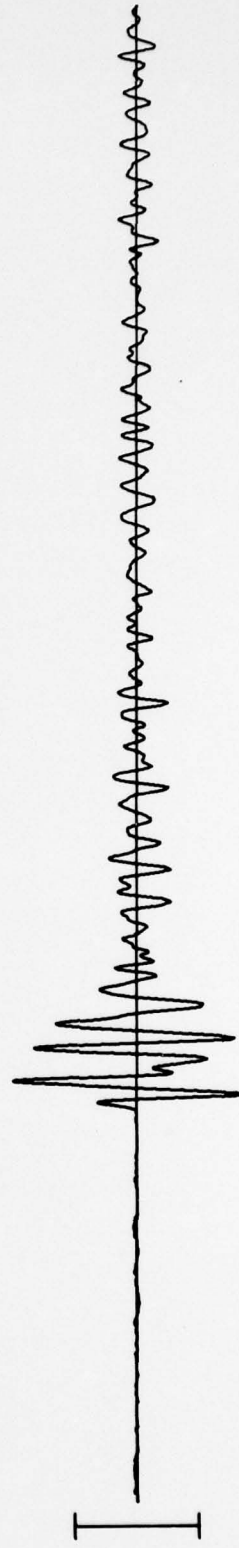
SPZ
414.75 MU



SPR
306.86 MU



SPT
81.24 MU

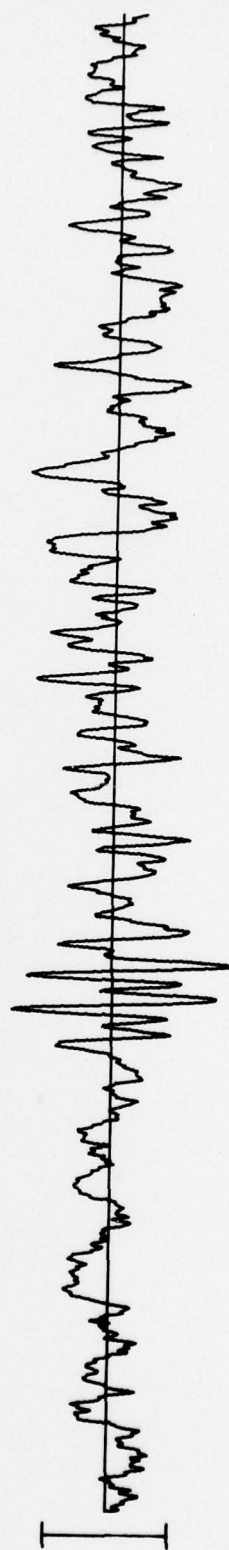
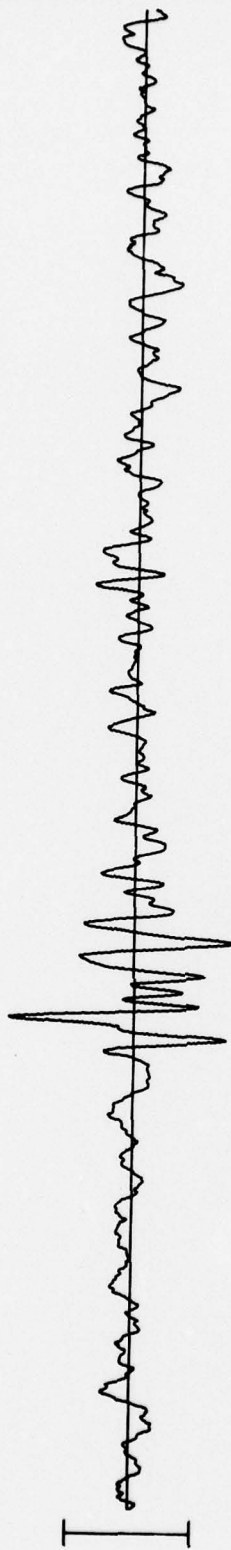
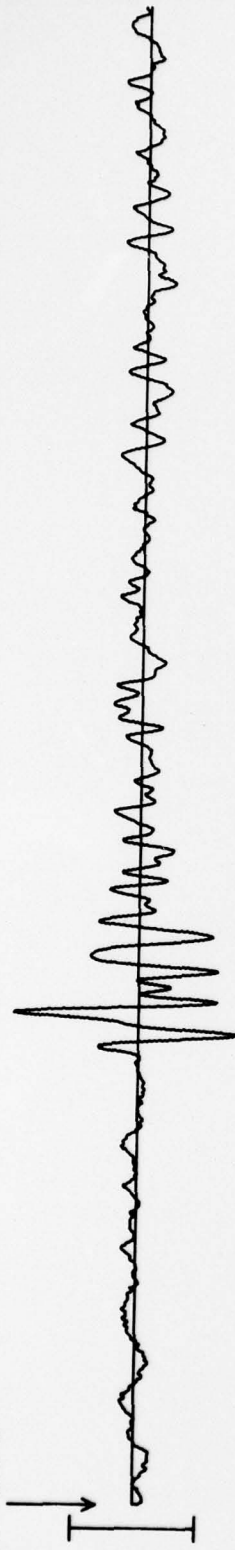


SPZLO
423.73 MU

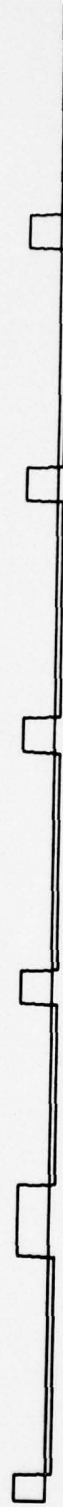
10 SEC

HN-ME 27 APR 77

15:06:50.0

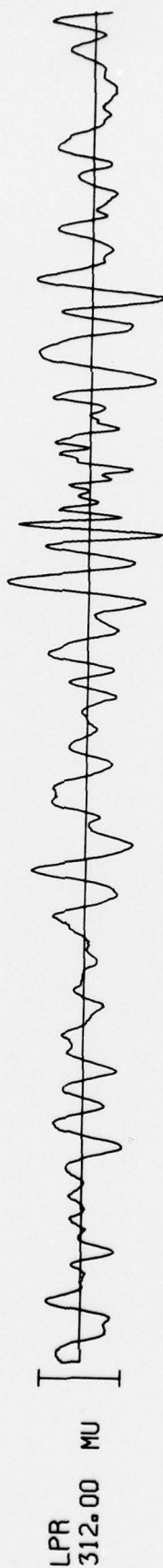
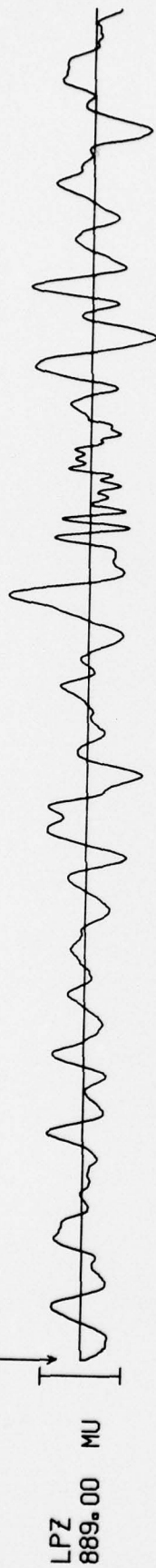


TIME



10 SEC

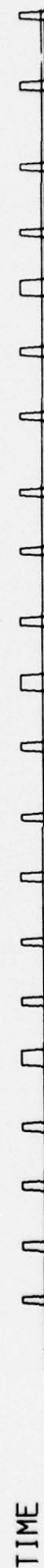
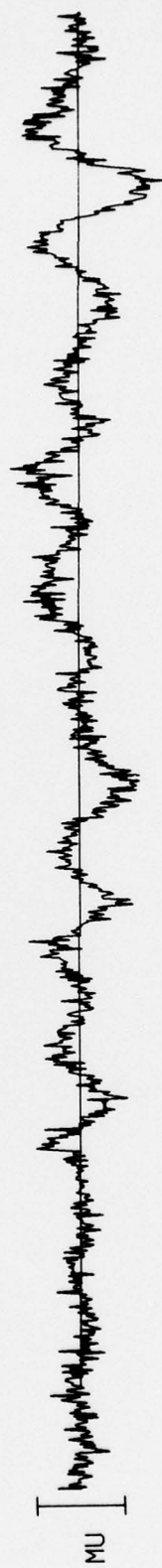
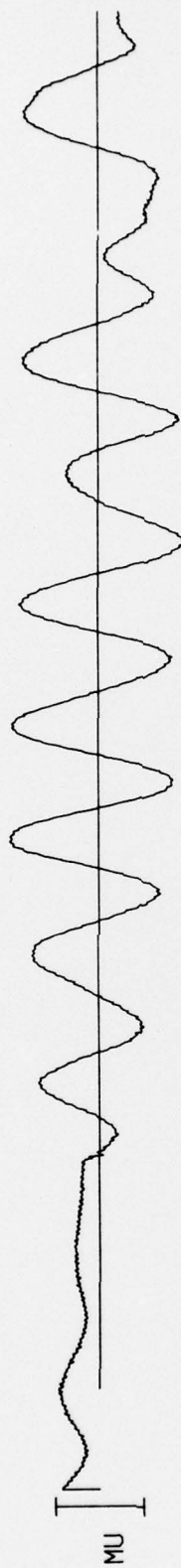
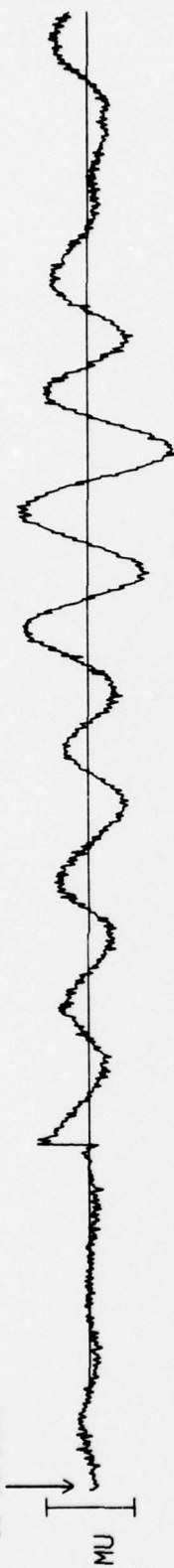
RK-ON 27 APR 77
15:07:00



120 SEC

HN-ME 27 APR 77

15:15:00.0



120 SEC