

Technical Report Documentation Page

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16. Abstract Overturning accidents of forklift trucks were simulated using a variety of turning maneuvers and drop tests. An instrumented anthropomorphic dummy, both restrained and unrestrained, was used to simulate the operator. Test results are given and observations about the validity and repeatability of the test procedures are made. This volume contains computer output of the data analysis.			
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APPENDIX A
DYNAMIC TESTS

CONTENTS OF APPENDIX A

An "x" indicates that this graph is included in the appendix. The sheets are not paginated so that slides may be made of them. The order of the sheets marked "x" are from left to right, and from top to bottom.

TEST CODE	Summary	Head Accel	Chest Accel	Pelvis Accel	Truck Decel	Steering Forces	Steering Moments	Knee/Belt Loads	Tape 1 (Ch 1-8)	Tape 1 (Ch 9-14)	Tape 2 (Ch 1-8)	Tape 2 (Ch 9-14)
Q1	x	x	x	x		x	x	x	x	x	x	x
Q2	x	x	x	x	x	x	x	x	x	x	x	x
Q3	x	x	x	x	x	x	x	x	x	x	x	x
R1	x	x	x	x	x	x	x		x	x	x	x
R2	x	x	x	x	x	x	x		x	x	x	x
R3	x	x	x	x	x	x	x		x	x	x	x
S1	x	x	x	x	x	x	x		x	x	x	x
S2	x	x	x	x	x	x	x		x	x	x	x
S3	x	x	x	x	x	x	x		x	x	x	x
U1	x	x		x	x	x	x		x	x	x	x
V3	x	x	x	x	x	x	x		x	x	x	x
V4	x	x	x	x	x	x	x		x	x	x	x
U2	x	x	x	x	x	x	x	x	x	x	x	x
U4	x	x	x	x	x	x	x	x	x	x	x	x
V1	x	x	x	x	x	x	x	x	x	x	x	x
S5	x	x	x	x	x	x	x		x	x	x	x
S6	x	x	x	x	x	x	x		x	x	x	x
S7	x	x	x	x	x	x	x		x	x	x	x
S8	x	x	x	x	x				x	x		x
S9	x	x	x	x	x	x	x		x	x		x
S10	x	x	x	x	x	x	x		x	x		x

LA DY W SE		Test No. Q-1	S U M M A R Y			
			Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)						
	P-A acc	...	-7	430	25	502
	R-L acc	...	-16	452	68	502
	I-S acc	...	-61	431	30	420
	Resultant	...			73	502
	HIC =	132 ...		413		508

CHEST ACCELERATIONS (G)						
	P-A acc	...	-6	452	11	471
	R-L acc	...	-5	488	27	469
	I-S acc	...	-11	433	19	431
	Resultant	...			28	469

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-15	471	19	484
	R-L acc	...	-3	576	20	472
	I-S acc	...	-9	422	15	471
	Resultant	...			28	471

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	0	0	0	0
	Ay (L-R)	...	0	0	0	0
	Az (I-S)	...	0	0	0	0
	Resultant	...			0	0

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	-239	415	112	457
	Fy (L-R)	...	-222	477	145	445
	Fz (I-S)	...	-212	454	200	505
	Resultant	...			303	414

S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	-2119	390	1921	406
	My (L-R)	...	-867	379	1117	358
	Mz (I-S)	...				
	Resultant	...			2120	708

KNEE & BELTS LOADS (LB)						
	LT Knee	...				
	RT Knee	...				
	LT Belt	...	-8	526	237	466
	RT Belt	...	-40	567	333	443

LA DY W SB

DEC 11, 1981

PEAKS

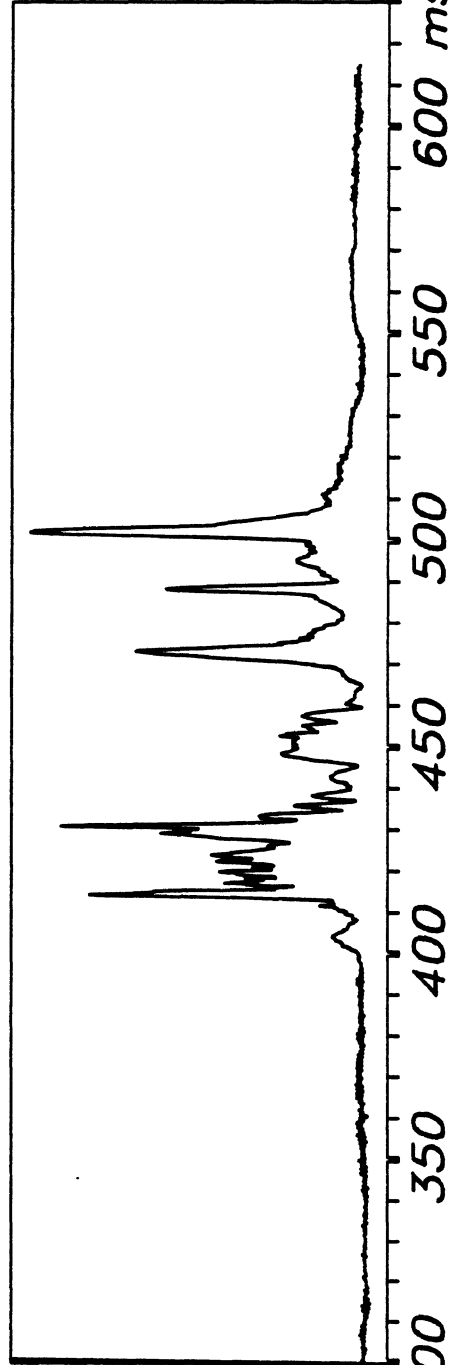
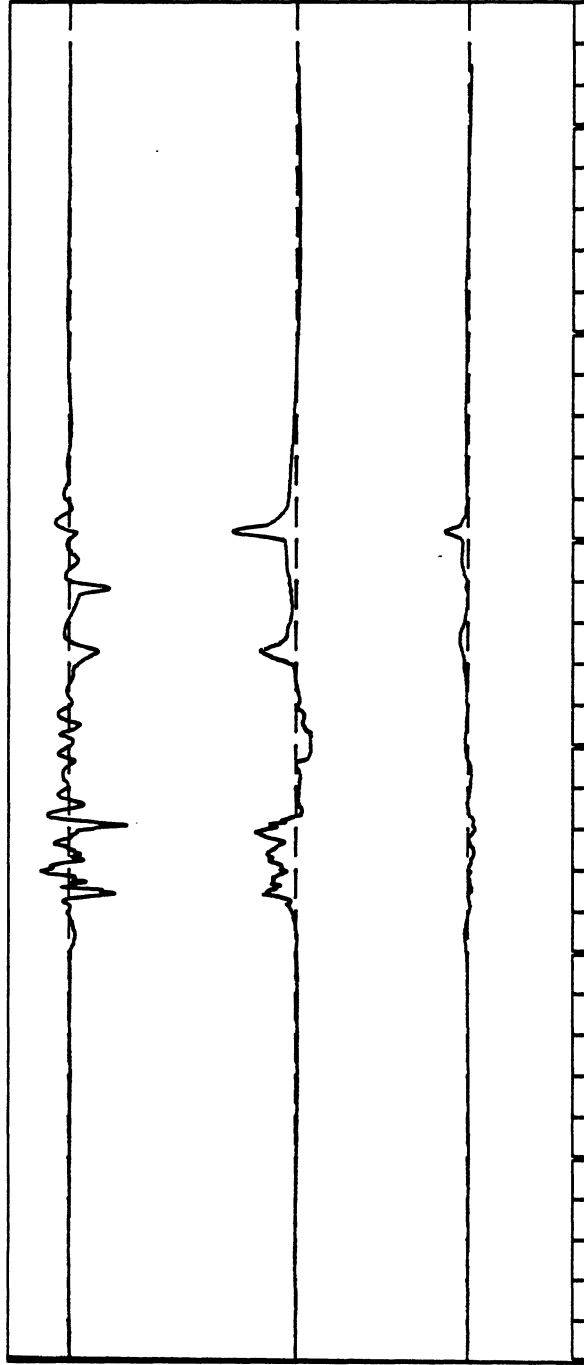
I-S acc -62

R-L acc 68

P-A acc 24

HIC = 132

Resultant 72



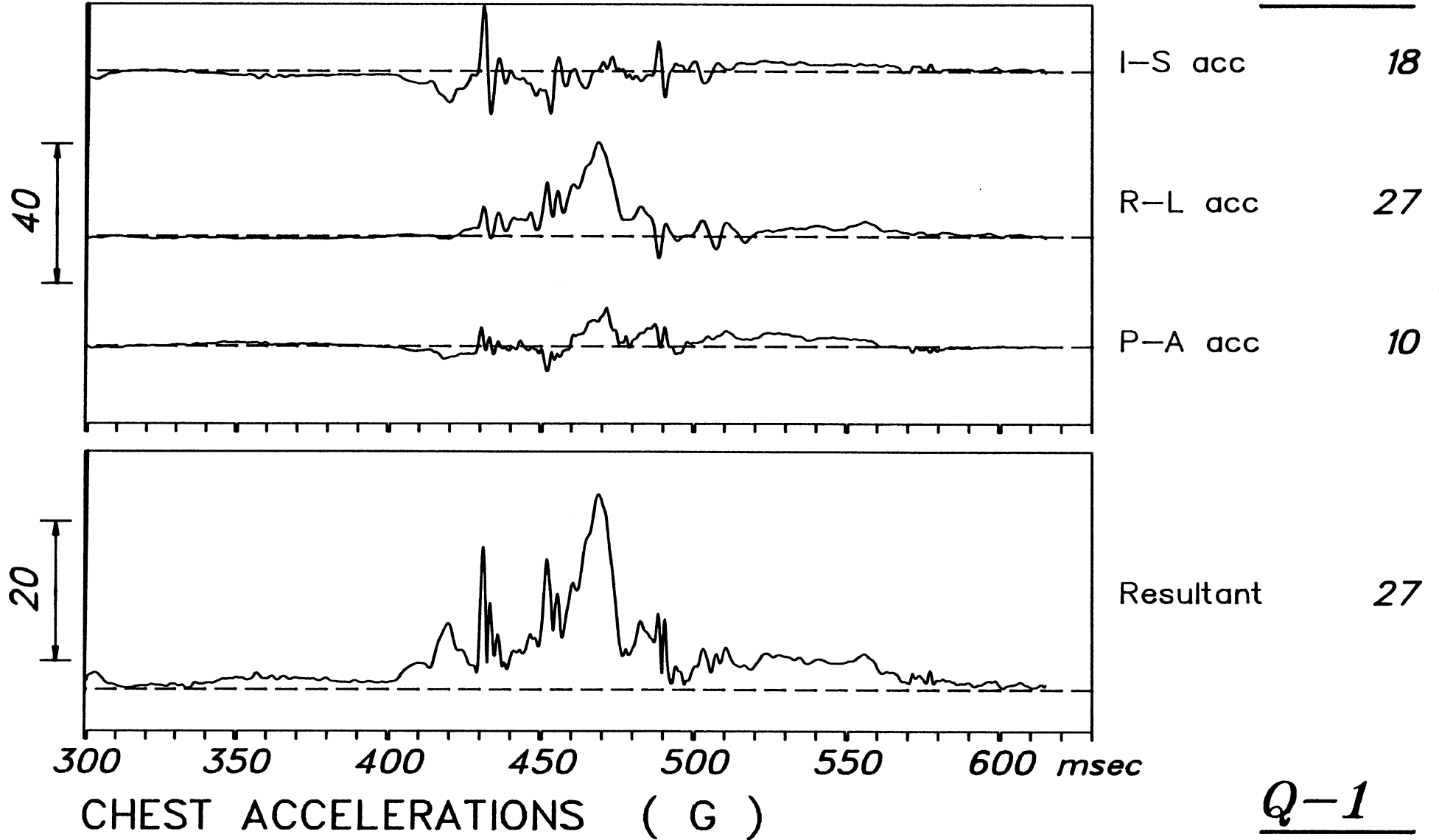
HEAD ACCELERATIONS (G)

Q-1

LA DY W SB

DEC 11, 1981

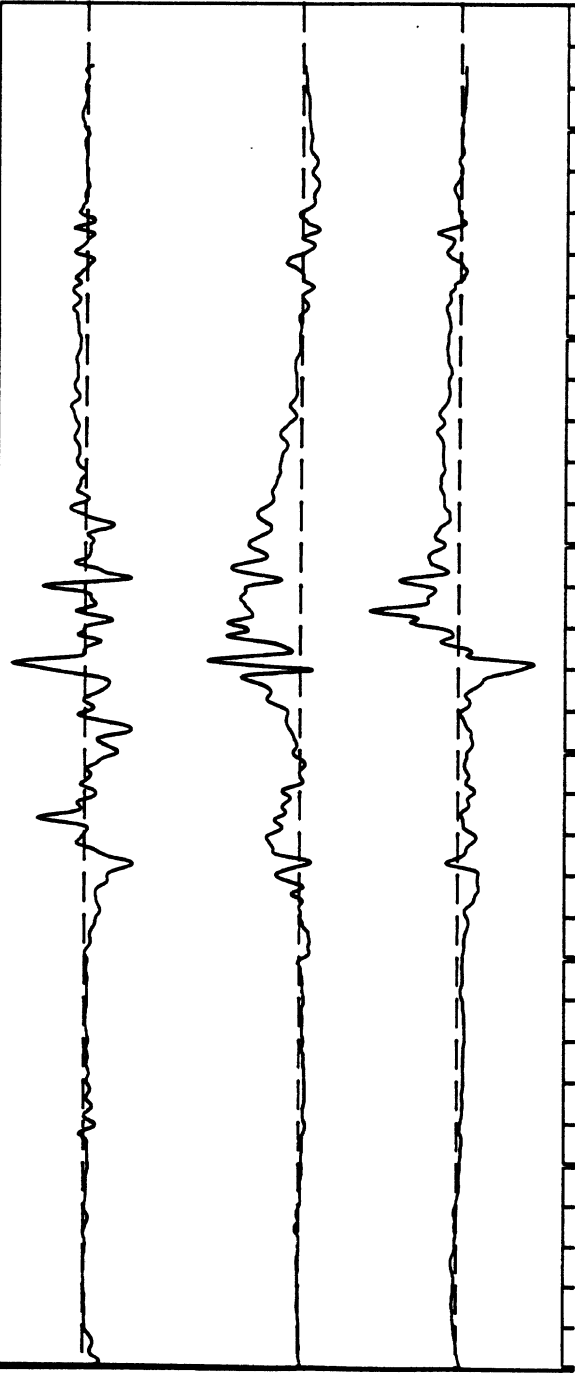
PEAKS



L.A DY W SB

DEC 11, 1981

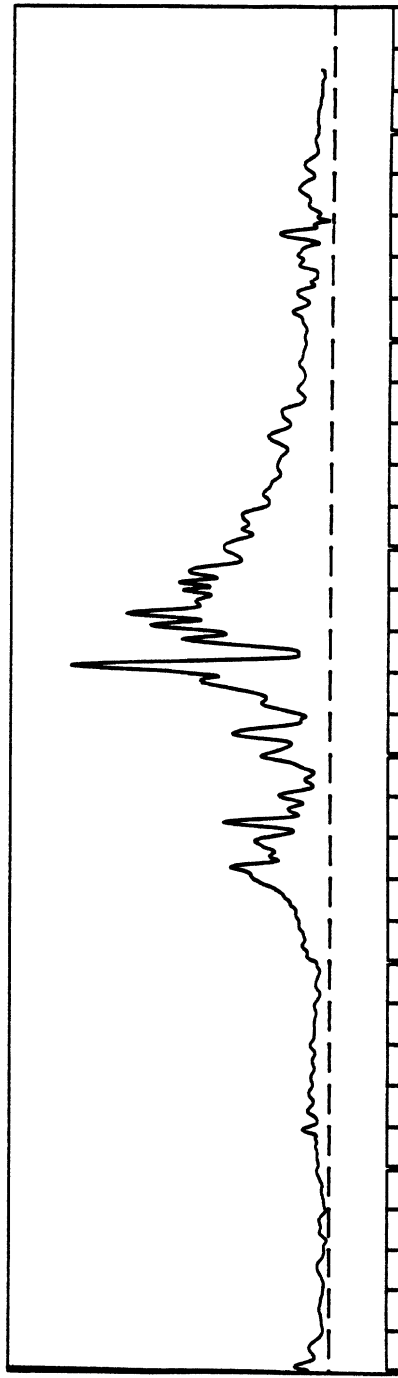
PEAKS



15

19

18



Resultant

27

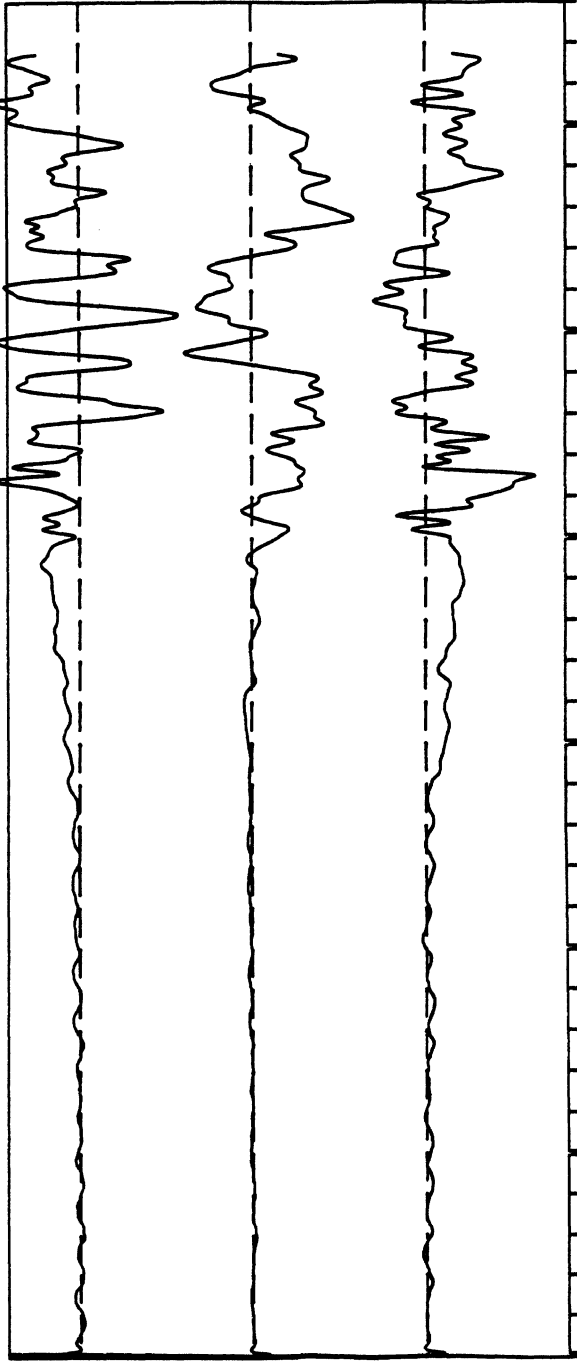
300 350 400 450 500 550 600 msec

PELVIS ACCELERATIONS (G)

Q-1

LA DY W SB

DEC 11, 1981

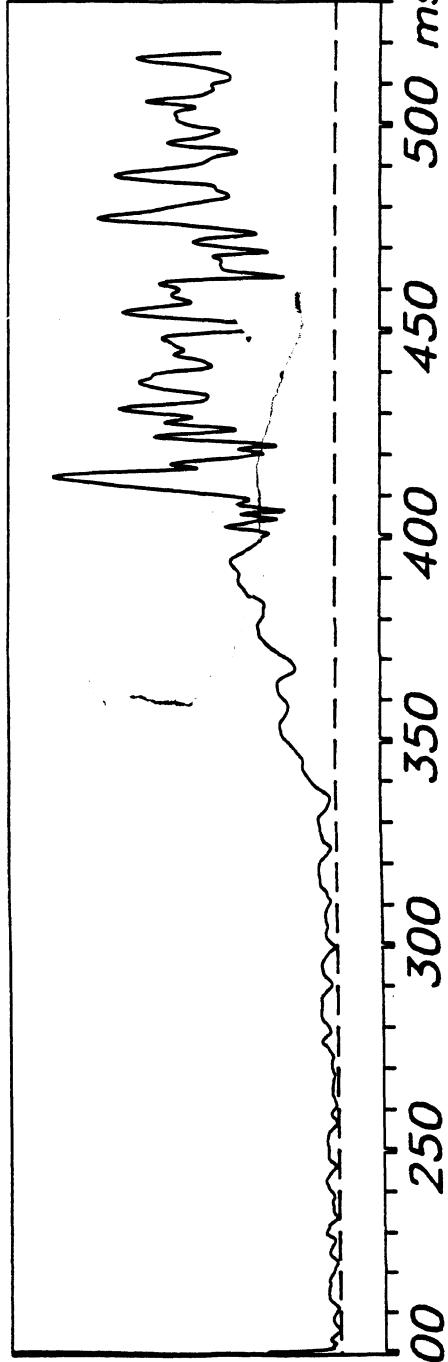


PEAKS

Fz (I-S) -213

Fy (L-R) -223

Fx (A-P) -240



Resultant

303

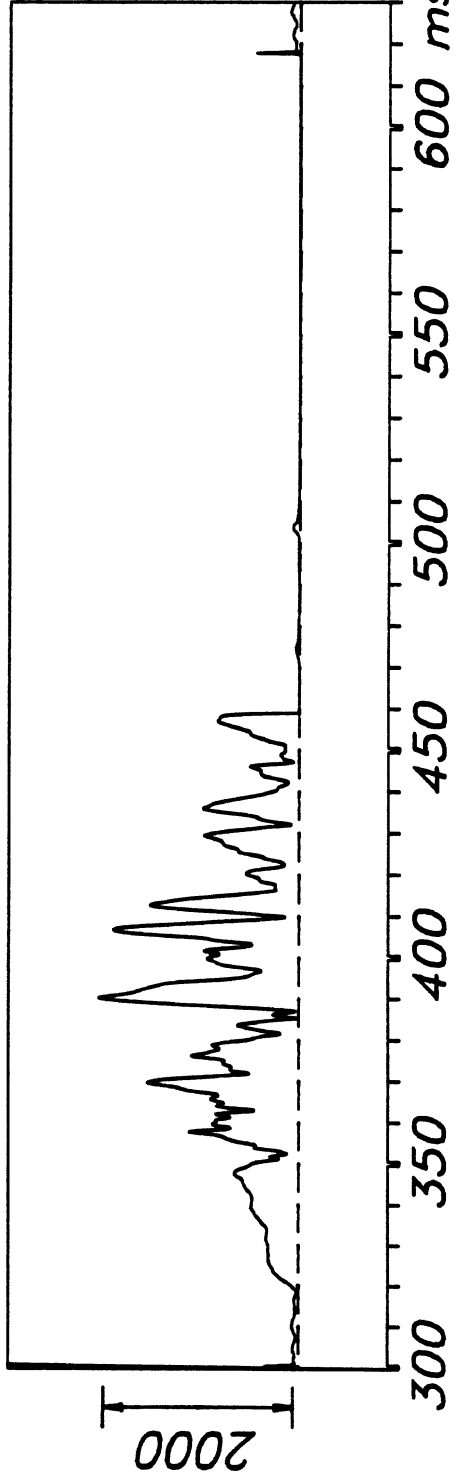
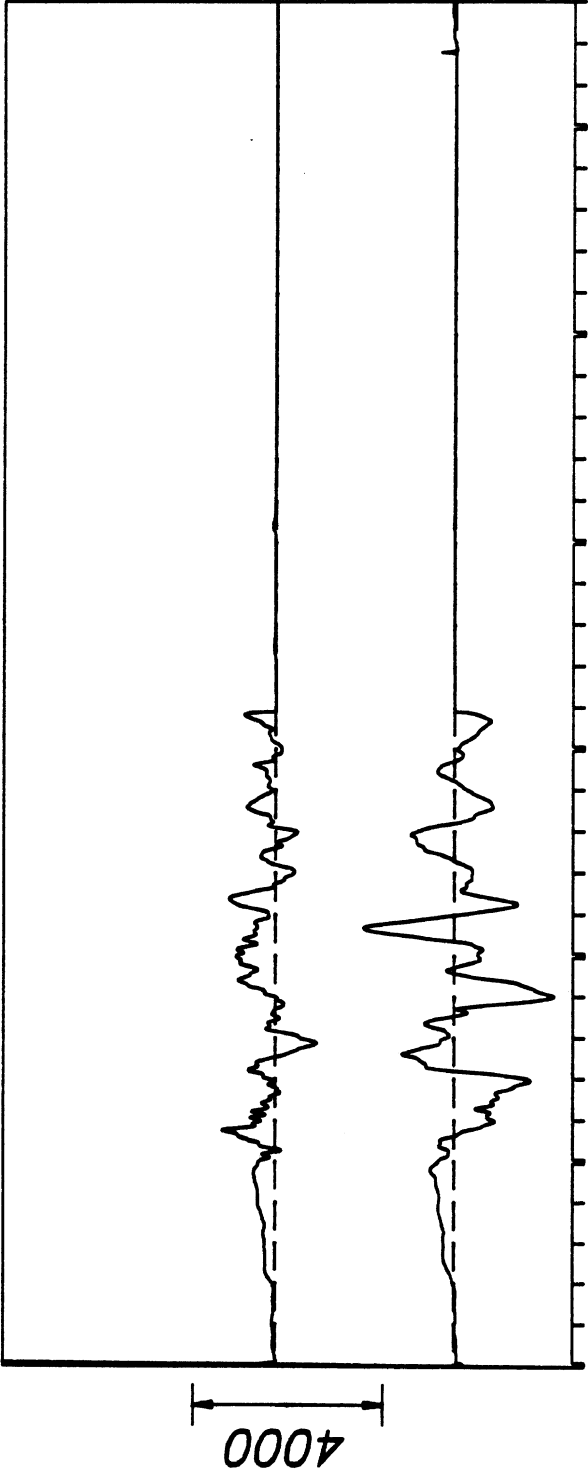
S. COLUMN FORCES (LB)

Q-1

LA DY W SB

DEC 11, 1981

PEAKS



S. COLUMN MOMENTS (IN-LB)

Q-1

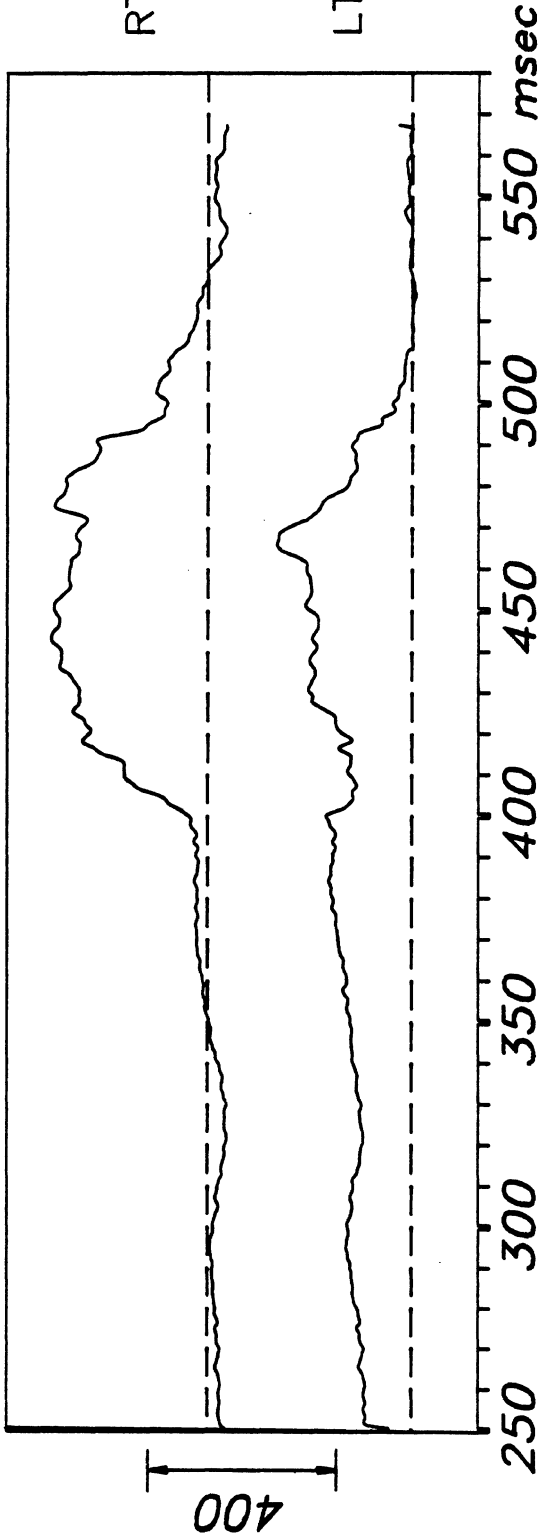
LA DY W SB

DEC 11, 1981

PEAKS

RT Belt 332

LT Belt 286

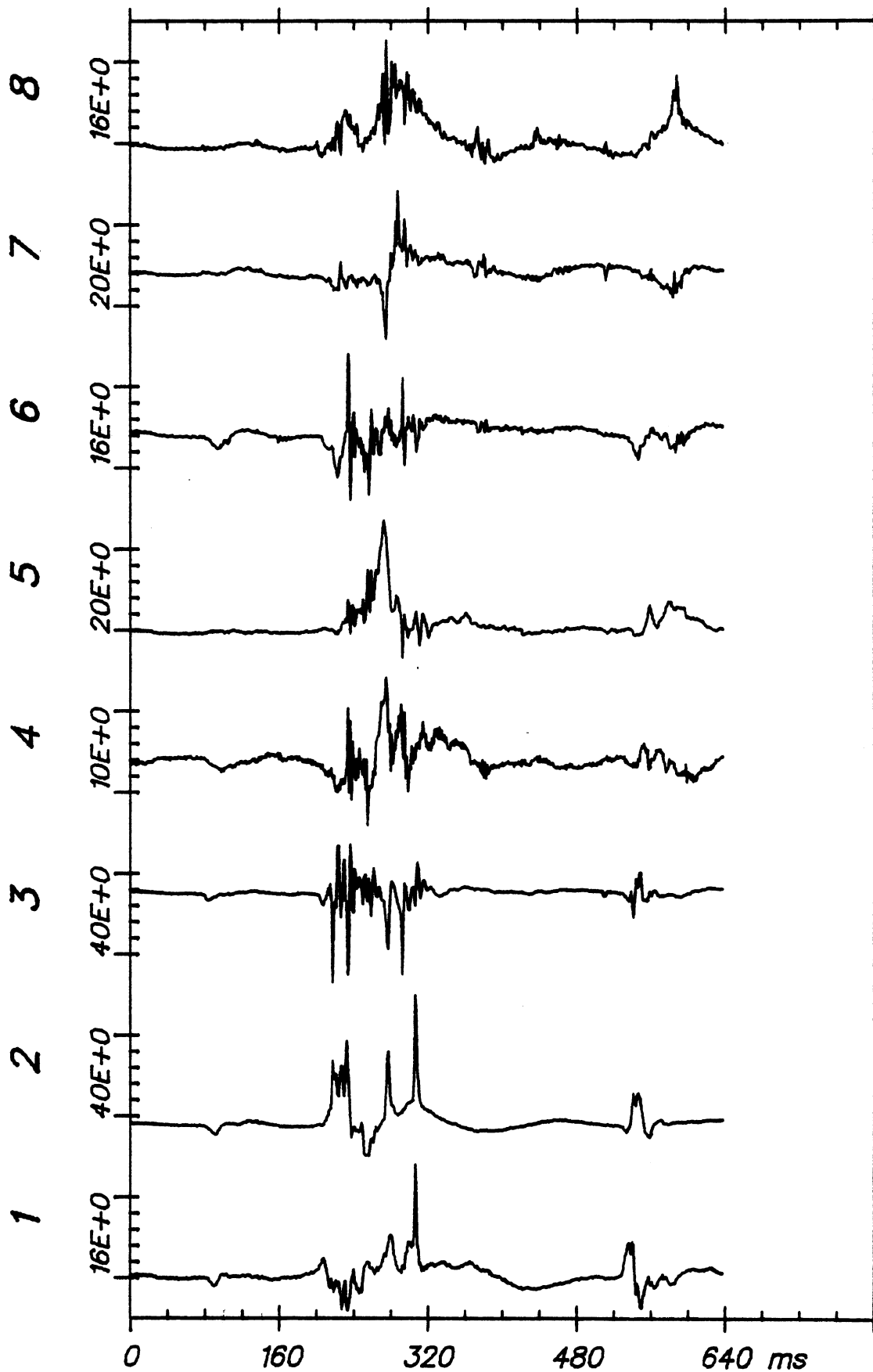


KNEE & BELTS LOADS (LB)

Q-1

DEC 2, 1981

From HSRI-175 to 81-SORT, file 159: /1/2/3/4/5/6/7/8/

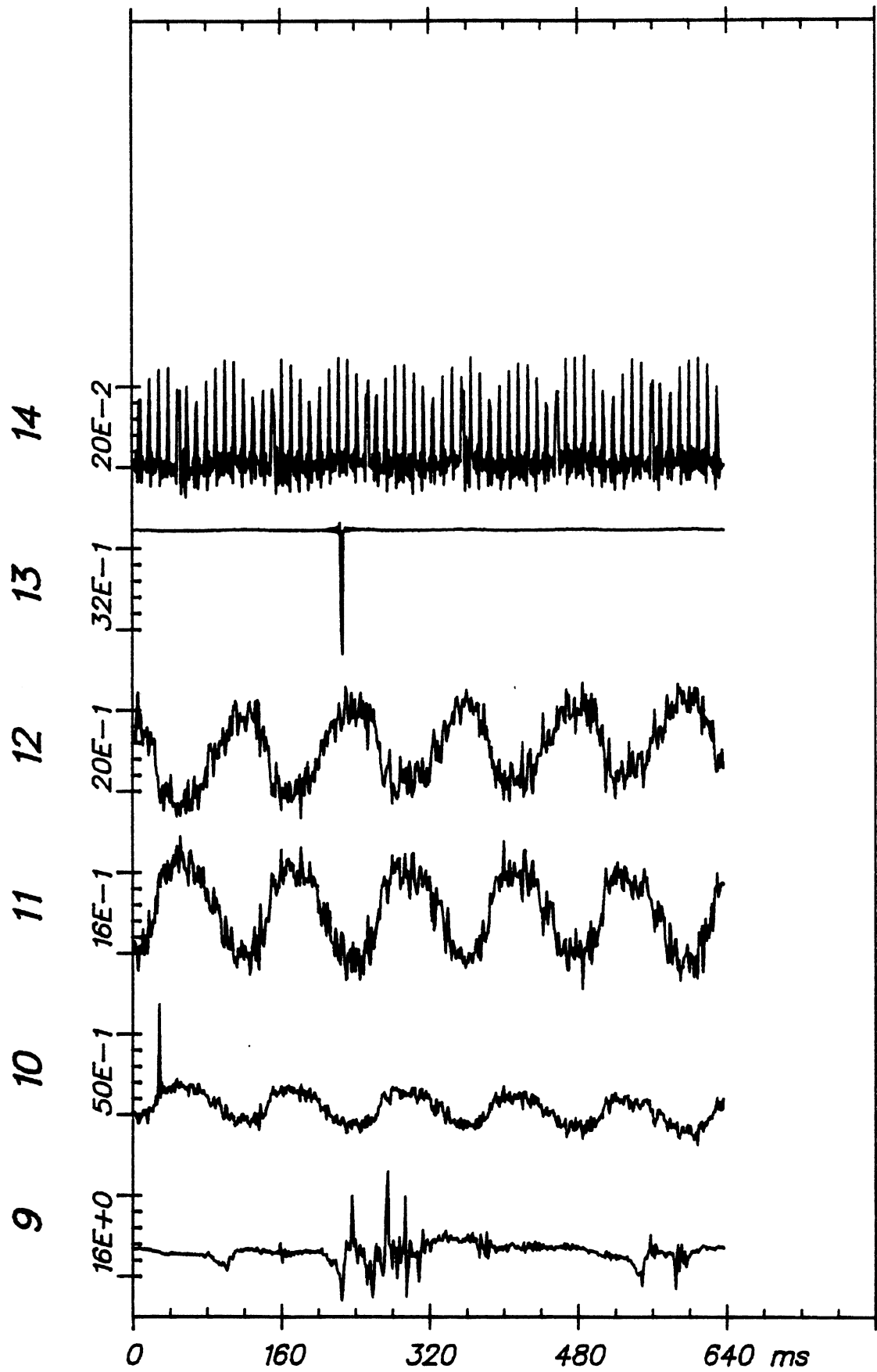


Time Histories

ITA Q-1 (1)

DEC 2, 1981

From HSRI-175 to 81-SORT, file 159: /9/10/11/12/13/14/-/-/

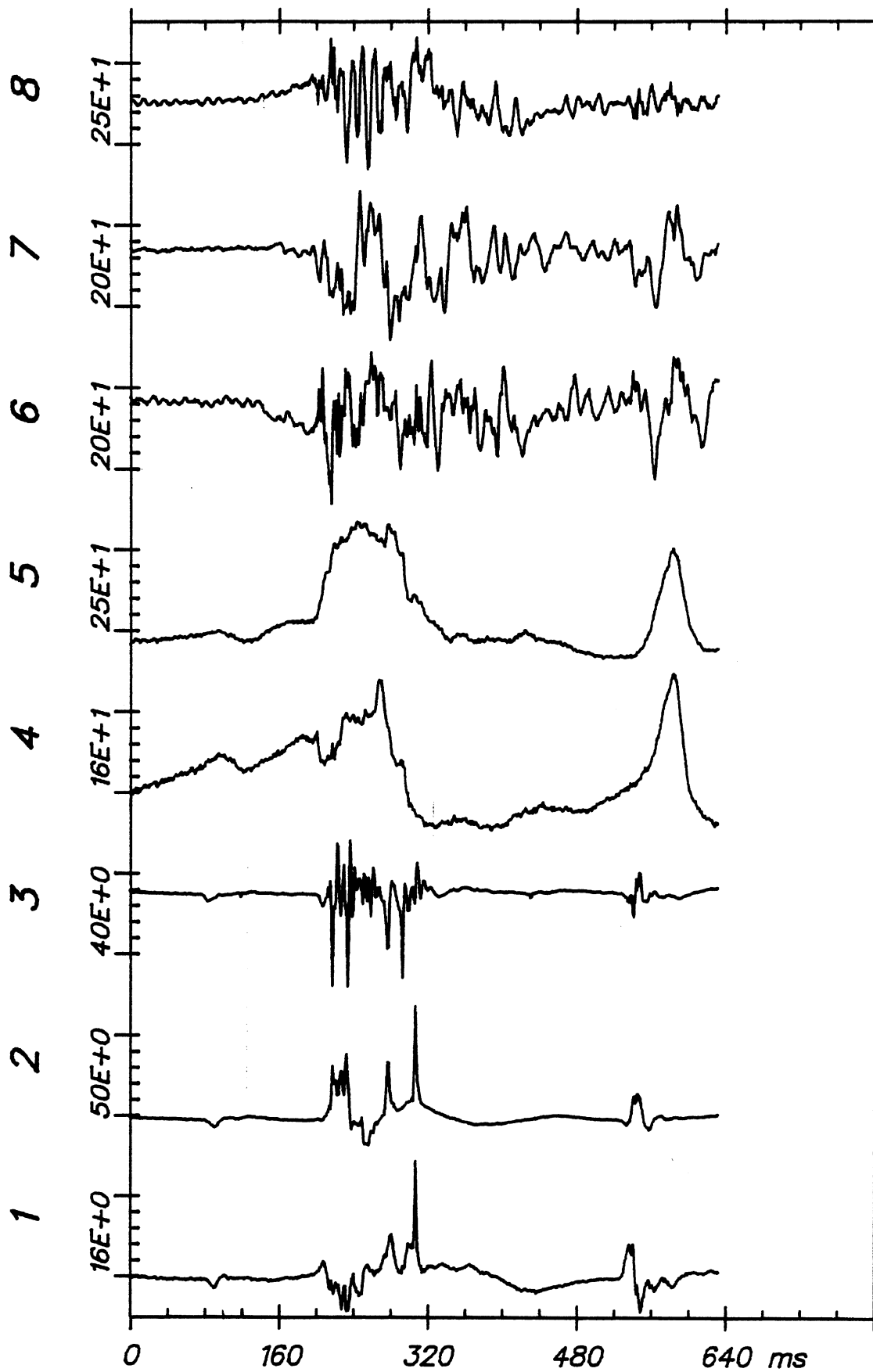


Time Histories

ITA Q-1 (1)

DEC 2, 1981

From HSRI-176 to 81-SORT, file 169: /1/2/3/4/5/6/7/8/

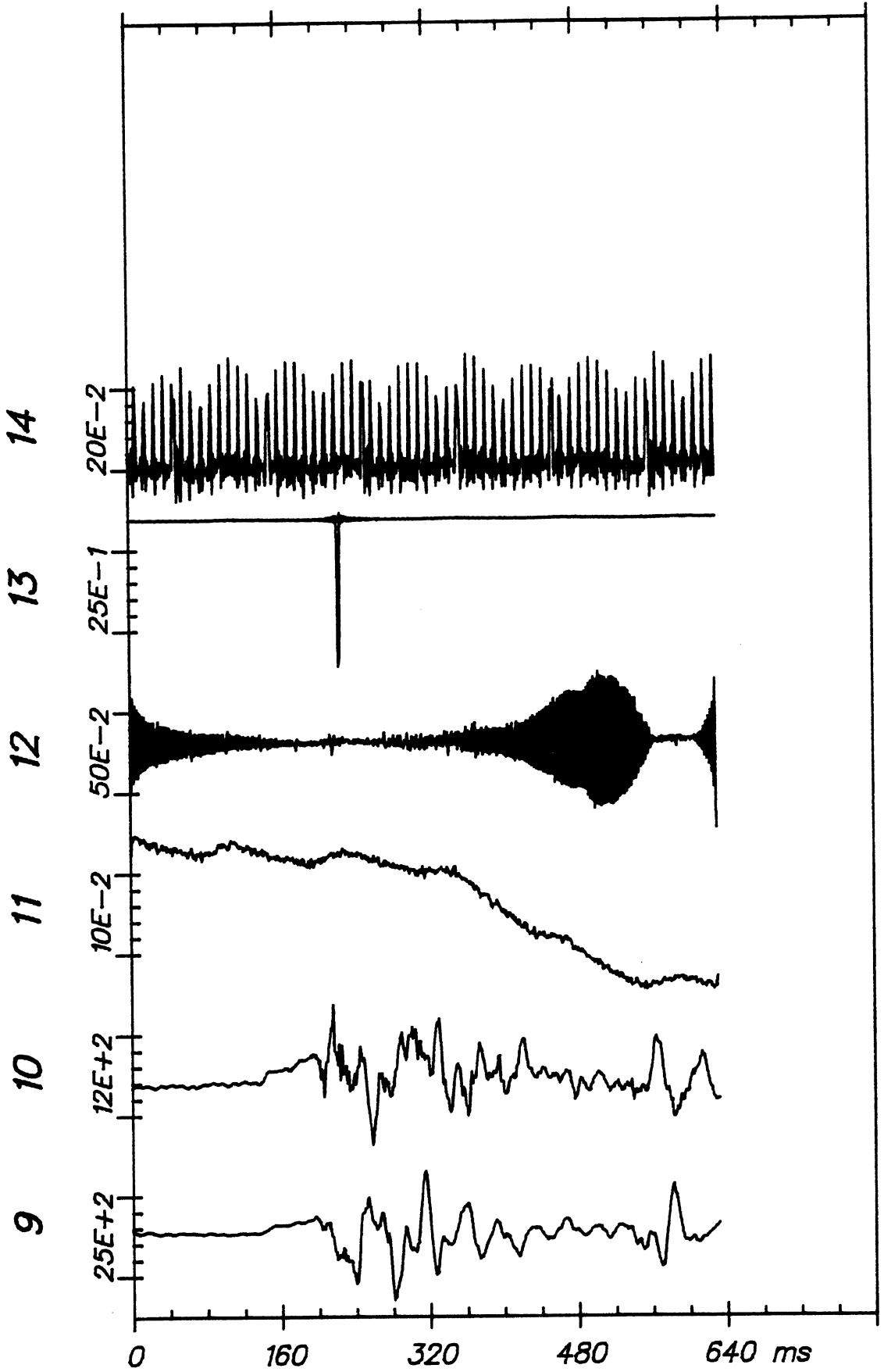


Time Histories

ITA Q-1 (2)

DEC 2, 1981

From HSRI-176 to 81-SORT, file 169: /9/10/11/12/13/14/-/-/



Time Histories

ITA Q-1 (2)

LA DY W SB		Test No. Q-2	S U M M A R Y			
			Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)						
	P-A acc	...	-7	428	205	424
	R-L acc	...	-14	382	156	424
	I-S acc	...	-94	362	38	364
	Resultant	...			245	424
	HIC =	506 ...		423		425

CHEST ACCELERATIONS (G)						
	P-A acc	...	-16	393	10	427
	R-L acc	...	-6	438	27	408
	I-S acc	...	-11	364	21	363
	Resultant	...			29	394

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-13	419	27	424
	R-L acc	...	-13	485	23	420
	I-S acc	...	-12	424	11	426
	Resultant	...			30	424

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-12	340	17	347
	Ay (L-R)	...	-1	347	16	330
	Az (I-S)	...	-6	347	7	420
	Resultant	...			18	347

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	-244	358	130	382
	Fy (L-R)	...	-248	408	184	472
	Fz (I-S)	...	-191	399	313	433
	Resultant	...			352	433

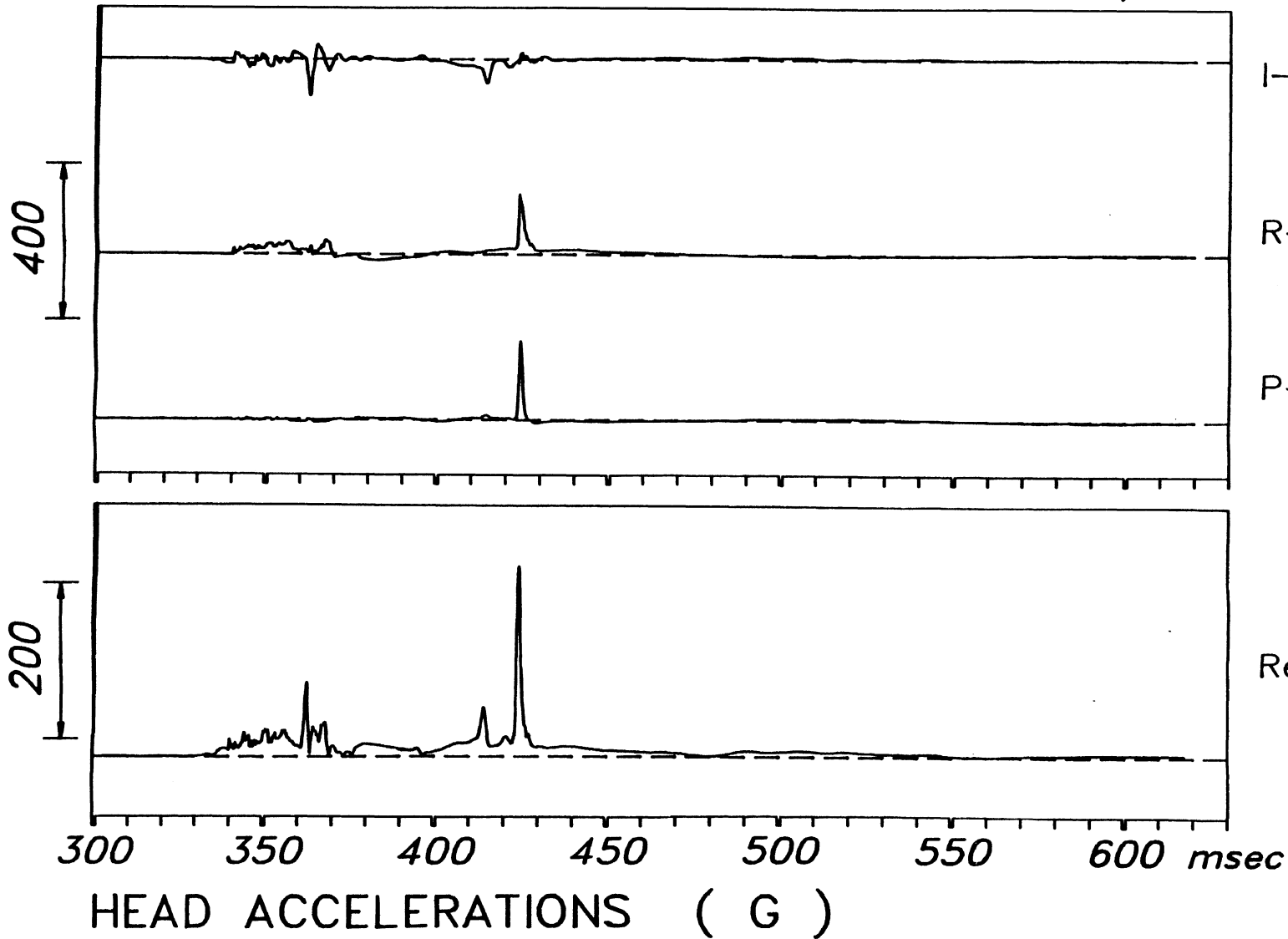
S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	-2481	330	1173	356
	My (L-R)	...	-819	318	980	299
	Mz (I-S)	...				
	Resultant	...			2562	648

KNEE & BELTS LOADS (LB)						
	LT Knee	...				
	RT Knee	...				
	LT Belt	...	-15	480	432	403
	RT Belt	...	27	252	907	405

LA DY W SB

DEC 11, 1981

PEAKS



I-S acc -95

R-L acc 155

P-A acc 205

HIC = 606

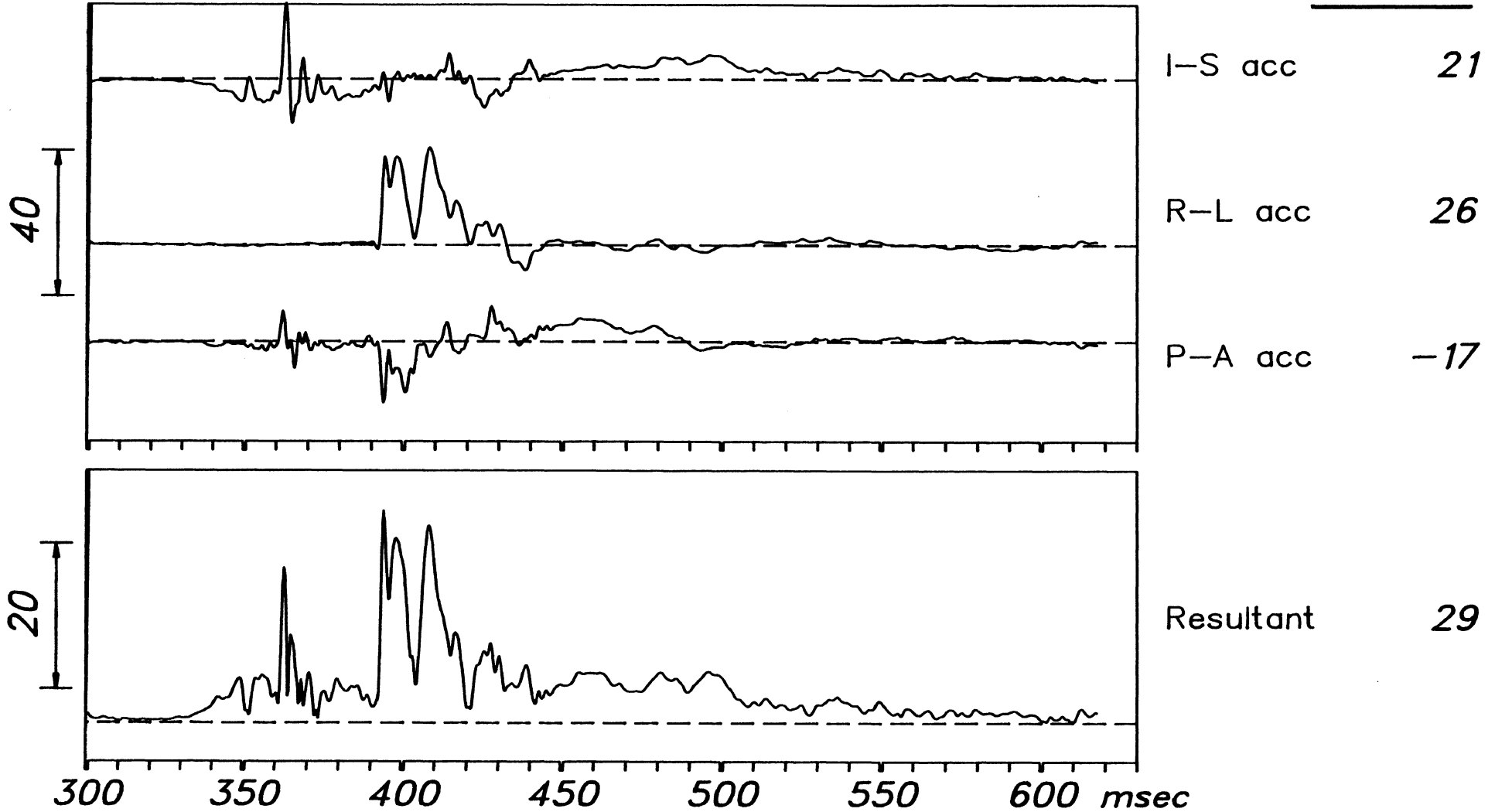
Resultant 245

Q-2

LA DY W SB

DEC 11, 1981

PEAKS



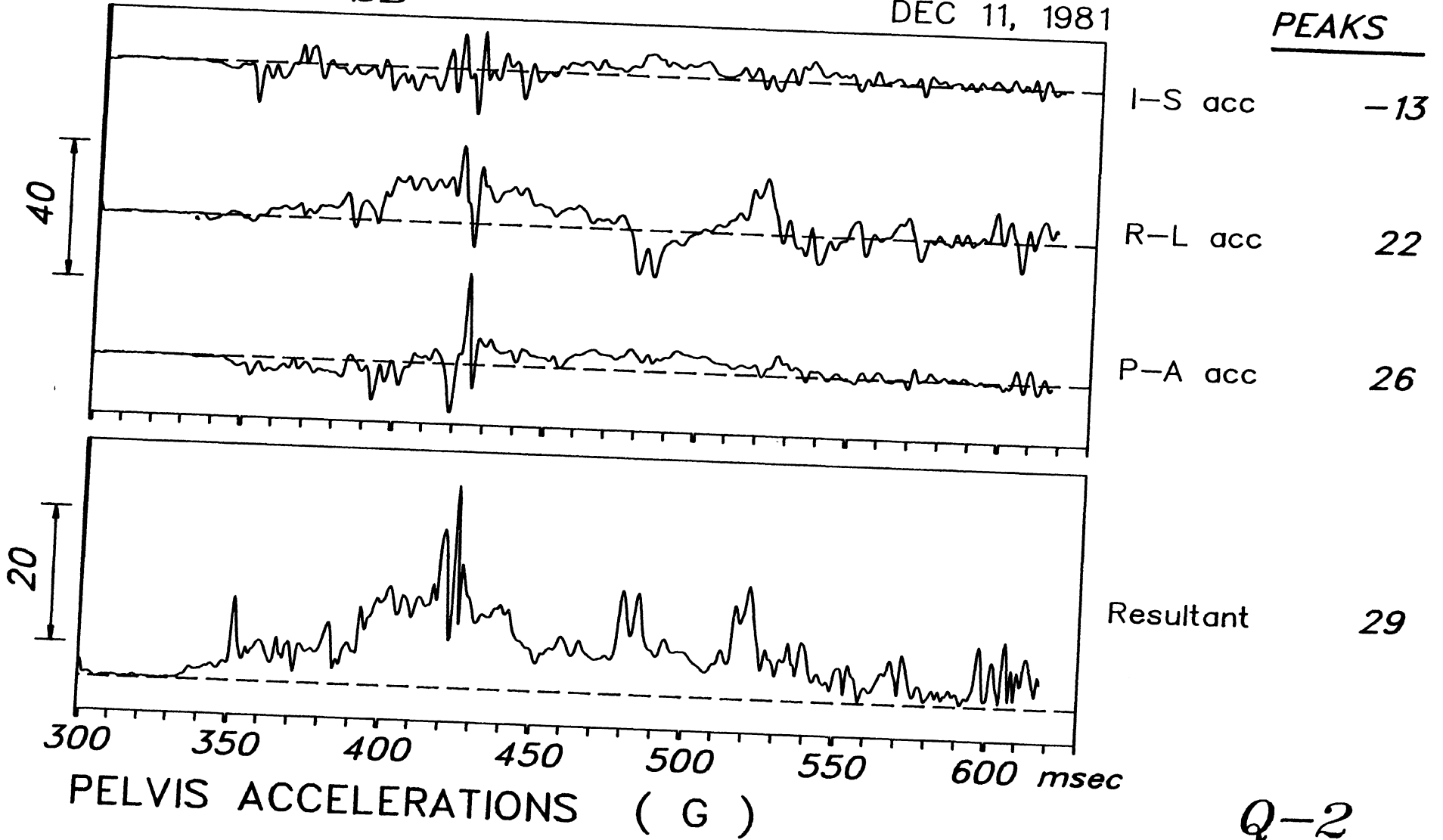
CHEST ACCELERATIONS (G)

Q-2

LA DY W SB

DEC 11, 1981

PEAKS



Q-2

LA DY W SB

DEC 11, 1981

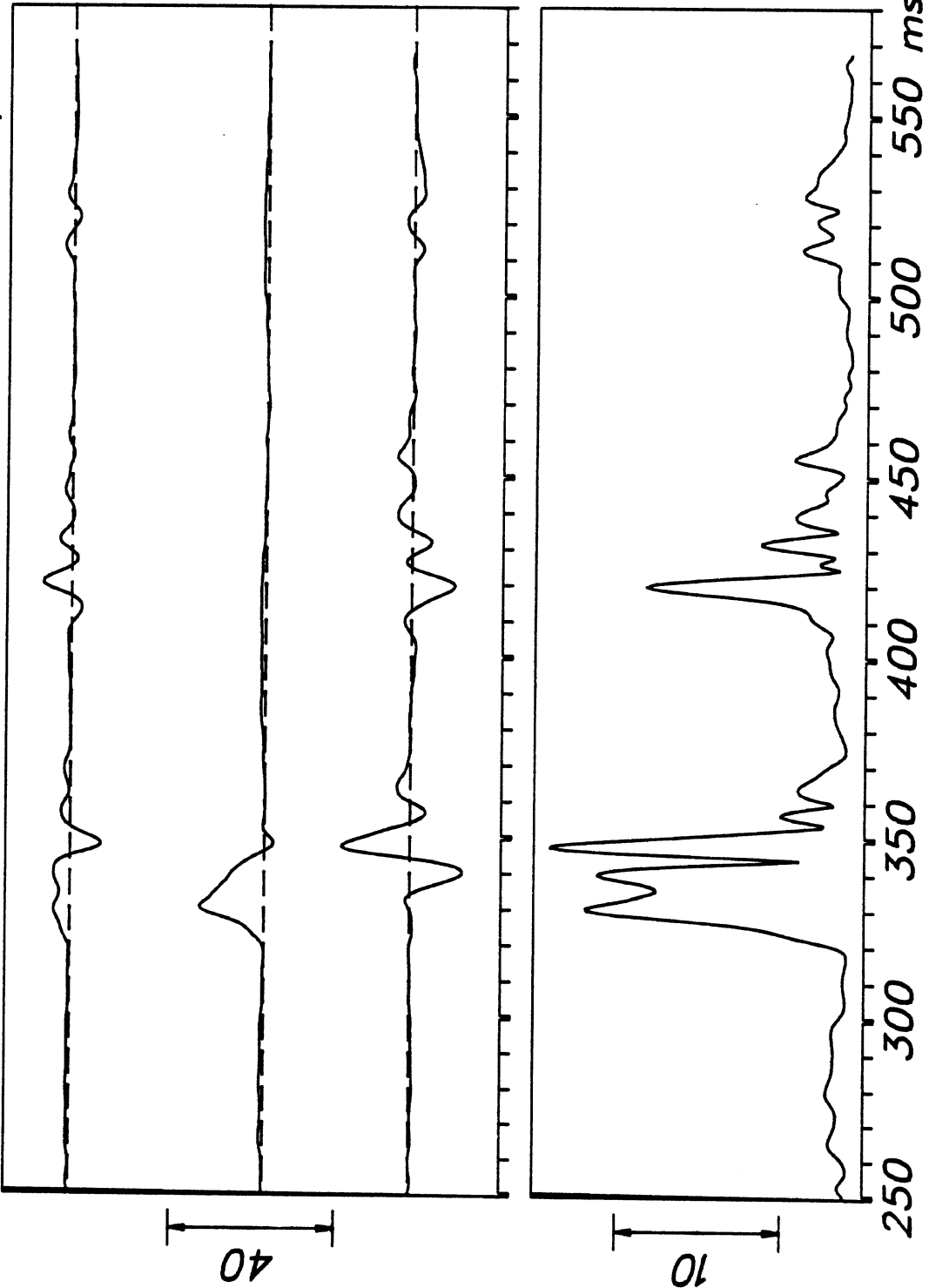
PEAKS

Az (I-S) -7

Ay (L-R) 15

Ax (A-P) 16

Resultant 18

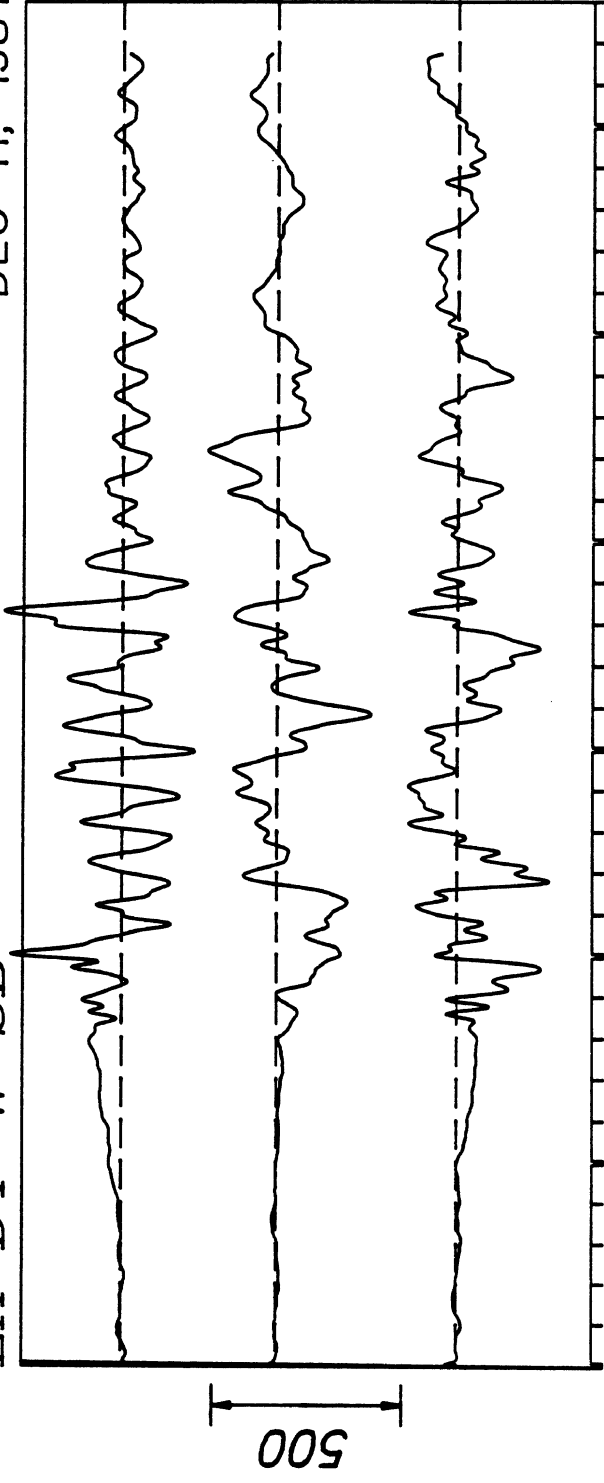


Q-2

L.A DY W SB

DEC 11, 1981

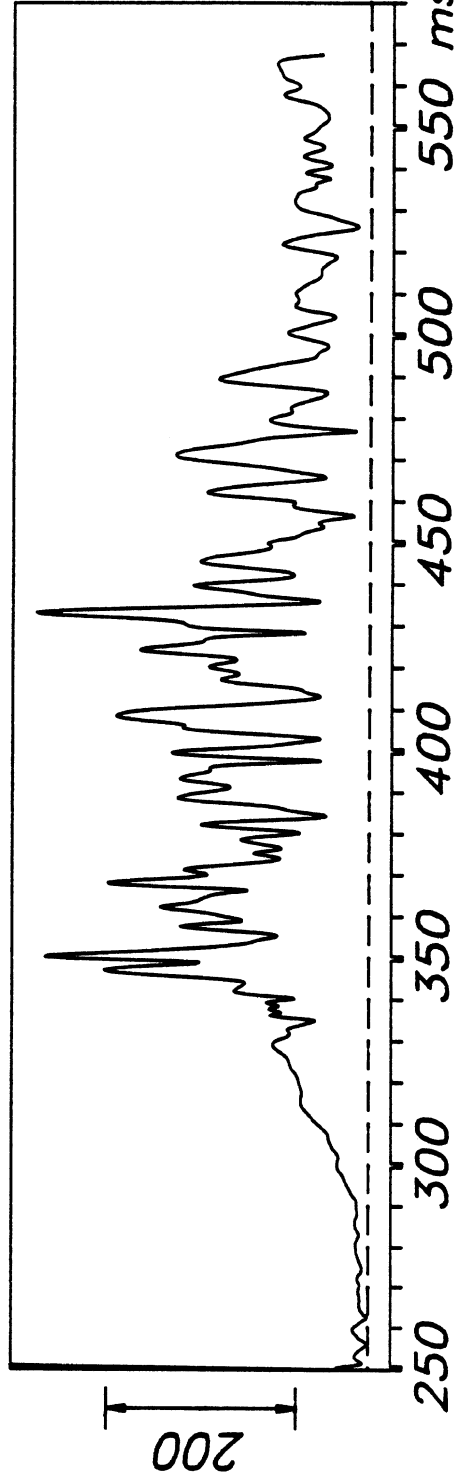
PEAKS



Fz (I-S) 312

Fy (L-R) -249

Fx (A-P) -245



Resultant 351

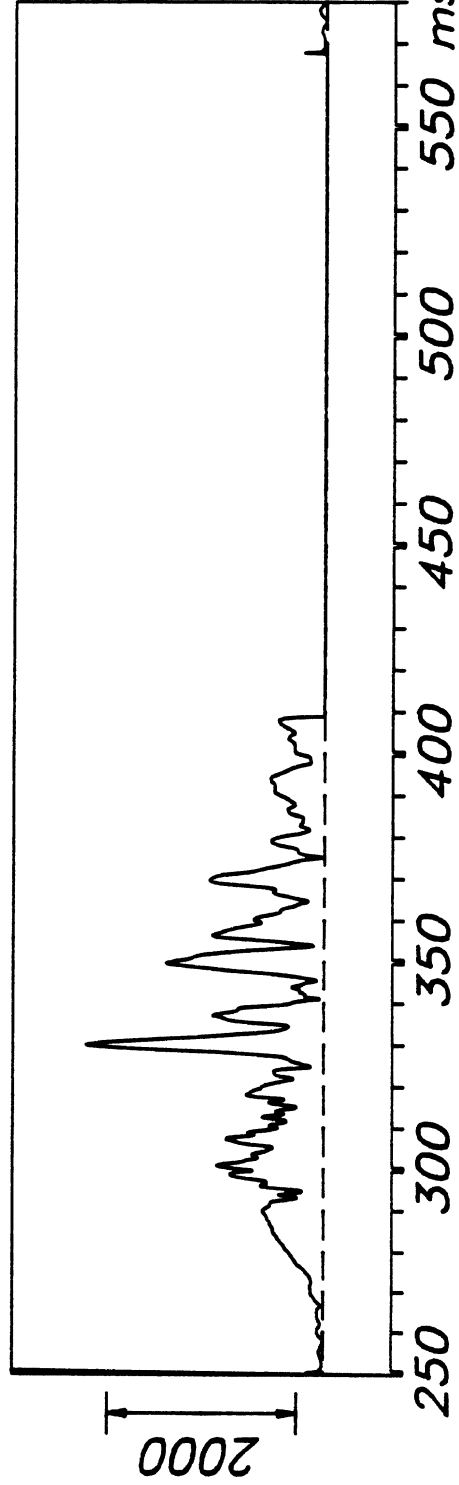
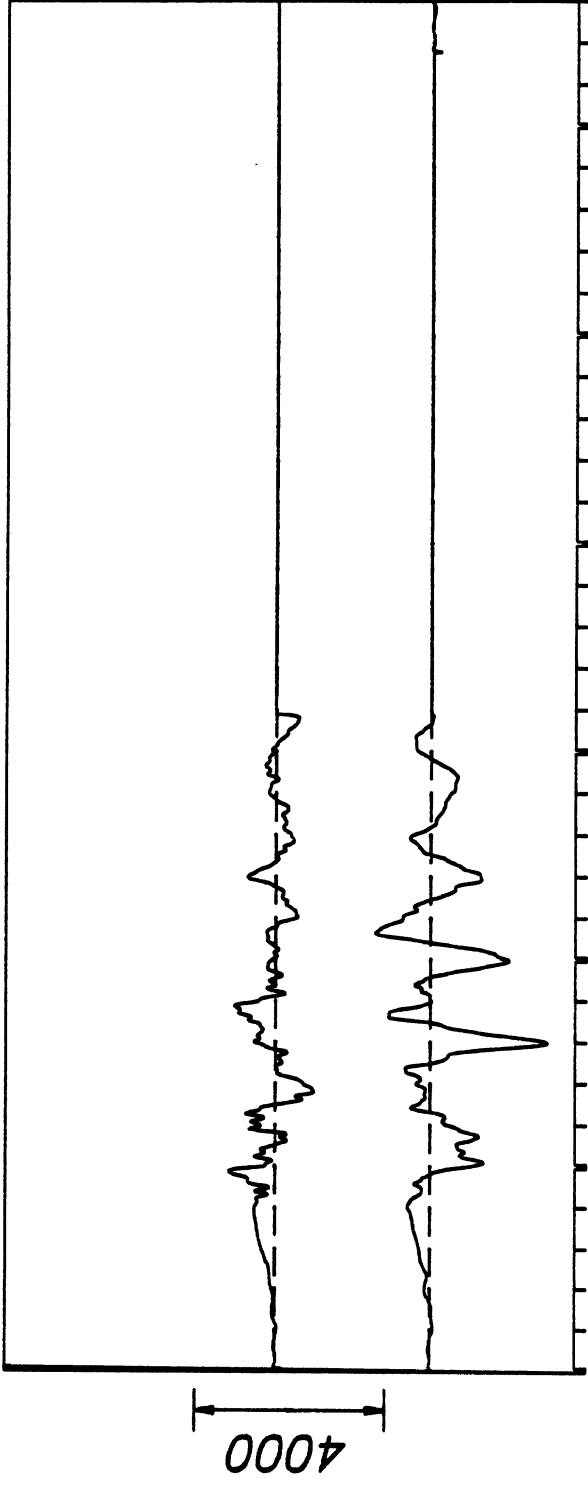
S. COLUMN FORCES (LB)

Q-2

LA DY W SB

DEC 11, 1981

PEAKS



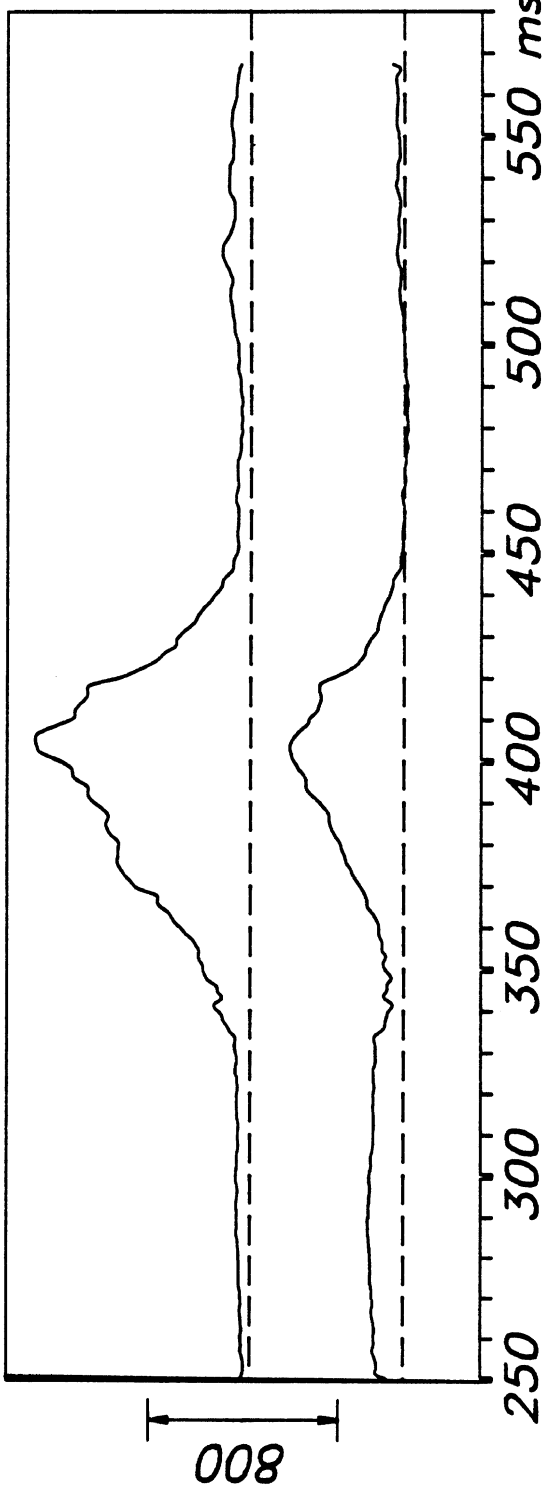
S. COLUMN MOMENTS (IN-LB)

Q-2

LA DY W SB

DEC 11, 1981

PEAKS

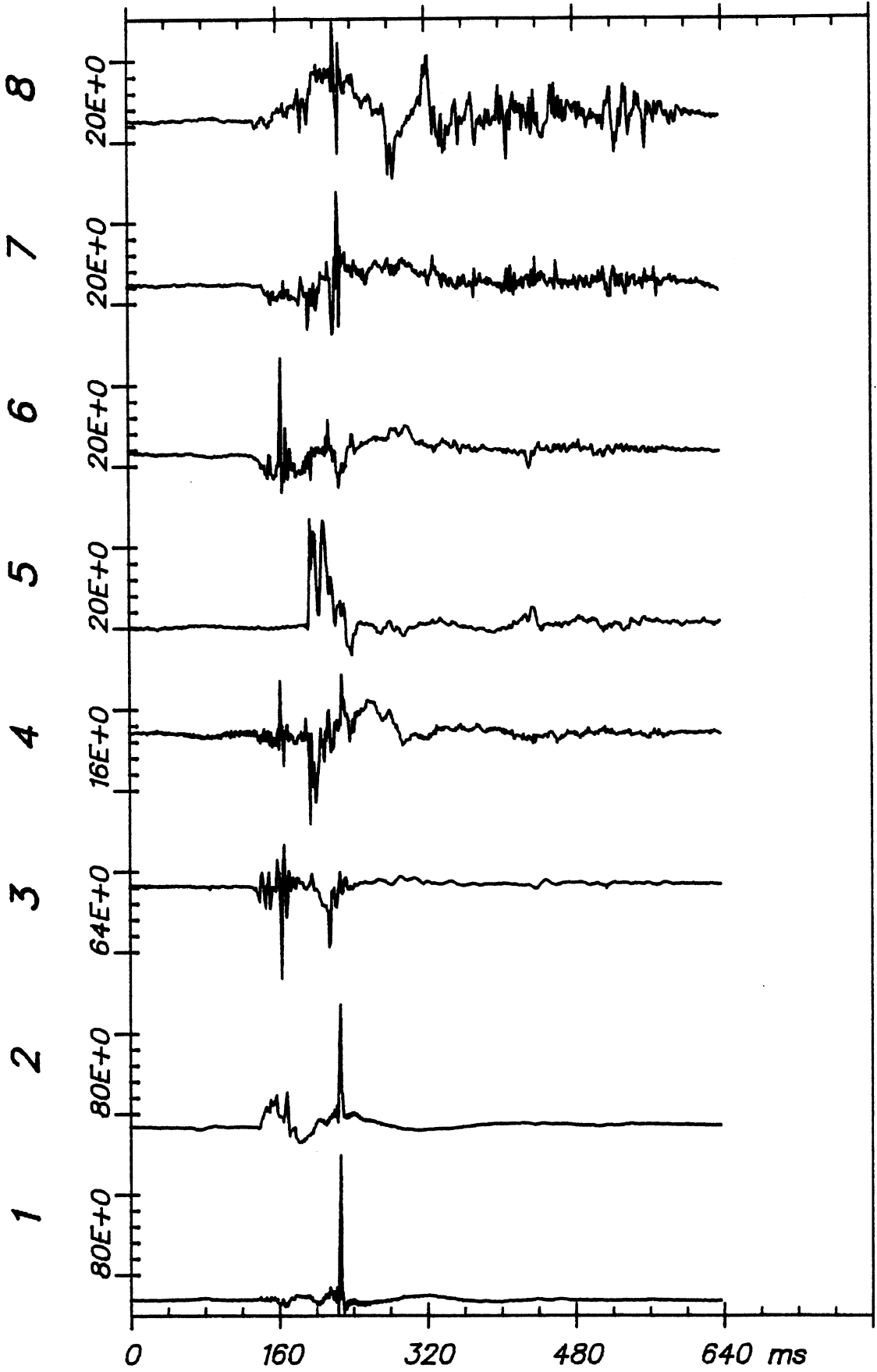


KNEE & BELTS LOADS (LB)

Q-2

From HSRI-175 to 81-SORT, file 160: /1/2/3/4/5/6/7/8/

DEC 2, 1981

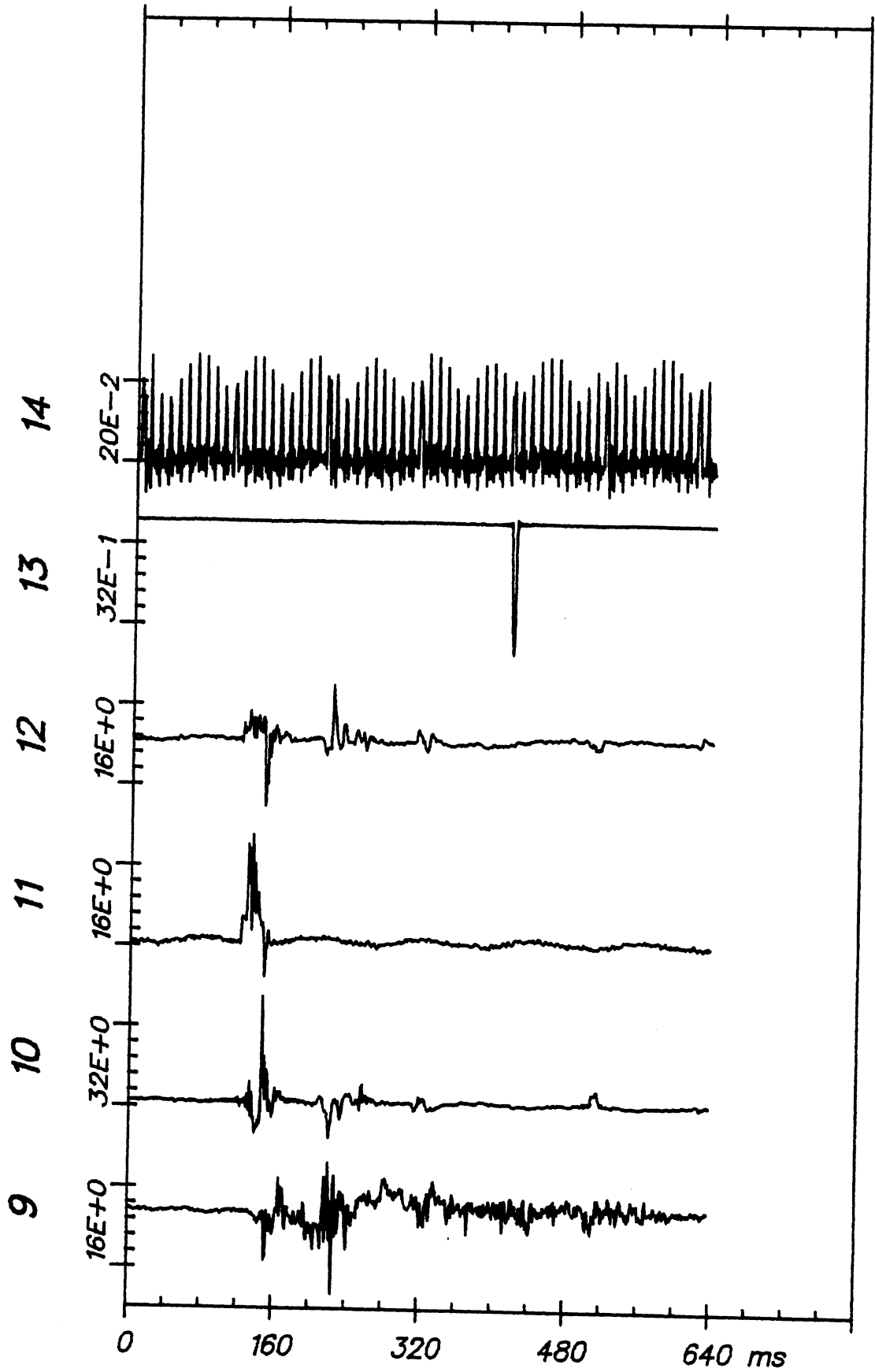


Time Histories

ITA Q-2 (1)

From HSRI-175 to 81-SORT, file 160: /9/10/11/12/13/14/-/-/

DEC 2, 1981

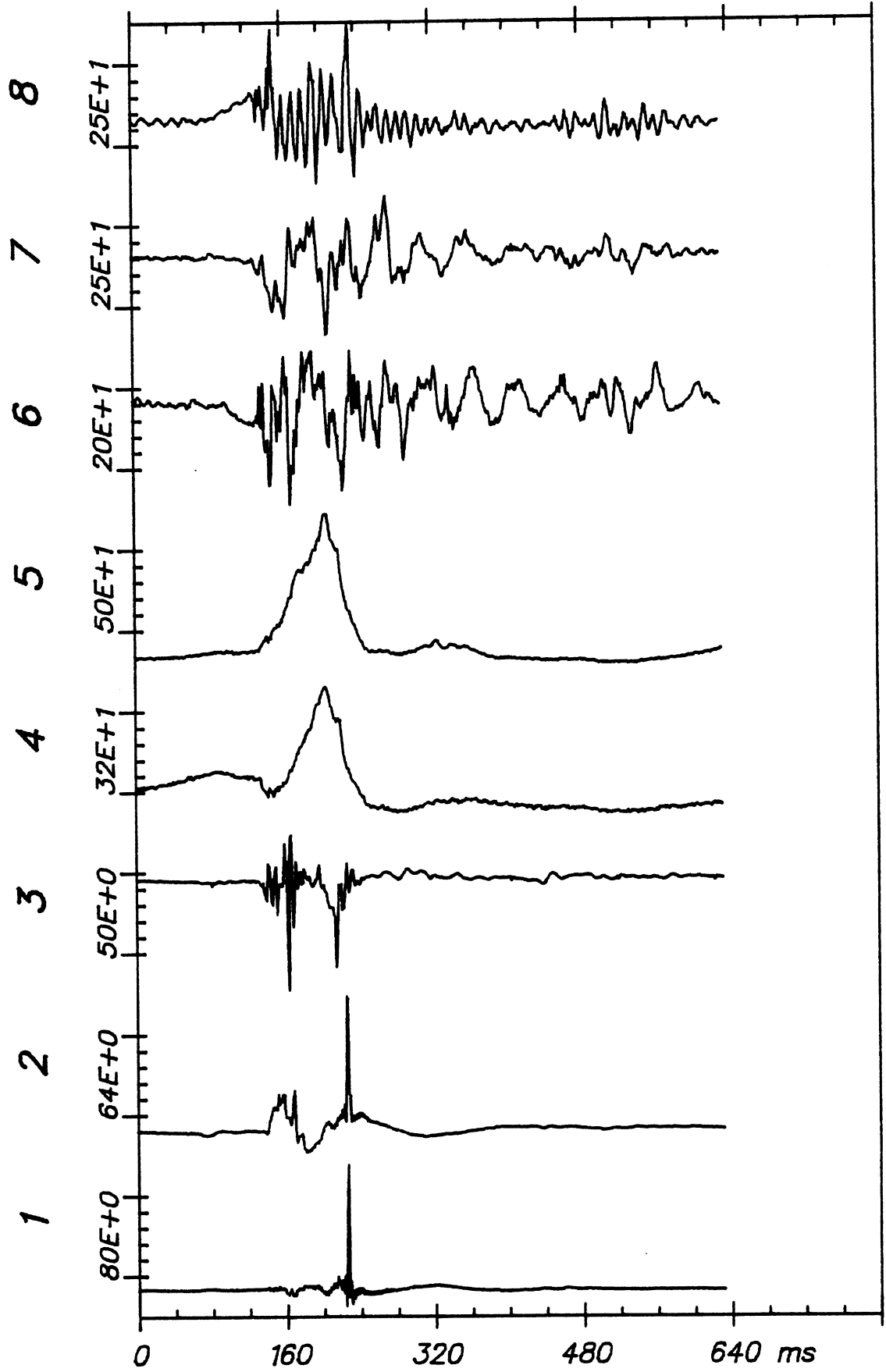


Time Histories

ITA Q-2 (1)

From HSRI-176 to 81-SORT, file 170: /1/2/3/4/5/6/7/8/

DEC 2, 1981

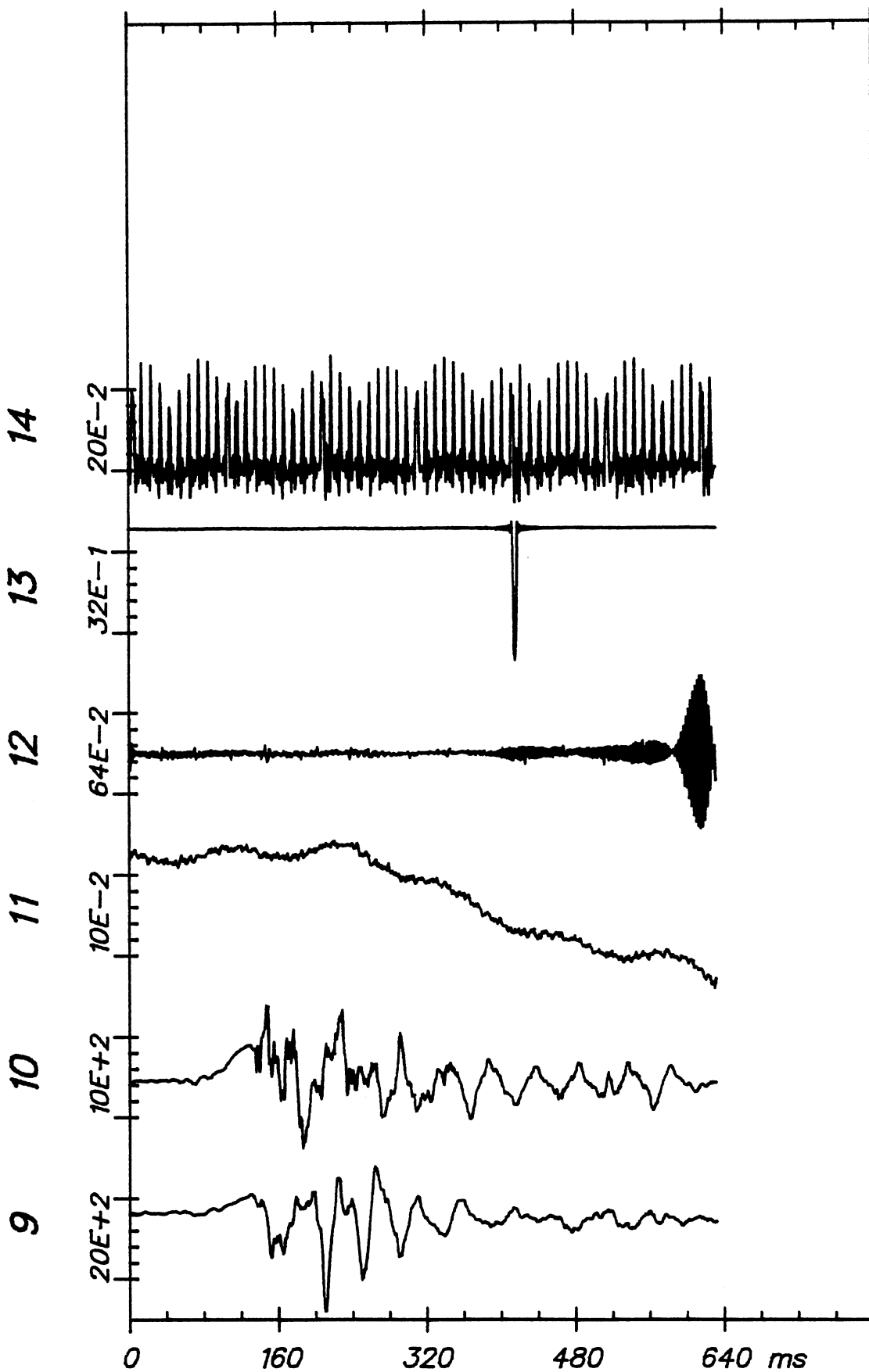


Time Histories

ITA Q-2 (2)

DEC 2, 1981

From HSRI-176 to 81-SORT, file 170: /9/10/11/12/13/14/-/-/



Time Histories

ITA Q-2 (2)

LA DY W SB		Test No. Q-3	S U M M A R Y			
			Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)						
	P-A acc	...	-15	292	223	353
	R-L acc	...	-150	354	320	353
	I-S acc	...	-158	353	176	353
	Resultant	...			417	353
	HIC = 1836	...		352		353

CHEST ACCELERATIONS (G)						
	P-A acc	...	-13	325	41	501
	R-L acc	...	-7	473	27	355
	I-S acc	...	-6	355	7	364
	Resultant	...			41	501

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-10	323	14	359
	R-L acc	...	-3	475	17	362
	I-S acc	...	-6	356	15	366
	Resultant	...			21	366

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-10	272	29	279
	Ay (L-R)	...	-6	457	19	257
	Az (I-S)	...	-12	279	3	255
	Resultant	...			32	279

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	-277	368	243	292
	Fy (L-R)	...	-296	369	151	312
	Fz (I-S)	...	-227	344	138	362
	Resultant	...			411	368

S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	-2139	295	1771	255
	My (L-R)	...	-993	347	1136	284
	Mz (I-S)	...				
	Resultant	...			2535	602

KNEE & BELTS LOADS (LB)						
	LT Knee	...				
	RT Knee	...				
	LT Belt	...	-43	457	333	303
	RT Belt	...	-15	455	638	310

LA DY W SB

DEC 11, 1981

PEAKS

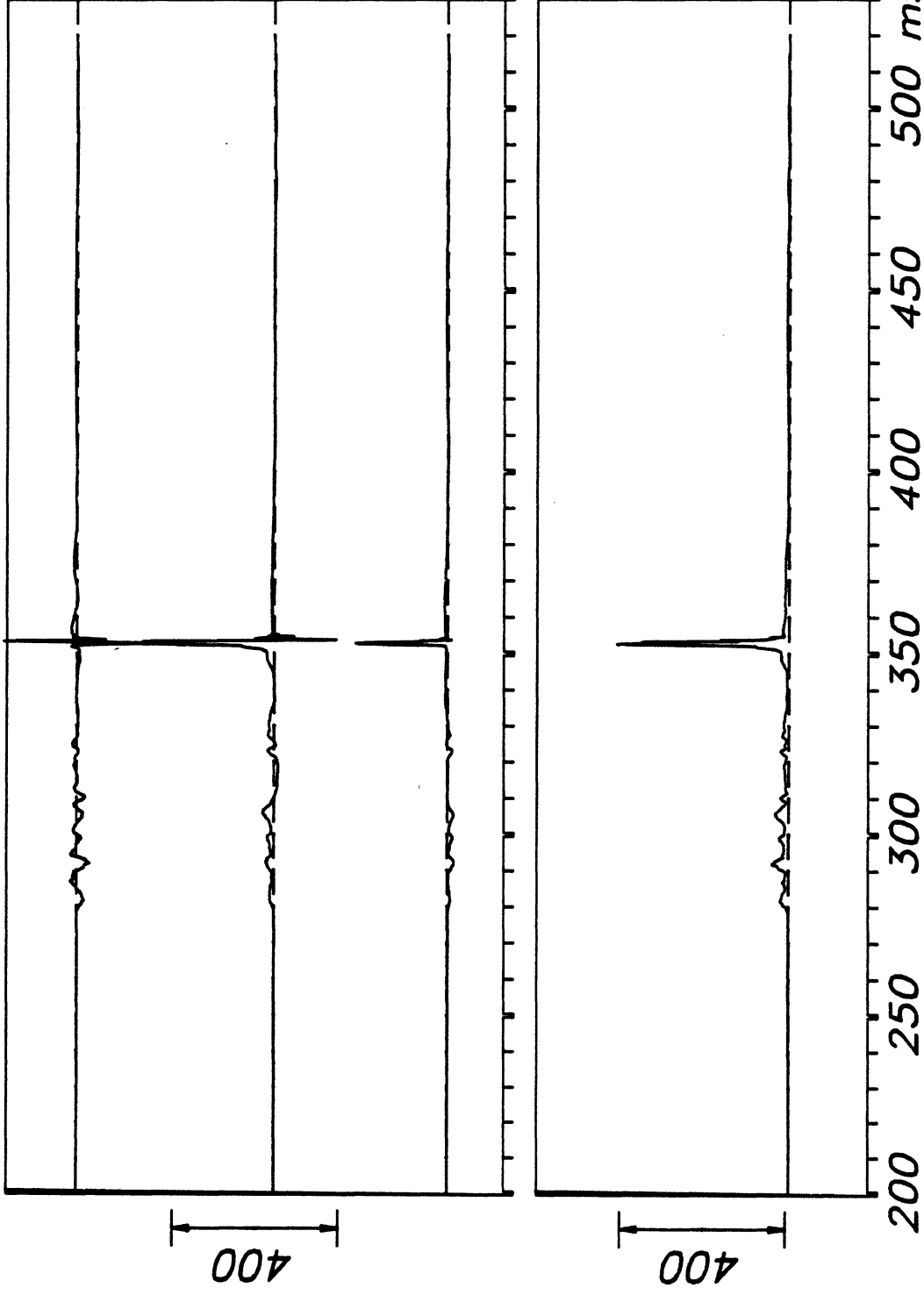
I-S acc 175

R-L acc 319

P-A acc 223

HIC = 1636

Resultant 417



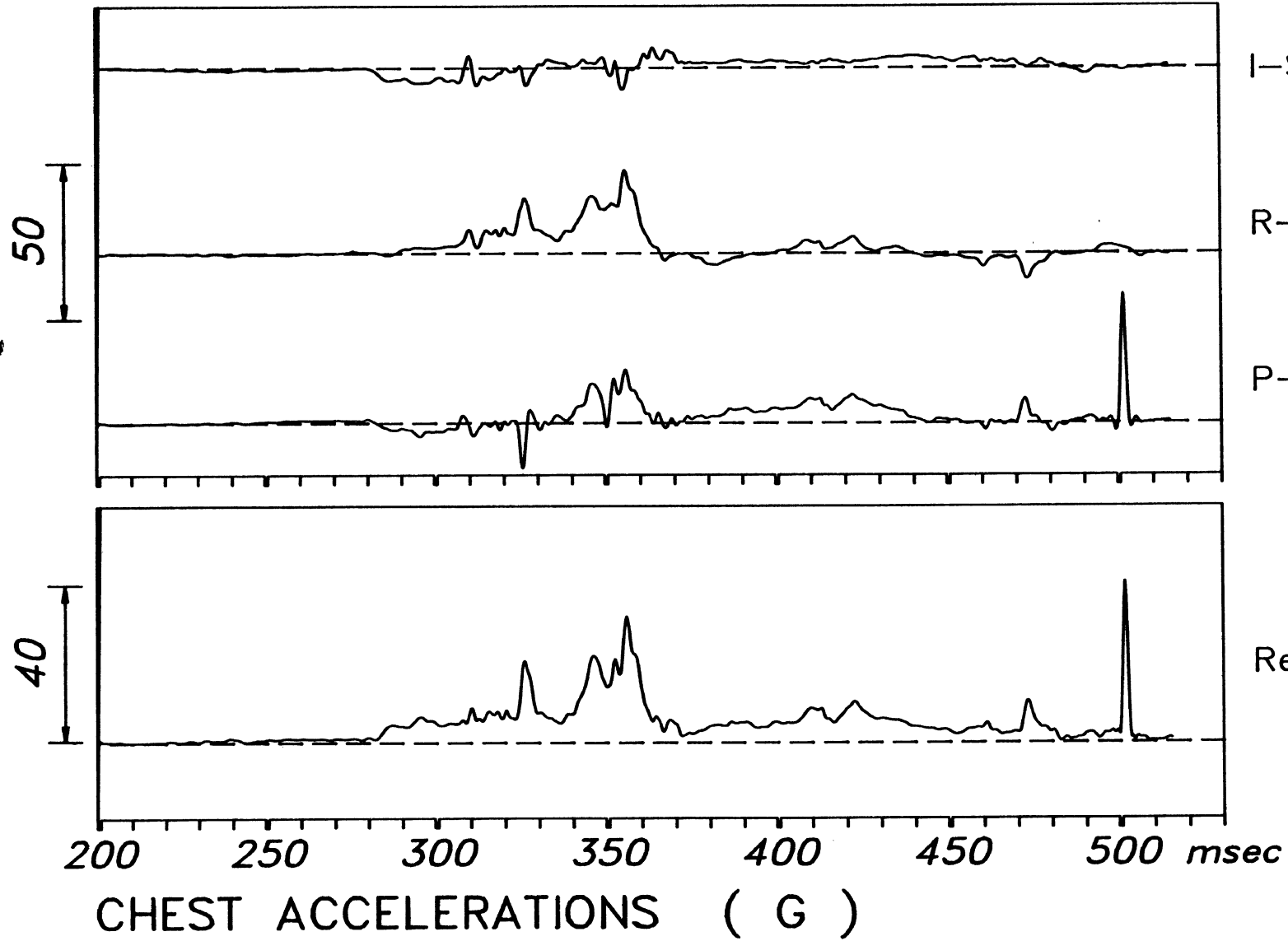
HEAD ACCELERATIONS (G)

Q-3

LA DY W SB

DEC 11, 1981

PEAKS



I-S acc -7

R-L acc 26

P-A acc 41

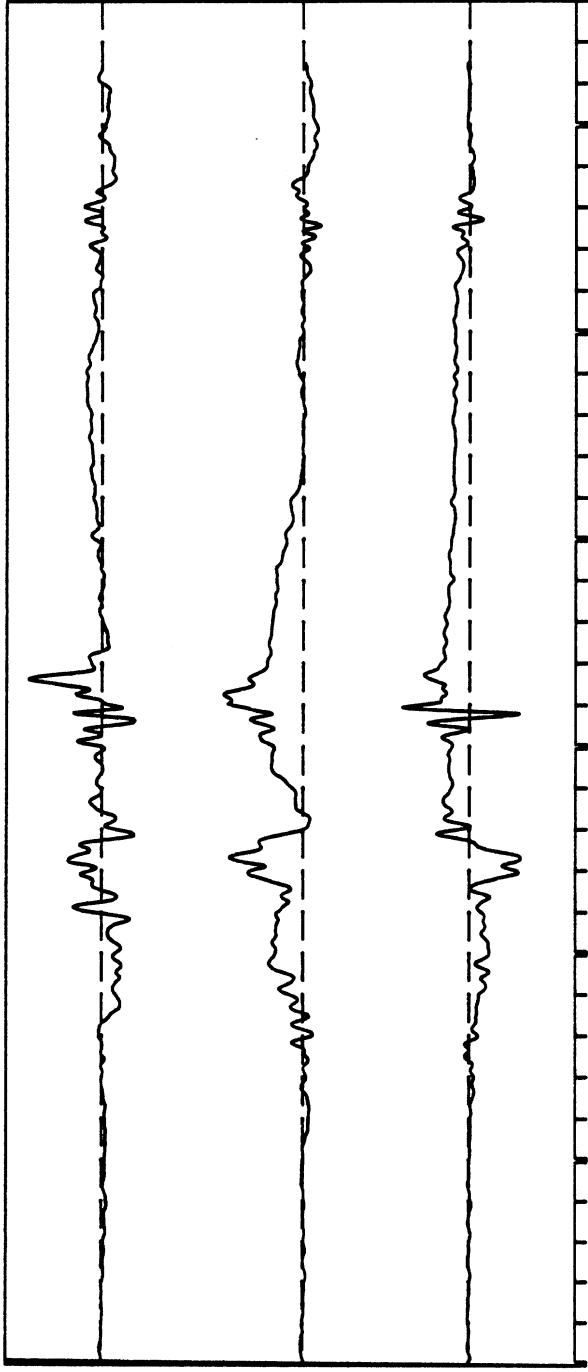
Resultant 41

Q-3

L.A DY W SB

DEC 11, 1981

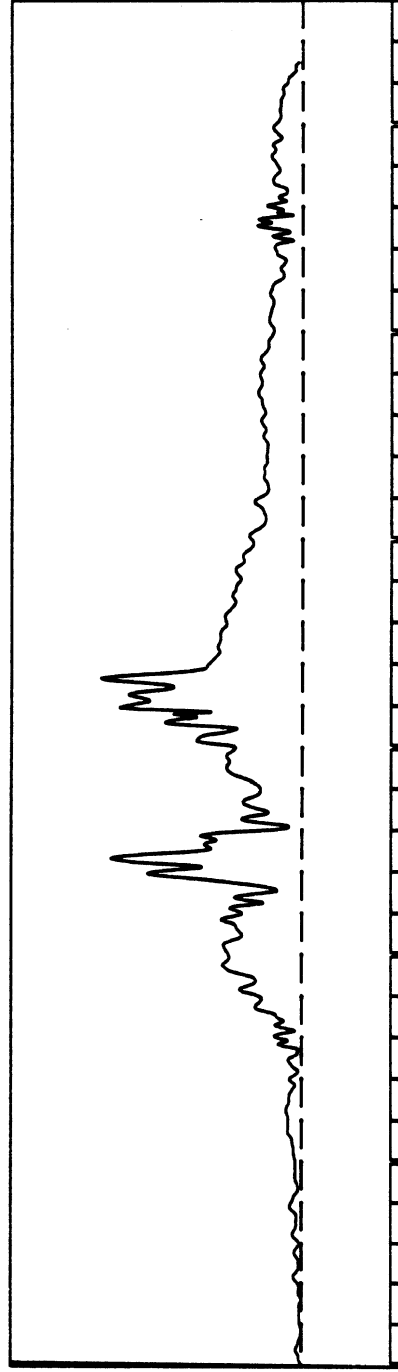
PEAKS



I-S acc 15

R-L acc 16

P-A acc 14



Resultant 21

200 250 300 350 400 450 500 msec

PELVIS ACCELERATIONS (G)

Q-3

LA DY W SB

DEC 11, 1981

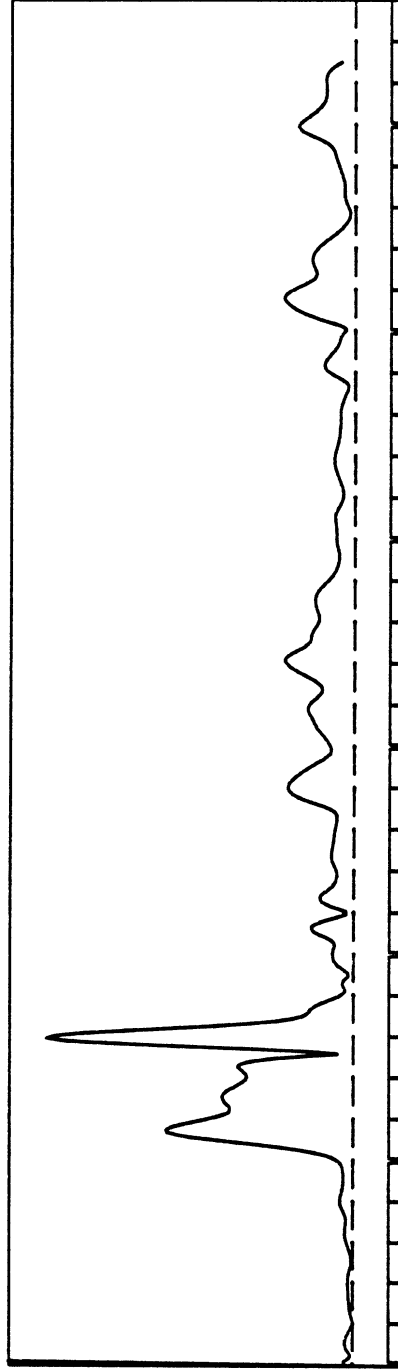
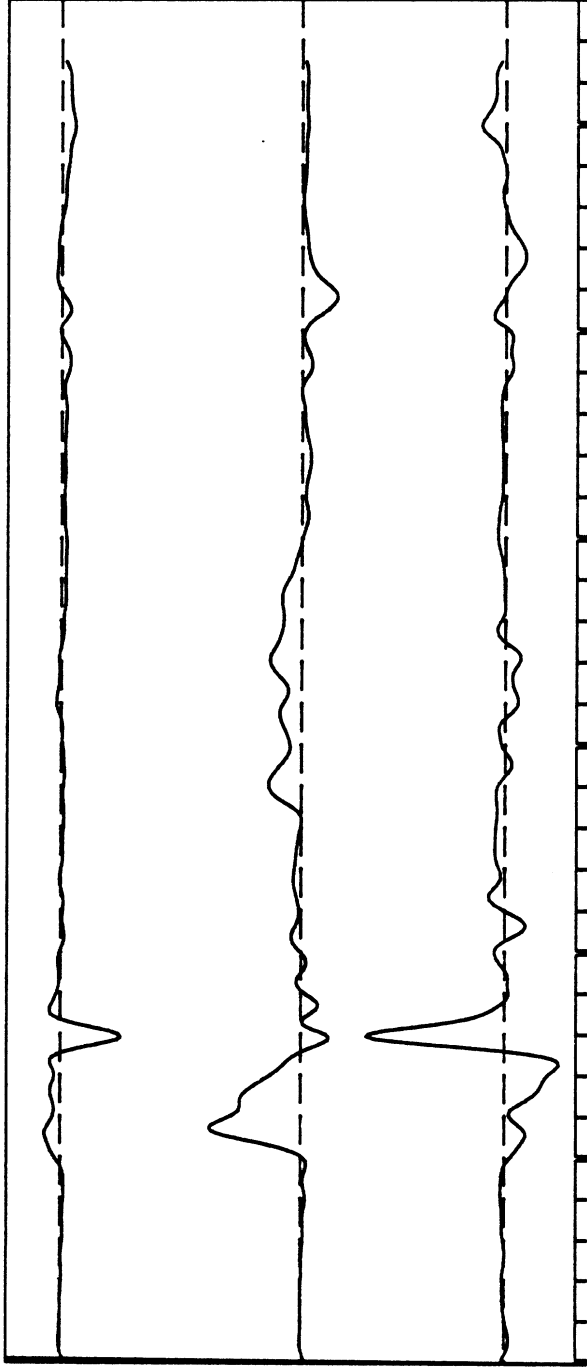
PEAKS

Az (I-S) -13

Ay (L-R) 19

Ax (A-P) 29

Resultant 32



200 250 300 350 400 450 500 msec

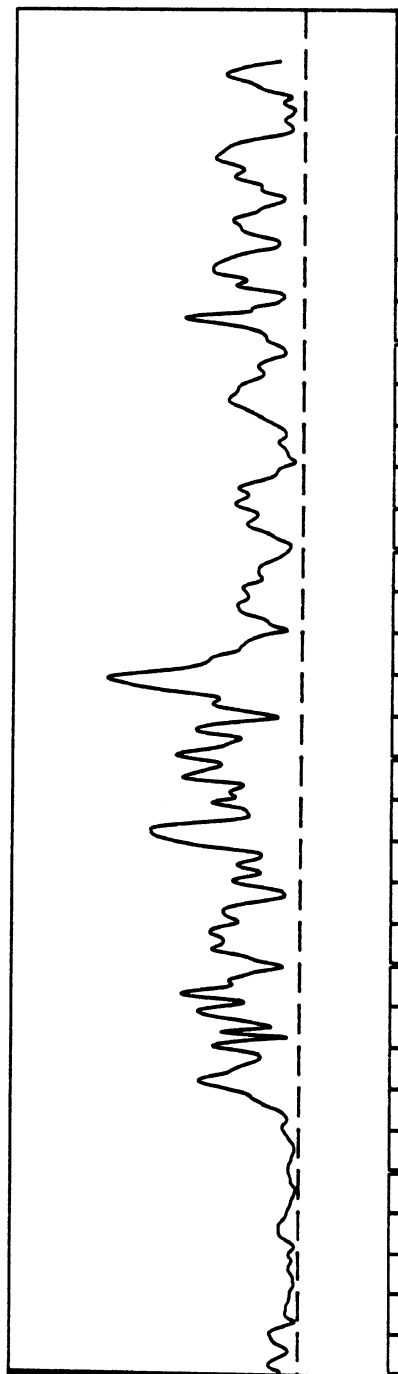
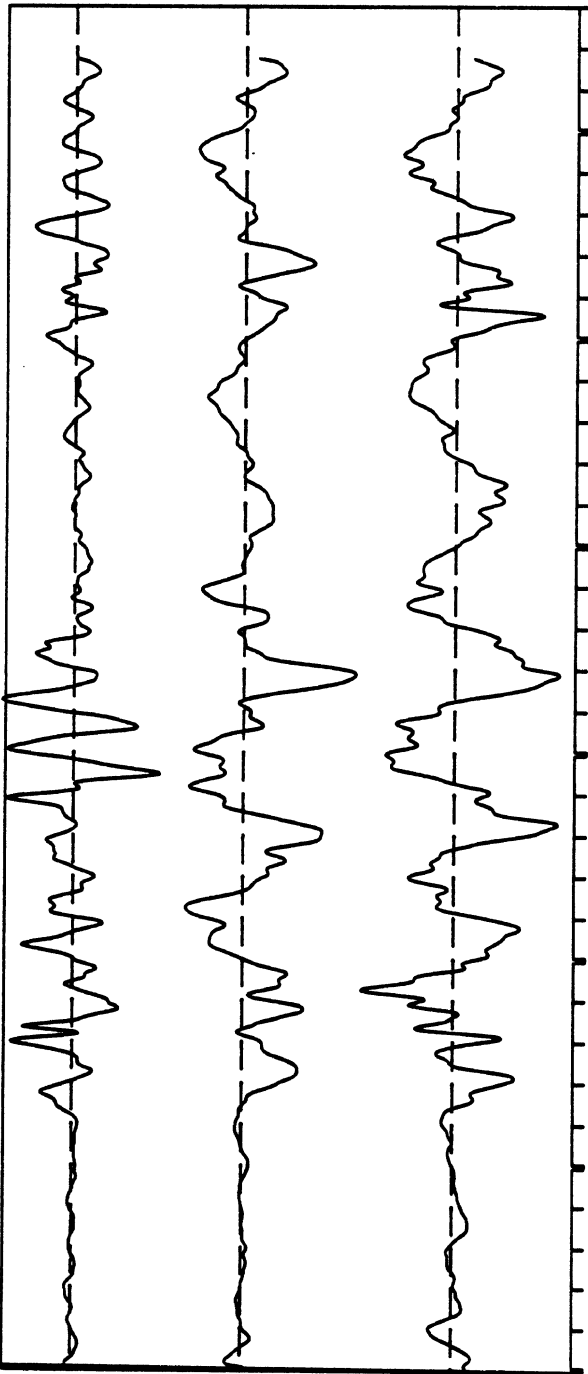
TRUCK DECELERATIONS (G)

Q-3

LA DY W SB

DEC 11, 1981

PEAKS



200 250 300 350 400 450 500 msec

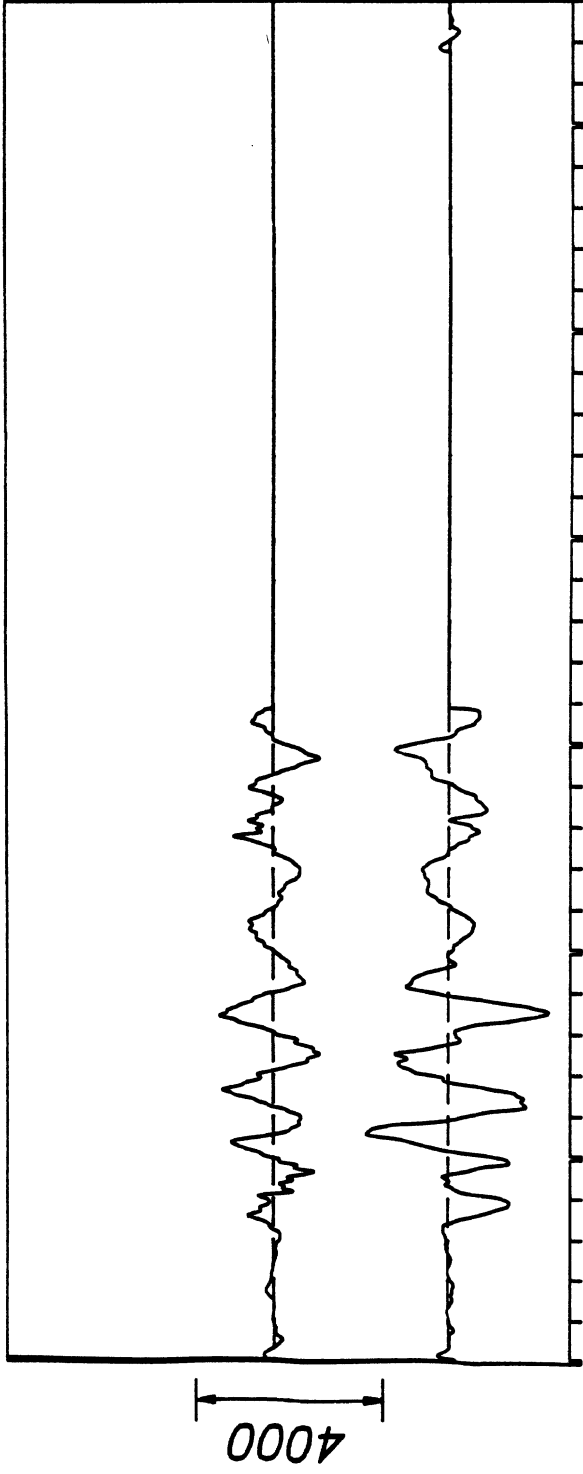
S. COLUMN FORCES (LB)

Q-3

L.A DY W SB

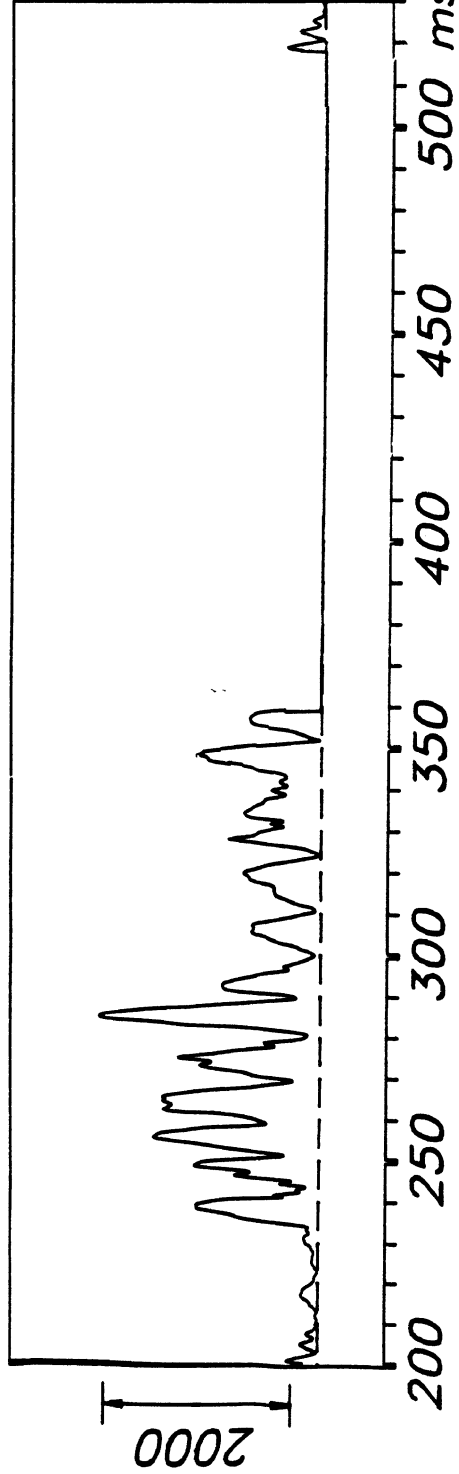
DEC 11, 1981

PEAKS



My (L-R) 1135

Mx (A-P)



Resultant 2585

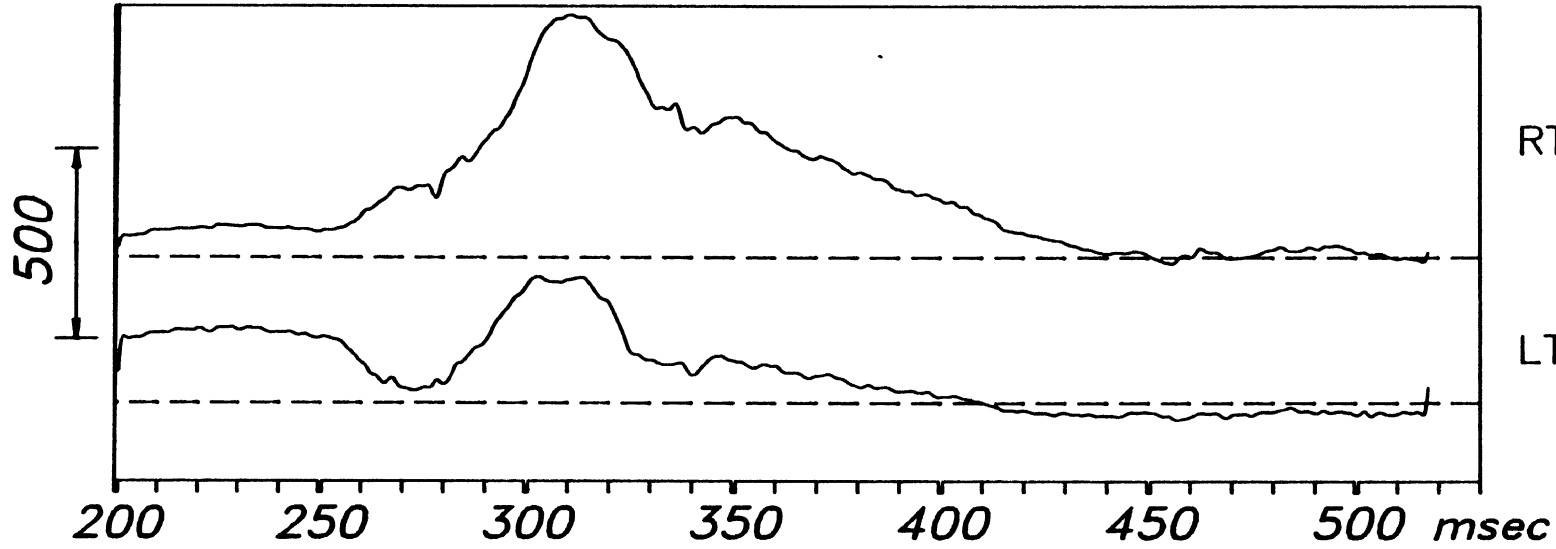
S. COLUMN MOMENTS (IN-LB)

Q-3

LA DY W SB

DEC 11, 1981

PEAKS



RT Belt 637

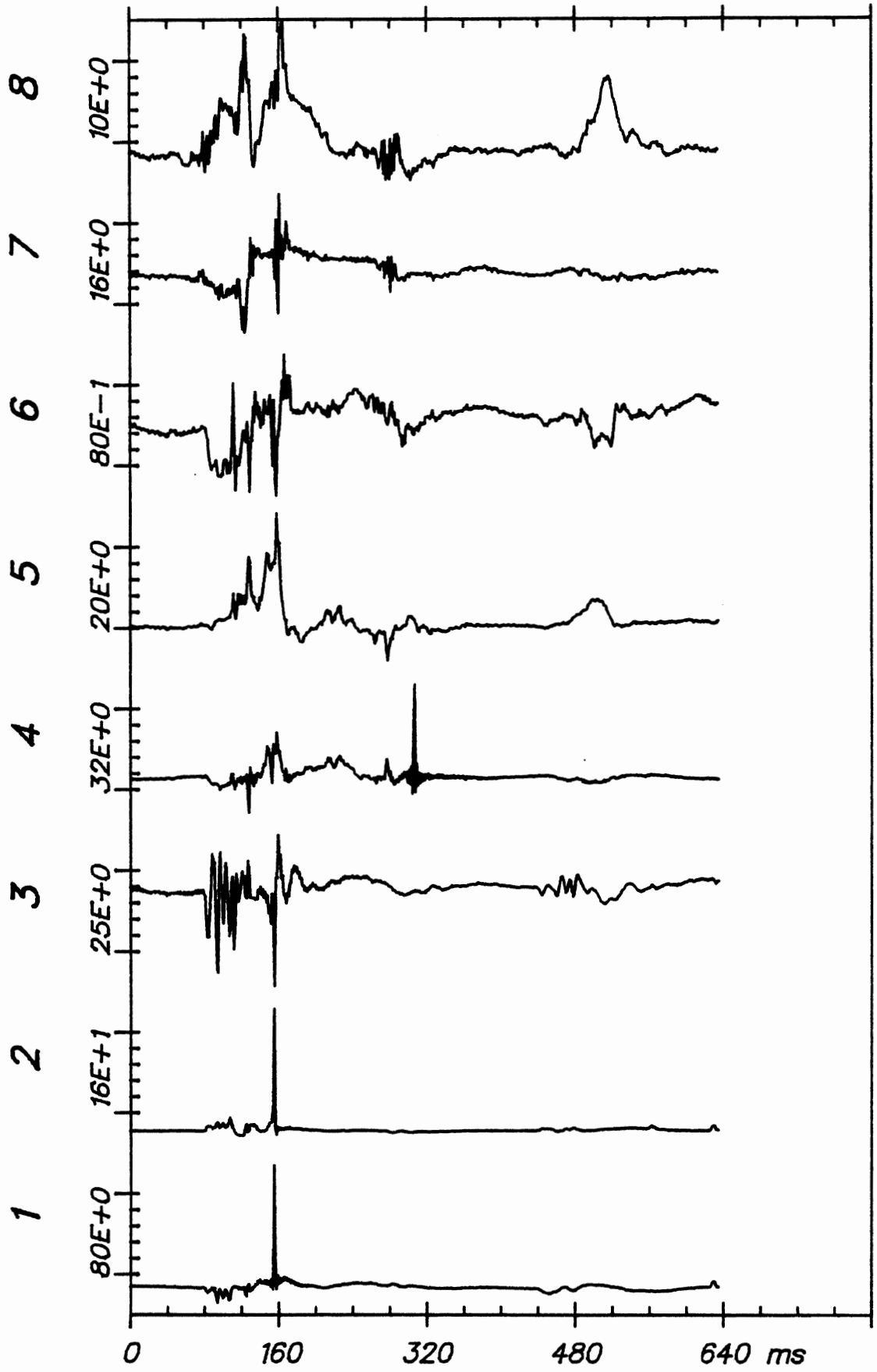
LT Belt 333

KNEE & BELTS LOADS (LB)

Q-3

From HSRI-175 to 81-SORT, file 161: /1/2/3/4/5/6/7/8/

DEC 2, 1981

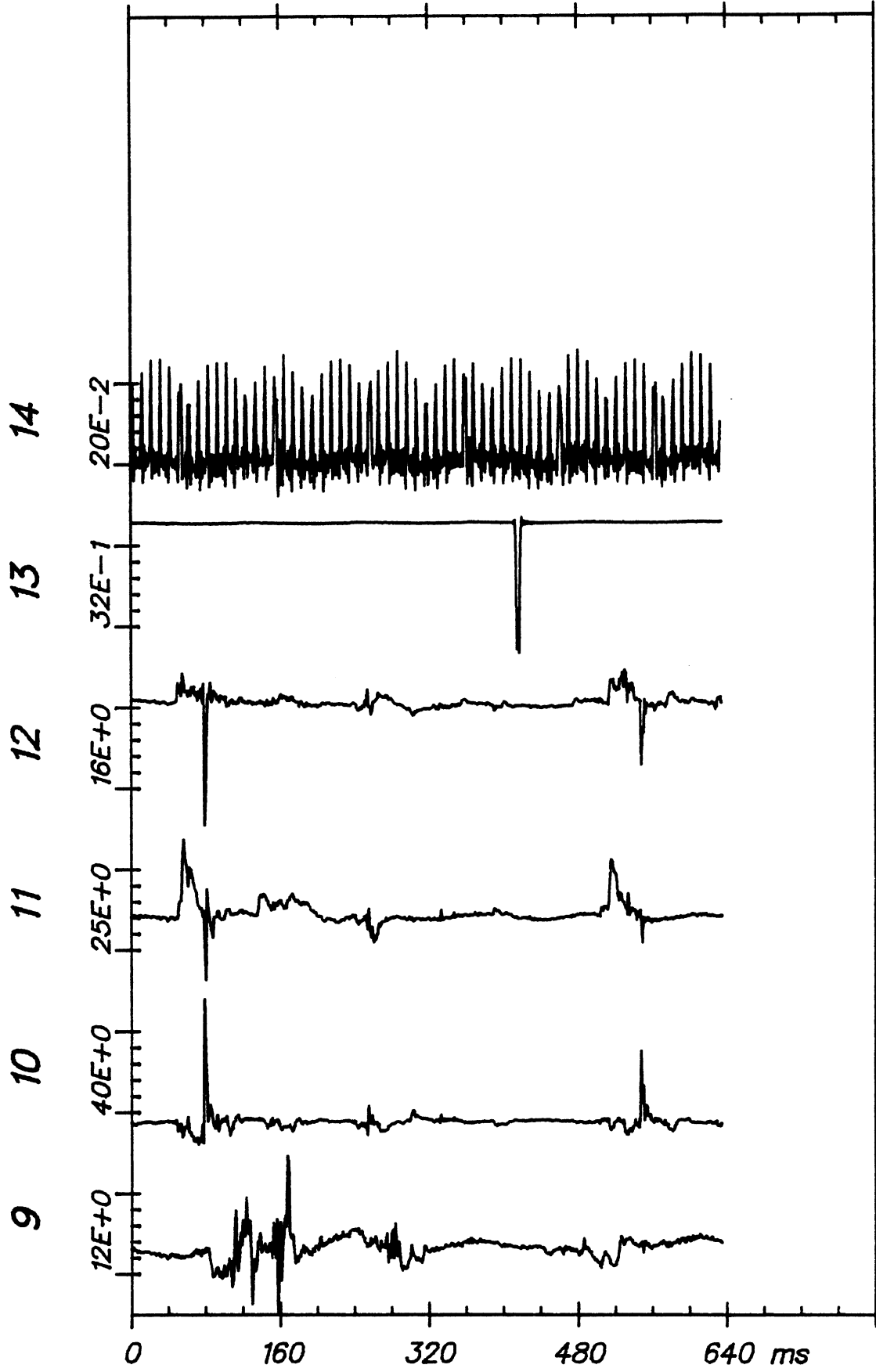


Time Histories

ITA Q-3 (1)

DEC 2, 1981

From HSRI-175 to 81-SORT, file 161: /9/10/11/12/13/14/-/-/

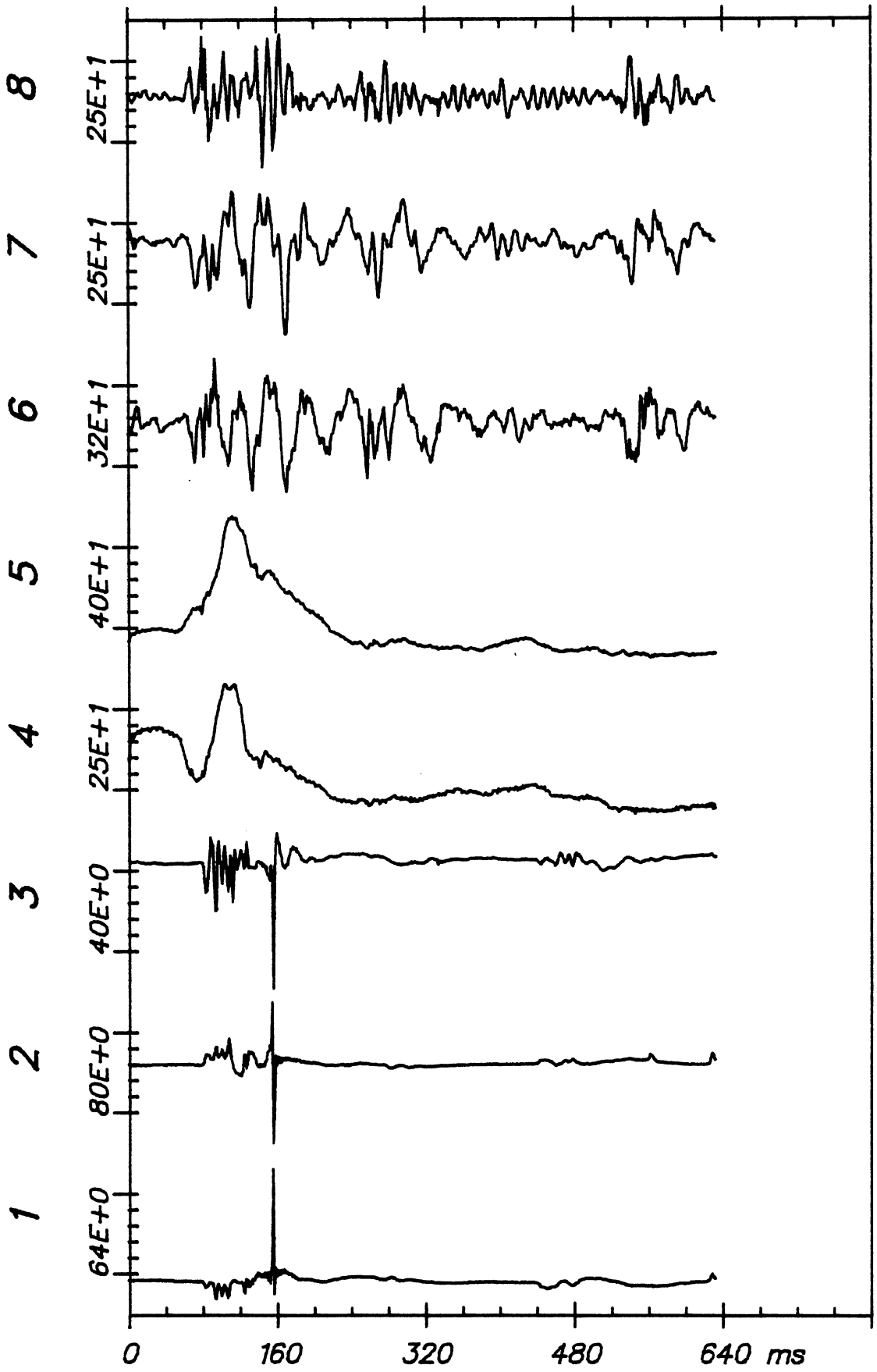


Time Histories

ITA Q-3 (1)

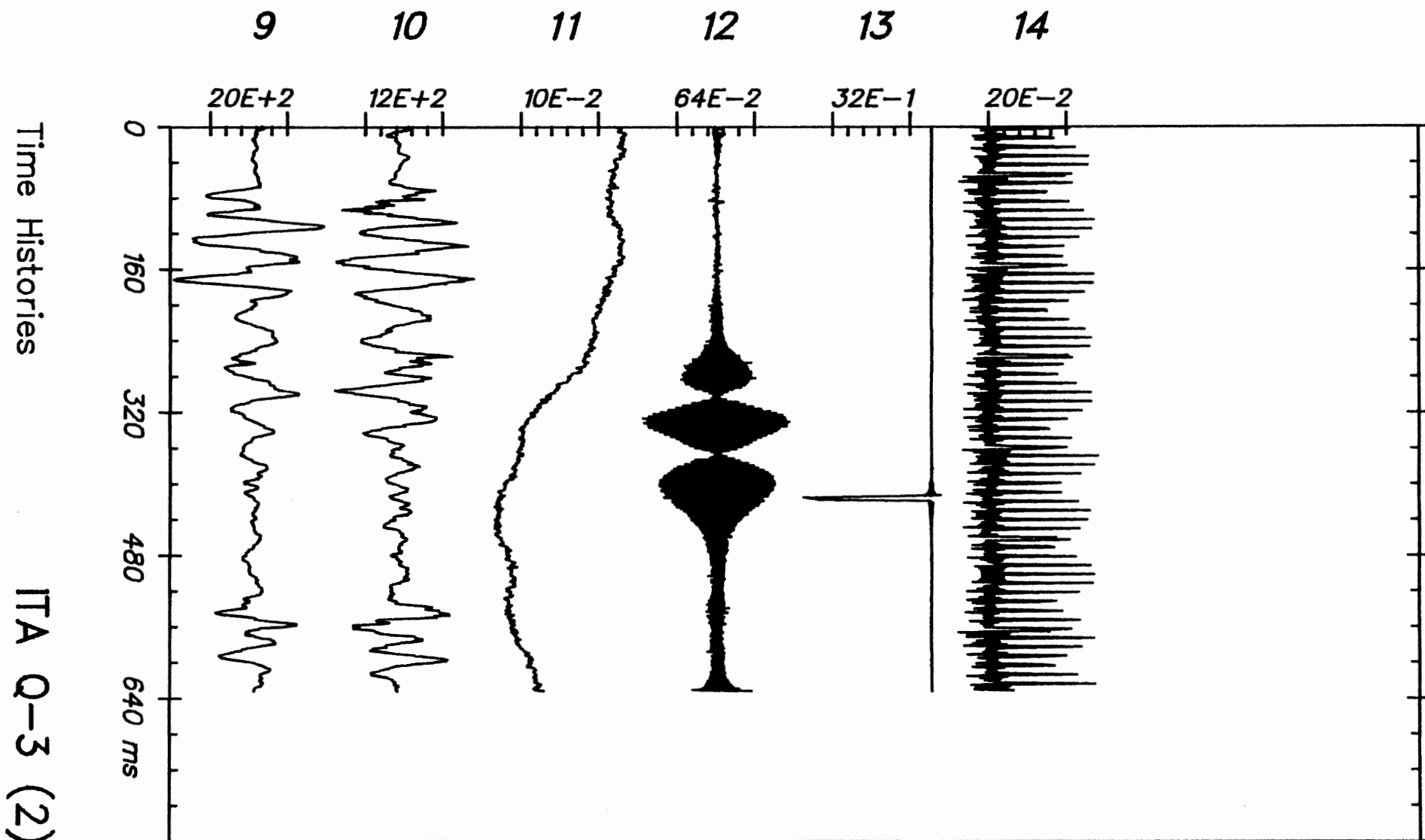
From HSRI-176 to 81-SORT, file 171: /1/2/3/4/5/6/7/8/

DEC 2, 1981



Time Histories

ITA Q-3 (2)



LA DY W AR		Test No. R-1	S U M M A R Y			
			Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)						
	P-A acc	...	-60	391	14	379
	R-L acc	...	-13	392	330	390
	I-S acc	...	-155	379	42	392
	Resultant	...			363	390
	HIC = 1166	...		389		391

CHEST ACCELERATIONS (G)						
	P-A acc	...	-37	365	24	396
	R-L acc	...	-5	379	40	368
	I-S acc	...	-17	377	16	373
	Resultant	...			50	366

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-50	376	52	371
	R-L acc	...	-4	428	175	372
	I-S acc	...	-50	369	32	376
	Resultant	...			181	372

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-14	303	25	309
	Ay (L-R)	...	-5	310	34	289
	Az (I-S)	...	-7	309	5	302
	Resultant	...			35	289

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	-351	416	141	323
	Fy (L-R)	...	-284	400	170	346
	Fz (I-S)	...	-188	405	271	347
	Resultant	...			337	416

S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	-1695	284	1903	591
	My (L-R)	...	-771	263	1903	276
	Mz (I-S)	...				
	Resultant	...			2633	627

KNEE & BELTS LOADS (LB)						
	LI Knee	...				
	RT Knee	...				
	LI Belt	...	0	0	0	0
	RT Belt	...	0	0	0	0

LA DY W AR

DEC 11, 1981

PEAKS

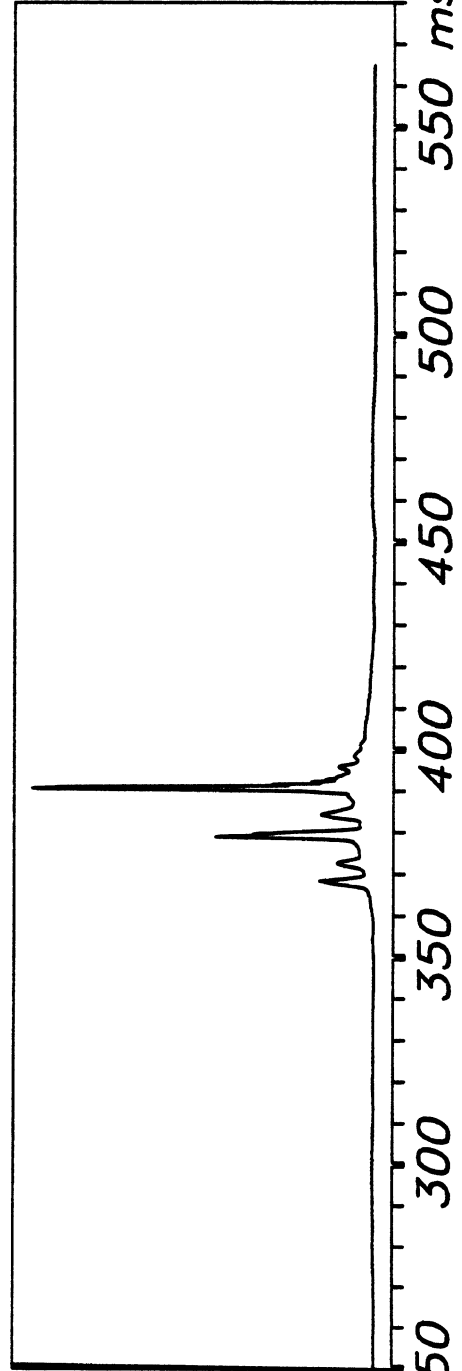
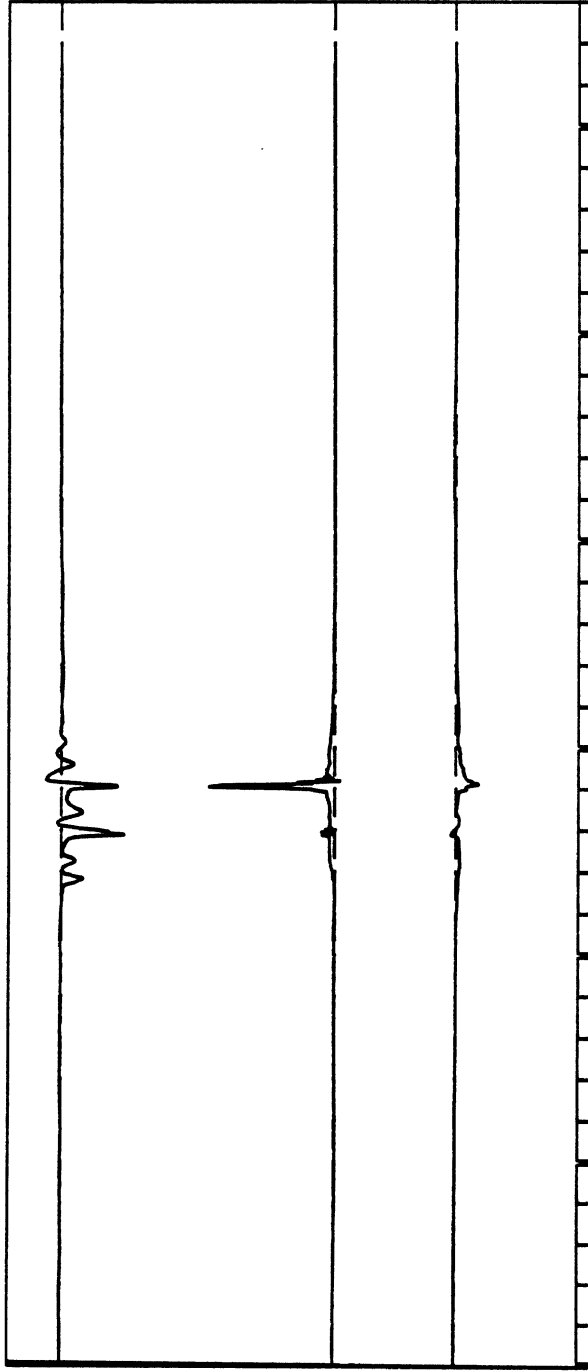
I-S acc -166

R-L acc 330

P-A acc -61

HIC = 1166

Resultant 363

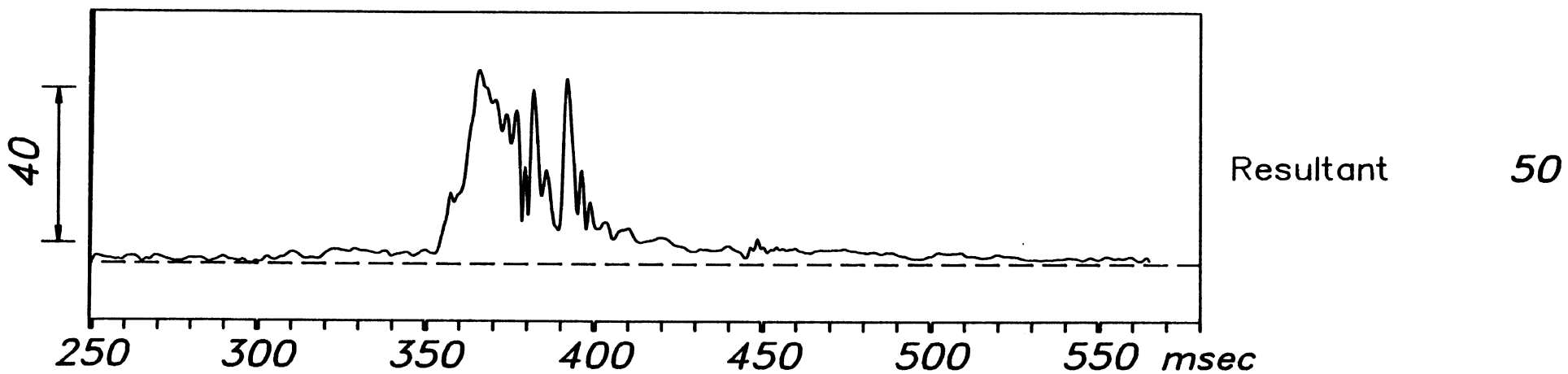
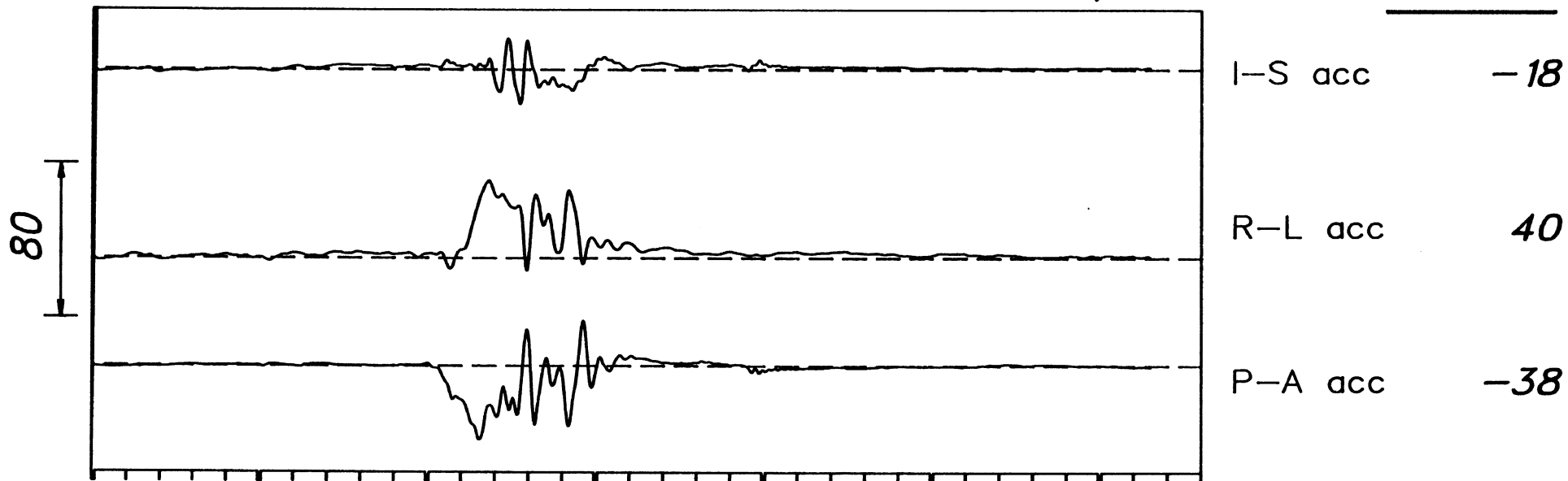


R-1

LA DY W AR

DEC 11, 1981

PEAKS



250 300 350 400 450 500 550 msec

CHEST ACCELERATIONS (G)

R-1

LA DY W AR

DEC 11, 1981

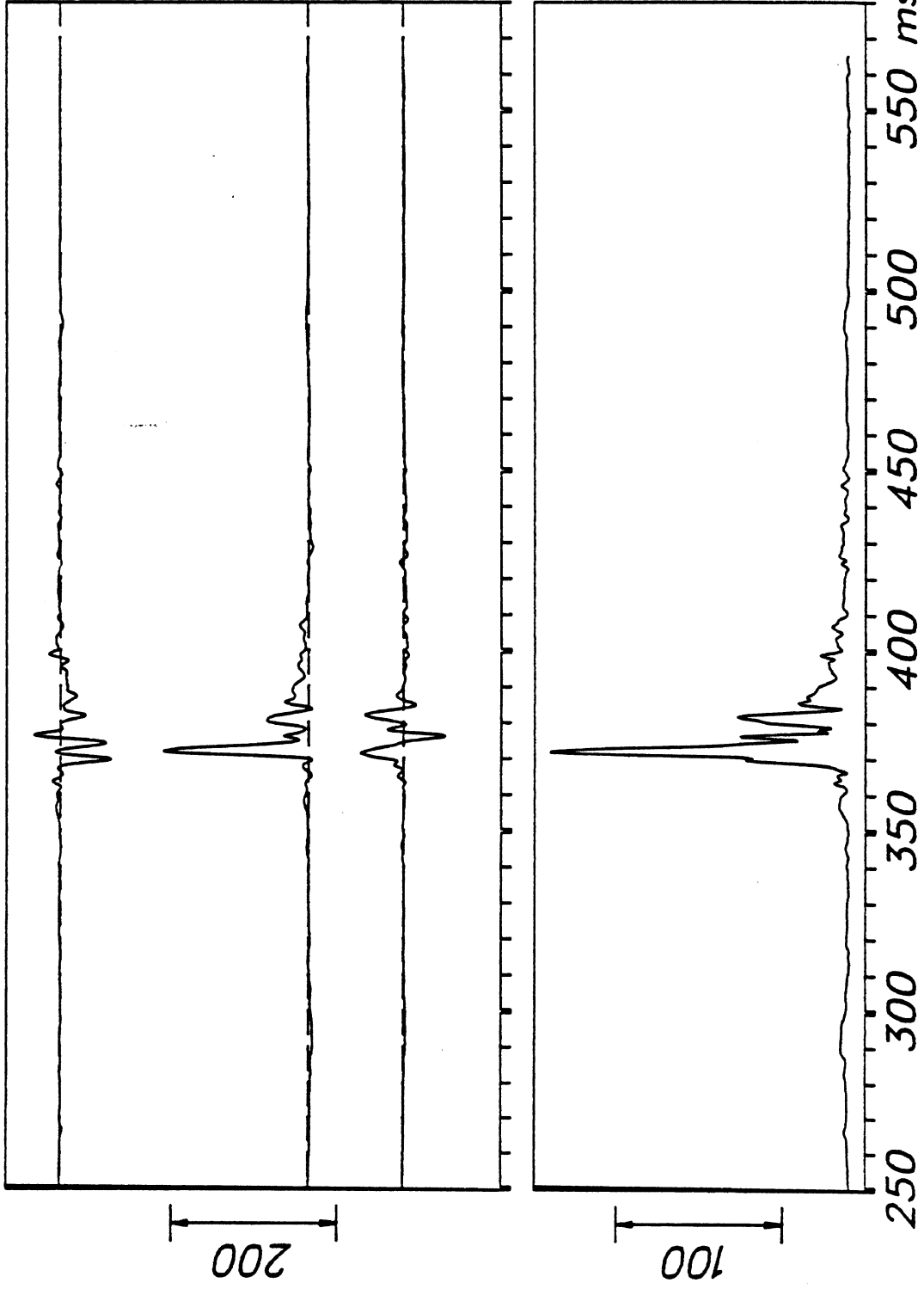
PEAKS

I-S acc -61

R-L acc 174

P-A acc 52

Resultant 181

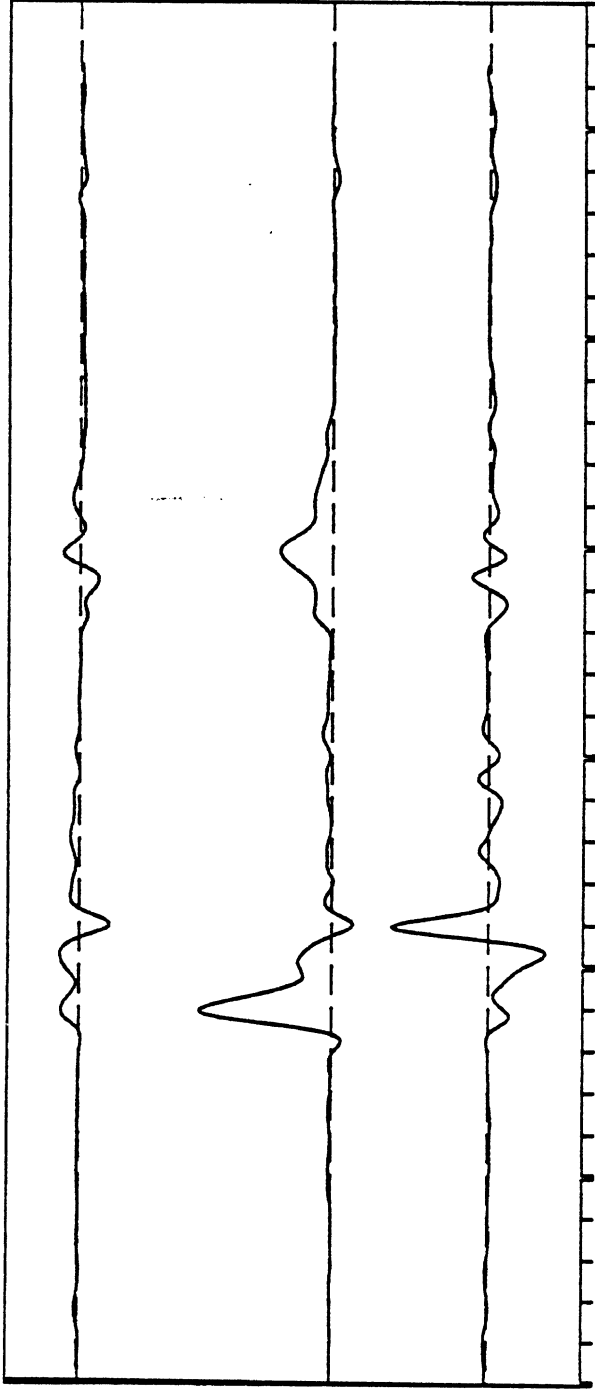


R-1

L A D Y W A R

DEC 11, 1981

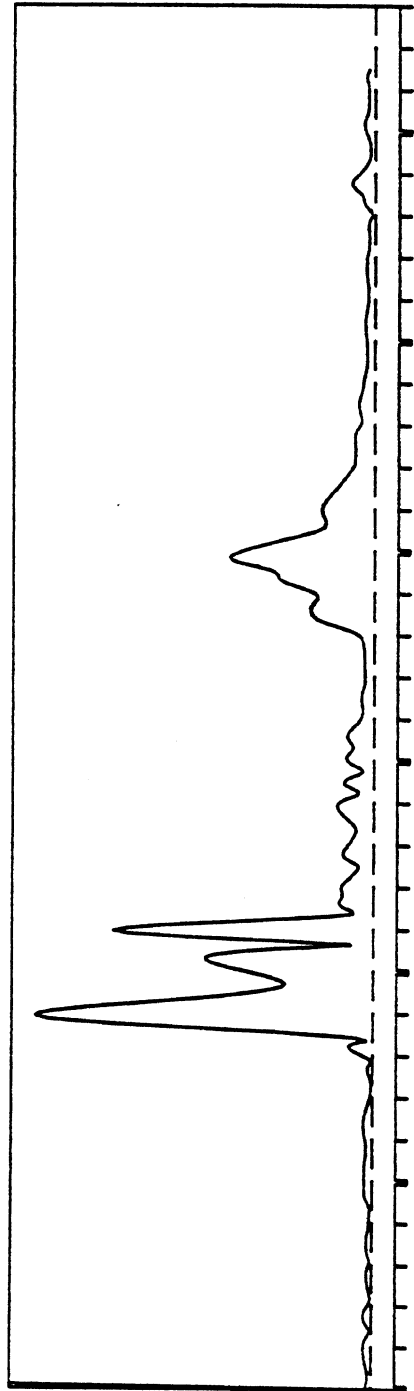
PEAKS



Az (I-S) -8

Ay (L-R) 34

Ax (A-P) 25



Resultant 35

200 250 300 350 400 450 500 msec

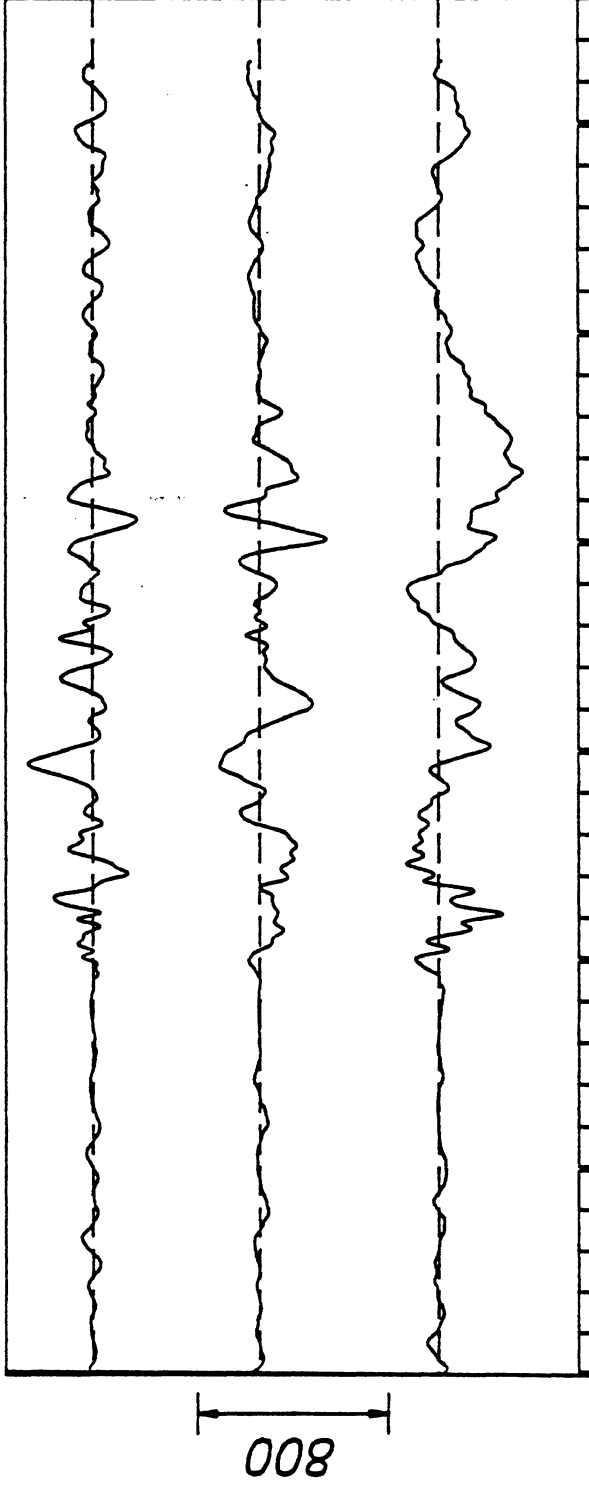
TRUCK DECELERATIONS (G)

R-1

L A D Y W A R

DEC 11, 1981

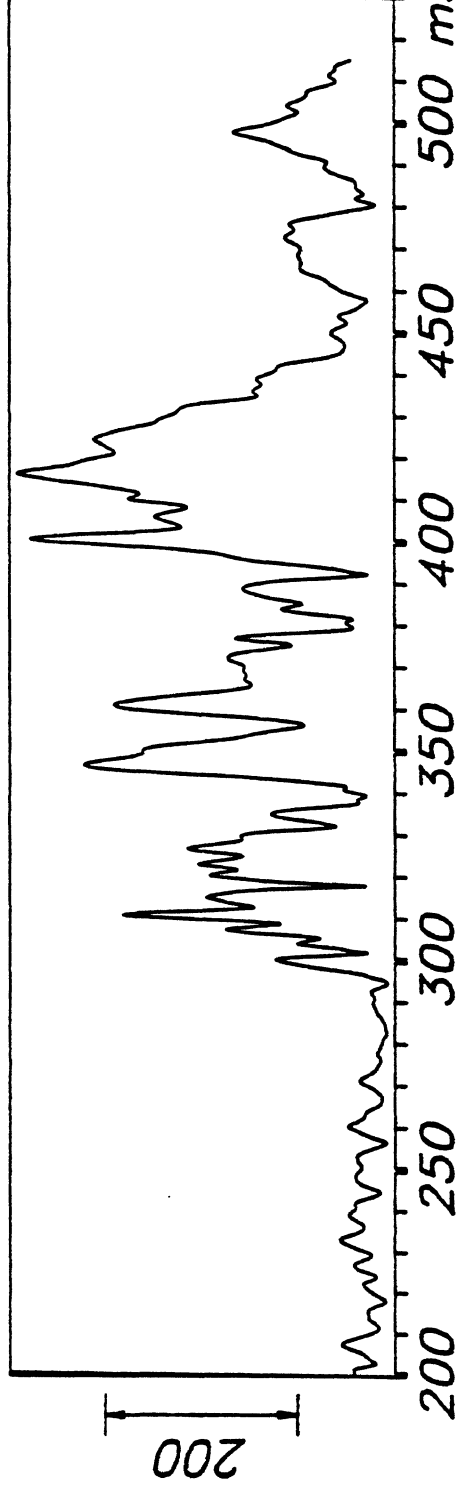
PEAKS



Fz (I-S) 271

Fy (L-R) -285

Fx (A-P) -352



Resultant 387

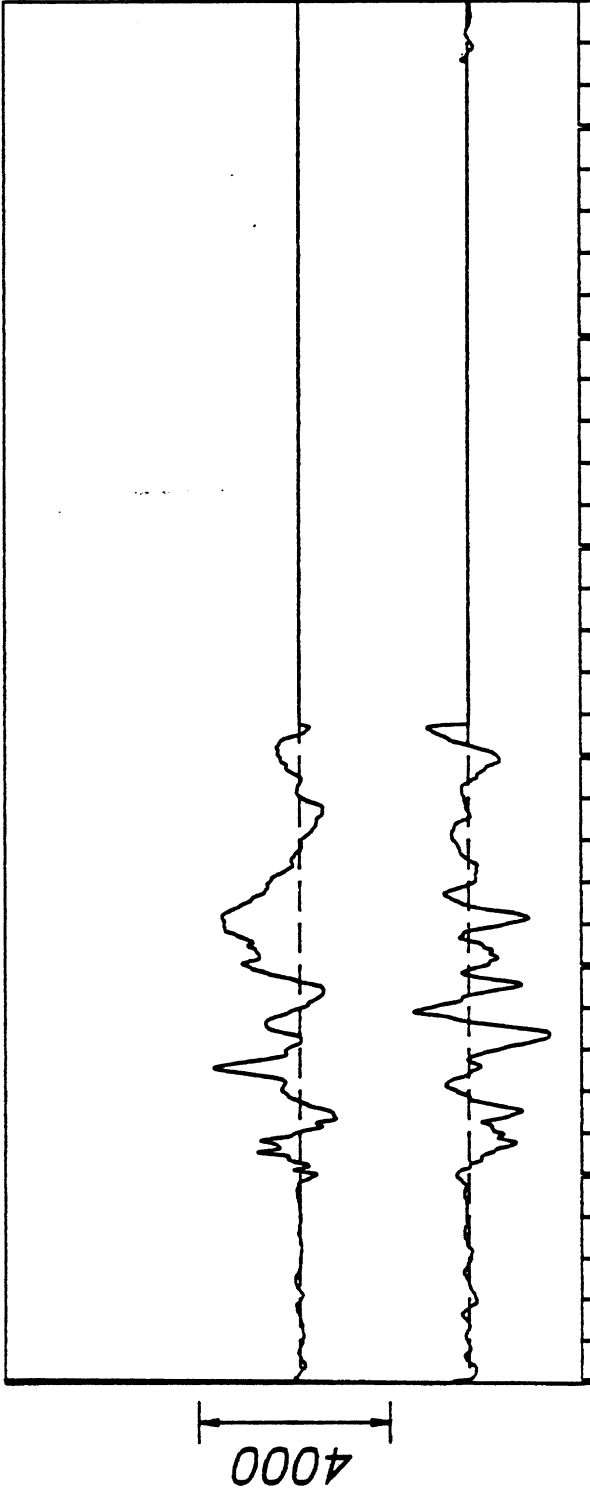
S. COLUMN FORCES (LB)

R-1

L A D Y W A R

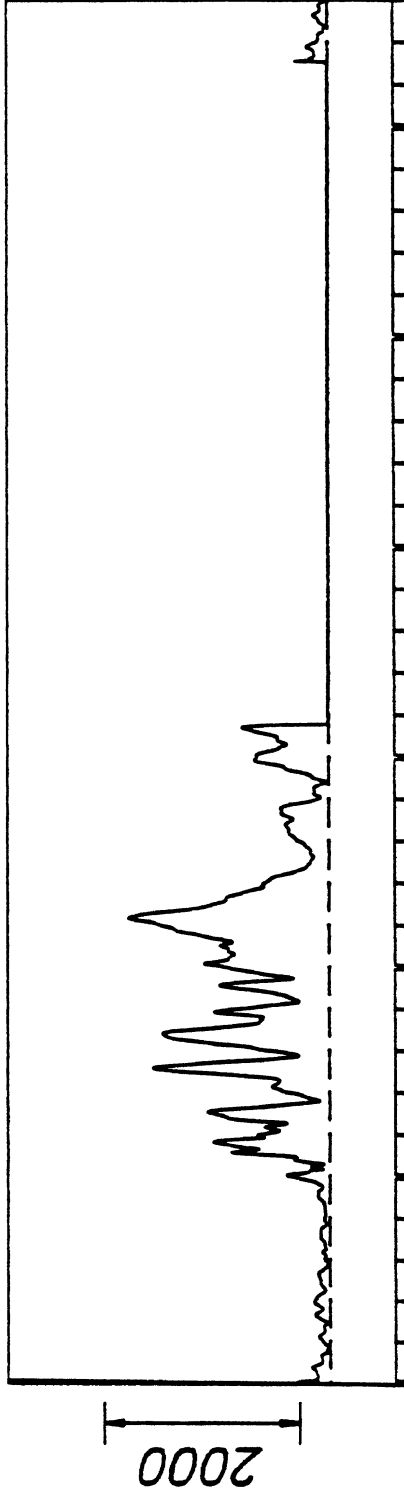
DEC 11, 1981

PEAKS



My (L-R) 1803

Mx (A-P) 1803



Resultant 2632

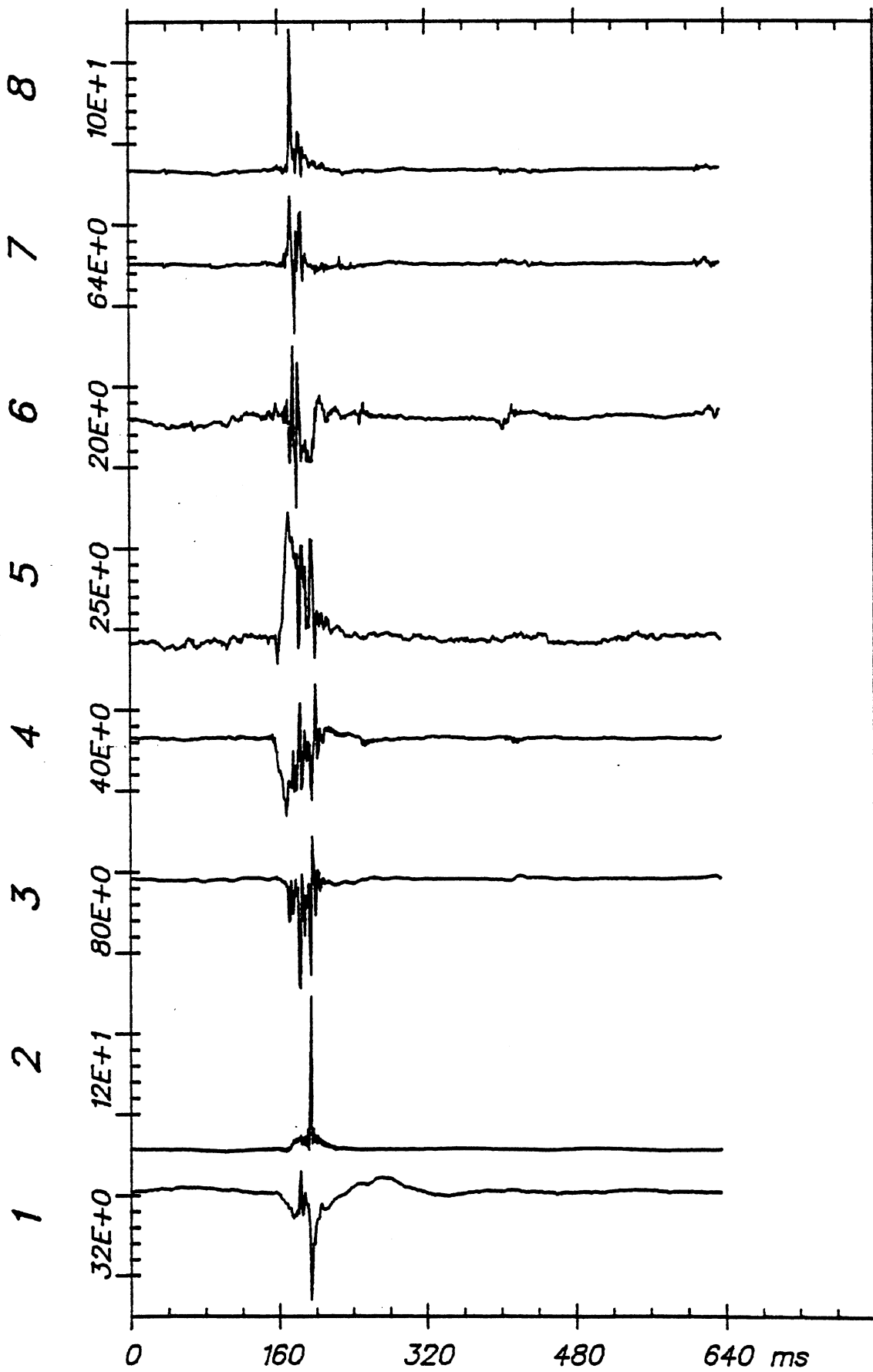
200 250 300 350 400 450 500 msec

S. COLUMN MOMENTS (IN-LB)

R-1

DEC 2, 1981

From HSRI-175 to 81-SORT, file 165: /1/2/3/4/5/6/7/8/

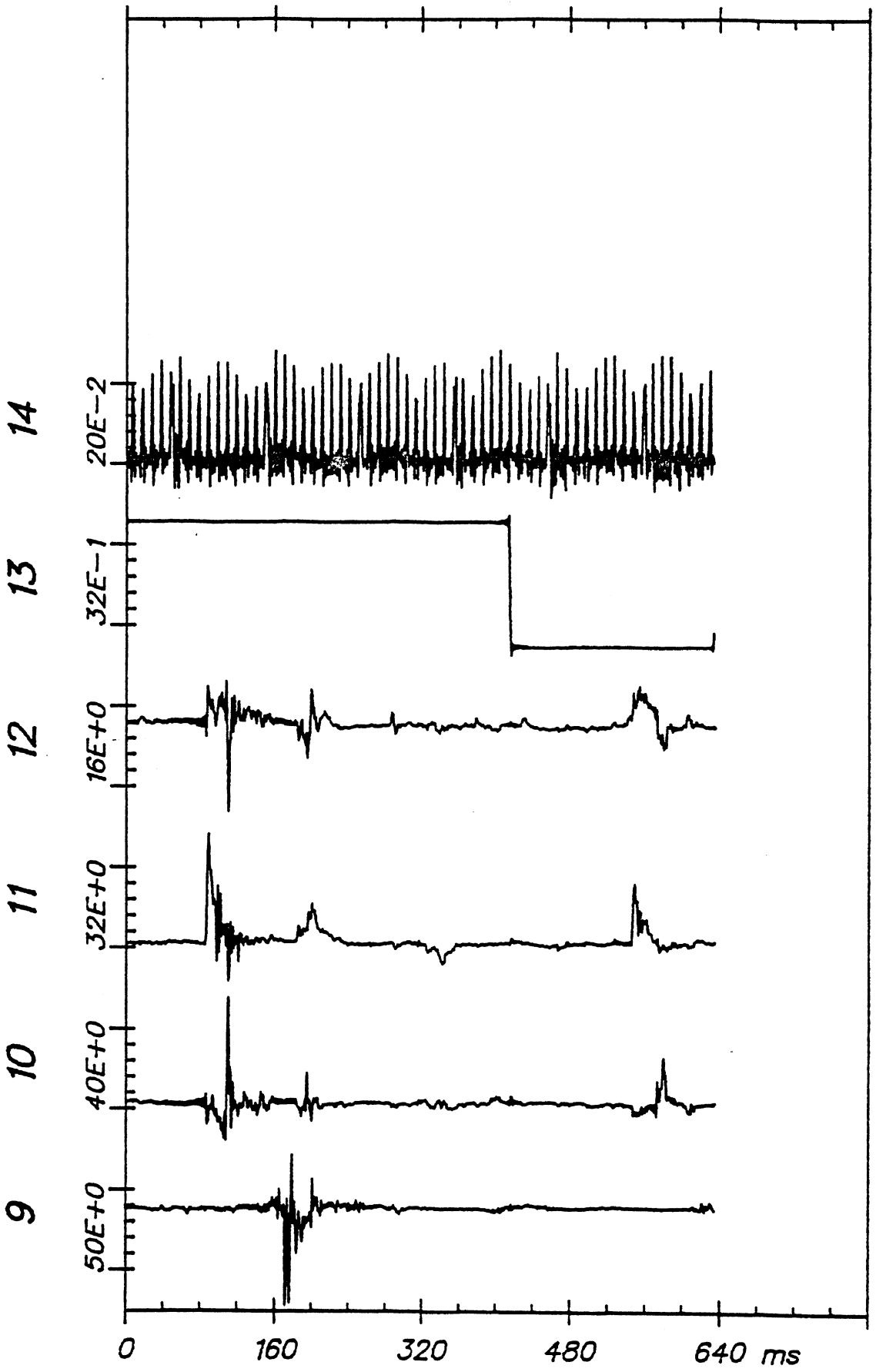


Time Histories

ITA R-1 (1)

DEC 2, 1981

From HSRI-175 to 81-SORT, file 165: /9/10/11/12/13/14/-/-/

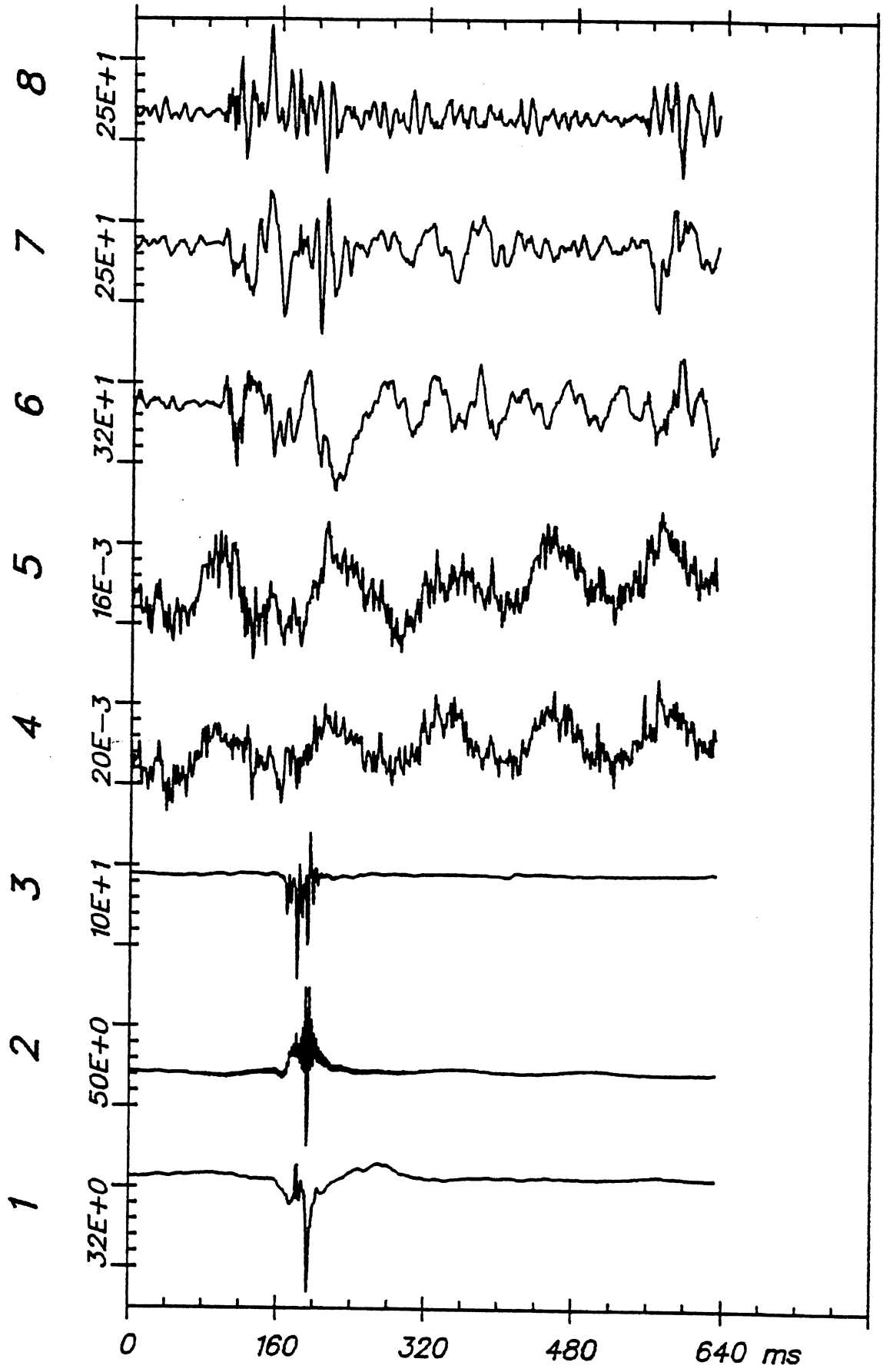


Time Histories

ITA R-1 (1)

From HSRI-176 to 81-SORT, file 175: /1/2/3/4/5/6/7/8/

DEC 2, 1981

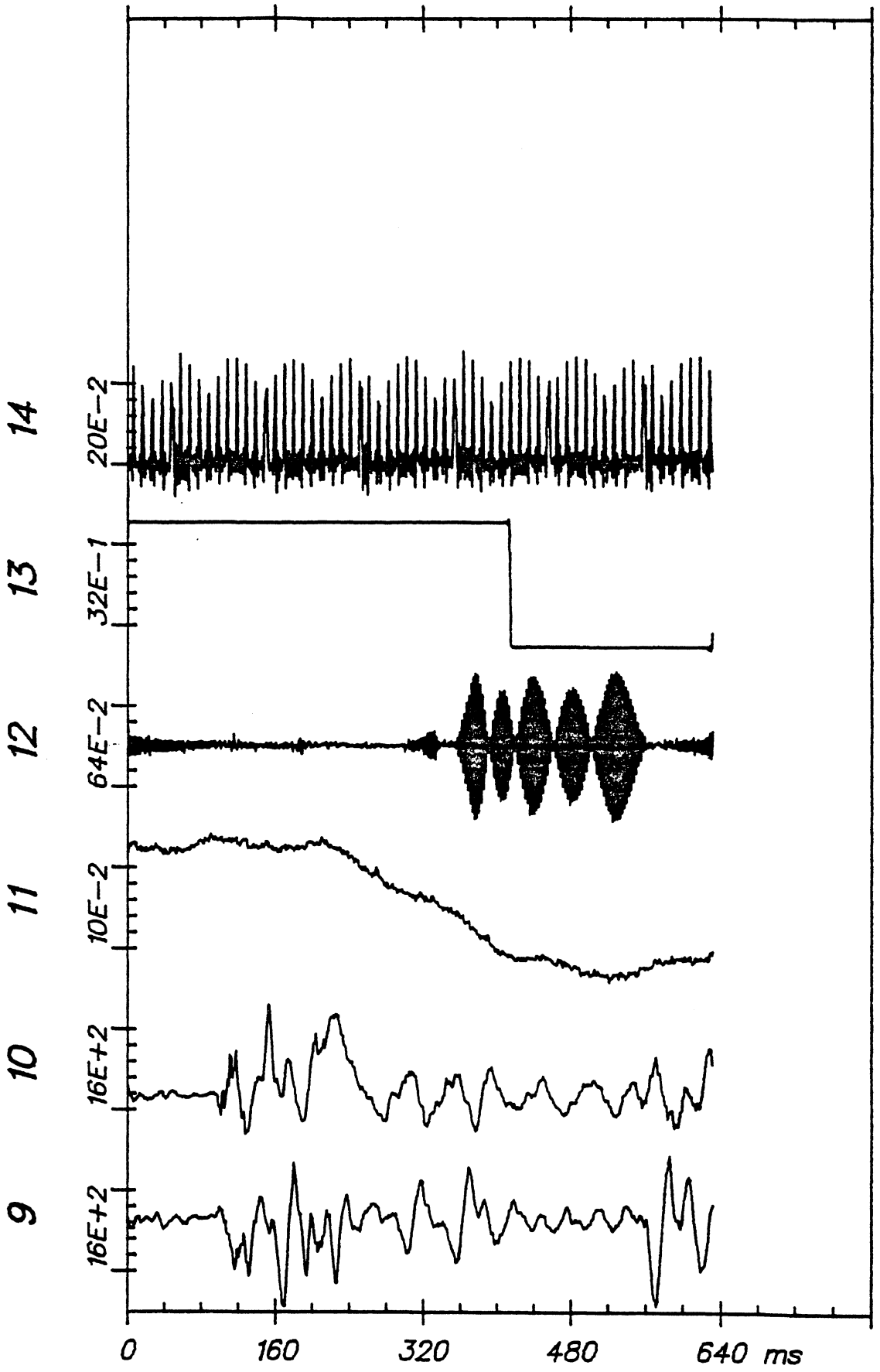


Time Histories

ITA R-1 (2)

DEC 2, 1981

From HSRI-176 to 81-SORT, file 175: /9/10/11/12/13/14/-/-/



Time Histories

ITA R-1 (2)

LA DY W AR	Test No. R-2	S U M M A R Y				
		Min @ msec		Max @ msec		

HEAD ACCELERATIONS (G)						
	P-A acc	...	-29	368	188	368
	R-L acc	...	-230	370	363	369
	I-S acc	...	-189	358	226	369
	Resultant	...			439	368
	HIC = 1766	...		367		370

CHEST ACCELERATIONS (G)						
	P-A acc	...	-52	319	32	378
	R-L acc	...	-3	340	49	320
	I-S acc	...	-24	372	23	321
	Resultant	...			62	319

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-34	315	64	351
	R-L acc	...	-13	320	92	316
	I-S acc	...	-28	327	34	315
	Resultant	...			96	316

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-9	267	29	277
	Ay (L-R)	...	-5	278	23	255
	Az (I-S)	...	-9	278	6	372
	Resultant	...			31	277

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	-374	405	156	494
	Fy (L-R)	...	-164	336	143	313
	Fz (I-S)	...	-188	392	180	281
	Resultant	...			390	404

S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	-2099	298	1770	618
	My (L-R)	...	-779	347	1770	303
	Mz (I-S)	...				
	Resultant	...			2947	613

KNEE & BELTS LOADS (LB)						
	LT Knee	...				
	RT Knee	...				
	LT Belt	...	0	0	0	0
	RT Belt	...	0	0	0	0

LA DY W AR

DEC 11, 1981

PEAKS

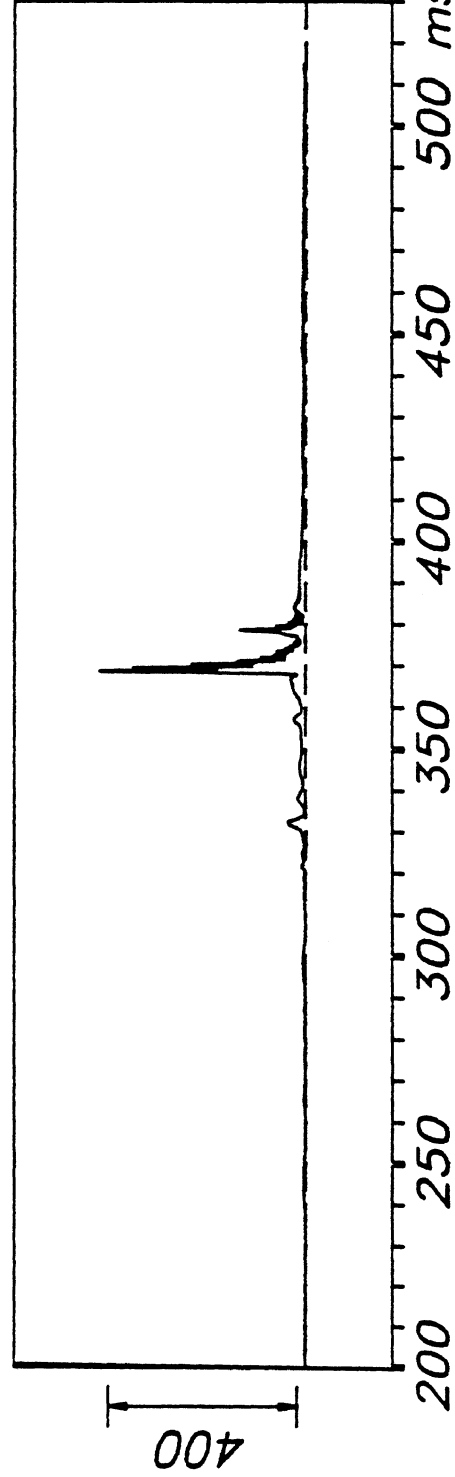
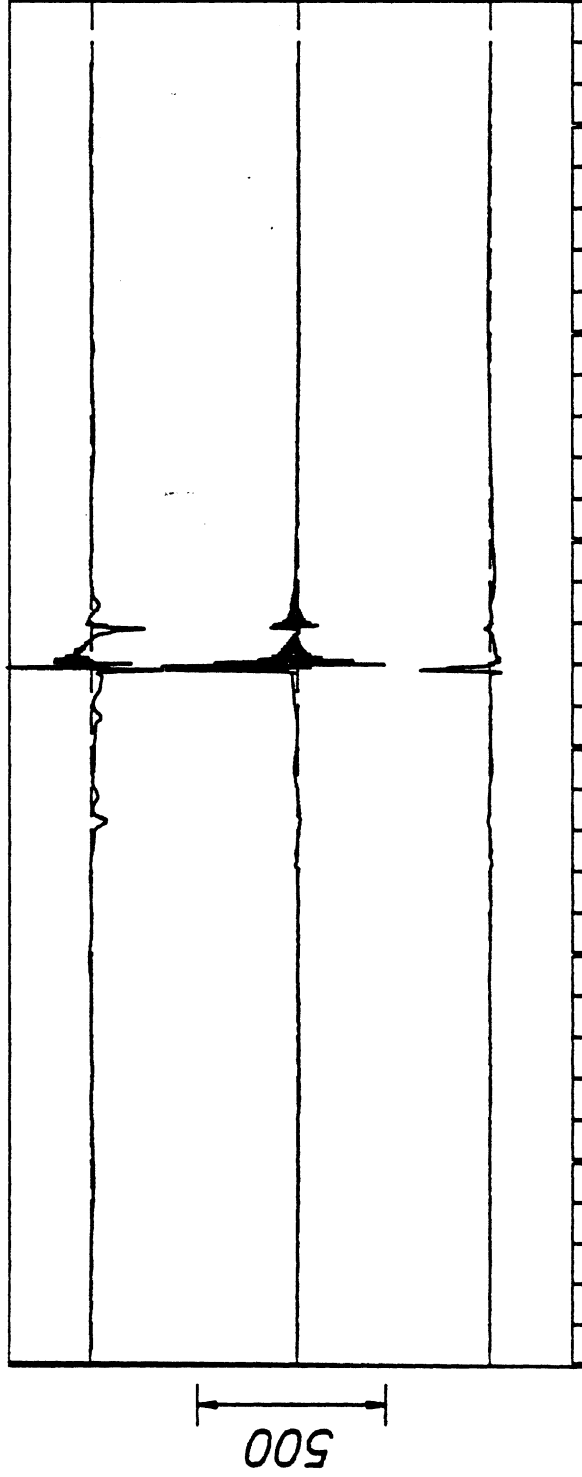
I-S acc 226

R-L acc 362

P-A acc 188

HIC = 1766

Resultant 439

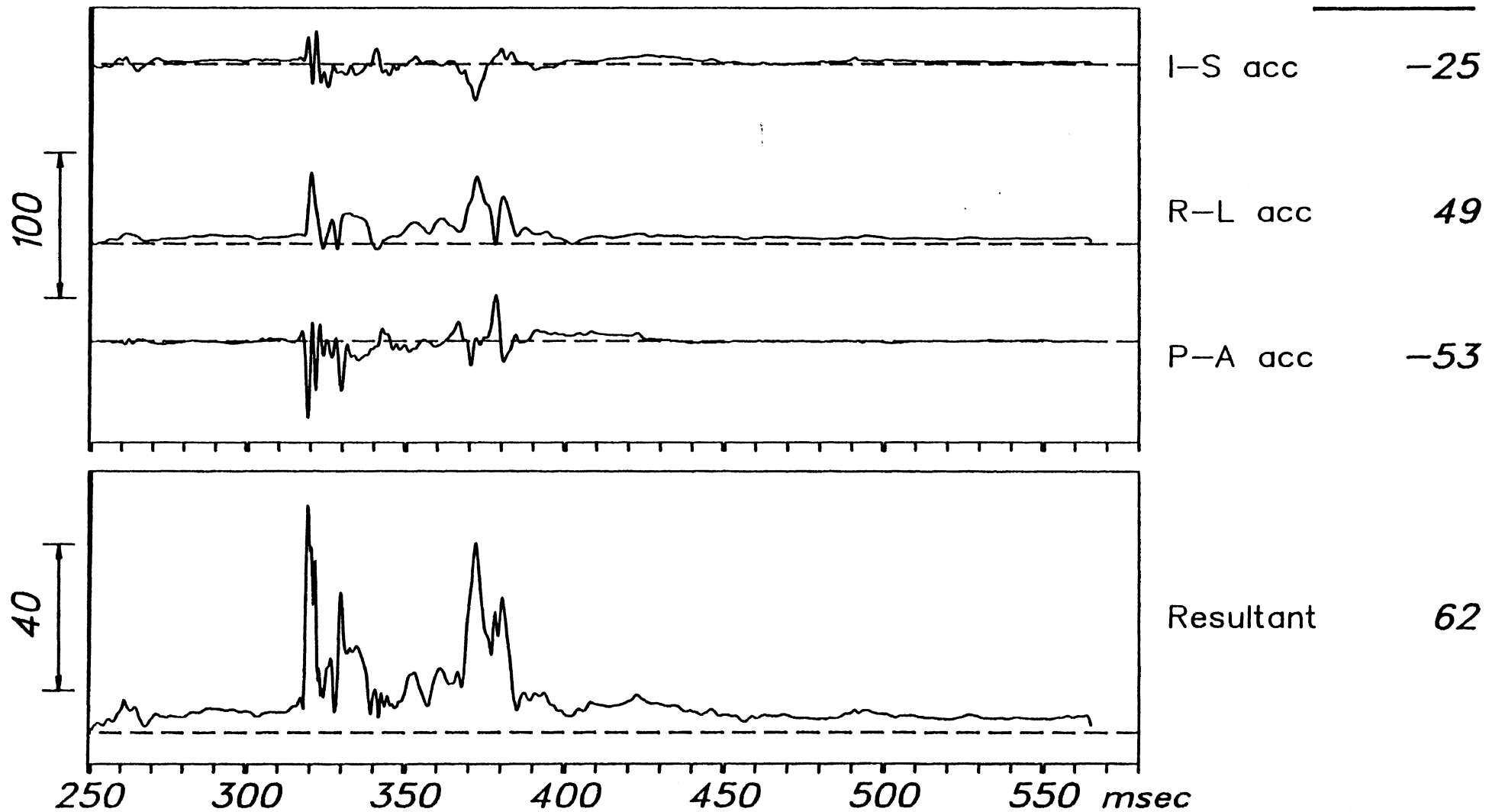


R-2

LA DY W AR

DEC 11, 1981

PEAKS

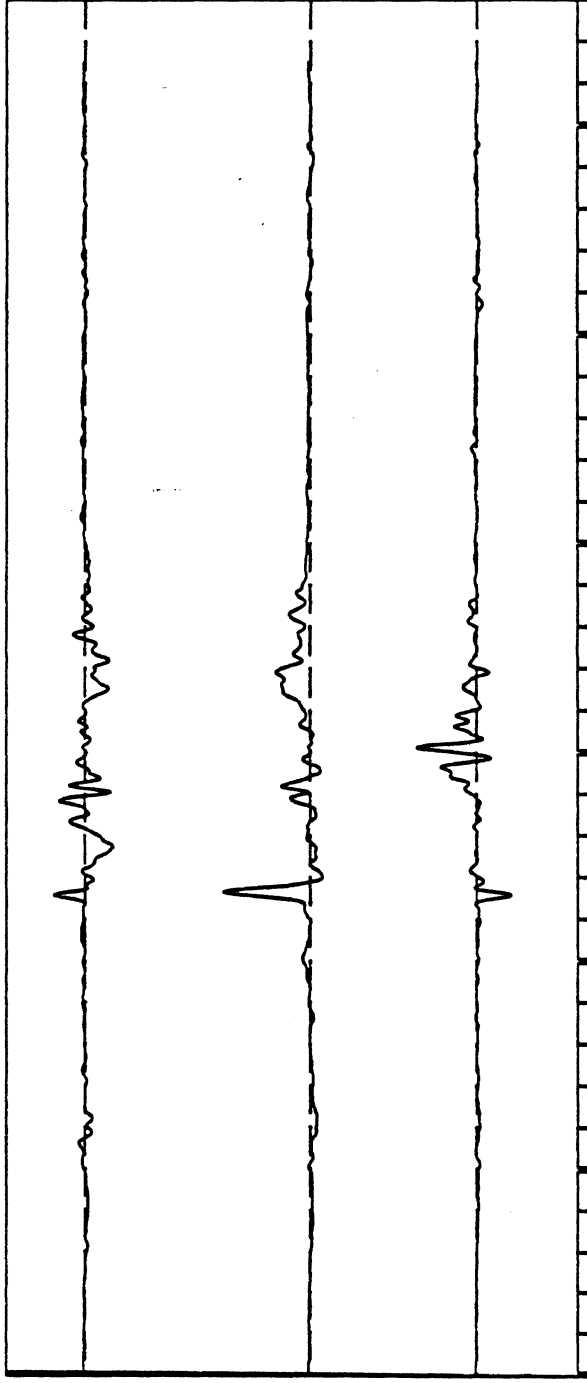


R-2

L A D Y W A R

DEC 11, 1981

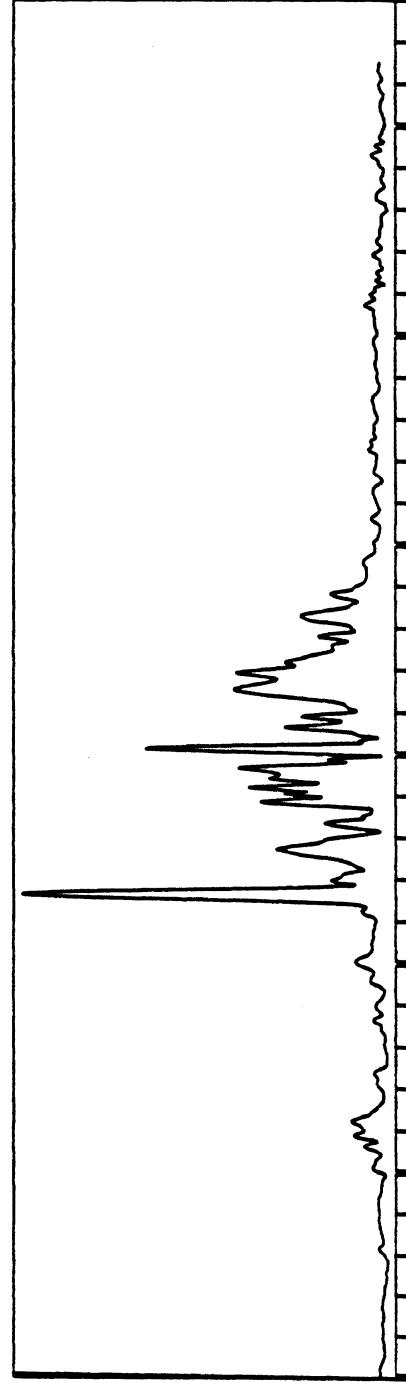
PEAKS



I-S acc 33

R-L acc 91

P-A acc 63



Resultant 96

200 250 300 350 400 450 500 msec

PELVIS ACCELERATIONS (G)

R-2

L A D Y W A R

DEC 11, 1981

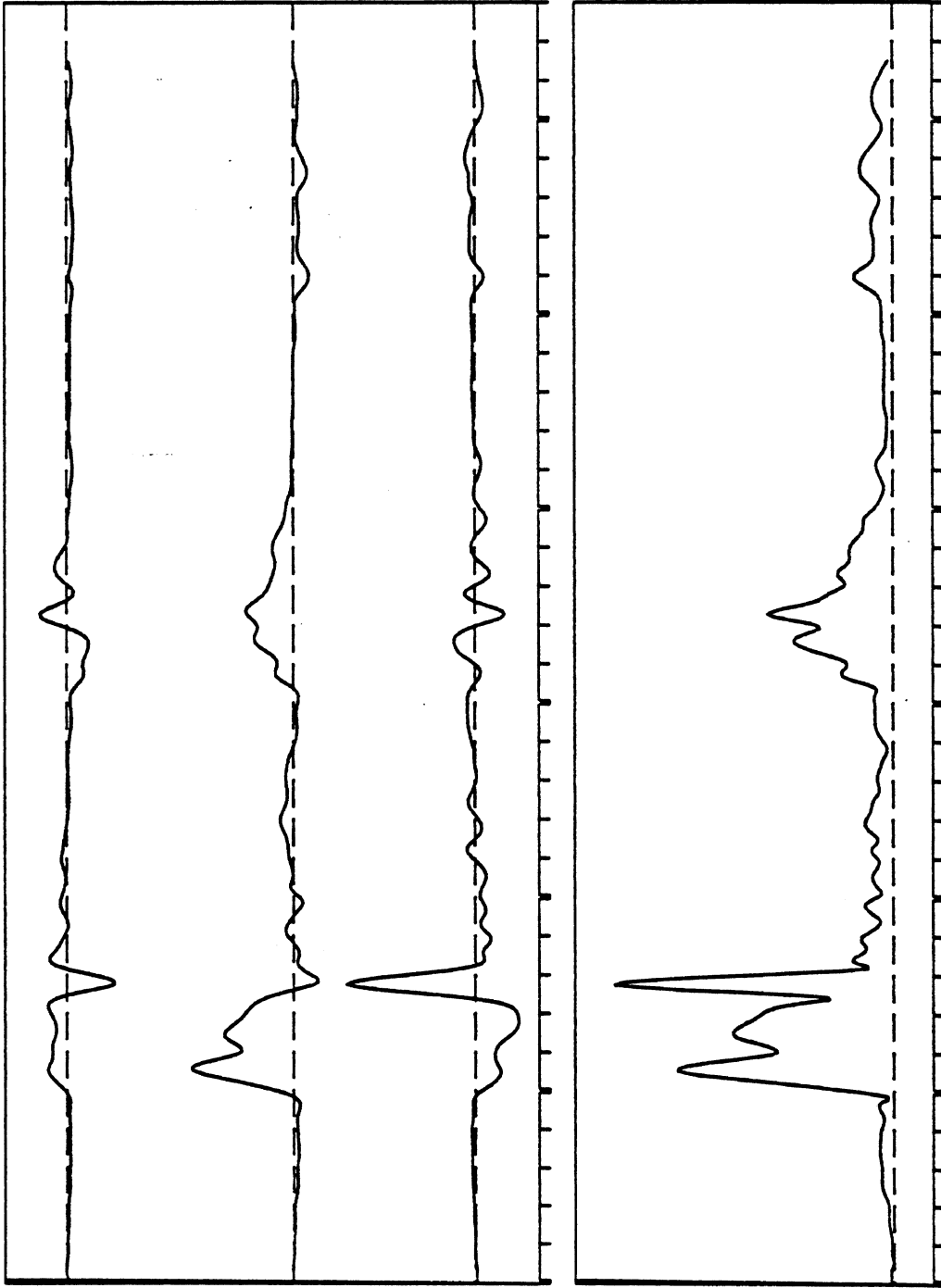
PEAKS

Az (I-S) -10

Ay (L-R) 23

Ax (A-P) 29

Resultant 31



200 250 300 350 400 450 500 msec

TRUCK DECELERATIONS (G)

R-2

L A D Y W A R

DEC 11, 1981

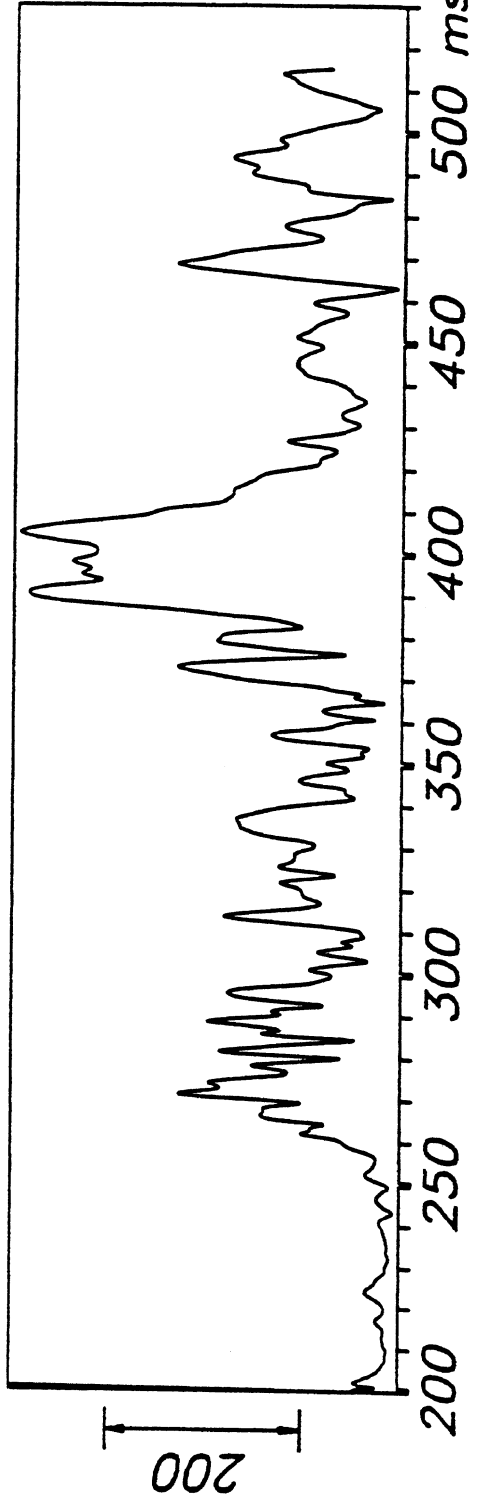
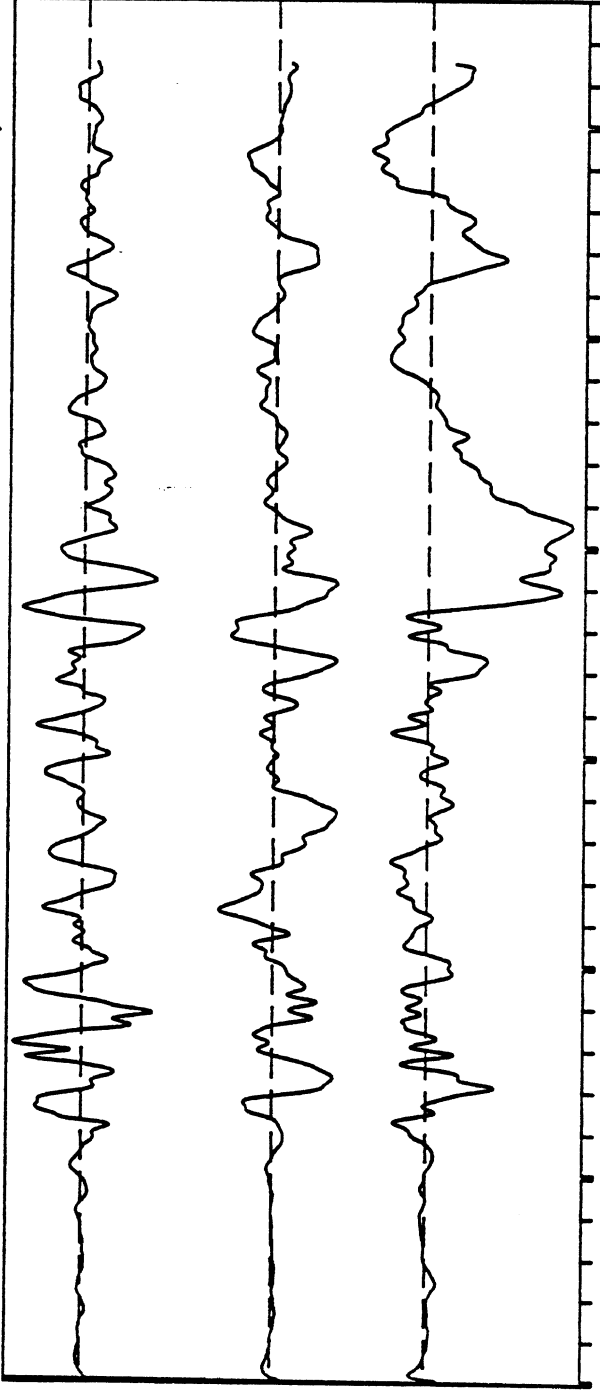
PEAKS

Fz (I-S) -189

Fy (L-R) -165

Fx (A-P) -375

Resultant 390



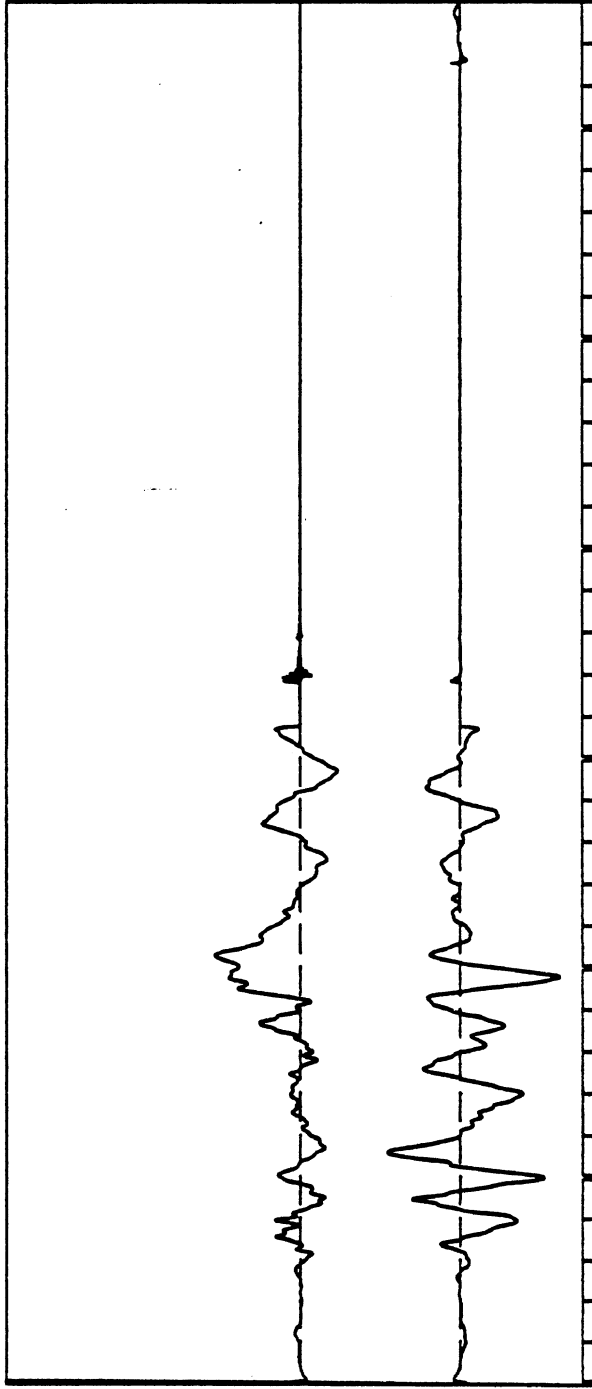
S. COLUMN FORCES (LB)

R-2

L A D Y W A R

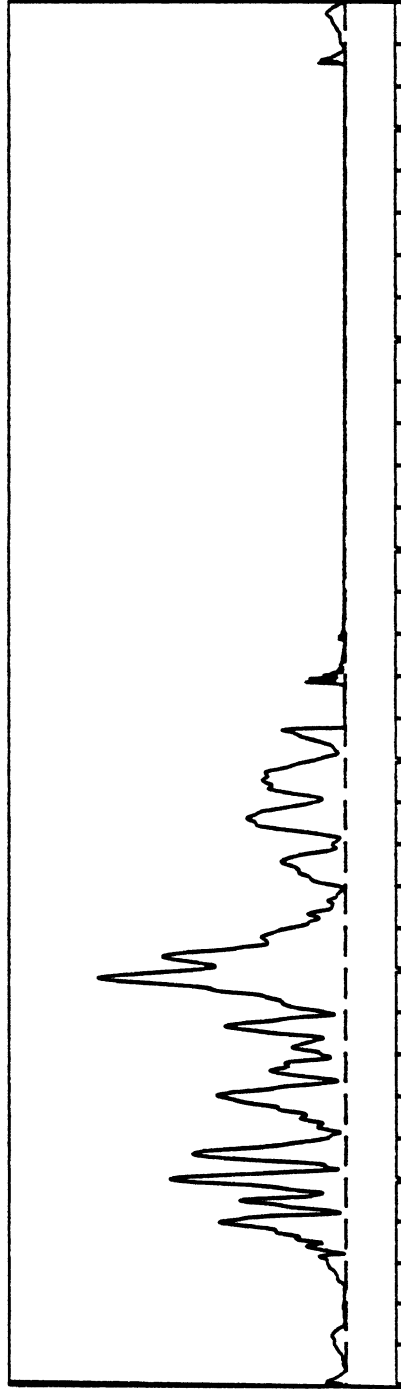
DEC 11, 1981

PEAKS



My (L-R) 1769

Mx (A-P)

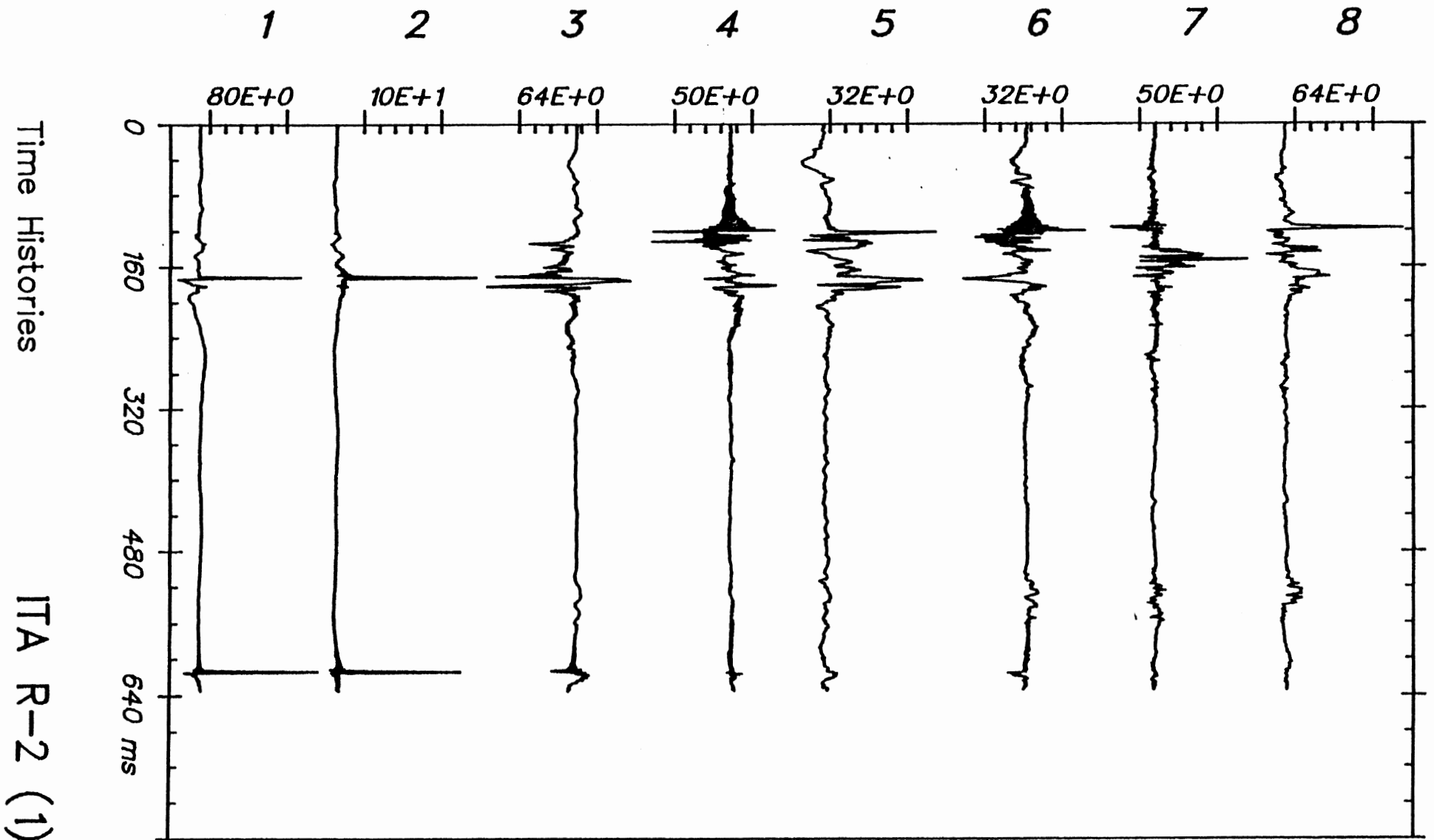


Resultant 2946

200 250 300 350 400 450 500 msec

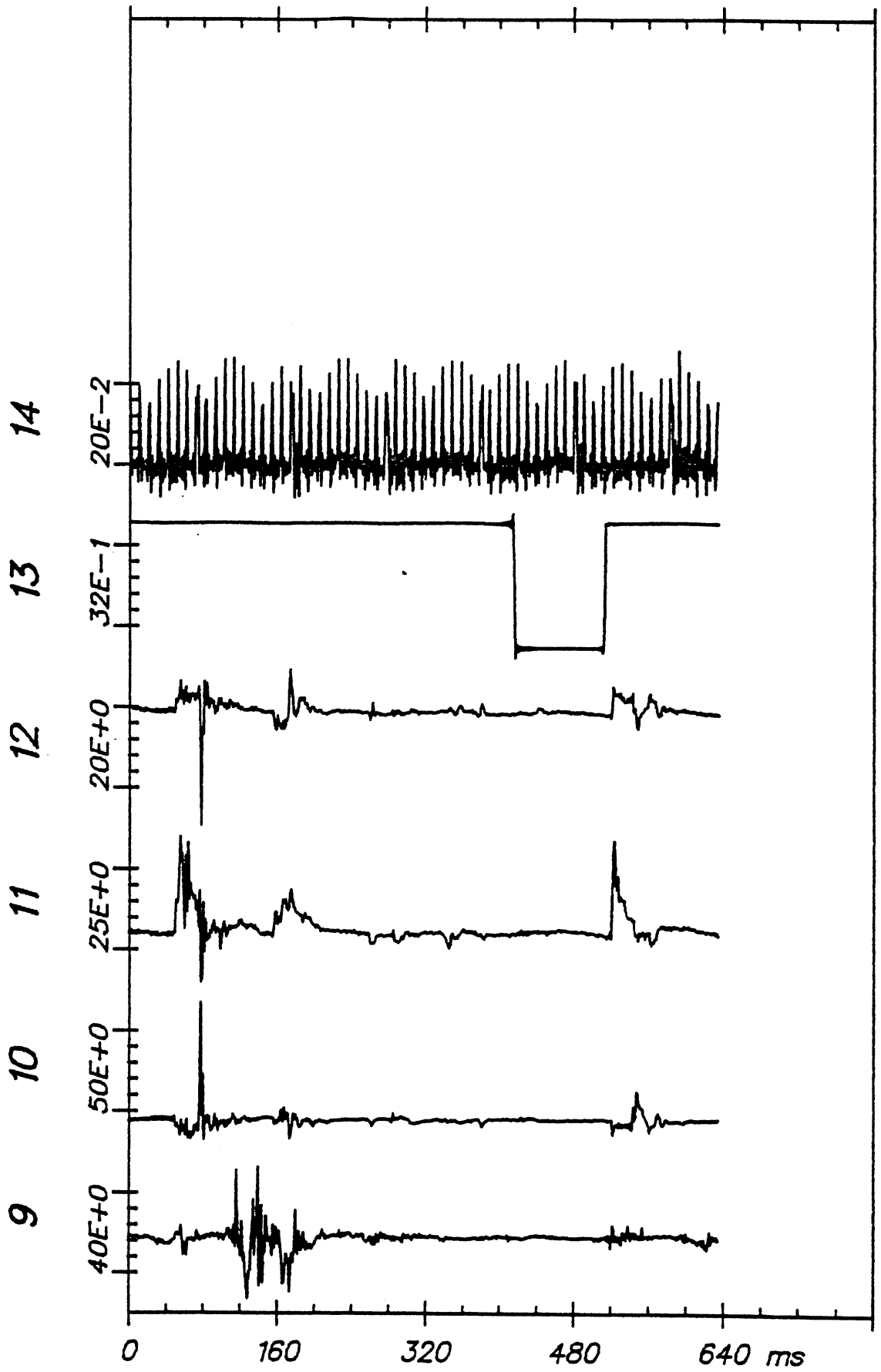
S. COLUMN MOMENTS (IN-LB)

R-2



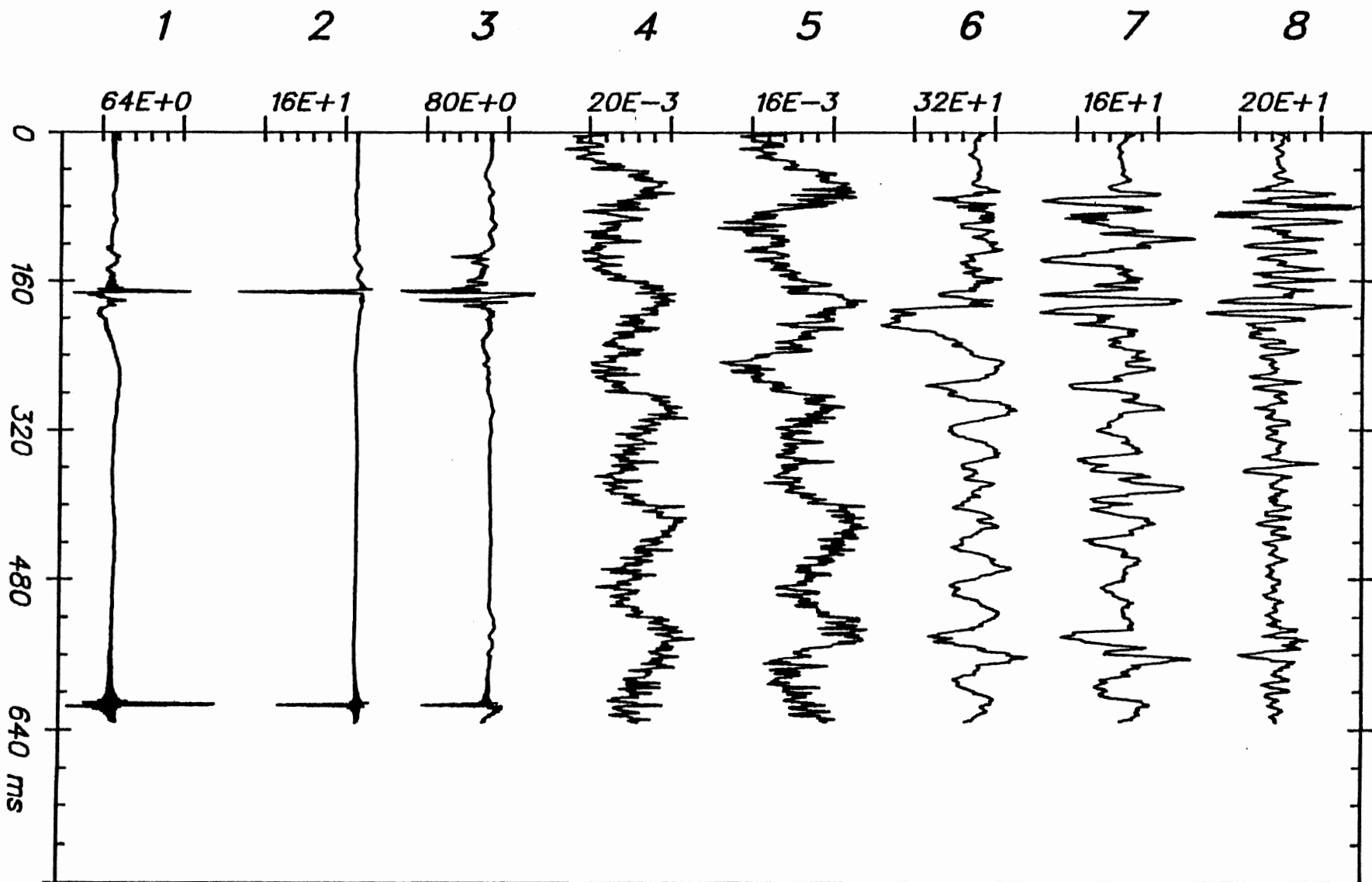
DEC 2, 1981

From HSRI-175 to 81-SORT, file 166: /9/10/11/12/13/14/-/-/



Time Histories

ITA R-2 (1)

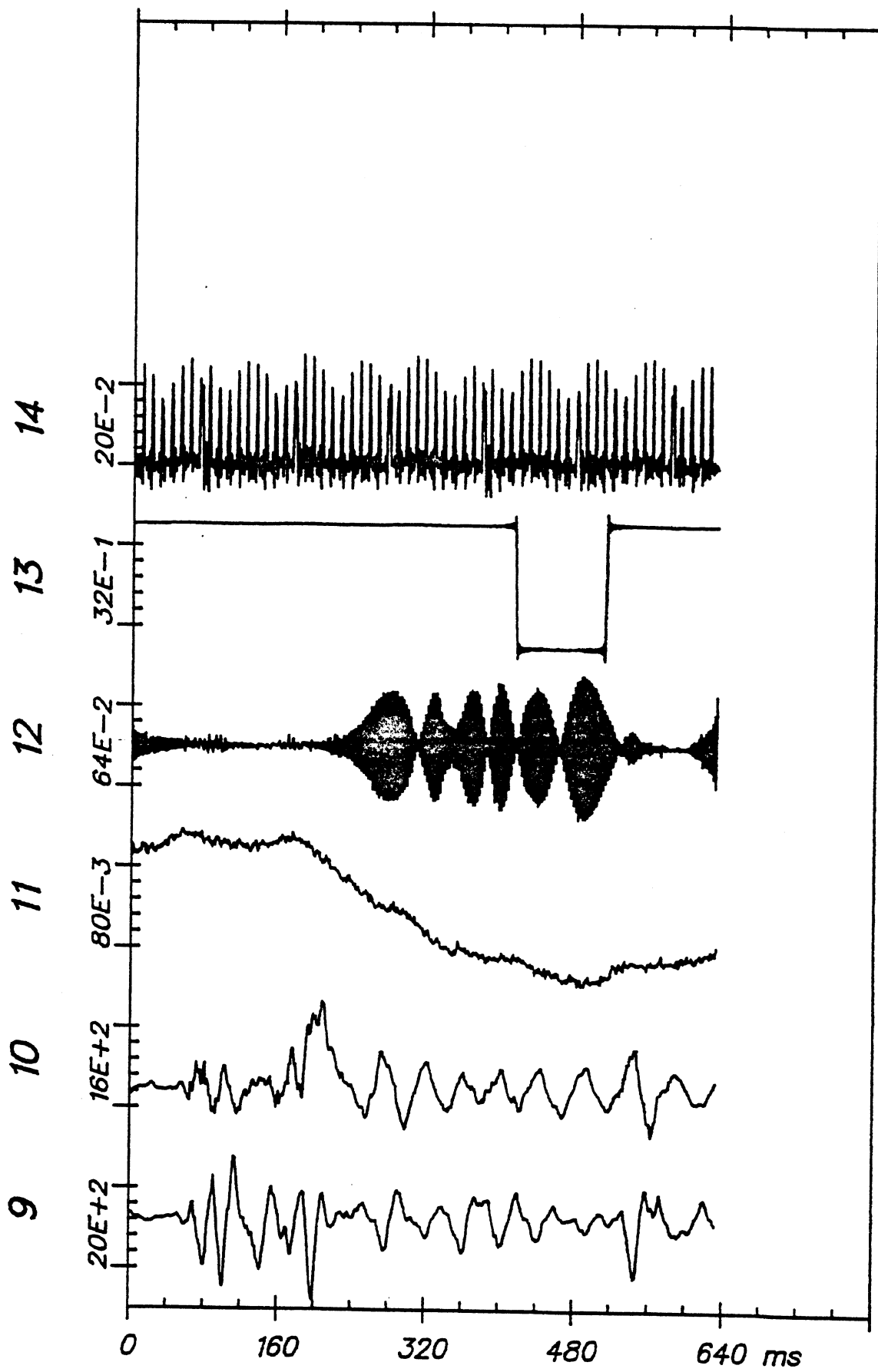


Time Histories

ITA R-2 (2)

DEC 2, 1981

From HSRI-176 to 81-SORT, file 176: /9/10/11/12/13/14/-/-/



Time Histories

ITA R-2 (2)

LA DY W AR		Test No. R-3	S U M M A R Y			
			Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)						
	P-A acc	...	-24	439	131	505
	R-L acc	...	-8	380	243	505
	I-S acc	...	-132	504	105	505
	Resultant	...			298	504
	HIC =	709 ...		503		505

CHEST ACCELERATIONS (G)						
	P-A acc	...	-22	463	11	510
	R-L acc	...	-15	510	32	506
	I-S acc	...	-12	498	8	430
	Resultant	...			35	506

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-86	427	39	503
	R-L acc	...	-17	435	126	428
	I-S acc	...	-21	437	75	427
	Resultant	...			165	427

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-9	385	21	397
	Ay (L-R)	...	-6	561	23	374
	Az (I-S)	...	-8	395	8	470
	Resultant	...			24	374

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	-436	472	206	442
	Fy (L-R)	...	-232	456	139	482
	Fz (I-S)	...	-131	409	459	484
	Resultant	...			564	466

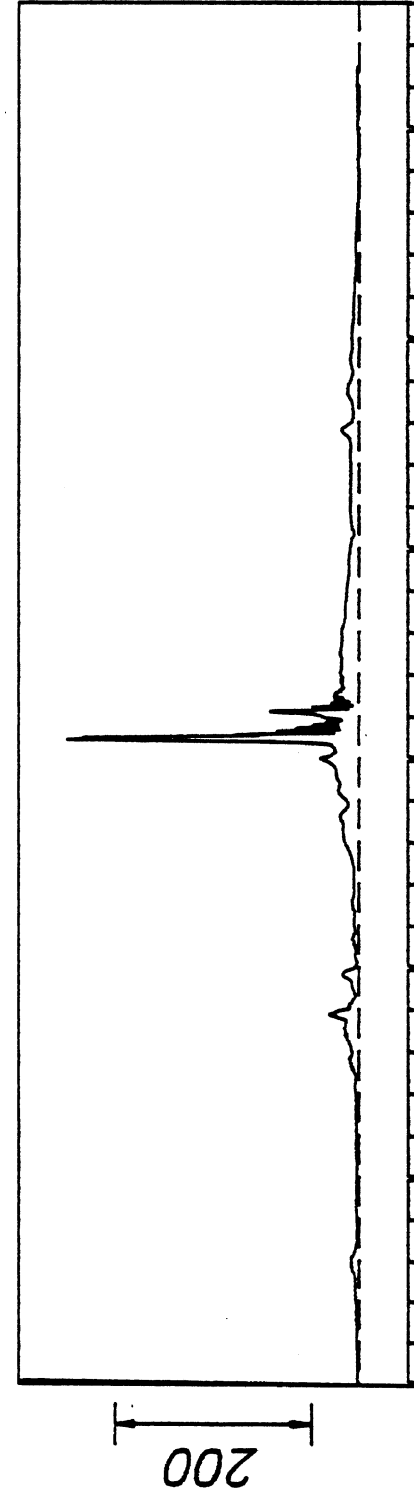
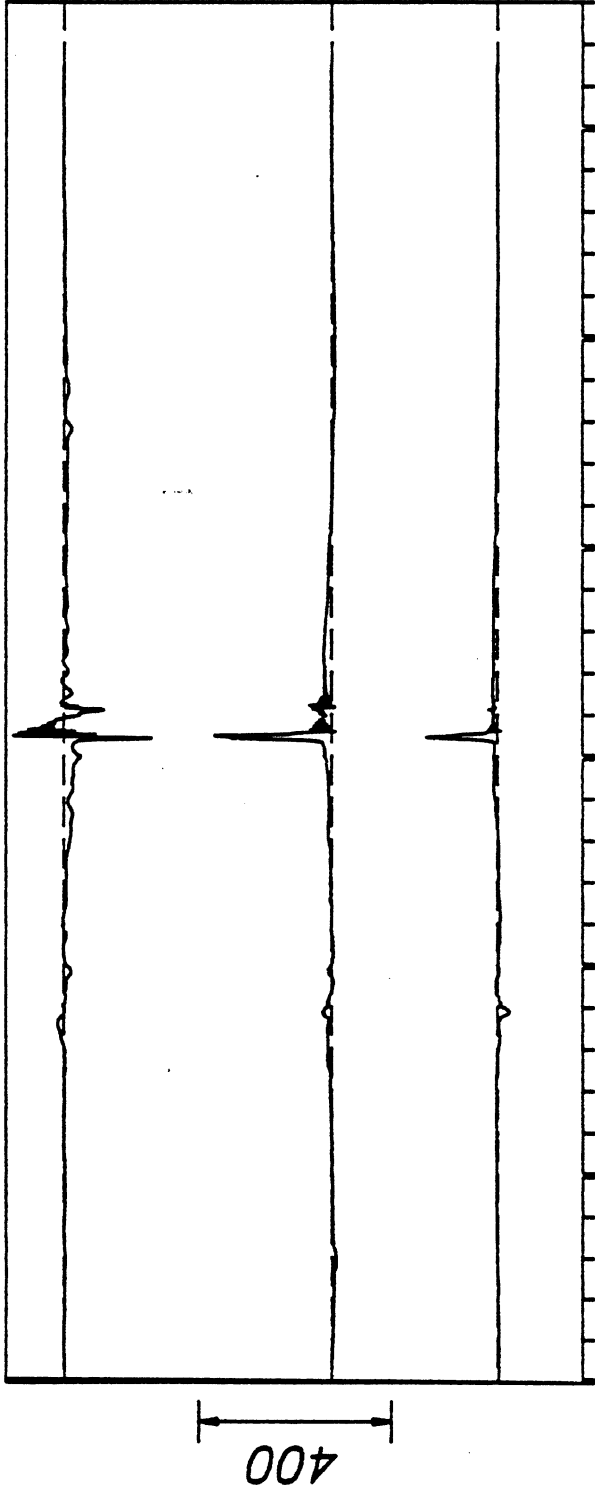
S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	-4430	389	2872	702
	My (L-R)	...	-817	371	2872	386
	Mz (I-S)	...				
	Resultant	...			5795	702

KNEE & BELTS LOADS (LB)						
	LT Knee	...				
	RT Knee	...				
	LT Belt	...	0	0	0	0
	RT Belt	...	0	0	0	0

L A D Y W A R

DEC 11, 1981

PEAKS



R-3

L A D Y W A R

DEC 11, 1981

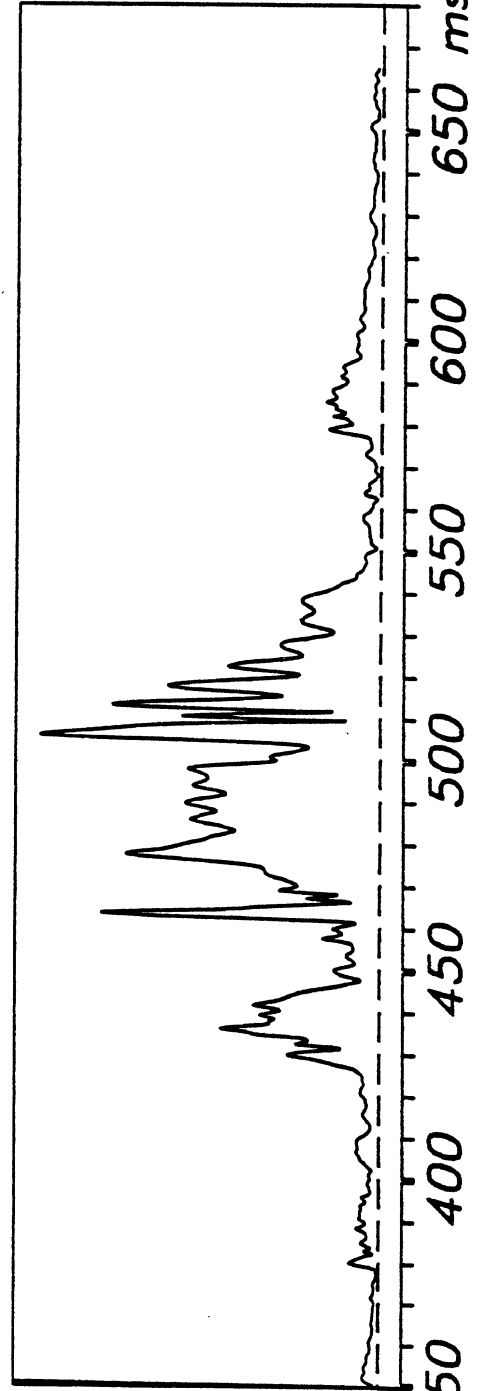
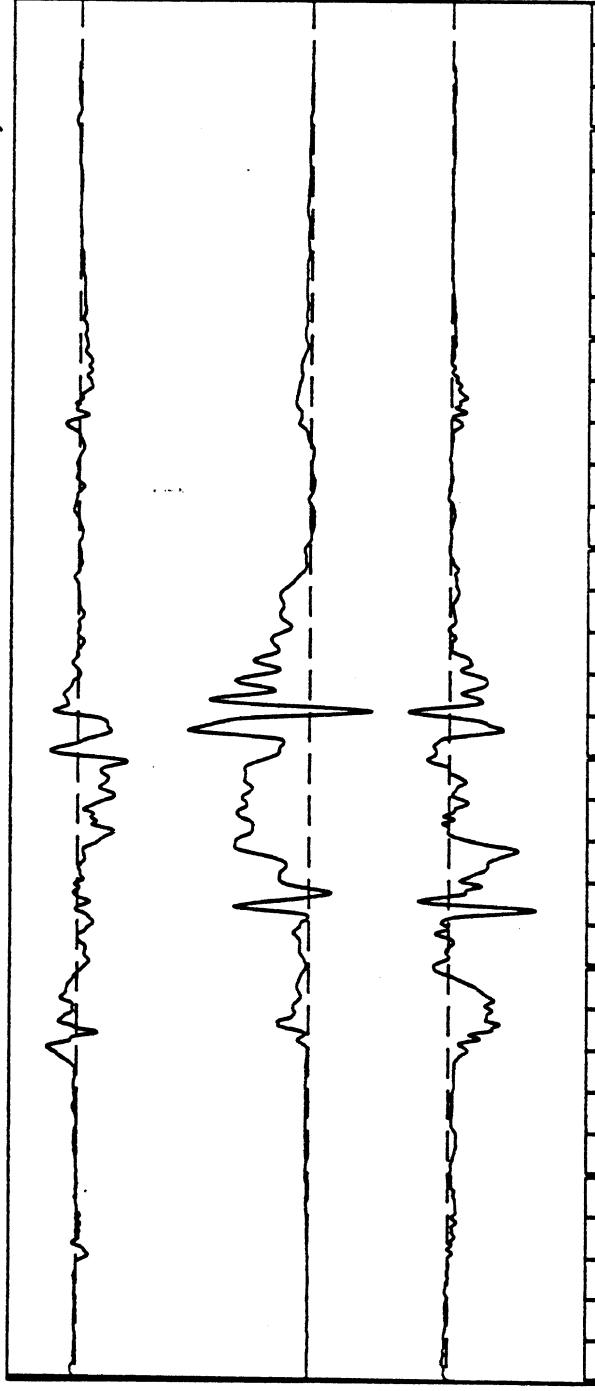
PEAKS

I-S acc -13

R-L acc 31

P-A acc -23

Resultant 35



CHEST ACCELERATIONS (G)

R-3

L A D Y W A R

DEC 11, 1981

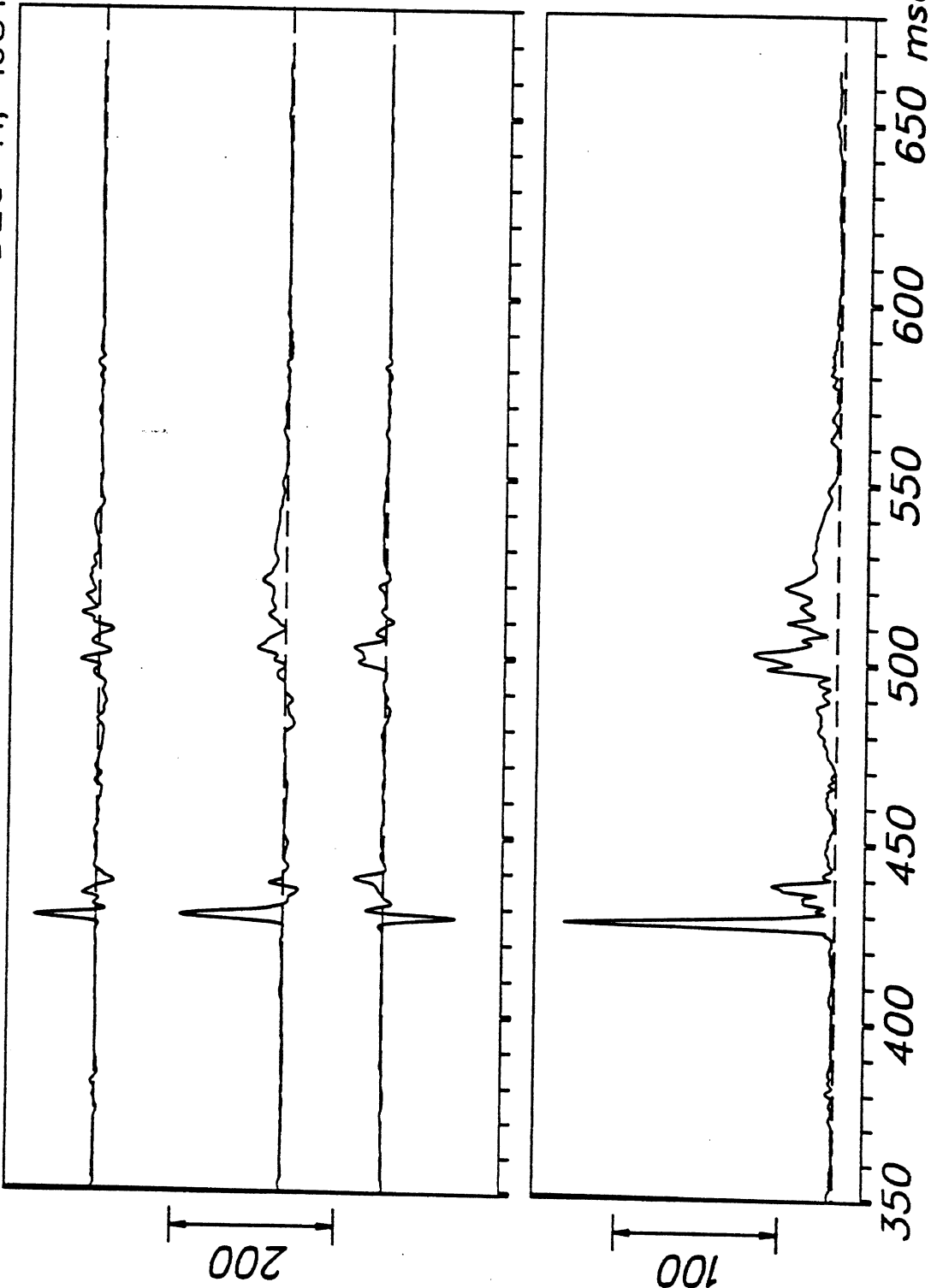
PEAKS

I-S acc 74

R-L acc 126

P-A acc -87

Resultant 164



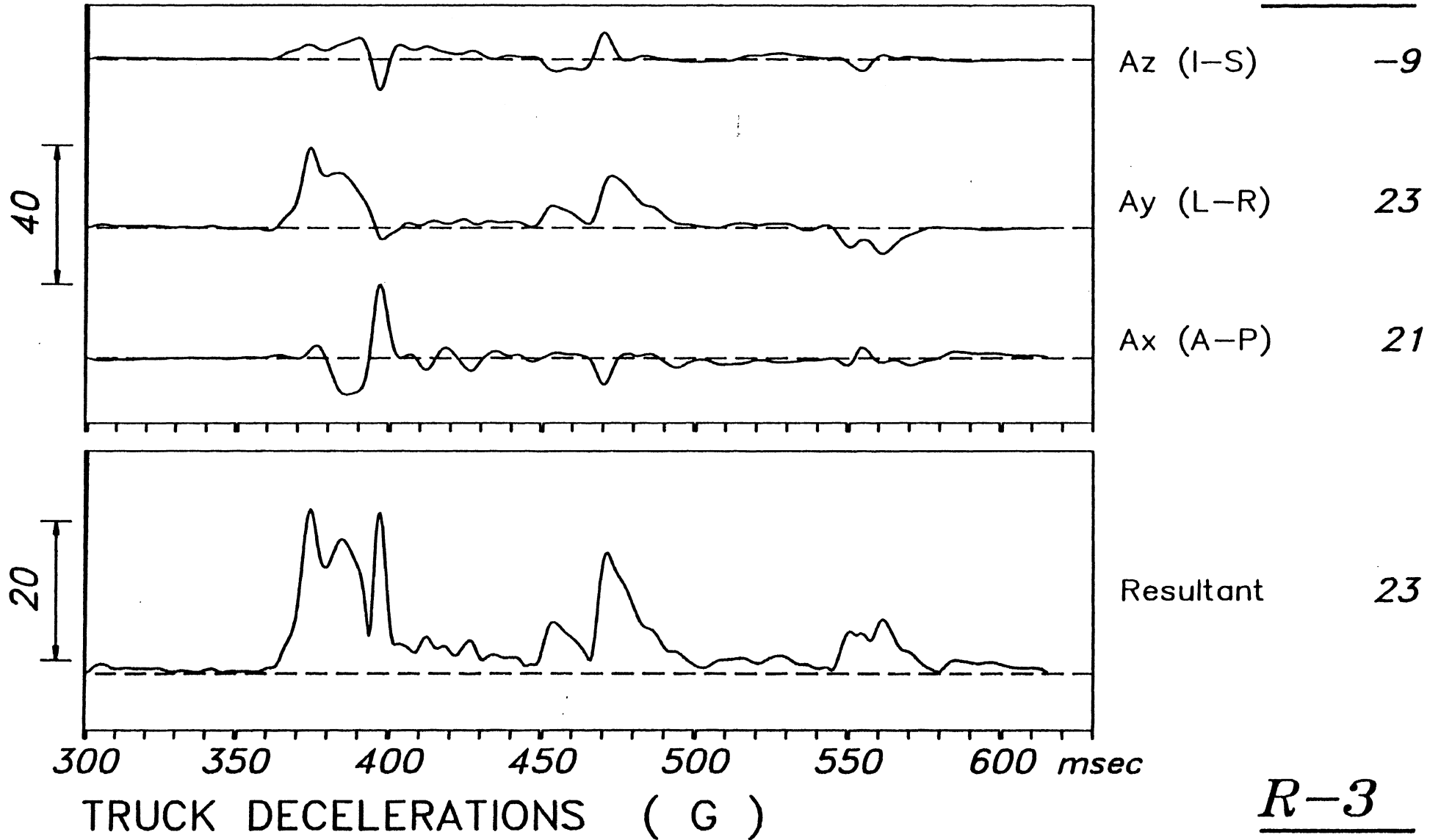
PELVIS ACCELERATIONS (G)

R-3

LA DY W AR

DEC 11, 1981

PEAKS



R-3

L A D Y W A R

DEC 11, 1981

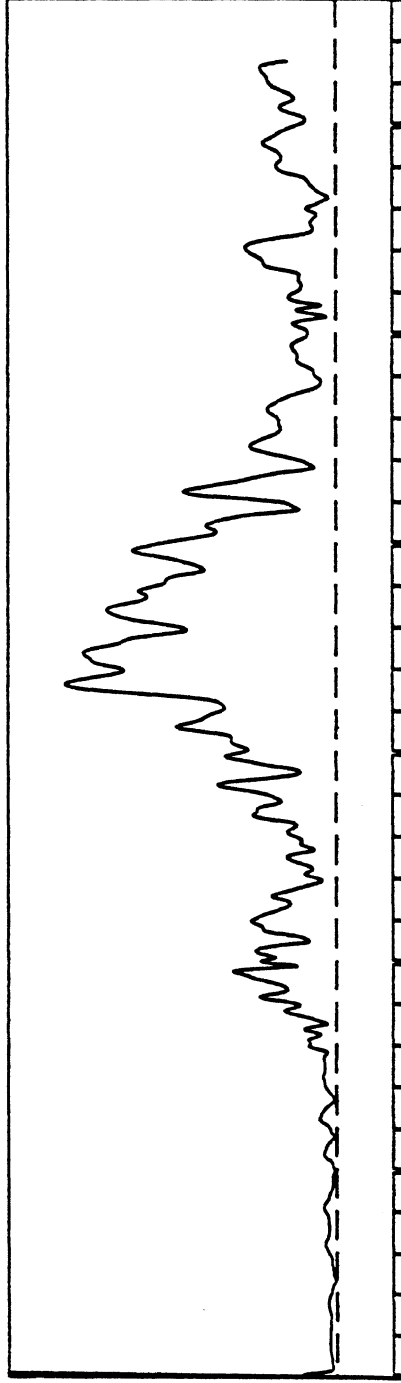
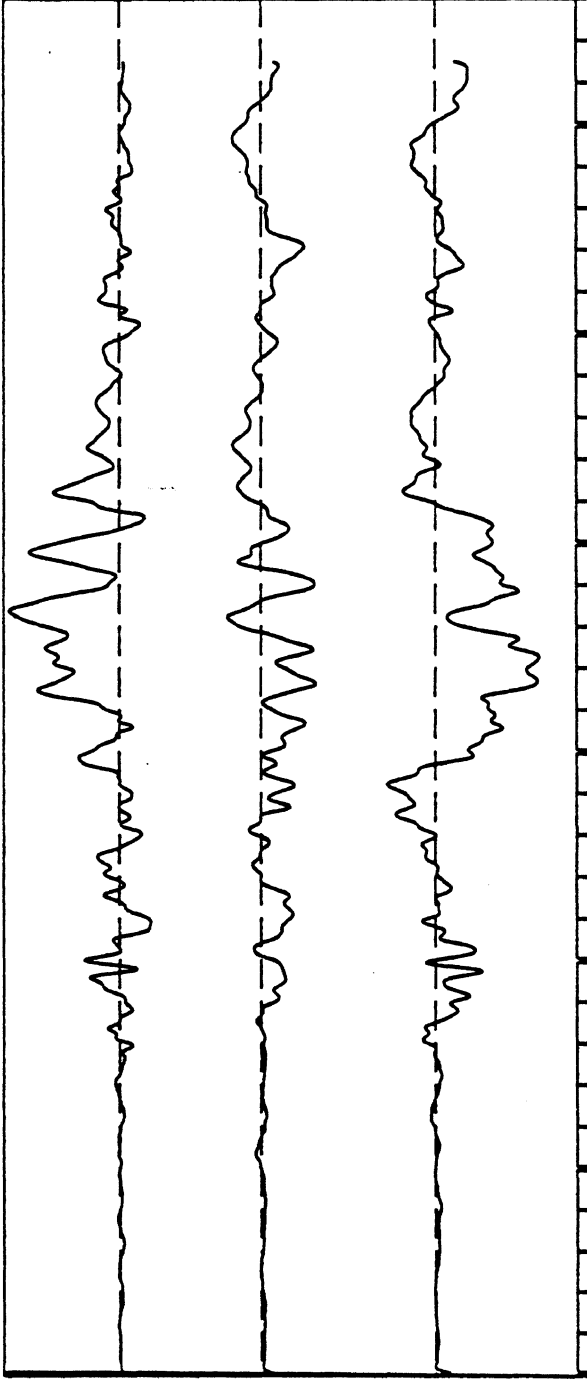
PEAKS

Fz (I-S) 458

Fy (L-R) -233

Fx (A-P) -437

Resultant 564



300 350 400 450 500 550 600 msec

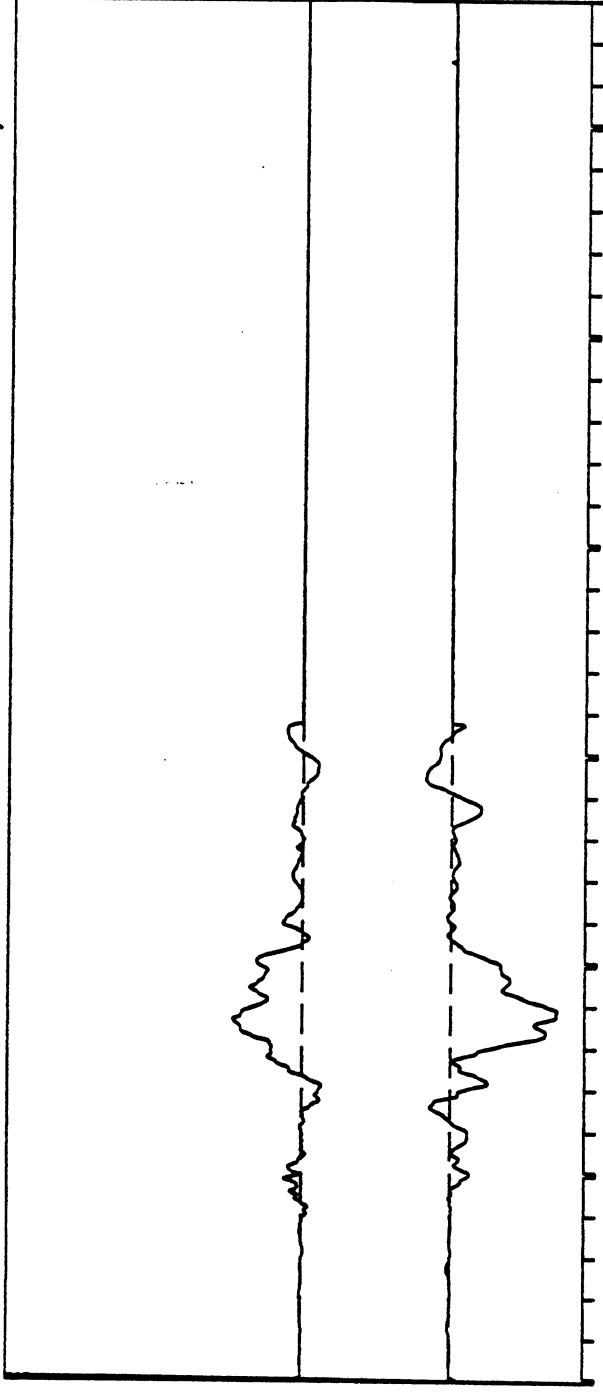
S. COLUMN FORCES (LB)

R-3

L A D Y W A R

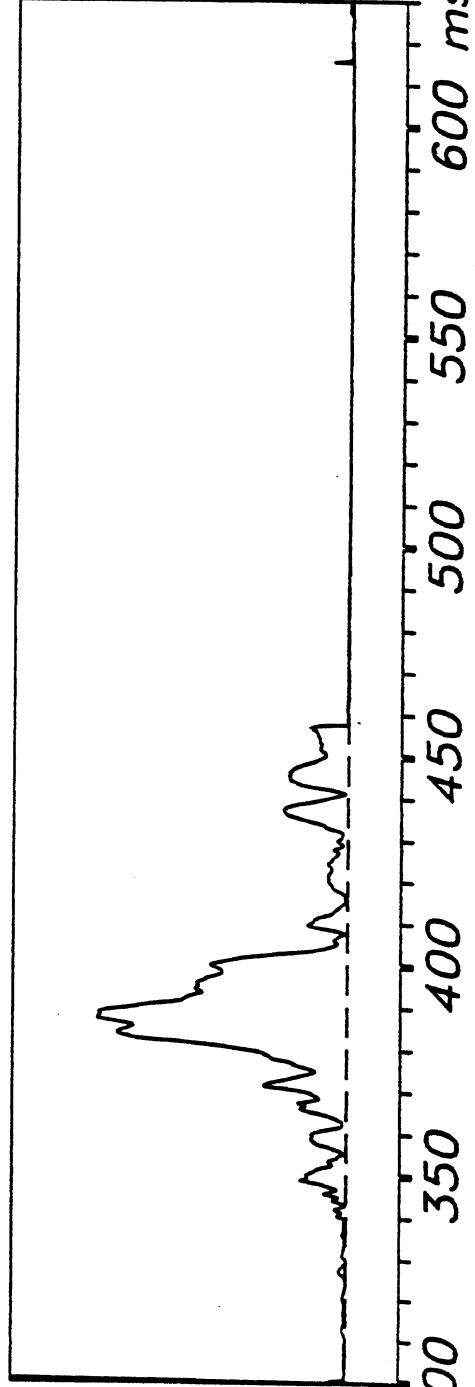
DEC 11, 1981

PEAKS



My (L-R) 2872

Mx (A-P)



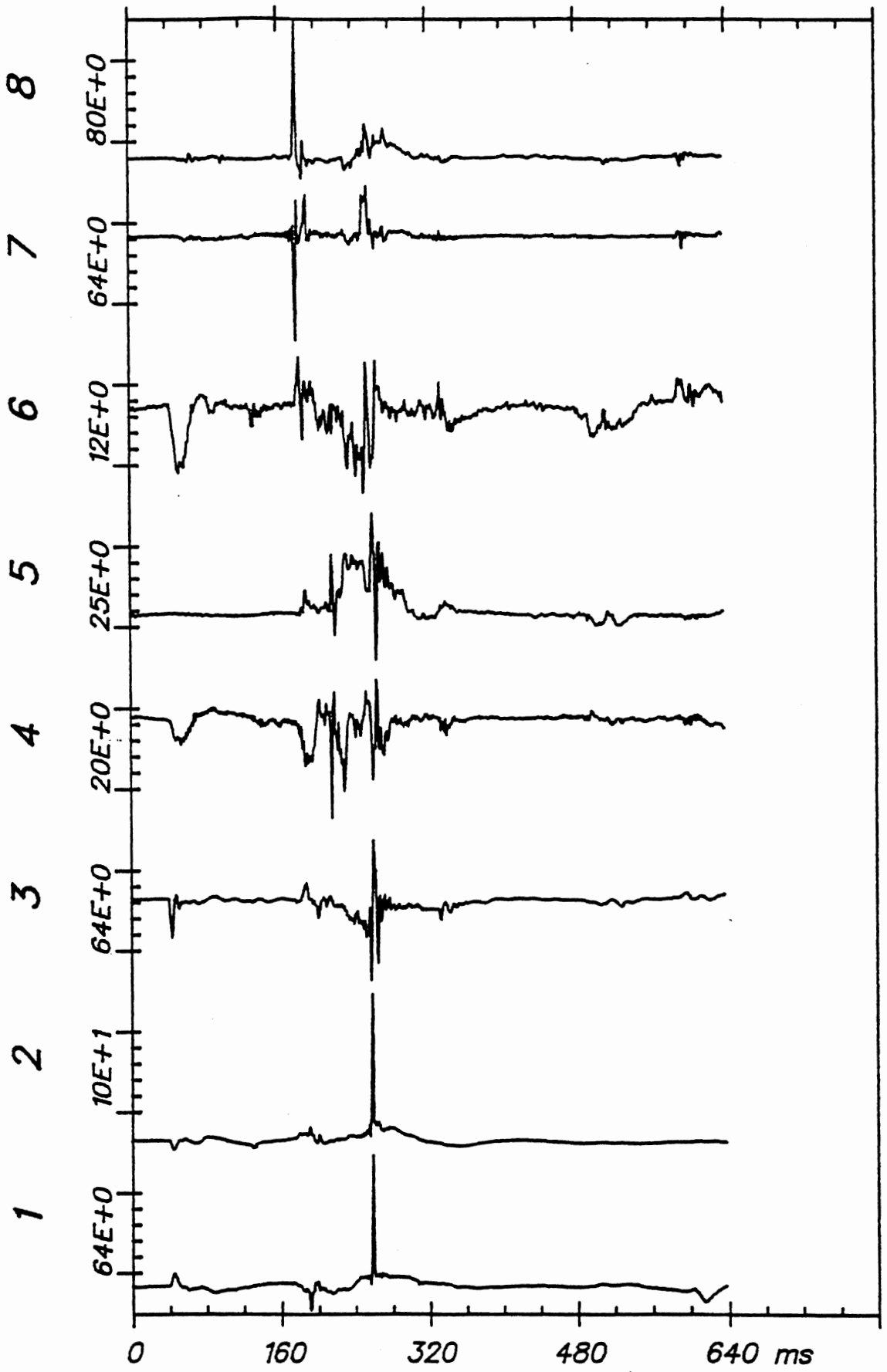
Resultant 5794

S. COLUMN MOMENTS (IN-LB)

R-3

From HSRI-175 to 81-SORT, file 167: /1/2/3/4/5/6/7/8/

DEC 2, 1981

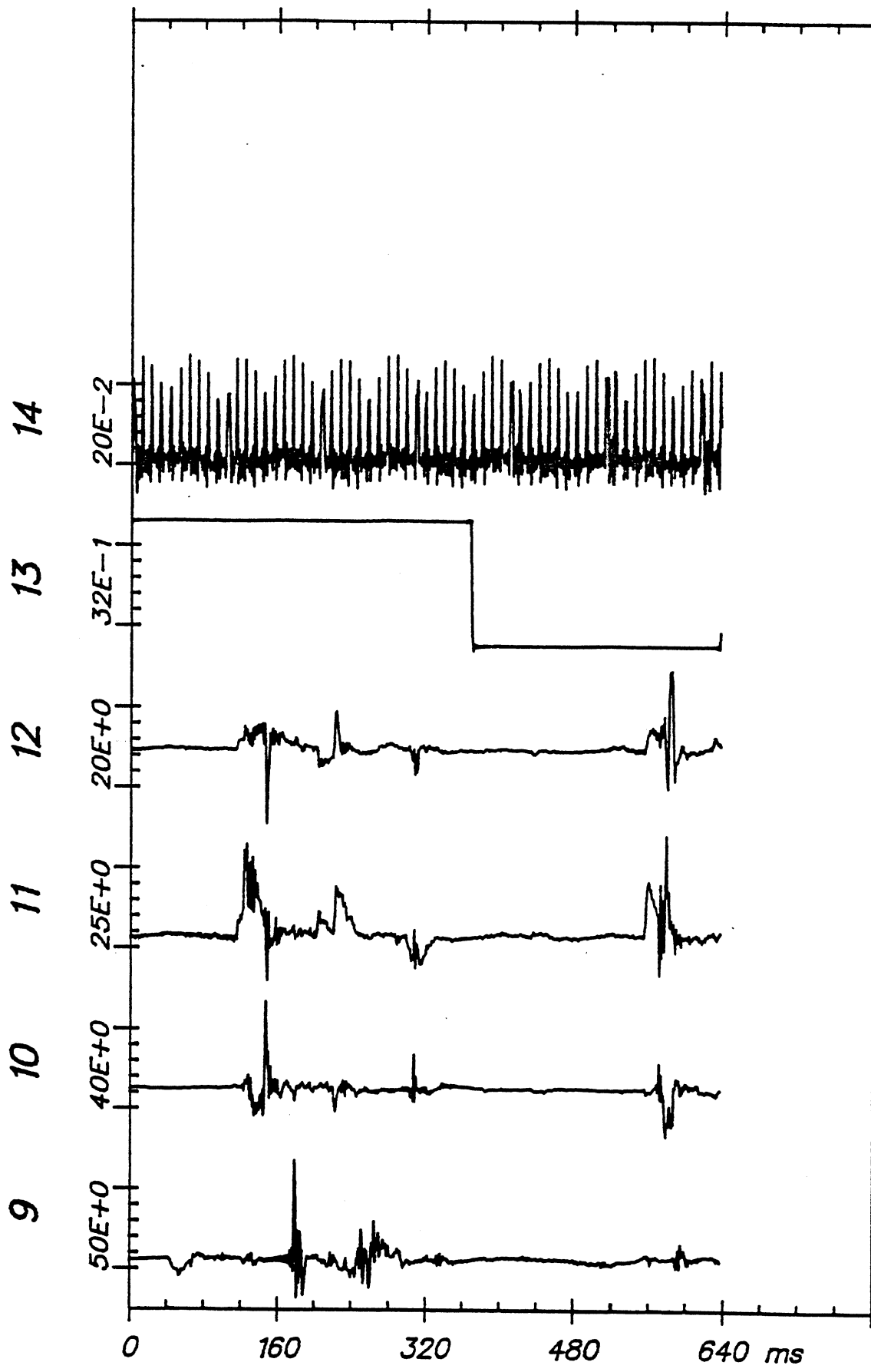


Time Histories

ITA R-3 (1)

DEC 2, 1981

From HSRI-175 to 81-SORT, file 167: /9/10/11/12/13/14/-/-/

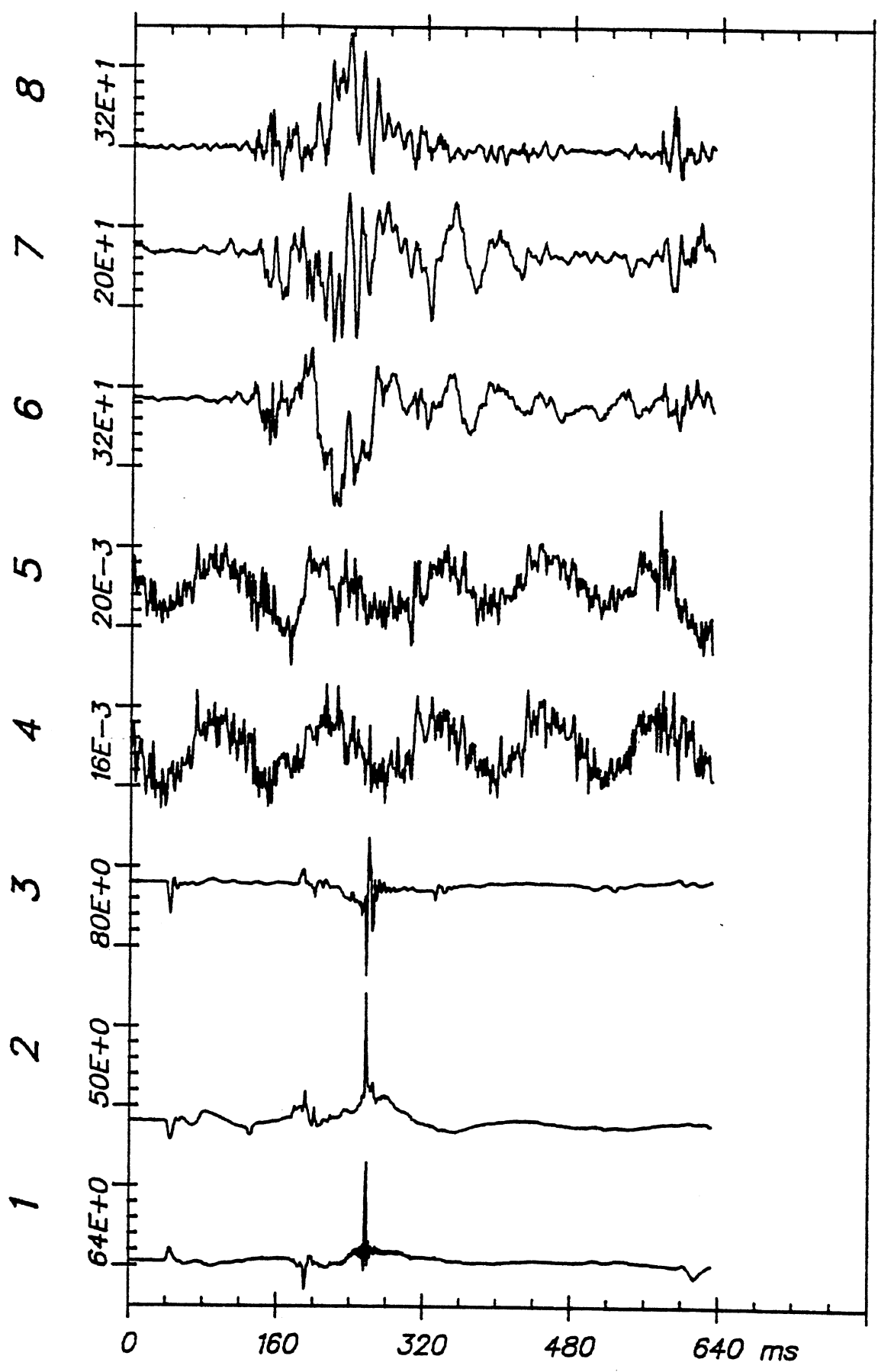


Time Histories

ITA R-3 (1)

From HSRI-176 to 81-SORT, file 177: /1/2/3/4/5/6/7/8/

DEC 2, 1981



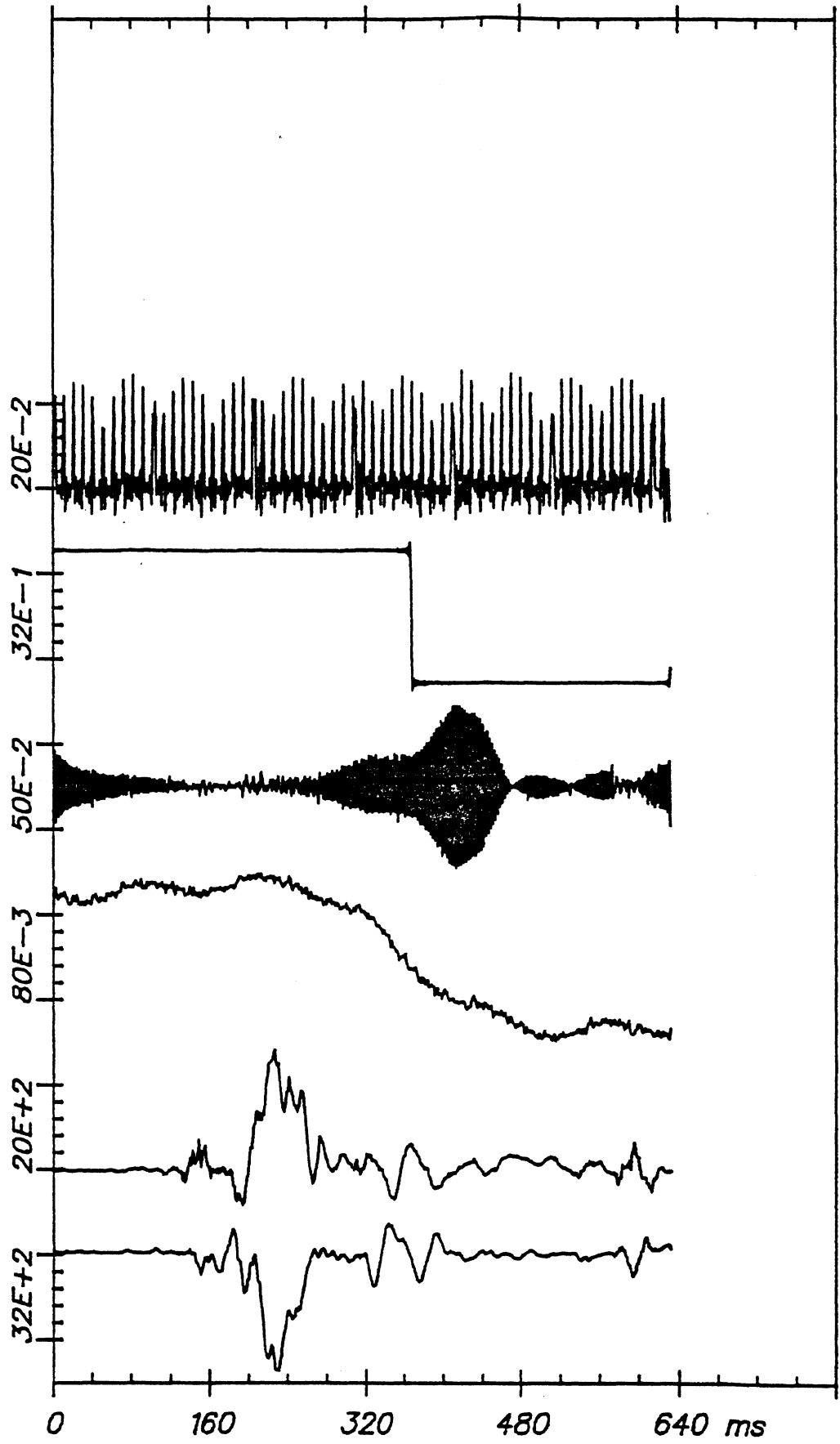
Time Histories

ITA R-3 (2)

DEC 2, 1981

From HSRI-176 to 81-SORT, file 177: /9/10/11/12/13/14/-/-/

9 10 11 12 13 14



Time Histories

ITA R-3 (2)

LA DY W/O SB		Test No. S-1	S U M M A R Y			
			Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)						
	P-A acc	...	-59	429	82	429
	R-L acc	...	-73	399	328	429
	I-S acc	...	-192	429	105	429
	Resultant	...			371	429
	HIC =	790 ...		427		432

CHEST ACCELERATIONS (G)						
	P-A acc	...	-42	400	18	434
	R-L acc	...	-18	420	71	399
	I-S acc	...	-30	394	38	390
	Resultant	...			83	398

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-32	398	56	395
	R-L acc	...	-19	396	200	390
	I-S acc	...	-23	395	30	385
	Resultant	...			202	390

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-14	336	26	343
	Ay (L-R)	...	-9	539	23	324
	Az (I-S)	...	-11	344	6	323
	Resultant	...			29	343

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	-459	440	208	417
	Fy (L-R)	...	-187	435	144	555
	Fz (I-S)	...	-223	354	186	422
	Resultant	...			421	440

S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	-1276	324	2607	660
	My (L-R)	...	-751	402	2607	345
	Mz (I-S)	...				
	Resultant	...			3871	660

KNEE & BELTS LOADS (LB)						
	LT Knee	...				
	RT Knee	...				
	LT Belt	...	0	0	0	0
	RT Belt	...	0	0	0	0

LA DY W/O SB

DEC 11, 1981

PEAKS

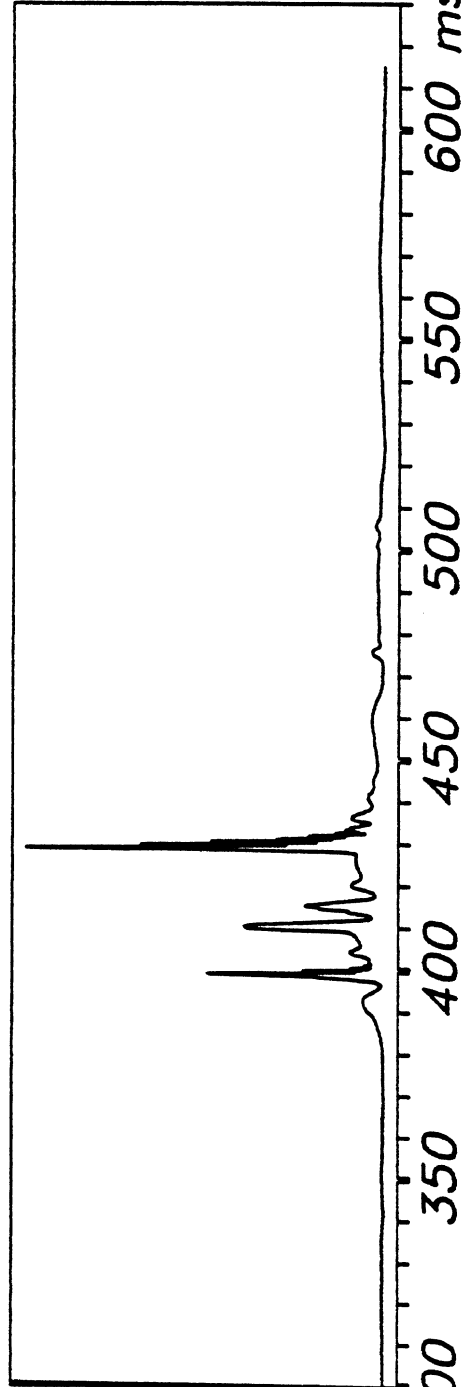
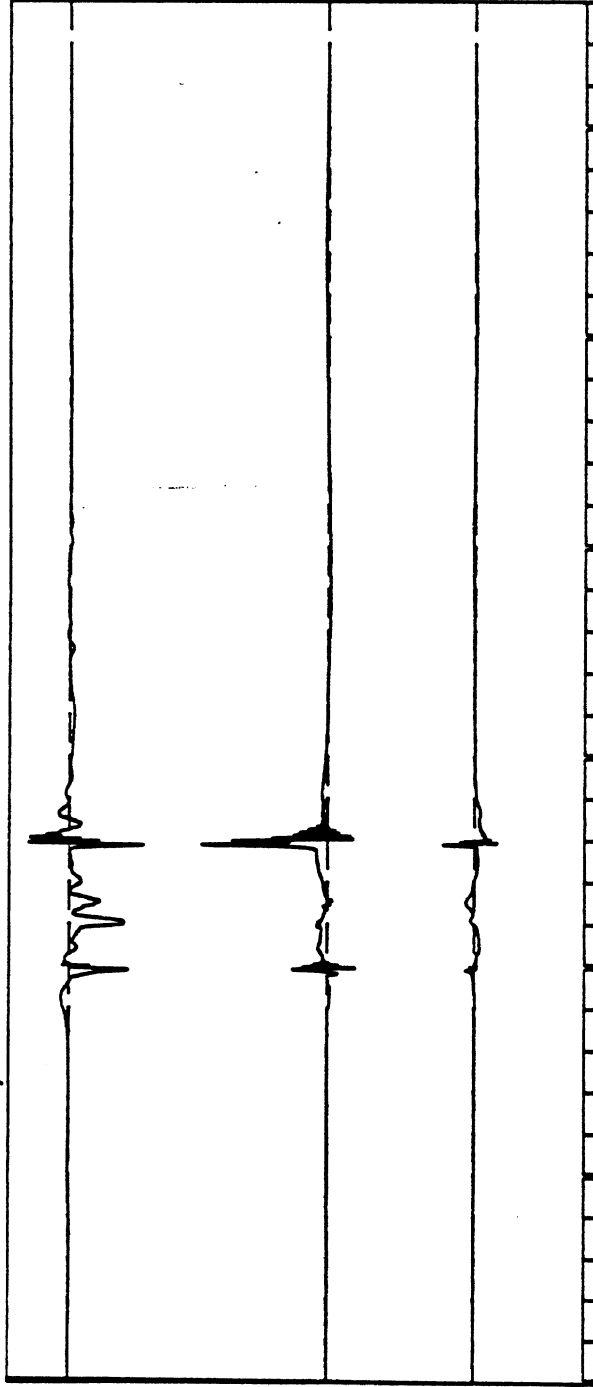
I-S acc -193

R-L acc 327

P-A acc 81

HIC = 790

Resultant 371



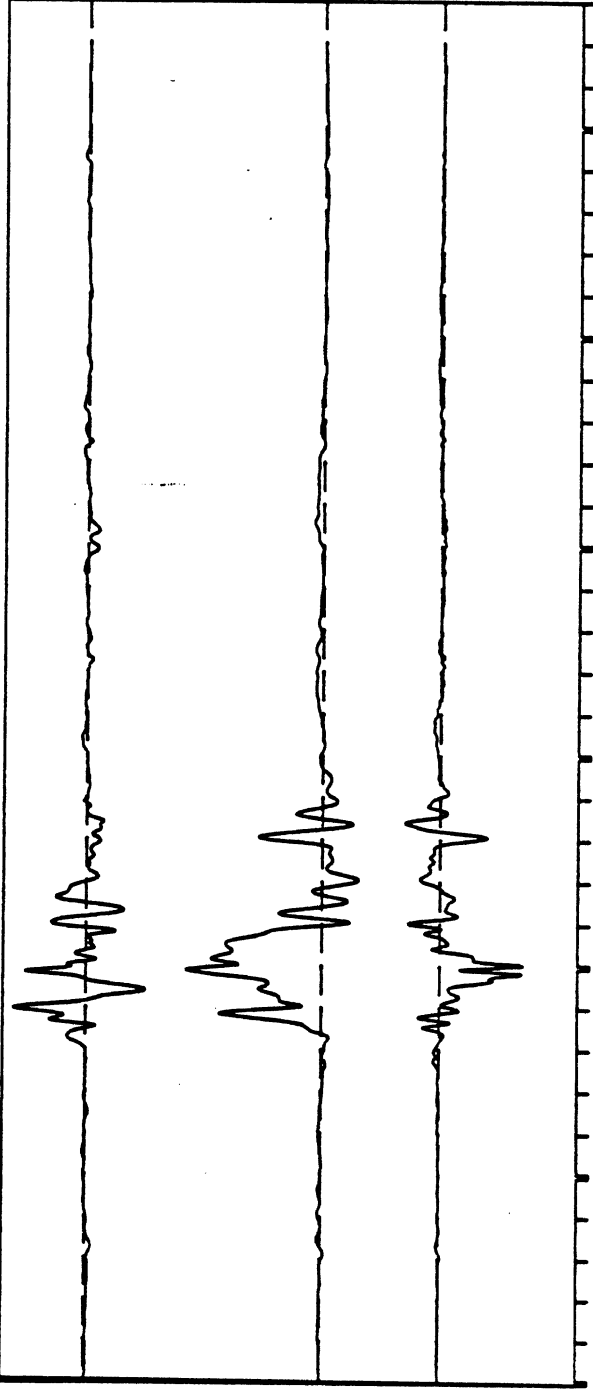
HEAD ACCELERATIONS (G)

S-1

L.A DY W/O SB

DEC 11, 1981

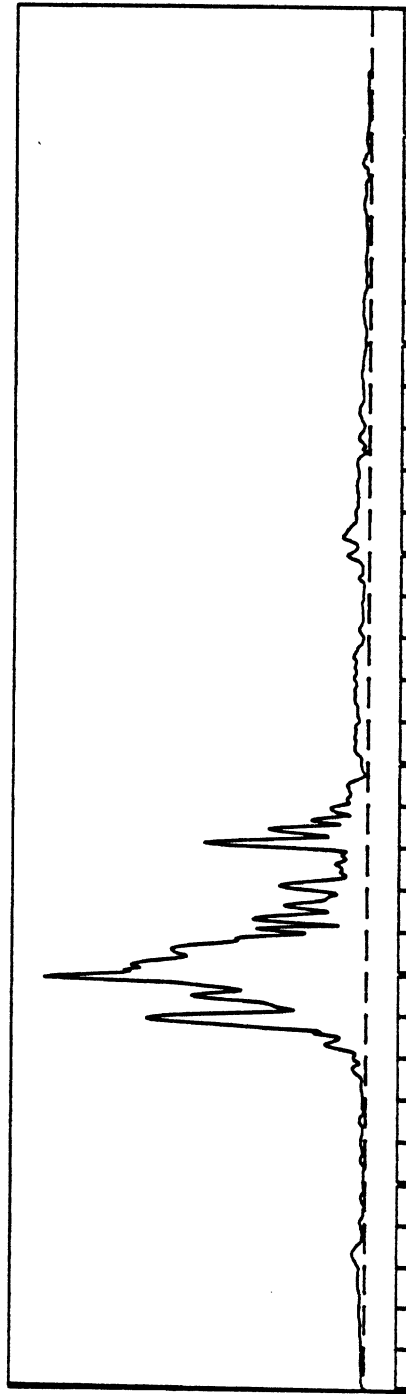
PEAKS



I-S acc 37

R-L acc 70

P-A acc -43



Resultant 82

300 350 400 450 500 550 600 msec

CHEST ACCELERATIONS (G)

S-1

L A D Y W / O S B

DEC 11, 1981

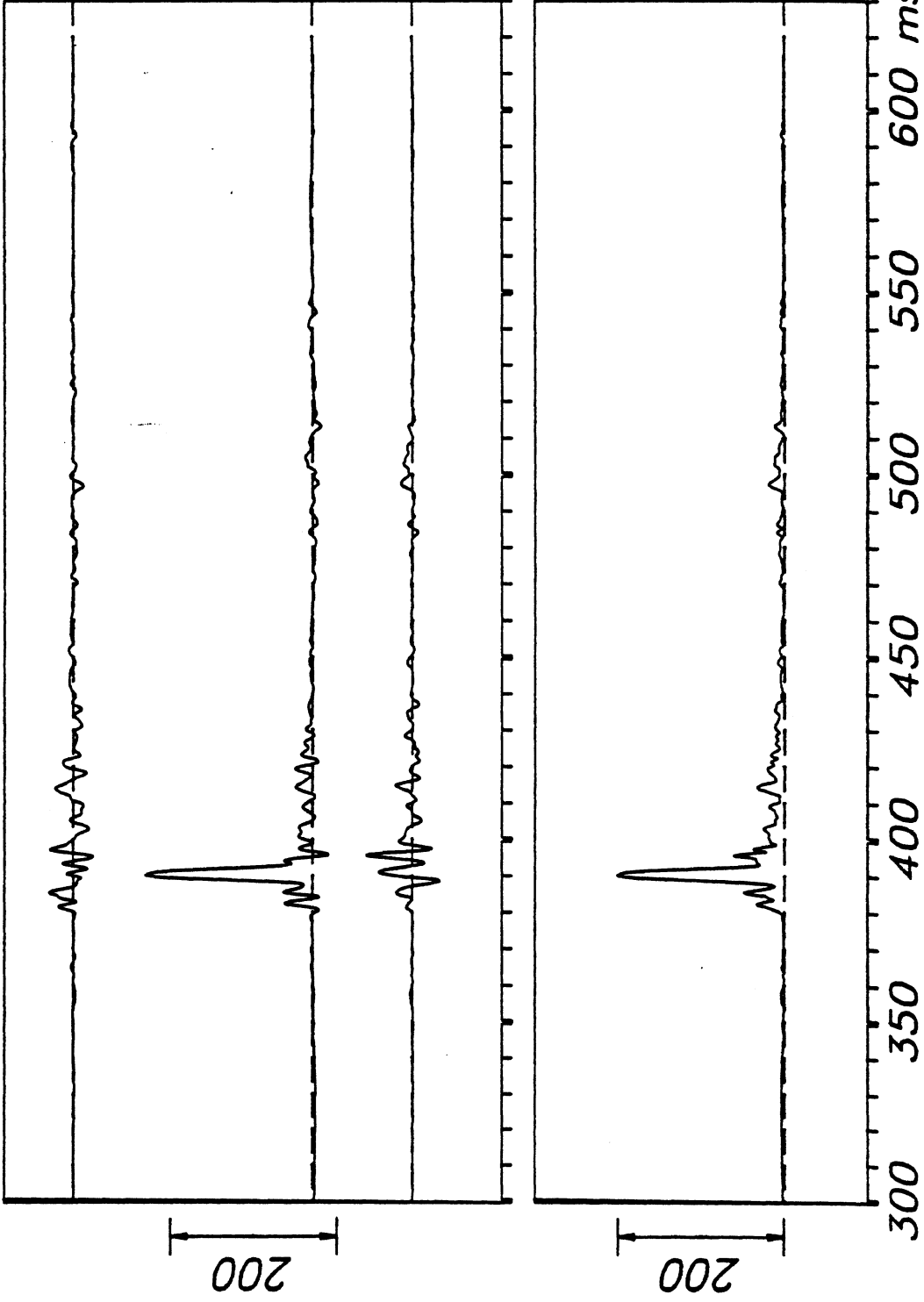
PEAKS

I-S acc 29

R-L acc 200

P-A acc 56

Resultant 201



PELVIS ACCELERATIONS (G)

S-1

L.A DY W/O SB

DEC 11, 1981

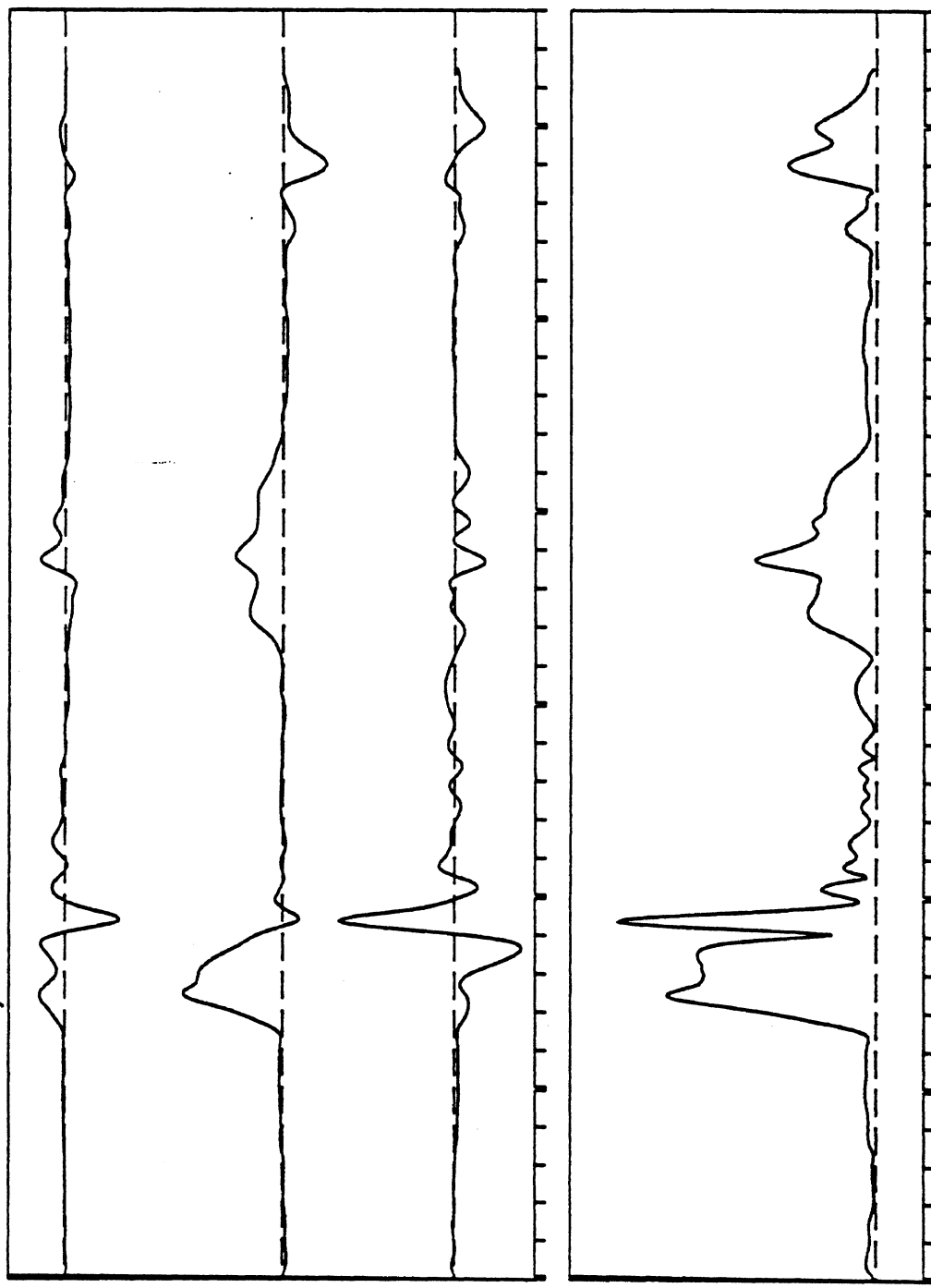
PEAKS

Az (I-S) -12

Ay (L-R) 22

Ax (A-P) 26

Resultant 29



250 300 350 400 450 500 550 msec

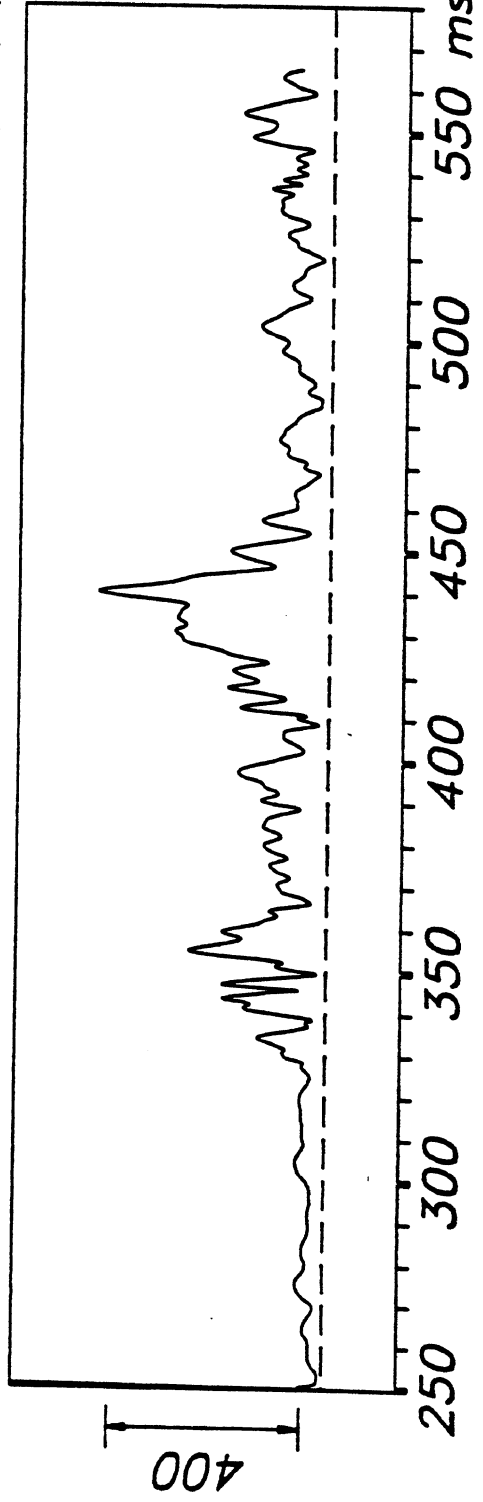
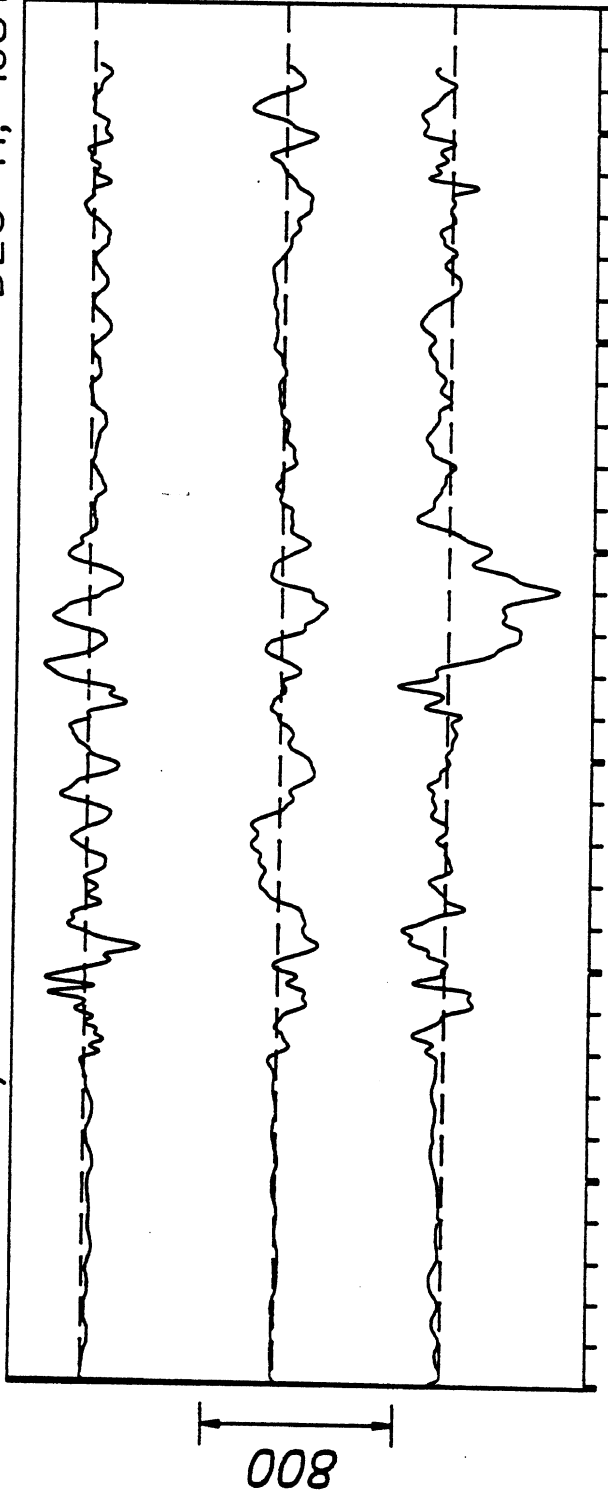
TRUCK DECELERATIONS (G)

S-1

LA DY W/O SB

DEC 11, 1981

PEAKS



Resultant 480

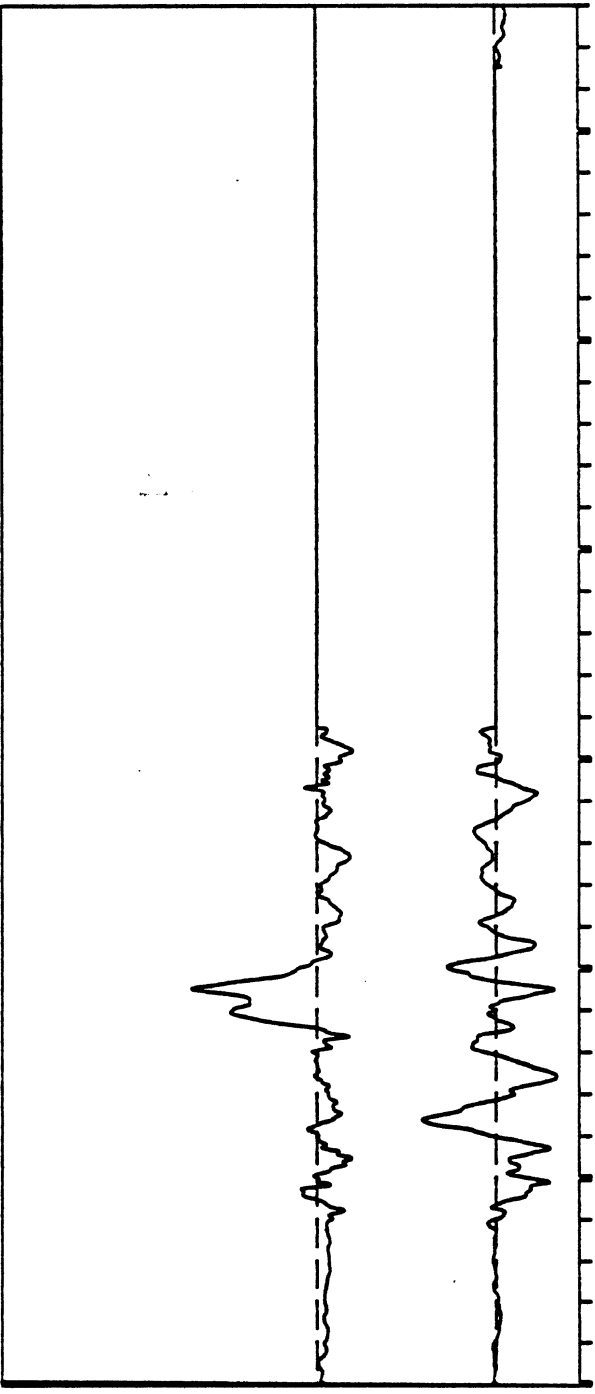
S. COLUMN FORCES (LB)

S-1

L A D Y W / O S B

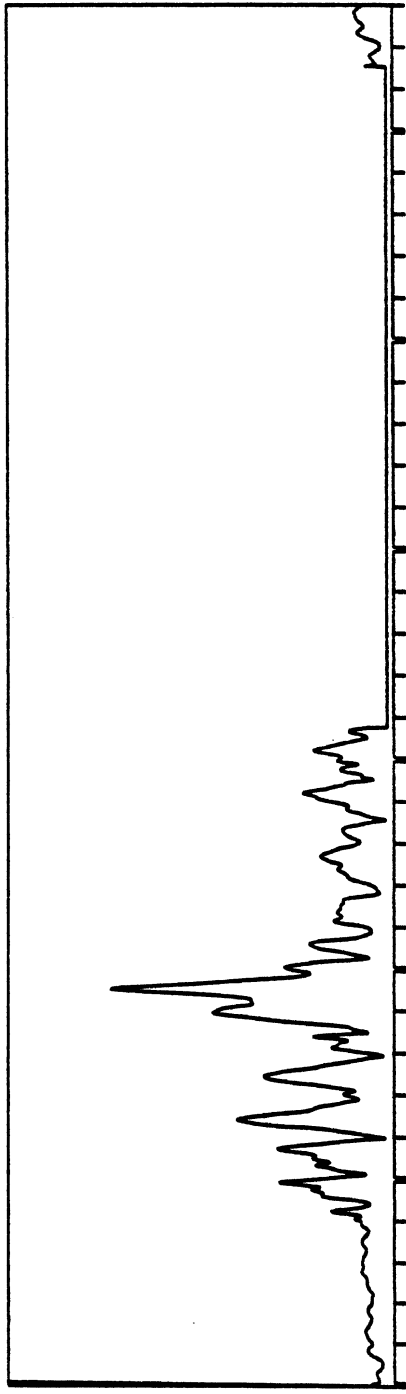
DEC 11, 1981

PEAKS



My (L-R) 2606

Mx (A-P) 2606



Resultant 3870

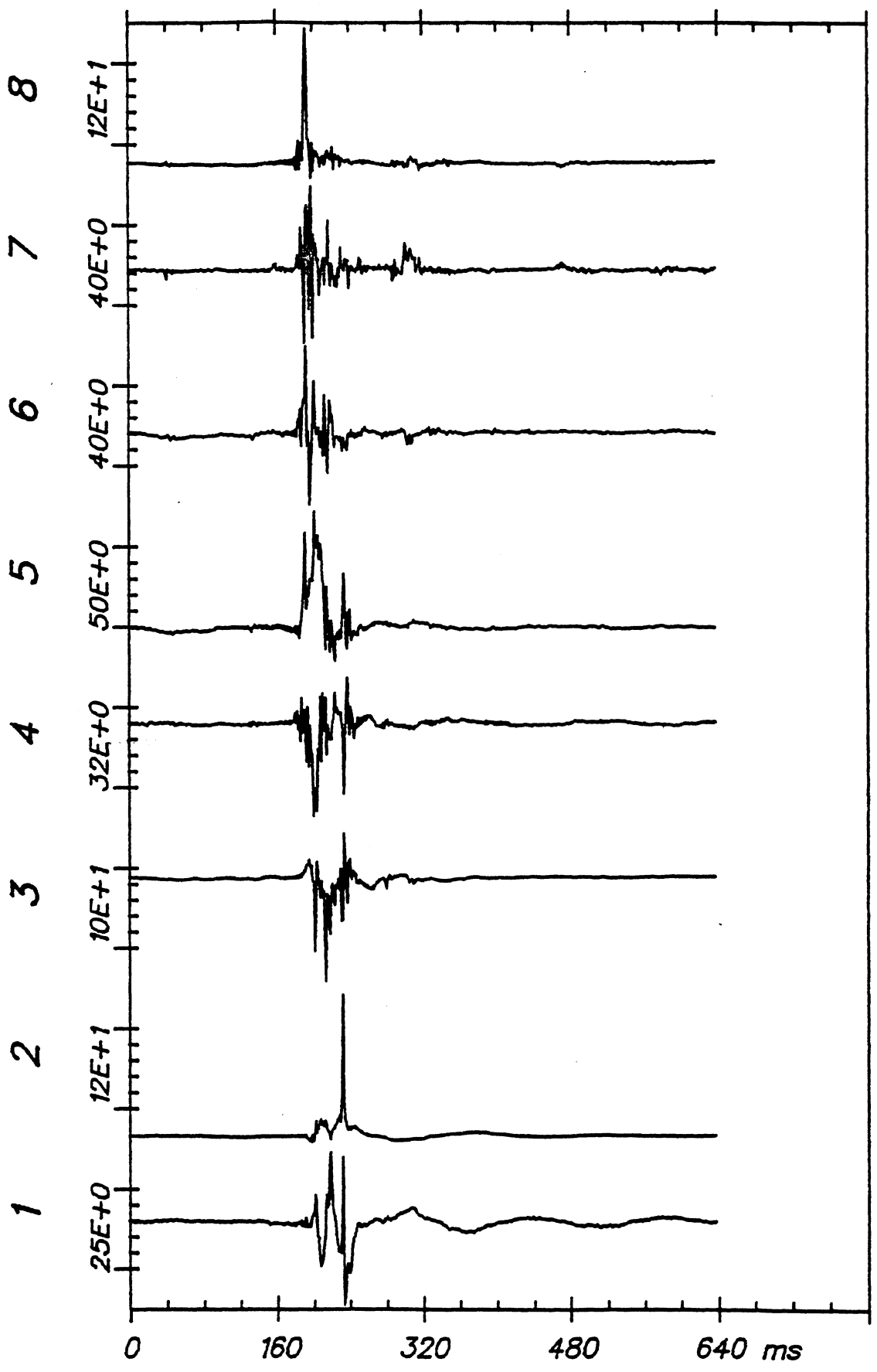
250 300 350 400 450 500 550 msec

S. COLUMN MOMENTS (IN-LB)

S-1

DEC 2, 1981

From HSRI-175 to 81-SORT, file 162: /1/2/3/4/5/6/7/8/

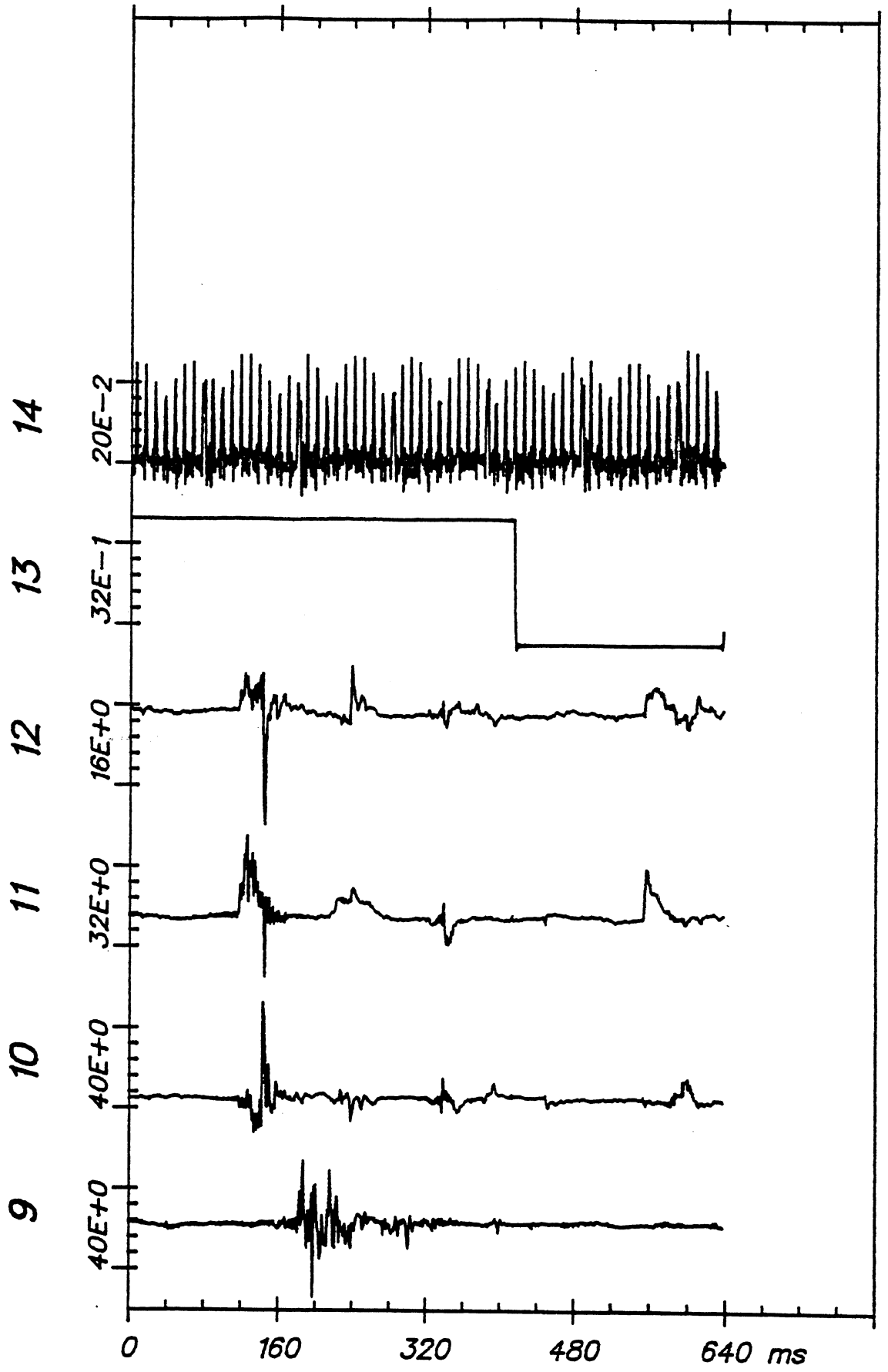


Time Histories

ITA S-1 (1)

DEC 2, 1981

From HSRI-175 to 81-SORT, file 162: /9/10/11/12/13/14/-/-/

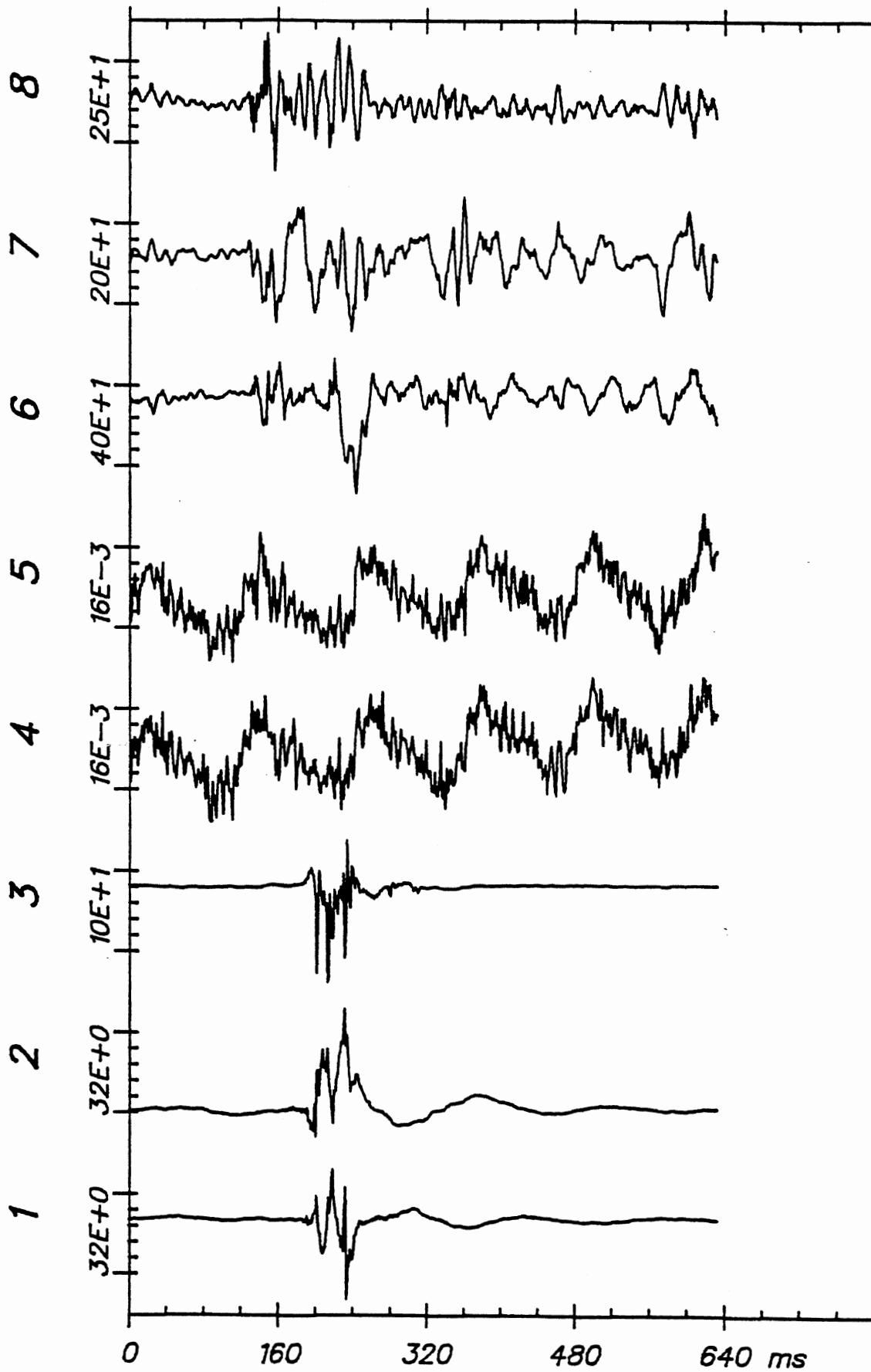


Time Histories

ITA S-1 (1)

From HSRI-176 to 81-SORT, File 172: /1/2/3/4/5/6/7/8/

DEC 2, 1981

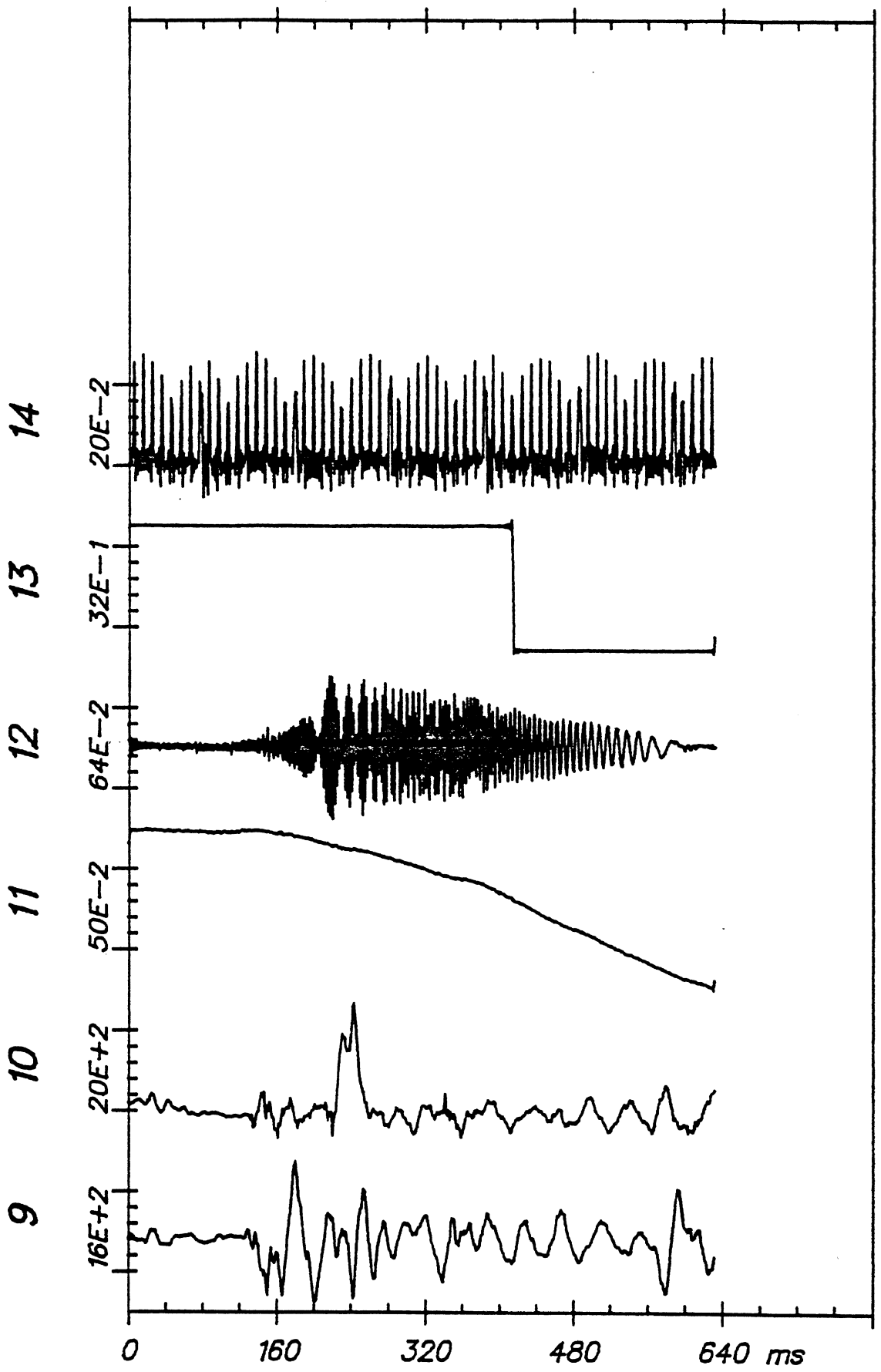


Time Histories

ITA S-1 (2)

DEC 2, 1981

From HSRI-176 to 81-SORT, file 172: /9/10/11/12/13/14/--/



Time Histories

ITA S-1 (2)

LA DY W/O SB	Test No. S-2	S U M M A R Y				
		Min @ msec		Max @ msec		

HEAD ACCELERATIONS (G)						
	P-A acc	...	-69	498	128	497
	R-L acc	...	-203	498	350	497
	I-S acc	...	-181	497	134	498
	Resultant	...			415	497
	HIC = 1646	...		497		500

CHEST ACCELERATIONS (G)						
	P-A acc	...	-32	439	8	493
	R-L acc	...	-9	509	26	431
	I-S acc	...	-29	431	17	459
	Resultant	...			39	431

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-56	426	43	496
	R-L acc	...	-49	496	72	426
	I-S acc	...	-39	433	70	431
	Resultant	...			99	426

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-11	366	24	373
	Ay (L-R)	...	-9	547	28	353
	Az (I-S)	...	-9	373	6	352
	Resultant	...			29	353

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	-138	374	220	477
	Fy (L-R)	...	-232	430	160	584
	Fz (I-S)	...	-251	474	190	467
	Resultant	...			262	475

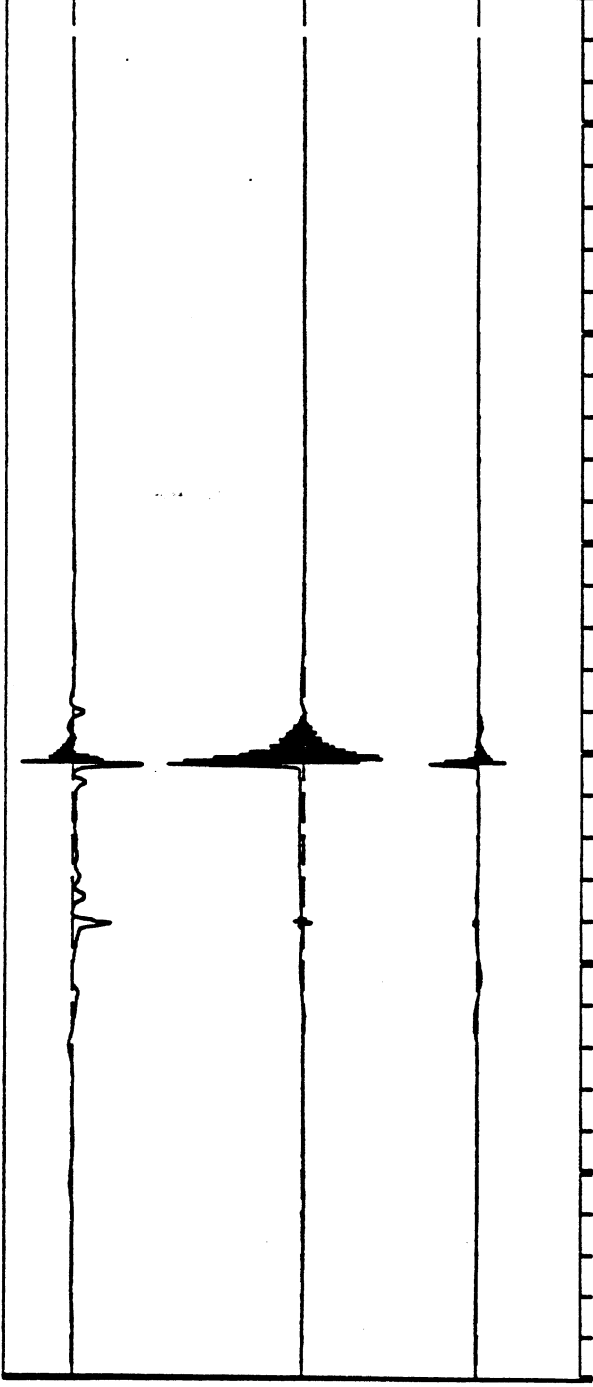
S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	-1576	397	1675	353
	My (L-R)	...	-787	354	697	397
	Mz (I-S)	...				
	Resultant	...			1860	713

KNEE & BELTS LOADS (LB)						
	LT Knee	...				
	RT Knee	...				
	LT Belt	...	0	0	0	0
	RT Belt	...	0	0	0	0

LA DY W/O SB

DEC 11, 1981

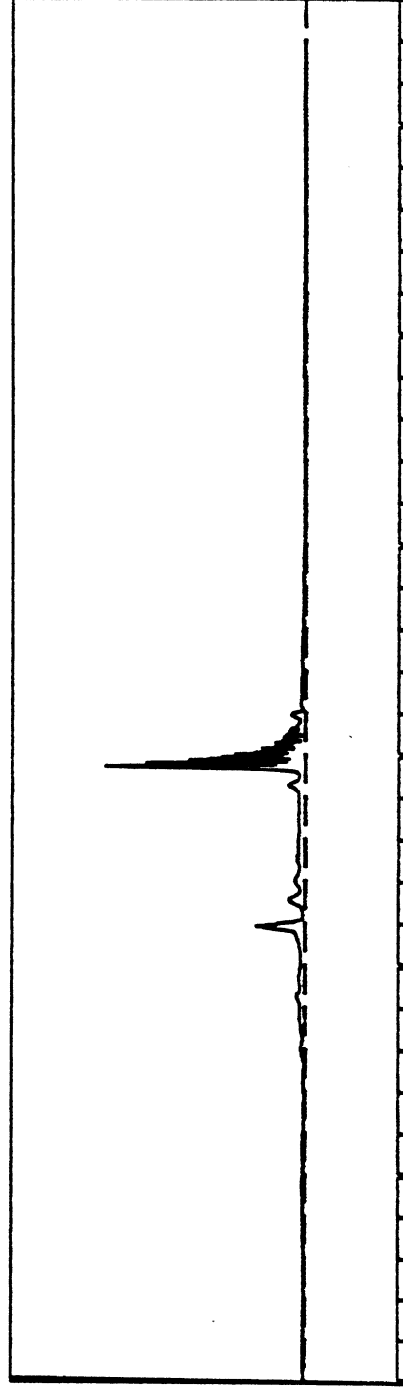
PEAKS



-182

350

128



HIC = 1646

Resultant 415

350 400 450 500 550 600 650 msec

HEAD ACCELERATIONS (G)

S-2

LA DY W/O SB

DEC 11, 1981

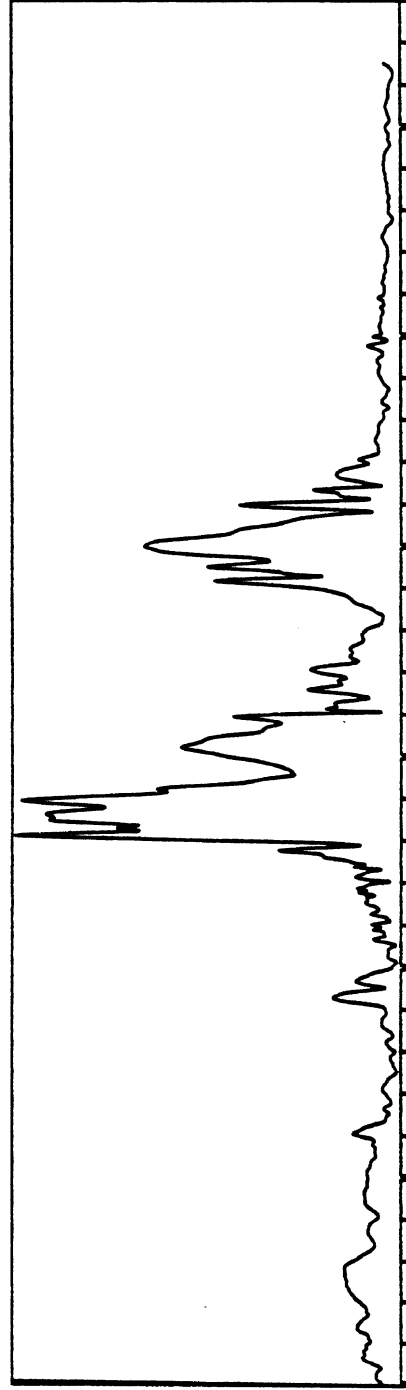
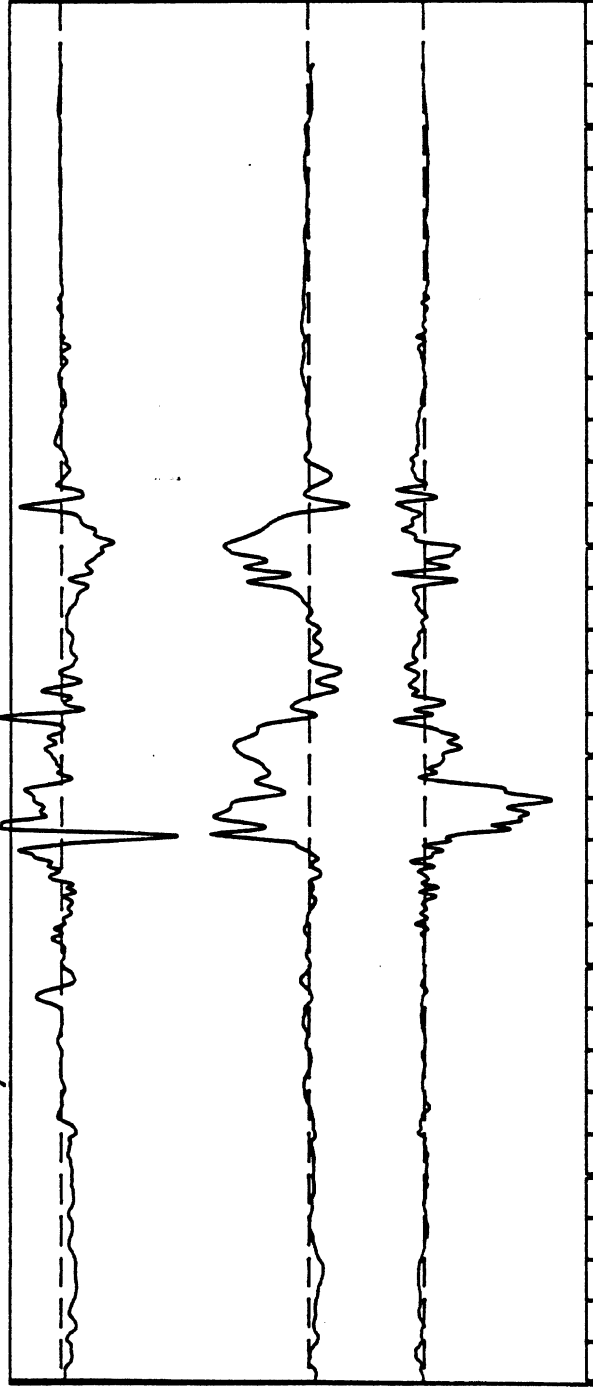
PEAKS

I-S acc -30

R-L acc 25

P-A acc -33

Resultant 39



CHEST ACCELERATIONS (G)

S-2

LA DY W/O SB

DEC 11, 1981

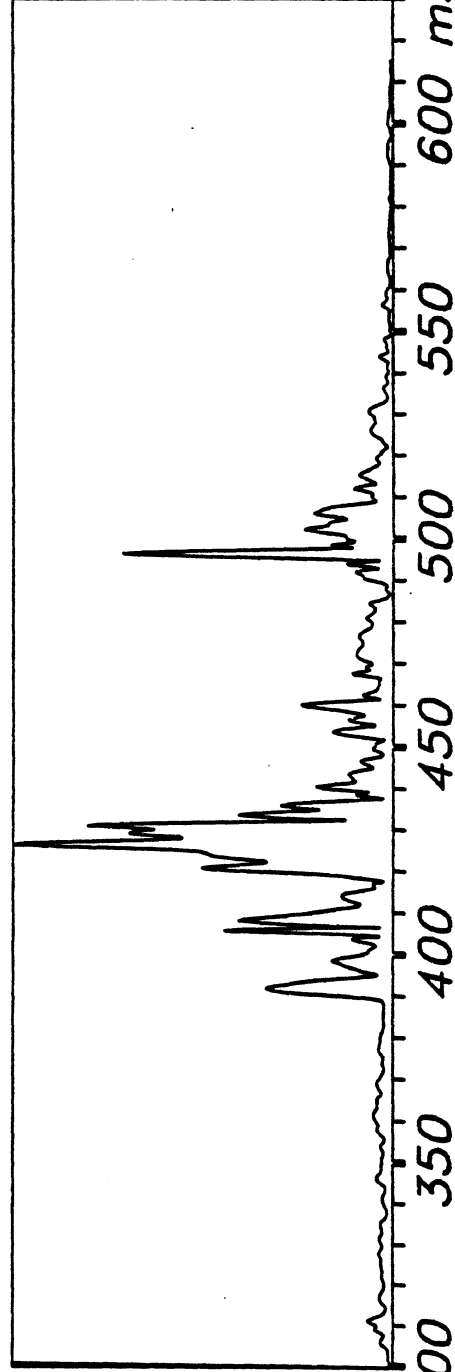
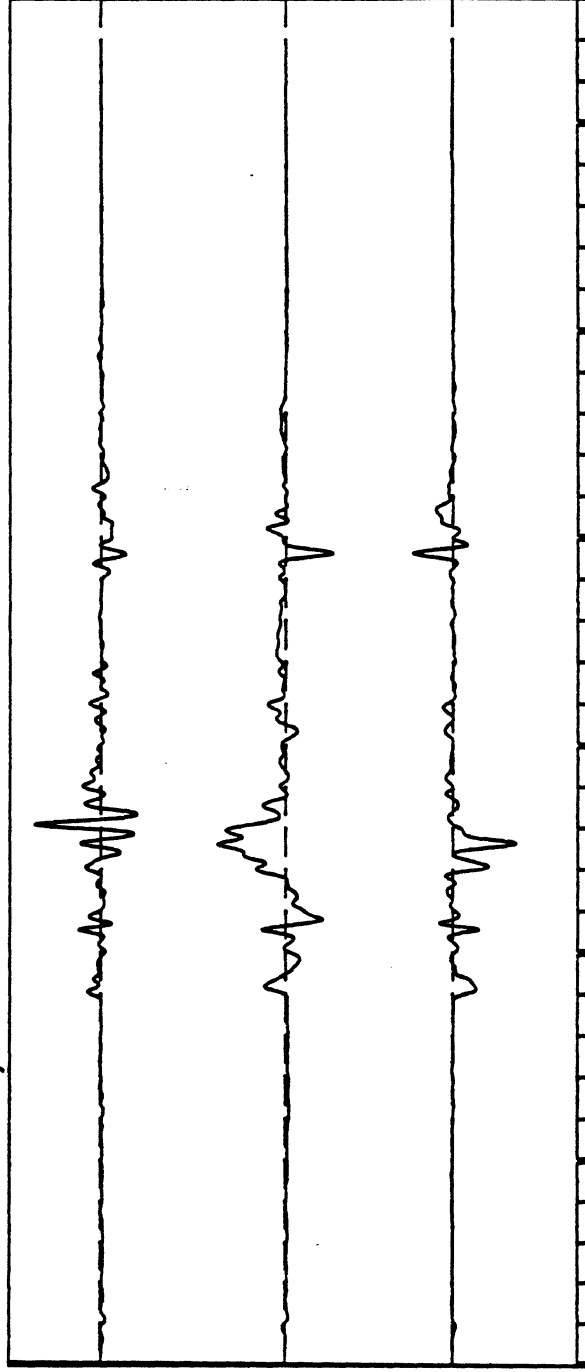
PEAKS

I-S acc 70

R-L acc 72

P-A acc -67

Resultant 99



PELVIS ACCELERATIONS (G)

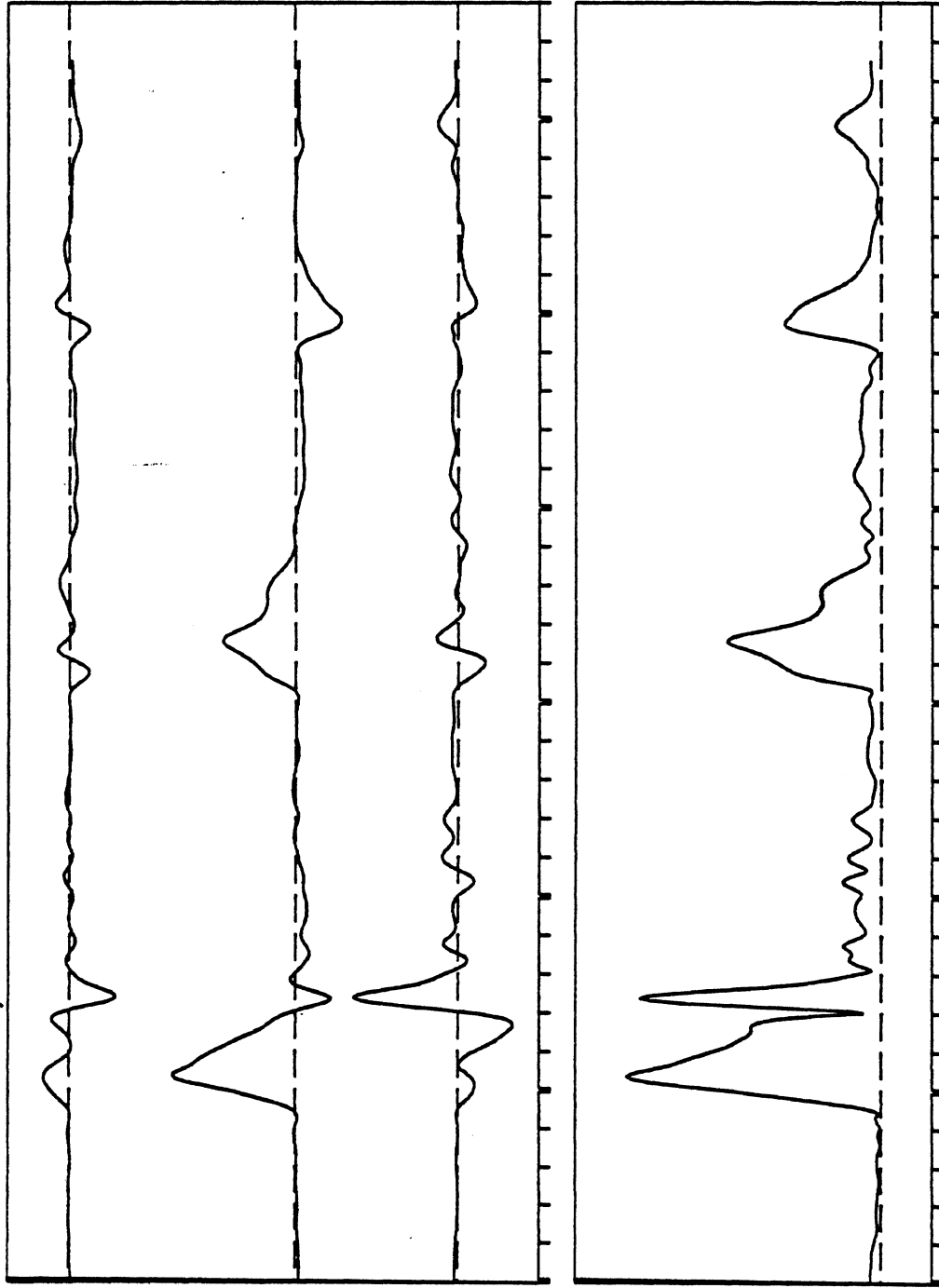
S-2

LA DY W/O SB

DEC 11, 1981

PEAKS

Az (I-S)	-10
Ay (L-R)	27
Ax (A-P)	23



Resultant 28

300 350 400 450 500 550 600 msec

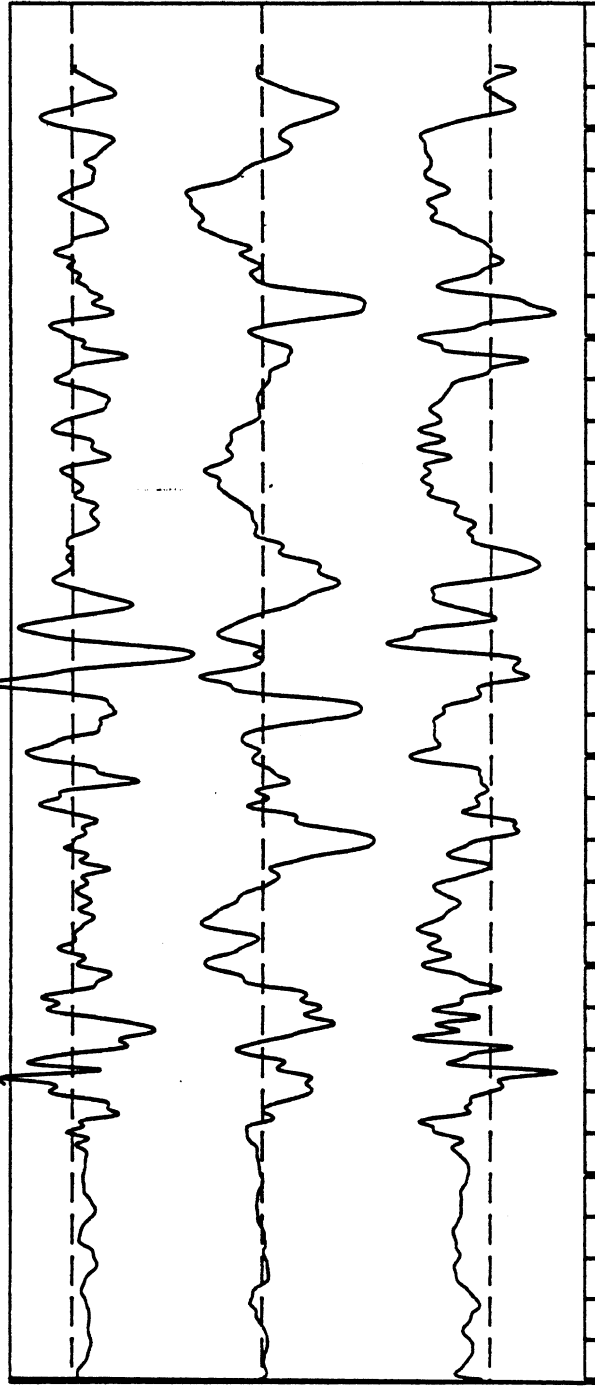
TRUCK DECELERATIONS (G)

S-2

LA DY W/O SB

DEC 11, 1981

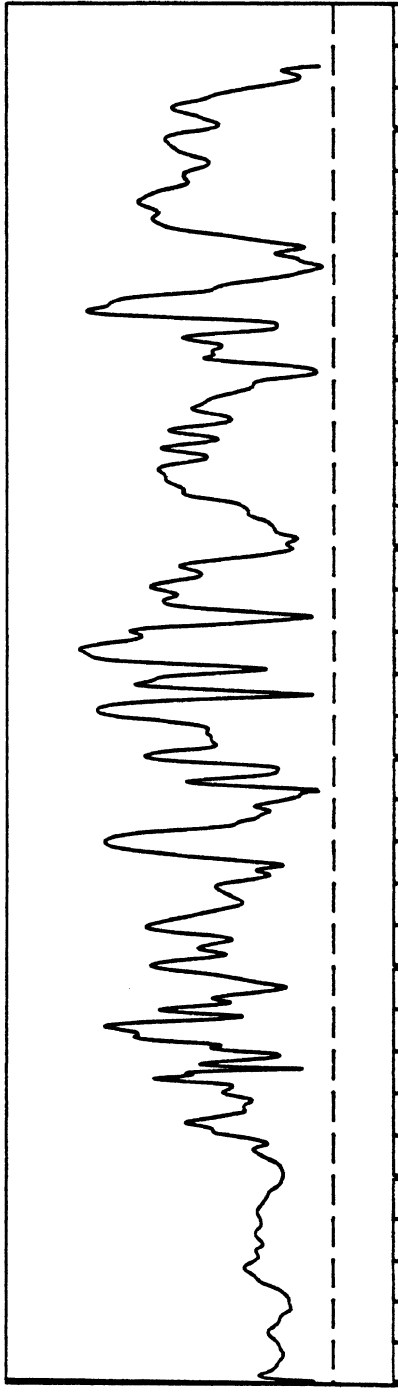
PEAKS



Fz (I-S) -252

Fy (L-R) -233

Fx (A-P) 220



Resultant 262

300 350 400 450 500 550 600 msec

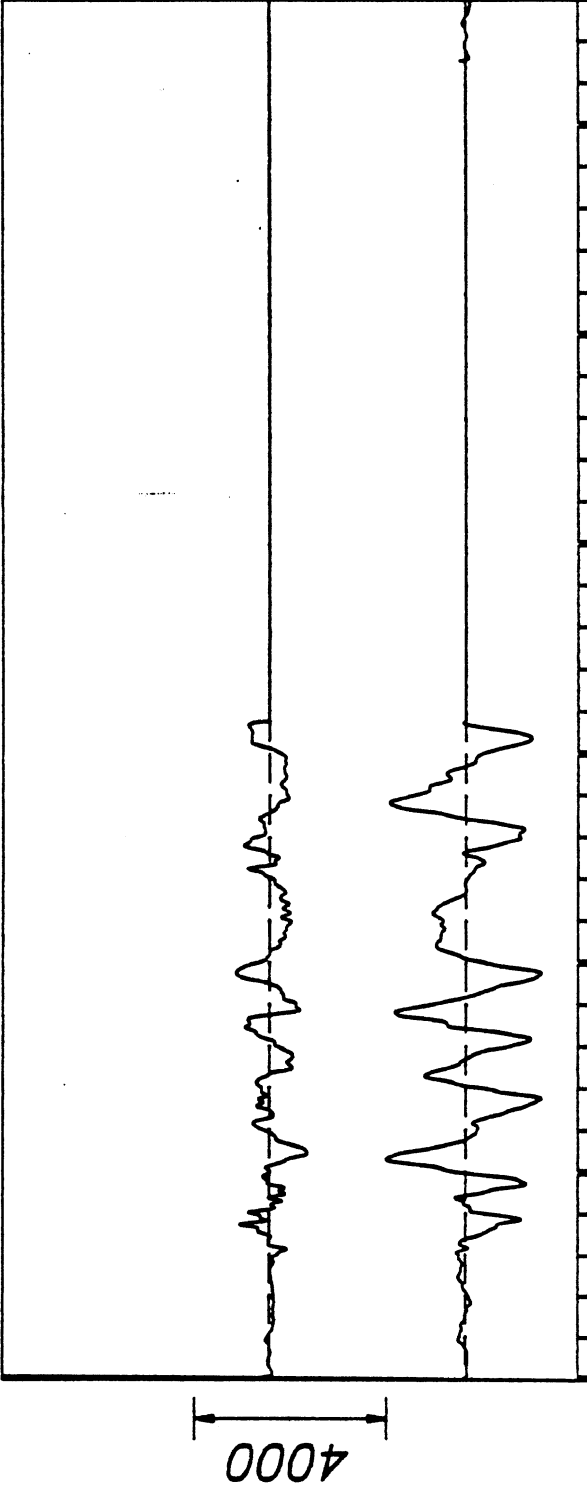
S. COLUMN FORCES (LB)

S-2

L.A DY W/O SB

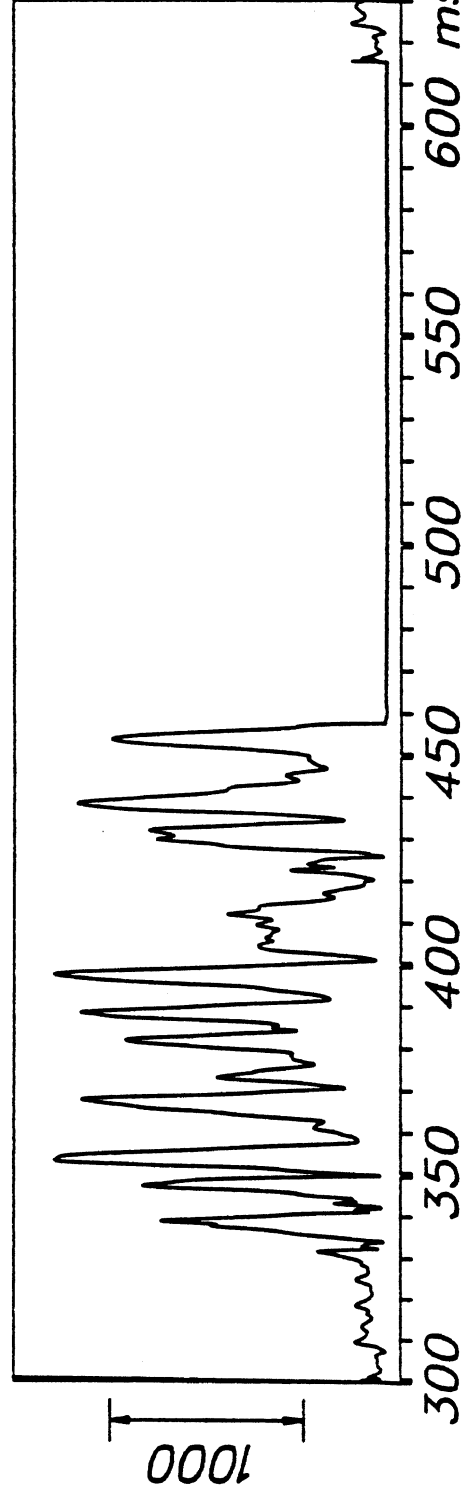
DEC 11, 1981

PEAKS



My (L-R) -788

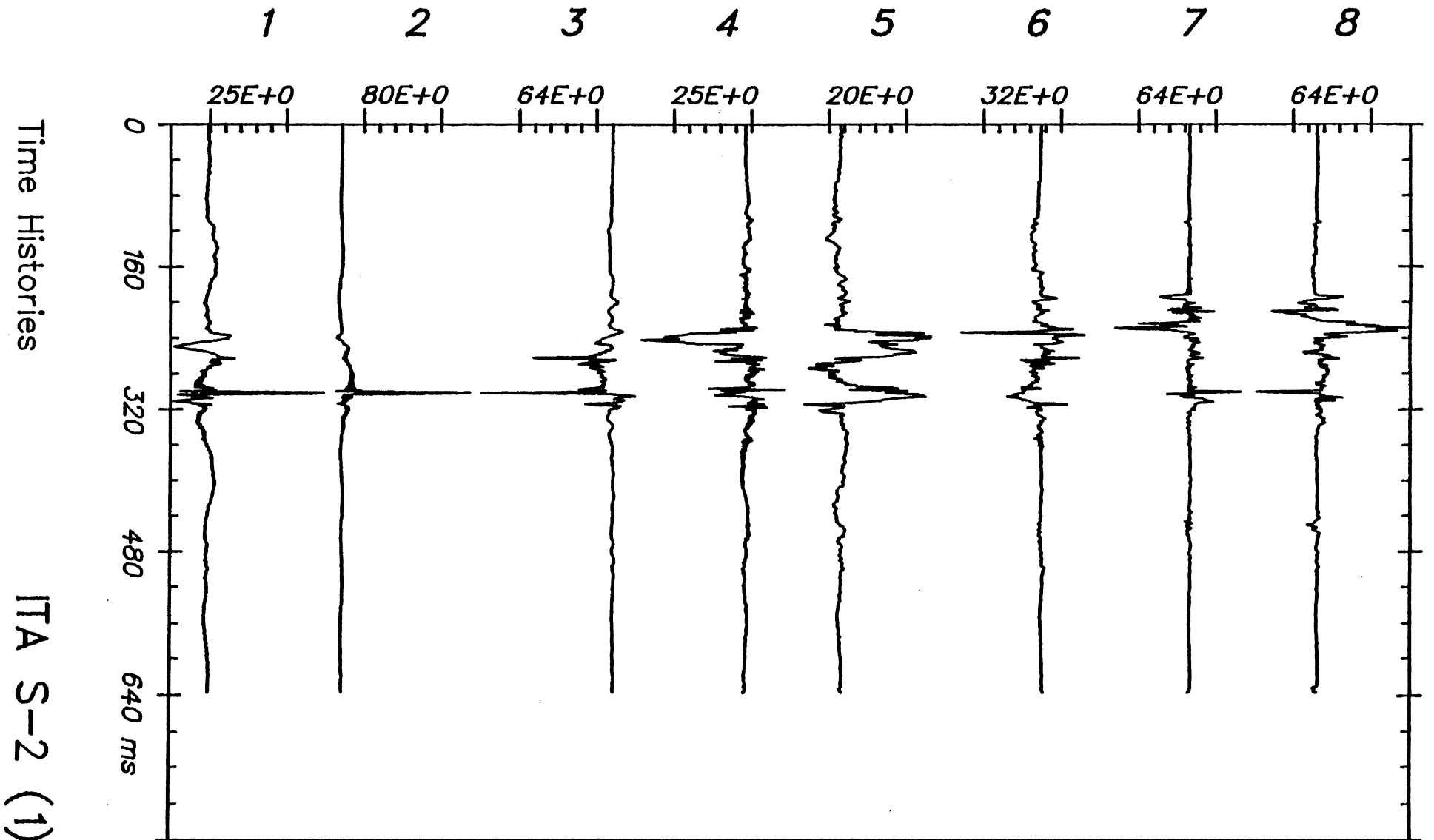
Mx (A-P) 1675



Resultant 1859

S. COLUMN MOMENTS (IN-LB)

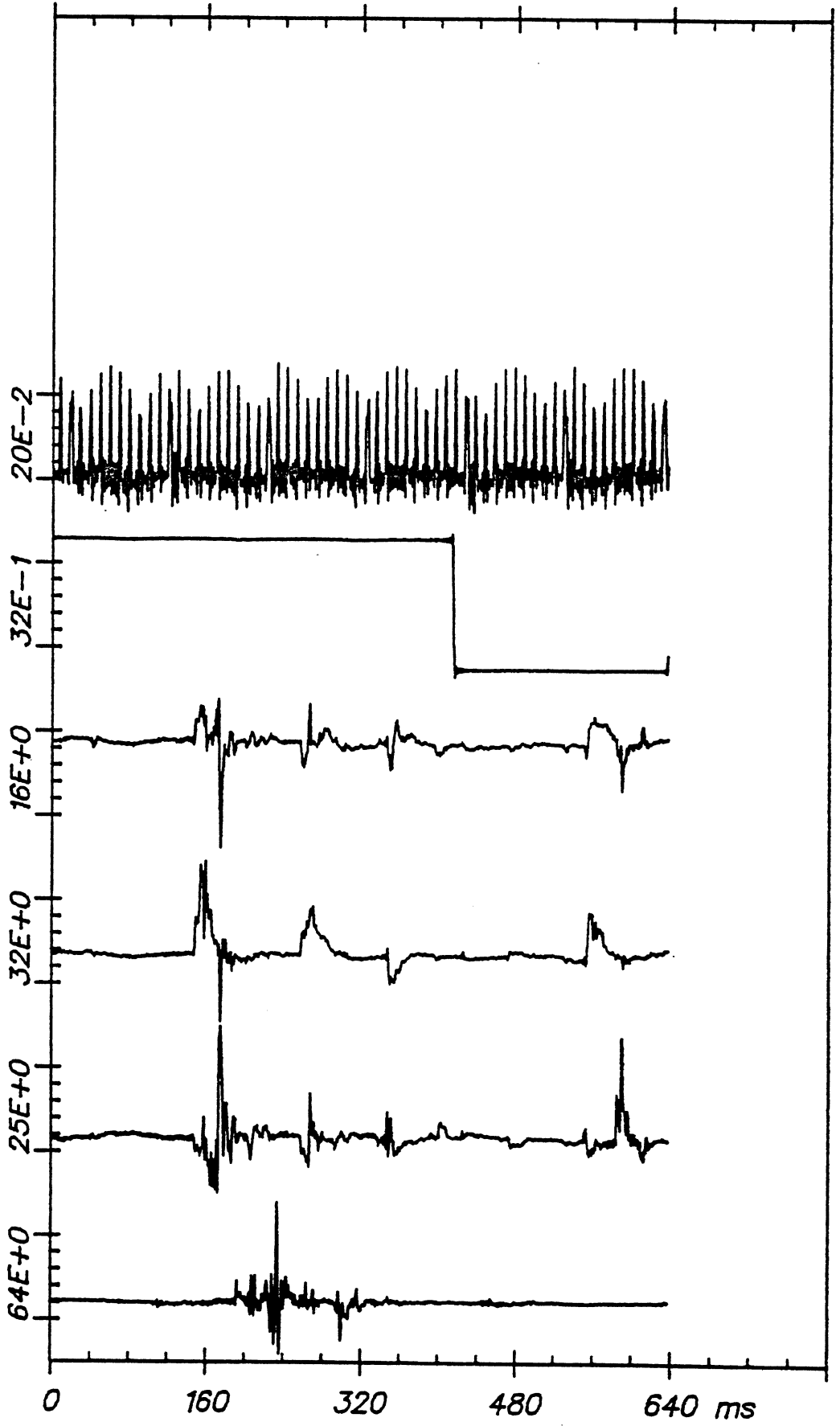
S-2



DEC 2, 1981

From HSRI-175 to 81-SORT, file 163; /9/10/11/12/13/14/-/-/

9 10 11 12 13 14

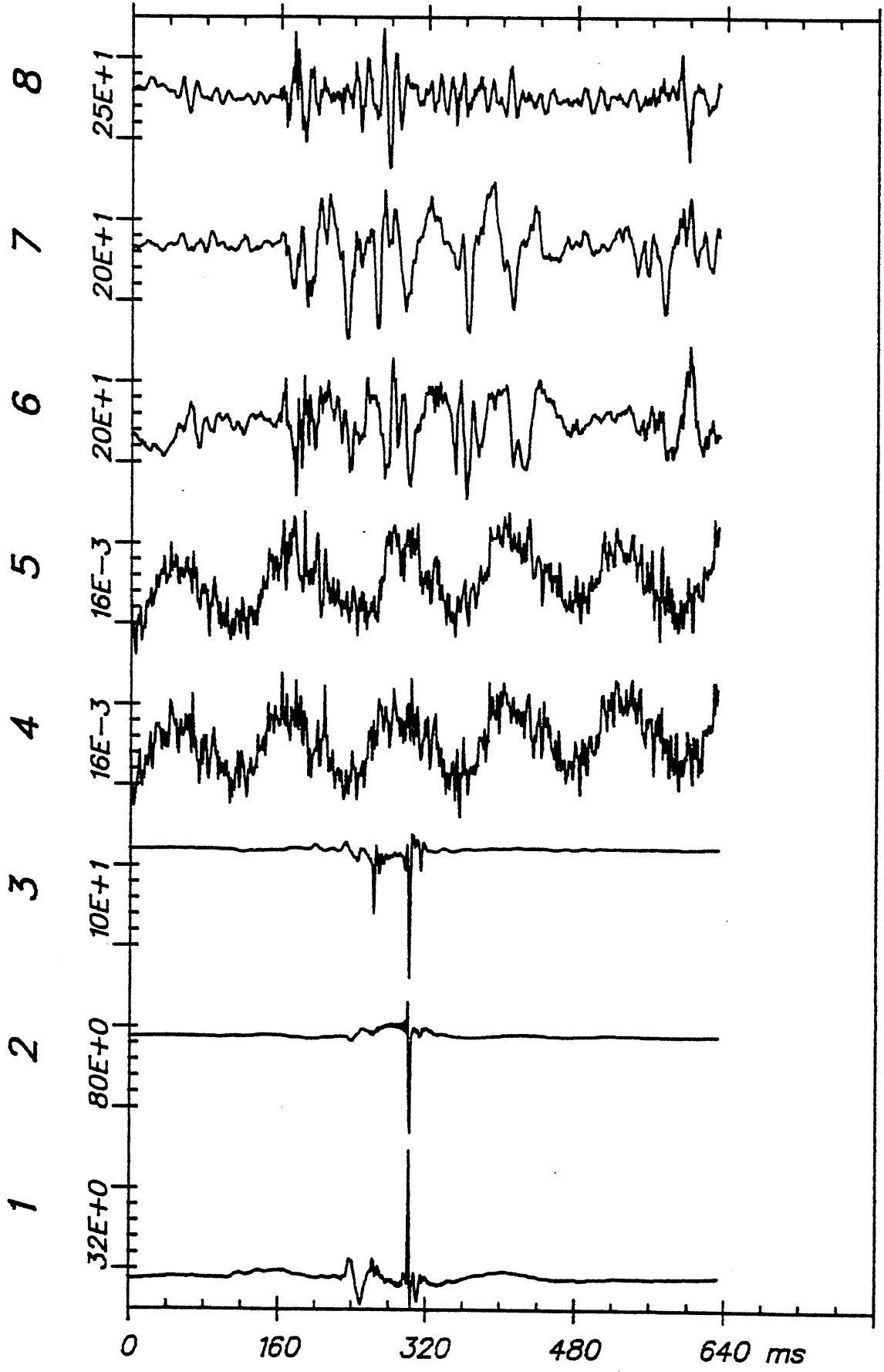


Time Histories

ITA S-2 (1)

From HSRI-176 to 81-SORT, file 173: /1/2/3/4/5/6/7/8/

DEC 2, 1981

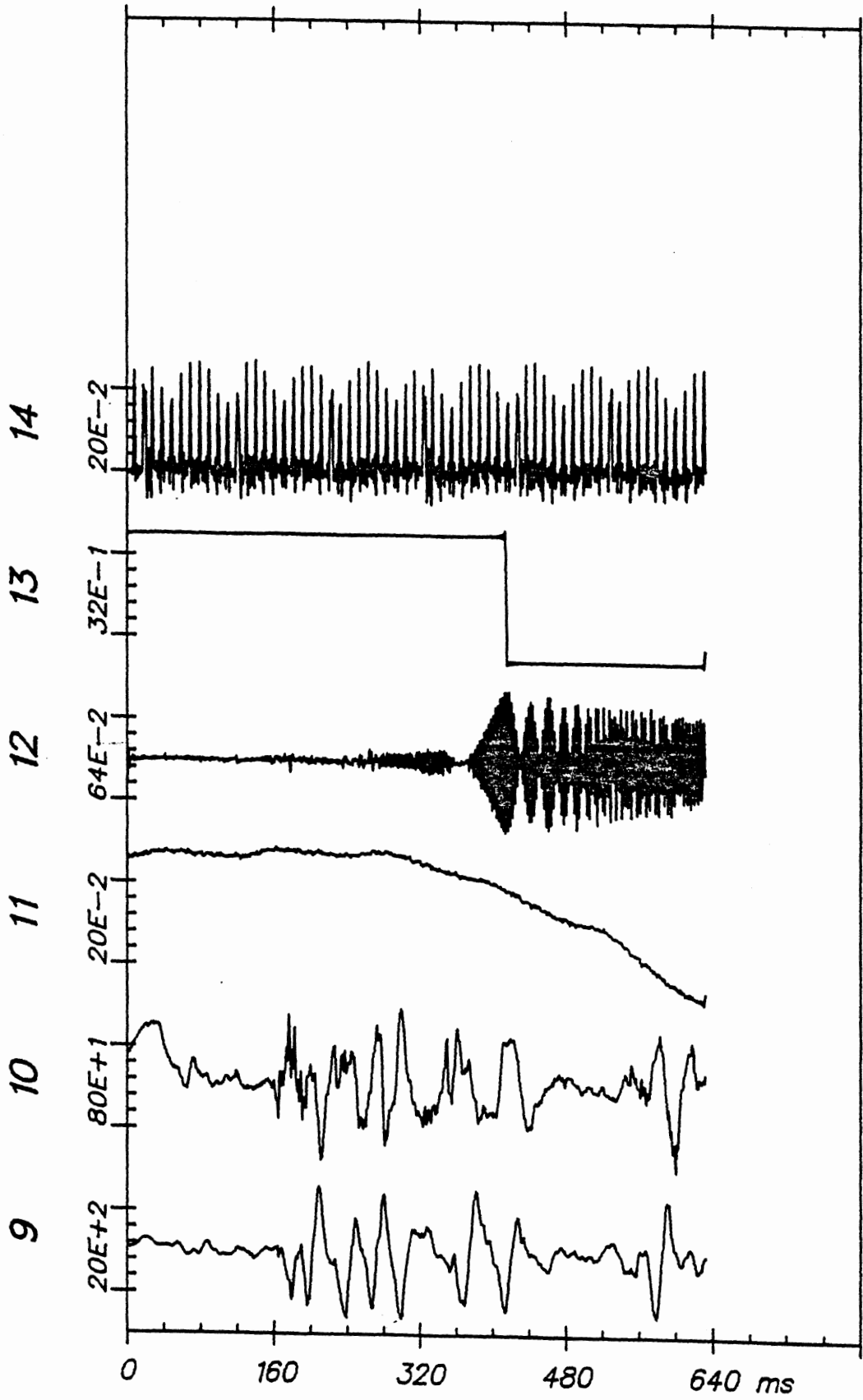


Time Histories

ITA S-2 (2)

DEC 2, 1981

From HSRI-176 to 81-SORT, file 173: /9/10/11/12/13/14/-/-/



Time Histories

ITA S-2 (2)

LA DY W/O SB

Test No. S-3

S U M M A R Y

Min @ msec

Max @ msec

HEAD ACCELERATIONS (G)

P-A acc	...	-14	381	5	451
R-L acc	...	-3	323	15	422
I-S acc	...	-24	388	12	383
Resultant	...			96	388
HIC =	71	...	376		435

CHEST ACCELERATIONS (G)

P-A acc	...	-38	381	4	416
R-L acc	...	-3	276	35	384
I-S acc	...	-7	449	19	377
Resultant	...			54	381

PELVIS ACCELERATIONS (G)

P-A acc	...	-59	378	42	387
R-L acc	...	-41	380	177	377
I-S acc	...	-29	387	51	375
Resultant	...			189	378

TRUCK DECELERATIONS (G)

Ax (A-P)	...	-11	319	22	326
Ay (L-R)	...	-6	326	34	304
Az (I-S)	...	-7	326	5	303
Resultant	...			35	304

S. COLUMN FORCES (LB)

Fx (A-P)	...	-292	387	143	467
Fy (L-R)	...	-270	389	157	453
Fz (I-S)	...	-212	413	244	330
Resultant	...			357	388

S. COLUMN MOMENTS (IN-LB)

Mx (A-P)	...	-1585	341	1248	634
My (L-R)	...	-539	358	1248	319
Mz (I-S)	...				
Resultant	...			1908	634

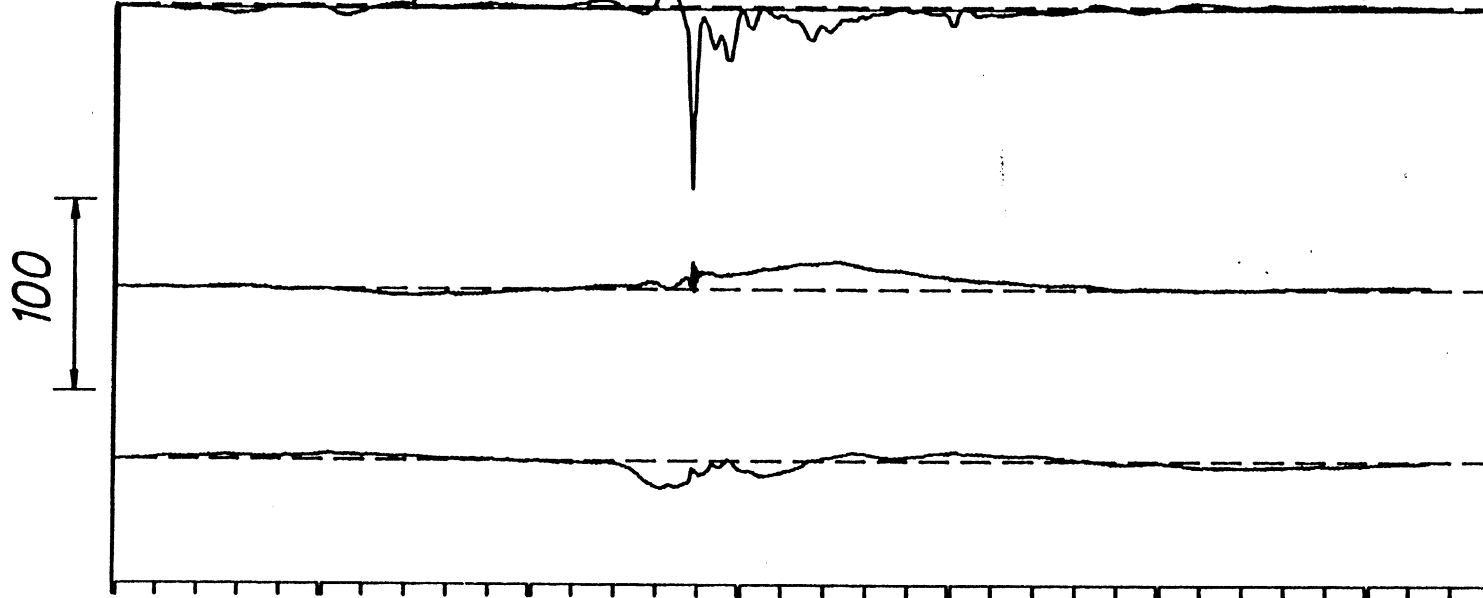
KNEE & BELTS LOADS (LB)

LT Knee	...				
RT Knee	...				
LT Belt	...	0	0	0	0
RT Belt	...	0	0	0	0

LA DY W/O SB

DEC 11, 1981

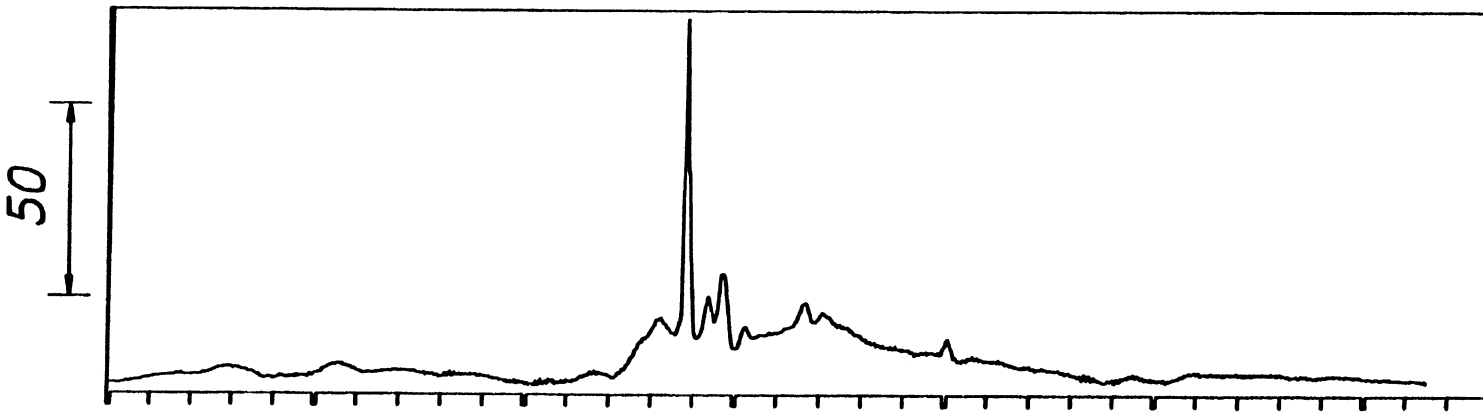
PEAKS



-95

14

-15



HIC = 71

95

250 300 350 400 450 500 550 msec

HEAD ACCELERATIONS (G)

S-3

LA DY W/O SB

DEC 11, 1981

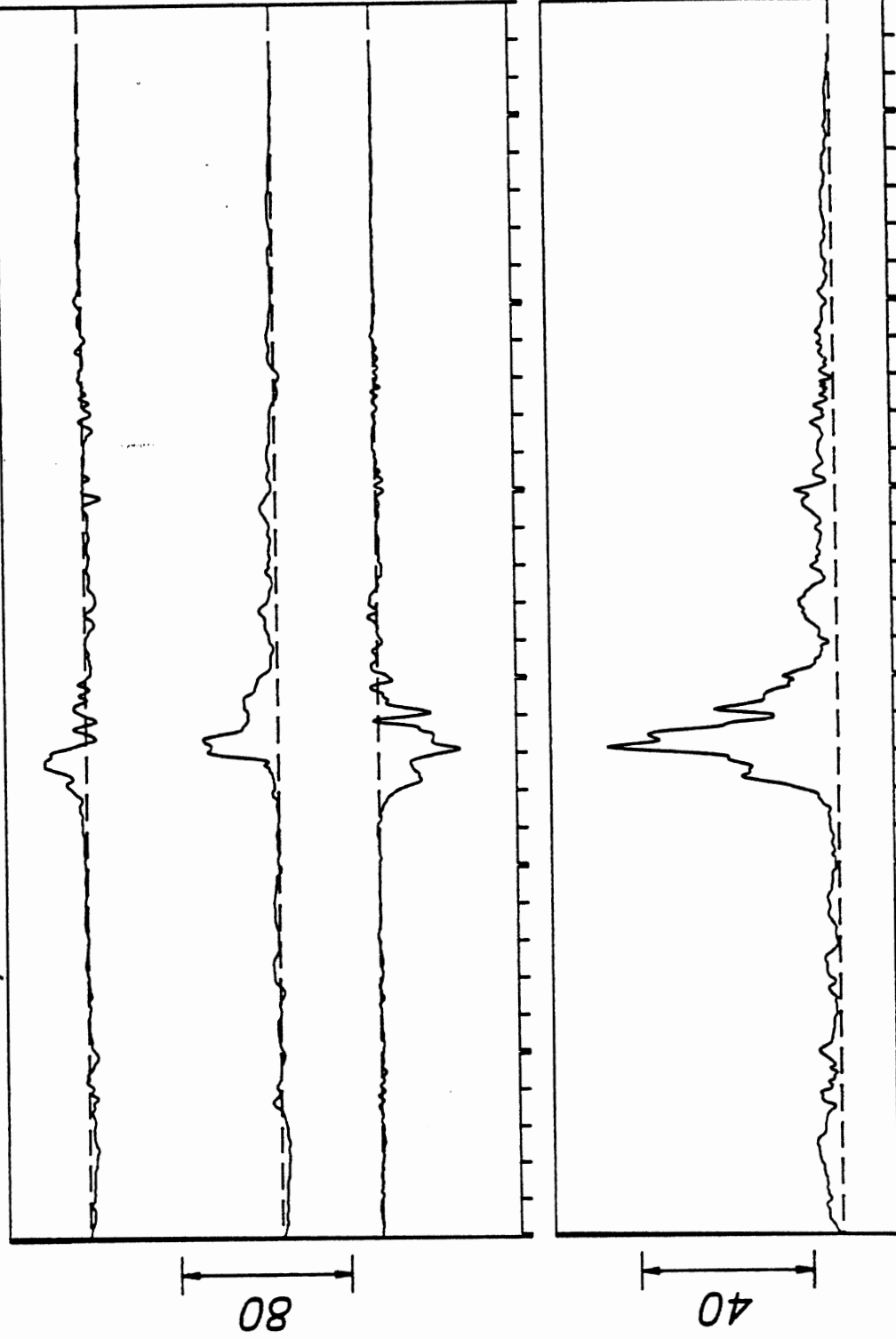
PEAKS

I-S acc 19

R-L acc 35

P-A acc -39

Resultant 53



250 300 350 400 450 500 550 msec

CHEST ACCELERATIONS (G)

S-3

LA DY W/O SB

DEC 11, 1981

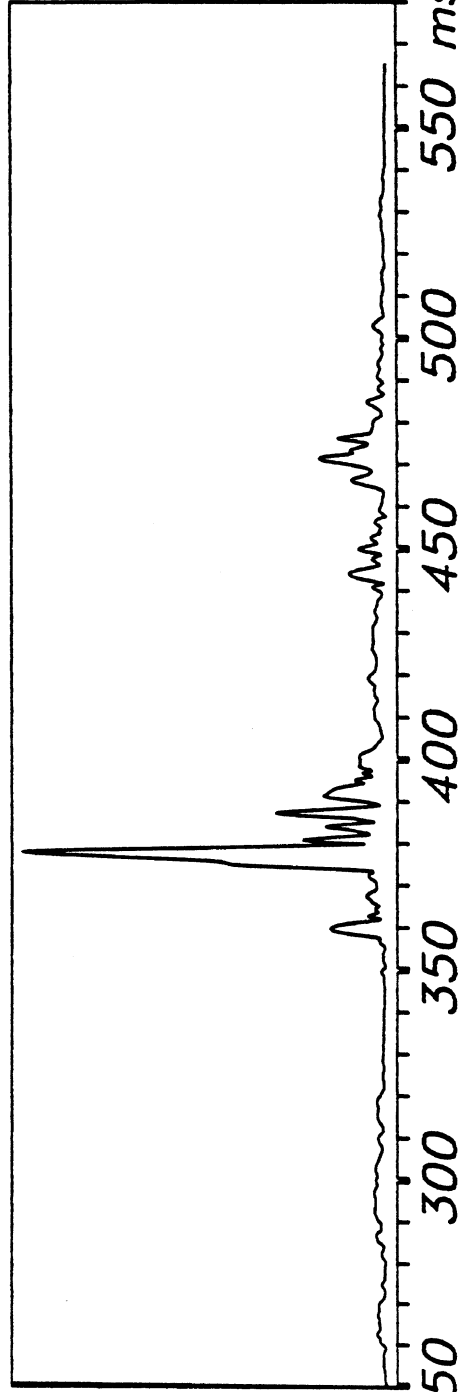
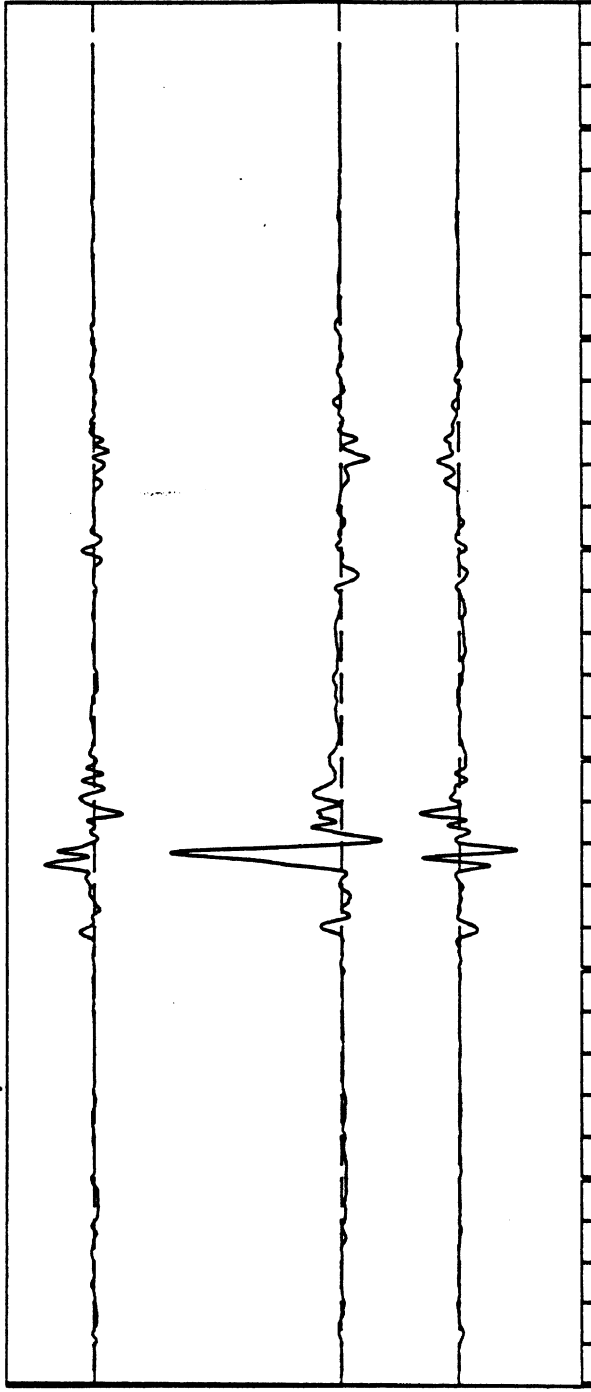
PEAKS

I-S acc 51

R-L acc 177

P-A acc -60

Resultant 188



PELVIS ACCELERATIONS (G)

S-3

LA DY W/O SB

DEC 11, 1981

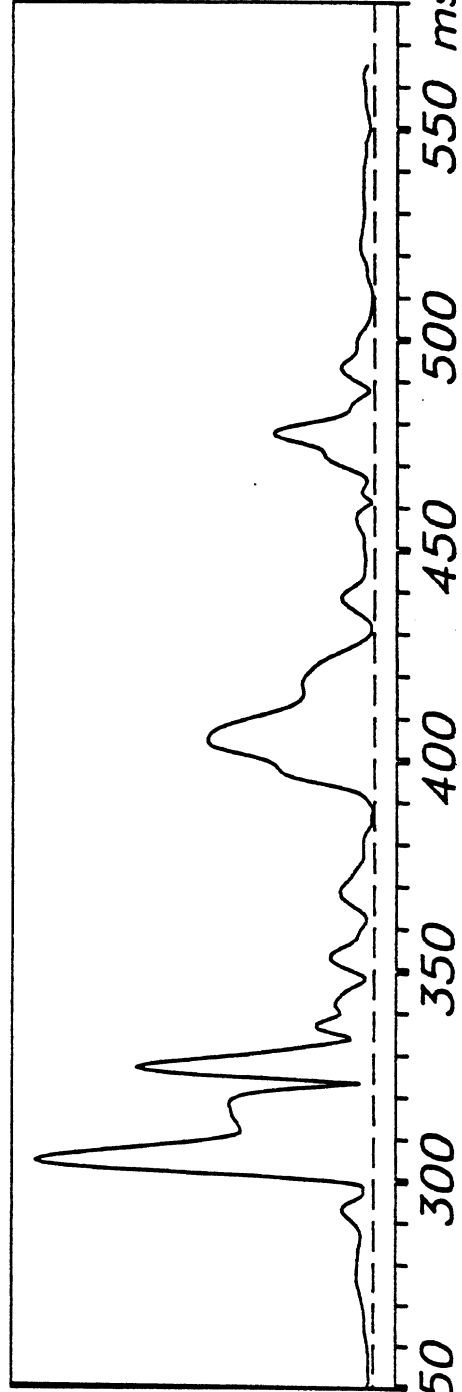
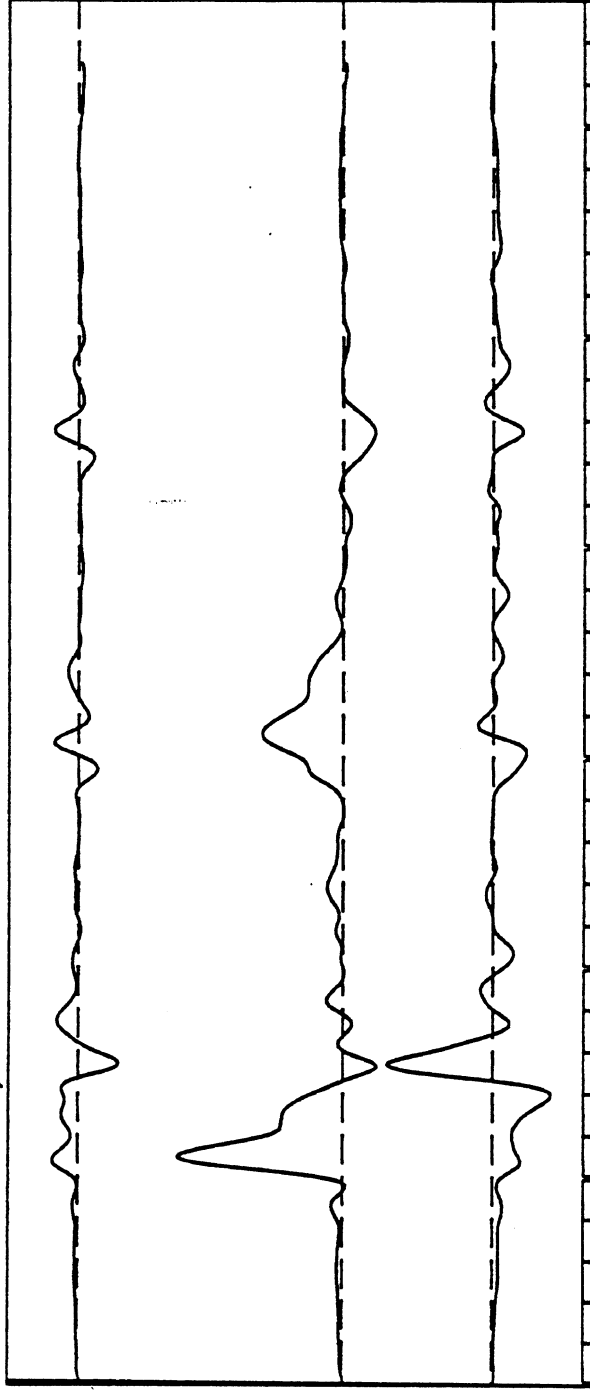
PEAKS

Az (I-S) -8

Ay (L-R) 34

Ax (A-P) 22

Resultant 35



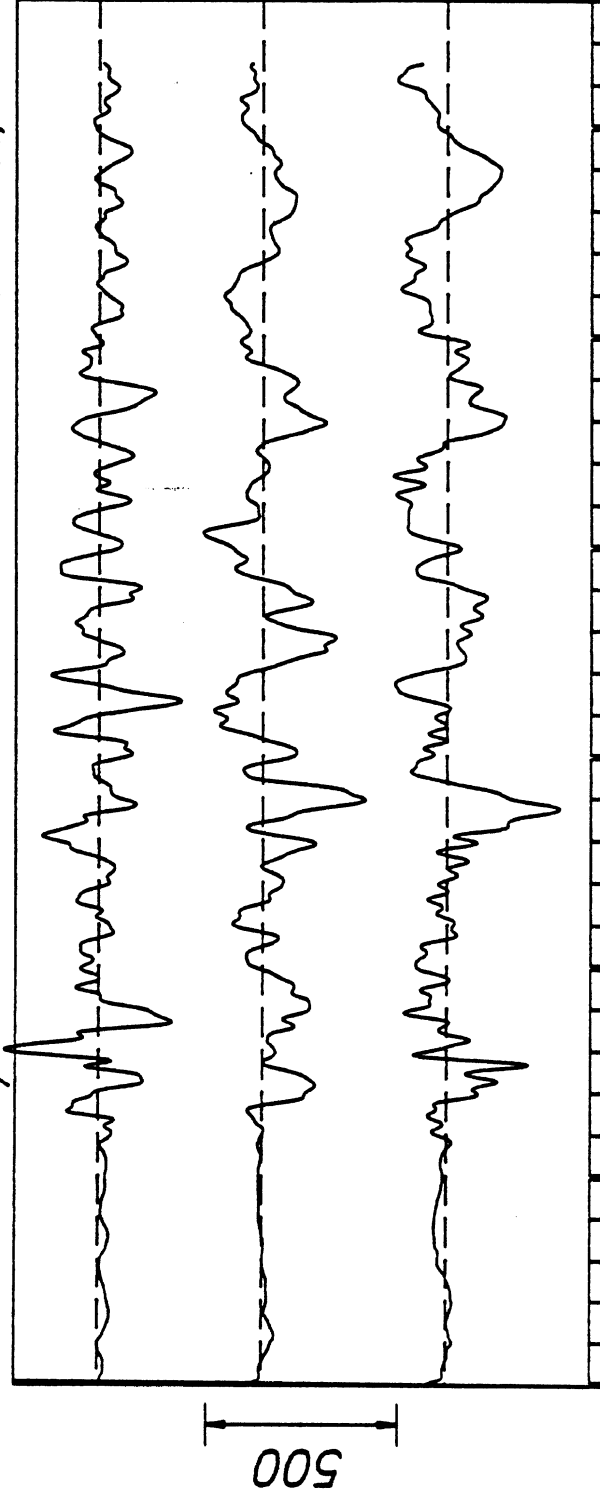
TRUCK DECELERATIONS (G)

S-3

LA DY W/O SB

DEC 11, 1981

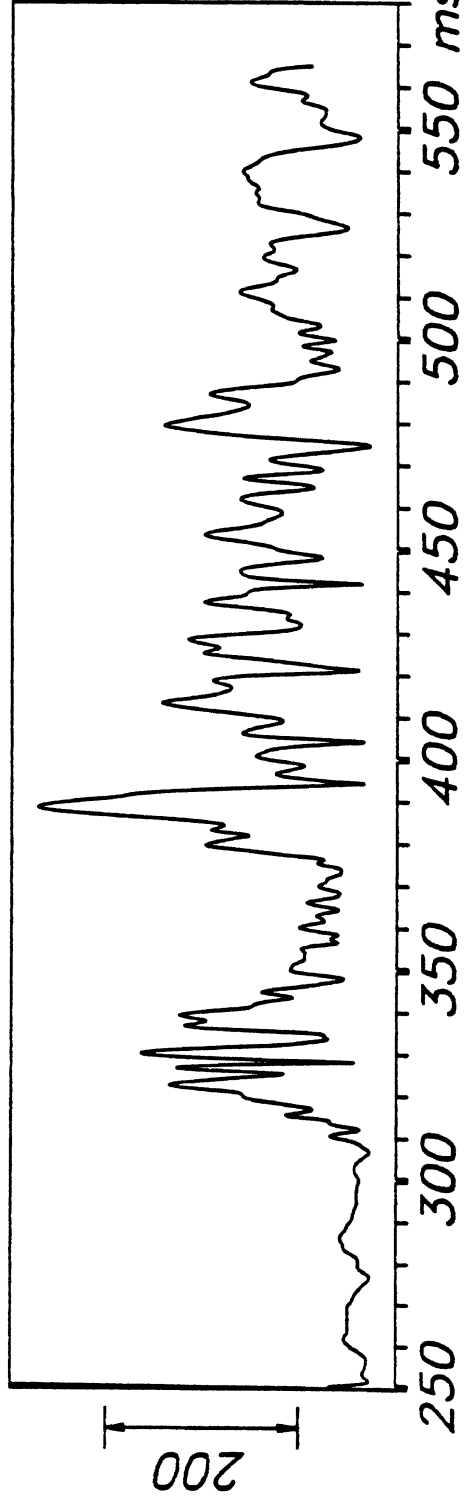
PEAKS



Fz (I-S) 244

Fy (L-R) -271

Fx (A-P) -293



Resultant 357

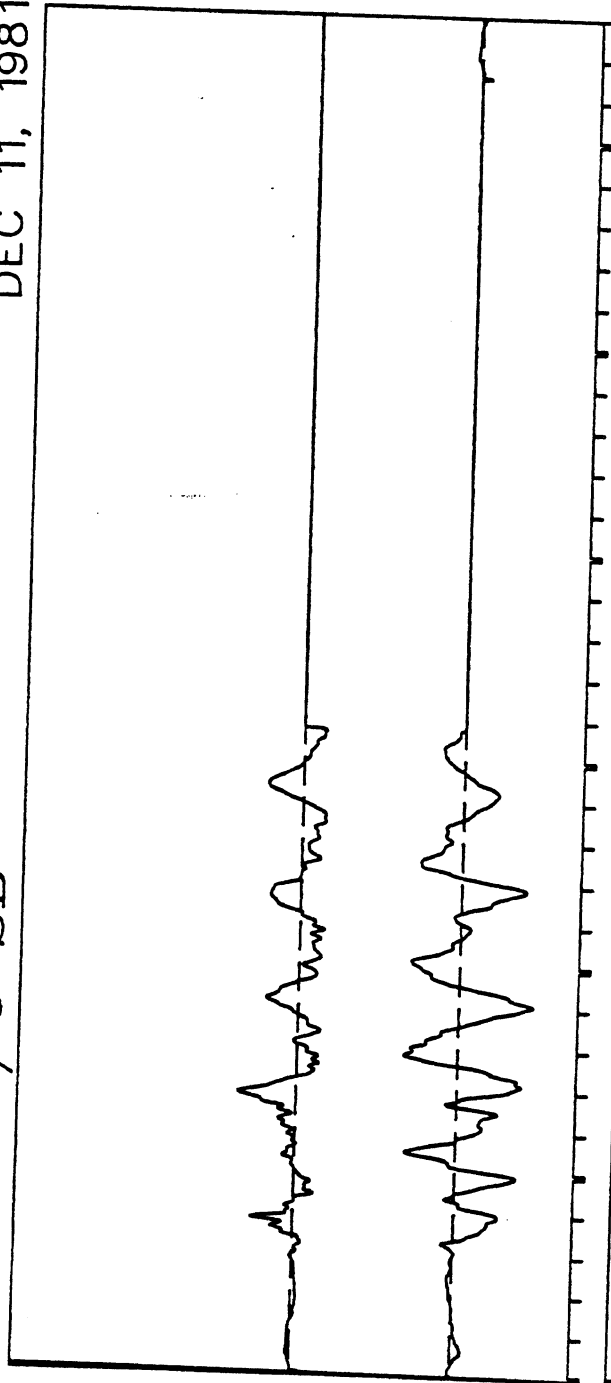
S. COLUMN FORCES (LB)

S-3

LA DY W/O SB

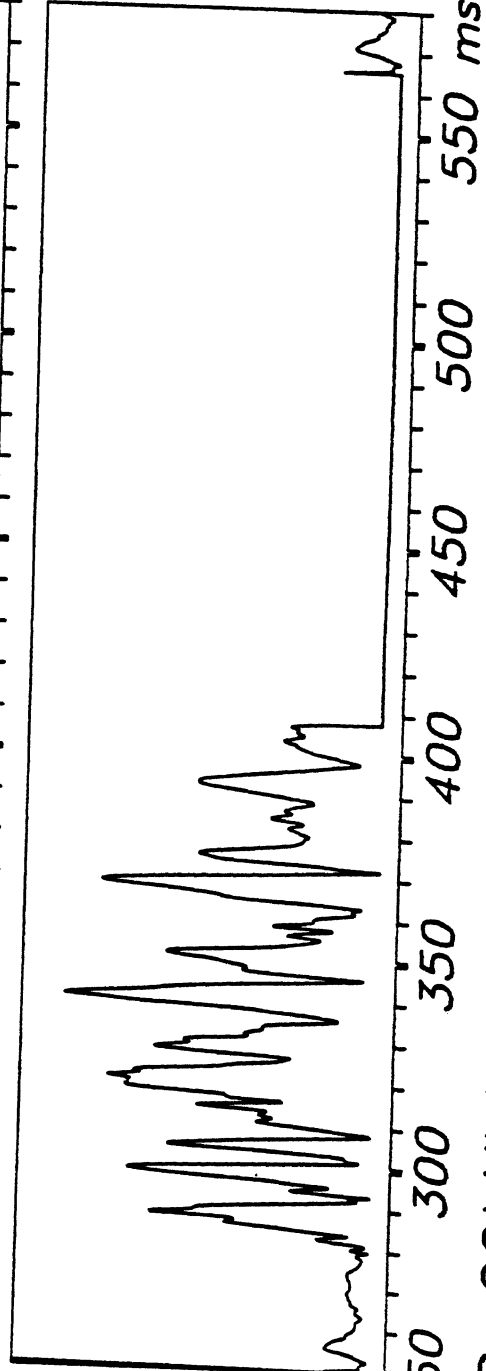
DEC 11, 1981

PEAKS



My (L-R) 1248

Mx (A-P)



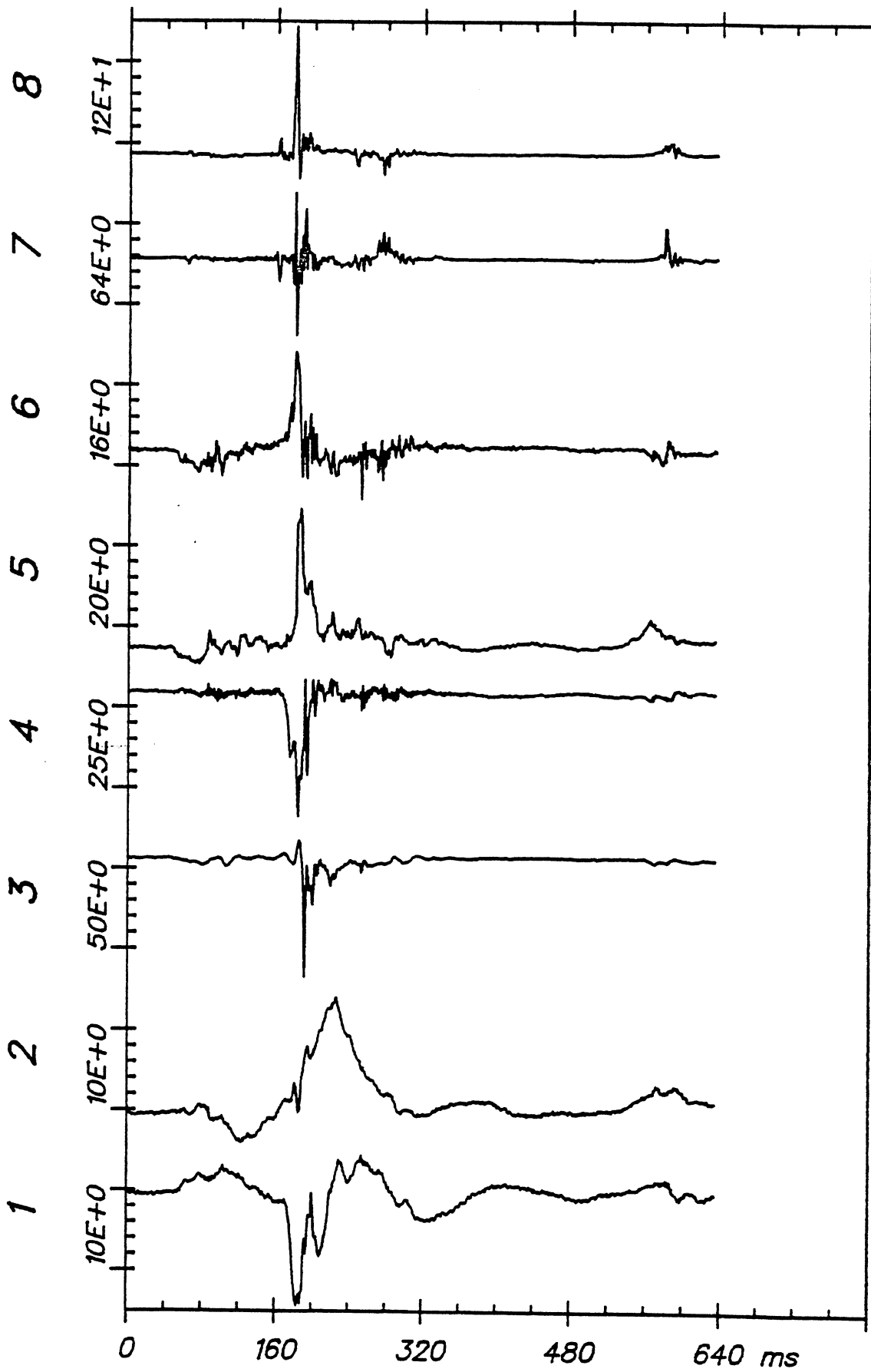
Resultant 1808

S. COLUMN MOMENTS (IN-LB)

S-3

From HSRI-175 to 81-SORT, file 164: /1/2/3/4/5/6/7/8/

DEC 2, 1981

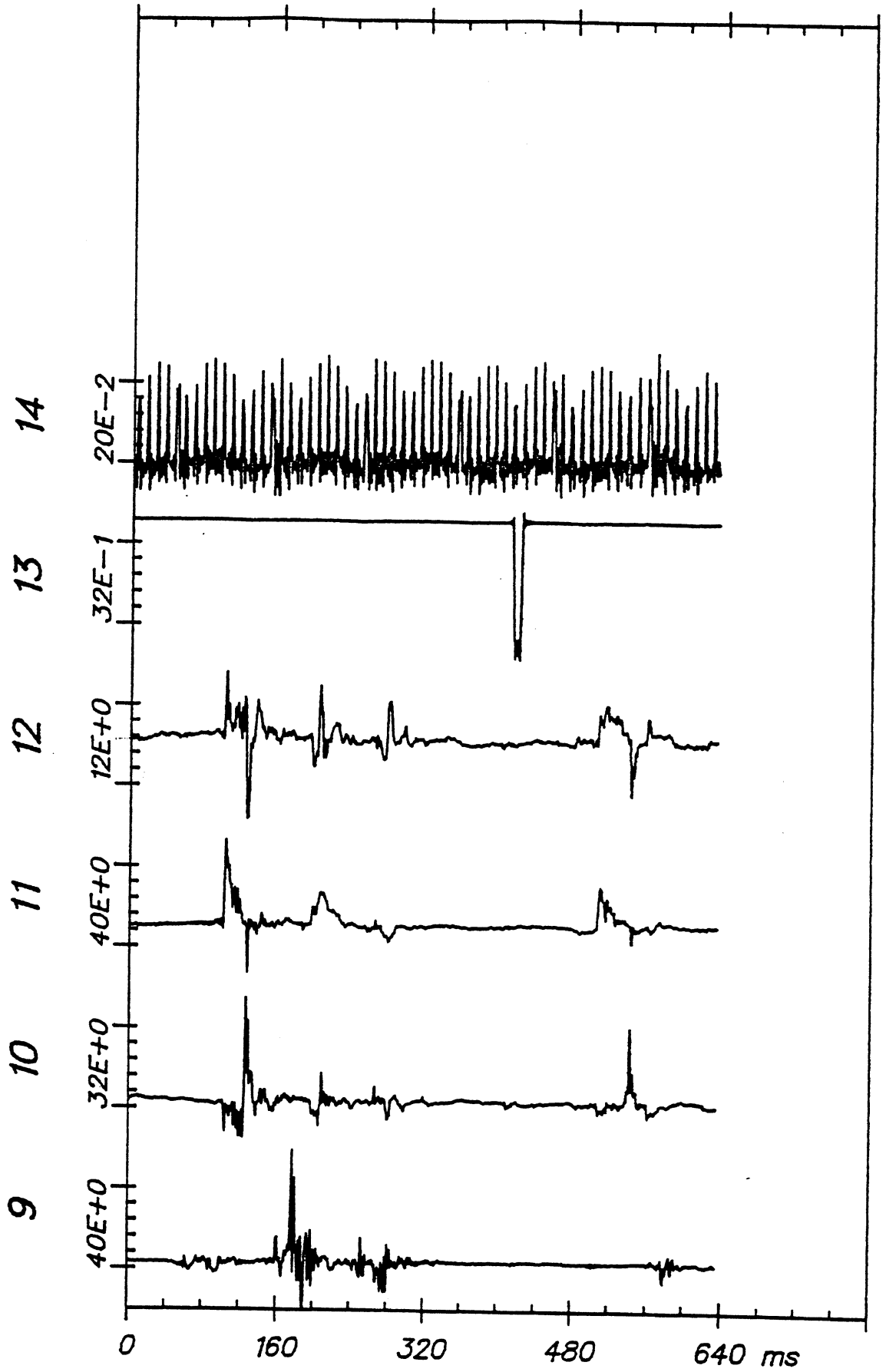


Time Histories

ITA S-3 (1)

DEC 2, 1981

From HSRI-175 to 81-SORT, file 164: /9/10/11/12/13/14/-/-/

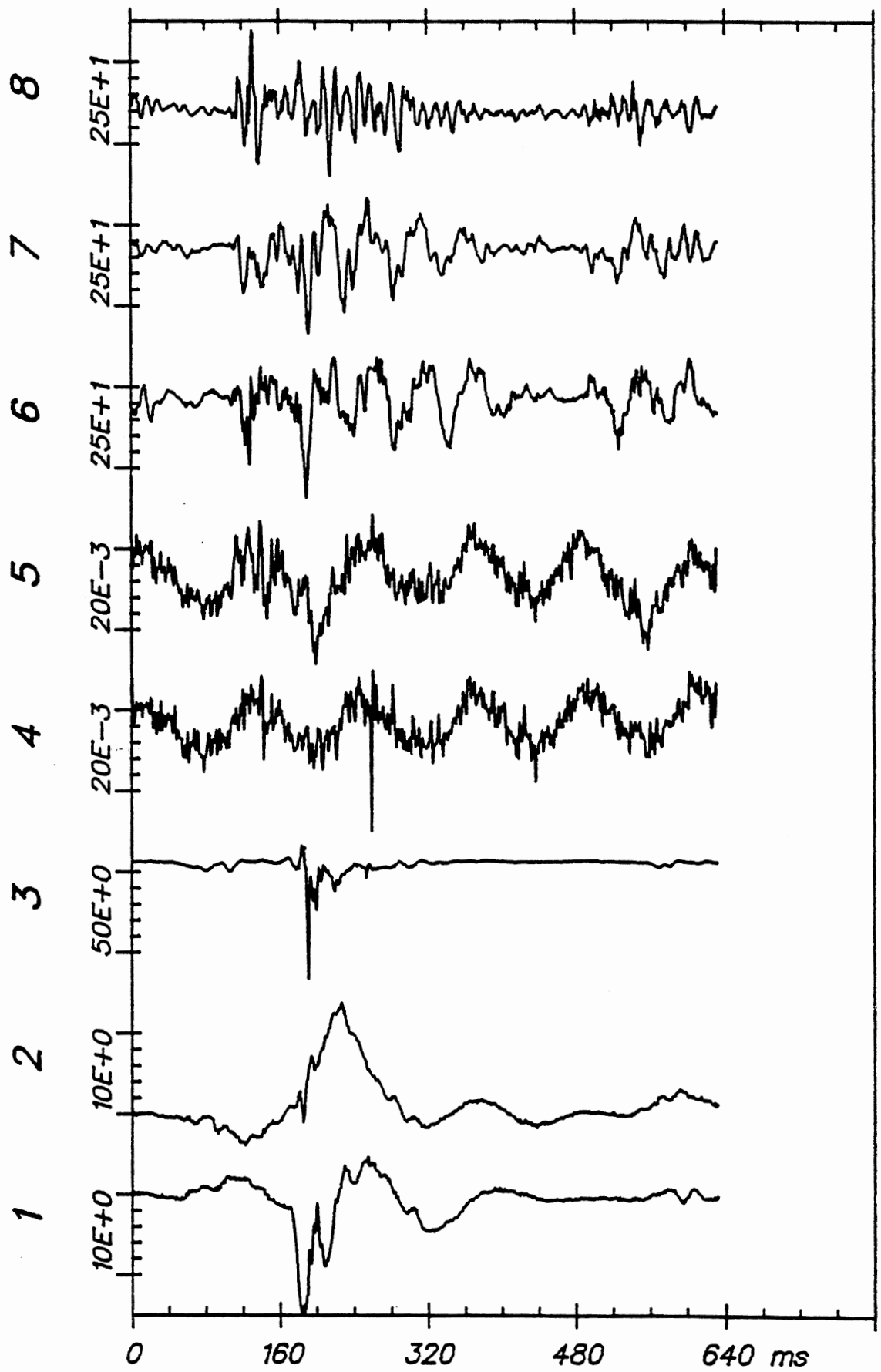


Time Histories

ITA S-3 (1)

From HSRI-176 to 81-SORT, file 174: /1/2/3/4/5/6/7/8/

DEC 2, 1981

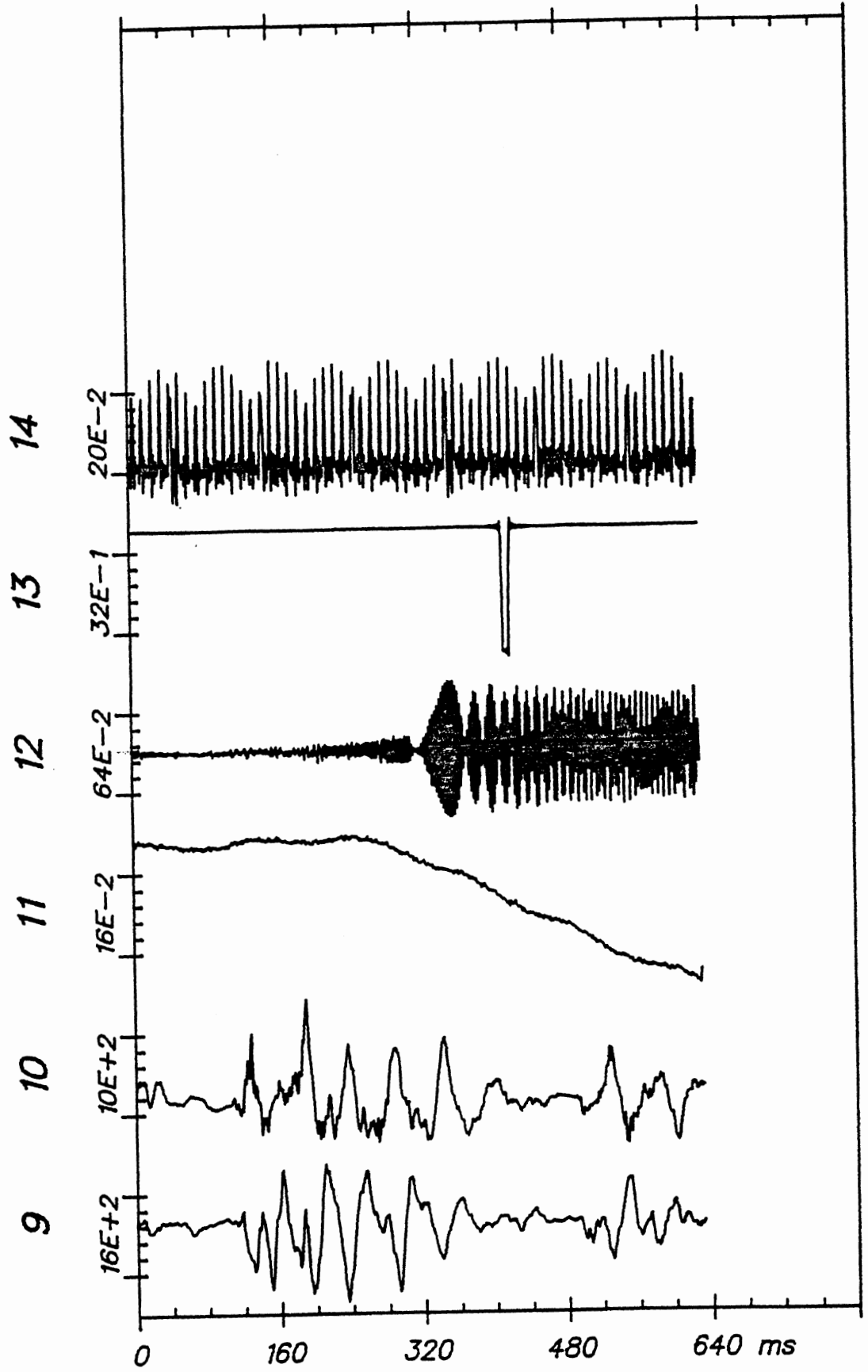


Time Histories

ITA S-3 (2)

DEC 2, 1981

From HSRI-176 to 81-SORT, file 174: /9/10/11/12/13/14/-/-/



Time Histories

ITA S-3 (2)

LA DYS W AR		Test No. U-1	S U M M A R Y			
			Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)						
	P-A acc	...	-35	454	565	495
	R-L acc	...	-171	496	644	495
	I-S acc	...	-378	495	414	496
	Resultant	...			925	495
	HIC = 4299	...		494		496

CHEST ACCELERATIONS (G)						
	P-A acc	...	-44	481	16	510
	R-L acc	...	-16	510	29	482
	I-S acc	...	-26	502	15	481
	Resultant	...			52	481

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-33	448	44	515
	R-L acc	...	-15	457	92	448
	I-S acc	...	-22	501	27	447
	Resultant	...			99	448

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-8	506	22	423
	Ay (L-R)	...	-5	582	36	401
	Az (I-S)	...	-6	423	5	417
	Resultant	...			37	401

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	-286	474	206	436
	Fy (L-R)	...	-131	419	97	511
	Fz (I-S)	...	-206	434	394	504
	Resultant	...			403	517

S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	-3423	406	2023	704
	My (L-R)	...	-476	368	2023	389
	Mz (I-S)	...				
	Resultant	...			4230	721

KNEE & BELTS LOADS (LB)						
	LI Knee	...				
	RT Knee	...				
	LI Belt	...	0	0	0	0
	RT Belt	...	0	0	0	0

LA DYS W AR

DEC 11, 1981

PEAKS

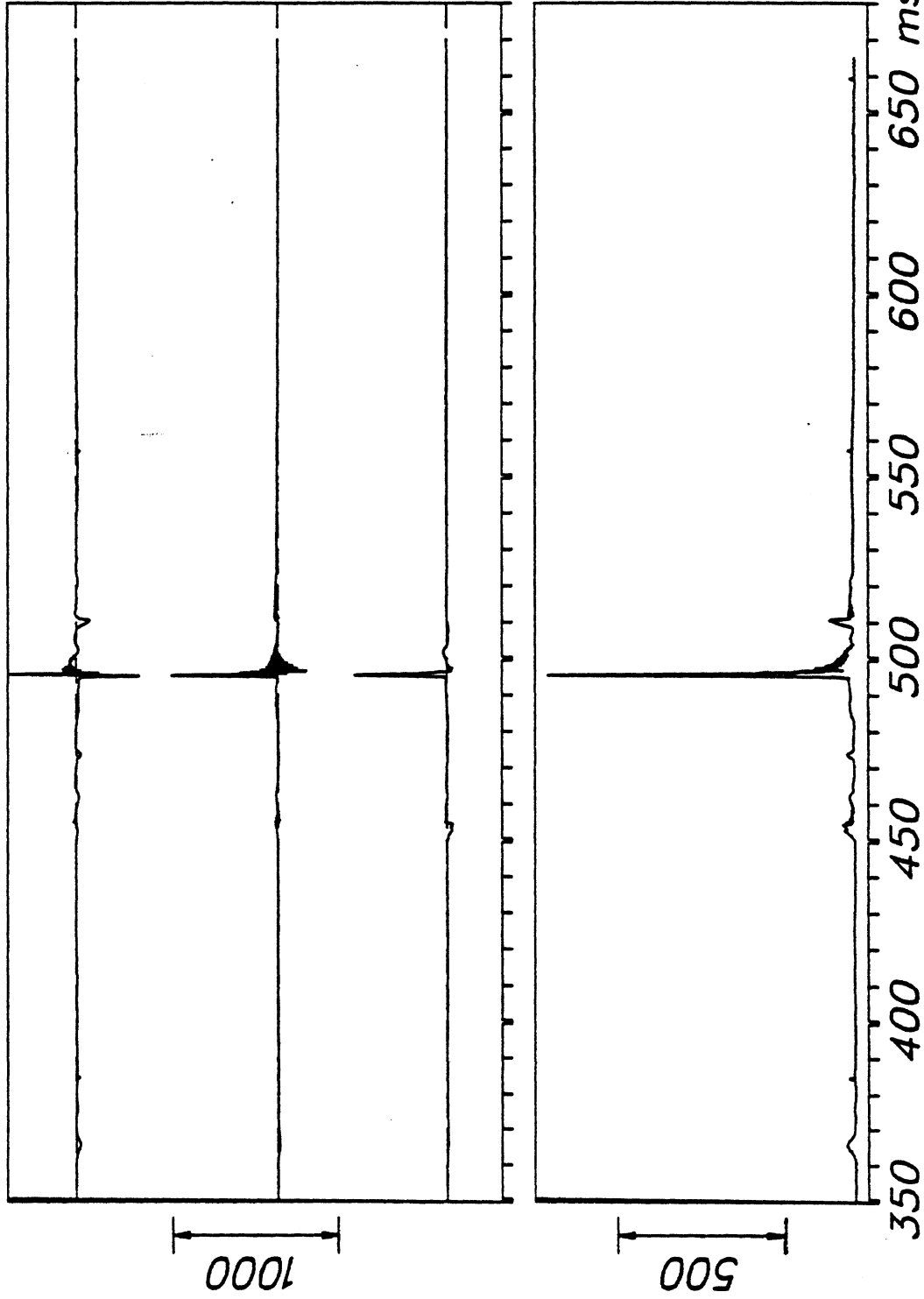
I-S acc 413

R-L acc 643

P-A acc 565

HIC = 4299

Resultant 924



U-1

LA DYS W AR

DEC 11, 1981

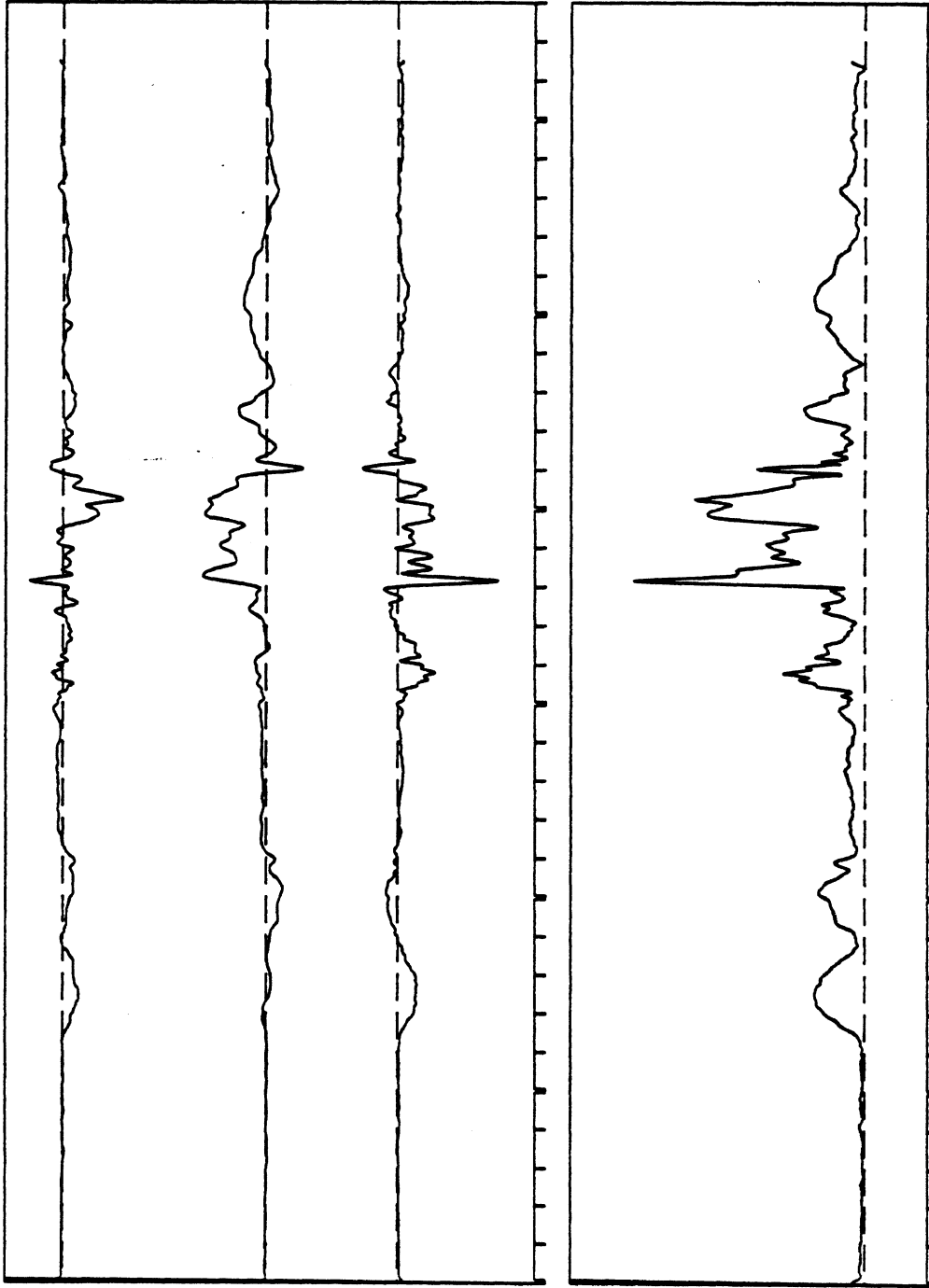
PEAKS

I-S acc -27

R-L acc 28

P-A acc -45

Resultant 51



300 350 400 450 500 550 600 msec

CHEST ACCELERATIONS (G)

U-1

LA DYS W AR

DEC 11, 1981

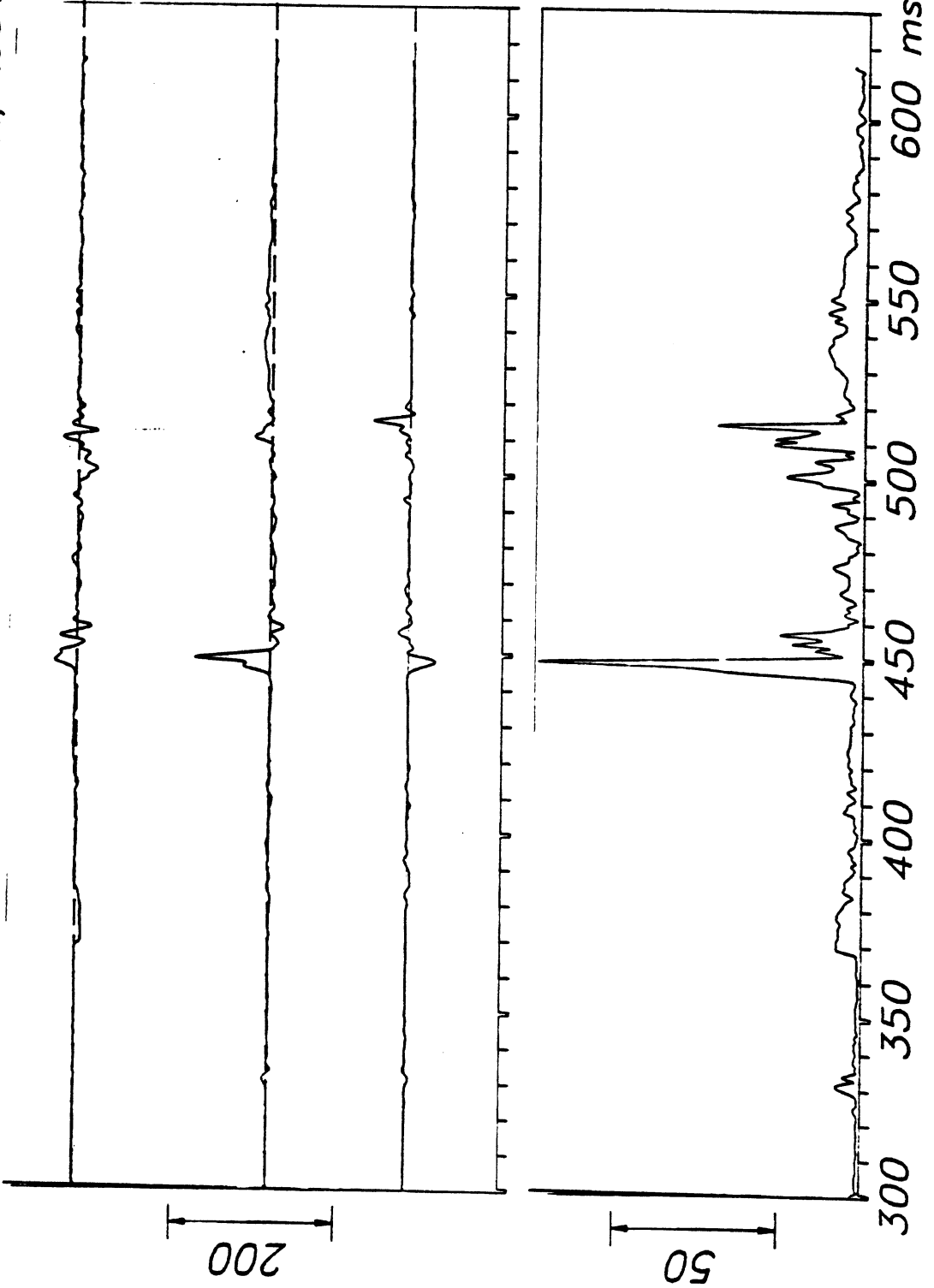
PEAKS

I-S acc 27

R-L acc 92

P-A acc 44

Resultant 98



PELVIS ACCELERATIONS (G)

U-1

L.A DYS W AR

DEC 11, 1981

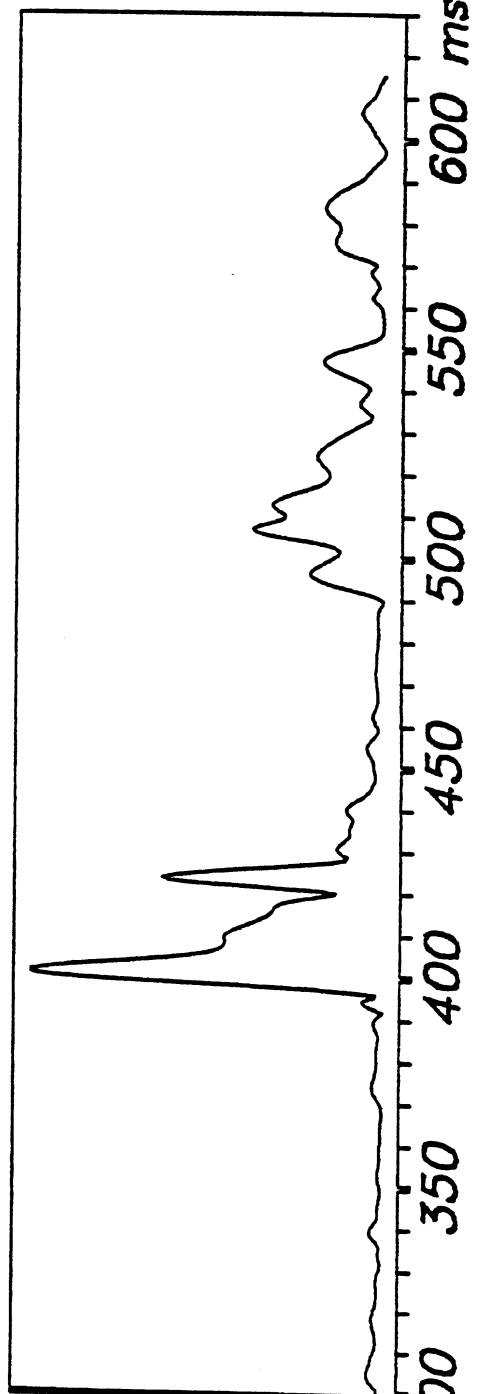
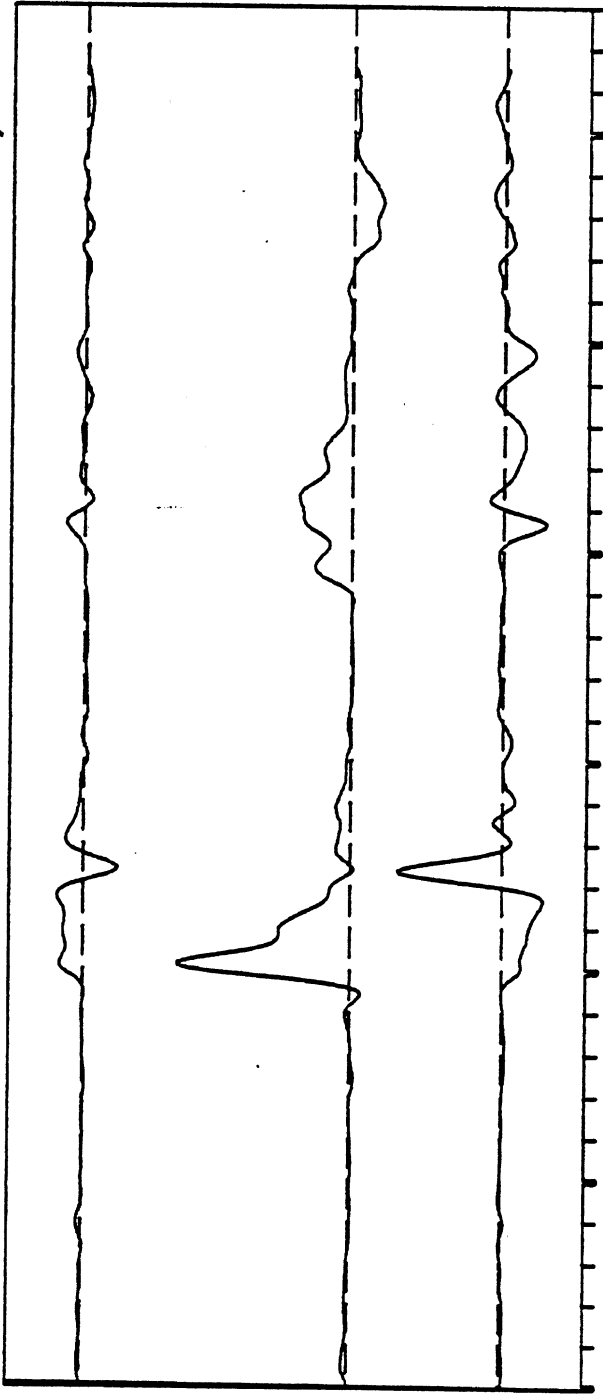
PEAKS

Az (I-S) -7

Ay (L-R) 36

Ax (A-P) 21

Resultant 36

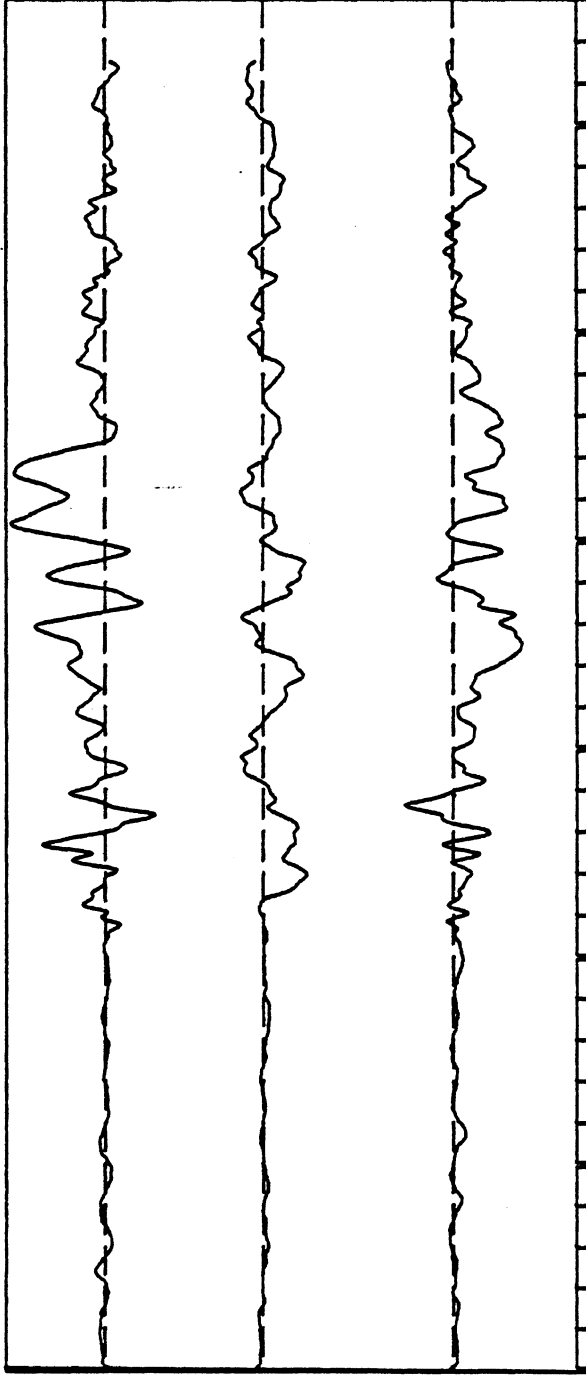


U-1

LA DYS W AR

DEC 11, 1981

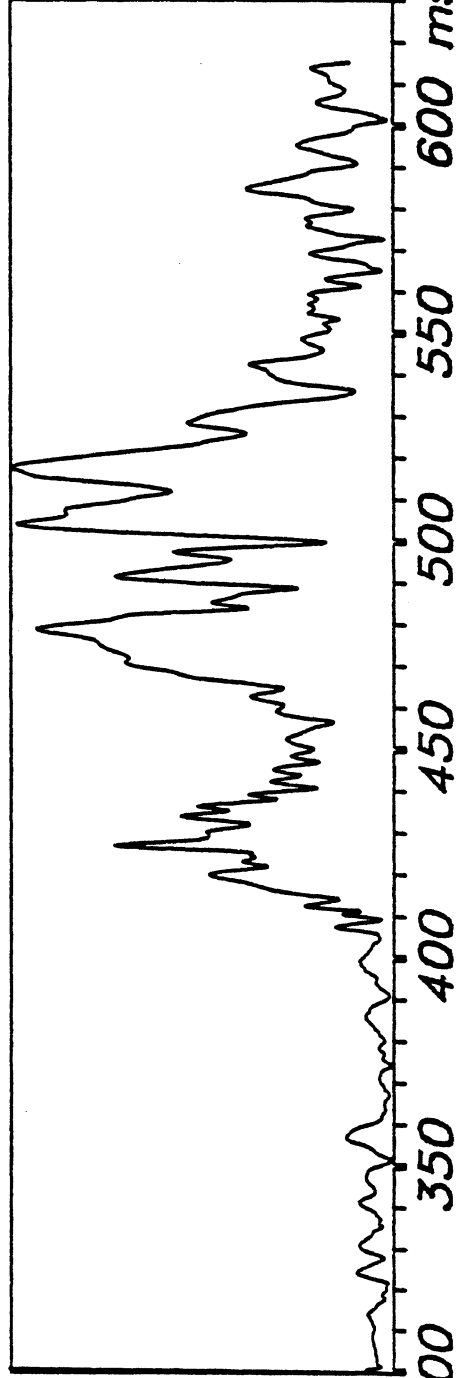
PEAKS



Fz (I-S) 393

Fy (L-R) -182

Fx (A-P) -287



Resultant 402

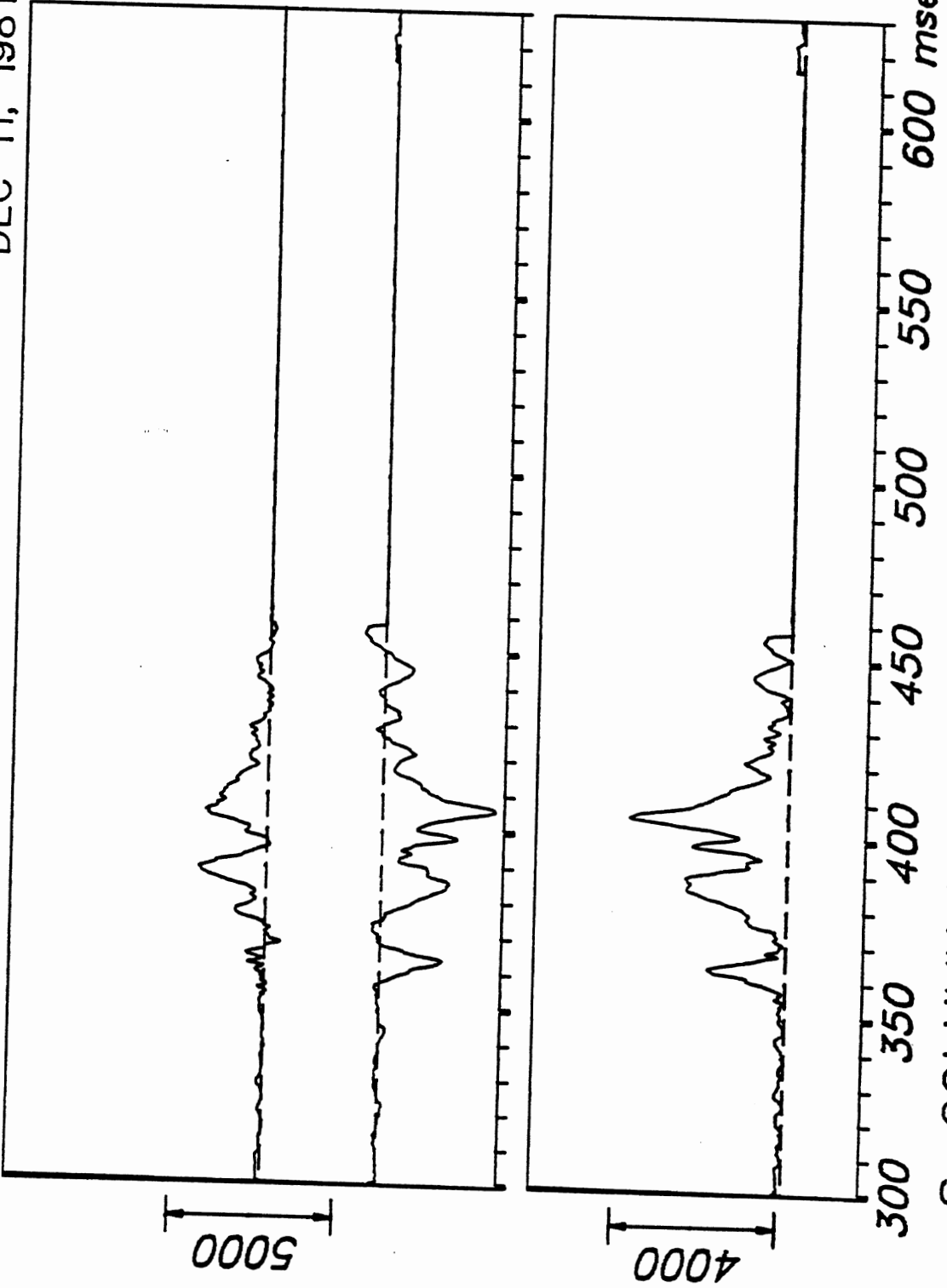
S. COLUMN FORCES (LB)

U-1

LA DYS W AR

DEC 11, 1981

PEAKS



My (L-R) 2023

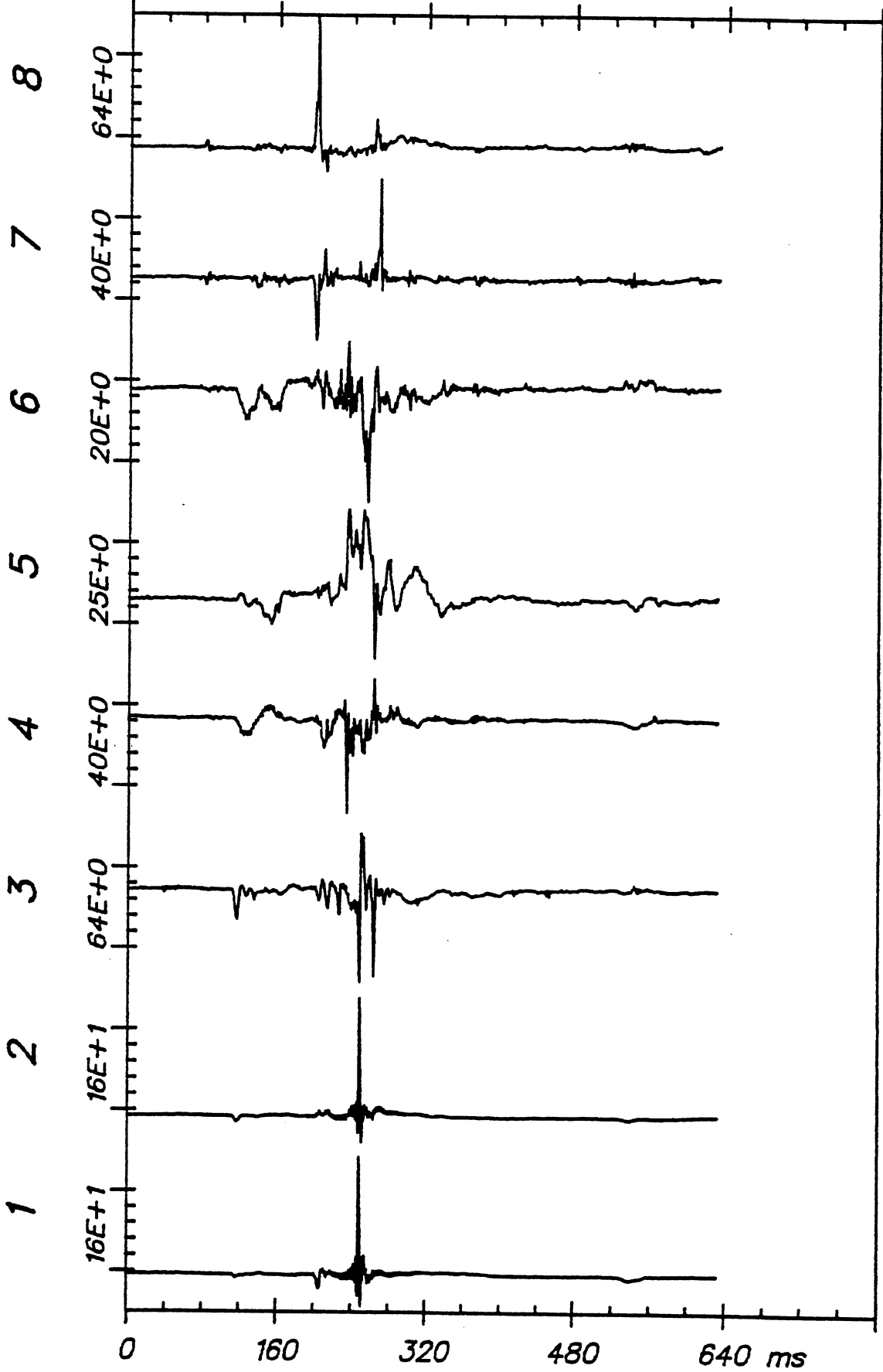
Mx (A-P)

Resultant 4230

U-1

DEC 2, 1981

From HSRI-175 to 81-SORT, file 168: /1/2/3/4/5/6/7/8/

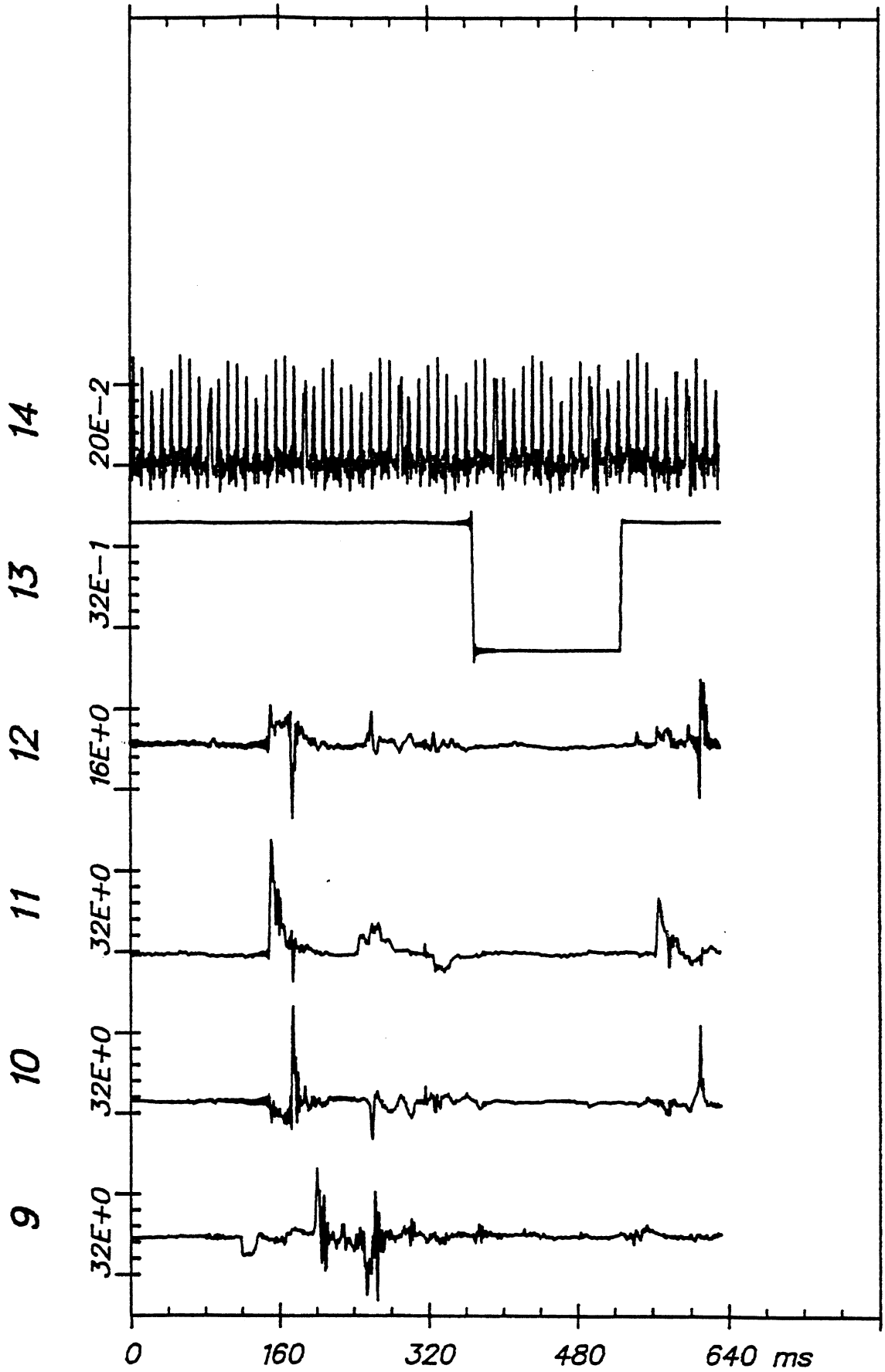


Time Histories

ITA U-1 (1)

DEC 2, 1981

From HSRI-175 to 81-SORT, file 168: /9/10/11/12/13/14/--/--

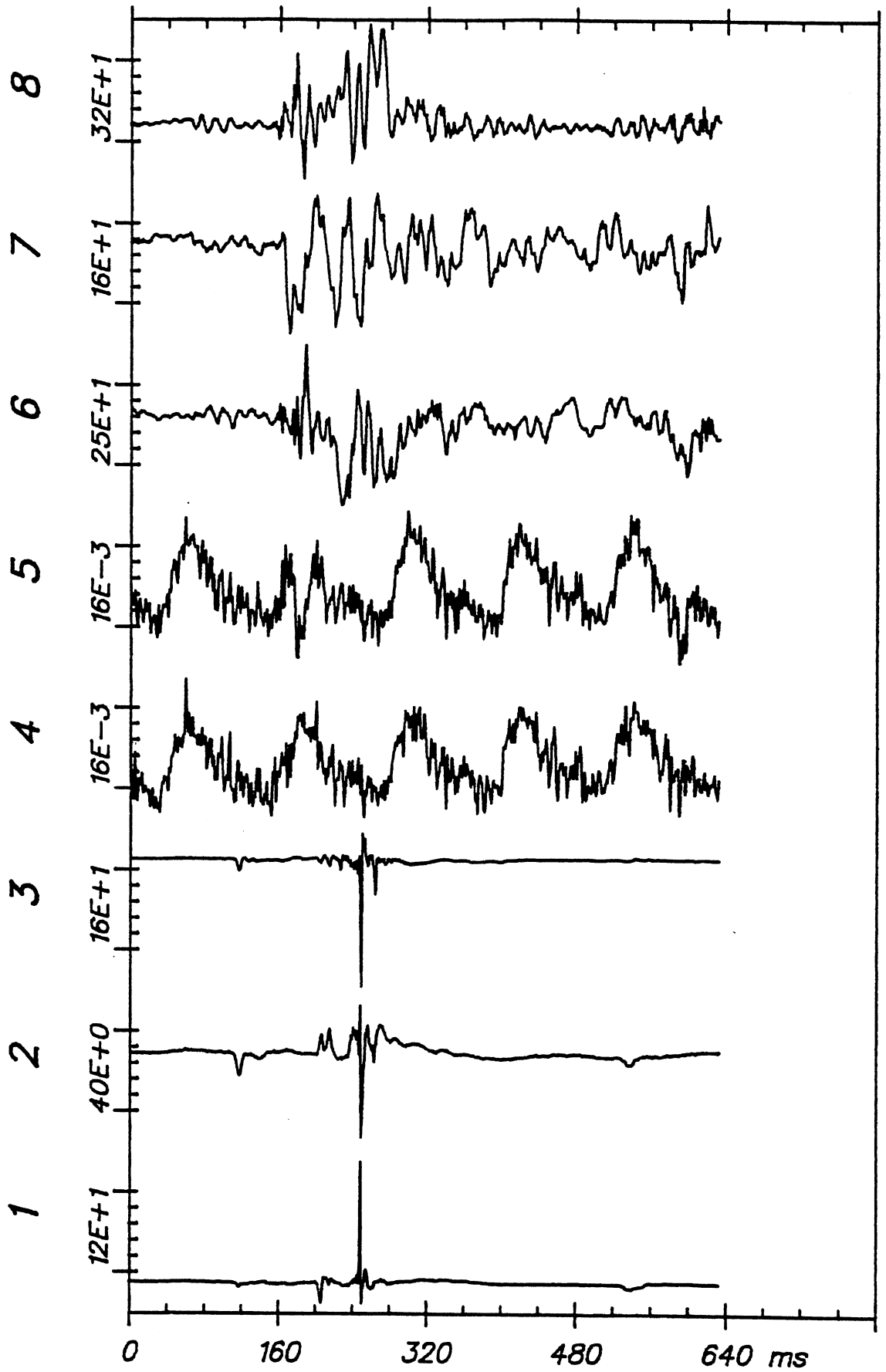


Time Histories

ITA U-1 (1)

DEC 2, 1981

From HSRI-176 to 81-SORT, file 178: /1/2/3/4/5/6/7/8/

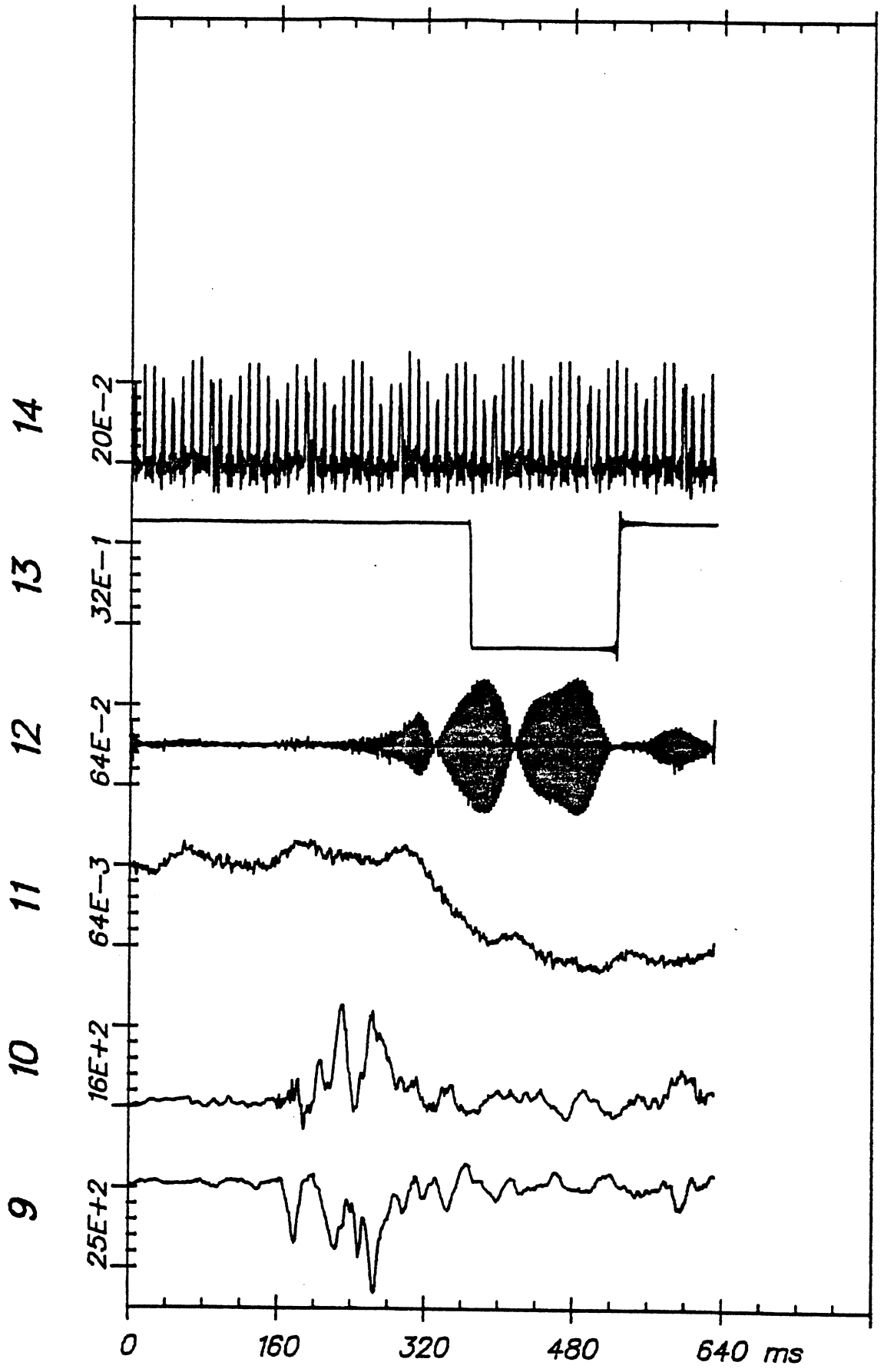


Time Histories

ITA U-1 (2)

DEC 2, 1981

From HSRI-176 to 81-SORT, file 178: /9/10/11/12/13/14/-/-/



Time Histories

ITA U-1 (2)

LA DYS W/O SE		Test No. V-3		S U M M A R Y			
				Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)							
	P-A acc	...	-17	190	48	154	
	R-L acc	...	-52	175	39	155	
	I-S acc	...	-100	174	58	189	
	Resultant	...			116	157	
	HIC =	376 ...		148		221	

CHEST ACCELERATIONS (G)							
	P-A acc	...	-26	200	7	193	
	R-L acc	...	-2	255	26	204	
	I-S acc	...	-27	161	23	173	
	Resultant	...			32	200	

PELVIS ACCELERATIONS (G)							
	P-A acc	...	-20	224	13	313	
	R-L acc	...	-7	208	45	223	
	I-S acc	...	-40	150	22	321	
	Resultant	...			49	223	

TRUCK DECELERATIONS (G)							
	Ax (A-P)	...	-9	140	17	147	
	Ay (L-R)	...	-2	327	22	127	
	Az (I-S)	...	-5	147	5	138	
	Resultant	...			22	127	

S. COLUMN FORCES (LB)							
	Fx (A-P)	...	-391	190	154	234	
	Fy (L-R)	...	-349	170	88	237	
	Fz (I-S)	...	-138	242	318	158	
	Resultant	...			445	173	

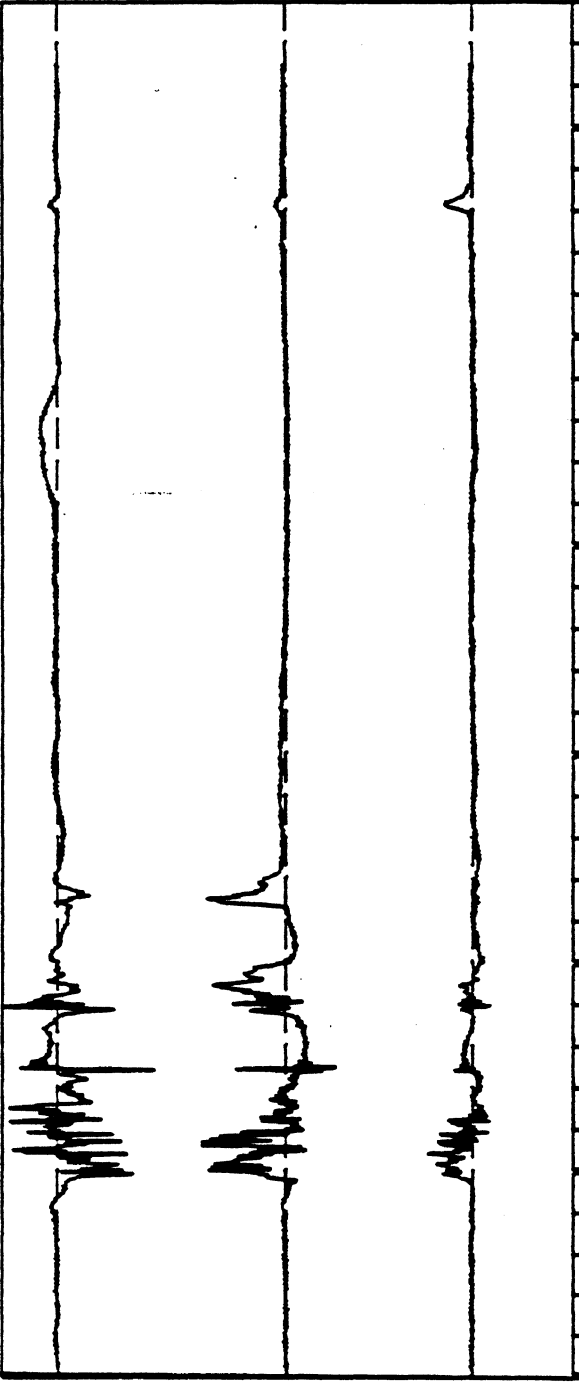
S. COLUMN MOMENTS (IN-LB)							
	Mx (A-P)	...	-3497	111	1911	430	
	My (L-R)	...	-790	142	1911	115	
	Mz (I-S)	...					
	Resultant	...			3963	427	

KNEE & BELTS LOADS (LB)							
	LT Knee	...	0	0	0	0	
	RT Knee	...	0	0	0	0	
	LT Belt	...					
	RT Belt	...					

L.A DYS W/O SB

DEC 11, 1981

PEAKS



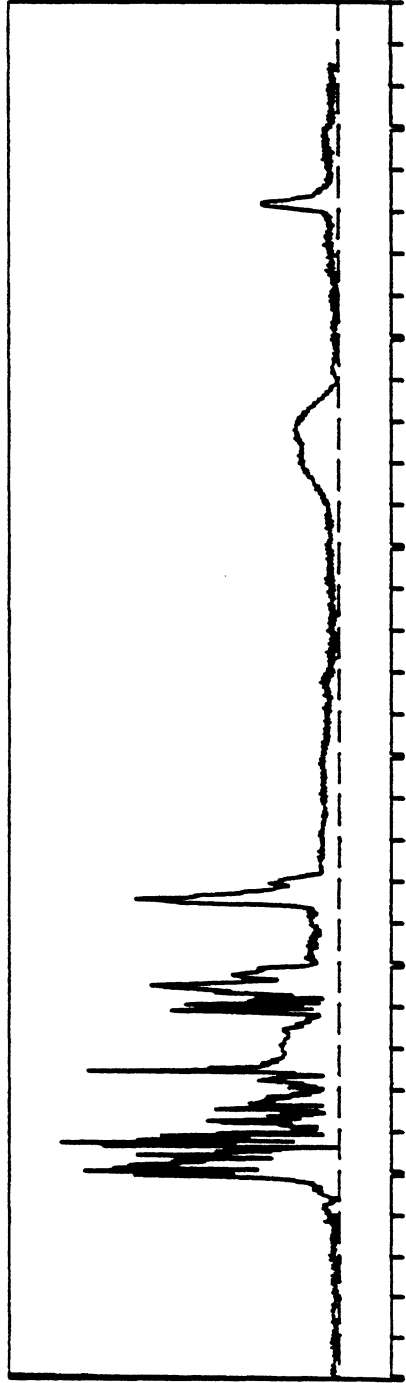
I-S acc -101

R-L acc 88

P-A acc 47

HIC = 376

Resultant 116



100 150 200 250 300 350 400 msec

HEAD ACCELERATIONS (G)

V-3

LA DYS W/O SB

DEC 11, 1981

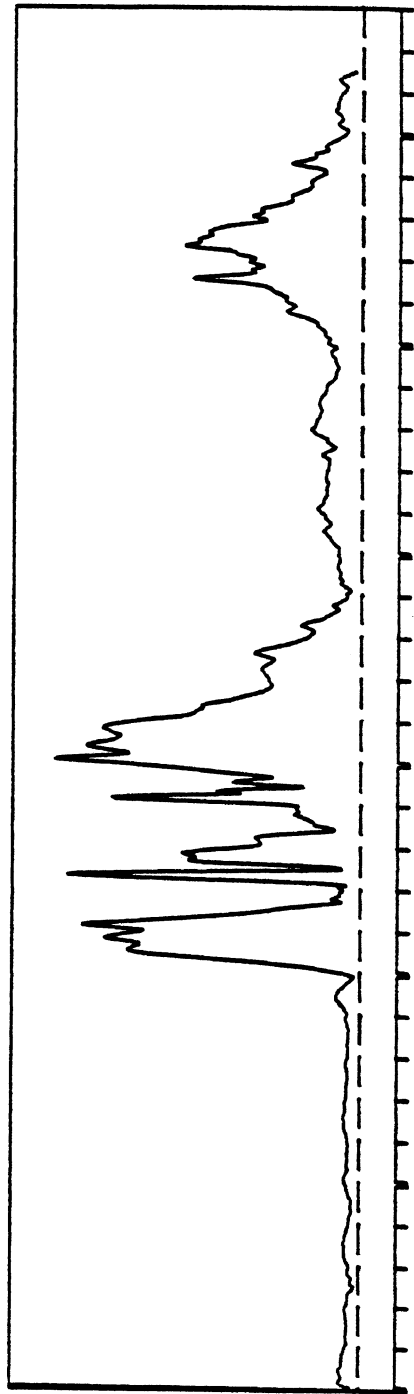
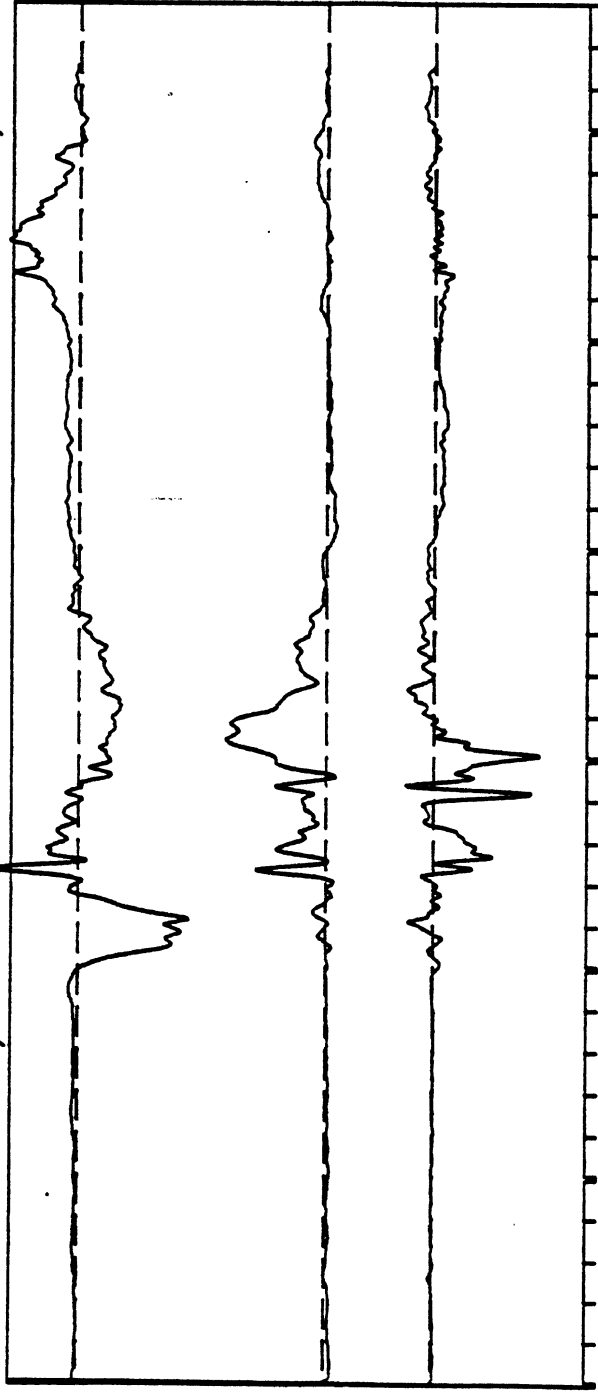
PEAKS

I-S acc -28

R-L acc 26

P-A acc -27

Resultant 31



CHEST ACCELERATIONS (G)

V-3

LA DYS W/O SB

DEC 11, 1981

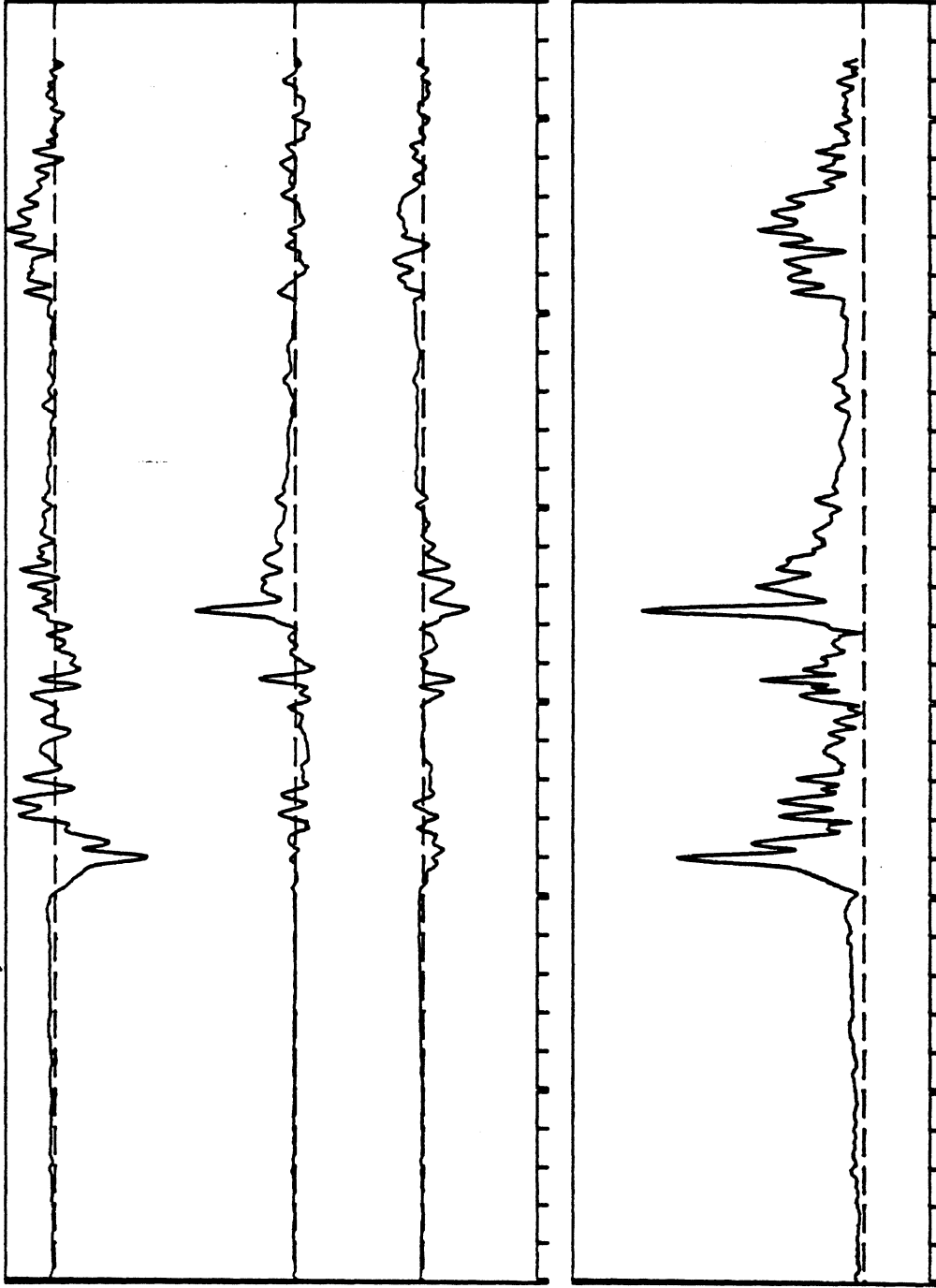
PEAKS

I-S acc -41

R-L acc 44

P-A acc -21

Resultant 49



50 100 150 200 250 300 350 msec

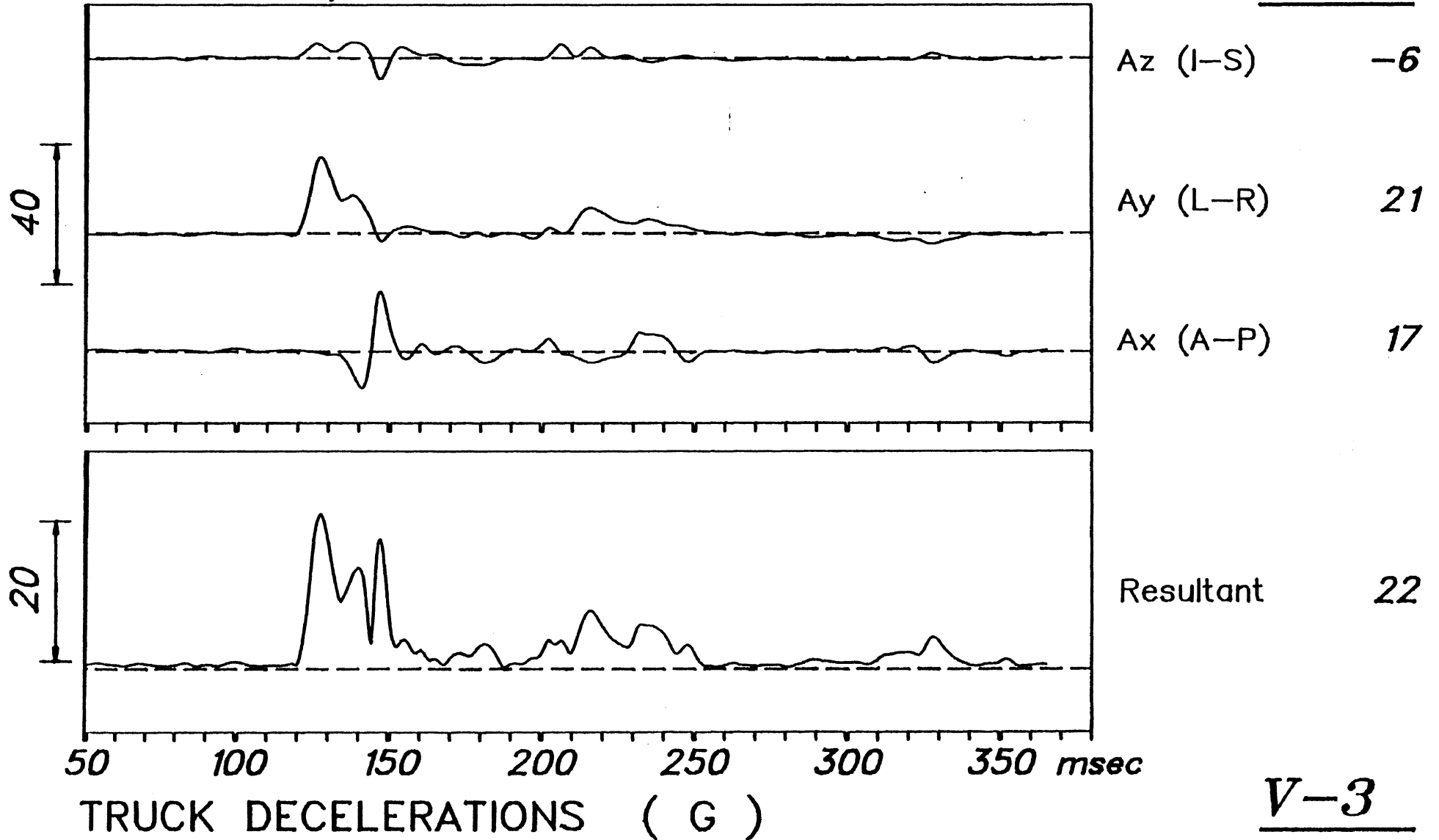
PELVIS ACCELERATIONS (G)

V-3

LA DYS W/O SB

DEC 11, 1981

PEAKS



V-3

L.A DYS W/O SB

DEC 11, 1981

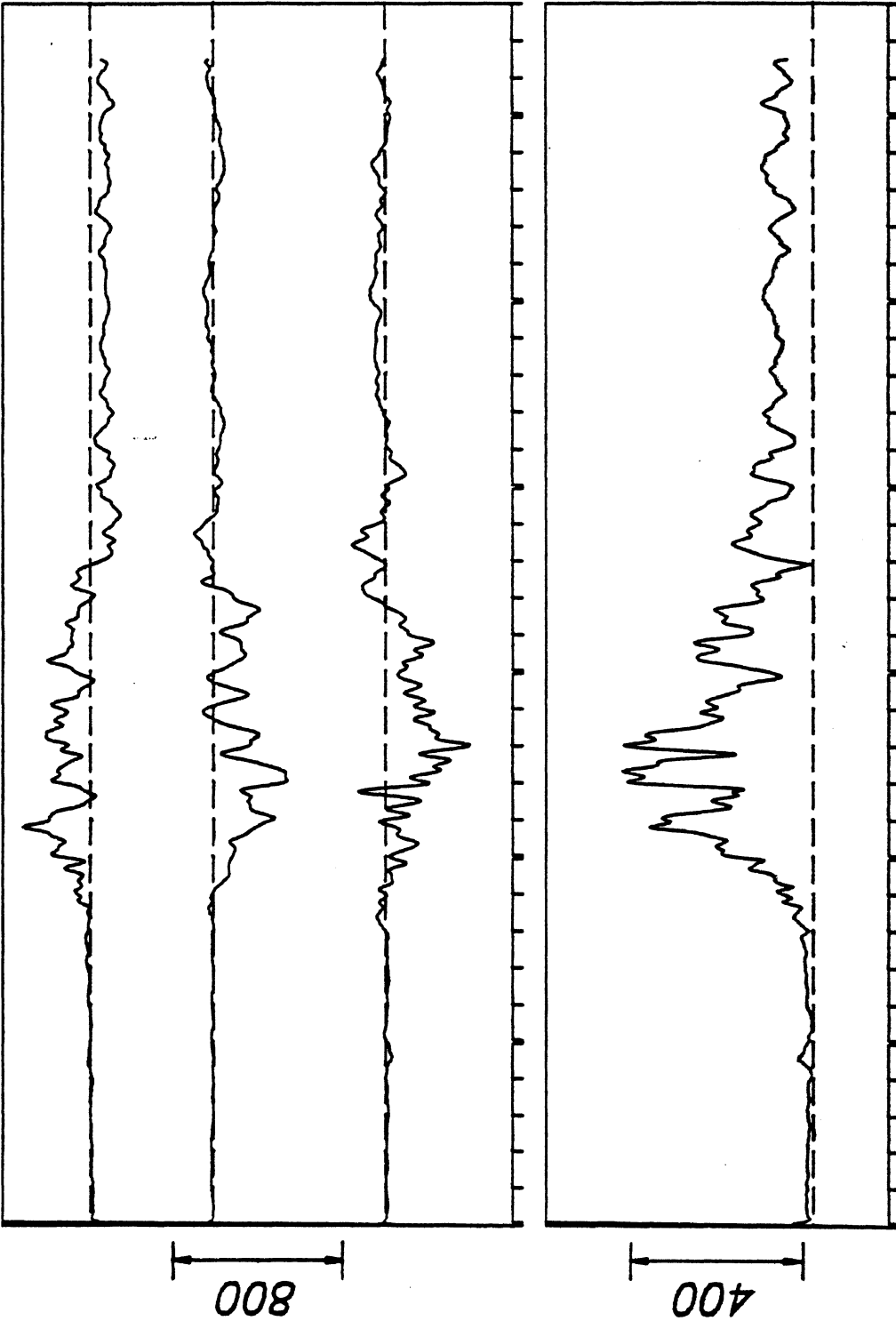
PEAKS

Fz (I-S) 318

Fy (L-R) -350

Fx (A-P) -392

Resultant 445



50 100 150 200 250 300 350 msec

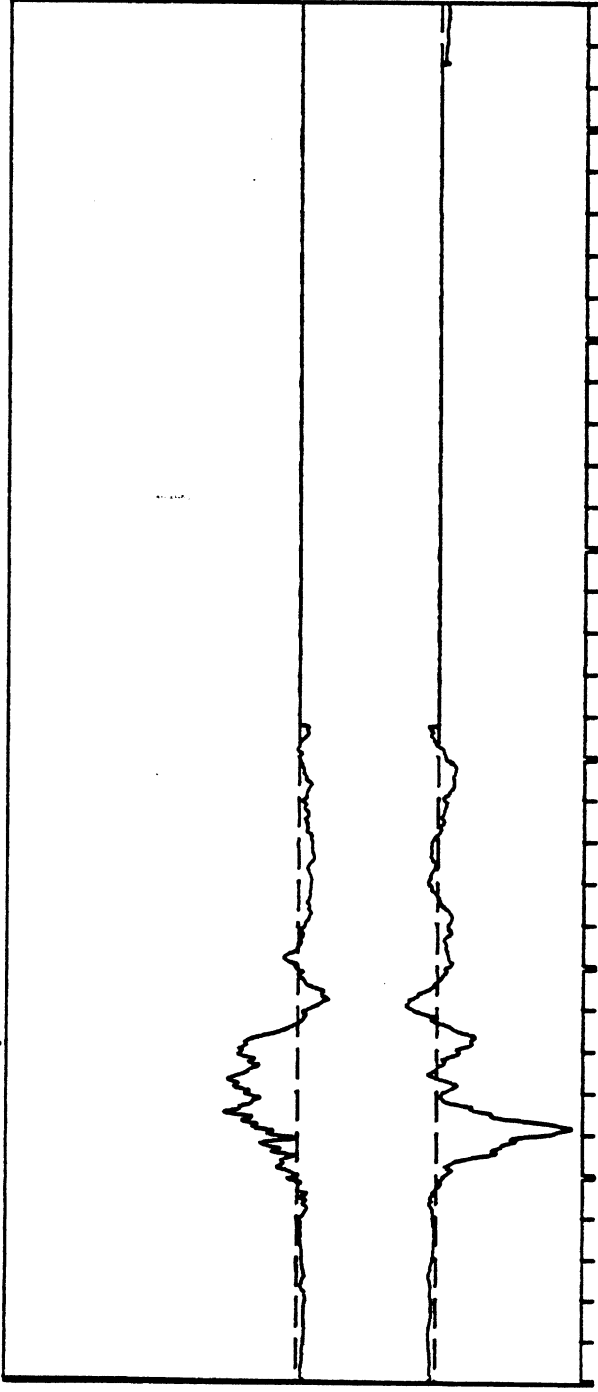
S. COLUMN FORCES (LB)

V-3

LA DYS W/O SB

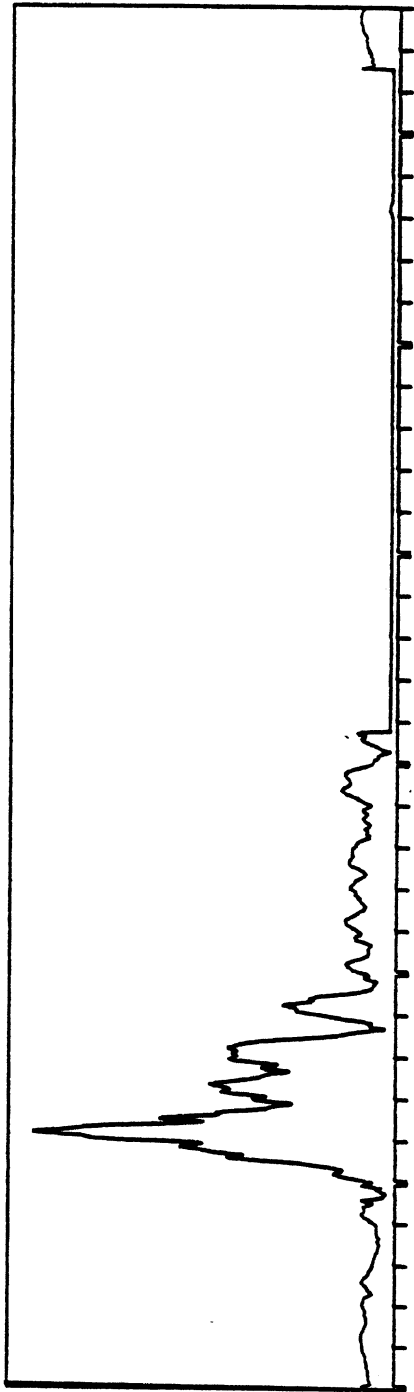
DEC 11, 1981

PEAKS



My (L-R) 1911

Mx (A-P)

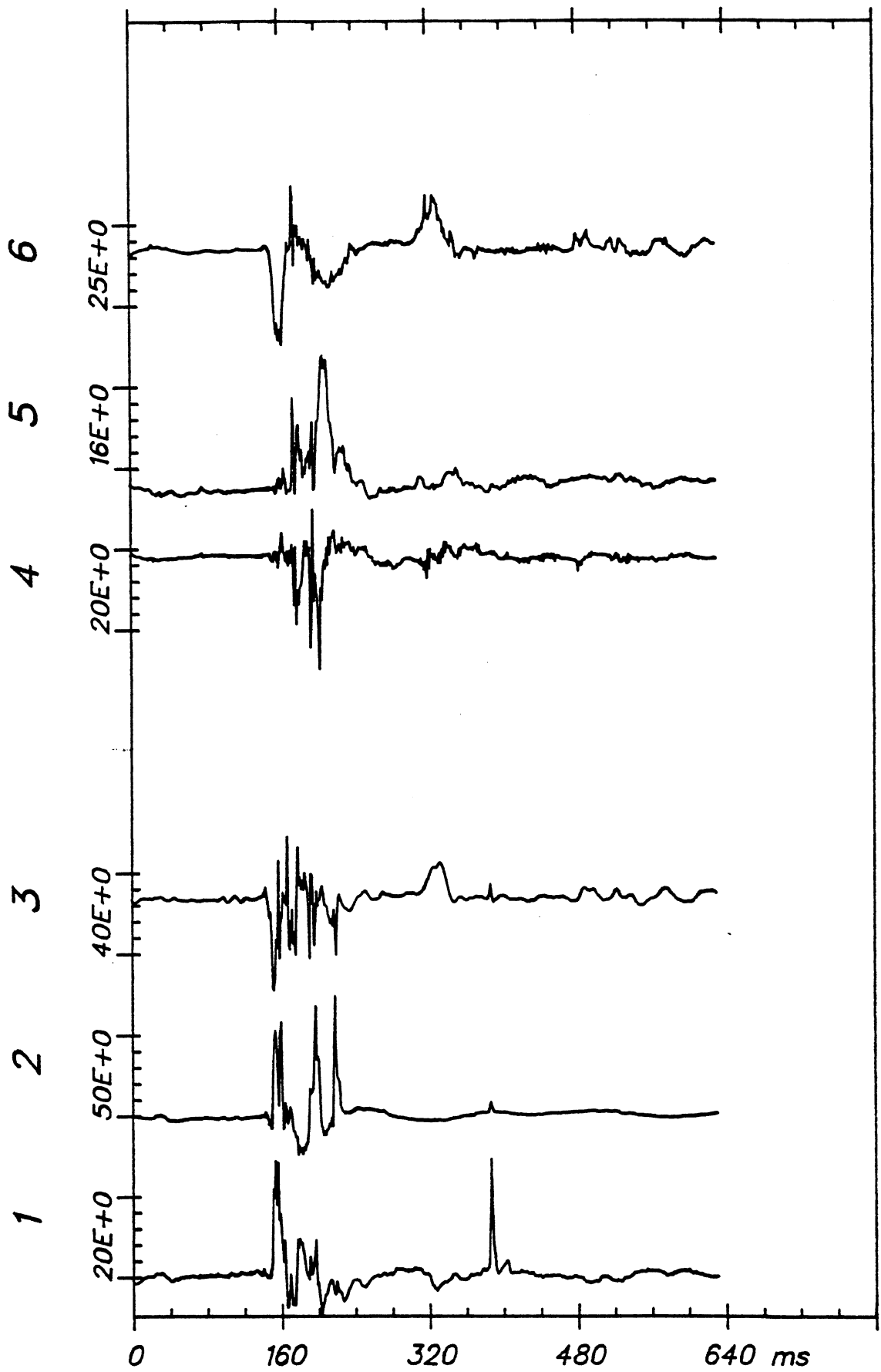


Resultant 3863

V-3

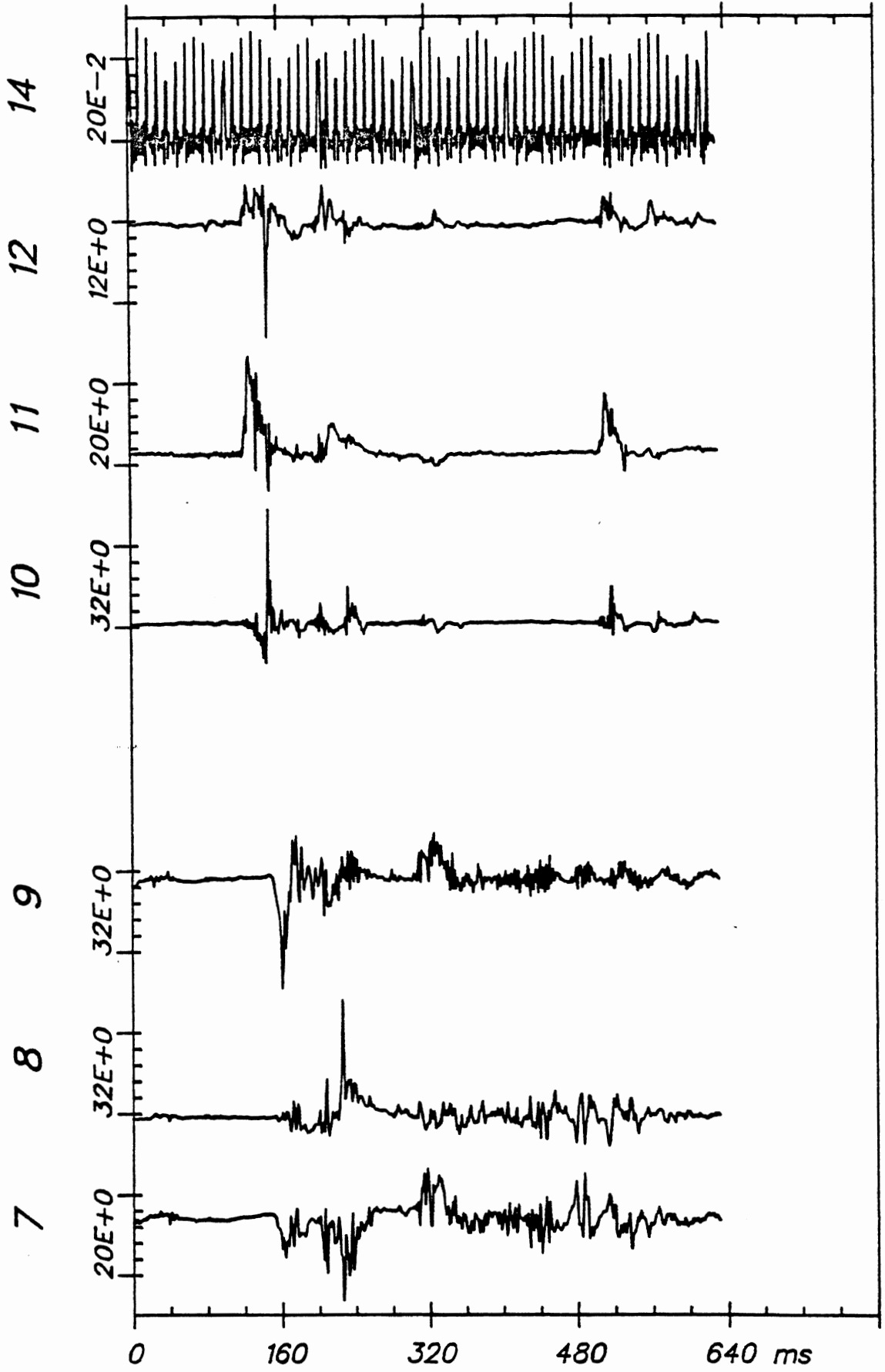
DEC 10, 1981

From HSRI-175 to 20+SITA, file 4: /1/2/3/-/4/5/6/-/-/



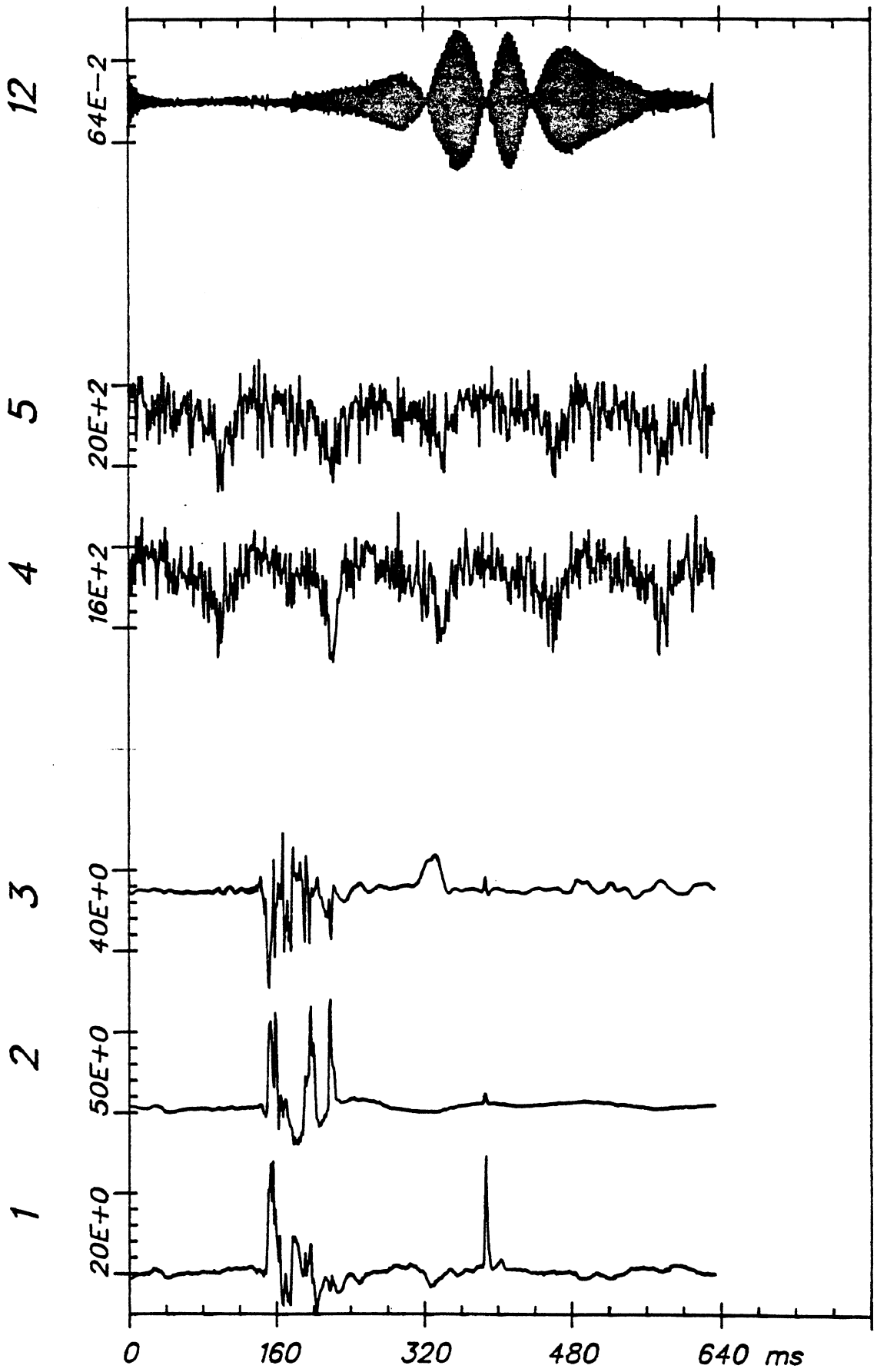
Time Histories

ITA V-3 (1)



Time Histories

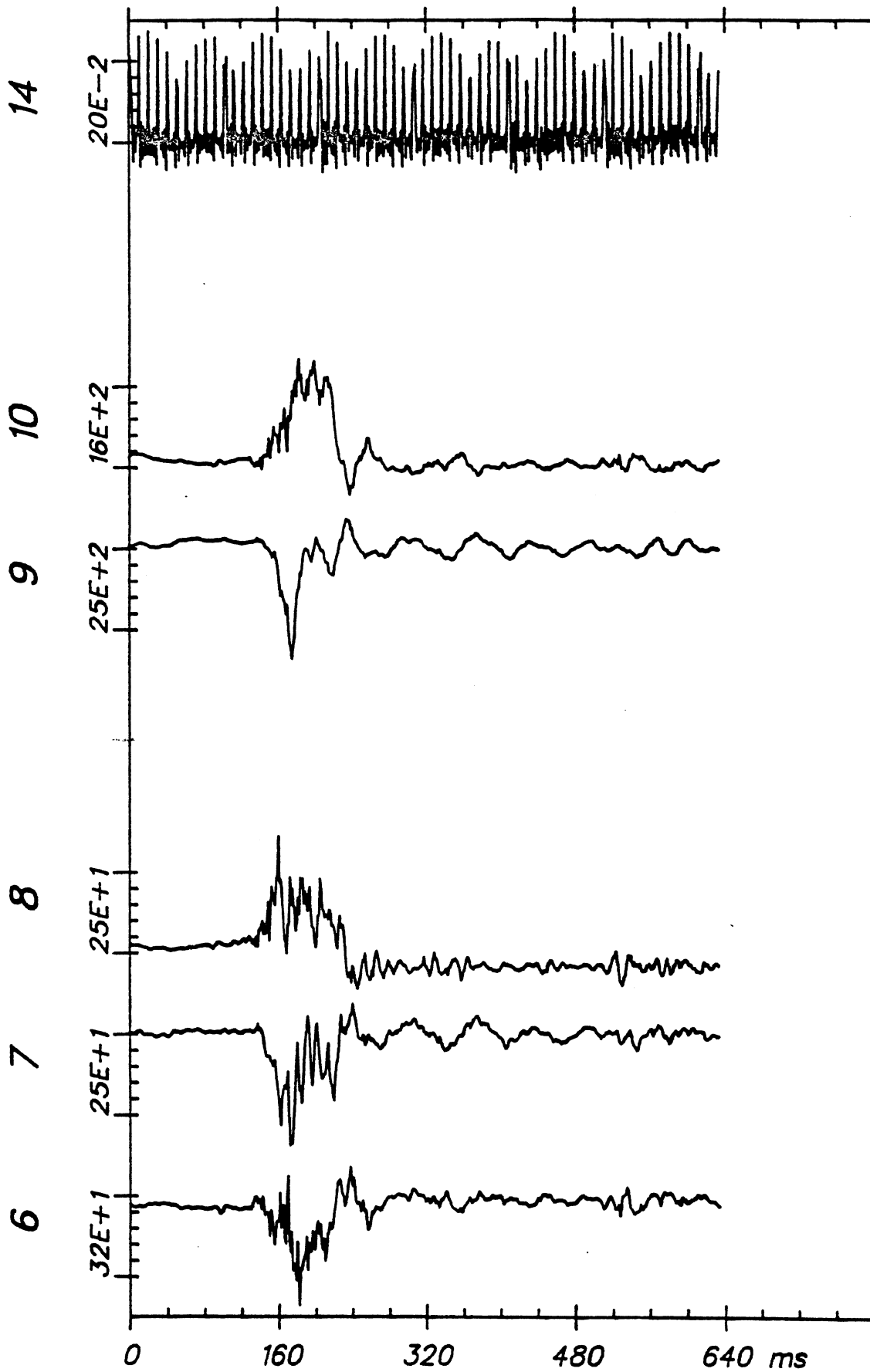
ITA V-3 (1)



Time Histories

DEC 10, 1981

From HSRI-176 to 20+SITA, file 9: /6/7/8/-/9/10/-/14/



Time Histories

ITA V-3 (2)

LA DYS W/O SB		Test No. V-4		S U M M A R Y			
				Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)							
	P-A acc	...		-21	127	33	73
	R-L acc	...		-29	102	112	126
	I-S acc	...		-69	87	50	128
	Resultant	...				112	126
	HIC =	262	...		67		138

CHEST ACCELERATIONS (G)							
	P-A acc	...		-42	130	6	142
	R-L acc	...		-2	114	24	142
	I-S acc	...		-16	76	18	101
	Resultant	...				46	130

PELVIS ACCELERATIONS (G)							
	P-A acc	...		-20	151	13	162
	R-L acc	...		-13	115	70	144
	I-S acc	...		-13	78	15	147
	Resultant	...				71	144

TRUCK DECELERATIONS (G)							
	Ax (A-P)	...		-7	58	14	66
	Ay (L-R)	...		-2	56	26	42
	Az (I-S)	...		-5	56	4	50
	Resultant	...				27	42

S. COLUMN FORCES (LB)							
	Fx (A-P)	...		-269	95	61	229
	Fy (L-R)	...		-254	78	57	156
	Fz (I-S)	...		-74	181	344	104
	Resultant	...				376	104

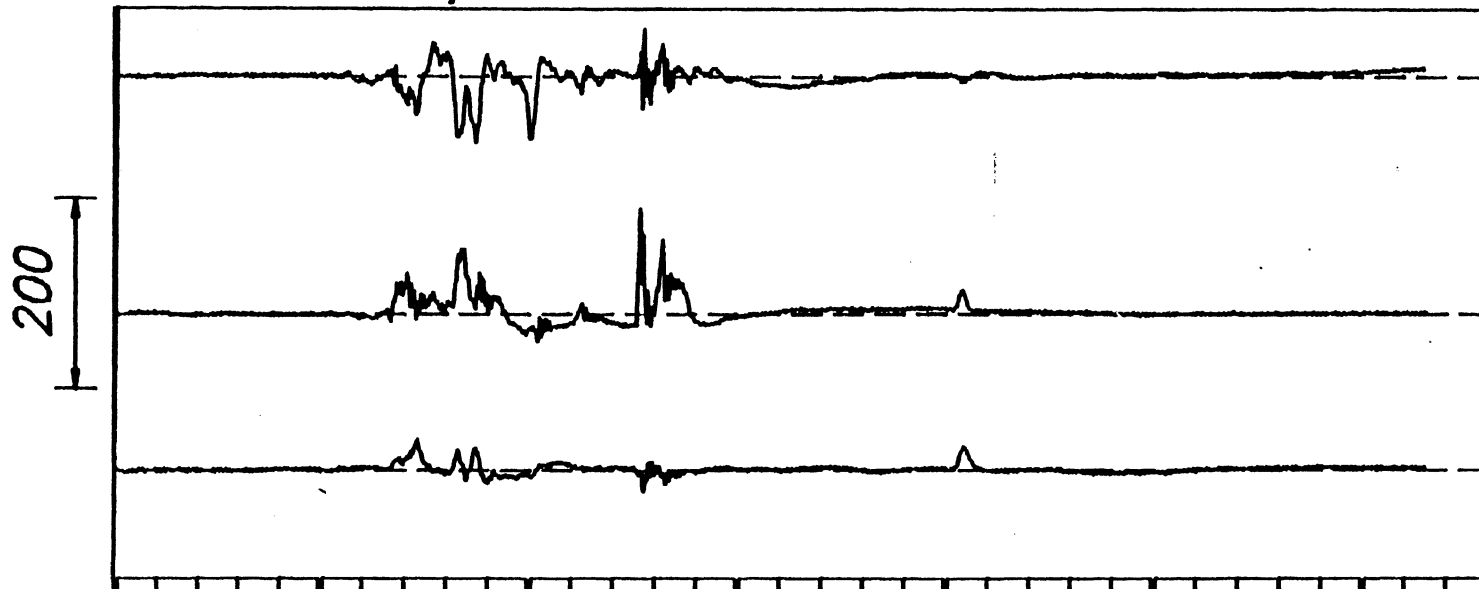
S. COLUMN MOMENTS (IN-LB)							
	Mx (A-P)	...		-2144	49	1785	358
	My (L-R)	...		-271	114	1785	43
	Mz (I-S)	...					
	Resultant	...				2900	358

KNEE & BELTS LOADS (LB)							
	LI Knee	...		0	0	0	0
	RI Knee	...		0	0	0	0
	LI Belt	...					
	RI Belt	...					

LA DYS W/O SB

DEC 11, 1981

PEAKS

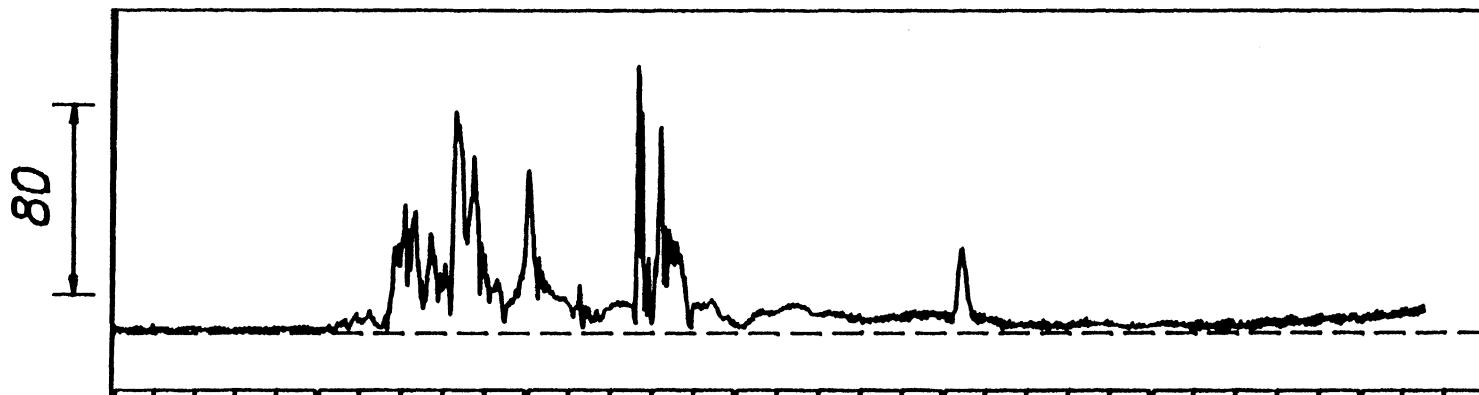


I-S acc -70

R-L acc 112

P-A acc 33

HIC = 262



Resultant 112

0 50 100 150 200 250 300 msec

HEAD ACCELERATIONS (G)

V-4

LA DYS W/O SB

DEC 11, 1981

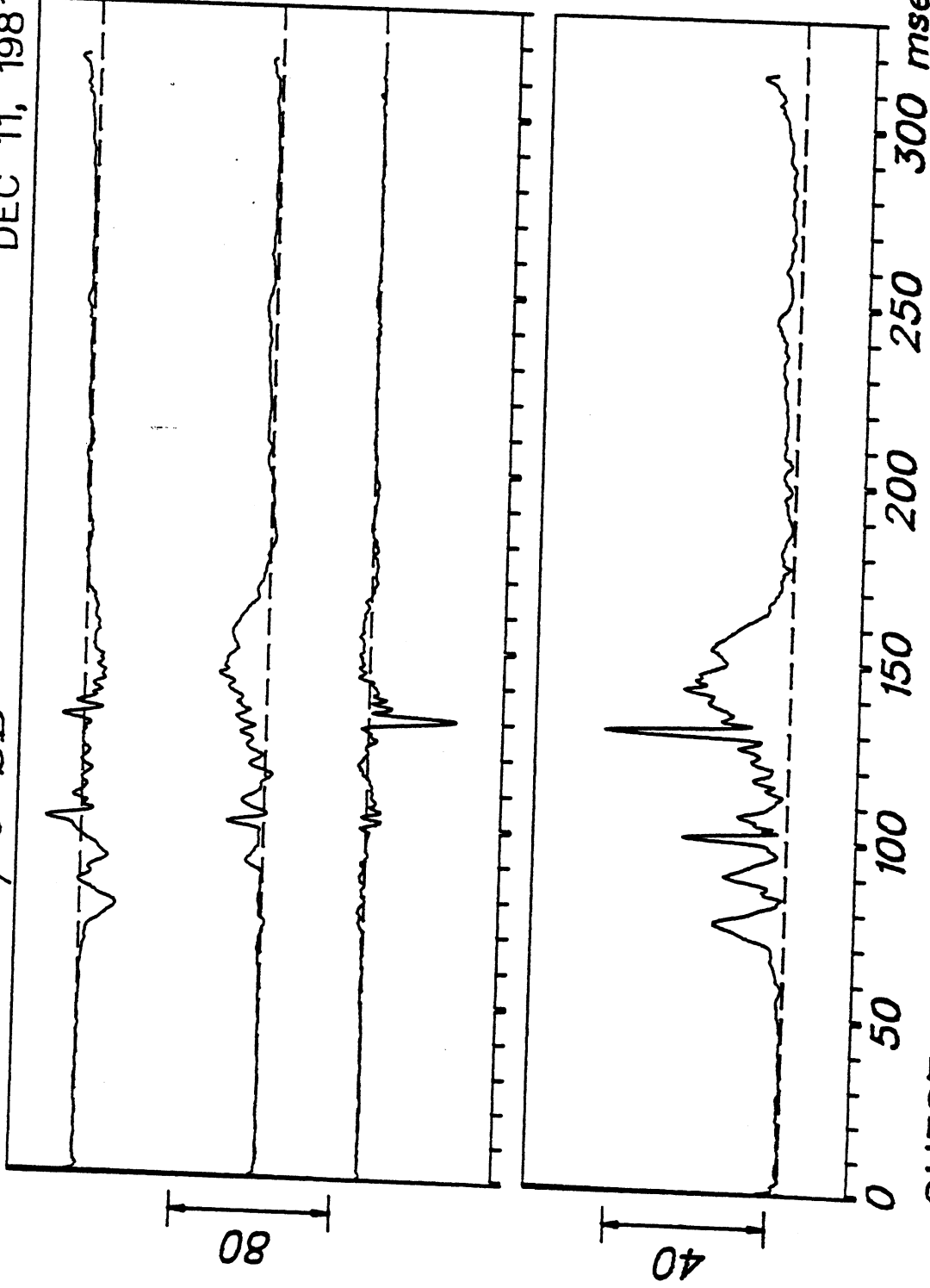
PEAKS

I-S acc 17

R-L acc 23

P-A acc -43

Resultant 45

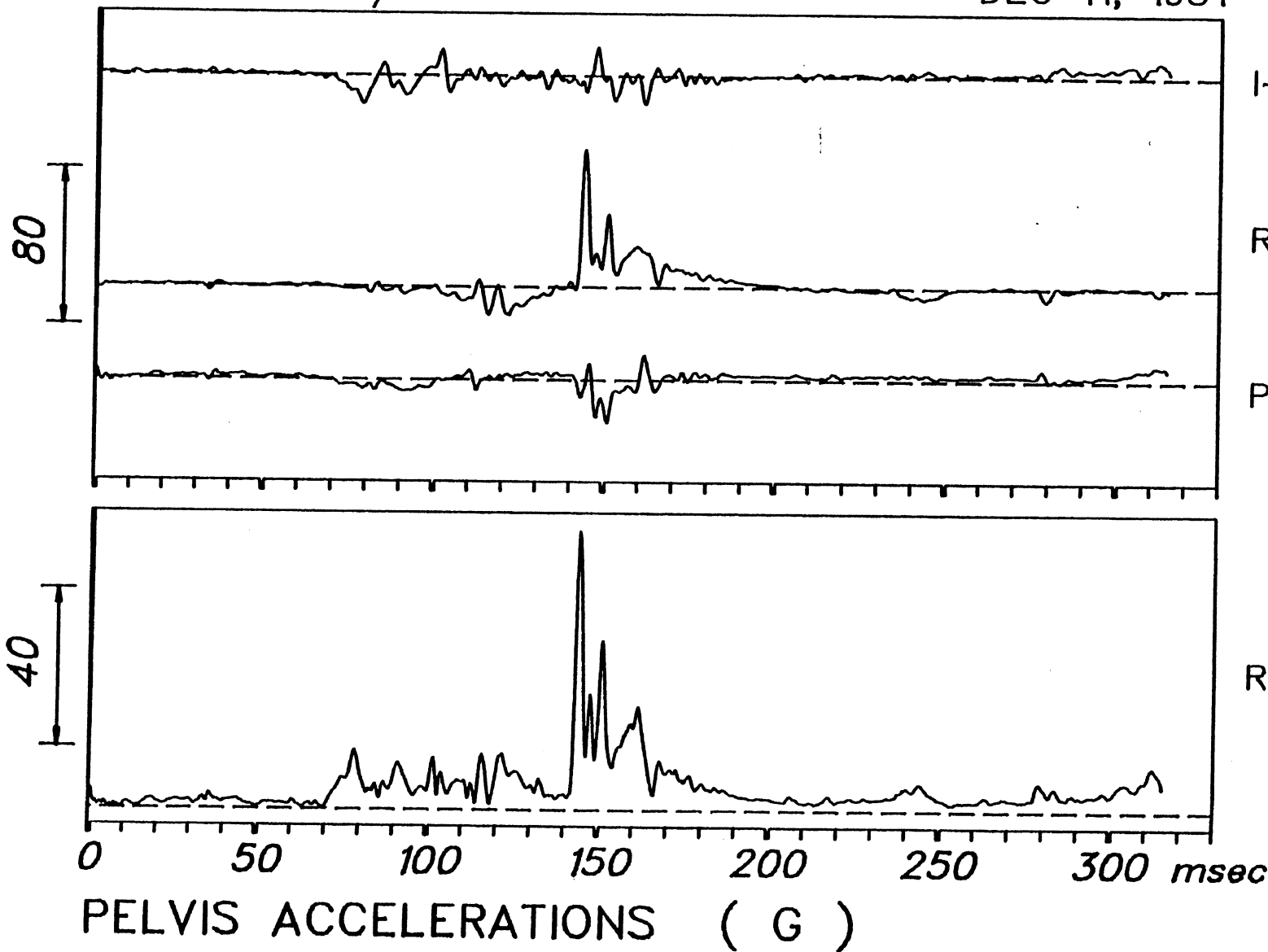


V-4

LA DYS W/O SB

DEC 11, 1981

PEAKS



I-S acc 14

R-L acc 70

P-A acc -21

Resultant 71

V-4

L.A DYS W/O SB

DEC 11, 1981

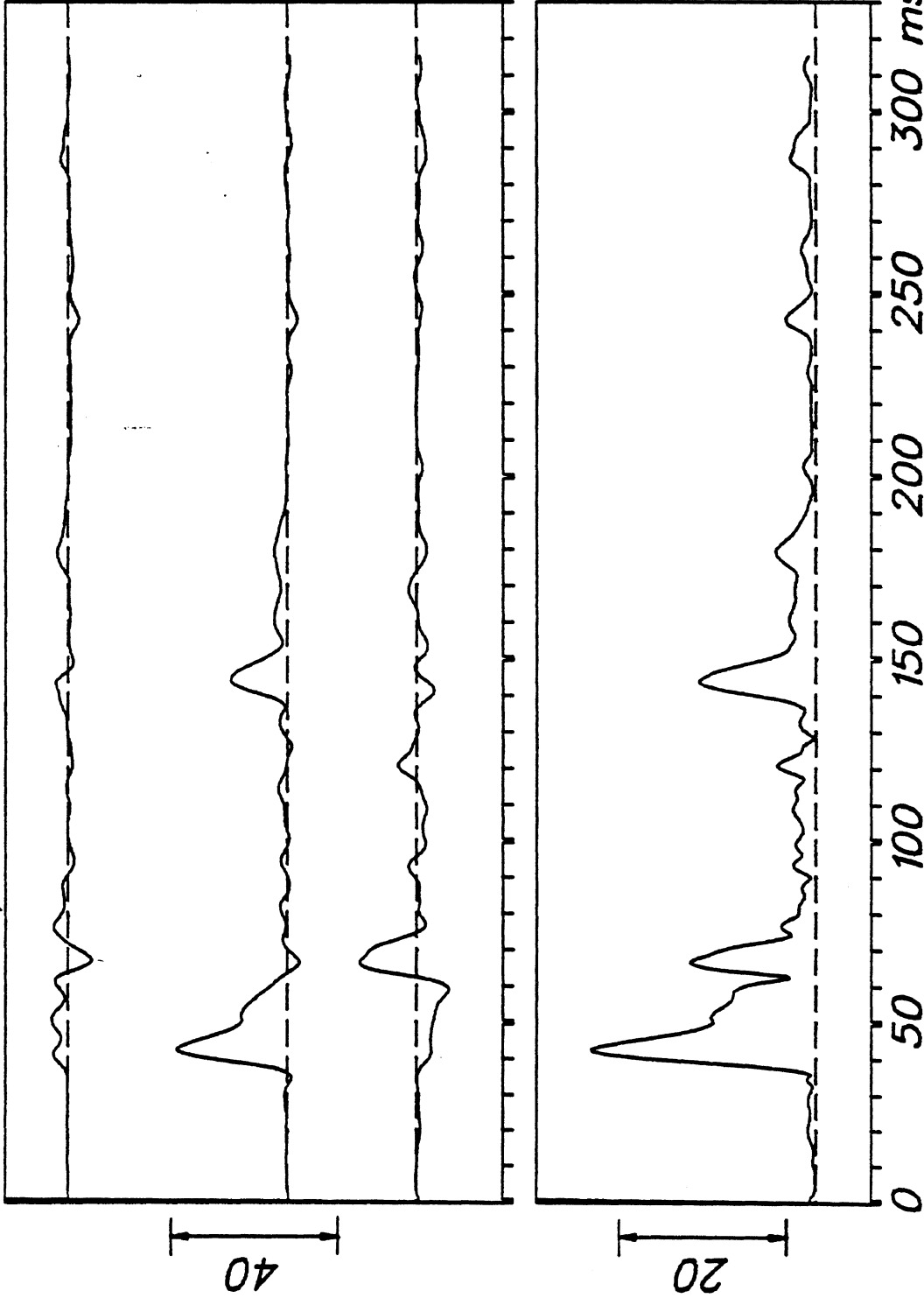
PEAKS

Az (I-S) -6

Ay (L-R) 26

Ax (A-P) 13

Resultant 26



TRUCK DECELERATIONS (G)

V-4

LA DYS W/O SB

DEC 11, 1981

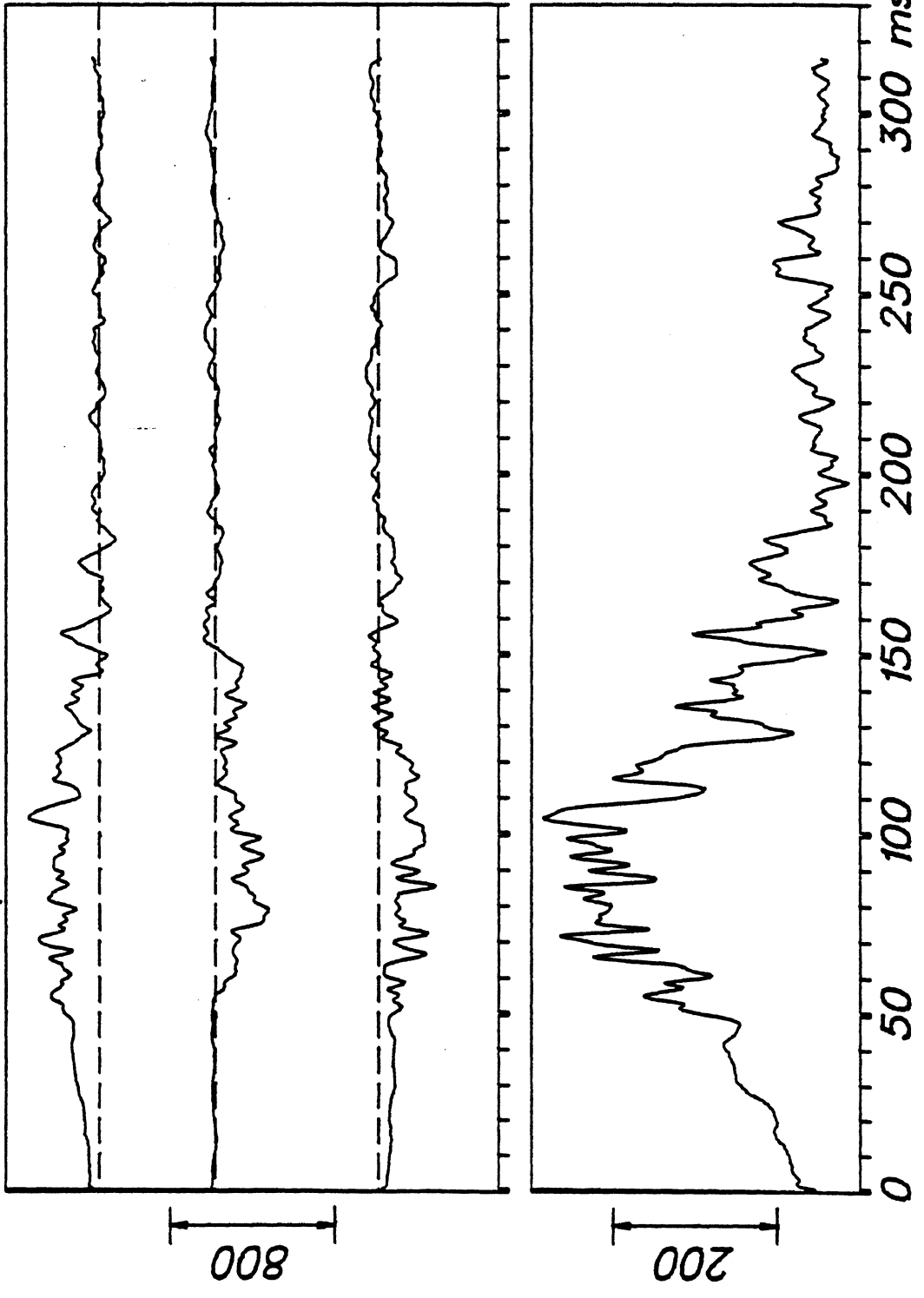
PEAKS

Fz (I-S) 343

Fy (L-R) -255

Fx (A-P) -270

Resultant 375



S. COLUMN FORCES (LB)

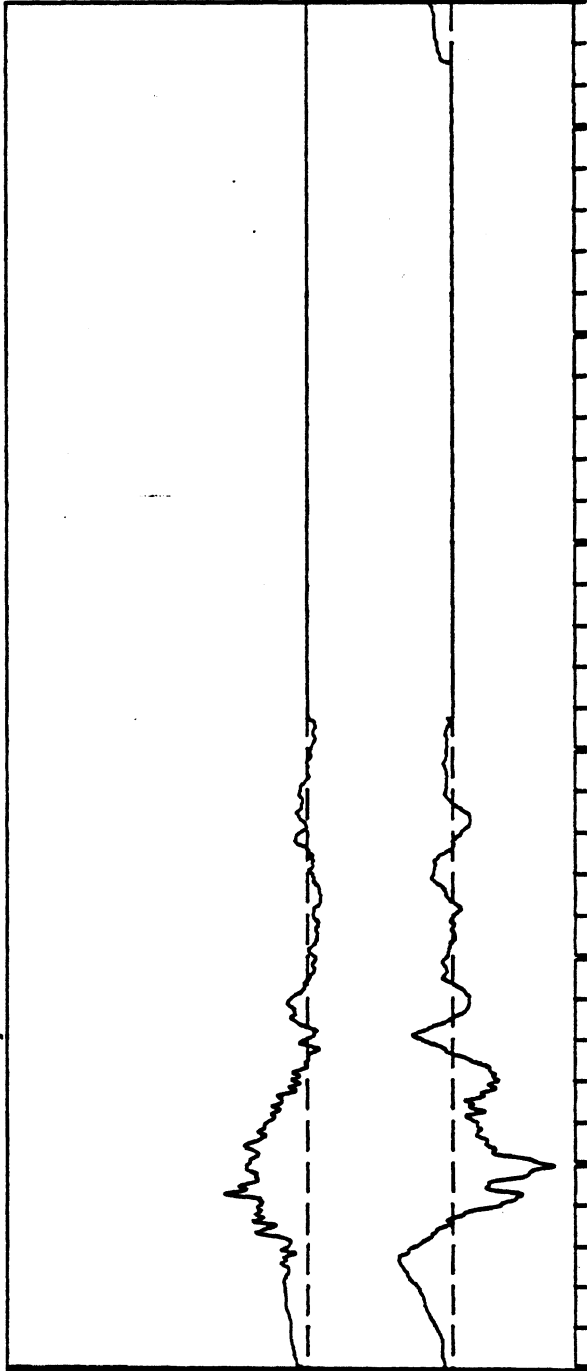
V-4

LA DYS W/O SB

DEC 11, 1981

PEAKS

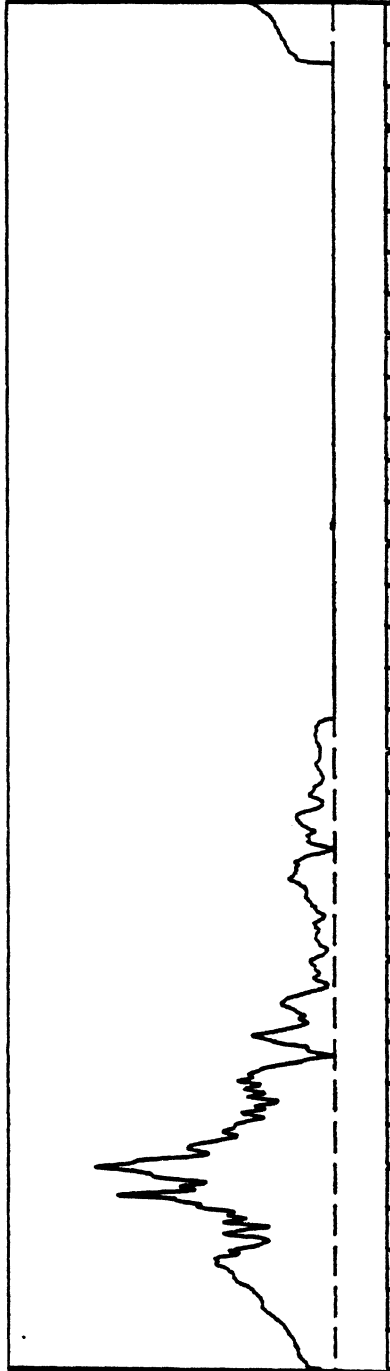
4000



My (L-R) 1784

Mx (A-P)

2000

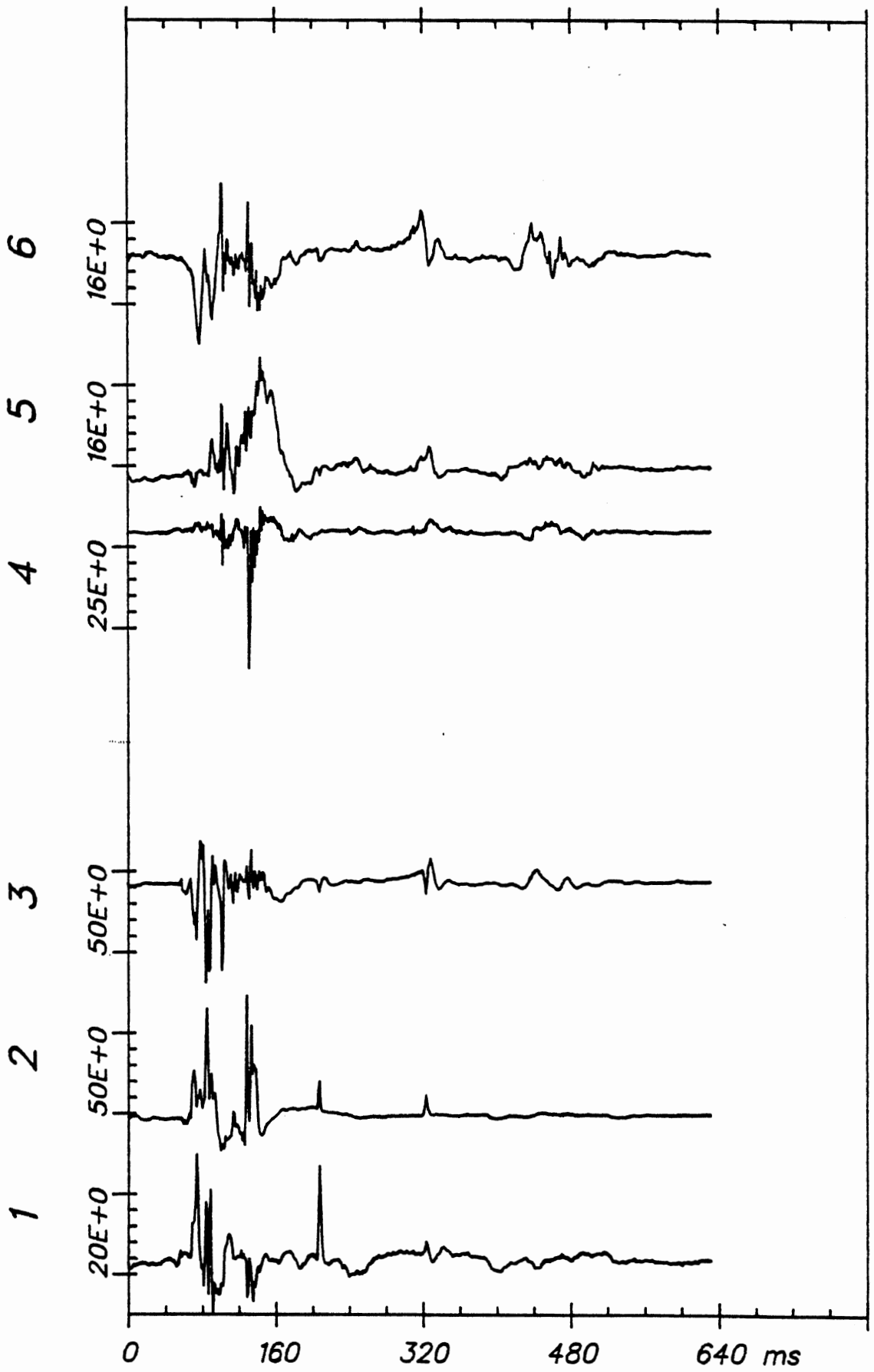


Resultant 2899

0 50 100 150 200 250 300 msec

S. COLUMN MOMENTS (IN-LB)

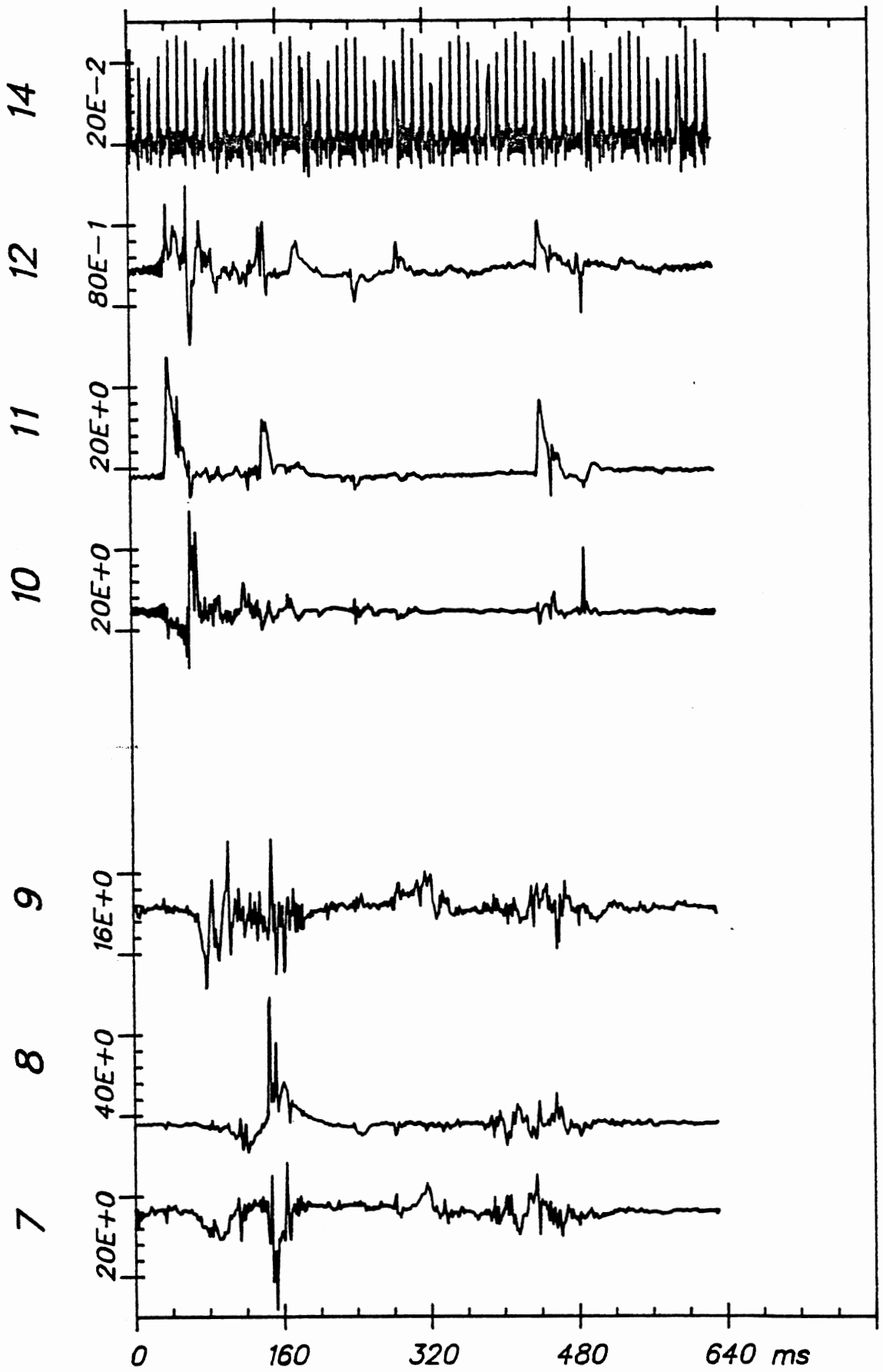
V-4



Time Histories

From HSRI-175 to 20+SITA, file 5: /7/8/9/--/10/11/12/14/

DEC 10, 1981

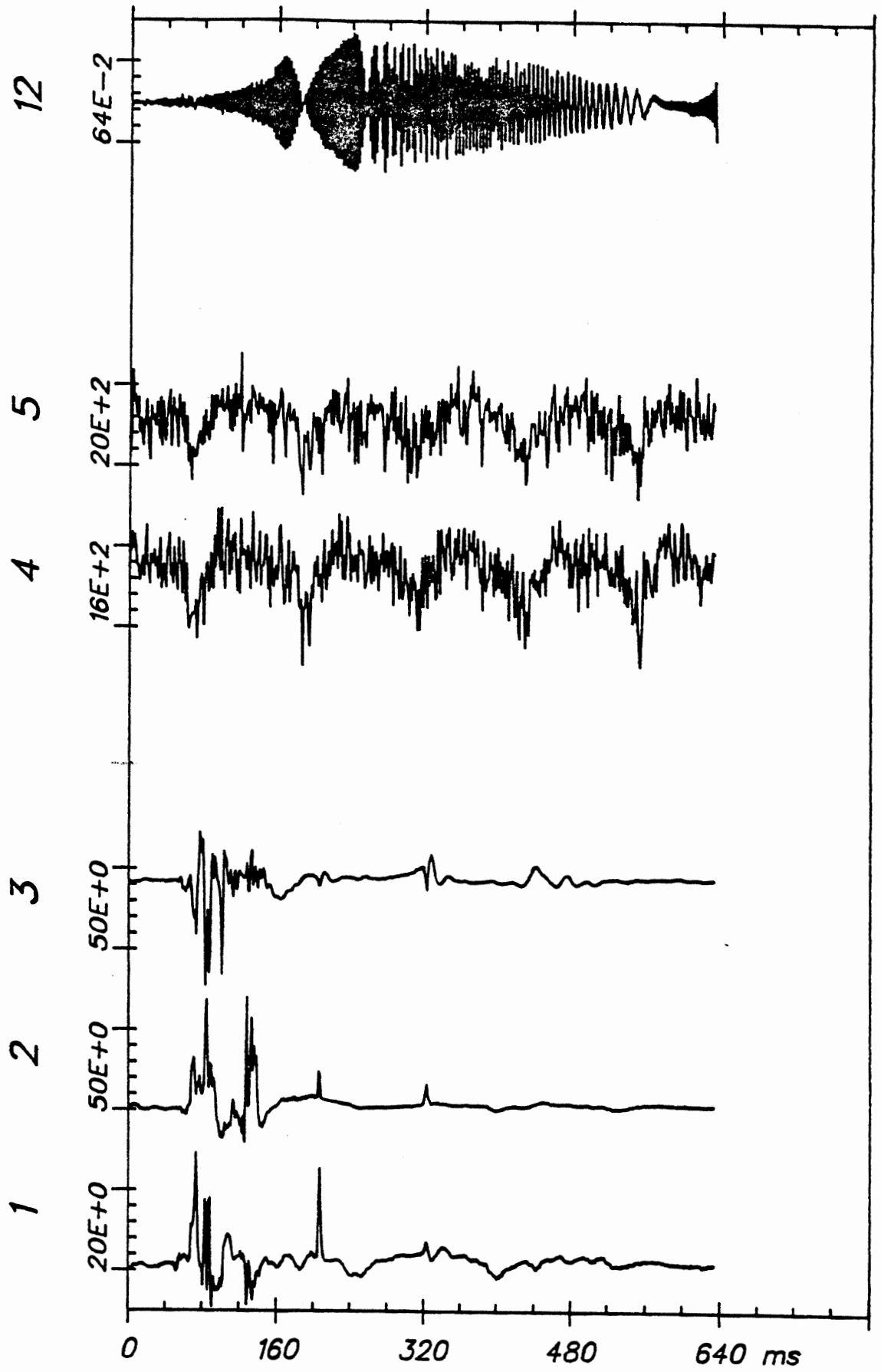


Time Histories

ITA V-4 (1)

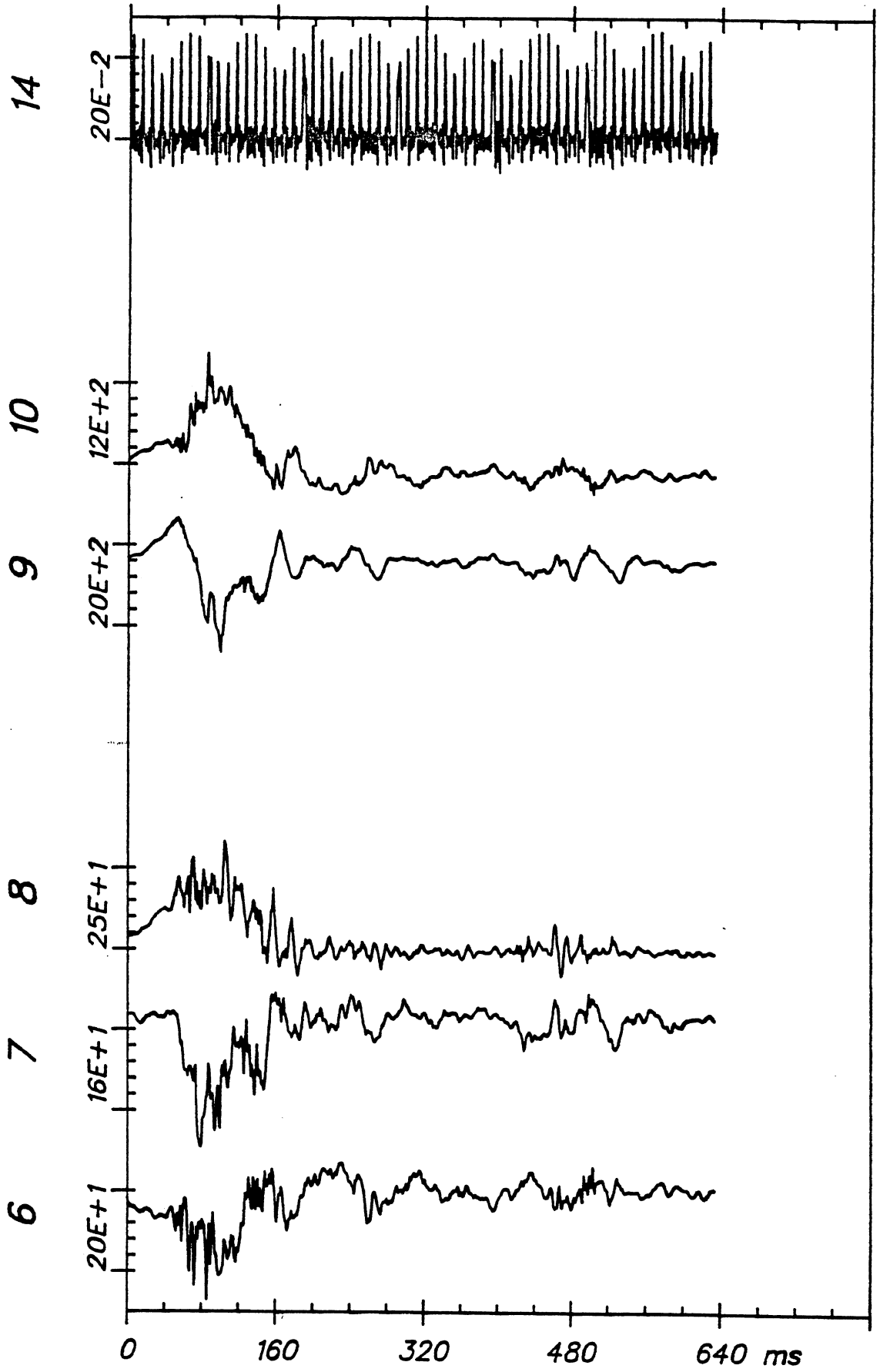
From HSRI-176 to 20+SITA, file 10: /1/2/3/-/4/5/-/12/

DEC 10, 1981



Time Histories

ITA V-4 (2)



Time Histories

LA DYS WAR	Test No. U-2	S U M M A R Y				
		Min @ msec		Max @ msec		

HEAD ACCELERATIONS (G)						
	P-A acc	...	-23	211	30	138
	R-L acc	...	-38	139	110	139
	I-S acc	...	-251	138	128	139
	Resultant	...			275	138
	HIC = 414	...		138		148

CHEST ACCELERATIONS (G)						
	P-A acc	...	-23	158	12	159
	R-L acc	...	-6	148	22	158
	I-S acc	...	-28	145	4	321
	Resultant	...			33	158

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-15	149	5	317
	R-L acc	...	-3	268	17	180
	I-S acc	...	-51	148	12	181
	Resultant	...			54	148

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-3	120	9	154
	Ay (L-R)	...	-3	313	20	112
	Az (I-S)	...	-3	126	5	139
	Resultant	...			20	112

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	-280	157	163	212
	Fy (L-R)	...	-339	148	125	201
	Fz (I-S)	...	-109	209	296	157
	Resultant	...			413	157

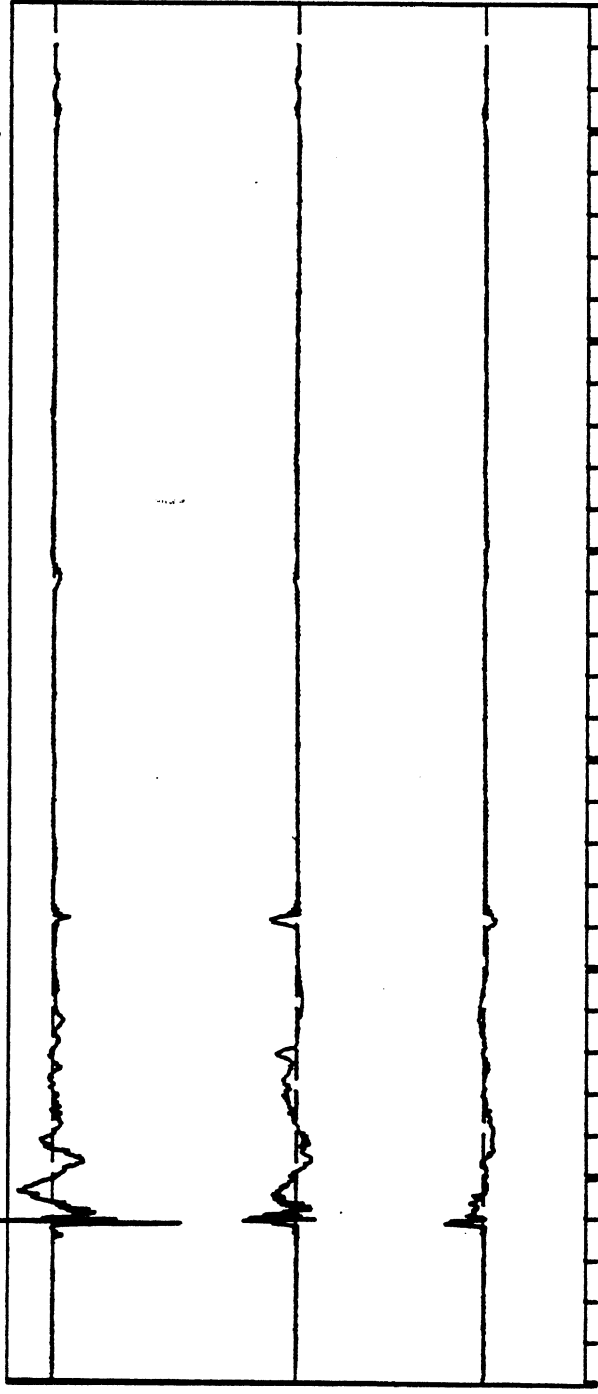
S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	-2430	126	1439	454
	My (L-R)	...	-805	156	1439	138
	Mz (I-S)	...				
	Resultant	...			2889	441

KNEE & BELTS LOADS (LB)						
	LT Knee	...	-562	502	169	456
	RT Knee	...	-562	186	169	141
	LT Belt	...				
	RT Belt	...				

LA DYS W AR

DEC 11, 1981

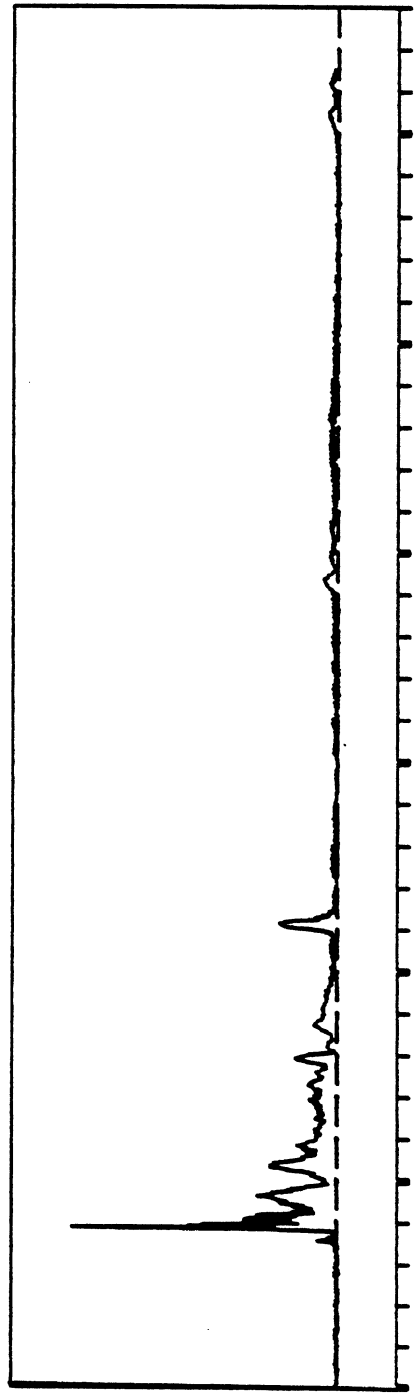
PEAKS



I-S acc -262

R-L acc 109

P-A acc 79



Resultant 274

HIC = 414

100 150 200 250 300 350 400 msec

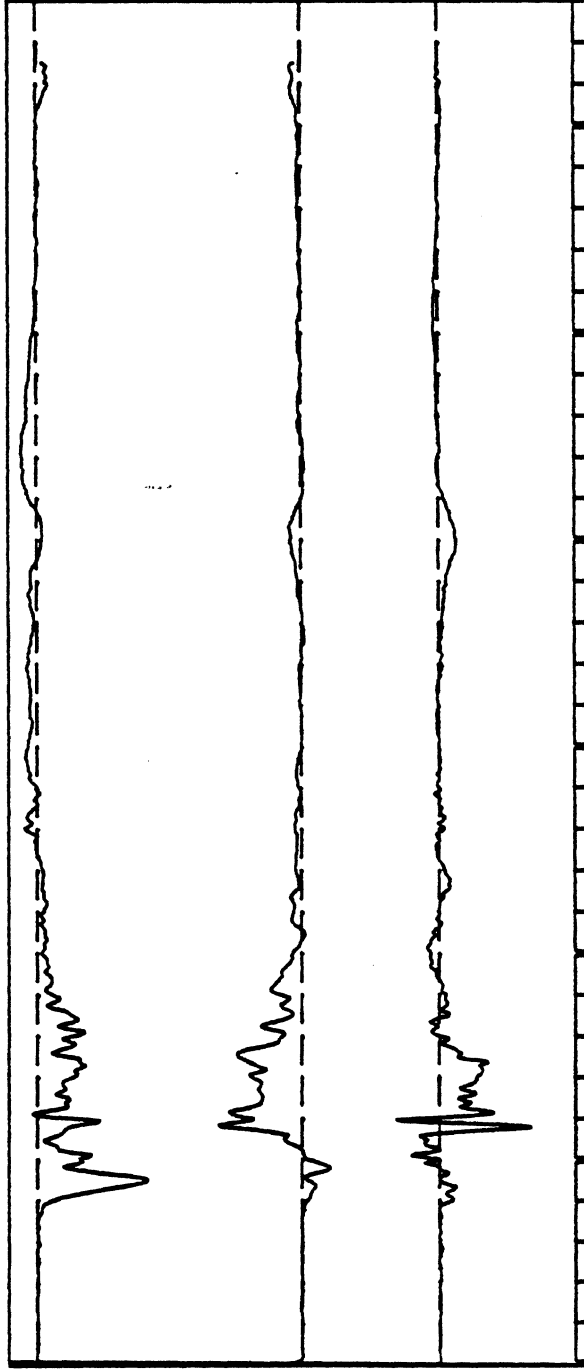
HEAD ACCELERATIONS (G)

U-2

LA DYS W AR

DEC 11, 1981

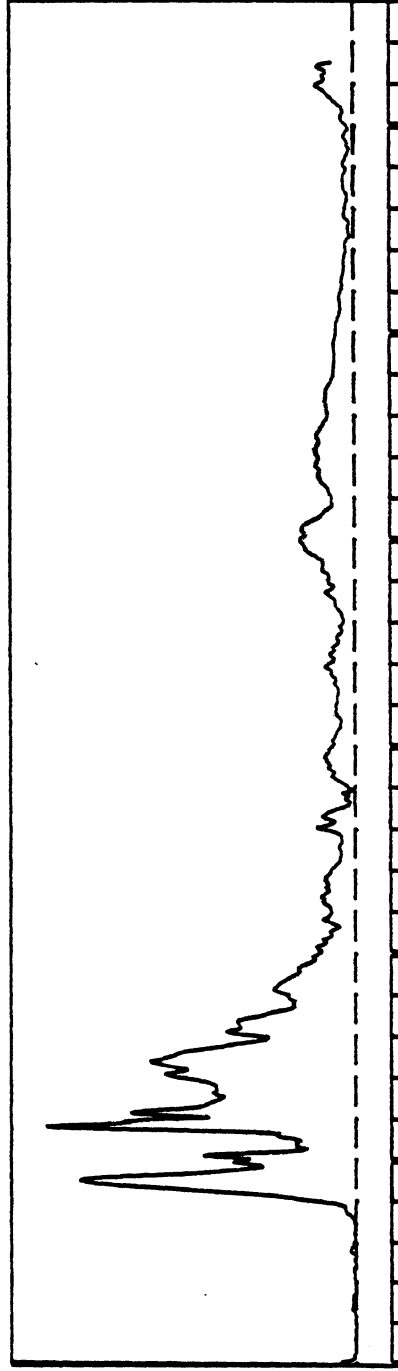
PEAKS



I-S acc -29

R-L acc 22

P-A acc -24



Resultant 32

100 150 200 250 300 350 400 msec

CHEST ACCELERATIONS (G)

U-2

LA DYS W AR

DEC 11, 1981

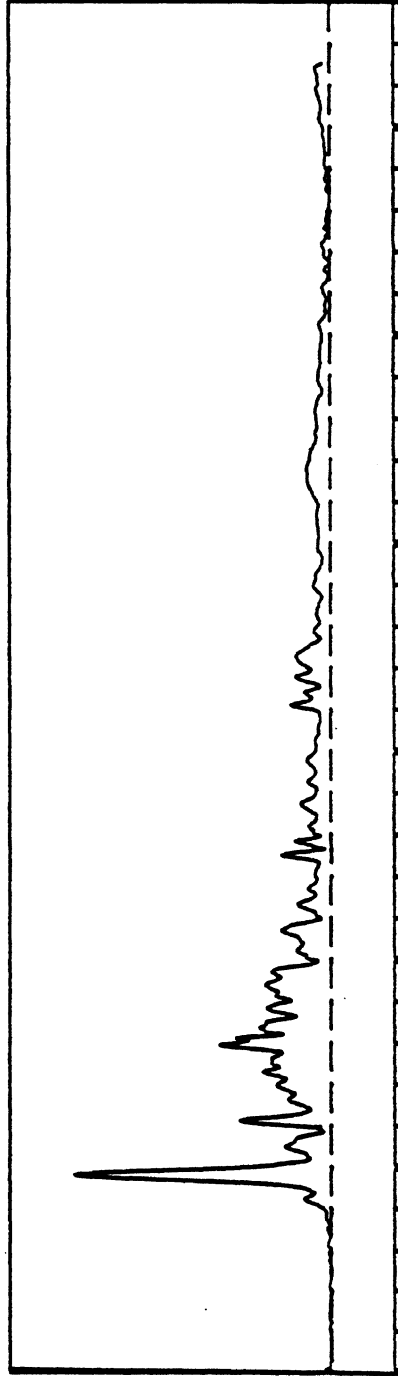
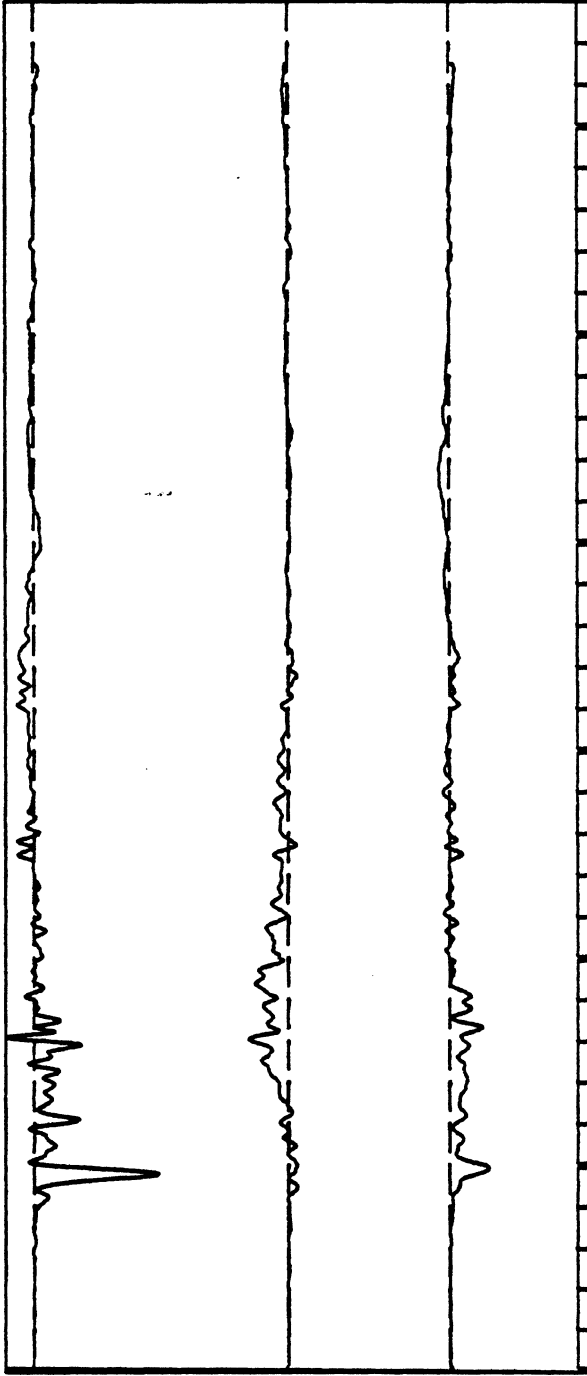
PEAKS

I-S acc -52

R-L acc 16

P-A acc -16

Resultant 53



100 150 200 250 300 350 400 msec

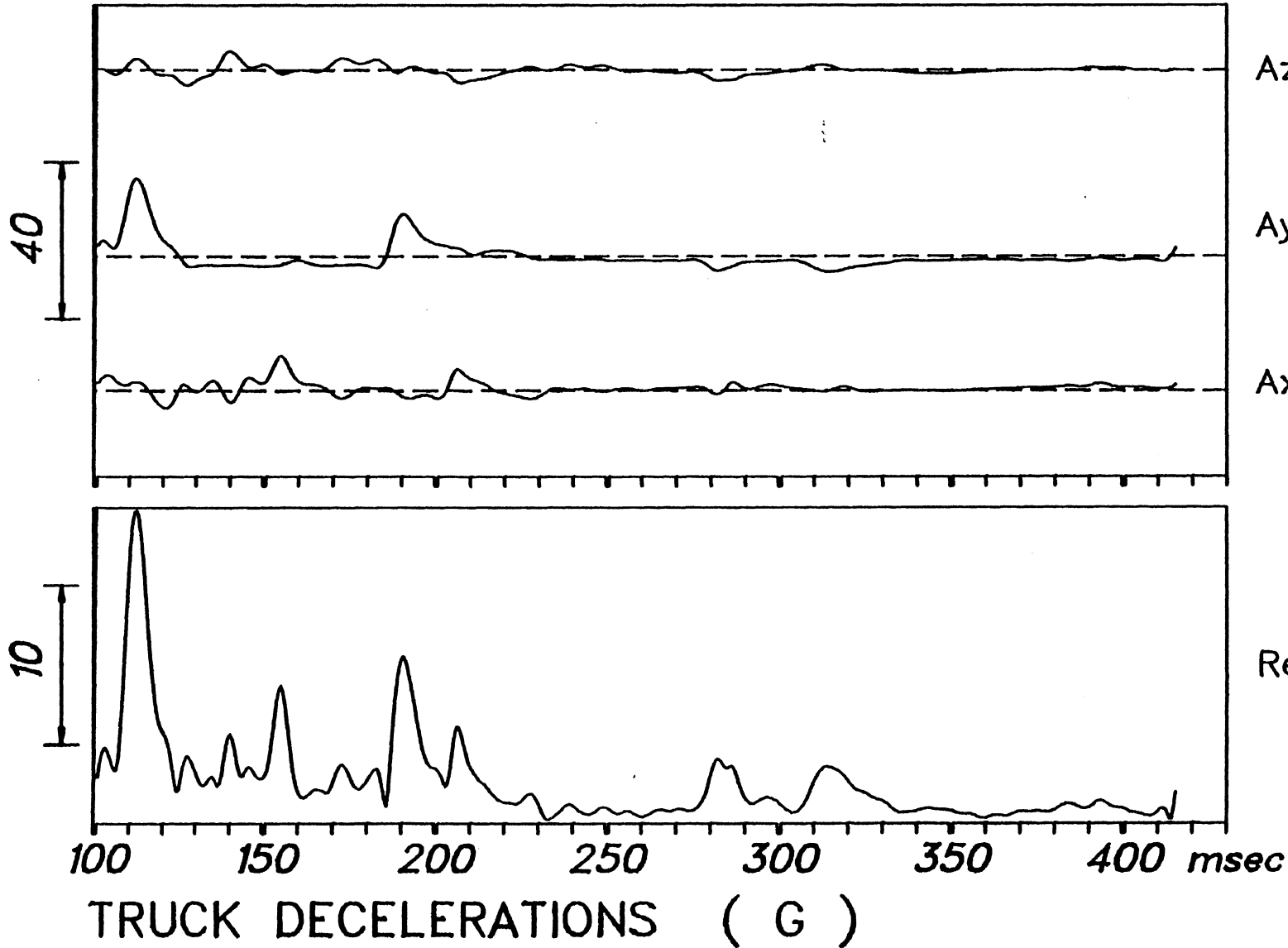
PELVIS ACCELERATIONS (G)

U-2

LA DYS W AR

DEC 11, 1981

PEAKS



Az (I-S) 4

Ay (L-R) 19

Ax (A-P) 8

Resultant 20

U-2

LA DYS W AR

DEC 11, 1981

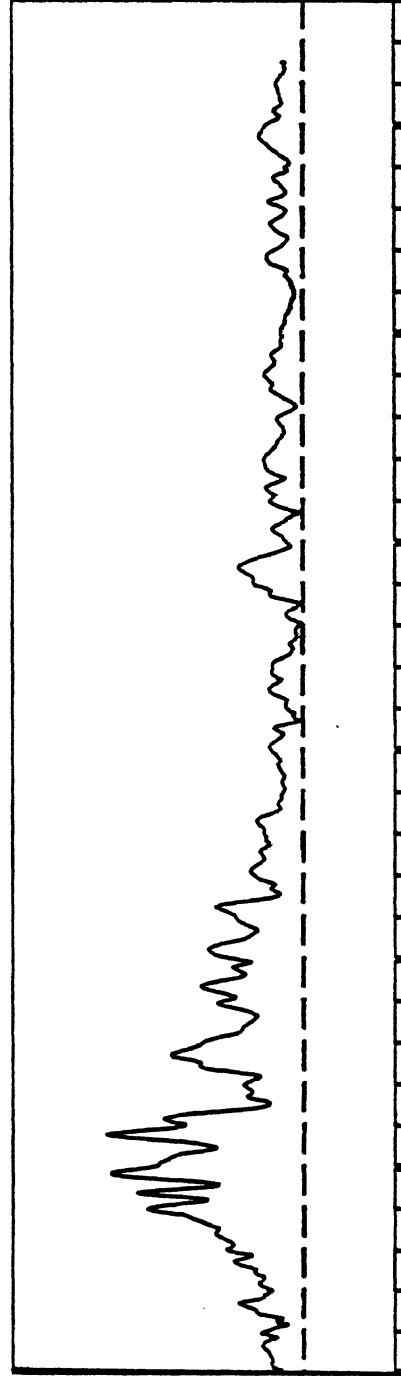
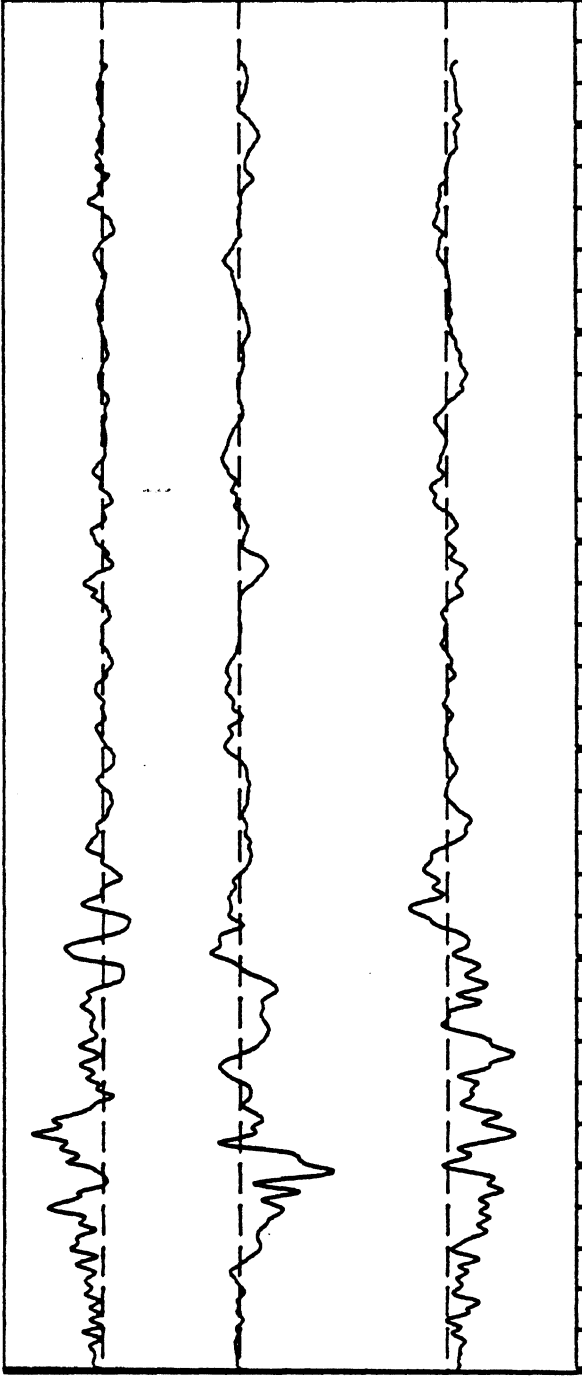
PEAKS

Fz (I-S) 295

Fy (L-R) -390

Fx (A-P) -281

Resultant 412



100 150 200 250 300 350 400 msec

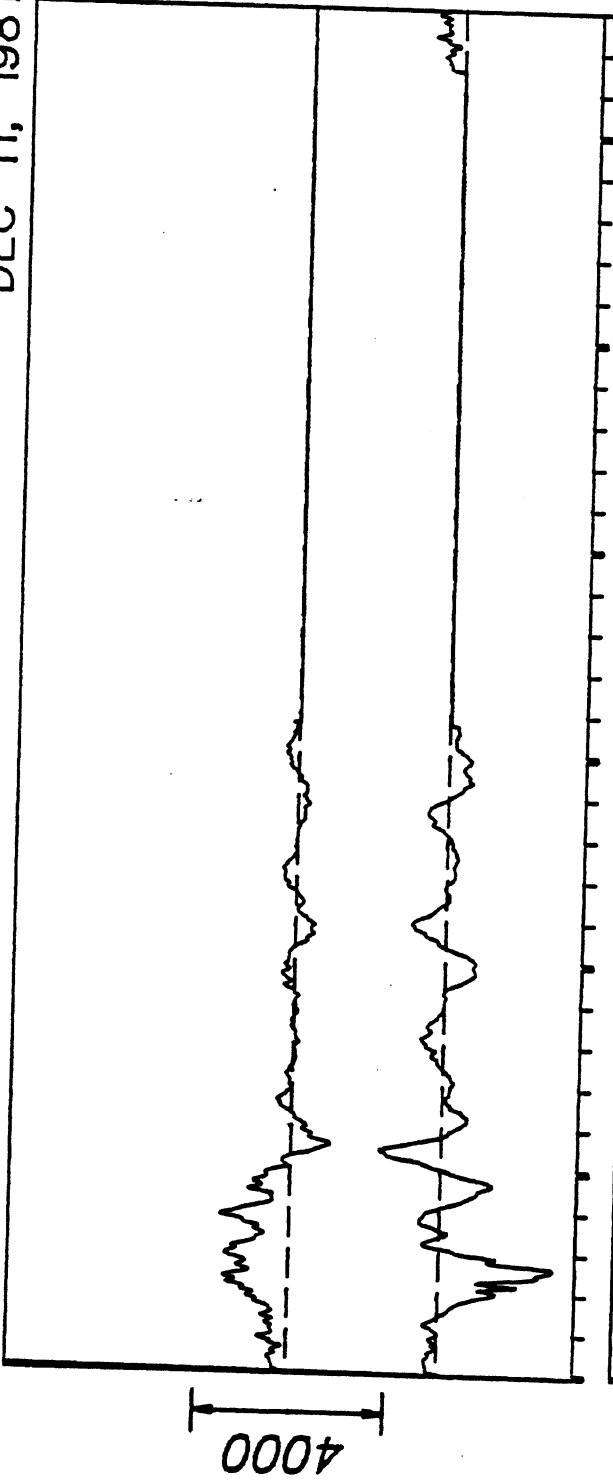
S. COLUMN FORCES (LB)

U-2

LA DYS W AR

DEC 11, 1981

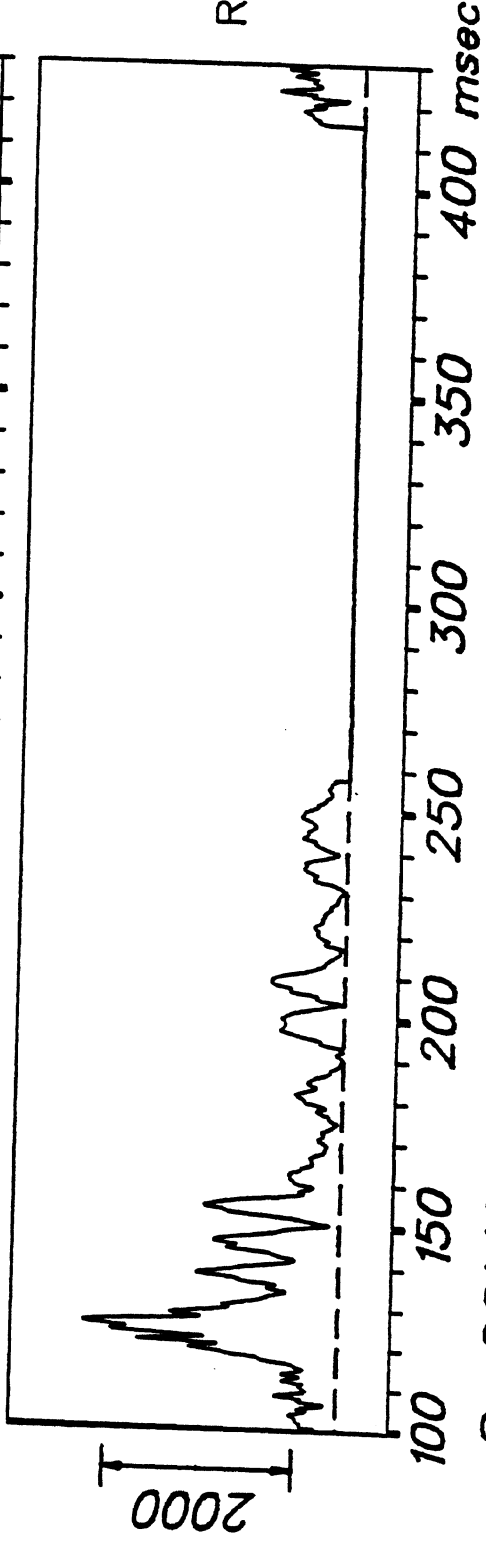
PEAKS



My (L-R) 1438

Mx (A-P)

Resultant 2888



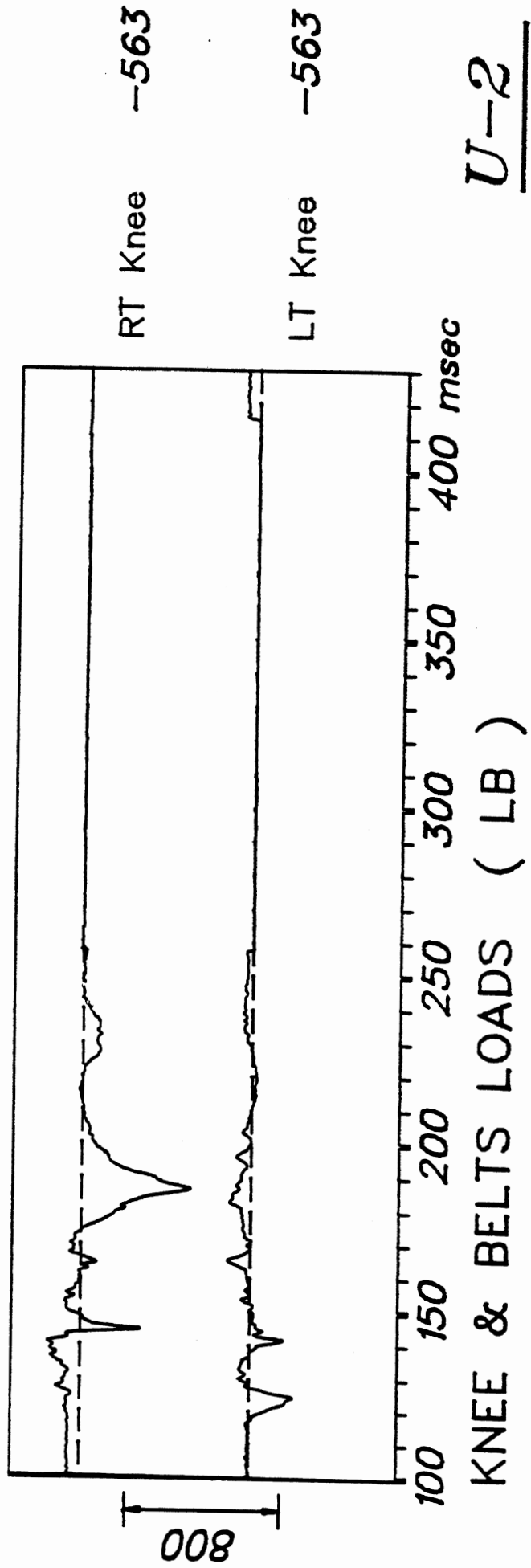
S. COLUMN MOMENTS (IN-LB)

U-2

LA DYS W AR

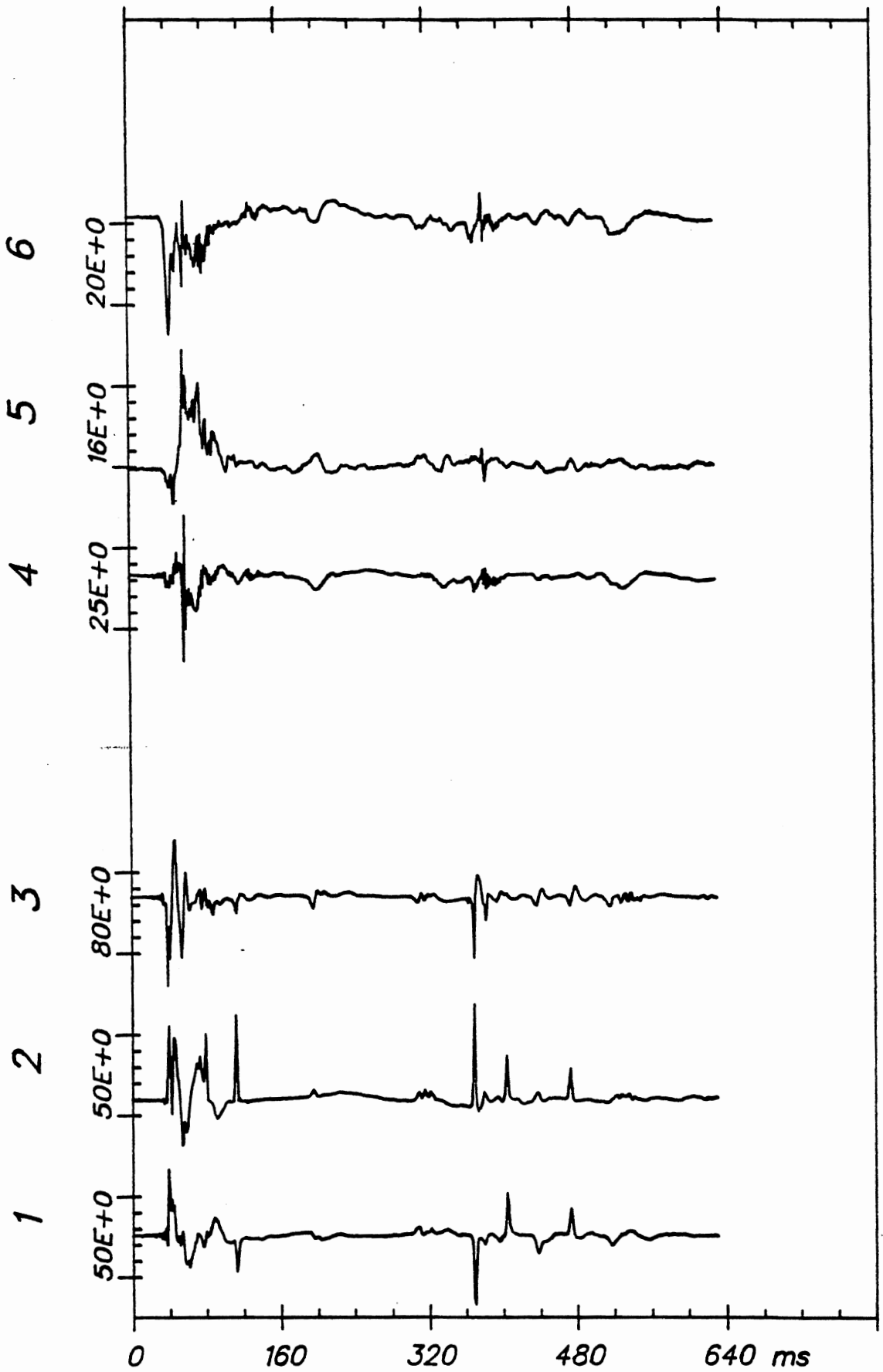
DEC 11, 1981

PEAKS



DEC 10, 1981

From HSRI-175 to 20+SITA, file 1: /1/2/3/-/4/5/6/-/-/

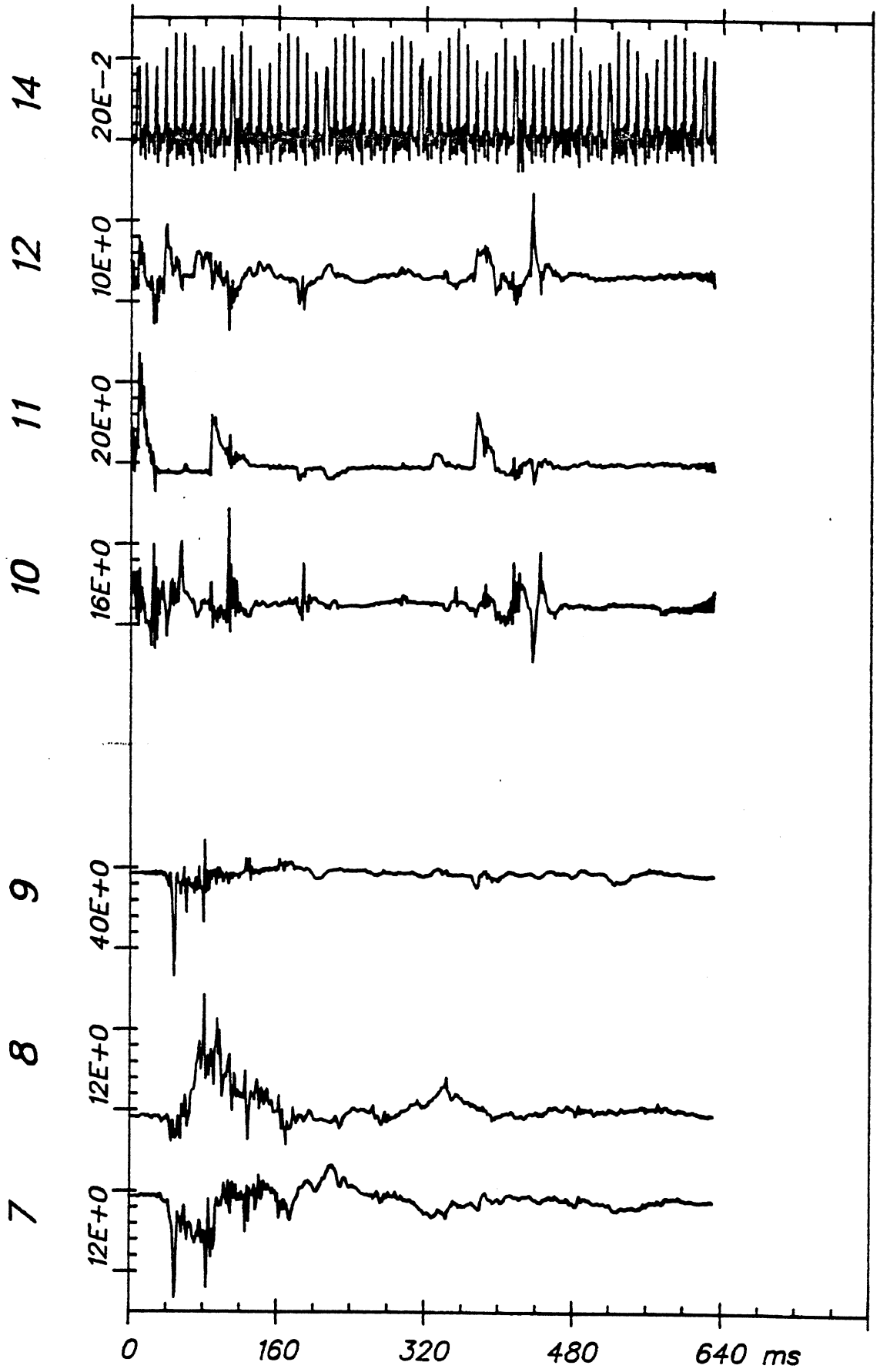


Time Histories

ITA U-2 (1)

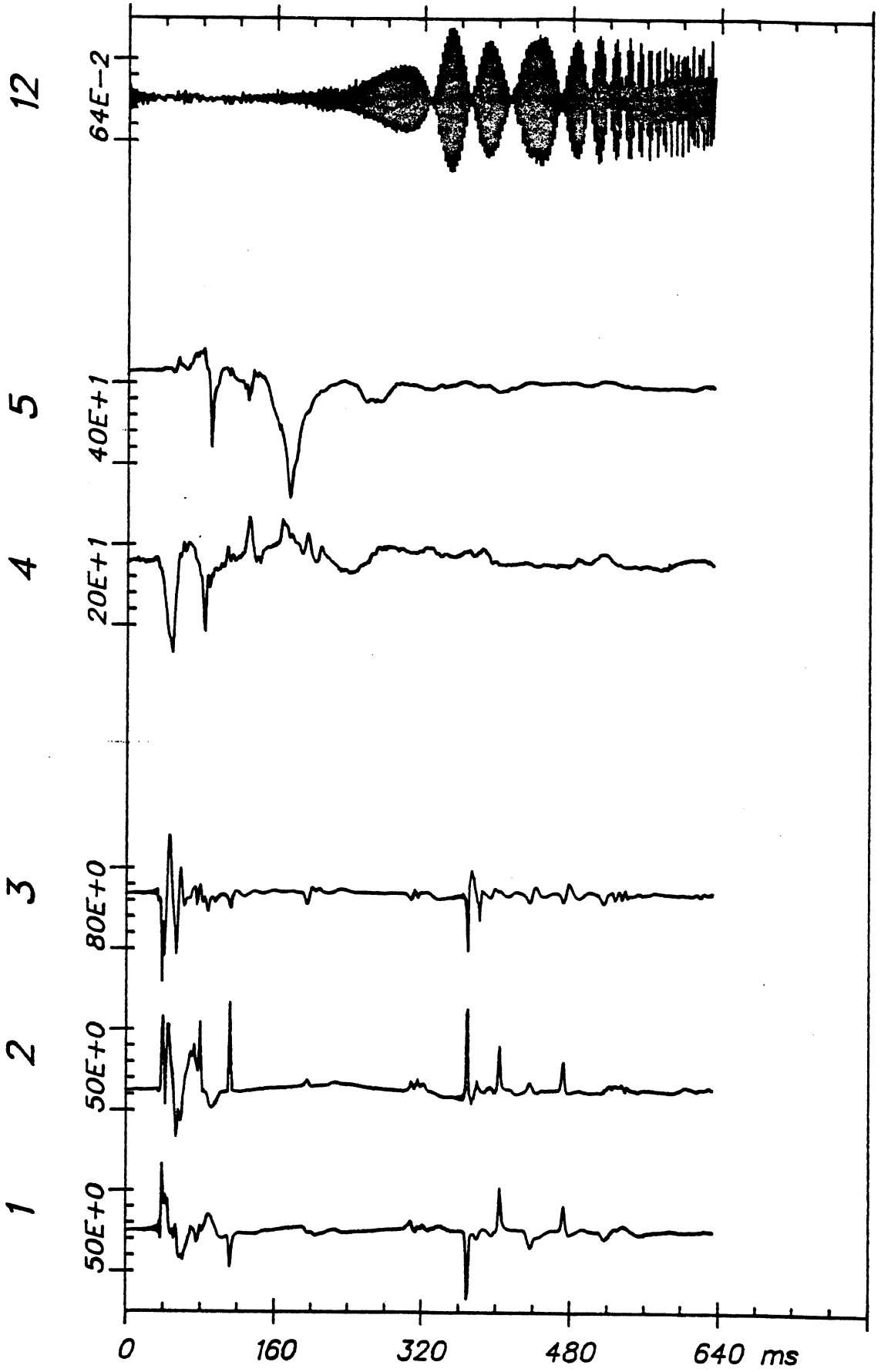
From HSRI-175 to 20+SITA, file 1: /7/8/9/-/10/11/12/14/

DEC 10, 1981



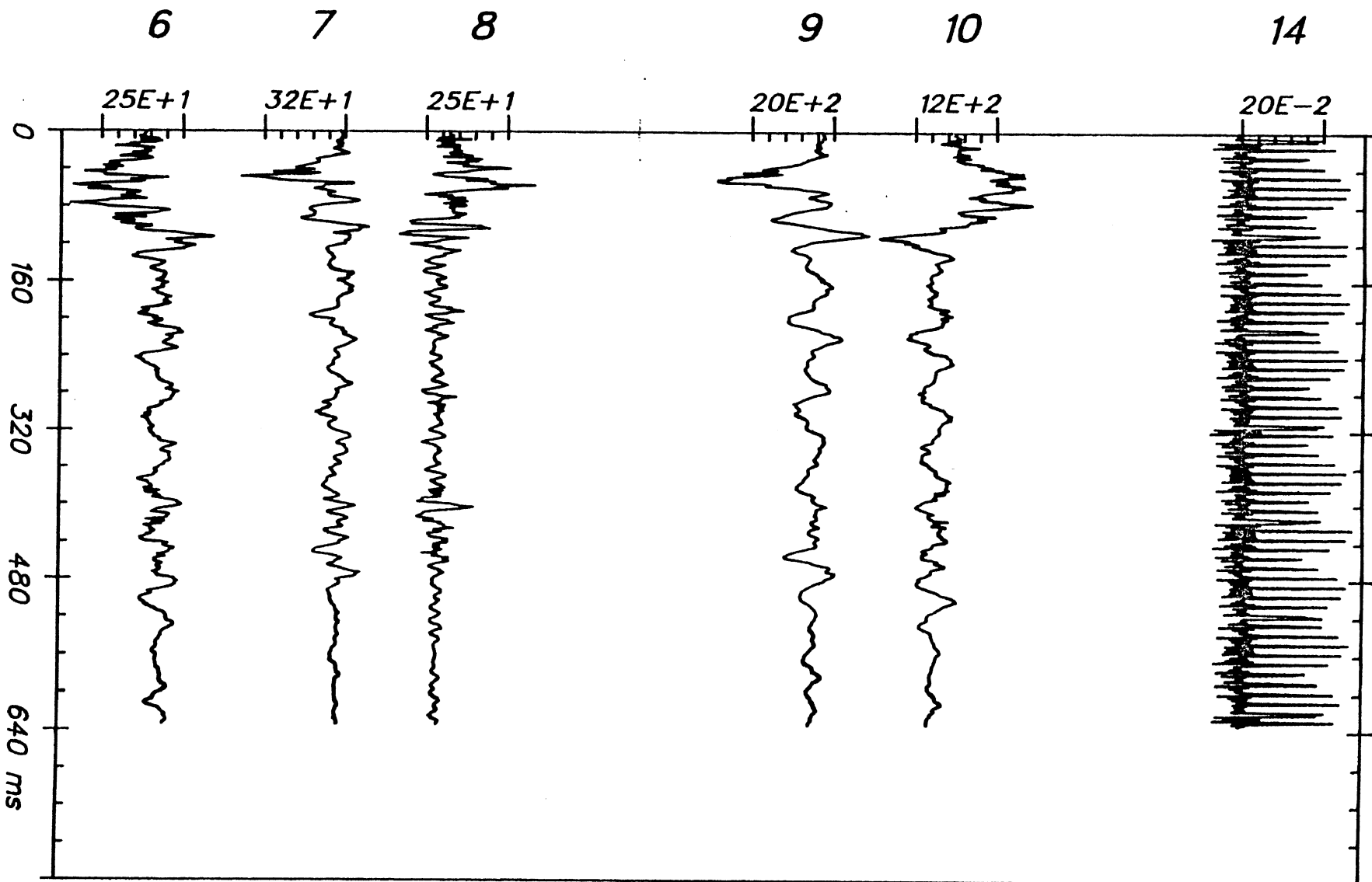
Time Histories

ITA U-2 (1)



Time Histories

ITA U-2 (2)



Time Histories

ITA U-2 (2)

LA DYS W AR		Test No. U-4	S U M M A R Y			
			Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)						
	P-A acc	...	-23	316	68	99
	R-L acc	...	-59	95	195	100
	I-S acc	...	-123	99	77	107
	Resultant	...			198	100
	HIC =	686 ...		90		110

CHEST ACCELERATIONS (G)						
	P-A acc	...	-50	122	7	141
	R-L acc	...	-5	103	21	122
	I-S acc	...	-22	106	10	122
	Resultant	...			56	122

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-27	178	12	113
	R-L acc	...	-12	161	22	175
	I-S acc	...	-30	100	30	178
	Resultant	...			41	178

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-9	103	7	218
	Ay (L-R)	...	-2	282	22	71
	Az (I-S)	...	-3	154	6	103
	Resultant	...			22	71

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	-444	126	212	177
	Fy (L-R)	...	-335	108	102	134
	Fz (I-S)	...	-114	181	345	124
	Resultant	...			547	116

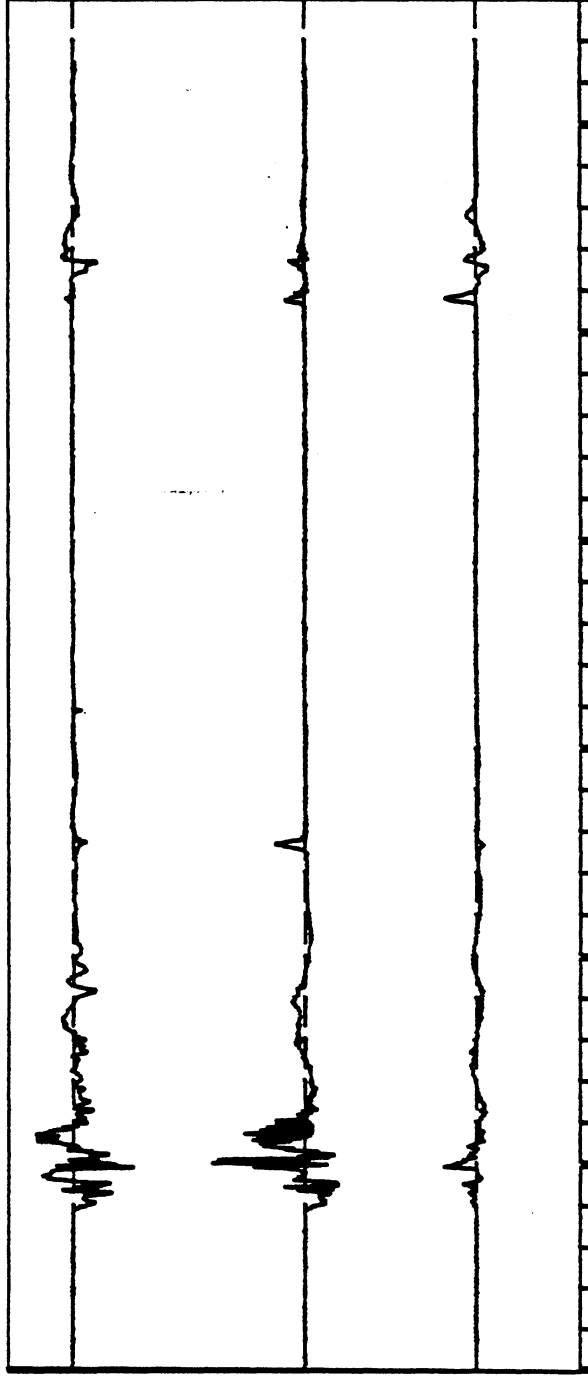
S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	-2966	58	2203	379
	My (L-R)	...	-1096	89	2203	64
	Mz (I-S)	...				
	Resultant	...			3963	373

KNEE & BELTS LOADS (LB)						
	LT Knee	...	-550	505	92	186
	RT Knee	...	-550	190	91	101
	LT Belt	...				
	RT Belt	...				

L.A DYS W AR

DEC 11, 1981

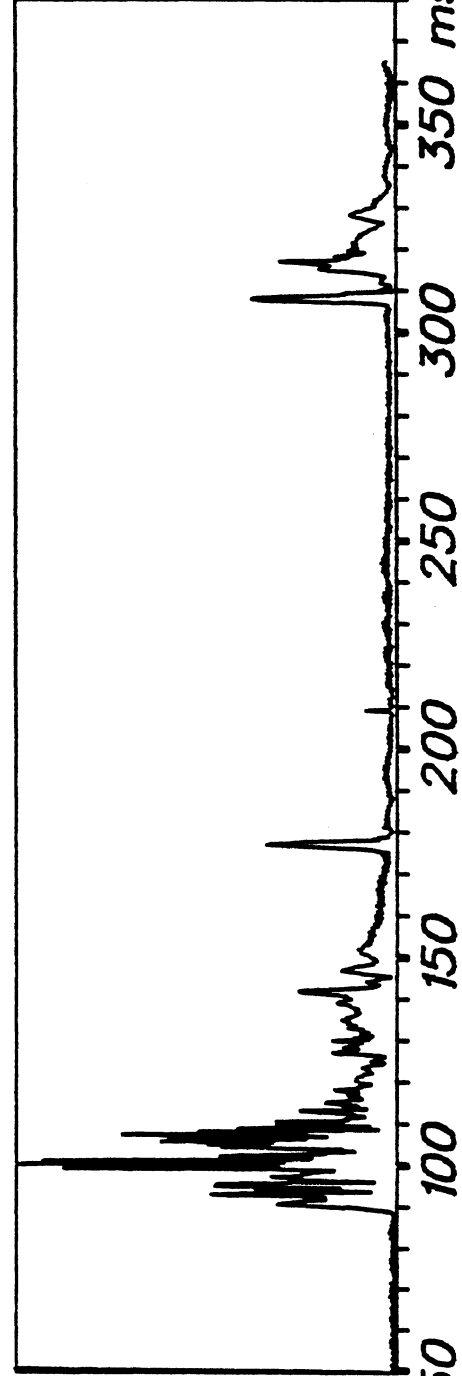
PEAKS



I-S acc -124

R-L acc 194

P-A acc 67



HIC = 686

Resultant 198

HEAD ACCELERATIONS (G)

U-4

LA DYS W AR

DEC 11, 1981

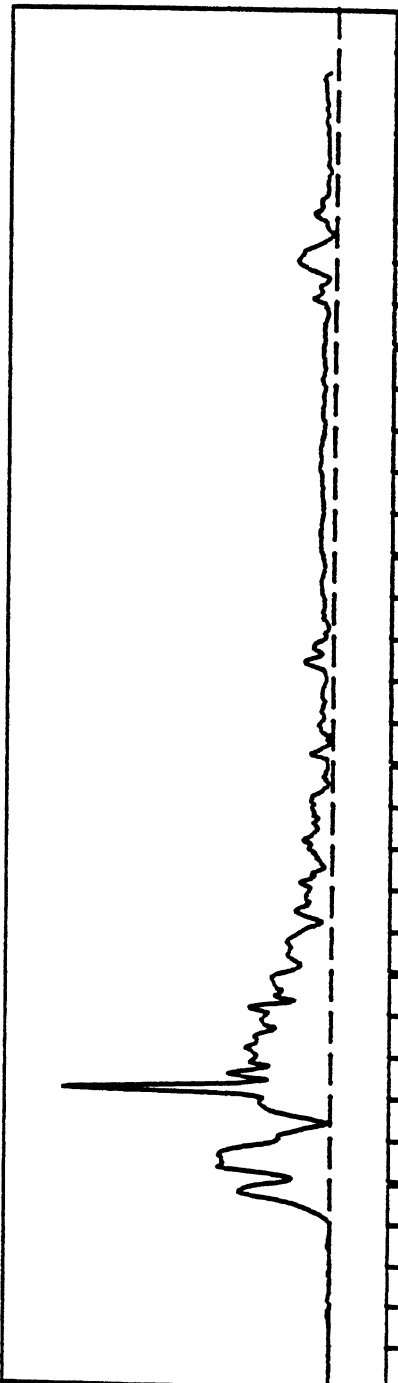
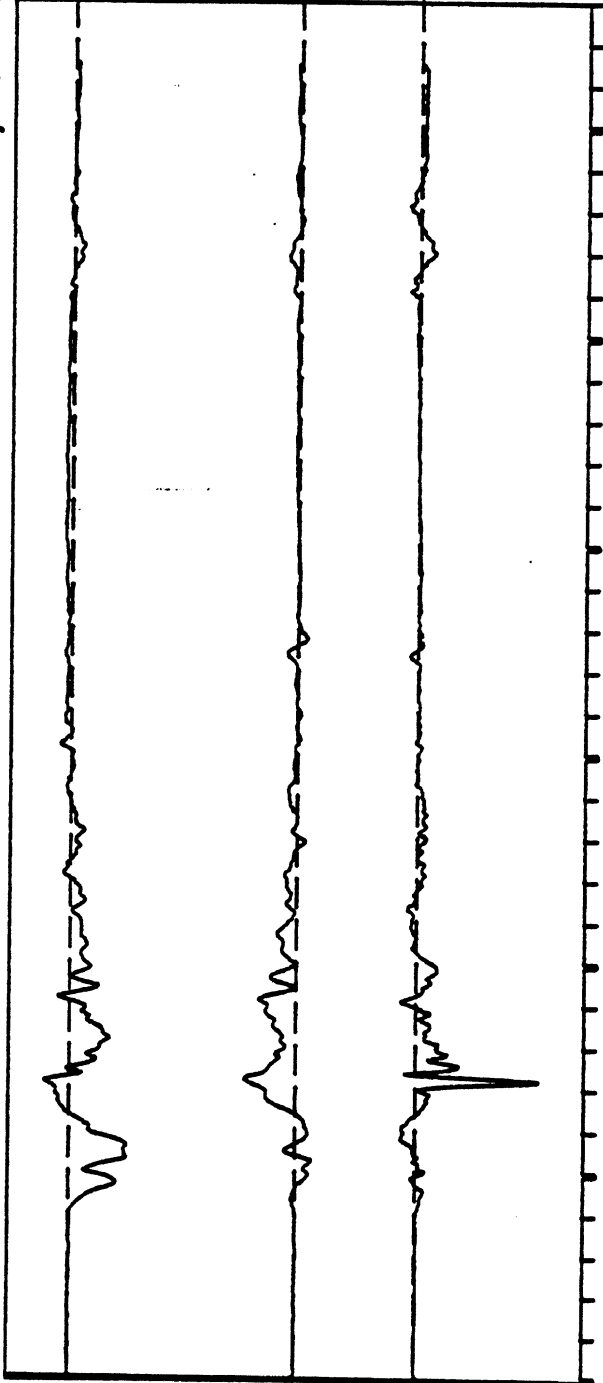
PEAKS

I-S acc -23

R-L acc 21

P-A acc -51

Resultant 55

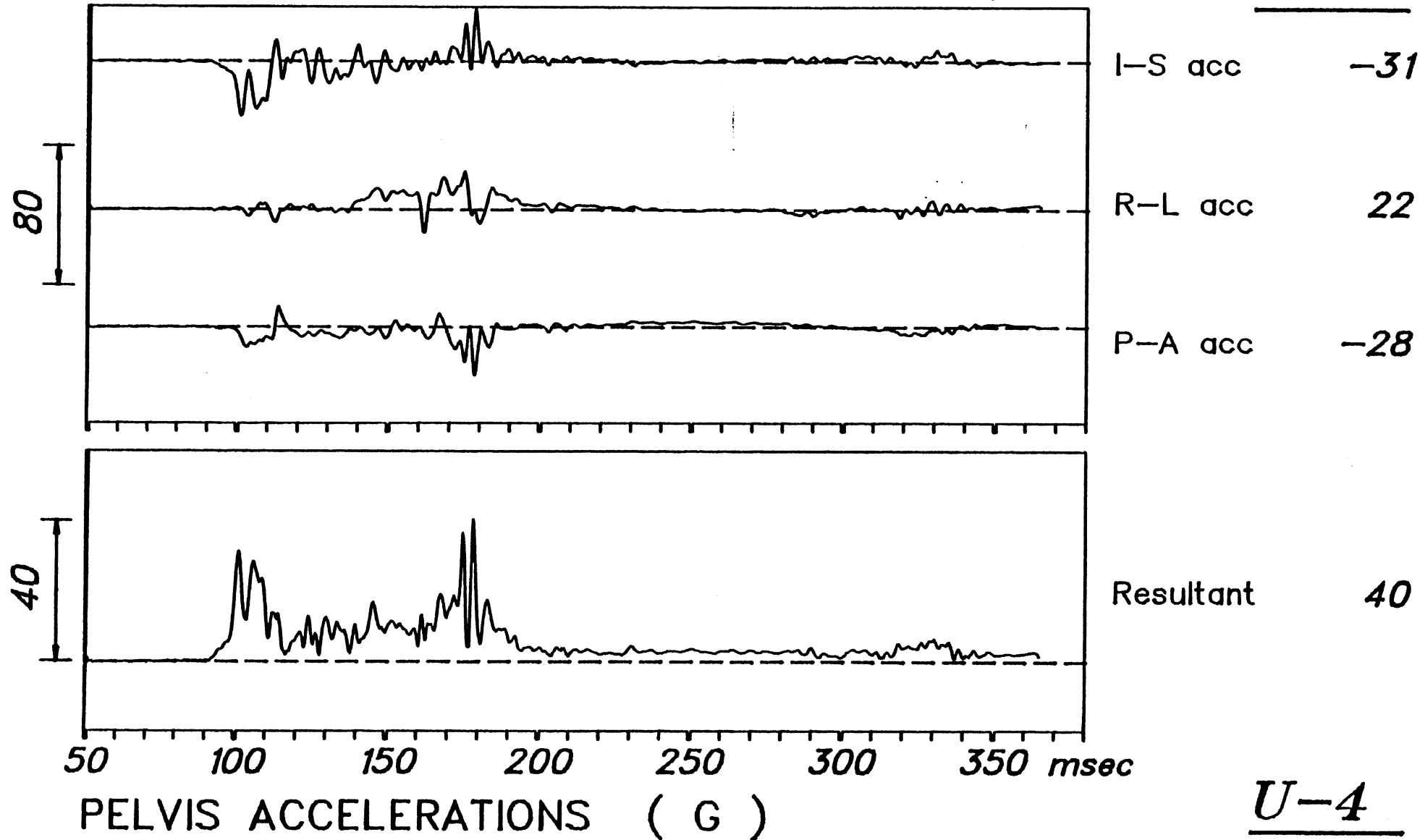


U-4

LA DYS W AR

DEC 11, 1981

PEAKS



U-4

LA DYS W AR

DEC 11, 1981

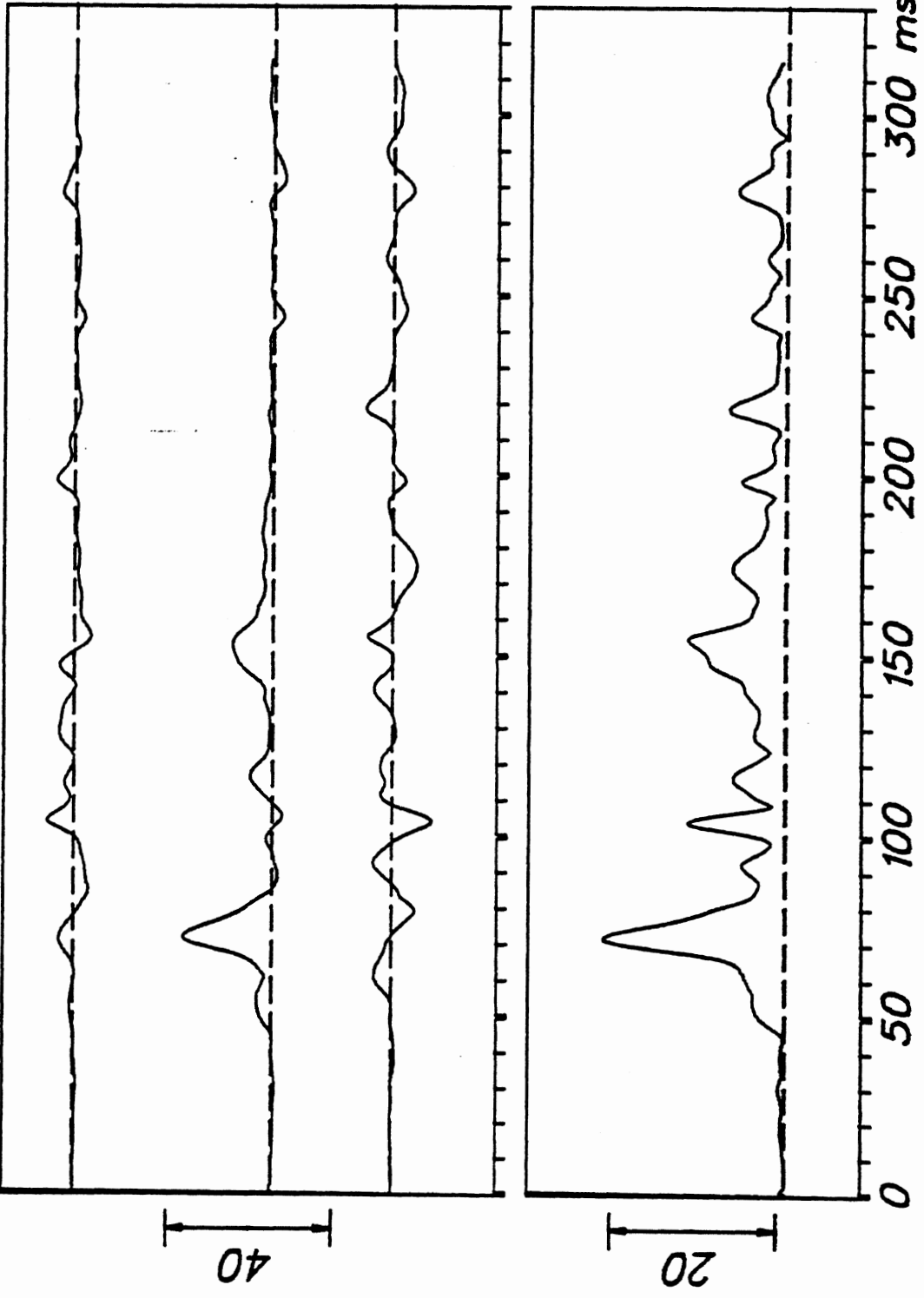
PEAKS

Az (I-S) 6

Ay (L-R) 21

Ax (A-P) -10

Resultant 21



U-4

LA DYS W AR

DEC 11, 1981

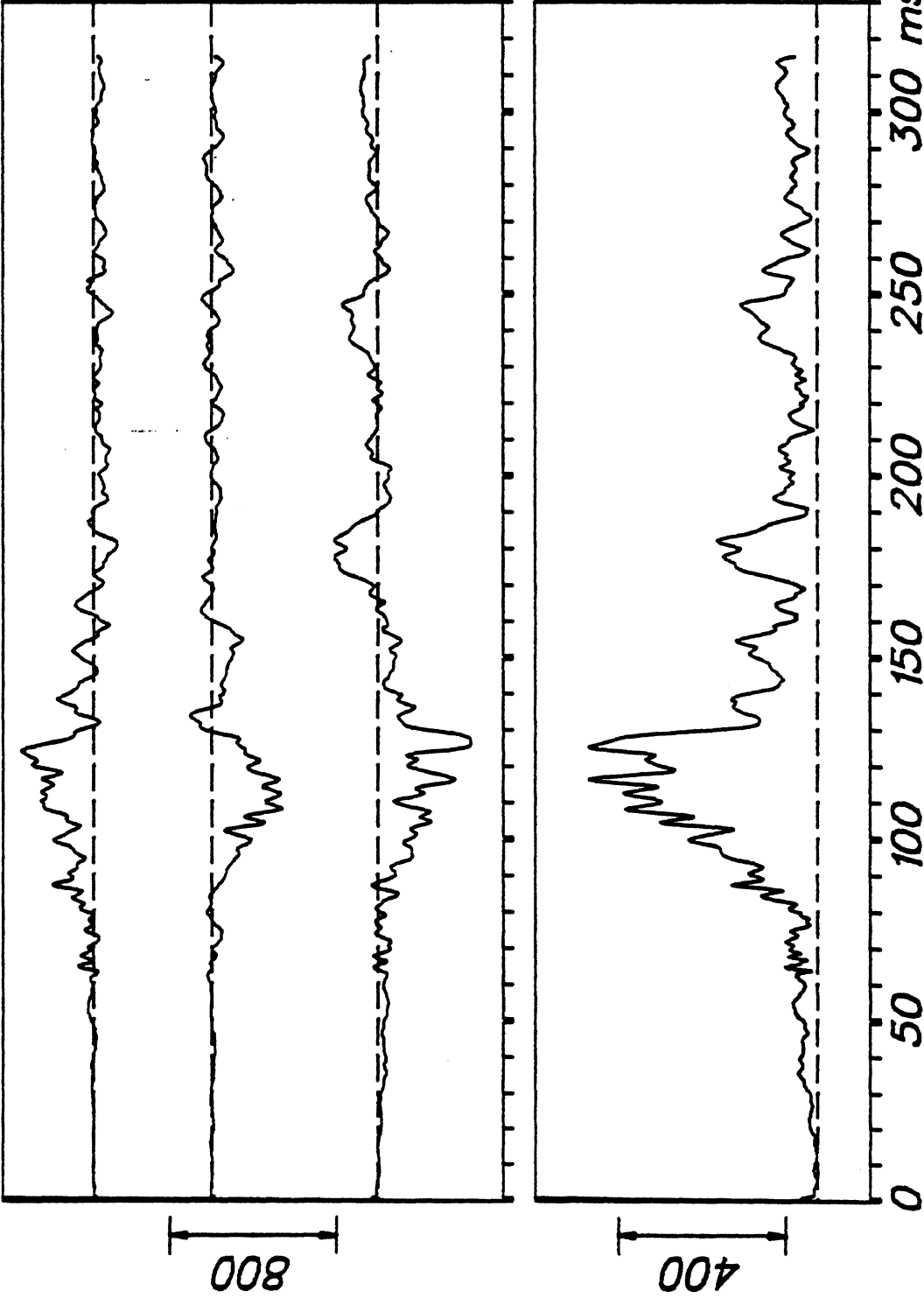
PEAKS

Fz (I-S) 344

Fy (L-R) -336

Fx (A-P) -445

Resultant 547

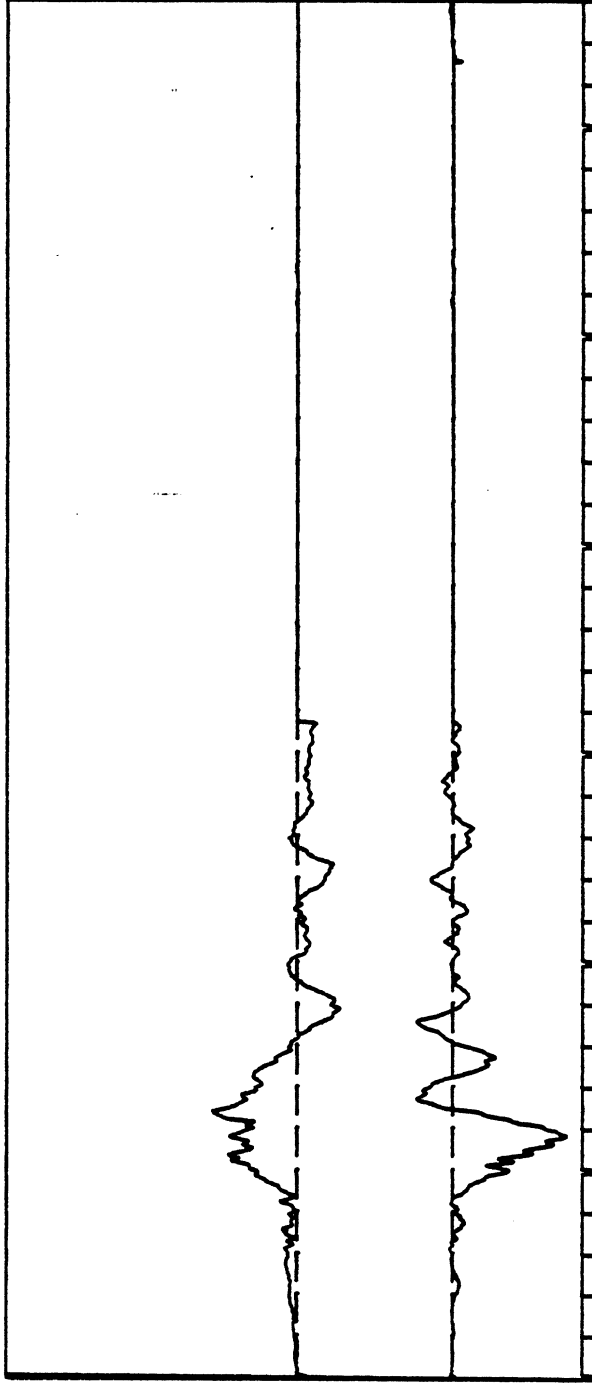


U-4

L.A DYS W AR

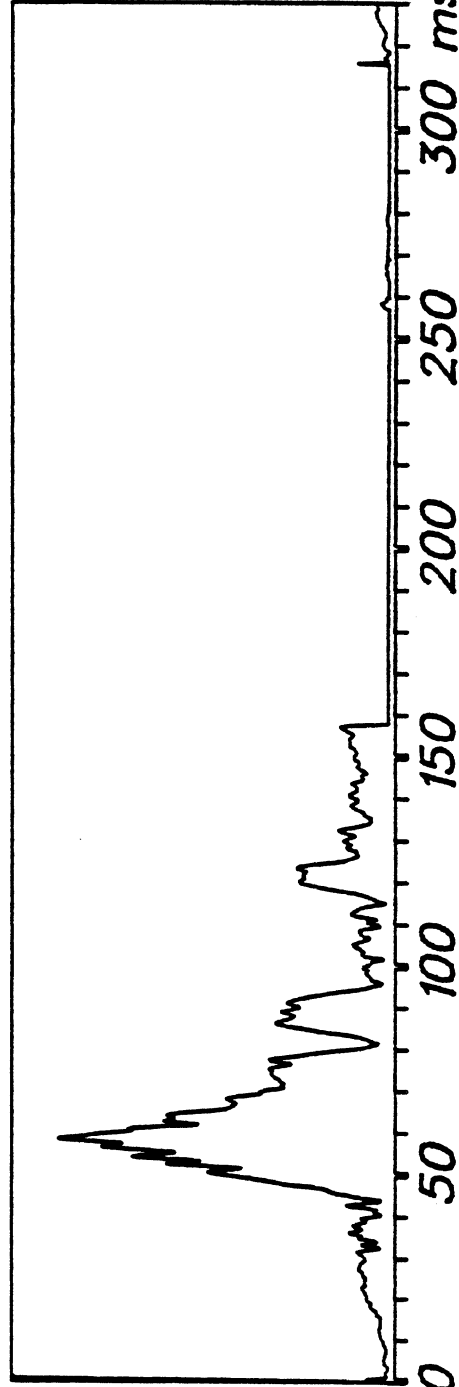
DEC 11, 1981

PEAKS



My (L-R) 2202

Mx (A-P)



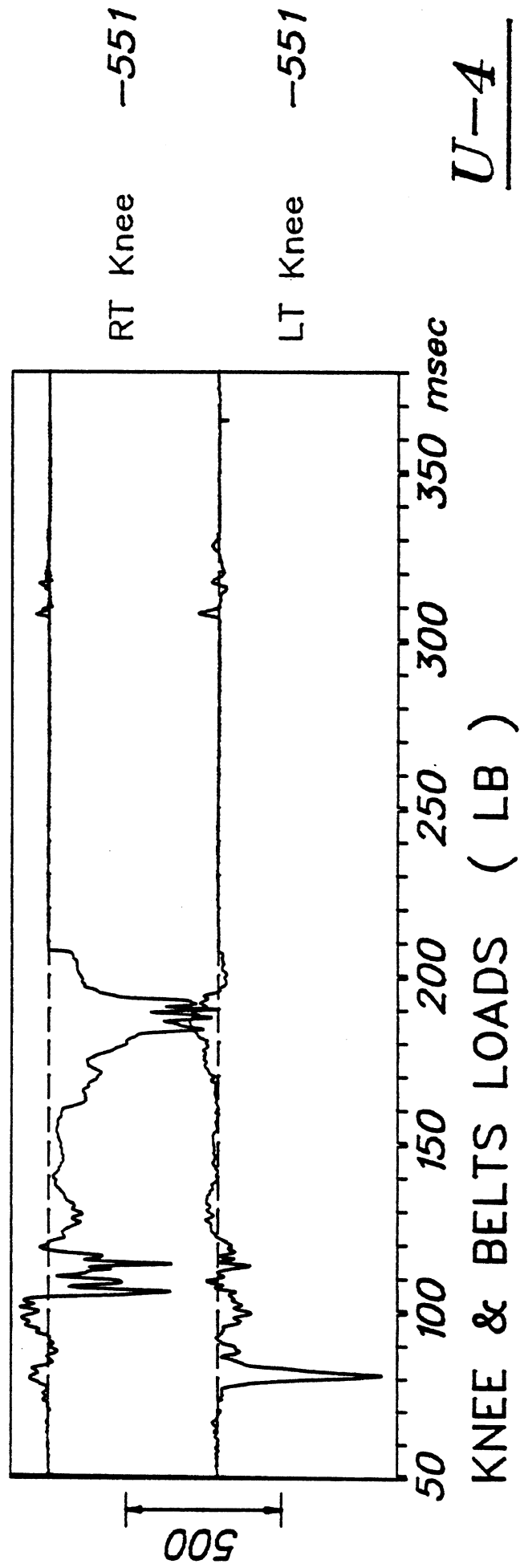
Resultant 3863

U-4

LA DYS W AR

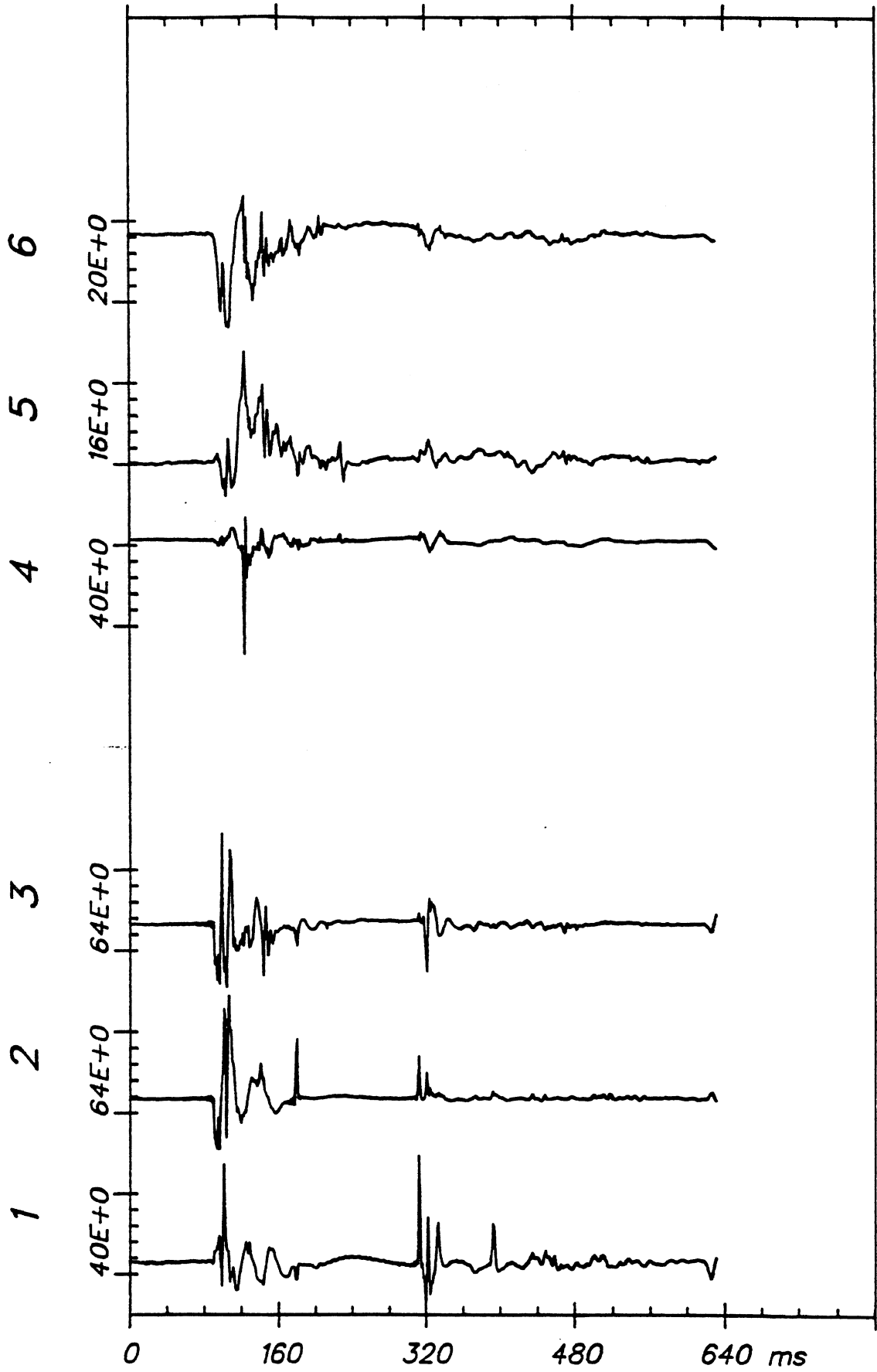
DEC 11, 1981

PEAKS



DEC 10, 1981

From HSRI-175 to 20+SITA, file 2: /1/2/3/-/4/5/6/-/-/

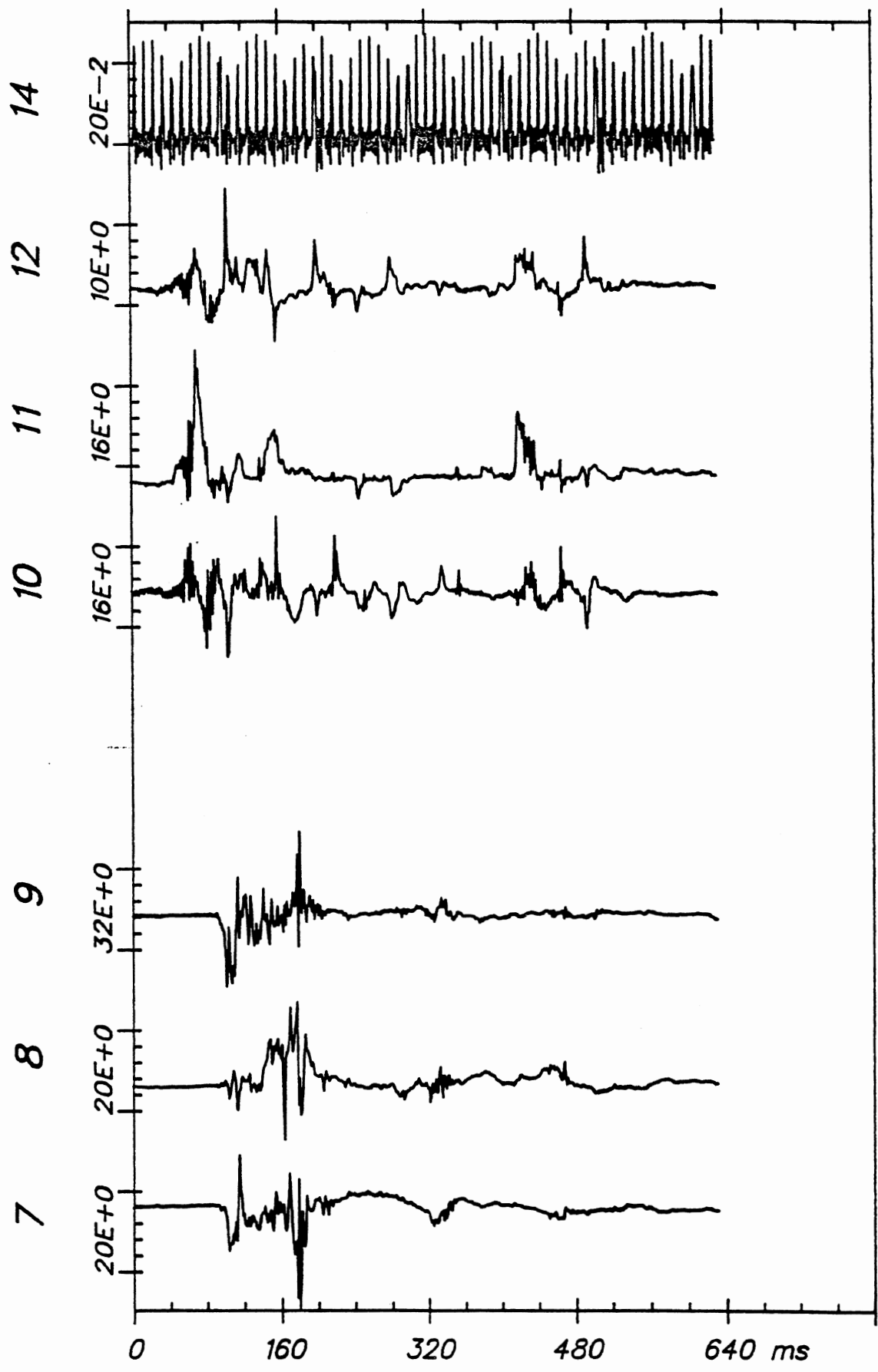


Time Histories

ITA U-4 (1)

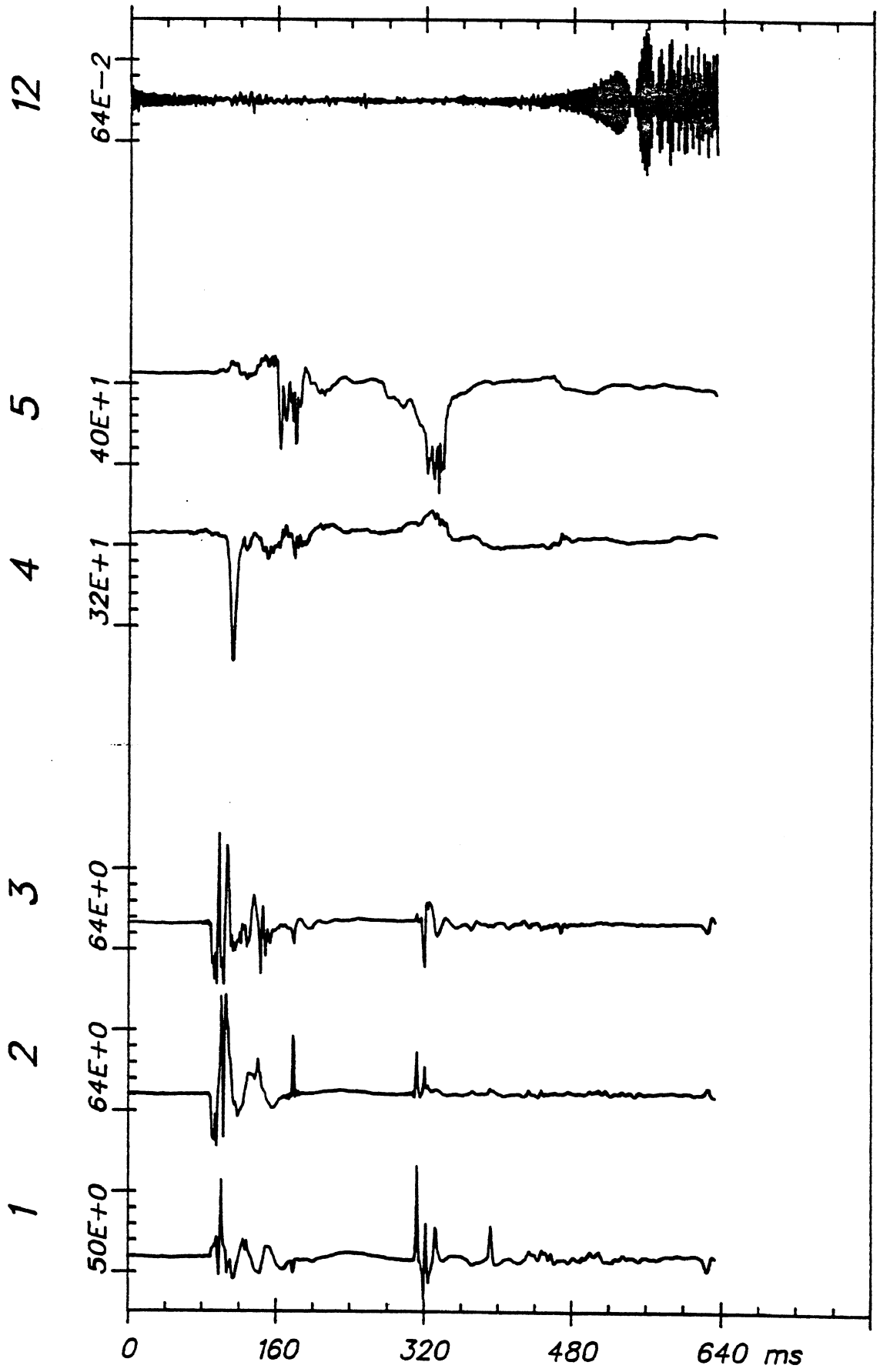
From HSRI-175 to 20+SITA, file 2: /7/8/9/-/10/11/12/14/

DEC 10, 1981



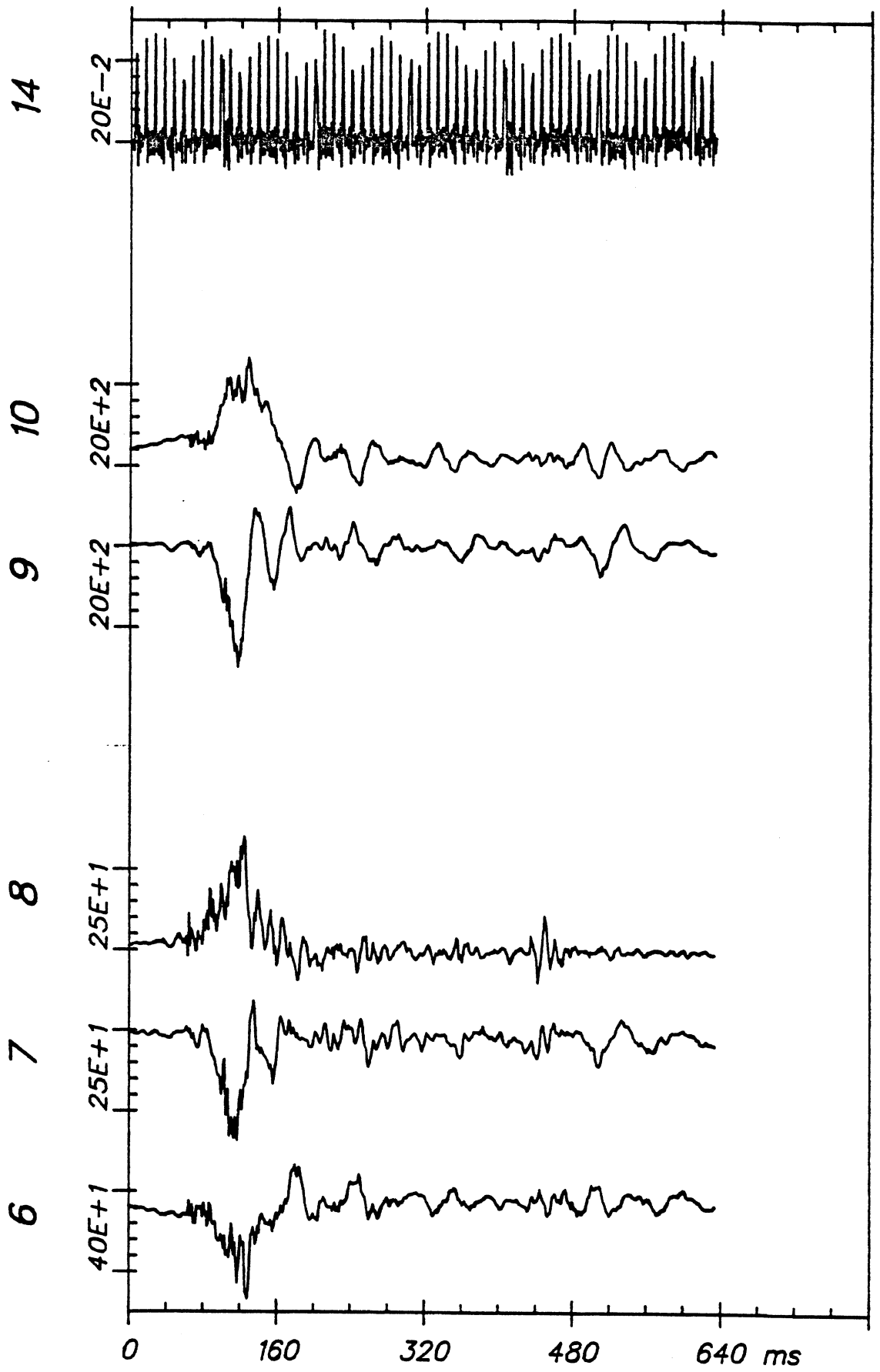
Time Histories

ITA U-4 (1)



Time Histories

ITA U-4 (2)



Time Histories

LA DYS W/O SB		Test No. V-1	S U M M A R Y			
			Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)						
	P-A acc	...	-27	34	55	34
	R-L acc	...	-51	51	38	76
	I-S acc	...	-128	50	112	34
	Resultant	...			146	33
	HIC =	277 ...		33		53

CHEST ACCELERATIONS (G)						
	P-A acc	...	-25	88	15	49
	R-L acc	...	-7	52	34	94
	I-S acc	...	-13	40	19	50
	Resultant	...			39	50

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-12	110	18	109
	R-L acc	...	-16	109	103	90
	I-S acc	...	-34	98	24	110
	Resultant	...			106	90

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-4	118	6	10
	Ay (L-R)	...	-3	39	15	11
	Az (I-S)	...	-2	28	4	38
	Resultant	...			16	10

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	-232	46	101	117
	Fy (L-R)	...	-346	42	103	109
	Fz (I-S)	...	-76	92	230	58
	Resultant	...			400	43

S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	-1918	46	1092	108
	My (L-R)	...	-358	117	1302	48
	Mz (I-S)	...	0	313	0	5
	Resultant	...			2265	46

KNEE & BELTS LOADS (LB)						
	LT Knee	...	-663	360	298	45
	RT Knee	...	-663	45	282	57
	LT Belt	...				
	RT Belt	...				

LA DYS W/O SB

DEC 11, 1981

PEAKS

I-S acc -129

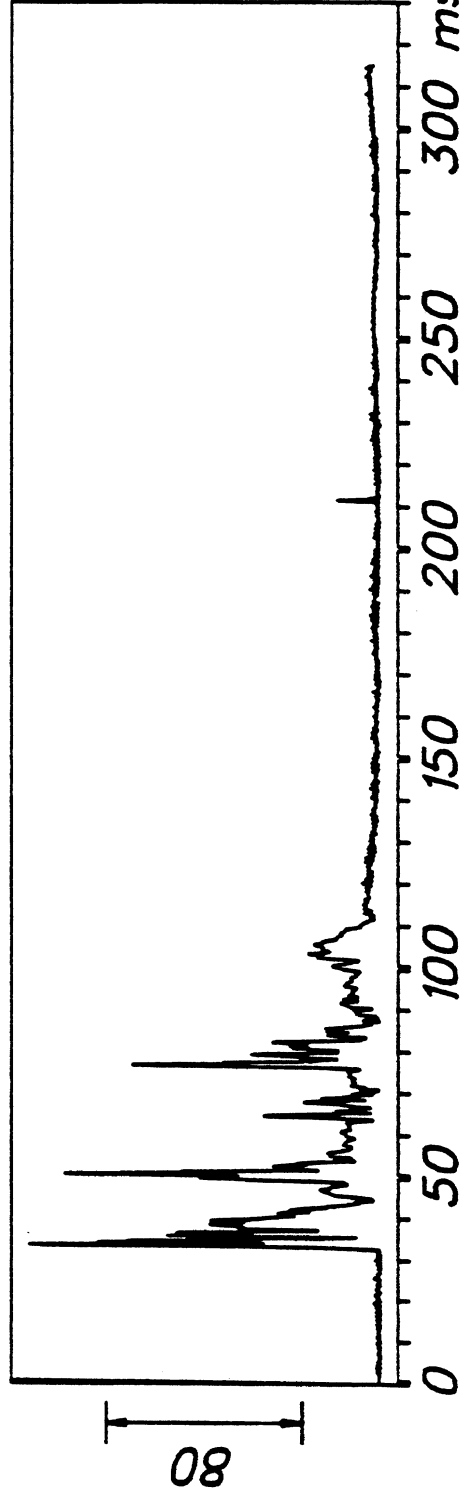
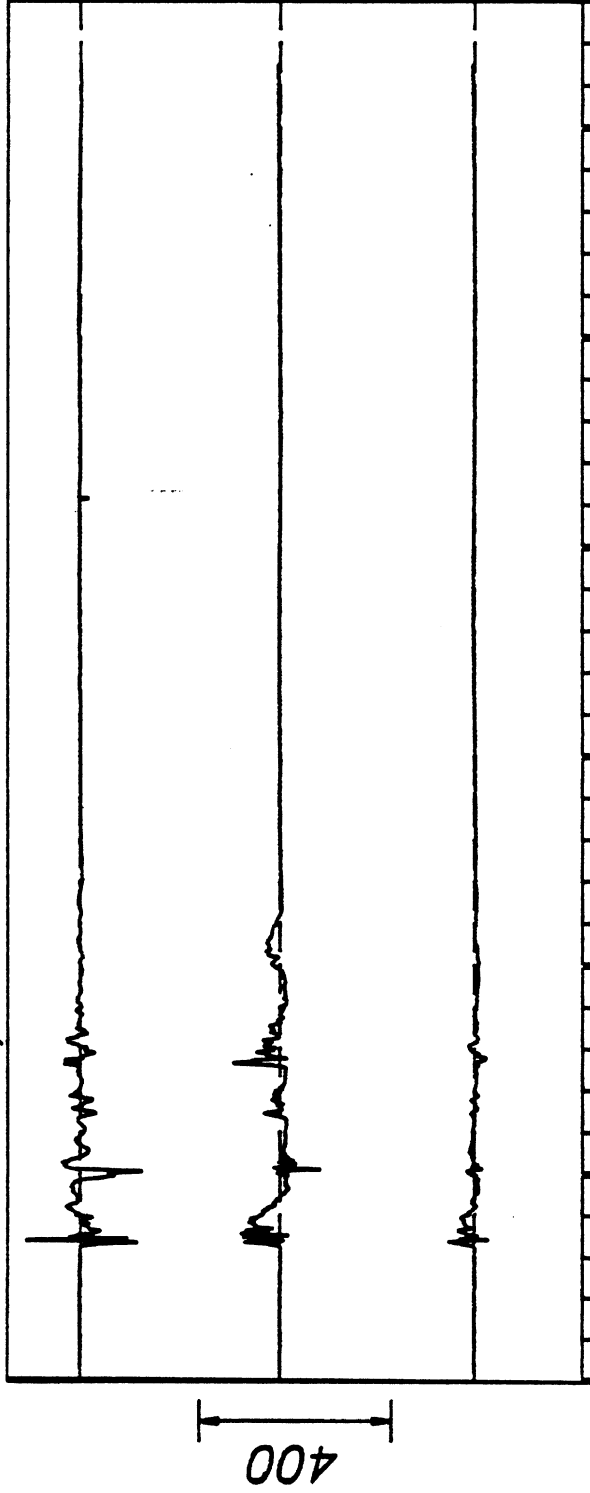
R-L acc 97

P-A acc 54

HIC = 277

Resultant 145

V-1



HEAD ACCELERATIONS (G)

LA DYS W/O SB

DEC 11, 1981

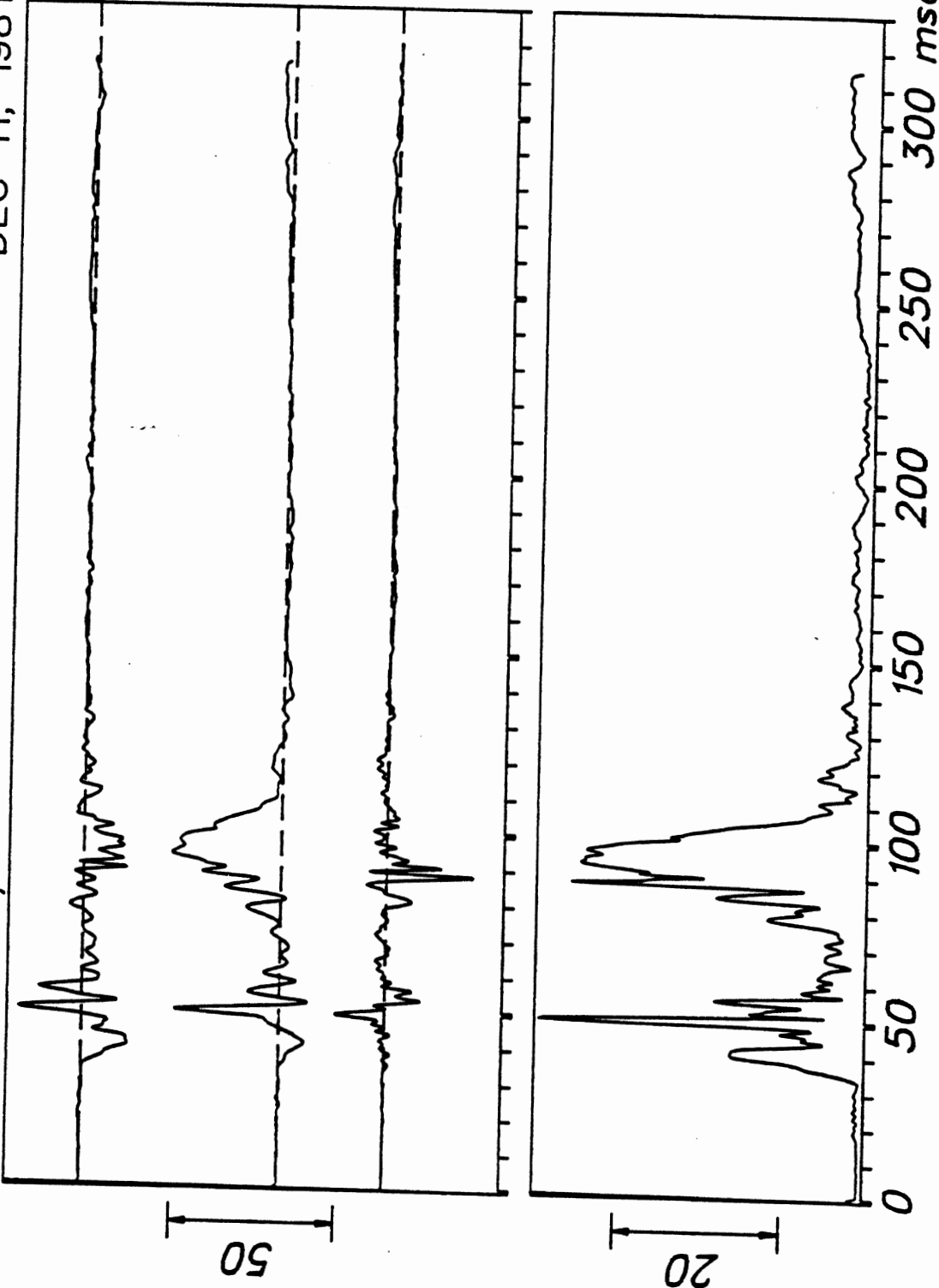
PEAKS

I-S acc 18

R-L acc 33

P-A acc -26

Resultant 38



CHEST ACCELERATIONS (G)

V-1

L.A DYS W/O SB

DEC 11, 1981

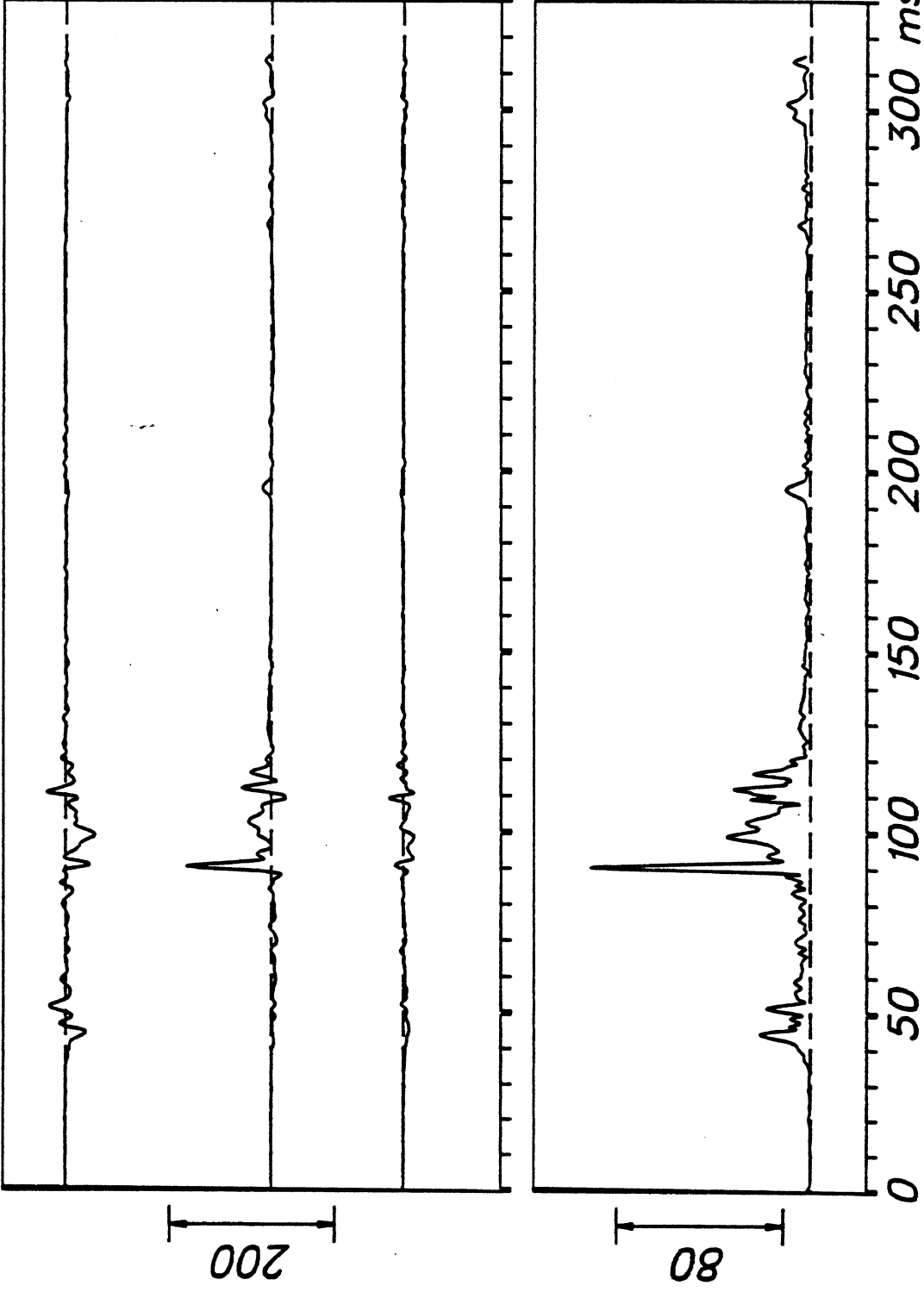
PEAKS

I-S acc -35

R-L acc 103

P-A acc 18

Resultant 105



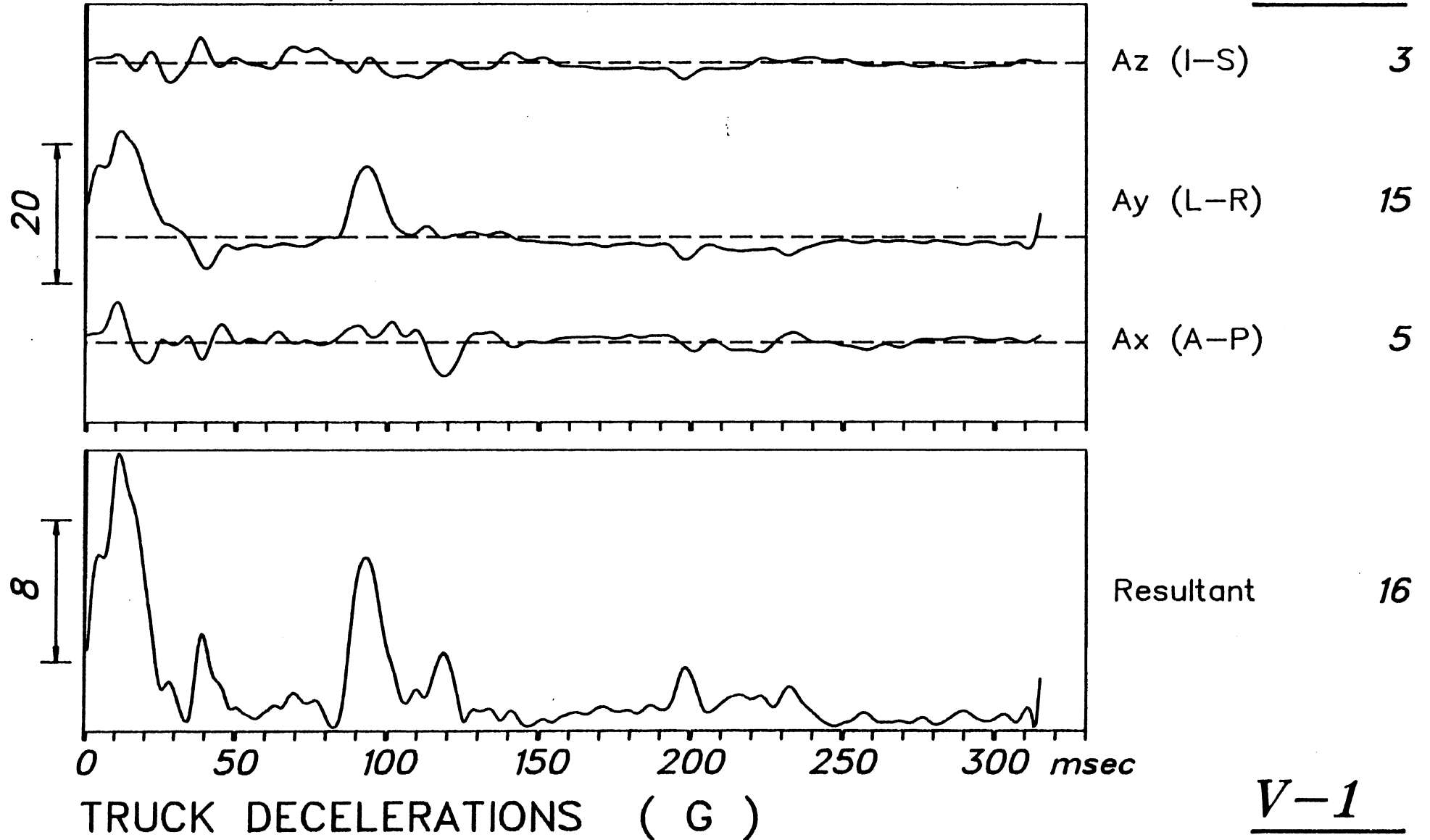
PELVIS ACCELERATIONS (G)

V-1

LA DYS W/O SB

DEC 11, 1981

PEAKS



LA DYS W/O SB

DEC 11, 1981

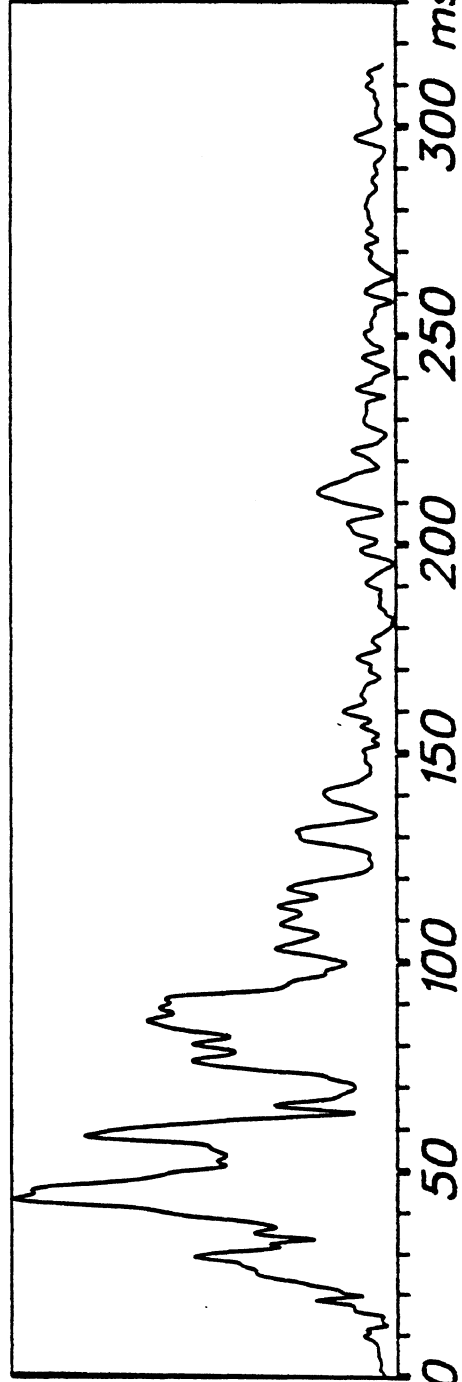
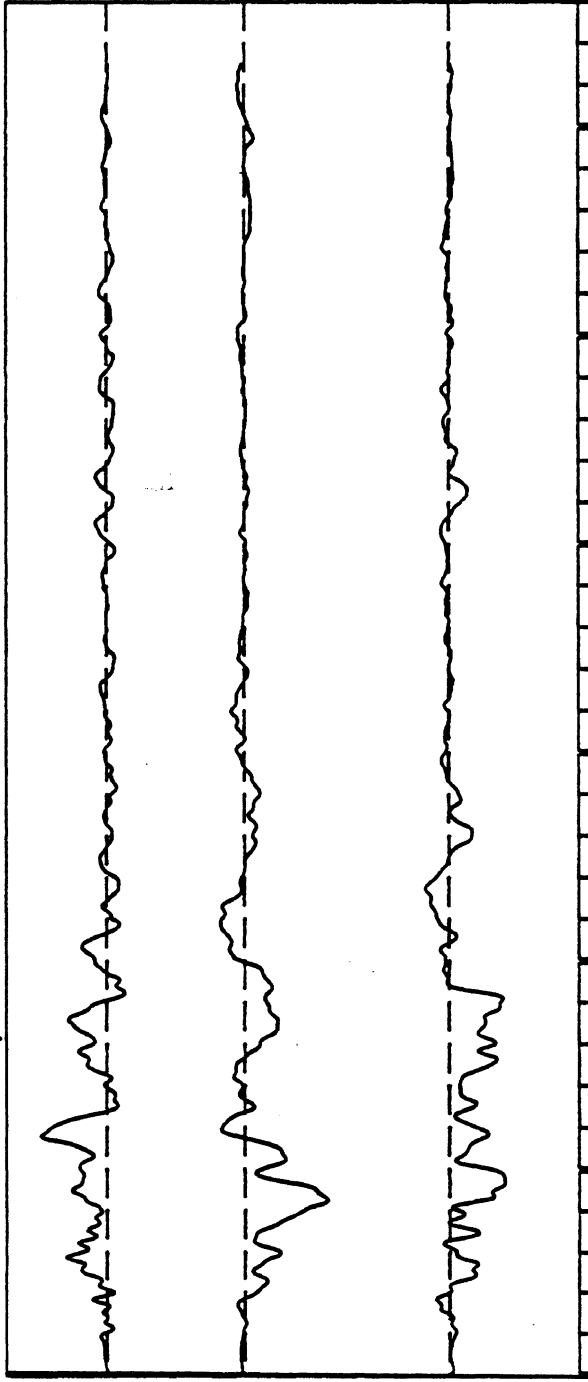
PEAKS

Fz (I-S) 279

Fy (L-R) -347

Fx (A-P) -233

Resultant 399



S. COLUMN FORCES (LB)

V-1

LA DYS W/O SB

DEC 11, 1981

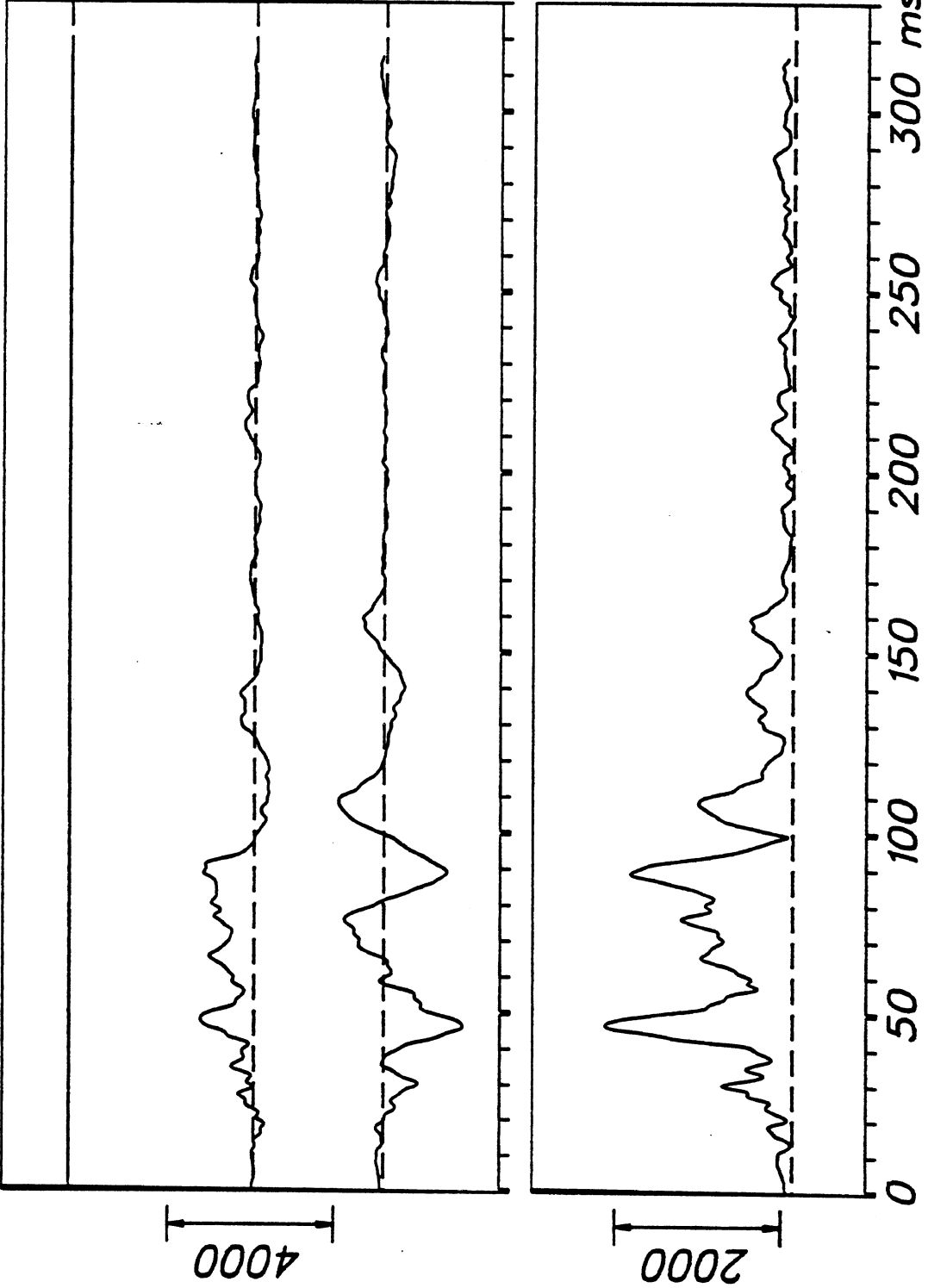
PEAKS

Mz (I-S)

My (L-R) 1302

Mx (A-P)

Resultant 2265

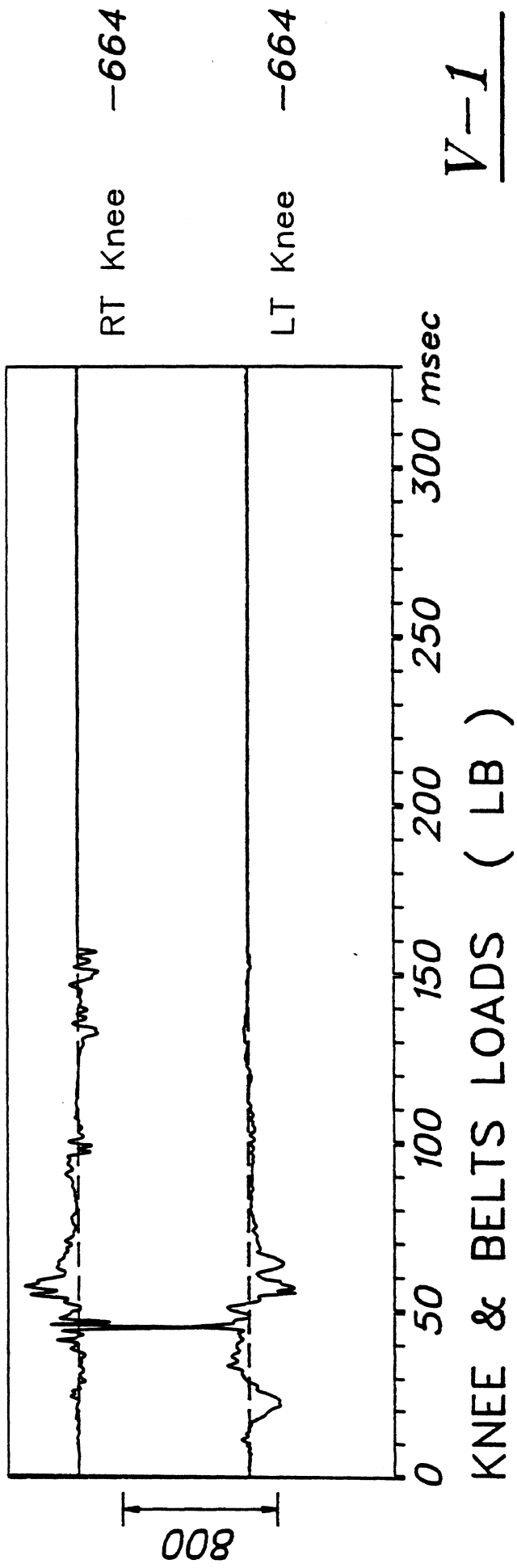


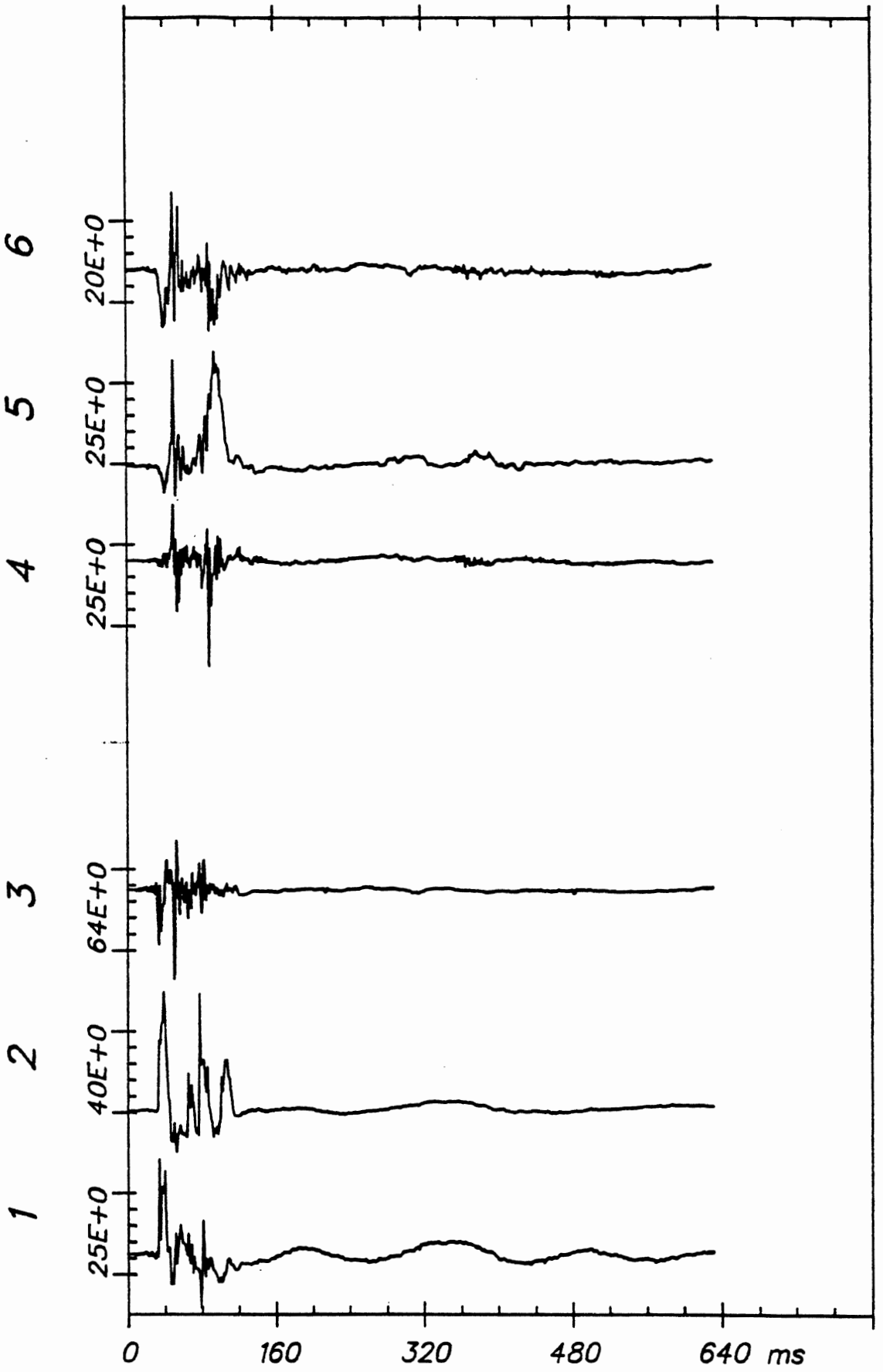
V-1

L.A DYS W/O SB

DEC 11, 1981

PEAKS



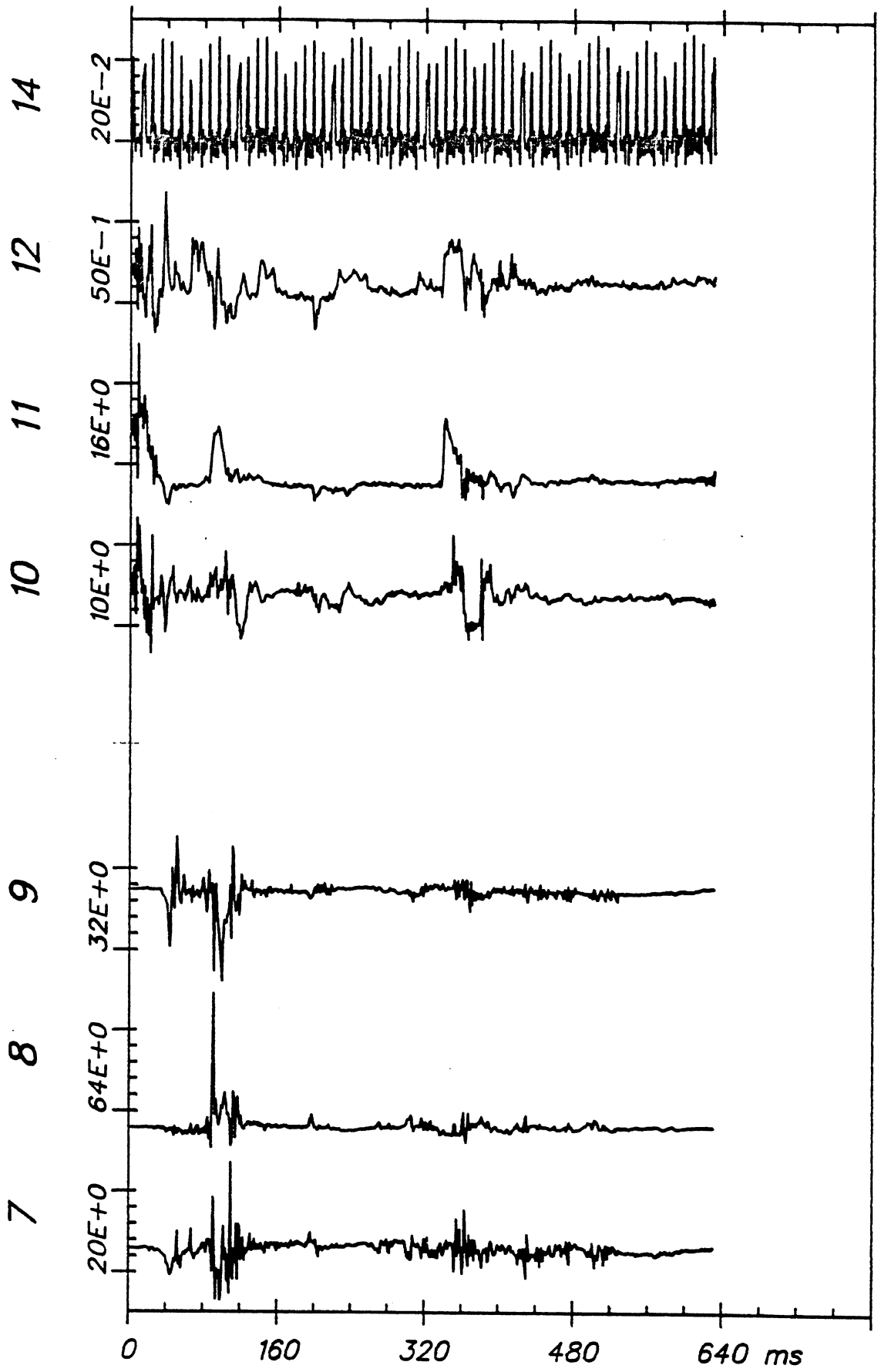


Time Histories

ITA V-1 (1)

DEC 10, 1981

From HSRI-175 to 20+SITA, file 3: /7/8/9/-/10/11/12/14/

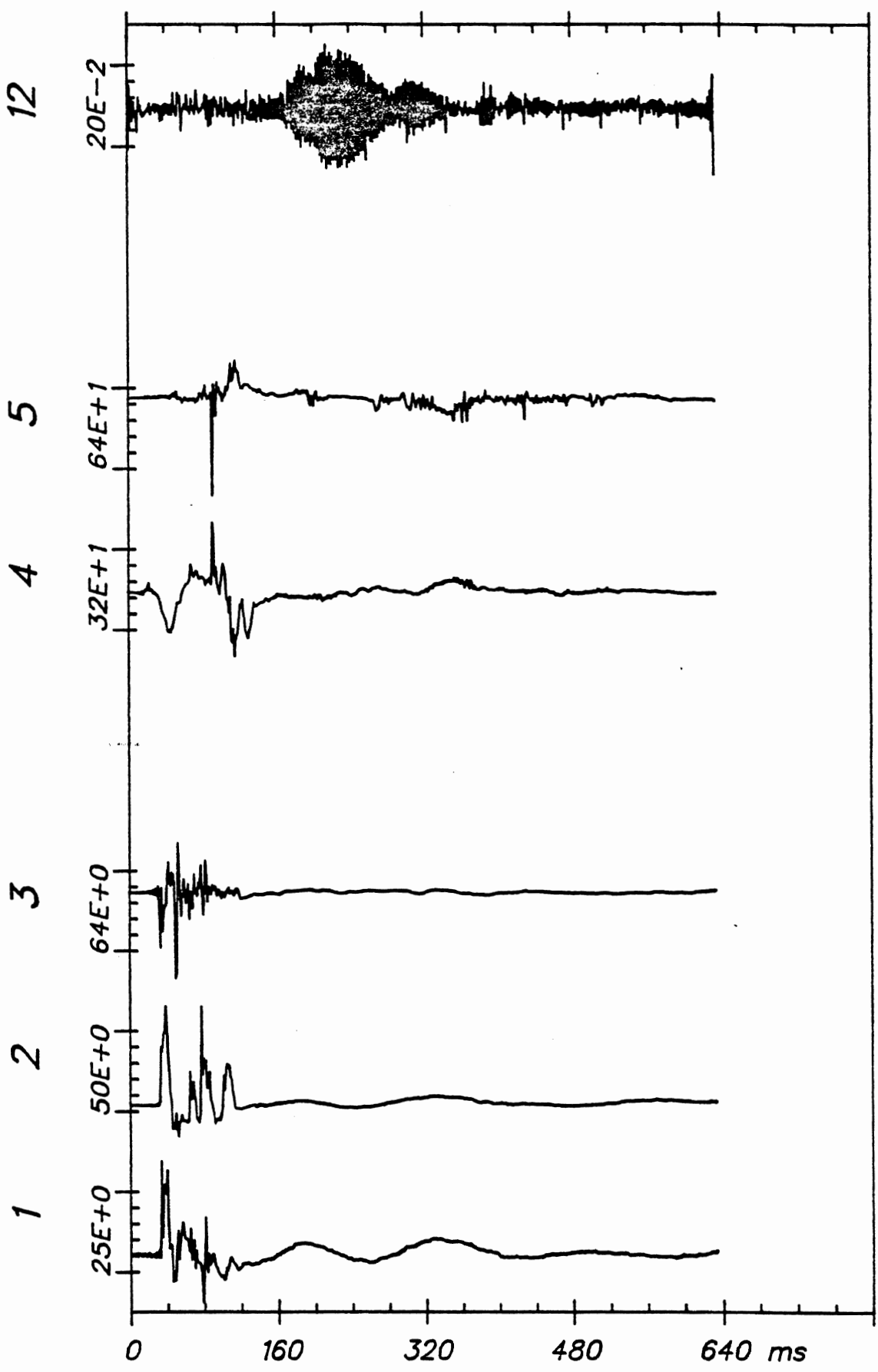


Time Histories

ITA V-1 (1)

DEC 10, 1981

From HSRI-175 to 20+SITA, file 8: /1/2/3/-/4/5/-/12/

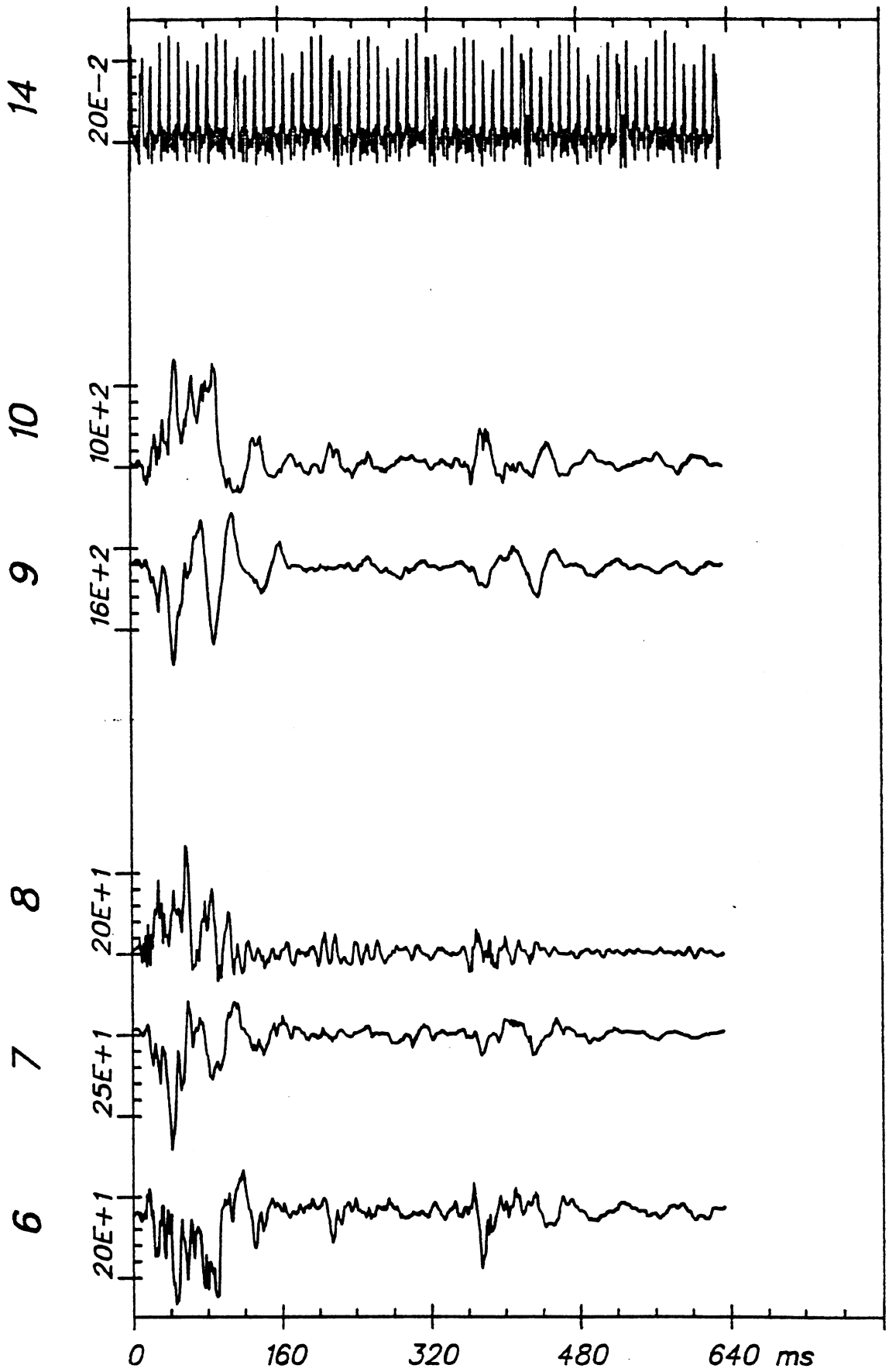


Time Histories

ITA V-1 (2)

DEC 10, 1981

From HSRI-175 to 20+SITA, file 8: /6/7/8/-/9/10/-/14/



Time Histories

ITA V-1 (2)

```

=====
LA DY W/O SB      Test No. S-5
                                     S U M M A R Y
                                     Min @ msec      Max @ msec
-----
HEAD ACCELERATIONS ( G )
  P-A acc      ...      -54   247      153   246
  R-L acc      ...      -110  247      643   246
  I-S acc      ...      -242  246       51   372
  Resultant    ...                          691   246

  HIC = 5858 ...                          246   246
-----
CHEST ACCELERATIONS ( G )
  P-A acc      ...      -34   230       12   227
  R-L acc      ...       -1   290       28   230
  I-S acc      ...      -13   251       12   290
  Resultant    ...                          44   230
-----
PELVIS ACCELERATIONS ( G )
  P-A acc      ...      -11   238       11   310
  R-L acc      ...       -4   305       12   240
  I-S acc      ...      -17   248       13   292
  Resultant    ...                          18   248
-----
TRUCK DECELERATIONS ( G )
  Ax (A-P)     ...       -9   164        6   224
  Ay (L-R)     ...       -4   364       17   156
  Az (I-S)     ...       -2   172       14   165
  Resultant    ...                          22   165
-----
S. COLUMN FORCES ( LB )
  Fx (A-P)     ...      -185    7      199   105
  Fy (L-R)     ...      -200    3      303    30
  Fz (I-S)     ...      -208  188      346    37
  Resultant    ...                          402    37
-----
S. COLUMN MOMENTS ( IN-LB )
  Mx (A-P)     ...     -2742    3      1097   328
  My (L-R)     ...     -689    52      1097    10
  Mz (I-S)     ...                          2811   321
  Resultant    ...
-----
KNEE & BELTS LOADS ( LB )
  LT Knee     ...         0    0         0    0
  RT Knee     ...         0    0         0    0
  LT Belt     ...         0    0         0    0
  RT Belt     ...         0    0         0    0
    
```

LA DY W/O SB

DEC 22, 1981

PEAKS

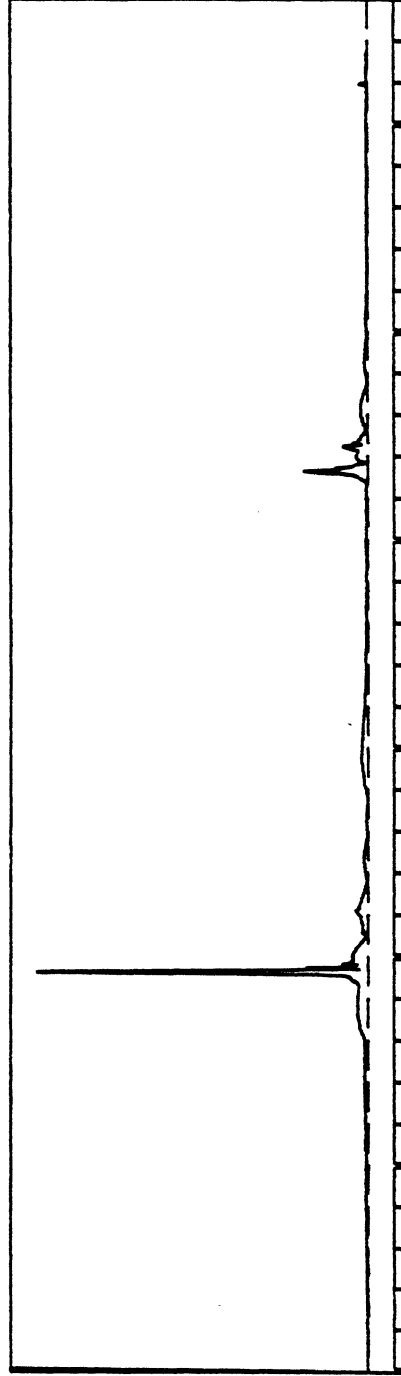
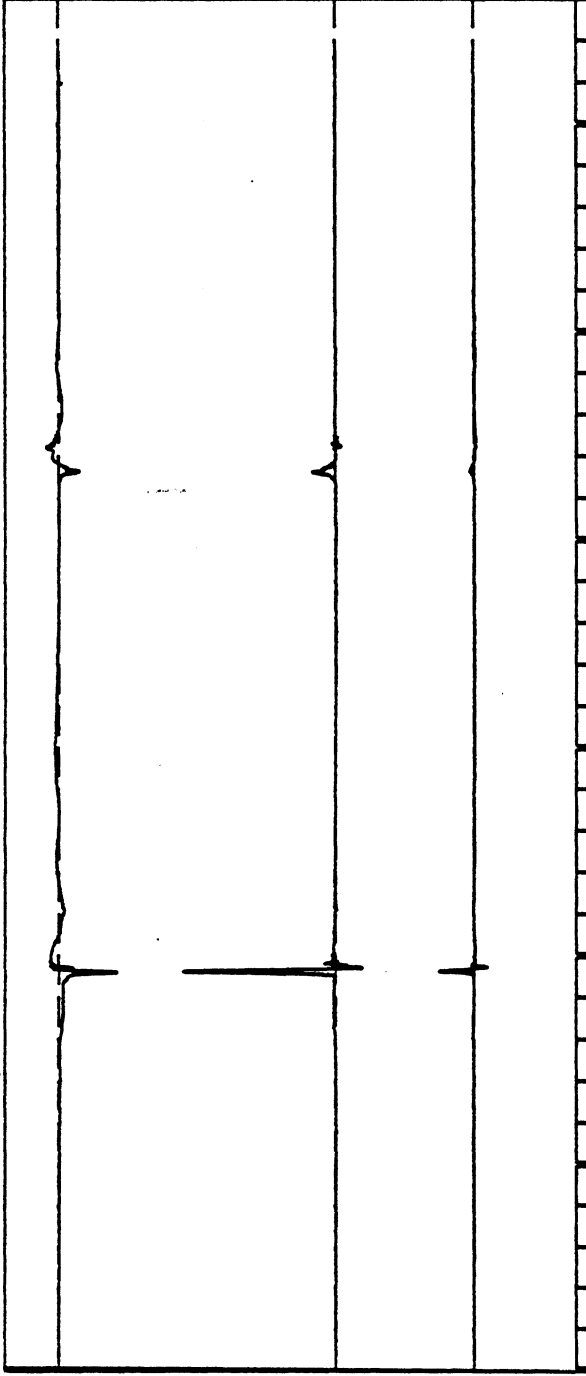
I-S acc -243

R-L acc 642

P-A acc 153

HIC = 5858

Resultant 690



150 200 250 300 350 400 450 msec

HEAD ACCELERATIONS (G)

S-5

L A D Y W / O S B

DEC 22, 1981

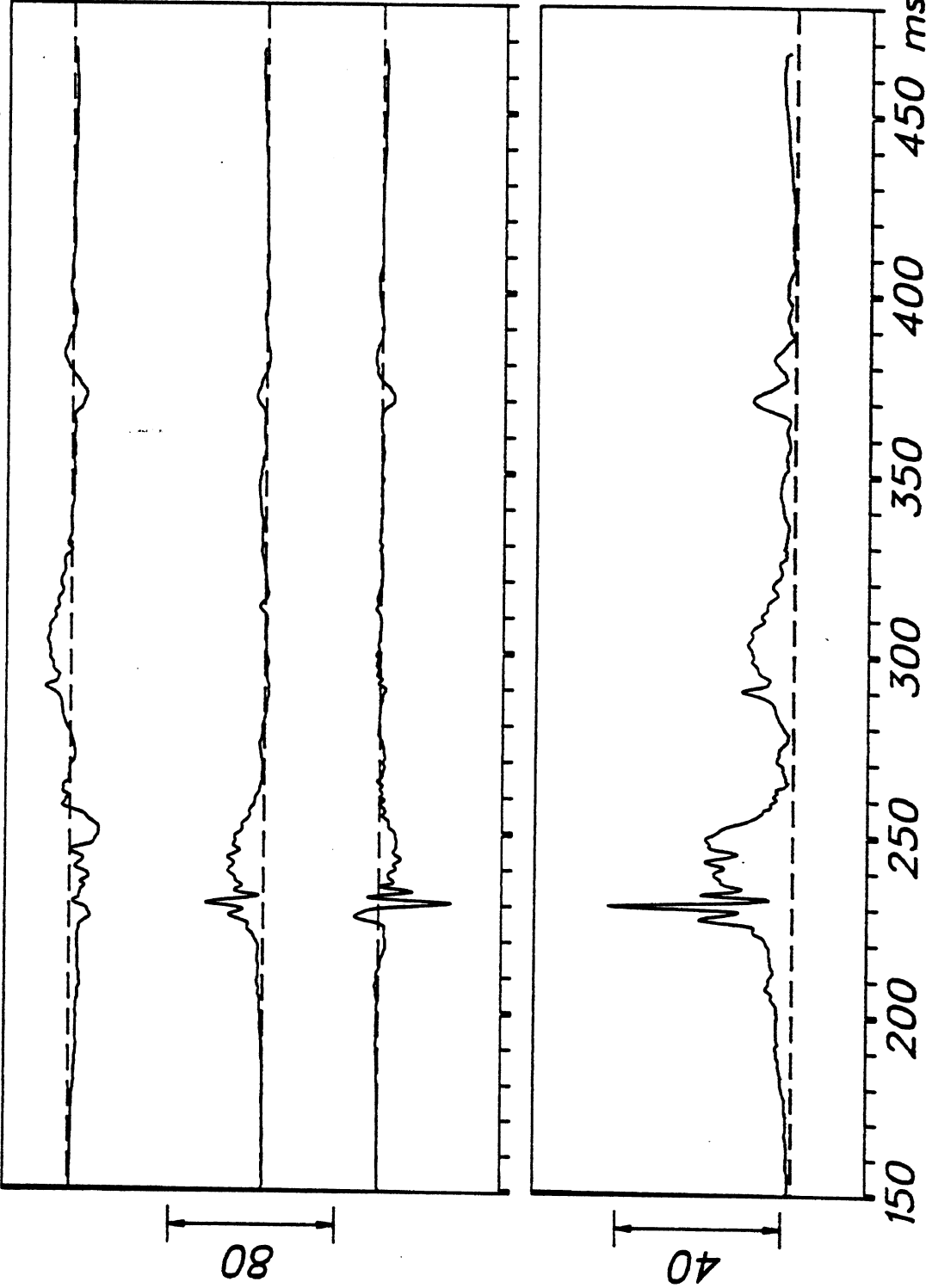
PEAKS

I-S acc -14

R-L acc 27

P-A acc -35

Resultant 44



S-5

L.A DY W/O SB

DEC 22, 1981

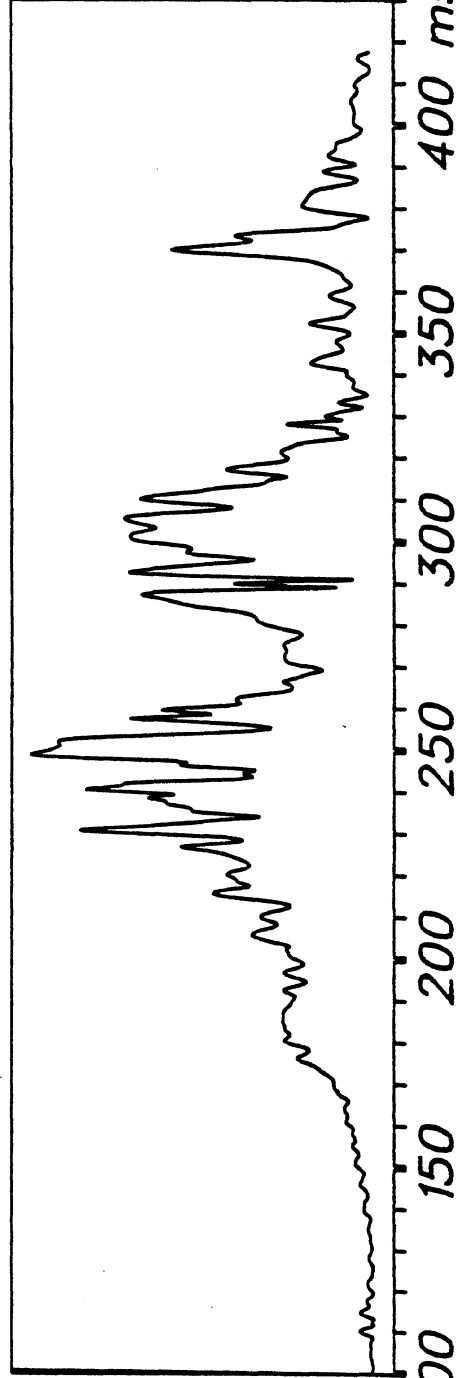
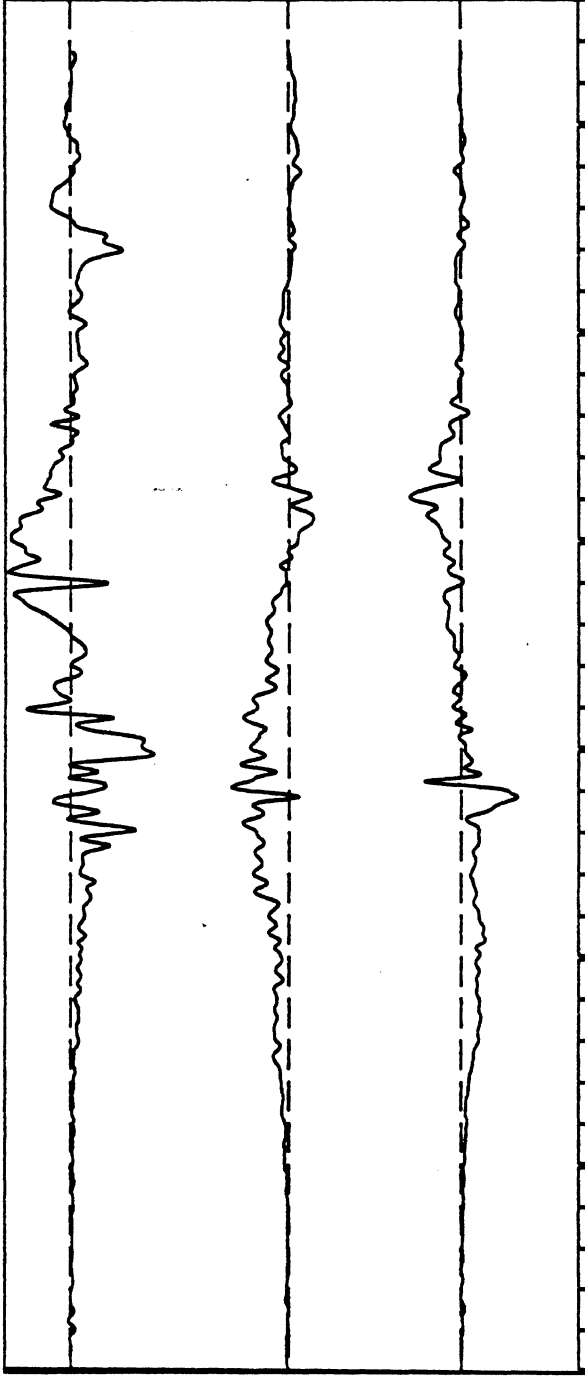
PEAKS

I-S acc -18

R-L acc 12

P-A acc -12

Resultant 18



PELVIS ACCELERATIONS (G)

S-5

LA DY W/O SB

DEC 22, 1981

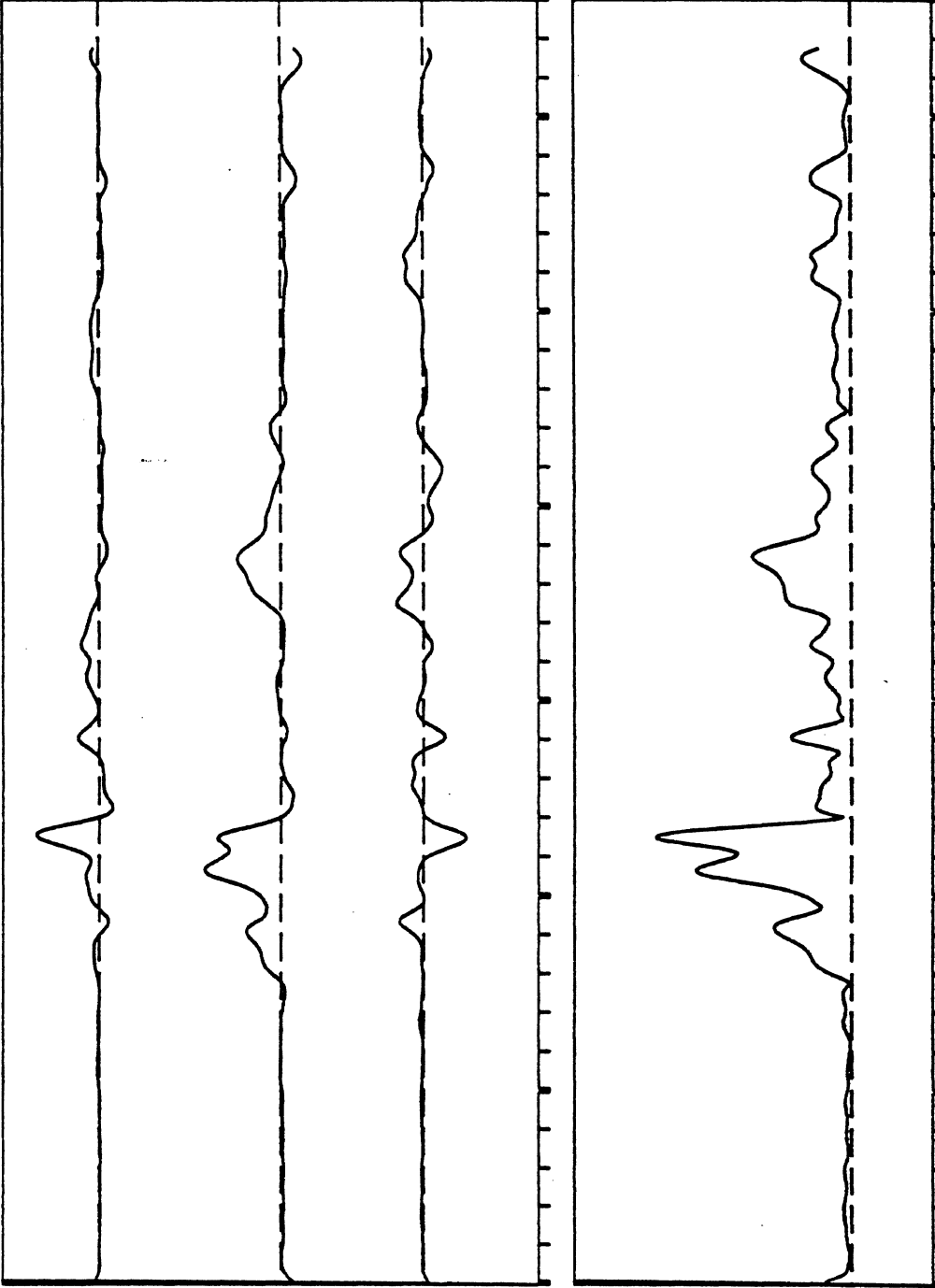
PEAKS

Az (I-S) 13

Ay (L-R) 17

Ax (A-P) -10

Resultant 21



50 100 150 200 250 300 350 msec

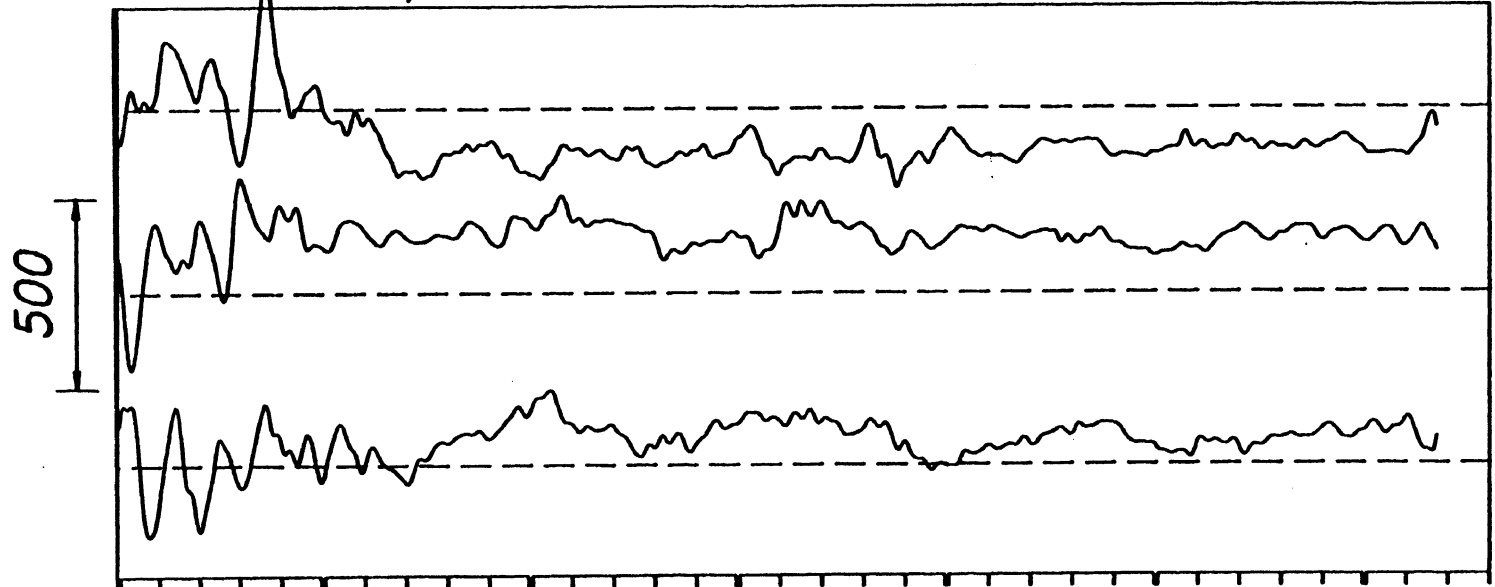
TRUCK DECELERATIONS (G)

S-5

LA DY W/O SB

DEC 22, 1981

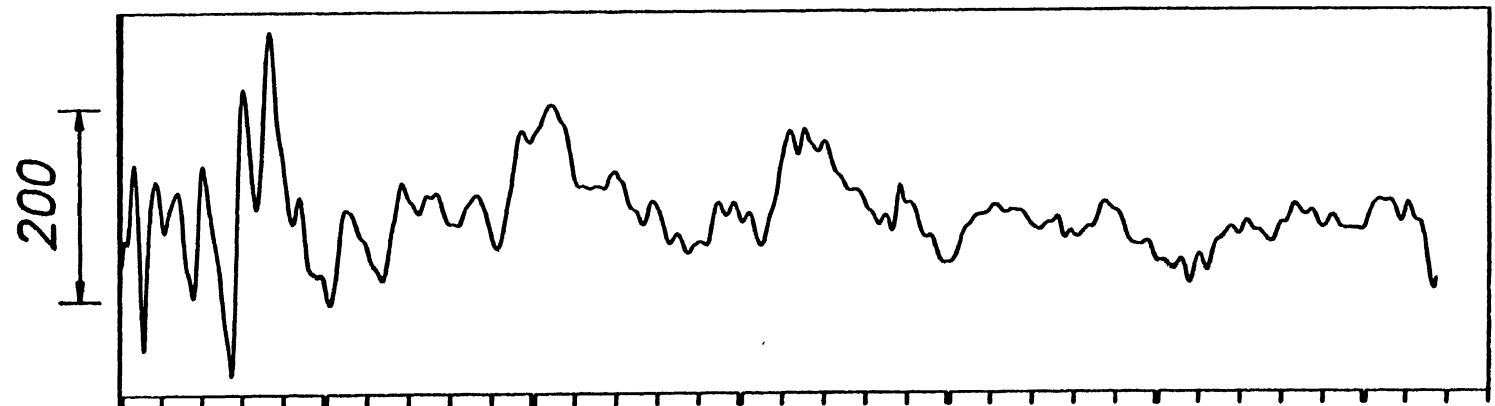
PEAKS



345

303

199



401

0 50 100 150 200 250 300 msec

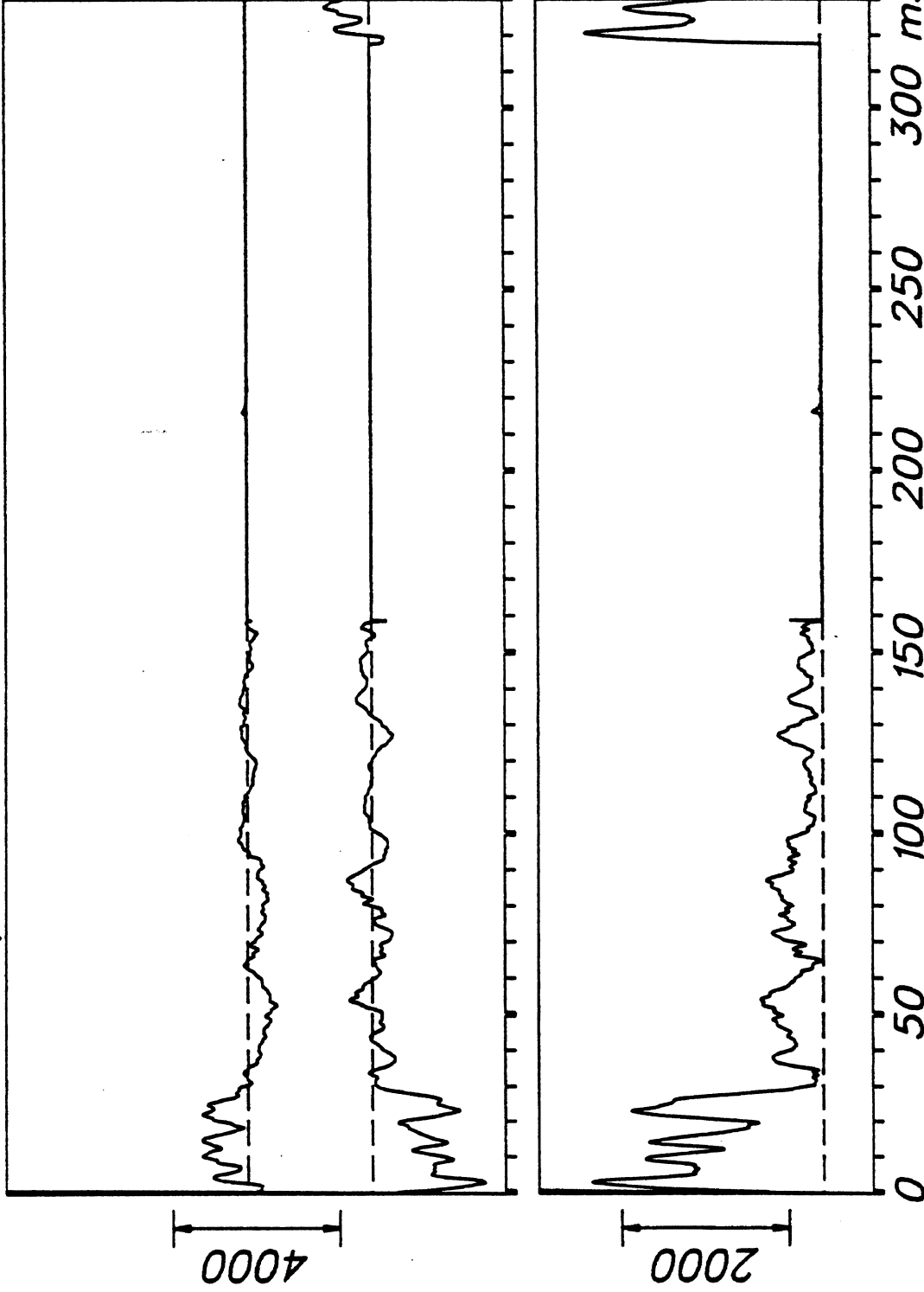
S. COLUMN FORCES (LB)

S-5

L.A DY W/O SB

DEC 22, 1981

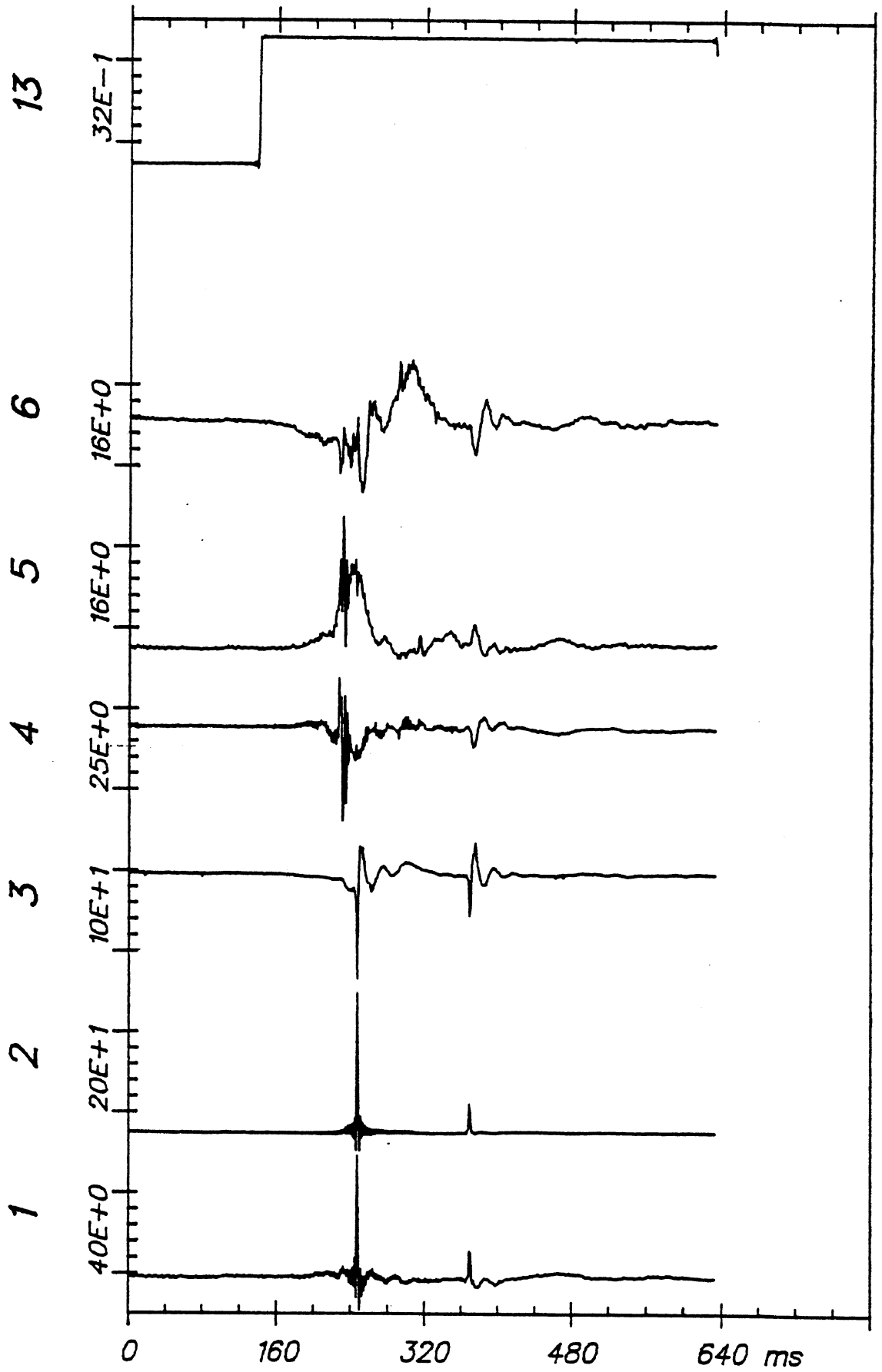
PEAKS



S-5

From HSRI-175 to SITA, file 1: /1/2/3/4/5/6/-/13/

DEC 22, 1981

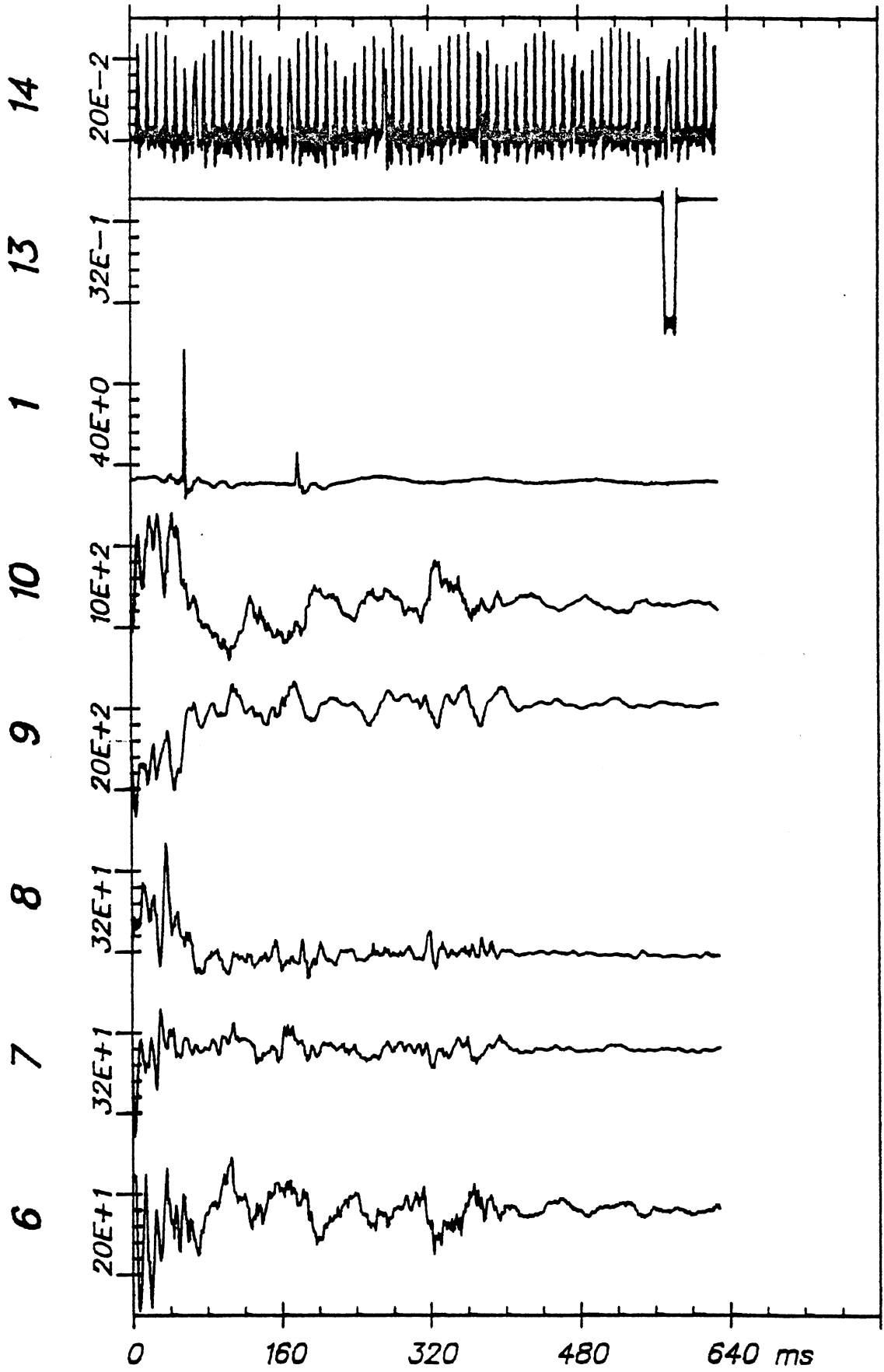


Time Histories

ITA S-5 (1)

From HSRI-175 to SITA, file 7: /6/7/8/9/10/1/13/14/

DEC 22, 1981



Time Histories

ITA S-5 (2)

LA DY W/O SB		Test No. S-6	S U M M A R Y			
			Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)						
	P-A acc	...	-67	115	4	139
	R-L acc	...	-34	115	16	116
	I-S acc	...	-40	115	10	118
	Resultant	...			84	115
	HIC =	12 ...		113		129

CHEST ACCELERATIONS (G)						
	P-A acc	...	-4	215	1	221
	R-L acc	...	-3	216	1	339
	I-S acc	...	-2	207	5	216
	Resultant	...			8	216

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-16	203	6	201
	R-L acc	...	-27	204	7	198
	I-S acc	...	-5	195	11	203
	Resultant	...			32	203

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-3	273	5	280
	Ay (L-R)	...	0	238	16	193
	Az (I-S)	...	-1	206	5	255
	Resultant	...			16	193

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	0	0	0	0
	Fy (L-R)	...	0	0	0	0
	Fz (I-S)	...	0	0	0	0
	Resultant	...			0	0

S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	0	0	0	0
	My (L-R)	...	0	0	0	0
	Mz (I-S)	...				
	Resultant	...			0	0

KNEE & BELTS LOADS (LB)						
	LT Knee	...	0	0	0	0
	RT Knee	...	0	0	0	0
	LT Belt	...	0	0	0	0
	RT Belt	...	0	0	0	0

*second
bounce
values!*

?

L.A DY W/O SB

DEC 22, 1981

PEAKS

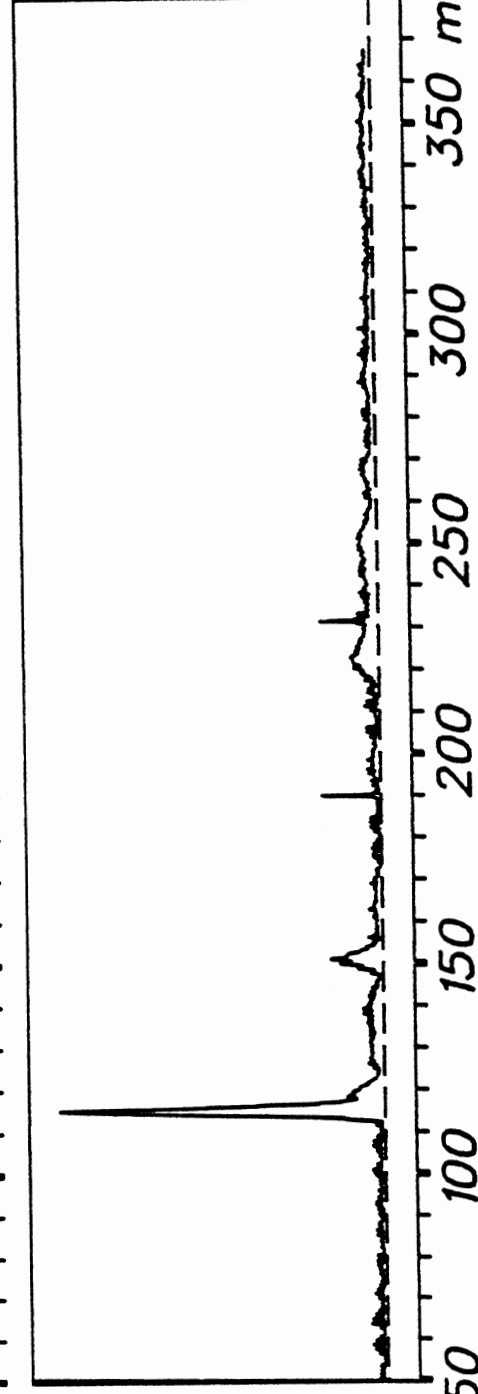
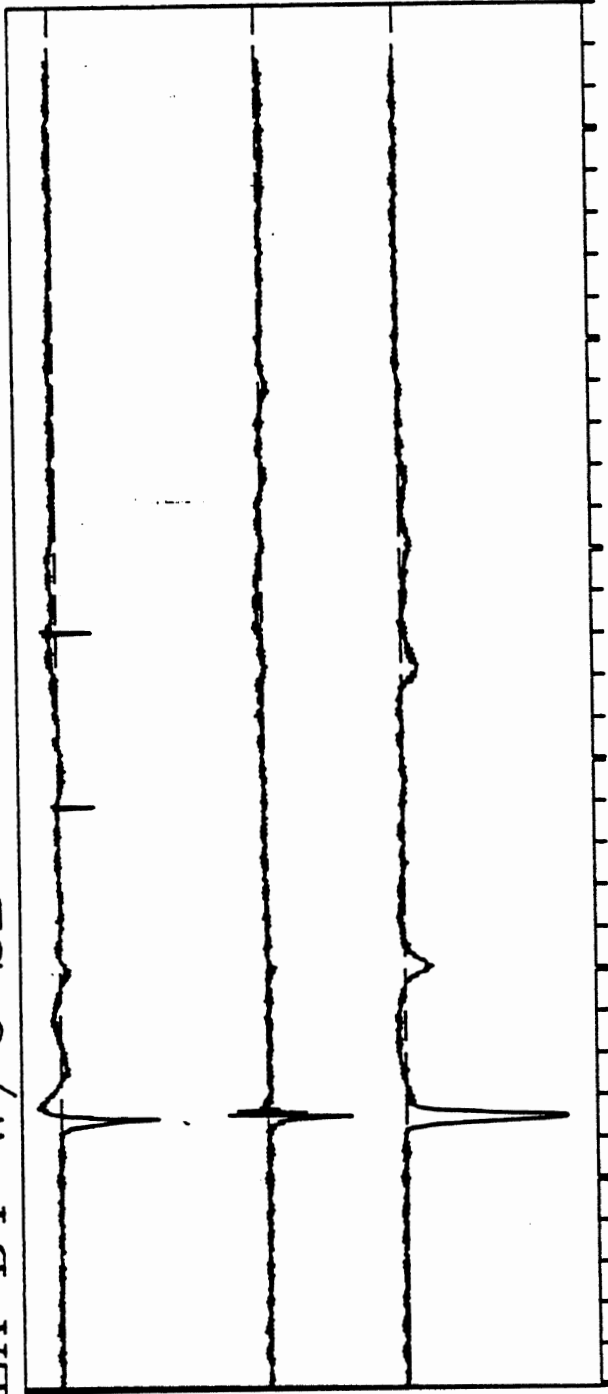
I-S acc -41

R-L acc -35

P-A acc -68

HIC = 12

Resultant 83



S-6

L.A DY W/O SB

DEC 22, 1981

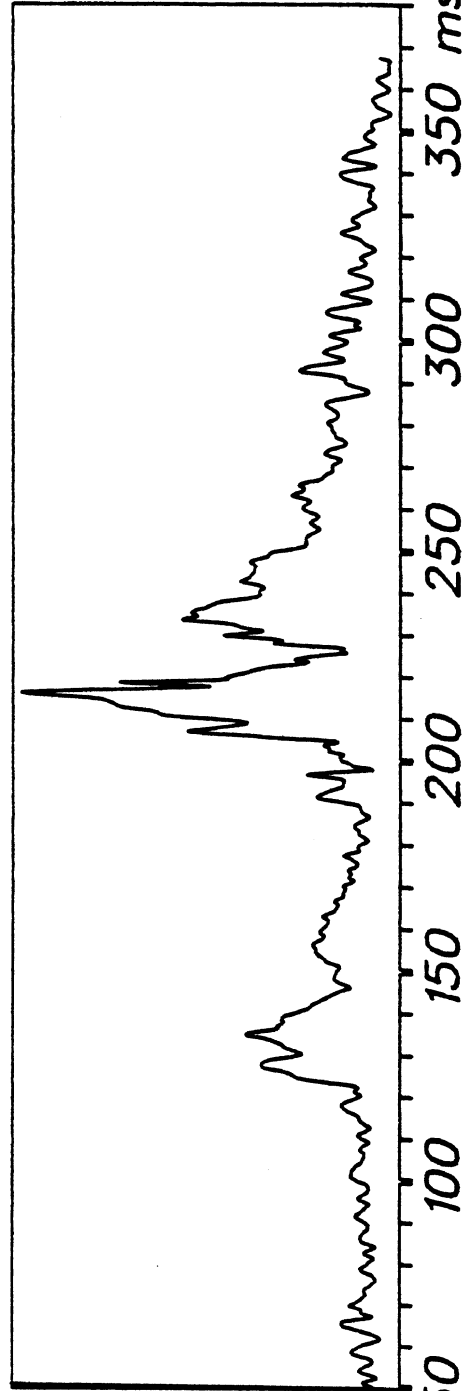
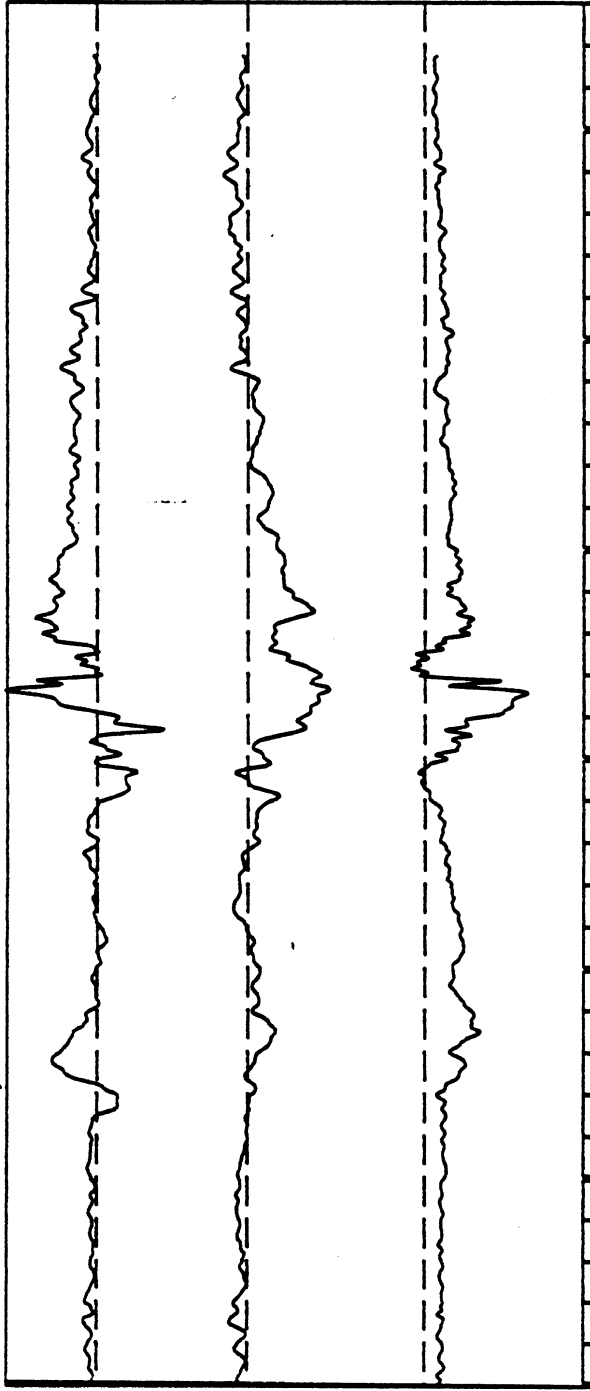
PEAKS

I-S acc 4

R-L acc -4

P-A acc -5

Resultant 8



CHEST ACCELERATIONS (G)

S-6

LA DY W/O SB

DEC 22, 1981

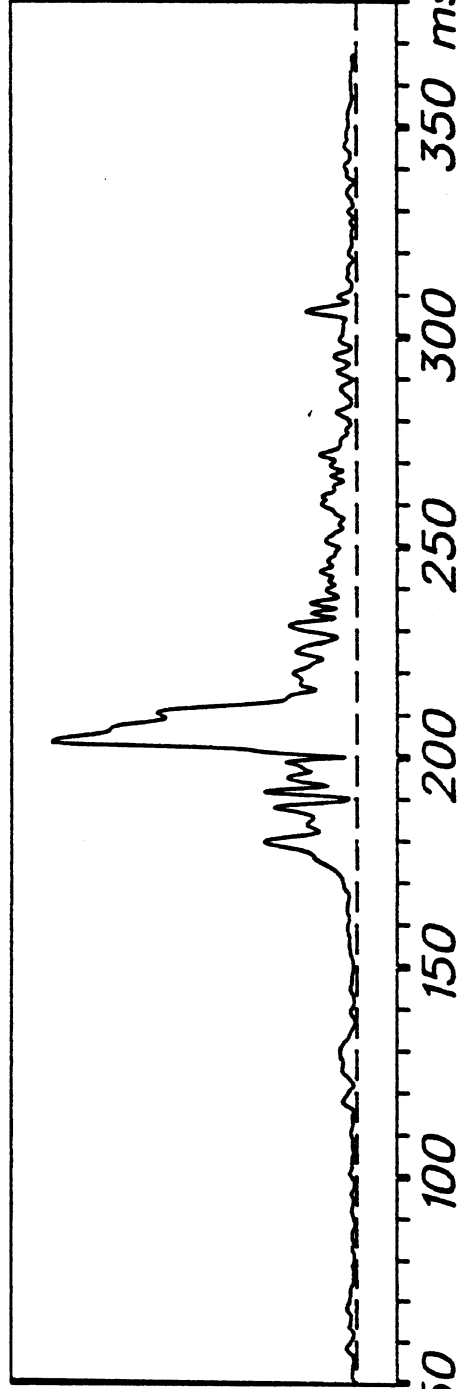
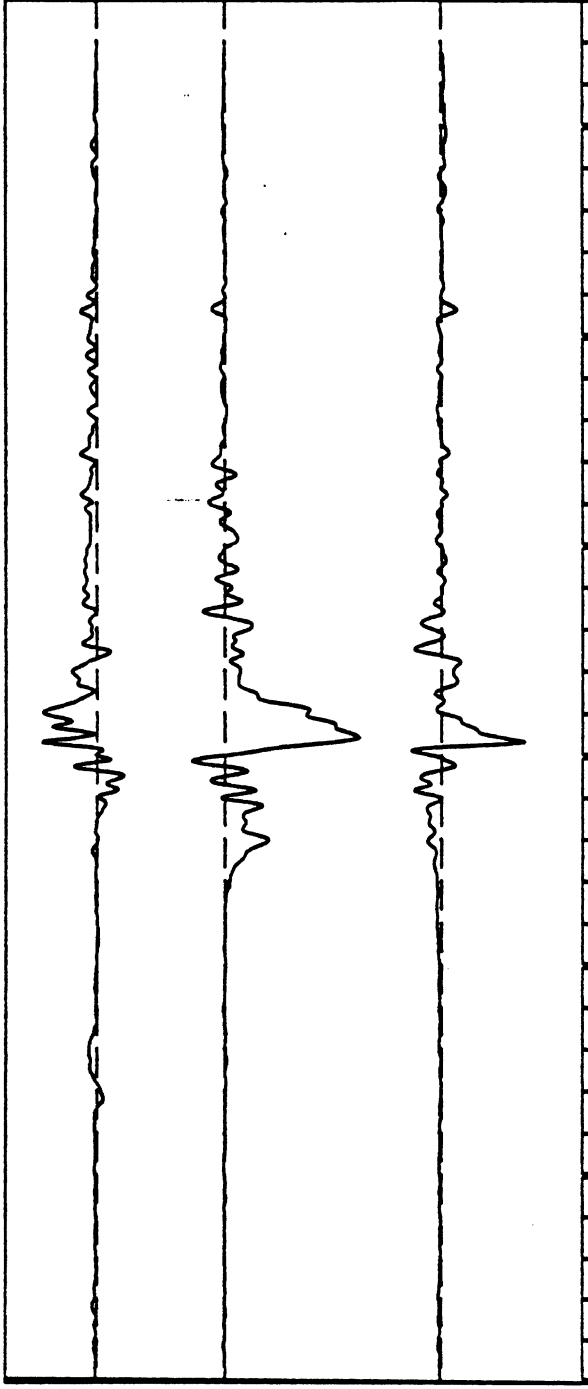
PEAKS

I-S acc 11

R-L acc -28

P-A acc -17

Resultant 31



S-6

LA DY W/O SB

DEC 22, 1981

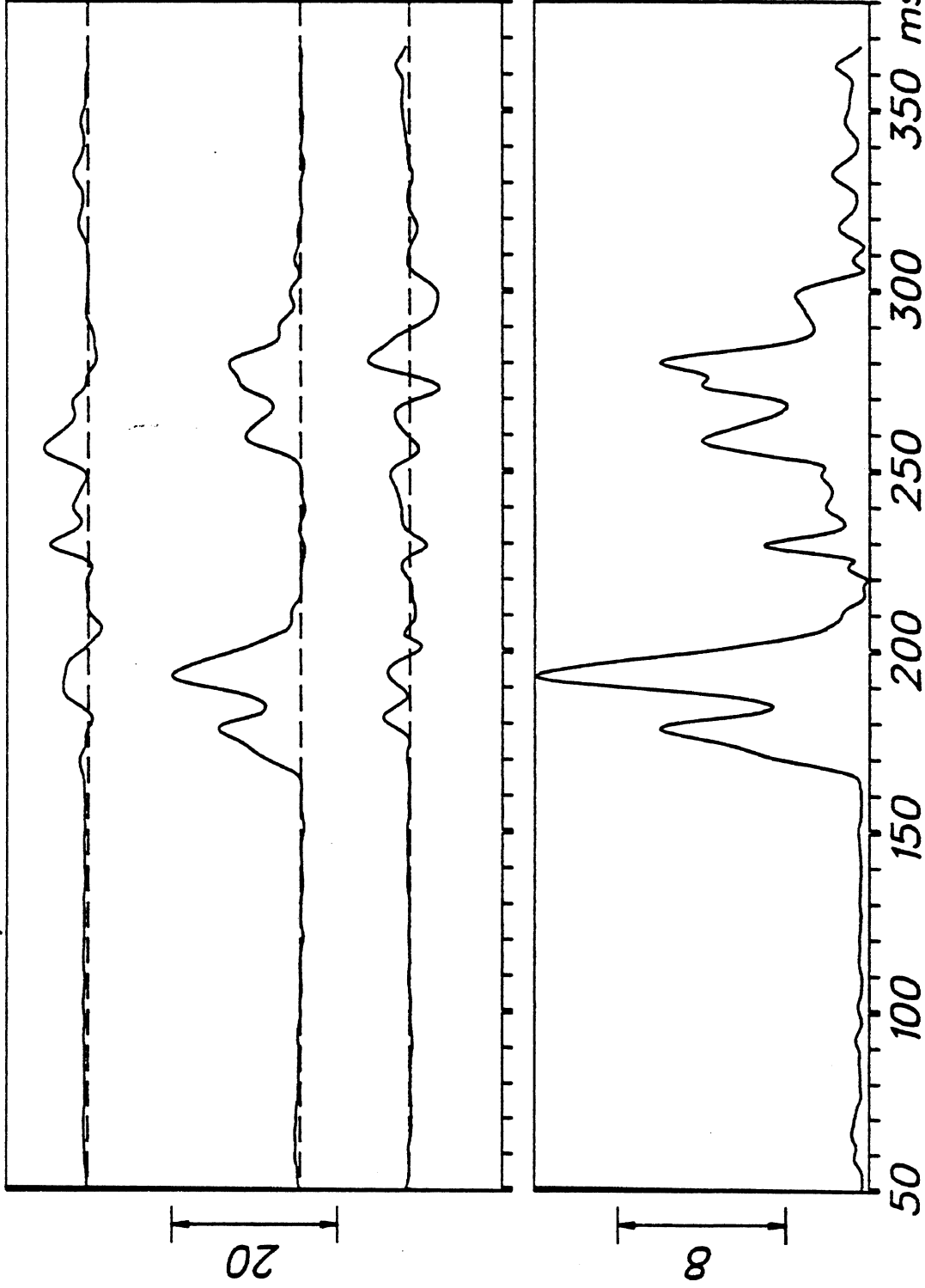
PEAKS

Az (I-S) 5

Ay (L-R) 15

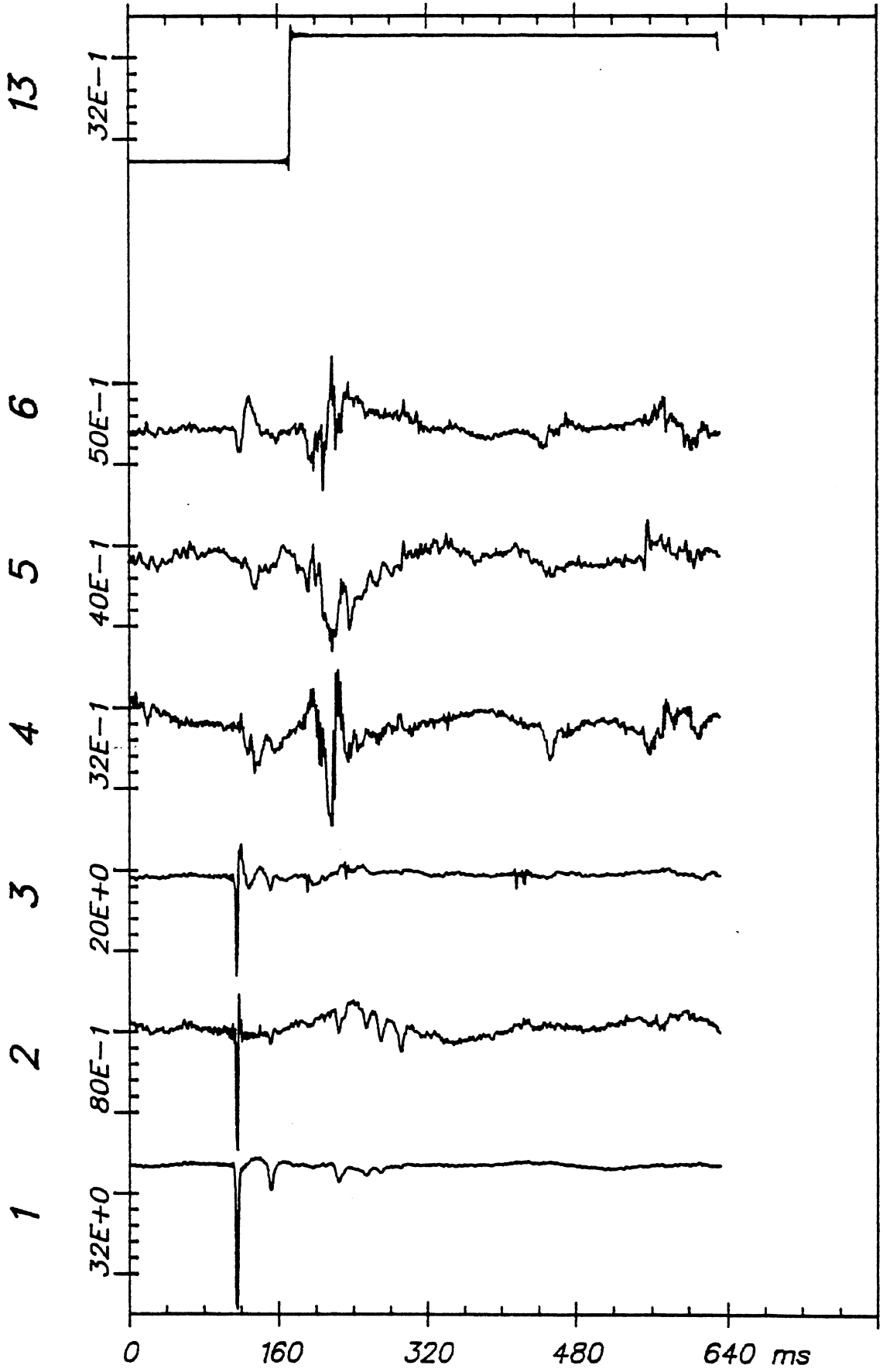
Ax (A-P) 5

Resultant 15



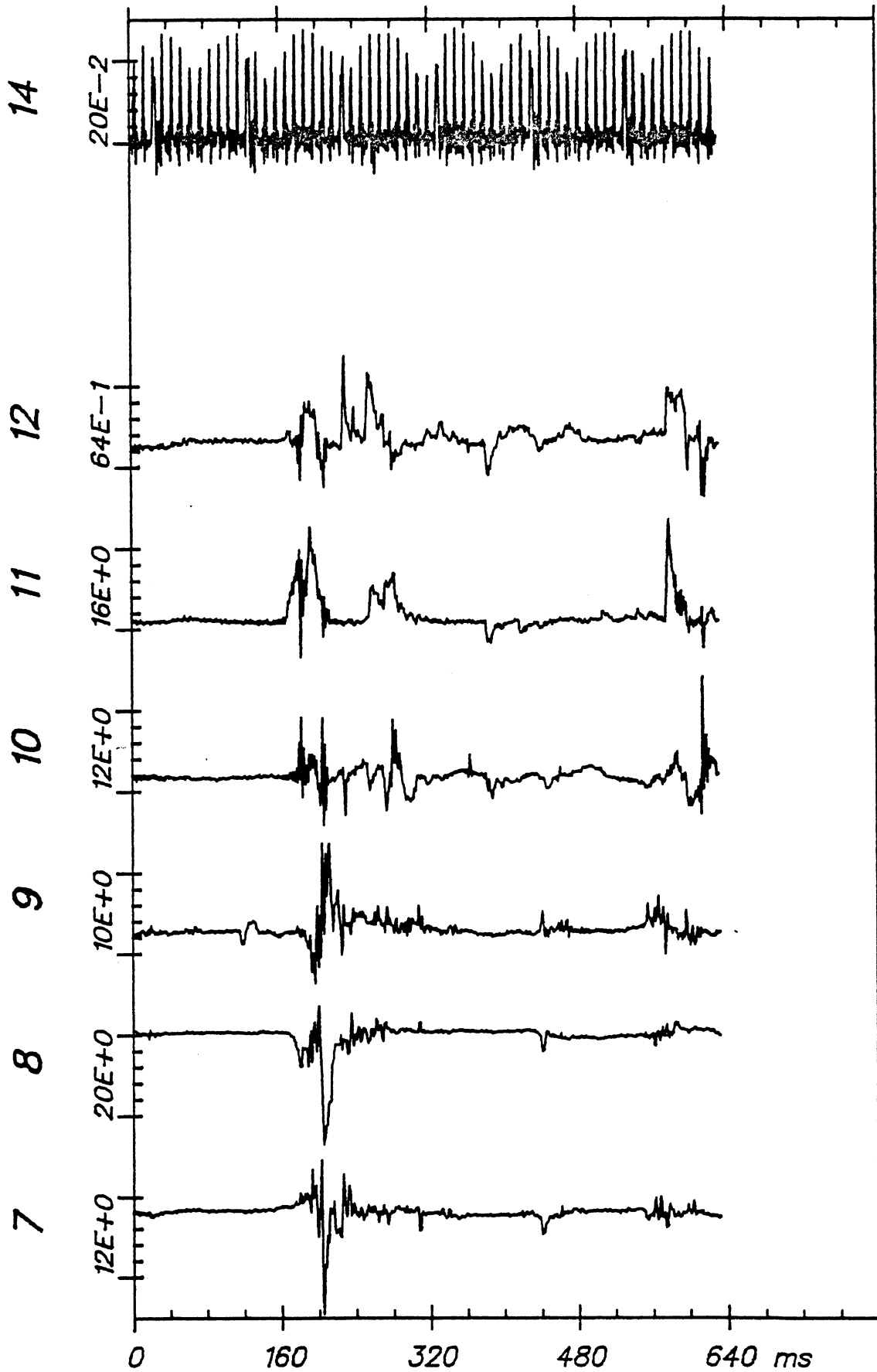
TRUCK DECELERATIONS (G)

S-6



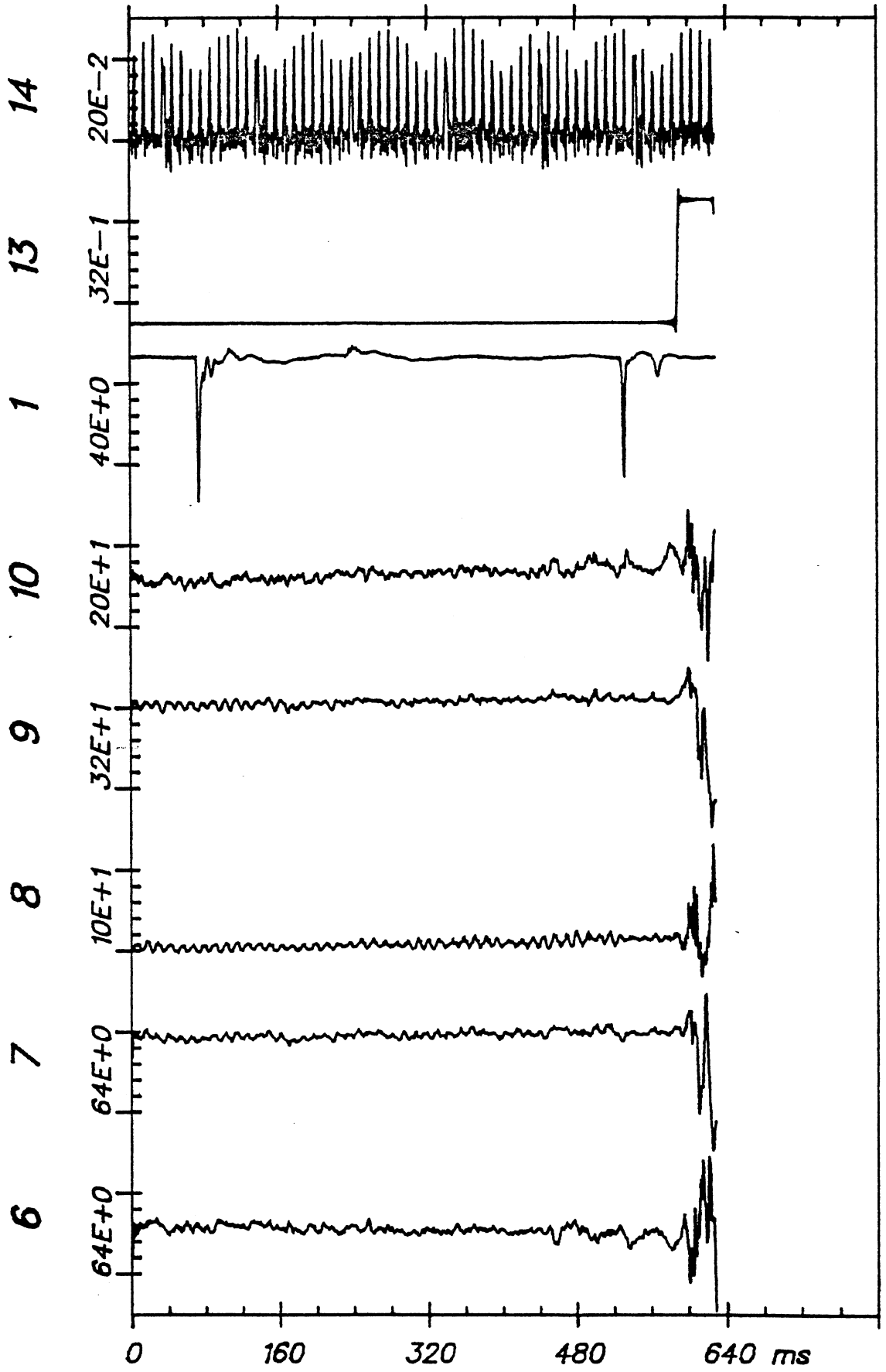
Time Histories

ITA S-6 (1)



Time Histories

ITA S-6 (1)



Time Histories

ITA S-6 (2)

LA DY W/O SB		Test No. S-7	S U M M A R Y			
			Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)						
	P-A acc	...	-143	215	12	237
	R-L acc	...	-105	215	508	215
	I-S acc	...	-407	215	97	214
	Resultant	...			624	215
	HIC = 2934	...		215		215

CHEST ACCELERATIONS (G)						
	P-A acc	...	-21	221	8	244
	R-L acc	...				
	I-S acc	...	-51	223	25	242
	Resultant	...			56	223

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-41	349	62	573
	R-L acc	...	-20	295	62	255
	I-S acc	...				
	Resultant	...			95	573

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	0	0	0	0
	Ay (L-R)	...	0	0	0	0
	Az (I-S)	...	0	0	0	0
	Resultant	...			0	0

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	0	0	0	0
	Fy (L-R)	...	0	0	0	0
	Fz (I-S)	...	0	0	0	0
	Resultant	...			0	0

S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	0	0	0	0
	My (L-R)	...	0	0	0	0
	Mz (I-S)	...				
	Resultant	...			0	0

KNEE & BELTS LOADS (LB)						
	LT Knee	...	0	0	0	0
	RT Knee	...	0	0	0	0
	LT Belt	...	0	0	0	0
	RT Belt	...	0	0	0	0

L.A DY W/O SB

DEC 22, 1981

PEAKS

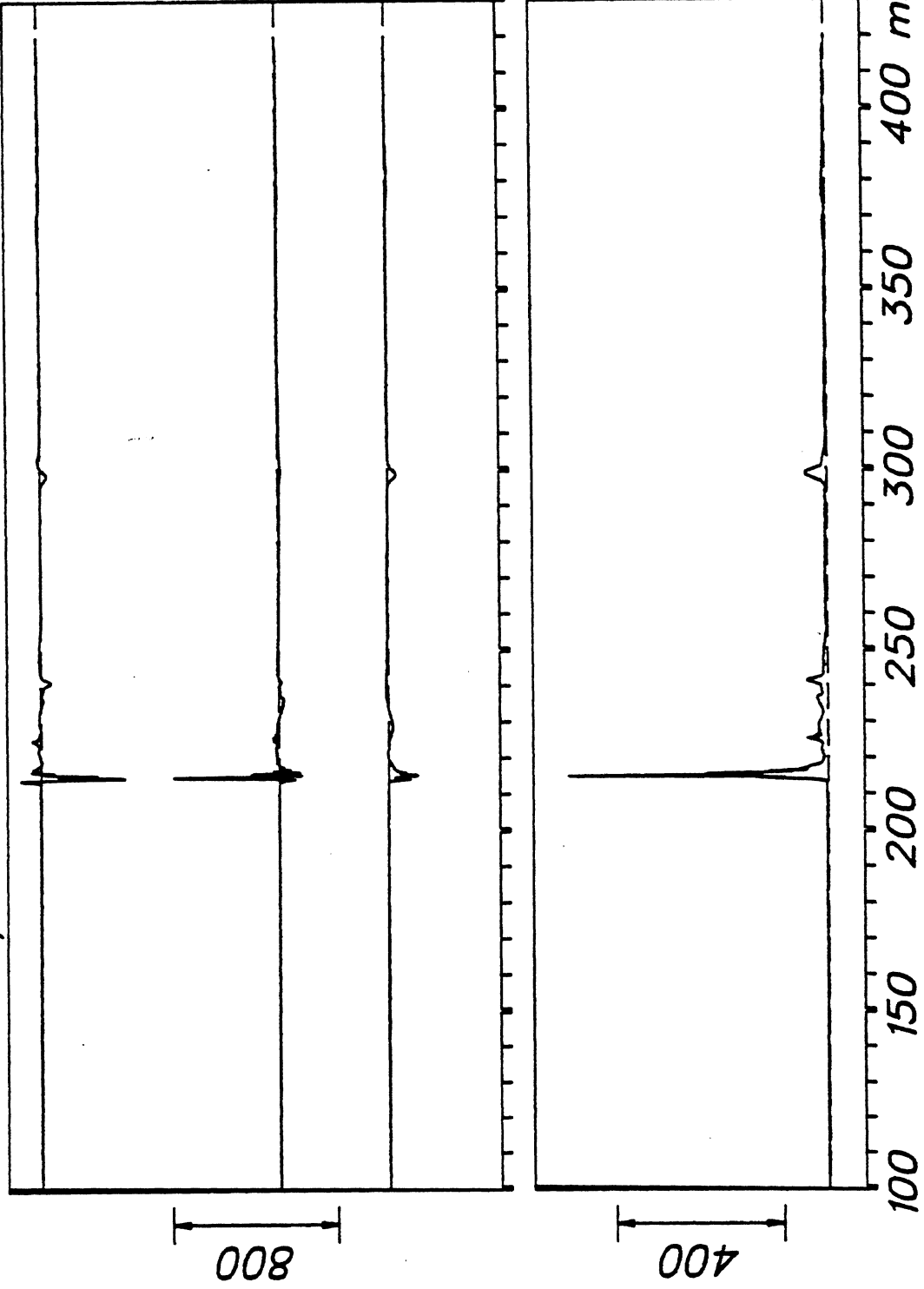
I-S acc -408

R-L acc 507

P-A acc -144

HIC = 2934

Resultant 624



HEAD ACCELERATIONS (G)

S-7

L A D Y W / O S B

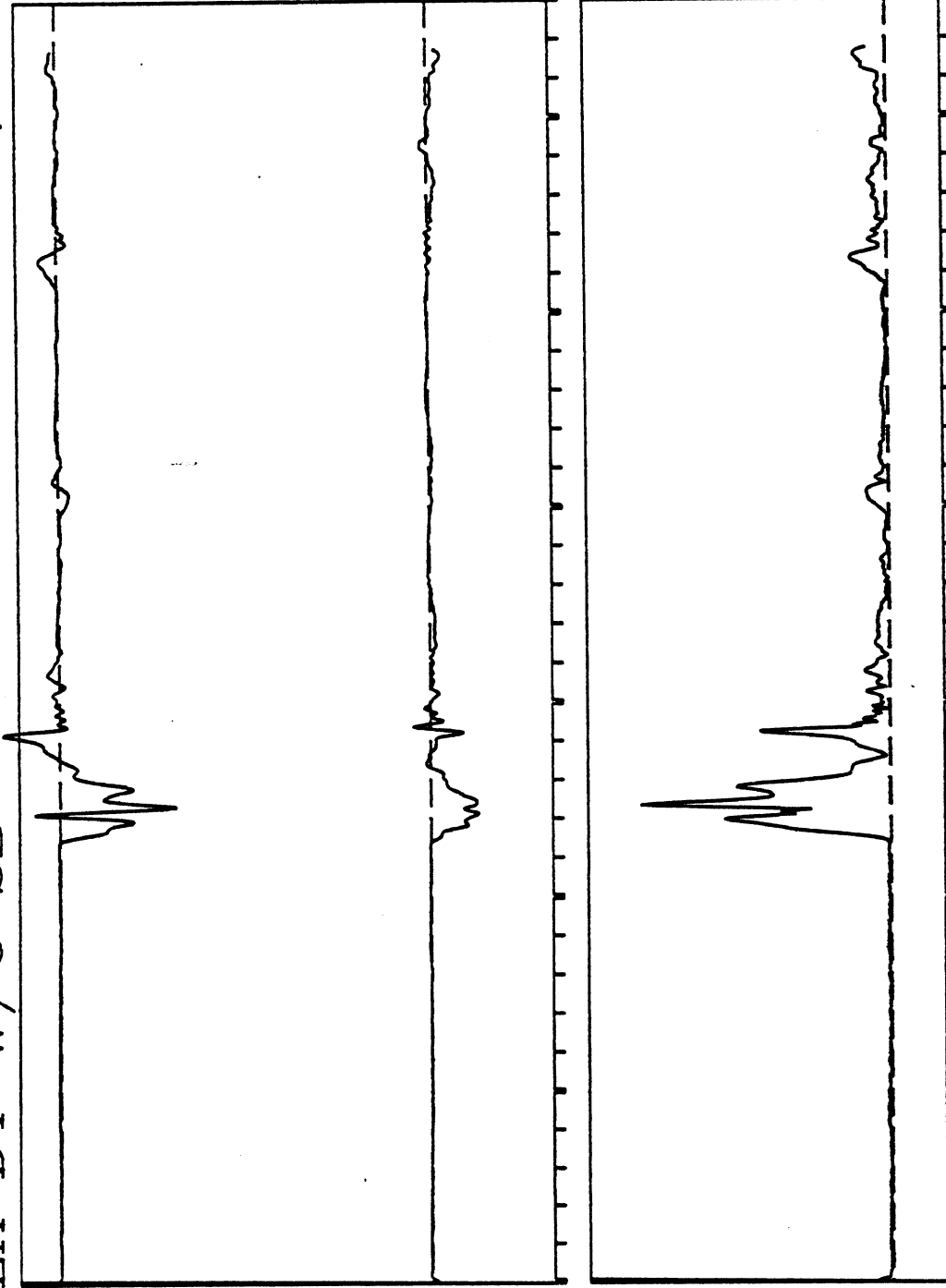
DEC 22, 1981

PEAKS

I-S acc -52

P-A acc -22

Resultant 55



100 150 200 250 300 350 400 msec

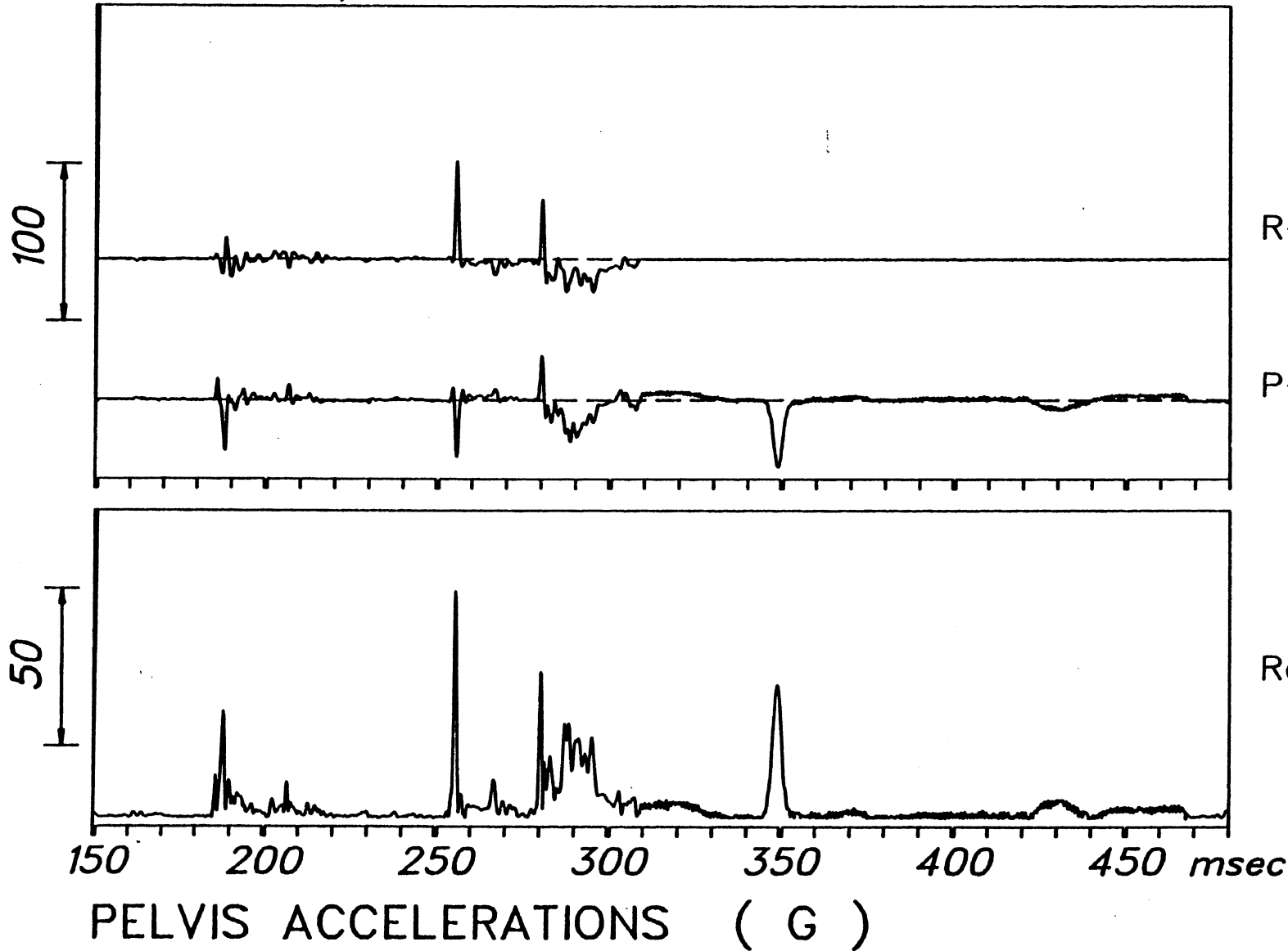
CHEST ACCELERATIONS (G)

S-7

LA DY W/O SB

DEC 22, 1981

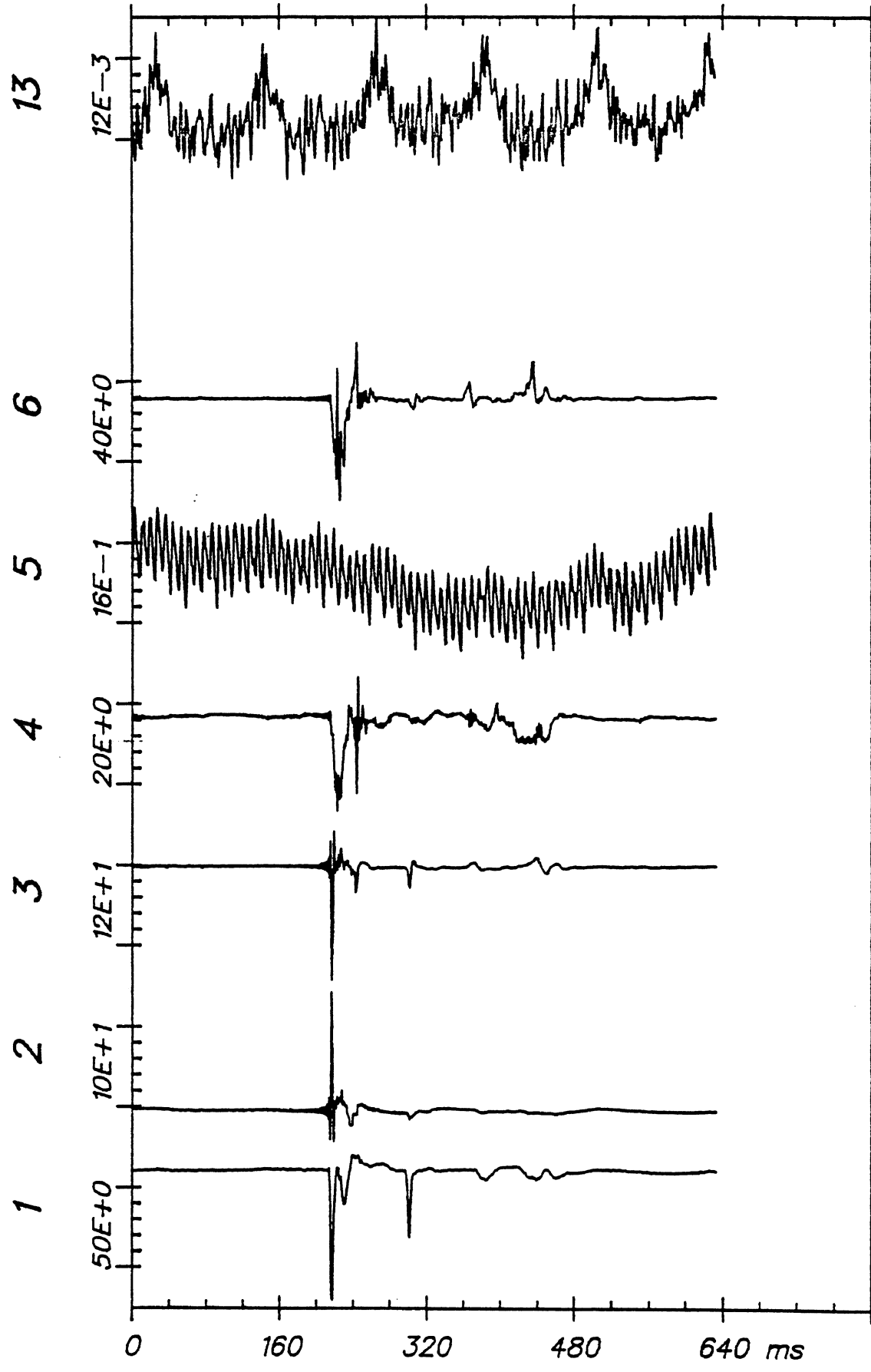
PEAKS



S-7

DEC 22, 1981

From HSRI-175 to SITA, file 3: /1/2/3/4/5/6/-/13/

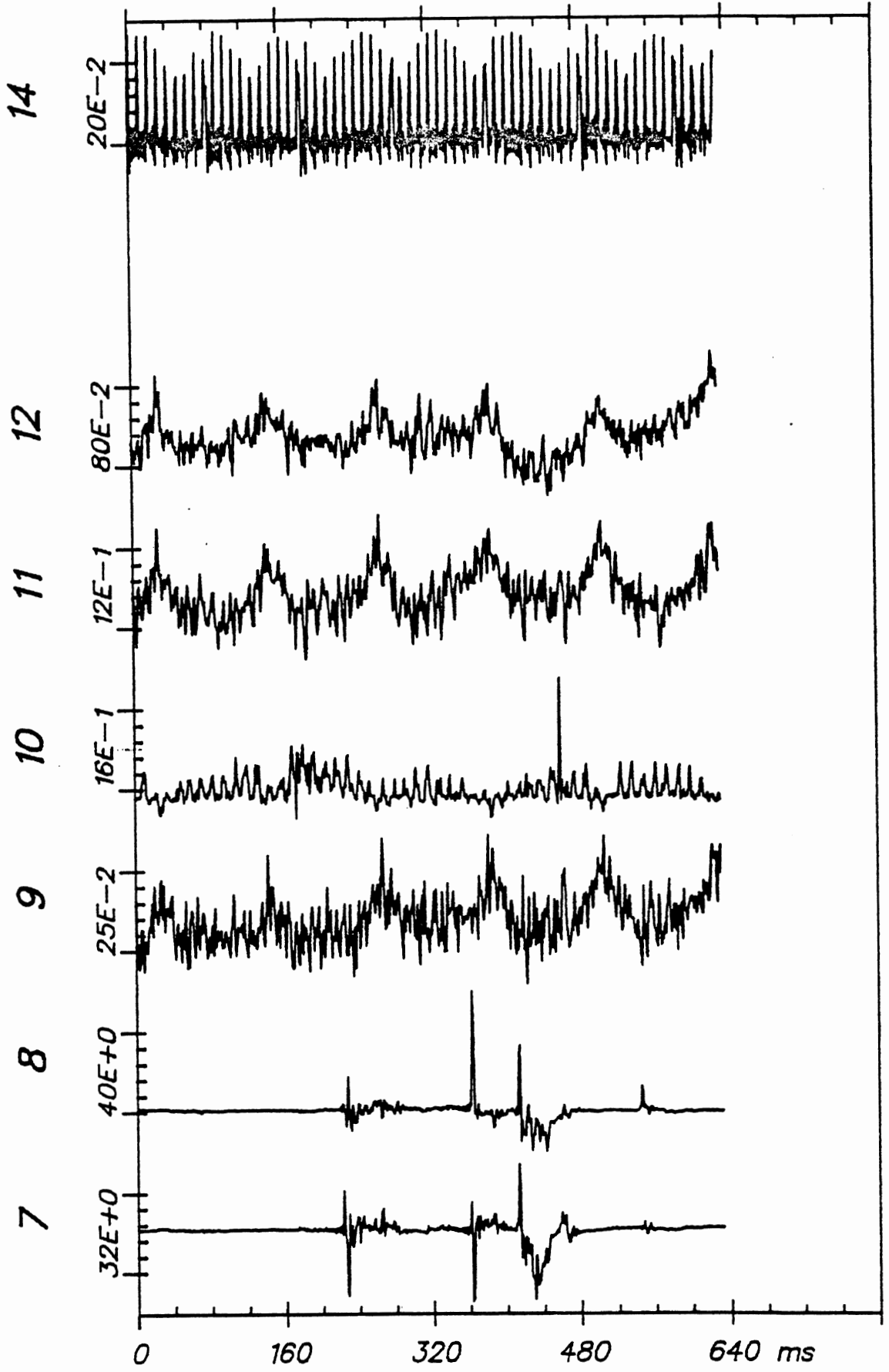


Time Histories

ITA S-7 (1)

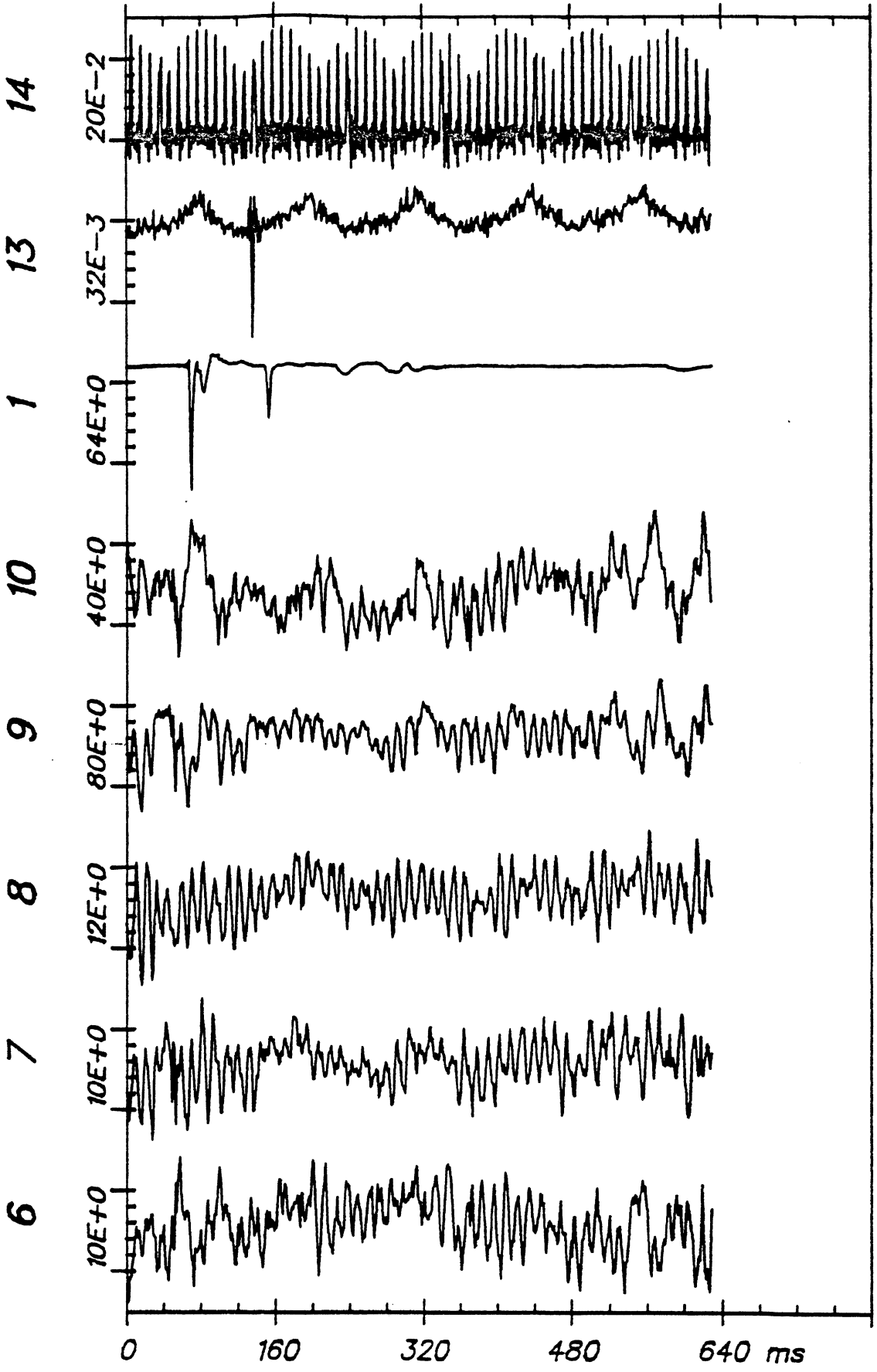
DEC 22, 1981

From HSRI-175 to SITA, file 3: /7/8/9/10/11/12/-/14/



Time Histories

ITA S-7 (1)



Time Histories

ITA S-7 (2)

LA DY W/O SB	Test No. S-8	S U M M A R Y				
		Min @ msec		Max @ msec		

HEAD ACCELERATIONS (G)						
	P-A acc	...	-166	146	17	170
	R-L acc	...	-95	147	282	145
	I-S acc	...	-379	145	45	148
	Resultant	...			475	145
	HIC = 2281	...		145		146

CHEST ACCELERATIONS (G)						
	P-A acc	...	-32	152	26	168
	R-L acc	...	-26	170	19	150
	I-S acc	...	-48	153	26	237
	Resultant	...			57	153

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-58	208	39	211
	R-L acc	...	-30	234	75	208
	I-S acc	...	-89	152	87	208
	Resultant	...			129	208

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-5	441	10	475
	Ay (L-R)	...	-4	591	35	597
	Az (I-S)	...	-1	585	5	462
	Resultant	...			35	597

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	0	0	0	0
	Fy (L-R)	...	0	0	0	0
	Fz (I-S)	...	0	0	0	0
	Resultant	...			0	0

S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	0	0	0	0
	My (L-R)	...	0	0	0	0
	Mz (I-S)	...				
	Resultant	...			0	0

KNEE & BELTS LOADS (LB)						
	LT Knee	...	0	0	0	0
	RT Knee	...	0	0	0	0
	LT Belt	...	0	0	0	0
	RT Belt	...	0	0	0	0

LA DY W/O SB

DEC 22, 1981

PEAKS

I-S acc -380

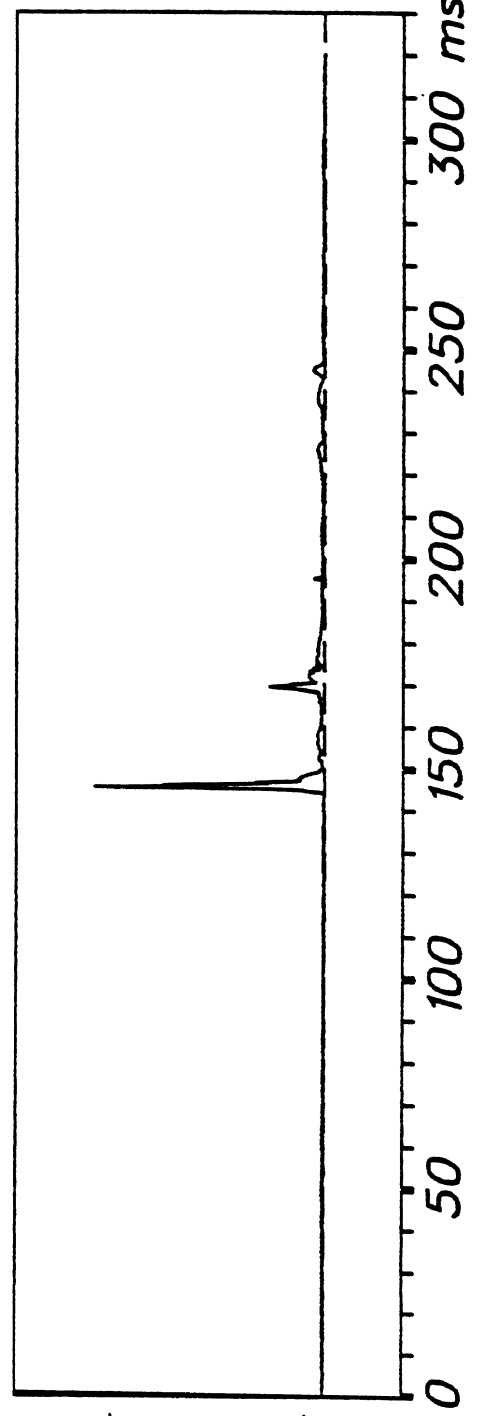
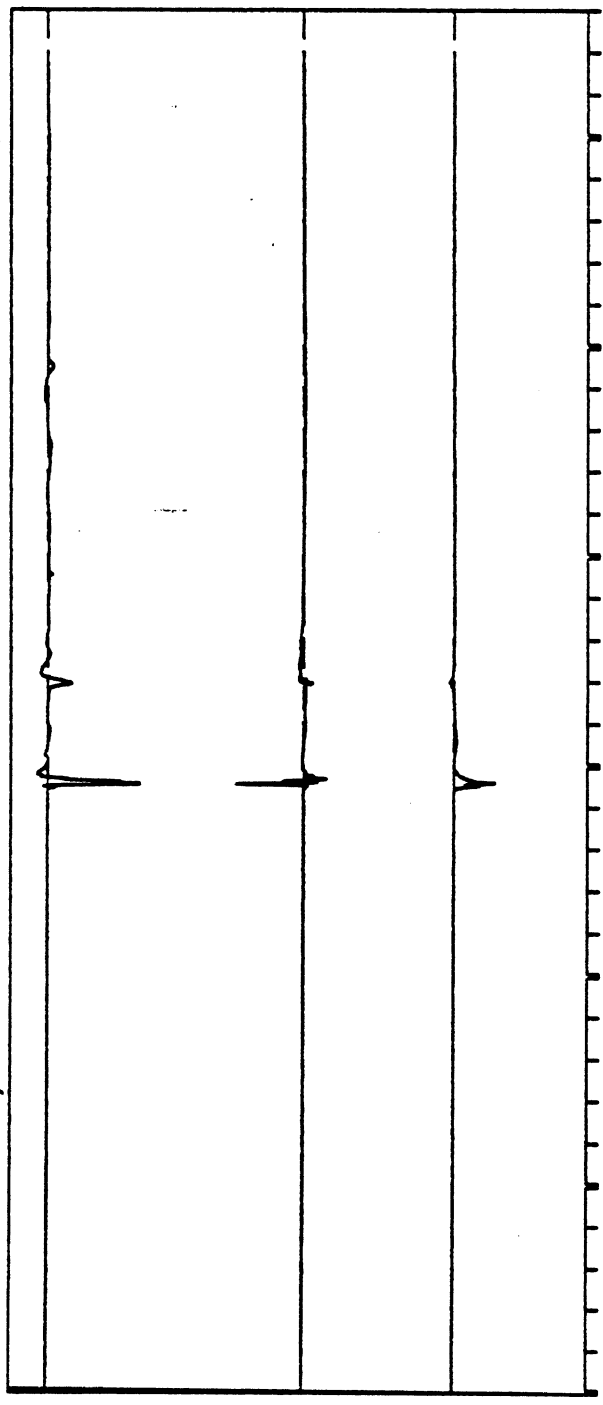
R-L acc 282

P-A acc -167

HIC = 2281

Resultant 475

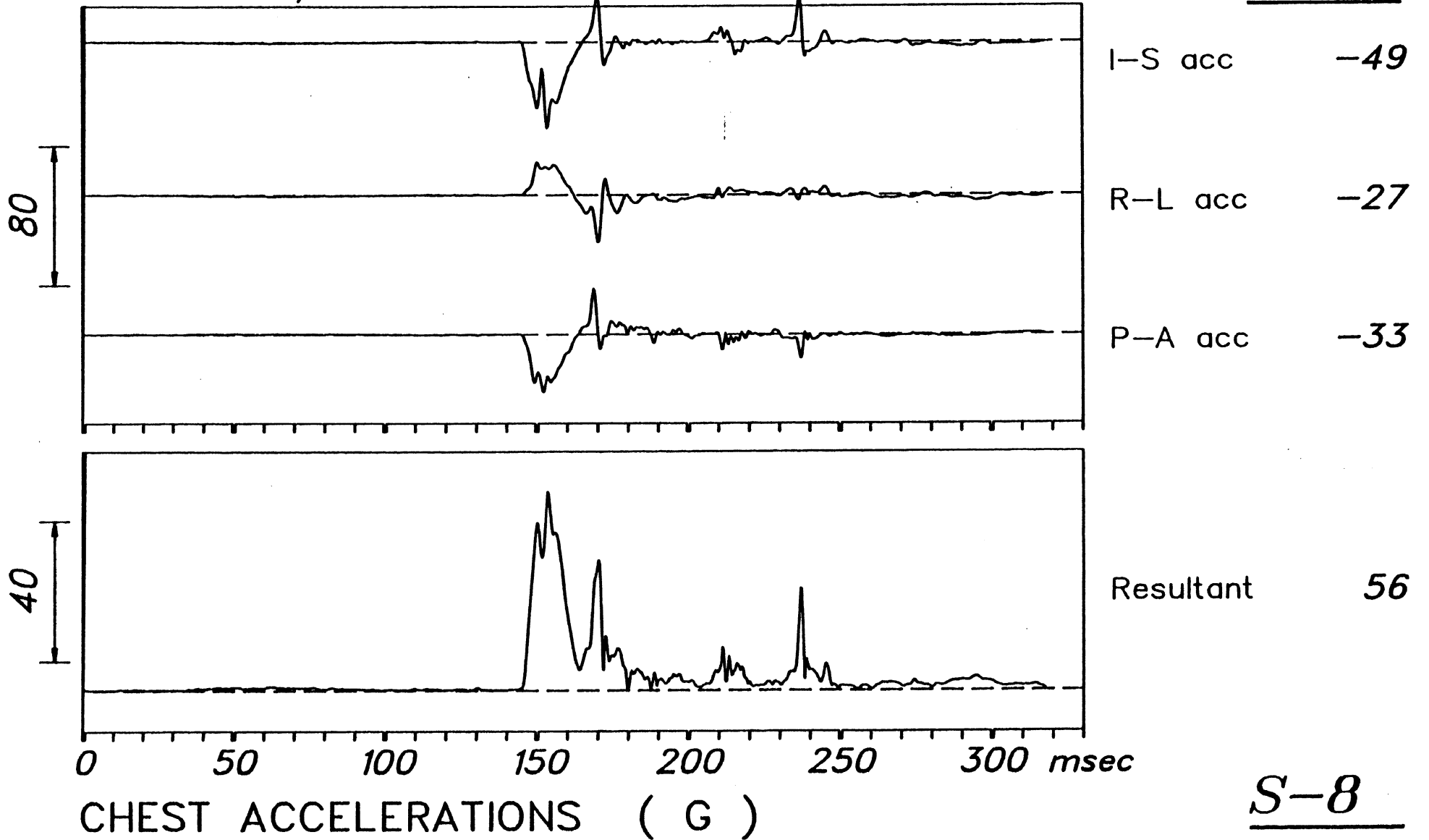
S-8



LA DY W/O SB

DEC 22, 1981

PEAKS

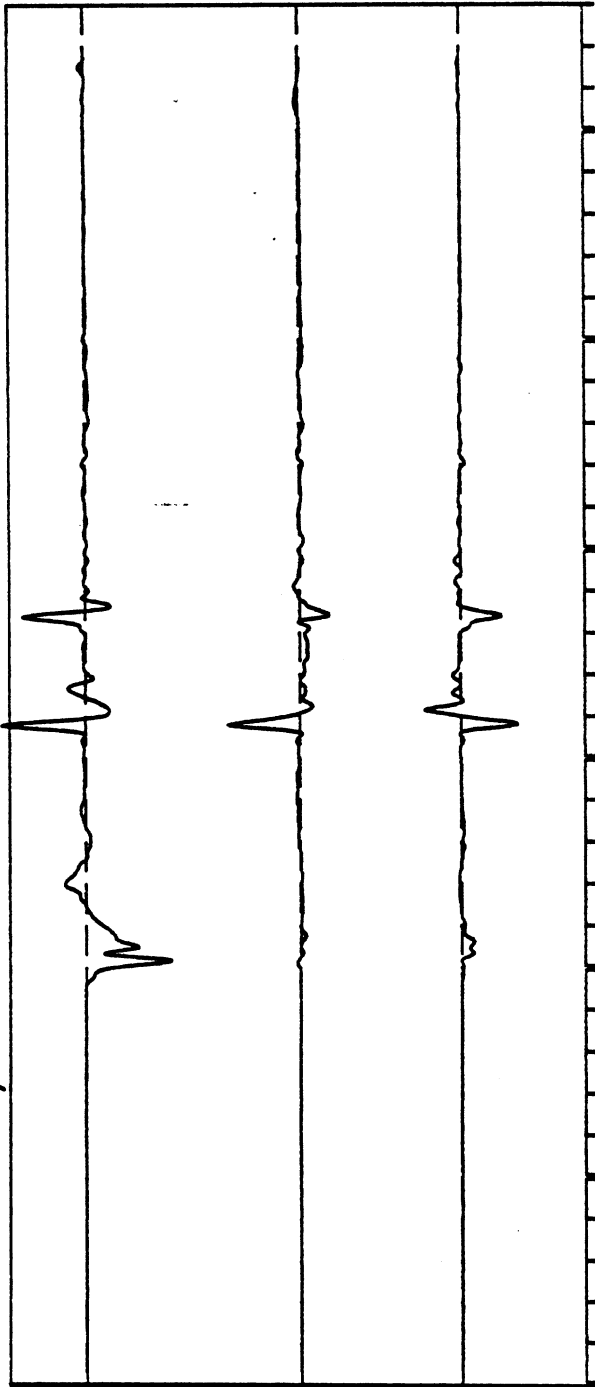


S-8

LA DY W/O SB

DEC 22, 1981

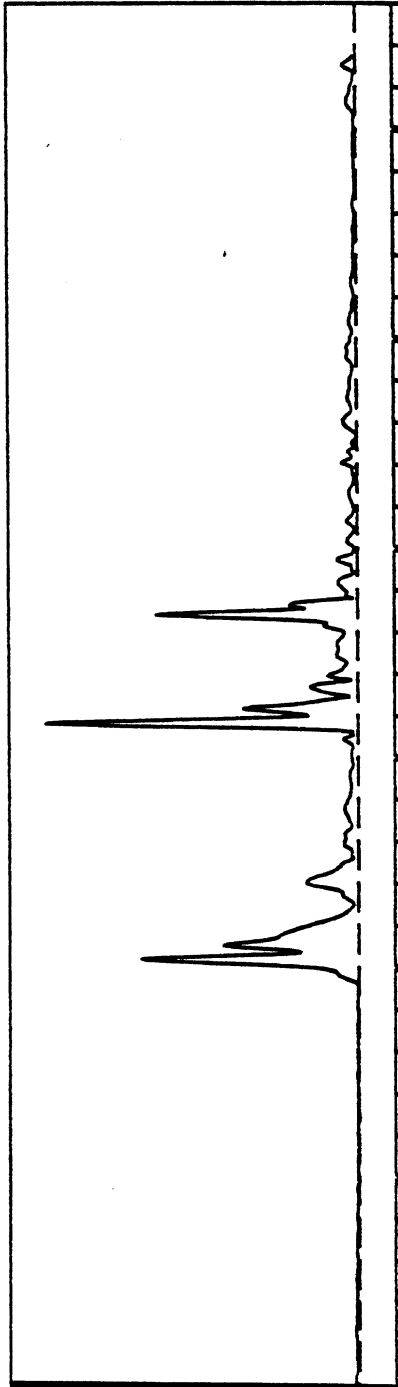
PEAKS



I-S acc -90

R-L acc 74

P-A acc -59



Resultant 129

50 100 150 200 250 300 350 msec

PELVIS ACCELERATIONS (G)

S-8

LA DY W/O SB

DEC 22, 1981

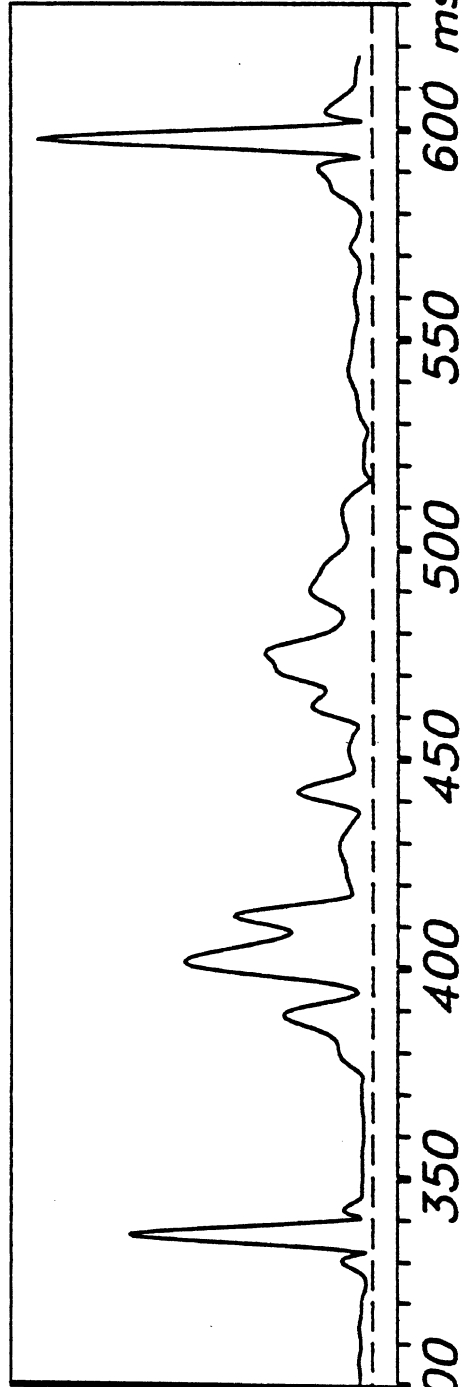
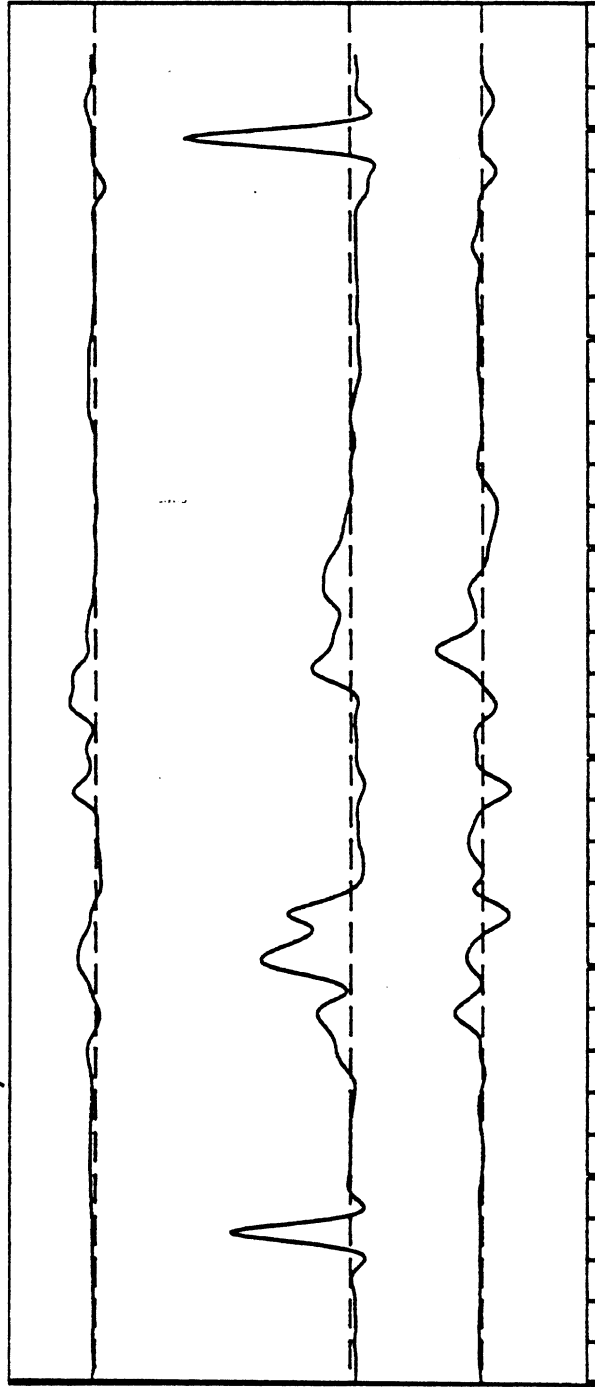
PEAKS

Az (I-S) 5

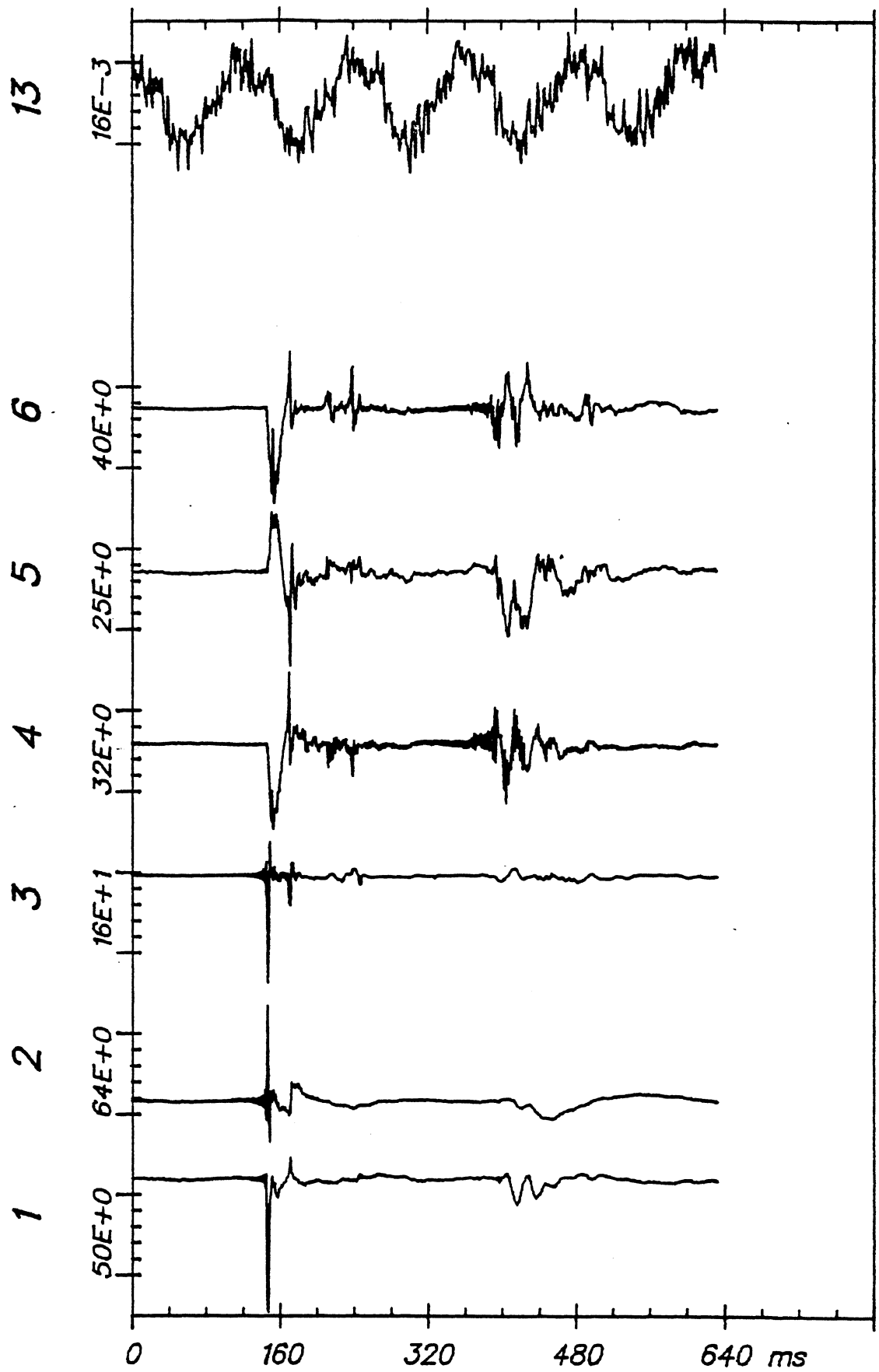
Ay (L-R) 34

Ax (A-P) 9

Resultant 34

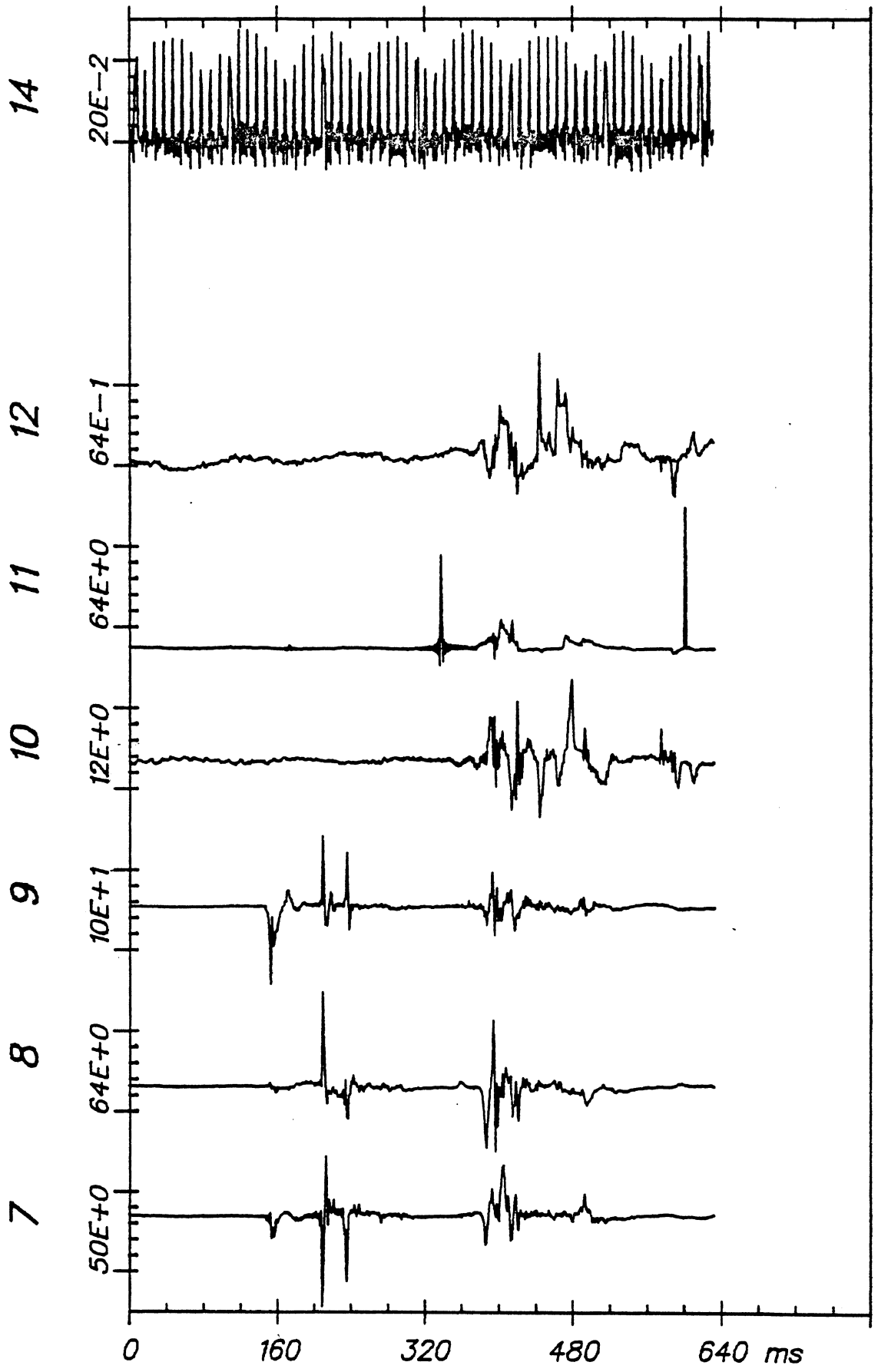


S-8



Time Histories

ITA S-8 (1)

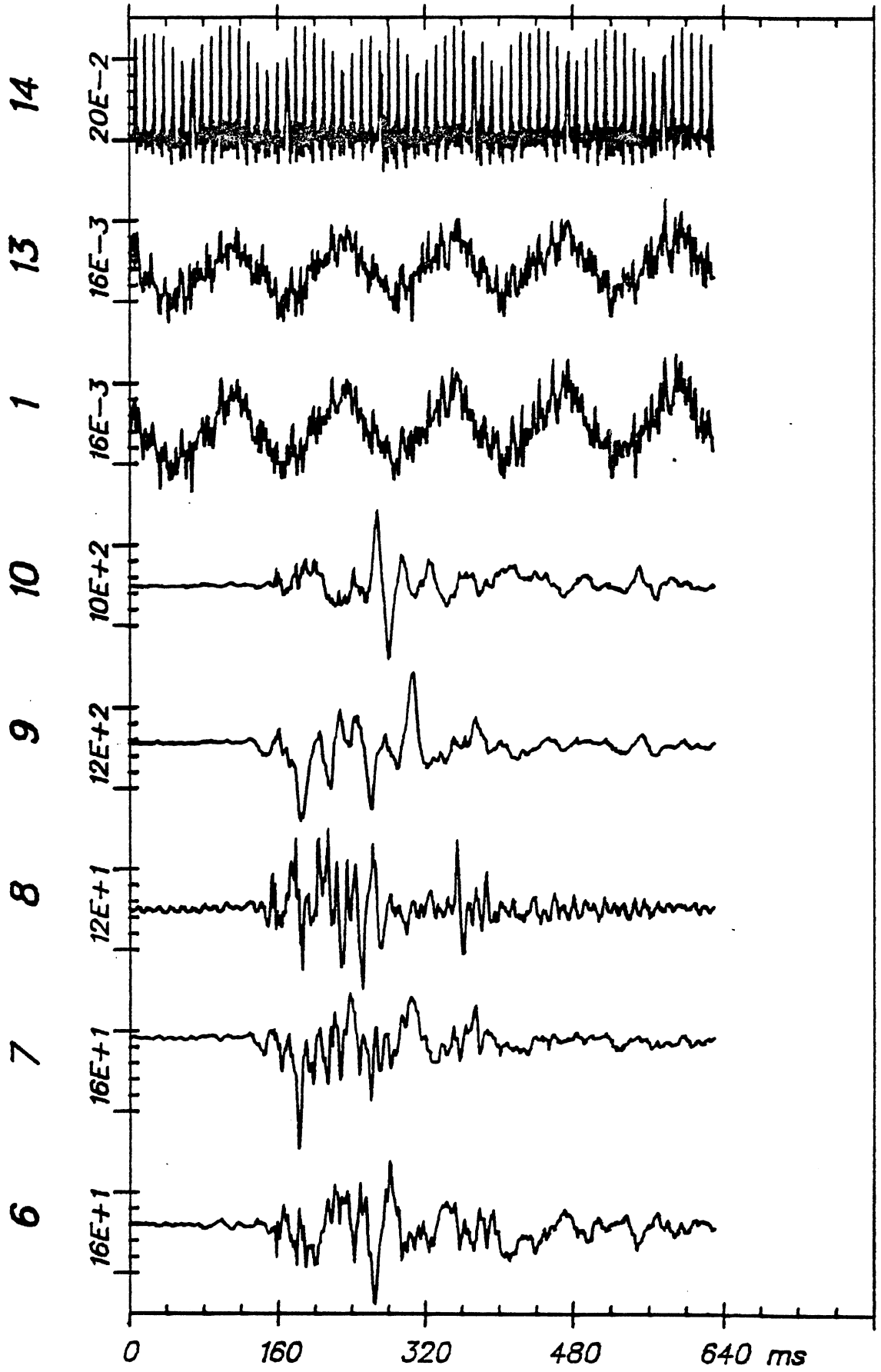


Time Histories

ITA S-8 (1)

From HSRI-176 to SITA, file 10: /6/7/8/9/10/1/13/14/

DEC 22, 1981



Time Histories

ITA S-8 (2)

LA DY W/O SB	Test No. S-9	S U M M A R Y				
		Min @ msec		Max @ msec		

HEAD ACCELERATIONS (G)						
	P-A acc	...	-21	130	368	108
	R-L acc	...	-371	108	634	108
	I-S acc	...	-393	108	401	108
	Resultant	...			831	108
	HIC = 8595	...		108		109

CHEST ACCELERATIONS (G)						
	P-A acc	...	-9	110	8	139
	R-L acc	...	-5	121	43	113
	I-S acc	...	-31	113	7	321
	Resultant	...			54	113

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-22	160	5	310
	R-L acc	...	-6	120	48	158
	I-S acc	...	-20	113	11	140
	Resultant	...			51	158

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-4	489	4	526
	Ay (L-R)	...	-2	313	13	463
	Az (I-S)	...	-2	502	4	532
	Resultant	...			14	463

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	-393	181	163	200
	Fy (L-R)	...	-373	178	219	202
	Fz (I-S)	...	-86	208	290	185
	Resultant	...			455	181

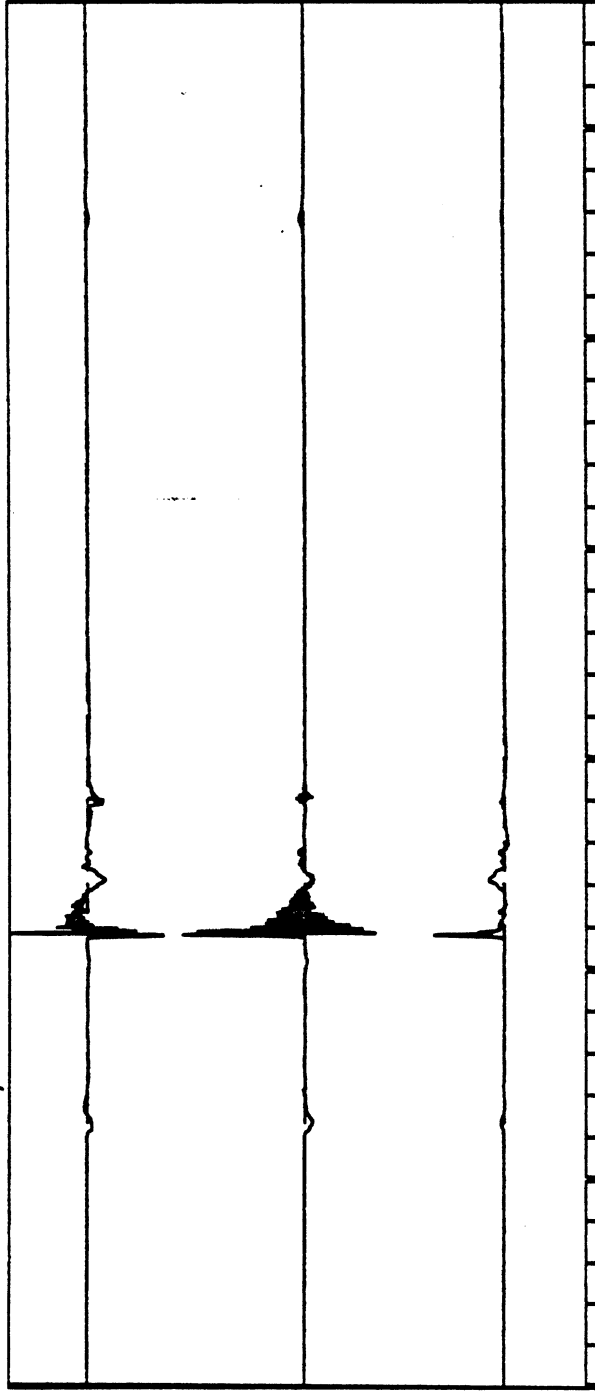
S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	-2931	90	2105	99
	My (L-R)	...	-937	100	1625	91
	Mz (I-S)	...				
	Resultant	...			3698	413

KNEE & BELTS LOADS (LB)						
	LT Knee	...	0	0	0	0
	RT Knee	...	0	0	0	0
	LT Belt	...	0	0	0	0
	RT Belt	...	0	0	0	0

LA DY W/O SB

DEC 22, 1981

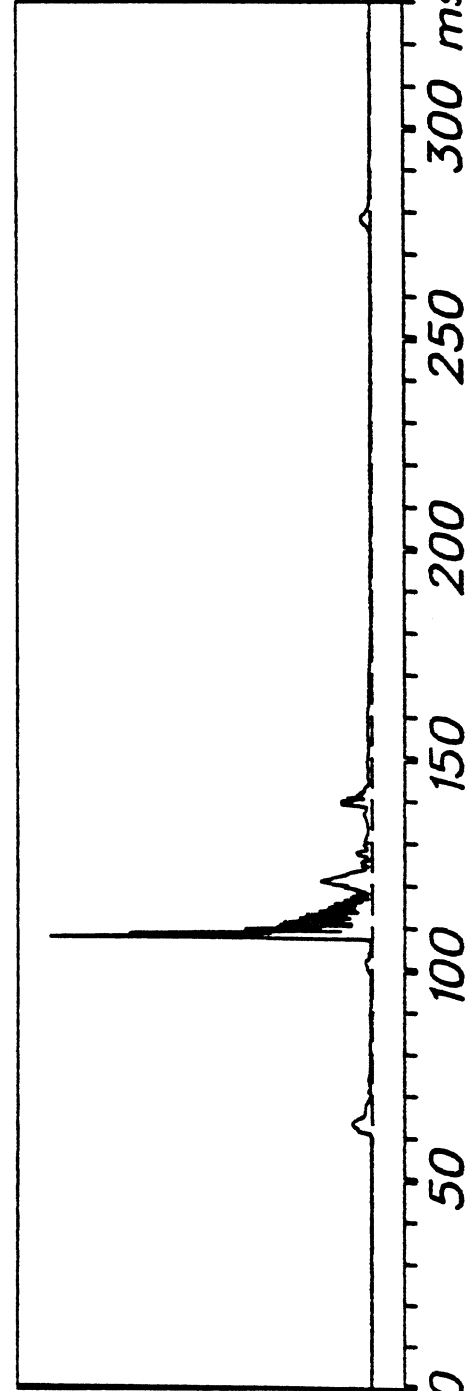
PEAKS



I-S acc 400

R-L acc 633

P-A acc 367



HIC = 8595

Resultant 831

HEAD ACCELERATIONS (G)

300 msec

250

200

150

100

50

0

S-9

LA DY W/O SB

DEC 22, 1981

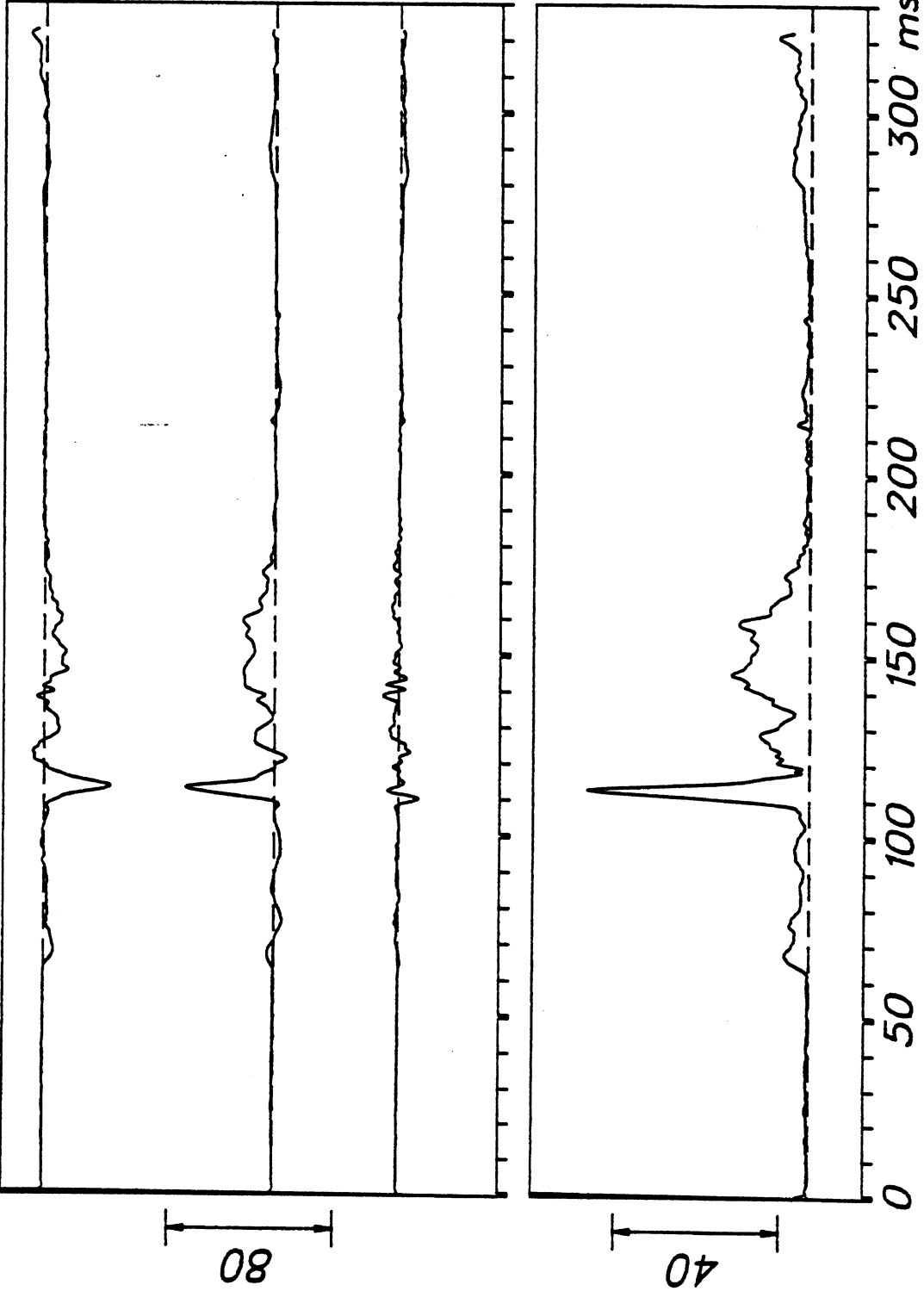
PEAKS

I-S acc -32

R-L acc 42

P-A acc -10

Resultant 53



S-9

L A D Y W / O S B

DEC 22, 1981

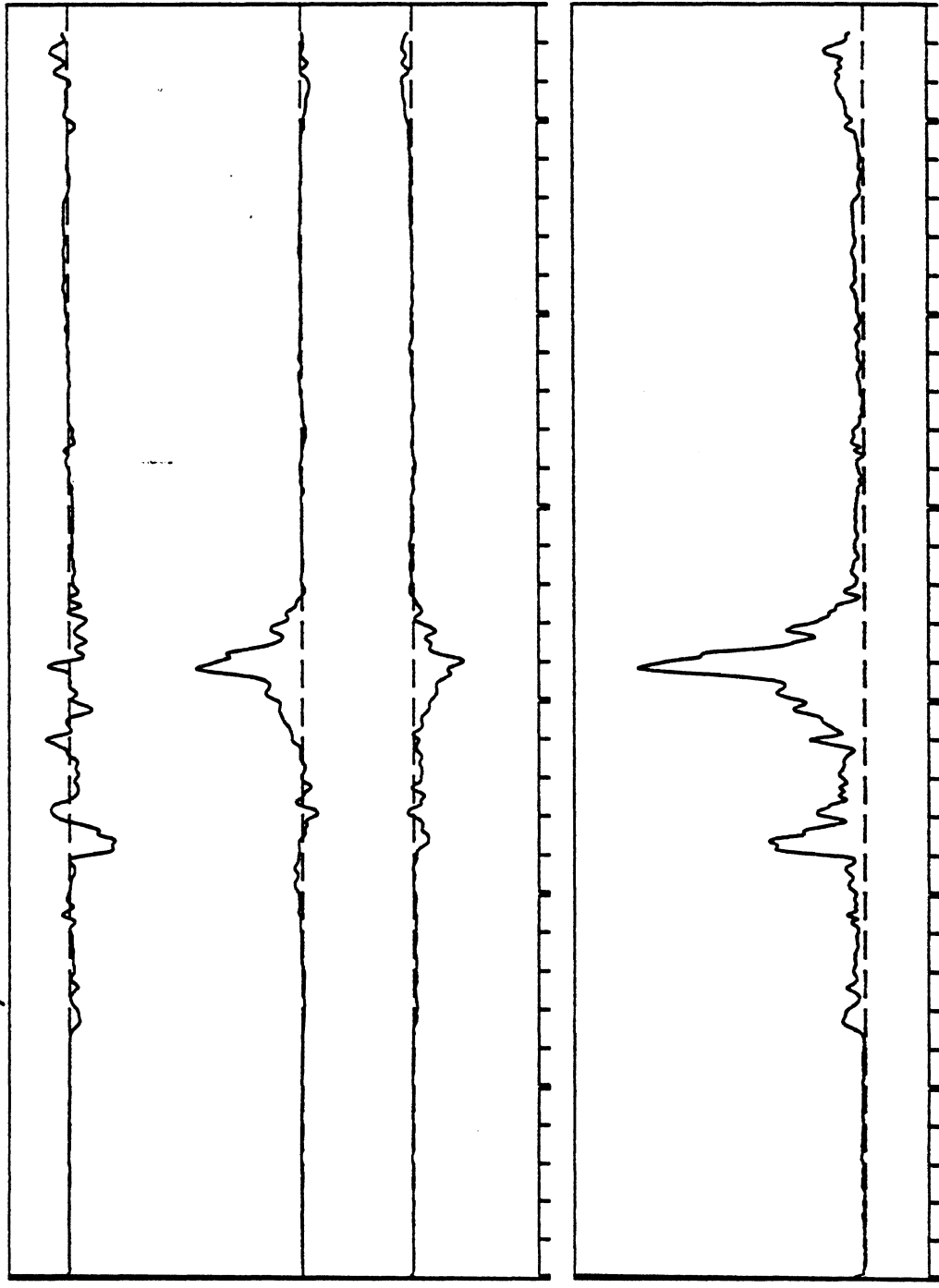
PEAKS

I-S acc -21

R-L acc 48

P-A acc -23

Resultant 51



0 50 100 150 200 250 300 msec

PELVIS ACCELERATIONS (G)

S-9

L.A DY W/O SB

DEC 22, 1981

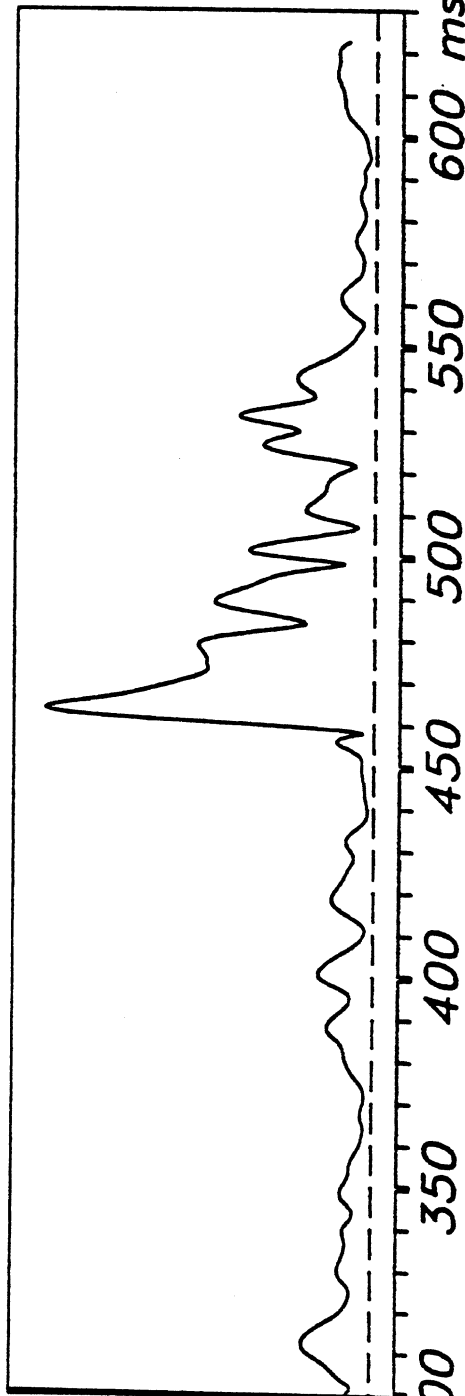
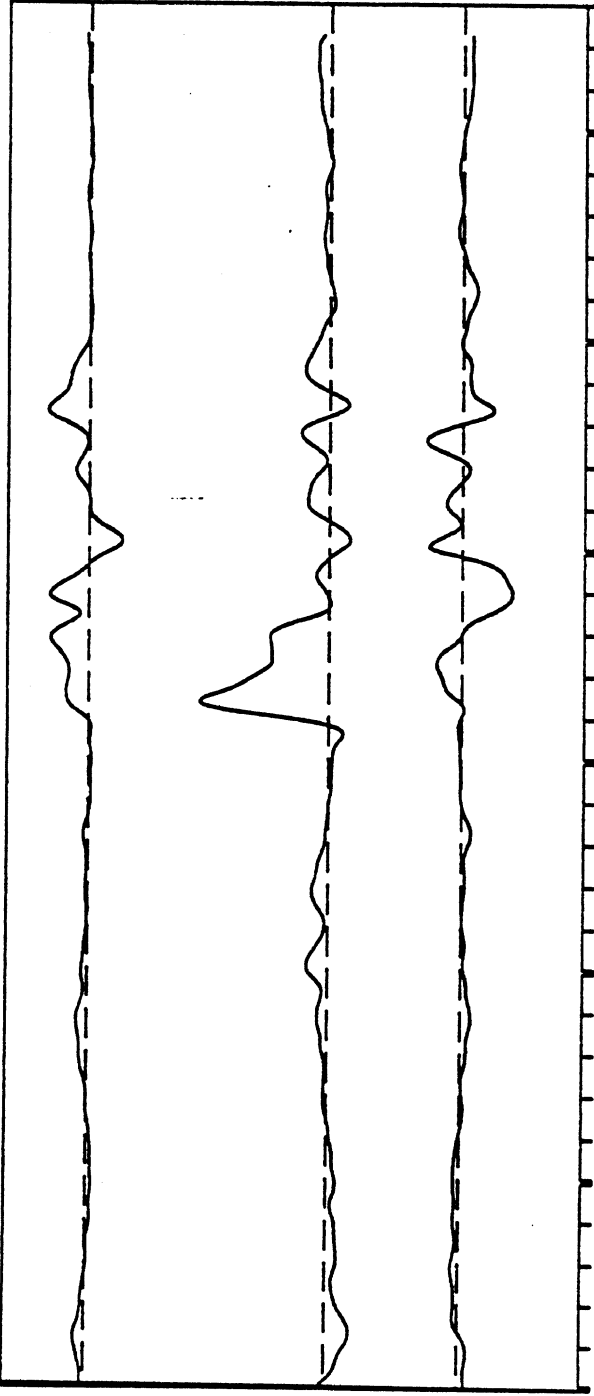
PEAKS

Az (I-S) 4

Ay (L-R) 13

Ax (A-P) -5

Resultant 13



TRUCK DECELERATIONS (G)

S-9

LA DY W/O SB

DEC 22, 1981

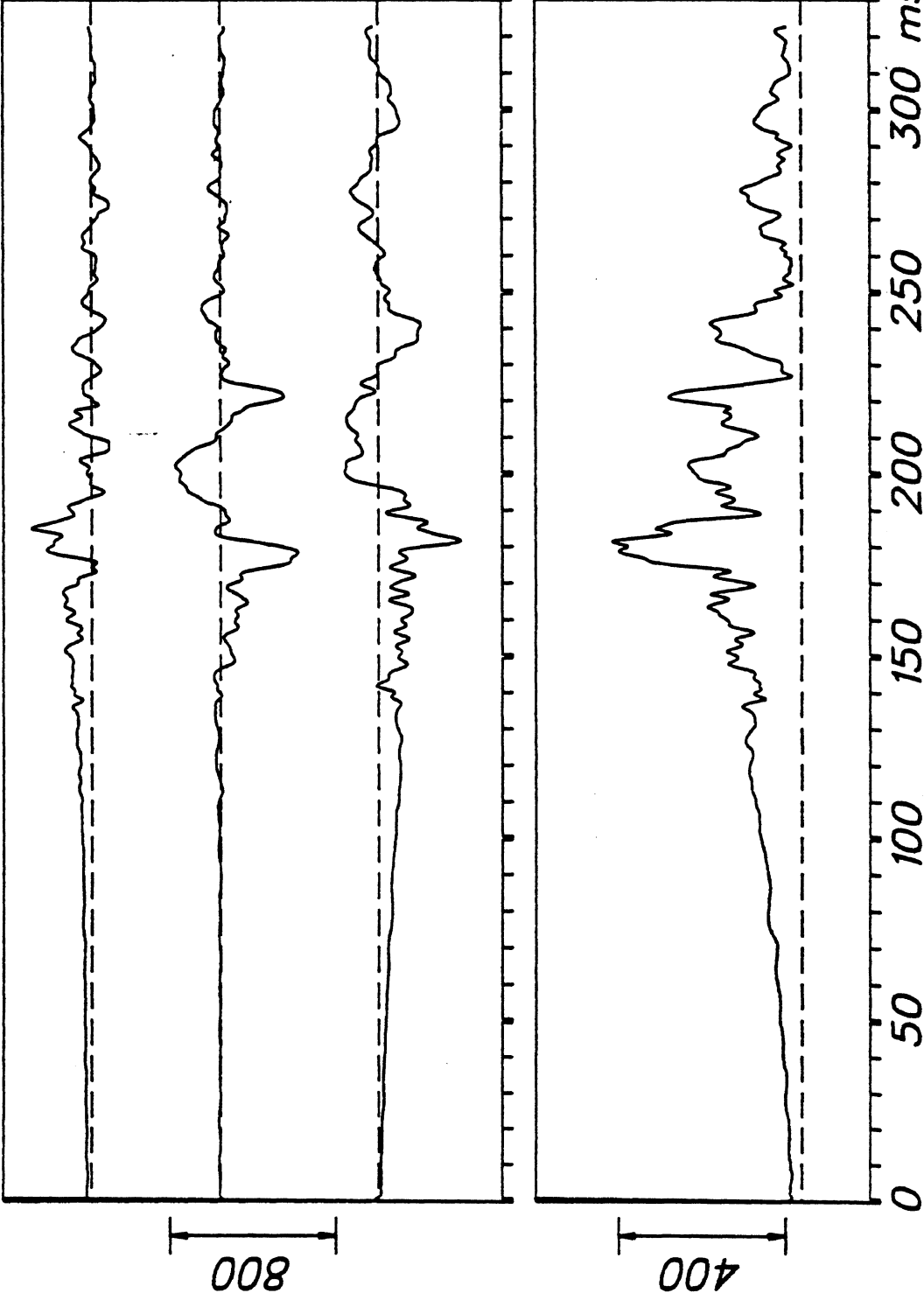
PEAKS

Fz (I-S) 290

Fy (L-R) -374

Fx (A-P) -394

Resultant 454



S. COLUMN FORCES (LB)

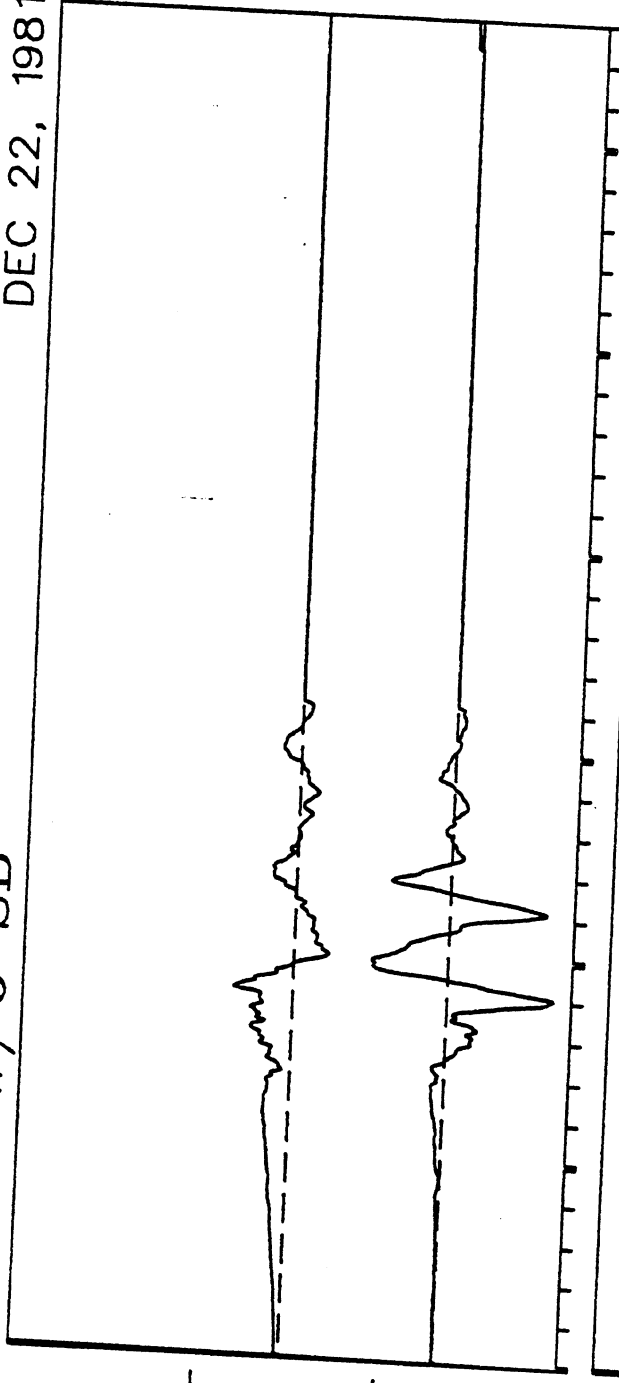
S-9

LA DY W/O SB

DEC 22, 1981

PEAKS

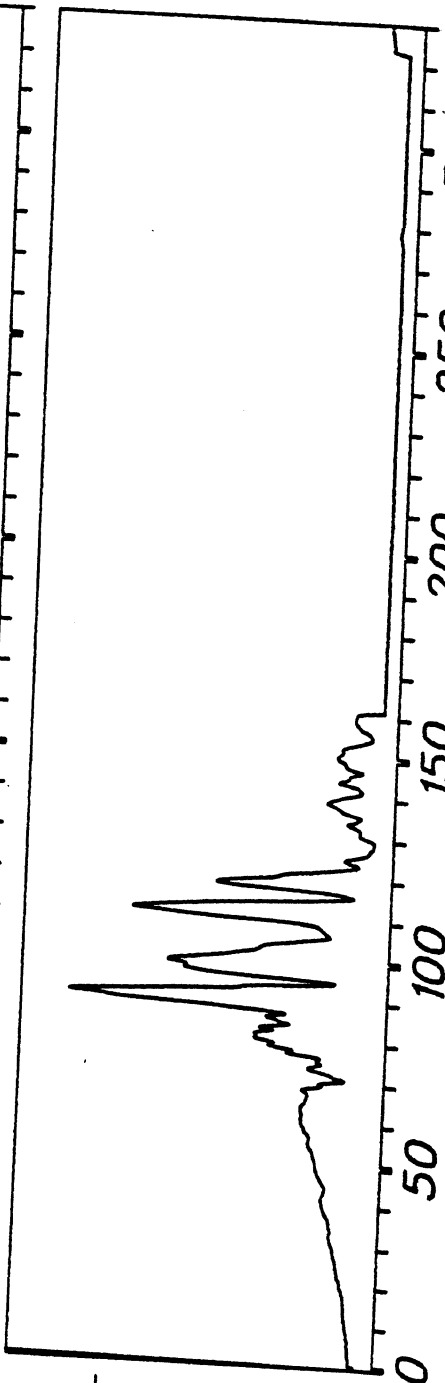
5000



My (L-R) 1625

Mx (A-P)

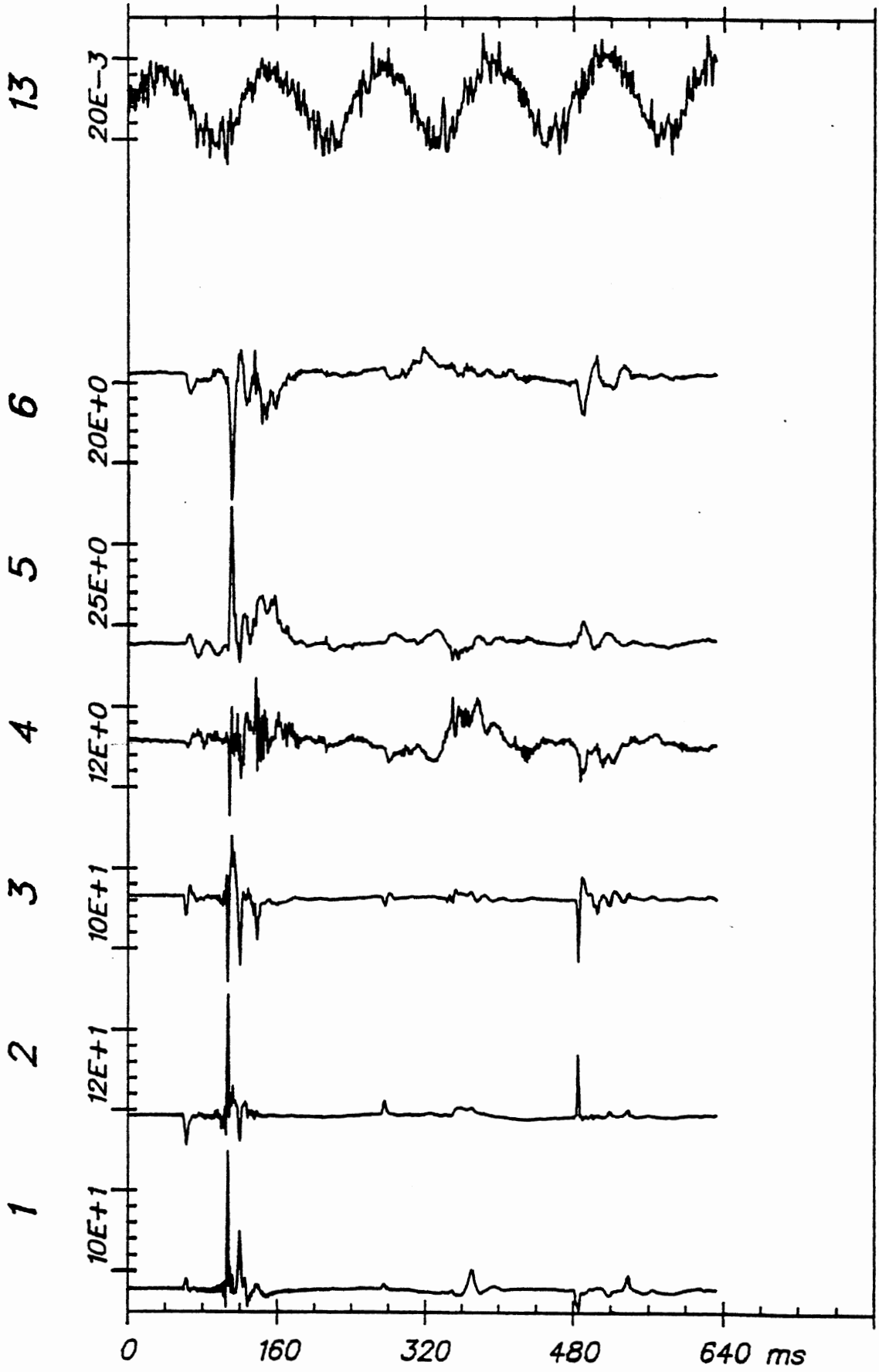
2000



Resultant 3698

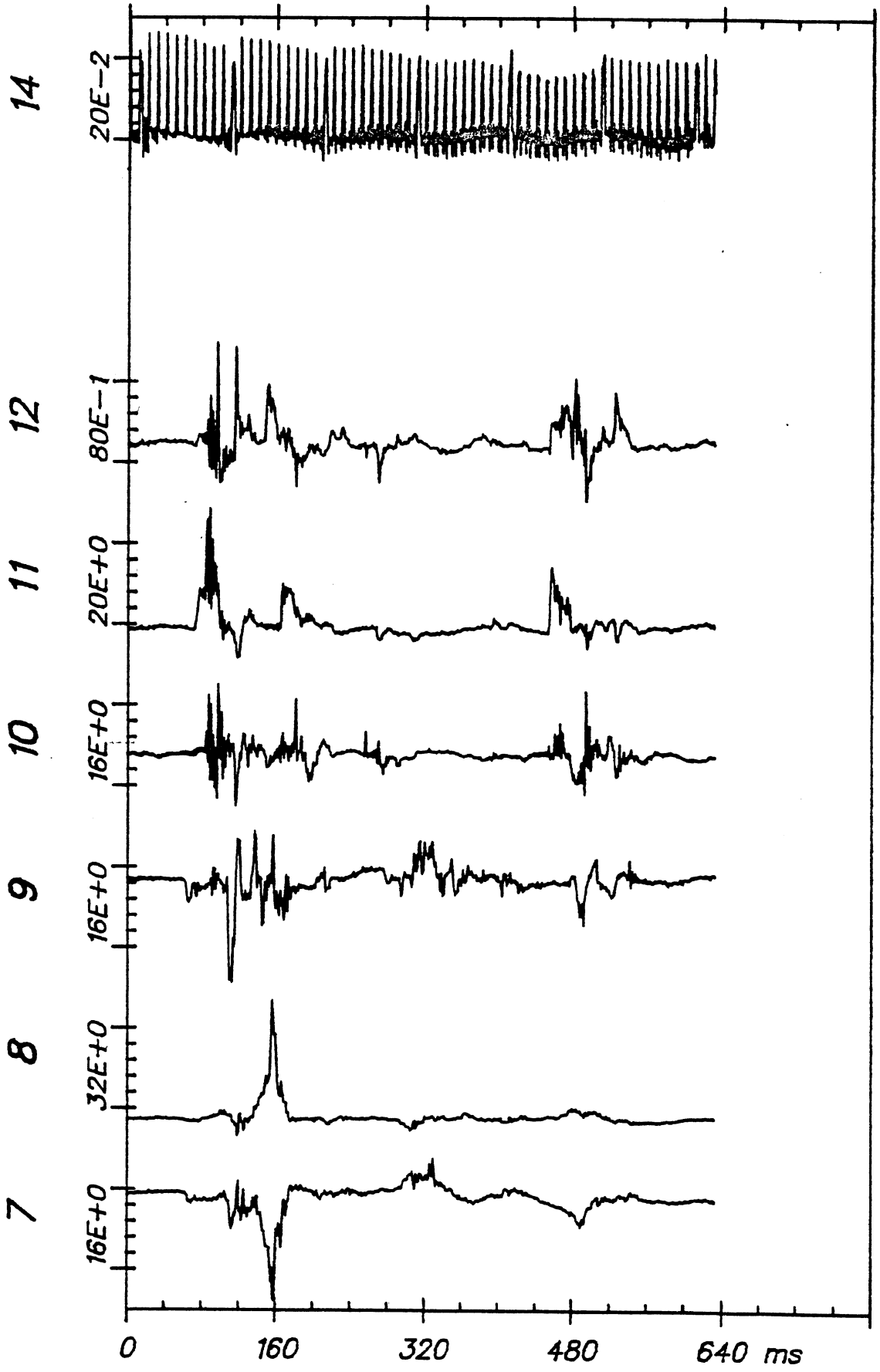
S. COLUMN MOMENTS (IN-LB)

S-9



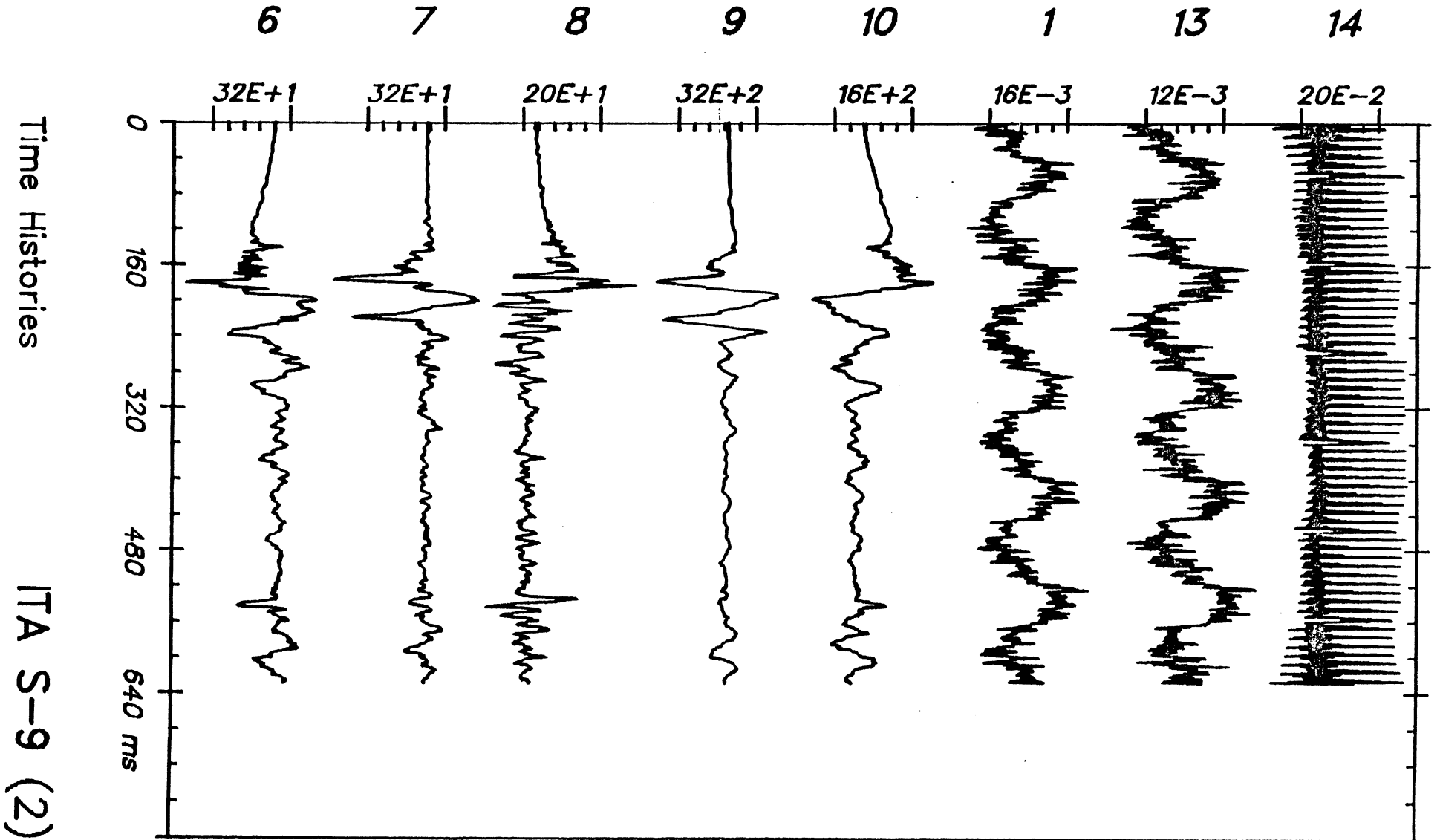
Time Histories

ITA S-9 (1)



Time Histories

ITA S-9 (1)



LA DY W/O SB		Test No. S-10		S U M M A R Y			
				Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)							
	P-A acc	...		-68	91	142	90
	R-L acc	...		-366	92	523	91
	I-S acc	...		-364	90	148	92
	Resultant	...				606	90
	HIC =	4745	...		90		93

CHEST ACCELERATIONS (G)							
	P-A acc	...		-14	117	13	129
	R-L acc	...		-12	131	24	112
	I-S acc	...		-42	113	18	129
	Resultant	...				48	113

PELVIS ACCELERATIONS (G)							
	P-A acc	...		-93	255	93	119
	R-L acc	...		-22	119	26	186
	I-S acc	...		-50	111	36	124
	Resultant	...				96	119

TRUCK DECELERATIONS (G)							
	Ax (A-P)	...		-5	136	7	195
	Ay (L-R)	...		-4	139	23	100
	Az (I-S)	...		-2	196	4	135
	Resultant	...				24	100

S. COLUMN FORCES (LB)							
	Fx (A-P)	...		-252	123	171	170
	Fy (L-R)	...		-214	125	170	207
	Fz (I-S)	...		-153	173	172	155
	Resultant	...				326	123

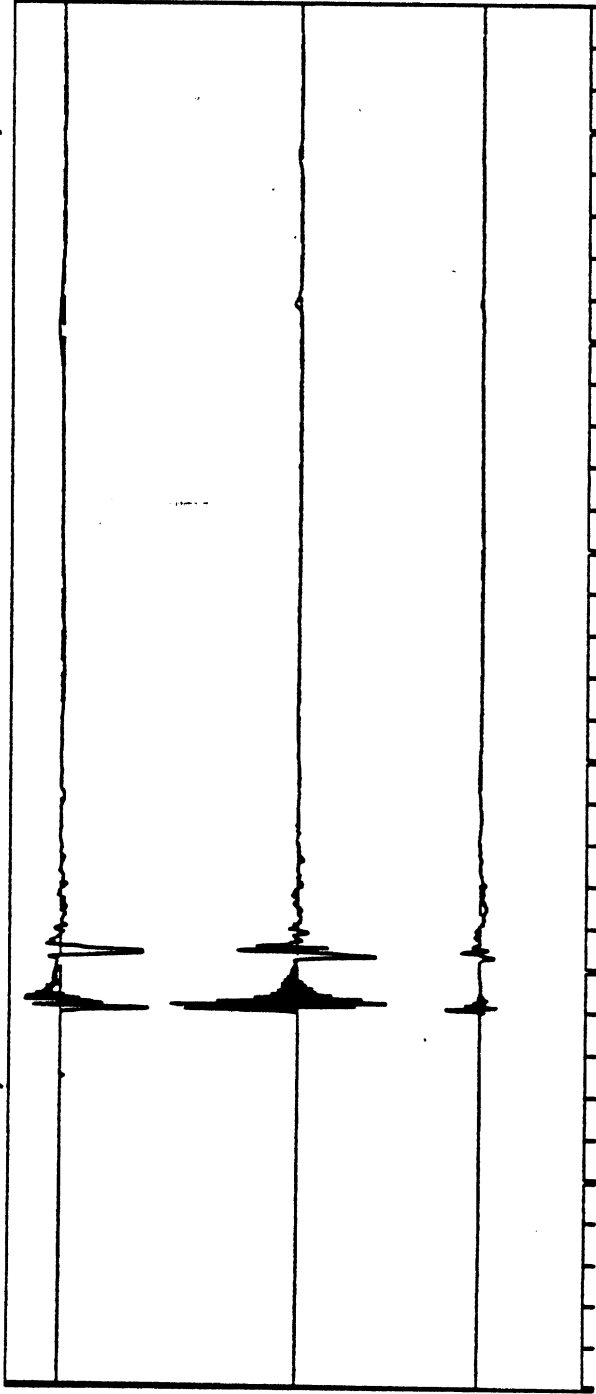
S. COLUMN MOMENTS (IN-LB)							
	Mx (A-P)	...		-1853	65	1216	108
	My (L-R)	...		-731	110	1136	62
	Mz (I-S)	...					
	Resultant	...				2191	388

KNEE & BELTS LOADS (LB)							
	LT Knee	...		0	0	0	0
	RT Knee	...		0	0	0	0
	LT Belt	...		0	0	0	0
	RT Belt	...		0	0	0	0

LA DY W/O SB

DEC 22, 1981

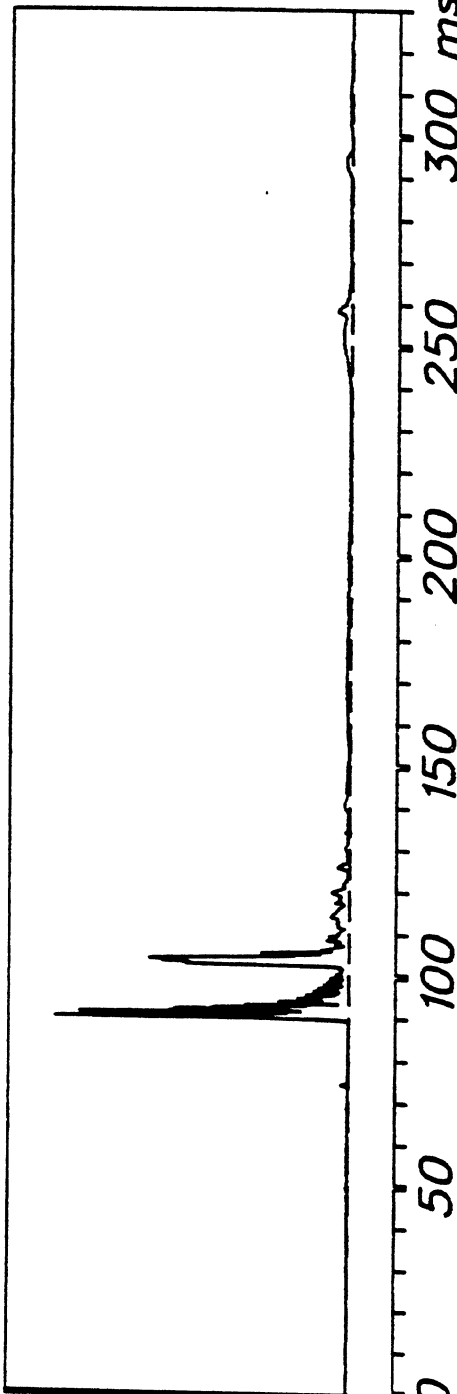
PEAKS



I-S acc -365

R-L acc 523

P-A acc 142



HIC = 4745

Resultant 606

HEAD ACCELERATIONS (G)

S-10

L.A DY W/O SB

DEC 22, 1981

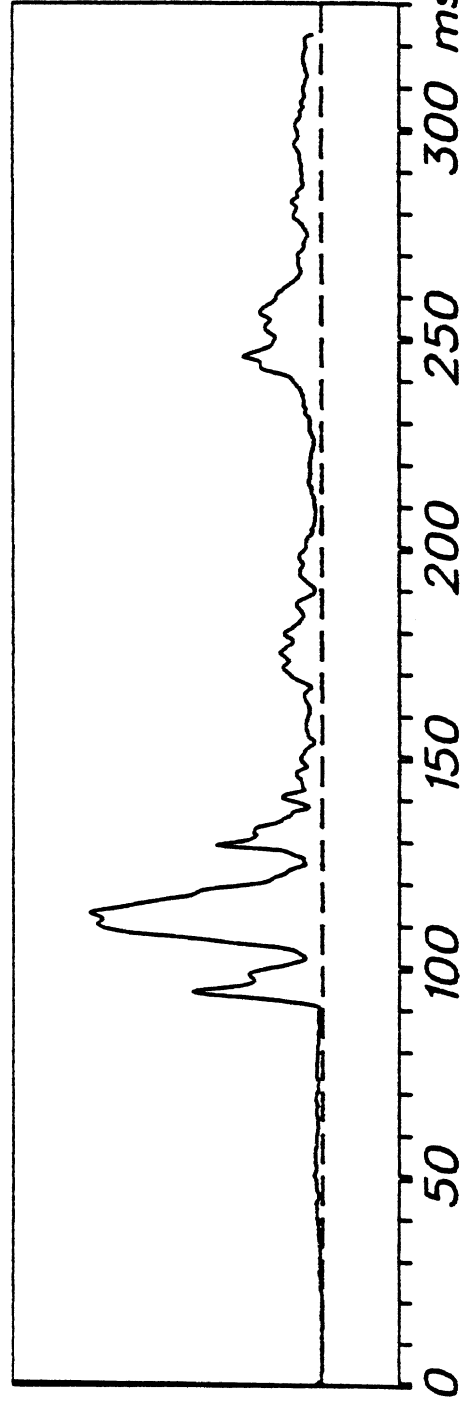
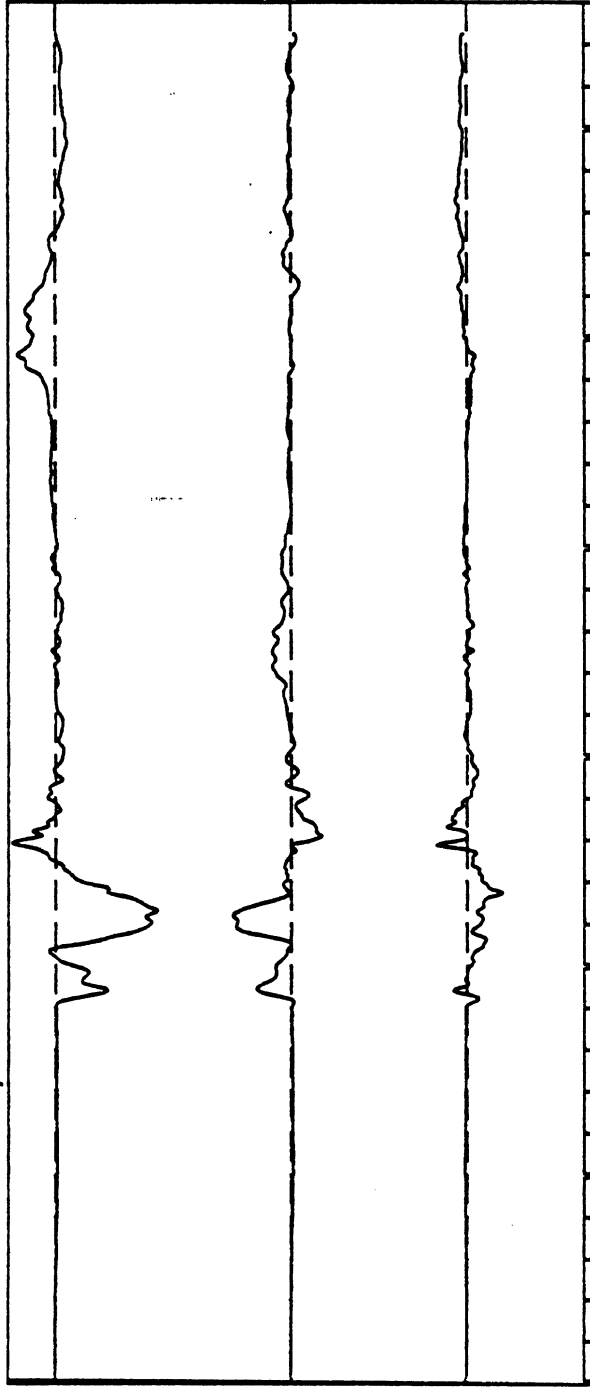
PEAKS

I-S acc -43

R-L acc 24

P-A acc -15

Resultant 48



S-10

LA DY W/O SB

DEC 22, 1981

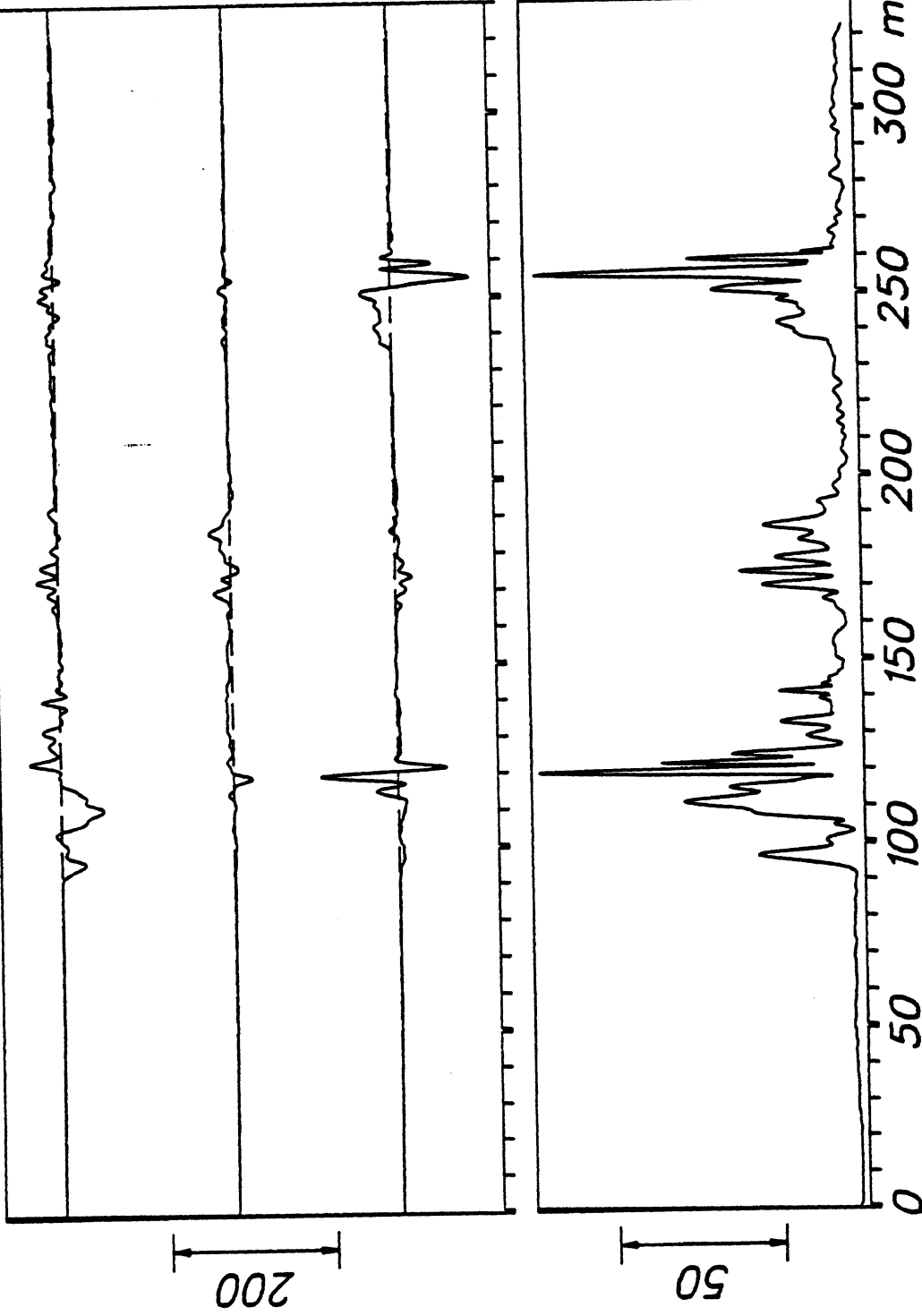
PEAKS

I-S acc -51

R-L acc 26

P-A acc -94

Resultant 95



PELVIS ACCELERATIONS (G)

S-10

LA DY W/O SB

DEC 22, 1981

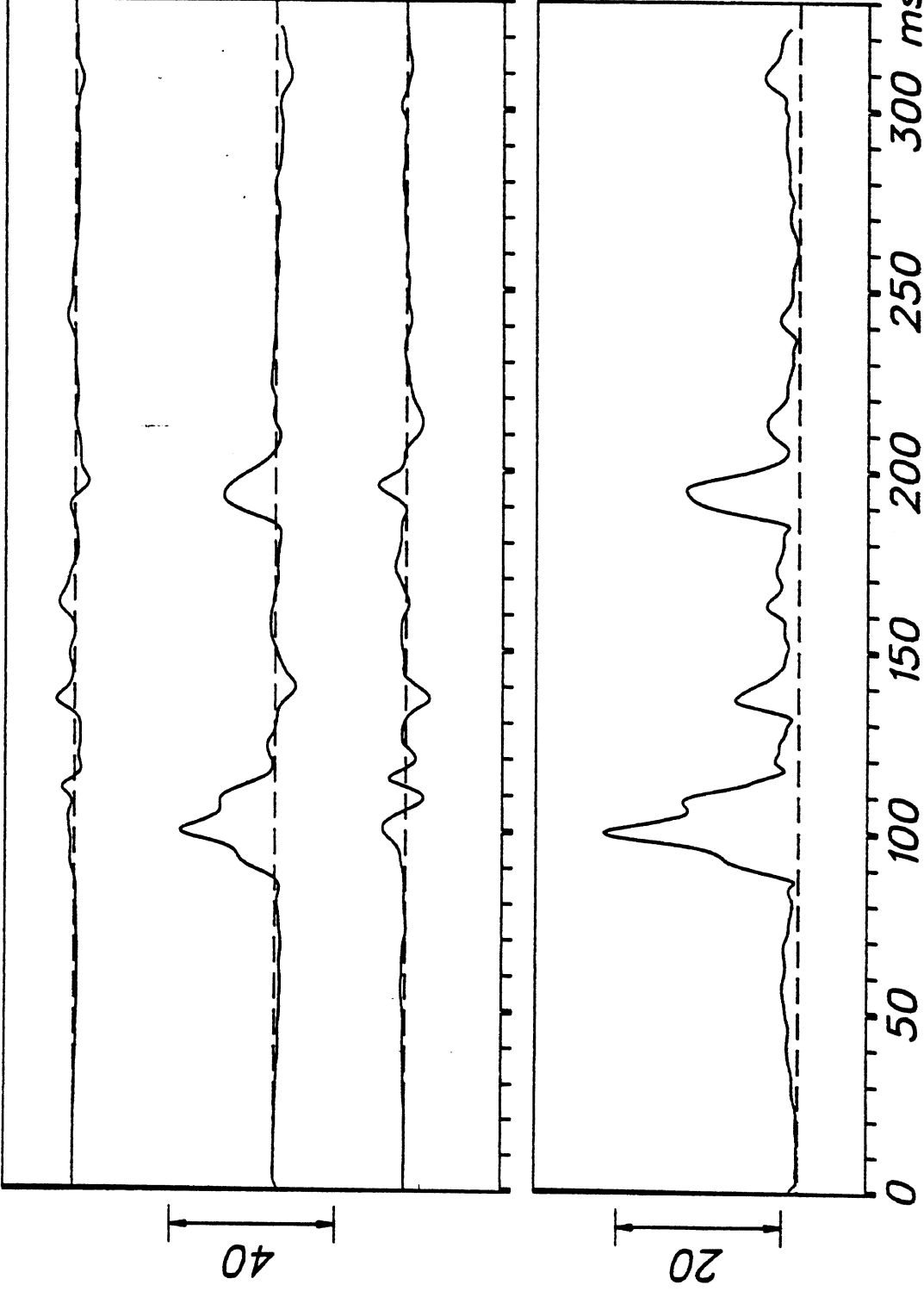
PEAKS

Az (I-S) 4

Ay (L-R) 22

Ax (A-P) 6

Resultant 23



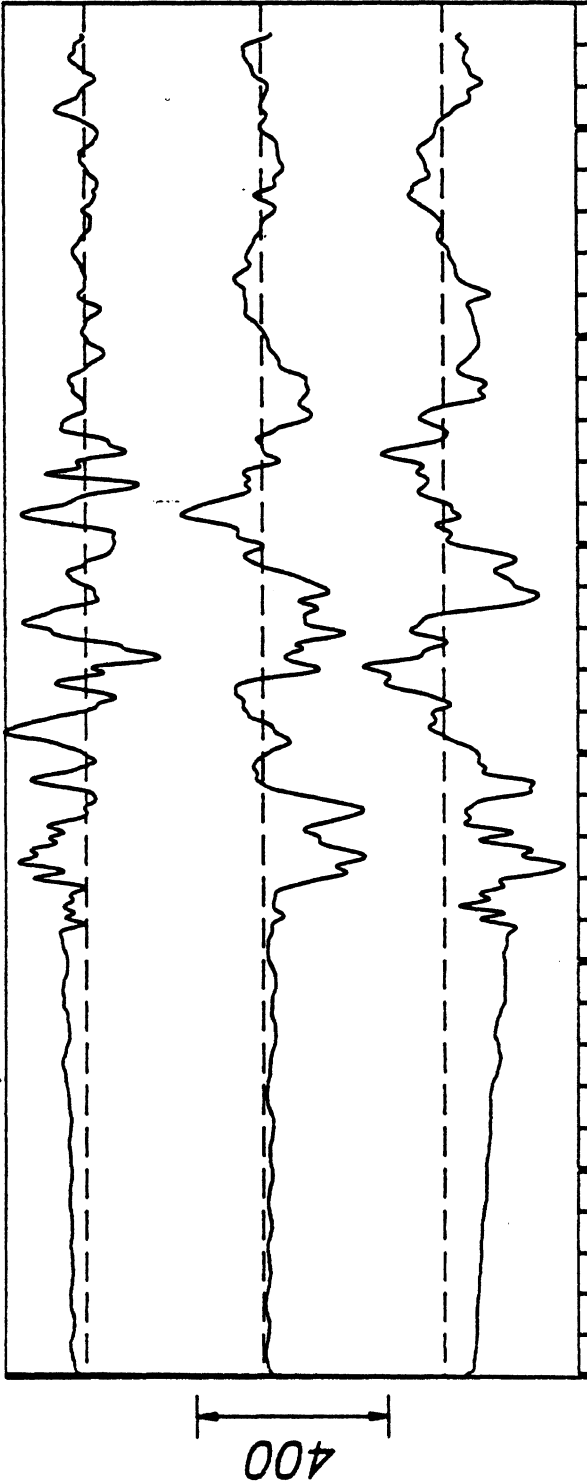
TRUCK DECELERATIONS (G)

S-10

LA DY W/O SB

DEC 22, 1981

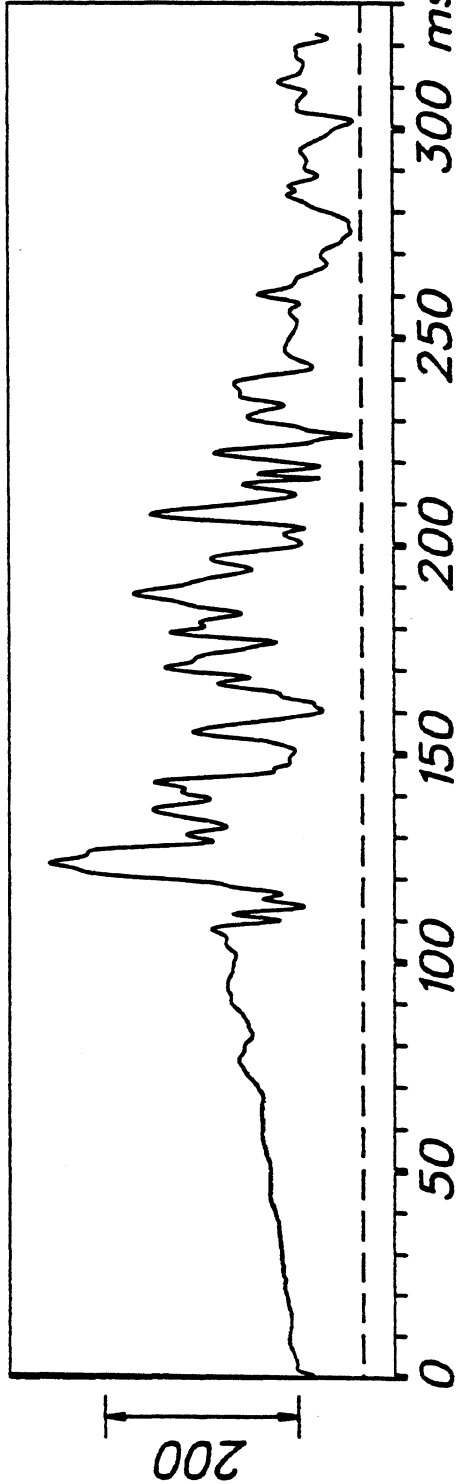
PEAKS



Fz (I-S) 171

Fy (L-R) -215

Fx (A-P) -253



Resultant 325

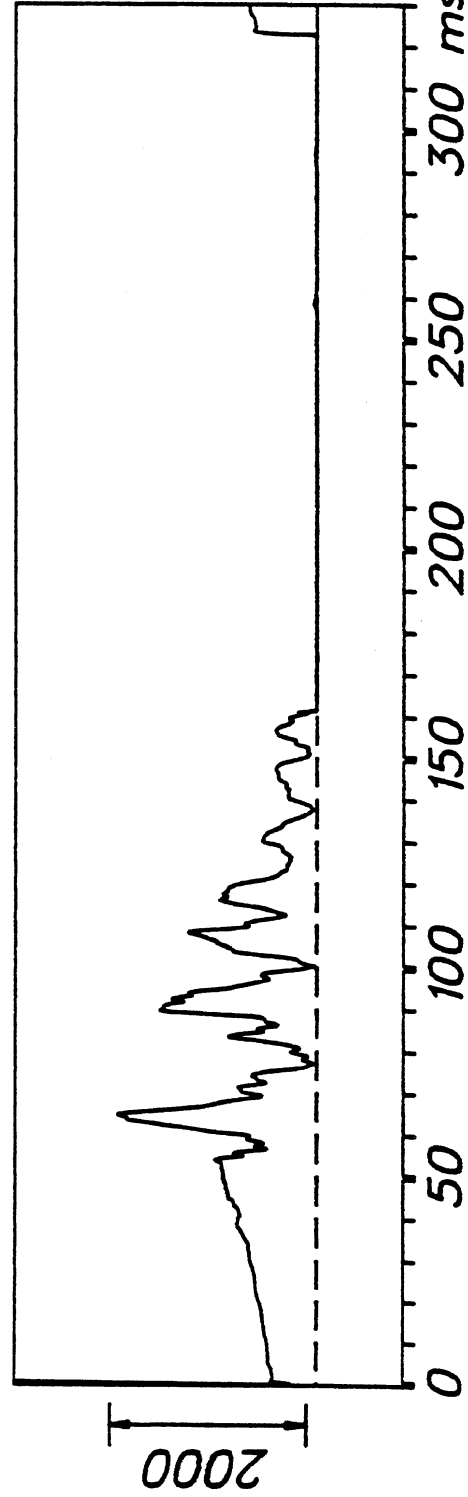
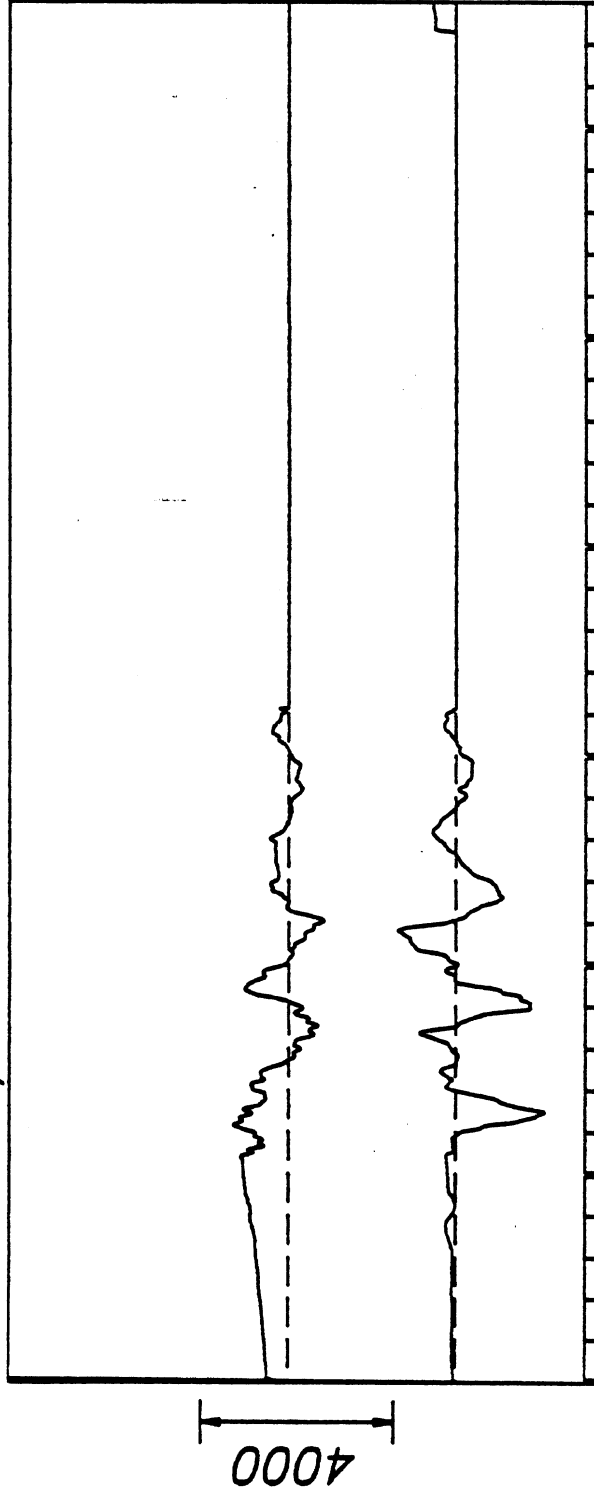
S. COLUMN FORCES (LB)

S-10

L.A DY W/O SB

DEC 22, 1981

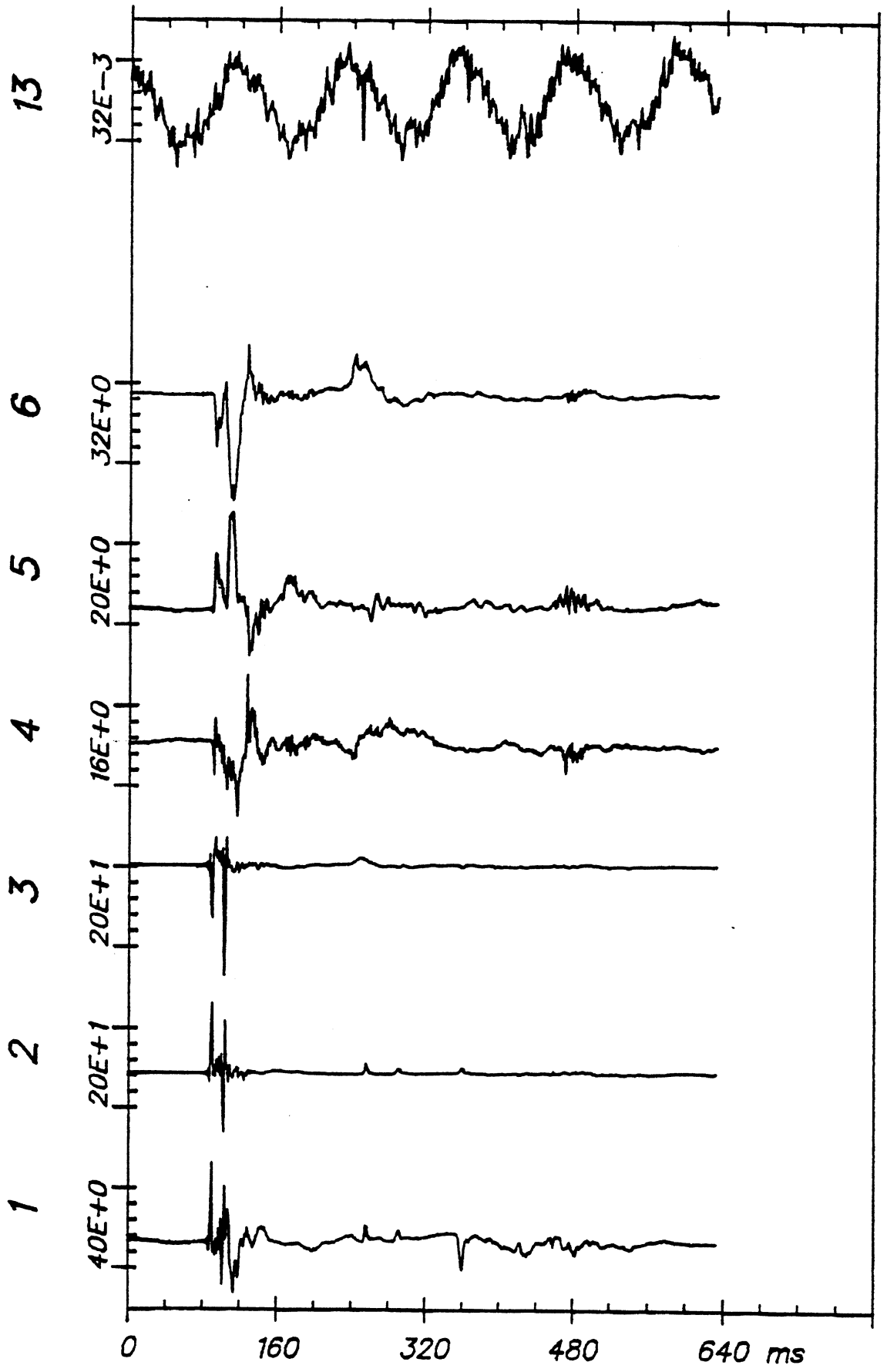
PEAKS



S-10

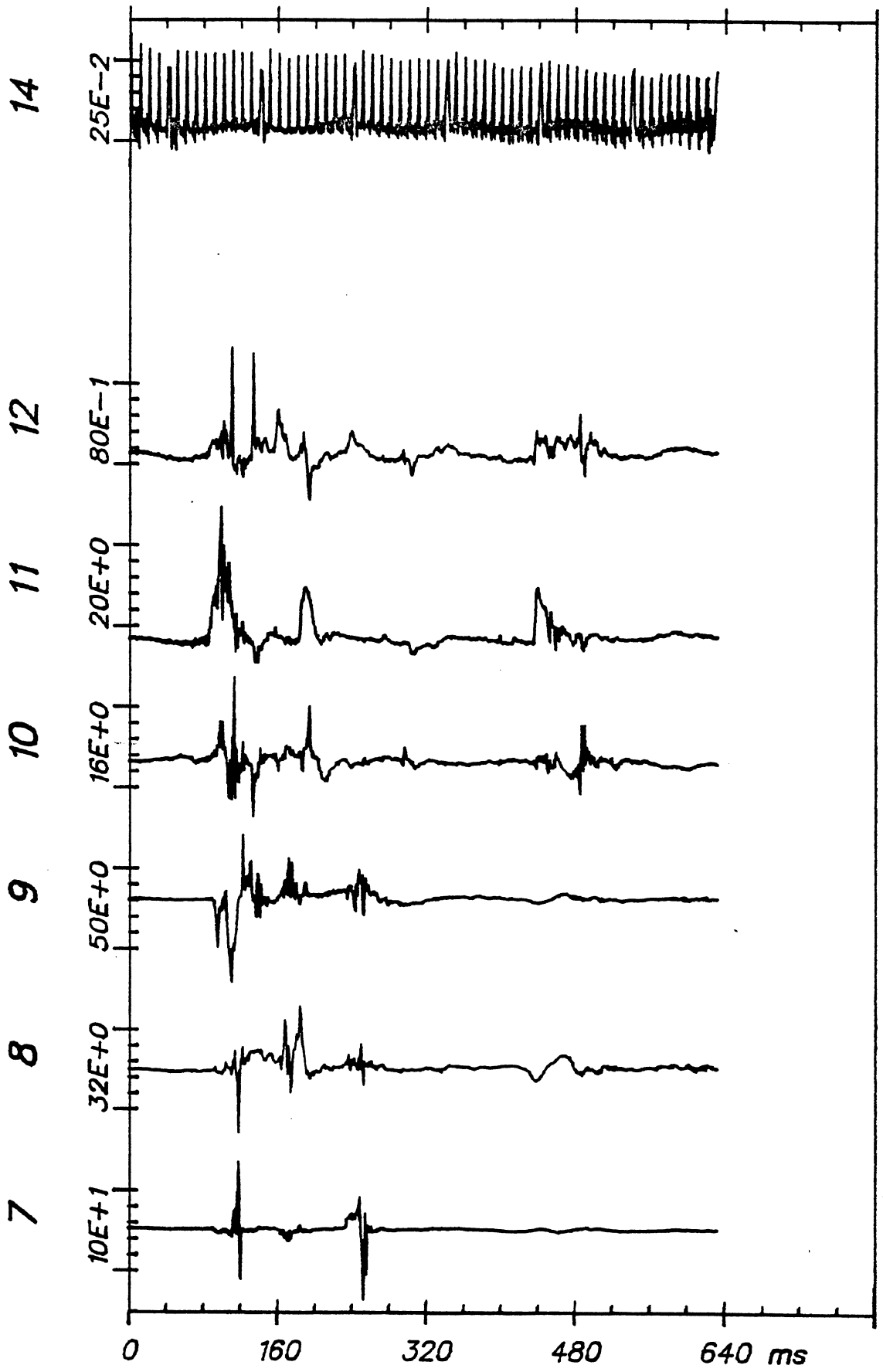
From HSRI-175 to SITA, file 6: /1/2/3/4/5/6/-/13/

DEC 22, 1981



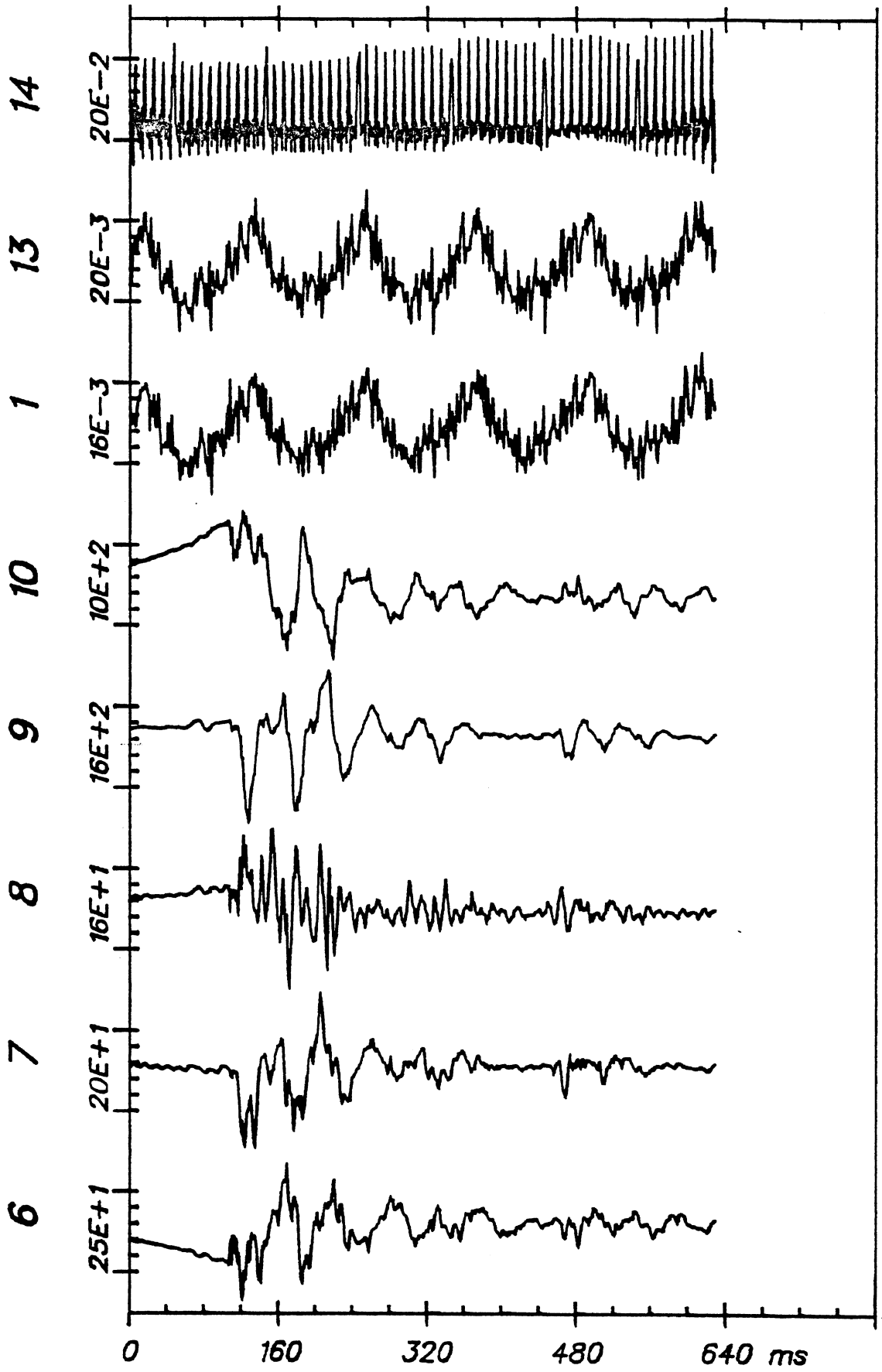
Time Histories

ITA S-10 (1)



Time Histories

ITA S-10 (1)



Time Histories

ITA S-10 (2)

APPENDIX B
STATIC TESTS

CONTENTS OF APPENDIX B

An "x" indicates that this graph is included in the appendix. The sheets are not paginated so that slides may be made of them. The order of the sheets marked "x" are from left to right, and from top to bottom.

TEST CODE	Summary	Head Accel	Chest Accel	Pelvis Accel	Truck Decel	Knee/Belt Loads	Tape 1 (Ch 1-8)	Tape 1 (Ch 9-14)	Tape 2 (Ch 1-8)
L1	x	x	x	x			x	x	
L2	x		x	x			x	x	x
L3	x	x	x	x	x	x	x	x	x
L4	x	x	x	x	x	x	x	x	x
L5	x	x	x	x	x	x	x	x	x
M1	x	x	x	x	x	x	x	x	x
M2	x	x	x	x	x	x	x	x	x
M3	x	x	x	x	x	x	x	x	x
N2	x	x	x	x	x	x	x	x	x
P1	x	x	x	x	x	x	x	x	x
P2	x	x	x	x	x	x			x

RE DO W SB	Test No. L-1	S U M M A R Y			
		Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)					
	P-A acc	...			
	R-L acc	...	-420	317	10 316
	I-S acc	...	-20	377	52 369
	Resultant	...			421 317
	HIC = 8752	...		317	320

CHEST ACCELERATIONS (G)					
	P-A acc	...	-12	365	66 383
	R-L acc	...	-5	367	9 365
	I-S acc	...	-20	370	87 366
	Resultant	...			87 366

PELVIS ACCELERATIONS (G)					
	P-A acc	...	-16	395	98 363
	R-L acc	...	-14	367	23 364
	I-S acc	...	-38	368	60 363
	Resultant	...			105 363

TRUCK DECELERATIONS (G)					
	Ax (A-P)	...	0	0	0 0
	Ay (L-R)	...	0	0	0 0
	Az (I-S)	...	0	0	0 0
	Resultant	...			0 0

S. COLUMN FORCES (LB)					
	Fx (A-P)	...	0	0	0 0
	Fy (L-R)	...	0	0	0 0
	Fz (I-S)	...	0	0	0 0
	Resultant	...			0 0

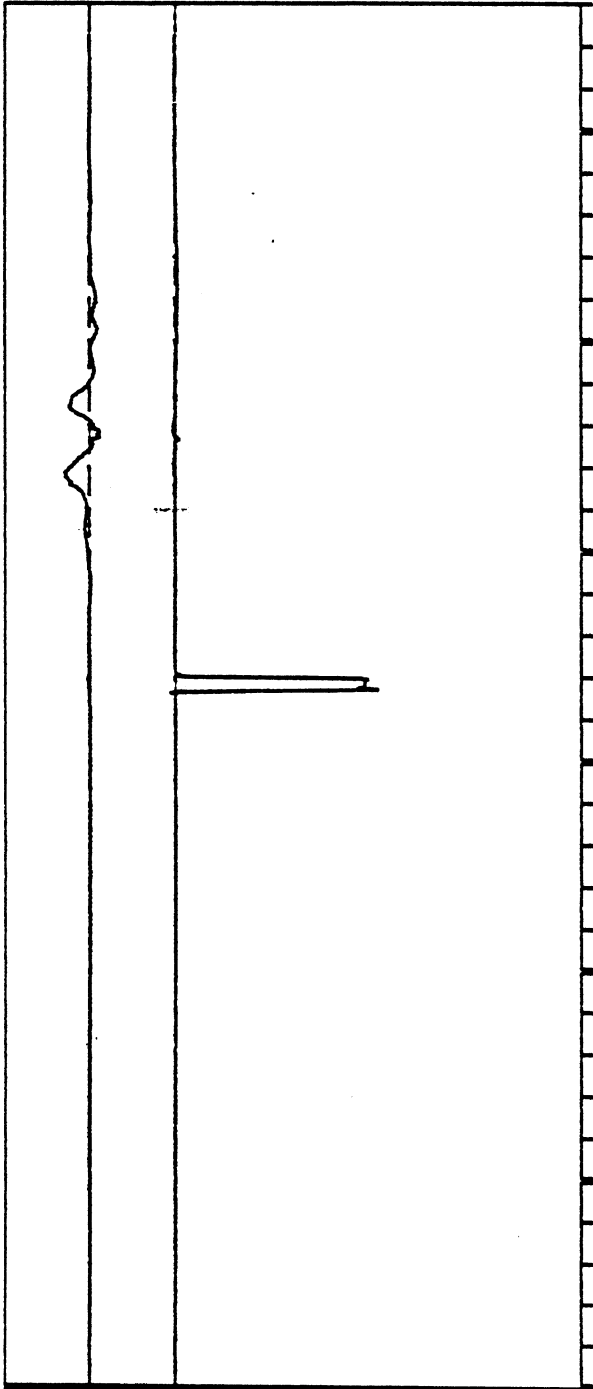
S. COLUMN MOMENTS (IN-LB)					
	Mx (A-P)	...	0	0	0 0
	My (L-R)	...	0	0	0 0
	Mz (I-S)	...	0	0	0 0
	Resultant	...			0 0

KNEE & BELTS LOADS (LB)					
	LT Knee	...	0	0	0 0
	RT Knee	...	0	0	0 0
	LT Belt	...	0	0	0 0
	RT Belt	...	0	0	0 0

RE DO W SB

FEB 10, 1982

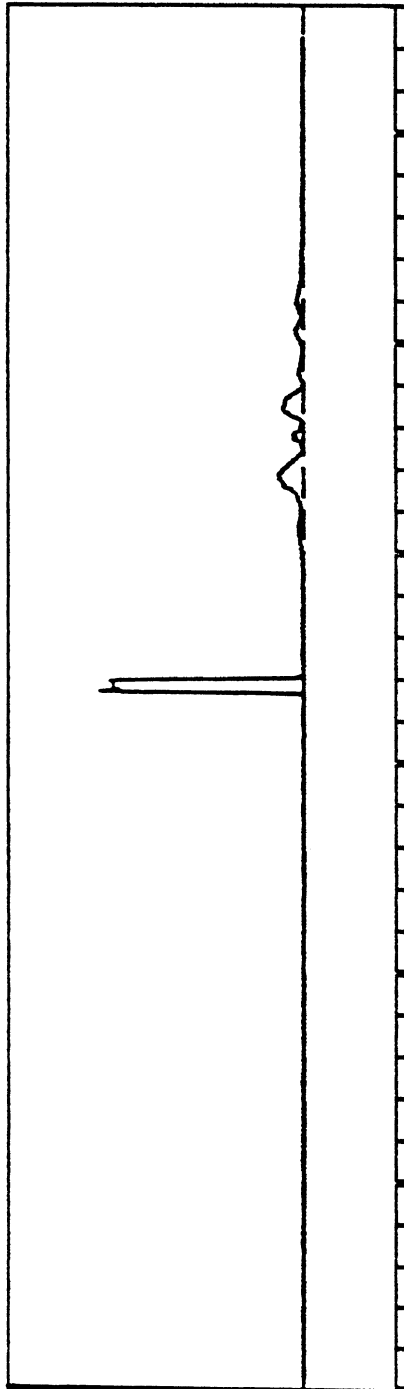
PEAKS



I-S acc 51

400

R-L acc -421



Resultant 421

400

HIC = 8752

150 200 250 300 350 400 450 msec

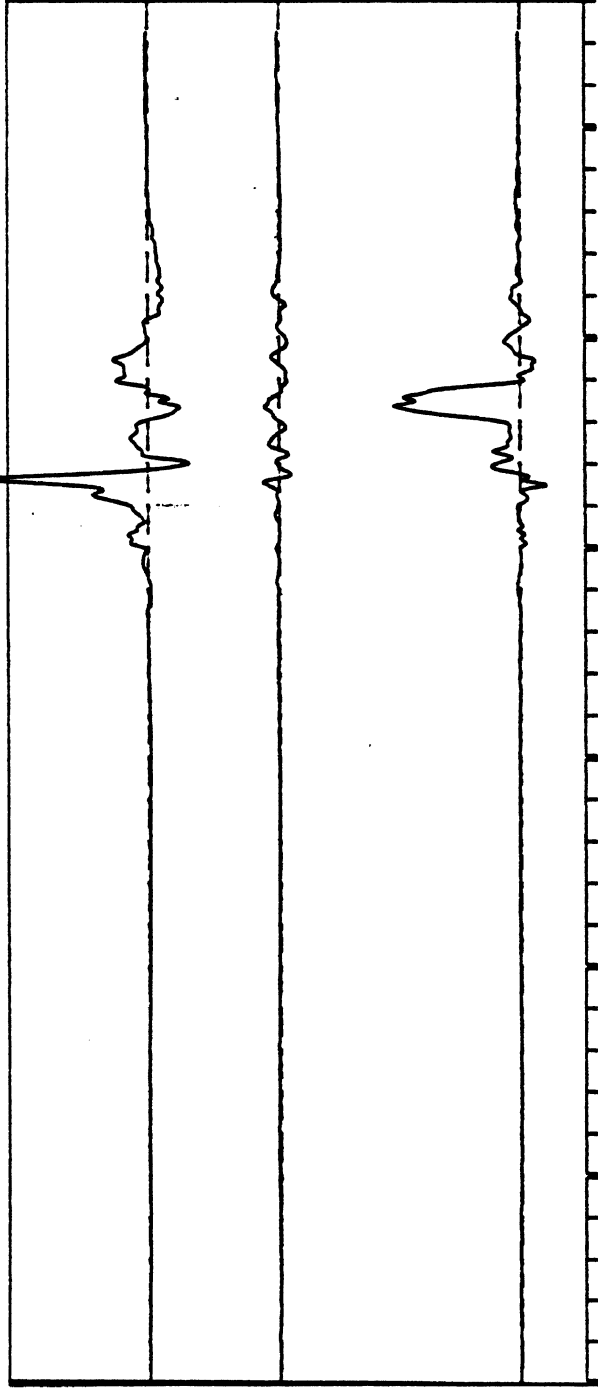
HEAD ACCELERATIONS (G)

L-1

RE DO W SB

FEB 10, 1982

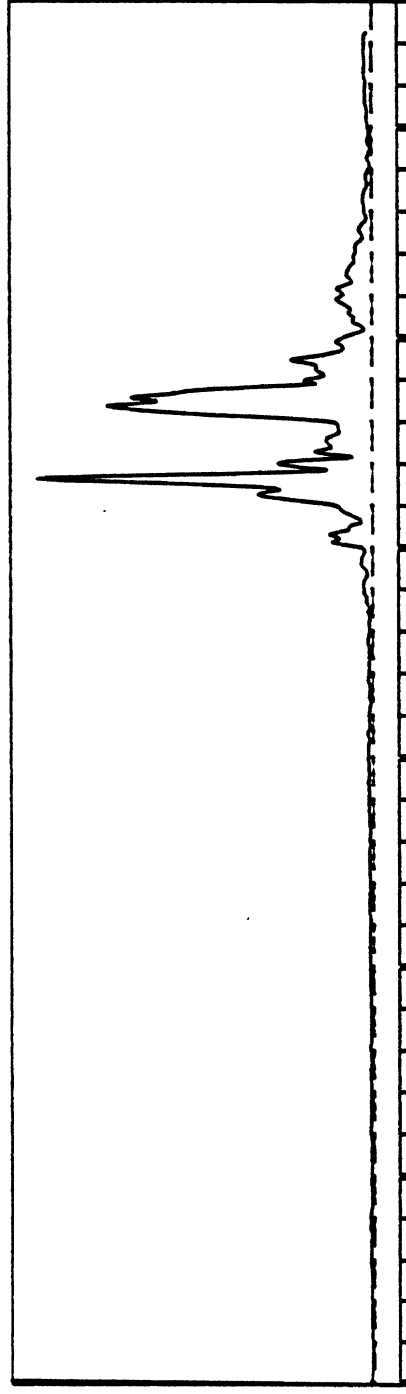
PEAKS



I-S acc 86

R-L acc 8

P-A acc 65



Resultant 86

150 200 250 300 350 400 450 msec

CHEST ACCELERATIONS (G)

L-1

RE DO W SB

FEB 10, 1982

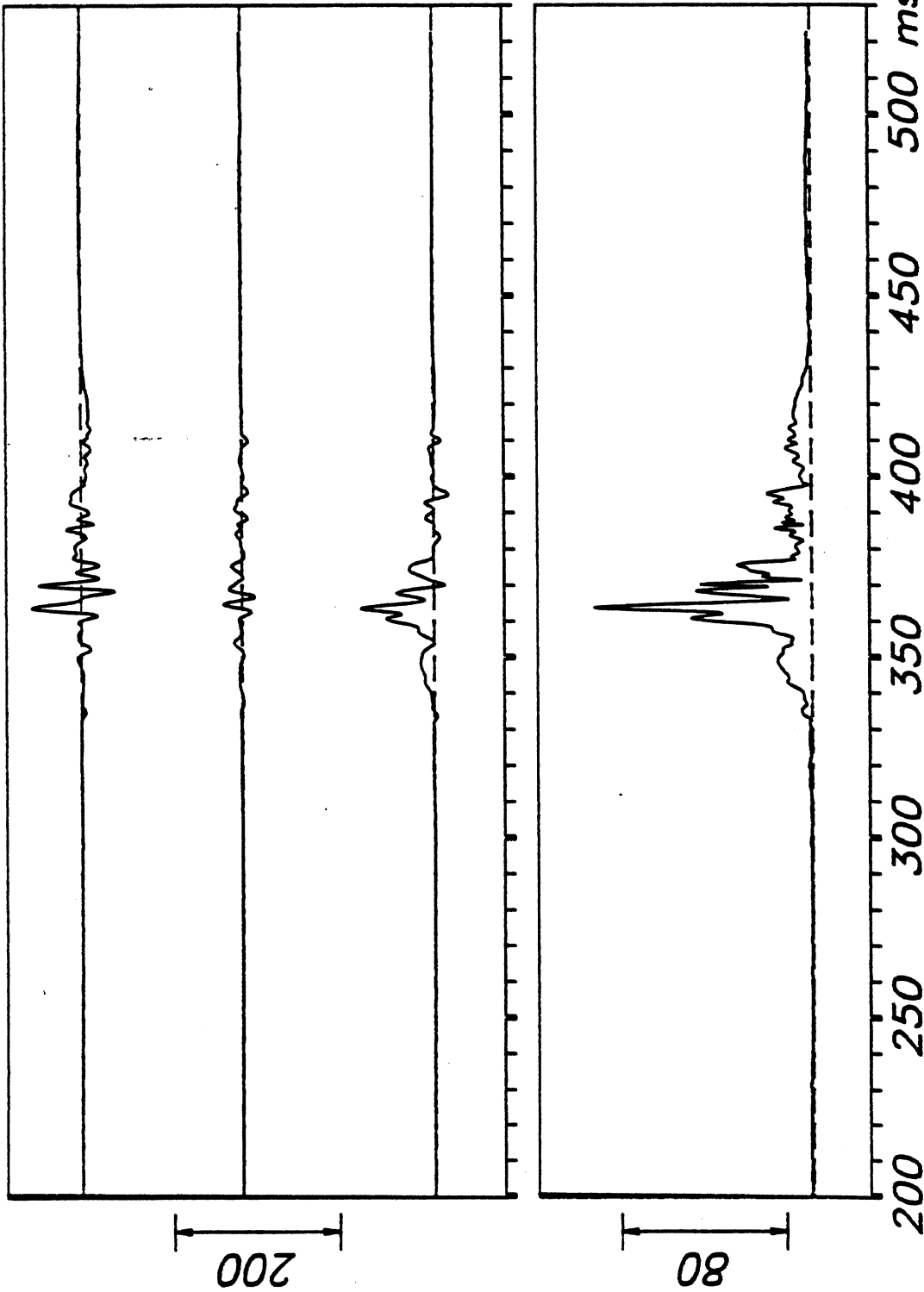
PEAKS

I-S acc 59

R-L acc 22

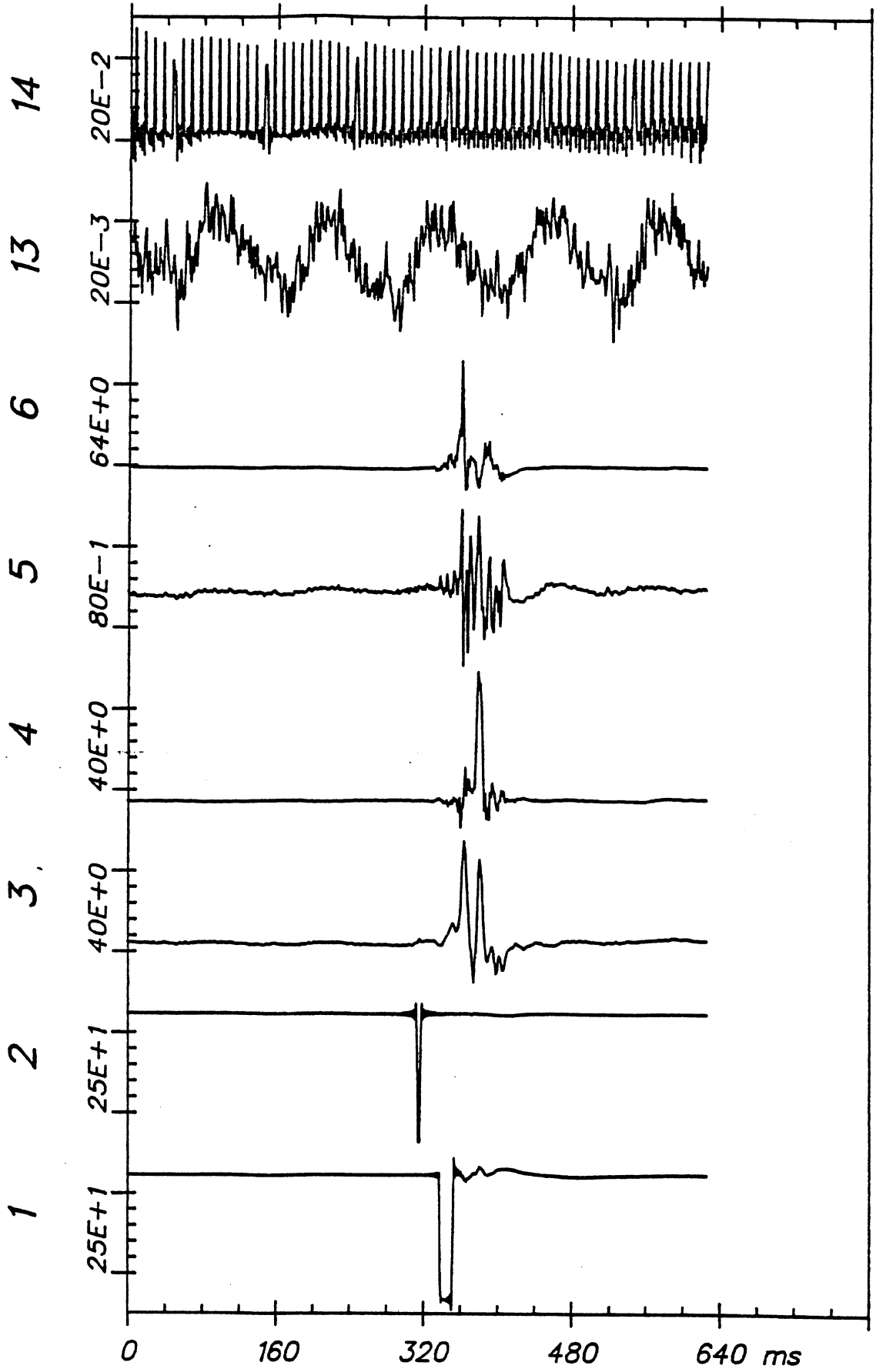
P-A acc 88

Resultant 105



PELVIS ACCELERATIONS (G)

L-1

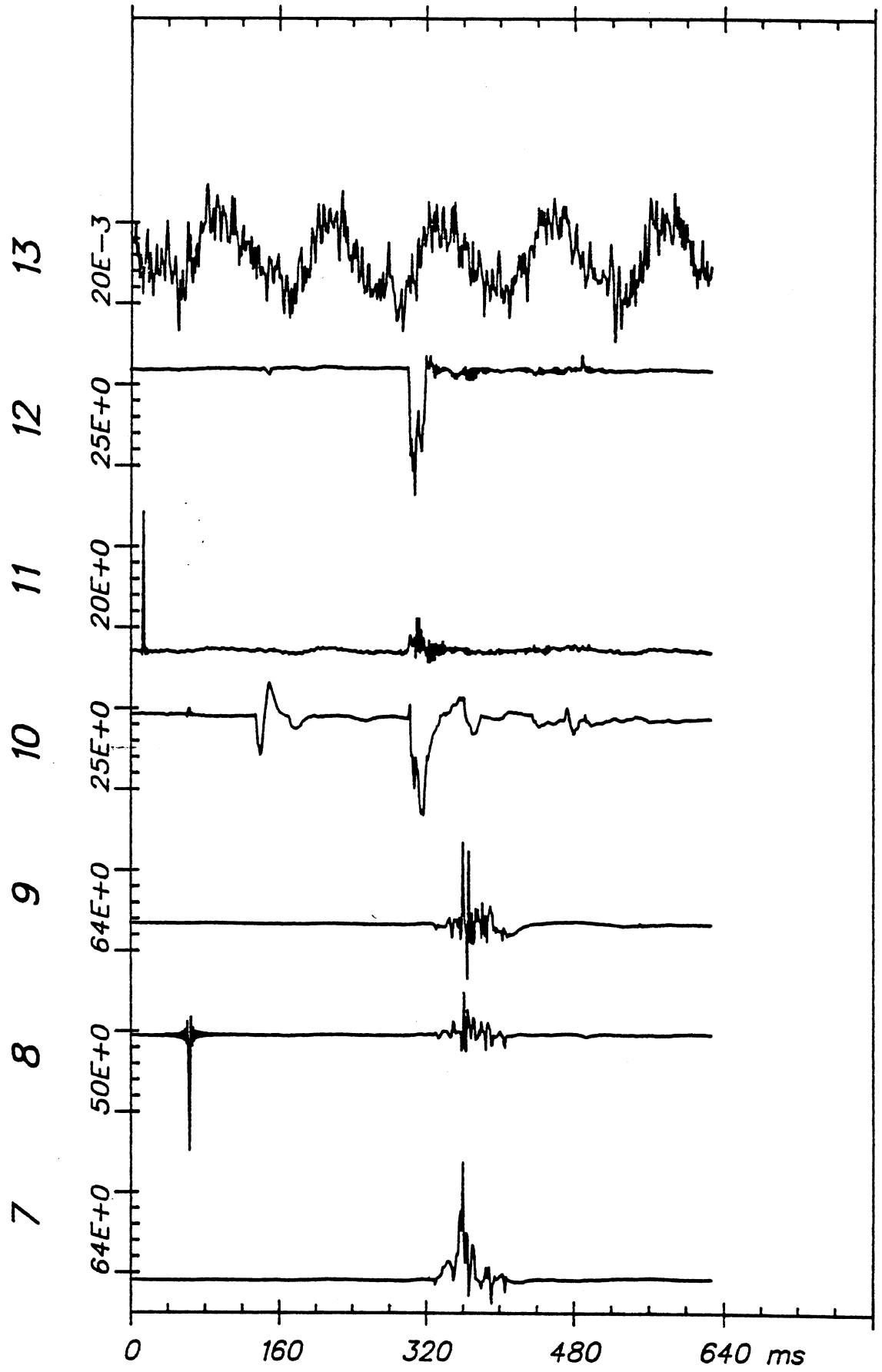


Time Histories

ITA L-1 (1)

From HSRI-175 to 81-SORT, file 175: /7/8/9/10/11/12/13/-/-/

JAN 26, 1982



Time Histories

ITA L-1 (1)

RE DO W SE	Test No. L-2	S U M M A R Y			
		Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)					
	P-A acc	...			
	R-L acc	...	0	0	0 0
	I-S acc	...	0	0	0 0
	Resultant	...			0 0
	HIC =	0 ...		0	0

CHEST ACCELERATIONS (G)					
	P-A acc	...	-1	409	61 399
	R-L acc	...	-4	409	8 400
	I-S acc	...	-1	395	25 400
	Resultant	...			62 399

PELVIS ACCELERATIONS (G)					
	P-A acc	...	-1	400	23 370
	R-L acc	...	-2	406	6 375
	I-S acc	...	-16	412	27 402
	Resultant	...			29 402

TRUCK DECELERATIONS (G)					
	Ax (A-P)	...	0	0	0 0
	Ay (L-R)	...	0	0	0 0
	Az (I-S)	...	0	0	0 0
	Resultant	...			0 0

S. COLUMN FORCES (LB)					
	Fx (A-P)	...	0	0	0 0
	Fy (L-R)	...	0	0	0 0
	Fz (I-S)	...	0	0	0 0
	Resultant	...			0 0

S. COLUMN MOMENTS (IN-LB)					
	Mx (A-P)	...	0	0	0 0
	My (L-R)	...	0	0	0 0
	Mz (I-S)	...	0	0	0 0
	Resultant	...			0 0

KNEE & BELTS LOADS (LB)					
	LT Knee	...	0	0	0 0
	RT Knee	...	0	0	0 0
	LT Belt	...	0	0	0 0
	RT Belt	...	0	0	0 0

RE DO W SB

FEB 10, 1982

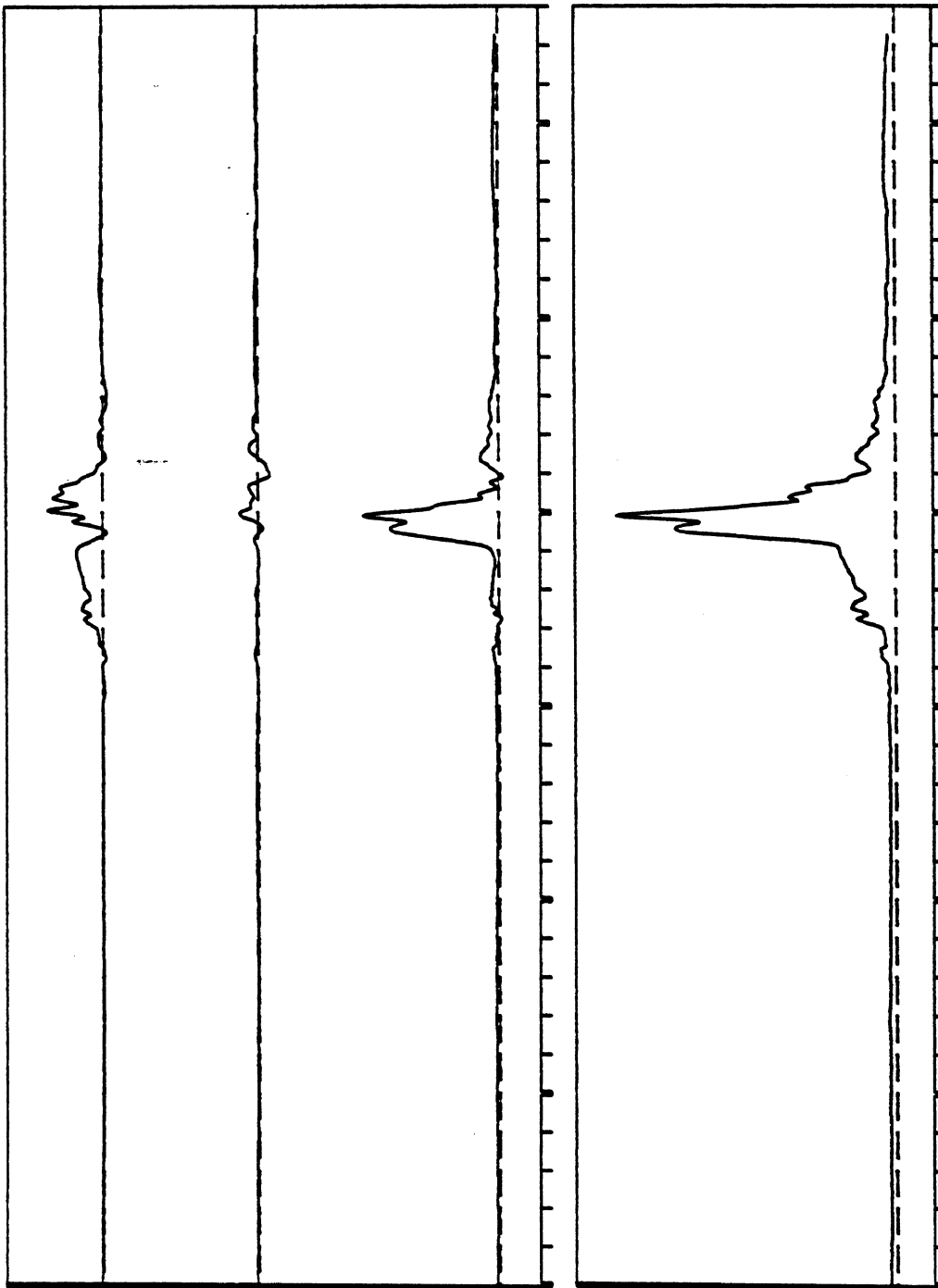
PEAKS

I-S acc 24

R-L acc 8

P-A acc 61

Resultant 62



200 250 300 350 400 450 500 msec

CHEST ACCELERATIONS (G)

L-2

RE DO W SB

FEB 10, 1982

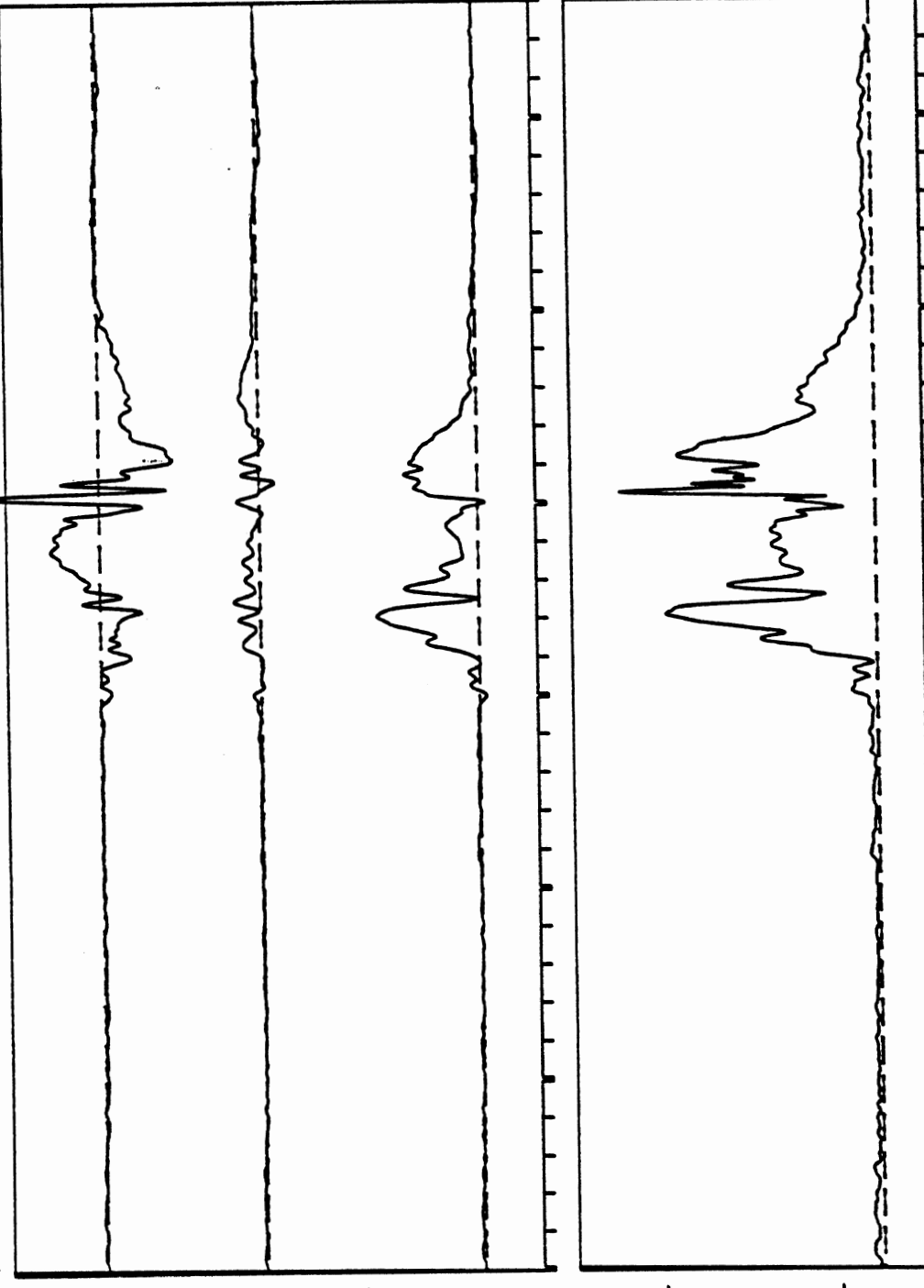
PEAKS

I-S acc 26

R-L acc 6

P-A acc 23

Resultant 29



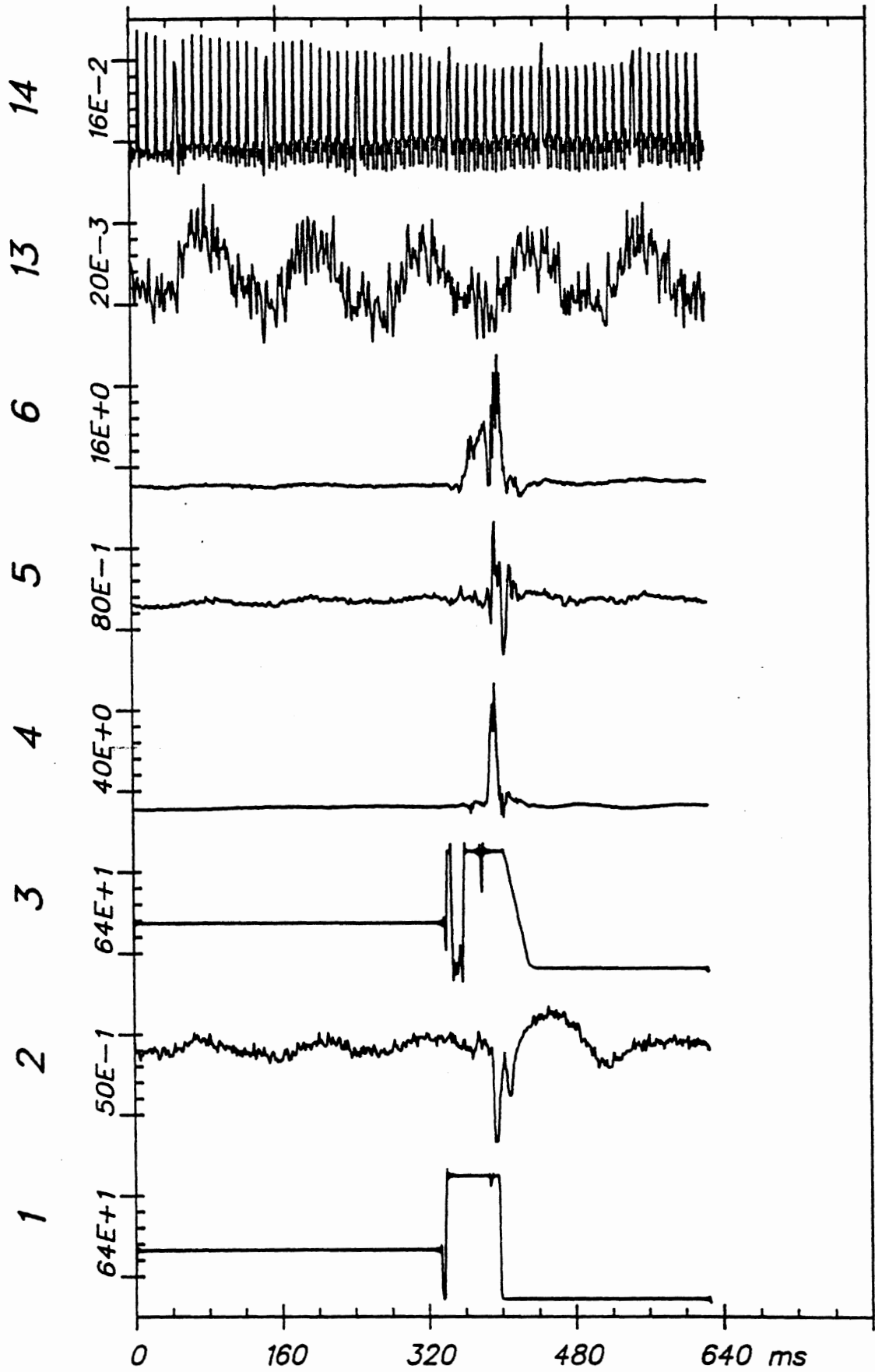
200 250 300 350 400 450 500 msec

PELVIS ACCELERATIONS (G)

L-2

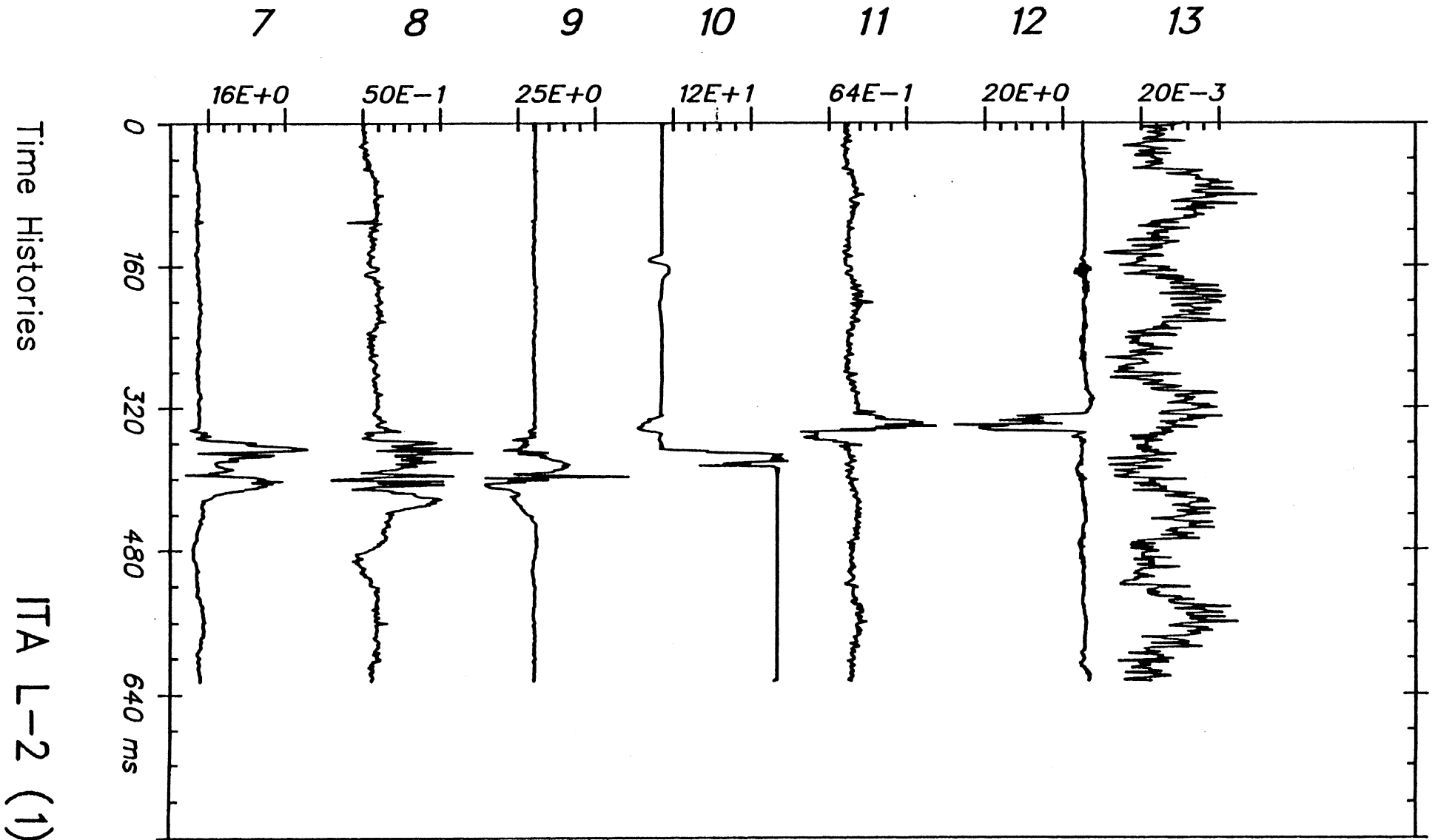
From HSRI-175 to 81-SORT, file 176: /1/2/3/4/5/6/13/14/

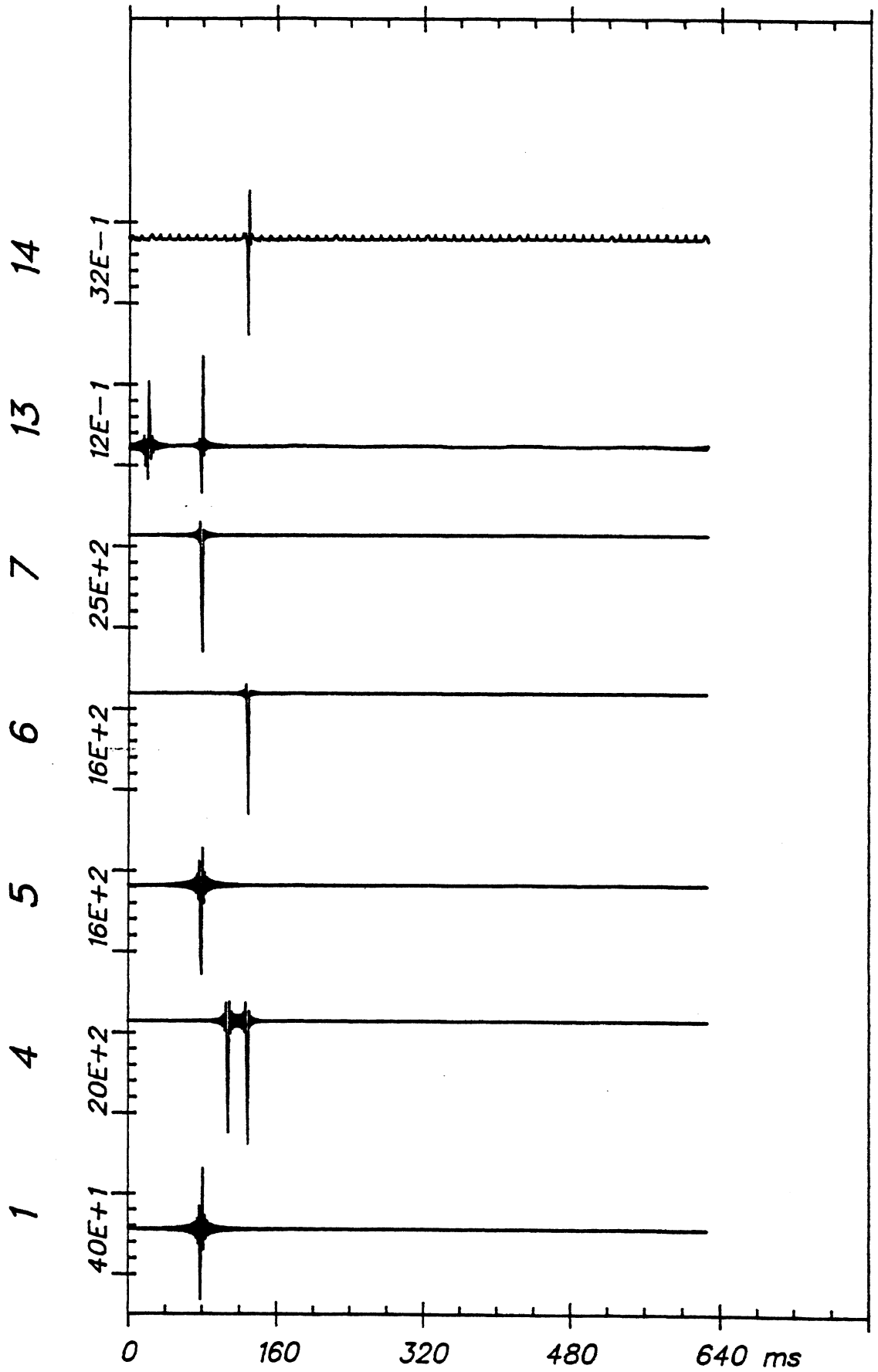
JAN 26, 1982



Time Histories

ITA L-2 (1)





Time Histories

ITA L-2 (2)

RE DO W SB	Test No. L-3	S U M M A R Y				
		Min @ msec		Max @ msec		

HEAD ACCELERATIONS (G)						
	P-A acc	...	-26	196	162	271
	R-L acc	...	-42	272	18	205
	I-S acc	...	-75	258	90	193
	Resultant	...			175	270
	HIC =	377 ...		269		272

CHEST ACCELERATIONS (G)						
	P-A acc	...	-23	192	26	256
	R-L acc	...	-11	207	6	201
	I-S acc	...	-21	197	141	192
	Resultant	...			143	192

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-13	196	129	202
	R-L acc	...	-8	188	28	190
	I-S acc	...	-38	192	94	190
	Resultant	...			147	190

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-40	146	7	189
	Ay (L-R)	...	-3	158	8	139
	Az (I-S)	...	-28	144	1	130
	Resultant	...			49	146

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	0	0	0	0
	Fy (L-R)	...	0	0	0	0
	Fz (I-S)	...	0	0	0	0
	Resultant	...			0	0

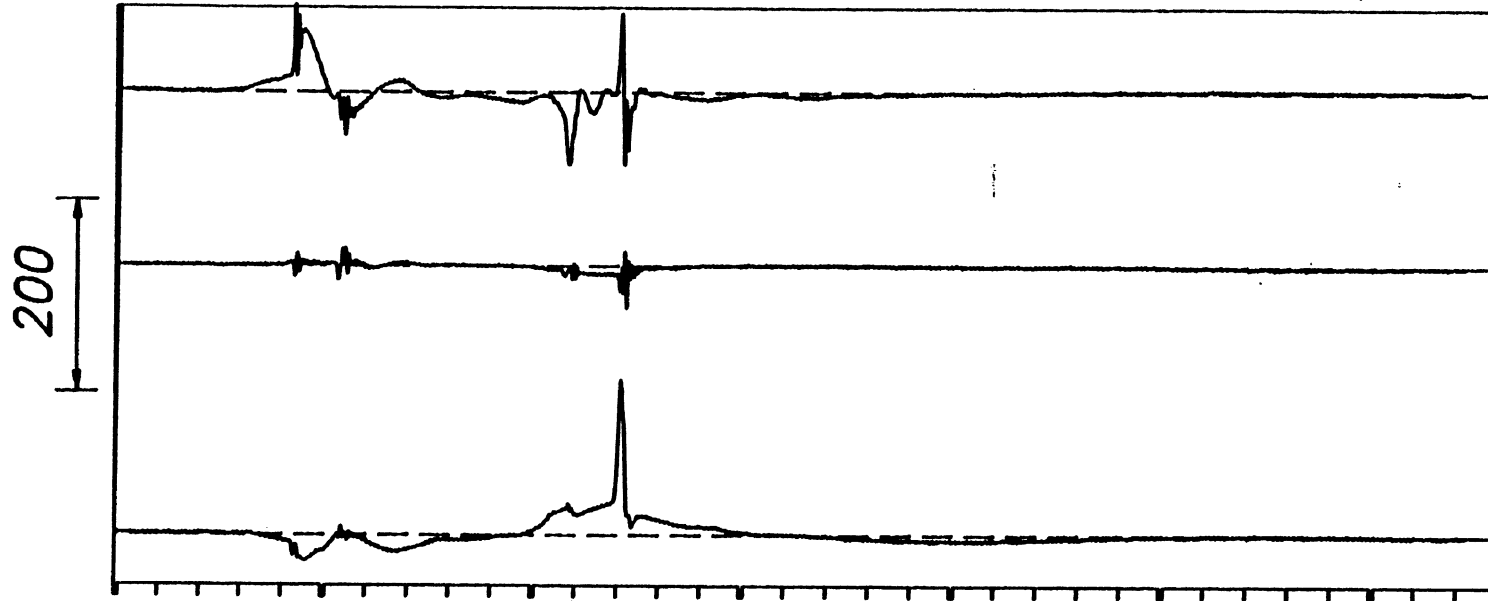
S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	0	0	0	0
	My (L-R)	...	0	0	0	0
	Mz (I-S)	...	0	0	0	0
	Resultant	...			0	0

KNEE & BELTS LOADS (LB)						
	LT Knee	...	-1236	367	68	49
	RT Knee	...	-1236	44	36	48
	LT Belt	...				
	RT Belt	...				

RE DO W SB

FEB 10, 1982

PEAKS

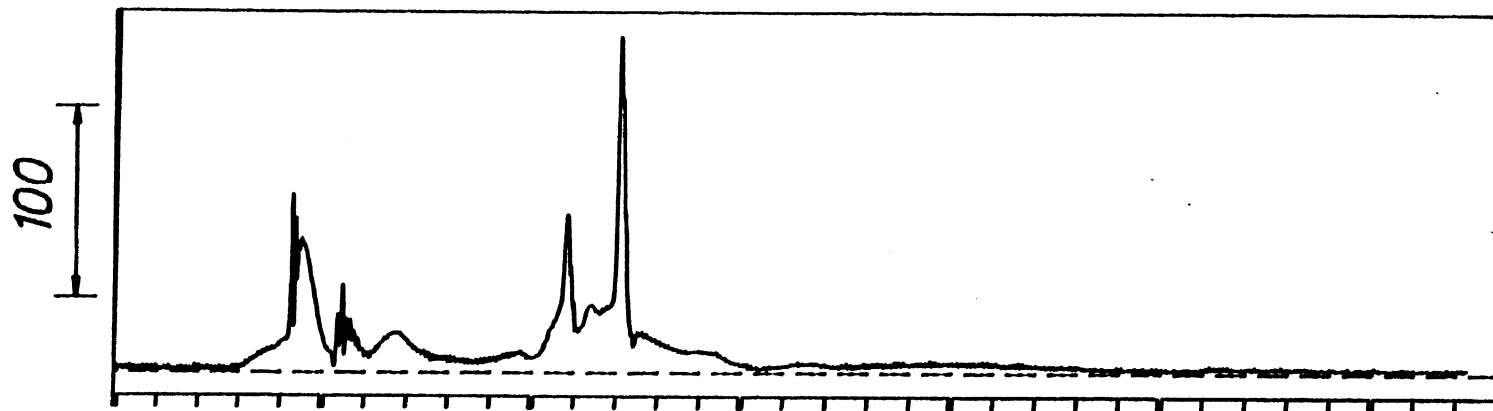


I-S acc 89

R-L acc -43

P-A acc 161

HIC = 377



Resultant 175

150 200 250 300 350 400 450 msec

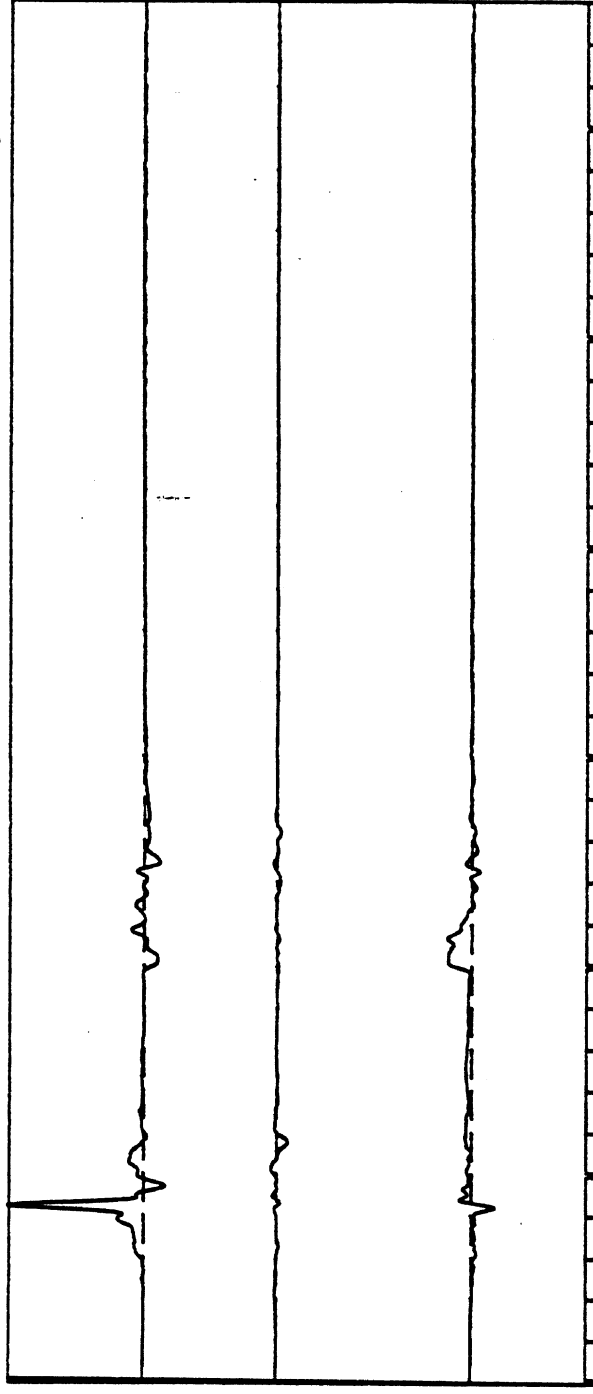
HEAD ACCELERATIONS (G)

L-3

RE DO W SB

FEB 10, 1982

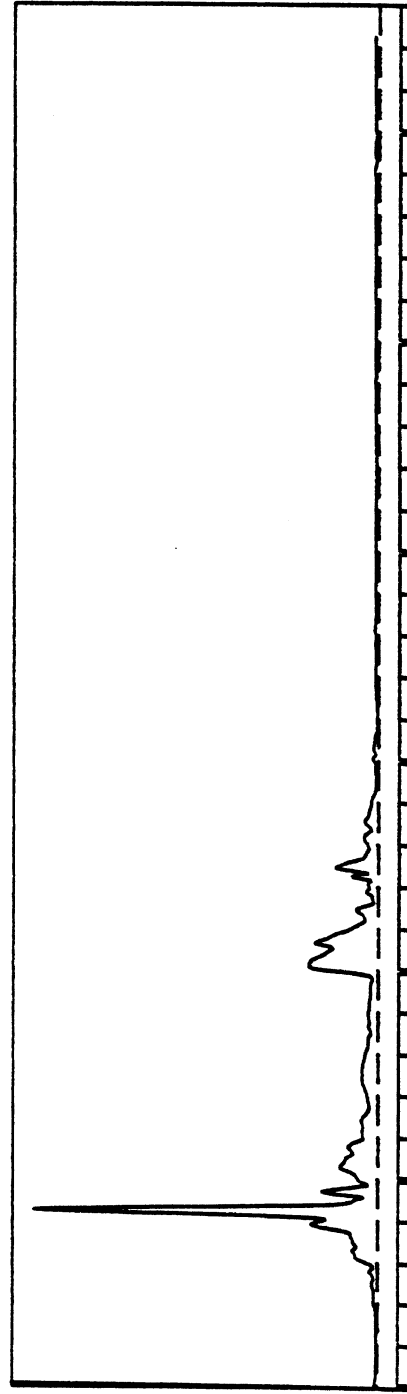
PEAKS



I-S acc 141

R-L acc -12

P-A acc 26



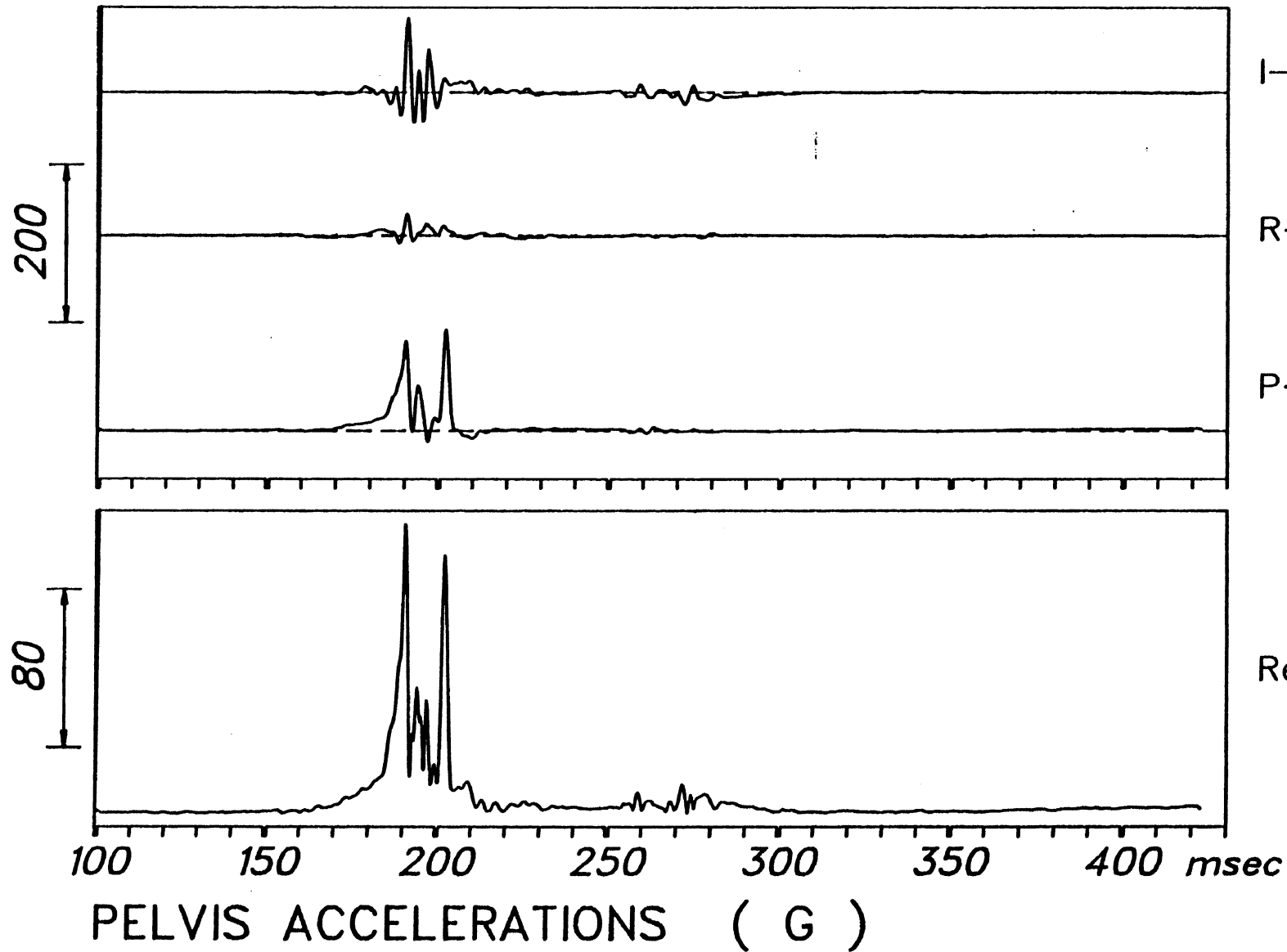
Resultant 142

L-3

RE DO W SB

FEB 10, 1982

PEAKS



I-S acc 94

R-L acc 28

P-A acc 129

Resultant 146

L-3

RE DO W SB

FEB 10, 1982

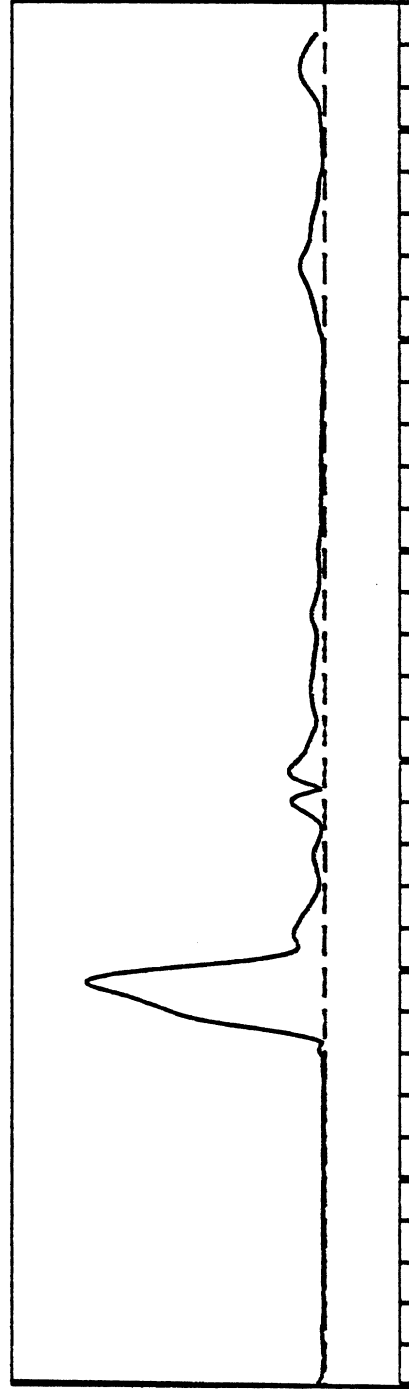
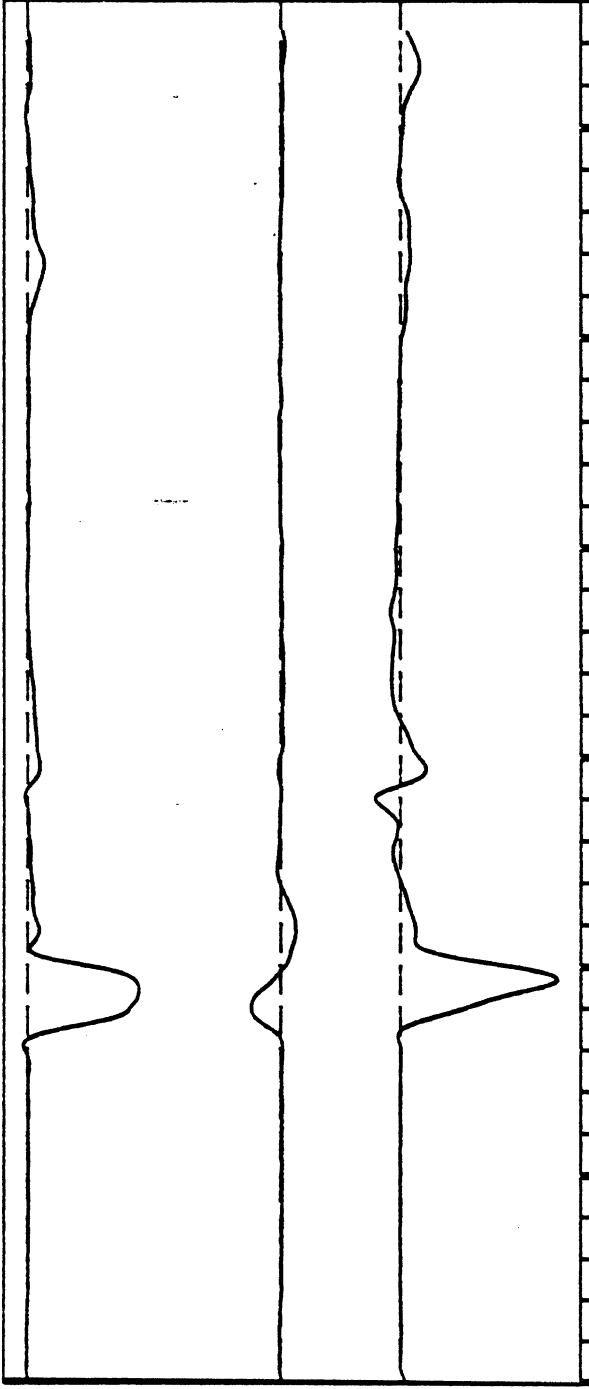
PEAKS

Az (I-S) -29

Ay (L-R) 7

Ax (A-P) -41

Resultant 49

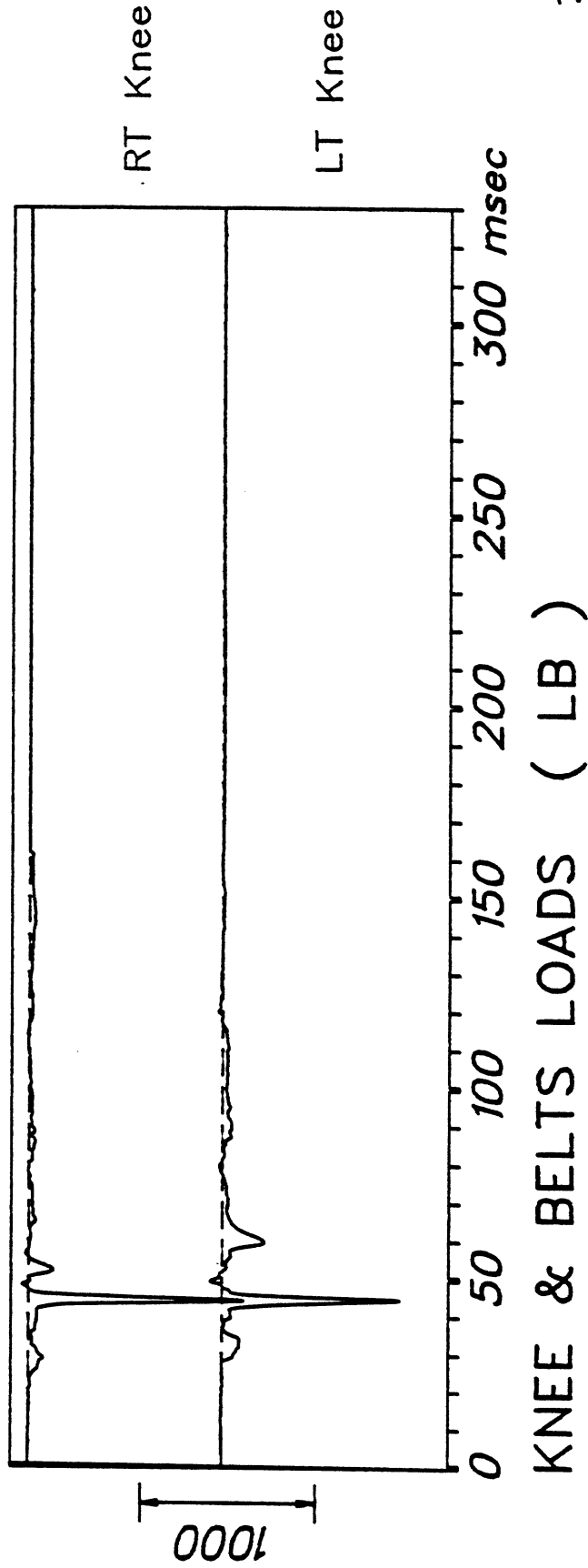


L-3

RE DO W SB

FEB 10, 1982

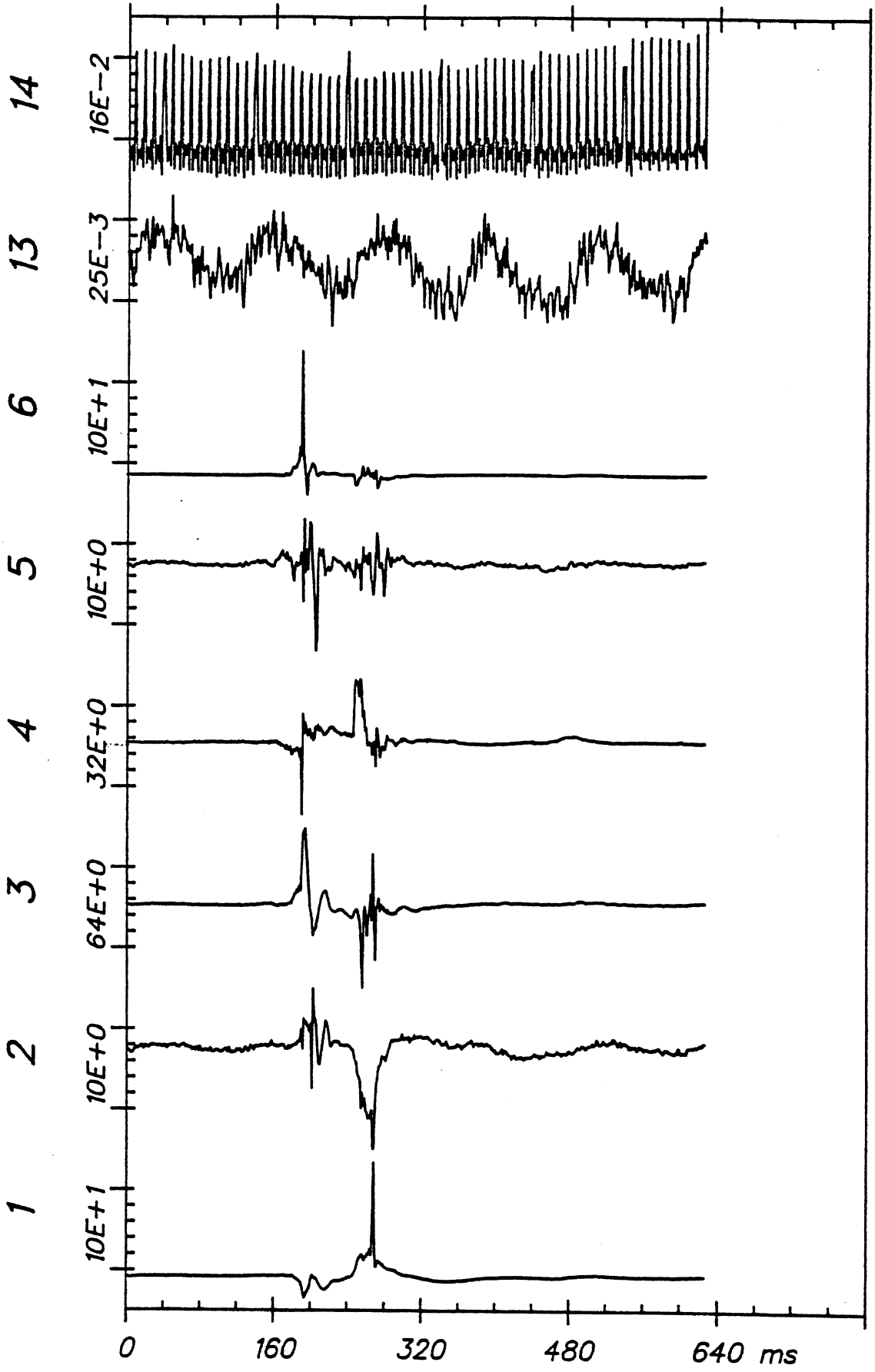
PEAKS



L-3

From HSRI-175 to 81-SORT, file 177: /1/2/3/4/5/6/13/14/

JAN 26, 1982

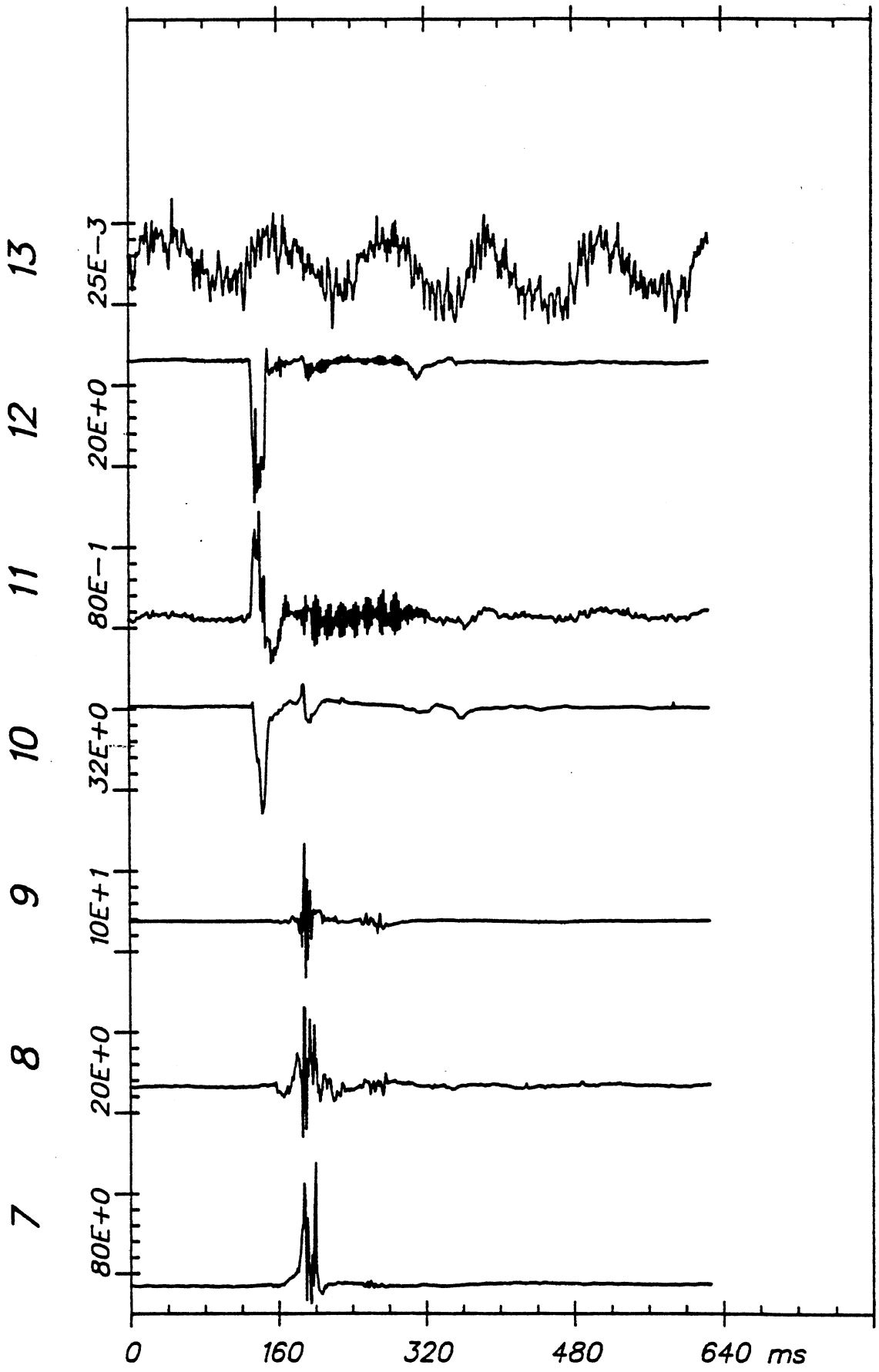


Time Histories

ITA L-3 (1)

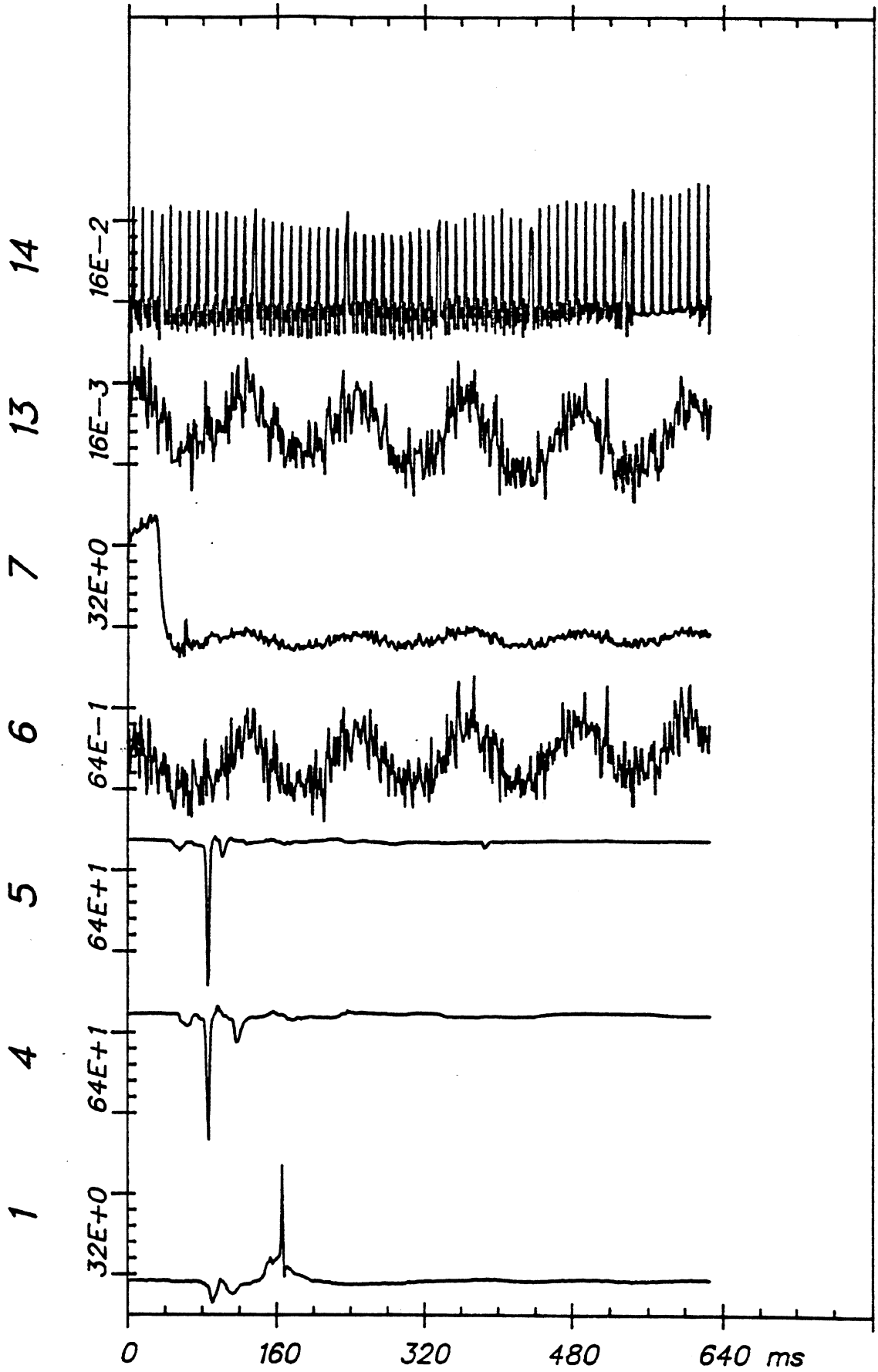
JAN 26, 1982

From HSRI-175 to 81-SORT, file 177: /7/8/9/10/11/12/13/-/



Time Histories

ITA L-3 (1)



Time Histories

ITA L-3 (2)

RE DO W SB		Test No. L-4	S U M M A R Y			
			Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)						
	P-A acc	...	-11	270	241	238
	R-L acc	...	-272	239	290	238
	I-S acc	...	-147	239	333	237
	Resultant	...			405	238
	HIC = 3598	...		237		242

CHEST ACCELERATIONS (G)						
	P-A acc	...	-2	192	77	240
	R-L acc	...	-11	241	5	236
	I-S acc	...	-19	245	16	239
	Resultant	...			79	240

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-9	262	43	219
	R-L acc	...	-7	272	5	189
	I-S acc	...	-35	243	55	241
	Resultant	...			55	241

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-38	159	5	206
	Ay (L-R)	...	-2	149	2	156
	Az (I-S)	...	-24	159	2	166
	Resultant	...			46	159

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	0	0	0	0
	Fy (L-R)	...	0	0	0	0
	Fz (I-S)	...	0	0	0	0
	Resultant	...			0	0

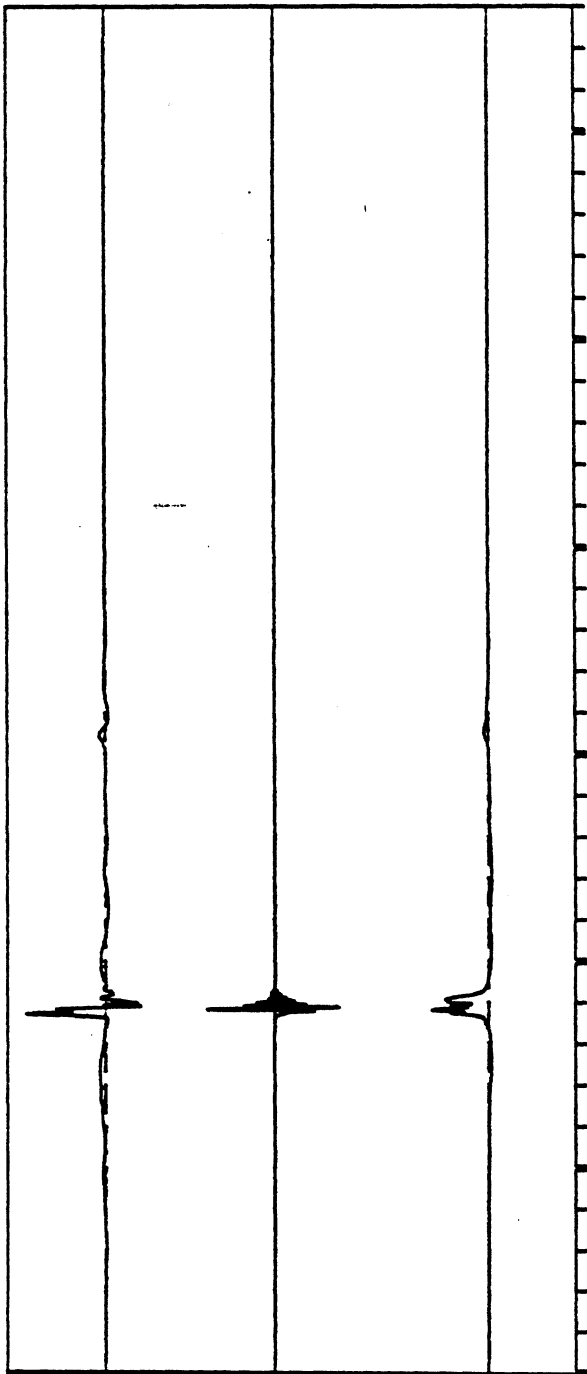
S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	0	0	0	0
	My (L-R)	...	0	0	0	0
	Mz (I-S)	...	0	0	0	0
	Resultant	...			0	0

KNEE & BELTS LOADS (LB)						
	LT Kneec	...	-191	54	164	403
	RT Kneec	...	-107	54	164	80
	LT Belt	...				
	RT Belt	...				

RE DO W SB

FEB 10, 1982

PEAKS



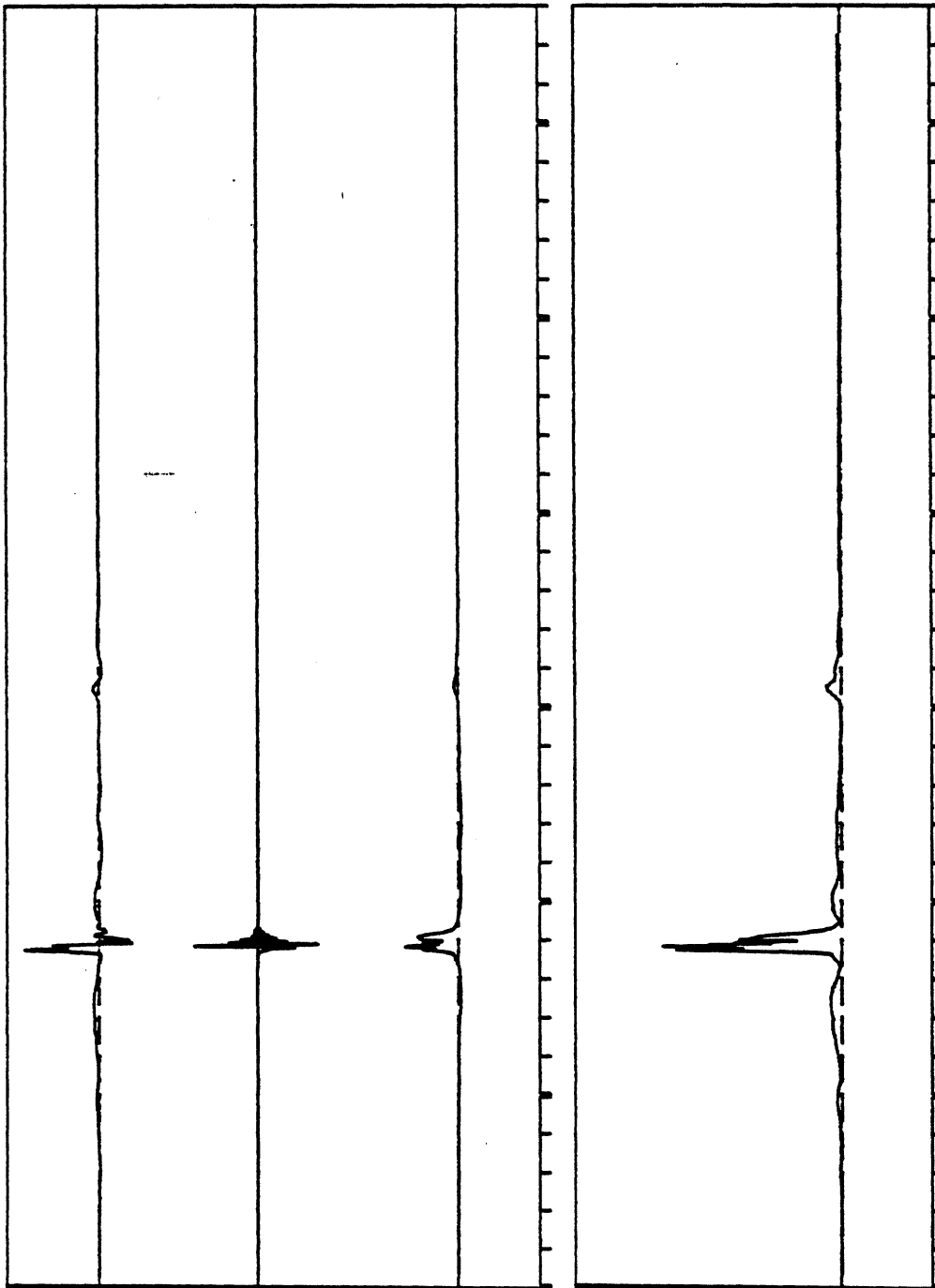
I-S acc 333

R-L acc 289

P-A acc 241

HIC = 3598

Resultant 404



150 200 250 300 350 400 450 msec

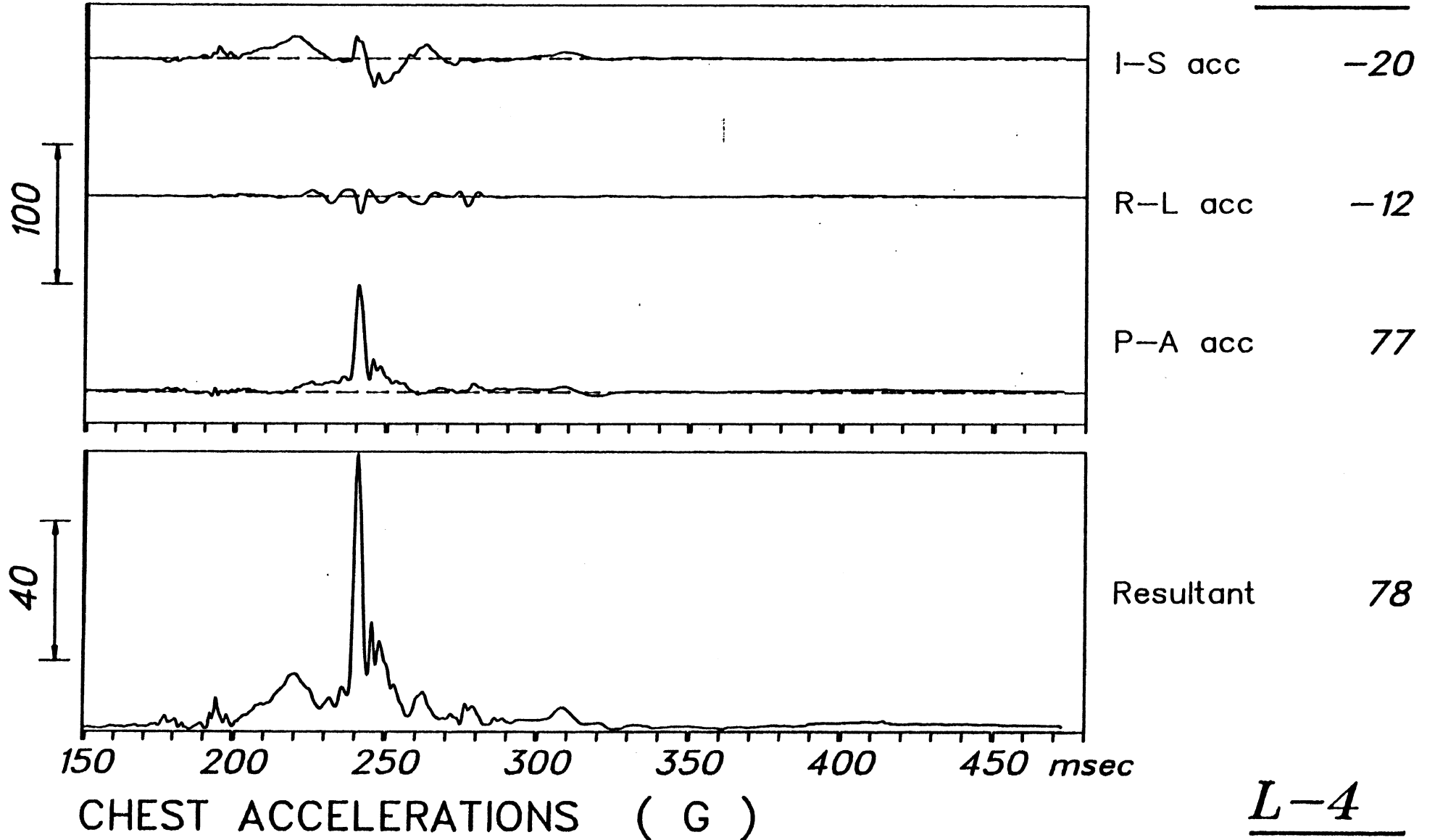
HEAD ACCELERATIONS (G)

L-4

RE DO W SB

FEB 10, 1982

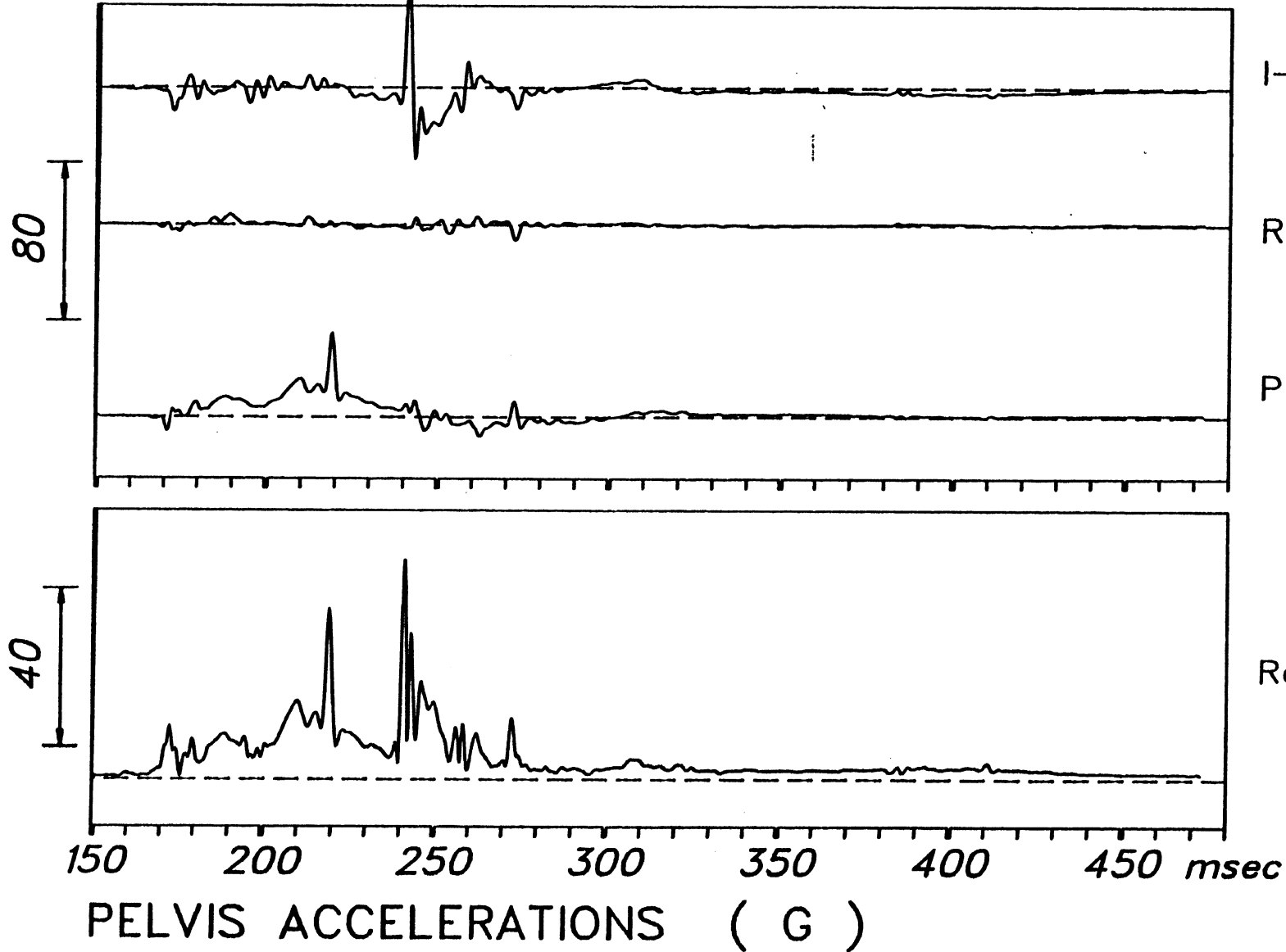
PEAKS



RE DO W SB

FEB 10, 1982

PEAKS

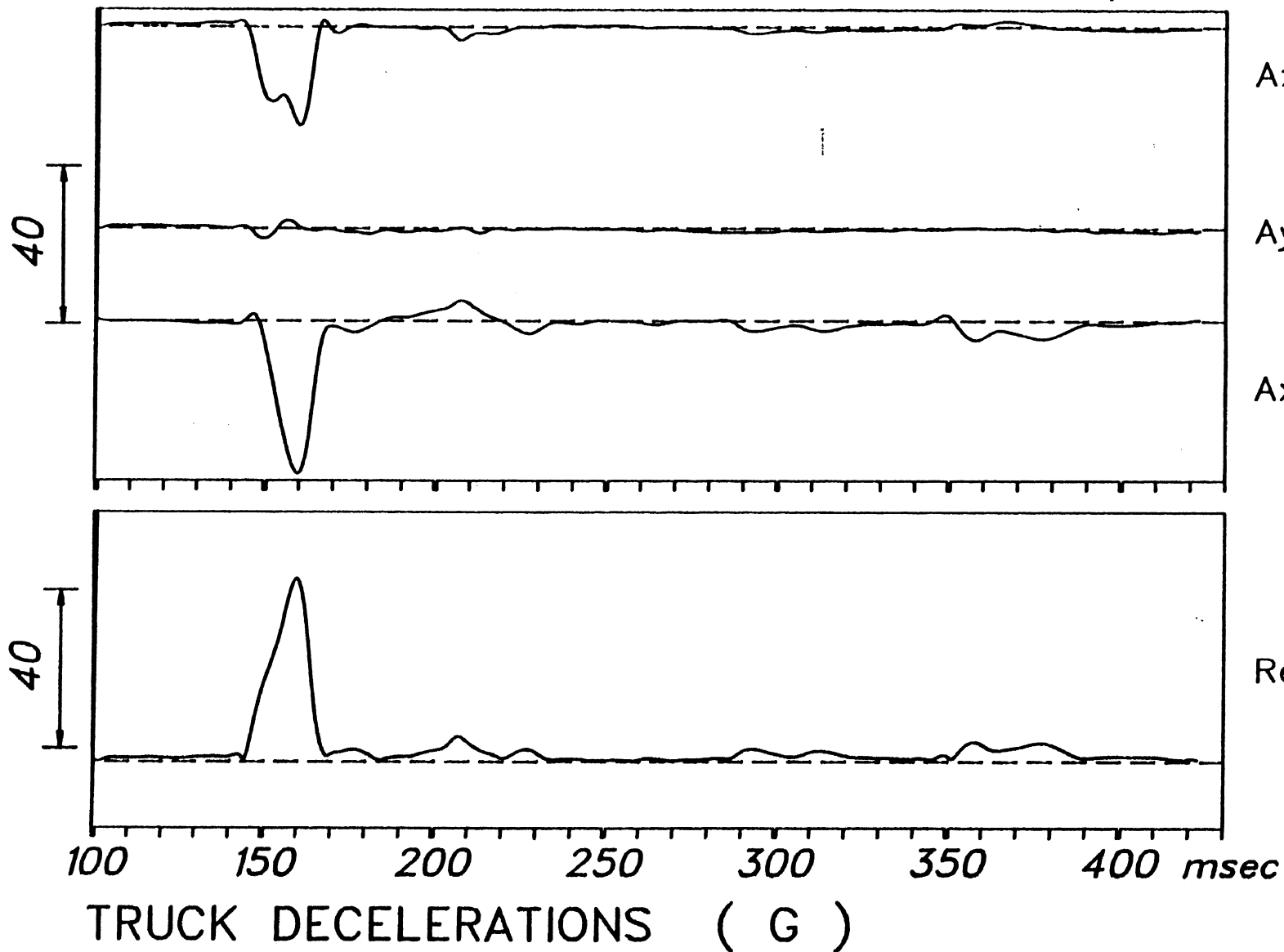


L-4

RE DO W SB

FEB 10, 1982

PEAKS

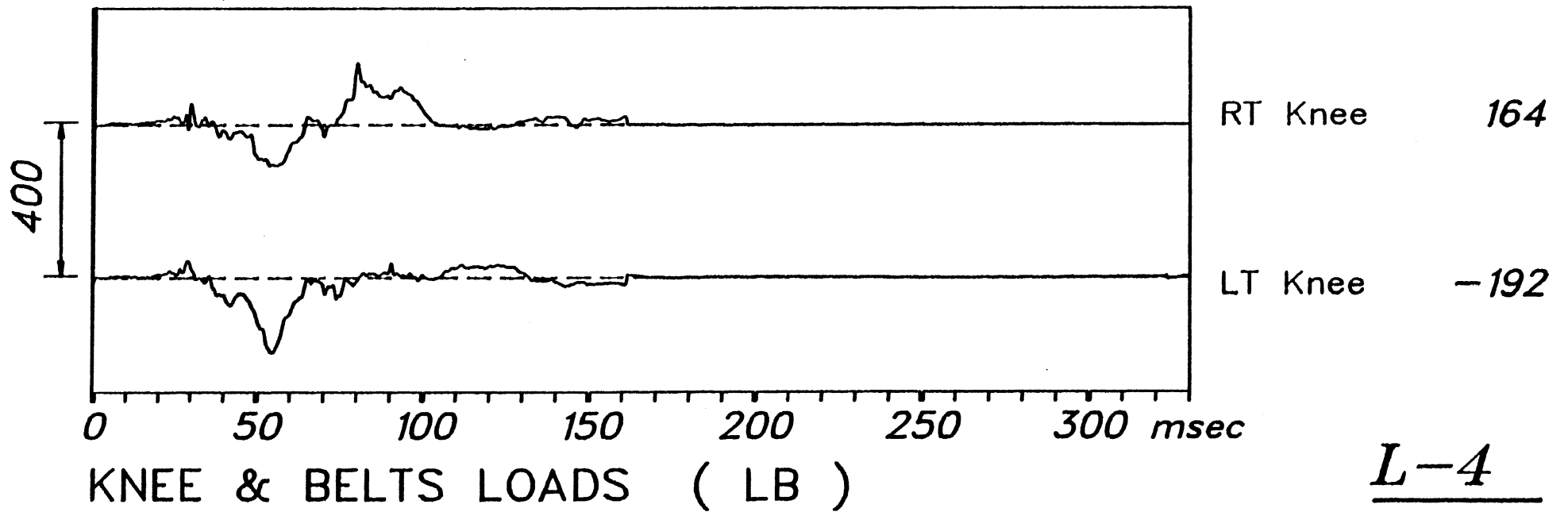


L-4

RE DO W SB

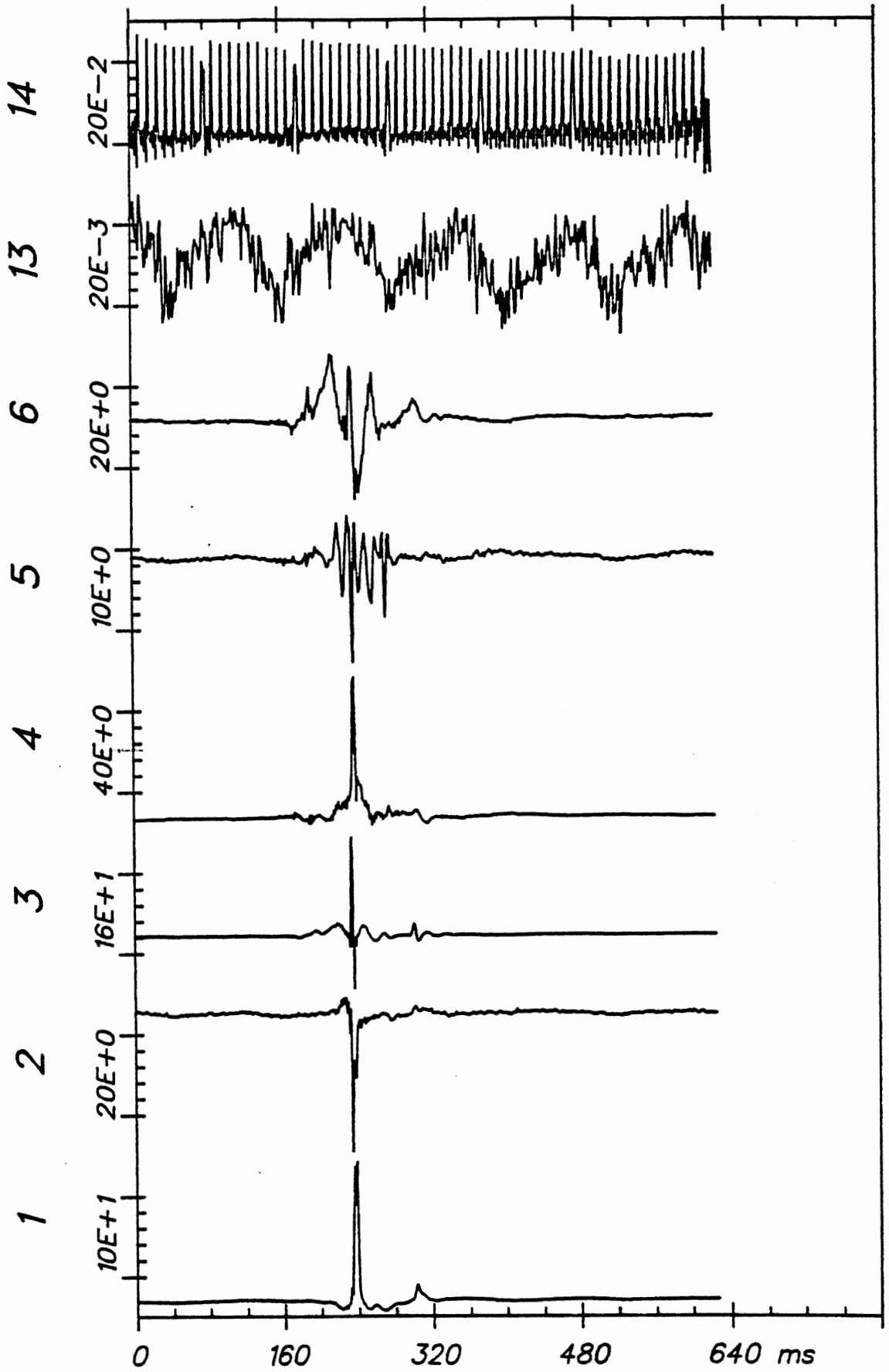
FEB 10, 1982

PEAKS



JAN 26, 1982

From HSRI-175 to 81-SORT, file 178: /1/2/3/4/5/6/13/14/

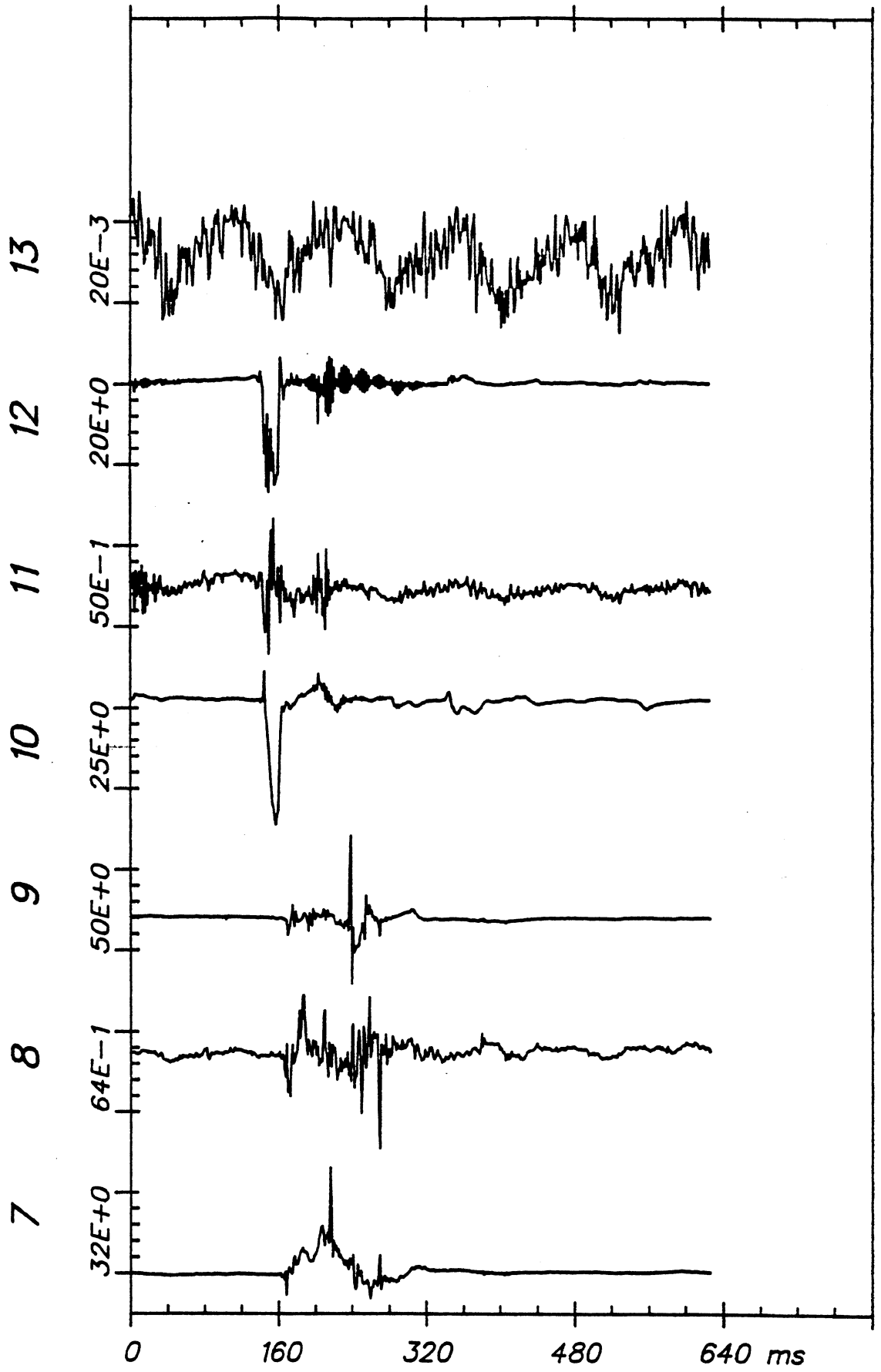


Time Histories

ITA L-4 (1)

JAN 26, 1982

From HSRI-175 to 81-SORT, file 178: /7/8/9/10/11/12/13/-/-/

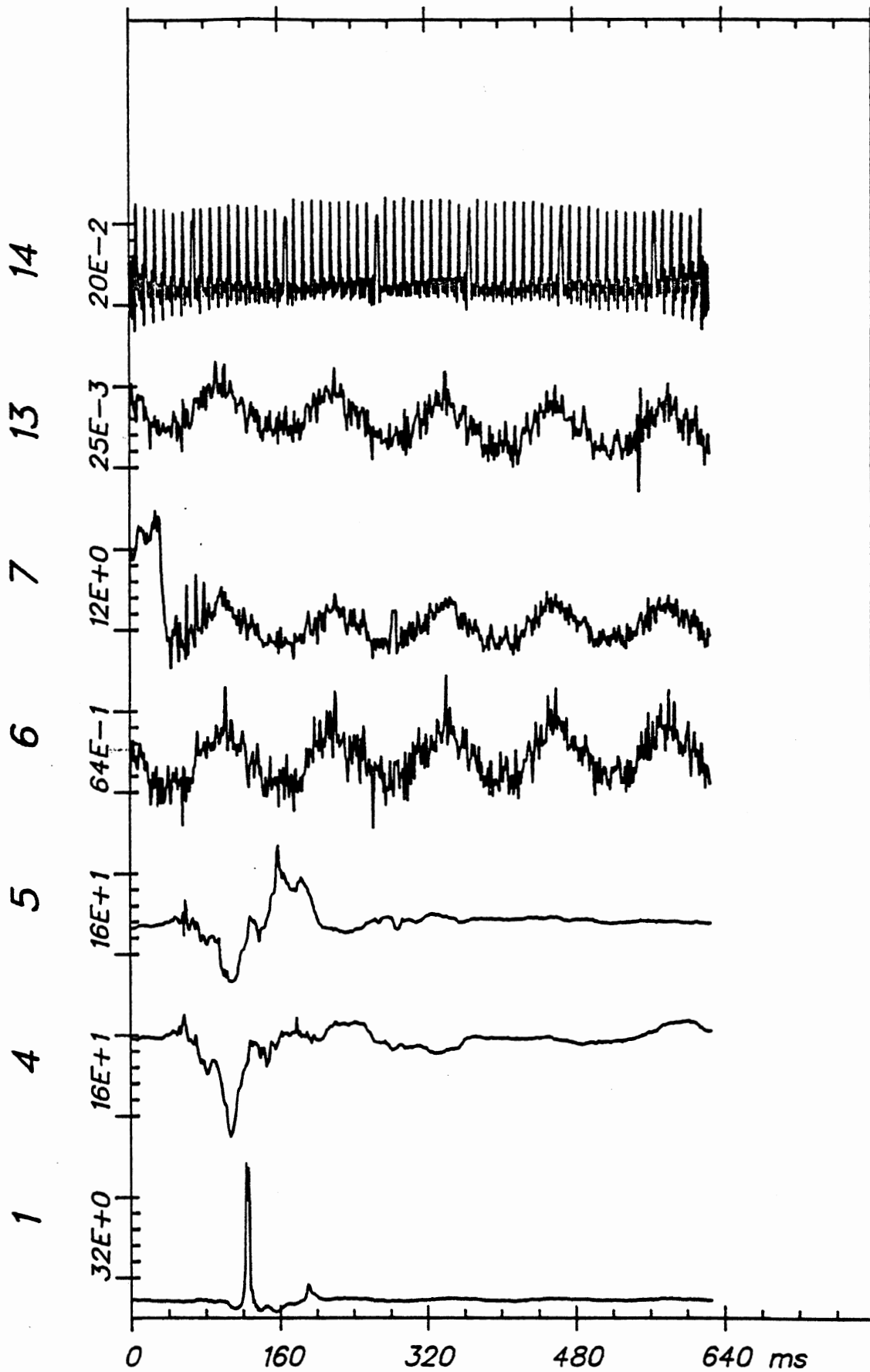


Time Histories

ITA L-4 (1)

JAN 26, 1982

From HSRI-176 to 81-SORT, file 191: /1/4/5/6/7/13/14/-/-/



Time Histories

ITA L-4 (2)

RE DO W SB	Test No. L-5	S U M M A R Y				
		Min @ msec		Max @ msec		

HEAD ACCELERATIONS (G)						
	P-A acc	...	0	0	0	0
	R-L acc	...	0	0	0	0
	I-S acc	...	0	0	0	0
	Resultant	...			0	0
	HIC =	0	...	0		0

CHEST ACCELERATIONS (G)						
	P-A acc	...	0	0	0	0
	R-L acc	...	0	0	0	0
	I-S acc	...	0	0	0	0
	Resultant	...			0	0

PELVIS ACCELERATIONS (G)						
	P-A acc	...	0	0	0	0
	R-L acc	...	0	0	0	0
	I-S acc	...	0	0	0	0
	Resultant	...			0	0

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	0	0	0	0
	Ay (L-R)	...	0	0	0	0
	Az (I-S)	...	0	0	0	0
	Resultant	...			0	0

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	0	0	0	0
	Fy (L-R)	...	0	0	0	0
	Fz (I-S)	...	0	0	0	0
	Resultant	...			0	0

S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	0	0	0	0
	My (L-R)	...	0	0	0	0
	Mz (I-S)	...	0	0	0	0
	Resultant	...			0	0

KNEE & BELT LOADS (LB)						
	LT Knee	...	-153	197	102	238
	RT Knee	...	-128	206	61	269
	LT Belt	...				
	RT Belt	...				

RE DO W SB

FEB 10, 1982

PEAKS

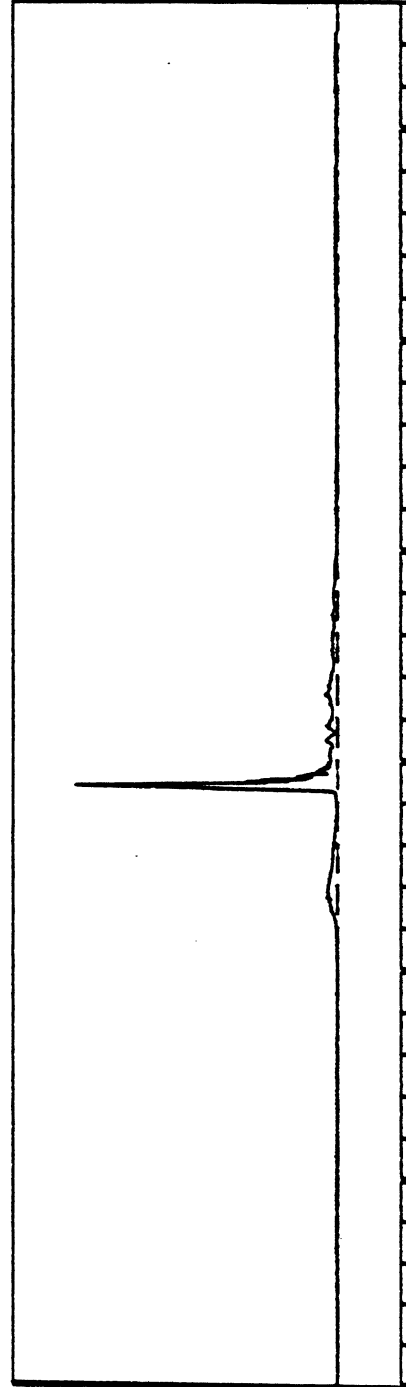
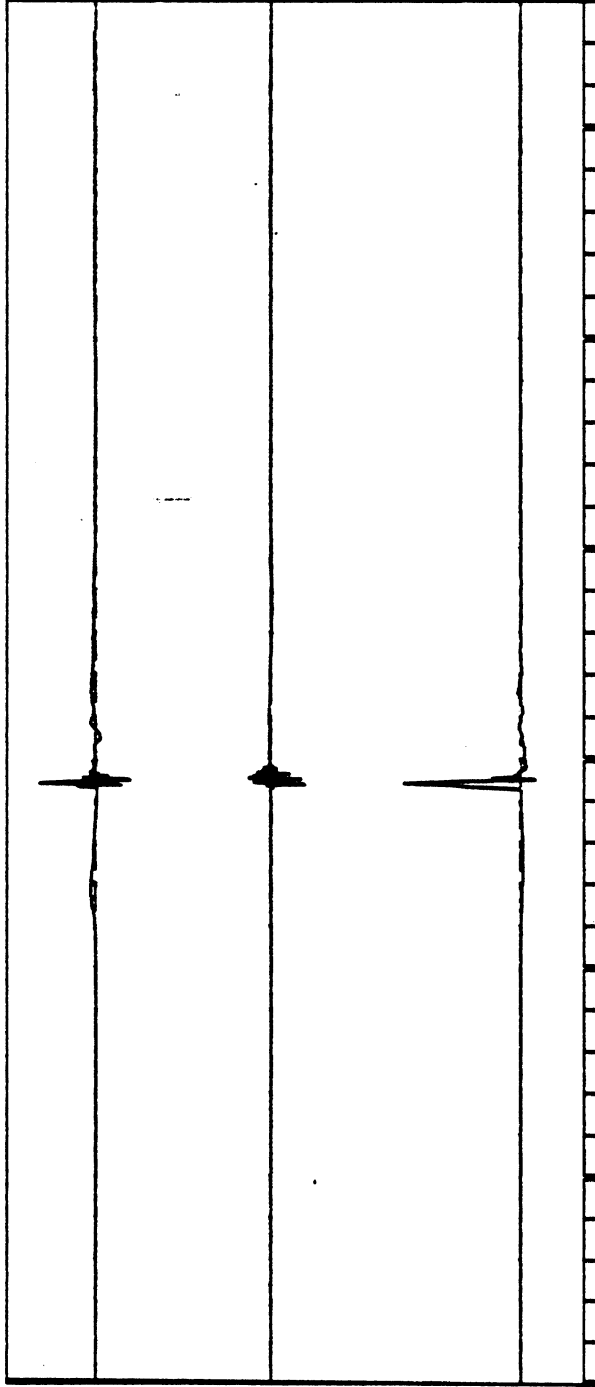
I-S acc 231

R-L acc -140

P-A acc 486

HIC = 2883

Resultant 539



150 200 250 300 350 400 450 msec

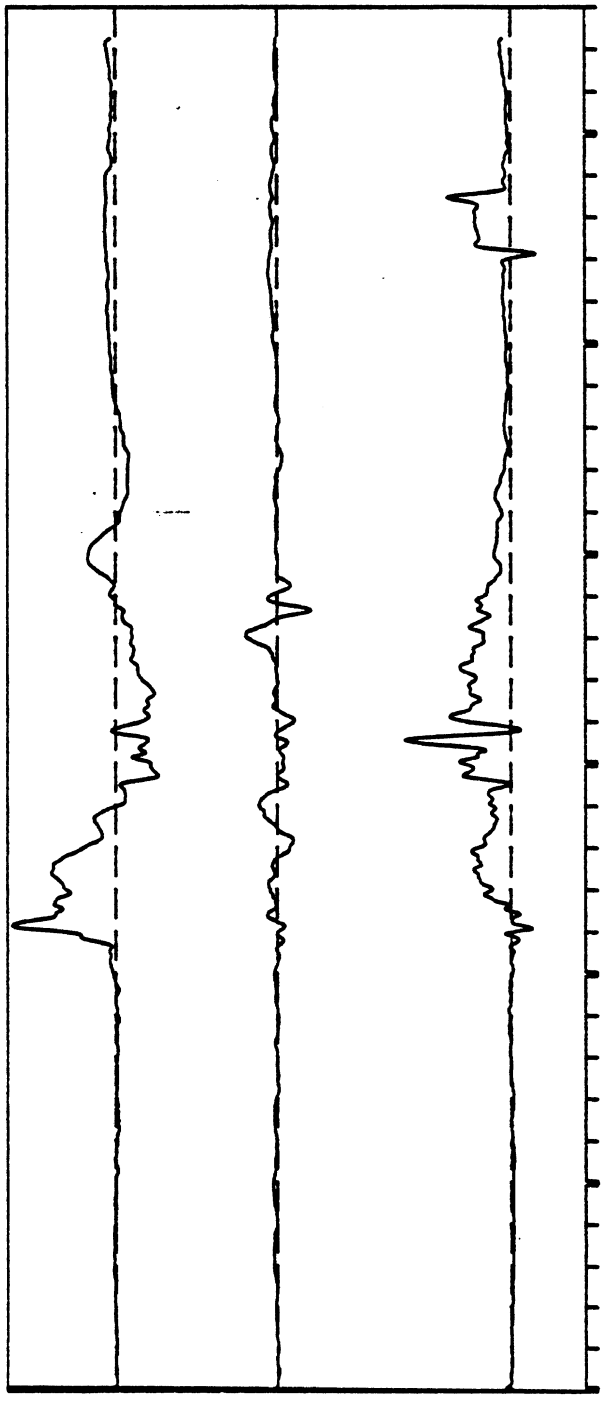
HEAD ACCELERATIONS (G)

L-5

RE DO W SB

FEB 10, 1982

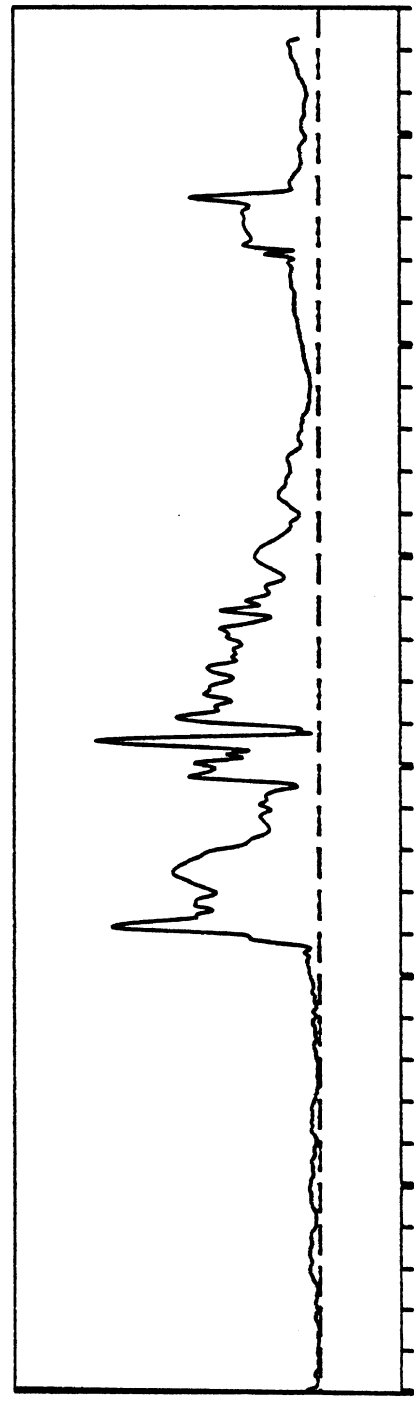
PEAKS



21

-7

22



23

150 200 250 300 350 400 450 msec

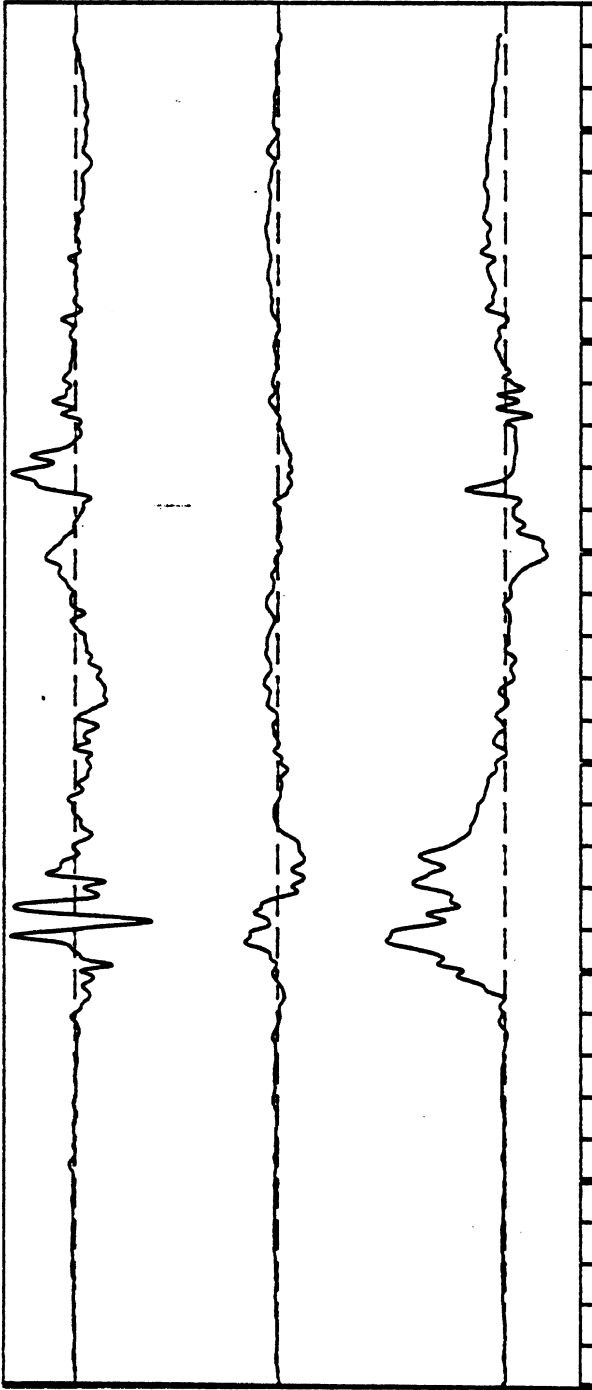
CHEST ACCELERATIONS (G)

L-5

RE DO W SB

FEB 10, 1982

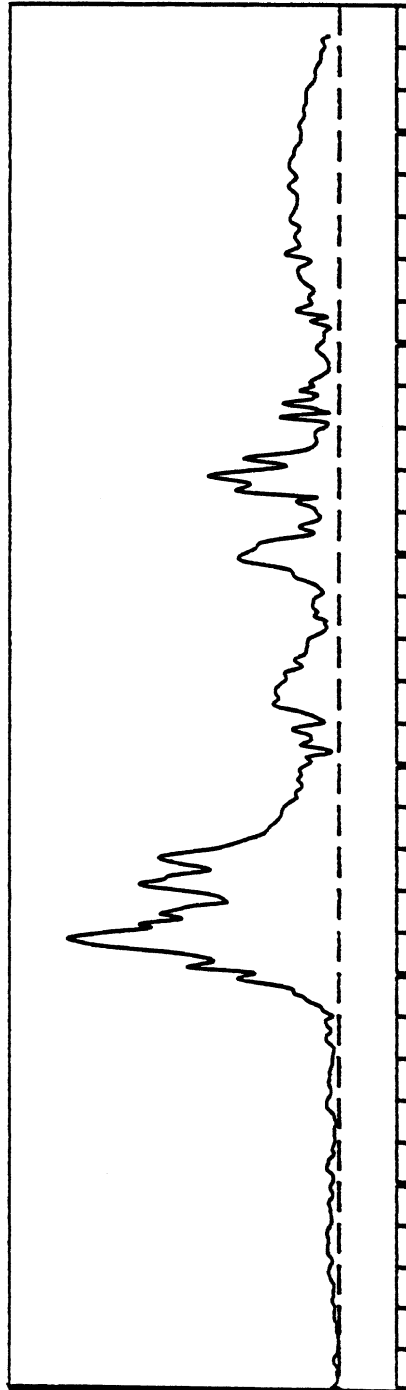
PEAKS



-16

7

24



Resultant 28

150 200 250 300 350 400 450 msec

PELVIS ACCELERATIONS (G)

L-5

RE DO W SB

FEB 10, 1982

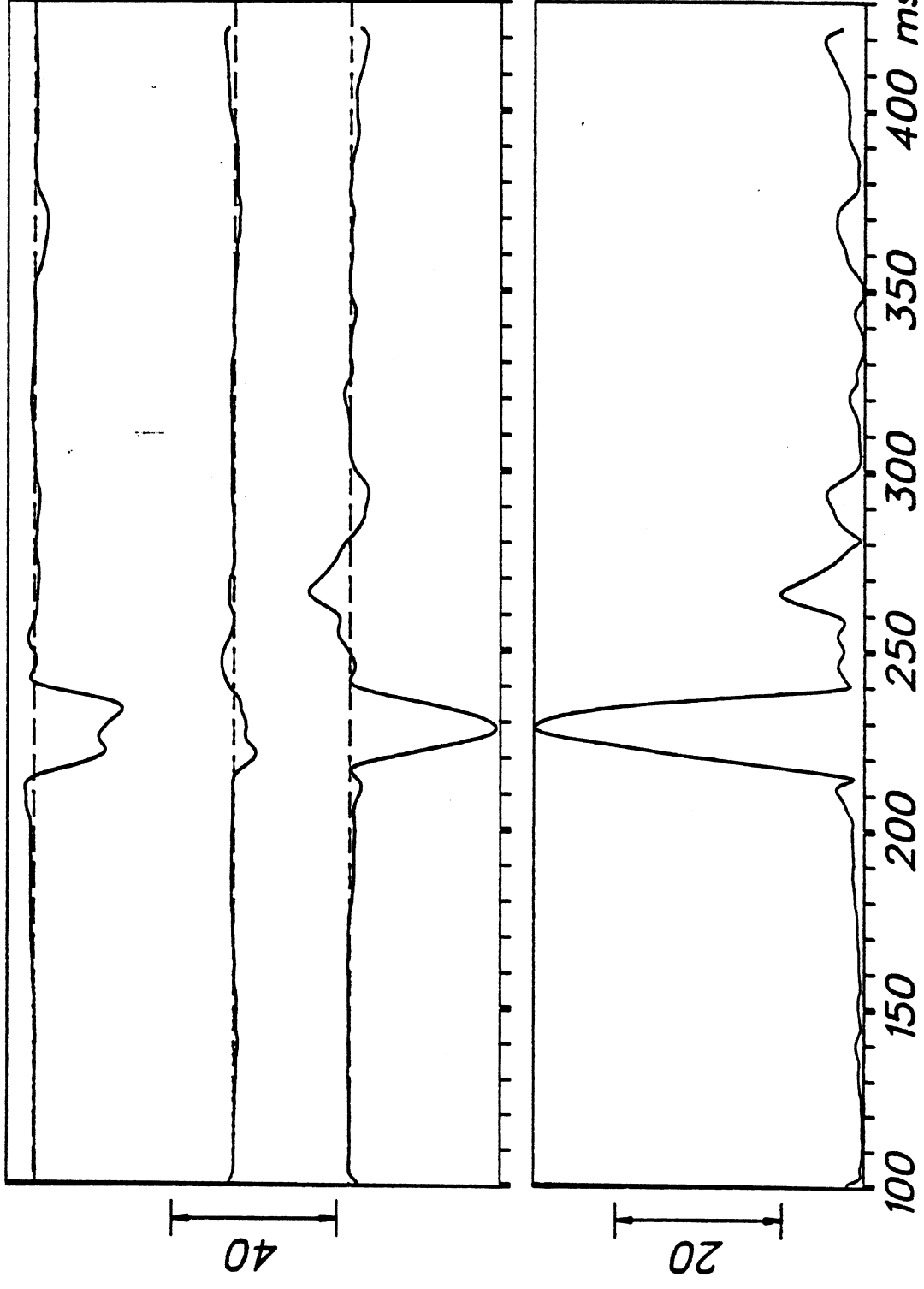
PEAKS

Az (I-S) -21

Ay (L-R) -5

Ax (A-P) -36

Resultant 39

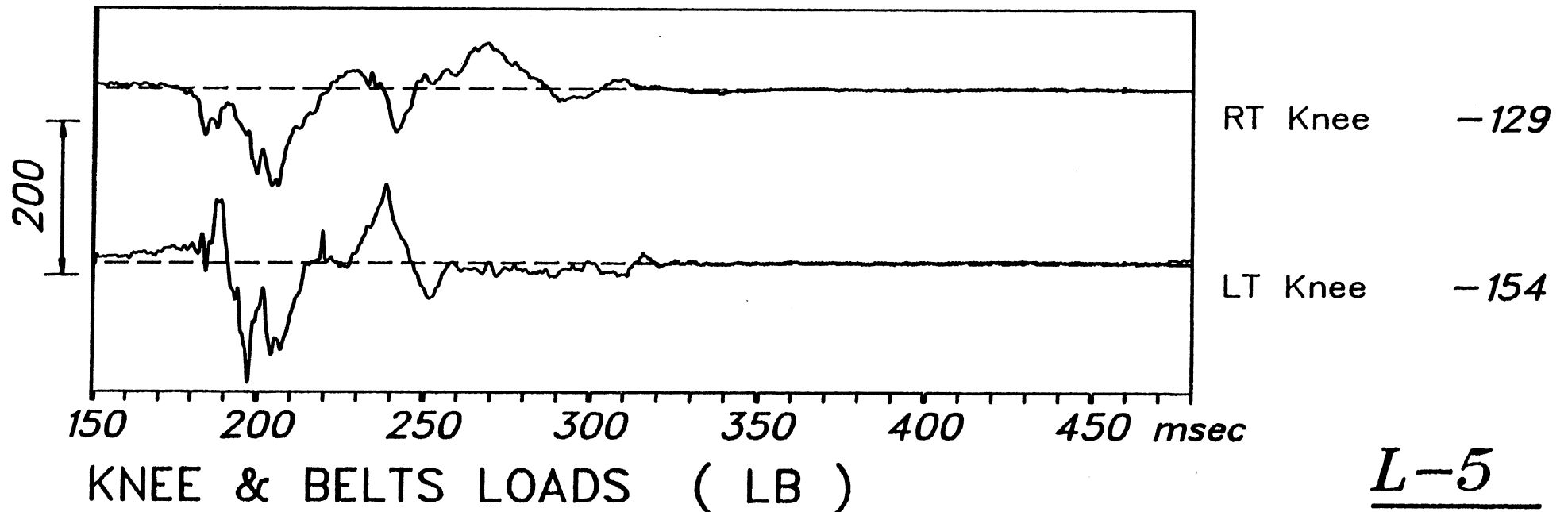


L-5

RE DO W SB

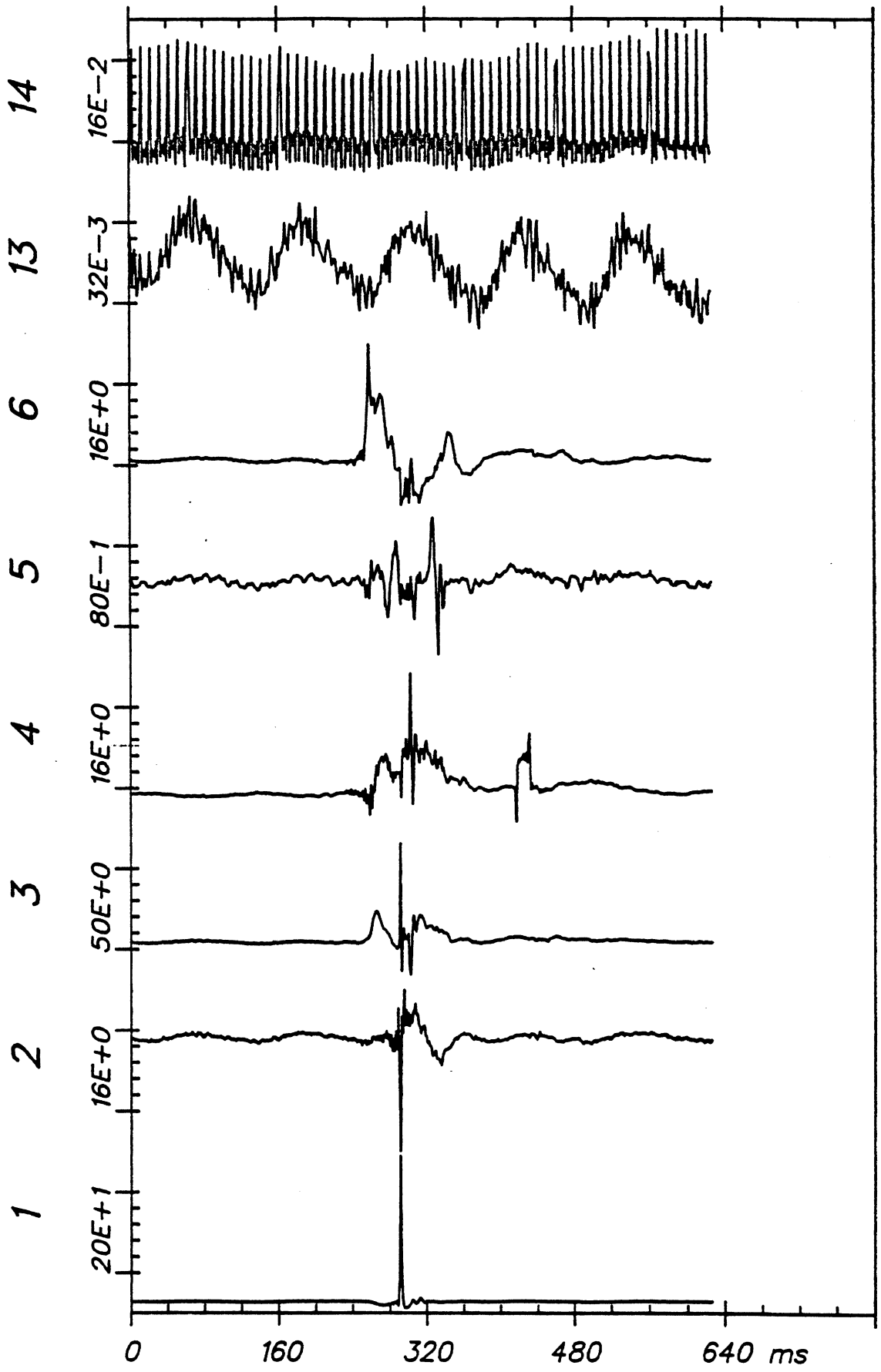
FEB 10, 1982

PEAKS



From HSRI-175 to 81-SORT, file 182: /1/2/3/4/5/6/13/14/

JAN 26, 1982

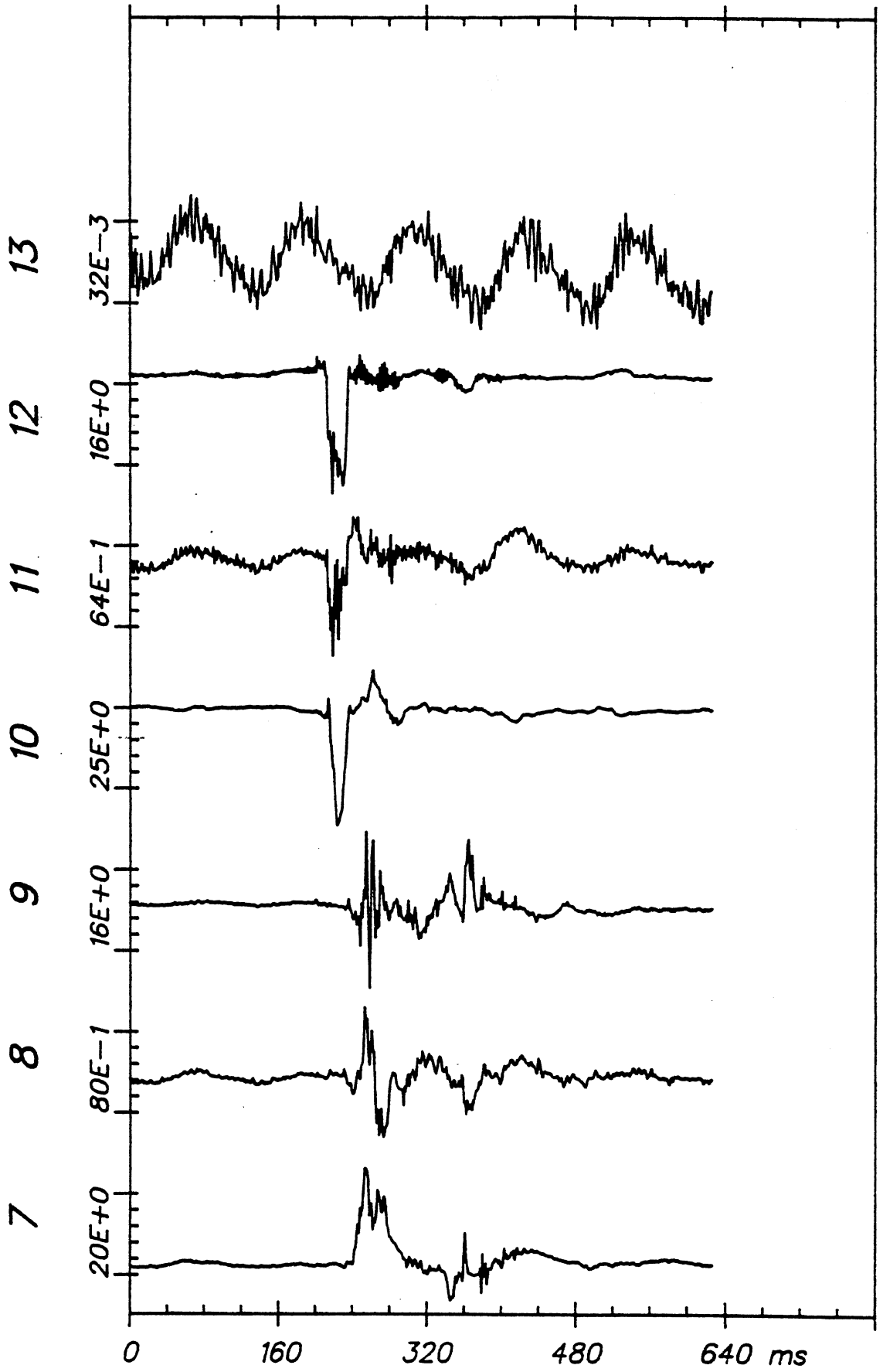


Time Histories

ITA L-5 (1)

JAN 26, 1982

From HSRI-175 to 81-SORT, file 182: /7/8/9/10/11/12/13/-/

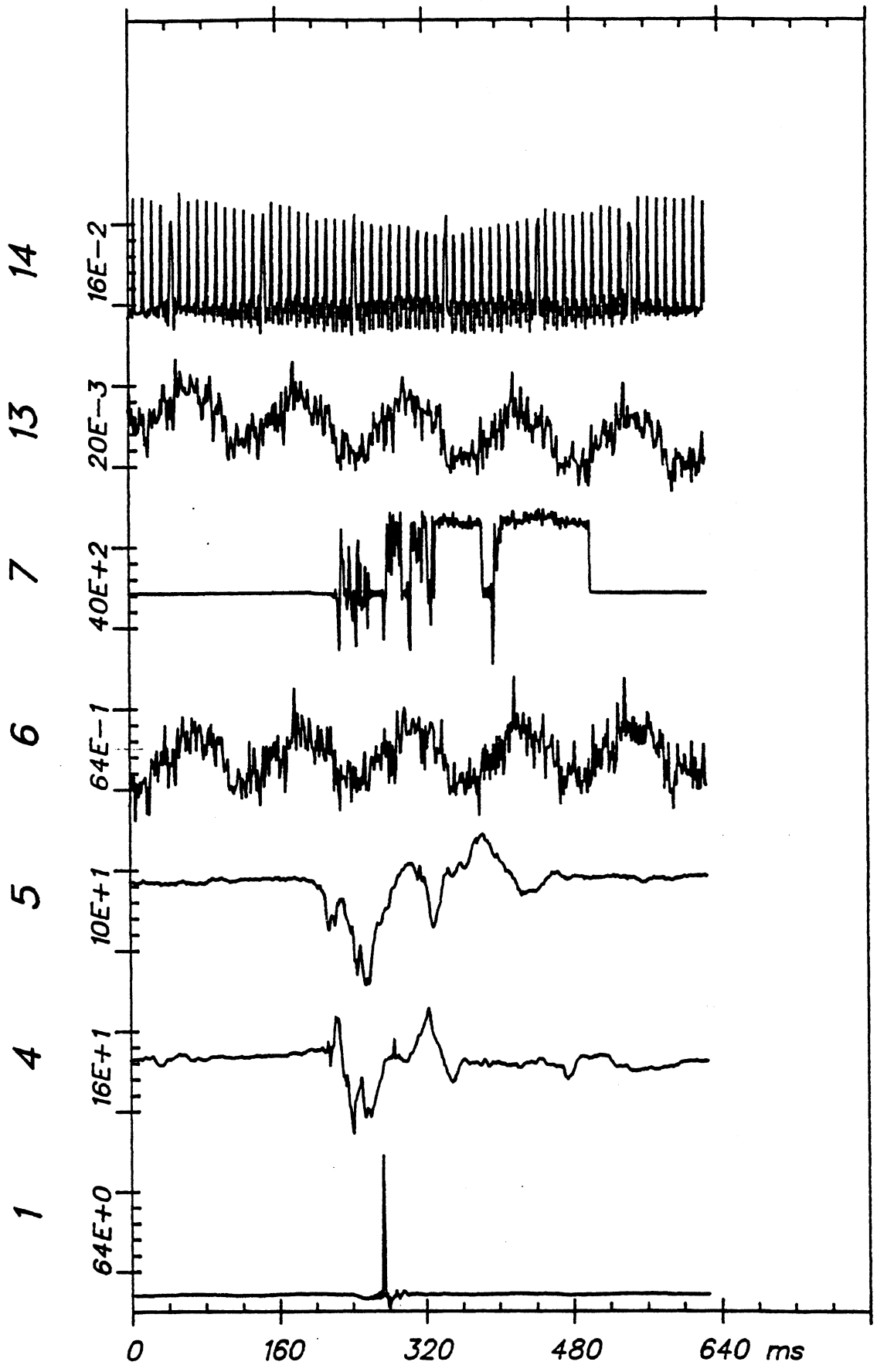


Time Histories

ITA L-5 (1)

JAN 26, 1982

From HSRI-176 to 81-SORT, file 195: /1/4/5/6/7/13/14/-/-/



Time Histories

ITA L-5 (2)

BE DO W SP		Test No. M-1	S U M M A R Y			
			Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)						
	P-A acc	...	-48	323	570	322
	R-L acc	...	-355	322	129	322
	I-S acc	...	-208	321	291	322
	Resultant	...			676	322
	HIC = 7657	...		321		322

CHEST ACCELERATIONS (G)						
	P-A acc	...	-6	323	13	283
	R-L acc	...	-1	347	4	282
	I-S acc	...	-13	328	24	281
	Resultant	...			25	281

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-6	377	65	276
	R-L acc	...	-3	271	19	276
	I-S acc	...	-42	275	31	277
	Resultant	...			70	275

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-41	213	11	247
	Ay (L-R)	...	0	203	3	211
	Az (I-S)	...	-30	209	2	198
	Resultant	...			50	213

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	0	0	0	0
	Fy (L-R)	...	0	0	0	0
	Fz (I-S)	...	0	0	0	0
	Resultant	...			0	0

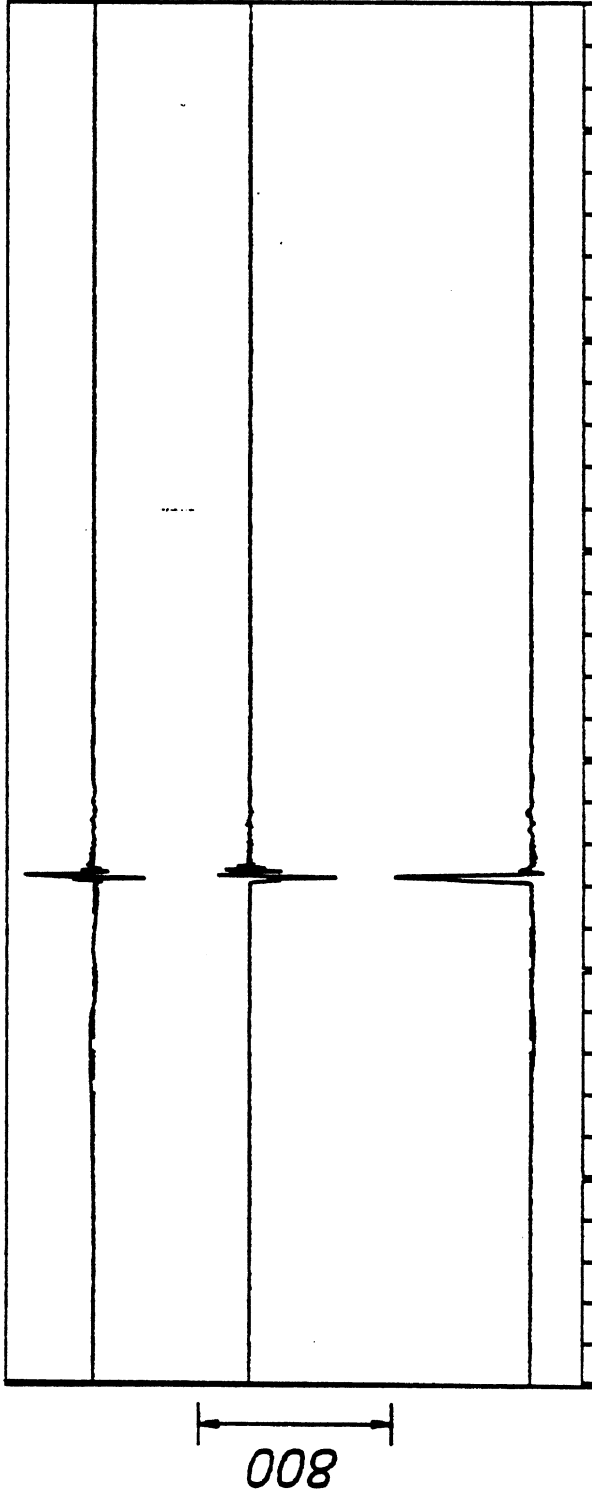
S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	0	0	0	0
	My (L-R)	...	0	0	0	0
	Mz (I-S)	...	0	0	0	0
	Resultant	...			0	0

KNEE & BELTS LOADS (LB)						
	LT Knee	...	-512	109	36	180
	RT Knee	...	-427	109	31	175
	LT Belt	...				
	RT Belt	...	-7	225	78	62

RE DO W SB

FEB 10, 1982

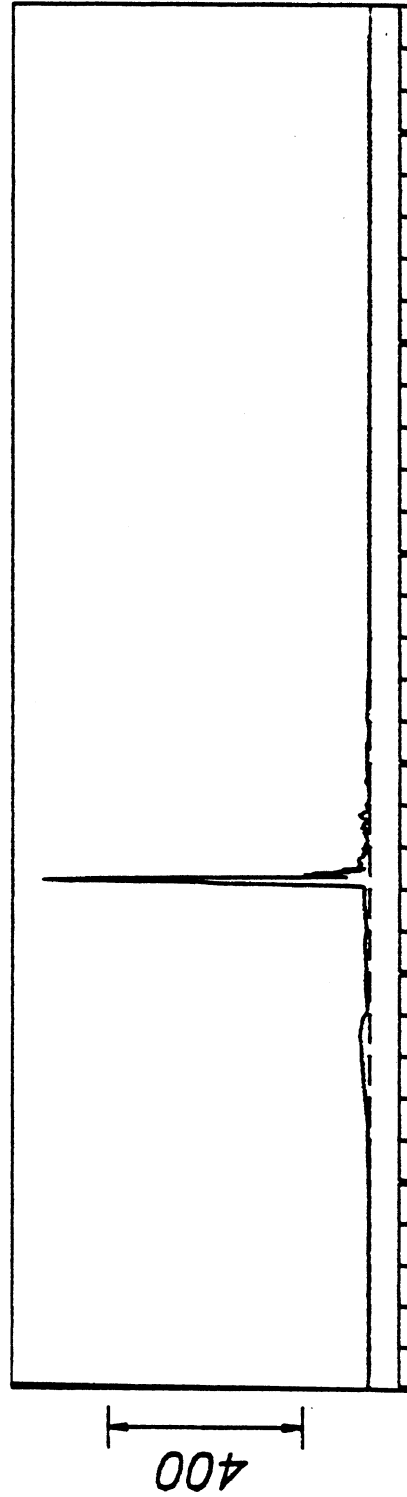
PEAKS



I-S acc 291

R-L acc -356

P-A acc 569



HIC = 7657

Resultant 676

M-1

HEAD ACCELERATIONS (G)

RE DO W SB

FEB 10, 1982

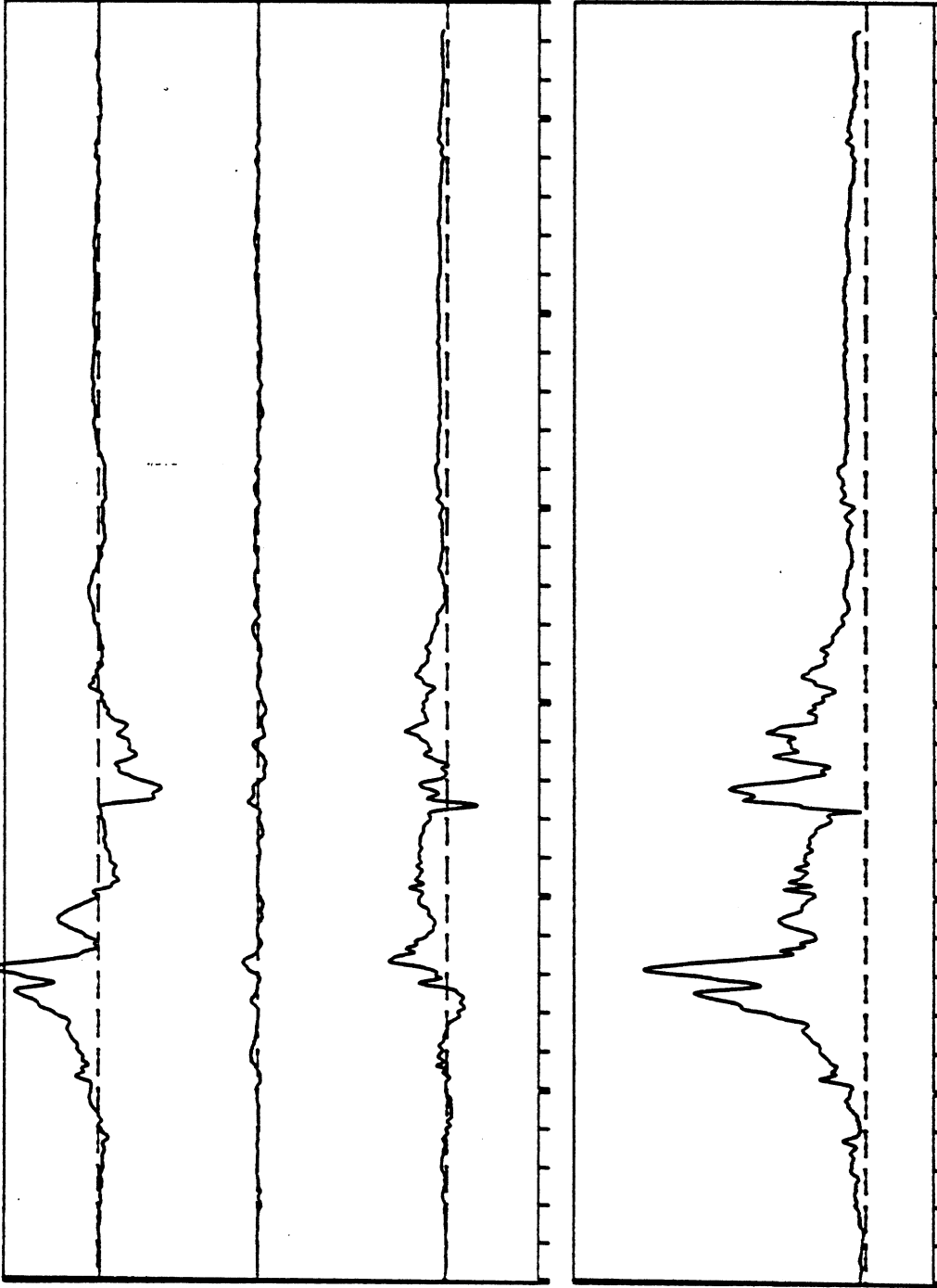
PEAKS

I-S acc 24

R-L acc 3

P-A acc 13

Resultant 24



200 250 300 350 400 450 500 msec

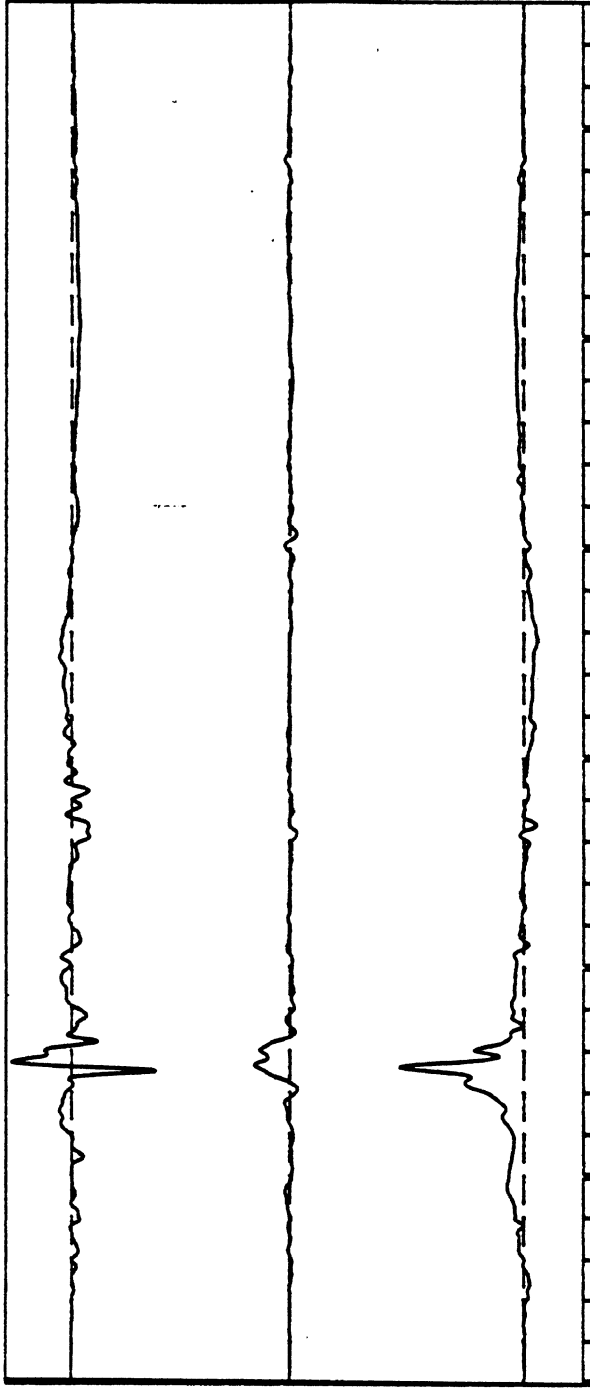
CHEST ACCELERATIONS (G)

M-1

RE DO W SB

FEB 10, 1982

PEAKS

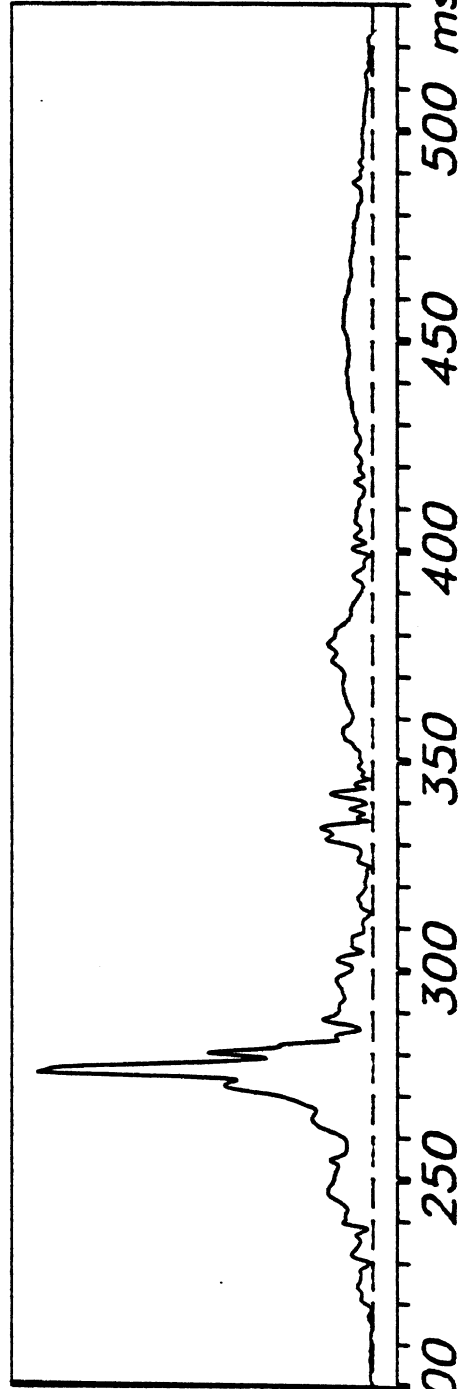


I-S acc -43

R-L acc 18

P-A acc 64

Resultant 69



200 250 300 350 400 450 500 msec

PELVIS ACCELERATIONS (G)

M-1

RE DO W SB

FEB 10, 1982

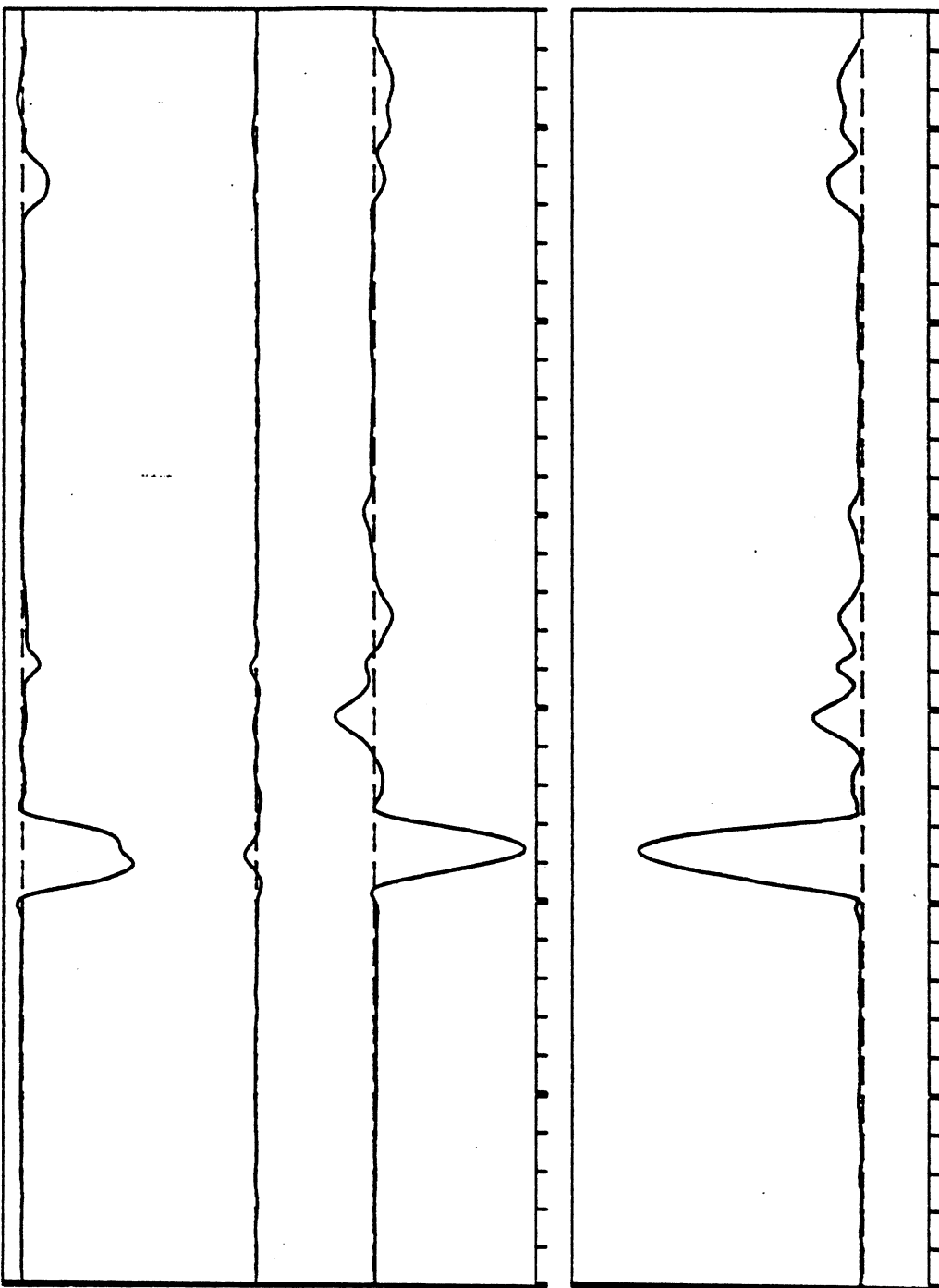
PEAKS

Az (I-S) -31

Ay (L-R) 3

Ax (A-P) -42

Resultant 50



50

40

100 150 200 250 300 350 400 msec

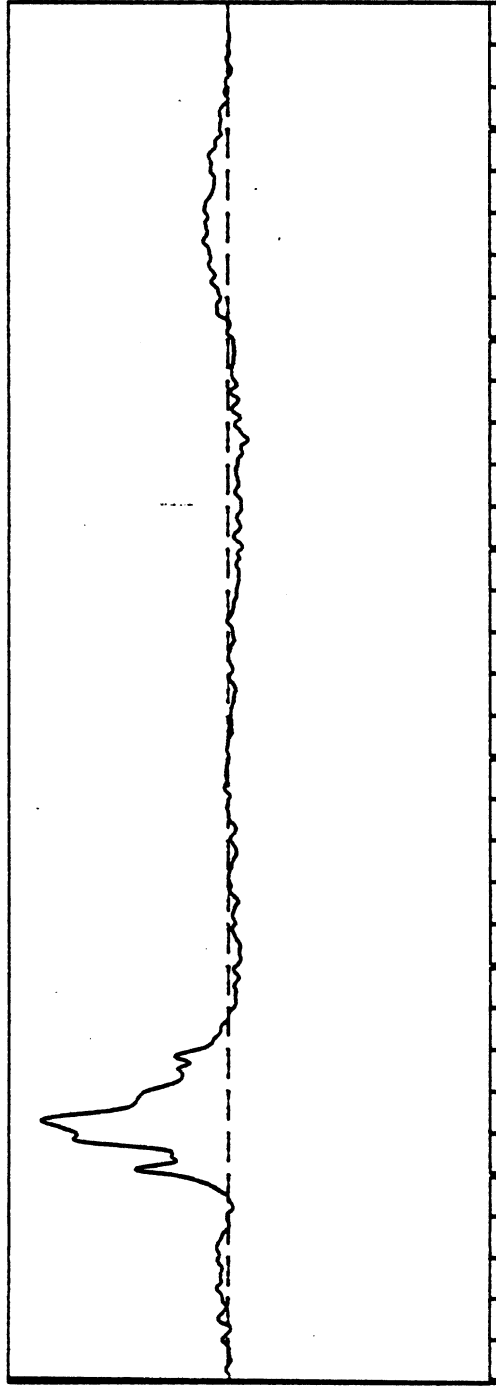
TRUCK DECELERATIONS (G)

M-1

RE DO W SB

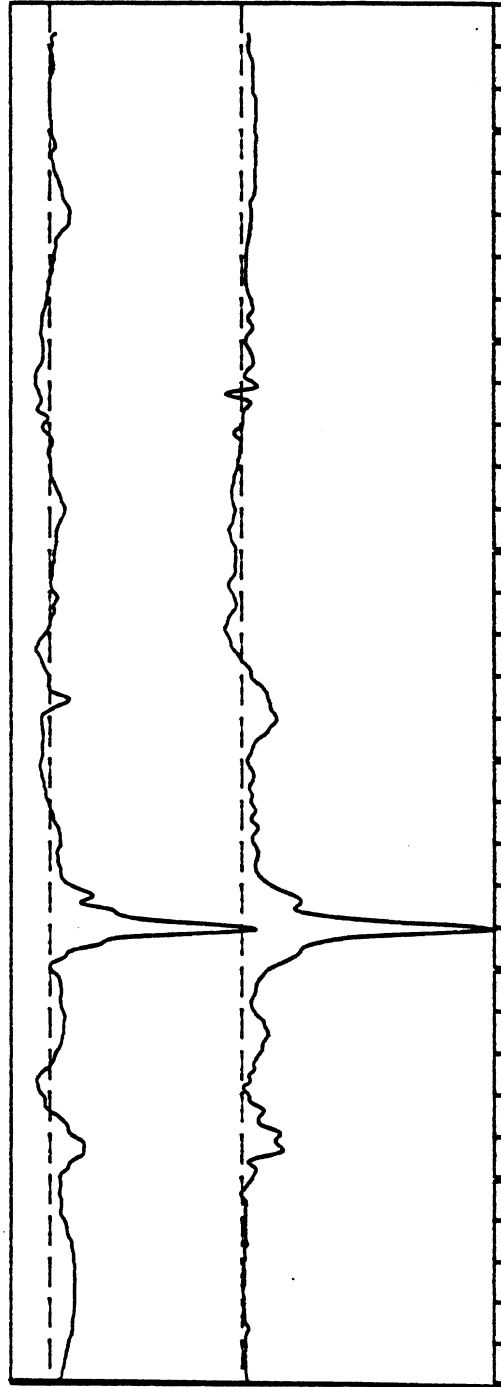
FEB 10, 1982

PEAKS



RT Belt

77



RT Knee

-428

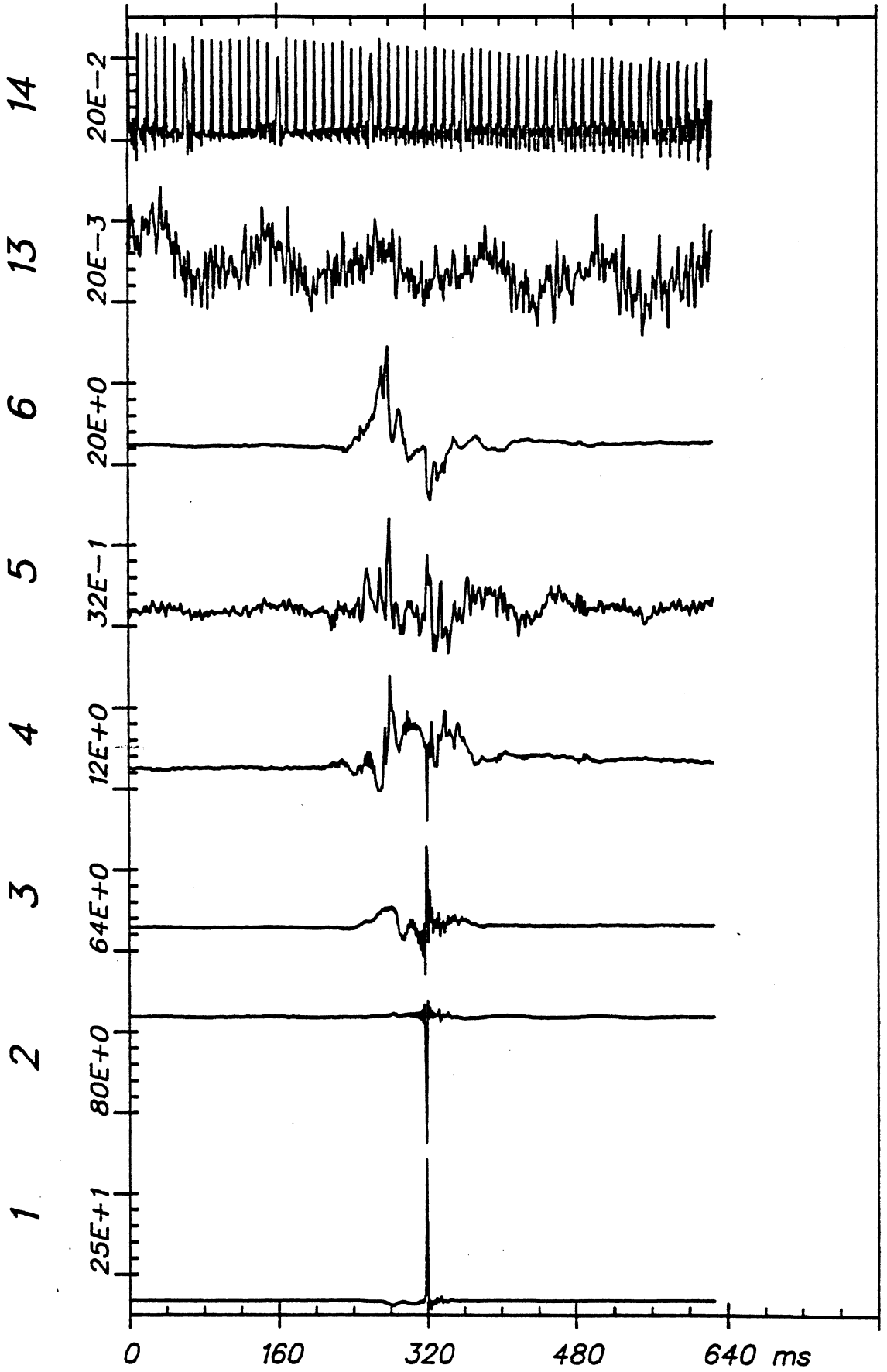
LT Knee

-513

0 50 100 150 200 250 300 msec

KNEE & BELTS LOADS (LB)

M-1

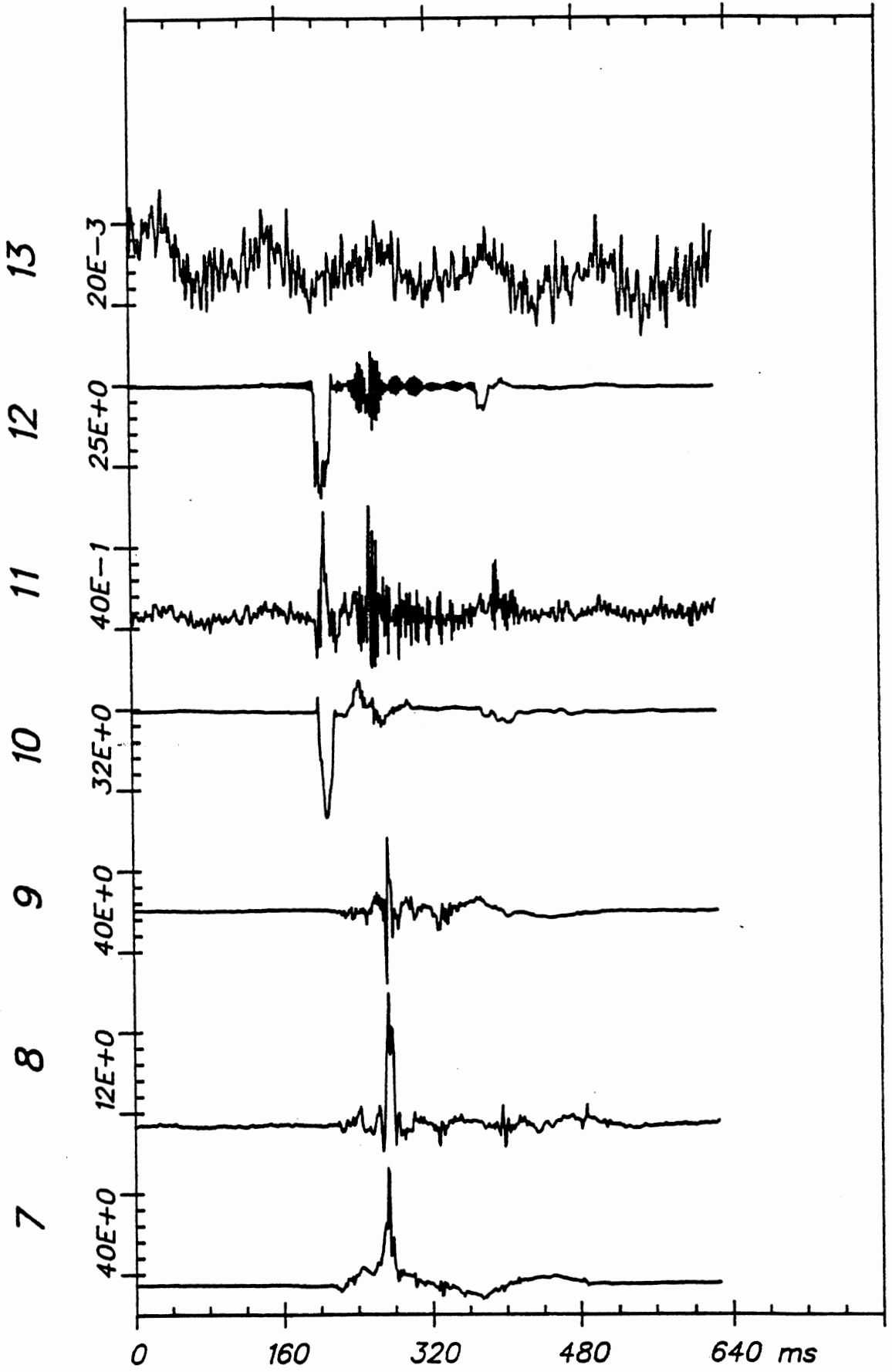


Time Histories

ITA M-1 (1)

JAN 26, 1982

From HSRI-175 to 81-SORT, file 179: /7/8/9/10/11/12/13/-/-/

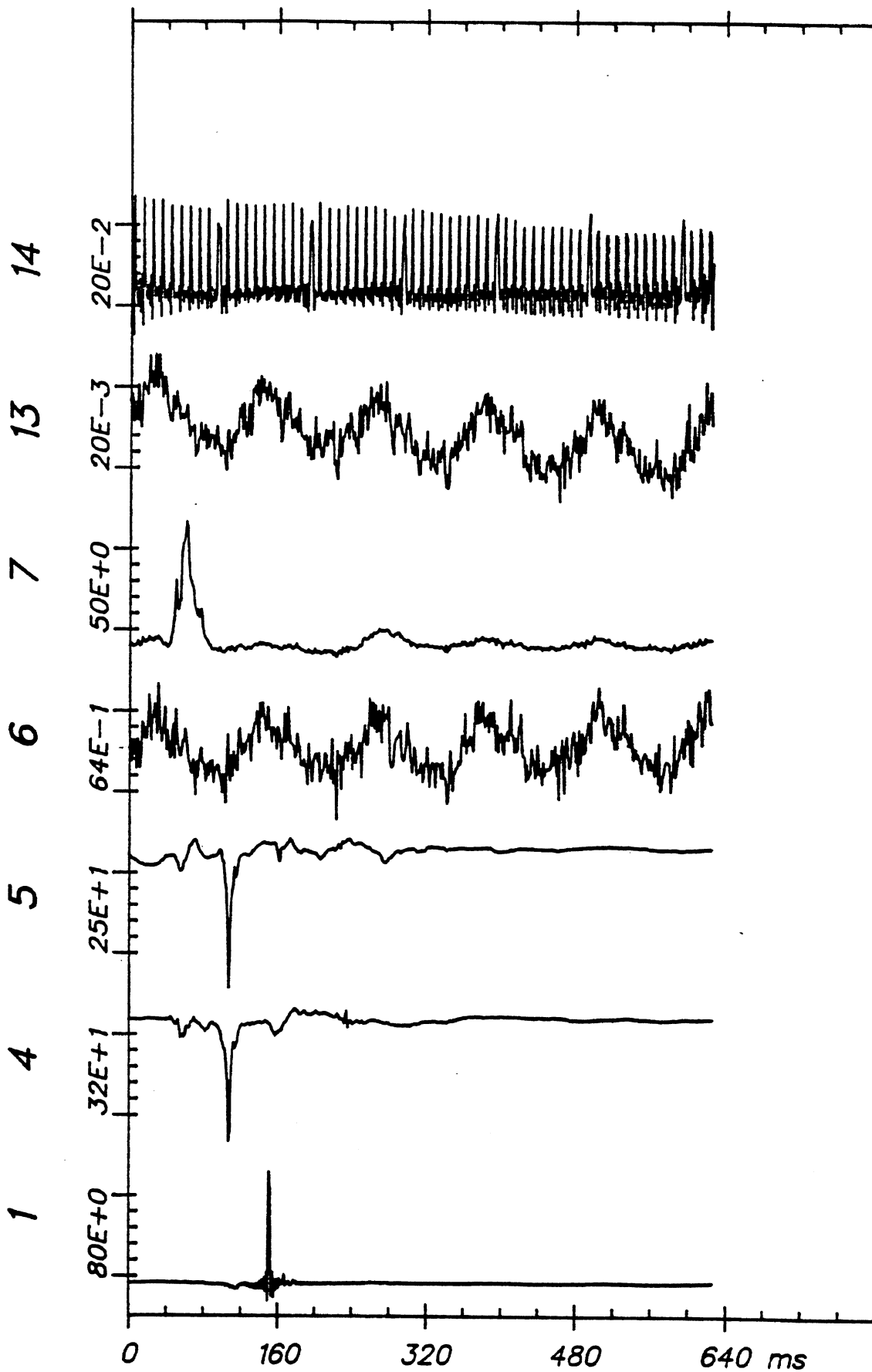


Time Histories

ITA M-1 (1)

JAN 26, 1982

From HSRI-176 to 81-SORT, file 192: /1/4/5/6/7/13/14/--/



Time Histories

ITA M-1 (2)

RE DO W SB		Test No. M-2	S U M M A R Y			
			Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)						
	P-A acc	...	-23	265	557	261
	R-L acc	...	-233	260	90	261
	I-S acc	...	-233	260	358	261
	Resultant	...			631	261
	HIC = 4584	...		259		261

CHEST ACCELERATIONS (G)						
	P-A acc	...	-2	219	18	273
	R-L acc	...	-4	227	4	300
	I-S acc	...	-11	267	16	222
	Resultant	...			19	273

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-7	312	18	214
	R-L acc	...	-6	235	3	189
	I-S acc	...	-7	231	8	216
	Resultant	...			18	214

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-40	162	9	196
	Ay (L-R)	...	-1	165	2	173
	Az (I-S)	...	-25	164	3	146
	Resultant	...			47	163

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	0	0	0	0
	Fy (L-R)	...	0	0	0	0
	Fz (I-S)	...	0	0	0	0
	Resultant	...			0	0

S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	0	0	0	0
	My (L-R)	...	0	0	0	0
	Mz (I-S)	...	0	0	0	0
	Resultant	...			0	0

KNEE & BELTS LOADS (LB)						
	LT Knee	...	-134	247	50	301
	RT Knee	...	-147	254	55	306
	LT Belt	...				
	RT Belt	...	-6	314	76	204

RE DO W SB

FEB 10, 1982

PEAKS

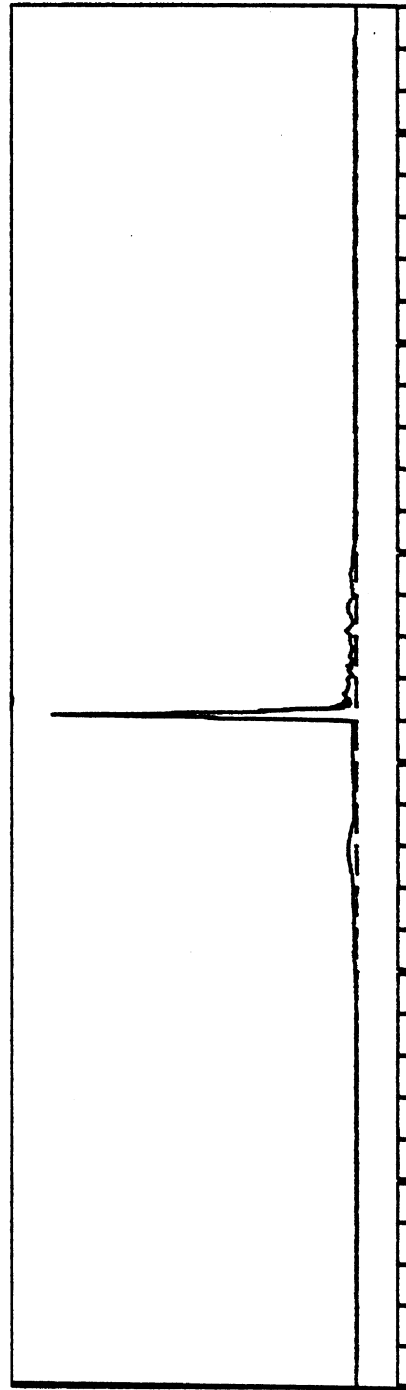
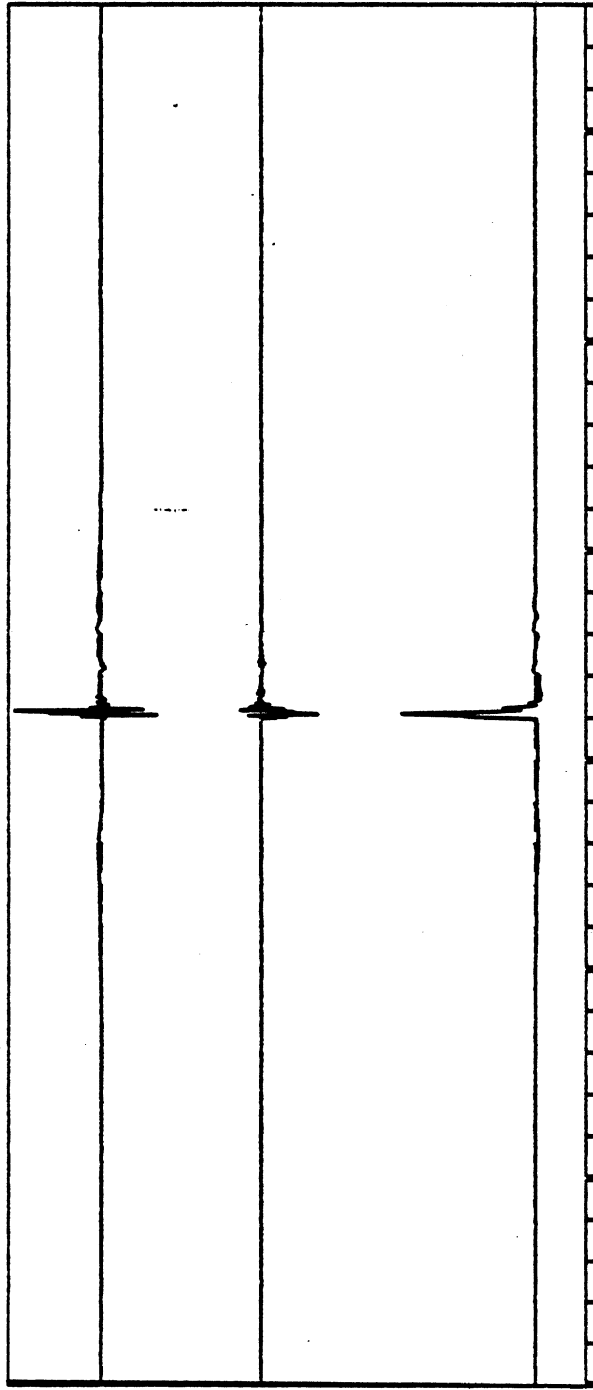
I-S acc 357

R-L acc -234

P-A acc 556

HIC = 4584

Resultant 631



100 150 200 250 300 350 400 msec

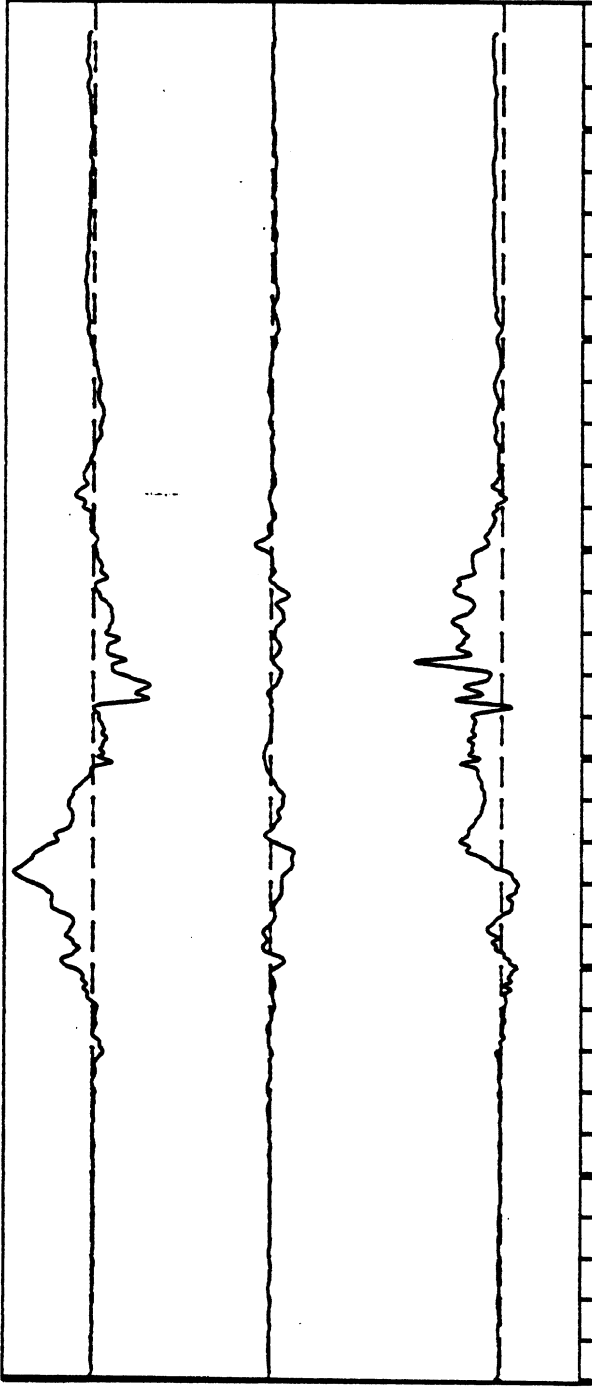
HEAD ACCELERATIONS (G)

M-2

RE DO W SB

FEB 10, 1982

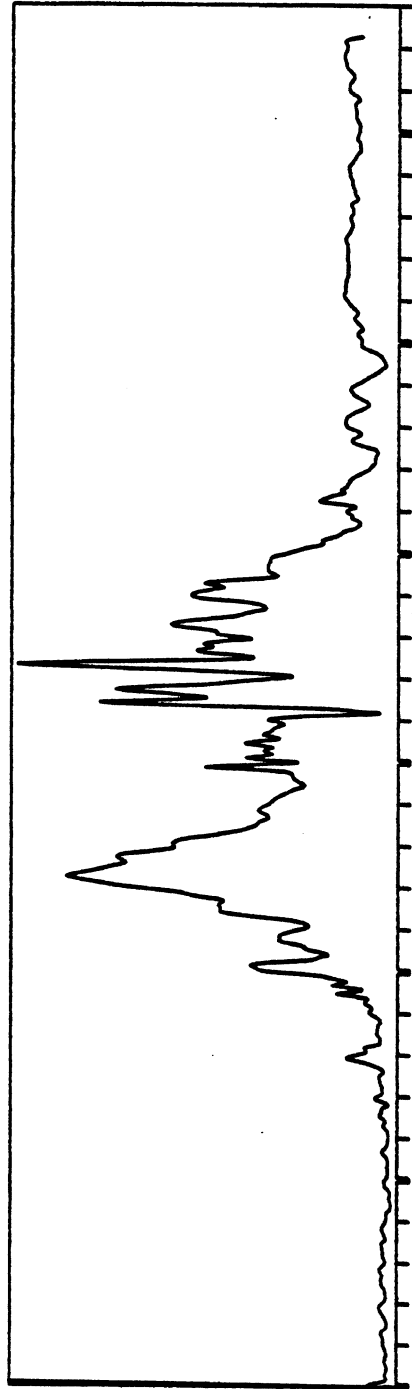
PEAKS



I-S acc 16

R-L acc -5

P-A acc 18



Resultant 19

100 150 200 250 300 350 400 msec

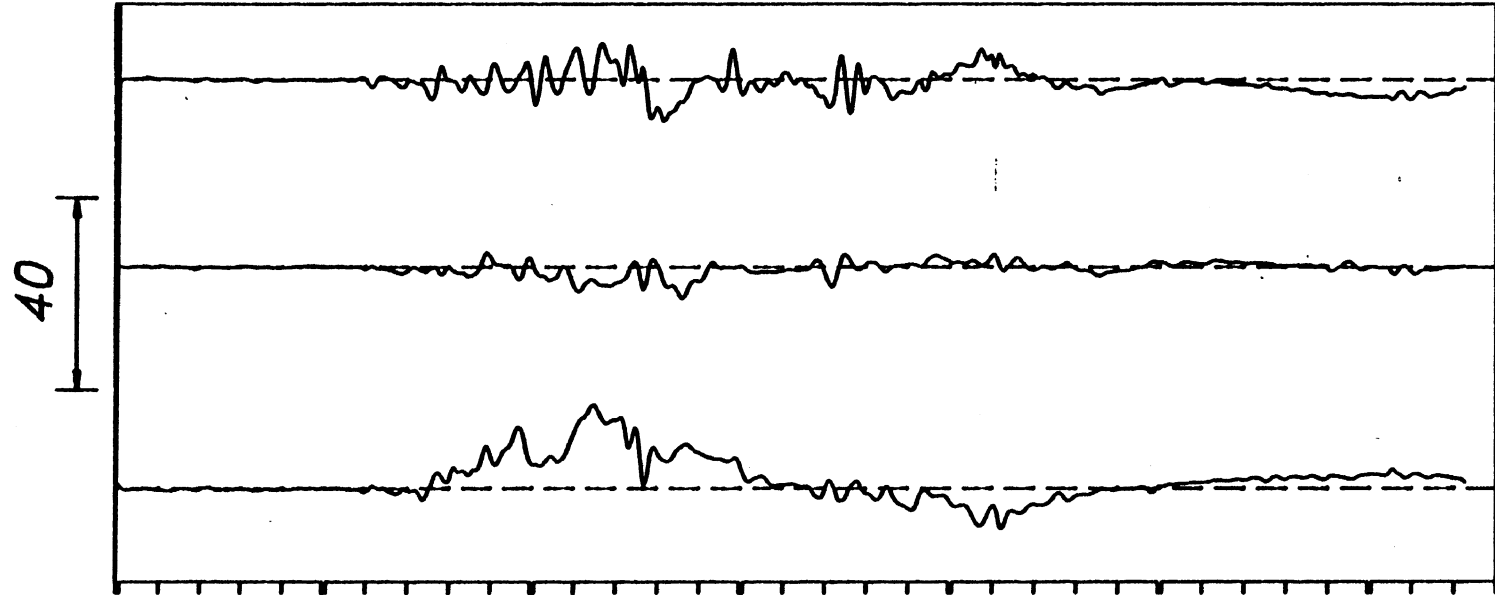
CHEST ACCELERATIONS (G)

M-2

RE DO W SB

FEB 10, 1982

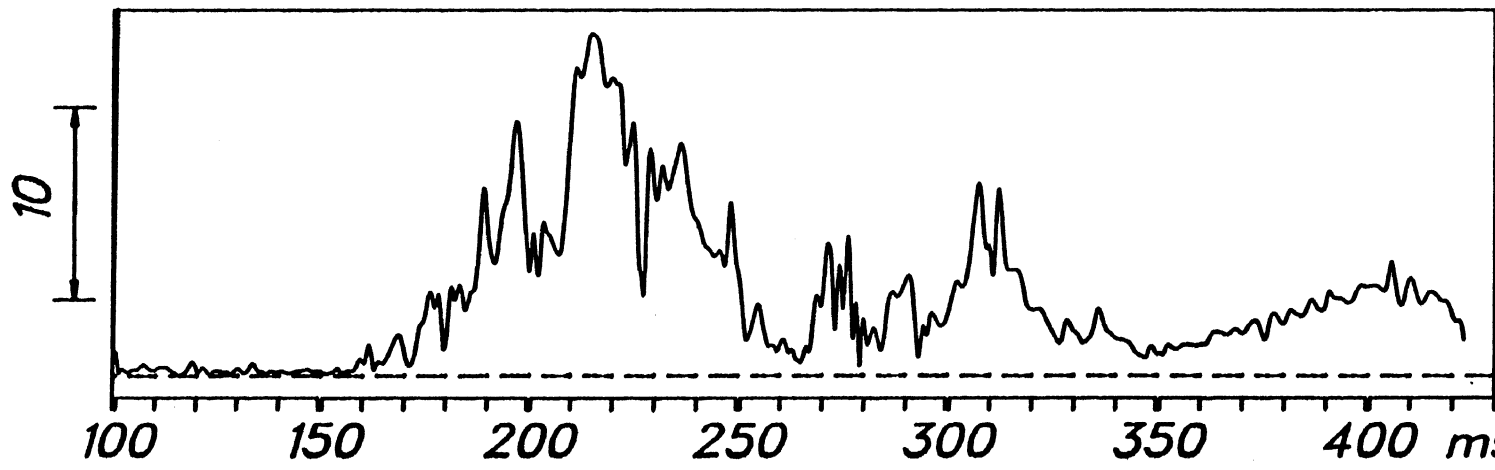
PEAKS



I-S acc -8

R-L acc -7

P-A acc 17



Resultant 17

100 150 200 250 300 350 400 msec

PELVIS ACCELERATIONS (G)

M-2

RE DO W SB

FEB 10, 1982

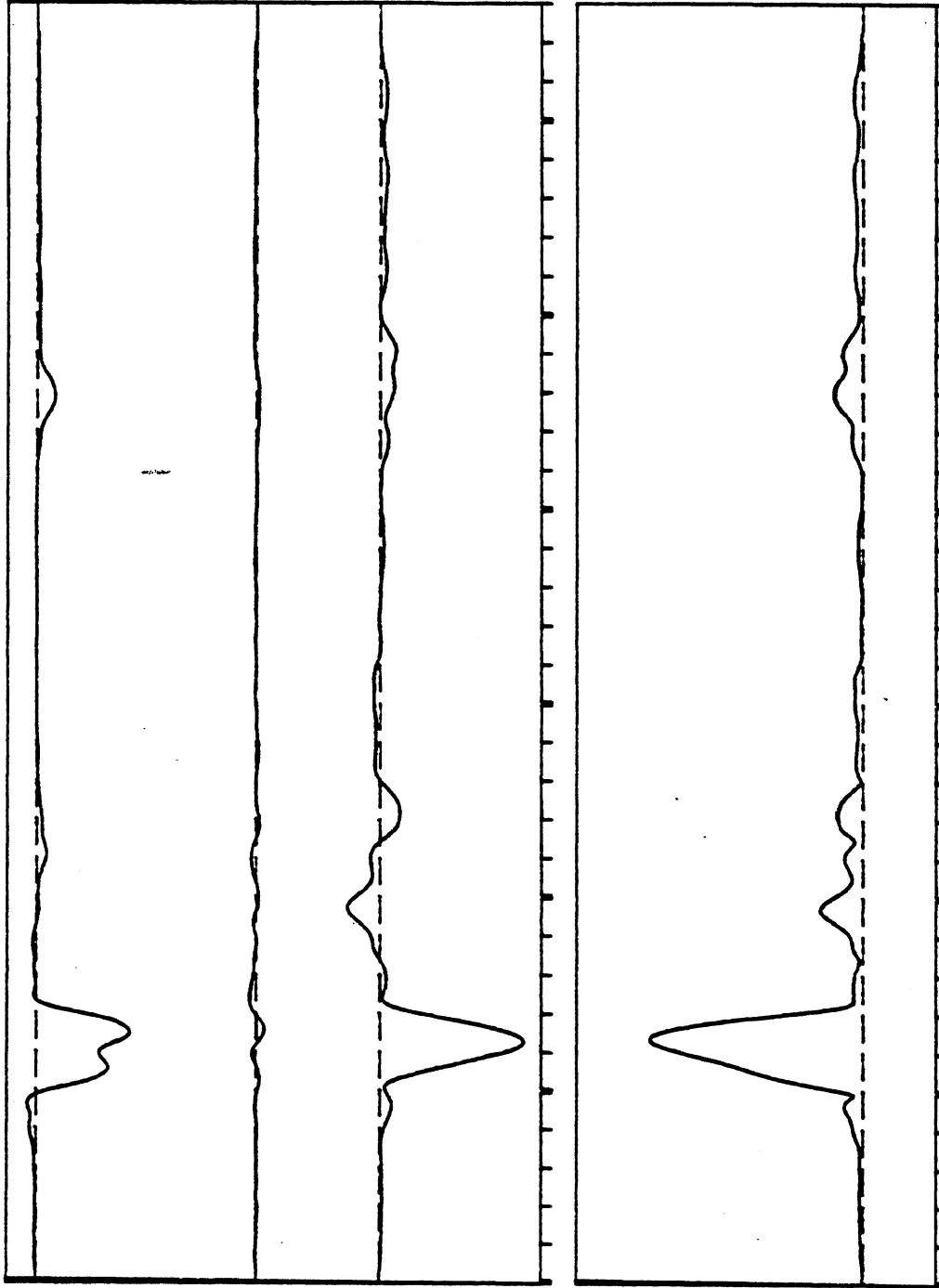
PEAKS

Az (I-S) -26

Ay (L-R) -2

Ax (A-P) -41

Resultant 47



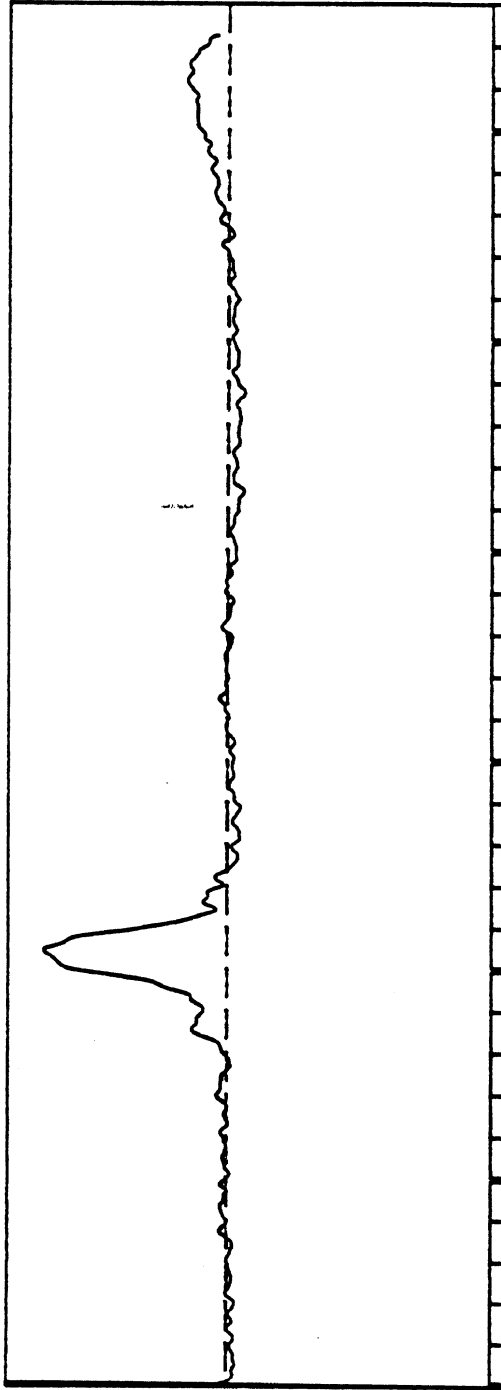
TRUCK DECELERATIONS (G)

M-2

RE DO W SB

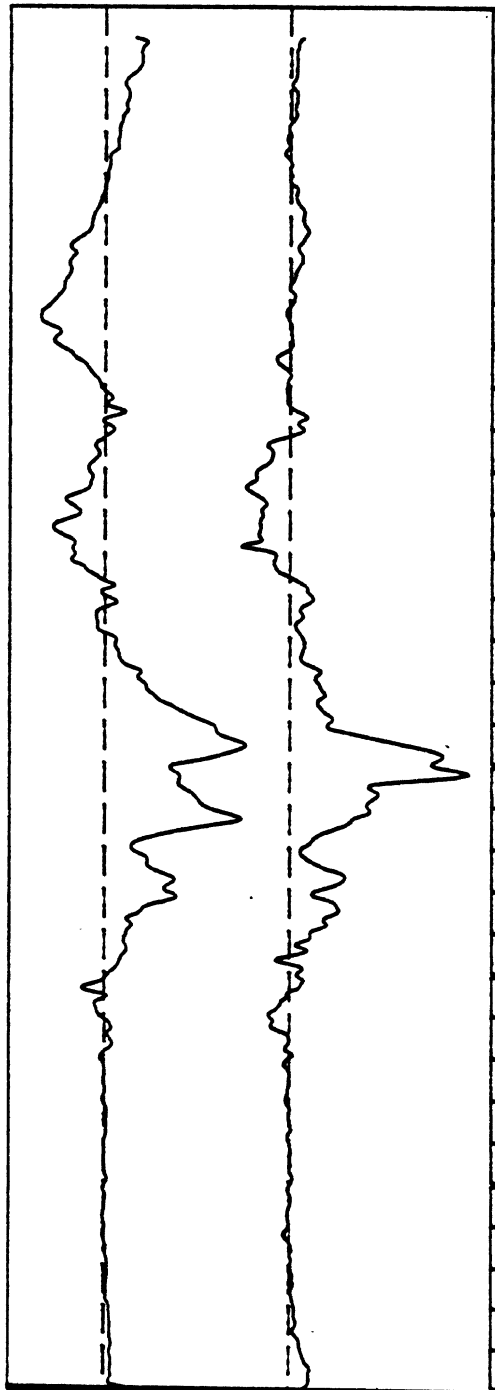
FEB 10, 1982

PEAKS



RT Belt

75



RT Knee

-148

LT Knee

-185

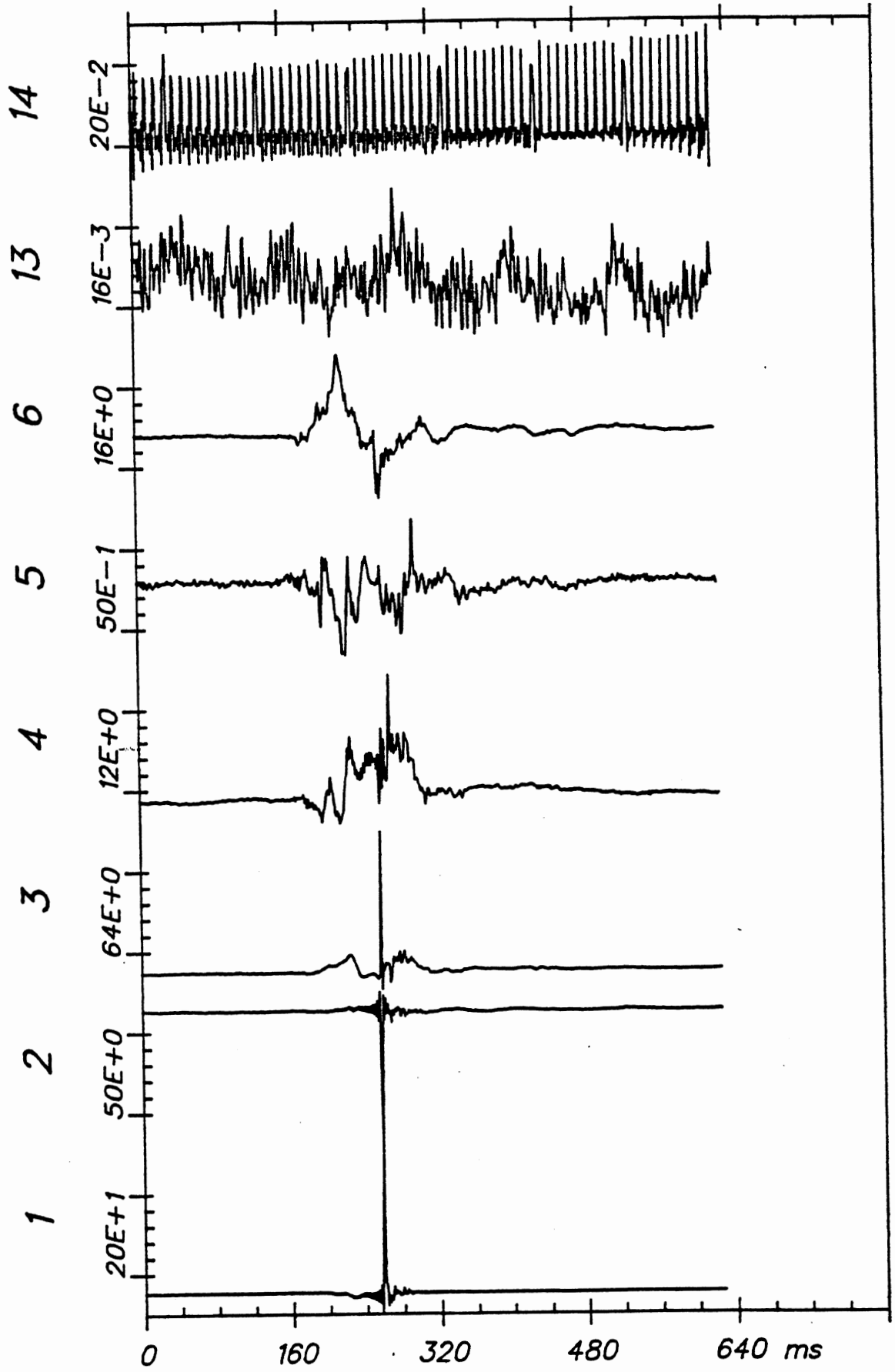
100 150 200 250 300 350 400 msec

KNEE & BELTS LOADS (LB)

M-2

JAN 26, 1982

From HSRI-175 to 81-SORT, file 180: /1/2/3/4/5/6/13/14/

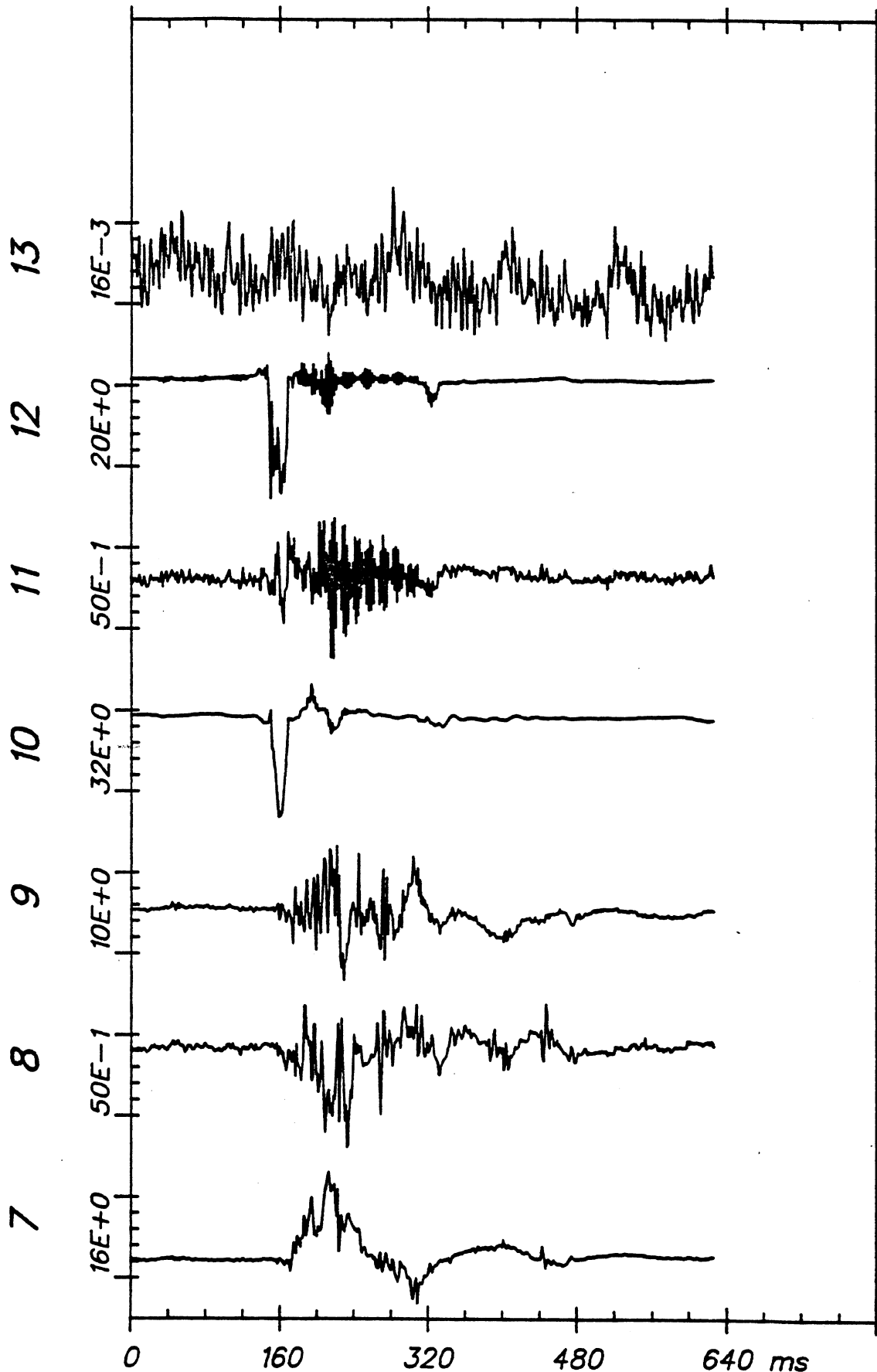


Time Histories

ITA M-2 (1)

From HSRI-175 to 81-SORT, file 180: /7/8/9/10/11/12/13/-/

JAN 26, 1982

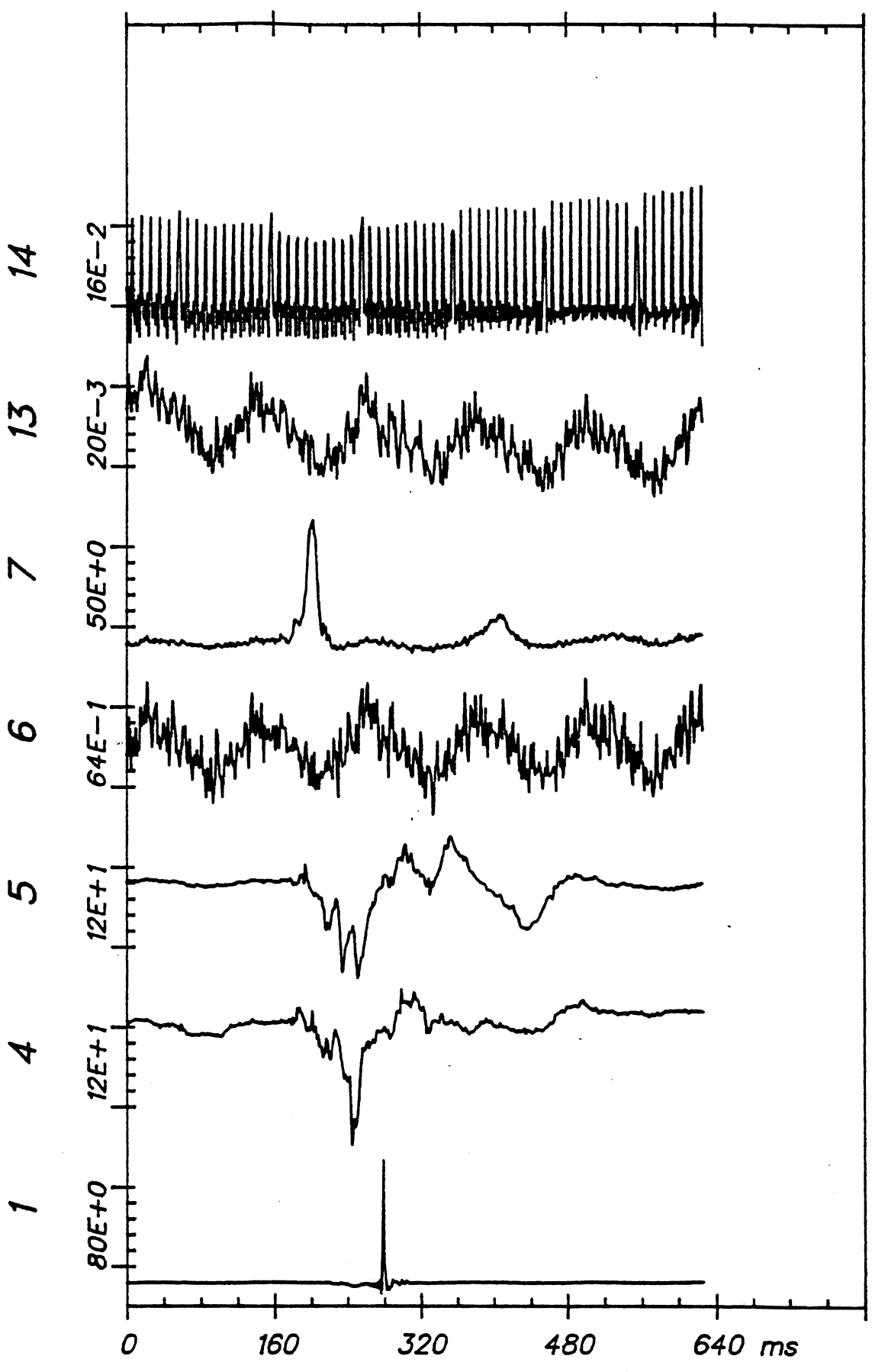


Time Histories

ITA M-2 (1)

JAN 26, 1982

From HSRI-176 to 81-SORT, file 193: /1/4/5/6/7/13/14/-/-/



Time Histories

ITA M-2 (2)

RE DO W SB		Test No. M-3	S U M M A R Y			
			Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)						
	P-A acc	...	-16	239	52	254
	R-L acc	...	-7	261	15	261
	I-S acc	...	-43	260	58	254
	Resultant	...			78	254
	HIC =	172 ...		252		265

CHEST ACCELERATIONS (G)						
	P-A acc	...	-12	233	84	255
	R-L acc	...	-16	269	15	254
	I-S acc	...	-26	252	72	234
	Resultant	...			87	255

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-38	259	125	232
	R-L acc	...	-20	235	39	232
	I-S acc	...	-18	257	28	259
	Resultant	...			126	232

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-41	169	5	210
	Ay (L-R)	...	-2	158	4	183
	Az (I-S)	...	-20	170	4	188
	Resultant	...			47	169

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	0	0	0	0
	Fy (L-R)	...	0	0	0	0
	Fz (I-S)	...	0	0	0	0
	Resultant	...			0	0

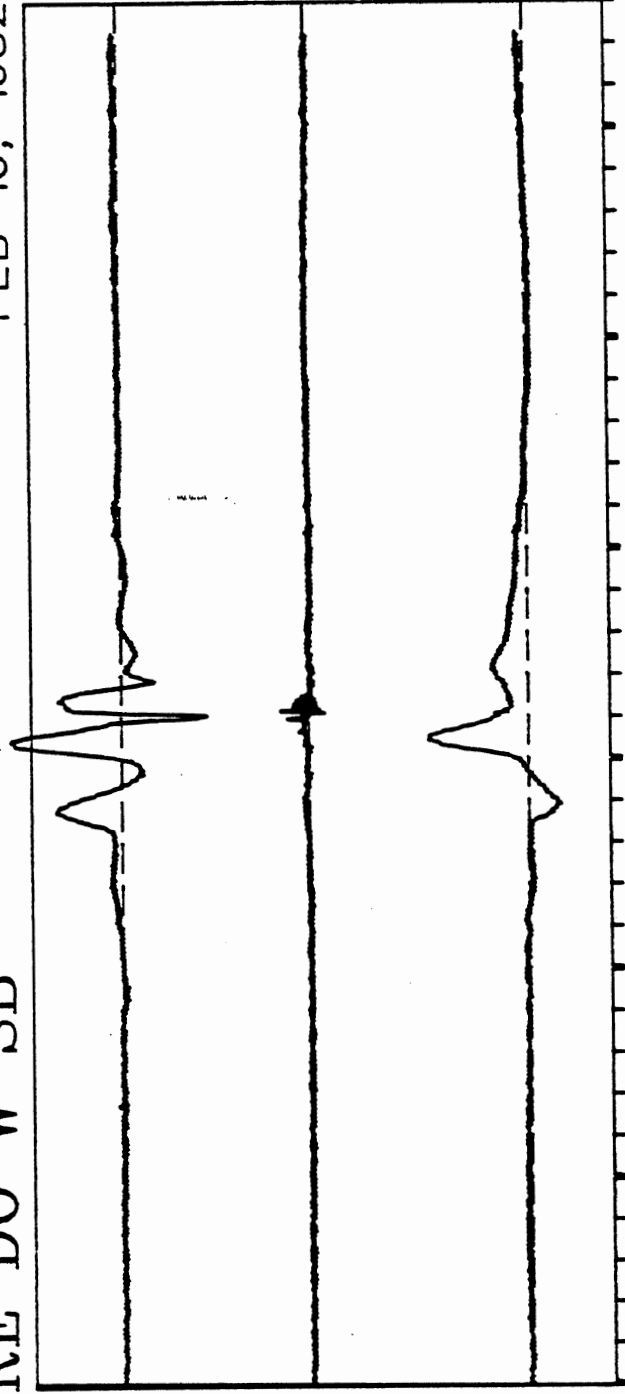
S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	0	0	0	0
	My (L-R)	...	0	0	0	0
	Mz (I-S)	...	0	0	0	0
	Resultant	...			0	0

KNEE & BELTS LOADS (LB)						
	LT Knee	...	-857	142	186	476
	RT Knee	...	-930	142	186	153
	LT Belt	...				
	RT Belt	...				

RE DO W SB

FEB 10, 1982

PEAKS



57

14

52

HIC = 172



Resultant 77

100 150 200 250 300 350 400 msec

HEAD ACCELERATIONS (G)

M-3

RE DO W SB

FEB 10, 1982

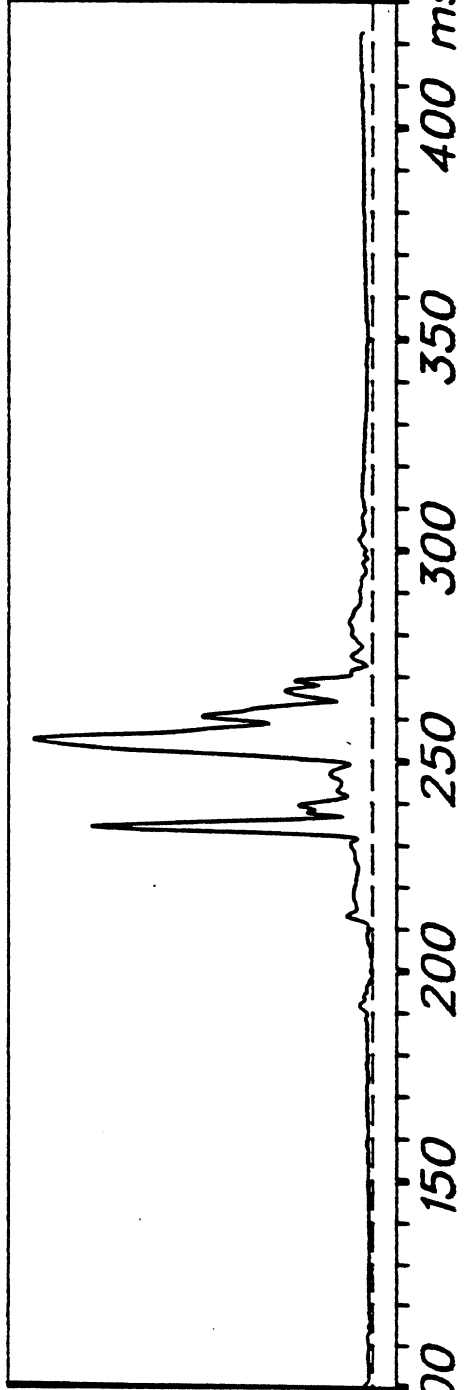
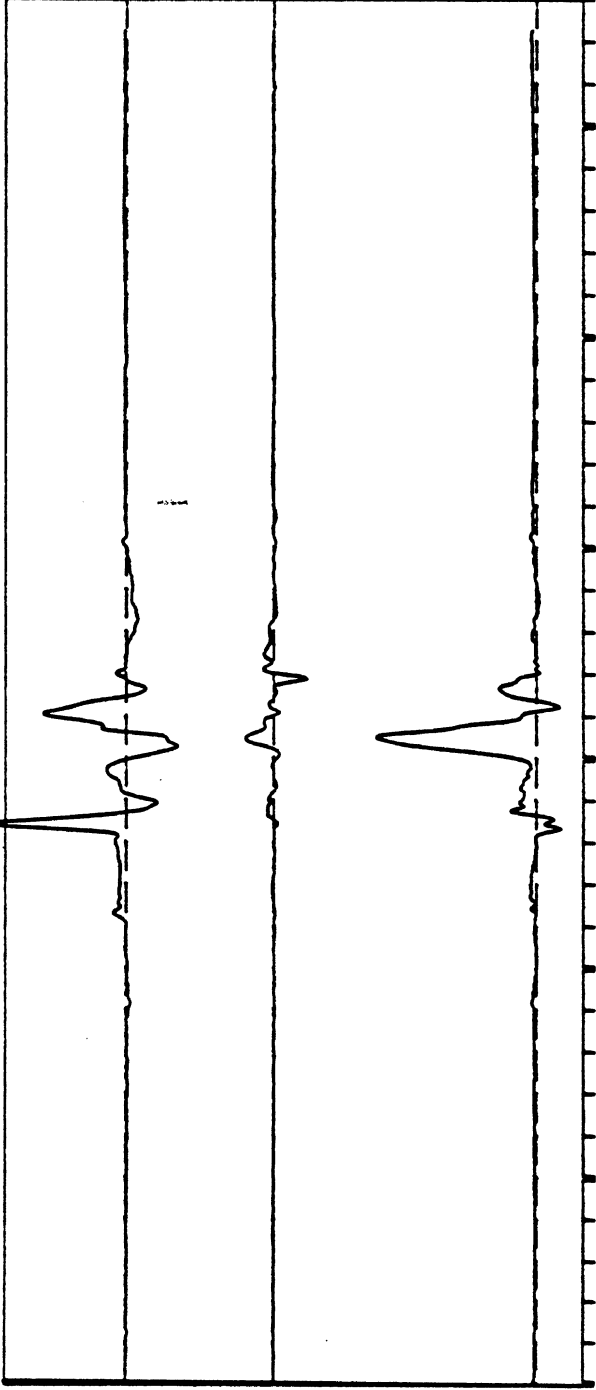
PEAKS

I-S acc 72

R-L acc -17

P-A acc 83

Resultant 87



CHEST ACCELERATIONS (G)

M-3

RE DO W SB

FEB 10, 1982

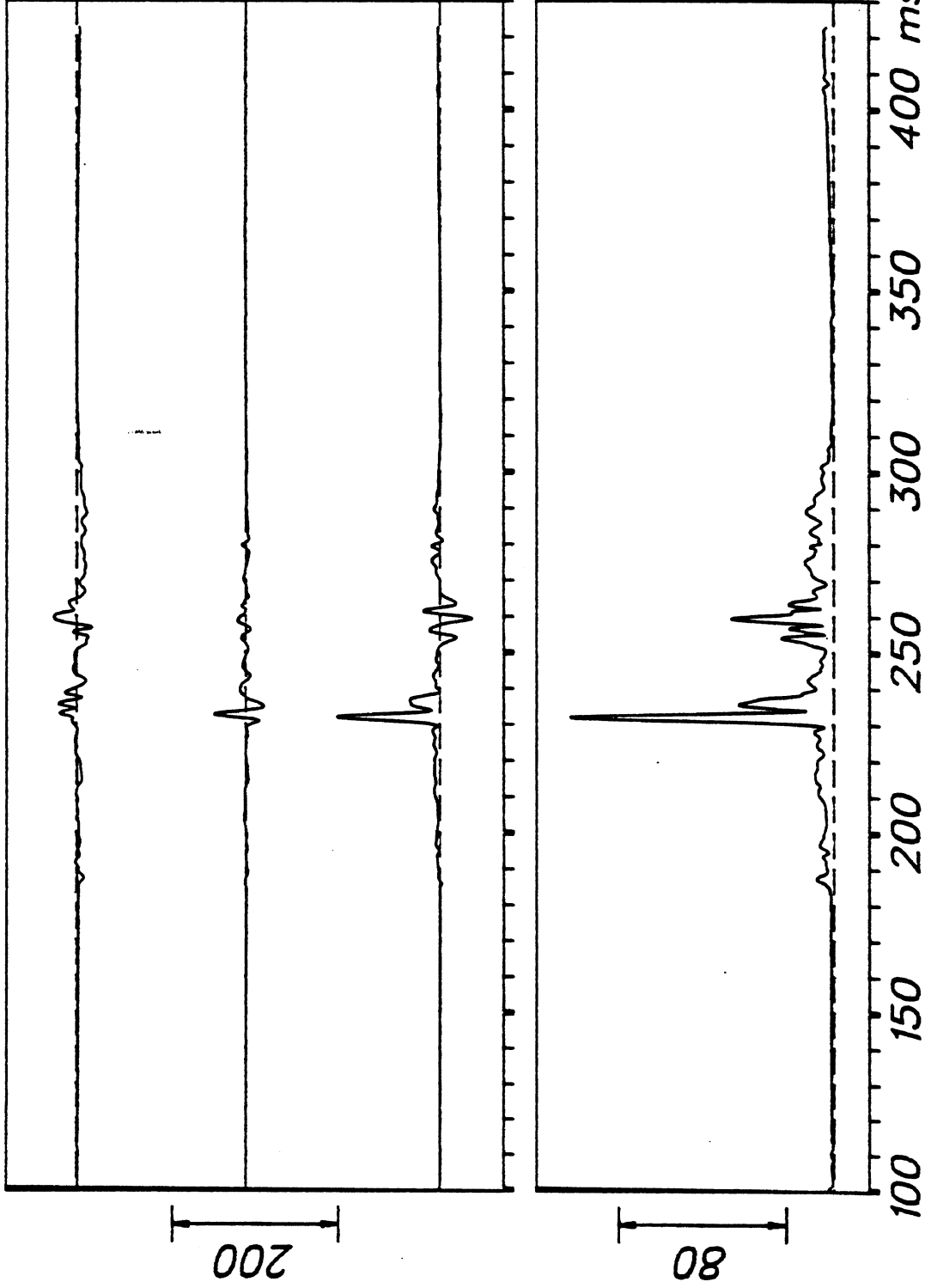
PEAKS

I-S acc 27

R-L acc 38

P-A acc 124

Resultant 126



PELVIS ACCELERATIONS (G)

M-3

RE DO W SB

FEB 10, 1982

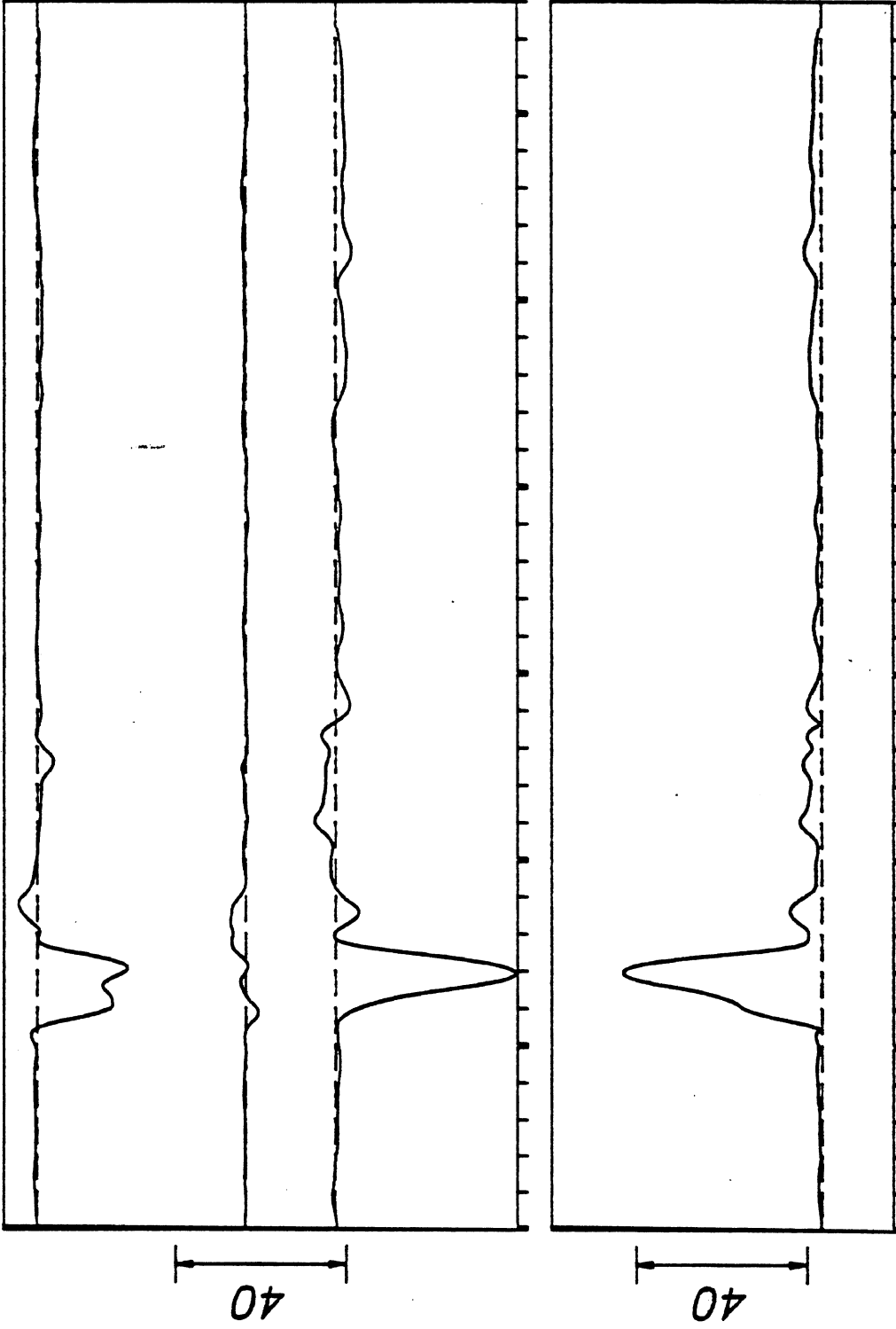
PEAKS

Az (I-S) -21

Ay (L-R) 3

Ax (A-P) -42

Resultant 46



100 150 200 250 300 350 400 msec

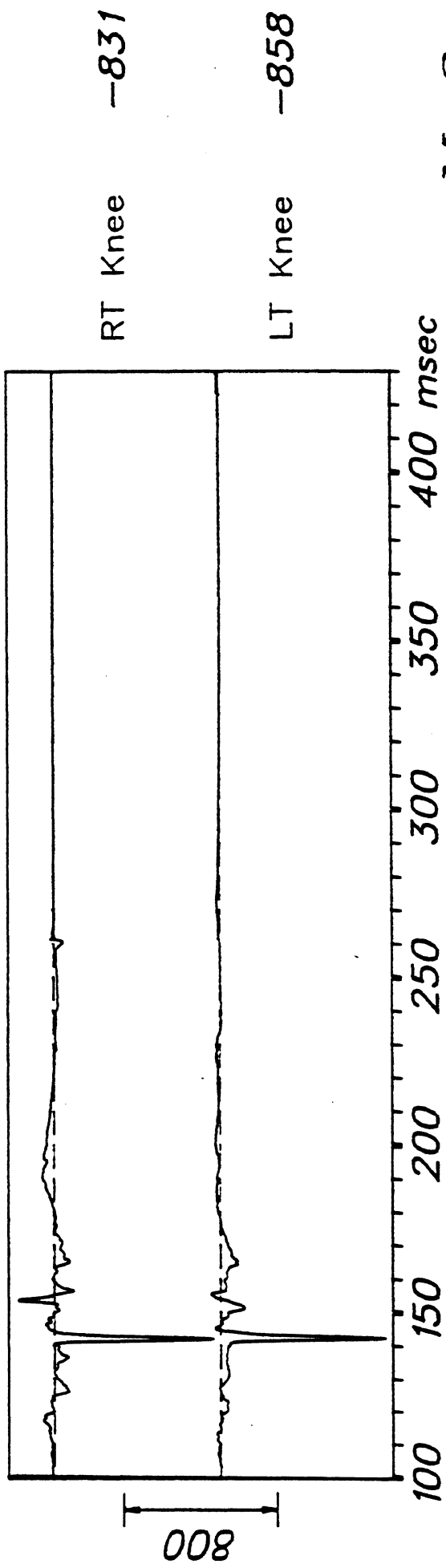
TRUCK DECELERATIONS (G)

M-3

RE DO W SB

FEB 10, 1982

PEAKS

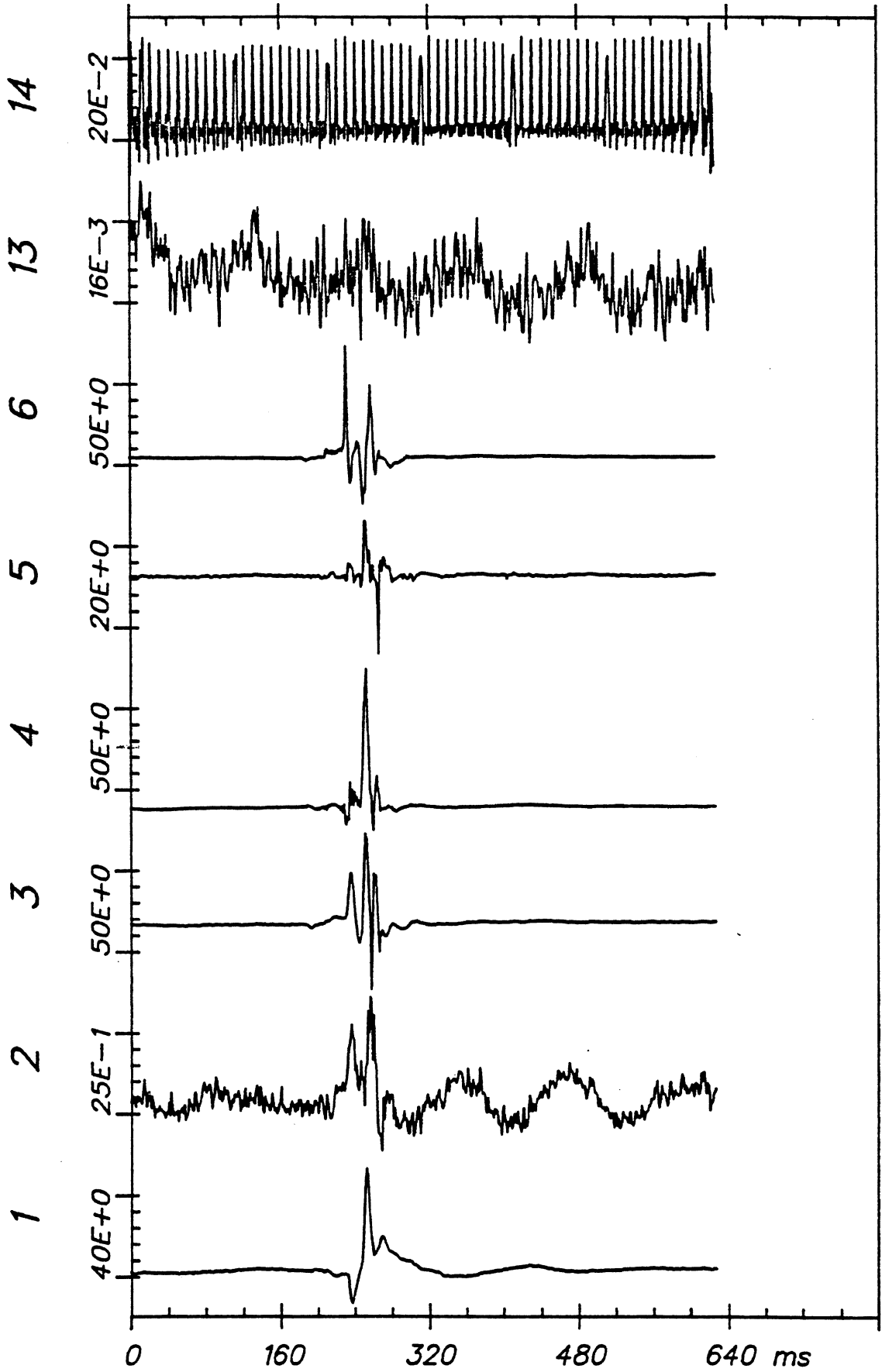


KNEE & BELTS LOADS (LB)

M-3

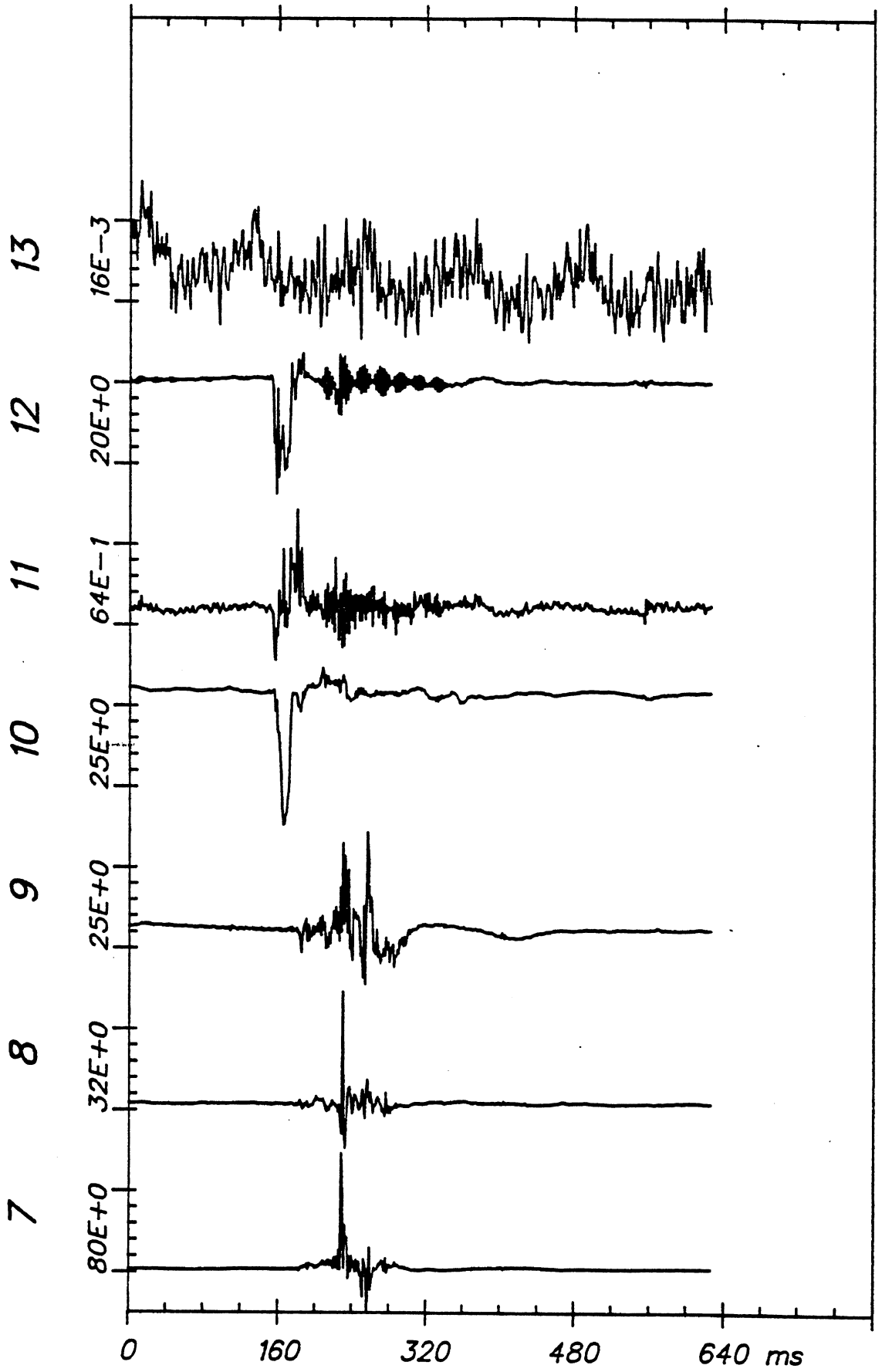
JAN 26, 1982

From HSRI-175 to 81-SORT, file 181: /1/2/3/4/5/6/13/14/



Time Histories

ITA M-3 (1)

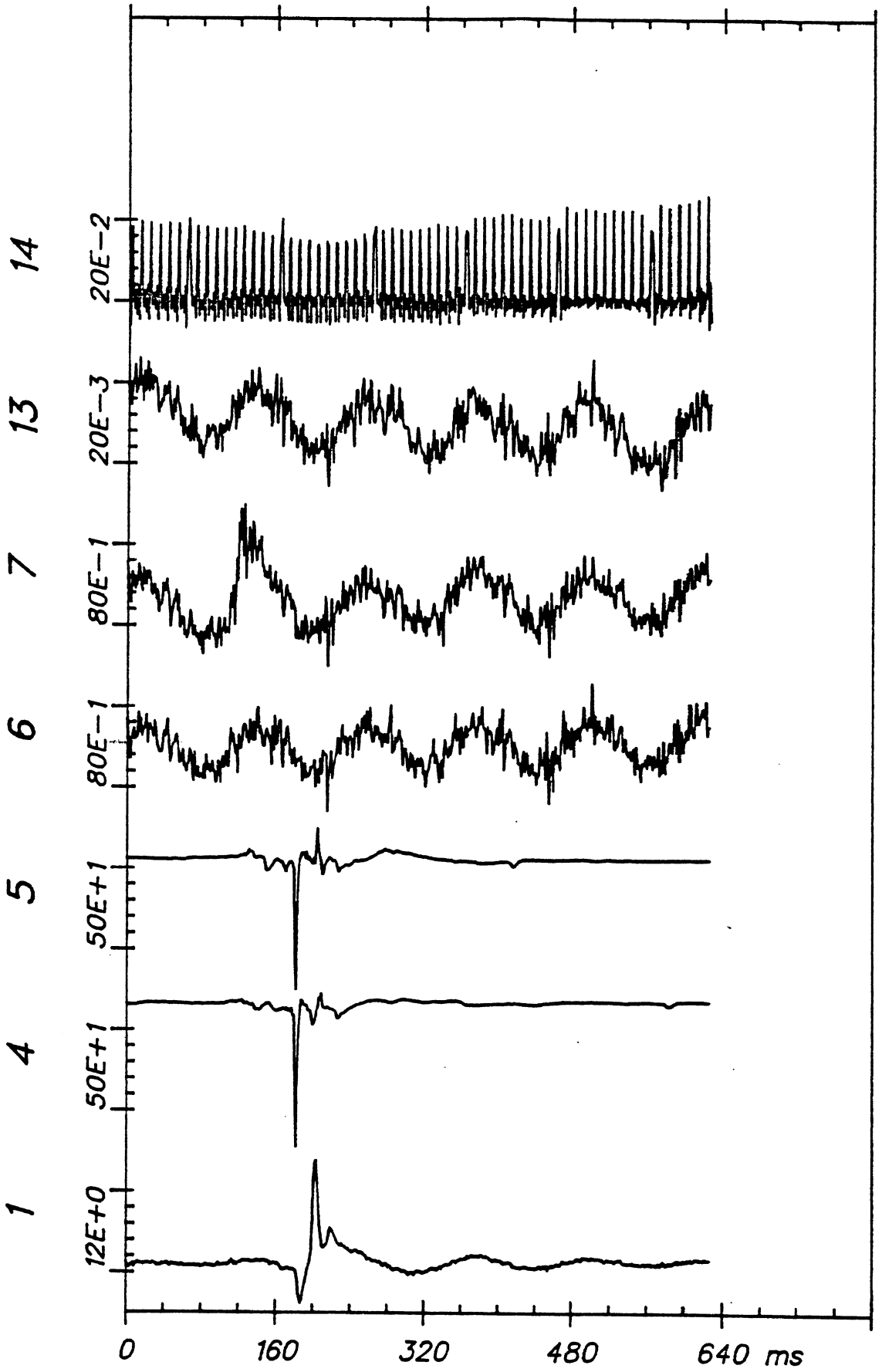


Time Histories

ITA M-3 (1)

JAN 26, 1982

From HSRI-176 to 81-SORT, File 194: /1/4/5/6/7/13/14/-/



Time Histories

ITA M-3 (2)

LA DO W SB		Test No. N-2	S U M M A R Y			
			Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)						
	P-A acc	...	-17	187	519	220
	R-L acc	...	-52	141	502	220
	I-S acc	...	-93	139	226	220
	Resultant	...			756	220
	HIC = 5886	...		219		220

CHEST ACCELERATIONS (G)						
	P-A acc	...	-2	143	23	223
	R-L acc	...	-2	150	14	234
	I-S acc	...	-19	146	7	169
	Resultant	...			29	234

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-6	236	44	257
	R-L acc	...	-37	163	38	159
	I-S acc	...	-40	159	16	157
	Resultant	...			56	159

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-85	114	15	121
	Ay (L-R)	...	-2	108	43	115
	Az (I-S)	...	-1	134	13	141
	Resultant	...			96	114

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	0	0	0	0
	Fy (L-R)	...	0	0	0	0
	Fz (I-S)	...	0	0	0	0
	Resultant	...			0	0

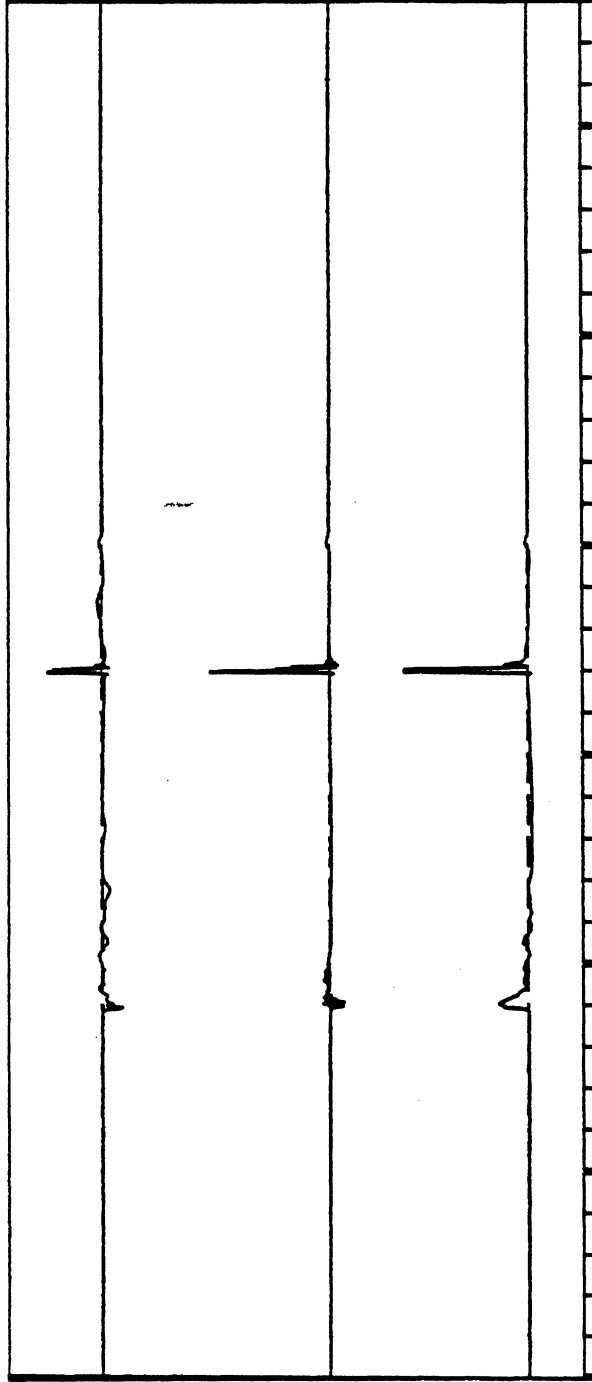
S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	0	0	0	0
	My (L-R)	...	0	0	0	0
	Mz (I-S)	...	0	0	0	0
	Resultant	...			0	0

KNEE & BELTS LOADS (LB)						
	LT Kneec	...	-346	317	145	245
	RT Kneec	...	-181	327	76	219
	LT Belt	...				
	RT Belt	...	6	178	254	273

LA DO W SB

FEB 10, 1982

PEAKS

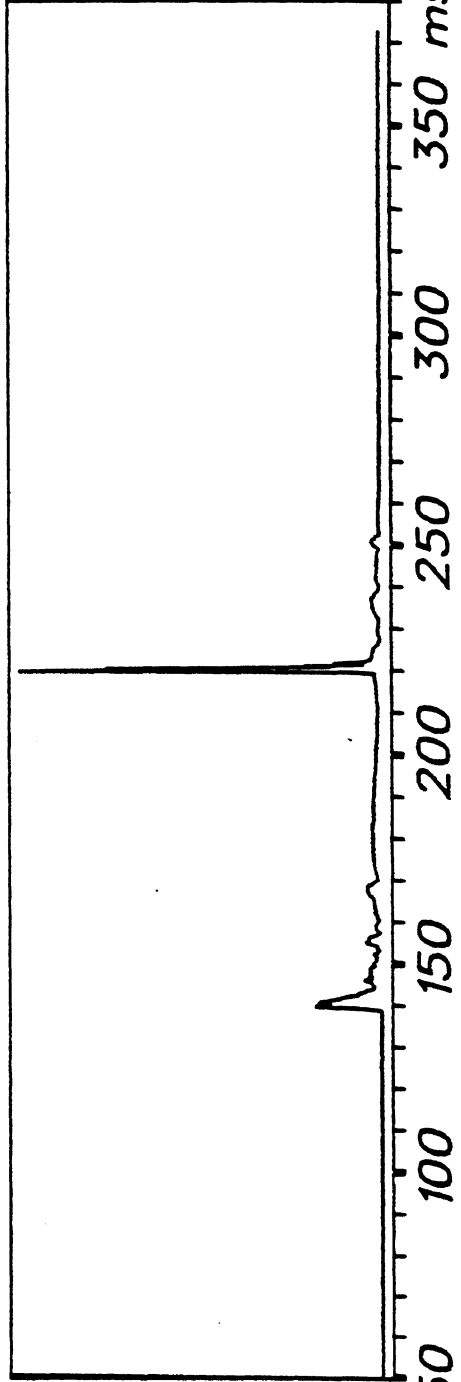


I-S acc 225

R-L acc 501

P-A acc 519

HIC = 5886



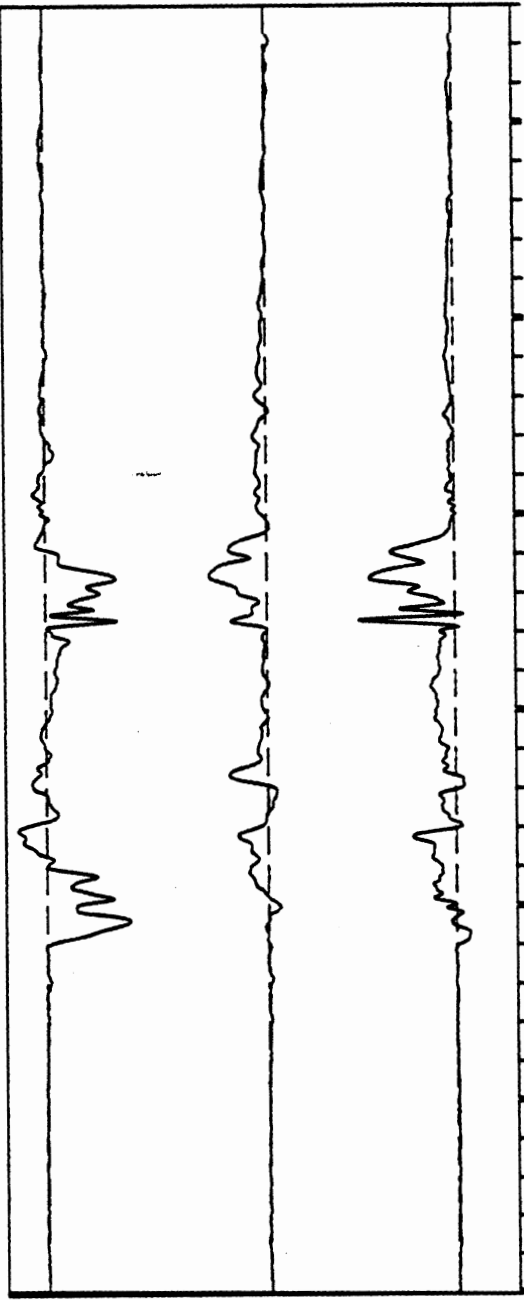
Resultant 756

N-2

LA DO W SB

FEB 10, 1982

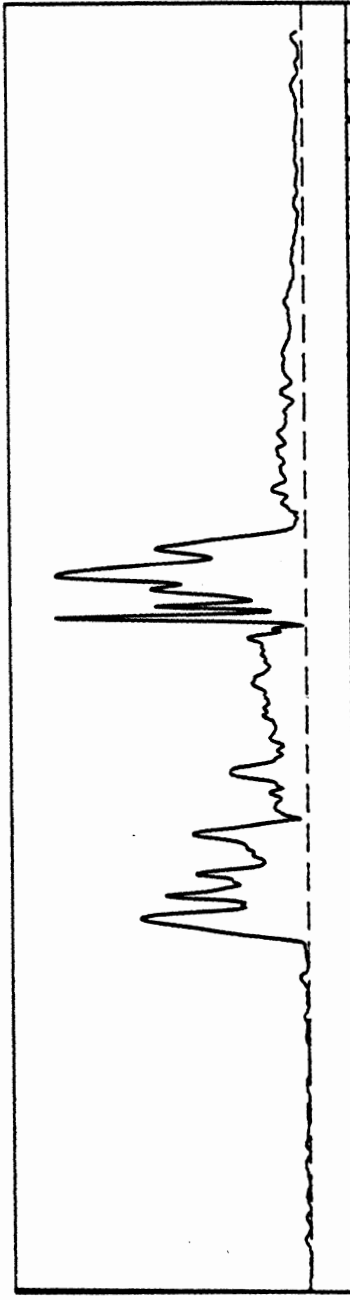
PEAKS



I-S acc -20

R-L acc 13

P-A acc 22



Resultant 29

50 100 150 200 250 300 350 msec

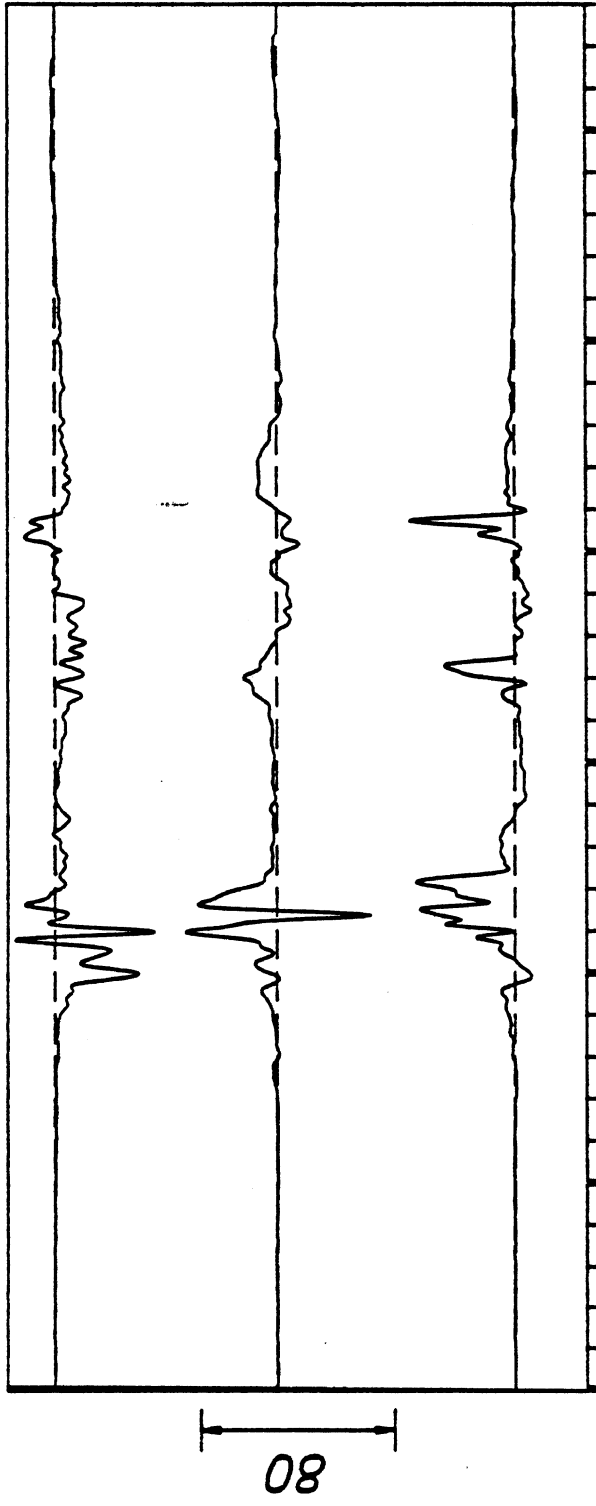
CHEST ACCELERATIONS (G)

N-2

LA DO W SB

FEB 10, 1982

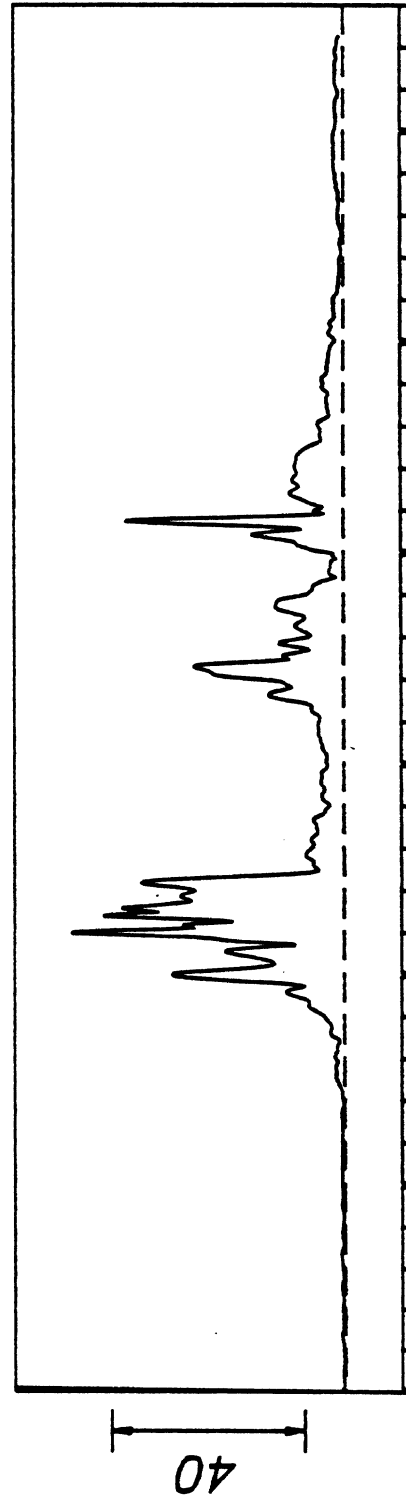
PEAKS



I-S acc -41

R-L acc -38

P-A acc 43



Resultant 56

50 100 150 200 250 300 350 msec

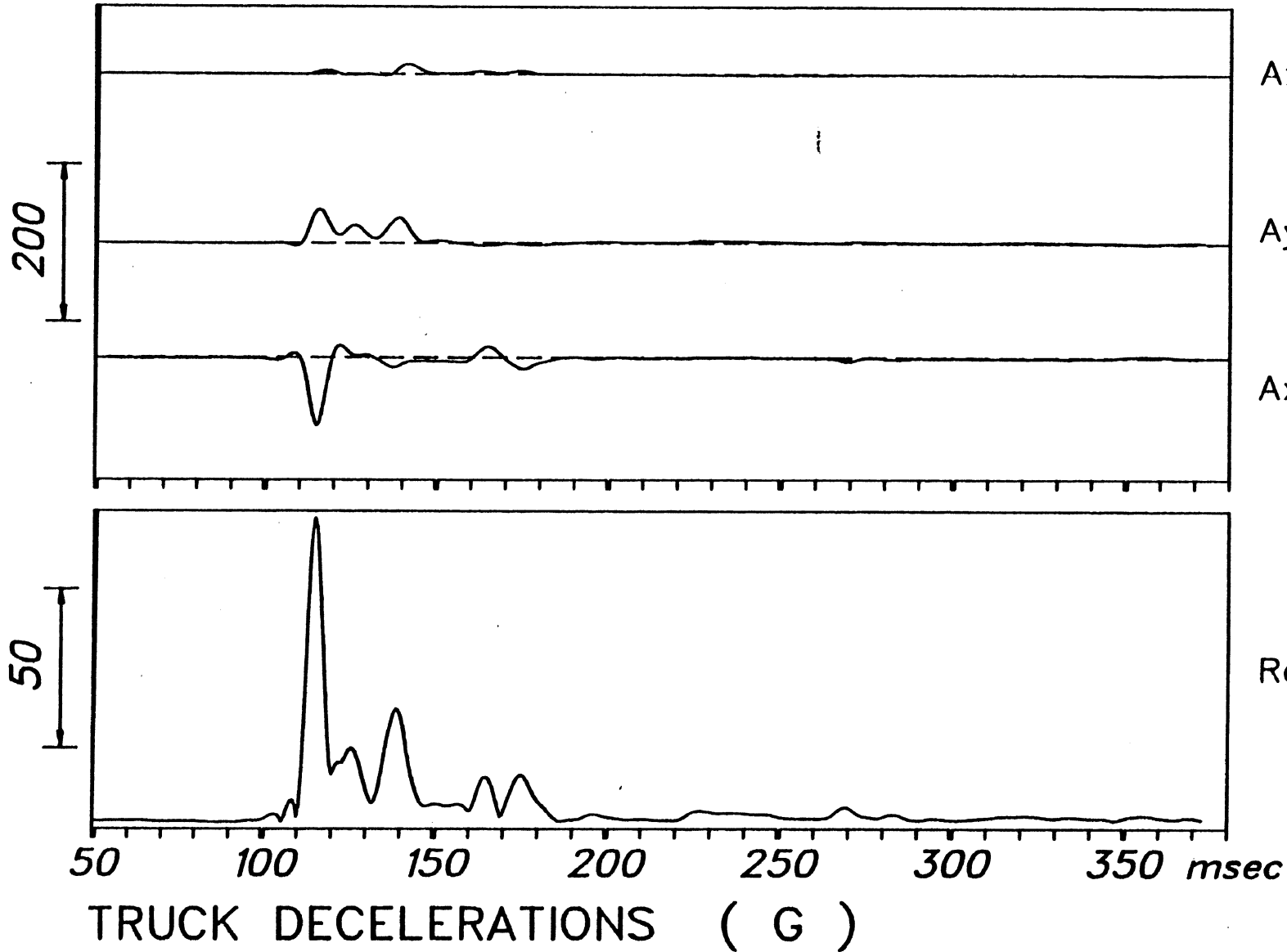
PELVIS ACCELERATIONS (G)

N-2

LA DO W SB

FEB 10, 1982

PEAKS



Az (I-S) 12

Ay (L-R) 43

Ax (A-P) -86

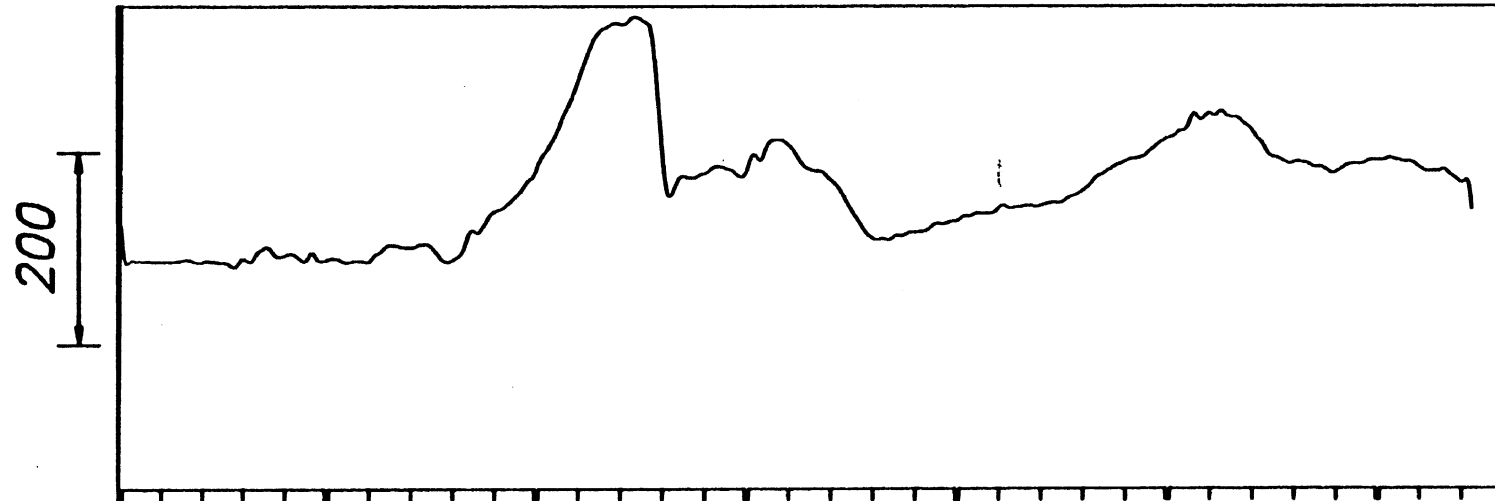
Resultant 95

N-2

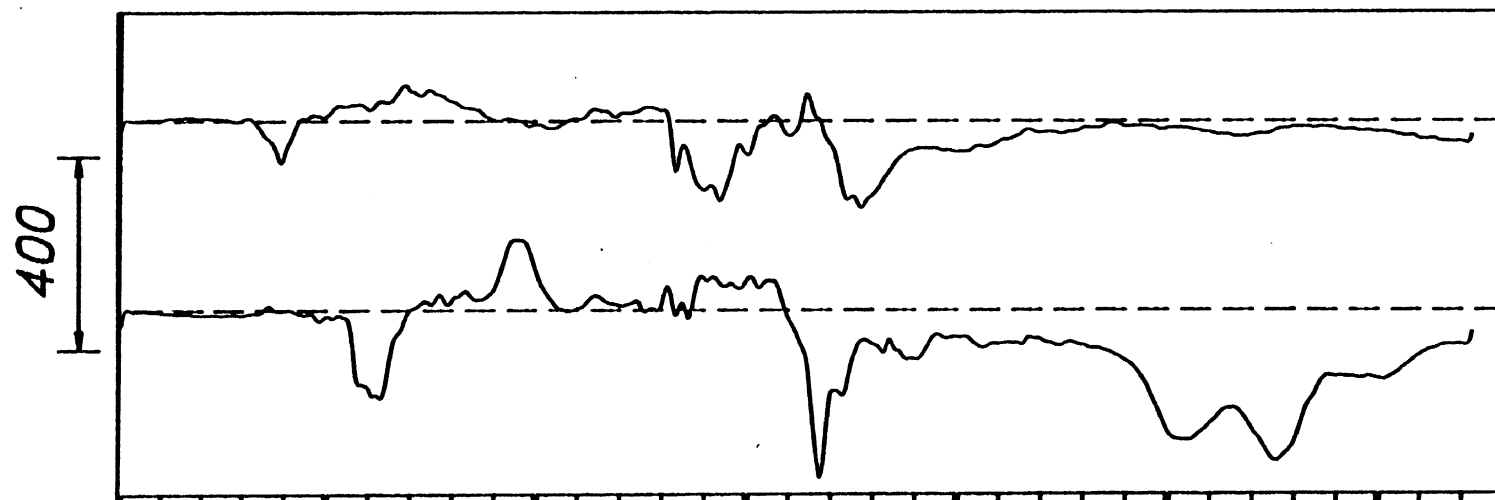
LA DO W SB

FEB 10, 1982

PEAKS



RT Belt 263



RT Knee -182

LT Knee -347

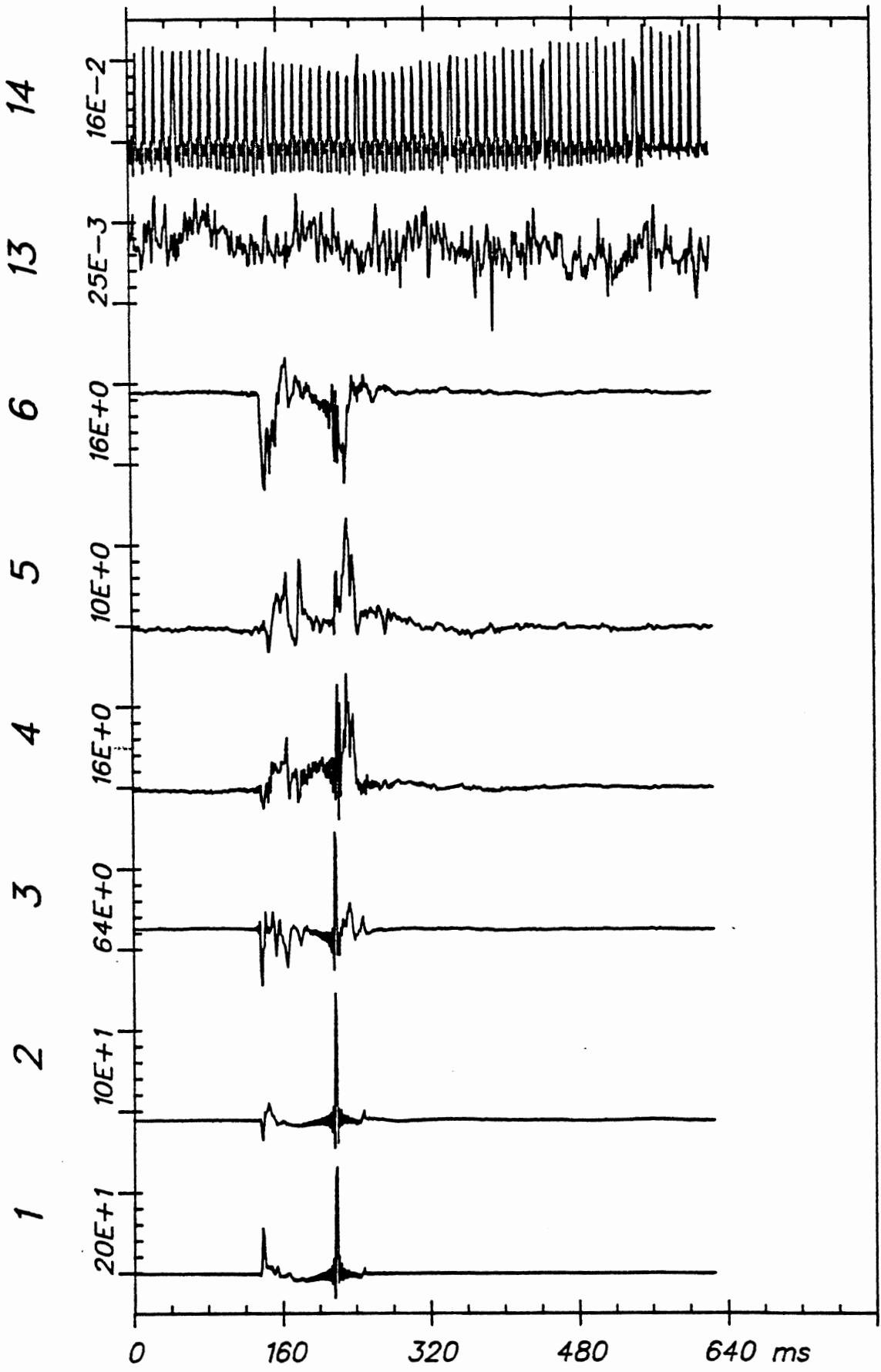
150 200 250 300 350 400 450 msec

KNEE & BELTS LOADS (LB)

N-2

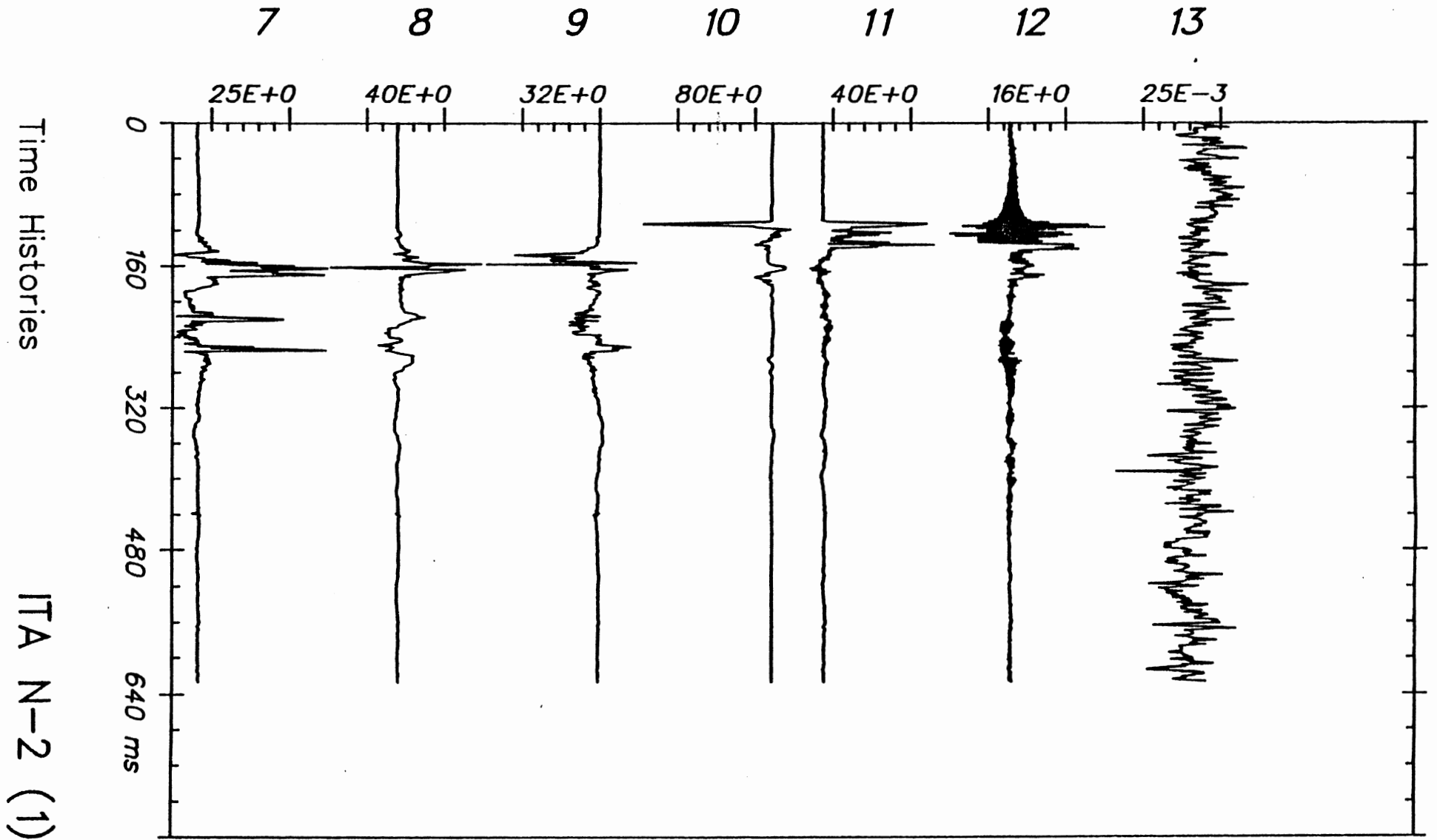
JAN 26, 1982

From HSRI-175 to 81-SORT, file 184: /1/2/3/4/5/6/13/14/



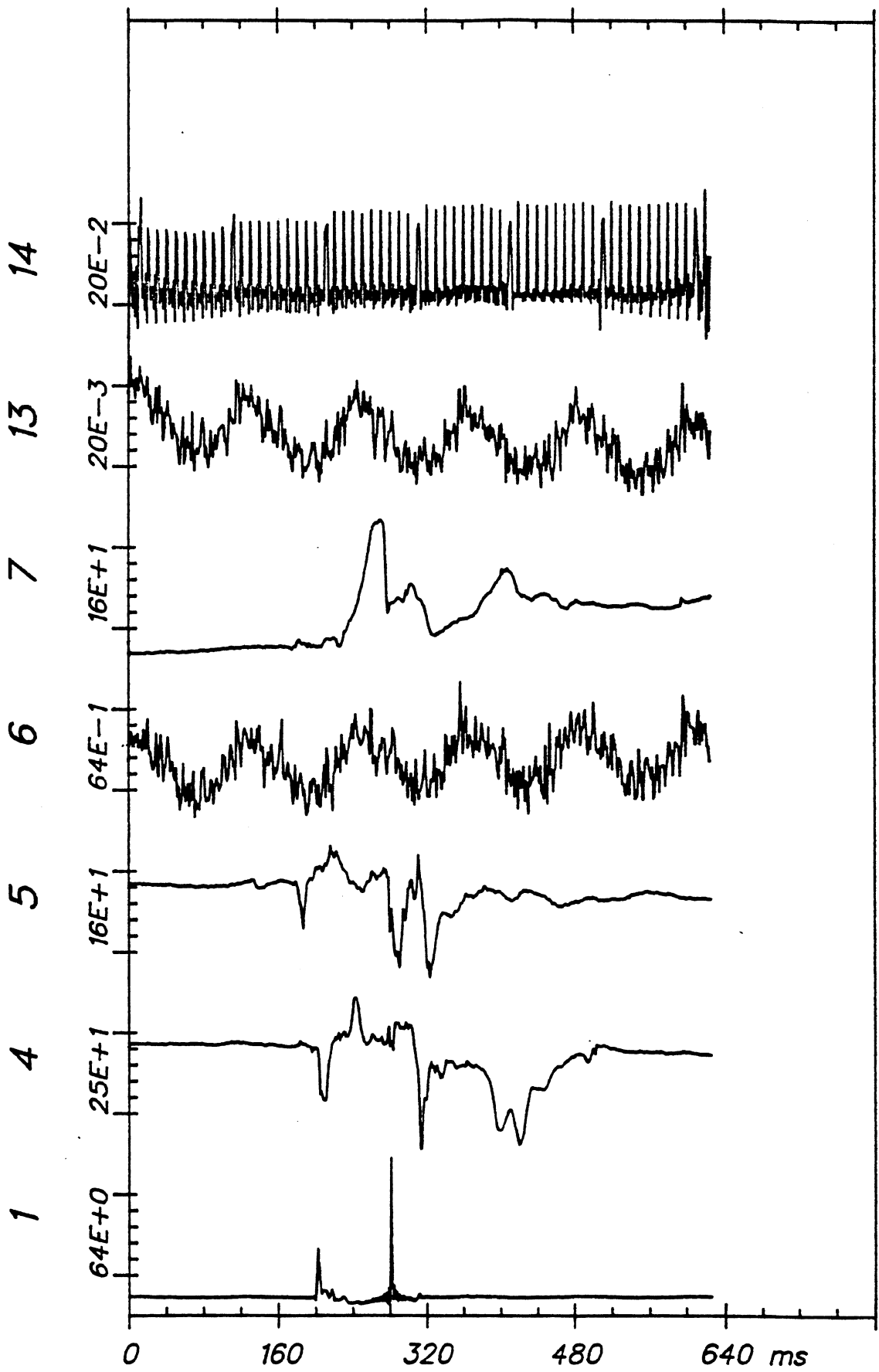
Time Histories

ITA N-2 (1)



JAN 26, 1982

From HSRI-176 to 81-SORT, file 197: /1/4/5/6/7/13/14/-/



Time Histories

ITA N-2 (2)

LA DO W SB		Test No. N-3		S U M M A R Y			
				Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)							
	P-A acc	...	-39	176	492	176	
	R-L acc	...	-294	176	478	176	
	I-S acc	...	-133	140	349	176	
	Resultant	...			712	176	
	HIC = 6292	...		175		176	

CHEST ACCELERATIONS (G)							
	P-A acc	...	-20	162	27	178	
	R-L acc	...	-1	142	37	163	
	I-S acc	...	-12	178	12	138	
	Resultant	...			42	178	

PELVIS ACCELERATIONS (G)							
	P-A acc	...	-9	171	9	174	
	R-L acc	...	-7	182	26	171	
	I-S acc	...	-19	174	25	139	
	Resultant	...			31	171	

TRUCK DECELERATIONS (G)							
	Ax (A-P)	...	-42	109	5	100	
	Ay (L-R)	...	-6	175	24	115	
	Az (I-S)	...	-14	108	43	102	
	Resultant	...			47	102	

S. COLUMN FORCES (LB)							
	Fx (A-P)	...	0	0	0	0	
	Fy (L-R)	...	0	0	0	0	
	Fz (I-S)	...	0	0	0	0	
	Resultant	...			0	0	

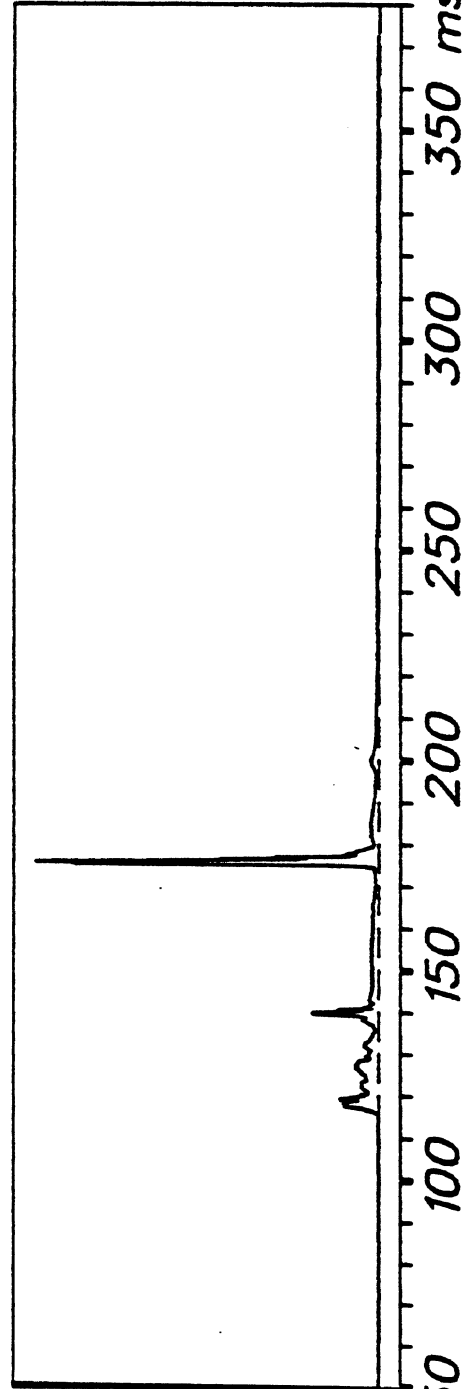
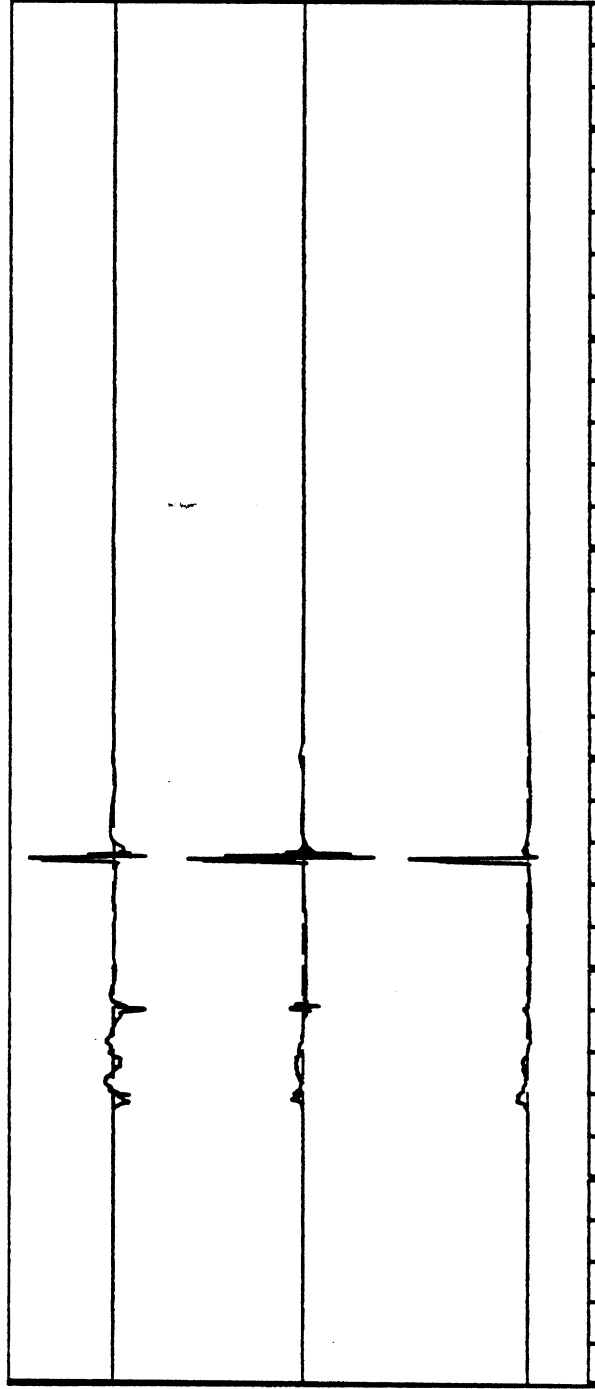
S. COLUMN MOMENTS (IN-LB)							
	Mx (A-P)	...	0	0	0	0	
	My (L-R)	...	0	0	0	0	
	Mz (I-S)	...	0	0	0	0	
	Resultant	...			0	0	

KNEE & BELTS LOADS (LB)							
	LT Knee	...	-493	136	248	60	
	RT Knee	...	-61	84	136	67	
	LT Belt	...					
	RT Belt					

LA DO W SB

FEB 10, 1982

PEAKS



HIC = 6292

Resultant 711

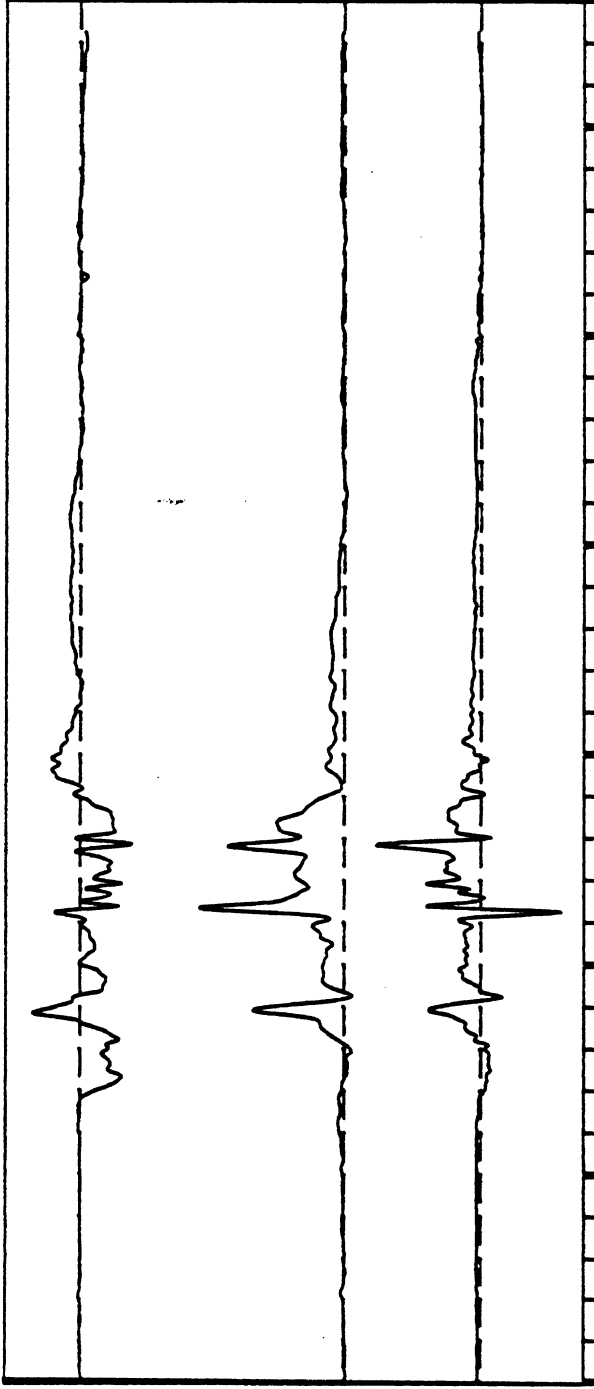
N-3

HEAD ACCELERATIONS (G)

LA DO W SB

FEB 10, 1982

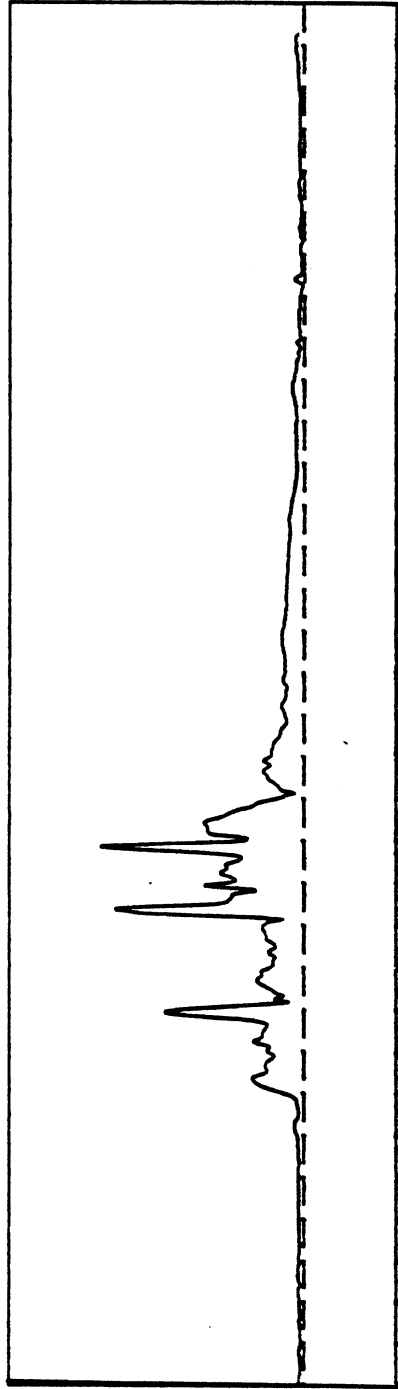
PEAKS



I-S acc -13

R-L acc 37

P-A acc 27



Resultant 42

50 100 150 200 250 300 350 msec

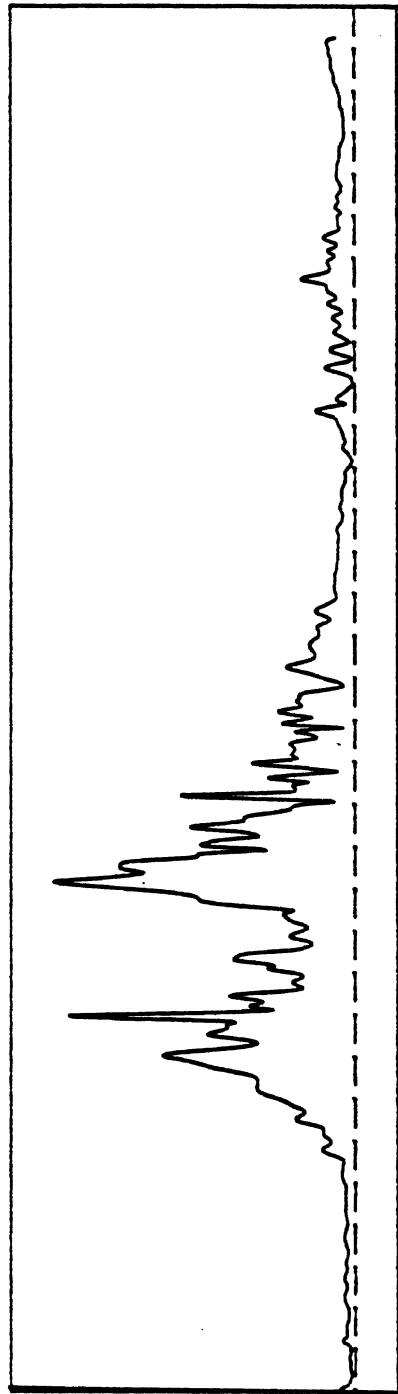
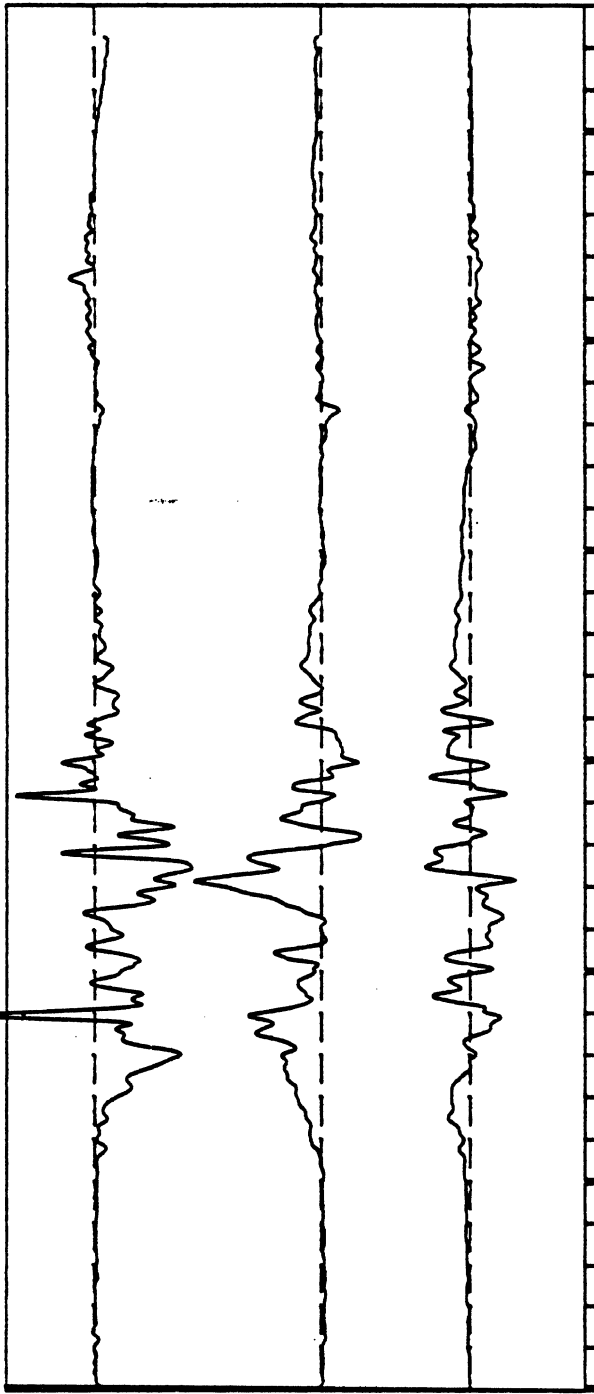
CHEST ACCELERATIONS (G)

N-3

L.A. DO W SB

FEB 10, 1982

PEAKS



50 100 150 200 250 300 350 msec

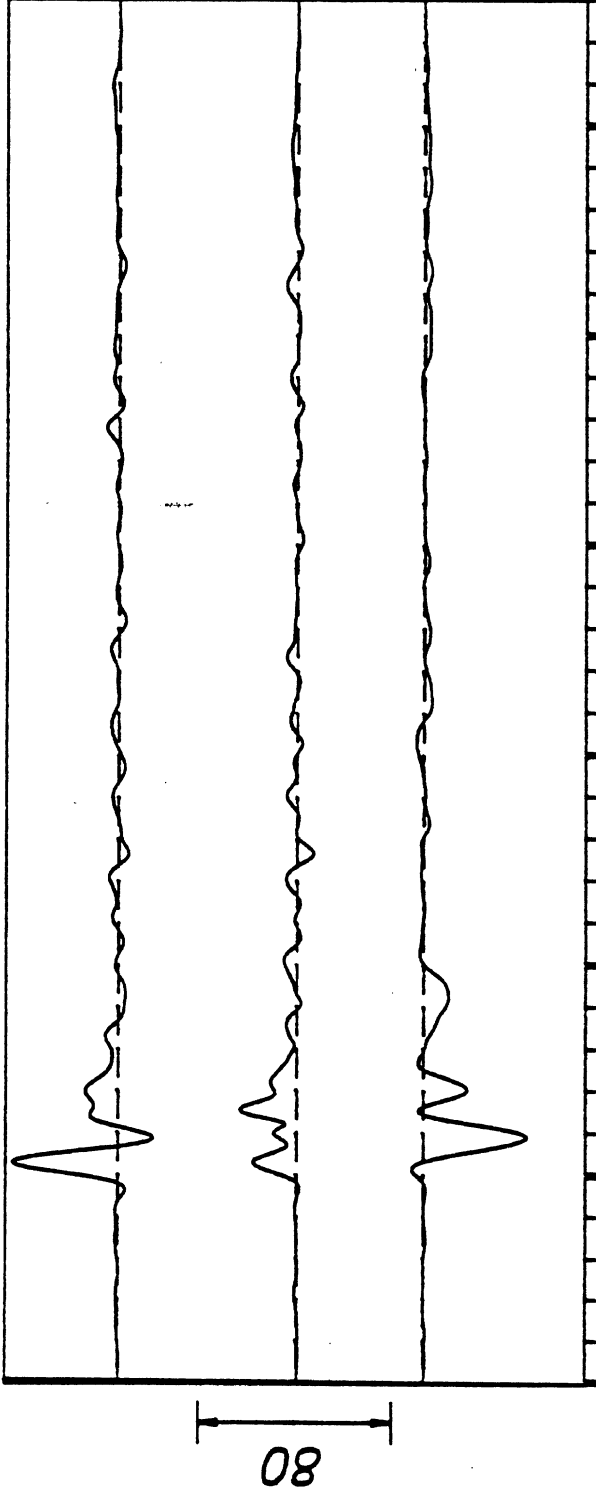
PELVIS ACCELERATIONS (G)

N-3

L.A. DO W SB

FEB 10, 1982

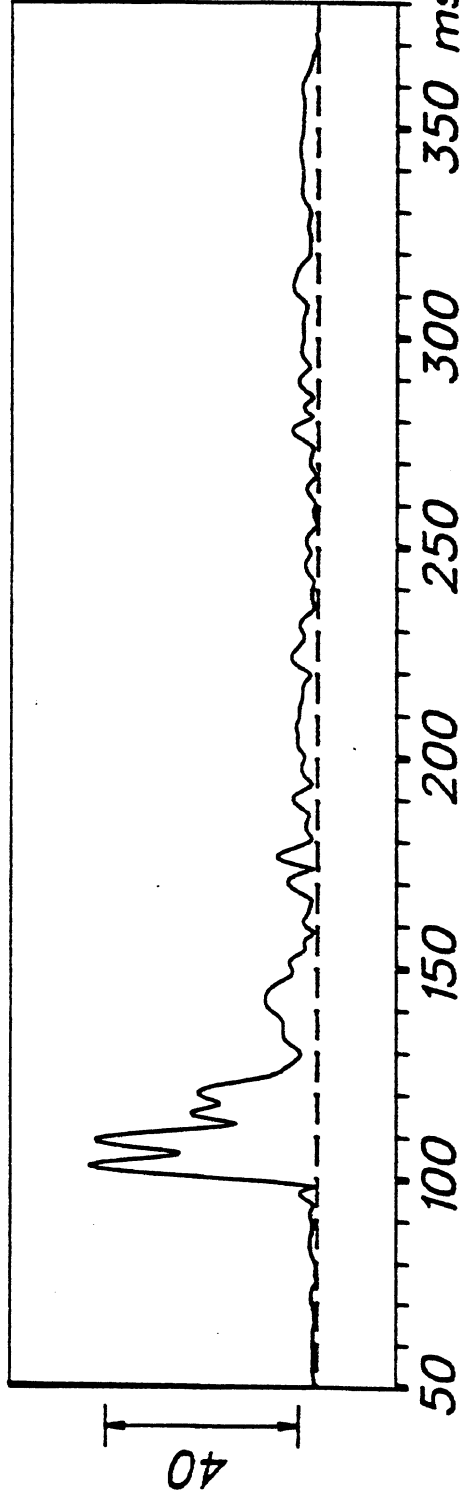
PEAKS



Az (I-S) 43

Ay (L-R) 23

Ax (A-P) -43



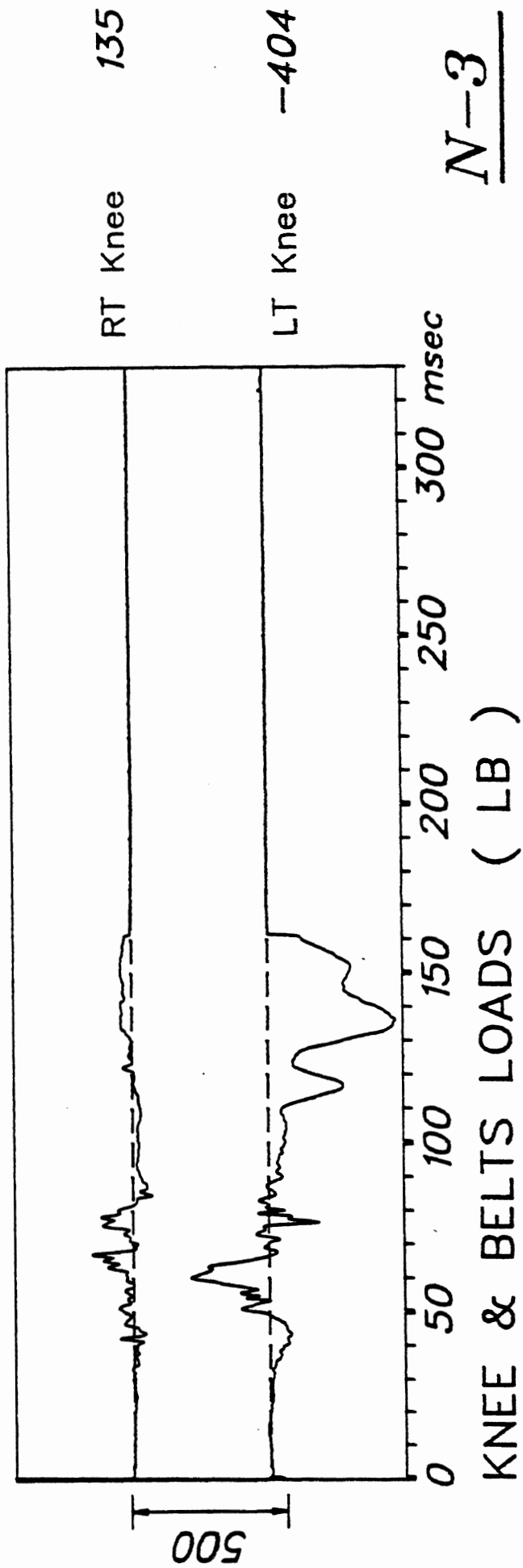
Resultant 47

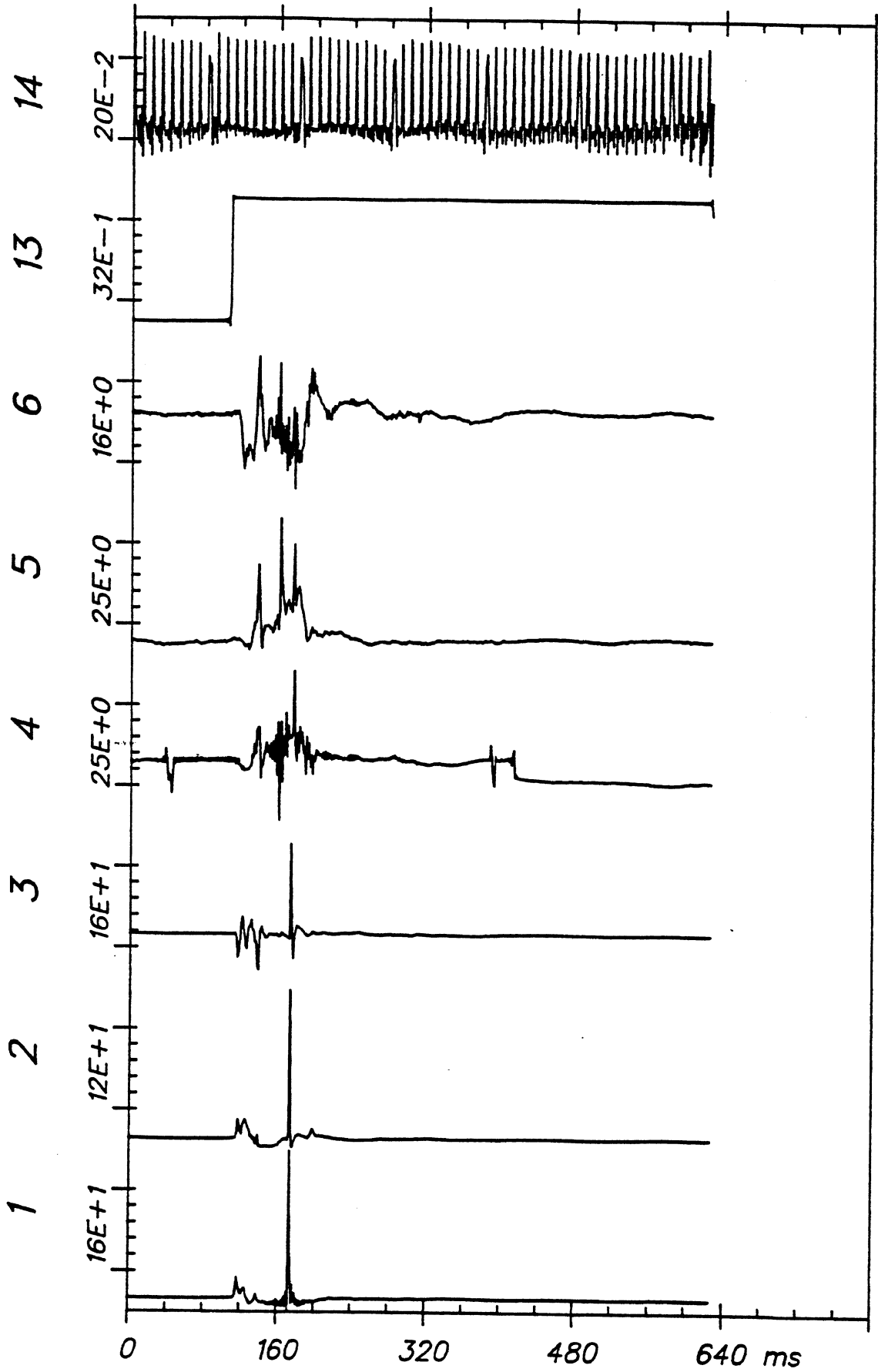
N-3

L.A DO W SB

FEB 10, 1982

PEAKS

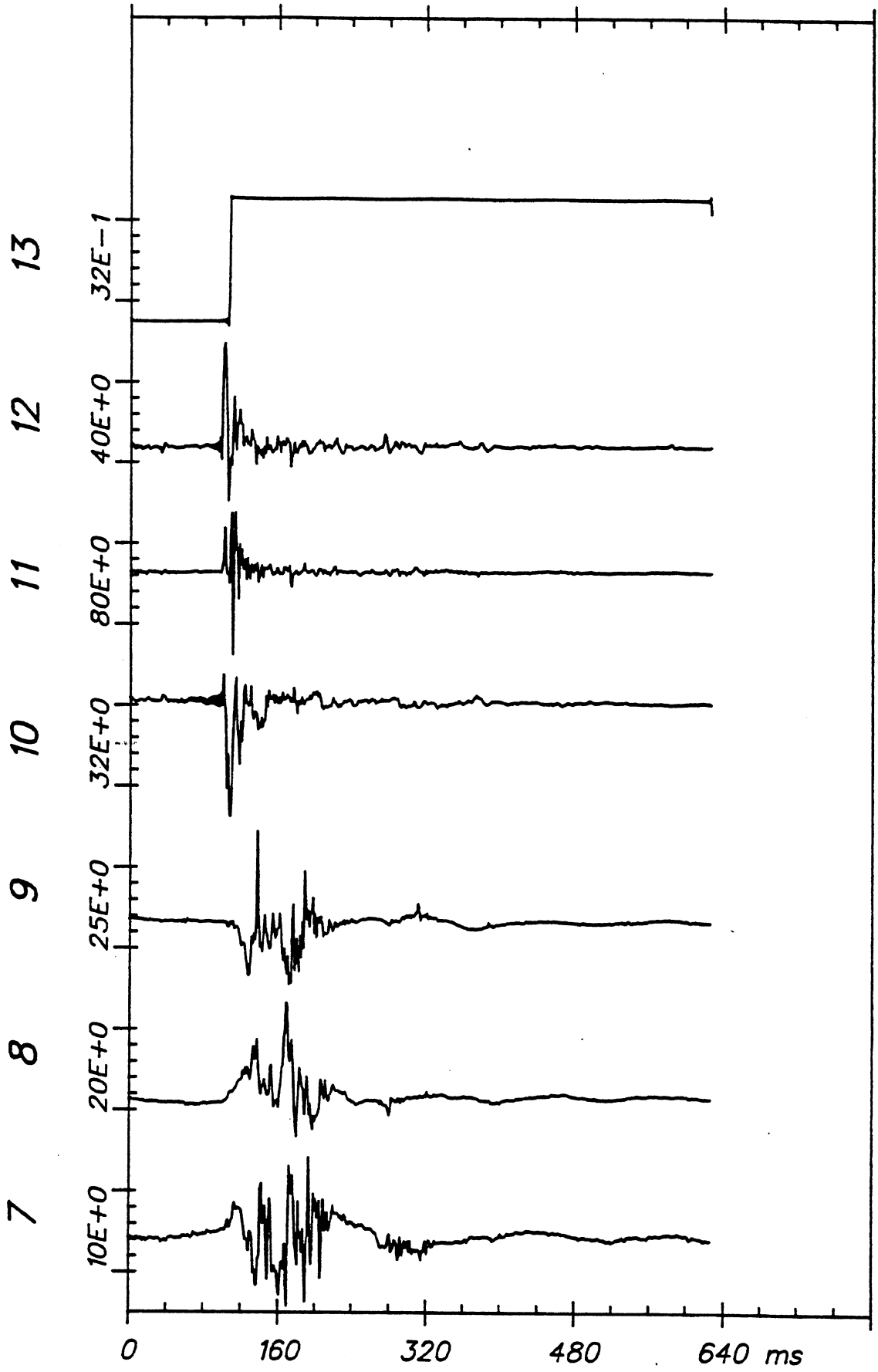




Time Histories

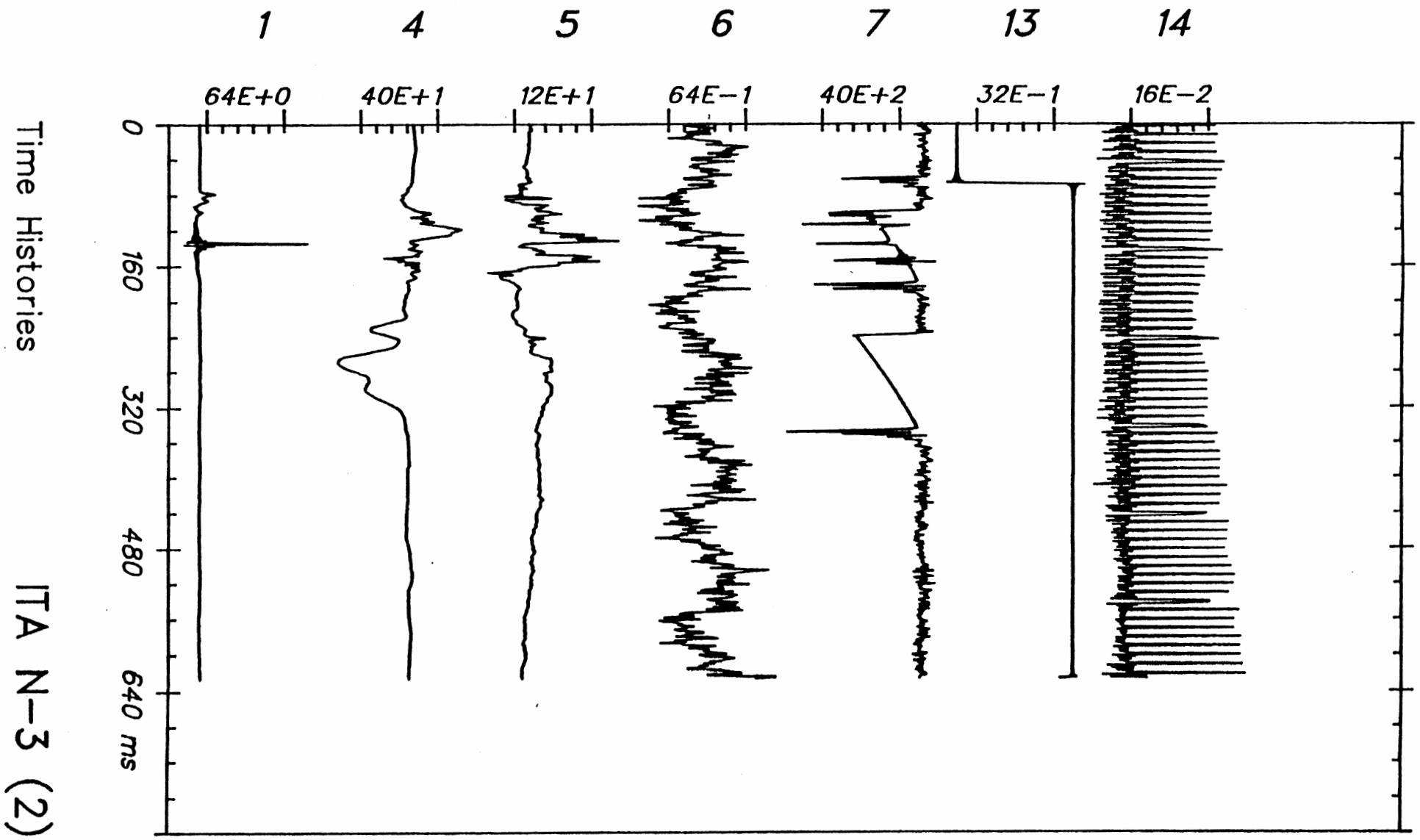
ITA N-3 (1)

From HSRI-175 to 81-SORT, file 185: /7/8/9/10/11/12/13/-/ JAN 26, 1982



Time Histories

ITA N-3 (1)



LA DO W/O SB		Test No. P-1	S U M M A R Y			
			Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)						
	P-A acc	...	-13	118	88	131
	R-L acc	...	-2	2	98	131
	I-S acc	...	-67	140	29	70
	Resultant	...			134	131
	HIC = 196	...		128		135

CHEST ACCELERATIONS (G)						
	P-A acc	...	-17	135	38	127
	R-L acc	...	-11	136	81	125
	I-S acc	...	-20	132	8	78
	Resultant	...			87	125

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-8	131	26	135
	R-L acc	...	-5	136	25	144
	I-S acc	...	-32	128	19	133
	Resultant	...			33	128

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-24	116	7	197
	Ay (L-R)	...	-12	122	41	115
	Az (I-S)	...	-4	89	35	115
	Resultant	...			59	115

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	0	0	0	0
	Fy (L-R)	...	0	0	0	0
	Fz (I-S)	...	0	0	0	0
	Resultant	...			0	0

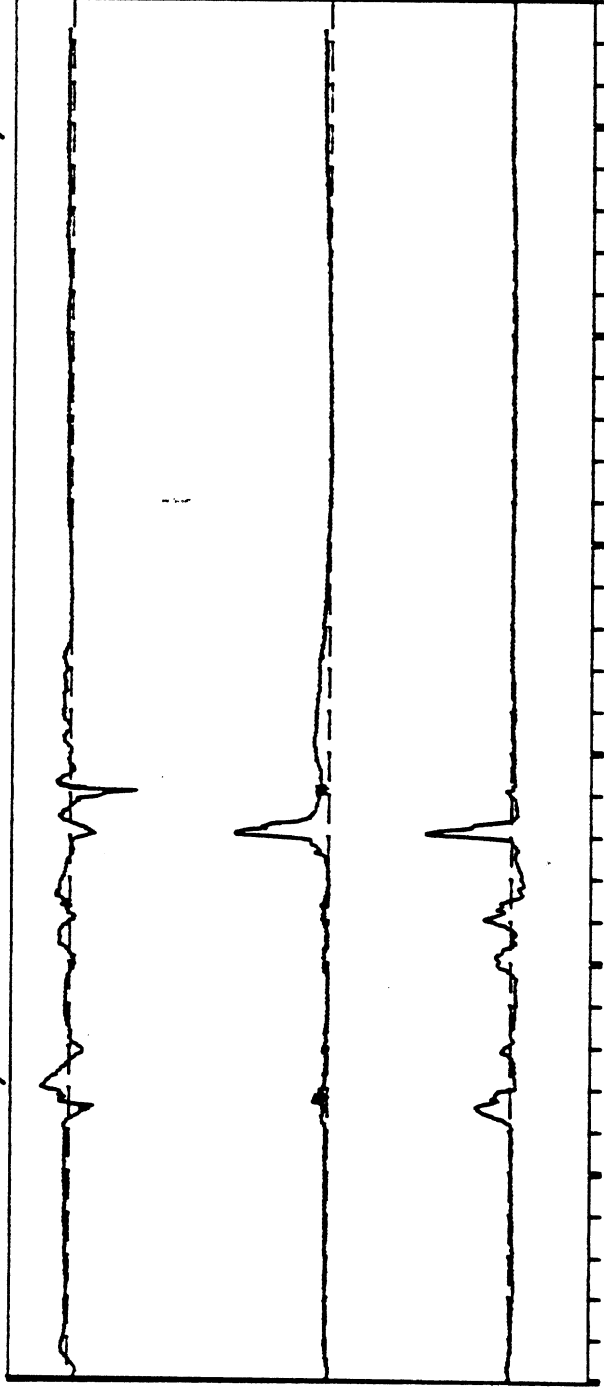
S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	0	0	0	0
	My (L-R)	...	0	0	0	0
	Mz (I-S)	...	0	0	0	0
	Resultant	...			0	0

KNEE & BELTS LOADS (LB)						
	LT Knee	...	-394	63	161	71
	RT Knee	...	-113	71	127	66
	LT Belt	...				
	RT Belt	...				

L.A. DO W/O SB

FEB 10, 1982

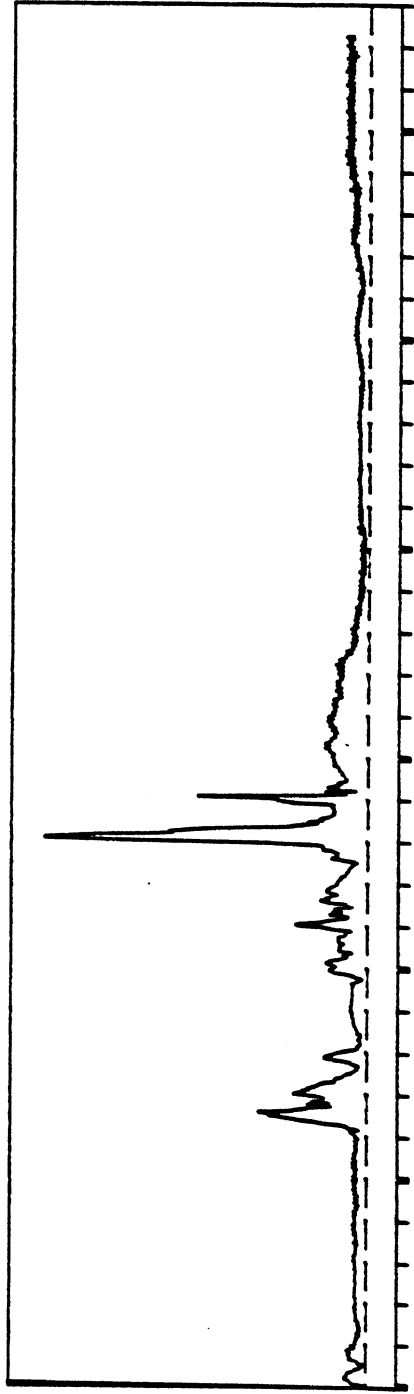
PEAKS



I-S acc -68

R-L acc 97

P-A acc 88



Resultant 133

HIC = 196

0 50 100 150 200 250 300 msec

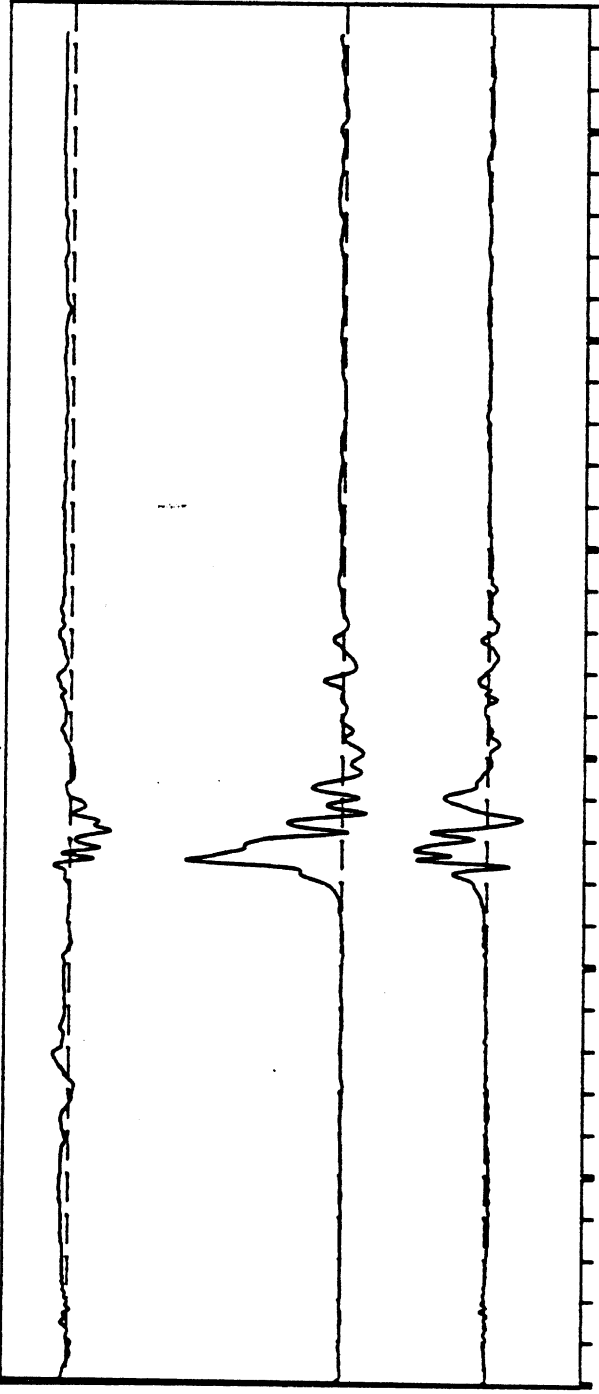
HEAD ACCELERATIONS (G)

P-1

L.A DO W/O SB

FEB 10, 1982

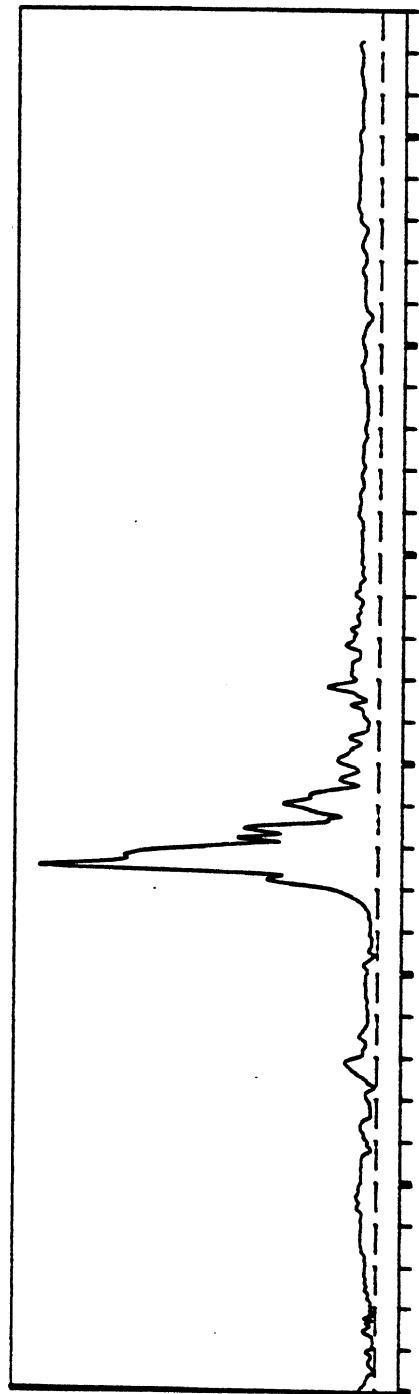
PEAKS



I-S acc -21

R-L acc 80

P-A acc 37



Resultant 87

0 50 100 150 200 250 300 msec

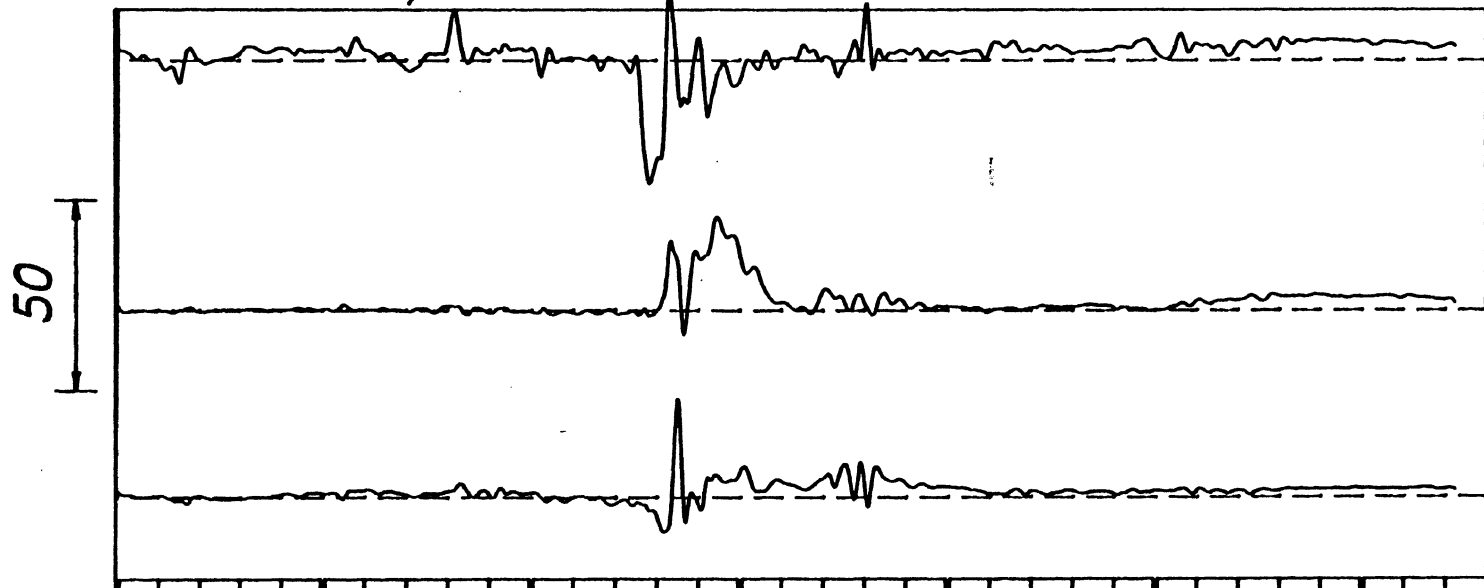
CHEST ACCELERATIONS (G)

P-1

LA DO W/O SB

FEB 10, 1982

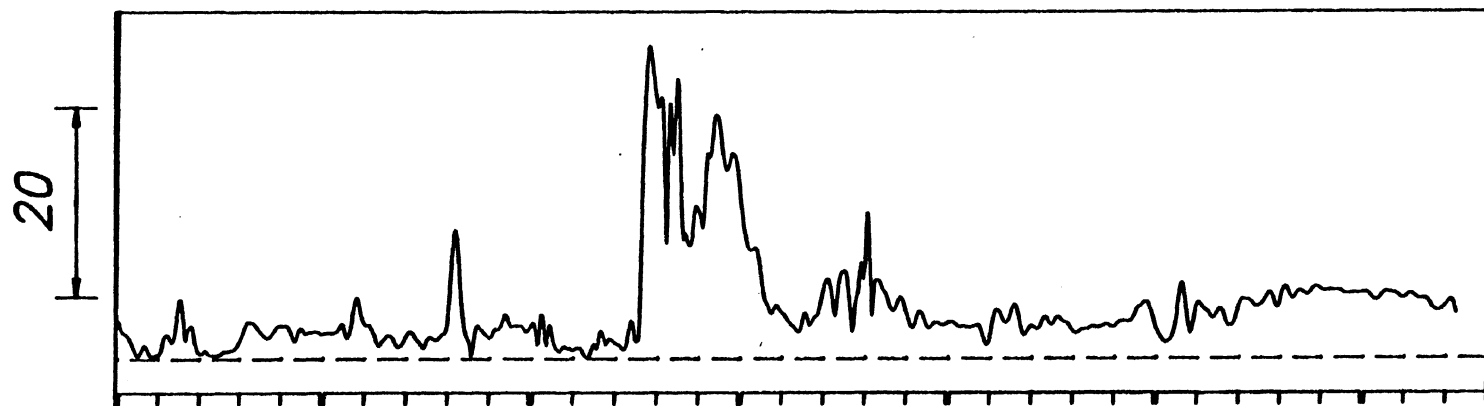
PEAKS



I-S acc -33

R-L acc 24

P-A acc 25



Resultant 32

0 50 100 150 200 250 300 msec

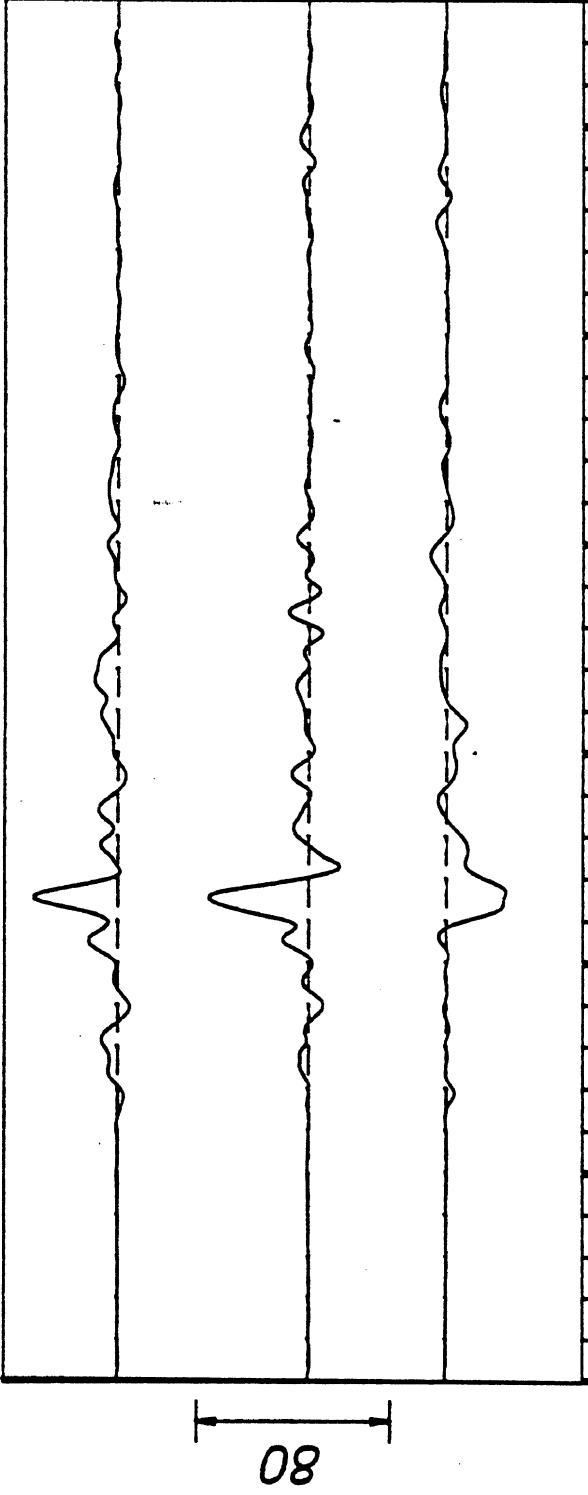
PELVIS ACCELERATIONS (G)

P-1

LA DO W/O SB

FEB 10, 1982

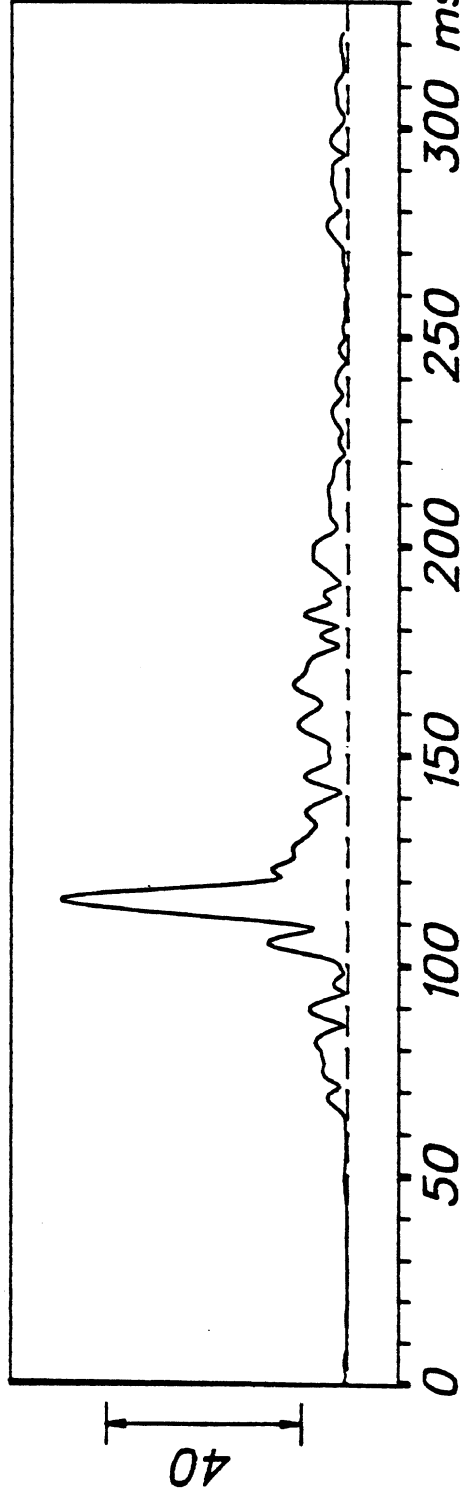
PEAKS



Az (I-S) 34

Ay (L-R) 41

Ax (A-P) -25



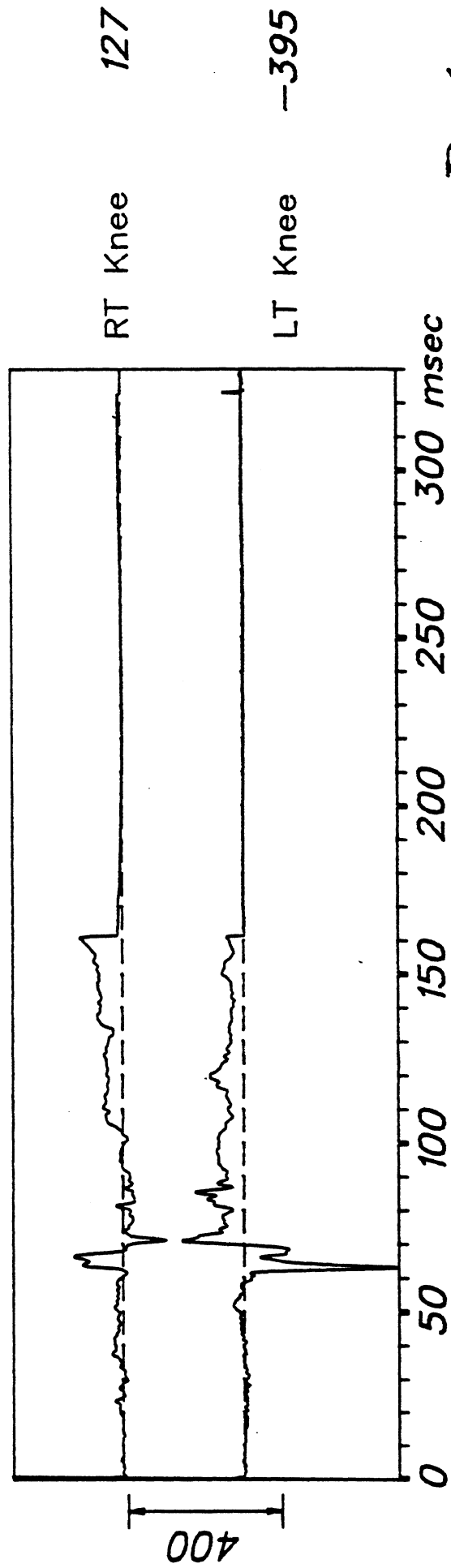
Resultant 58

P-1

LA DO W/O SB

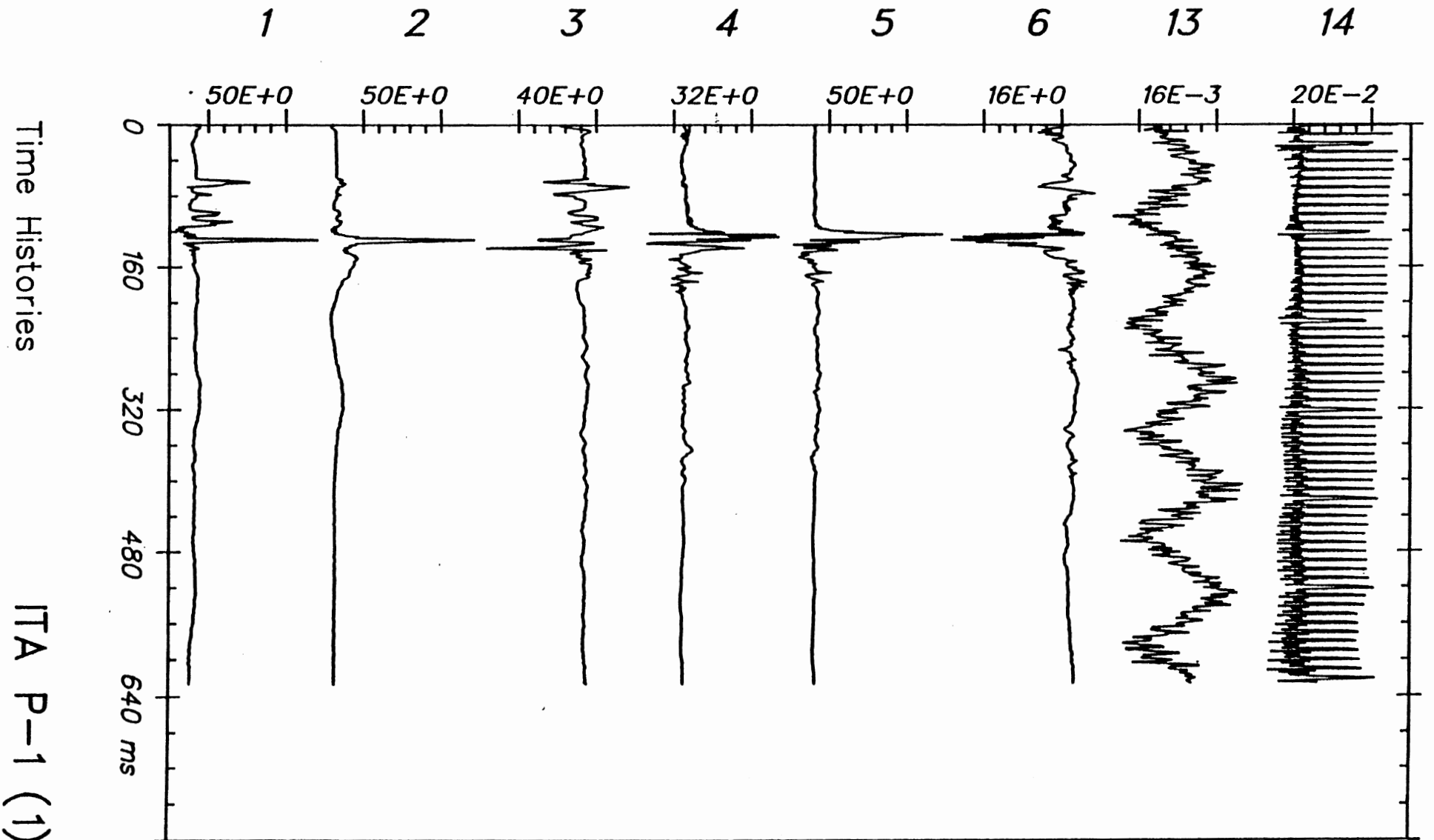
FEB 10, 1982

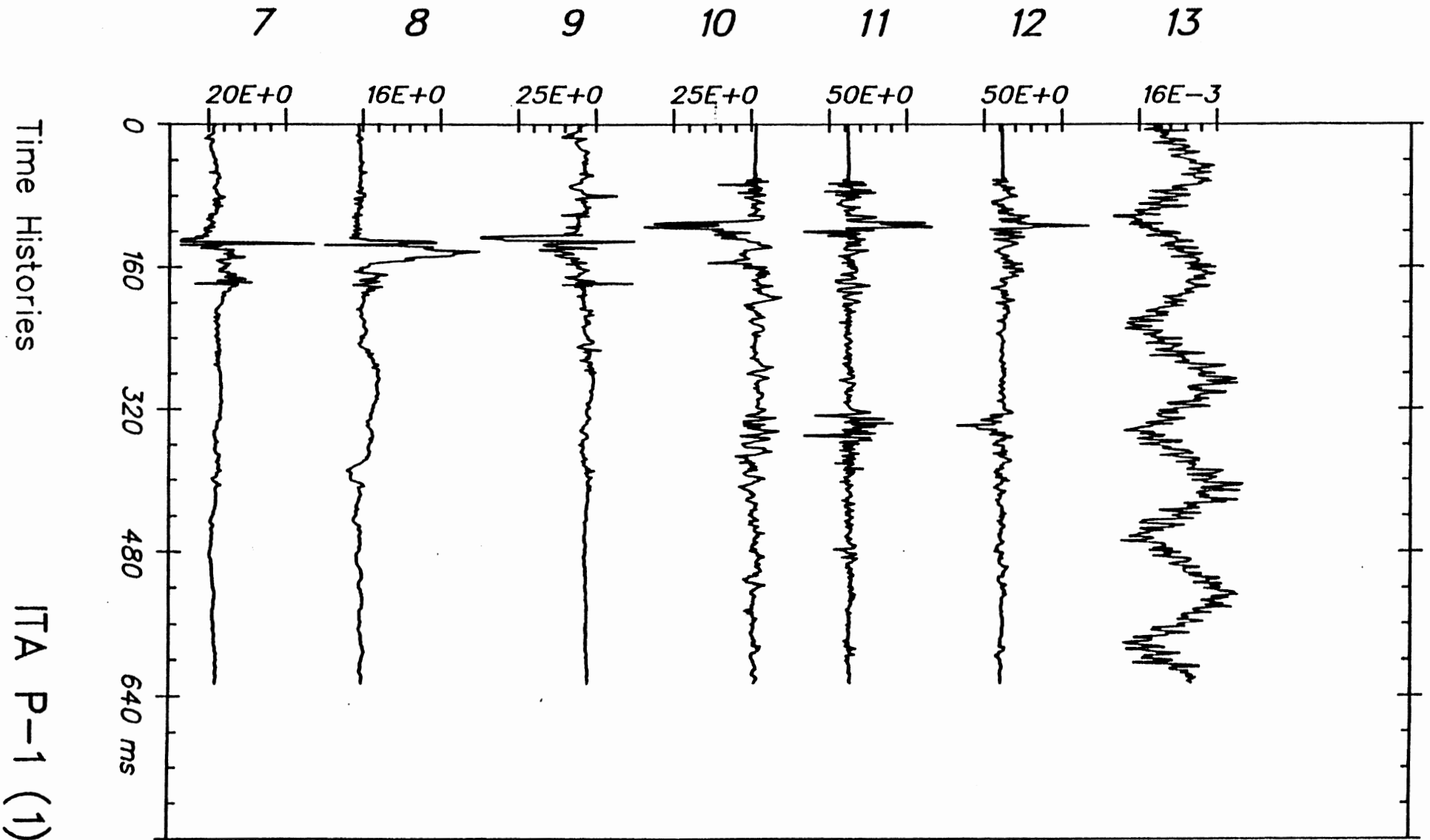
PEAKS



KNEE & BELTS LOADS (LB)

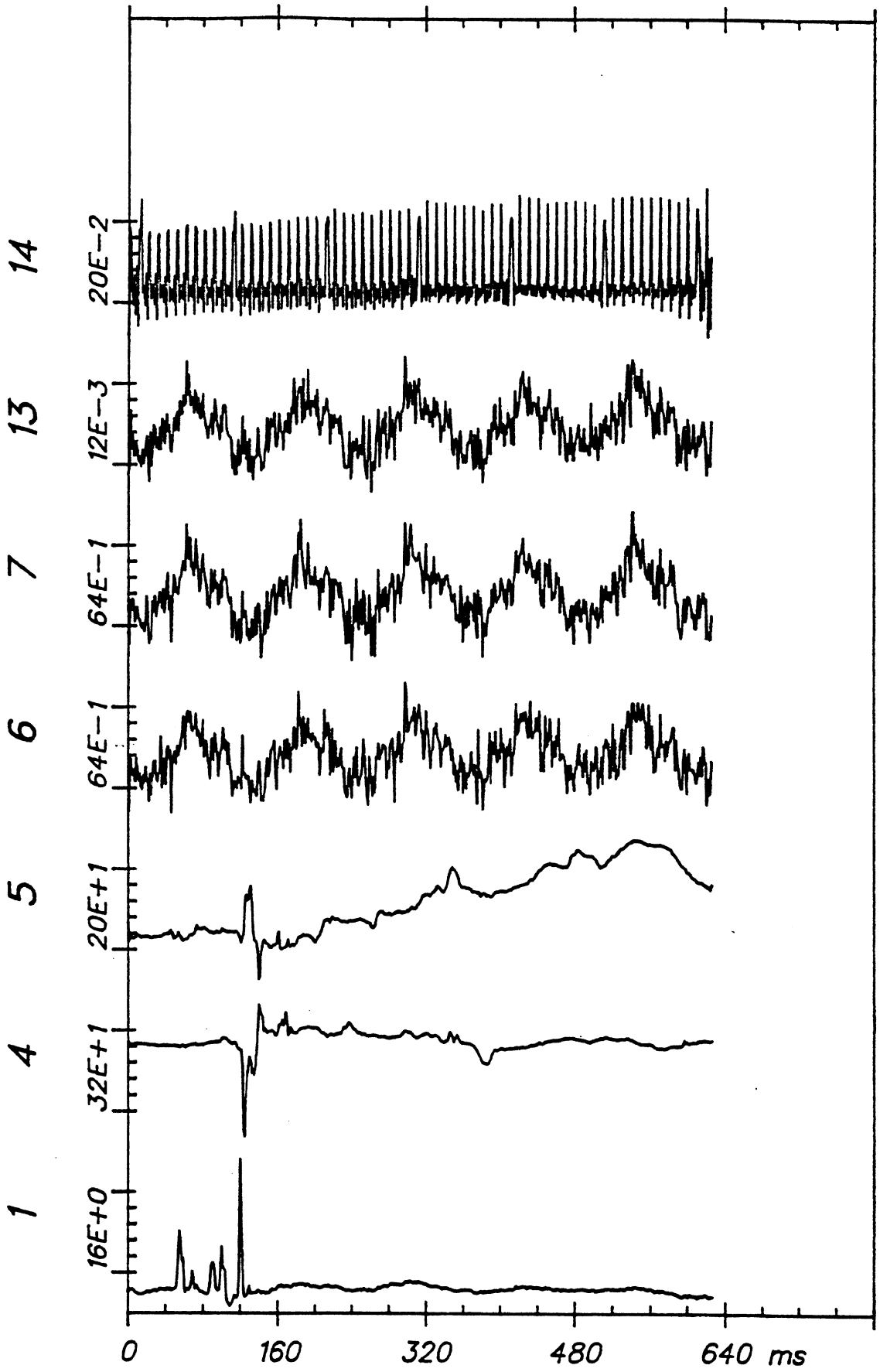
P-1





JAN 26, 1982

From HSRI-176 to 81-SORT, file 199: /1/4/5/6/7/13/14/-/



Time Histories

ITA P-1 (2)

LA DO W/O SE		Test No. P-2	S U M M A R Y			
			Min @ msec		Max @ msec	

HEAD ACCELERATIONS (G)						
	P-A acc	...	-93	283	485	281
	R-L acc	...	-203	283	454	281
	I-S acc	...	-139	282	460	281
	Resultant	...			792	281
	HIC = 7192	...		281		282

CHEST ACCELERATIONS (G)						
	P-A acc	...	-14	295	106	282
	R-L acc	...	-17	286	104	283
	I-S acc	...	-54	282	21	295
	Resultant	...			159	282

PELVIS ACCELERATIONS (G)						
	P-A acc	...	-12	284	23	303
	R-L acc	...	-18	288	30	274
	I-S acc	...	-42	284	51	292
	Resultant	...			54	292

TRUCK DECELERATIONS (G)						
	Ax (A-P)	...	-34	202	4	252
	Ay (L-R)	...	-10	304	28	213
	Az (I-S)	...	-9	304	36	198
	Resultant	...			44	199

S. COLUMN FORCES (LB)						
	Fx (A-P)	...	0	0	0	0
	Fy (L-R)	...	0	0	0	0
	Fz (I-S)	...	0	0	0	0
	Resultant	...			0	0

S. COLUMN MOMENTS (IN-LB)						
	Mx (A-P)	...	0	0	0	0
	My (L-R)	...	0	0	0	0
	Mz (I-S)	...	0	0	0	0
	Resultant	...			0	0

KNEE & BELTS LOADS (LB)						
	LT Knee	...	-780	56	485	281
	RT Knee	...	-254	50	464	281
	LT Belt	...				
	RT Belt	...				

L.A DO W/O SB

FEB 10, 1982

PEAKS

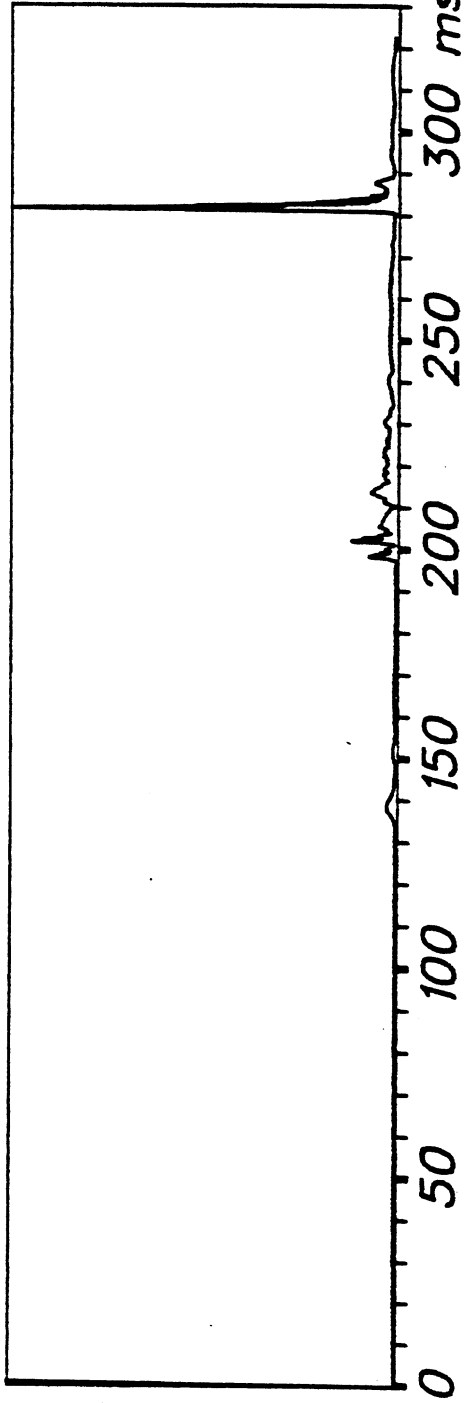
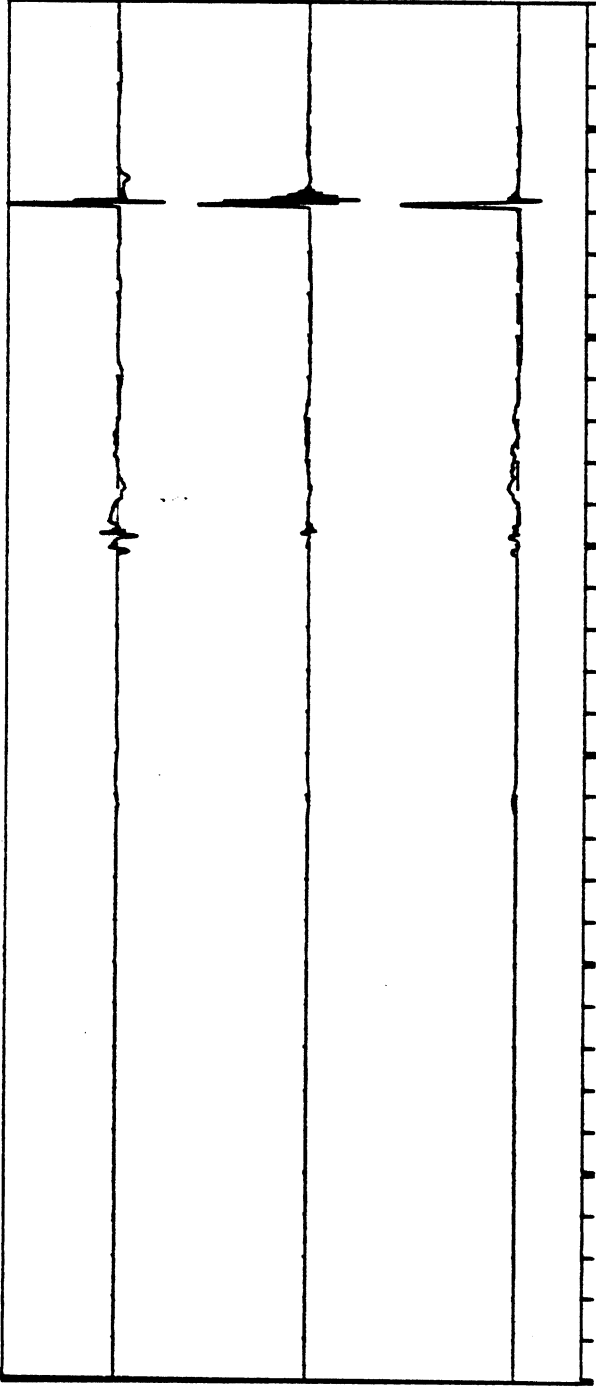
I-S acc 459

R-L acc 464

P-A acc 484

HIC = 7192

Resultant 791



HEAD ACCELERATIONS (G)

P-2

I.A DO W/O SB

FEB 10, 1982

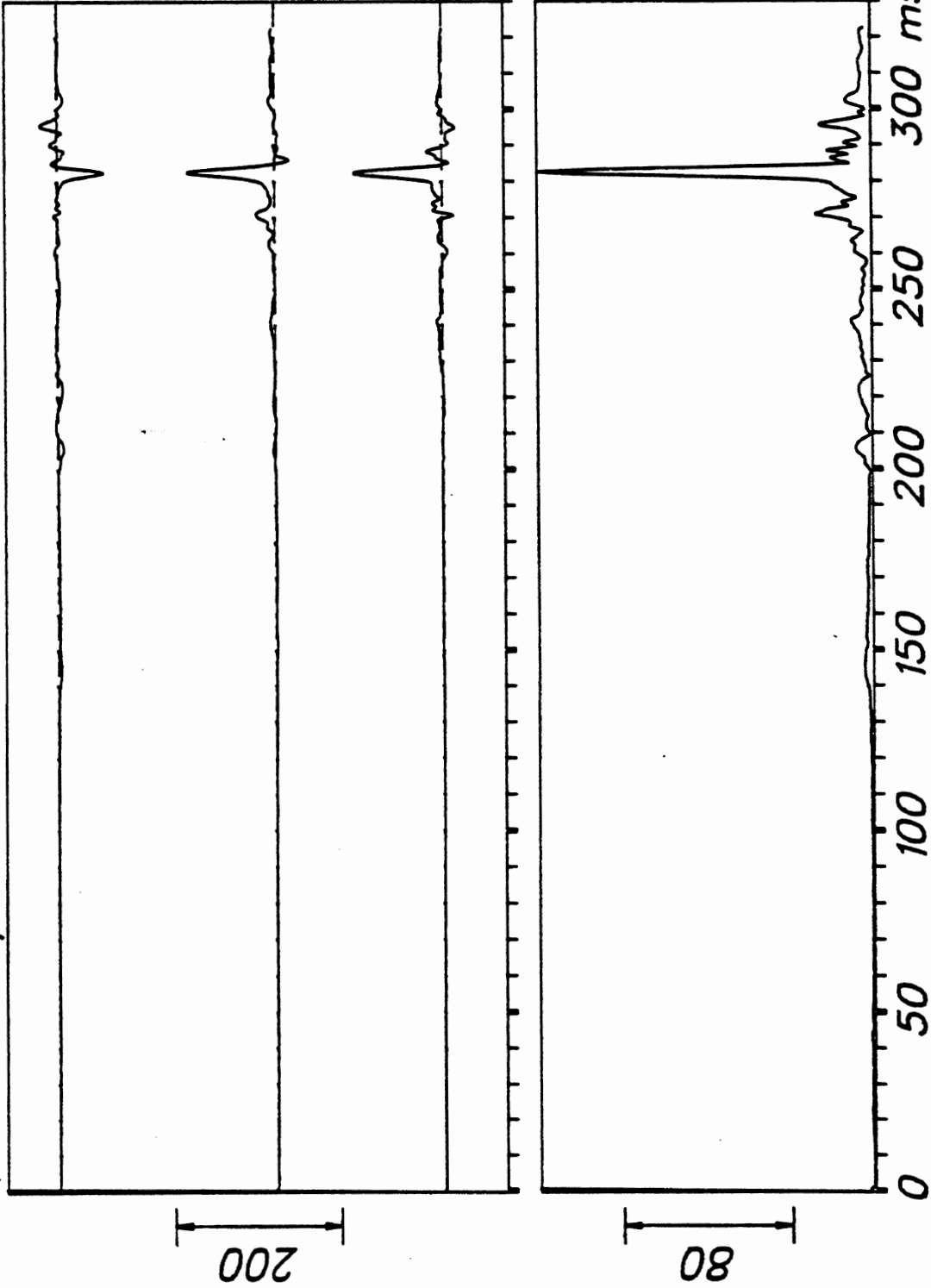
PEAKS

I-S acc -55

R-L acc 104

P-A acc 106

Resultant 158



P-2

L.A DO W/O SB

FEB 10, 1982

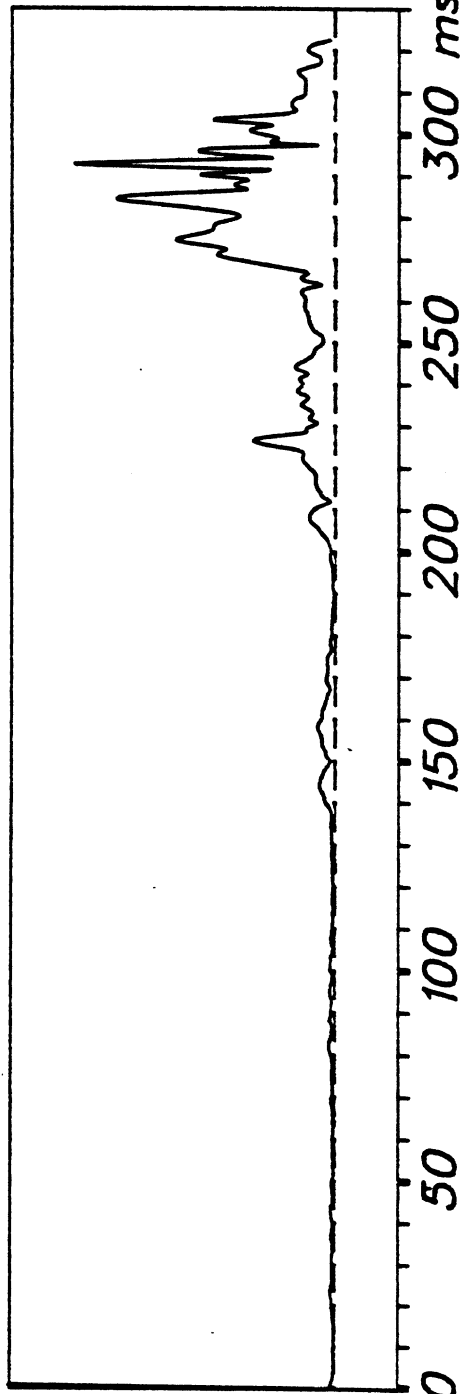
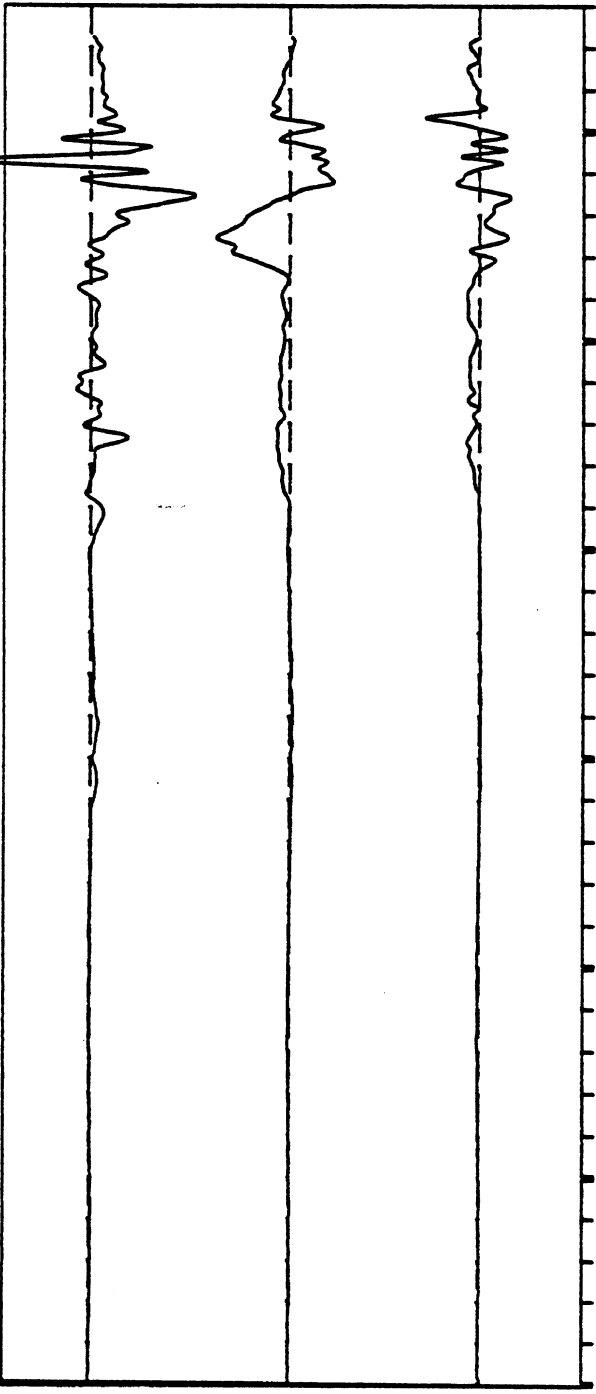
PEAKS

I-S acc 50

R-L acc 30

P-A acc 22

Resultant 53



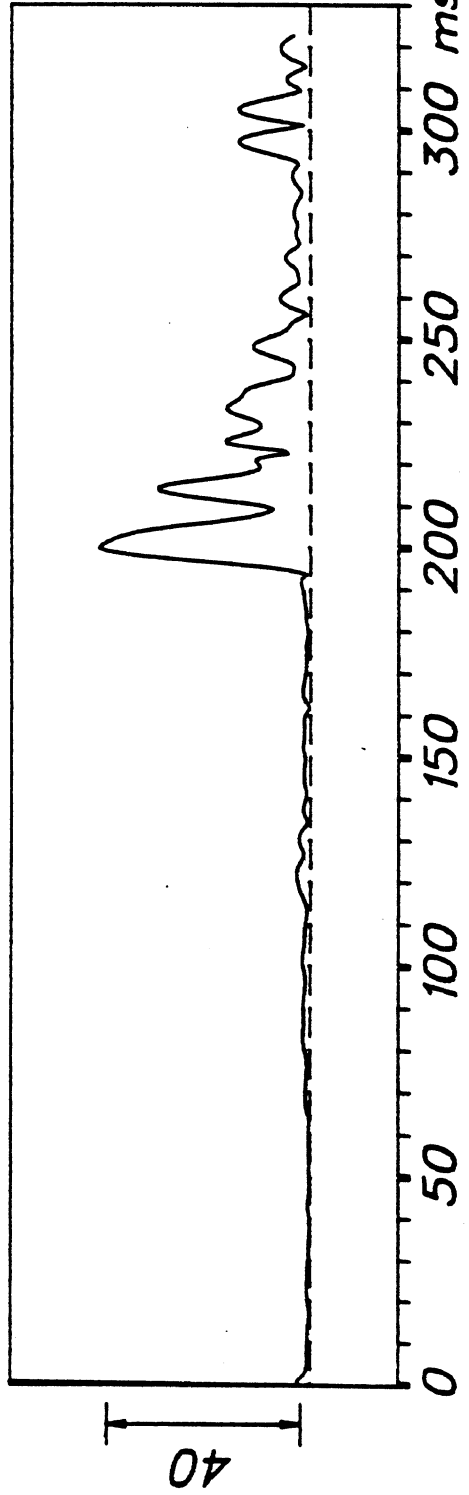
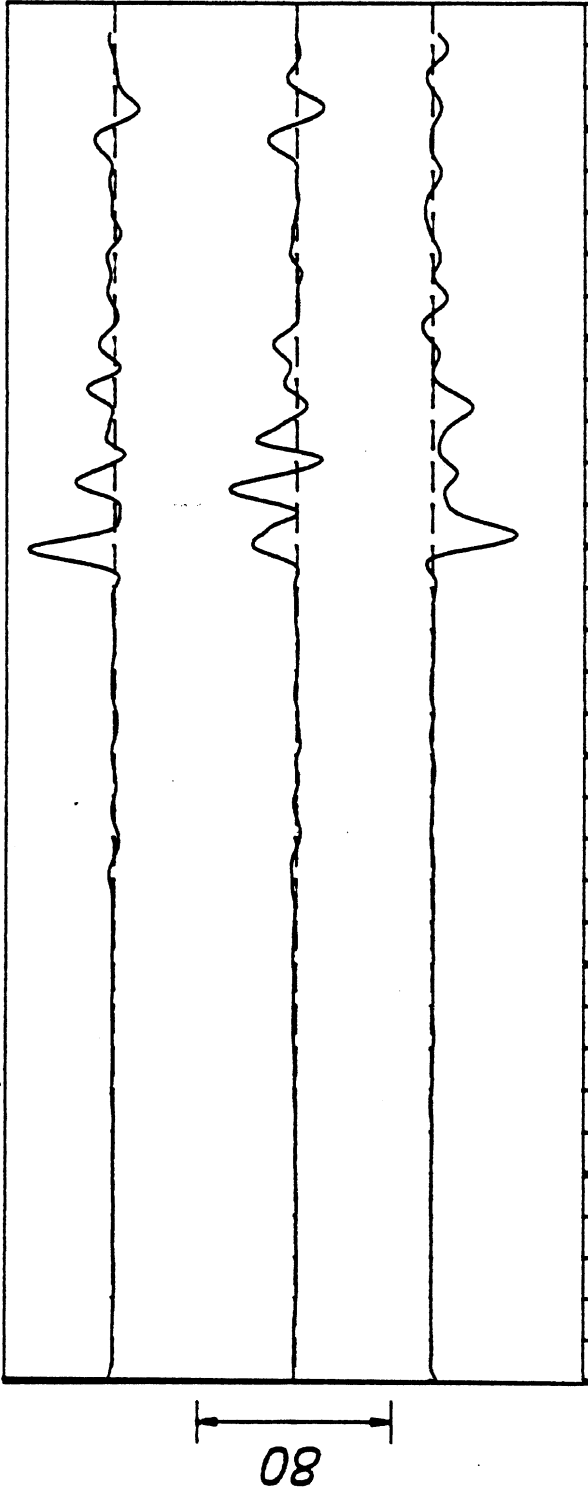
PELVIS ACCELERATIONS (G)

P-2

LA DO W/O SB

FEB 10, 1982

PEAKS

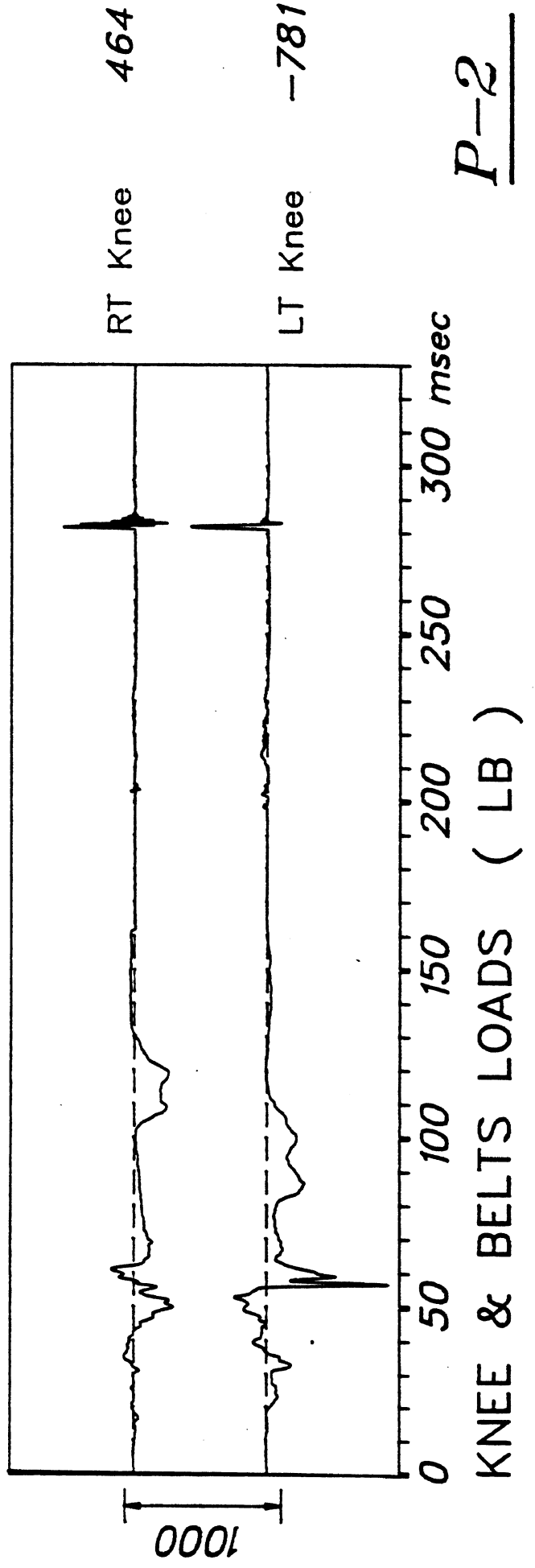


P-2

I.A DO W/O SB

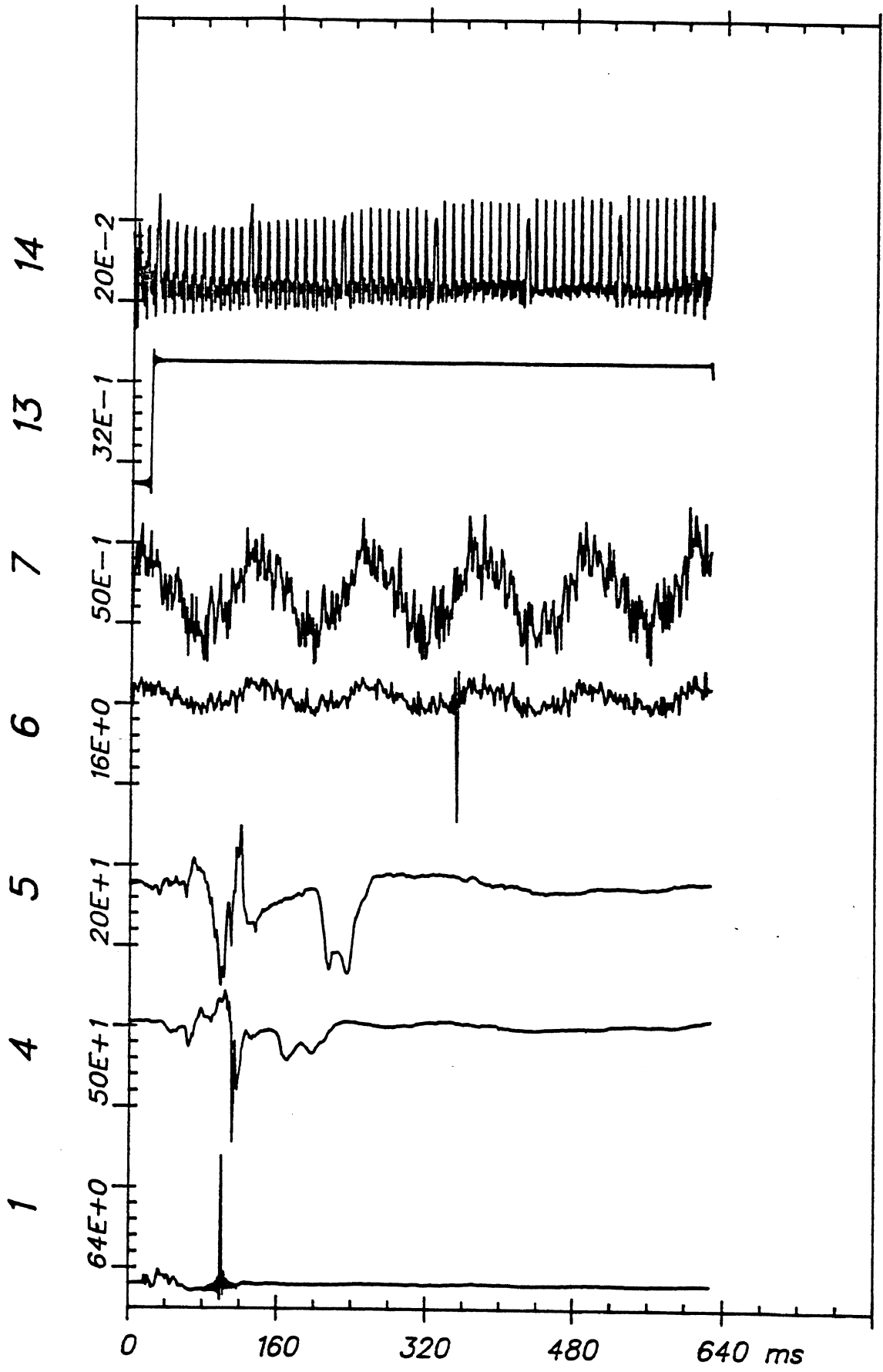
FEB 10, 1982

PEAKS



JAN 26, 1982

From HSRI-176 to 81-SORT, file 200: /1/4/5/6/7/13/14/--/



Time Histories

ITA P-2 (2)