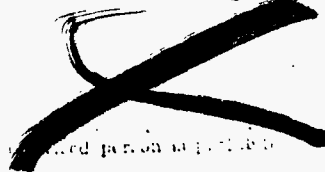


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SANDIA CORPORATION
SANDIA BASE, ALBUQUERQUE, N. M.



Ref. Sys: 5110 (100)

RG 326 US ATOMIC ENERGY COMMISSION

Air Force Cambridge Research Center
230 Albany Street
Cambridge 39, Massachusetts

Location SNL Roll #1382

Collection CENTRAL Tech. Files

Attention: Miss Edna Ruth Bargfield

Folder 0-1 IVY

For: Mr. Norman A. Haskell

(3RD Folder)

Subject: Preliminary Data on IVY Air Shocks

Enclosed are subject data taken by the Sandia Corporation group and supplied with the hope that you may employ these results meaningfully in preparing your reports and interpreting your data.

Arrival times to specified (ground level, not slant) distances are probably as accurate now as they ever will be. Peak overpressure values and durations of positive phases may get slightly different final values after we have the opportunity of reviewing the played-back records more closely.

On the King shot you will note quite large differences between data taken on the gages placed over the reef (so-called "water line") and over land. There was evidently a good "precursor" of the type described in WT-501.

CLASSIFICATION CANCELLED
BY AUTHORITY OF DDE/EG
Everett
J. Diaz 3/11/57

BEST AVAILABLE COPY

Everett F. Cox, Manager
Weapons Effects Department

EFC:es

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1-550

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CDL No.	
ACCOUNTABILITY CARD	<input checked="" type="checkbox"/>
FILE No.	<u>0-1</u> <i>Diaz</i>

INVENTORIED

MR 755

4162

INVENTORIED

2510 JAN 8 '54

CENTRAL M & R CONTROL NO. Q

516

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DEC 1 1957

MIKE SHOT

Ref. Symb 5110 (100)

Island	Station	Distance (ft)	Peak (psi)	Arrival Time (sec)	T + (sec)	Type of gauge	Notes
Bogon	615.02	8,250		1.379			
Engabi	611.01	15,900	17.46	5.18	3.81	SOB	(31)
			20.26	5.18	3.91	PS	
Muzin	612.02	21,412	12.10	7.70	5.96	SOB	
			12.27	8.81	5.85	PS	
Aomon	611.04	47,574	2.68	28.86	8.86	SOB	
			2.60 ^a	28.87	9.53	PS	
Runit	613.02	74,884	1.32 ^a	51.19	12.73	SOB	0.72 sec rise time
			1.24 ^a	51.19	12.87	PS	0.76 sec rise time
Parry	612.01	114,240	0.46 ^a	83.27	15.51	SOB	1.6 sec rise time
			0.66 ^a	83.32	14.50	PS	1.55 sec rise time

USS Estes
185,400

145

^aValue taken from Brush record; all other P_{max} taken from IBM
SOB - side-on baffle; PS - pitot tube

KING SHOT BEST AVAILABLE COPY

	Water Line	Ground Distance (ft)				
Runit	617.01	3,034	88.85	0.880		
	617.02	3,533	64.60	0.965		
	617.03	4,531	40.59	1.420	1.05	
	617.04	5,531	24.57	1.930	1.11	
	617.05	6,530	19.83	2.515	1.67	
	617.06	7,529	15.44 ^a	3.130		
	617.07	10,529	7.10	5.190	1.95	
Parry	617.08	15,494	3.75	8.970	3.05	
	612.02	55,132	0.33	38.76	5.05	
Runit	Land Line					
	6101.01	3,458	62.31	0.800	1.23	
	6101.02	5,490	16.26	1.755	1.54	
	6101.03	7,502	11.36 ^a	3.080	1.76	
	6101.04	10,188	8.54	4.940	1.95	

Gauge broke off
Gauge broke off

Cable broke

T (main shock) = 0.96
T (max) = 1.01
T (main shock) = 1.845
T (max) = 1.922
Wave starting to clean up
T (max) = 3.22
0.04 sec rise time
114 psi initial pressure

^aValue taken from Brush record instead of IBM

