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J-15-3-17



EDGERTON, GERMESHAUSEN & GRIER, INC.

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Classification changed to: UNCLASSIFIED  
by R. J. TSM (ESS-16/4/10/97 ADC/ADD  
1st review 10/10/97 4-10-97 ADC  
2nd review 10/10/97 4-10-97 ADC

TO: Dr. R.L. Aamodt, CTU 8.1.1  
FROM: R.C. Schneiderhan, TU 8.1.6 *RCS*  
SUBJECT: Shot SUNSET, Shot Report

Shot Sunset, Operation Dominic was detonated on July 10, 1962 at a local Christmas Island time of 0733:01.2372. The measured time of fall was 55.191 sec.

The Timing and Firing system operated properly, all monitors indicating that all signals were received and sent out. The five EG&G photostations (three ground and two airborne) operated as scheduled except for one Photo-Sonic 35 mm camera at "A" Site which jammed before its film was expended, however, the film recorded the event through time of interest.

Readings from five Bhangmeter traces (two from the T&F trailer and three from the C-130 aircraft) gave an average time to minimum of 80.4 msec. The preliminary Bhangmeter yield is 855 Kt  $\pm$  20% corrected for effects of ambient air density at burst altitude.

A three station graphic triangulation was performed using data obtained from phototheodolite records at the three ground photostations. Slant ranges computed from this triangulation from "A" Site to burst and "MM" Site to burst are 27,497 m and 28,585 m respectively. A height of burst at 5100'  $\pm$  100' is quoted at this time.

Preliminary analysis was made of two Photo-Sonic 35 mm records, one from "A" Site and one from "MM" Site. These cameras employed nominal 150 mm lenses. The agreement between the stations was good. The preliminary fireball yield derived from the analysis is 930 Kt  $\pm$  10%. All EG&G film has been sent to Hickam Air Force Base for processing and detailed analysis.

cc:

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