

PROGRESS REPORT FOR PERIOD

ENDING 26 MAY 1966

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SC-CR-66-2059X

for

Contract Sandia 13-8888

SANDIA SYSTEMATIC DECLASSIFICATION REVIEW	
1 st Review Date: <u>10/79</u>	Determination (Circle Numbers):
Authority: <input type="checkbox"/> ADC <input type="checkbox"/> ADD <u>CCRP-RR</u>	1. Classification Retained
Name: _____	2. Classification Changed to: <u>U</u>
2 nd Review Date: <u>10-02-96</u>	3. Contains No DOE Classified Information
Authority: ADD	4. Coordinate With: _____
Name: <u>W. Layne</u>	5. Contains UCAIT
	6. Comments: _____
	<u>Declassified 10/79</u>

Submitted to

Sandia Corporation
Albuquerque, New Mexico

SANDIA SYSTEMATIC DECLASSIFICATION REVIEW	
COMPLETING OR DECLASSIFICATION STAMP	
Classification: <u>U</u>	Authority: <u>W.C. Layne</u>
Emelda Selph <u>10-03-96</u>	RECORD ID: <u>925N011</u>
<u>R.T. Duff 10/29/96</u>	DATE: <u>10-02-96</u>
PERSON YEAR	COMPLETION DATE

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1 June 1966

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INTRODUCTION

This is the twenty-fifth in a series of letter progress reports issued in accordance with the documentation requirements of Sandia Corporation Contract 13-8888, dated May 1965. This report will cover the work performed through 26 May 1966.

TECHNICAL DISCUSSION

During this reporting period, main efforts were concerned with the testing of a putty capable of floating on water. Test units were ejected into a body of water, 3 feet in diameter by 4 feet deep. The units were fired from a height of 55 feet at a velocity of approximately 200 ft/sec.

During these tests, a problem arose in the firing mechanism. Several units did not ignite until they had impacted with the ground. Two units that hit the ground and one that landed in the water did not ignite at all. When these three units were investigated, it was found that one of the bore rider pins had not released. Several tests were conducted using the firing mechanism only. In these tests, one safety pin was released before the other. In all of these tests it was found that, if one safety pin is pulled and the bore rider pin released, the other bore rider will not be released when the safety pin is pulled. When just one bore rider pin is released, the firing pin is cocked, causing to bend on the other bore rider pin, which prevents its release. This problem did not occur in previous tests because a lighter firing pin spring was used, nor did it occur during high velocity tests. It was found that this problem could be eliminated by tapering the firing pin groove.

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On the whole, this series of ejection tests into a body of water was unsatisfactory because its small size made it impossible to hit the water consistently with an ignited unit.

PROPOSED WORK

Future testing will be performed in an 18 foot diameter tank, and utilize units with the modified firing pins. Additional work, such as modification of the firing pin for the next lot of flares, will depend on these tests. This modification will also depend on the results of any test performed by Sandia and whether Sandia feels it is necessary.

The 25 units will be delivered on or before 17 June 1966.

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