[redacted]

UNCLASSIFIED

10/5/98
RBCraven
10/26/98
WCLayne
Declassify
Air Force Armament Lab. Memo dated 12/5/72

10/11/67

T-90534 OCT 1 1 1967 File: E-3

SLED TEST OF GARLIC TANK (U)

Organization 7300 Environmental Test Report

K. M. Timmerman, Org. 7344

Approved by _____
D. C. Bickel - 7344

Approved by _____
7331 Test Project Engineer

Distribution:
D. E. Henry, 5613
Attn: B. J. Petterson
G. J. Simmons, 5612
Attn: C. W. Sprague
H. E. Walker, 2151
D. S. Bliss, 2562
D. C. Bickel, 7344
Attn: K. M. Timmerman
E. White, 7331
Central Technical File, 3428-1

[redacted]

UNCLASSIFIED

[redacted]

UNCLASSIFIED

T-90534

SLED TEST OF GARLIC TANK (U)

Introduction

The object of this test was to determine the size and distribution of a propane cloud that is produced by cutting open a tank of propane that is traveling 800 fps at 30 feet above the ground. The test was to be accomplished by ejecting the tank from the ejector sled and opening the tank with explosives after ejection. High speed cameras located above, behind and beside the target area were to record the action and size of the cloud.

This test was requested by Ben Petterson, 5613, on July 24, 1967. The test item was received September 11, 1967 and the test was completed September 12, 1967.

Procedure and Results

The Garlic Tank was loaded on the ejector sled as shown in Figure 1. A pusher sled operating as the first rocket stage and a second stage on the ejector sled accelerated the unit to about 800 fps at the ejection point 1000 feet from the end of the track. At this point the unit was to be ejected upward from the sled. A plug pulled out of the unit at ejection was to initiate a 2 second timer which would then cause flexible linear shaped charge to detonate and cut open the tank 40 feet above and 700 feet beyond the end of the track.

Because of an apparent sled malfunction the unit did not eject. When the sled entered the water brake area, the unit left the sled and struck the track approximately ½ second later at an estimated velocity of 700 fps. The FLSC detonated them and opened the tank. The cameras tracking the flight of the unit recorded the impact and subsequent distribution of the gas cloud. The wind at the time of the test was 20 fps from 285°.

KMT:mw

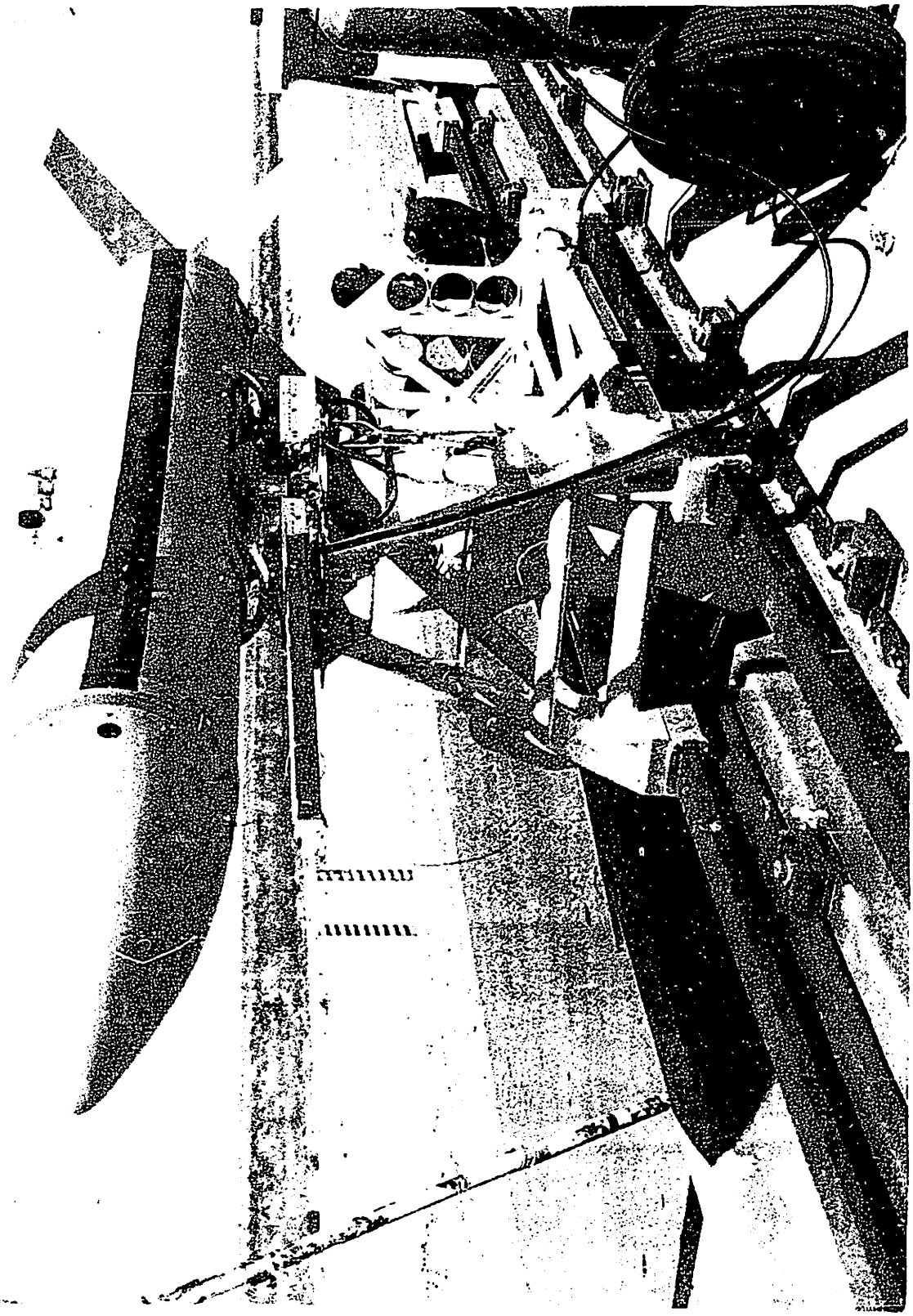
UNCLASSIFIED

[redacted]

#130

[redacted]

UNCLASSIFIED



D#47-6903

[redacted]

UNCLASSIFIED