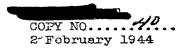
Image Cover Sheet

CLASSIFICATION	SYSTEM NUMBER	100077
UNCLASSIFIED	SISTEM NUMBER	139977
TITLE	<u> </u>	
VISUAL ASSESSMENT AND VAPOUR SAMF	LING WITH M70 BOMBS	CHARGED LEVINSTEIN H AT
System Number:		
Patron Number:		
Requester:		
Notes:		
DSIS Use only:		
Deliver to:		

EXPERIMENTAL STATION DRAFT

SUFFIELD ALBERTA

FIELD EXPERIMENT NO. 191



1. TRIAL

Visual assessment and vapour sampling with M70 bombs charged Levinstein H at low temperature.

2. OBJECT

This trial is designed to obtain data on three aspects of the performance of this bomb.

- (a) The form of the contamination and the area affected.
- (b) The vapour concentrations produced downwind.
- (c) The traversing danger.

3. REFERENCE

Sl2l

4. WEATHER

Air Temperature minus 10°C to minus 20°C. Wind Speed below 20 mi/hr. Wind Direction any but steady. Suitable for bombing from 15,000 ft.

No snow cover.

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5. MATERIAL

- (a) Four M70 bombs charged Levinstein H dyed red with Rhodamine B Classification / Doningette
- (b) Fuse No. MllO or M 108
- (c) Burster 665 gris Tetryl.

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C. Laforce Date 25 Feb 98 Signature

D. Kuseler

PROCEDURE

Appointment 6. Pretreatment of Bombs The bombs will be stored in the open; on the day of the triel the charging temperature must be between minus 10°C and minus 20°G.

7. Release of Bombs.

The four bombs will be released in salvo from a Boston aircraft flying at 12,000 ft. above terrain and at 200 mi/hr. They will be aimed (TV 1200 ft/sec) at a triangle put down by M.E.O.

8. Inspection of Contamination

.The area contaminated will be inspected by O.M. & E.; P. & M.S. and P.R.S. The functioning, approximate area contaminated & condition of dispersed charging will be recorded.

9. Traversing Hazard

Ten observers will walk in the area contaminated as directed by They will wear: Service boots and anklets. Spare boots will be taken into the field.

- 10. The observers will be divided into two equal groups A & B. (a) The boots and unklets of Group A will be removed immediately on completion of the traversing and will be placed in a metal container with well fitting lid.
 - (b) Group B will march four miles across the prairie and their boots and anklets will be removed and placed in another container.
- 11. Footgear from Group A will be put in the chamber in P. & M.S. and those from Group B into that in Phys. 3. This should be done as soon as possible after completion of the traversing. The chamber temperature in each case will be 65°F to 75°F.
- 12. Vapour Concentrations will be measured in the chember at intervals for a period of 3 hours or until the values recorded reach a maximum whichever is the less.

Field Experiment No. 191 (continued)

- 13. Phys. S will report whether contamination is picked up or retained on the boots and anklets.
- 14. Vapour Concentrations in the Field.

 12 injectors and bubblers will be disposed in an are
 downwind of the contaminated area at positions to be decided by P. & M.S.
 & Chem. S. in consultation. Zero for sampling will be as soon as possible after the bombs are dropped. Sampling will be conducted from Z to
 Z + 1 hour and from Z + 1 to Z + 2 hours.
- 15. PHOTOGRAPHS Still photographs will be taken as required.

...16. ADMINISTRATION

M.E.O. Control of Trial. Aiming mark. Plot of craters & sampling points.

CHEM. S. Sampling in field and in chambors.

P. & M. S.

Inspection of contamination. Positioning of sampling points. Meteorological observations.

Photographs as required.

O/C RCAF DETACHMENT - Release of bombs. Height and speed of mircraft.

O. M. & E.

Provision of charged weapons. Inspection of contamination.

PHYS. S. Organization of traversing trial, & vapour sampling from footgear, including provision of any special equipment needed.

139977)

H. J. Hadow

P. R. S.

Experimental Station

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(K. Biřchall) W/Cmdr.

C.E.O.

Experimental Station