Image Cover Sheet

CLASSIFICATION	SYSTEM NUMBER
UNCLASSIFIED	140020

TITLE

AREA SHEET WITH 25 PDR. BE/CHEMICAL SHELL CHARGED HBF \(1.5% PERSPEX\)

System Number:

Patron Number:

Requester:

Notes:

DSIS Use only:

Deliver to:

140020
52-M545

DOCUMENT RECLASSIFICATION RECORD

Document FE 142(TSS) Title Area Shoot with 25 pdr.BE/Chemical Shell Charged HBV (1.5% Perspex)

Author(s) J.T. Hugill Date Jul 43

Original Classification Secret

Limitation

Harvey Recommendation
Classification Unclassified

Limitation Unlimited Clause

Deletions

Reviewed by C. Laforce Date 30/4/97

Classification Unclassified

Limitation Unlimited

Official Warning Term

This Document may be released as is under ATI:

Deletions required

ATI Clause

Other Requesters

I concur

Chairman/DRP

5/97
meeting

8/8/97
Date

HQS. 4350-27-13-1 Vol 1

UNCLASSIFIED / UNLIMITED

[redacted]

COPY NO. 41

5th July, 1943

EXPERIMENTAL STATION
SUFFIELD, ALTA.

Classification / Designation Changed to / Remplacée par U/U
By Authority of
Sur l'Autorisation de C. Laforce
Date 26 Feb 98 Signature D. Keuseler
Appointment
Fonction
Unit
Unité

FIELD EXPERIMENT NO. 142

Area Shoot with 25 pdr. BE/Chemical Shell charged HBV (1.5% Perspex)

REFERENCE — Priority Programme No. 5 - Item IV - 4(c)

OBJECT
(a) To check the ammunition expenditure of 10 rounds per 100 yards by 100 yards necessary to achieve anti-personnel effects with the 25 pdr. BE/Chem. shell charged HBV (perspex 1.5%) under hot weather conditions.
(b) Determine whether this expenditure produces any vapour and/ or contact hazard under such onditions.

METEOROLOGICAL CONDITIONS

Windspeed - below 20 m.p.h.
Wind direction - Any
Temperature - (a) 70 - 85°F.
(b) Above 85°F.
Absense of precipitation.

SITE — Artillery Target Area C-3

TIME — As soon as possible.

MATERIAL — 300 rounds 25 pdr. BE/CHem. Shell Mk. X charged [redacted] (1.5% Perspex 12p, 4 - 25 pdr. Mk. 11 guns.

PROCEDURE

1. Layout will be as in Appendix 1.

2. The target zone will be engaged by searching and sweeping on nine points of origin.

3. Four guns will engage the target zone firing one round per gun per point of origin, for first searching and sweeping and two rounds per gun per point of origin for successive searching and sweeping. (Seven rounds/ gun per point of origin.)

4. The guns will be spaced at 50 yards. If the wind is uncertain at the target, no correction will be made for drift of droplets, the shell being fired to burst over each point of origin. If the wind is above 5 m.p.h 50% will be added to the range table correction for drift of droplets.

5. Range will be 8,000 yards, giving 150 yards searching and 1° sweeping.

6. Injectors will be turned on immediately prior to firing and will be changed as follows:

(a) Immediately after the shoot.
(b) From zero to zero plus 60 min. (where zero = time of end of shoot).

Inlet of bubblers will be curved downard to prevent entrance of liquid.

7. Persistence tests, ten positions, will be made at zero plus twelve hours by Chem. S. in consultation with P. & M.S.

8. Thirty Livens drums will be placed in the target area prior to the shoot. Observers under the direction of Phys. S. will carry the drums off the area as soon as possible after the shoot.

9. One dummy dressed in German uniform will be placed in each trench in a crouching position and two dummies will be placed on the ground in each row in a lying or crouching position. Immediately after the shoot, the suit will be removed and placed on observers with the least possible delay. It is important that the change of uniform from the dummies to the observers be carried out as quickly and as soon as possible after cease firing. Dummies are to be placed in such a position that the shoulders and head will be just below ground level.

10. Heights of burst will be taken from two points by P. & M.S.

11. O. M. & E. will report the number of shell going to graze. (Two observers).

12. The usual meteor data will be recorded throughout the trial.

ADMINISTRATION

Section in charge of trial - M.E.O.
Section responsible for final report - C.E.O.

C.E.O.	Decision as to time of trial, transport, final report.
M.E.O.	Conduct of shoot, layout, trenches, provision and placing of dummies. Report.
P. & M.S.	Meteor data, heights of burst. Report.
Phys. S.	Supervision and handling of observers. Report.
O.M. & E.	Charging of shell. Temperature of shell charging - number of shell going to graze. Report.
Chem. S.	Provision, placing and operation of sampling equipment. Persistence tests.

J.T.Hugill

(J.T.Hugill) Major
C. E. O.
Experimental Station,
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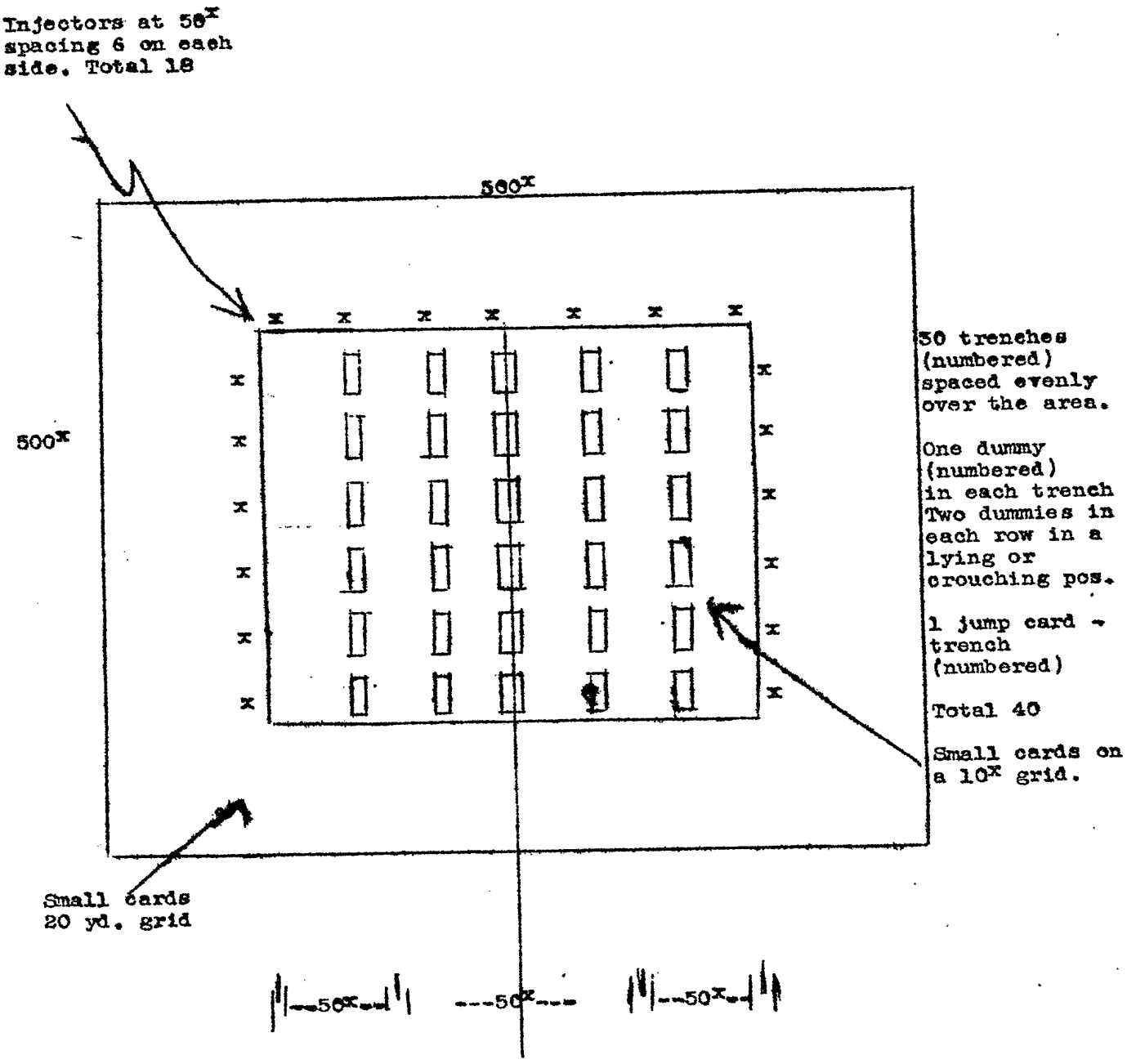
JTH/TJ

APPENDIX 1.


Injectors at 50x spacing 6 on each side. Total 18
500x
500x
50 trenches (numbered) spaced evenly over the area.
One dummy (numbered) in each trench Two dummies in each row in a lying or crouching pos.
1 jump card - trench (numbered)
Total 40
Small cards on a 10x grid.
Small cards 20 yd. grid
50x
50x
50x

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Desk copy 2 - Ref file (general)