

CHAPTER 5

REPORTING AND RECORDING

MINEFIELD REPORTS

A minefield report is an oral, electronic, or written communication concerning friendly or enemy mining activities. The report format is specified by the local command. It is submitted by the emplacing unit commander through operational channels to the Assistant Chief of Staff, G3 (Operations and Plans) (G3)/Operations and Training Officer (US Army) (S3) of the authorized headquarters. The headquarters integrates the report with terrain intelligence and disseminates it with tactical intelligence. The report is sent by the fastest, most secure means available. Figure 5-1, page 5-2, summarizes the minefield report flow at the division level and below.

Report of Intention

When planning to emplace a minefield, the unit must submit a report of intention to notify their higher headquarters. The report doubles as a request when it is initiated at levels below emplacement authority. The report includes—

- Tactical purpose of the minefield.
- Estimated number and type of mines to be emplaced.
- Location.
- Proposed start and completion times.
- Type of minefield.
- Whether mines are surface-laid or buried.
- Whether AHDs are used.
- Location and width of lanes and gaps.

Conventional minefields that are part of an operation plan (OPLAN) or general defense plan (GDP) approved by the authorizing commander do not require a report of intention because inclusion in an OPLAN or GDP implies an intention to lay.

Report of Initiation

A report of initiation is mandatory. It informs higher headquarters that emplacement has begun and that the area is no longer safe for friendly movement and maneuver. The report specifies the time emplacement began and identifies the location and target number of minefields.

Report of Completion

A report of completion is usually an oral report to the authorizing commander. It indicates the minefield is complete and functional. A report of completion is immediately followed by a completed DA Form 1355 or DA Form 1355-1-R.

Additional Reports

Progress reports. During the emplacing process, the commander may require periodic reports on the amount of work completed.

Report of transfer. Minefield responsibility is transferred from one commander to another in a report of transfer. This report is signed by the relieved commander and the relieving commander. It includes a certificate stating the relieving commander was shown or otherwise informed of all mines within the relieved commander's zone of responsibility. The report states the relieving commander assumes full

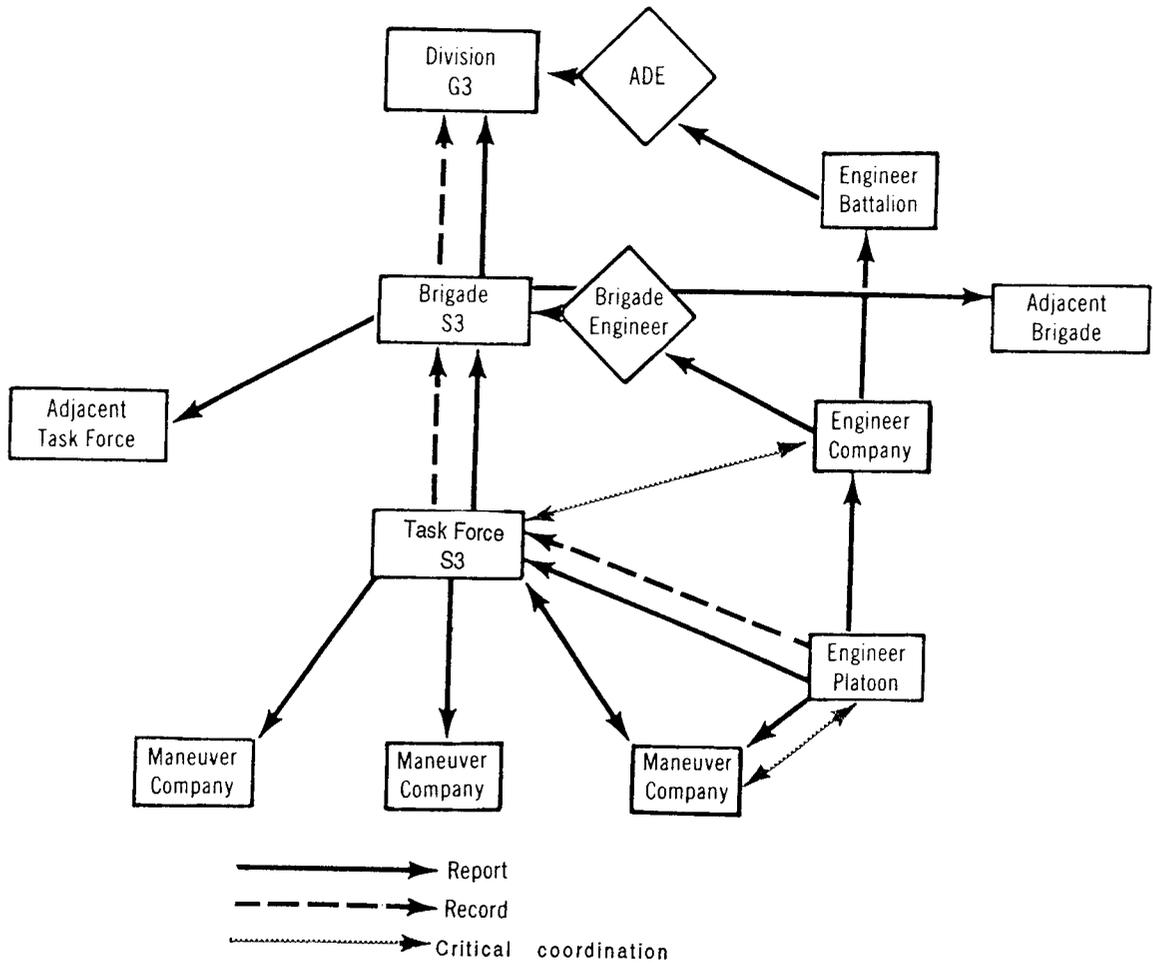


Figure 5-1. Conventional minefield reporting chain

responsibility for those mines. The report of transfer is sent to the next higher commander who has authority over both the relieved commander and the relieving commander.

Report of change. A report of change is made immediately upon any change or alteration to

a previously reported minefield. It is sent to the next higher commander and then through channels to the headquarters that keeps the written minefield record. A report of change is made by the commander responsible for surveillance and maintenance of the minefield.

MINEFIELD RECORDS

★ Conventional minefields (except hasty protective) are recorded on DA Form 1355. Hasty protective minefields are recorded on DA Form 1355-1 -R. Examples of completed DA Forms 1355 and 1355-1-R are shown in Figures 5-2a through 5-2c, pages 5-4 through 5-6, and in Figure 5-3, page 5-7. A blank DA Form 1355-1-R is provided at the back of this publication. It can be locally reproduced on 8 1/2- by 11-inch paper. The laying unit prepares the standard minefield record form. The OIC signs and forwards the form to the next higher command as soon as possible. Once the information is entered on the form, the form is classified SECRET or NATO SECRET. The number of copies prepared depends on the type of minefield and local procedures. Unit standing operating procedures (SOPS) should provide advanced guidance on how minefield information is to be passed to higher, lower, and adjacent commands. Minefield records are circulated on a need-to-know basis. When a record is made, it should be reproduced at the lowest level having the equipment to make copies. When used for training, the record is marked *SAMPLE*. Large minefields are recorded on two or more DA Forms 1355.

When changes are made to an existing minefield, a new record must be prepared on DA Form 1355. This record is marked REVISED. It shows the minefield as it is after changes. The original minefield number remains unchanged. Some changes which require a new record are—

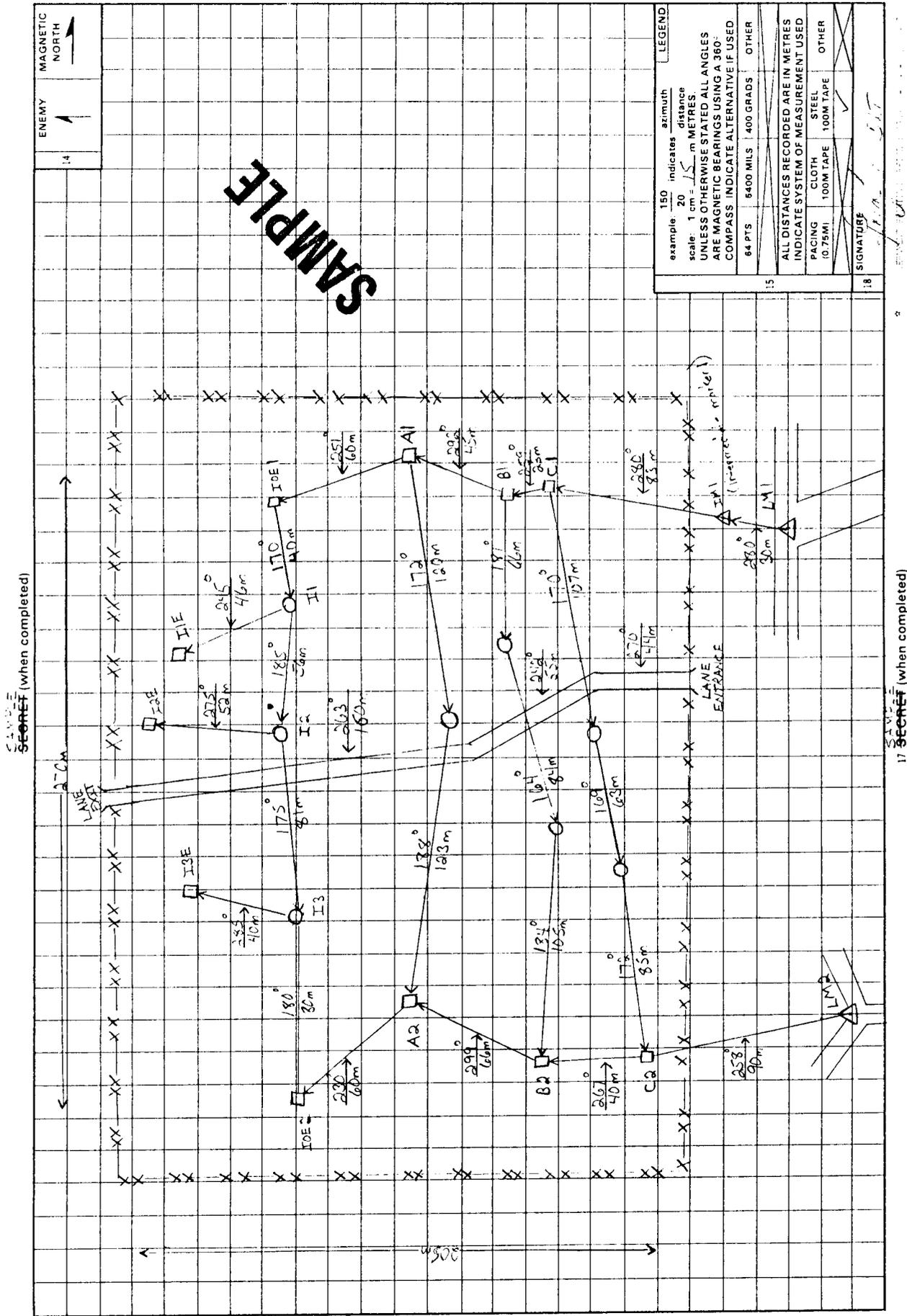
- Relocation of mines in safe lanes.
- Relocation of safe lanes.
- Changed lane or minefield markings.
- Inclusion of the minefield into a larger minefield system.
- Removal or detonation of mines.
- Addition of mines to the field.

Conventional minefield records are forwarded through operational channels to theater army headquarters (TAHQ) where they will be maintained on file by the theater engineer. If a TAHQ has not been established, minefield records are maintained on file with the assistant corps engineer in whose area of operation the minefield is located.

SAMPLE
SECRET (when completed)

DA FORM 1355, MAR 87
EDITION OF JUL 67 IS OBSOLETE

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★ Figure 5-2b. Standard pattern minefield - completed sample DA Form 1355 (inside) (continued)

SECRET

(when completed)

MINEFIELD REQUIREMENTS COMPUTATION FORMULA

Desired Density _____

IOE Representative Cluster _____

Front _____ meters

Depth _____ meters

AHD _____ %

*1. No. of IOE Clusters = Front / 9 _____

2. No. of IOE Clusters x IOE Representative Cluster _____

3. Mines in Minefield = Front x Desired Density _____

4. Subtotal of Mines Required = Line 2 x Line 3 _____

*5. Mine Rejections, Strip Length Variances = Line 4 x .1 _____

6. Total AT Mines Required = Line 4 + Line 5 _____

7. Add a + b + c of "Desired Density" = _____

*8. Line 7 x .6 = _____

9. AT Mine "Desired Density" x 3 = _____

10. No. of Regular Strips = Highest No. of Line 8 or 9 _____

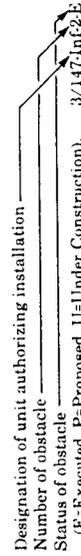
*11. No. of AHD = % AHD x Total AT Mines (Line 6) _____

12. Strip Cluster Composition = Desired Density x 3 _____

• NOTE: Round up to the next whole number.

TABULAR DATA (Numbers correspond to numbered blocks on front of form).

1. Enter complete data on authority of laying and on the laying unit. OIC blanks will include name, rank, and SSN.
2. Enter date-time groups for starting and completion times. Recorder blanks will include name, rank, and SSN.
3. Enter copy and sheet numbers. Number of copies will depend upon unit SOP and the classification of the minefield. The number of sheets will depend upon the length and the depth of the minefield versus scale.
4. Enter minefield number as follows:



5. Enter map data as stated on map(s) used.
6. Enter complete data on at least two landmarks with 8 digit grid coordinates. Cross out unused blocks.
7. Enter description(s) of any intermediate markers used. When a landmark is more than 200 meters from the minefield or the strip/row reference stake cannot be seen from the landmark, an intermediate marker must be used. If possible, the intermediate marker should not be closer than 75 meters to the strip/row reference stake. Cross out unused blocks.
8. Enter the word "Standard" when the standard marking fence is used. Enter the word "Standard" when the boundary marking fence is used.
9. Enter the number of strips/rows laid other than IOE. Describe the strips/rows. (Line out words not applicable).
10. Enter the width, marking, and closing provisions for each lane, when applicable. Give the type and number of mines for closing. The location of these mines is described in the "Notes" (Line 12). Strip lanes are 1 meter wide, one-way vehicular lanes are 8 meters and two-way vehicular lanes are 16 meters. Cross out unused blocks.
11. Enter type of minefield by crossing out lines not needed. Indicate method of laying by marking out incorrect descriptions. Enter types of mines as AT, APF, APB. (Enter chemical mines under AT mines). For each type of mine, enter number of mines and antihandling devices installed in the IOE and in each Strip or Row. Strips or Rows will be lettered serially, starting with the first one laid. Enter totals. Cross out unused blocks.
12. Enter under Notes information which would be useful to personnel clearing the minefield. Appropriate items include location of chemical mines, location of AT mines with antihandling devices, location AP mines with tripwires, clusters in IOE, which contain mines, where safety devices are buried, strip cluster composition and numbered omitted clusters in regular strips.
13. OIC enters signature, rank and date.
14. Enter arrows for the direction of the enemy and magnetic north. The enemy arrow should always point within the top 180 degrees of the paper; the north arrow should follow one of the lines of the graph.
15. Enter scale of sketch for standard pattern minefields the sketch should be drawn to a scale of about 1cm=10 meters.
16. Sketch in the following, as applicable:
 - Show directional arrows as follows:
 - (1) Landmarks (or intermediate markers) to strip markers at starting and finishing points of the last strip laid or to the nearest or farthest mine in a group.
 - (2) From landmarks (or intermediate markers) to fence or boundary markers.
 - (3) From landmarks to intermediate markers, if used.
 - (4) For each straight line section of a lane centerline.
 - (5) Between markers of starting points of adjacent strips, including IOE, and between finishing points of adjacent strips, including IOE.
 - (6) For each segment of the IOE, label all directional arrows with magnetic azimuth in degrees and distance in meters. Express as a fraction (247 degrees/90 meters). Recorded from friendly to enemy side and from right to left/or left to right.
 - Show approximate location of protective fence or boundary markers.
 - Show length and depth of minefield in meters. These dimensions indicate the extremities of the minefield.
 - Show a grid intersection and give grid coordinates.
 - Show trace of shoreline and direction and approximate rate in meters per second of water current, for mines laid underwater.
17. Enter security classification of the form. (If the form is used for training, enter the word SAMPLE.)
18. OIC enters signature and rank.

CLUSTER	STRIP	AT	APF	APB	ROW TOTAL
					(Cannot exceed 5)
A	_____	_____	_____	_____	_____
B	_____	_____	_____	_____	_____
C	_____	_____	_____	_____	_____
D	_____	_____	_____	_____	_____
E	_____	_____	_____	_____	_____
F	_____	_____	_____	_____	_____
G	_____	_____	_____	_____	_____
H	_____	_____	_____	_____	_____
I	_____	_____	_____	_____	_____
J	_____	_____	_____	_____	_____
COLUMN TOTAL	_____	_____	_____	_____	_____
(Totals cannot exceed Line 12.)					

SECRET

(when completed)

Figure 5-2c. Standard pattern minefield - completed sample DA Form 1355 (back side) (continued)

DA Form 1355, Minefield Record

DA Form 1355 from STANAG 2036 consists of a single sheet, printed on both sides. The front side contains blocks for tabular data. The back side is a graph consisting of 1-centimeter squares for a scaled sketch of the field. The scale for plotting minefields depends on the size of the field. To avoid using two sheets for the sketch, adjust the scale so that one form

will support the sketch. For very large minefields, two sheets may be required. The system of measurement and scale sizes must be indicated in the legend block. A second form may be used to support any additional information in the mandatory notes block. Any blocks or lines not used on the form must be crossed out to avoid unauthorized entries on the form. The following step-by-step instructions are provided for completing DA Form 1355.

Block 1

Enter complete data on authority for laying and on the laying unit. The OIC block includes rank, name, and social security account number (SSAN).

1	AUTHORITY:	CG 2nd INF DIV
	LAYING UNIT:	B Co 2nd ENGR BN 1st PL
	OFFICER IN CHARGE:	LT R. YOUNG 762-01-1352

Block 2

Enter date-time group (DTG) for starting and completion times. The recorder block includes rank, name, and SSAN.

2	DATE AND TIME	START	090630Z JAN 90
		COMPLETION	091500Z JAN 90
	RECORDER:	SFC F. LING SSC-82-1332	

Block 3

Enter copy and sheet number. The number of copies prepared depends on the unit SOP and minefield classification.

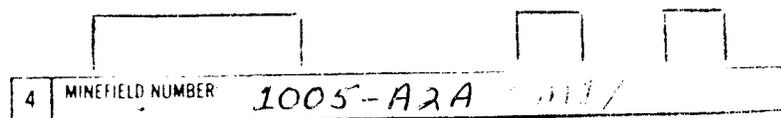
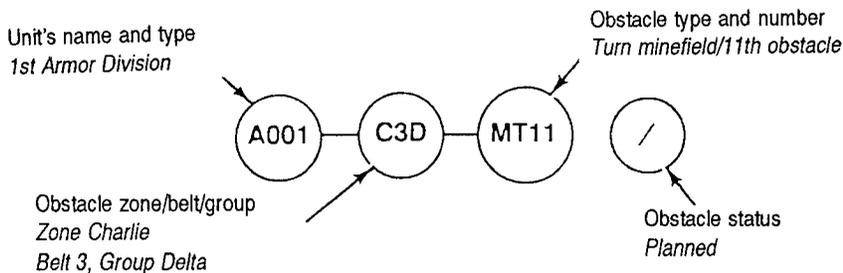
The minefield record is forwarded by the laying unit. One copy is retained by the overmatching unit, one copy by the next higher command, one copy by corps, where appropriate, and one copy by the proper national territorial authority.

3	Copy No. <u>1</u> of <u>4</u>	Sheet No. <u>1</u> of <u>1</u>
---	-------------------------------	--------------------------------

Block 4

The minefield obstacle numbering system shown below will consist of 11 characters and an obstacle status symbol. It will show the type of obstacle, the belt and zone in which it is located, and the headquarters that established the zone.

Character	Description
1 through 4	Alphanumeric descriptions of the headquarters type and numerical designation that established the obstacle zone. Character 1 designates the unit type with a letter (A, armor division/brigade; I, infantry division/brigade; C, cavalry division; R, cavalry regiment; and Z, corps).
5	Letter indicating obstacle zone.
6	Number indicating belt number in obstacle zone.
7	Letter indicating group in obstacle belt.
8 and 9	Letters indicating obstacle type.
10 and 11	Two numbers indicating obstacle number in the group.
12	One of four characters indicating obstacle status: / (slash) = planned obstacle. - (dash) = obstacle being prepared. + (plus) = prepared obstacle. (The + is for reserve demolition targets and may indicate a readiness state of safe or armed.) X (X) = completed obstacle



Obstacle Type Abbreviations

B - Bridge demolitions (demos)

- BA - bridge demo, abutment
- BS - bridge demo, span
- BC - bridge demo, combination of abutment and span

M - Minefields

- MD - minefield, disrupt
- MT - minefield, turn
- MF - minefield, fix
- MB - minefield, block
- MN - minefield, nonstandard
- MP - minefield, protective
- MQ - minefield, nuisance
- MS - minefield, standard pattern

R - Road craters

- RH - road crater, hasty
- RD - road crater, deliberate
- RM - road crater, mined

W - Wire obstacles

- WA - wire, double apron
- WB - wire, obstacle with booby traps
- WF - wire, tangle foot
- WG - wire, general purpose barbed tape (GPBT)
- WN - wire, nonstandard
- WR - wire, road block
- WT - wire, triple standard

S - Scatterable minefields

- SA - FASCAM, ADAM
- SP - FASCAM, PDM
- SG - FASCAM, GEMSS
- SB - FASCAM, Gator
- SR - FASCAM, RAAM
- SF - FASCAM, ADAM and RAAM
- SM - FASCAM, MOPMS
- SV - FASCAM, Volcano
- SW - FASCAM, wide area mine (WAM)

Miscellaneous

- AD - antitank ditch
- AR - rubble by combat engineer vehicle (CEV) gun
- AB - rubble by blade
- AT - abatis
- AE - rubble by explosives
- AM - movable military operations on urbanized terrain (MOUT) obstacle (car, bus)
- AN - expedient nonstandard
- AL - log crib, log obstacles
- AP - post obstacles (hedgehog, tetrahedron)
- AH - log hurdles

Example: Obstacle number 1005-A2A-SM21 / indicates the 5th Infantry Division planned the obstacle in zone A. It is the 21st obstacle in group A, belt 2, and has not been executed. The obstacle is a MOPMS.

Block 5

Enter map data as stated on the map(s) used.

5	MAP SERIES, NO AND SCALE	H754 1:50 000
	SHEET NO (OR NAME)	N3 2015 MUNSAN

Block 6

Enter grid coordinates and a description of at least two landmarks. If landmarks are roads, trails, or routes, enter their name or number. This makes identification easier when removing the minefield.

LANDMARKS		
NO	COORDINATES	DESCRIPTION
6	1 U1 34917312	U-SHAPED PICKET FLUSH WITH GROUND
	2	NEXT TO ROAD
	2 U1 34927323	U-SHAPED PICKET FLUSH WITH GROUND
	4	NEXT TO ROAD

Block 7

Enter the description(s) of any intermediate markers. When a landmark is more than 200 meters from the minefield or the strip/row reference stake cannot be seen from the landmark, an intermediate marker must be used. If possible, the intermediate marker is no closer than 75 meters to the strip/row reference stakes. Cross out any unused blocks.

INTERMEDIATE MARKERS	
NO	DESCRIPTION
7	1 3 U-SHAPED PICKETS 12" ABOVE GROUND
	2
	3
	4

Block 8

Enter the word STANDARD when a standard marking fence is used. Describe the boundary marking if a standard marking fence is not used. (Use two sides and the rear for tactical; four sides for protective.)

8	DESCRIPTION OF BOUNDARY FENCE OR MARKING STANDARD 4 SIDES MINEFIELD FULLY ENCLOSED
---	---

Block 9

Enter the number of strips/rows laid. (Do not include the IOE.) Describe strip/row markers. Cross out words that do not apply.

9	NO. OF STRIPS/ ROWS ... 3 ... U-SHAPED PICKETS FLUSH WITH GROUND	DESCRIPTION OF STRIP/ ROW MARKERS
---	--	--

Block 10

Enter width, marking, and closing provisions for each lane. When appropriate, give the type and number of mines for closing. The location of these mines is described in Block 12.

LANES			
NO	WIDTH	HOW MARKED	METHOD OF CLOSING
1	8m	HEMMS SET	15xM15, 30xM16, 30xM14
2			
3			

Block 11

Enter the type of minefield by crossing out lines not needed. Indicate the method of laying by crossing out incorrect descriptions. Enter the types of mines as APB, APF, or AT. For each type of mine, enter the number of mines. Also enter the number of AHDs installed in the IOE and in each row. Strips or rows are lettered sequentially, starting with the first one laid. Enter totals.

PROTECTIVE TACTICAL MINEFIELD NUMERICAL MINEFIELD PHONETIC MINEFIELD	ANTITANK MINES (AT)							TOTAL AT MINES	ANTI LIFT DEV	ANTIPERSONNEL MINES (AP)			TOTAL AP MINES
	TYPE	TYPE	TYPE	TYPE	TYPE	TYPE	TYPE			TYPE	TYPE	TYPE	
	M15									M16	M14		
	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
MINES	BURIED AND SURFACE-LAY	IOE	28	/	/	/	/	28		56	56	/	112
		A	72	/	/	/	/	72		144	144	/	288
		B	74	/	/	/	/	74		148	148	/	296
		C	76	/	/	/	/	76		152	152	/	304
	D	/	/	/	/	/	/				/		
	IN STRIPS IN ROWS IN PATTERNS	E	/	/	/	/	/	/				/	
		F	/	/	/	/	/	/				/	
		G	/	/	/	/	/	/				/	
		H	/	/	/	/	/	/				/	
		I	/	/	/	/	/	/				/	
J		/	/	/	/	/	/				/		
TOTAL	250	/	/	/	/	/	250		500	500	/	1000	

★ Block 12

At a minimum, enter the following items in the note block. Also, enter any additional information that would be useful in the removal of the minefield.

1. Mine clusters at ____ meters/paces spacing.
2. Number of IOE live clusters (all others numbered but omitted).
- 3a. Numbered omitted clusters in IOE and regular strips and why.
- 3b. Omitted clusters for lanes or gaps.
4. Clusters with AHDs (what type and where they are located on the mine). When using the M 142 multipurpose firing device, state the activation mode for each mine.
5. Clusters with trip-wire actuated AP mines.
6. Strip cluster composition,
7. Location of safety clips/pins (are buried 30 cm to the rear of each start strip/row marker).
8. Location of mines for closing lanes and gaps.

NOTES			
12	<p style="text-align: center;">1. MINE CLUSTERS AT ... <u>3</u> ... METRES/PAGE SPACING ALL DISTANCES IN MINEFIELD MEASURED IN METERS.</p> <p>(2) NUMBER OF IOE LIVE CLUSTERS (ALL OTHERS NUMBERED BUT OMITTED) IOE: <u>1, 2, 4, 5, 7, 8, 9, 10, 11, 12, 13, 4, 6, 7, 9, 10, 11, 13: 1, 3, 4, 5, 7, 8, 9.</u> (3A) NUMBERED OMITTED CLUSTERS IN REGULAR STRIPS: A: <u>10, 23, 26, 51, 62</u> (ROCKS) B: <u>4, 6, 8, 9, 11</u> (TREES) C: <u>4, 15, 18, 40</u> (ROCKS); (3B) OMITTED CLUSTERS FOR LANES AND GAPS: IOE: <u>NONE</u>, A: <u>39, 40, 41, 42, 43</u>, B: <u>47, 48, 49, 50, 51</u>, C: <u>30, 31, 32, 33, 34</u> (4) CLUSTERS WITH AHD'S: <u>NONE</u> (5) CLUSTERS WITH TRIPWIRE ACTIVATED AP MINES: IOE: <u>NONE</u>, A: <u>13, 27, 61, 73</u>, B: <u>19-33</u>, C: <u>NONE</u> (6) STRIP CLUSTER COMPOSITION: <u>IOE (1-2-2), A(1-2-2), B(1-2-2), C(1-2-2)</u> (7) LOCATION OF SAFETY CLIPS/PINS BURIED 30 CM TO REAR OF START MARKER. (8) LOCATION OF MINES FOR CLOSING LANES AND GAP: <u>UT34827331 - 15EA, M15's, 30EA, M16's, AND 30EA M14's</u></p>		
13	<table style="width: 100%; border: none;"> <tr> <td style="width: 70%; border: none;">SIGNATURE (OFFICER IN CHARGE) <i>[Signature]</i> SIT</td> <td style="width: 30%; border: none; text-align: right;">DATE <u>09 JAN 98</u></td> </tr> </table>	SIGNATURE (OFFICER IN CHARGE) <i>[Signature]</i> SIT	DATE <u>09 JAN 98</u>
SIGNATURE (OFFICER IN CHARGE) <i>[Signature]</i> SIT	DATE <u>09 JAN 98</u>		

Block 13

The emplacing unit OIC signs and dates the form.

13	SIGNATURE (OFFICER IN CHARGE)	DATE
	<i>Regel P. Young LT</i>	<i>10 Jan 90</i>

The front side of DA Form 1355 is now complete. The rest of the form and step-by-step instructions follow.

Block 14

When filling out the sketch, enter arrows for the direction of the enemy and magnetic North. The enemy arrow will always point within the top 180° of the form; the North arrow will follow one of the graph lines.

14	ENEMY	MAGNETIC NORTH
	↑	→

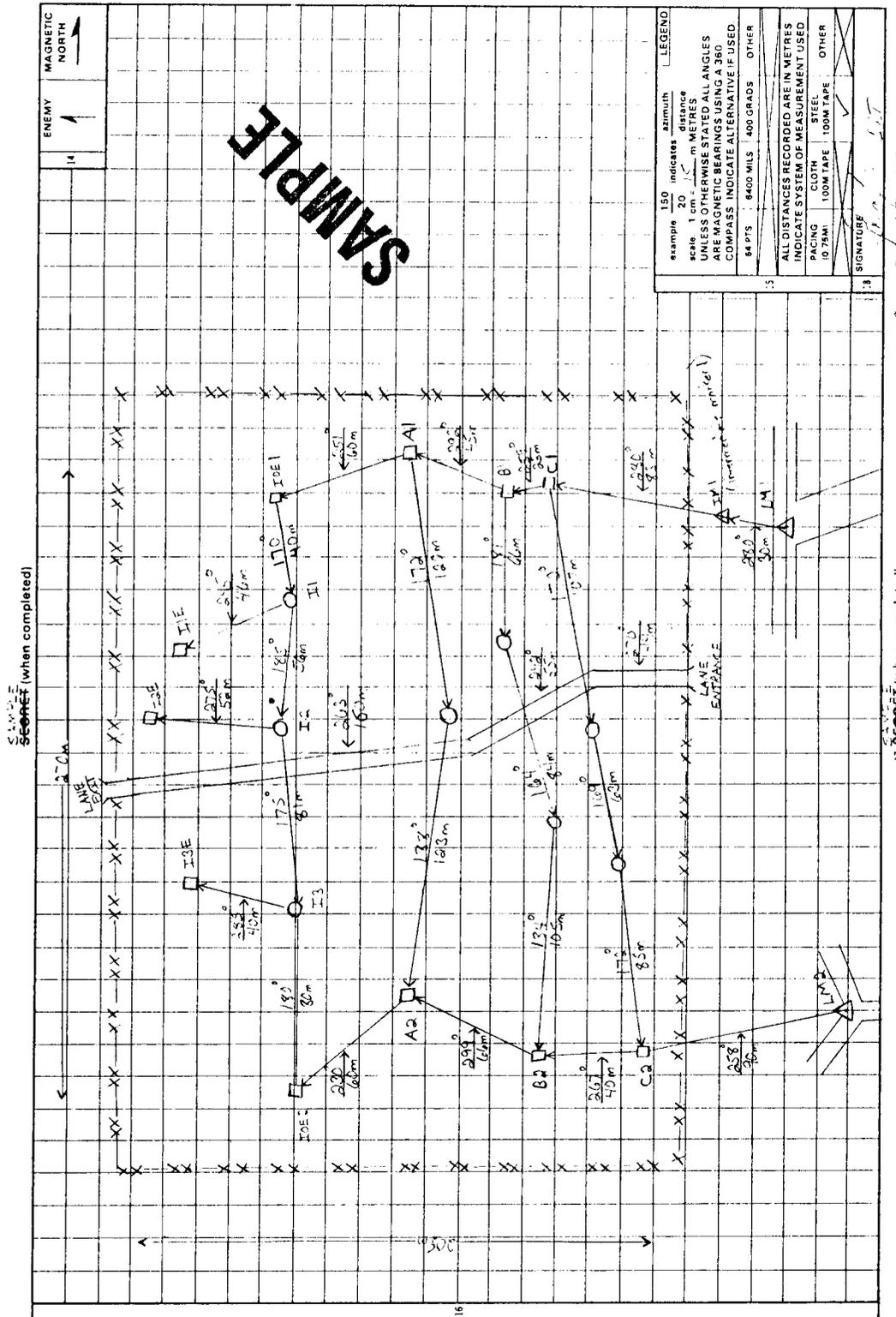
Block 15.

If a compass was not available, enter what was used in the information block. Indicate the system of measurement and the scale used.

15	example: $\frac{150}{20}$ indicates $\frac{\text{azimuth}}{\text{distance}}$ scale: 1 cm = <u>15</u> m METRES. UNLESS OTHERWISE STATED ALL ANGLES ARE MAGNETIC BEARINGS USING A 360° COMPASS. INDICATE ALTERNATIVE IF USED.			LEGEND
	64 PTS	6400 MILS	400 GRADS	OTHER
	ALL DISTANCES RECORDED ARE IN METRES INDICATE SYSTEM OF MEASUREMENT USED			
	PACING (0.75M)	CLOTH 100M TAPE	STEEL 100M TAPE	OTHER
			✓	

★ Block 16

Enter the following information on the sketch:



Block 17.

Enter the security classification of the form. If the form was used for training, enter the word *SAMPLE*.

17 ~~SECRET~~ (when completed)

Block 18.

The emplacing unit OIC signs in the signature block.

18	SIGNATURE	<i>Regel P. Young LT</i>
----	-----------	--------------------------

DEFENSE INFORMATION OFFICE : (204) 645-2441 : (204) 645-2442

DA Form 1355-1-R, Hasty Protective Minefield Record

The purpose and composition of a hasty protective minefield are discussed in Chapter 1. Hasty protective minefields are recorded on DA Form 1355-1-R (see Figure 5-3, page 5-7). Conducting a thorough leader's reconnaissance of the proposed minefield area is the first step when emplacing a hasty protective minefield. Mine locations that cover likely AAs, enhance key weapon systems, and cover dead space are identified. After the reconnaissance, mines are emplaced but not armed. As mines are being emplaced, an easily identifiable reference point (RP) is established between the minefield and the unit's position. From the RP, mines are visualized as running in rows parallel to the unit position. This procedure simplifies recording and makes retrieval quicker and safer. By international agreements, the row closest to the enemy is designated row A; succeeding rows are designated B, C, D, and so on. Procedures for recording a hasty protective minefield are explained below. In the minefield depicted in Figure 5-4, only two rows are appropriate (row A and row B). The ends of a row are indicated by markers labeled with the row's letter and the numbers 1 (for one end of the

row) and 2 (for the other end of the row). The marker should be an easily identifiable object, such as a wooden stake or steel picket.

To determine the scale for use on DA Form 1355-1-R, use the following formula:

$$\text{Distance from RP to the farthest point in the field} + 10 \text{ paces} / 4 = \text{scale.}$$

EXAMPLE: 90 paces + 10 paces = 100 / 4 = 25 paces.

The number 4 is a constant and represents the four concentric rings on DA Form 1355-1-R. Ten is added to the pace count as a safety margin to ensure the minefield sketch is entirely contained within the largest ring. The distance between rings is 2 centimeters; therefore, the scale used in this example is 2 centimeters = 25 paces.

From the RP, the magnetic azimuth is measured in degrees. The distance to a point arbitrarily selected is between 15 and 25 paces to the right of the first mine laid. This point, called B1 (if there are two rows), marks the beginning of the second row. A marker is placed at B1, and the azimuth and distance are recorded on DA Form 1355-1-R.

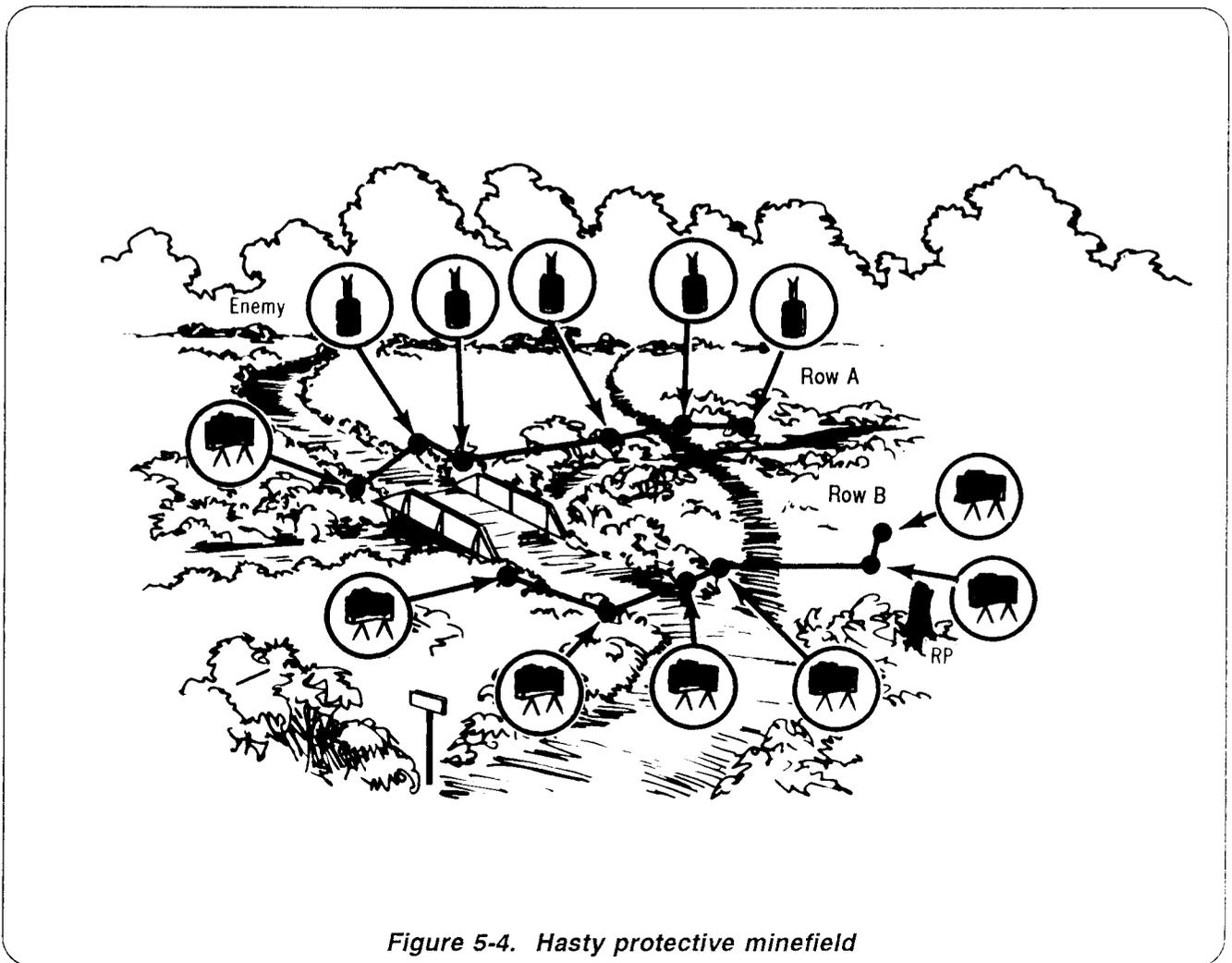
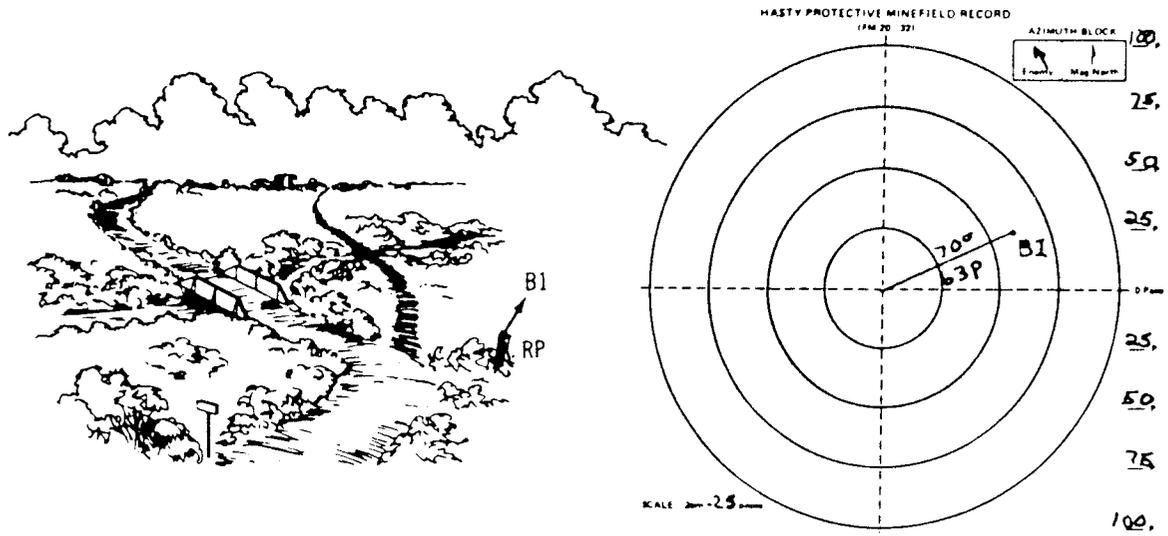
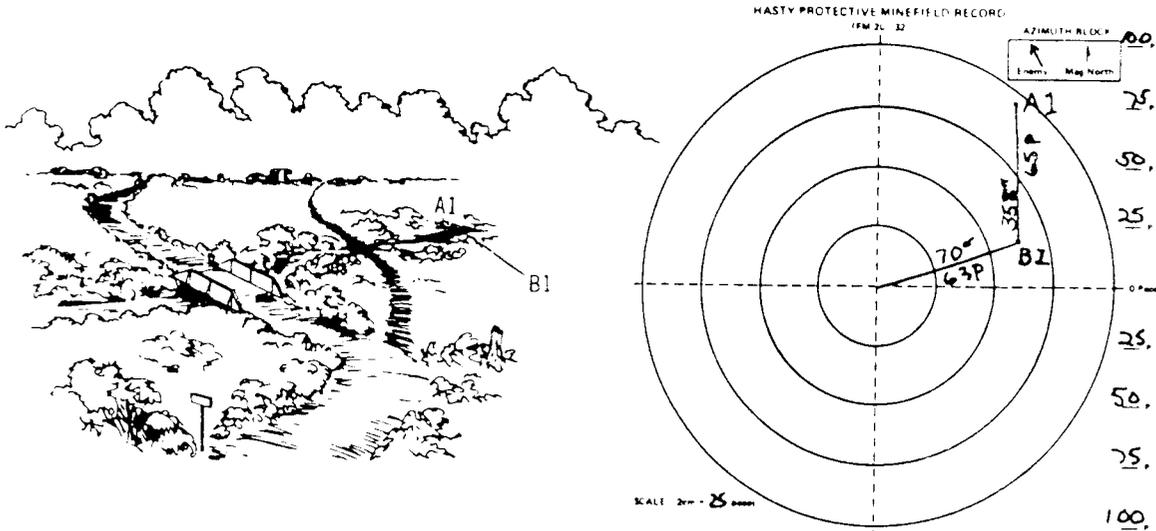
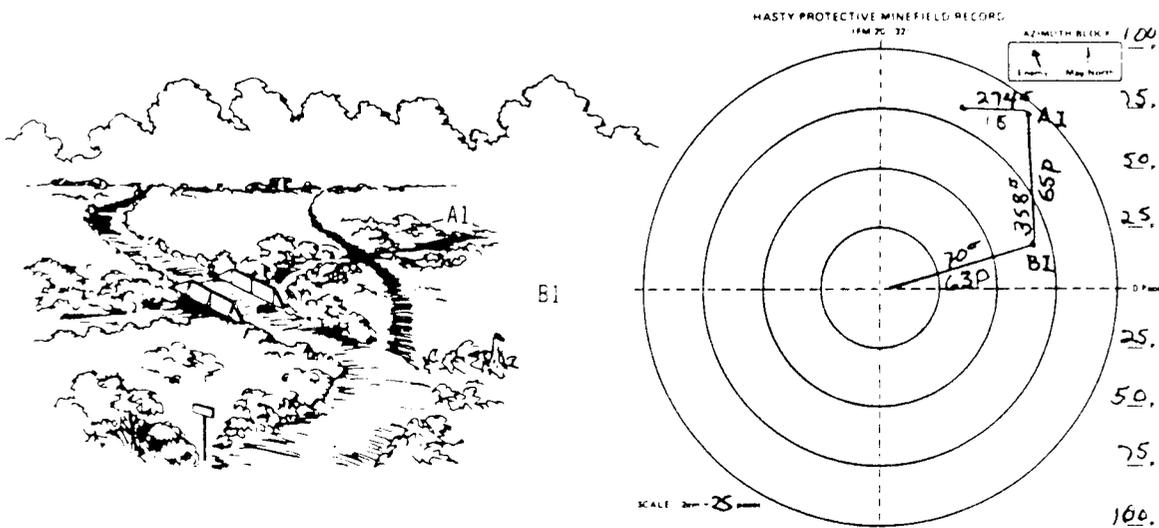


Figure 5-4. Hasty protective minefield

The azimuth and distance are measured to a point 15 to 25 paces from the first mine in row A. A marker is placed at this point and recorded as A1.



The distance and azimuth are measured from A1 to the first mine and recorded.



DA Form 1355, Nuisance Minefield

The precise location of individual nuisance mines does not need to be recorded. The practice of locating mines within a defined boundary is used only when authorized. For this reason and because recording positions of mines which are laid to a pattern (either standard pattern or one adopted for the situation) is easy and quick, patterned laying should be used when it does not prejudice concealment. The number of mines to be laid on the site may make it impracticable or undesirable to

lay mines to a pattern. In this case, they may be laid individually (unless otherwise authorized) if their positions are accurately recorded. Figures 5-5a through 5-5c, pages 5-21 through 5-23, provide an example of a completed nuisance minefield record.

Minefield Overlay Symbols

The symbols contained in Figure 5-6, pages 5-24 through 5-26, are extracts from FM 101-5-1 and are provided to assist in posting mine data on maps and overlays.

Sample **SECRET** (when completed)

DA FORM 1355, MAR 87
EDITION OF JUL 67 IS OBSOLETE

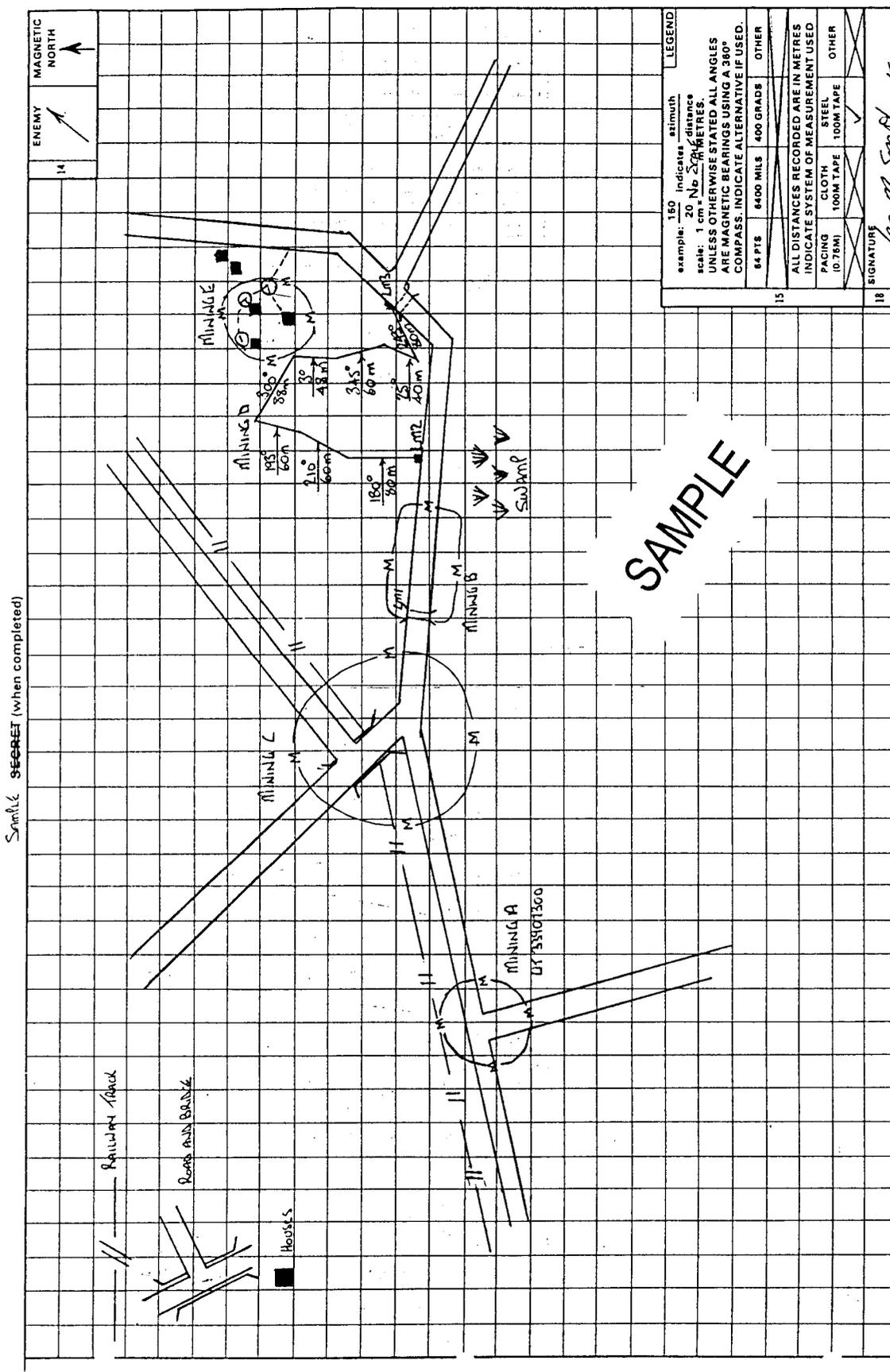
MINEFIELD - RECORD			
1	AUTHORITY: CG 2nd INF DIV	DATE AND TIME: 090630Z JAN 90	3
	LAYING UNIT: R Co 2nd ENGR BN, 2nd PL	COMPLETION TIME: 091100Z JAN 90	4
	OFFICER IN CHARGE: Lt J. M. SMART	RECORDED BY: SEC I. R. TOO	5
	COORDINATES: 68F-02-2725	RECORDED DATE: 661-41-264	
LANDMARKS			
6	1	UT 34107509	LOWERY HEADWALL NORTH SIDE OF ROAD
	2	UT 34567299	10 MILE MARKER ON NORTH SIDE OF ROAD
	3	UT 34497200	CULVERT HEADWALL ON NORTH SIDE OF ROAD
	4		
8	DESCRIPTION OF BOUNDARY FENCE OR MARKING: NONE		
9	NO. OF STRIPS/ROWS: NONE		
INTERMEDIATE MARKERS			
	NO	DESCR	'N
	1		
	2		
	3		
	4		
LANES			
	NO	WIDTH	HOW MARKED
	1		
	2		
	3		
METHOD OF CLOSING			
	NO	WIDTH	HOW MARKED
	1		
	2		
	3		
NOTES			
1. MINE CLUSTERS AT METRES/PAGE SPACING			
2. LOCATION OF AHD'S NOT RECORDED			
3. NUISANCE MINING A: 5 MINE MINES LOCATED IN RUBBLE OF CRATER LOCATED AT INTERSECTION UT 33907300 IN VERGE OF NORTH SIDE OF ROAD 10M FROM CENTERLINE OF EW ROAD.			
4. NUISANCE MINING B: MINING EXTENDS 100M SE OF LADMARK I AND HAS FOLLOWING PATTERNS: ROWE FROM LMI SOUTH ALONG ROAD CENTERLINE MINES PLACED 3M TO LEFT CONTINUE 5M ALONG CENTERLINE MINES PLACED 3M TO RIGHT CONTINUE AT 5M INTERVALS LEFT/RIGHT FOR 100M (10 CLUSTERS) EACH CLUSTER CONSISTS OF 1 AT AND 2 AP (M14) MINES.			
5. NUISANCE MINING C: MINES RANDOM Laid WITHIN 75M RADIUS OF NE POST OF BRIDGE			
6. NUISANCE MINING D: MINES Laid TO PATTERNS BETWEEN LMI 2 AND 3. NO OMITTED CLUSTERS ALL CLUSTERS 2-2			
7. NUISANCE MINING E: THREE MINES PLACED AT EACH INTERSECTION OF TRACK LEADING FROM HOUSES. TOTAL OF 9 (M14) MINES.			

NUISANCE MINEFIELD	ANTITANK MINES (AT)				ANTIPERSONNEL MINES (AP)			
	TYPE	NO	TYPE	NO	TYPE	NO	TYPE	NO
A	M15	NO	M16	NO	M14	NO	M14	NO
B	20	NO	5	NO	40	NO	5	NO
C	10	NO	20	NO	30	NO	30	NO
D		NO	10	NO	226	NO	226	NO
E		NO	3	NO	9	NO	9	NO
F		NO	3	NO	261	NO	261	NO
G		NO	3	NO	305	NO	305	NO
H		NO	3	NO	305	NO	305	NO
I		NO	3	NO	305	NO	305	NO
J		NO	3	NO	305	NO	305	NO
TOTAL		30		30		261		566

Sample **SECRET** (when completed)

SIGNATURE (OFFICER IN CHARGE) Jan. M. Smart Lt DATE 9 Jan 90

Figure 5-5a. Nuisance minefield - completed sample DA Form 1355 (front side)



SECRET (when completed)

Figure 5-5b. Nuisance minefield - completed sample DA Form 1355 (inside) (continued)

SAMPLE
SECRET

(when completed)

MINEFIELD REQUIREMENTS COMPUTATION FORMULA

	AT	APF	APR
Desired Density	a	b	c
IOE Representative Cluster	a	b	c
Front _____ meters	a	b	c
Depth _____ meters	a	b	c
AHD _____ %	a	b	c

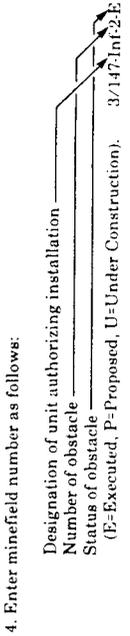
- No. of IOE Clusters = Front x 9
 - No. of IOE clusters x IOE Representative Cluster
 - Mines in Minefield = Front x Desired Density
 - Subtotal of Mines Required = Line 2 + Line 3
 - Mine Rejections, Strip Length Variances = Line 4 x 1
 - Total AT Mines Required = Line 4 + Line 5
 - Add a + b + c of "Desired Density" = _____
 - Line 7 x 6 = _____
 - AT Mine "Desired Density" x 3 = _____
 - No. of Regular Strips = Highest No. of Line 6 or 9
 - No. of AHD = % AHD x Total AT Mines (Line 6)
 - Strip cluster Composition = Desired Density x 3
- *NOTE: Round up to the next whole number.

COMPOSITION	STRIP			ROW TOTAL (Cannot exceed 5)		
	AT	APF	APR	AT	APF	APR
A	a	b	c	_____	_____	_____
B	a	b	c	_____	_____	_____
C	a	b	c	_____	_____	_____
D	a	b	c	_____	_____	_____
E	a	b	c	_____	_____	_____
F	a	b	c	_____	_____	_____
G	a	b	c	_____	_____	_____
H	a	b	c	_____	_____	_____
I	a	b	c	_____	_____	_____
J	a	b	c	_____	_____	_____
COLUMN TOTAL (Totals cannot exceed Line 12)	_____	_____	_____	_____	_____	_____

SAMPLE
SECRET

(when completed)

TABULAR DATA (Numbers correspond to numbered blocks on front of form).
 1. Enter complete data on authority of laying and on the laying unit. OIC blanks will include name, rank, and SSN.
 2. Enter date-time groups for starting and completion times. Recorder blanks will include name, rank, and SSN.
 3. Enter copy and sheet numbers. Number of copies will depend upon unit SOP and the classification of the minefield. The number of sheets will depend upon the length and the depth of the minefield versus scale.
 4. Enter minefield number as follows:



- Enter map data as stated on map(s) used.
- Enter complete data on at least two landmarks with 8 digit grid coordinates. Cross out unused blocks.
- Enter description(s) of any intermediate markers used. When a landmark is more than 200 meters from the minefield or the strip/row reference stake cannot be seen from the landmark, an intermediate marker must be used. If possible, the intermediate marker should not be closer than 75 meters to the strip/row reference stake. Cross out unused blocks.
- Enter the word "Standard" when the standard marking fence is used; describe the boundary marking if other than the standard marking fence is used.
- Enter the number of strips/rows laid other than IOE. Describe the type and number of mines for closing. The location of these mines is described by vehicular lanes are 8 meters and two-way vehicular lanes are 12 meters. Patrol lanes are 1 meter wide, one-way marking out incorrect.
- For each type of mine, strip/row or Rows will be entered serially, starting with the first one laid. Enter totals. Cross out unused blocks.
- Enter under Notes information which would be useful to personnel.
- Enter location of chemical mines, location of AT mines with antihandling device, location of IOE, which contain mines, where safety devices are buried, strip cluster composition and numbered omitted clusters in regular strips.
- OIC enters signature, rank and date.
- Enter arrows for the direction of the enemy and magnetic north. The enemy arrow should always point within the top 180 degrees of the paper; the north arrow should follow one of the lines of the graph.
- Enter scale of sketch for standard pattern minefields the sketch should be drawn to a scale of about 1cm=10 meters.
- Sketch in the following, as applicable:
 - Show directional arrows as follows:
 - Landmarks (or intermediate markers) to strip markers at starting and finishing points of the last strip laid or to the nearest or farthest mine in a group.
 - From landmarks (or intermediate markers) to fence or boundary markers.
 - From landmarks to intermediate markers, if used.
 - For each straight line section of a lane centerline.
 - Between markers of starting points of adjacent strips, including IOE, and between finishing points of adjacent strips, including IOE.
 - For each segment of a strip or of the IOE, label all directional arrows with magnetic azimuth in degrees and distance in meters. Express as a fraction (247 degrees/90 meters). Recorded from friendly to enemy side and from right to left or left to right.
- Show approximate location of protective fence or boundary markers.
- Show length and depth of minefield in meters. These dimensions indicate the extremities of the minefield.
- Show a grid intersection and give grid coordinates.
- Show trace of shoreline and direction and approximate rate in meters per second of water current, for mines laid underwater.
- Enter security classification of the form. (If the form is used for training, enter the word SAMPLE.)
- OIC enters signature and rank.

SAMPLE

Figure 5-5c. Nuisance minefield - completed sample DA Form 1355 (back side) (continued)

Extract from FM 101-5.

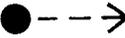
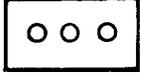
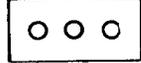
Description	Symbol
<p>Minefields</p> <p>Indicators</p> <p>Antipersonnel mine</p>	
<p>Antitank mine</p>	
<p>Antitank mine with antihandling device</p>	
<p>Directional mine (arrow points in direction of main effect)</p>	
<p>Mine cluster</p>	
<p>Mine, type unspecified</p>	
<p>Conventional</p> <p>A planned minefield consisting of unspecified mines</p>	
<p>A completed minefield consisting of unspecified mines</p>	
<p>Scatterable minefield (DTGs used for self-destruct mines)</p>	<p style="text-align: center;">S</p>  <p style="text-align: center;">DTG</p>

Figure 5-6. Minefield overlay symbols

Extract from FM 101-5.

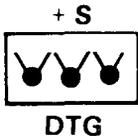
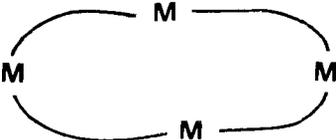
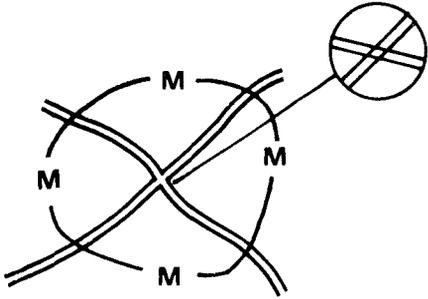
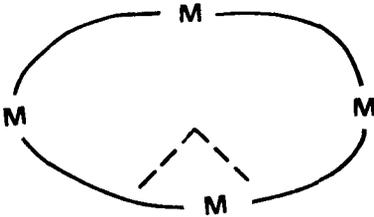
Description	Symbol
<p>Conventional (cont) Conventional minefield thickened with scatterable mines</p>	
<p>Conventional row mining (outline drawn to scale)</p>	
<p>Nuisance Nuisance minefield</p>	
<p>Demolished crossroads with nuisance mines</p>	
<p>Phony Phony minefield</p>	
<p>Protective Protective minefield</p>	
<p>Antitank ditch reinforced with antitank mines</p>	

Figure 5-6. Minefield overlay symbols (continued)

Extract from FM 101-5.

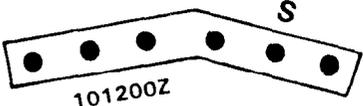
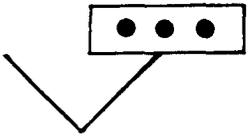
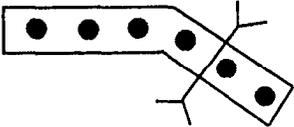
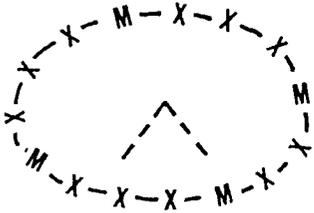
Description	Symbol
<p>Tactical Tactical minefield of scatterable antitank mines, effective till 101200Z</p>	
<p>Completed antitank minefield (drawn away from the location and connected by a vector)</p>	
<p>Lane in conventionally laid antitank minefield</p>	
<p>Gap in conventionally laid antitank minefield</p>	
<p>Phony (dummy) minefield, fenced</p>	

Figure 5-6. Minefield overlay symbols (continued)