**TECHNICAL MANUAL** 

**OPERATORS MANUAL** 

TRAINING SET,

CHEMICAL AGENT IDENTIFICATION:

SIMULANTS, M72A2

(NSN 6910-01-043-2090)



This copy is a reprint which includes current pages from changes 1 through 3.

HEADQUARTERS, DEPARTMENT OF THE ARMY

13 MARCH 1979

HEADQUARTERS DEPARTMENT OF THE ARMY WASHINGTON, DC, *17 June 1983* 

## Operator's Manual TRAINING SET, CHEMICAL AGENT IDENTIFICATION: SIMULANTS, M72A2 (NSN 6910-01-043-2090)

TM 3-6910-227-10, 13 March 1979, is changed as follows:

1. Remove old pages and insert new pages as indicated below. New or changed material is indicated by a vertical bar in the margin of the page. When an entire section is changed the bar will be adjacent to the title only.

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By Order of the Secretary of the Army:

Official:

E. C. MEYER General, United States Army Chief of Staff

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Distribution:

To be distributed in accordance with DA Form 12-28, Operator's Maintenance requirements for Chemical Kits and Sets for Training.

CHANGE No. 3

# WARNINGS

Wear protective mask at all times when using SCAITS. Don't breathe agent simulant vapors. Work in a well ventilated area. Some simulants are corrosive and some are toxic. Breathing simulant vapors may cause you irritation, discomfort, and injury. Refer to appendix D for specific first aid and medical information.

Wear gloves when you handle bottles or vials of agent simulants. If simulants get on your skin, immediately wash with soap and water.

Wear your protective mask when operating the M256 sampler-detector. The heater ampoules, when broken, produce hot vapors which may cause injury to your eyes. Hold the sampler-detector at arms length, down, and away from your body when breaking heater ampoules to prevent hot vapors from reaching your eyes.

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HEADQUARTERS DEPARTMENT OF THE ARMY WASHINGTON, DC, 3 September 1982

# CHANGE ]

## Operators Manual TRAINING SET, CHEMICAL AGENT IDENTIFICATION: SIMULANTS, M72A2 (NSN 6010-01-043-2090)

The purpose of this change is to add first aid and medical information to Appendix D.

TM 3-6910-227-10, 13 March 1979, is changed as follows:

- 1. New or changed material is indicated by a vertical bar in the outer margin of the page.
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HEADQUARTERS DEPARTMENT OF THE ARMY WASHINGTON DC, 24 June 1981

# Operator's Manual TRAINING SET, CHEMICAL AGENT IDENTIFICATION: SIMULANTS, M72A2 (NSN 6910-01-043-2090)

The major purpose of this change is to add specific first aid and medical information. It also adds warnings for use of the sampler-detector and authorizes an additional item to the expendable supplies list. TM 3-6910-227-10, 13 March 1979, is changed as follows:

1. New or changed material is indicated by a vertical bar in the margin of the page.

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Warning (inside front cover)	
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3. File this change sheet in front of the publication for reference purposes.

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HEADQUARTERS DEPARTMENT OF THE ARMY WASHINGTON, DC, *13 March 1979* 

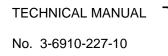
# OPERATOR'S MANUAL TRAINING SET, CHEMICAL AGENT IDENTIFICATION: SIMULANTS, M72A2 (NSN 6910-01-043-2090) Current as of November 1978

#### REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual, direct to: Commander, US Army Armament Materiel Readiness Command, ATTN: DRSAR-MAS-C, Aberdeen Proving Ground, MD 21010. A reply will be furnished direct to you.

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#### CHAPTER 1

## INTRODUCTION

#### Section I. GENERAL INFORMATION

## 1-1. Scope

This operator's manual is for your use in operating and maintaining the Training Set, Chemical Agent Identification, Simulants, M72A2 (fig. 1-1). The M72A2 simulants chemical agent identification training set (SCAITS) is hereinafter referred to as SCAITS. This TM provides instructions for operation of the SCAITS. Instructions are also provided for employment of the M256 chemical agent detector kit (hereinafter referred to as M256 kit) when used in conjunction with the SCAITS.

#### 1-2. Maintenance Forms and Records

No maintenance forms and records are required for use of SCAITS.

# Section II. EQUIPMENT DESCRIPTION

#### 1-4. Equipment Purpose, Capabilities, and Features

a. *Purpose.* SCAITS (fig. 1-1) is intended to be used to instruct personnel in the use of the M256 kit. SCAITS produces color changes in the M256 kit that the trainee can recognize. The colors produced are identical to the colors of the respective toxic chemical agents. SCAITS is intended for use by a school trained instructor, or by a trainee under the supervision of the school trained instructor.

*b. Capabilities.* Tests will simulate detection of nerve, blood, and blister agents. SCAITS is intended for use at temperatures between 500 and 1050 F. ( $10^{\circ}$  and 410 C.).

- c. Features. SCAITS consists of the following:
  - (1) 1 steel pail.
  - (2) TM 3-6910-227-10.
  - (3) 8 test bottles (empty).
  - (4) 3 bottles of simulants (liquid).
  - (5) 250 vials of agent simulants (5 boxes).
  - (6) 1 sampling adapter assembly.

Test bottles and vials containing ampoules of vapor agent simulants have corresponding colored markings to assure proper matching during use (table 1-1).

(1) Pail. The steel pail (fig. 1-1) with handle

## 1-3. Reporting Equipment Improvement Recommendations (EIR's).

If your SCAITS needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design. Tell us why a procedure is hard to perform. Put it on an SF 368 (Quality Deficiency Report). Mail it to us at: Commander, US Army Armament Materiel Readiness Command, Attn: DRSAR- MAD-E, Aberdeen Proving Ground, MD 21010. Well send you a reply.

is the container for the SCAITS. It has a removable lid held in place with a lever locking ring.

2) *Simulant/test bottle* carrier. The simulant/test bottle carrier is made of styrofoam material with 13 pockets. Eight contain the empty test bottles. Three contain bottles filled with simulant. The other two round pockets are finger holes.

(3) *Vials carrier.* Five boxes of vials are packed in the styrofoam carrier. Each box contains 50 vials. Each box is marked with the agent simulant. Two round pockets are finger holes. The top cover of each box of vials is marked as follows:

#### WARNING

Harmful if inhaled or swallowed. Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Wash thoroughly after handling.

(4) *Sampling adapter carrier.* The sampling adapter carrier holds the sampling adapter assembly. The two round pockets are finger holes.

(5) The sampling adapter assembly. The sampling adapter assembly (fig. 1-2) has a rubber squeeze bulb affixed to it. The sampling adapter is threaded so that a test bottle can be screwed into it. A badge clip is affixed to the sampling adapter. It is used to hold a sampler-detector from the M256 kit when using SCAITS to perform tests.

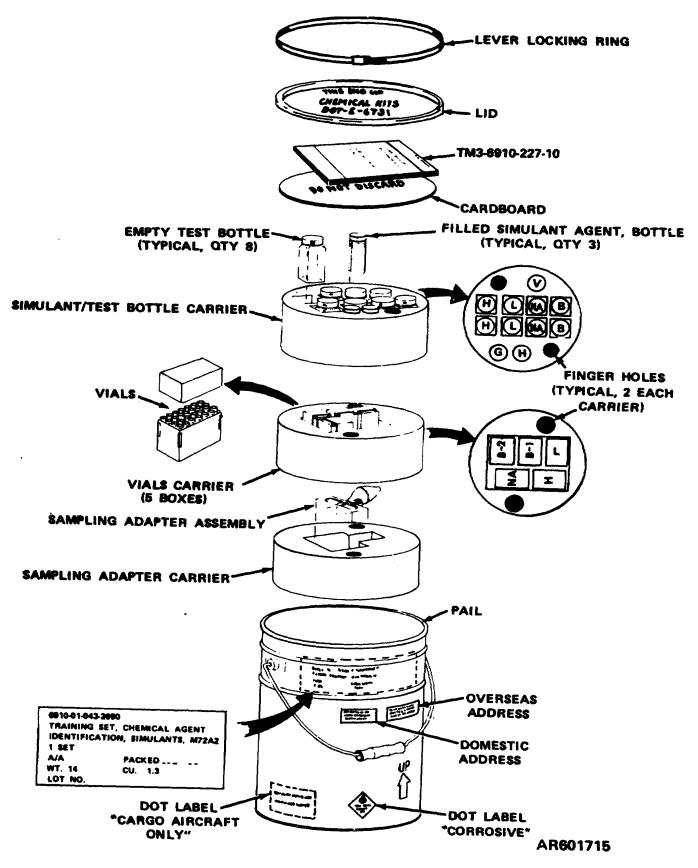


Figure 1-1. M72A2 simulants chemical agent identification training set

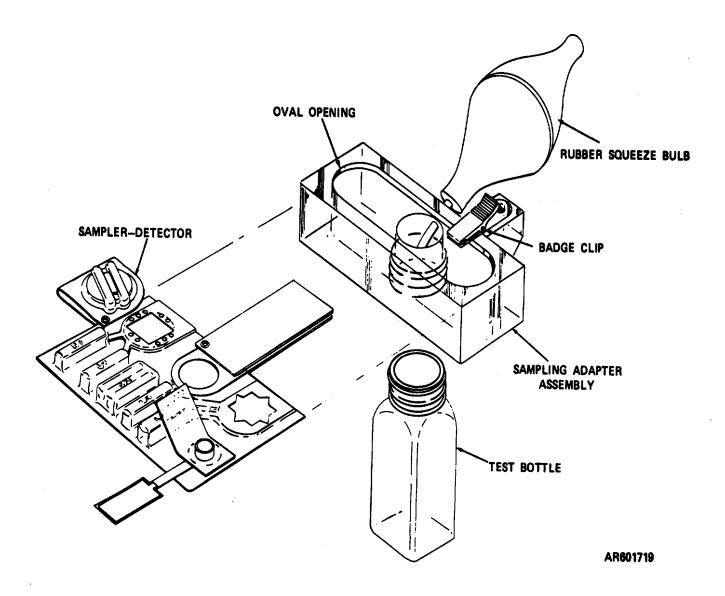


Figure 1-2. Sampling adapter assembly, test bottle, and sample-detector.

1-3

(6) *Technical manual.* A copy of this TM (TM 3-6910-227-10) is packed beneath the lid of the pail.

Test bottle marking	Vial marking	Marking color	Type of test
ы		Blue	Dliator
Н	H	Blue	Blister
В	*B-1	Red	Blood
	*B-2	Red	Blood
NA	NA	White	Nerve
L	L	Yellow	Lewisite

# Table 1-1. Markings and Colors

H-Agent symbol for Mustard, a blister agent B-Blood agent NA-Nerve agent L-Agent symbol for Lewisite, a blister agent

\*Both are needed for blood agent test.

## NOTE

Vials of liquid agent simulants (G, V, and H) are for use with Paper, Chemical Agent Detector, VGH, ABC-M8

# 1-5. Tabulated Data

All Data are approximate.

а.

SCAITS.	
Weight	4 lb. (6.4 kg)
Volume	6 gal (228 1)
Cubage	1.3 cu ft (.037 cu m)
Temperature:	
Operating	50-105- F (10°-41° C)
Storage	no restrictions

b. Number of Tests Available in One SCAITS.

<ol><li>Vapor agent tests.</li></ol>	
Blister H	50
Blood B	50
Nerve NA	50
Lewisite L	50
(2) Liquid agent tests.	
Н	
V200	
G200	

c. Shelf Life. Non deteriorative.

*d.* Intermittent Travel Restrictions. Cargo aircraft only.

1-4

## CHAPTER 2 OPERATING INSTRUCTIONS

#### Section I. UNPACKING, INSPECTION, AND REPACKING

#### WARNING

Wear protective mask at all times when using SCAITS. Don't breathe agent simulant vapors. Work in a well ventilated area. Some simulants are corrosive and some are toxic. Breathing simulant vapors may cause you irritation, discomfort, and injury. Refer to appendix D for specific first aid and medical information. Wear gloves when you handle bottles or vials of agent simulants. If simulants get on your skin, immediately wash with soap and water.

#### NOTE

Observe warning labels on simulant packaging.

#### 2-1. Unpacking SCAITS

Unpack SCAITS as follows:

a. Put on gloves (app B and C).

b. Remove lever locking ring (fig. 1-1) and lid from

pail.

*c.* Remove TM 3-6910-227-10.

*d*. Remove and save any cardboard packing material.

e. Remove simulant/test bottle carrier.

f. Remove vials carrier.

g. Remove sampling adapter carrier.

## 2-2. Inspection of SCAITS Contents

a. Simulant/Test Bottles.

(1) Inspect the simulant/test bottles and caps to ensure the test bottles are not broken.

(2) Discard broken bottle as ordinary trash. Requisition a replacement bottle (item 2, app C). Retain cap if serviceable.

# NOTE

Replacement bottles contain no markings. Instructor must code bottle at time of use.

(3) Check that the three simulant bottles are not empty, not broken, and that caps are. secure. Do not remove caps from the three simulant bottles.

(4) Decontaminate the SCAITS using a solution of water and detergent (item 4, app C), if simulant bottle is broken. Discard broken glass bottle as ordinary trash.

b. Vial Boxes.

(1) Remove and open the vial boxes one at a time.

(2) Check that the ampoules within the vials are not broken. Do not remove ampoules within the vials. If ampoules are broken, remove cap from vial, wash cap, vial, and ampoule in solution of water and detergent (item 4, app C). Discard as ordinary trash.

c. Sampling Adapter Assembly.

(1) Remove and inspect the sampling adapter assembly (fig. 1-2) to make sure it is complete.

(2) If missing or incomplete, requisition a replacement sampling adapter assembly (item 3, app C).

#### NOTE

The empty test bottles and the sampling adapter assembly are the only SCAITS parts that may be requisitioned separately (app C). If other items, such as the simulants, are missing, requisition a new SCAITS and keep the old, incomplete set for replacement parts.

#### 2-3. Repacking SCAITS

Repack SCAITS components in their respective carriers (fig. 1-1). Repacking is reverse of unpacking of SCAITS (para 2-1). Repack the pail and store SCAITS until ready for use.

## Section II. OPERATING UNDER USUAL CONDITIONS

#### WARNING

Wear protective mask at all times when using SCAITS. Don't breathe agent simulant vapors. Work in a well ventilated area. Some simulants are corrosive and some are toxic. Breathing simulant vapors may cause you irritation, discomfort, and injury. Refer to appendix D for specific first aid and medical information.

Wear gloves when you handle bottles or vials

of agent simulants. If simulants get on your skin, immediately wash with soap and water.

#### NOTES

Observe warning labels on simulant packaging.

If more sampling adapter assemblies are needed, such as when training several soldiers at the same time on one SCAITS, these assemblies may be requisitioned separately (item 3, app C).

#### 2-4. Preparations-Prior to Use

*a. M256 Kit.* The M256 kit (TM 3-6665-307-10) is listed in appendix B. It is used to perform portions of SCAITS operations.

*b. Gloves.* A pair of gloves must be worn by the operator, when using SCAITS. These gloves are available in many sizes and the National Stock Number (NSN's) are listed for each size gloves in appendix B or C.

c. SCAITS.

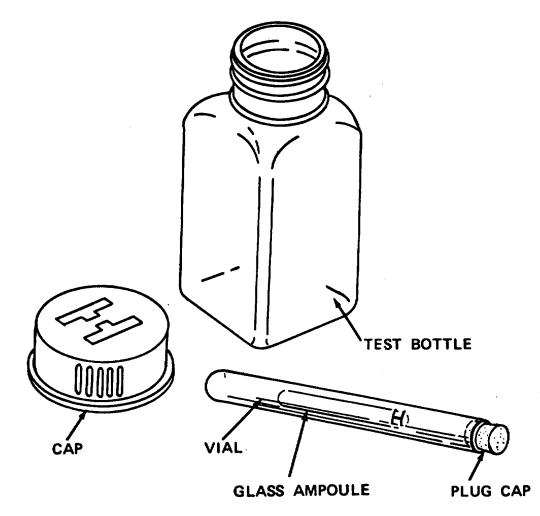
(1) Unpack SCAITS in accordance with instructions in paragraph 2-1.

(2) Inspect SCAITS (para 2-2).

(3) Remove one vial of H simulant from the H box (fig. 1-1).

(4) Refer to table 1-1 and match the vial with the correct empty test bottle. Remove the empty test bottle from the simulant/test bottle carrier.

(5) Remove the screw cap from the empty test bottle (fig. 2-1).



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Figure 2-1. Test bottle-vial preparations

(6) Without removing the plug cap from the vial, squeeze the plastic vial to break the glass ampoule which is inside the vial.

(7) After the glass ampoule is broken, remove then plug cap from the vial. Drop the vial, open end down, and the plug cap into the test bottle.

(8) Replace and tighten screw cap on the test bottle.

(9) Repeat these procedures for the L and NA simulants listed in table 1-1.

#### 2-5. Preparing Sampler—Detector for Test

a. Obtain the M256 kit (app B).

b. Hold the M256 kit with one hand at the bottom case with the top case fastener facing away from you.

*c.* With the other hand, grasp the loose end of the top case fastener. Using one continuous motion, pull upward on the top case fastener which separates the hook and pile fastener tape. Continue to pull up on the top case fastener until the top case stops its upward motion.

*d.* Pull the top case fastener away from you until the top case is completely open.

*e.* Remove a sampler-detector from M256 kit. Read the instructions on both sides of protective bag before proceeding.

f. Check the discard date on protective bag to. make sure the discard date has not expired. If discard date has expired, discard the sampler-detector. Obtain another sampler-detector.

g. Carefully tear open protective bag along the tear line marked with arrows.

*h.* Remove sampler-detector from protective bag. Hold sampler-detector by hinged protective strip (fig. 2-2) in the closed position.

#### CAUTION

Be careful not to touch the test spots. Touching the test spots could result in a false test.

i. Swing the hinged heater assembly away from test spots. Discard two loose protective strips under the hinged heater assembly.

j. Thoroughly inspect the sampler-detector for damage; such as, missing components, broken or empty ampoules, obstructed formed channels, or cracked plastic pockets. If any of these has occurred, discard sampler-detector and repeat this preparation procedure with a new sampler-detector.

*k.* Swing the hinged heater assembly back over the test spots.

2-6. Testing Procedures for H, NA, and L Vapor Agents

## NOTES

The following procedure is intended to instruct the user by providing him with an unknown simulant on which to perform all the tests on one sampler-detector. If desired, the instructor may elect to demonstrate one test at a time. He should, therefore, prepare only the appropriate test spot by following the applicable steps for that particular test. You can run more than one test using one test bottle without introducing more simulant. If necessary additional simulant can be added to continue test without washing test bottle.

a. Perform the procedure of paragraphs 2-4 and 2-5.

b. Pull off and discard the pull tab (marked 1) to expose the lewisite detecting tablet (fig. 2-2).

c. Rub the top half of white paper side of lewisite tablet rubbing tab (marked 2) on lewisite detecting tablet. Repeat rubbing until mark is visible.

*d.* Hold the sampler-detector in the vertical position so that the ampoules are down.

*e*. Finger-crush the two reagent ampoules (marked 3) one on each side of the center pockets. Do not crush the two center ampoules in the center pocket (marked 3). The ampoules to crush are indicated by asterisks on figure 2-2.

f. Rotate the sampler-detector until the test spots are in a down position. Force the liquid from the two crushed ampoules through the formed channels to the test spots. Doing this makes sure that the test spots get wet.

g. Check that hinged protective strip that is over the test spots. Hold the sampler-detector horizontal with left thumb over the center test spot.

*h.* Swing the hinged heater assembly away from the blister agent test spot.

## WARNING

Wear your protective mask when operating the sampler-detector. The heater ampoules, when broken, produce hot vapors which may cause injury to your eyes. Hold the sampler-detector at arms length, down, and away from your body when breaking heater ampoules to prevent hot vapors from reaching your eyes.

## CAUTION

Break only one green ampoule at a time because, if two ampoules are broken, the blister test cannot be completed.

*i.* Finger-crush one of the two green ampoules (marked 4). Immediately swing the hinged heater assembly over the blister agent test spot. Vent vapor away from the operator's body. Leave the hinged heater assembly in place for 2 minutes.

j. Swing the hinged heater assembly (after 2 minutes has passed) and the hinged protective strip away from the test spots.

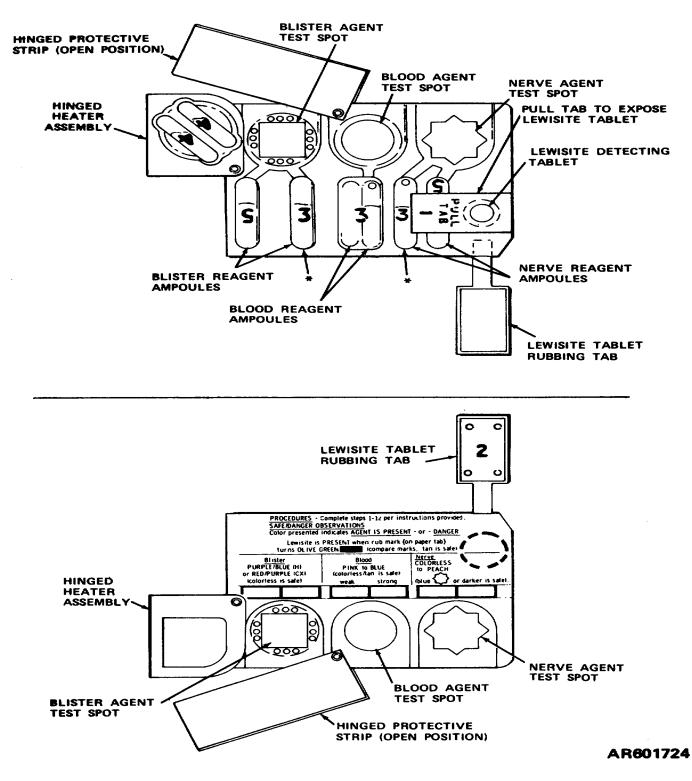


Figure 2-2. M256 chemical agent detector kit sampler-detector.

k. Using the badge clip (fig. 2-3) on the sampling adapter, fasten the sampler-detector (ampoule

side up and test spots over the oval opening) to the sampler adapter.

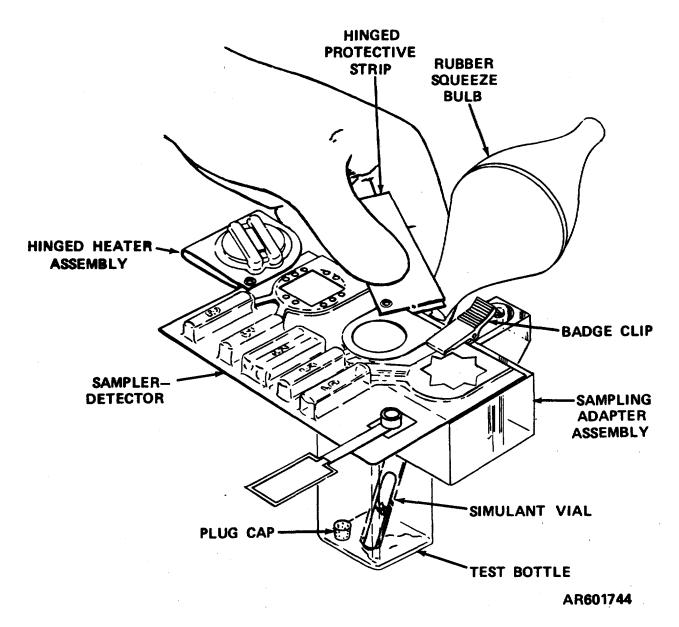


Figure 2-3. Holding the sampler-detector to the sampling adapter assemblyready for sampling.

*I.* Remove the screw cap from a previously prepared test bottle. Screw the test bottle onto the sampling adapter assembly (fig. 2-3).

*m.* Hold the sampler-detector tightly to the sampling adapter assembly with one hand. Pump the rubber squeeze bulb ten times using the other hand.

n. Remove the sampler-detector from the sampling adapter assembly.

o. Hold the lewisite tablet rubbing tab with the tablet mark (step c above) over the sampling adapter bottle opening. Pump the rubber squeeze bulb 10 times p. Remove the test bottle from the sampling adapter. Replace the screw cap on the test bottle.

q. Hold the sampler-detector by the hinged protective strip.

r. Finger-crush the second green ampoule (marked 4) (fig. 2-2). Swing the hinged heater assembly over the test spot. Vent vapor away from operator's body. Leave the hinged heater assembly in place for 1 minute.

s. Swing hinged heater assembly (after 1 minute has passed) away from test spot.

t. Hold the sampler-detector vertically with the test spots down.

u. Finger-crush the remaining ampoules (marked 5). Force the liquid from the two ampoules through the formed channels to the test spots to ensure wetting.

#### NOTE

The blister agent simulant will react immediately after the blister agent test spot is rewet.

v. Rub the lewisite tablet rubbing tab (paper side, beneath original mark) on lewisite detecting tablet. Compare the two rub marks immediately.

w. After 2 minutes, observe all test spots for color change.

x. Turn sampler-detector over and compare test spots and lewisite tablet rubbing with safe or danger conditions on back of sampler-detector.

#### NOTE

If during the instruction period, an improper color response or no response occurs, repeat procedures above.

2-7. Testing Procedures for B-1 and B-2 Blood Agent Vapor

#### NOTES

Because of the high volatility of the simulants used, the blood agent vapor (B) test is performed separate from the H, NA, and L tests (para 2-6). The vapor will escape from the test bottle quickly if the test bottle is left uncapped. Only one test can be conducted with one simulant preparation.

a. Perform the procedures of paragraphs 2-4 a and b, and 2-5.

*b.* Remove one each B-1 and B-2 vials from their respective vial boxes (fig. 1-1).

c. Remove test bottle B from the simulant/test bottle carrier.

d. Remove the cap from the empty test bottle.

e. Without removing the plug caps from the B-1 and B-2 vials, squeeze the plastic vials to break the glass ampoules inside.

#### CAUTION

Immediately replace and tighten cap on test bottle after performing the following step.

f. Remove the plug cap from the B-1 and B-2

vials. Drop both vials, open ends down, and the plug caps in the test bottle.

g. Immediately replace and tighten the cap on the test bottle.

h. Hold the sampler-detector in the vertical position so that the ampoules are down. Swing hinged protective strip away.

i. Finger-crush only the two ampoules in the center pocket (marked 3).

#### NOTE

For this procedure, it is unnecessary to crush the outer ampoules (marked 3). For this procedure, it is unnecessary to crush any of the other ampoules on the sampler- detector.

*j.* Rotate the sampler-detector until the test spots are in a down position. Force the liquid through the formed channels to the blood agent test spot to ensure wetting.

*k.* Using the badge clip (fig. 2-3) on the sampling adapter, fasten the sampler-detector (ampoule side up and test spots over the oval opening) to the sampling adapter.

1. Remove the screw cap from the previously prepared test bottle (g above). Screw the test bottle onto the sampling adapter assembly (fig. 2-3).

m. Hold the sampler-detector tightly to the sampling adapter assembly with one hand. Pump the rubber squeeze bulb 10 times using the other hand.

n. Remove the sampler-detector from the sampling adapter assembly.

o. Remove the test bottle from the sampling adapter assembly. Replace the screw cap on the test bottle.

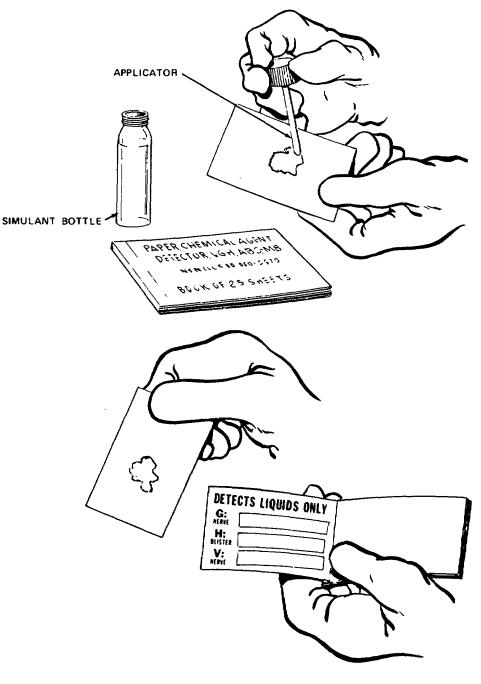
p. After 2 minutes, turn sampler-detector over and compare blood test spot with colors shown on back of sampler-detector.

#### 2-8. Testing Procedures for Liquid H, V, and G Agents

a. The ABC-M8 VGH chemical agent detector paper is in the M256 kit (app B) (hereinafter referred to as detector paper). Remove the book of detector paper from the M256 kit. Tear out a sheet of detector paper from the book. If perforated, use half a sheet of detector paper.

*b.* Take the filled bottle of simulant agent marked "H," on figure 1-1 and open the bottle.

c. Apply a drop of "H" liquid agent simulant onto a strip of detector paper (fig. 2-4).



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Figure 2-4. Applying agent stimulant on detector paper and comparing color changes

d. Repeat with the "V" and "G" liquid agent simulants to the same strip of detector paper.

e. Compare the color(s) on the detector paper with color bars on inside front cover of the detector paper booklet to identify the agent simulant(s).

#### Section III. OPERATING UNDER UNUSUAL CONDITIONS

This equipment (SCAITS) is intended for use at temperatures between 50° and 105° F. (10° and

41° C.). Therefore, operating under unusual conditions does not apply.

## CHAPTER 3 MAINTENANCE INSTRUCTIONS

# Section I. SERVICING

#### WARNINGS

Wear protective mask at all times when using SCAITS. Don't breathe agent simulant vapors. Work in a well ventilated area. Some simulants are corrosive and some are toxic. Breathing simulant vapors may cause you irritation, discomfort, and injury. Refer to appendix D for specific first aid and medical information.

Wear gloves when you handle bottles or vials of agent simulants. If simulants get on your skin, immediately wash with soap and water.

#### 3-1. Cleaning

When' you have finished using SCAITS clean test bottles and simulant bottles as follows:

a. Test Bottles.

(1) Remove caps from test bottles.

(2) Empty contents of bottles into a container of water and detergent (item 4, app C).

(3) Soak bottles, caps, and contents for at least 8 hours.

(4) Pour off water after soaking period.

(5) Discard any remaining plastic vials, plug caps, and broken glass as ordinary trash.

(6) Refill a container with water and detergent as you did in (2) above.

(7) Put on gloves (item 1, app C) and wash test bottles and caps to remove all traces of simulant.

(8) Rinse bottles and caps thoroughly.

(9) Let bottles and caps drain only.

(10) Screw caps on bottles. Return bottles to simulant/test bottle carrier (fig. 1-1).

b. Liquid Agent Simulant Bottles.

(1) Cap the liquid agent simulant bottles securely and wash them in water and detergent (item 4, app C).

#### CAUTION

Do not soak these bottles as you did the test bottles because the water could seep into them and dilute the remaining simulant.

(2) Rinse the three bottles, allow to dry, and return them to simulant/test bottle carrier.

#### 3-2. Repacking of Used SCAITS

After the used test bottles are cleaned (para 3-1), return the boxes of vials, sampling adapter, and simulant bottles to their carriers. Place the carriers into the container in the order as shown in figure 1-1.

#### Section II. Disposal

#### 3-3. Reusable/Serviceable Components

Reusable/serviceable components may be retained for future use.

## 3-4. Other Components

Any other components may be discarded as ordinary trash or may be buried.

Change 3 3-1/(3-2 blank)

# APPENDIX A

# REFERENCES

FM 21-48	Planning and Conducting Chemical, Biological, Radiological (CBR), and Nuclear Defense Training.
TM 3-6665-307-10	Operator's Manual: Detector Kit, Chemical Agents, M256 (NSN 6665-01-016-8399).

A-1

# ADDITIONAL AUTHORIZATION LIST

#### Section I. INTRODUCTION

# B-1. Scope

This appendix lists additional items you are authorized for the support of the SCAITS.

# **B-2.** General

This list identifies items that do not have to accompany the SCAITS and that do not have to be turned in with it. These items are all authorized to you by CTA, MTOE, TDA, or JTA.

## **B-3. Explanation of Listing**

National stock numbers, descriptions, and quantities are provided to help you identify and request the additional items you require to support this equipment.

# Section II. ADDITIONAL AUTHORIZATION LIST

(1) National	(2) Description			(4) QTY
stock number	Part number & FSCM	Usable on code	U/M	auth
6665-01-016-8399	Detector Kit, Chemical Agent: M26		ea	1
8415-00-753-6550	Gloves, Toxicological Agents Protectiv	ve (TAP), Size: X-Small.	pr	AR
8415-00-753-6551	Gloves, Toxicological Agents Protectiv	ve (TAP), Size: Small	pr	AR
8415-00-753-6552	Gloves, Toxicological Agents Protective (TAP), Size: Medium.			AR
8415-00-755-6553	Gloves, Toxicological Agents Protectiv	ve (TAP), Size: Large.	pr	AR
8415-00-753-6554	Gloves, Toxicological Agents Protectiv	ve (TAP), Size: X-Large.	pr	AR
8415-00-782-3239	Gloves, Cloth, Chemical Protective, S	ize: Small.	pr	AR
8415-00-782-3245	Gloves, Cloth, Chemical Protective, S	ize: Medium.	pr	AR
8415-00-782-3248	Gloves, Cloth, Chemical Protective, S	ize: Large.	pr	AR

B-1

#### APPENDIX C EXPENDABLE SUPPLIES AND MATERIALS LIST

## Section I. INTRODUCTION

#### C-1. Scope

This appendix lists expendable supplies and materials you will need to operate and maintain the SCAITS. These items are authorized to you by CTA 50-970, Expendable Items (Except Medical, Class V, Repair Parts, and Heraldic Items).

#### C-2. Explanation of Columns

*a.* Column *I-Item* Number. This number is assigned to the entry in the listing and is referenced in the narrative instructions to identify the material (e.g., "Use disposable gloves, item 1, app C").

*b.* Column 2-Level. This column identifies the lowest level of maintenance that requires the item, which is C—operator/Crew.

*Column 3-National Stock Number.* This is the National stock number assigned to the item; use it to request or requisition the item.

*d.* Column 4-Description. Indicates the Federal item name and, if required, a description to identify the item. The last line for each item indicates the part number followed by the Federal Supply Code for Manufacturer (FSCM) in parentheses, if applicable.

e. Column 5-Unit of Measure (U/M). Indicates the measure used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr). If the unit of measure differs from the unit of issue, requisition the lowest unit of issue that will satisfy your requirements.

## Section II. EXPENDABLE SUPPLIES AND MATERIALS LIST

(1)	(2)	(3)	(4)	(5)
ltem Number	Level	National Stock Number	Description	U/M
1	С	8415-00-682-6786	Gloves, Disposable	pr
2	С	6530-00-112-0152	Bottle, Safety Cap, 16 Dram, Amber (Test Bottle)	ea
3	С	6910-01-113-3754	Adapter, Sampling (Sampling Adapter Assembly)	ea
4	С	7930-00-282-9699	Detergent, General Purpose	gl

Change 3 C-1/(C-2 blank)

# APPENDIX D FIRST AID AND MEDICAL INFORMATION

# D-1. Scope

This appendix lists information you and a doctor may need should anyone swallow or otherwise come in contact with the chemical agent ;simulants contained in this kit.

# D-2. Explanation of Listing

a. The first column identifies the particular

chemical agent simulant container.

b. The second column gives a generic name for each ingredient of the chemical agent simulant.

c. The third column lists the reactions and symptoms that may result from contact with the chemical agent simulant.

The fourth column tells the emergency d. treatment for exposure to each chemical agent simulant.

(1) Marking on Bottle	(2) Generic Name	(3) Major Reactions and Symptoms of Exposure	(4) Emergency Treatment
G	Mixture of hexylene glycol (13.5 ml) and methoxyethanol (6.5 ml) total of 20 ml in bottle)	Mild eye, skin, and mucous membrane irritant. Swallowing or inhaling can lead to liver or kidney damage. May cause central nervous system effects such as garbled speech, staggering walk, shaking, and mental confusion.	Remove from exposure. Flood exposed tissues with large amounts of water. If swallowed and the individual is conscious, induce vomiting. Provide professional medical attention as soon as possible. Other treatment depends on the amount of exposure.
Н	Isoamyl salicylate (20 ml in bottle).	Moderate eye, skin, and mucous membrane irritant. Swallowing may lead to salicylate poisoning which appears as mental confusion, neurological symptoms, decreased respiration and unconsciousness.	Same as for G simulant.
V	Mixture of tetrahydrofurfuryl alcohol (70 gm), N- methylgluca- mine (16 gm), and diethylene glycol (300 gm). (This is batch proportioned; total of 20 ml in bottle).	Mild eye, skin, and mucous membrane irritant. Swallowing can lead to liver or kidney damage. Prolonged exposure at high concentrations or swallowing may cause central nervous system effects and kidney damage.	Same as for G simulant.

Table D-1. First Aid and Medical Information, Liquid Agent Simulants in Bottles

(1) Marking On Vial and Vial Box	(2) Generic Name	(3) Major Reactions and Symptoms of Exposure	(4) Emergency Treatment
Н	Dimethyl sulfate (0.3 ml per ampoule; 15 ml in set)	Severe eye, akin, and mucous membrane irritant.	DO NOT INDUCE VOMITING.
		inhaling or swallowing may cause systemic effects hours later. These include	Flood exposed areas with water.
		headaches, giddiness, sensitivity to light, bloodshot	If swallowed, give water. Pro- vide professional medical atten-
		eyes, and itching and swelling around the eyes, cheeks, and nose, Individuals may become hoarse	tion as soon as possible.
		or lose their voices. They may also vomit and have short-	
		ness of breath, inability to swallow, and diarrhea.	
L	Potassium iodide dissolved in iodine (0.3 ml per ampoule; 1.5 ml in set)	Potassium iodide is not toxic in these amounts.	None required.
B-1	Sodium hypochlorite (1.0 ml per ampoule; 50ml in set)	Moderate eye irritant. Mild skin and mucous <u>mem-</u> brane irritant. Swallowing usually produces im- mediate vomiting. Other	Flood exposed area with water Induce vomiting if it has not yet occurred. Provide professional medical attention as soon as possible.
B-2	Sodium thissuspate (1.0 ml por	symptoms are rare, but may include swelling of throat.	
D-2	Sodium thiocyanate (1.0 ml per ampoule; 50 ml in set)	Swallowing produces vomiting, extreme excitation, delirium, convulsions, and	Same as for B-1.
		spasticity. Kidney functions may be affected.	
NOTE			
Mixing B1 and B2 together pro- duces Hydrogen cyanide	Hydrogen cyanide	Headache, dizziness, unsteady walking, feeling of air. Keep victim warm. Give suffocation, nausea, flushed appearance.	Remove from exposure. Get fresh air. Keep victim warm give artificial respiration if breath ing stops. If available, crush 2 ampoules of amyl nitrite in hollow of hand and hold close to victim's nose. Repeat every 4 to 5 minutes until total of 8 am- poules have been used or normal breathing has resumed Provide medical attention as soon as possible.
NA	Glacial acetic acid (1.0 ml per ampoule; 50 ml in set)	Severe eye, akin, and mucous membrane irritant. Swallowing causes extensive damage to throat and upper gastrointestinal tract.	DO NOT INDUCE VOMITNG Flood exposed area w/ water Give water if the individual is conscious. Provide professional medical attention as soon as possible.

Table D-2. First Aid and Medical Information, Vapor Agent Simulants in Ampoules
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By Order of the Secretary of the Army:

Official:

E. C. MEYER General, United State Army Chief of Staff

ROBERT M. JOYCE Major General, United States Army The Adjutant General

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