WARNINGS
SIGNALS CONTAIN HAZARDOUS MATERIALS

KEEP away from FIRE
DON’T handle if damaged or parts are missing
Handle CAREFULLY and use *GLOVES and
FULL HELMET when possible.

AIM at all times AWAY from:
FACE-BODY-FRIENDLY TROOPS

BEFORE ITEMS ARE LAUNCHED check WIND to:
ACHIEVE HEIGHT FOR VISIBILITY
AVOID OVERHEAD OBSTACLES (foliage, etc.)
AVOID FALLOUT (rocket parts, etc.)

Maintain at least 453 elevation to launch.

CHECK WIND TO AVOID FIRE, SMOKE INHALATION OR IRRITATION WITH ALL
PYROTECHNIC ITEMS.

*Leather work gloves (basic issue)
TM 9-1370-206-10, 31 March 1991, 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.

<table>
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2. File this change sheet in front of the publication for reference purposes.
By Order of the Secretary of the Army:

GORDON R. SULLIVAN  
General, United States Army  
Chief of Staff

Official:  

MILTON H. HAMILTON  
Administrative Assistant to the  
Secretary of the Army  
01893

DISTRIBUTION:

To be distributed in accordance with DA Form 12-40-E, (Block 0721), Operator Maintenance Requirements for TM 9-1370-206-10.
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*This manual supersedes TM 9-1370-206-10, 28 July 1978, including all changes.*
CHAPTER I. UNPACKING

WHEN READY FOR USE

CAUTION

KEEP BOXES SEALED—DUDS OR IMPROPER FUNCTIONING COULD OCCUR IF EXPOSED TO MOISTURE. OPEN JUST BEFORE USE.

(1) Cut steel strapping carefully with metal shears to avoid springback. Remove and dispose of straps.

(2) Cut metallic seal with pliers. Discard seal.

(3) Turn hasp catch and open hasps on hinge and hasp boxes, or pull out on spring latch to release on spring latch boxes.
Lift box top and remove top padding. Note top position for reclosing on spring-latch boxes.

Remove inner packs.
BARRIER BAG

1. Cut barrier bag open along the edge with most free area cutting as close to sealed edge as possible.

2. Cut or remove tape and open inner container.

3. Remove padding, if any.

4. Remove items. If all items are not removed, close and reseal barrier bag with adhesive tape.
DO NOT OPEN HERMETICALLY SEALED (AIR TIGHT) CONTAINERS UNTIL READY FOR USE.

SIGNAL EXPOSED TO MOISTURE MAY NOT FUNCTION.

(1) Using key attached to container, remove sealing strip.
(2) Remove top of container.
(3) Remove any padding pieces from container.
(4) Remove item.
(1) Remove adhesive tape.
(2) Open top of container.
(3) Remove any padding pieces from container.
(4) Remove item.

SAVE ALL CONTAINERS - WHEN POSSIBLE - FOR REPACK

Change 1  7
PLASTIC PA142 CONTAINER IN M548 OVERPACK

Change 1 8.1 (8.2 blank)
CHAPTER II. DESCRIPTION AND OPERATION

SECTION 1. SELF CONTAINED GROUND SIGNALS

M125A1 GREEN CLUSTER ILLUMINATION
M126A1 RED PARACHUTE ILLUMINATION
M127A1 WHITE PARACHUTE ILLUMINATION
M128A1 GREEN PARACHUTE SMOKE
M129A1 RED PARACHUTE SMOKE
M158 RED CLUSTER ILLUMINATION
M159 WHITE CLUSTER ILLUMINATION
M194 YELLOW PARACHUTE SMOKE
M195 GREEN PARACHUTE ILLUMINATION
DESCRIPTION

The following signal groups will be used to produce the charted effects.

Cylindrical Aluminum Launcher Tube

RED KNURLED BAND

BASE

PRIMER

10.13 IN.

1.63 IN.

SIGNAL ENTIRELY SELF CONTAINED
- 700 to 800 ft. high

LASTS 12 seconds min.

M128A1 GREEN
M129A1 RED
M194 YELLOW

SMOKE

CANDLE

LASTS
RED 50 sec.
WHITE 25 sec.
GREEN 50 sec.

M126A1 RED
M127A1 WHITE
M195 GREEN

U
AR 5311
OPERATION

1. HOLD signal in LEFT hand

- FOREFINGER
- RED BAND
- THUMB

M125A1 GREEN
M158 RED
M159 WHITE
CLUSTER CANDLE

700 to 800 ft. high

LASTS 6-10 seconds

5 STARS
ALIGN thumb and forefinger grip on red band.

KEEP LEFT HAND ALIGNMENT

2 WITHDRAW cap from ejection end.

3 Turn left hand until signal ejection end is up.

EJECTION END
4. ALIGN cap rim with knurled red band.

5. ADJUST left hand grip as shown about center of signal.
MISFIRE

- KEEP SIGNAL AIMED.
- PULL CAP BACK TO RED KNURLED BAND AND ROTATE 90°.
- MAKE TWO MORE ATTEMPTS TO FIRE.
- WAIT 30 SECONDS WITH ARM REMAINING RIGID AND SIGNAL AIMED OVERHEAD.
- RETURN CAP TO EJECTION END. TURN IN TO AMMUNITION SUPPLY POINT.
SECTION 2. RED STAR PARACHUTE ILLUMINATION GROUND SIGNAL M131

DESCRIPTION

This hand held signal illuminates the same as M128A1 except at an altitude of 1500 feet.

1500 FEET
LASTS 25-30 seconds
OPERATION

Hold signal firmly in left hand with ejection end away from body.

1. Remove and keep cap from ejection end.

2. Carefully remove and keep lower cap.

Make sure pull ring and cord hang free.
(3) Grasp signal FIRMLY with left hand. Keep arm rigid as shown.

(4) AIM

(5) Insert finger of right hand in pull ring and pull downward.

**MISFIRE**

- KEEP SIGNAL AIMED.
- WAIT 30 SECONDS WITH ARM REMAINING RIGID.
- CAREFULLY INSTALL BOTH CAPS. TURN IN TO AMMUNITION SUPPLY POINT.
SECTION 3. ILLUMINATION GROUND SIGNALS AND KITS

KIT 1. THREADED PROJECTOR (cloth bandoleer)

DESCRIPTION

Each of the signals listed below may be fired from a hand held projector while encompassed in a bandoleer.

- RED ILLUMINATION GROUND SIGNAL, M187
- WHITE ILLUMINATION GROUND SIGNAL, M188
- GREEN ILLUMINATION GROUND SIGNAL; M189
- AMBER ILLUMINATION GROUND SIGNAL, M190

The projector and the bandoleer plus seven signals make up the signal kit.

All signals may be obtained and fired separately.

5 seconds burning time-candle power 3200
in kit form.....

RED PERSONNEL SIGNAL KIT, M185
(Contains only red signals).

VARIOUS COLOR SIGNAL KIT, M186
(Contains 3 red, 2 white and 2 green signals).

Caps protect threaded end of signal which attach to the projector.
OPERATION

(1) Select signal by color, if bandoleer contains more than one signal of that color, use the one farthest from the lanyard.

(2) Remove and keep plastic cap.

(3) Cock projector firing pin by moving trigger to safety slot.
**KEEP ON TARGET**

4. Carefully thread projector onto signal so as not to dislodge trigger from safety slot.

5. AIM CAREFULLY

6. FIRE by moving trigger to bottom of firing slot and releasing with a SNAP.
(7) If expended signal is on end of bandoleer, or if signals between expended signal and end have been used, cut bandoleer and discard waste.

(8) RETURN PARTIALLY USED KIT TO BARRIER BAG AND SEAL WITH TAPE.

REPEAT STEP (6)

IF SIGNAL STILL FAILS TO FIRE WAIT 10 SECONDS KEEPING SIGNAL AIMED.
REMOVE FROM PROJECTOR.
CUT SIGNAL FROM BANDOLEER.

REPLACE CAP.
TURN IN TO AMMUNITION SUPPLY POINT.
KIT 2. FORCED FIT PROJECTOR (plastic bandoleer)

DESCRIPTION

Signals must be removed from bandoleer before firing.

- RED ILLUMINATION GROUND SIGNAL, M260

The projector and the bandoleer plus seven signals make up the signal kit.

All signals may be obtained and fired separately.

10 seconds burning time-candle power 10000

24
in kit form.....
RED PERSONNEL DISTRESS SIGNAL KIT: A/P255-5A
(Contains only red signals).
THIS SIGNAL KIT IS A COMPONENT OF THE SRU-211P, VEST SURVIVAL KIT. AND CANNOT BE PROCURED SEPARATELY.
1. Select and remove signal from bandoleer using the one farthest from lanyard.

2. Carefully insert nozzle end of signal into projector until signal bottoms out.

3. Aim carefully

4. Fire by pulling trigger knob to rear of slot and releasing with a snap.
(5) Retain bandoleer for future use.

(6) RETURN PARTIALLY USED KIT TO PLASTIC BAG AND SEAL WITH TAPE.

REPEAT STEP (4)

IF SIGNAL STILL FAILS TO FIRE WAIT 10 SECONDS KEEPING SIGNAL AIMED.
REMOVE FROM PROJECTOR.

REINSTALL IN BANDOLEER.
TURN IN TO AMMUNITION SUPPLY POINT.

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SECTION 4. SMOKE AND ILLUMINATION MARINE SIGNAL, AN-MK13 MOD 0

DESCRIPTION

A hand held signal which contains a signal for day use and a signal for night use. (Both ends useable)

The end of the signal used for day operations contains a non-serrated cap. The pull ring has no attached cord.

The DAY signal emits ORANGE smoke
Burning time 18-20 seconds
DESCRIPTION (continued)

For identification in darkness the night signal end cap is serrated and contains three bosses.

When the cap is removed from the night signal end the pull ring appears with an attached cord and washer.

The NIGHT signal emits a RED FLAME
Candle power 3000 Burning time 18-20 seconds
OPERATION

① Select applicable end.
② Remove and keep plastic cap.
③ Unfold pull ring.
④ Position signal as shown.
⑤ FIRE
  Jerk pull ring sharply.

CAUTION:
WHEN USING NIGHT SIGNAL PULL ONLY ON PULL RING. WASHER IS ONLY A MEANS OF IDENTIFICATION.
(6) If only one end of signal is used IMMERSE that end ONLY in oil or water to cool. DRY CAREFULLY

(7) Place signal back in original packing (Retain for use of opposite end.)

MISFIRE

KEEP SIGNAL AIMED
WAIT 30 SECONDS

REPLACE PLASTIC CAP.
TURN IN TO AMMUNITION SUPPLY POINT.

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AR 5331

31 (32 blank)
ALL REPACKING SHOULD BE TIGHTLY WRAPPED. CLEARLY MARKED AND WATERPROOF

TURN IN UNUSED ITEMS TO AMMUNITION SUPPORT AREA AS SOON AS POSSIBLE. PROVIDE AS MUCH PROTECTION FOR THESE ITEMS BY REPACKING IN ORIGINAL CONTAINERS, IF AVAILABLE, OR EQUIVALENT IMPROVED PACKING.

AVOID EXPOSURE TO....MOISTURE-DENTS-ETC.
To report errors and omissions or to suggest improvements

PLEASE WRITE
COMMANDER
USA ARDEC
ATTN: SMCAR-LMB
Picatinny Arsenal, New Jersey 07806-5000

USE FORM DA 2028
WE NEED TO KNOW

MALFUNCTION REPORTS
SUBMIT MALFUNCTION REPORTS IN ACCORDANCE WITH AR 79-1

DID YOU GET MY SIGNALS?

Change 1 35 (36 blank)
Pyrotechnic Signals

By Order of the Secretary of the Army:

CARL E. VUONO
General, United States Army
Chief of Staff

Official:
THOMAS F. SIKORA
Brigadier General, United States Army
The Adjutant General

DISTRIBUTION: To be distributed in accordance with DA Form 12-40-E, block 0721 Operator Maintenance requirements for Pyrotechnics.

TM 9-1370-206-10

U
AR 5300
**SOMETHING WRONG WITH PUBLICATION**

THEN...JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL.

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

<table>
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<th>PUBLICATION DATE</th>
<th>PUBLICATION TITLE</th>
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BE EXACT  PIN-POINT WHERE IT IS

<table>
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<tr>
<th>PAGE NO.</th>
<th>PARA-GRAPH</th>
<th>FIGURE NO.</th>
<th>TABLE NO.</th>
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IN THIS SPACE, TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT.

PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

P.S.—IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.
The Metric System and Equivalents

**Linear Measure**

1 centimeter = 10 millimeters = .39 inch
1 decimeter = 10 centimeters = 3.94 inches
1 meter = 10 decimeters = 39.37 inches
1 dekameter = 10 meters = 32.8 feet
1 hectometer = 10 dekameters = 328.08 feet
1 kilometer = 10 hectometers = 3,280.8 feet

**Liquid Measure**

1 centiliter = 10 milliters = .34 fl. ounce
1 deciliter = 10 centiliters = 3.38 fl. ounces
1 liter = 10 deciliters = 33.81 fl. ounces
1 dekaliter = 10 liters = 2.64 gallons
1 hectoliter = 10 dekaliters = 26.42 gallons
1 kiloliter = 10 hectoliters = 264.18 gallons

**Weights**

1 centigram = 10 milligrams = .15 grain
1 decigram = 10 centigrams = 1.54 grains
1 gram = 10 decigrams = .035 ounce
1 decagram = 10 grams = .35 ounce
1 quintal = 100 kilograms = 220.46 pounds
1 metric ton = 10 quintals = 1.1 short tons

**Square Measure**

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
1 sq. meter (centare) = 100 sq. decimeters = 1,076.4 sq. feet
1 sq. dekameter (are) = 100 sq. meters = 10.76 sq. feet
1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

**Cubic Measure**

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch
1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches
1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

**Approximate Conversion Factors**

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**Temperature (Exact)**

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