

FIELD MANUAL

No. 31-70

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 12 April 1968

BASIC COLD WEATHER MANUAL

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*This manual supersedes FM 31-70, 24 February 1959, including all changes.

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CHANGE }
No. 1 }

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BASIC COLD WEATHER MANUAL

FM 31-70, 12 April 1968, is changed as follows:

- Page 53, paragraph 3-51 b, In line 16 "(LOW)" is changed to read "(LAW or Lubricant, Semi-Fluid, MIL-L-46000A(LSA))."
- Page 165, paragraph D-2 a. In line 10 "(LOW)" is changed to read "(LAW or Lubricant, Semi-Fluid, MIL-L-46000A(LSA))."
- Page 166, paragraph D-3a (2). In line 21 "LOW" is changed to read "LAW or Lubricant, Semi-Fluid, MIL-L-46000A(LSA)."
- Page 166, paragraph D-3 a (3), In lines 3 & 4 "LOW" is changed to read "LAW or Lubricant, Semi-Fluid, MIL-L-46000A(LSA)."
- Page 166, paragraph D-3 b (4). In line 7 "LOW" is changed to read "LAW or Lubricant, Semi-Fluid, MIL-L-46000A(LSA)."
- Page 170, paragraph E-2 a. In line 14 "Cap, Cold Weather" is changed to read "Cap, Insulating, Helmet Liner-Helmet."
- Page 171, paragraph E 2c. Entire page 171 is deleted and the following is added:

Weapon, Antipersonnel (Claymore).....	3. 00
Pistol, Automatic, Cal. 45.....	2. 50
250 rounds, 7.62mm, Machinegun.....	22. 00
Bandoleer, w/7.62mm Ammunition (60 rds).....	3. 61
Compass, Lensatic.....	. 30
Grenade Launcher, M79.....	6. 00
81mm Mortar, M29:	
Barrel.....	28. 00
Mount, M23A1.....	31. 00
Baseplate, M3.....	28. 50
3.5" Rocket Launcher:	
Launcher.....	13. 00
Rockets.....	9. 00
Rifle, 90mm, M67:	
Rifle.....	35. 00
Ammo.....	9. 25
Stove, One Burner, Squad.....	1. 30
Reel, DR8, w/WD1 Wire.....	13. 00
Radio, AN/PRC 6.....	7. 50
Radio, AN/PRC 25.....	24. 72

E-3. Type Load

The loads shown below are *type* loads which could be worn during moderately cold weather (approx-

mately 15° F to -15° F). The term moderately cold is used only as a descriptive term. What is termed as moderately cold to one person, may be extremely cold to another. The windchill factor must also be considered, a moderate cold could change momentarily to extreme cold by the addition of high winds. Therefore, the commander should use the type loads for planning only and should adjust them accordingly to fit a given situation and temperature condition.

a. Fighting Load.

<i>Clothing</i>	<i>Weight</i>
Helmet, w/liner.....	3. 00
Undershirt, 50/50.....	0. 82
Drawers, 50/50.....	0. 89
Socks, Cushion Sole.....	0. 19
Suspenders.....	0. 25
Trousers, Cotton Nylon WR.....	2. 10
Shirt, Wool Nylon OG.....	1. 50
Coat, Cotton Nylon WR.....	3. 20
Liner, Coat, Nylon Quilted.....	0. 73
Cap, Insulating Helmet Liner-Helmet..	0. 26
Hood, Winter.....	0. 96
Muffler, Wool.....	0. 38
Mitten Shells, Trigger Finger.....	0. 43
Mitten Inserts, Wool Nylon.....	0. 22
Overwhite Set.....	4. 00
Boots, Insulated, White.....	5. 50
<hr/>	
Total clothing.....	24. 43
<hr/>	

Equipment:

Rifle, M14.....	9. 08
Grenade, M26 (2 ea).....	1. 90
Magazine, w/7.62mm ammo (5 ea).....	7. 85
Pouch, Ammo, 7.62mm, M14 (2 ea)...	1. 46
Canteen, Cold Climatic.....	3. 85
Belt, M14, w/first aid packet & pouch..	1. 01
Intrenching Tool, w/carrier.....	3. 96
Bayonet, w/scabbard.....	1. 07
Snowshoes, Magnesium.....	4. 60
Body Armor.....	8. 87
Protective Mask.....	2. 88
<hr/>	
Total equipment.....	46. 53
<hr/>	

<i>Carried in pockets:</i>	<i>Weight</i>
Chasstick.....	0. 10
Sun Glasses, w/case.....	0. 30
Box, Match, Waterproof.....	0. 15
Knife, Pocket.....	0. 40
Thong, Emergency.....	0. 12
	<hr/>
Total.....	1. 07
	<hr/>
Total Fighting Load.....	72. 03
	<hr/> <hr/>

b. Existence Load.

Rucksack, Nylon Duck, OG.....	3. 60
Following items are carried in or attached to the rucksack:	
Bag, Sleeping (Outer).....	7. 06
Bag, Sleeping (Innor).....	5. 41
Mattress, Pnoumatic.....	3. 00
Case, Water Repellent.....	2. 25
Liner, Trousers, Nylon Quilted.....	0. 64
Socks, Cushion Sole (2 pr).....	0. 38
Poncho, Nylon Twill.....	2. 00
1/3 Ration.....	2. 13
Toilet Articles.....	2. 00
Towel, Turkish.....	0. 64
Starter, Fire.....	0. 15
Mitton Inserts, Wool Nylon.....	0. 22
	<hr/>
Total Existence Load.....	29. 48
	<hr/>
Total of Fighting and Existence Load.....	101. 51

c. Supplemental Existence Load. The following are items of clothing not immediately needed by the individual during moderately cold weather. These items are normally carried in the duffle bag on unit transportation and should be available to the individual when needed:

Undershirt, 50/50
 Drawers, 50/50
 Socks, Cushion Sole (3 pr)
 Trousers, Cotton Nylon, WR
 Shirt, Wool Nylon, OG
 Parka, Cotton Nylon
 Liner, Parka, Nylon Quilted
 Mitten Set, Arctic

Page 184, paragraph G-6a. In line 1 "(LOW)" is changed to read "(LAW or Lubricant, Semi-Fluid, MIL-L-46000A(LSA))."

By Order of the Secretary of the Army:

Official:

KENNETH G. WICKHAM,
Major General, United States Army,
The Adjutant General.

W. C. WESTMORELAND,
General, United States Army,
Chief Of Staff.

Distribution:

To be distributed in accordance with DA Form 12-11 requirements for Basic Cold Weather Manual.

CHAPTER 1

INTRODUCTION

1-1. Purpose and Scope

a. This manual is designed to prepare the individual soldier and small unit commander to conduct military operations for extended periods of time under the most severe and varying cold weather climatic conditions. The doctrine and techniques in the manual are applicable in any area that has cold weather and snow with their accompanying operational problems. Troops *properly trained* in this doctrine and these techniques will be able to fight; live; and move in any cold weather area of the world.

b. The provisions of SOLOG Agreement 23R, Arctic Doctrine are implemented in this manual.

c. The material contained herein emphasizes that cold, with its attendant problems affects military operations but does not prevent them. The proper use of authorized equipment and field expedients will, to a major degree, overcome any problems encountered as a result of the cold. It is the commander's responsibility to train his men so they can make the environment save military operations, *not hinder them*. The material presented herein is applicable, without modification to nuclear and nonnuclear warfare, employment of, and protection from, chemical, biological, and radiological agents, and internal defense and development operations.

d. Throughout this manual reference is made to the additional time required to conduct various tasks in cold weather operations. This requirement cannot be overemphasized and must be included in all planning. In addition to the increased amount of time consumed in actual movement, allowance must be made for other time consuming tasks that are not present in temperate zone operations.

These include, among others, erecting and striking tents, performing maintenance, constructing roads, starting and warming engines, movement of supplies, and hundreds of other small tasks that must be performed while wearing bulky cold weather clothing.

e. Insofar as possible illustrations used in this manual reflect Standard A items of clothing and equipment. However, because of non-availability of some items at time of publication, some illustrations show Standard B or C items of clothing (para 2-7).

f. Measurements in this manual to the extent practicable, reflect both the Metric and U.S. systems; however, in some cases figures will show only the U.S. system. For ease in transposition, meters have been converted to yards on a one for one basis. For more exact measurements use the conversions shown in appendix H.

g. Users of this manual are encouraged to submit recommendations to improve its clarity or accuracy, Comments should be keyed to the specific page, paragraph, and line of the text in which the change is recommended. Reasons should be provided for each comment to insure understanding and complete evaluation. Comments should be forwarded direct to Commanding General, United States Army, Alaska, APO Seattle 98749. Originators of proposed changes which would constitute a significant modification of approved Army doctrine may send an information copy, through command channels, to the Commanding General, United States Army Combat Developments Command, Fort Belvoir, Virginia 22060, to facilitate review and followup.

1-2. Relation to Other Manuals

This manual is prepared with the assumption that normal individual and basic unit