ROYAL CANADIAN AIR FORCE



DESCRIPTION AND MAINTENANCE INSTRUCTIONS

SURVIVAL KIT, INLAND, WINTER AND ARCTIC

(This EO replaces EO 55-15F-2 dated 27 Jan 56 and all revisions issued thereto)

ISSUED ON AUTHORITY OF THE CHIEF OF THE AIR STAFF

31 JAN 64

LIST OF RCAF REVISIONS

DATE PAGENO DATE PAGENO

TABLE OF CONTENTS

PART	TITLE	PAGE
1	DESCRIPTION	1
	GENERAL	ĩ
	CONTENTS	1
	DESCRIPTION OF CONTENTS	i
2	PACKING PROCEDURES	5
3	INSPECTION	13
	PRIMARY INSPECTION	13
	PERIODIC INSPECTION	13
	SEALING	13
	REPAIRS	13
	STORAGE	13

LIST OF ILLUSTRATIONS

FIGURE	TITLE	PAGE
1-1	Contents (Exploded View)	. 2
2-1	Contents Layed out Before Being Rolled	5
2-2	Rolled Contents Placed in Plastic Tubing	6
2-3	Vacuum Being Applied	7
2-4	Survival Kit Packed and Sealed	,
2-5	Container Bag Showing Protective Pad	8 9
2-6	Container Bag (Opened)	
2-7	Protective Cover on Ice Chisel Blade	10 11
3-1	Container Bag Sealed	13

PART 1 DESCRIPTION

GENERAL

1 The survival kit, inland, winter and arctic provides the necessary equipment for survival of a crew of six, when forced to land. The number of kits to be carried in the aircraft will be in accordance with CAP 603, Scale D53.

CONTENTS

The contents of the survival kit, inland, winter and arctic are to be in accordance with CAP 650, C/L K70. The contents, as shown in Figure 1-1, are vacuum packed in a container bag.

NOTE

To assist in identification a patch approximately 20 x 12 inches in size of Ref. 32B/8305-21-804-9964 duck, red doubled is to be sewn on the container bag. The unit call letters and the type of survival kit are to be stencilled on the patch, similar to that shown in Figure 2-4.

DESCRIPTION OF CONTENTS

SNOW KNIFE AND SAW COMBINATION

3 The combined snow knife and saw is suited to the needs of a party surviving in bush country or in the barren lands. The use of the saw should be limited to small trees, and may be most useful in clearing a camp area. In barren land survival, the knife and/or saw is useful for cutting out snow blocks with which to build a shelter or windbreak. Proficiency will come after a few attempts have been made to cut and remove snow blocks.

CAUTION

Avoid using this item as a "pry", as the blade may snap off at the handle. Keep it inside your shelter to prevent loss. Make certain that the thumbscrew on the handle is tight. This will secure the blade.

STOVE, SINGLE-BURNER

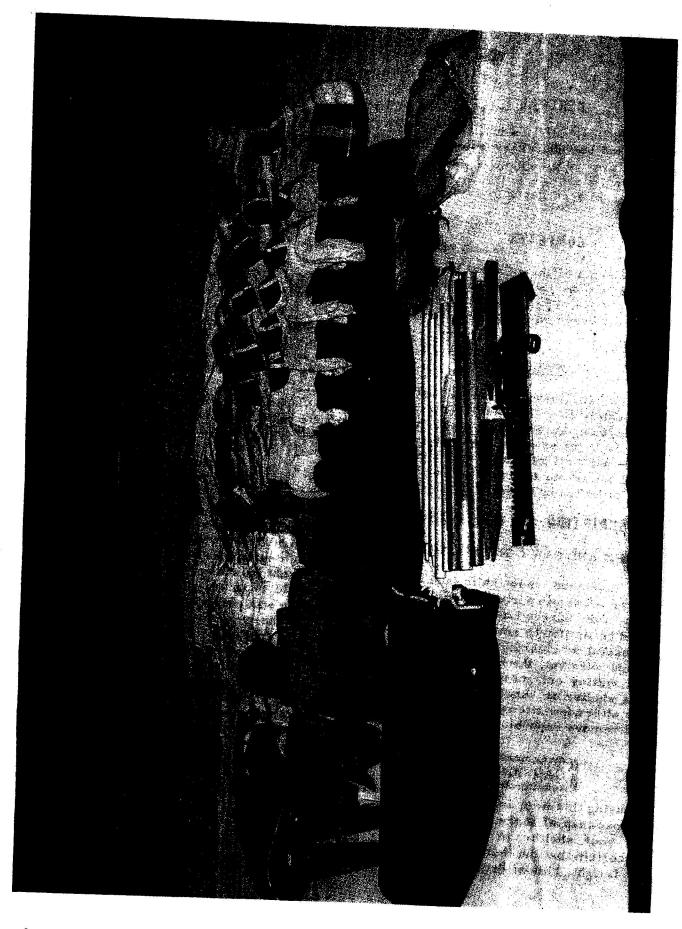
- 4 Printed instructions for the assembly of the primus stove will be found in the container. A point not covered is the proper use of the two-piece brass windscreen which protects the fluid burning in the brass spirit cup (B on instruction sheet).
- (a) Fit together the two parts of the windscreen.
- (b) Close, and with the side down, place over burner until it rests on primus stove.
- (c) Ignite the priming fuel in the spirit cup through the hole in the windscreen. When the priming fuel is almost burned out, pump the stove slowly and it should ignite.
- (d) One quart of fuel will give 75 tenminute burnings. The stove will burn practically all types of liquid fuel.

CAUTION

Stove should be placed on a firm base other than snow. When releasing the pressure to put the stove out, shield the escaping vapour from the open flame to prevent ignition of the gas. Never use a candle to prime or light the stove because wax may close the jets. Be sure that the generator is warm enough to ignite fuel before applying pump pressure. Under extreme cold conditions a second priming may be needed. Failure to ignite when pressure is applied will result in fuel spraying over your camp equipment and creating a fire hazard. When possible, best results will be obtained when stove is sheltered from the wind. In a confined shelter, burning stove will give off carbon-monoxide fumes. Ensure there is adequate ventilation.

(e) The primus stove and quart container are to be filled with Ref. 34A/9130-11-000-2007





2

turbine fuel or Ref. 34A/9140-21-802-4321 kerosene. These containers should not be filled to capacity, an air space of 1/4" should be left.

(f) The small brass container that comes with the stove is to be filled with alcohol methyl Ref. 34A/6810-21-802-2313 Spec. O-M-232B and is to be used as a primer.

NOTE

This container is to be labelled POISON Alcohol-Methyl (Primer).

- (g) Before filling the primus stove the gaskets and leather pump plunger are to be treated with neat's foot oil.
- (h) Check cap liners, if worn or missing, replace with a cork liner made from Ref. 32E/46 sheet cork 1/8" thick.

TENT PYRAMIDAL

- 5 The six-man survival tent should be erected as follows:
- (a) Clear the area of stones, etc.
- (b) Lay the tent out in a square pattern. Peg out four corners and secure supporting corner cords.
- (c) Fit aluminum pole sections together. Enter tent through circular doorway and place pole through top ring and in an upright position. Pole may be placed full centre or slightly off centre depending on the sleeping plan to be followed.
- (d) Secure the remaining guys and tighten all around. The colour of the tent (international orange) makes it easily seen during the day. If aircraft are known to be in the area on night search, leave the candle, which will be found in the basic kit, burning inside the tent during the hours of darkness. It is possible that it may be seen from the air.

HOOD, COLD WEATHER

6 This item may be worn as a cap or as a comforter. Care should be taken to prevent condensation of moisture around the mouth area which would result in extreme discomfort and possible freezing of the face.

MITTS, INNER

Woollen mitts are worn in combination with mitts, chopper, type "D", leather outer. They will give comfort and good service if kept dry at all times. Dry them out whenever possible.

SOCKS, WOOLLEN

Socks should be frequently changed, aired and dried. Care must be taken not to place wet socks too close to the source of heat, but damp socks may be dried in the sleeping bag at night. Most people prefer to wear the survival sock over a light type if possible.

INSOLES, HAIR, FELT

9 Felt insoles are worn immediately under the duffle footwear. There is likely to be an accumulation of moisture in the felt insoles, and they should be frequently dried.

KOMICKS

10 This type of footwear should be worn exclusively under cold conditions.

EYESHIELD

11 Used to reduce glare, from water and snow, which may cause discomfort or snow blindness. If blindness occurs, keep the eyes covered and avoid rubbing them. Stay well away from camp fire since smoke will cause additional discomfort. Take all precautions to prevent snow blindness. Fogged lenses are better than no protection.

MITTS, LEATHER, CHOPPER, TYPE "D"

12 Extreme caution should be taken to ensure that the leather outer mitts are slowly dried away from the source of heat.

NOTE

Leather mitts, while drying, should be periodically "worked" with the hands or across a bench to prevent shrinkage.

SOCKS, DUFFLE

13 Duffle footwear is worn over woollen socks. They require the same care as other woollen articles and should be occasionally

dried before a fire or in the sleeping bag during the night. Since these duffles are made from long woollen fibres, they should be frequently "brushed up", which will increase their insulating qualities and add to your comfort. Refer to CAP 361 for the care of all Section 22G items which are dealt with under "Care of Clothing".

BROOM, WHISK

14 This whisk is used to remove loose snow from garments and footwear before entering shelters. It may also be used to remove snow from crashed aircraft so that the reflective surface may be seen during a search.

NOTE

Keep it convenient to all and use frequently.

CAN, OIL, SCREW TOP

This quart container is intended to hold a ready supply of liquid fuel for the operation of the primus stove under survival conditions. A more positive seal of the quart fuel container cap opening is to be achieved by cutting a metal

disc of a suitable size from Ref. 30B-1595 tin steel sheet or equivalent and soldering the disc in place in the container cap opening. If difficulties are encountered in holding the metal disc in place to solder, fasten (spot weld) a piece of wire to the centre of the disc to aid in holding the disc in place. The wire can be removed after soldering operation has been completed and the cap replaced. The seal can then be punctured when the fuel is required and the standard cap can be used to close the container until the fuel is required again or used up.

CAUTION

All safety precautions pertaining to the indoor soldering of containers with fuel are to be observed.

ICE CHISEL

16 The ice chisel consists of 3 sectional parts, each approximately 2 ft long, of which one part has the 1 inch wide chisel blade mounted on. The chisel blade is to be protected with a length of 1-3/4 inch wide webbing folded around the cutting edge and taped in position, as shown in Figure 2-7.

PART 2

PACKING PROCEDURES

1 The survival kit is to be packed to CAP 650 C/L K70. Available space being limited in the container bag, care must be taken in packing the components and the folding of the tent. Proceed as outlined in steps 1 to 4.

NOTE

The tent pyramidal is to be accordian folded to a maximum width of 22 inches because when the tent is rolled it broadens out to 24 inches which is the maximum length of the container bag.

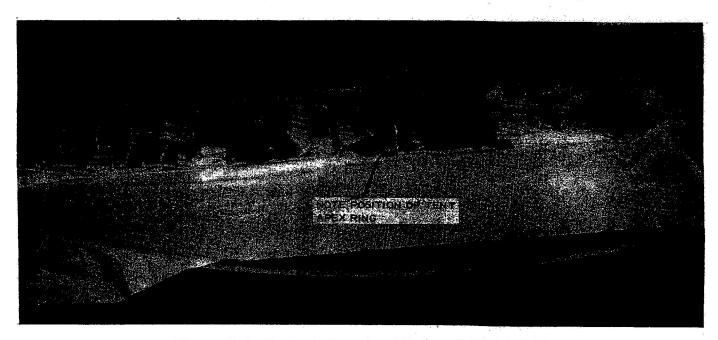
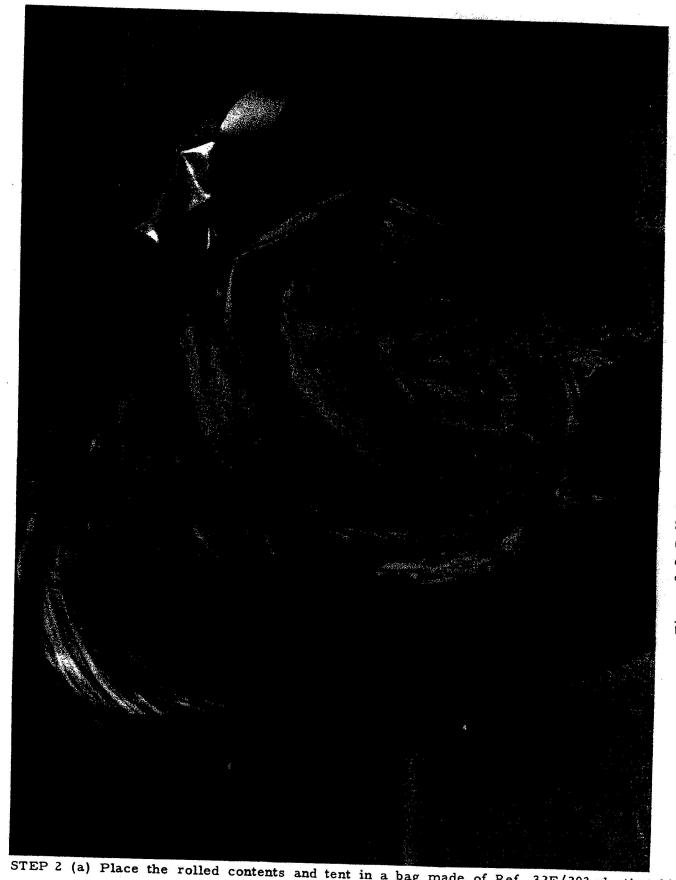


Figure 2-1 Contents Layed out Before Being Rolled

- STEP 1 (a) Tent pyramidal folded to maximum width of 22 inches. Note position of the apex ring.
 - (b) Lay the survival kit contents out on top of the tent.
 - (c) Install protective cover on the ice chisel blade as shown in Figure 2-7
 - (d) The eyeshields, hats and headnets are to be placed under the mitts.
 - (e) The snowknife-saw combination and handle are placed under the mukluks.
 - (f) The fuel cans and stove are separated by one pair of mitts woollen.



STEP 2 (a) Place the rolled contents and tent in a bag made of Ref. 32E/203 plastic tubing.

(b) Seal off both ends of the plastic bag using strips of Ref. 33G/8135-21-805-9884 adhesive tape 4 inches wide.



Figure 2-3 Vacuum Being Applied

- STEP 3 (a) Install vacuum hose (adapter locally manufactured) to one end of the plastic container bag.
 - (b) Apply vacuum and shape the container with a rubber mallet.

NOTE

Use care when shaping the container as puncture of the plastic is easily done.

- (c) Place a foam rubber or felt pad as shown in Figure 2-5 at the bottom of the fabric container bag.
- (d) Place the rolled contents in the container bag with the vacuum hose still connected.
- (e) Place another pad as outlined above on the top of the contents.
- (f) Close the container bag and simultaneously remove the vacuum hose.

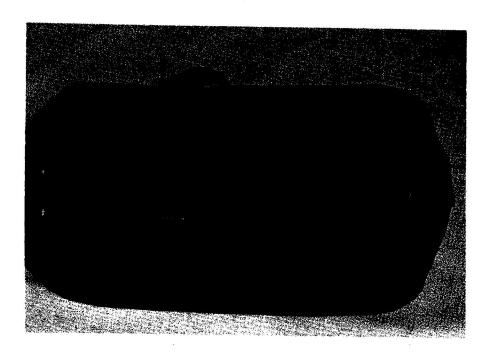
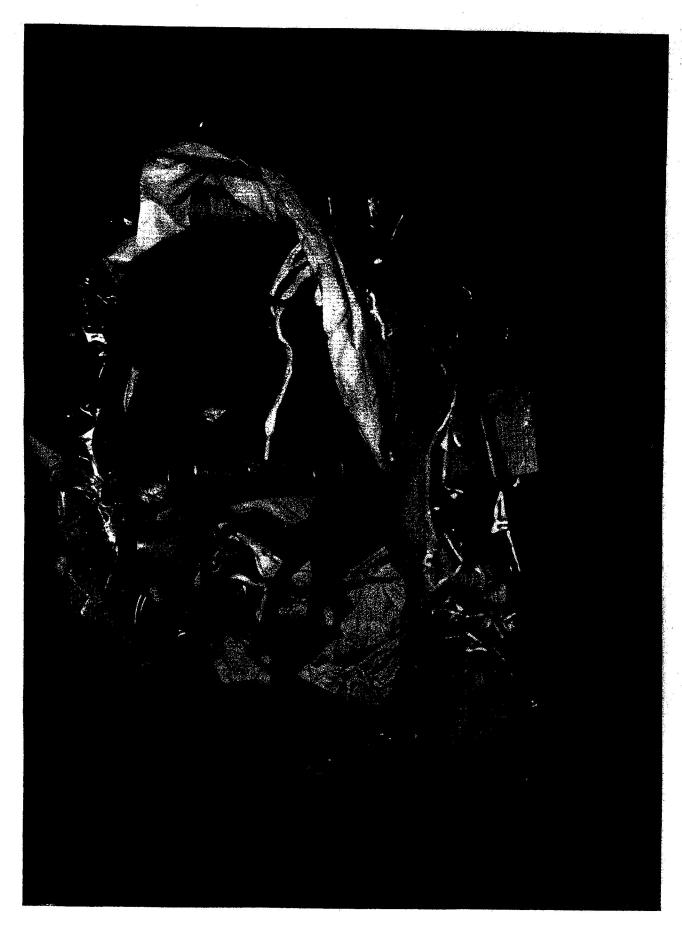


Figure 2-4 Survival Kit Packed and Sealed STEP 4 (a) Seal in accordance with EO 55-15-2, also see Figure 3-1.





PART 3

INSPECTION

PRIMARY INSPECTION

1 The exterior of the container will be visually inspected. Ensure that the seal is properly attached and that the proper die as described in EO 55-15-2 is used.

PERIODIC INSPECTION

- Periodic inspections are to be carried out at least every four months as follows:
- (a) An external, visual inspection as described for the primary inspection.
- (b) Once every four months, or more often where conditions warrant, each kit will be unpacked and the components visually inspected for serviceability and completeness. Such items as the tent, container bag, socks, mitts, etc., are to be checked for dampness. If dampness is noted, they are to be dried for 48 hours before being repacked. Any grease, oil, mildew or dirt is to be immediately washed off with soapy water and the affected part thoroughly dried. Moth repellant Ref. 33CM/6840-21-803-6781, insecticide, paradichlorobenzine is to be renewed at this time.

SEALING

3 To be carried out in accordance with EO 55-15-2. The container bag is to be sealed as shown in Figure 3-1.

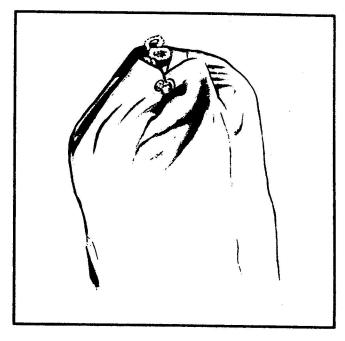


Figure 3-1 Container Bag Sealed

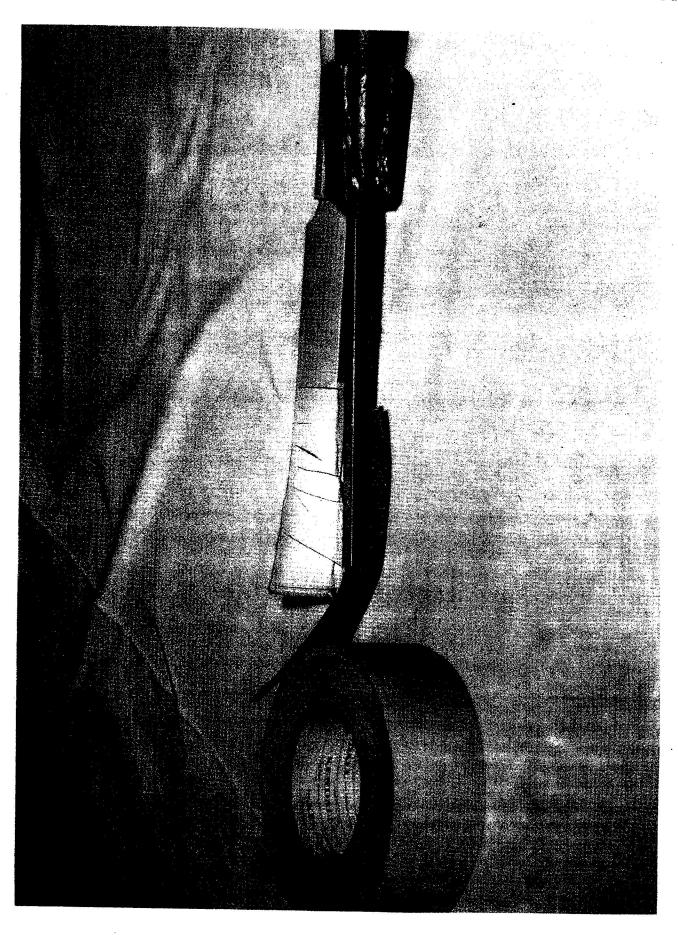
REPAIRS

4 Repairs to the kit are to be carried out by the unit.

STORAGE

5 Kits are to be stored clear of the floor in a dry atmosphere. Every precaution is to be taken to prevent kits from coming into contact with grease or oil. The contents are to be protected from moths by a liberal application of Ref. 33CM/6840-21-803-6781 insecticide paradichlorobenzine.





	4		
	×.		