Fig. 1.—Three views of paratroop with parachute and personal equipment

CHAPTER 3

PERSONAL PARATROOP EQUIPMENT

General

1. The personal equipment of paratroops may be divided into four categories as follows:—

(i) Clothing
(ii) Parachute
(iii) Arms and ammunition
(iv) Provisions and toilet requisites

2. The information given in this chapter should be treated as representative only. Items of clothing and provisions may be varied according to the length and nature of an operation, and the arms and ammunition carried may be varied at the discretion of Brigade Commanders.

Clothing

3. A water-proof tunic is worn over the standard battle-dress. The purpose of the tunic is to prevent any entanglement of such items as ammunition pouches and respirator during the descent. The tunic may be either retained or discarded on landing.

4. In some instances it has been found convenient to rip out the lining sleeves of the tunic and stitch these inside the tunic to serve as pockets for hand grenades. There is at present no official ruling on this subject.

5. A close-fitting helmet, with camouflage net and chin strap, is worn by paratroops during descent and subsequent action. The helmet need not be worn during the flight to target.

6. Leather boots and anklets are worn by paratroops.

7. A spare pullover and a pair of socks is packed in the haversack with the paratroops provisions.

Parachute

8. For paratroop operations the standard parachute is the 'X' type. Stores Ref. 15A/386 (standard canopy) and 15A/387 (Jacob canopy), which is fully described in A.P. 1180A, Vol. I, Part 3. This is a static line parachute and carries a 'D' ring for attachment to one of the straps and strong points in the paratroop aircraft.

9. On landing, the parachute harness is disconnected by twisting and sharply pressing the release disc which is located on the wearer's chest.

Arms and ammunition

10. Each paratroop wears over his battle-dress a belt to which is attached an assault respirator. If this respirator is worn at the back, two ammunition pouches may be carried towards the front of the belt. If, however, the respirator is worn at the right-hand side of the belt towards the front, the ammunition pouches must be attached to shoulder braces. The arms and ammunition carried vary with the category of the paratroops.

Rifleman

11. The following armament and defensive equipment is carried by a rifleman:—

(i) One light assault respirator, attached to belt.
(ii) Two pouches, each with two Bren gun magazines, attached either to belt or shoulder braces.
(iii) One needle bayonet and scabbard held in 'frog' on belt.
(iv) One bandolier with fifty rounds of rifle ammunition.
(v) Two hand grenades carried either in knee pockets of battle-dress or in tunic pockets, *see* para. 4.
(vi) One fighting knife, either in scabbard on hip or in pocket provided in battle-dress.
(vii) One toggle rope, for climbing, slung round shoulders.
(viii) One haversack. For contents *see* paras. 14 to 18.

Bren gunner

12. The following armament and defensive equipment is carried by a Bren gunner:—

(i) One light assault respirator, attached to belt.
(ii) One revolver carried at left-hand side.
(iii) One pouch with revolver ammunition carried at right-hand side.
(iv) Two pouches, each with two Bren gun magazines, attached to shoulder braces.
(v) Two hand grenades.
(vi) One fighting knife.
(vii) One toggle rope.
(viii) One haversack. For contents *see* paras. 14 to 18.

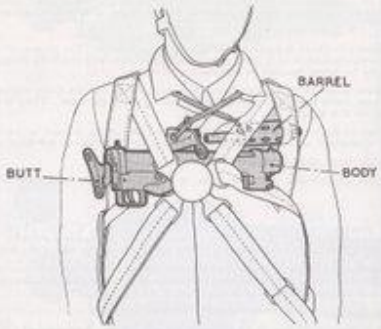


Fig. 2.—Stowage of Sten gun in parachute harness

Sten gunner

13. The following armament and defensive equipment is carried by a Sten gunner:—

(i) One light assault respirator, attached to belt.
(ii) One Sten gun. The barrel, body and butt are stowed separately in the parachute harness, *see* fig. 2.
(iii) One Sten bandolier containing seven magazines of twenty-eight rounds each.
(iv) One magazine either in pocket or tucked in parachute harness.
(v) Two hand grenades.
(vi) One fighting knife.
(vii) One toggle rope.
(viii) One haversack. For contents *see* paras. 14 to 18.

FIG.3. CONTENTS OF PARATROOP HAVERSACK

Provisions and toilet requisites

14. A paratroop haversack is packed, for a typical operation, with the following items:—

One ration S.T.6 (4 lb. 4 oz.), *see* para. 16.
One knife.
One fork.
One spoon.
One solidified spirit burner.
One mess tin (two parts).
One water bottle.
One ground sheet or gas cape.
One pullover.
One pair of socks.
One towel.
Soap, shaving soap, shaving brush, razor, toothbrush and comb.

15. The system of packing these items in the haversack is illustrated in fig. 3.

Ration S.T.6

16. This ration is intended to cover a period up to forty-eight hours and comprises the following items:—

One 12 oz. tin of corned beef, with key.
One 2 oz. tin of dripping spread.
Two tins of processed cheese.
One tin of tea and dried milk.
One box of matches.
One tin containing service biscuits, sweet biscuits, chocolate, acid drops, and barley sugar.

17. The ration S.T.6 is issued to paratroops at their operational base where the separate articles should be packed tightly in the smaller mess tin, using broken biscuits to prevent any possibility of rattle which might reveal to the enemy the whereabouts of a paratroop. The method of packing is illustrated in fig. 3. The larger mess tin is used as a lid when packing is complete.

Solidified spirit burner

18. The burner is supplied in the form of a flat tin filled with 4½ oz. of solidified spirit. To use the burner the lid is removed and the two tin vanes are sprung out from the lower lip of the tin. The vanes are pushed one into the other in the form of a cross and are then inserted in the tin to form a stand for the mess tin. A protection from draughts is essential. The flame is extinguished, after removing the vanes by a wire passed through the holes provided, simply by replacing the lid.

CHAPTER 4

PARATROOP SUPPLIES EQUIPMENT

General

1. Paratroop supplies are packed in containers or sling in harnesses and are usually dropped by means of parachutes from the bomb stations of paratroop-carrying aircraft. The selection of bomb stations in each type of aircraft is dealt with in Sect. 2, Chap. 5 of this manual.

C.L.E. Mark I container (*see* figs. 1 and 3)

2. The C.L.E. Mark I container is fully described in A.P.1180A, Vol. I, Part 2, Sect. 1, Chap. 1. The container comprises a metal framework, faced with plywood, and is made in halves which are hinged along their length to make an approximate cylinder when closed. It can be carried by and released from a 500 lb. or a Universal bomb carrier. One end of the container (the forward end when loaded on an aircraft) is domed to form a percussion head and to house an identification lighting set when required. The other end of the container provides stowage for the Mark I parachute and pack described in A.P.1180A, Vol. I, Part 2, Sect. 2, Chap. 1. The weights of the C.L.E. Mark I container and parachute are 103½ lb. nett and 380 lb. gross (max.).

Stores Ref. numbers

3. The Stores Ref. number of the C.L.E. Mark I container is 15C/89: that for the C.L.E. Mark I parachute is 15C/90–95, the serial numbers referring to different coloured canopies.

Packings for C.L.E. Mark I containers (*see* fig. 2)

4. Containers used for paratroop supplies equipment are packed by the paratroop section concerned who work from instructions issued by Airborne Division relative to a given operation. A series of Air Diagrams, Nos. A.D.2349 *et seq.*, has been issued to illustrate certain standard packing arrangements. One of these diagrams is reproduced in miniature in fig. 2. It should be noted that the aircraft numbers appearing in these diagrams are representative only and may vary with each operation.

C.L.E. Mark I.T. container (*see* fig. 1)

5. The C.L.E. Mark I.T. container is fully described in A.P.1180A, Vol. I, Part 2, Sect. 1, Chap. 1. It is a replica of the Mark I container except in regard to the outer covering which is of metal instead of plywood. The carrying capacity of this container and the type of parachute used are the same as for the Mark I container described in paras. 2 and 4. The weights of the C.L.E. Mark I.T. container and parachute are 135½ lb. nett and 380 lb. gross (max.).

Stores Ref. number

6. The Stores Ref. number of the C.L.E. Mark I.T. container is 15C/119.

C.L.E. Mark III container (*see* fig. 1)

7. The C.L.E. Mark III container is fully described in A.P.1180A, Vol. I, Part 2, Sect. 1, Chap. 2. It is generally similar to the Mark I and Mark I.T. containers and may be faced either with a plywood skin or metal covering. Its length is 8 in. less than that of the Mark I, and, when closed, its cross section is exactly circular. A percussion head with provision for an identification lighting set is fitted at one end of the container. The other end provides stowage for the Mark I parachute and pack. The weights of the C.L.E. Mark III container and parachute are 113½ lb. nett and 380 lb. gross (max.). [illegible] weights of 103½ lb. and 135½ lb. respectively.

8. The Mark III container is intended to supersede the Mark I and Mark I.T. types for all packings except those requiring the additional length of the earlier types.

Stores Ref. number

9. The Stores Ref. number of the C.L.E. Mark III container is 15C/165. In addition to the C.L.E. Mark I parachute, Stores Ref. 15C/90–95, the Type C parachute, Stores Ref. 15C/63, may also be used with the Mark III container.

Identification lighting (*see* fig. 3, sketch III)

10. The identification lighting equipment for Mark I, I.T. and III containers is mounted on a wooden baffle between the container body and the percussion head, and is for use when the containers are dropped at night. The lighting equipment comprises a dry battery, 3 volt, Ever Ready No. 800, and four lamps with a switch that automatically completes the circuit when the percussion

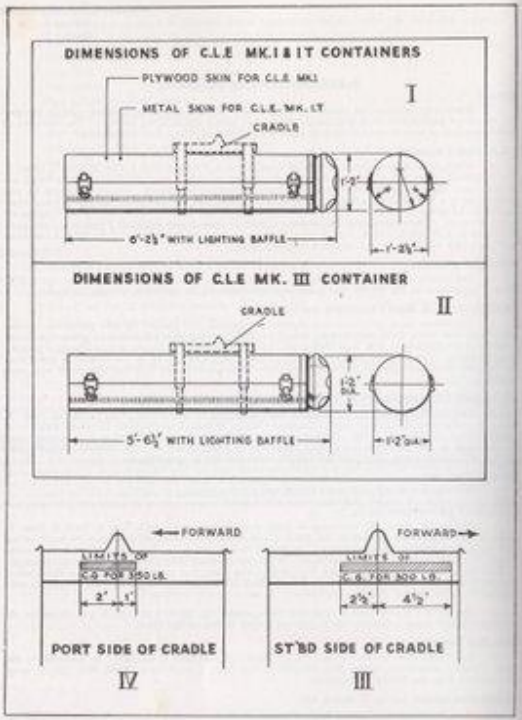


FIG. 1 C.L.E. MK.I., I T. & III. CONTAINERS

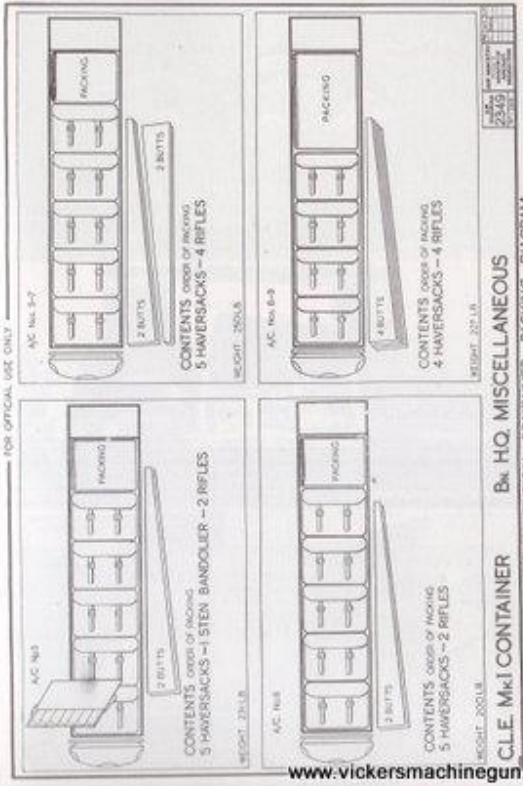


FIG. 2 TYPICAL CONTAINER PACKING DIAGRAM

TYPE 'E' CONTAINER ON BOMB CARRIER


TYPE 'F' CONTAINER PACKED

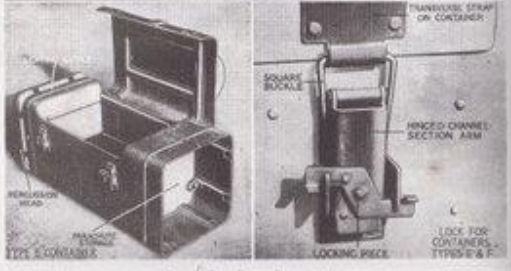
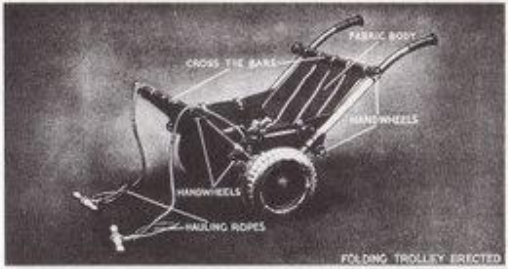
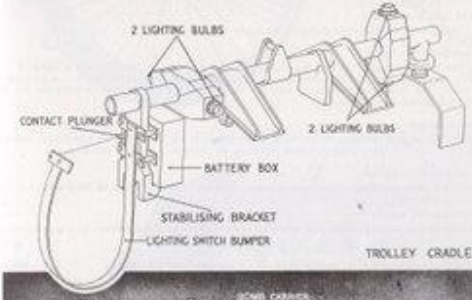


FIG. 4—TYPE E AND F CONTAINERS



FOLDING TROLLEY ERECTED



TROLLEY CRADLE

TROLLEY LOADED ON BOMB CARRIER

FIG. 5—TYPE D APPARATUS AND FOLDING TROLLEY

cradle (*see* A.P.1180A, Vol. I, Part 2, Sect. 1, Chap. 1) which incorporates the suspension hook bracket for attachment to the bomb carrier. Four men are normally required to handle a packed container.

Delayed opening device for parachute

23. A device is in course of development for establishing a short delay in the opening of the parachute after the container has been released from the bomb carrier. A description of this device will be issued as soon as it is approved for Service use.

Type E container (*see* fig. 4)

24. The type E container is fully described in A.P.1180A, Vol. I, Part 2, Sect. 1, Chap. 4. The container body is of metal, rectangular-shaped with longitudinal rounded edges. The top face is provided with a hinged lid carrying a suspension hook bracket for direct attachment to the bomb carrier. One end of the container (the aft end when loaded on an aircraft) carries a domed percussion head which is designed to house an identification lighting set when this is required. The other end of the container provides stowage for the C.L.E. Mark I parachute and pack described in A.P.1180A, Vol. I, Part 2, Sect. 2, Chap. 1.

Stores Ref. numbers

25. The Stores Ref. number of the Type E container is 15C/30; that for the C.L.E. Mark I parachute is 15C/90–95, the serial numbers referring to different coloured canopies.

Contents of type E container

26. The type E container is designed to house the No. 18 W/T.

Type F container (*see* fig. 4)

27. The type F container is fully described in A.P.1180A, Vol. I, Part 2, Sect. 1, Chap. 5. It is generally similar to the Type E container, but is several inches greater in length. A percussion head is fitted, and identification lighting may be used if required. Stowage is provided for the C.L.E. Mark I parachute and pack.

Stores Ref. numbers

28. The Stores Ref. number of the type F container is 15C/75; that for the C.L.E. Mark I parachute is 15C/90–95, the serial numbers referring to different coloured canopies.

Contents of type F container

29. The type F container is designed to house the Nos. 11, 19, 21 and 22 W/T sets.

Weights of types E and F containers

30. The empty and gross weights of these containers are as follows:—

(i)	Type E container empty (including parachute)	80 lb.
(ii)	Type E container with No. 18 W/T	190 lb.
(iii)	Type F container empty (including parachute)	lb.
(iv)	Type F container with No. 11 W/T	lb.
(v)	Type F container with No. 19 W/T	lb.
(vi)	Type F container with No. 21 W/T	lb.
(vii)	Type F container with No. 22 W/T	lb.

General notes

31. The types E and F containers are generally received from military sources with the supplies packed. The procedure for loading these containers on the bomb racks of paratroop-carrying aircraft is similar to that outlined in paras. 10 to 22 with the exception that no provision is made for adjusting the longitudinal position of the C.G. Three or four men are normally required to handle a packed W/T container. It should be noted that these containers are mounted on the Universal bomb carriers with their percussion heads aft in order to suit the non-adjustable crutches of these carriers.

FIG. 6—FOLDING BICYCLE ERECTED FOR USE AND FOLDED FOR STOWAGE

Type D supplies dropping apparatus (see fig. 5)

32. The type D apparatus is fully described in A.P.1180A, Vol. I, Part 2, Sect. 1, Chap. 6. It is designed to carry the folding trolley and comprises a special cradle with identification lighting, the switch for this being automatically operated on impact. A type D parachute pack, as described in A.P.1180A, Vol. 1, Part 2, Sect. 2, Chap. 3, is strapped on to the cradle. It is opened, when the apparatus is released from the bomb rack, by means of a static line attached to a strong point on the aircraft.

Stores Ref. numbers

33. The Stores Ref. number of the type D apparatus is 15C/35; that for the type D parachute is 15C/48-51, the serial numbers referring to different coloured canopies.

Folding trolley

34. The folding trolley (see fig. 5) comprises two side frames, each with one wheel, and a fabric body incorporating four tie-bars with handwheels for quick attachment to lugs on the side frames.

Weight of type D apparatus and folding trolley

35. The weights are as follows:—

(i) Type D apparatus without trolley ... ... 25 lb.

(ii) Type D apparatus with folding trolley ... ... 73 lb.

Type Q apparatus—folding bicycle (see fig. 6)

36. The folding bicycle is fully described in A.P.1180A, Vol. 1, Part 2, Sect. 1, Chap. 8. The frame of the bicycle is elliptical and is hinged at two points. The slackening of two wing-nuts enables the frame to be folded so that the two wheels lie side by side. The wheels are lashed to the frame to prevent their turning and a type Q parachute with 12 ft. canopy, as described in A.P.1180A, Vol. 1, Part 2, Sect. 2, Chap. 4, is attached to their circumference. Any partial bending of the handlebars on landing can usually be corrected by hand.

Stores Ref. number

37. The Stores Ref. number of the parachute is 15C/84

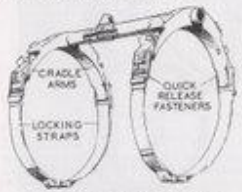
Weight of folding bicycle

38. The weight of the folding bicycle and parachute is 32½ lb.

General note

39. It is necessary to throw the bicycle vertically downwards through the door of the aircraft to prevent the parachute fouling the tail. Tests were made by A.F.E.E. from a C.47, with satisfactory results.

Albemarle, modified container cradles



ALBEMARLE MODIFIED CRADLE
FIG. 1

40. The overall width of the normal cradle is too great to enable three containers to be carried side by side on the Albemarle aircraft. The width is decreased sufficiently if the cradle arms are shortened and the metal locking straps lengthened to bring the quick release fasteners above the horizontal centre-line.

This leaf issued with A.L. No. 17
May, 1946

CHAPTER 1

EQUIPMENT ATTACHED TO PARACHUTISTS

LIST OF CONTENTS

LIST OF ILLUSTRATIONS

LIST OF APPENDICES

AIRBORNE KITBAG

General

1. This special kitbag, developed for the purpose of dropping equipment with parachute troops, is of conventional shape but opens down one side as well as across the top, and is fitted with a resilient base to withstand landing shocks. The kitbag may be used in a variety of ways as described in this chapter, and may be loaded with any equipment as long as the maximum permissible weight is not exceeded and the kitbag remains approximately cylindrical. Special loads which can be carried in the kitbag are dealt with in the Appendix to this chapter.

Description (fig. 1, 2 and 3)

2. The kitbag is approximately cylindrical, measuring about 30 in. in length and 14½ in. in diameter. In addition to being open at one end, it is open down one side, the whole aperture being fitted with eyeletted holes and laced with cord. The base of the kitbag is padded to a depth of four inches and embodies a slot which accommodates the parachutist's foot when the kitbag is carried strapped to the leg.

3. A pair of leather straps about 11 in. apart are sewn to the kitbag. The buckle of each strap is fixed to a small leather tab which in turn is fitted to a leather flap by a pin-and-cone release, permitting both length adjustment and quick-release action. The leather flap carries the cones of the releases and is sewn to the valise along one side only.

4. The pins of the pin-and-cone releases are connected by a length of cord, one end of which is extended and tied to a suspension D-ring at the top of the kitbag. A cone-release cover is provided in the form of a canvas flap, similar in shape and size to the leather flap referred to in para. 3. This is sewn to the kitbag along one side. The cone-release cover, when closed, is fastened to the leather flap by three press-studs. Two slits in the cone-release

Fig. 1.—Side view of kitbag

6. A sleeve-type quick release, Part Number 478606, may be issued as part of the complete kitbag. This quick release, when closed, is a cylinder of about $\frac{5}{8}$ in. diameter and $2\frac{1}{2}$ in. long, at each end of which a D-ring is attached by a swivel joint. One D-ring is attached to a webbing loop which secures the quick release to the parachute harness, the harness leg strap passing through the webbing sleeve. To the the other D-ring is tied the suspension line of the kitbag. Should the parachutist wish to jettison the kitbag he takes the sleeve on the cylinder of the release in his right hand and pulls it upwards. This automatically releases the lower D-ring with its attached load.

Methods of use

Kitbag carried on the chest (fig. 3 and 4)

7. Only kitbags loaded with items susceptible to damage are carried on the chest for descent

cover are so positioned that each buckle, with about an inch of its leather tab, can be passed through the cover. On the outside of the cone-release cover is sewn another piece of canvas to form a deep pocket which serves as the suspension line stowage (*fig. 2*).

5. The kitbag is strengthened at the top by canvas strips which secure a D-ring to either side of the top opening, as shown in fig. 2. When the kitbag is packed, these D-rings are drawn together and secured with the loose end of the suspension line, which consists of a 20 ft. length of cord with a spliced loop at one end. The anti-sear sleeve, which consists of a canvas sleeve about 6 in. long through which the suspension line passes, is on the suspension line, close to the point of attachment of the line to the D-rings (*fig. 3*).

Fig. 2.—General view of kitbag

and landing, as this method increases slightly the risk of injury to the parachutist. Ensure that the kitbag has been prepared as shown in fig. 3, the following main points being noted:—

(i) The pin-and-cone releases for the leather leg straps are in the "fast" position and that the release cord emerges from the end of the release-cone cover towards the base of the kitbag, the loose end being tied to a convenient point on the kitbag.

(ii) The suspension line is coiled round the kitbag as shown in fig. 3 and the loose end temporarily attached to the lower leg strap.

(iii) The leg straps pass through the canvas bridges; this shortens their effective length.

8. The method of attaching the kitbag is as follows. Lay the kitbag across the chest with the padded end on the parachutist's right-hand side. Unbuckle the leg straps, pass them round behind the two upper chest straps of the parachute harness and re-buckle tightly. Unfasten the looped end of the suspension line which is attached to the lower leg strap, pull it tight, and attach it to the parachute-harness lower right leg strap. (Tying the suspension line in this way removes any possibility of the kitbag striking the parachutist in the face, should he somersault.)

9. When jumping with the kitbag on his chest the parachutist can either land with it still in this position, or release it to the full extent of the suspension line as soon as the parachute canopy has developed; this is done by pulling the pin release cord with the right hand and paying out the suspension line through the anti-sear sleeve, controlled by the left hand.

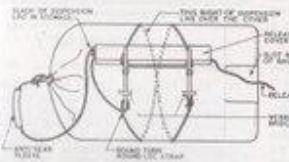


Fig. 3.—Kitbag loaded to 60 lb. ready for fitting on chest

Fig. 4.—Kitbag attached to chest

Whether the kitbag is lowered on the suspension line or not, is determined by the store packed in it or by emergency.

Kitbag carried on the right leg (fig. 5)

10. Used in this way, the kitbag does not require to have the suspension line coiled round it. Before attaching the kitbag to the leg ensure that the pin-and-cone releases are in the "fast" position with the pin release cord emerging from the top end of the cone-release cover. Place the kitbag against the right leg so that the right foot fits into the slot provided in the base. Pass the straps through the canvas

Fig. 5.—Kitbag attached to right leg

bridges and fasten them sufficiently tight to ensure that the kitbag does not slip downwards when the parachute canopy develops. Loop the end of the suspension line round the lower right leg strap of the parachute harness and slide the anti-sear sleeve close to the attachment of the suspension line to the D-rings. Fold the surplus line, tie with No. 8 thread, and place in the stowage on the cone-release cover. When jumping with a kitbag in this position, the right leg should be swung out of the aircraft parachute exit first and, to prevent somersaulting, the left leg brought up to it as soon as possible. As soon as the canopy has developed the parachutist should pull the pin-release cord with his right hand and allow the kitbag to descend to the full extent of the suspension line, controlling its rate of descent by the anti-sear sleeve held in the left hand.

Kitbag carried attached to both legs (for "sitting exit" only)

11. When making a "sitting exit" from an aircraft the kitbag may be attached to both legs. This method of attachment has little advantage over attachment to one leg except that the weight of the kitbag is borne by both legs instead of one when the canopy develops. When the kitbag is carried in this way, the leg straps do not pass through the bridges. The kitbag is placed on the right foot and the straps are passed round both legs and tightened. The loose end of the suspension line is attached to the lower right leg strap of the parachute harness in the same way as for single-leg attachment. Normal "sitting exit" jumping procedure is followed.

RIFLE VALISE

General

12. The rifle valise was originally intended for packing the No. 4 Lee-Enfield Service rifle prior to its stowage in containers or crates, and consisted of a simple felt sleeve. With the alterations described in para. 13 it is used when dropping rifles attached to parachutists. Appendix I to this chapter describes the various uses of the valise in both forms.

Description

13. The valise consists of a flat, felt sleeve about 44 in. long, 8 in. broad, and open at one end. An adjustable webbing belt, fitted with a pin-and-cone quick release, is sewn about 8 in. from the closed end. A webbing strap is sewn across the open end, and a fabric pocket is sewn to the edge of the valise for the stowage of the suspension line. This is a 20 ft. length of cord, looped at each end, which is used for securing the valise to the parachutist. A slit is provided in the sewn edge of the valise about 14 in. from the open end to enable one end of the suspension line to be secured to the contents of the valise.

BREN GUN VALISE MK. I

General

14. The Bren gun valise was originally intended for packing Bren guns prior to their stowage in containers or crates, and consists of a simple felt sleeve. It has become available as a protective cover for many articles of equipment carried by parachutists. Appendix I to this chapter describes specific uses of the valise.

Description

15. The valise is a flat, felt sleeve about 46 in. long with an average width of 9 in. It is closed and padded at one end, the other end being open and fitted with a padded flap. Rectangular, white, recognition patches are sometimes to be found sewn on the sides near the closed end of the sleeves.

Method of use

16. The valise is attached to a suspension line, and secured by quick-release straps.

BREN GUN VALISE, MK. II

General

17. When Bren guns are to be dropped with parachute troops they are packed in Bren gun valises strapped to the parachutists. The valise is always lowered on a suspension line during descent; this enables the parachutist to land unencumbered by the valise and ensures that the equipment is immediately available for use. In addition, when the ground cannot be seen, the slackening of the suspension line caused by the valise landing about a second before the parachutist lands, serves as a warning.

Description (fig. 6 and 7)

18. The valise consists of a flat felt sleeve about 46 in. long with an average width of 9 in. It is closed and padded at one end, the other being open across the bottom and for 8 in. or 9 in. up one side. The open end is closed by bringing the end flap round the bottom and securing it by means of a quick-release buckle. The upper loose corner of felt is tucked round and under the butt of the gun and the lower loose corner is brought round and over the end flap to which it is fastened by a quick-release buckle.

19. A canvas pocket is sewn to the front of the valise about 14 in. from the upper, or closed, end. This pocket is stitched along one side only, the open end being towards the top of the valise and is the stowage for the suspension line which is a twenty foot length of circular woven cord with a loop at each end. One loop of the suspension line is secured to the loop on the end of the length of webbing which runs almost the whole length of the valise, terminating in the end flap quick-release buckle. The webbing loop is situated about 6 in. from the top of the valise and just above the webbing band which encircles the valise.

20. An anti-sear device which consists of a padded sleeve of webbing is provided on the suspension line to enable the parachutist to control the descent of the load without damage to his hands. A band is sewn to the sleeve to prevent it from slipping from his hand.

21. About 8 in. from the top of the valise an adjustable webbing belt is sewn to the back. This belt is fitted with a pin-and-cone quick-release and is located so that the cone comes to one side of the back of the valise as shown in fig. 7.

Fig. 6.—Bren gun valise Mk. II in jumping position

22. An adjustable webbing strap fitted with a pin-and-cone quick-release is sewn approximately four inches from the bottom of the valise. This strap is located on the back of the valise so that the cone comes to the side in the same way as the waist belt shown in fig. 7.

23. The pins of the pin-and-cone releases on the waist belt and ankle strap are joined by a length of ¼ in. webbing lanyard which has a steel ring inserted about four inches from the upper end. When the pins are in position the lanyard is held in a straight line along the valise by two fabric loops.

Method of use

24. A full description of how to pack and carry the valise will be found in Appendix I to this chapter.

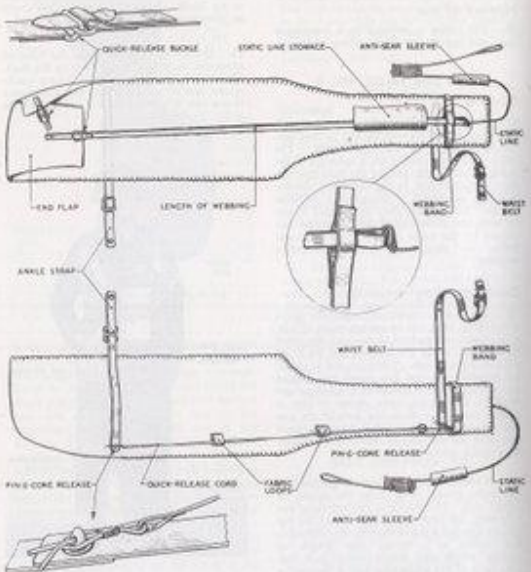


Fig. 7.—Bren gun valise Mk. II

QUICK-RELEASE STRAPS

General

25. Equipment which is not to be carried by means of a special kitbag can be attached to a parachutist's harness by quick-release straps. The equipment is held securely in place by the straps until the parachute canopy has developed; the parachutist then pulls the dual release pin and lowers the equipment to the end of a 20 ft. suspension line. An anti-sear sleeve is provided to control the rate of descent of the load and to prevent the line from burning the man's hands.

Description (fig. 8)

26. (i) The device is shown in fig. 8, and consists of the pin-and-cone release straps from the following obsolete stores:—

(a) Sten leg ammunition case (Army Stores Ref. AA. 5355)

(b) 2 in. mortar leg case (Army Stores Ref. AA.5380)

(c) 2 in. mortar bomb leg case (Army Stores Ref. AA.5381) each modified by increasing the length of the straps by 6 in.

(ii) Both straps are adjustable and are spaced about 6 in. apart by a length of webbing in which are the eyeletted holes for the quick-releases and the two short lengths of webbing with buckles. A dual-release pin holds both cones secure.

Method of use

27. The device is normally used for equipment carried on the chest. Methods of using it are described in Appendix I to this chapter.

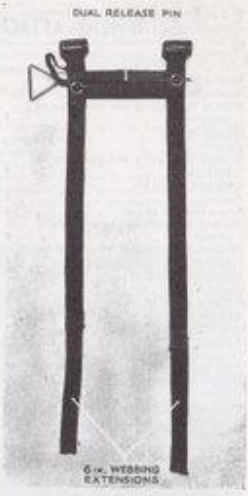


Fig. 8.—Pin-and-cone release

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May, 1946

AIR PUBLICATION 2452A
VOL. I PART 4 SECT. 3 CHAP. 1

APPENDIX 1

EQUIPMENT ATTACHED TO PARACHUTISTS

LIST OF CONTENTS

LIST OF ILLUSTRATIONS

BREN GUN

General

1. When Bren guns are dropped attached to parachutists they must be packed in valises, Bren Gun Mk. II, a full description of which will be found in Chapter 1, para. 17 to 24. In all cases the load, which is attached to the parachutist by a suspension line, must be released to the full extent of the line during descent. Normal jumping procedure may be followed.

Method of packing and attaching to parachutist

2. Place the gun in the valise, muzzle foremost, and close the open end by securing the end flap with the quick-release buckle. Tuck the upper loose corner of felt round and under the butt and bring the lower loose corner round and over the end flap; fasten with the quick-release buckle. Rest the loaded valise on the parachutist's right foot with the suspension line stowage towards him, secure the ankle strap and waist belt with the pin-and-cone quick releases. Pass the parachute-harness lower right leg strap through the free loop on the suspension line, fold the slack line, secure with No. 8 thread (Stores Ref. 15A/108) and place in the stowage.

Note . . . The anti-scar sleeve must be located on the suspension line between its attachment to the valise and the stowage. Sufficient slack must be left to permit the parachutist to grip it comfortably at his side (*see fig. 6* in Chapter 1 of this Section).

SERVICE RIFLE

General

3. Parachutists may jump with service rifles so long as they are packed and carried as described below. In all instances the load must be released to the full extent of the suspension line during descent. Normal jumping procedure may be followed.

Method of packing and attaching to parachutist

4. Loop one end of the suspension line round the rifle below the upper sling-swivel; ensure that it passes between the sling and the barrel, and put the rifle into the valise, butt-end first. Thread the free end of the suspension line through the slit provided in the valise, fold and stow the remainder of the line in the pocket leaving 18 in. free for subsequent attachment to the parachute harness. Fasten the strap across the open end of the valise, ensuring at the same time that the muzzle protrudes from the side remote from the suspension-line stowage. Affix a webbing bayonet frog to the upper strap of the parachutist's right ankler. Place the muzzle in the bayonet frog and secure the belt round the parachutist's waist. Pass the parachute-harness right leg strap through the loop on the free end of the suspension line and re-assemble the parachute harness.

AIRBORNE BICYLE

General

5. Parachuting with the airborne bicycle from either Dakota or Stirling aircraft is simple and requires little equipment. The bicycle is suspended from the parachutist's body by a quick-release strap when jumping and is always released and lowered to the full extent of a 20 ft. suspension line during descent.

Preparation of bicycle

6. Fold the bicycle and push the pedals through into the stowed position. Lower the handlebars and raise the saddle so that the latter will receive most of the landing shock.

7. Strap both wheels together, securing them to the rear chain stays to prevent them from rotating (An Army-issue valise strap is most suitable for this). Tie one end of the 20 ft. suspension line to both the wheels in such a position that when the cycle is suspended by the line the saddle is lowermost. This is important to prevent damage to the handlebars on landing.

Method of attaching bicycle to parachutist (*fig. 1*)

8. Commencing from the free end, plait the suspension line to ensure that it will pay out quickly and easily without forming loose coils likely to foul the cycle. Take the free end and tie it to the lower left leg strap of the parachute harness. Finally, suspend the bicycle from a quick-release strap passing round the back of the parachutist's neck.

Fig. 1.—Airborne bicycle in jumping position

Method of jumping with airborne bicycle (*fig. 2 and 3*)

9. When making an exit from Dakota aircraft, hold the bicycle slightly forward and to the right-hand side, as shown in fig. 2. Take care to avoid fouling the forward edge of the door and catching the brake cable of the bicycle on

Fig. 2.—Jumping position from Dakota

Fig. 3.—Jumping position from Stirling

Note:—Parachutist to be slightly to the starboard side of the aircraft centre-line.

the door jettison handle. Step well out to avoid being brushed along the side of the aircraft. As soon as the canopy has developed, release the bicycle by pulling the loose end of the quick-release strap.

10. When jumping from Stirling aircraft, hold the bicycle slightly forward and to the right-hand side, as shown in fig. 3. It is important to stand slightly to the starboard side of the aircraft centre-line to prevent the cycle from fouling the exit. As soon as the canopy has developed, release the bicycle by pulling the loose end of the quick-release strap. No anti-sear sleeve is required.

AIRBORNE STRETCHER

General

11. The airborne stretcher is strapped diagonally across the chest of the parachutist who jumps with it in this position. It must always be released so the full extent of the suspension line during descent.

Preparation of stretcher (fig. 4)

12. The stretcher is folded, and the handles are strapped to the frame by a pair of Army-issue valise straps. The suspension line, which consists of a 20 ft. length of line, is tied to one end of the folded stretcher. To make this attachment secure, the line is passed once round each leg, as shown in fig. 4. The remainder of the line is folded and tucked into the canvas of the stretcher leaving about 18 in. of the loose end free for attachment to the parachutist.

Fig. 4.—Airborne stretcher packed

Attachment of stretcher to parachutist (fig. 5)

13. The quick-release device (described in Chapter 1, paras. 25 to 27) is placed against the chest and one strap is passed under the parachute-harness upper right chest strap, the other strap being passed under the parachutist-harness lower left chest strap. The stretcher is then held almost vertically against the parachutist's chest and the straps buckled round it. Finally, the loose end of the suspension line is attached to the left leg strap of the parachute harness.

14. The stretcher is held almost vertical for jumping. As soon as the canopy has developed the stretcher is released by pulling the dual release pin of the pin-and-cone release device. It is not necessary to use an anti-sear sleeve as this load weighs only 16 lb. Apart from the special points mentioned in this paragraph, standard jumping procedure is followed.

Fig. 5.—Airborne stretcher in jumping position

AIRBORNE-STRETCHER BUNDLES

General

15. Stretcher bundles consist of an airborne stretcher, together with all, or a combination, of the items listed in paragraph 16. Stretcher bundles may be carried either across the chest or packed in a kitbag attached to the right leg.

Preparation of bundle

16. The items which may be packed with the airborne stretcher are:—

Blankets	2
Sheets, ground	1
Splints, knee, Thomas	1
Splint, knee, bar, suspension ...	1
Splint, knee, stirrup	1
Bandage, flannelette	1
Pins, safety, 4½ in.	3
Container, canvas, 3½ gal. ...	1
Pick	1
Shovel	1

In addition, the following will be required for packing the above:—

Army-issue valise straps (or similar)	1 set
Quick-release straps	1 set
Suspension line, 20 ft.	1
Anti-sear sleeve	1
Airborne kitbag, if required ...	1
No. 8 linen thread, Steeds Ref. 15A/108	As required
Cord for lashing ...	As required

17. Fold the stretcher and lash it to the Thomas splint so that one end protrudes through the leather-padded ring of the splint. Remove the head of the pick from the helve and secure it to the splint frame with cord. Next secure the helve to one side of the splint frame and the suspension bar to the other. Place the shovel pan on the leather-padded ring and secure the handle to the suspension bar with cord. Should the Thomas splint not be included, the above items must be securely lashed to the folded stretcher frame. Place the flannelette bandage, safety pins and stirrup in the canvas container, fold the container, and lash it to the shovel-

side of the bundle. Finally wrap the folded blankets, covered by the ground sheet, round the bundle and secure the whole at each end with an Army valise strap.

Attachment of bundle to parachutist

18. There are two approved methods for attaching stretcher bundles to parachutists. They are:—

(i) Attach one end of the suspension line to the leather-padded ring of the splint, or if the splint is not included in the bundle, round both legs of the stretcher at one end. The procedure is then the same as for the airborne stretcher described in para. 13 and 14 of this Appendix, except that an anti-sear sleeve must be used.

(ii) Place the bundle, with the leather padded ring of the splint downwards, in an airborne kitbag and attach it to the right leg as described in para. 10 of Chapter 1.

MEDIUM MACHINE GUN

General

19. The medium machine gun is dropped with parachute troops as two separate parachutists' loads. One load consists of the machine-gun barrel complete with action and is carried in a Bren Gun Valise Mk. 1, across the parachutist's chest while the other load consists of the tripod in an airborne kitbag.

Machine-gun barrel, complete with action

Method of packing (fig. 6)

20. The barrel is placed muzzle-first in a Bren Gun Valise Mk. I and is bound round

Fig. 6.—M.M.G. (C/W action) packed in Bren gun valise Mk. I

Fig. 7.—M.M.G. in jumping position

with the suspension line of a rifle valise. A 20 ft. rope is used as a suspension line for the barrel, and is secured at the end containing the butt, passing under the line binding. The slack line is folded and tied with linen thread (Stores Ref. 15A/108), about 18 in. of the free end being left for attachment to the parachutist. An anti-sear sleeve is slipped on the line between its attachment to the load and the stowage.

Method of attachment to parachutist (fig. 7)

21. The straps of a pin-and-core release device are passed one behind each of the upper chest straps of the parachutist's harness. The packed machine gun barrel is then laid across the chest, with the butt end to the parachutist's right-hand side, and buckled tightly. The loose end of the suspension line (a 20 ft. rope) is looped round the right leg strap of the parachute harness.

Jumping procedure (fig. 8)

22. To prevent fouling the sides of the aircraft parachute exit when jumping the load is held

Fig. 8.—M.M.G. in landing position

almost vertically, as shown in fig. 7. After his exit from the aircraft the parachutist need no longer hold the load which should, of its own accord, take up a horizontal position. As soon as the parachute canopy has developed, the load should be released by holding the anti-sear sleeve in the right hand and pulling away the dual release-pin from the quick release strap with the left hand. The load is then allowed to descend slowly to the full extent of the suspension line, but under special circumstances the parachutist may land with the load still strapped across his chest.

Machine gun tripod

Method of packing

23. As the tripod is both heavy and angular it must be well padded and packed in an airborne kitbag. It should be folded and inserted in the kitbag with its legs uppermost. One leg will remain protruding from the bag, and therefore must be particularly well padded.

Method of attachment to parachutist, and jumping technique

24. The load may be attached to the parachutist's legs or across his chest. No special jumping technique is required but, due to the shape of the load, it must always be lowered to the full extent of the suspension line during descent. Full details of method of attachment will be found in para. 7–11 of Chapter 1 (to which this is an Appendix).

3 in. MORTAR

General

25. The 3 in. mortar is carried as two separate parachutists' loads when dropped with parachute troops. One load consists of the barrel, which is packed in a rifle valise and strapped to one parachutist's chest, and the other, the base plate, is carried by another parachutist in an airborne kitbag. 15 lb. of additional equipment may be carried in the kitbag bringing the load up to 60 lb. Both loads must be released to the full extent of the suspension line during descent.

Barrel

Method of packing (fig. 9)

26. The barrel is placed in a rifle valise, and another valise (modified by cutting to 14 in. in length) is put over the muzzle end. The whole assembly is then bound up with a rifle-valise suspension line. A 20 ft. rope is attached by making a bowline loop at one end and tying the short end to the valise, as shown in fig. 9. The remainder of the 20 ft. rope is folded and secured with No. 8 linen thread (Stores Ref. 15A/108). Ensure that there is an anti-sear sleeve on the suspension line between its attachment to the load and the line in the stowage.

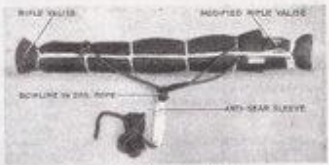

Fig. 9.—Mortar barrel packed

Method of attachment to the parachutist (fig. 10)

27. The straps of a pin-and-cone release device are passed behind the parachute-harness straps, one behind the right upper chest strap and the other behind the left leg strap. The packed barrel is placed against the chest in an almost vertical position and is strapped tightly. The loose end of the 20 ft. rope is tied to the parachutist's right leg strap.

Jumping procedure

28. The load is held almost vertically for jumping as shown in fig. 10. As soon as the parachute canopy has developed, the load should be released by holding the anti-sear sleeve in the right hand and pulling the dual release-pin away with the left hand. The rate of descent of the load is controlled by the anti-sear sleeve.

Base plate

Method of packing

29. The base plate is padded and packed in an airborne kitbag. As the base plate weighs only 45 lb. an additional 15 lb. of equipment may be packed into the bag.

Attachment to parachutist and jumping procedure

30. The load may be carried as a normal kitbag load, as described in Chap. 1, para. 10.

Note . . . The load must be released on the 20 ft. line during descent.

P.I.A.T.

General

31. The P.I.A.T. may be dropped (as one load) attached to a parachutist. It does not need any protective covering when it is packed for dropping as described in para. 32. It is lowered on a 20 ft. suspension line during descent, but under special circumstances the parachutist may land with it still strapped across his chest.

Method of preparation

32. The action is cocked and the monopod removed and replaced in the projectile support. The clamp of the monopod is passed through

Fig. 10.—Mortar barrel in jumping position

the aperture which the adapter normally fills. The lower sling is removed and the upper sling is attached to the butt end and passed round the foresight bracket, up the left-hand side of the weapon, round the monopod base plate, back down the right-hand side of the weapon, and is finally attached to the forward swivel attachment of the lower sling. The sling is then tightened to hold the monopod firmly in the projectile support. The 20 ft. suspension line is attached to the weapon at the clamp groove; the remainder of the line is folded and secured with linen thread, Stores Ref. 15A/108. Ensure that there is an anti-sear sleeve on the suspension line between its point of attachment to the load and the folded line.

Method of attachment to parachutist (fig. 11 and 12)

33. The straps of the pin-and-cone release device are passed behind the upper chest straps of the parachute harness. The weapon is placed against the parachutist's chest and the straps are fastened round it, one before and one behind the trigger guard. The loose end of the suspension line is attached to the right leg strap.

Note . . . The spigot-guide tube stopper must be in place to prevent the ingress of dirt.

Jumping procedure

34. When jumping, the P.I.A.T. must be held firmly against the body in the position shown in fig. 11. As soon as the parachute canopy has developed, the weapon is released by holding the anti-sear sleeve in the right hand and pulling the dual release pin away with the left hand. The rate of descent of the weapon is controlled by the anti-sear sleeve held in the right hand. The parachutist may, if necessary, land with the load on his chest, in which case it should be held in a horizontal position for landing (fig. 12).

Fig. 11.—P.I.A.T. in jumping position

Fig. 12.—P.I.A.T. in landing position