

CHAPTER 13

ARCTIC RIGGING

When using arctic rigging, the number of personnel who can be parachuted from a single aircraft is reduced by the bulk of equipment and cold weather clothing. When computing weightfactors, the cold weather-equipped parachutist is estimated to weigh 310 pounds.

Section I

ARCTIC EQUIPMENT SPACE CONSIDERATIONS

Exiting interval between each parachutist is increased to 2 seconds when using arctic rigging. Aircraft compartment space required for a parachutist is 1 1/2 times more in cold regions than in temperate climates. Commanders must be familiar with the airborne operations portion of FM 31-71 for successful arctic rigging operations. However, plane-side parachute issue and rigging are impossible during winter months due to harsh temperatures.

13-1. WEIGHT FACTORS

Aircraft must be within 200 meters of the parachute rigging facility to keep rigged jumpers from walking through deep snow or over ice during winter months when temperatures are low and the individual parachutist's equipment is the heaviest. The serviceability of the activating lever on the ejector snap of the HPT lowering line should be checked, since there is an increased risk of the lever malfunctioning due to the heavy loads.

13-2. MODIFICATIONS

Modifications of standard equipment must be made for airborne operations under cold weather conditions.

a. **Waistband.** A modified waistband strap is used in lieu of the standard waistband when parachuting with snowshoes or skis. The strap consists of two pieces: a 6-foot A-7A strap and a 16-inch strep with a buckle at each end. The skis or snowshoes are attached to the side of the jumper opposite the static line (to prevent fouling). The modified waistband allows the buckle for the

quick-release fold to be located on the same (either) side with the snowshoes or skis (Figure 13-1). Tandem loads are dropped on a single lowering line. Rigging or lowering procedures are contained in this chapter. Under arctic conditions, most individual equipment is lowered during descent due to the weight.

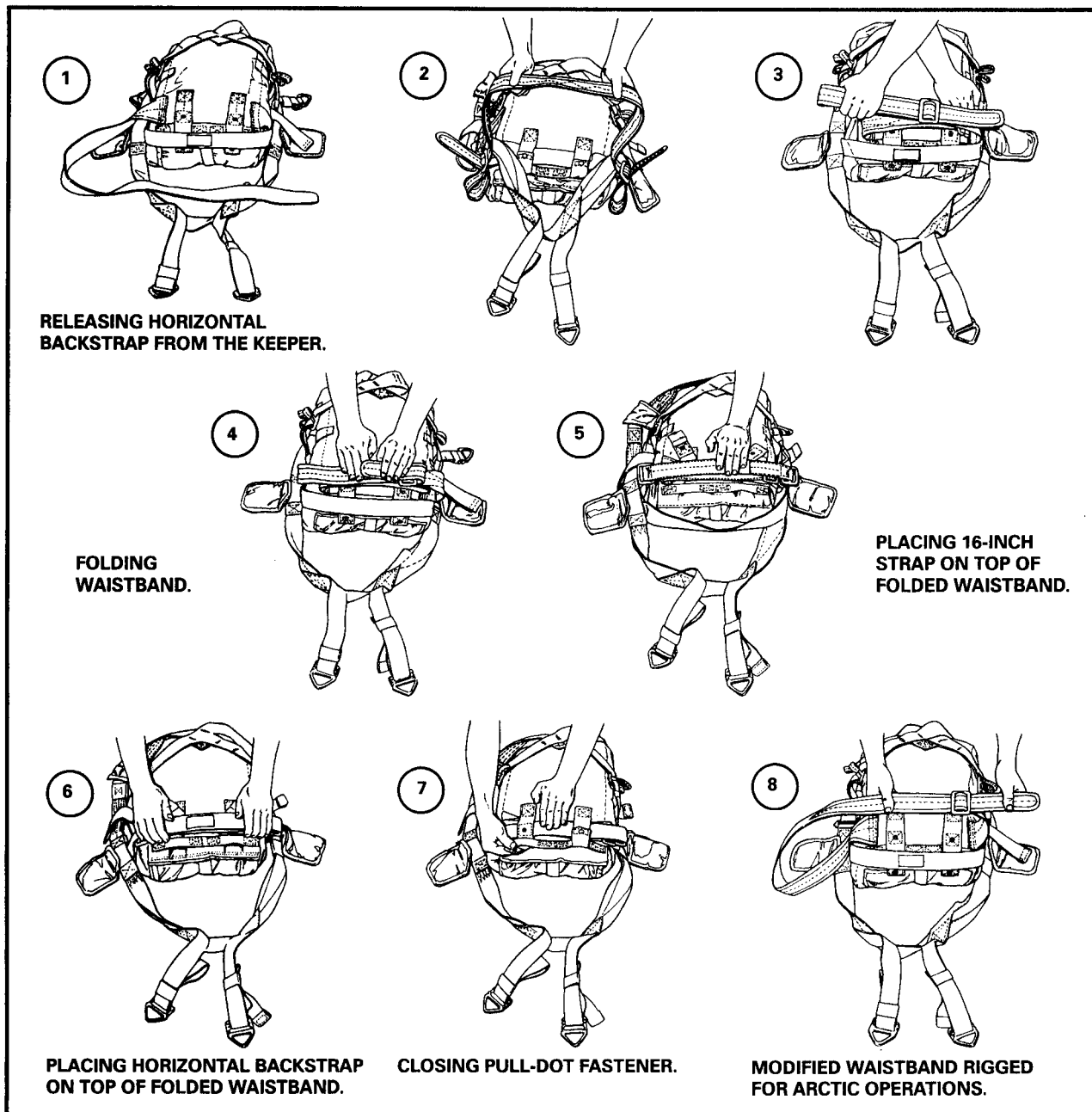


Figure 13-1. Modified waistband routed on parachute harness.

b. **Reserve Parachute.** Deployment of the reserve parachute under arctic or extreme cold weather conditions may be hindered by the bulkiness of the gloves worn. To overcome this obstacle, the rip cord is inverted as an optional requirement. Commanders requesting the modified T-10 reserve parachute for an arctic airborne operation must allow enough time for the reserves to be modified.

c. **Mittens.** Arctic mittens are not worn during the parachute jump; their bulkiness interferes with deployment of the reserve parachute and the lowering of equipment. The mittens are tucked inside the front of the jacket or under the parachute harness. They are not attached to, or packed in, a container. Trigger-finger mittens are stowed inside the jacket for wear as soon as the jumper is on the ground.

d. **Arctic Canteen.** The arctic canteen poses a hazard due to its long neck and metal body, which can injure a jumper if the PLF is executed on top of the canteen. Commanders should consider packing it in the ALICE pack to prevent personal injury or damage to the canteen.

Section II

SNOWSHOES AND INDIVIDUAL WEAPON

Snowshoes are usually rigged on the parachutist to allow for immediate access.

13-3. SNOWSHOES WITHOUT WEAPON

The prefitted snowshoes are placed one on top of the other. The heel strap of the lower snowshoe is run underneath the lower shoe and up between the frame and webbing of both snowshoes. The heel strap buckle is brought up similarly on the other side of the snowshoes. A sling may be fabricated using 550-cord (or other suitable material). The snowshoes are secured with an additional tie-down, using 550-cord at the toe (Figure 13-2).

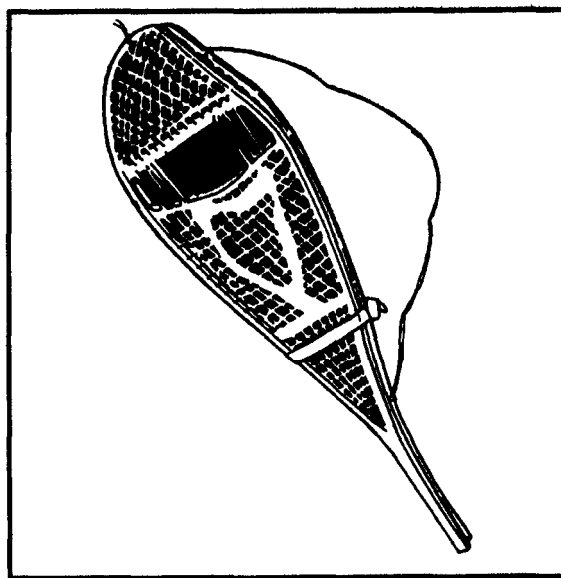


Figure 13-2. Snowshoes without weapon.

13-4. SNOWSHOES WITH WEAPON EXPOSED

The snowshoes are rigged as previously described, and the rifle sling is secured. The M16 rifle is placed so that the barrel rests on top of the snowshoe trails, with the bolt-assist up for left door exit (or down when rigged for right door exit). The M16 rifle is secured to the snowshoes (Figure 13-3, page 13-4) by

buckling the heel strap around the slip ring and the toe strap around the small of the stock. The barrel is secured to the yoke of the snowshoes with 550-cord, using a bowknot. The M203 grenade launcher is rigged in a similar manner (Figure 13-4).

NOTE: Using this method, the parachutist may exit either the right or left jump door.

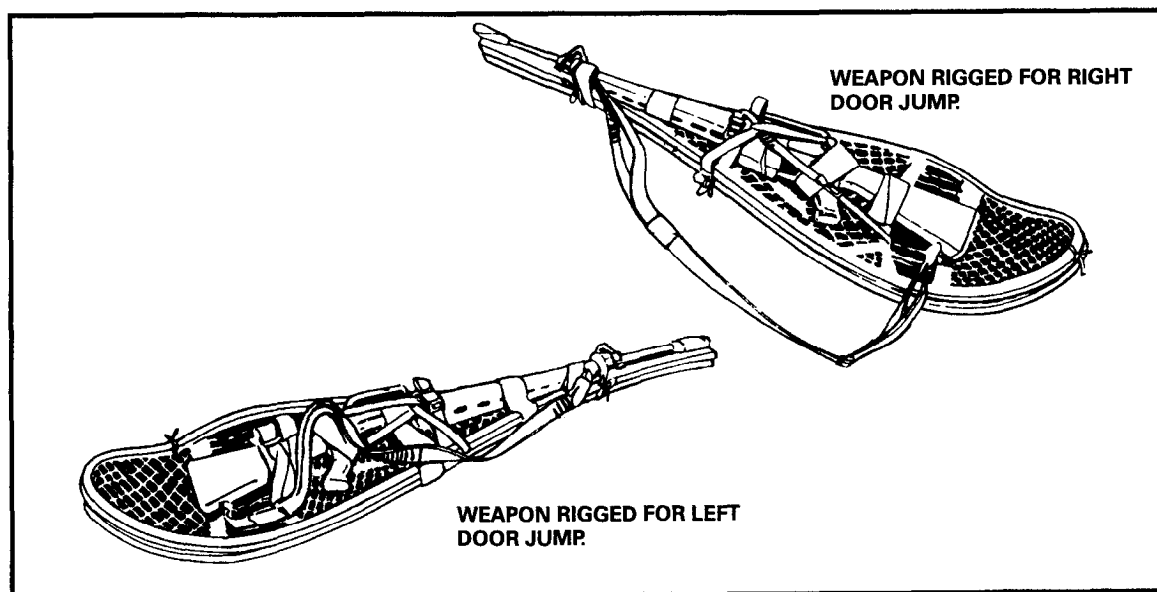


Figure 13-3. Snowshoes with weapon.

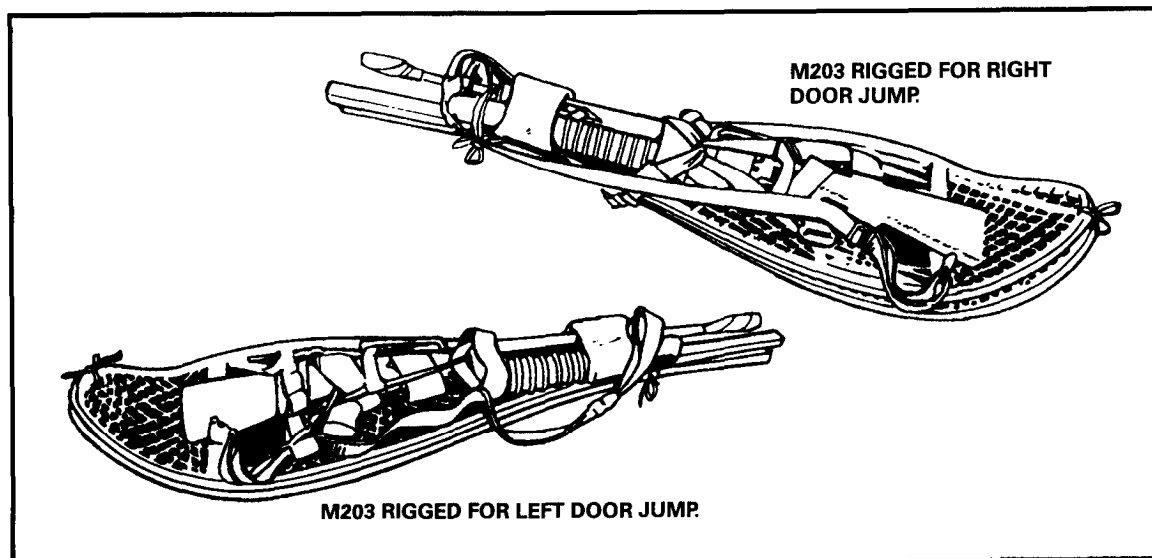


Figure 13-4. Snowshoes with M203.

13-5. JUMPING SNOWSHOES WITH M1950 WEAPONS CASE

Snowshoes are attached to the outside of the M1950 with the tails down and the tips of the snowshoes facing the jumper. The 550-cord is used to secure the snowshoes to the M1950 through both the upper and lower tie-down tape retaining bars. The running ends of the upper tie-down tape are routed through the toe window on the snowshoes and then around the M1950 to the left side of the main lift web. The M1950 is then attached as the outermost item to the left D-ring (Figure 13-5).

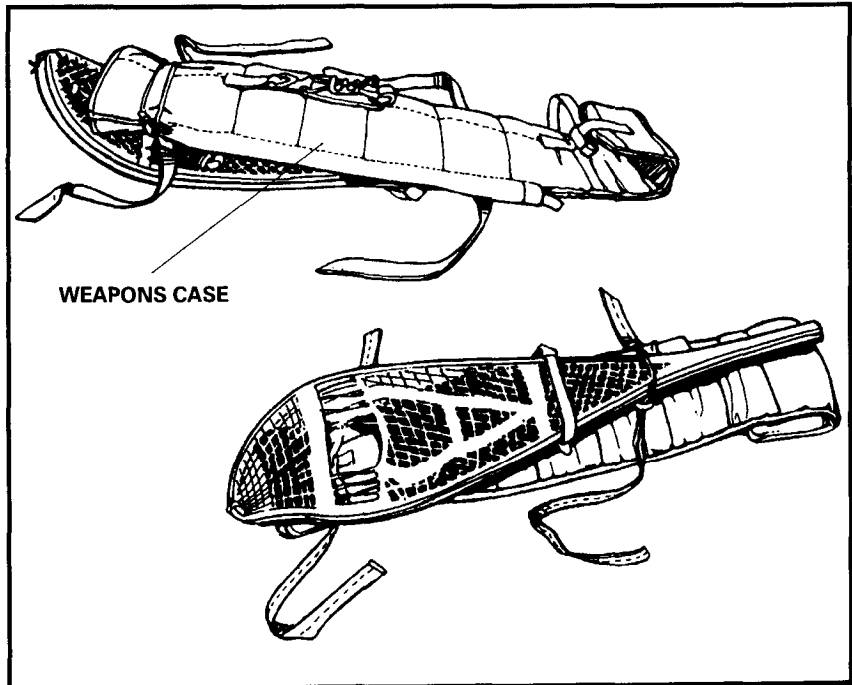


Figure 13-5. Snowshoes with weapons case.

NOTE: Using this method, the parachutist does not need the modified waistband. The standard waistband is routed through the waistband retainers of the reserve parachute to the waistband adjuster panel without going around the outside of the snowshoes and M1 950. The M1 950 is then lowered in the same manner as in a tandem load without snowshoes.

Section III TANDEM LOAD ON SINGLE LOWERING LINE

Tandem loads rigged on a single lowering line allow the individual parachutist to lower two items of equipment. This procedure reduces the time and tasks required to lower equipment and provides more time for canopy control and landing preparations.

13-6. RIGGED LOAD

The ALICE pack or weapons case is worn in the prescribed manner. The rifle sling is used to attach the snowshoes to the rifle. This load is suspended over the shoulder opposite the static line. The running end of the modified waistband extension is threaded through the waistband retainers of the reserve parachute and around the snowshoes, and the end is made into a quick-release fold (Figure 13-6, page 13-6).

NOTE: The rifle sling is adjusted to fit the parachutist snugly. The sling adjustment is also small enough so that it does not come off the load when released to slide down the lowering line.

13-7. HOOK-PILE TAPE LOWERING LINE

The lowering line is threaded through the rifle sling and attached to the main lift web of the parachutist (on the side the snowshoes are attached).

a. A length of 80-pound test tape is attached around the sling and the main lift web with a bowknot (just below the canopy release assembly). The lowering line adapter web is attached (Figure 13-7) to the left (right) side, corresponding to the side to which the snowshoes and rifle are to be attached.

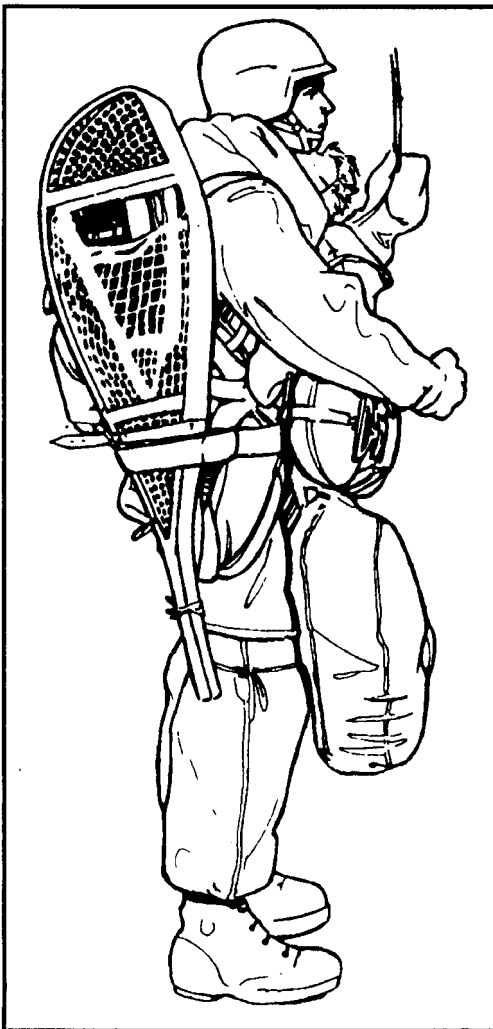


Figure 13-6. Parachutist rigged to jump left door.



Figure 13-7. Lowering line assembly attached for a tandem load.

b. When jumping with the ALICE pack or weapons case, the parachutist routes the lower tie-down on the case through the metal frame and around the leg. A separate tie-down tape for each is not necessary (Figure 13-8).

c. The stowed lowering line is secured with two retainer bands to the left (right) side of the vertical bar of the combat pack. After the pack, snowshoes, and rifle are attached to the parachutist, the lowering line ejector snap is passed through the rifle sling and attached to the accessory attaching ring of the adapter web. If the adapter web is not used, the ejector snap is attached directly to the D-ring on the harness. If the weapons case is attached to the snowshoes (Figure 13-9), the lowering line ejector snap is passed between the case and the cotton chafe material, which is attached to the case V-ring.

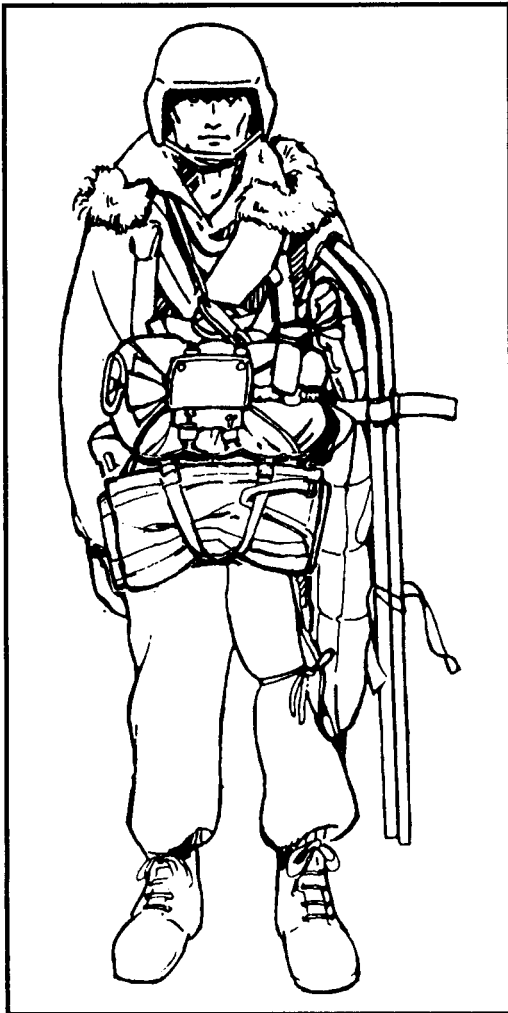


Figure 13-8. Upper and lower tie-downs.

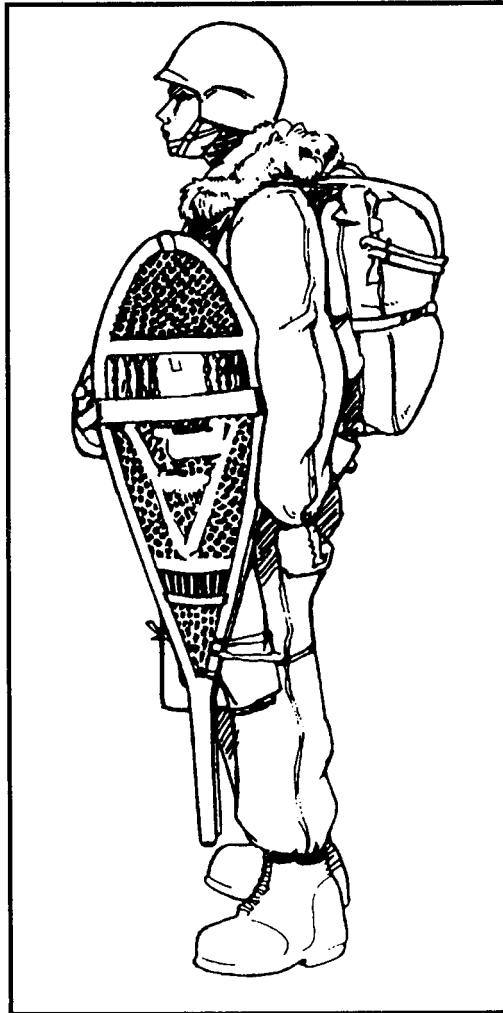


Figure 13-9. Left side view with weapon case.

d. The upper bowknot (below canopy release assembly) and the lower tie-down tape around the parachutist's leg are untied, and the load is dropped by pulling the free-running ends of the D-ring attaching straps. This ensures that the pack load falls the length of the line. The modified waistband quick-release fold is pulled and releases the snowshoes, which slide down the lowering line on top of the pack (Figure 13-10).

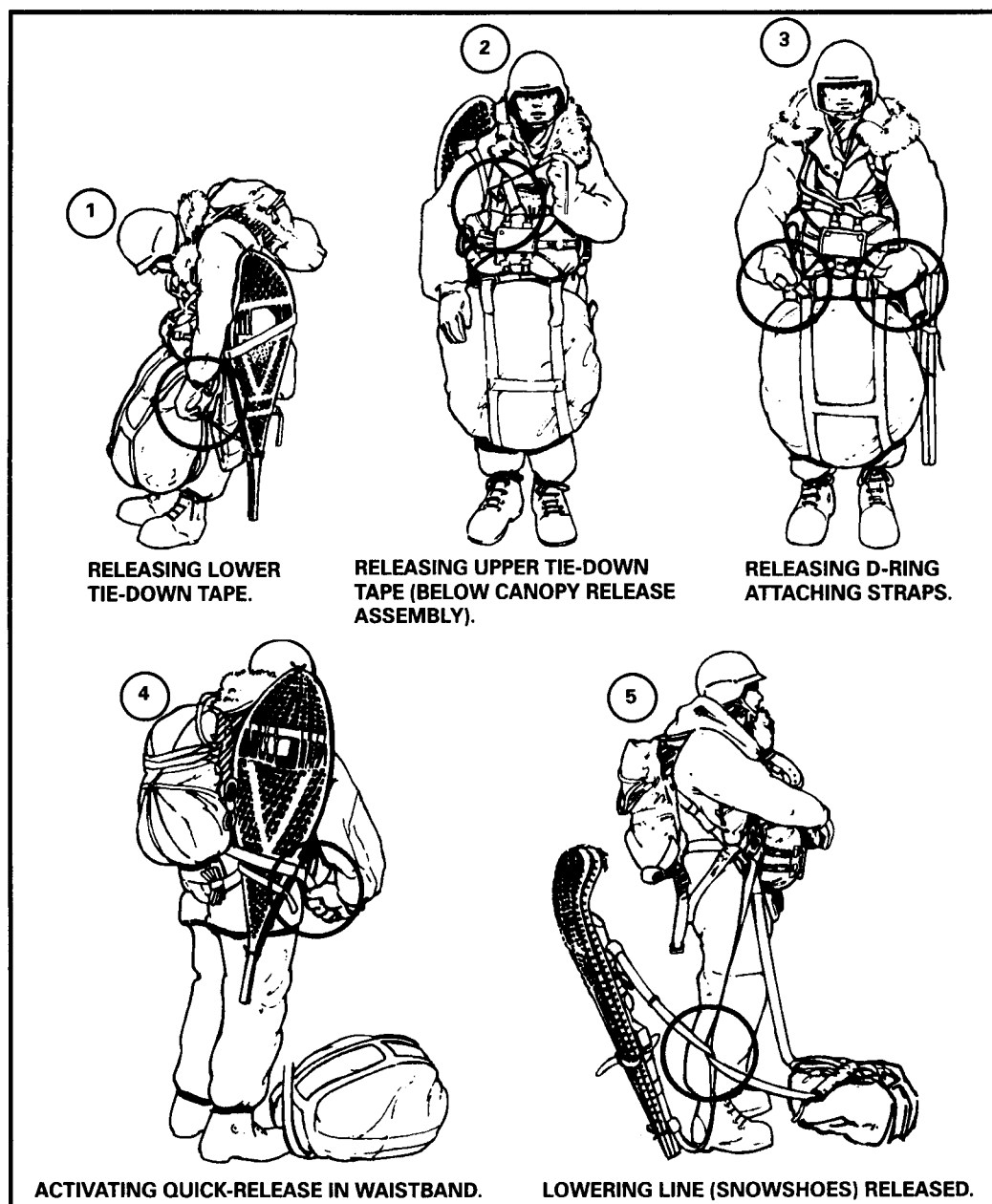


Figure 13-10. Arctic equipment released and lowered.

Section IV

SKIS JUMPED WITH RIFLE OR ALICE PACK

Skis, with the rifle attached, can be jumped using the procedures outlined.

13-8. SKIS AND RIFLE

When the parachutist jumps with skis, or with skis as part of the individual jump load, the jump must be from a rear platform or ramp (Figure 13-11).

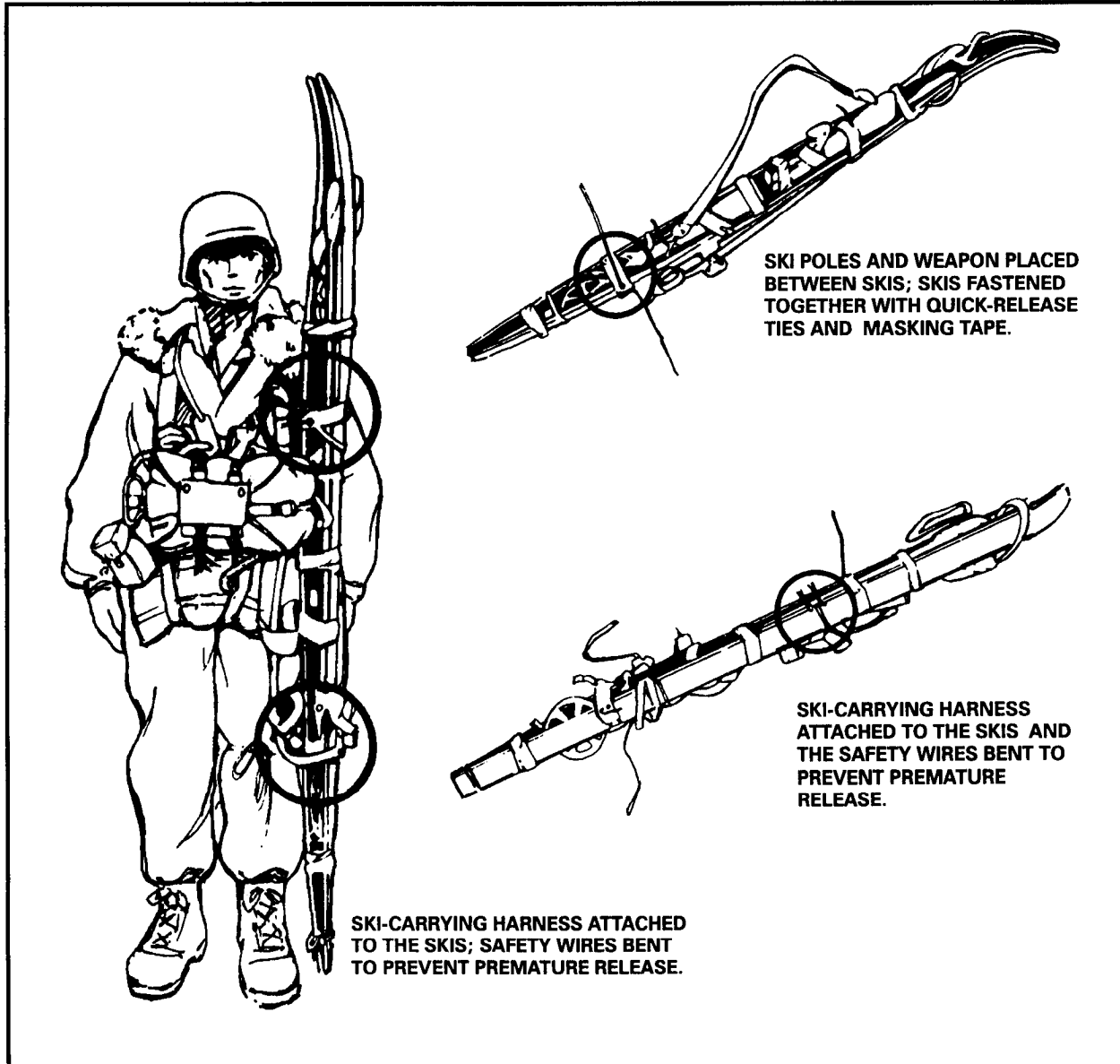


Figure 13-11. Skis and rifle rigged.

13-9. SKIS AND ALICE PACK OR WEAPONS CASE

The ALICE pack, or weapons case, lowering line is threaded between the skis and attached to the main lift web on the side to which the skis are attached. The lowering line is routed the same way, and the ejector snap is fastened to the lowering line adapter web or to the D-ring on the parachute harness (Figure 13-12). To secure and stabilize the skis, a length of 80-pound test is attached to the top and bottom of the skis with a bowknot. The skis and ALICE pack (or weapons case) are lowered by pulling the free-running end on the D-ring attaching straps at the same time. This drops the load down the length of the lowering line. Pulling the quick-release fold of the A-7A strap and the locking-pin cord lanyard of the ski-carrying harness releases and lowers the skis.

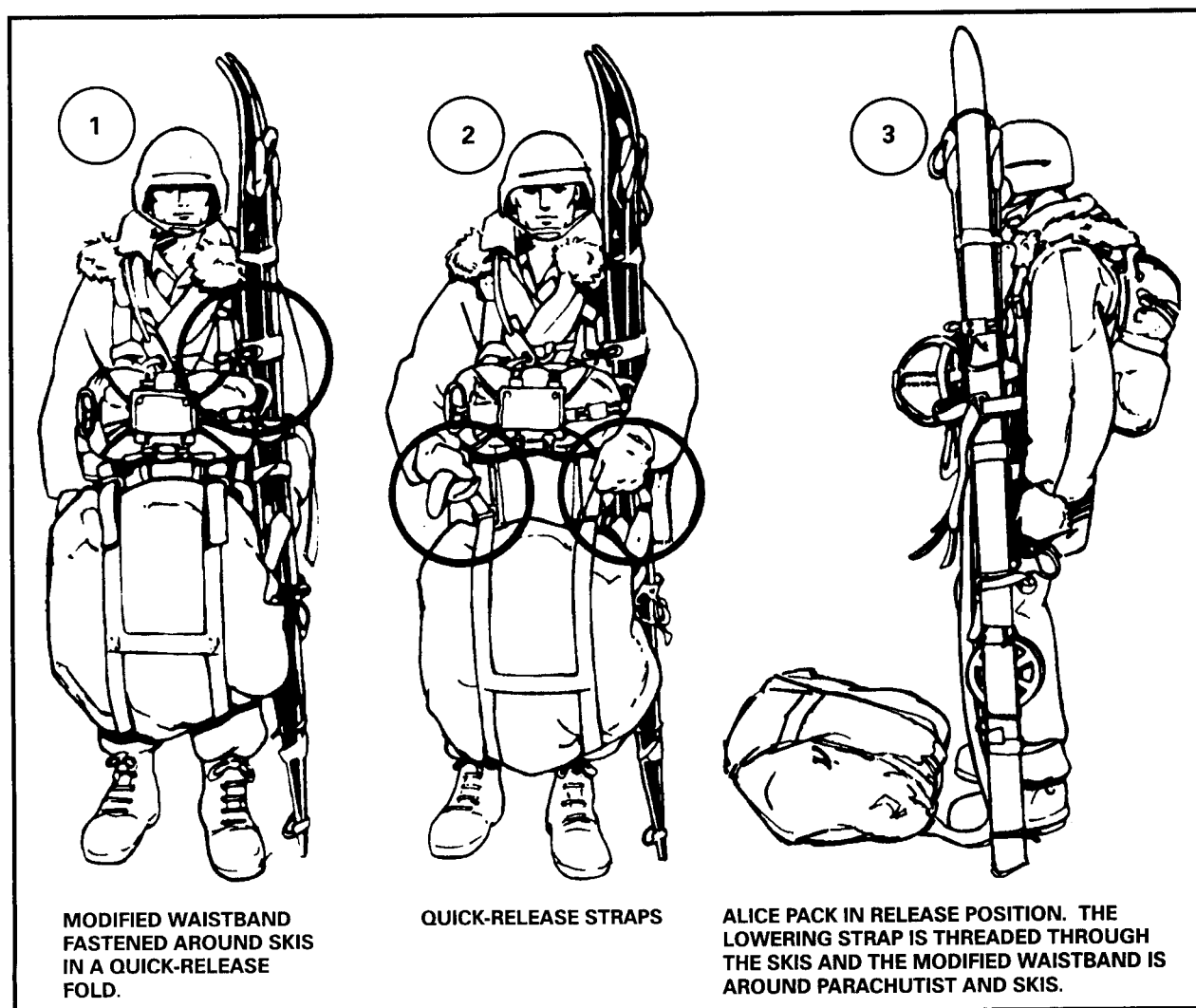


Figure 13-12. Skis and ALICE pack released.

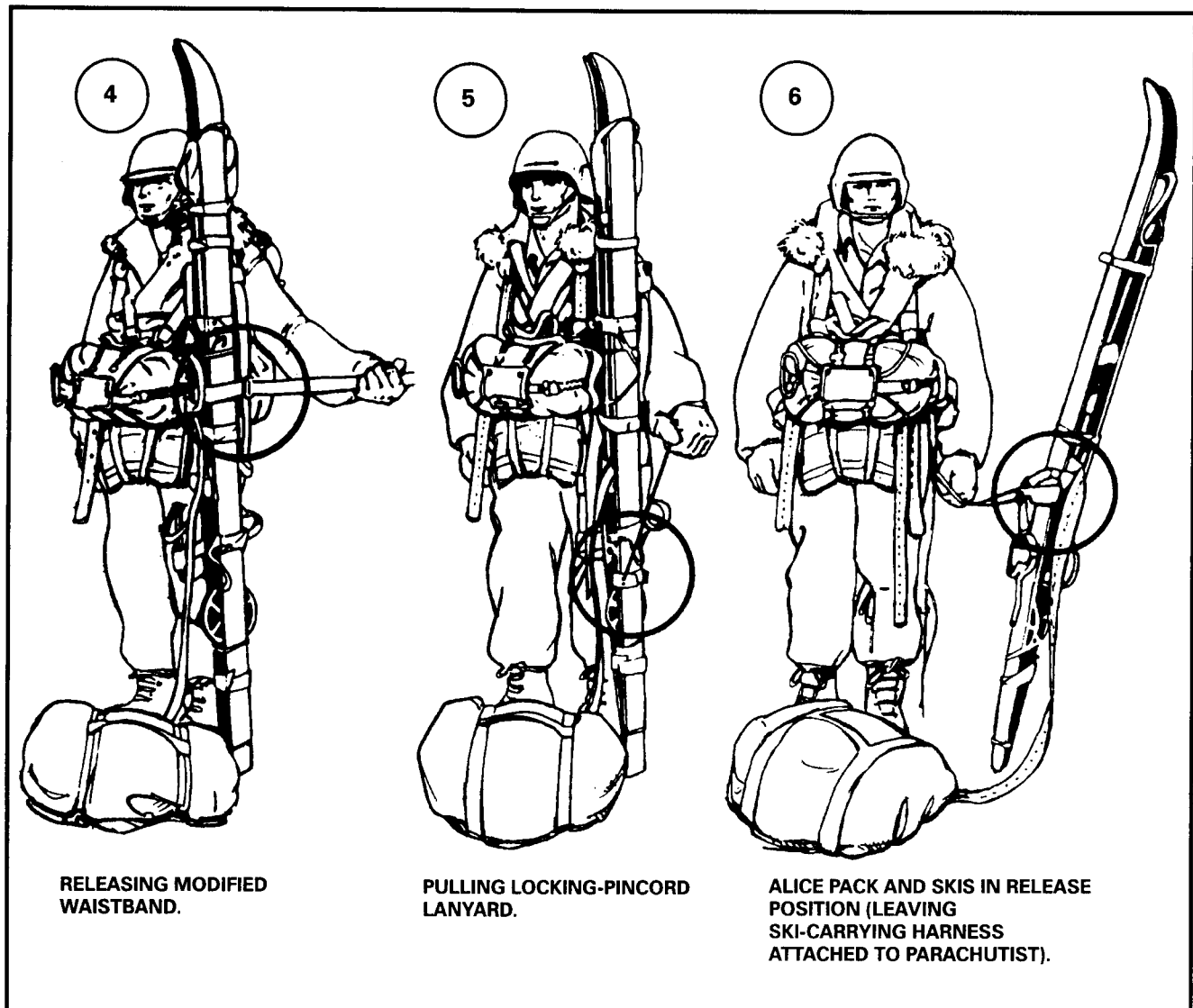


Figure 13-12. Skis and ALICE pack released (continued).