Chapter 12 Tents



Figure 12-1: Three Scott Polar tents and one Stretch Dome tent. (photo by Gerry Gales)

This chapter describes the types of tents used in the USAP and offers some tips on using them in the field.

Seven different tents are issued: the Scott Polar tent, the Endurance tent, the North FaceTM VE-25 tents, and the Sierra DesignsTM Stretch Dome, Super Flash, Tiros 1, and Sphere Expedition tents.

The following pages provide detailed information on the setup and tear down of Scott Polar tents. These tents are unique to polar travel and require some instruction to use properly, especially in strong winds. The Super Flash or Tiros 1 is packed in survival bags. They are easy to set up, secure in strong winds, and the flysheet provides extra room for cooking or gear storage. The Super Flash is a non-free-standing tent.

The VE-25, Stretch Dome and Sphere Expedition are four-season self-standing tents. The hemispherical shape is extremely efficient in shedding both wind and snow.

The Endurance Tent is a large clamshell shaped tent used by groups as a kitchen or lab tent. There are a limited number of these tents and they require a practice "set-up session" at the BFC.

During your Field Safety Training course, you will receive hands-on instruction on setting up any tent that has been allocated to you. Specific written instructions are packed with all tents.

12.1 Preparation for All Tents

Find a level site free of sharp objects and preferably out of the wind. In strong winds, if it is not an emergency, build a snow wall (See Chapter 11, Section 11.2) before erecting the tent, unless it is a Scott tent.

12.2 The Scott Polar Tent

The Scott Polar tent has been the standard Antarctic exploration shelter for almost 80 years; it has changed little in design since its original concept. This tent is designed for two people, but four or more can be accommodated in an emergency. It travels assembled,

sets up quickly, is very secure in strong winds (when set up properly), is safe to cook in, and as tents go, is quite warm.

12.2a Scott Polar Tent Set-up

- 1. In high winds, raise the tent while belaying with the attached rope, allowing the wind to assist you, pulling the leeward poles into position. (See figures 12-2 and 12-3).
- 2. In hard snow, ice, or dirt, chop or scoop out small depressions (3-5 inches deep) for the tent poles to rest in.
- 3. Place heavy items in the valance (flaps), e.g., snow, ice blocks, food boxes, rocks, etc. If you use rocks, make sure the rocks don't rub on the main tent fabric.
- 4. Secure the stakes, and tighten all the guy lines. Use "slippery" knots that won't require a knife when it's time to take down the tent.
- 5. Spread the separate floor sheet inside the tent.
- 6. Insert the vent tube and tie it in so that it doesn't fall out. It's sometimes easiest to insert the vent tube before erecting the tent. Do not operate a stove in the tent without the vent tube in place.

Note: Because of this tent's large surface area, anchors need to be especially "bombproof." In snow, deadman style anchors are the strongest and should be used for

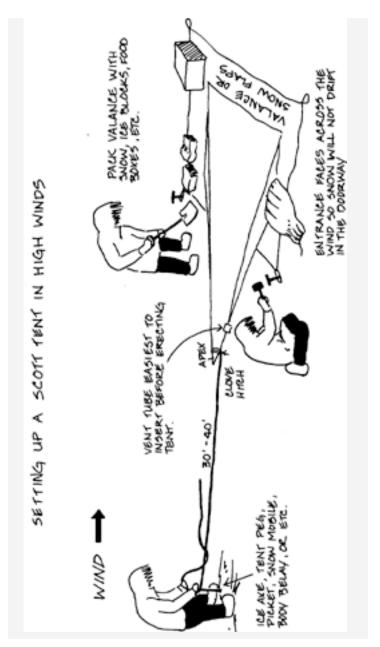


Figure 12-2: Setting up a Scott Tent in high winds.

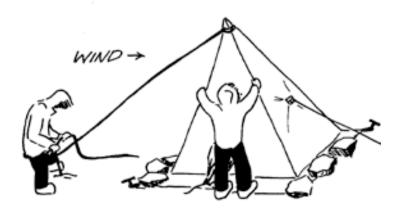


Figure 12-3: Raise the tent while belaying with the attached rope.

guylines. In the Dry Valleys, you may have to spend five minutes on each stake sledgehammering it into frozen dirt and rock.

12.2b Setting a Polar tent up for Extra Wind Protection

The "Braddock Bridle" is recommended for high wind areas, especially where wind direction is variable. See figure 12-4.

- 1. Place the Bridle over the peak of the tent.
- 2. Line up the 4 loops over the tent poles.
- 3. Connect the guy lines to the loops with carabiners.
- 4. Raise the tent with a belay on the up-wind bridle guy line, if windy.
- 5. Connect all guy lines to secure anchors and tension lines.

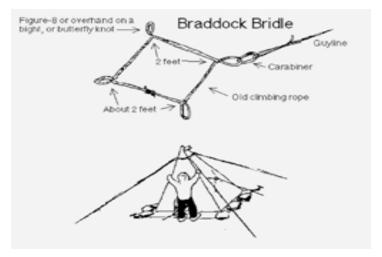


Figure 12-4: The Braddock Bridle.

12.2c Scott Polar Tent Tear-Down

- 1. Fold up the floor sheet and secure it in a location where it won't blow away.
- 2. Uncover the valance and disconnect all but the windward guylines.
- 3. Tip the tent into the wind, collapsing the leeward poles. If the belay rope is still connected to the apex, take in slack to secure the tent. Lay the tent flat on the ground apex into the wind.

 Disconnect all guylines and neatly wind them up and lay them on the tent. (See figure 12-5).
- 4. Pull the tent bag over the bundle, insert the floor sheet, and tie off the tent bag as shown below in figure 12-6.

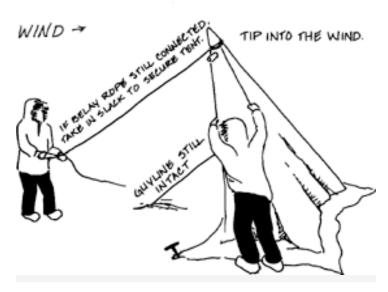


Figure 12-5
If you find any tears or rips on the tent, repair them immediately with repair tape, duct tape, or needle and thread. If you don't repair these tears immediately, high

winds could destroy your tent very quickly!

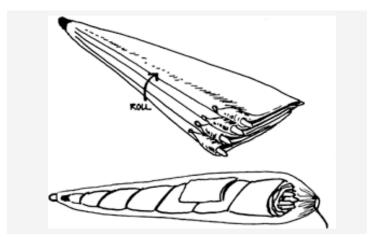


Figure 12-6

At the end of your field season, place tags on the tent indicating tears, rips, pole problems, and/or comments. This will enable the repair staff to quickly locate the problems and fix them.

12.3 Setting up the Stretch Dome, Sphere Expedition Tents

To set up a Stretch Dome or Sphere Expedition tent, stake the floor before inserting the poles. This will allow for greater pitching ease and for greater safety and stability especially in high winds.

Next, stake each of the webbing loops at the back of the tent (points G and H in figure 12-7). Then move to the front of the tent and pull the webbing loops at points A and B until the tent floor is squarely and tautly positioned, and stake them down. Finally, stake the sides (points C and D), again pulling the tent floor taut.

To erect the tent, inset the metal tips of one of the four long poles into the grommets at points A and H, and the tops of a second long pole into the grommets at points B and G. Next, position yourself in the open doorway and locate the double Swift ClipsTM at the apex of the roof.

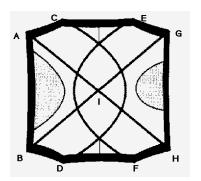


Figure 12-7: Top view of tent body.

Pull the two poles up so that they intersect at point I,

and attach both Swift Clips over the intersection of the poles, as shown in figure 12-8. Follow the seams along the paths of the poles and attach the Swift Clips to the poles.

Next, insert a long pole at points C and D, arching the

pole around the back of the tent. Following the discontinuous seam along the path of the pole, attach all single Swift Clips, and the double Swift Clips located at the intersection points of the three poles. Insert the remaining long pole at points E and F, arching the pole around the front of the tent and again attaching all Swift Clips along the discontinuous seams as before.



Figure 12-8: Double Swift Clips.

12.4 Setting up a VE-25 Tent

Figure 12-9 on the next page shows how to set up the NorthfaceTM VE-25 tent.



Figure 12-9: NorthfaceTM VE-25 set up.