



# Oval Pavilion Owner's Manual

# DRAGONUING P. O. Box 13322 Sacramento, CA 95813-3322

hank you for your selection of the DRAGONWING Oval Pavilion. We are sure that your pavilion will weather many years of service, if you care for it properly. In this manual, you will find details on how to assemble and erect it, and how to care for it.



The frame provided with your DRAGONWING pavilion is a semi-rigid structure designed to keep the tent up in all but the greatest storms, with a minimum of structure and transportation problems. The result of years of continuous refinement, it can be set up by one person in less than an hour (even in winds), is lighter and easier to transport than those of other manufacturers, and is extremely stable in winds. It consists of two center poles, six side poles, two eave poles, and one ridge pole. It also uses four "end shapers," made of steel tubing, to define the shape of the tent's ends. That seems like a lot of poles and stuff if you're accustomed to modern commercial camping tents, but I've found it to be the minimum you can get away with. A schematic of the frame is shown by Figure 1.

## FINISHING THE POLES

We have left the finishing of the poles to you, since it reduces your costs and it gives you the opportunity to stain or paint the pieces as you desire. Whatever your preference, it's worth it to buy the very best finishing medium you can afford. Scrimping on the cost here is always false economy, not only because it gets unsightly a lot quicker, but also because a frame unprotected from the elements will warp and deteriorate very quickly. The friendly attendant at your neighborhood hardware store will be happy to advise you on what you need for the conditions you'll face in your part of the world. I usually use a good marine "spar varnish" or a polyurethane varnish on the poles I use for my own tents. You may wish to go for a more "period" effect with linseed or tung oils. Whatever you decide to do, do it now, right away, while the wood is still fresh and new. Remember to sand the poles first, to remove any collected grime and give the finish a good surface to stick to.

# SETTING UP YOUR PAVILION

Decide where you want to pitch the tent. You want a fairly level, well drained area cleared of rocks and debris. If possible, orient the tent so that the prevailing wind will be coming from behind and to one side. That is, if the wind is coming from the north, you'll want to position the tent so that the door faces southeast or southwest. This orientation allows the tent's shape to resist the wind most effectively.

Lay your ground cloth on the ground exactly where you want to have the tent set up. Lay out the eave poles where the front and back sides of the tent will be. Find one of the two pairs of side poles that are connected by ropes. Lay these poles out so that the tops of the poles (where the ropes are) touch the ends of the eave poles, and adjust the distance between the eave poles to be the length of the rope (these ropes, by the way, will be called "crossropes" in this manual, to distinguish them from the "guy ropes" that stake the tent to the ground). This distance will be a couple of feet less than the width of the ground cloth, due to the tent's slanting walls. Make sure that the ropes aren't wrapped around the side poles, and that the square steel



projections at the top of the side poles will face away from the eave poles when the side pole is brought to vertical. Lay the other pair of roped side poles the same way, at the other end of the eave poles. If the whole thing looks like figure 2, you done good.

Spread out the canopy, right side up, over the ground cloth so that the eaves of the flat portion of the canopy (not the tapered panels of the rounded ends) lay over the eave poles. Start from the large flat area of the canopy and work out from the center toward the rounded part of the canopy (where the tapered panels are) until you come to a grommet. This grommet is where you'll be installing the guy-rope pins.

If your tent was provided with natural ropes, you have guy-rope assemblies in two flavors: four assemblies of thick rope for the main load-bearing guys, and two assemblies for the guys at the end of the pavilion. (If your ropes are the braided polyester type, all the rope sets are interchangeable; it doesn't matter which end up as side ropes or end ropes.) Find a guy-rope assembly that has the thicker rope (if it's a natural rope), and remove the cinch pin from the rope pin (that thing that looks like an unthreaded eye-bolt). Put the rope pin through the grommet, from the outside in, and then thread it though the washer-and-spacer arrangement provided in the top of the side pole. Secure the rope pin with the cinch pin. The square steel projection is still

facing away from the eave pole, right? If it's not, switch that side pole with its buddy on the other end of the rope. When you're done, the arrangement should look like figure 3.



Repeat this operation with the other three thick rope assemblies and side poles.

Now sort out your tent stakes. You'll find eight large (16") stakes and a larger number of small (12") stakes. The large ones are for the tent guy ropes, and the small ones are used to stake the sidewall to the ground.

At each corner of the rectangle formed by the eave poles and crossropes, measure out five feet at right angles from the corner, as shown in

figure 2. (The X shows where the stake goes.)You'll notice that there's a handy knot to measure with along each of the guy ropes. Drive in one of the big stakes there, angling the top of the stake away from the tent as you drive it in. Loosen the slider a little and slip the loop at the end of each rope over a stake, but don't tighten anything yet.

That five feet is a minimum dimension, by the way. If the winds are strong, make it six feet or more. And for the greatest holding power, remember to drive in the stakes at a 90° angle to the rope, not the ground.

Now you're ready to raise two of the side poles, at either the front or the back of the tent (whichever is upwind). The guy ropes for these poles can now be adjusted so that they'll hold the pole upright without further assistance. It doesn't have to be perfect yet.

Find the ridge pole and one of the center poles. On the ridge pole, you'll notice that the eyescrew is closer to one side than the other (in fact, the other side has cut away a bit at the corner). Orient the ridge pole so that the eye-screw will be over the cut-away, not under it, when the center pole goes up. Look again at Figure 1 if you're confused.

Keeping the center-pole on the outside of the cross-rope (that is, away from the center of the tent), feed the center pole's stud through the eye at one end of the ridge-pole, and then through the large grommet at the apex of the canopy. The cross-rope will hold everything nicely in place while you do the same thing with the other center pole at the other end of the ridge pole. If you have any ornaments to go on the center-pole stud, walk around the tent and put them on now; it's your last chance to do this.

If you're expecting really strong winds and want to use wind lines on the tent, now is the time to put them on.

It's time to raise the center poles! If there are two of you, you can do it together, simultaneously. If you're alone, no matter. Just go to one and raise it as much as you can, and dig the end into the turf to keep it from sliding back. Go to the other one and raise that one as much

as you can. Alternate between the poles until both poles are vertical. And they should be on the outside of the side-pole ropes.

Now raise the other two side poles and adjust the ropes to keep them vertical. Say "That's starting to look like a tent now, by gum." Move the eave poles up into position, loops toward the top, and slip the loop over the top of the side pole to keep the eave pole from falling down again. (The side poles should nest snugly in the hollows in the ends of the eave pole.)

Now we're ready to set up the round ends of the pavilion. First, take one of the remaining side poles and one of the remaining rope assemblies (with the thinner rope) and locate the center grommet of the rounded end. Feed the pin through the canopy, from the outside in, then through the fitting on the side pole. Secure it with the cinch pin. If you did it right, the fitting should be against the canopy, with the square projections facing slightly inward (toward the center of the tent).

Plug the end shapers into the couplings in the side poles (long projections first, then short

projections) and stretch the canopy skirt over the tubing. Locate the little string loops hanging down from the canopy at the bottom of each canopy seam, and attach the canopy to the tubing by feeding the little string loop outside and underneath the tube, and then hooking them onto the retaining pin attached to the tubing. It may help to lift on the tube a little to put enough slack into the string to get it easily over the pin.

Now run each of the ropes to the closest guy-rope stake on either side. (Normally, you wouldn't want to run two ropes to one stake, but in this case, the forces

on the rope are so small that it doesn't make any difference. If you dispensed with the rope entirely, all that would happen is that the side pole would want to move up and down slightly.)

Perform the same operation at the other end of the tent. Take a break; you're more than halfway there now, and it's time to cool off (or warm up) and hydrate. There's no sense in making an ordeal of this, is there?

#### HANGING THE SIDEWALLS

You're ready to put up the sidewalls. These are made so that the stake loops should be on the bottom and facing outward. To help you distinguish inside from outside, all the top and bottom hems are folded inward. And the Dragonwing identification label on one of the sidewalls should be on the inside.

Let's hang the left sidewall (left side as you're facing out from the tent). Note that just under the eave poles are a series of webbing loops sewn onto the canopy. Find the center one (if your sidewalls have zippers) or the one just to the right of center (if your sidewalls have ties) and hang the first hook there. Proceed to the left. When you get to the side-pole, hang the hook directly on the fitting on the side-pole — that's what it's for. (You'll notice that some of the hooks have been bent so that their loops are at right angles to each other. These hooks go either into webbing loops or onto the fitting in the side pole.) Feed the fabric outside the pole, and continue hanging the sidewall. The hooks here have not been bent, so they can go right onto the tubing. Proceed in



DRACONLING Oval Pavilion Owner's Manual Page 6

this fashion until you come to the end of the sidewall. At this point, you should be directly opposite from where you started. If you're not, sigh deeply and do it over.

Now stake down the bottom of the sidewalls, remembering that the pavilion is designed to flare slightly outward at the base. Each stake should be one foot further outward from where it would be if the sidewall was hanging straight down. This feature helps keep the pavilion stable in winds, which is why it was so common on period tents.

Depending on the configuration of your tent, there may be additional stake loops on the rounded ends (between the panel seams along the bottom.) You'll probably only need these if it's very windy.

Once the sidewall stakes are in, re-adjust the tent ropes so as to minimize wrinkles in the canopy and sidewalls, and tighten them. There should be no slack in the cross-rope. You'll probably have to re-adjust and tighten them periodically, particularly in changes of temperature or humidity, or in winds. To help the sliders from loosening, loop the rope under the hook provided in the slider. If it's really windy and the ropes insist on loosening, you can wrap the rope and sliders together with string or tape.

Now your pavilion is set up! Have a party in it. Invite your friends.

Taking down the pavilion is the reverse of putting it up, except for these points:

When you take down the pavilion, be very careful not to harm the fabric. Be conscious of where the poke-y bits are. Before you lower the center poles, first make sure that the two side poles on the down-wind flat side have been taken down. Then lower the center poles, moving them out toward the rounded ends, not toward the center, to avoid bending the spikes at the top of the pole.

To loosen the stakes before pulling them out, rotate them a quarter-turn.

To keep the guy ropes organized, keep them with the canopy. Just remove the cinch pins, slide the side pole off the rope pin, and re-insert the cinch pins. To keep the guy ropes from tangling together, loop them into a big coil (or fold them into thirds) and tie the coil with a loose overhand knot.

#### HIGH-WIND CAMPING

The sixteen-inch stakes we provide for your tent ropes should suffice in all but the windiest weather, or in all but the loosest soil. But if you have an abundance of either condition, or a combination of the two, here are some things you can do to keep yourself connected to terra firma:

- 1. Use longer stakes. Many people have pieces of re-bar, 18" or more. My usual preference is to drive a piece of 1" x 2" furring lumber (at least a foot long or so) into the ground, with the wide side facing the tent, and then drive in the tent stake immediately behind it (that is, against the side of the slat that isn't facing the tent), so that the tent ropes pull the stake tight against the slat. This works because it's not so much the depth of the stake that counts, but the area of stake that presents itself to the dirt. The slat effectively triples the size of the stake.
- 2. Use more stakes. Tie additional lengths of rope to each of the rope pins and run them out to their own stakes. Don't get them too close to the other stakes.

- 3. Increase your footprint. Extend the rope beyond the five-foot radius recommended above. Enough rope has been provided to let you bring the stakes out over eight feet away from the tops of the poles if necessary. The only trouble with this method is that it creates more of a tripping hazard, so make sure the ropes are well flagged.
- 4. Use wind lines. These are special ropes that are attached to the center-pole spikes after the spikes go though the canopy, but before the center poles are raised. They extend out from the tent and then are staked down as far away from the tent as practicable. The idea is to stabilize the tops of the center poles and thereby prevent sway. Obviously, this method isn't something you can easily employ once the tent is erected, particularly if you have to partially dismantle the tent in a freshening storm. So you need to keep track of the weather forecasts, and have the ropes in place when you set up if it looks like it's going to be windy. On the other hand, Dragonwing pavilions have been through most of the horrorstory windstorms you've heard about (the famous "Estrella hurricane" of a few years back, the Twenty Five Year Celebration, the Thirty Year Celebration, and innumerable foulweather Pennsics and tourneys) without needing wind lines at all...

## ODDS AND ENDS

Some SCA kingdom tourney laws require, and we wholeheartedly recommend, that you attach yellow or white flags to the guy ropes to keep your comrades from tripping on them or colliding with them in the dark.

I hang curtains or drapes from the cross-ropes to partition off the rounded ends. They keep the steel tubing and all the mundane stuff out of sight. You can also suspend a chain from the ridge pole to hang a lantern or chandelier. (If you run two chains down from each end to the center, it will greatly reduce swaying.)

Period pavilion floors can be made of torn-up rugs available at little cost from thrift stores. If you use a slippery plastic ground-cloth underneath them, secure the rugs well against slipping by driving long nails through the rug and ground-cloth into the ground. (If you use cheap, replaceable plastic sheeting, you won't feel so bad about it.)

It's a good idea to take along scrap pieces of boards, blocks or other objects to put under the poles, if need be. Your campsite will seldom be perfectly level, and by shimming under the center-poles you will be able to remove many wrinkles from the canopy. And if the ground is soft, a piece of plywood a few inches square will help keep the center-pole from sinking into the ground from the weight of the canopy. If you're going to put an ornament or banner over the canopy of your pavilion, don't make it very large or heavy. Higher winds can put a lot of stress on the center pole spike, and your embellishment may take flight and become an airborne missile.

# CARING FOR YOUR PAVILION

The first rule is: make sure that the fabric parts are free from being abraded by anything, particularly when being transported. Keep the stakes in their own canvas bag when you're not using them.

The second rule is: don't store the pavilion wet. Although the fabric parts aren't particularly prone to mildew, the dirt that collect on them is, and will eventually cause discoloration and loss of water and fire-resistance. Find a dry, large area to air the pavilion if you bring it home wet,

DRACONLING Oval Pavilion Owner's Manual Page 8

and make sure it's dry before you put it into storage. Also, remember that the ropes are made of a natural fiber that may take longer to dry than the fabric, and which will certainly rot if given half a chance. If you must store the pavilion before the ropes are dry, take them off the canopy and dry them separately.

The third rule is: don't clean the pavilion with anything harsher than warm water and a mild soap or detergent. My rule of thumb is that if it's mild enough for your hands to be in (like dish soap or shampoo), it's mild enough for the pavilion. Using anything stronger may damage the water-proofing and fire-retardant properties of the fabric. Also, be sure to rinse the fabric well. And then rinse it again. (This is because sunlight and soap combined will weaken the fabric far worse than either would by itself.)

We wish you many years of happiness in your Dragonwing pavilion. We maintain a photo album of our tents, and would be honored to include yours if you would be so kind as to send us a photograph of your tent as you have it set up for your activities. We are also keen to hear about any customizing of the design which you have performed. Again, happy tourneying!

If you have any questions or comments, or if you would like to know more about our products, feel free to call us at (916) 922-5501 or write us at **Dragonwing**, **P. O. Box 13322,Sacramento CA 95813-3322.** If we're not in, we'll have a voice-mail/fax machine ready to take your message.

Contents ©1990, 1997, 2000 by Dragonwing