Slalom Tips for New Racers*

*Designed for paddlers with prior river-running experience in recreational WW canoes and kayaks who are new to slalom.

Slalom Basics:

- In WW slalom, competitors navigate their canoe or kayak in sequential order through 18-24 gates as they work their way through approximately 300 meters of whitewater rapids in the fastest time possible.

- Green gates are negotiated heading downstream, while red gates, typically hung in eddies, require the paddler to pass through them heading upstream.

- Hitting one of the hanging gates or missing one completely results in time penalties which are added to the paddler's time at the end of his or her run.

- A 2-second penalty is given for each gate touched by a decked boat (a 10-second penalty per touched gate is given for open canoes), and if the gate is missed completely or negotiated traveling in the wrong direction, there is a 50-second penalty.

- Slalom competition is divided into categories by type of craft, as well as by gender and by age. (See the Registration form for more information on slalom race categories and boat dimensional requirements.)

Race Preparation:

Just as an experienced river-runner would not fail to scout a new and difficult rapid, slalom competitors find it essential to scout each race course thoroughly. Here are a few tips in preparing for your first run:

- Walk the length of the course and memorize the entire sequence of gates.

- Identify features of the rapid that will impact your negotiation of the course (e.g. a smooth glassy wave next to an upstream gate that will enable an easy ferry to the next gate or the slack water below the hole that will cause your bow to veer off course unless you counteract its effect).

- Plan the precise line of your descent from gate to gate. Perennial U.S. National & World Cup K-1 Champion Scott Shipley advises competitors to scout a slalom course starting at the finish and working back to the start. As he explains, your ultimate goal is to cross the finish in the fastest way possible, so it is easiest to see the best line for achieving this goal if you start at the finish and work backwards. However, no matter how you scout the course, the underlying question is always the same, “what line do I take to move as quickly as possible to the finish?”

- Develop a “Plan B,” for what you’ll do if your initial plan doesn’t work. Like in river-running, this includes knowing the location of the nearest eddy to duck into should the run really blow-up on you. However, during practice it might also include alternate lines that you could try on your next run. Sometimes a quickly implemented “Plan B” can actually save a blown move (e.g. a couple of quick back ferry strokes might allow you to side slip enough to catch a gate that you were going to miss; a quick spin in a nearby eddy might make it easier to reverse direction toward a difficult gate offset in the opposite direction).

- Warming-up before practice and before your race runs is a good idea. Whole chapters have been written on warm-up techniques and each racer seems to have a different preference. I won’t bore you with them here.
Slalom Strategy & Tactics:

- Run each gate on a line that sets you up to negotiate the next. Often this means that you are turning above one gate, in order to negotiate it already heading with momentum toward the next one (see Fig. 1). The need for this anticipation increases as current speed increases, as distance between gates decreases, and/or as gates are offset further from a straight-line path down the rapid.

- **Paddling on the fastest line** through the gates is more important than paddling hard or maintaining a high stroke rate.

- **Maximizing the efficiency and effectiveness of each stroke** in moving you along the fastest line through the gates is more important than paddling hard or maintaining a high stroke rate.

- One way that racers maximize efficiency is to keep their paddle shafts close to vertical during forward strokes, ensuring that the active blade is directly alongside the boat, not angled away from the boat in a semi-sweep position. This position also helps to minimize pole touches when paddling through gates.

- When paddling in a gate, reach through the gate and plant your blade beyond the poles in order to pull you past them.

- If you have a choice, **use strokes that keep you moving toward the finish** (e.g. in most situations a sweep stroke is better for small course corrections than a draw as it maintains more forward momentum; similarly, a draw is usually better than a reverse sweep).

- **Use the water as much as possible** to move on the fastest line down the course. Sometimes the fastest line runs counter to the current, but more often than not, you should “go with the flow.”

- The “fastest line” through a section of gates is not always the straightest or shortest path. If one or two strokes off the shortest or straightest path puts you in faster current or avoids having to punch through a hole, it is likely to be faster. For a corollary of this tactic see “Upstream Gates” below.

- **Maintain momentum!**

- **Upstream gates** are where you lose the most time because you’re no longer in downstream current heading toward the finish. Thus, upstream gates are the most important gates to do well. Following are some tips for negotiating them:
  - The racer’s adage for upstream gates is “**slow in, fast out.**” Your primary goal is to exit the gate quickly, and thus getting your boat to the optimal position for a “fast out” is critical, and may be worth taking just a little extra time in achieving.
  - For the “classic” upstream involving entry and exit from the same side, the optimal position for a fast exit is typically with the paddler’s body just below the outside pole (opposite the side of entry & exit) and the bow pointing up through the gate angled back toward the current (see Fig. 2 on next page). This is the position that former U.S. slalom coach Bill Endicott called “the pocket.” As Scott Shipley observes, from this position you should be able to reach up through the gate, take a hard forward sweep to pull the boat up...
between the poles far enough to then reach past and around the inside pole and plant a duffek in the downstream current. This is the “fast out.”

- The biggest challenge is efficiently getting the boat into “the pocket.” This is the “slow in” portion of the adage, a corollary of the previous observation that the fastest line is not always the shortest or straightest path. The shortest & straightest path (see dotted outlines in Fig. 3) results in entry into the eddy pointing primarily downstream close to the inside pole, which requires that the paddler change momentum 180 degrees prior to exiting and also makes it difficult to drive deep into the eddy to find the pocket for a fast out. Ideally you want to approach the upstream gate charging hard sideways so that you only need to change your momentum about 90 degrees and have a good angle to drive deep into the eddy and into the pocket. This typically means taking a longer, slower path that starts above and well to the side of the eddy and then arcs into the eddy by keeping the bow pointed toward the inside pole as you descend toward the gate (see solid outlines in Fig. 3). While the arc starts with the bow angled only slightly, as the bow descends downstream the bow arcs more and more until, when it crosses the gate line, it is pointed almost dead sideways. If this is done with enough speed and a well placed duffek, the bow will drive well past the inside pole before carving up into the gate and turning back toward the current, with the body and center of the boat slipping into the pocket with enough momentum to be moving upstream between the poles ready for a “fast out.”

- This slalom event has “open practice,” allowing you can take an unlimited number of practice runs down the course in the time available. Take advantage of this opportunity to develop and advance your skills. Try alternate lines at points on the course where you aren’t happy with your performance. Stop and watch other boaters run the same section; they may be trying a different line that you hadn’t thought of. Although you don’t want to interrupt another boater in the midst of a practice run, if approached at a convenient time, most racers will be happy to discuss how they do a particular move and even offer suggestions for you to consider.

- After you have completed your practices runs, tested your planned line through the course and any appealing alternatives, and are satisfied that you’re ready for the race - close your eyes and run through the course in your mind a couple more times. Try to mentally envision each stroke you take, the angle of your boat in each gate, and other details of your optimum or “ultimate” run. Focus on picturing success, not potential problems, but, if such worries keep intruding, stop and think of what you would due to avoid them or how you would successfully resolve them if they occur, and then return to visualizing a successful run.

- Keep in mind that paddlers can have a wide range of goals in slalom. This is particularly true with paddlers new to the sport. I usually think of it as an expandable continuum of potential goals:
  1. Have fun!.
  2. Develop your boat control skills.
  3. Avoid swimming.
4. Stay upright.
5. Try for and make some of the gates.
6. Try for and make most of the gates.
7. Try for all of the gates.
8. Make all of the gates.
9. Make all of the gates while touching only some of them.
10. Make all the gates while touching only a few of them.
11. Make all the gates clean (without touching any of them)!
12. Make all the gates fast and clean!!

Most paddlers new to slalom struggle with achieving the first few goals for several races before moving on. During this initial phase, it is common and perfectly acceptable to decide that certain gates are NOT part of your course and to not even attempt them. Past racers at the Esopus slalom have included paddlers who’ve gone on to be U.S. and Olympic Team members and even National and World Champions. Who knows, perhaps you’ll have to expand your continuum of potential goals to include these!

Some Finer Points of Slalom Rules:

- Only one penalty is assessed per gate for each paddler’s run down the course. After receiving a penalty for touching a gate, a paddler doesn’t receive a second penalty either for touching the same gate again or for touching both poles of the same gate. Also, for each gate you receive either no penalty (“clean”), a penalty for touching the gate, or a penalty for missing the gate. Touching the gate and failing to go through it doesn’t result in a combined penalty; the 50-second penalty for missing the gate overrides the touch penalty.
- Paddlers can “sneak” the ends of their boat underneath one or both of the poles without incurring a penalty.
- A paddler successfully negotiates a gate, with or without a penalty for touching it, when both his or her head and a portion of the boat pass through the gate (between the poles) at the same time traveling in the correct direction. You sometimes see paddlers contort their heads and bodies in truly astonishing and marvelous ways in order to comply with this requirement. The orientation of the boat (bow first, stern first, or sideways) when negotiating a gate has no impact on penalties.
- If you’re in a decked boat, merely touching a gate out of sequence (touching gate 5 on your way to gate 4) results in you receiving a 50-second penalty for any preceding gate that you’ve not already negotiated. In open boat the same action results in your being assessed a minimum of a 10-second penalty for touching gate 5, but you are still allowed to negotiate gate 4 before returning to negotiate gate 5. However, in both decked and open boats, actually negotiating any gate out of sequence (i.e. having your head pass between the poles) results in receiving a 50-second penalty for any preceding gate that you’ve not already negotiated.
- Paddler’s must be in their boat and their head must be out-of-the water during the entire time they are negotiating a gate (when their head is passing between the poles) and when they cross the finish line. Paddlers may roll their boat if they capsize, but must have their head out of the water when it passes through the gate or else they receive a 50-second penalty for a missed gate. Crossing the finish line while upside down (i.e. head under water, results in a DNF (Did Not Finish). Any paddler who leaves his or her boat at any point during a run (e.g. swims or gets out on shore to empty a boat) or who receives assistance from another person (e.g. help refitting a spray skirt or bailing an open canoe) also receives a DNF for that run.
- A gate judge must actually sees the competitor’s boat, paddle or body touch a pole during negotiation of the gate in order to assess penalty points for a touch. Poles can be moved merely by the wind or splashing water. When uncertainty about a penalty exists, the benefit of the doubt is always given to the paddler.
- For safety, competitors are required to remain in their boats near the finish line after finishing their race runs in order to serve as safety boats for at least the next two racers descending the course behind them.

**Illustrations from “To Win the Worlds” and “The Ultimate Run,” both by legendary U.S. Team Coach William T. Endicott.**