## Fleet race boat rotations

## Taken from the "Race Management Handbook", © 2001, US SAILING Chapter 5; 5.2, 5.3

## "Follow the leader" rotations

"Follow the leader" rotations can be used with any number of entries, odd or even. Their advantages are that they are easy for crews to remember, and are easily adaptable when established in advance, if fewer crews than expected appear for the regatta.

The drawbacks to "follow-the-leader" rotations are that: (1) each crew to use a boat always follows the same crew which has previously used the boat, so it is easy for one crew to affect another's standing; and (2) they require a larger number of time-consuming landings and exchanges, either on the exchange boat or ashore.

Each crew draws a boat number for the first race, and thereafter sails the next highest (or lowest) number each succeeding race (there is no magic to use of a higher-numbered or lower numbered method, only personal preference).

A simple "follow the leader" rotation (sailing a higher numbered boat) is shown in Table 5.1.

## How to exchange boats

To exchange boats after the first race

## TABLE 5.1

1. The crew of Boat \#1 (Crew A) gets off on a well fendered exchange boat, and Boat \#1 is sailed away by a non-competitor. The crew of Boat \#2 (Crew B) then gets off on the exchange boat, and the former crew of Boat \#1 takes Boat \#2 for the next race. Similarly, the former crew of Boat \#3 (Crew C) takes Boat \#4, etc., until finally Boat \#1 is sailed back to the exchange boat for the last crew (Crew E).

| "Follow the Leader" Rotation |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fleet Racing Series |  |  |  |  |  |
| 6 Crews, 6 Boats, 5 Races |  |  |  |  |  |

2. To prevent Crew $A$ from having a big time advantage in preparing for subsequent races, Boat \#1 (rather than Crew A) should always be called first to the exchange boat
3. Should one or more boats not sail the entire series, a new rotation is easy to make. If all crew listed start the first race, the rotation should not be changed.

## "Direct swap" rotations

Whenever entries total an even number, the "direct swap" system lessens the time for boat exchanges by having pairs of crews change boats simultaneously. The number of races in which each crew follows the same crew is also markedly reduced. For odd numbers of entries, use the "follow-the-leader" method.

This section discusses the method of creating "direct swap" boat rotations. The tables contained here are designed for fleet-race competition (approximately $90 \%$ of all intercollegiate racing is currently fleet racing).'

While they are adaptable to team racing, most regatta organizers use the Hinman Championship style rotations which have been developed (see Tables in "Team racing rotations and boat pairings").

To create a table (5.2) of boat rotation for an even number of crews:

1. Down the vertical column for the first race, list boat numbers in ascending order.
2. For the first horizontal row, list boats in ascending order.
3. For the second horizontal row, list boats in descending order.
4. For the remaining horizontal rows, list boats alternately in ascending and descending order.

TABLE 5.2

| Fleet Race |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Swap Rotation |  |  |  |  |  |  |
| Race | 1 | 2 | 3 | 4 | 5 | 6 |
| Crew | Boat |  |  |  |  |  |
| A | 1 | 2 | 3 | 4 | 5 | 6 |
| B | 2 | 1 | 6 | 5 | 4 | 3 |
| C | 3 | 4 | 5 | 6 | 1 | 5 |
| D | 4 | 3 | 2 | 1 | 6 | 5 |
| E | 5 | 6 | 1 | 2 | 3 | 4 |
| F | 6 | 5 | 4 | 3 | 2 | 1 |

For example, Table 5.2 shows a direct swap rotation for six entries. If you have one fewer boats than the number of crews, you may still use the direct-swap format. Each crew sits out one race. An example is shown in Table 5.3. The same concept applies where there are ten crews, but only 8 boats. Each crew sits out 2 races.

Byes can be used in either direct swap or follow-the-leader rotations. If there is to be more than one bye, they should be staggered through the rotation so that one team or crew does not have consecutive byes.

TABLE 5.3
Fleet Race
Direct Swap Rotation
10 Crews, 9 Boats, 10 Races

| Race: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Crew: | Boat |  |  |  |  |  |  |  |  |  |
| A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | X |
| B | 2 | 1 | X | 9 | 8 | 7 | 6 | 5 | 4 | 3 |
| C | 3 | 4 | 5 | 6 | 7 | 8 | 9 | X | 1 | 2 |
| D | 4 | 3 | 2 | 1 | X | 9 | 8 | 7 | 6 | 5 |
| E | 5 | 6 | 7 | 8 | 9 | X | 1 | 2 | 3 | 4 |
| F | 6 | 5 | 4 | 3 | 2 | 1 | X | 9 | 8 | 7 |
| G | 7 | 8 | 9 | X | 1 | 2 | 3 | 4 | 5 | 6 |
| H | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | X | 9 |
| I | 9 | X | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| J | X | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

