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The "720" Penalty: Why It Should NOT Be Adopted

Its 10 clauses say: A yacht that infringes any Rule of NAYRU's Part IV (Sailing Rules When Yachts Meet) may "exonerate" herself by sailing two complete circles (720 degrees). If the infringement occurs before the starting gun, the 720 shall be made after the starting signal but before crossing the line. If the infringement occurs after the starting signal, the 720 shall be made "at the first reasonable opportunity". A yacht doing a 720 shall keep clear of all other yachts. Failure to sail a 720 shall leave an infringing yacht subject to Disqualification.

Its drawbacks:

1. When a 720 is NOT performed promptly, an infringing yacht is still subject to the 100% penalty of Disqualification.
2. The 720 is much too light a penalty for severe fouls, or for fouls in which the infringing yacht makes a big gain (such as illegally cutting inside of several overlapped boats at a leeward mark, or at a windward mark tacking too close to the leader of a string of starboard-tack boats.)
3. In general, the 720 (when performed) is too severe a penalty for most fouls before approaching the starting line to start, and too light a penalty for most fouls around the course.
4. And the 720 can actually be "no penalty at all" at the finish -- for a boat that fouls can do its 720 and still win the race!
5. Conversely, the 720 can sometimes be more of a penalty than intended, as when many boats are closely bunched ahead of a 720-boat at the finish.
6. Of most serious consequence, however, is the fact that the 720 actually promotes a risky maneuver in heavy weather -- two consecutive jibes, often in close proximity to other boats. (Imagine the 720 in effect for inexperienced sailors in capsizable centerboard boats in a fresh breeze; or for cruising boats running with spinnakers in heavy weather.)

Race Committees and Protest Committees may be inclined to favor the 720 for its "simplicity". But the overwhelming arguments AGAINST the 720 (above) are in the best interests of the majority of sailors -- and what's best for the SAILORS should prevail.

Theoretically, there are just three ways to penalize boats that foul: (a) Distance. (b) Time. (c) Finishing Place. Since distance and time have variable effects (or no effect) on a boat's score in different races, the logical way to apply a penalty is to adjust the Finishing Place -- and to have graduated penalties that "make the penalty fit the crime".

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GRADUATED PENALTIES

(An updating of the article on "Fair Fouls" in the May 1972 issue of SAIL)

1. In fleet racing, a yacht that infringes any Rule of MARIU's Part IV (Sailing Rules When Yachts Meet) shall have her Finishing Place penalized by one of the following percents, depending on how the infringement affected the innocent yacht (or yachts).
 - a. Two (or more) positions gained by the infringing yacht..... 50%
 - b. One position gained by the infringing yacht..... 30%
 - c. No position gained by the infringing yacht..... 10%
2. In general, the only fact to be determined is whether the infringing yacht was clear ahead or clear astern of the innocent yacht at the end of the overlap, or whether the infringing yacht gained two positions or one position or no position within the immediate vicinity of the infringement. Specifically, the Penalty Percents are:
 - a. Touching a mark, if a rerounding was not performed in accordance with the "however" clause of Rule 52; or if that clause is suspended by the Sailing Instructions..... 30%
 - b. Infringement of Rule 42-1-(e), the "anti-barging" rule..... 50%
(But if the barging yacht's bow was at any time ahead of the bow of the adjacent leeward yacht during that overlap, then an extra 10% shall be added to the barging yacht's Penalty Percent.)
 - c. Infringement of Rule 37-1 (Windward Yacht Keep Clear) if, while approaching the starting line to start and the true wind for the proper course to the 1st mark is forward of abeam, the bow of the windward yacht was at any time ahead of the bow of the leeward yacht during that overlap..... 50%
 - d. Infringement of Rule 36 (Port-tack Yacht Keep Clear) if, while approaching the starting line to start or on any windward leg, the starboard-tack yacht is forced to tack to avoid collision, or because of collision..... 50%
 - e. If the innocent yacht is scored as DNS or DNF because of collision damage or collision injury to personnel..... 100%
3. In addition, certain infringements are assigned specific Penalty Percents, as follows:
 - a. Touching a mark, if a rerounding was not performed in accordance with the "however" clause of Rule 52; or if that clause is suspended by the Sailing Instructions..... 30%
 - b. Infringement of Rule 42-1-(e), the "anti-barging" rule..... 50%
(But if the barging yacht's bow was at any time ahead of the bow of the adjacent leeward yacht during that overlap, then an extra 10% shall be added to the barging yacht's Penalty Percent.)
 - c. Infringement of Rule 37-1 (Windward Yacht Keep Clear) if, while approaching the starting line to start and the true wind for the proper course to the 1st mark is forward of abeam, the bow of the windward yacht was at any time ahead of the bow of the leeward yacht during that overlap..... 50%
 - d. Infringement of Rule 36 (Port-tack Yacht Keep Clear) if, while approaching the starting line to start or on any windward leg, the starboard-tack yacht is forced to tack to avoid collision, or because of collision..... 50%
 - e. If the innocent yacht is scored as DNS or DNF because of collision damage or collision injury to personnel..... 100%
4. If there is doubt as to which Penalty Percent to apply, the more severe penalty shall be chosen.
5. A yacht that infringes a Rule may continue racing and complete the course.
6. The Penalty Percent for an infringement shall be applied against the number of finishing places between the infringing yacht's finish and the place for DSQ (one place worse than the number of starters).

7. The resulting figure is the number of Penalty Places to be added to the infringing yacht's finishing place, thus obtaining her Adjusted Finish.
8. In calculating the number of Penalty Places: (a) the minimum penalty shall be one place; (b) decimal parts of places shall be rounded off to the nearest whole number; (c) .5 shall be counted as a full Penalty Place.
9. The assignment of Adjusted Finishes shall not affect the finishing places of other yachts. Two yachts may thus receive the same score. (But if prizes are awarded for a single race, a tie shall be broken in favor of the yacht with the fewer penalties in that race.)
10. A yacht infringing more than once in the same race shall have her Penalty Percents totalled (but not exceeding 100%) before calculation of her Penalty Places and Adjusted Finish.
11. If an infringement occurs between yachts of different fleets, the protest rules and/or penalties of the infringing yacht's fleet shall govern.

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An example of the Adjusted-Finish calculation:

In a 20-boat race, the 2nd-place finisher committed an infringement that caused the innocent yacht to lose one position. When the 30% penalty was applied against the 19 places between 2nd and 21st (for DSQ), the infringing yacht was scored as if finishing in 8th place. ($30\% \text{ of } 19 = .3 \times 19 = 5.7 = 6$ Penalty Places which, when added to 2nd place, gave an Adjusted Finish of 8th place.)

Examples of the Penalty Percents that would apply:

a. Before starting--

- (1) Before heading for the line to start, all infringements (except 3-e) would be 10%, because no position in the race would actually be lost by an innocent yacht.
- (2) While heading for the line to start, the effect of an infringement on the innocent yacht MUST be considered. Note that an infringing windward yacht can avoid the 50% penalty of 3-c by dropping clear astern of the leeward yacht -- in which case the 10% penalty of 2-c would apply.
- (3) "Barging", however, is so relatively detrimental to ALL other yachts in the race that the barging penalty must ALWAYS be no less than 50% -- and it can jump to 60%, depending on the relative positions of the barger and the adjacent leeward yacht.

b. On windward legs--

- (1) If a port-tack yacht infringed while crossing ahead of a starboard-tack yacht, or by tacking too close in front, the penalty would be 30%, because the innocent yacht lost one position.
- (2) However, if a port-tack yacht infringed by tacking too close under the lee bow of a starboard-tack yacht, the infringing yacht could avoid the 30% penalty of 2-b by dropping clear astern of the innocent yacht-- in which case the 10% penalty of 2-c would apply.

- c. On free legs--
(1) Section 2 would govern, and the applicable Penalty Percent would be self-evident.
- d. At windward marks--
(1) If a lone starboard-tack yacht was infringed against by a port-tack yacht that came about and completed her tack within two lengths of the mark, the penalty would be 30%, because the infringing yacht gained one position.
(2) However, if that infringing port-tack yacht had gained TWO (or more) positions by NOT going under the sterns of two or more starboard-tack yachts, the penalty would be 50%, in accordance with the wording of 2-a.
- e. At other marks--
(1) If an inside yacht infringed against a lone outside yacht, the infringing yacht could avoid the 30% penalty of 2-b by dropping clear astern of the innocent yacht -- in which case the 10% penalty of 2-c would apply.
(2) However, if an infringing inside yacht gained two or more positions, the penalty would be 50%, in accordance with the wording of 2-a.
- f. Conclusions concerning these examples--
(1) Infringing yachts are encouraged to get out of the way of innocent yachts.
(2) Choosing the applicable Penalty Percent is easy.
(3) And even if there should be a "miscarriage of justice" in choosing the Penalty Percent, the maximum error could be only 20% -- as compared with the rigid 100% of a DSQ.

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It is hoped that this system of Graduated Penalties--

Will help sailors "make the penalty fit the crime"....

Will get infringing yachts out of the way QUICKLY....

Will encourage more skippers to ADMIT their infringements
WITHOUT going to protest hearings.

May 16

Dear Sandy,

Can you get some of your
fleets to give this system of
Graduated Penalties a TRIAL
this summer?

If so, NAYRU will then
WELCOME a report of such
trial early in September
(along with reports on the
"720" and the "20%" from
OTHER classes).

In the meanwhile, I'd
appreciate hearing your
comments, criticisms,
suggestions for improvements,
etc.

Yours for
better racing--

Bill