# Other Class Rules (similar vintage boats, but not a complete comparison)

## Lightning Class Rules: Article VIII – Race Restrictions

PORTABLE EQUIPMENT

a) Mandatory

ii) Compass

- b) Optional
  - i) Electronic Equipment the following electronic devices are allowed aboard a Lightning:
  - 1) Battery-powered wrist watches
  - 2) An electronic digital compass with chronograph (timer and/or clock). The compass must be entirely self-contained with either an internal battery and/or solar power. The compass shall have no external connection and shall neither provide wind or boat speed nor compute correlations between time and distance.
  - 3) Other hand-held navigational devices. Use while racing is not permitted except for emergencies.
  - 4) Hand-held communication devices (cell phones, pagers, radios, etc.) with the following restrictions:
    - A) For all sanctioned regattas, use is not permitted on the water except for emergencies. This restriction may be modified to allow communication from the Race Committee to competitors on a predetermined channel if approved by the ILCA Executive Committee and so stated in both the Notice of Race and the Sailing Instructions.
    - B) For non-sanctioned regattas use is not permitted while racing except for emergencies. This restriction may be modified to allow communication from the Race Committee to competitors on a predetermined channel if so stated in both the Notice of Race and the Sailing Instructions.

### From Flying Scot Rules: Articles S-V Racing Restrictions

7. Except for compasses and timers, electronic devices which are used as an aid to the boat's performance shall not be operated or used while racing. This includes but is not limited to the following: VHF Radios, CB Radios, Cell Phones, GPS, PC Lap Top, compasses that calculate lifts and headers.

## How do Tactical Compasses work?:

When beating to the wind, top racers know to look for wind shifts and use them to their advantage. Some manufacturers provide "memory arrows" on the compass, but the basic adage is:

٠	Starboard:	Tack on –	(decreasing numbers)
٠	Port:	Tack on +	(increasing numbers)

Both analogue and digital tactical compasses provide "the same number" on both port and starboard tacks to allow quicker interpretation of the wind. The Plastimo Contest Tactical 101 and the Tacktick T061 Micro both provide this function. A good comparison is described by Tacktick in their user manual:

"The Tactical mode is for use when beating (tacking up-wind). With a conventional tactical compass, which has port tack and starboard tack lubber lines, you are able to read the same number on either tack. In the same way, with **Micro Compass** the port and starboard displays show the heading with an offset applied (just like reading from offset lubber lines), so that you can read the same number on either tack. **Micro Compass** adds half the tack angle to the starboard display, and subtracts half the tack angle from the port display, so that you are always looking at the same number, whichever tack you are on. Now you decide whether the wind is backing or veering, and thus when to tack."

Article on how to use tactical compasses – both analogue and digital varieties. http://www.roostersailing.com/articles/compass\_article.htm

## **Cost Comparison:**

TACKTICK Solar-Powered Micro Compass System; Manuf. # T060 \$459.00 (APS Ltd) Bracket and cover are included (T061 slight more expensive velcro mount ~\$500.00)

Plastimo Contest 101 Tactical Compass Product ID: 9313 \$273.00 (APS Ltd) Brackets & covers not included (~\$30)....non-tactical Contest 101 slightly cheaper (\$252)

Both products can be found cheaper on the web. I thought I'd keep the price comparison similar

#### Possibly ideas from ISAF for simple rules that they could foresee.

#### **Option 1.1**

Digital devices shall be prohibited unless they display only time information.

#### **Option 1.2**

Digital compasses and/or devices displaying heading and time are permitted, provided they do not have directional memory features.

#### **Option 2.1**

Digital compasses and/or devices, which offer functions not exceeding timing, heading and directional memory, which may include a user programmed reference heading, are permitted.

#### **Option 2.2**

Electronic digital compasses with a chronograph (timer and/or clock). The compass must be entirely selfcontained with either an internal battery and/or solar power. The compass shall have no external connections. It shall not have the ability to compute correlations between time, compass and VMG.