



Vic-Maui Race Communications

October 16, 2021

Race Communications – Selected Equipment

Reference OSR Cat 1, NoR, NoR Appendix A

- VHF – 25W fixed, DSC: MMSI & GPS, masthead antenna
- VHF – handheld (recommend DSC: MMSI)
- Satellite telephone – handheld, waterproof/case, internal battery
- Either:
 - Marine SSB transceiver – HF & MF, DSC: MMSI & GPS
--- OR ---
 - Satellite communications
 - 2 devices (includes the satellite telephone above)
 - with contiguous coverage over race area (approved: Inmarsat, Iridium)
 - at least 1 must be “charged and ready to receive voice calls at all times”

Race Communications – Selected Capabilities & Other Equipment

Reference OSR Cat 1, NoR, NoR Appendix A

- Email, bi-directional, low bandwidth, from anywhere on the course
- Email test with RC before start
- AIS transceiver for boat, AIS-MOB for each crew member
 - Compatibility, capabilities & limitations
- Transponder (YB Tracking – Iridium)
 - For race, supplied and installed by RC, included in race entry fee
 - For return delivery, available by advance reservation, extra charge

Race Communications – Content and Methods

Reference Racing Rules of Sailing; RRS 41, RRS cases, NoR

- Communications content permitted:
 - Communications necessary to comply with race requirements
 - Personal messages, not related to performance
 - Obtaining weather information and fleet position information, providing it is public and available without charge
- Communications content not permitted:
 - The transmission or receipt while racing of any communication for the benefit ... of an individual boat or group of boats ...
 - Fee-for-service weather information
 - Routing information or advice
- Communications methods are permissive, and may have costs
 - VHF, SSB, Satcom, Voice, Data, Messenger Pigeon, ...

Race Communications – NtC: Communications Information

- Reference Notice of Race (NoR) & Notice to Competitors (NtC):
Communications Information
- Published in June 2020
(see [2018 NtC 7 - Communications Information](#)
on the [Official Notice Board](#) as an interim reference)
- Emergency communications
- Daily roll call – report position & conditions by email to RC, receive notices
- Communications listening watch – for mutual safety
- Finish communications
- Weather information
- Fleet position information
- Communications directory
- ... and more

SSB Radio

- ▶ Marine SSB radio, MF & HF, DSC: MMSI & GPS

- ▶ Antenna

- ▶ RF ground

- ▶ Automatic antenna tuner

- ▶ Data modem

- ▶ Computer & software

- ▶ Installation:
see Farallon white paper at
<http://www.farallon.us/webstore/Pcup%20SSB.pdf>



Satellite Communications

- ▶ Networks:
Inmarsat, Iridium, (Globalstar)
- ▶ Satellite phone or
satellite messaging/data device
- ▶ Installation
 - ▶ cradle
 - ▶ charging/power connection
 - ▶ data connection
 - ▶ external antenna connection
- ▶ Computer & software:
laptop, tablet, smartphone, ...



Race Communications – Tradeoffs: SSB vs Satphone

	Marine SSB	Satphone (typical)
Voice communications service costs (typical)	Free	\$1-2 per minute
Data communications service costs (typical)	\$275 per year (Sailmail) Free (Ham / Amateur)	\$xxx per Kb / Mb - packages \$150+ per month “unlimited” *
Broadcast communications to all boats in the area	Yes	No
Ability to call a specific boat	Yes	Yes
Distress alerting capability	All stations in range Voice and DSC broadcast	Phone call to a known station SOS alert to a commercial call centre
Ease of use	Technical / Harder	Familiar / Easier