



# ***Whitsunday Cruise 2022 Communications***

***May 2022 – November 2022***

# Agenda

Rendezvous	9:00 – 9:30
Navigation	9:30 – 10:30
Coffee Break and Discussion	10:30 – 11:00
Engine and Electrical	11:00 – 11:30
<b>Communications</b>	<b>11:30 – 12:00</b>
Provisioning, Hunting and Gathering	12:00 – 12:20
Seamanship	12:20 – 12:40
Panel Q&A and lunch	12:40 – 1:00

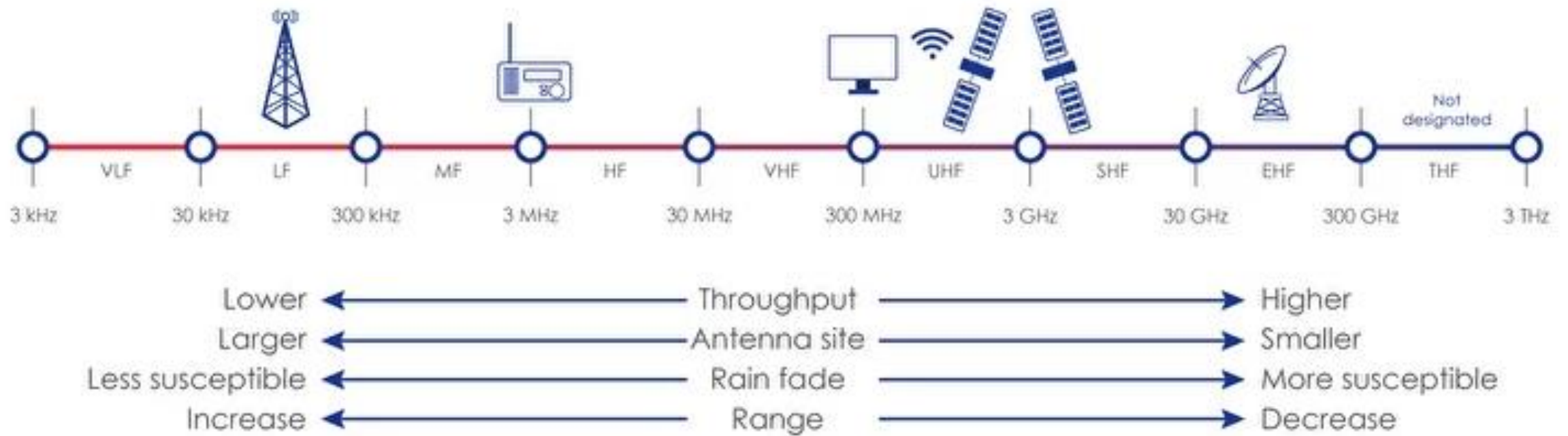


# Communications

- Proper communications are simply a necessity
  - Logging in with VMR for safety reasons
  - Communication between vessels when underway
  - Receipt of weather and other critical information
  - Making marina and airline bookings
  - Checking in with home
  - Communication with marine traffic control when entering controlled areas
  - Emergency communications
- Communications will use a mixture of technologies
  - VHF voice communications
  - AIS via VHF transceiver
  - VHF Digital Selective Calling
  - Internet
  - Mobile phone voice & SMS



# Communications



HF Radio

Cellular

VHF Radio

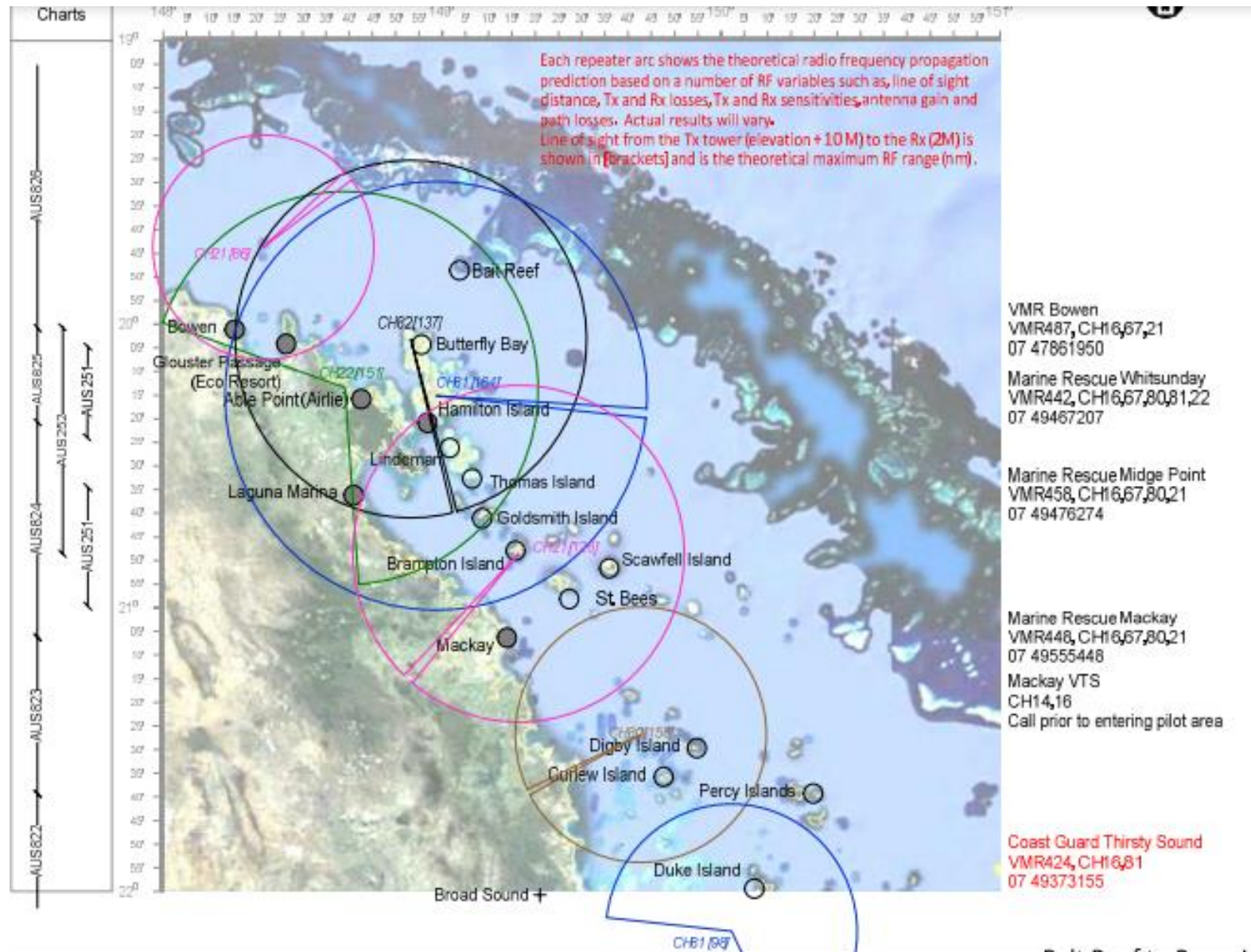
Satellite

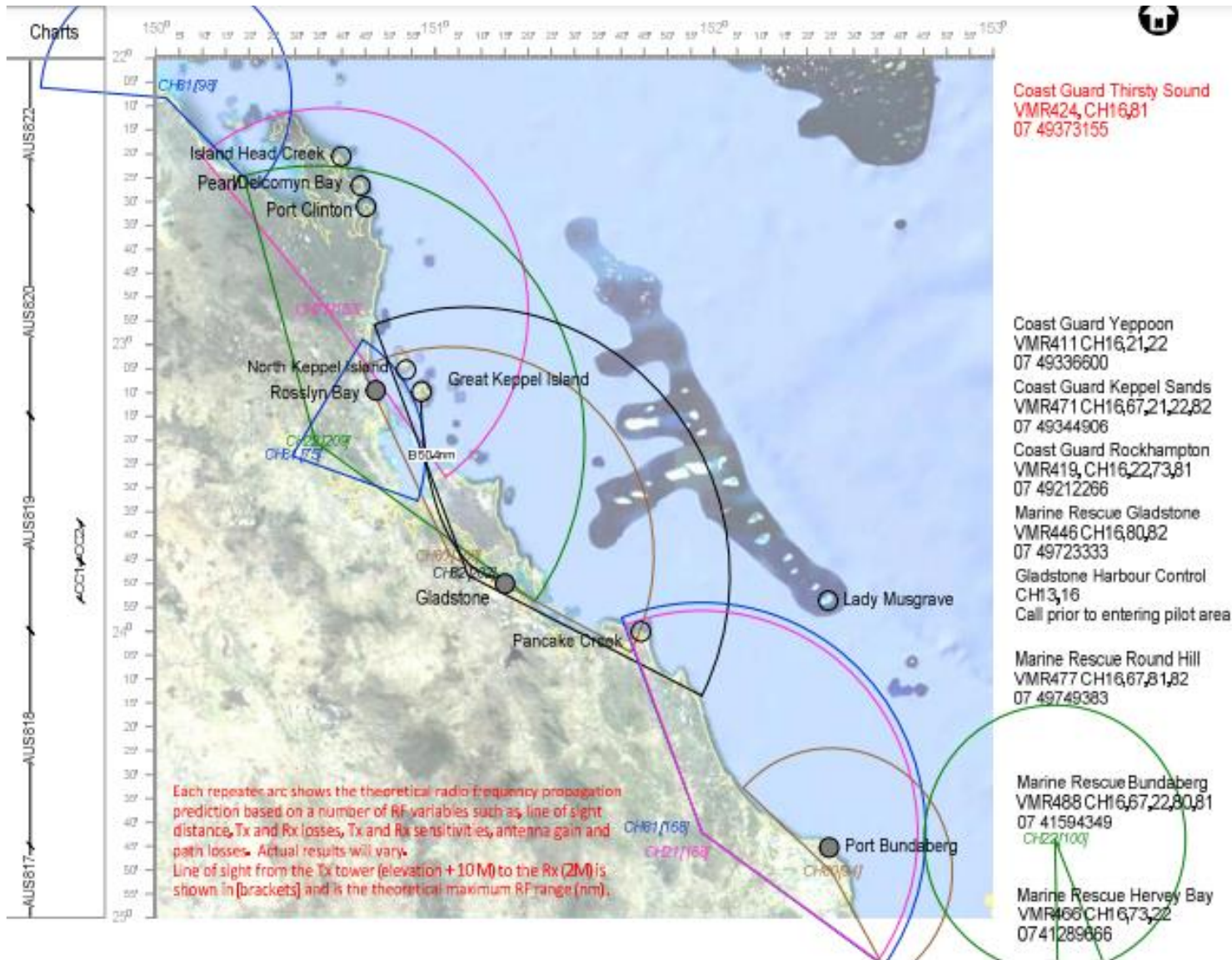
# Communications – VHF Radio

- Know your radio
  - Standard channels – 16, 77, 81, 82, 86
  - VMR Channels up the coast
  - Dual watch
  - Volume and squelch
  - Power selector
  - Line of sight operation
  - Helm handset
  - Handheld radios
  - DSC Emergency signal
  - DSC callup



# VHF Coverage





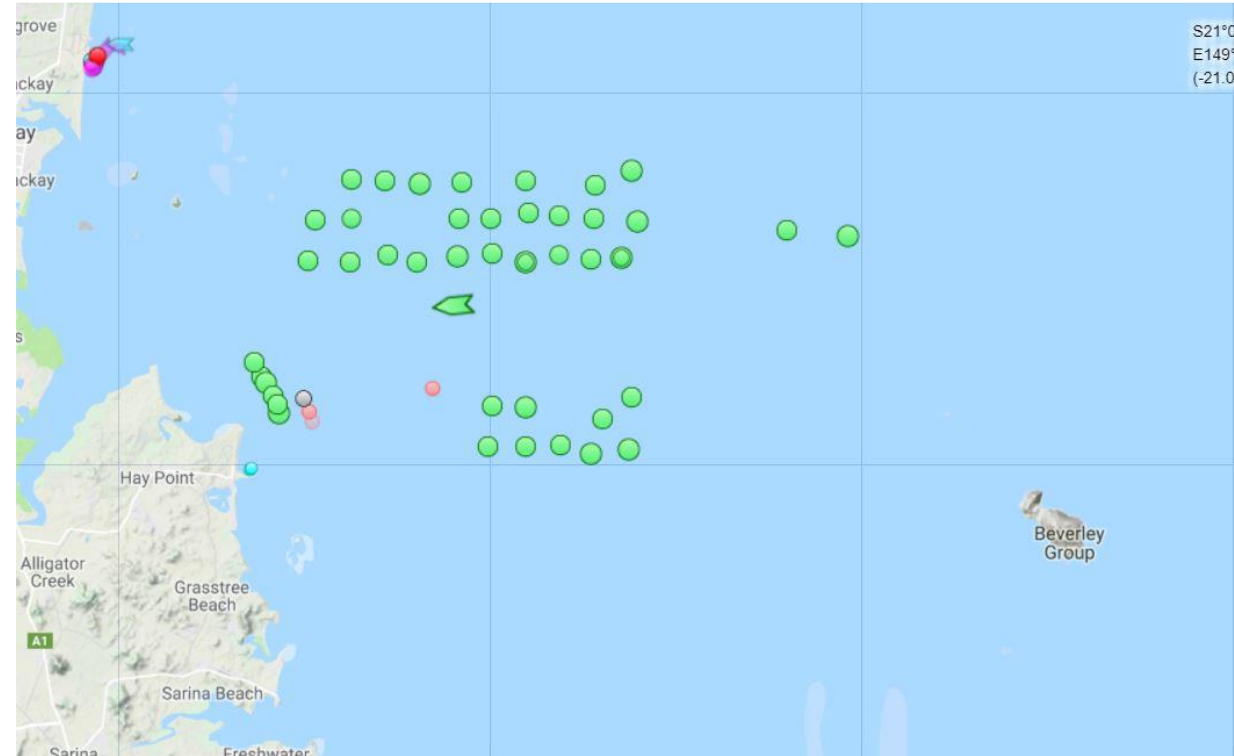
Marine Rescue Bundaberg also maintains a register of vessels visiting Lady Musgrave



# Communications – AIS

- Automatic Identification System
  - Required equipment for the 2022 cruise
  - Uses VHF signal (can use independent aerial or share main VHF aerial)
  - Provides name, position, speed and course details
  - Calculates collision info

REMEMBER – Only shows boats transmitting AIS signal

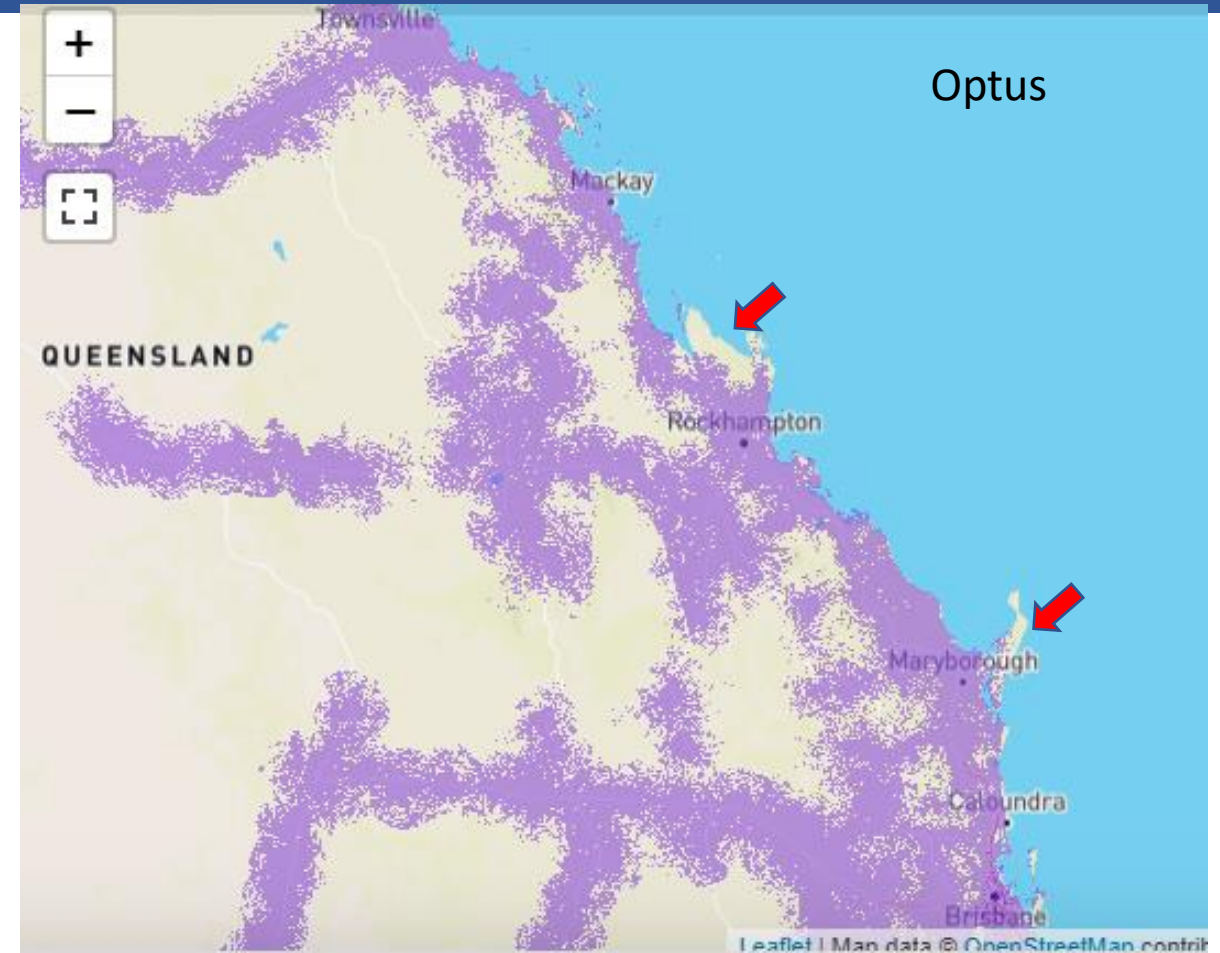
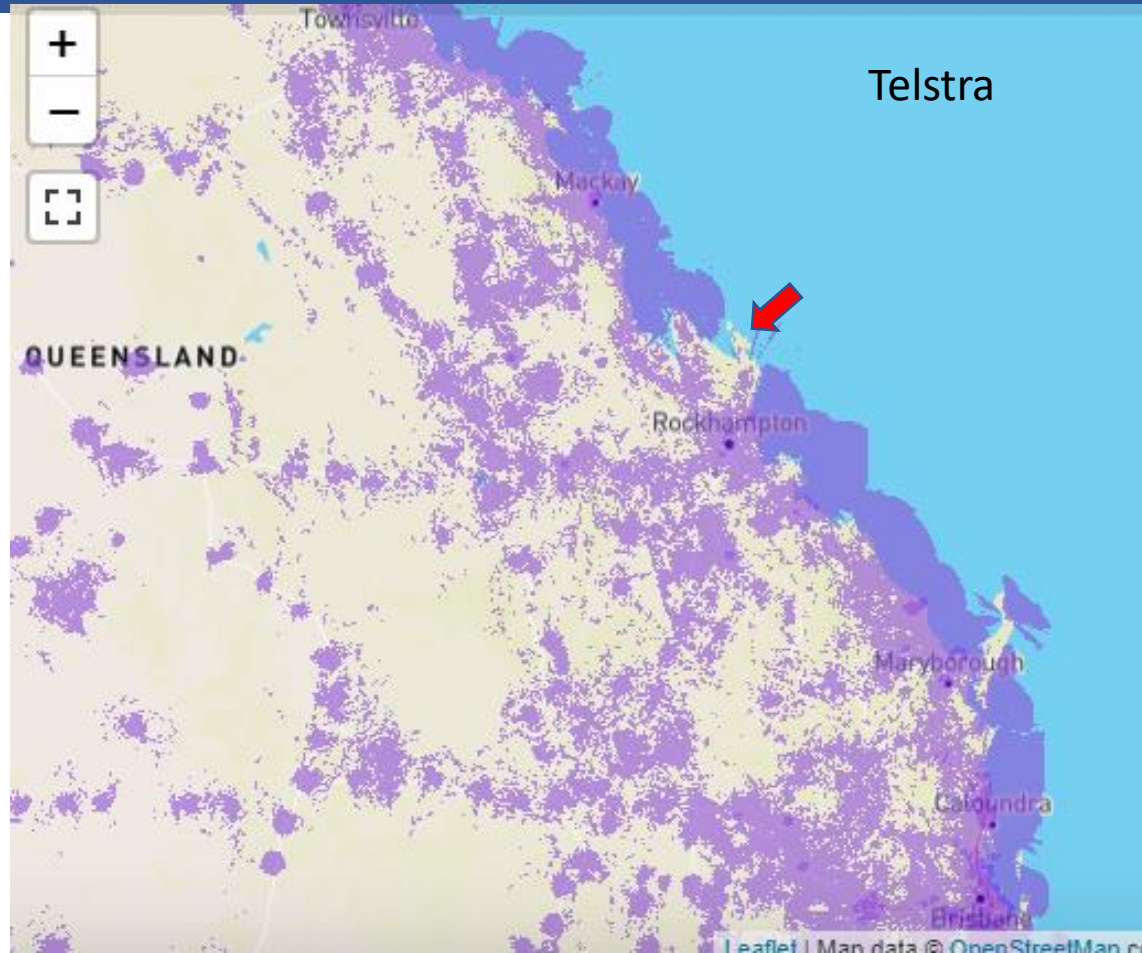


# Communications – Mobile phones

- Mobile phone communications are great (where they work)
  - Talk with parties where VHF won't work
  - Provides private link, without time limit
  - SMS can provide useful “buffered” messaging
  - Signal not always available
  - Signal repeaters (boosters) are available (these can be a game changer)



# Telstra and Optus 4G coverage

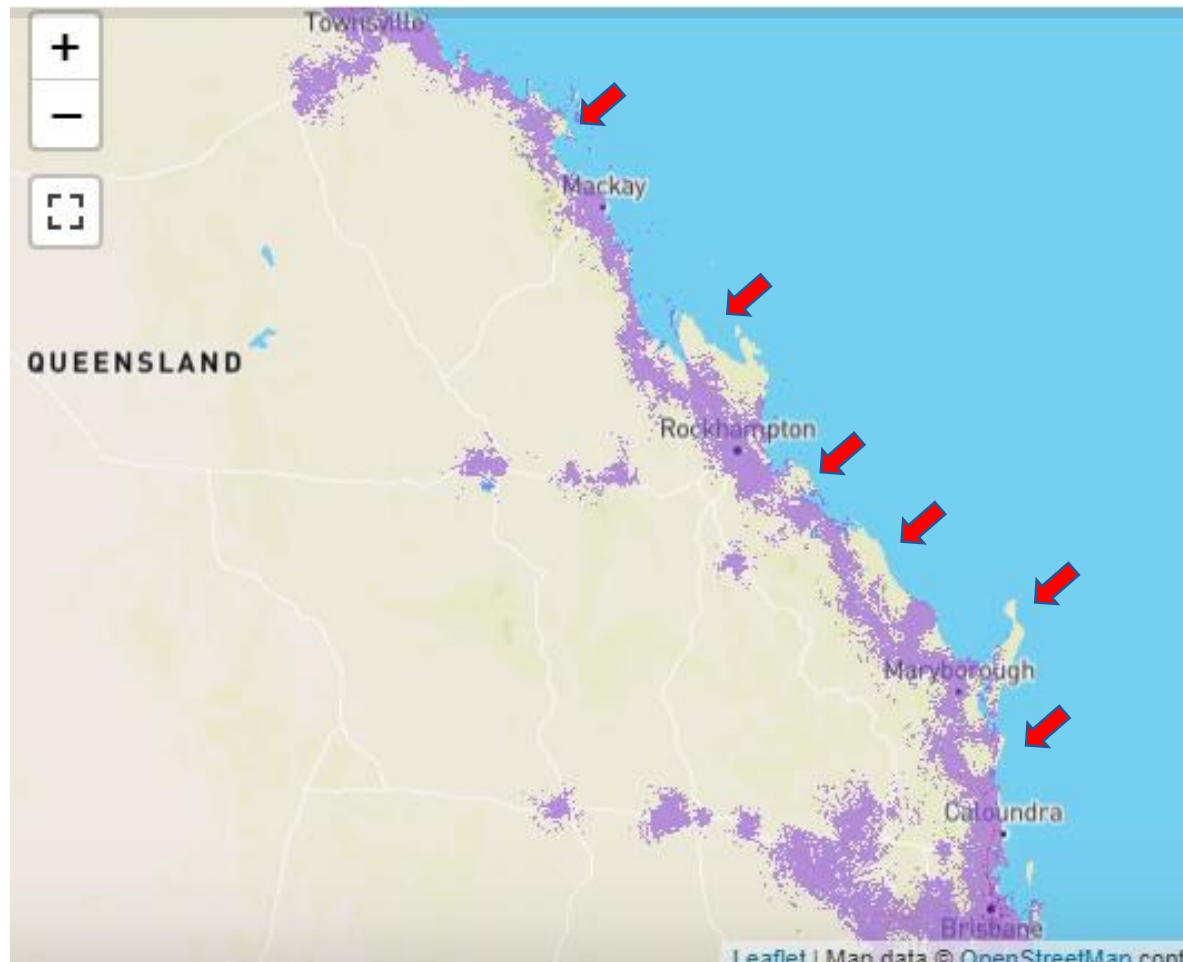


Both Telstra and Optus have good coverage along the coast  
Known problem areas

- Shoalwater military area (Port Clinton)
- Optus on Fraser Island
- Typical coverage is ~10nm from the coast without a booster with no obstructions



# Vodafone / TPG 4G coverage



TPG coverage more patchy than the others

The Telstra / TPG announcement will not have any impact in 2022

# Communications – Internet

- 4G Mobile internet provides access to almost unlimited information
  - Detailed weather forecasts
  - Navigational guidance
  - Google maps “satellite” mode
  - Daily updates to your chartplotter data
  - Technical and equipment guides
  - Email communication
    - ❖ Home
    - ❖ Marina, restaurant, provisioning bookings
    - ❖ Work (ughh)
  - Video calls
  - Signal not always available



# Useful Apps

- Weather
- Tides
- Marine Rescue notification
- Marine Traffic
- Anchor Watch
- First Aid
- Virtual chartplotter
- Ships Log



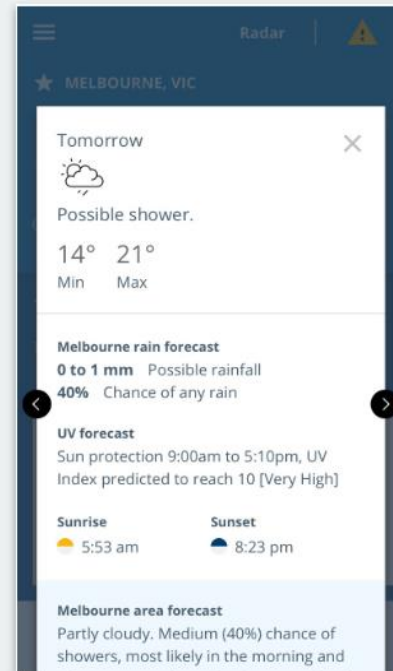
# BOM Weather



## Current conditions



## Forecasts



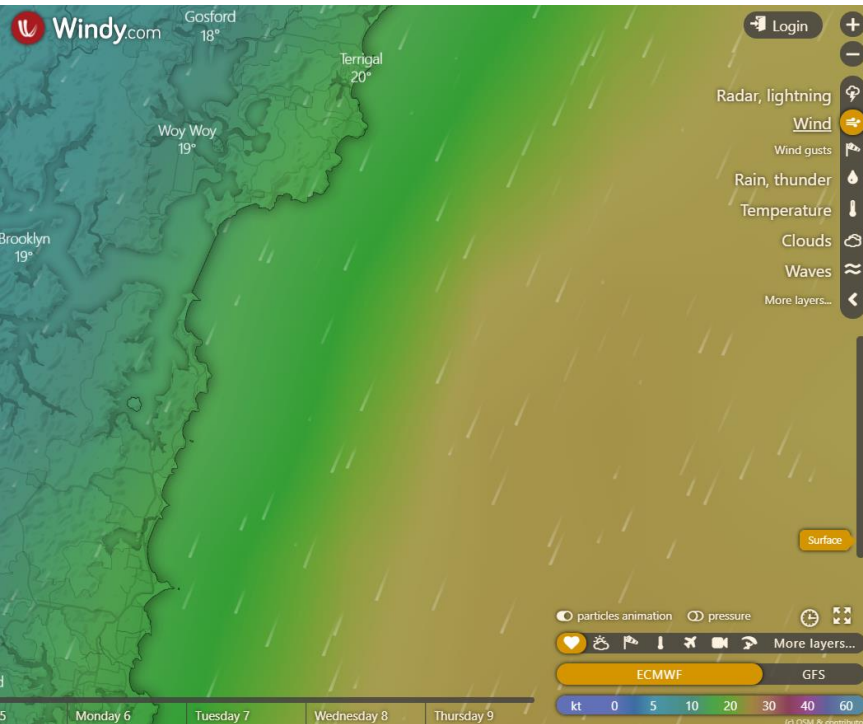
## Radar



## Warnings



# Windy



Windy is an intuitive and accurate weather forecast app which provides an up-to-date weather forecast. The app allows the user to zoom out to see global weather patterns or to zoom into a local area within the clear and concise interface. The data is based upon ECMWE, GFS, NEMS, NAM and other forecast models and is one of the most accurate weather apps on the market. The app is fully customisable and displays observed wind and temperature, forecasted weather and even nearby webcams. The data can be displayed in metric, imperial or custom units such as mph, m/s, etc. Detailed forecasts for any location can be displayed and include temperature, wind chill, wind speed, pressure, humidity, rain and snow accumulation. A range of 28 weather layers can be applied which include weather, wind, temperature, clouds (low, medium and high), visibility, pressure and even ozone layer

# Willy Weather

## LOCAL WEATHER FOR AUSTRALIANS

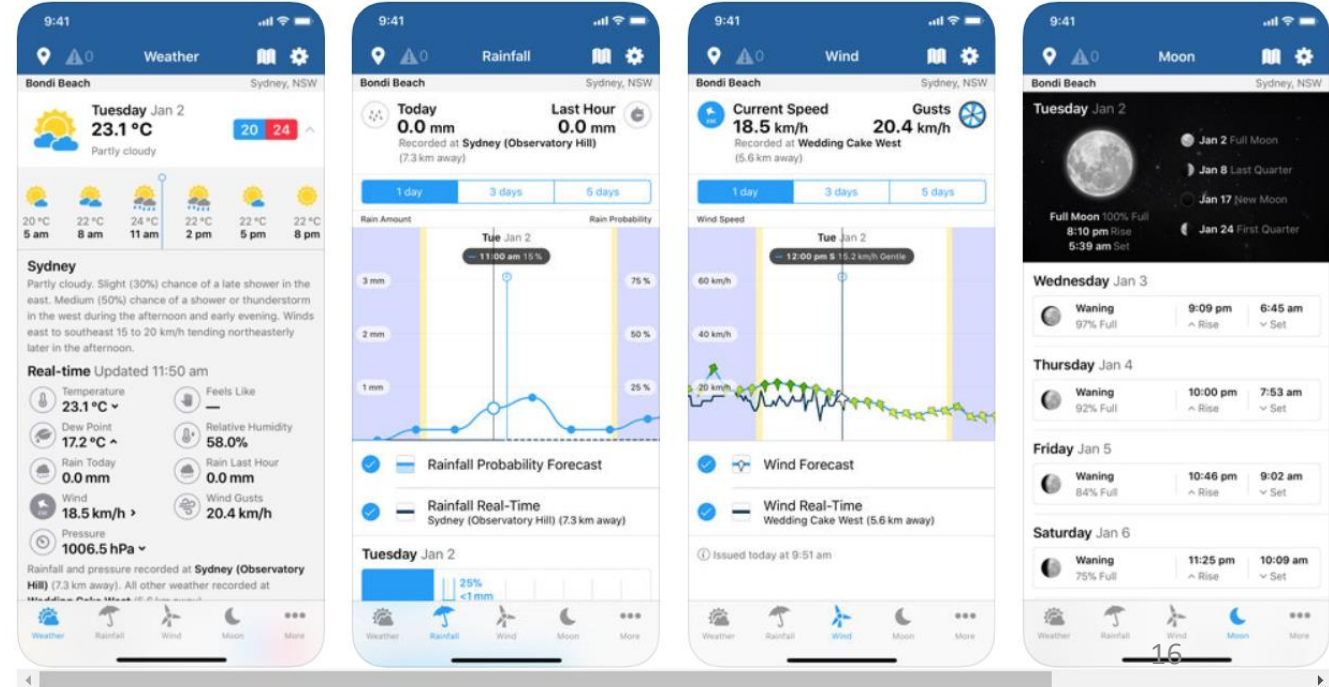
WillyWeather is a feature-rich weather app that includes BoM radar and satellite, detailed wind, rain, tide, swell and UV forecasts, as well as moon phases, and sunrise and sunset times.

Going beyond the average weather service, we process and fine-tune forecast data to the specific coordinates of over 17,000 Australian locations including all suburbs, towns, beaches, rivers, parks, lakes and islands.

Interactive rainfall radar and satellite, using iOS maps: pan and zoom like you've always wanted through the national BoM radar network, and continental satellite view to see exactly where rain is falling around you

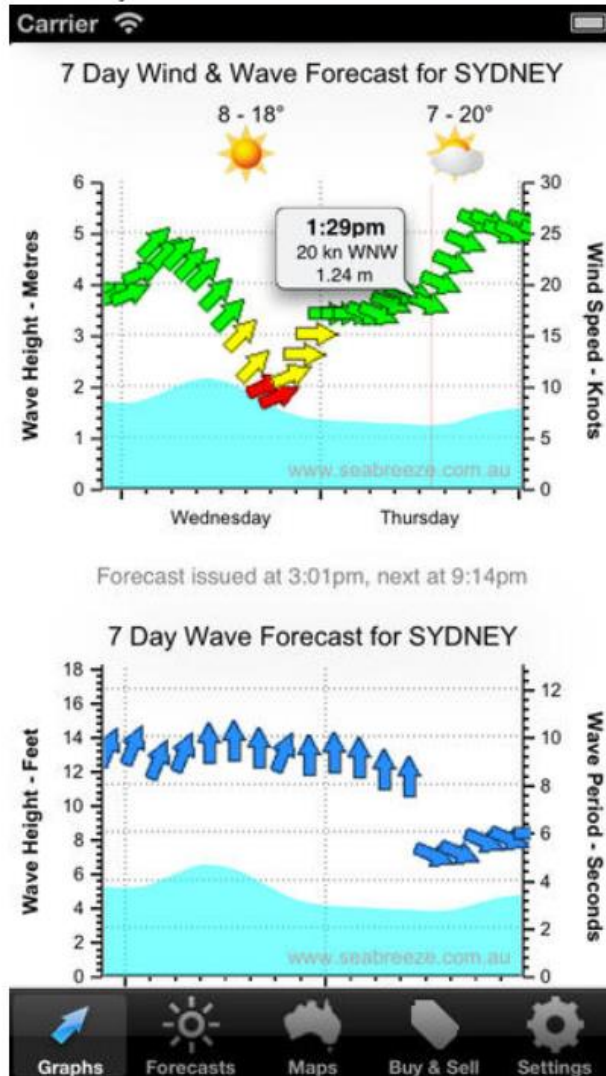
Interactive tide, swell, and wind forecast graphs which allow you to easily understand the conditions - in real-time, and up to seven days in the future.

**TIDES** - The most comprehensive tide times system in Australia, bringing together BoM standard port data with offsets from the Australian National Tide Tables and various state based marine agencies. Includes every beach in Australia, and many river systems and inlets



# Seabreeze Weather

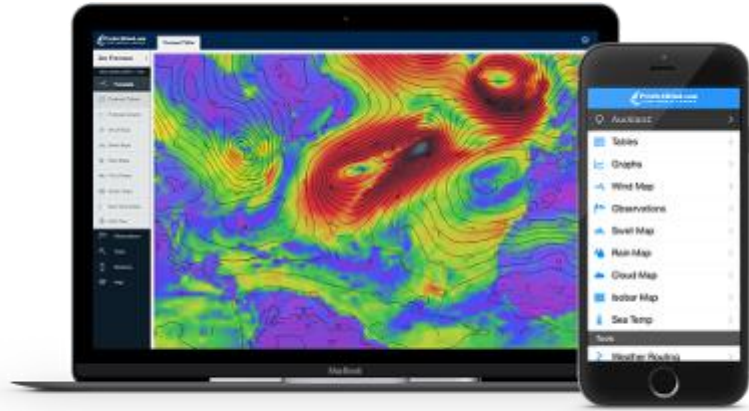
Fully native & customised for the iPhone.



FORECASTS and LIVE WEATHER for major coastal locations around Australia:

- 7 Day Wind Speed & Wind Direction forecasts
- 7 Day Tide predictions
- 7 Day Wave Height, Wave Direction and Wave Period predictions
- LIVE wind reports from Australian beach weather stations
- Moon phases & Sunrise / Sunset for the coming week.
- Temperature and rain forecasts

# Predict Wind

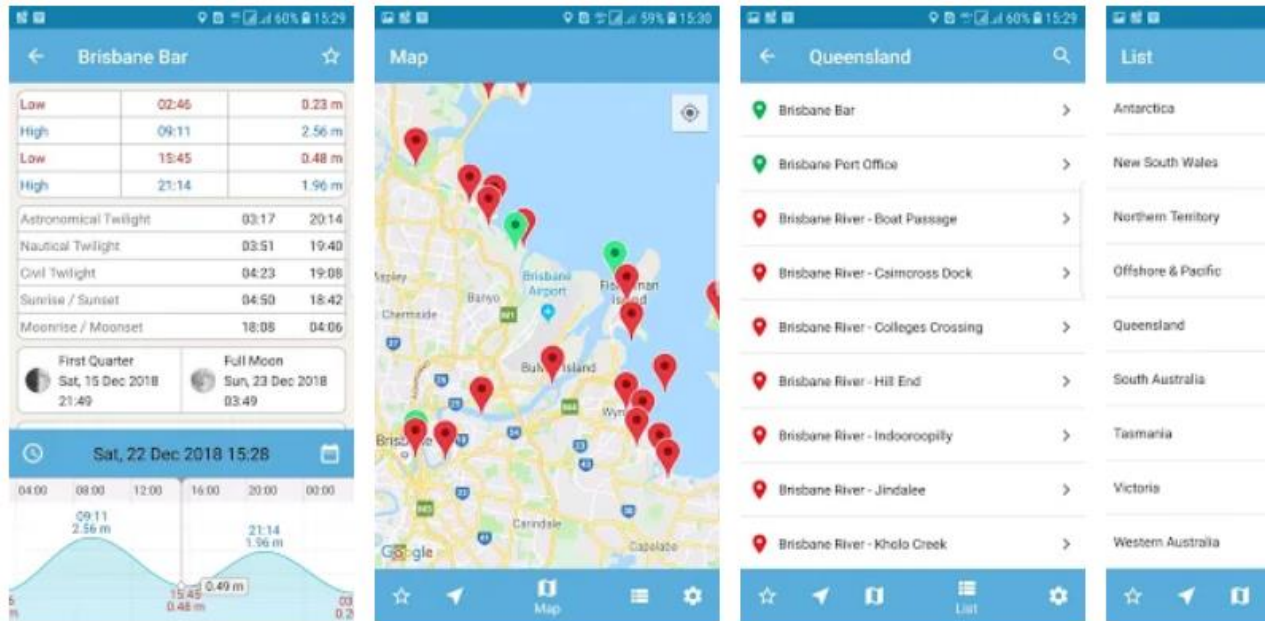


The PredictWind App lets you access PredictWind high resolution forecasts on the go over wifi or mobile data, in a mobile friendly format with simple pinch zoom and scrolling.

- Weather Routing and Departure planning tools
- Live wind observations from around the world
- Forecast alerts direct to your phone

	Free	Basic	MOST POPULAR Standard	Professional
	Free	US\$12.00 / 3 Months US\$29.00 / 1 Year	US\$99.00 / 3 Months US\$249.00 / 1 Year	US\$249.00 / 3 Months US\$499.00 / 1 Year
	TRY NOW	BUY NOW	BUY NOW	BUY NOW
<b>Features</b>				
<b>Wind Maps</b>	✓	✓	✓	✓
1km PredictWind	✗	✓	✓	✓
5km NAM	✗	✓	✓	✓
9km ECMWF	✗	✗	✓	✓
<b>Wave Maps</b>	✗	✓	✓	✓
PWG/PWE	✗	✓	✓	✓
ECMWF	✗	✗	✓	✓
<b>Rain Maps</b>	✗	✓	✓	✓
<b>CAPE Maps</b>	✗	✓	✓	✓
<b>Forecasts Alerts</b>	✗	✓	✓	✓
<b>Weather Routing</b>				
50km Resolution	✗	✗	✓	✓
8km Resolution	✗	✗	✓	✓
1km Resolution	✗	✗	✗	✓
Ocean/Tidal Currents	✗	✗	✗	✓
<b>Departure Planning</b>				
50km Resolution	✗	✗	✓	✓
8km Resolution	✗	✗	✓	✓
1km Resolution	✗	✗	✗	✓
Ocean/Tidal Currents	✗	✗	✗	✓

# AU Tides



Australia Tides shows tide times, tide heights, first/last light times, sunrise/sunset times, and moon phases for over 3200 locations across Australia including the states of Queensland (QLD), New South Wales (NSW), Victoria (VIC), Tasmania (TAS), South Australia (SA), Western Australia (WA), and the Northern Territory (NT).

- Select tides from favourites, nearest, map, or list.
- All tide times are displayed in the local time at the tide location and are adjusted for daylight saving if applicable.
- Tide heights are shown in metres.
- Shows statistics on tide times and tide heights such as the highest tide for each year, the lowest tide for each year, the largest spring tide for each year, and the smallest neap tide for each year.
- An internet connection is not required so you can view tides anywhere.



# Marine Rescue NSW

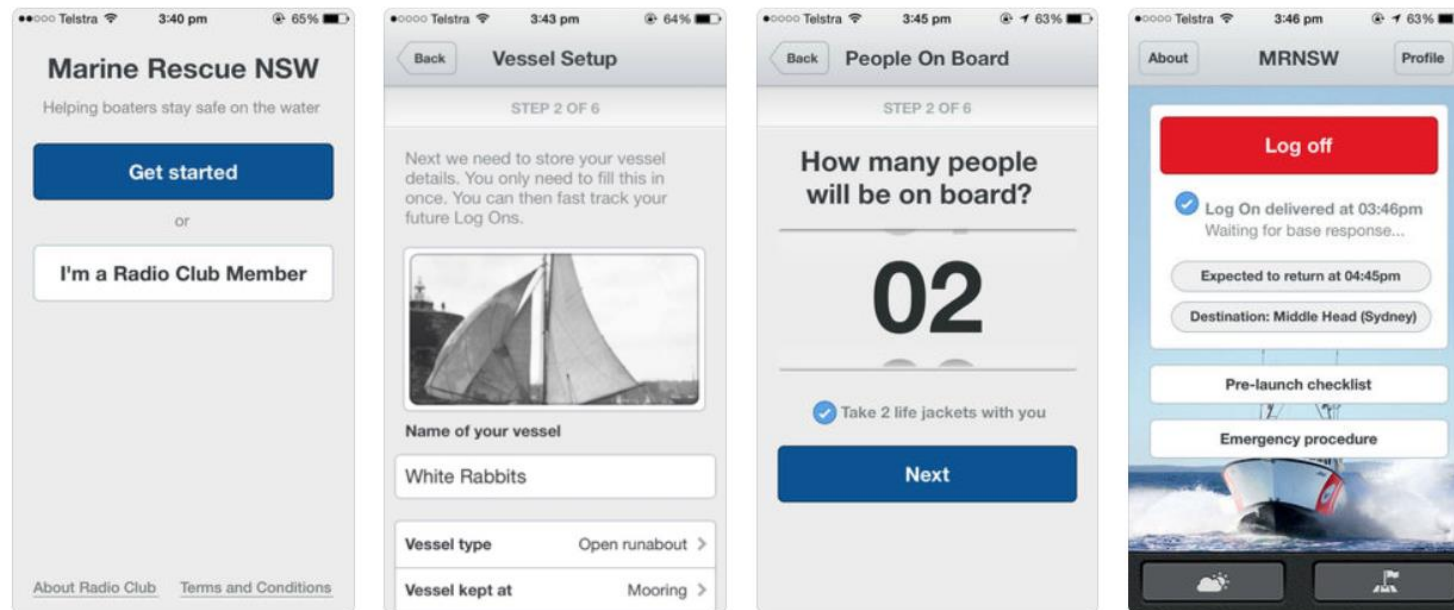


The Marine Rescue App replaces the process of logging on and off using your VHF radio and has the advantage that all the boat details are stored in the app.

After setting up your boat details, it allows you to log your trip, ETD and ETA, and leave the details of a contact ashore with VMR (Volunteer Marine Rescue).

If you do not log off or signal your safe arrival by the set ETA, they will try to contact you and potentially send a rescue team, saving you precious hours in the case of an incident at sea.

The app also includes a useful pre-departure checklist and procedures for issuing distress and emergency messages at sea, as well as a button to call 000 directly and summon help.



# Marine Traffic



Although not intended to replace a boat's AIS, this app is a handy reference guide which displays near real-time positions of ships and yachts worldwide. Vessels can be viewed on a live map and identified with augmented reality (in-app purchase necessary). Port arrivals and departures for over 4,000 ports and marinas can be viewed as well as current conditions in ports and ETAs for boats and ships. Vessels around you can be identified at a glance by simply pointing your device's camera to the horizon. The database contains over 2.5 million photos of ships, harbours and lighthouses and you can upload photos to MarineTraffic directly from your device. Great fun for non-sailing guests.

Once you have registered with Marine Traffic you will even get an email notifying you of your departure and arrival. An easy record of your trips.

Arrival: GALADRIEL, Port: NEWPORT ▷ Inbox ×

MarineTraffic <noreply@marinetraffic.com>

to me ▾

**GALADRIEL** arrived at

Port **NEWPORT**

at 2019-03-10 15:20 Local Time (2019-03-10 04:20 UTC)

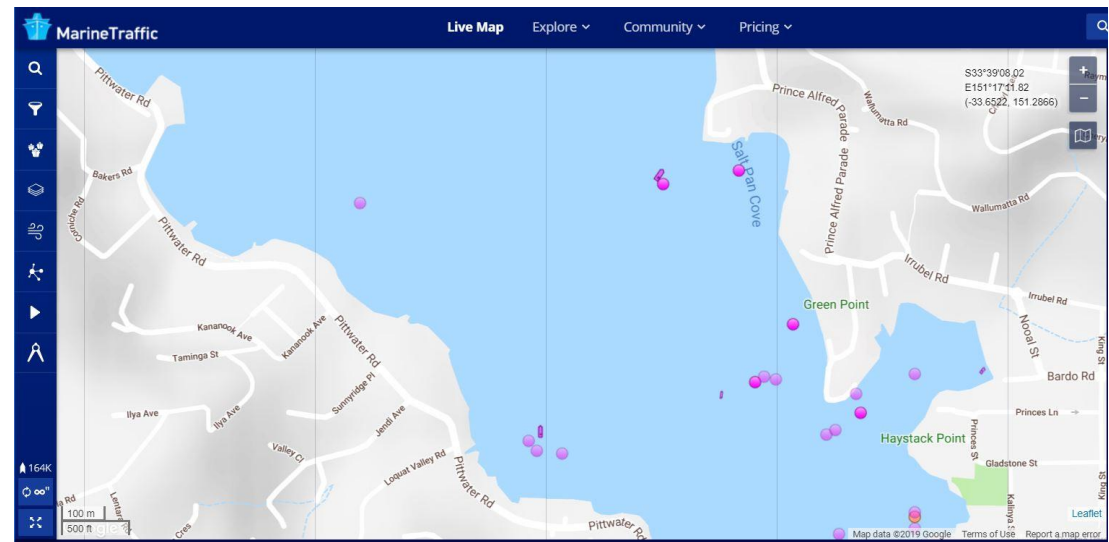
Time of Arrival/Departure is the time the Vessel approaches the entrance/exit of the Port respectively.

Vessel Details

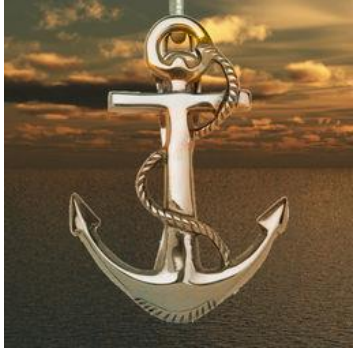
Current position, if within range

Position and track

Ship's Photos



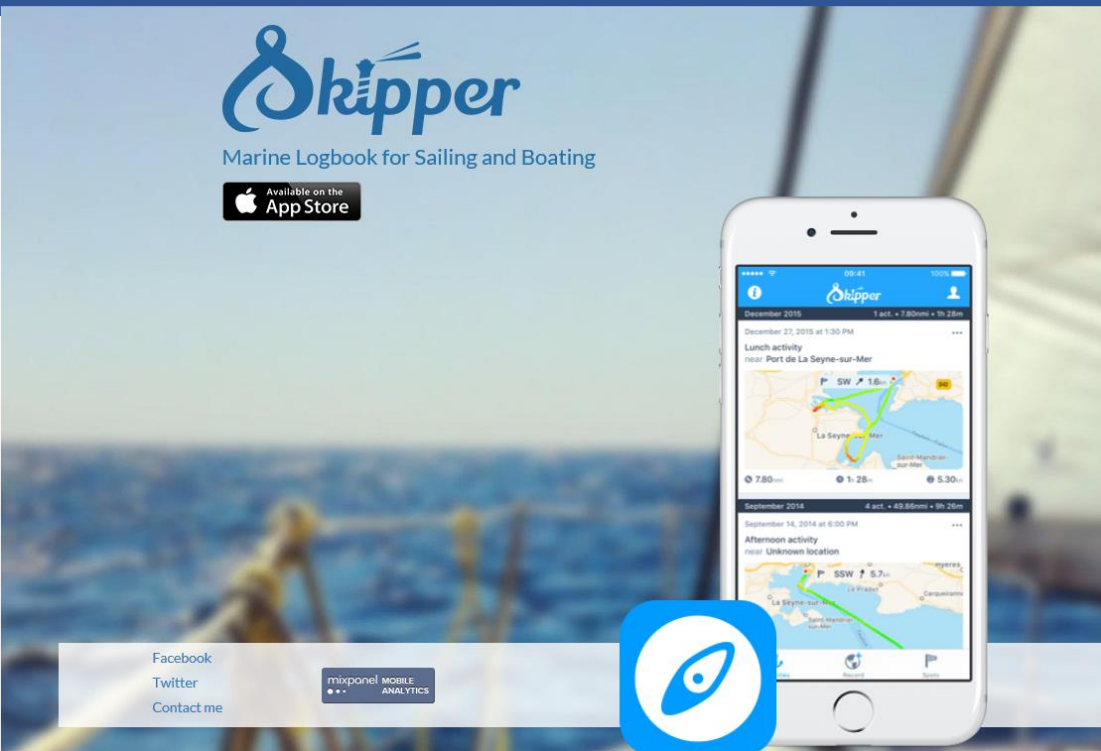
# Anchor Watch by Lukassan



This app could be the key to a good night's sleep at anchor after a fun day out. It lets you set your anchor's position either by a tap on the screen or by entering GPS coordinates manually, and then choose any safe radius you like, from as narrow as 10m. If the boat drifts outside of your "safe zone", not only will the phone vibrate, ring and display a pop-up, but you also have the option of sending an SMS and even automatically calling a number of your choice, so your crew members can be roused from their slumber if the need arises to get all hands on deck. Of all the anchoring apps this one seems to be the most recommended.

Cost: from \$1.49

# Skipper Marine Logbook



## WHAT IS SKIPPER?

Skipper is a modern iOS app that allows you to automate your marine logbook, keep a permanent record of your sailing or boating activity and share your coastal cruises with your friends and family.

## SAIL AND RECORD

- Monitor your nautical activities in real-time with your iPhone or iPad's GPS, even when you're offline.
- See trip data like elapsed time, trip distance, current course and speed.
- Autostart recording on movement (when your current speed is above a minimum specified speed).
- Track your exact position with built-in maps (provided by Apple).
- Access local wind forecast for the next hours and days while you record your navigation.

## SAVE

- Automatically and securely store all your trips so you can access your entire sailing & boating history from your device. This enables you to measure and review your sail performances over time. You can save all your routes offline on your device.

## DASHBOARD

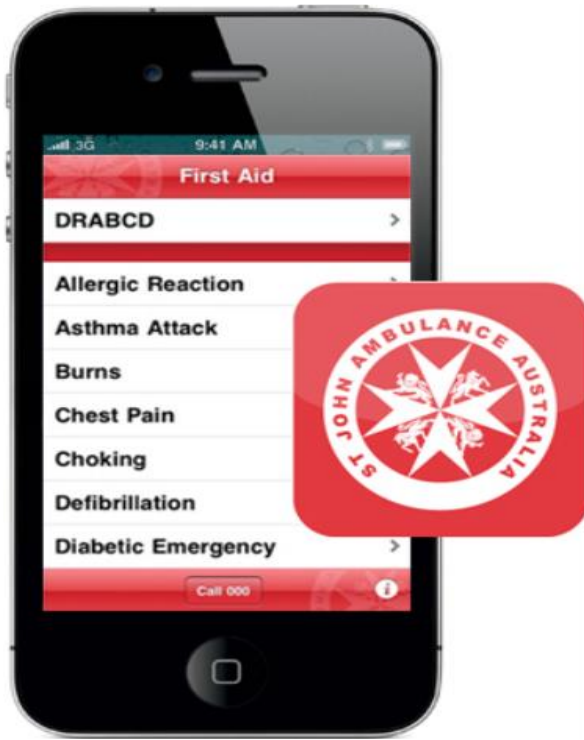
- See detailed stats around your trips: total number of navigations, average speed, total sailed distance, and total navigated duration.
- Keep track of your records: maximal trip duration, longest trip distance or top speed.



# St Johns First Aid

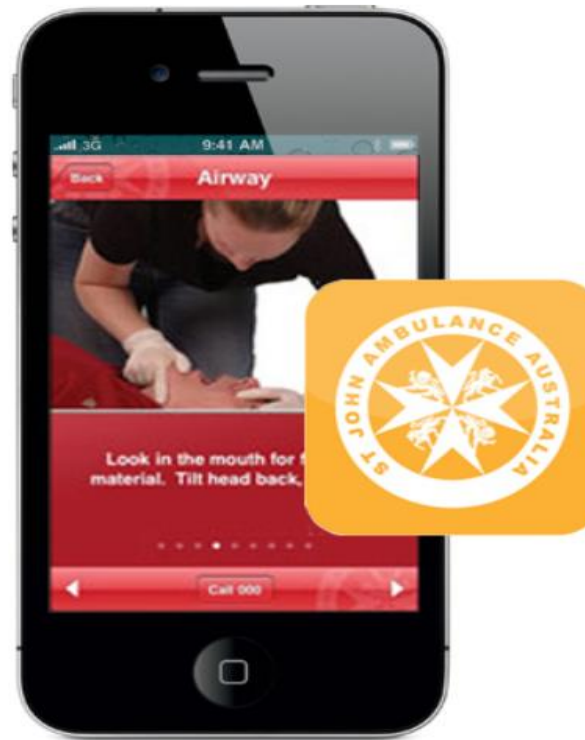
## First Aid

Undoubtedly the easiest to use First Aid app on the market. Included are 13 of the most common and critical conditions that require immediate lifesaving first aid. Featuring step-by-step emergency first aid information with large clear images for each step.



## Resuscitate

Puts easy-to-read instructions with large clear images at your fingertips, following St John Ambulance DRSABCD Action. Also included is an interactive defibrillator demo – become familiar with the Automatic External Defibrillator process, including voice prompts, placing pads and CPR.

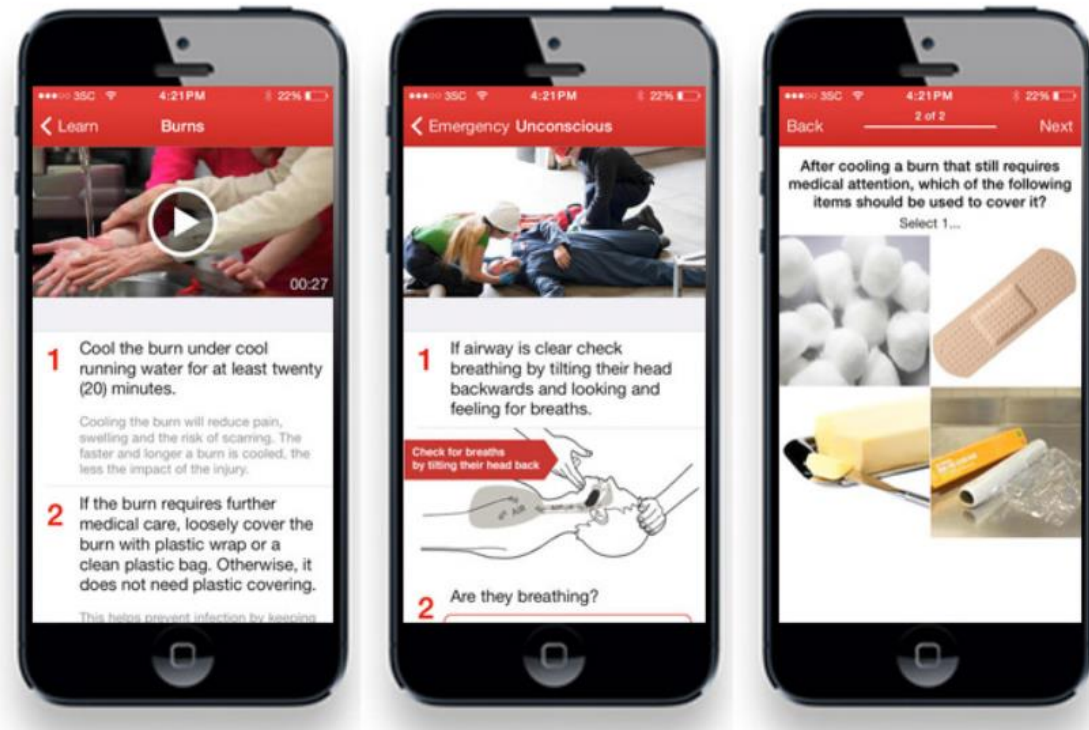


## MediProfiles

Gives you peace of mind by having all of your friends, family and co-worker's emergency medical information at your fingertips. Your custom medical profiles are displayed in an easy-to-read format that is there when you need it most.



# Australian Red Cross



Developed specifically for Australians, the Australian Red Cross app gives advice and appropriate actions for common emergencies from burns to broken bones. The simple yet effective interface is incredibly easy to use with a combination of videos and images for first aid solutions, making it a dream tool for stressful situations. Best of all, it's free!

# Australian First Aid Pocket Guide



The Australian First Aid Pocket Guide does exactly what it says on the tin. Designed by premier providers of first aid and advance life support training here in Australia, the user-friendly app covers everything from advanced traumas to the most common medical emergencies. Divided into colourful categories, with clear images and text, the information is well structured giving you everything you need in your back pocket. Australian First Aid Pocket Guide (\$2.49) is available on iTunes for iPhones and iPads.

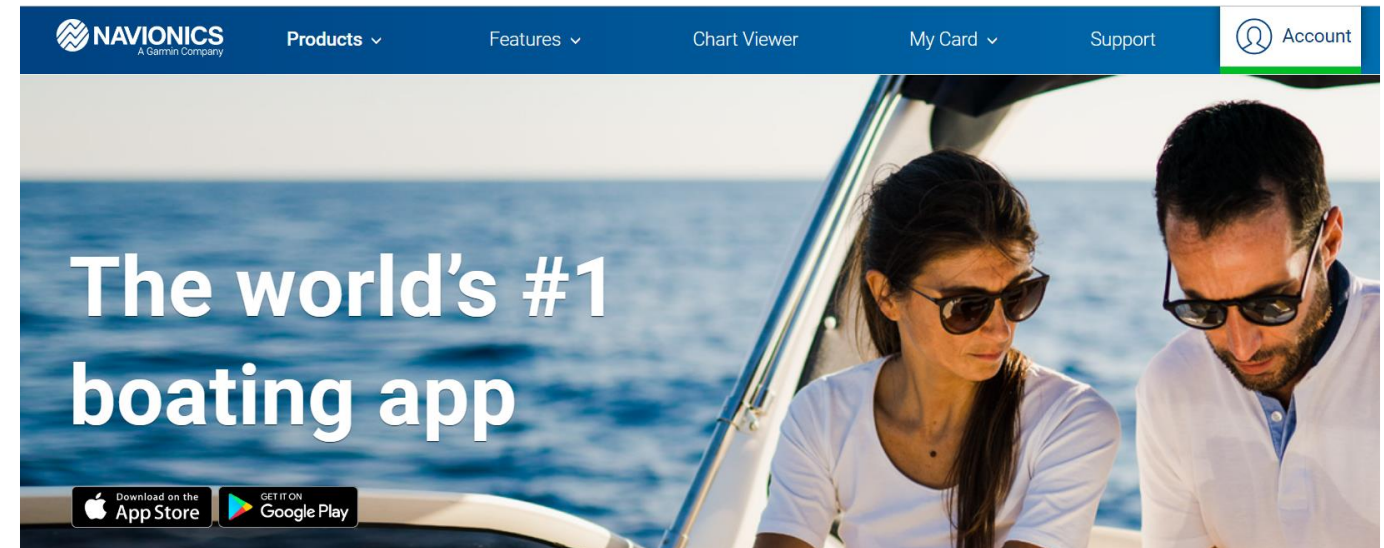
# Navionics

Essentially a chart plotter on your iPad or phone  
Subscription required to unlock the maps  
(\$21.99 USD per year)

## Free on-line chart viewer

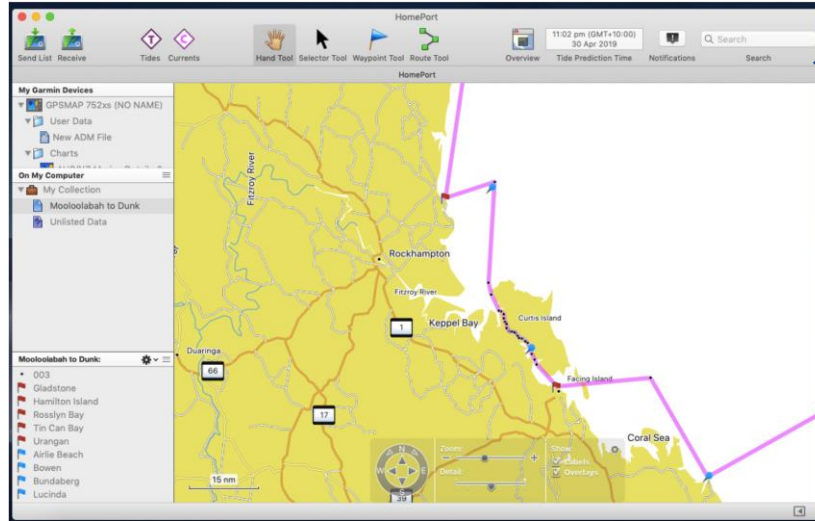
Plotter Sync allows Raymarine, Lowrance, Simrad and B&G plotter owners to transfer routes and markers, update charts and more!

- Same detailed charts as on your chartplotter
- Daily updates to the charts
- Dock to dock auto routing

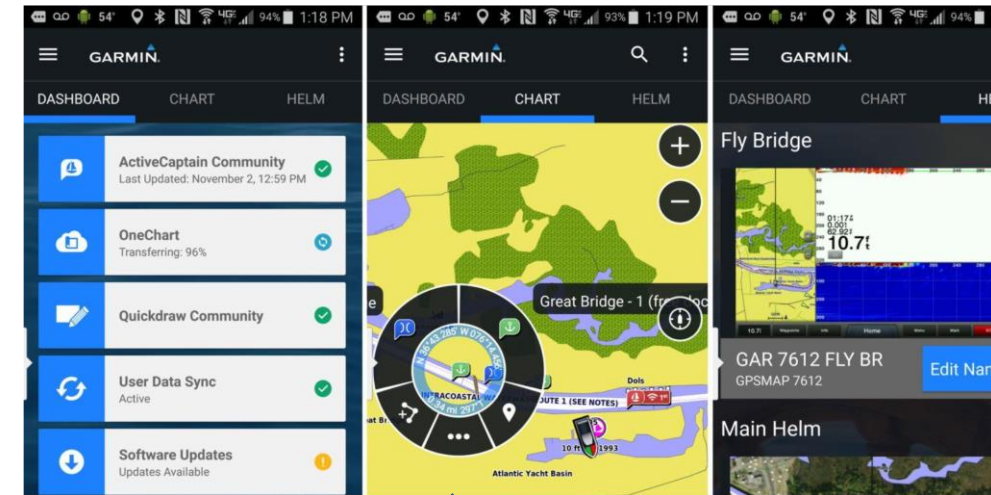


# Garmin MFD Ecosystem

## Homeport Program on laptop



## Active Captain App



Shared maps  
Routes  
Waypoints

- Chartplotter control
- Wireless software updates
- Access charts and maps
- Transfer routes and waypoints



# Raymarine Apps



RayView App

Stream your MFD screen directly to your tablet or smartphone.



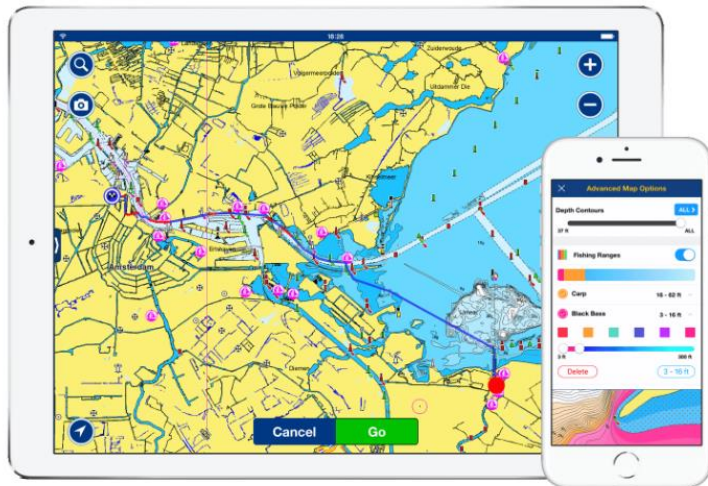
RayControl App

Perfect for tablets: 2 way control between your MFD and tablet



RayRemote App

Turn your smartphone into a remote for your MFD



Navionics App

# MFD Control App



## Link: Connect Your Boat 4+

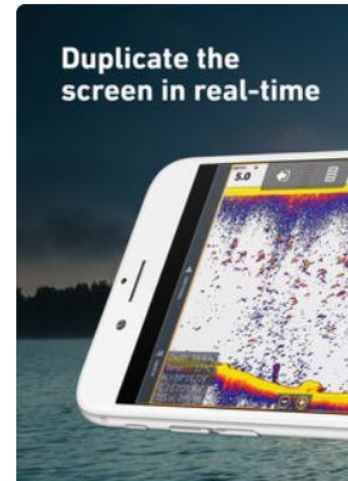
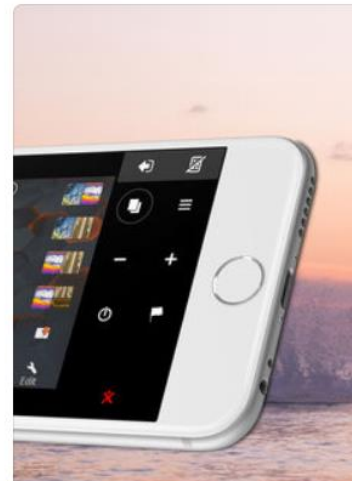
Lowrance, Simrad and B&G

Navico

★★★★★ 2.3, 70 Ratings

Free

### Screenshots iPhone iPad



# Smart Watch Apps

Garmin Quatix



- Display data from chartplotter
- Control Fusion stereo
- Control autopilot
- Anchor “watch”

Apple Watch Leader



- Watch Leader lets you view any available sailing data on your Apple Watch or iOS device
- Speaks directly to your B&G instruments - H5000, Vulcan and Zeus3
  - Automatic discovery of compatible devices
  - Unlimited number of data fields on your iPhone or iPad
  - Simple and intuitive user interface
  - Power saving mode when Apple Watch is inactive