User Guide

Version 2020.2

Contents

1. Introduction

This user guide outlines the main features of RYA SafeTrx.

Key components of the RYA SafeTrx system:

- Apple and Android smartphone app (RYA SafeTrx app)
- RYA SafeTrx website (https://safetrx.rya.org.uk)

This user guide provides information on both the RYA SafeTrx app and the RYA SafeTrx website. This guide is not exhaustive, you may encounter functionality which is not outlined in this guide.

Please visit www.rya.org.uk/go/safetrx for answers to frequently asked questions (FAQs).

About RYA SafeTrx

App

The RYA SafeTrx app is an app for both Android and Apple iOS smartphones that allows you to track your journey on your phone[1].

The app provides all recreational boat users, particularly dinghy cruisers, PWC users, RIB users, canoers, kayakers, wind and kite surfers and smaller boat users with an easily accessible and simple to use means that can inform HM Coastguard of their voyage plans and dynamic location in the event of distress.

You can enter your journey details directly from your smartphone and plan a trip knowing that should you not arrive by the time given, a nominated emergency contact will be alerted and advised to initiate appropriate action.

Where an emergency contact calls HM Coastguard about an overdue trip, they will have access to your location and SafeTrx trip data through a secure SafeTrx server.

Since the RYA SafeTrx app periodically sends your location data back to a dedicated server, HM Coastguard's response team can get help directly to you, and quickly.

Whilst components of the GMDSS system remain the preferred means for communication and distress alerting, the app is a useful backup and particularly helpful for those on the many small craft that do not have the ability to fit or carry standard GMDSS equipment.

The RYA SafeTrx app is an accessible tool that leisure craft users can use when going to sea. It does not replace GMDSS, EPIRB, PLB or AIS.

It is free to download and there is no charge to use it.

Website

In addition to the features the app offers, users also have access to the RYA SafeTrx website - https://safetrx.rya.org.uk. Here you can also manage your account, vessel details and emergency contacts, plus personalise checklists and review your trips.

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[1] The app relies on cellular phone coverage – see important notes on p.11

For users who do not want to use the app, there is the option to register an account and vessel details online via the RYA SafeTrx website - https://safetrx.rya.org.uk. The details you enter will be kept in the RYA SafeTrx database and will be available to HM Coastguard if you ever need assistance. See p.17 for guidance on how to register an account and add your vessel details.

RYA SafeTrx & CG66

On 4 July 2018, HM Coastguard approved RYA SafeTrx as its replacement for the official voluntary safety identification scheme, better known as CG66.

RYA SafeTrx builds on the advantages of the CG66 scheme to assist HM Coastguard with Search and Rescue and it provides enhanced functionality if used together with the optional RYA SafeTrx mobile app.

As part of the changeover, HM Coastguard stopped taking registrations for the CG66 scheme on 11 July 2018 but will retain access to the CG66 database until the end of March 2020.

The data from CG66 has not been migrated to the RYA SafeTrx database. Therefore, anyone who wishes to make use of RYA SafeTrx will need to register on the RYA SafeTrx system when and if they choose to do so.

RYA SafeTrx offers the full CG66 database function with additional lifesaving technologies provided by the RYA SafeTrx app.

If you do not wish to use the mobile app, you can register an account and your vessel details online at the RYA SafeTrx website (https://safetrx.rya.org.uk). Please see p.17 for guidance on how to register an account and add your vessel details.

If you choose to register this way, the details you enter will be stored in the RYA SafeTrx database and will be available to HM Coastguard should you ever need assistance.

You do not need to use the app for your details to be available to HM Coastguard if you ever need assistance.

The benefit of this system over the previous CG66 system is that registration is instantaneous, and users can maintain their own data to ensure that it is always up-to-date.

2. RYA SafeTrx app

i.   Getting started

Download the app

- Download the app from the UK Apple App Store
  (Requires Apple's iOS 8.0 and above)

- Download the app from the Google Play Store
  (Requires Android's OS 4.2 and above)

Designed for smartphones

The app is primarily a smartphone application and is therefore designed to fit such screen sizes and take advantage of the native features on the phone.
The RYA SafeTrx app can be installed on iPads that have iOS 8.0 or later and a cellular connection. A list of compatible devices can be seen on the RYA SafeTrx app page on the [Apple app store](). You may need to filter by "iPhone only" in the App Store to access the app.

The RYA SafeTrx Android app is not available on extra-large screens such as tablets devices. Unlike the iPad, specific tablet layouts are required on Android and as such do not scale the application to provide a sufficient user experience.

Phone settings

To make best use of the app, the following settings are recommended:

- Location services (under Privacy) have to be switched on to capture your position data

- Mobile Data has to be switched on in order to send the data to the central RYA SafeTrx system. If abroad, Data Roaming needs to be switched on if you still wish to use the app

- Allowing the use of Contact information from your phone for easy registration of emergency contacts

- Access to your camera or photo library if you want to save or update a photo of your craft

- Allow Notifications to receive notification alerts from RYA SafeTrx

Visit the FAQs (Technical section) at www.rya.org.uk/go/safetrx for more about settings and permissions.

Install the app and register an account

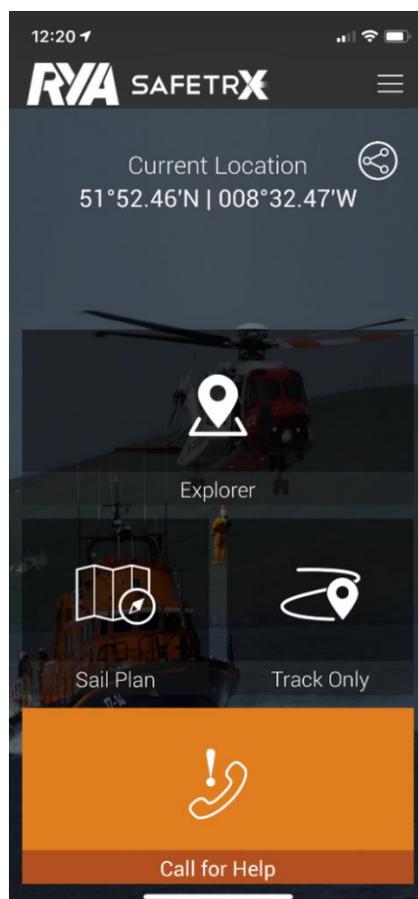Install the app and read and accept the terms of the End User License Agreement.

Tap 'Register' and complete the details to create a new account. **Please use a password of between eight and twelve characters**.

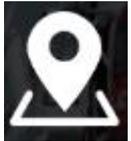Log-in using your registered email address and password.
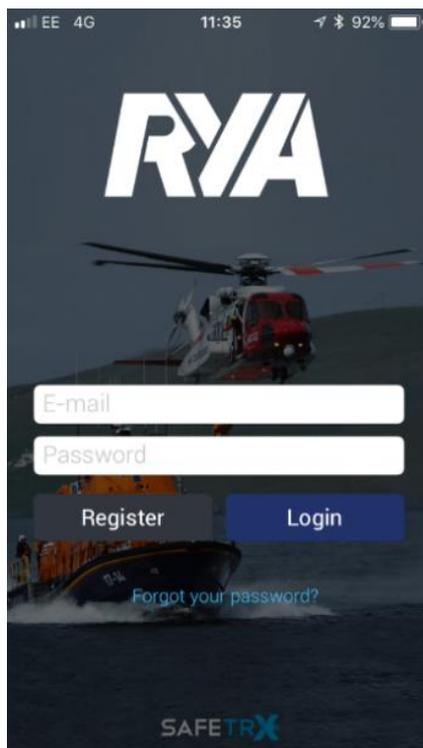
Once logged in, verify/edit your phone number by tapping the pencil beside the phone number which appears on screen.

The home screen will appear:

The four icons on the home screen are:

	Using the **Explorer** tool, find nearby ports and marinas, VHF channels and lifeboat stations. Check the sea area forecast. See more about the Explorer function on p.15.
	Sail Plan mode records a starting point, a destination and an estimated time of arrival (ETA). It sends SMS messages to your emergency contact(s) if you exceed your ETA. Read about Sail Plan on p.8.
	Quickly start your trip using the **Track Only** mode option. SMS messages are not sent to emergency contacts. See more about Track Only on p.12.
	Call for help. Call HM Coastguard in case of emergency. Read about the Call for help (emergency calls) function on p.13.

Menu icon
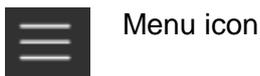
    Menu icon

Tapping on the Menu icon (3 horizontal lines at the top right of the screen) reveals other options available in the app including My Profile, Nearby Information, Local Weather, Safety Information, as well as Explorer, Sail Plan, Track Only and Call for help.

The menu icon appears in the top right-hand corner of most screen views.
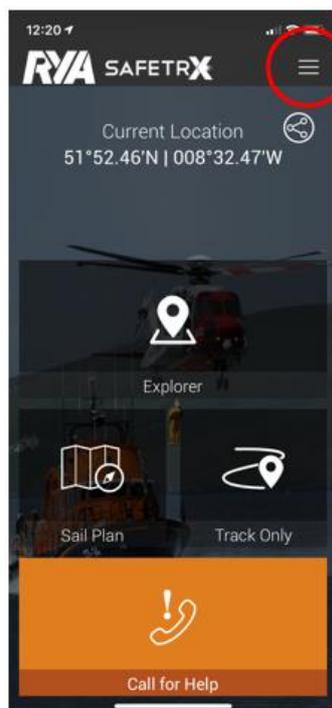
Question mark icon

Question mark icon

Tapping the question mark icon, where you see it, will provide you with an explanatory note on that function/option or explain what should be entered in a field and if necessary, in what format.

ii.   Registering a vessel

Before you can start recording a trip, you will need to register your vessel details.

To register a vessel, tap the Menu icon (3 horizontal lines at the top right of the screen) and choose 'My Profile'.

Then choose, 'Vessels/Crafts' and 'Add New Vessel/Craft'.

Enter the vessel information according to what type of vessel you have.

Fields marked with an asterisk are required fields.

Click 'Save' once completed.

In your own interest and that of the emergency services, please ensure your personal and vessel registration are as complete and kept up-to-date as much as possible.

Once you have entered vessel details, the app will give you the option of defining your personal Sail Plan checklist.

To add a checklist to your Sail Plan set up, go to 'manage checklist' on the Vessel details screen. It is optional in generating a Sail Plan. The elements applicable to your vessel can be added from a comprehensive list provided. You can add personal items to the checklists for each heading.

Remember to save your choices once you have completed your list.

iii.   Adding emergency contact details

From the Menu (3 horizontal lines at the top right of the screen) choose 'My Profile', then Emergency Contacts.

Add emergency contact details.

iv.   Sail Plan mode

Sail Plan mode records a starting point, a destination and an estimated time of arrival (ETA).

It sends SMS messages to your emergency contact(s) if you exceed your ETA.

Sail Plan mode can be accessed from the Home screen and Menu.

Define Sail Plan

Choose your vessel and set your expected time of arrival (ETA) at your destination by scrolling through date and time, then touching 'Select'.

Enter the number of passengers, making the distinction between adults and children under 16 by scrolling with the up and down arrows.

Then select your sailing trip type of activity and touch 'Select'.

Enter Emergency Contacts

After 'Next' you will be able to register your emergency contact information.

If you have already done so, the details will appear in this display.

Tap 'Add New Contact' to add a new contact. Choose the emergency contacts from your phone's address book or enter the contact details directly into the form. Click 'Save'.

At least one emergency contact has to be entered to file a Sail Plan and you should tell them they have been nominated.

Choose your Start Point, Waypoint and End Point

After touching 'Next', a map of your actual position's surroundings appears, and you may add that position or any other to the map by touching the desired position. If necessary, the map may be zoomed in.

Hold down your finger on the map to specify your Start Point. Information on 'Local Weather' and 'Nearby Information' for any position on the map is available.

By touching the icon again the options for 'Local Weather' will disappear again.

Touch 'Next' to add an optional Waypoint and touch 'Next' again to add an End Point.

Set Sail

Once the End Point has been defined, touch 'Next'.

If a Sail Plan checklist has been generated (for each individual vessel) it will be presented with the option of running through it. You can create your own personalised checklist by clicking on 'Add Checklist' and select items relevant to your vessel/trip and click 'save'. This step is optional so you can click 'Next' if you choose not to add a checklist.

At the start of your trip, all you have to do is touch 'Set Sail' at the bottom of the screen. Review the 'Risk Statement'. Click 'I agree' to proceed. This will send your Sail Plan details to the RYA SafeTrx central computer where your ETA will be automatically monitored. There is also an option to send a notification that your trip has started to your emergency contact.

It is vital that when you safely reach your destination you end your trip. Failing to end your trip triggers an escalation process as outlined on p.21.
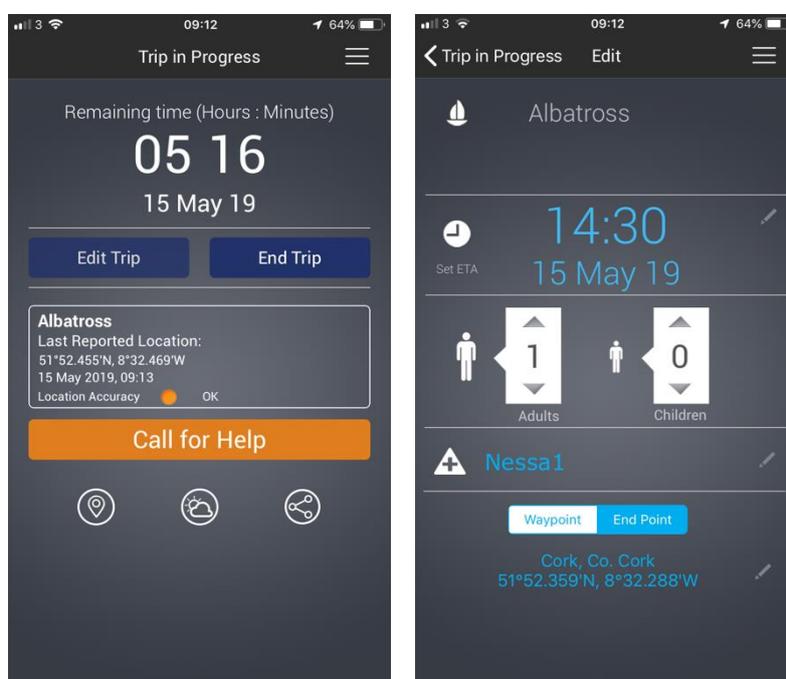
End your trip

Please make sure that you end your trip in the app on arrival at your destination, just closing the app does not end the trip, and neither does switching off the phone. There is also an option to send a notification to your emergency contact that your trip has ended.

Should you go overdue and HM Coastguard need to investigate, they have immediate access to all your logged data (including position history, vessel details, trip details, battery level, phone signal strength and logged ETA) to assist in locating you.

Editing a trip in progress

If you need to amend your ETA whilst on the water, tap on the 'Edit Trip' button on the Trip in Progress screen.

Tap on the pencil icon beside the ETA time to adjust your ETA.

The number of people on board, your emergency contacts, the waypoint and end points can also be amended while your trip is in progress. There is also an option to send a notification of any changes to your emergency contact.

Battery levels

The RYA SafeTrx app monitors your phone's battery in real time and adapts to declining battery levels.

In Sail Plan mode, if the battery level falls below 30% the location transmission interval is adjusted from 1km to 2km to save battery power.

There is also a failsafe to ensure that if the battery falls to 10%, RYA SafeTrx suspends in order to preserve battery power for emergency calls and sends a SMS to your Emergency Contacts.

IMPORTANT - when intending to use Sail Plan mode remember:

Tell your emergency contact what you are doing and that they have been nominated as your emergency contact for that trip. The emergency contacts section gives you the option to send them a SMS to let them know that they have been nominated. The app gives you the option of sending your emergency contacts a SMS with your Sail Plan trip details after you start your trip and also after you close your trip to let them know that you have arrived safely.

If you cannot close a Sail Plan trip, call or SMS your emergency contact to tell them you have arrived safely.

If you cannot make contact with your emergency contact, HM Coastguard can be contacted over VHF or phone so that you can advise them that you have arrived safely.

Once a Sail Plan is started, the passage plan is logged on a central RYA SafeTrx server which automatically monitors your ETA. Should you and your phone go overboard and the trip goes overdue, the RYA SafeTrx server will automatically send the SMS messages to your emergency contact. RYA SafeTrx Sail Plan escalation SMS messages and timings are determined by HM Coastguard and their Standard Operating Procedures (SOPs). Details of the automatic escalation process are on p.21.

It's important to consider the level of cellular coverage in the area you plan on sailing in and particularly at your destination. The app requires a mobile data connection to transmit location data in real time, and to start/stop Sail Plan (and Track Only) trips. As a guideline on mobile coverage, Ofcom has a mobile coverage checker app that may be useful when deciding to log a Sail Plan or not: https://www.ofcom.org.uk/phones-telecoms-and-internet/advice-for-consumers/advice/ofcom-checker.

If you think that mobile phone reception may be intermittent on your trip then use Track Only mode – it will still assist HM Coastguard if help is needed.

Boats sailing to more remote areas that have intermittent reception should be GMDSS equipped in such instances. By registering on the RYA SafeTrx database alone, you have the confidence of knowing that HM Coastguard will be able to look at your information for the purposes of search and rescue if ever you need assistance.

v.   Track Only mode

Quickly start your trip using the Track Only option. SMS messages are not sent to emergency contacts.

Track Only mode can be accessed from the Home screen and Menu.

If you have more than one vessel registered, select the correct one by tapping on the vessel name.

Entering the number of passengers is optional but highly recommended.

Track Only mode does not require you to enter an 'End point' or ETA.
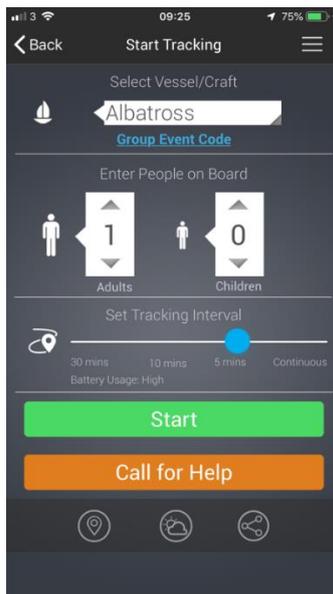
The information on your position is transmitted to the SafeTrx server with a frequency of your choice, so as to conserve your phone's battery power, should you wish to do so. The standard frequency is once every 10 minutes and may be reduced to once every 30 minutes by sliding the blue button to the left, or 5 minutes or 'Continuous' by sliding it to the right.

Our advice is to set it to 'Continuous' or 5 minutes when engaged in fast types of water sports. For longer trips and slower vessels we recommend a lower frequency of transmission. In any case, trip recording will be discontinued automatically at 10% remaining.

The icons at the bottom of the screen allow you to opt for:

|	
	Tracking your trip on the map
	Weather information
	Share your live trip with family and friends

Please remember to end the Track Only function when completing your trip. If you do not do so you will receive an e-mail after 24 hours, informing you that you have not ended your Track Only trip.

Performance analytics

Track Only mode will enable you to analyse your speed and performance on the water whether you are racing or fine tuning whilst cruising. Please note, analytics will only be provided on "Continuous Mode" in Track Only mode.

vi.   Emergency calls

An emergency call to 999 can be made from any screen in the RYA SafeTrx app. To initiate the call, you can either press the 'Call for help' icon on the home screen, menu or trip progress screen or hold your finger down anywhere on the screen for 3 seconds. This will present the Emergency Call screen. You will then need to press the red button labelled "Emergency" to initiate a call.
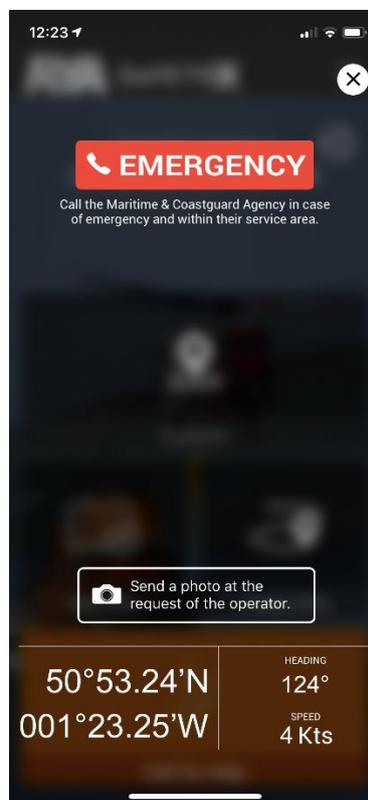
When the Emergency call options are pressed, the app will determine the boater's current location using location services on the device and will call a pre-defined number accordingly.

If you have an internet connection at the time of making the phone call, the app will send an emergency location update to the SafeTrx Monitoring Console as well as sending the UK National Maritime Operations Centre an email with your personal and location details.

Depending on your location, the RYA SafeTrx app can call the following services:

- If your location is in the UK, the Emergency Call dials the emergency services number, 999.

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- If your location is in Ireland, the Emergency Call dials the emergency services number, 112.
- If your location is in Netherlands, the Emergency Call dials the Netherlands Coast Guard.
- If your location is in Spain, the Emergency Call dials the Salvamento Maritimo (Spanish Maritime Safety Agency).
- If your location is in Germany, the Emergency Call dials the MRCC Bremen.
- If your location is in Finland, the Emergency Call dials the Finnish Border Guard.
- If your location is in Norway, the Emergency Call dials the Coastal Radio Emergency number.
- If your location is in Sweden, the Emergency Call dials the Sjöräddningssällskapet (Swedish Sea Rescue Society).
- If your location is in Denmark, the Emergency Call dials the Royal Danish Navy JRCC.
- All other countries, the Emergency Call dials the emergency services number, 112

If, for whatever reason, the location cannot be determined, it defaults to the emergency services number, 112. The app will always display the service that you are connecting to so that it is clear to the user who they are calling.

vii.   Sharing

SafeTrx allows you to share your real-time track with family and friends during and after your trip.

   Share icon

Share your current position

On the Home screen, tap the 'share' icon at the right-hand side of the location coordinates. Choose the SMS, e-mail or social media service you prefer. A standard message with a url with your location on a map is generated. You can edit and send the message. The selected contacts can see your position on a webpage and can send this to others (without your permission). Visit the FAQs at www.rya.org.uk/go/safetrx for more about sharing.

Share live location updates during your trip

If you have a Sail Plan or a Track Only trip in progress, you can share your location with friends and family on a live map, and allow them to track you while you're on the water. Tap the 'share' icon on the Trip in Progress screen to share a url with your location on a live map. This can be shared via SMS, e-mail or a social media channel of your choice. Visit the FAQs at www.rya.org.uk/go/safetrx for more about sharing.

Share a trip history

When you have ended your trip, you can share the track with friends and family. From the sidebar menu, choose 'My Profile', then tap 'Trip History'. Choose the track you wish to share. On the Trip Summary screen, tap the 'share' icon at the bottom of the screen at the left hand side. Choose the SMS, e-mail or social media service you prefer. A url is sent with the completed track on a webpage, indicating your name and your vessel name, last known position, last position update, trip start time and that the trip has ended. Visit the FAQs at www.rya.org.uk/go/safetrx for more about sharing.

Group sharing feature

The group sharing feature makes it easier for a single shore-side contact to keep track of a group going out together but in separate craft (e.g. kayakers, PWC users, dinghy cruisers, etc.). Instead of individual members sending separate messages from RYA SafeTrx, the group share feature allows the contact to track up to six app users taking part in one session.

Once the session has begun and the link has been shared with the contact ashore, the contact can view the group's live track the tracking webpage. During the session, each member is also able to view the group's live track and monitor each other's position on the water. It also allows users to review their session with a playback feature.

The group sharing feature is only available in Track Only mode under the 'Group Event Code' link.

Group sharing feature – creating and sharing a private group code

Open Track Only mode and tap on the 'Group Event Code' link under the vessel name field. Choose the 'Generate Private Group Code' option. The code generated is displayed on the screen together with the time and date by which the code will expire. A private group code expires 24 hours after it has been generated. When 'OK' is tapped, the Track Only screen displays the code and the date and time it expires.

Before starting your Track Only trip, you can share the private group code. Tap the 'share' icon at the bottom of the screen and choose your preferred way to share (the code will be included automatically in the message). You can also share the code by pressing the 'share' button on the Private Group Code screen. Up to six app users can use a private group code in one session.

Group sharing feature - entering a private group code

Open Track Only mode and tap on the 'Group Event Code' link under the vessel name field. Choose the 'Enter Group Code' option and enter your code. Following the input of a valid code, a confirmation message will be displayed. Tap 'OK'.

Group sharing feature – trip sharing with a private group code

Once a Track Only trip is underway, you can share a link to the tracking web page. Tap the 'share' icon and choose 'Share a link to the trip'. The tracking webpage is refreshed every minute.

You can also play back group trip tracks from the tracking webpage as indicated by the small red video camera icon. Press play and use the timeline slider to move forward and back. The tracking webpage will be available for three days after a private group code has been created.

viii.　Explorer

Tap on the Explorer icon on the Home screen or choose from the Menu.

Explorer icon

The app will display a map showing your location. If you touch a point on the map the following icon will appear:

⛅ **Weather**	If you tap the **Weather** icon you can check the sea area forecast.
📄 **Nearby Information**	By tapping on the **Nearby Information** icon you can see nearby information: • VHF channels • Port authorities • Marinas • Coastguard & Lifeboat stations

3. RYA SafeTrx website

RYA SafeTrx website - https://safetrx.rya.org.uk

In addition to the features the app offers, users also have access to the RYA SafeTrx website. Here you can also manage your account, vessel and vehicle details and emergency contacts, plus personalise checklists and review your trips.

Logging in to the RYA SafeTrx website

If you have registered an account via the RYA SafeTrx app:

If you have already registered an account via the RYA SafeTrx app you can use the same email address and password to access the RYA SafeTrx website.

If you have not registered an account via the RYA SafeTrx app:

A user who has not already registered an account via the RYA SafeTrx app may wish to register an account via the RYA SafeTrx website if:

- The user does not want to use the app but wants to register their details and vessel details in the RYA SafeTrx database to be available to HM Coastguard if they ever need assistance.

- The user wants to use the app but would prefer to register their account and set up other details such as vessel details and emergency contacts via the RYA SafeTrx website. You will use the same email address and password as you register on the RYA SafeTrx website to access the RYA SafeTrx app.

Registering an account

Go to https://safetrx.rya.org.uk, click on 'Register', read and accept the Terms & Conditions.
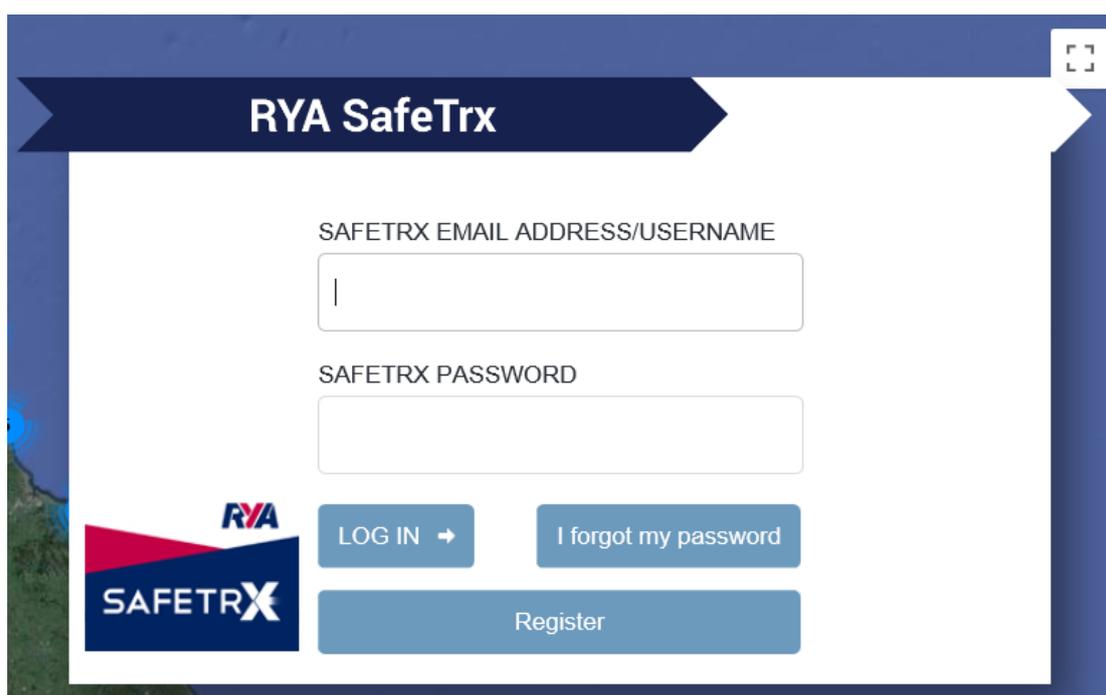
Complete the registration page. **Please use a password of between eight and twelve characters**.

Fields marked with an asterisk are required fields.

Click 'Register' at the bottom of the page.

Once registered you can log in to the RYA SafeTrx website using your registered email address (username) and password. You can also use the same credentials to log in to the RYA SafeTrx app.

Registering a vessel

Once logged in, choose the 'Vessels & Checklists' option:

Click 'Add' and enter vessel details.

Fields marked with an asterisk are required fields.

Clicking on the box next to '**Important details for SAR actions**' reveals further vessel details which can be completed.

Facilitate and expedite an effective search or rescue operation by providing as much detail as possible about your vessel

☐ **Important details for SAR actions**

In your own interest and that of the emergency services, please ensure your personal and vessel registration are as complete and kept up-to-date as much as possible.

When uploading a vessel photo, please ensure the image is in the format of a JPG or JPEG and is less than 1mb.

Adding emergency contact details

Choose the 'Emergency Contacts' option:

Click on 'Add' and enter details. You can also edit your emergency contacts by clicking on the pen icon ✏ next to the emergency contact you wish to edit.

4. Deleting your account

If you wish to delete your account, log onto the app, tap the Menu icon (3 horizontal lines at the top right of the screen), choose 'My Profile' and then select 'Account Details'. Choose the 'Delete Account' option and enter your password.

Simply uninstalling the app from your smartphone will not delete your account.

If you do not use the app and only have an account registered on the RYA SafeTrx website, please send a request to delete your account to rya@safetrxapp.com.

5. Useful links

RYA SafeTrx website – https://safetrx.rya.org.uk/login.html

RYA SafeTrx FAQs – www.rya.org.uk/go/safetrx

6. Any problems?

If you are having problems downloading, logging in or using the app, or if you are having problems using the RYA SafeTrx website, please contact rya@safetrxapp.com who will be able to assist you.

Annex A

Escalation process (Sail Plan mode)

Time	Trip status	Recipient	Message type	Message
T - 15 Mins (15 minutes before the ETA)	Active	Boater	Local Notification	"SafeTrx Your trip will be marked overdue within 15 minutes. Please extend or end your trip."
ETA	Late	Boater	Local Notification	SafeTrx Trip Expiration. Your trip is overdue. Extend or end.
T + 15 Mins (15 minutes after the ETA)	Late	Boater Boater	Local Notification SMS Message	SafeTrx Trip Expiration. Your trip is Overdue. Emergency Contacts will be alerted within 15 minutes. Your SafeTrx trip is now overdue. Your designated Emergency Contacts will be alerted within 15 minutes. Please extend or end your trip.
T + 30 Mins (30 minutes after the ETA)	Overdue	Boater	Local Notification	SafeTrx Trip Expiration. Your trip is overdue. Your designated Emergency Contacts are being alerted.
		Boater	SMS Message	Your SafeTrx trip is now 30 minutes overdue. Your designated Emergency Contacts are being alerted.
		Emergency Contacts	SMS Message	Please make contact with (boat name) immediately as they have not advised their return to port and are now 30 minutes overdue. If you are unable to contact them, please call HM Coastguard on (number supplied) quoting (TR number) (NOK@ T+30) and provide as much information as possible.