

# Skeyes Droneguide App User Guide

Version 02.10, 14-Nov-2018

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# Preface

## Intended audience

This user guide is intended for all users of the *Skeyes Droneguide\_* app.

Basic familiarity with your *Apple iOS/Google Android* mobile device including its operating system software is the only prerequisite for understanding the information presented in this guide.

## Software prerequisites (Nov. 2018)

Following mobile device operating systems are supported:

- Android 4.4 (KitKat) or later.
- Apple iOS 10 or later.

Following web browsers are supported:

- Evergreen i.e. auto-updating browsers such as *Microsoft Edge* (most recent version and 2 versions back), *Microsoft Internet Explorer 11*, *Mozilla Firefox* (most recent version and 2 versions back with major patches applied), and *Google Chrome* (most recent version and 2 versions back).
- *Apple Safari* (most recent version and 1 version back).
- *Opera* (most recent version and 2 versions back).

The screenshots included in this user guide were taken on an *Android* mobile device running the *Skeyes Droneguide* app version 2.0.2 but the *iOS* app has a very similar look-and-feel.

## Objectives

This user guide explains how to use the *Skeyes Droneguide* app to view Belgian limited and no-drone zone information and how to use the app to help you with validating and logging drone operations/flights in Belgium.

## Reader's comments

*Unify* welcomes your comments on this manual. Please send your comments to the following email address: [support@unify.aero](mailto:support@unify.aero).

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# Installing the Skeyes Droneguide app

Use your mobile device specific installation procedure (i.e. the *Play Store* app on Android and the *App Store* app on iOS) to download and install the *Skeyes Droneguide* app. You can easily locate the app in the Apple or Android app store by searching for the strings **Skeyes** or **Unifly**. You can also find links to the *Skeyes Droneguide* apps on the [Skeyes website](#).

# Launching the Skeyes Droneguide app

1. Tap the *Skeyes Droneguide* app icon to launch the app.
2. You are now automatically directed to the app's login screen:



3. From the login screen you can:
  - a. Tap the **[ LOGIN ]** button to log in if you are already registered on the *Skeyes* UTM system. See section [Logging in for the first time](#) for more details.
  - b. Tap the **[ SIGN UP ]** button to register on the *Skeyes* UTM system if you are not registered yet. See section [Registering on the Skeyes UTM system](#) for more details on the registration process.
  - c. Tap *Explore without account* to use the app anonymously. See section [Exploring the app without an account](#) for more details.

## Exploring the app without an account

It is possible to try out the app without registering and logging in first. This allows you to access most but not all functionalities of the app.

Following functional limitations are active when using the app anonymously:

- You cannot register/use your own drones for drone operation validation.
- You are limited to selecting one of a total of three standard drones for drone operation validation purposes: a small drone (0-1 kg), a medium drone (1-5 kg) or a large drone (more than 5 kg).
- The "PROFILE" screen is disabled so gear and logbook management are not available.
- Your flights are not logged in the app's logbook.

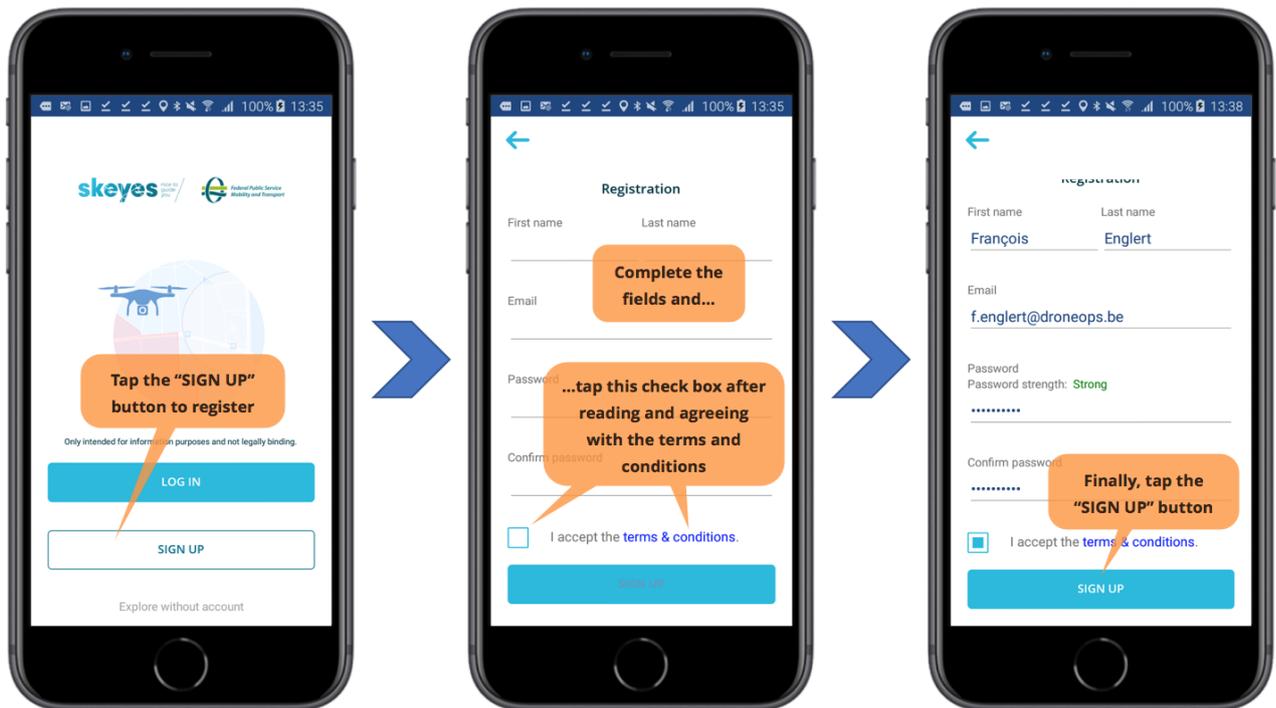
- Account management is disabled.
- The app does not allow you to manage your preferred user interface language, your preferred coordinates display format and your preferred units for distance, mass, temperature, height, and speed.

# Registering on the Skeyes UTM system

To use the full functionality of the app, you will first need to register yourself on the *Skeyes* UTM system and you need to login.

Proceed as follows to register:

1. On the login screen tap the [ **SIGN UP** ] button to go to the registration page, complete the registration form (an actively used email address is required), and tap the [ **SIGN UP** ] button to continue:



A warning message will be displayed if the strings entered in the *Password* and *Confirm password* fields are not identical. You will have to correct this to be able to continue the registration process.



Make sure to choose a strong password. An indication of the password strength is include in the registration screen.



Take the time to tap the *terms & conditions* and *privacy policy* links and to read the information presented. Do not use the *Skeyes Droneguide* app if you do not agree with the terms and conditions and/or the privacy policy!

2. Check your incoming emails and confirm your registration by following the instructions in the email message sent to you. Make sure to check your spam email folder if you don't find the confirmation email in your standard incoming email folder:

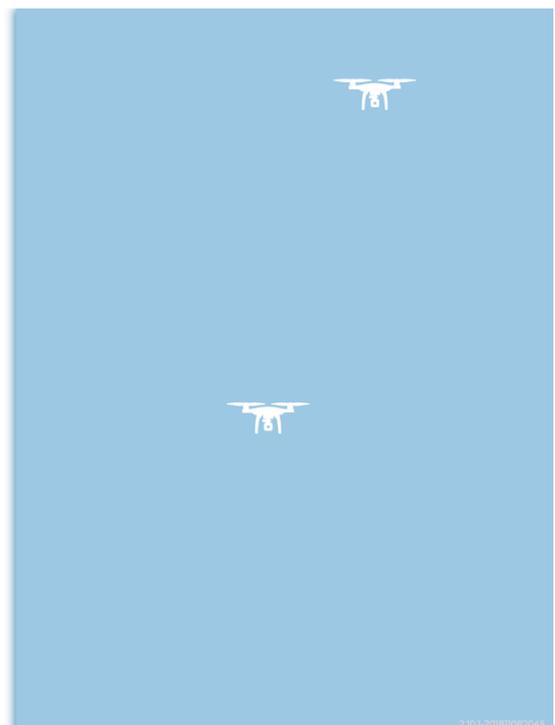
## Welcome to the droneguide platform.

Confirm your droneguide account.

[Activate account](#)

If your 'Activate account' button doesn't work, it is possible that it was broken by your e-mail system. If this button isn't clickable, please copy and paste this url <https://portal.droneguide.be/#/userConfirmation/9e679df1-b359-4b31-97e4-09aa3e046198> into your browser's address bar and press Enter.

3. A web page will open and confirm your account is now ready for use:



# Logging in for the first time

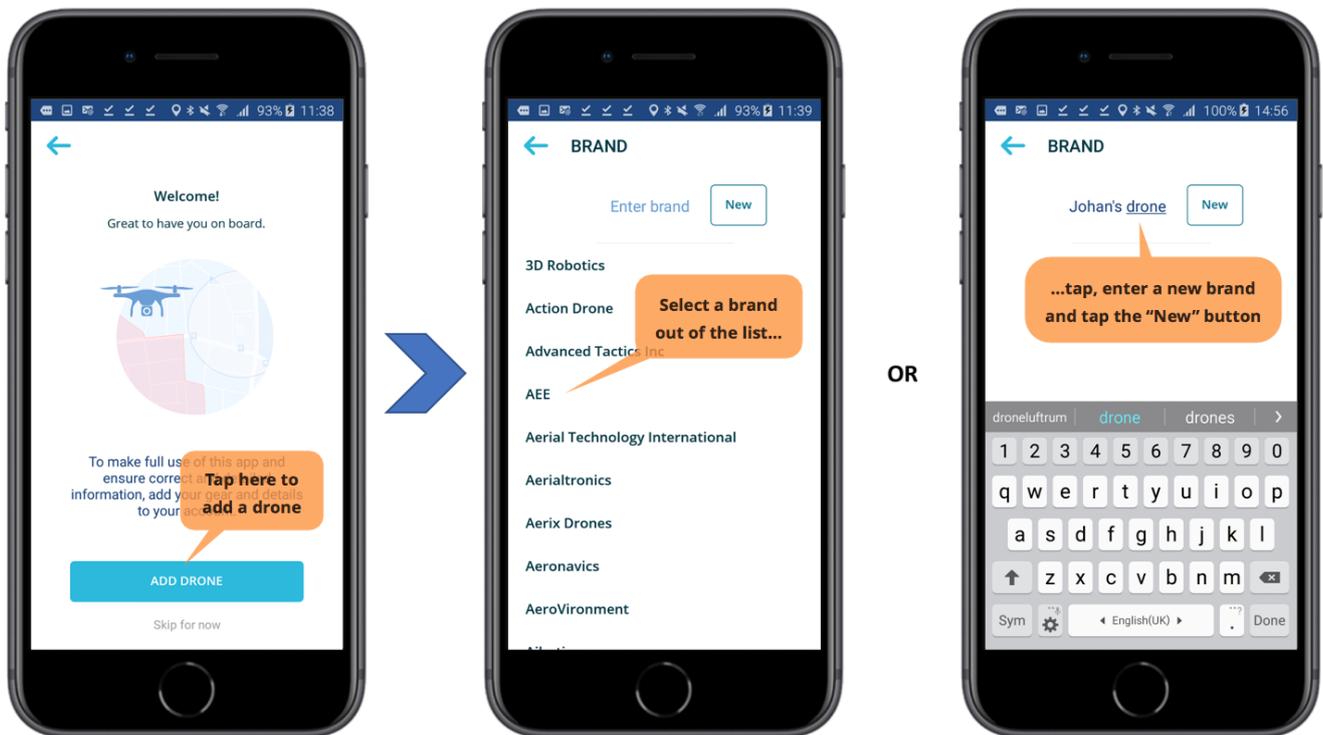
Logging in allows you to make maximum use of the functionalities offered by the *Skeyes Droneguide* app including the management of your personal logbook and settings, and the registration of your drones.

The first time you log in, the app will lead you through the completion of your personal details, the definition of a number of personal preferences and you are also given the opportunity to register a drone. Additional drones can be added later on as explained in section [Adding drones](#).

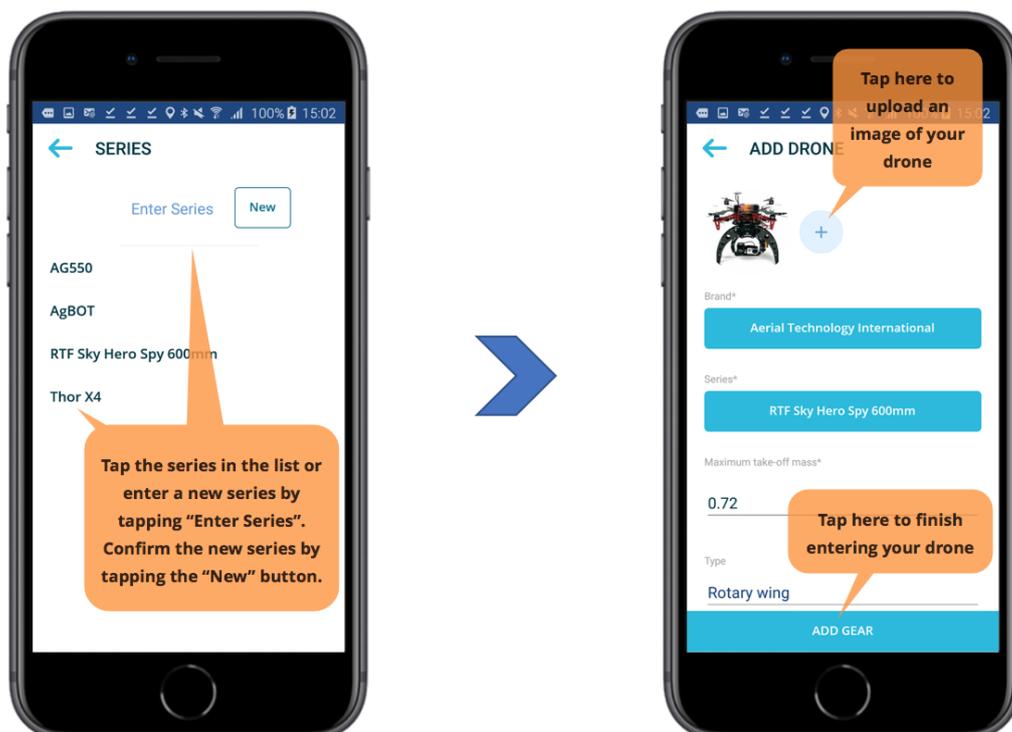


The "ADD DRONE" screen has a button for selecting the drone's brand, another button for selecting the drone's series/type and a field in which you have to enter the maximum take-off mass of the drone if it is not provided automatically by the app. These three fields are mandatory fields as indicated by the \* at the end of the field name. The form also includes a number of optional fields for your use.

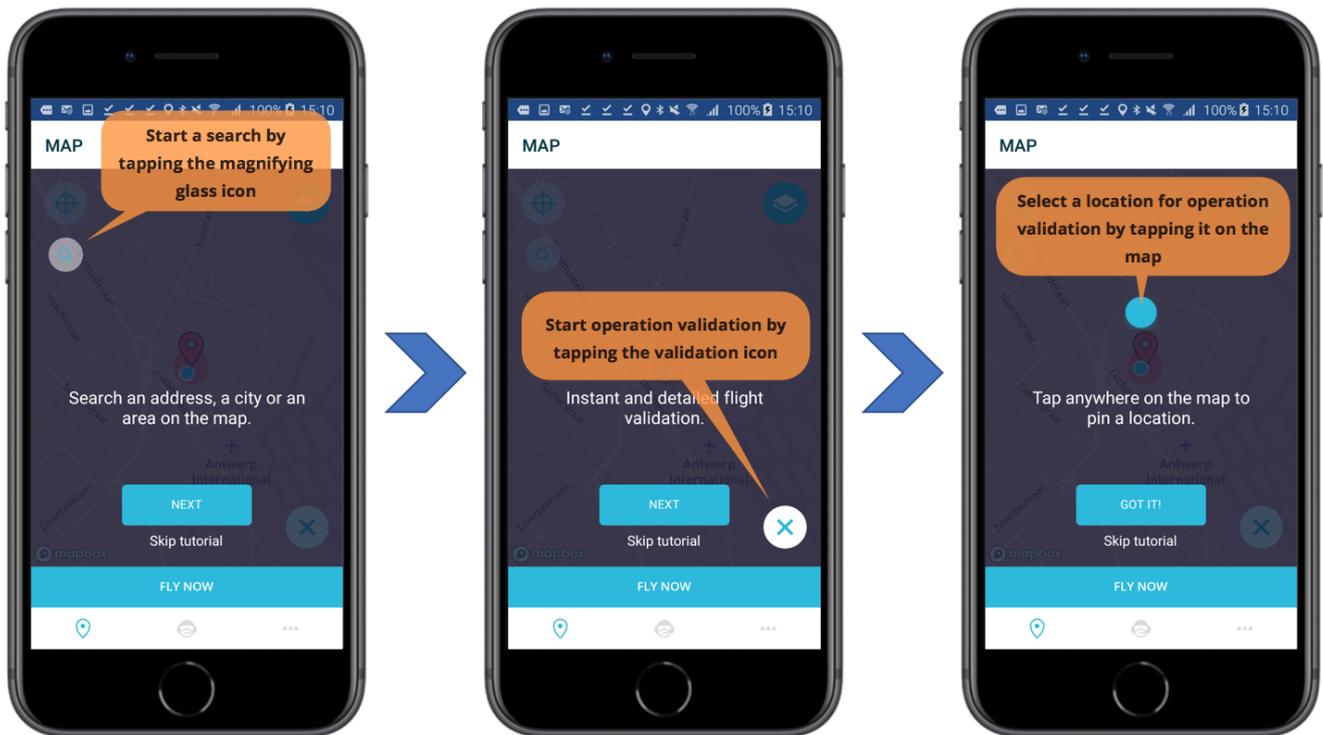
Tapping the [ **Add brand** ] button allows you to select the drone's brand out of a list. If your drone's brand is not in the list, you can enter the drone's brand yourself:



After selecting the drone's brand, the series/type of drone can be selected using a similar method including entering your drone's series if it is not included in the list:

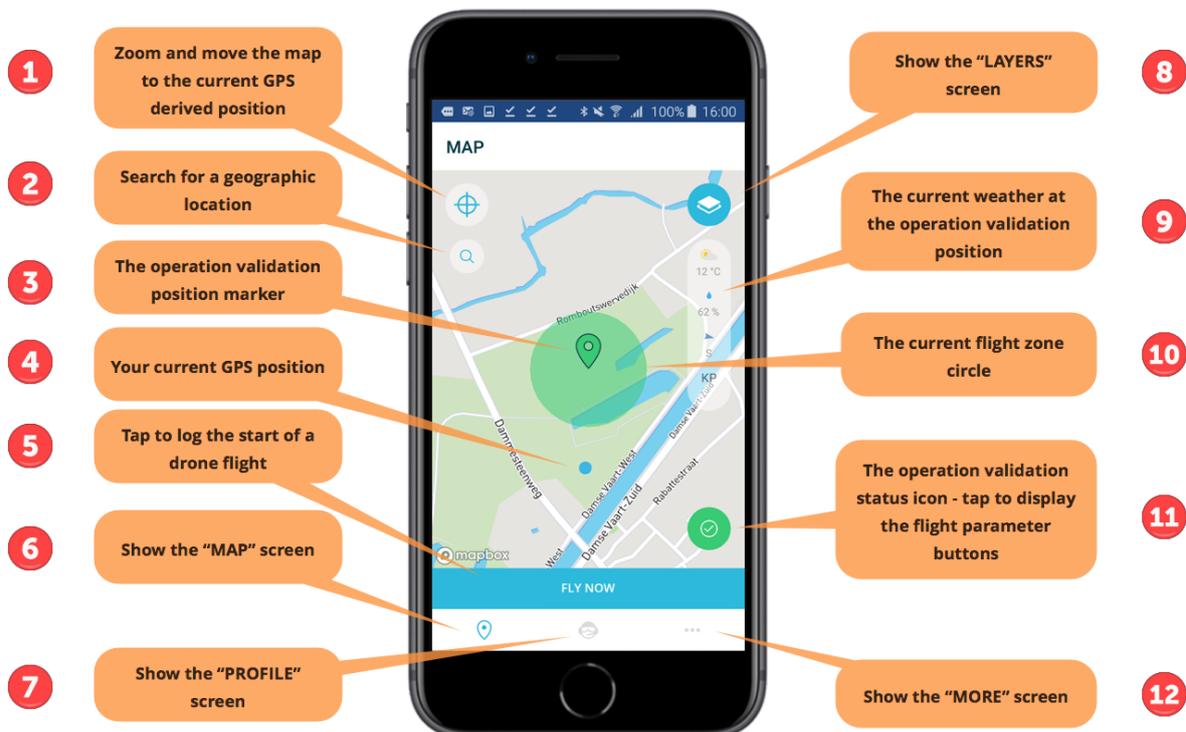


Once you have registered your first drone, you are given the opportunity to go through a short app tutorial. Tap the [NEXT] button to move through the available tutorial screens and/or leave the tutorial by tapping *Skip tutorial*:

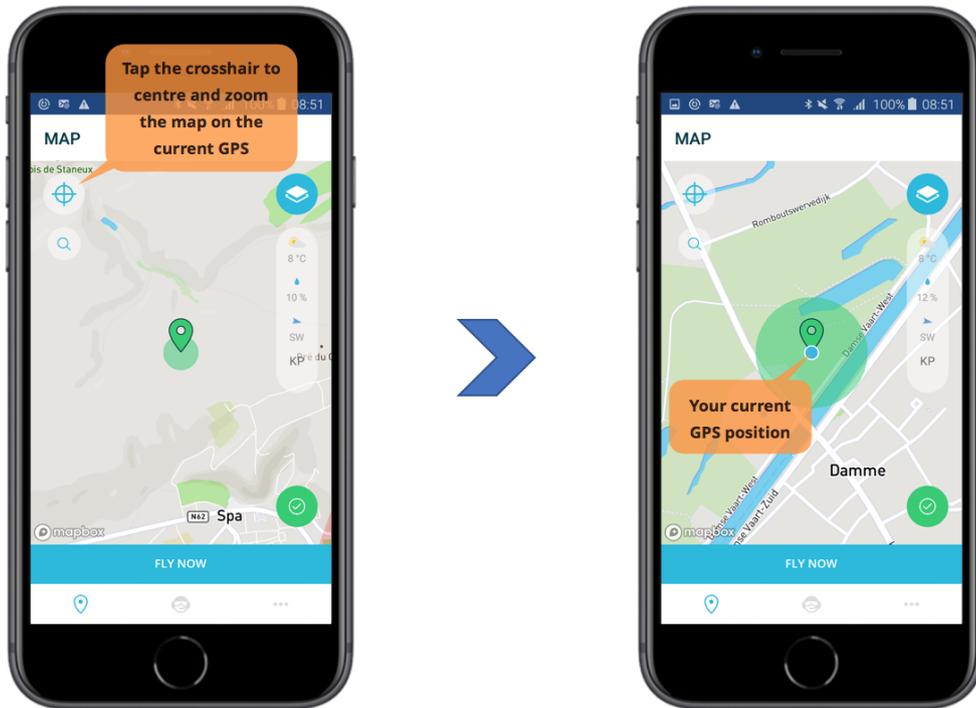


You will now see the app's "MAP" screen centred on your current, GPS derived location.

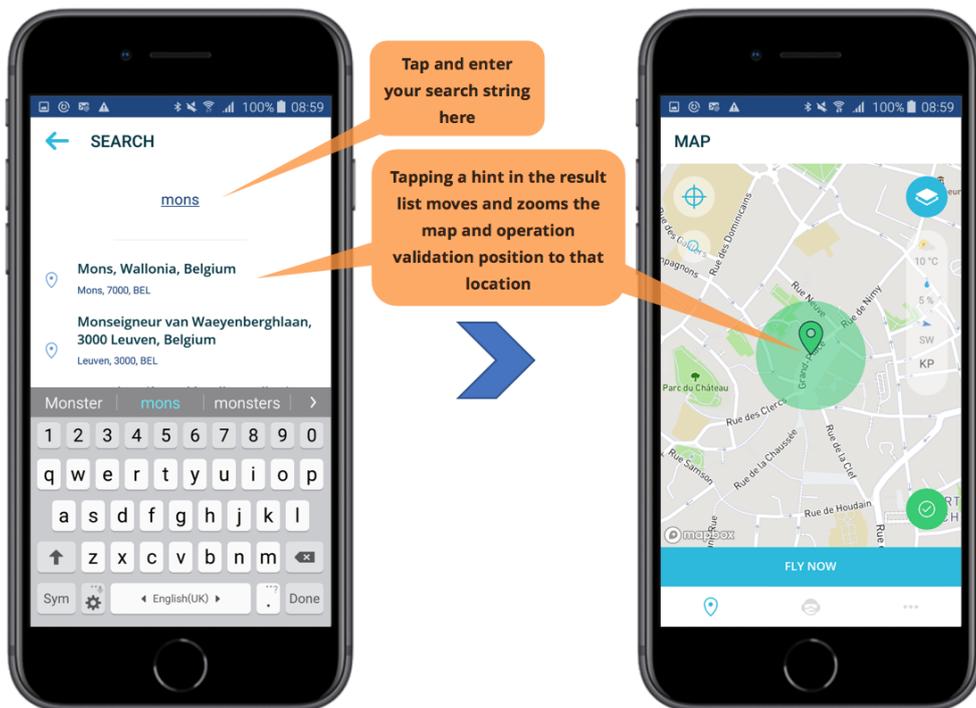
The "MAP" screen includes following user interface elements:



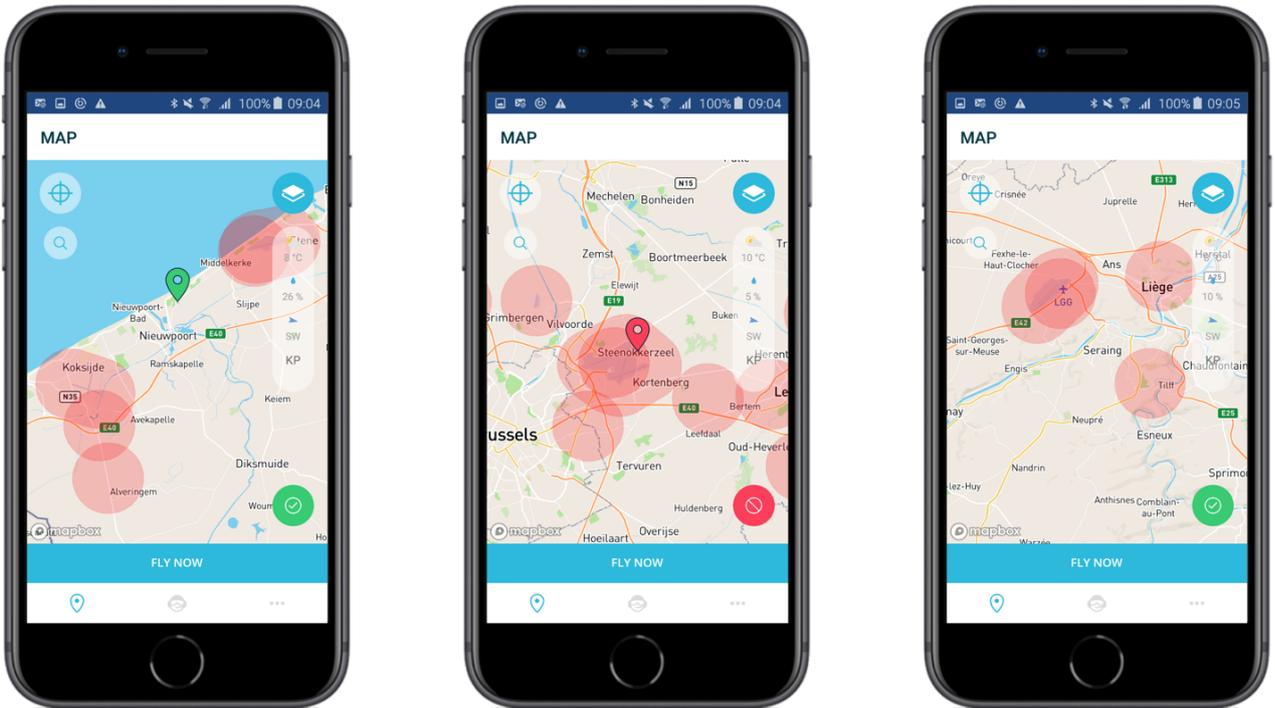
1. Tapping the  icon will centre and zoom the map on your current, GPS derived position:



2. Tapping the **Q** icon activates the search screen allowing you to enter and search for a geographical location such as an address or a city:

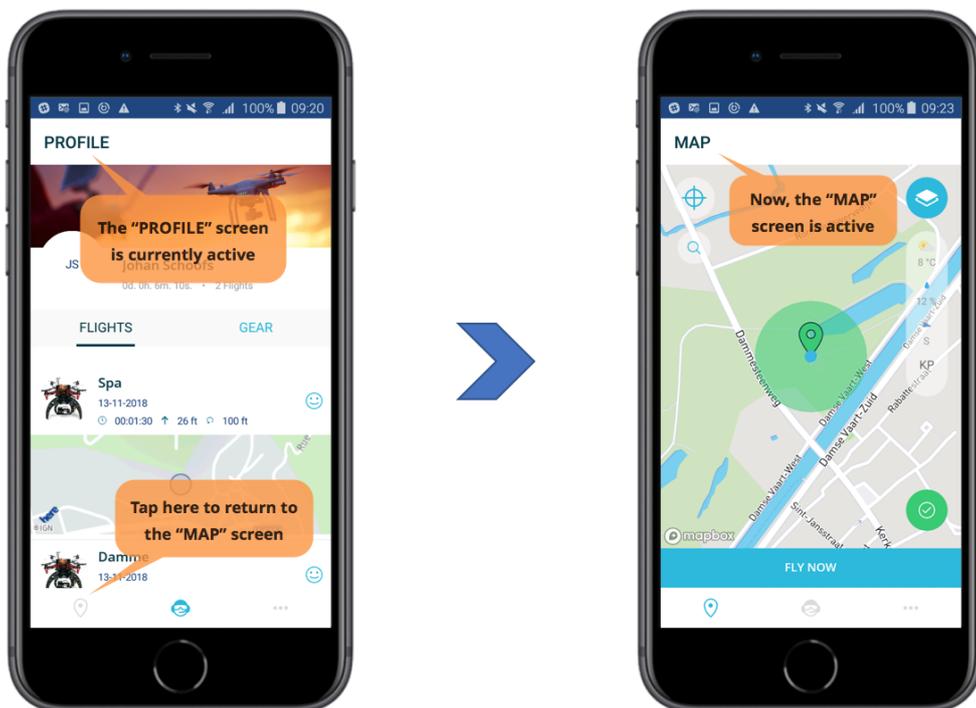


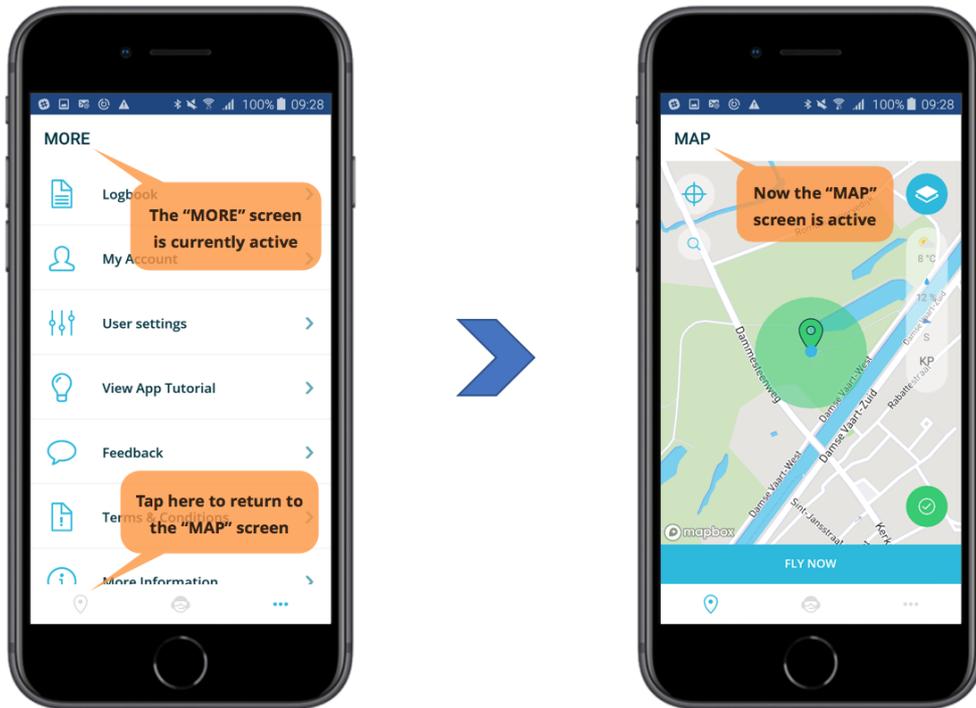
3. Tapping a location on the map will mark that location to be used in the operation validation process. The location tapped is visually marked on the map with a colour-coded **📍** marker. Zones which have active drone flight limitations are shown as transparent, coloured overlays on the map provided their display is enabled (see [here](#) for more information):



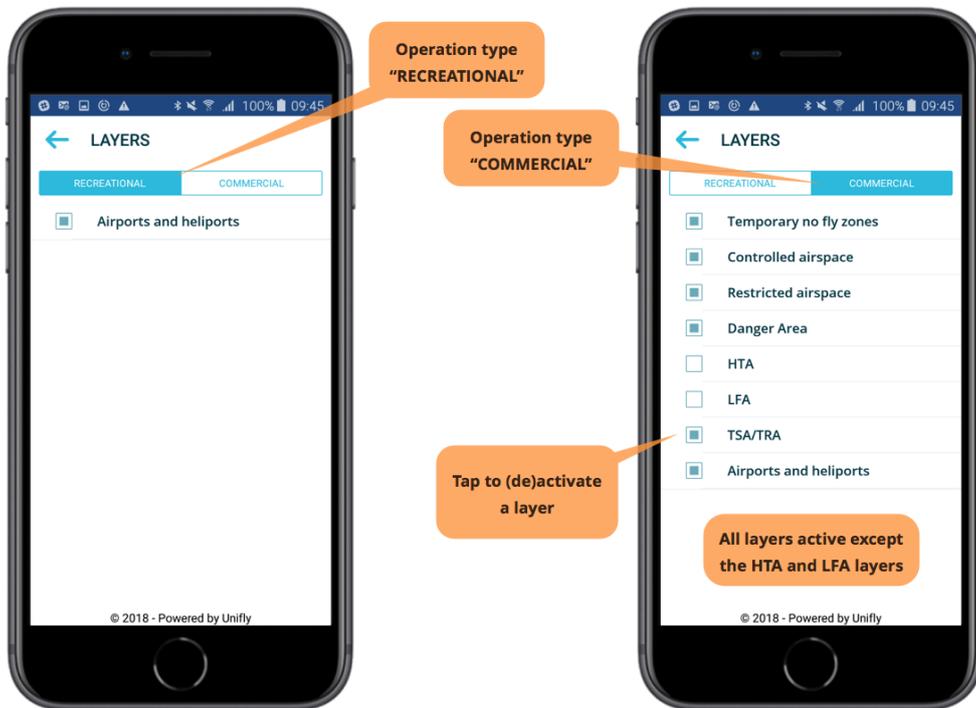
Zoom in on the map if you do not see the limited drone zone overlays. The app will display a warning message if your current zoom level does not allow you to see these overlays.

4. The blue dot indicates your current, GPS derived position on the map.
5. The [ Fly Now ] button is used to log the start of a drone flight. See section [Logging a drone flight](#) for more details.
6. When on the "PROFILE" or "MORE" screen, tapping the 📍 icon brings you back to the app's "MAP" screen.





7. Tap the  icon to display the "PROFILE" screen. This screen allows you to manage your gear and your logbook. See section [The PROFILE screen](#) for more details.
8. Tap the  icon on the "MAP" screen to display the "LAYERS" screen that allows you to select the operation type and the information to show on the "MAP" screen:

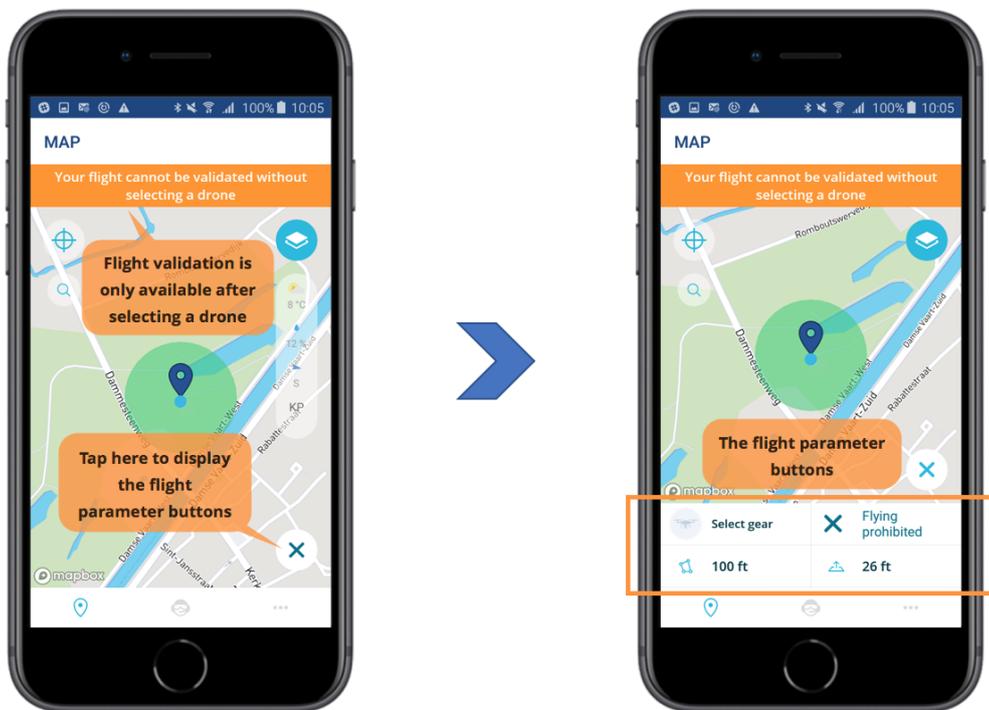


9. The weather bar lists the current temperature, the chance of precipitation, the wind direction, and the  $K_p$  index at the operation validation position as flagged by the  on the map. This index quantifies disturbances in the horizontal component of earth's magnetic field with an integer in the range 0–9 with 1 being calm and 5 or more indicating a geomagnetic storm. These disturbances are triggered by solar activity and interfere with GPS signals.
10. The flight zone circle is a 2D representation of the airspace in which you intend to fly your

drone. It is shown as a transparent colour-coded circle surrounding the colour-coded flight validation position marker. The colour of the flight zone circle and flight validation position marker indicates the result of the flight validation process:

- Green = flight allowed.
- Orange = check the disclaimers.
- Red = flight not allowed.

11. The operation validation status icon is used to signal if an operation is legally allowed or not on basis of the current flight parameters i.e. the operation type, the operation duration for commercial operations, the drone type, and the location and size of the operation flight zone. Tapping the operation validation status icon will display/hide the operation parameter buttons. See section [Validating a drone operation](#) for more details on operation validation and the use of the operation parameter buttons.



12. Tapping the **☰** icon brings up the "MORE" screen. See section [The MORE screen](#) for more details.

You can move the map by dragging it around and you can zoom in/out by stretching/pinching.

This overview of the app's map screen concludes this section describing the app's user interface, how to register on the *Skeyes* UTM system and how to register your first drone.

The following sections explain in detail how to make maximum use of the functionalities offered by the *Skeyes Droneguide* app.

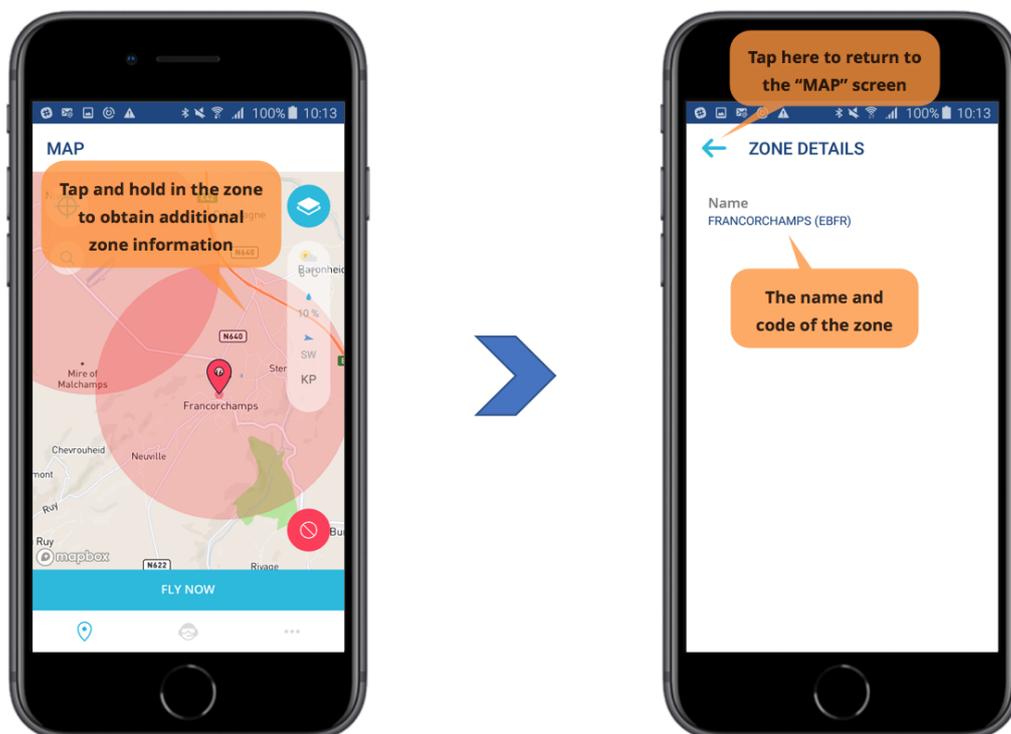
# Obtaining information on a zone

Limited and no drone zones are made visible on the map as red overlays.

Tapping and holding while on a zone will display the name of the zone. Two scenarios are possible depending on the number of zones covering the location on which you perform a tap and hold.

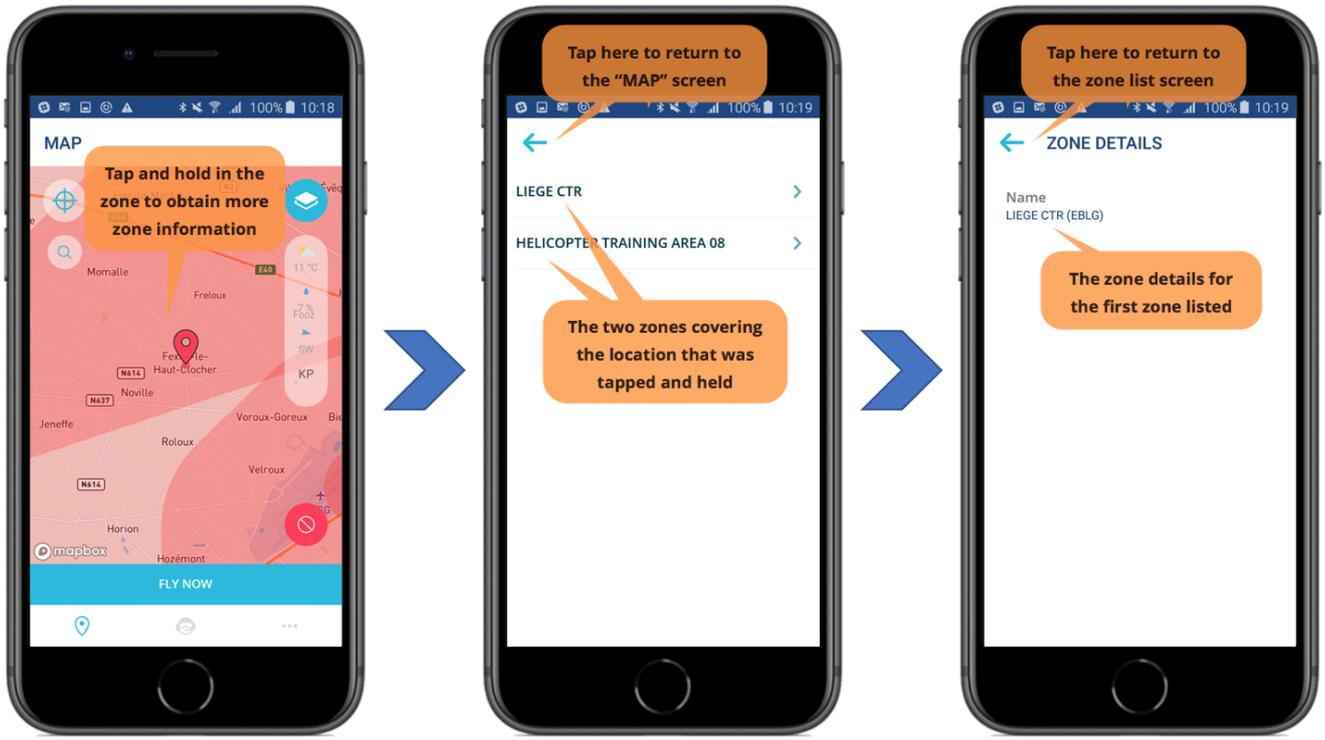
## The location is covered by one zone

In this case tapping and holding while on the zone will directly display the name and code of that zone as shown in the following example:



## The location is covered by multiple zones

When tapping and holding on a location covered by multiple zones you will first get to see the list of zones covering the location. Tapping a zone in that list will then display the name and code of that zone:



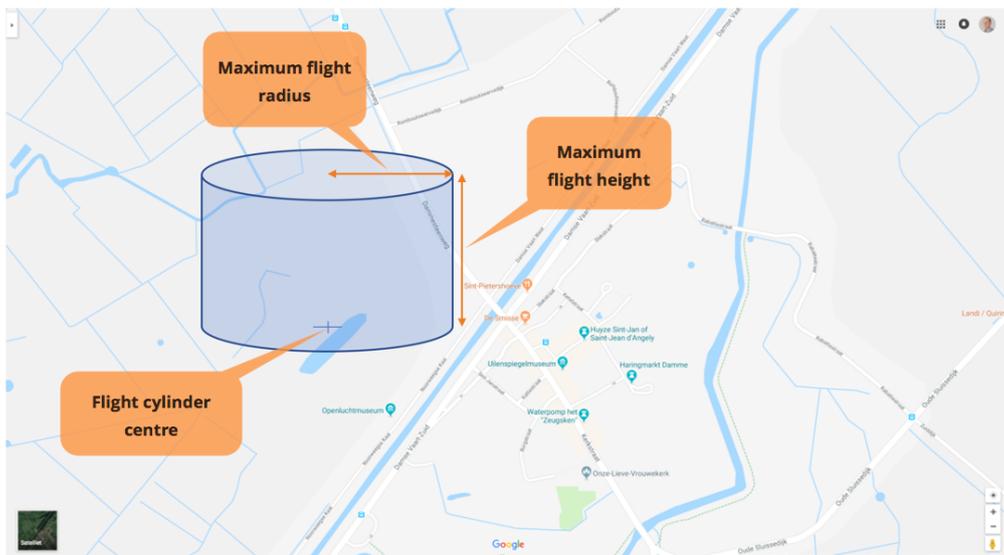
# Validating a drone operation

The *Skeyes Droneguide* app supports validation to check the legality of a drone operation you intend to perform.

To validate a drone operation with the *Skeyes Droneguide* app, you need to:

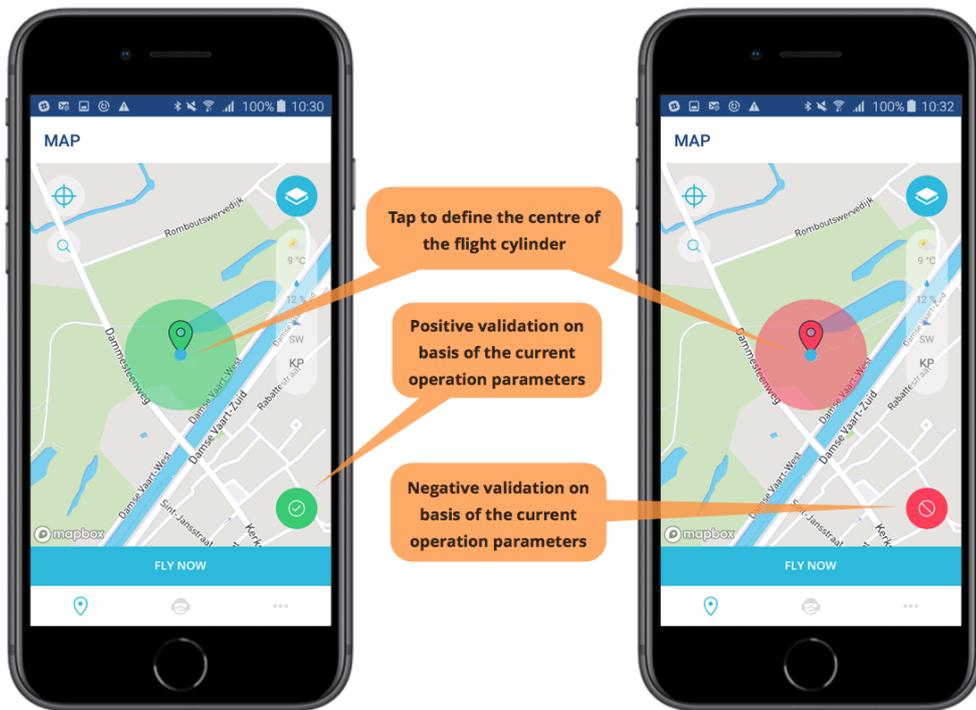
- select the drone you will be using for performing the operation.
- define the airspace in which you intend to fly the selected drone.
- define the operation type (recreational, commercial class 1A, commercial class 1B or commercial class 2).
- for commercial operations: define the operation duration.

The app allows you to define the airspace in which you intend to fly your drone to be a cylindrical airspace as defined by its centre location and the radius and the height of the cylinder.



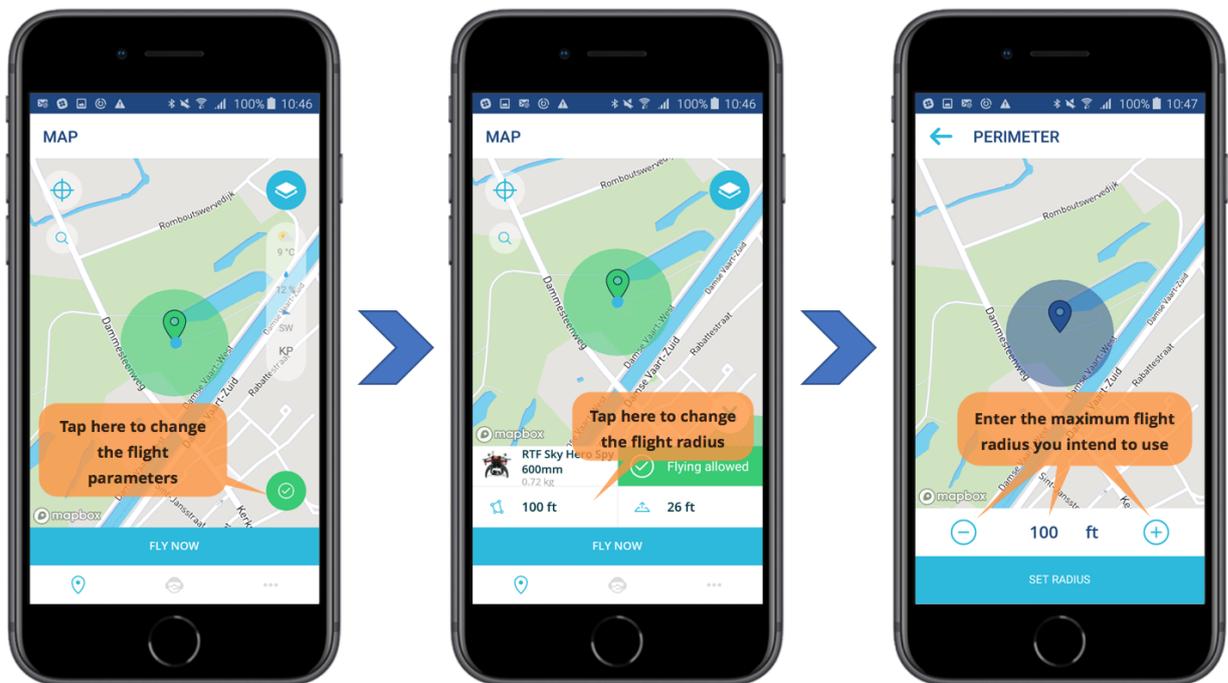
Proceed as follows to validate an operation using a cylindrical airspace:

1. On the "MAP" screen, tap the location you want to use as the centre of the flight cylinder. Remember you can use the search function to quickly move and zoom the map to a geographical location. The operation validation status icon will show the overall result of the operation validation provided all operation validation parameters i.e. the location, operation type, drone, maximum flight radius, and maximum flight height are known:

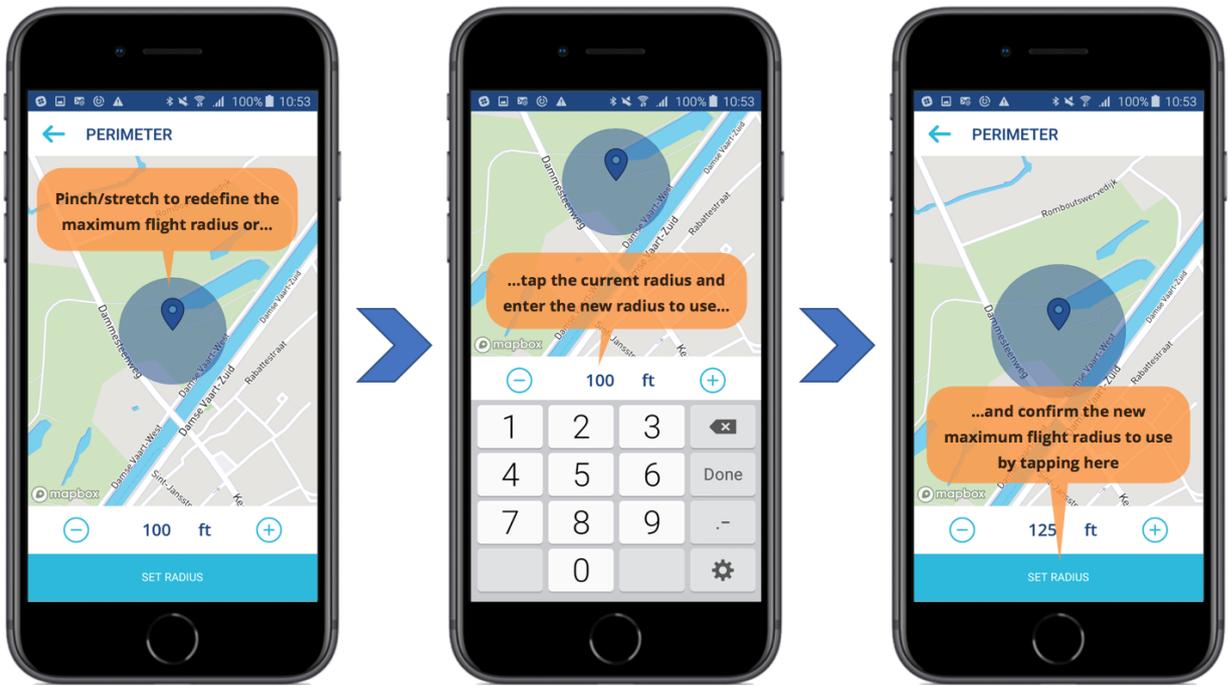


2. If necessary, change the maximum flight radius from its current value:

- Tap the flight validation status icon.
- Tap the flight perimeter button.
- Enter the new maximum radius to use.

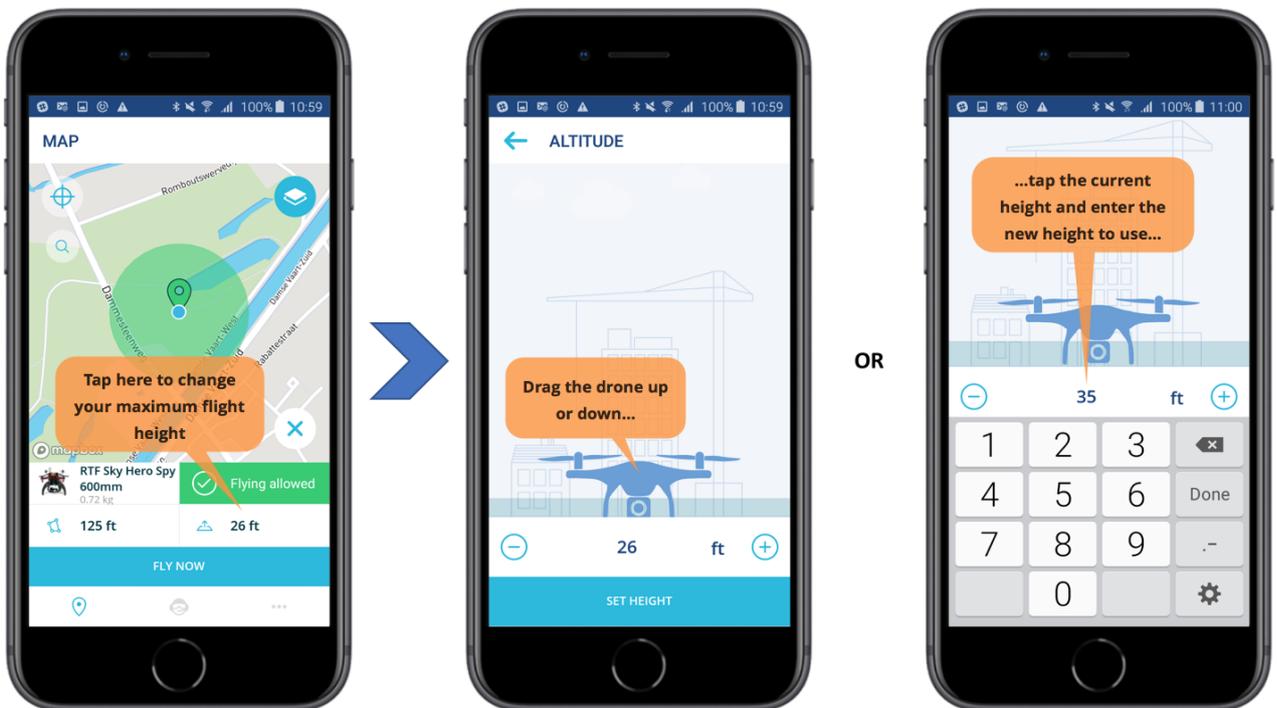


You can change the maximum flight radius to use by pinching/stretching the blue flight circle, by tapping the  $\oplus$  and  $\ominus$  icons or by tapping its current value and entering a new value using the virtual keyboard:

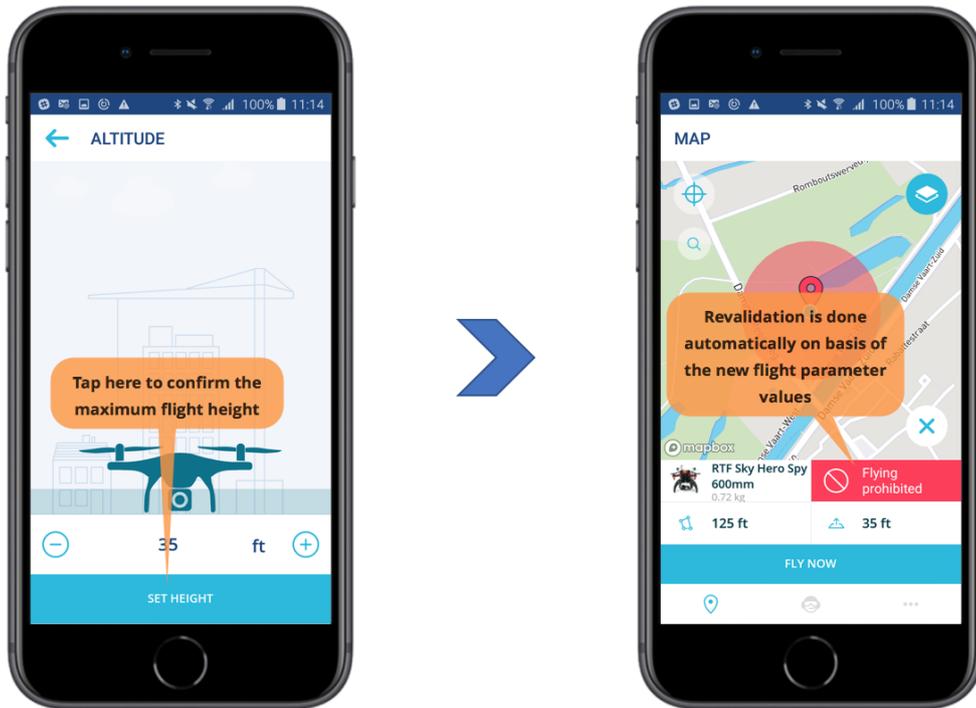


Don't forget to confirm your choice by tapping the [ SET RADIUS ] button at the bottom of the screen.

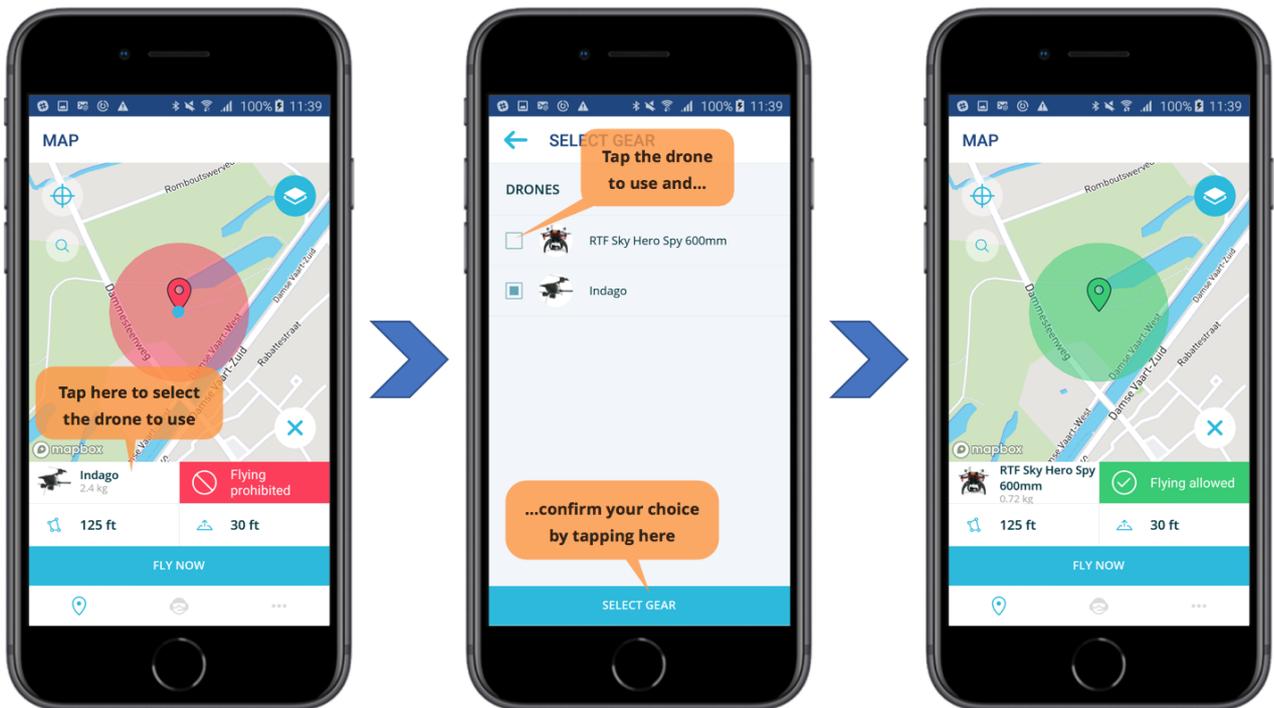
3. If necessary, change the maximum flight height from its current value by tapping the maximum flight height button and entering the new value to use:



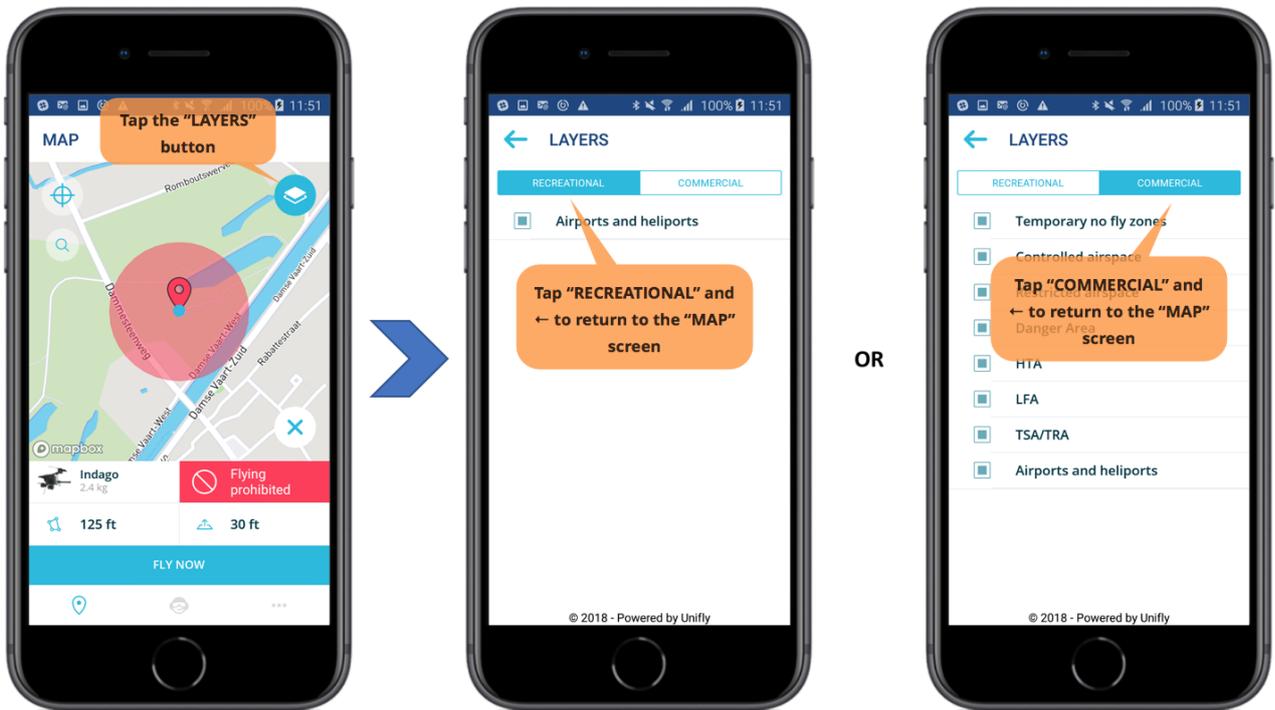
The maximum flight height can be changed by dragging the drone up and down, by tapping the **+** and **-**, or by tapping the current value and entering a new value using the virtual keyboard. Again, do not forget to confirm the new maximum flight height by tapping the "SET ALTITUDE" button.



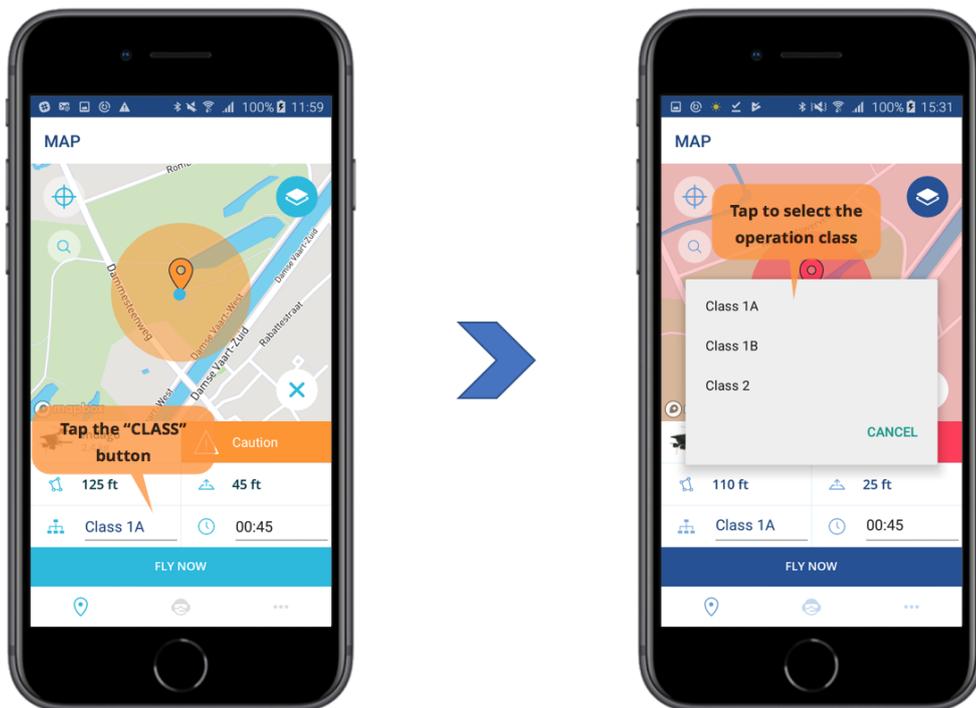
4. You also need to select the drone to use by tapping the drone button and selecting the drone to use for validation:



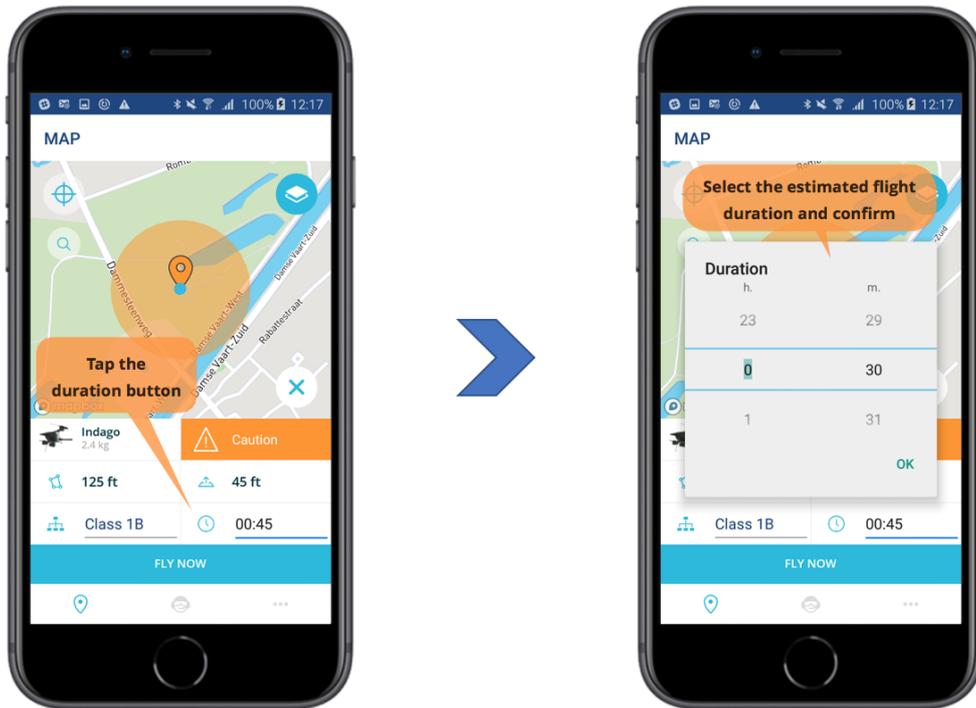
5. Select if you want to perform a recreational or commercial drone operation by tapping the [ LAYERS ] button, tapping the [ RECREATIONAL ] or the [ COMMERCIAL ] button and tapping ←:



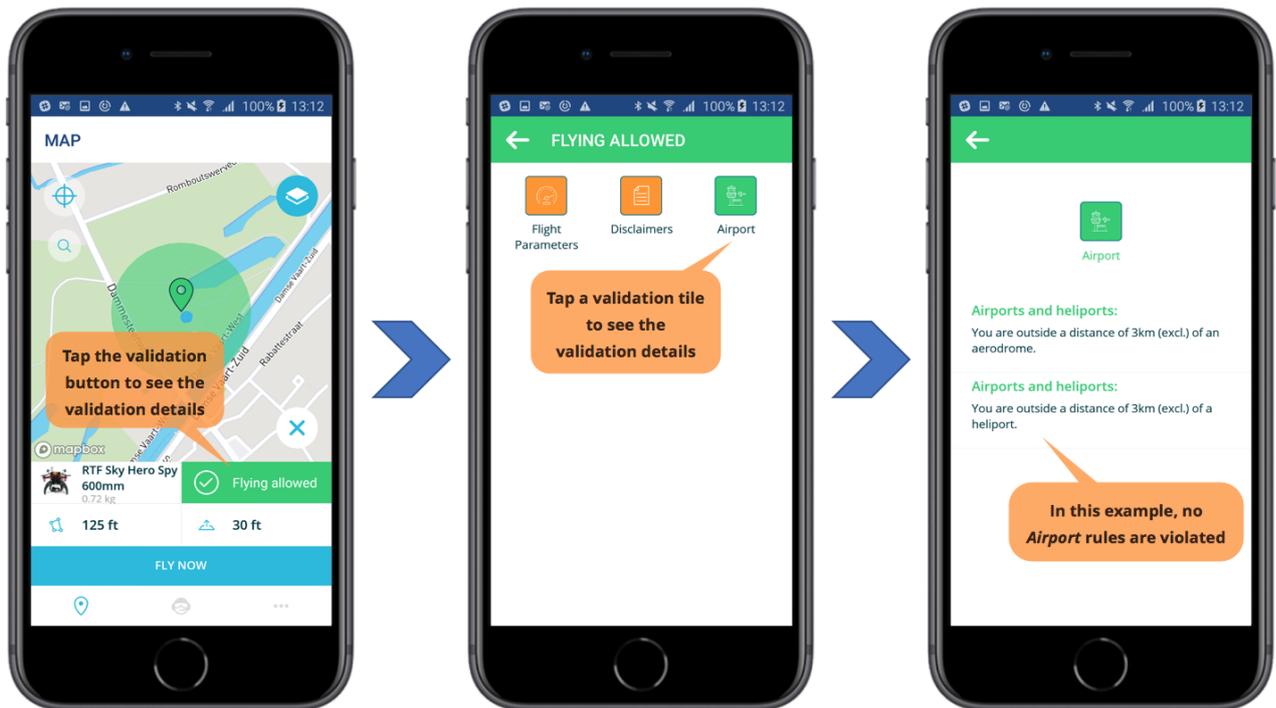
6. If you selected "COMMERCIAL" in step 5, tap the [ CLASS ] button and tap the class of operation you want to perform:



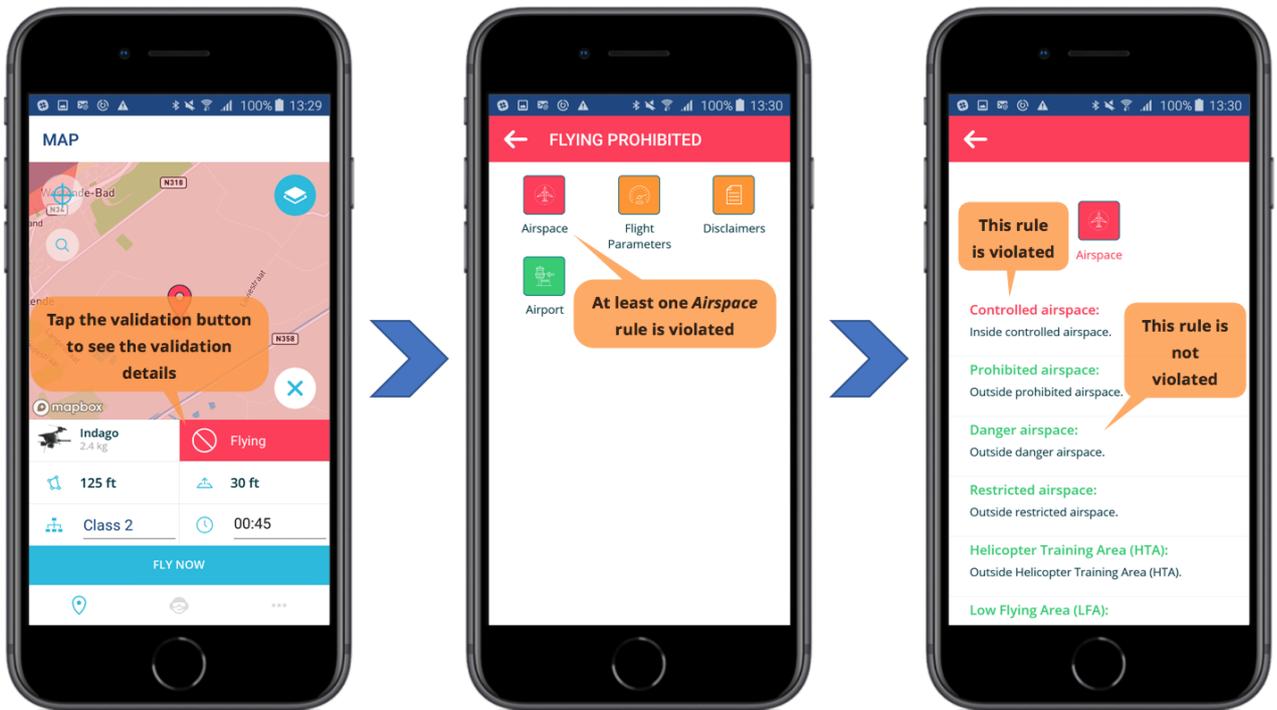
7. If you selected "COMMERCIAL" in step 5, tap the [ DURATION ] button and enter the estimated operation duration:



8. Check the detailed flight validation information by tapping the green, orange or red flight validation button and the validation tile(s):



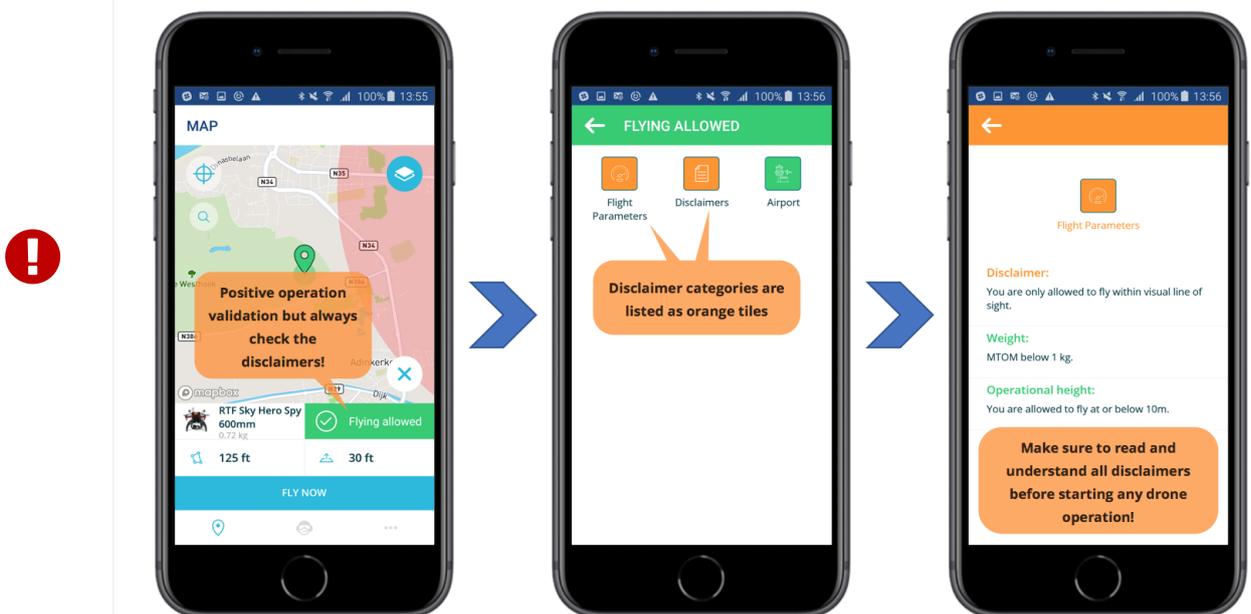
An example of a negative validation:



As illustrated in the examples above, both the validation tiles/titles and the validation rules are color-coded for easy interpretation:

Color	Meaning
Green	There are no rule violations.
Orange	There are disclaimers to be read and checked by the pilot/operator.
Red	There is at least one rule violation.

Independent of the validation result, always make sure to read and understand all the disclaimers (orange category buttons) before starting your drone flight!



# Logging a drone flight

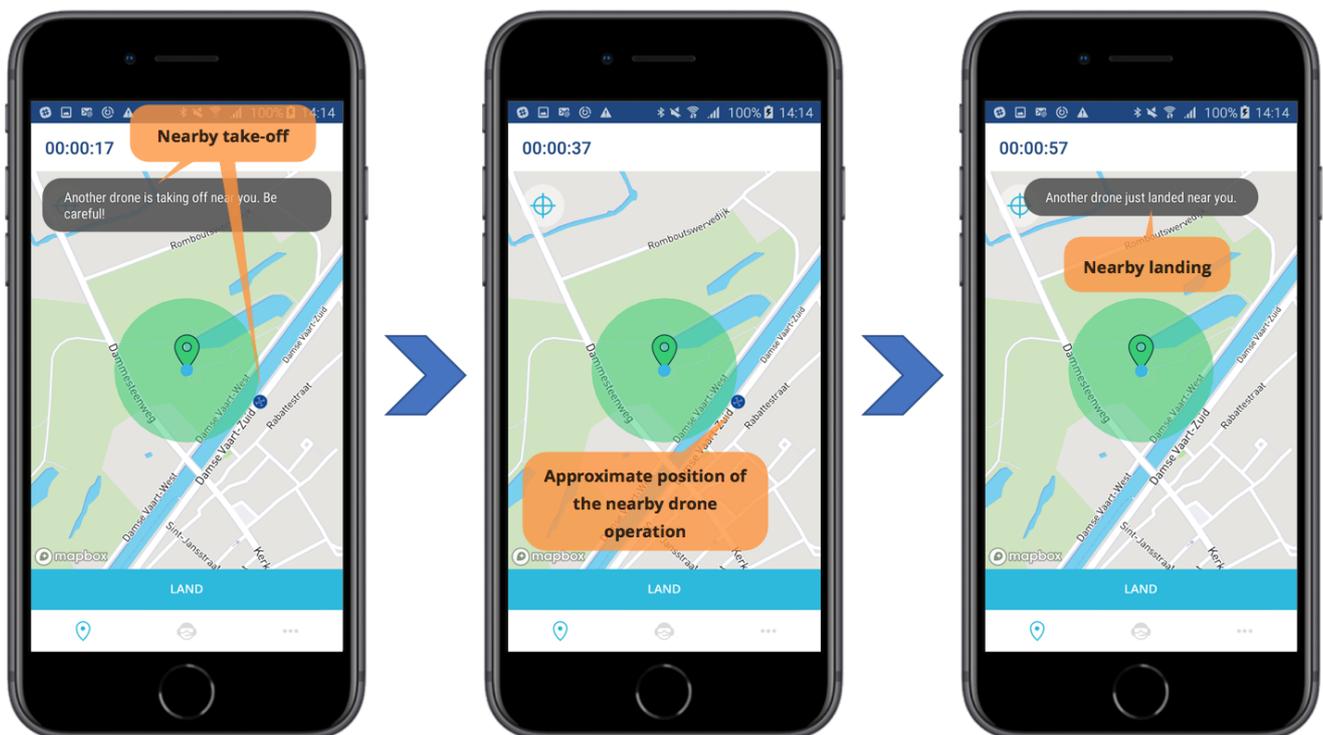
After validating the drone operation you intend to fly, you can move on to the actual execution of the drone flight(s).

The app will help you to keep track of your drone flights by registering the start and end of a flight and a series of other flight parameters in your personal logbook.

The only thing you have to do is to select the correct flight parameters and to signal the start and the end of the flight by tapping a few buttons.

## Detecting nearby active drone flights

You are kept aware of any other nearby active drone flights (i.e. drone is in the air) reported via the *Skeyes Droneguide* app. These nearby active drone flights are depicted on the map by a small quadcopter drone symbol as shown in the following example:



Popup messages also keep you informed regarding nearby drone activities.



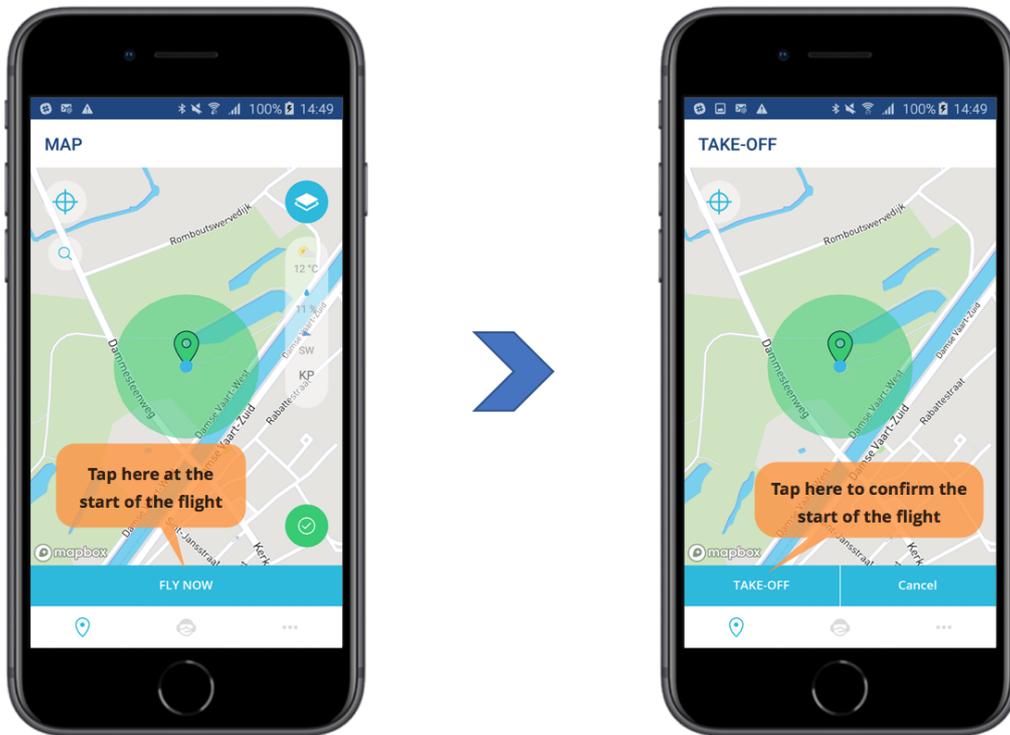
Drone activities are only displayed if these activities are reported to the Skeyes UTM system by using the *Skeyes Droneguide* app so always keep up your situational awareness!

## Starting a drone flight

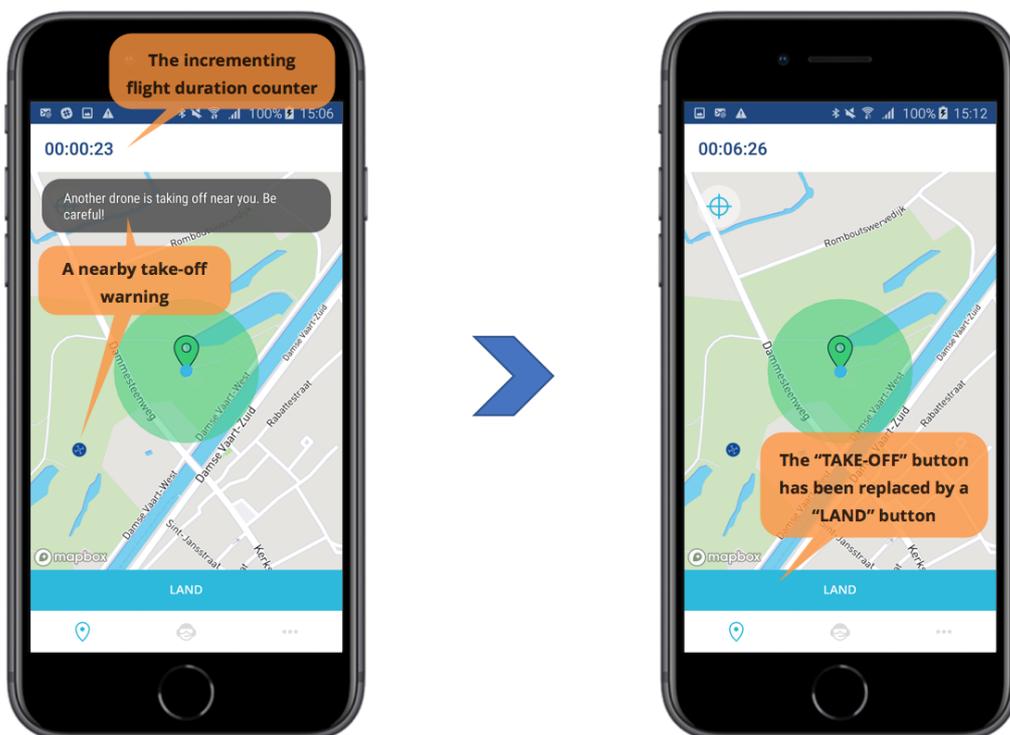
To signal the start of a drone flight:

1. If not done yet, validate the operation as explained in section [Validating a drone operation](#).

2. Tap the [ FLY NOW ] button on the "MAP" screen.
3. Tap the [ TAKE-OFF ] button to confirm the start of the flight.
4. Your flight is now active as indicated by the incrementing flight duration counter at the top and the [ LAND ] button at the bottom of the "MAP" screen.



After confirmation of the start of the drone flight, your "MAP" screen will display the flight duration counter at the top and the [ LAND ] button at the bottom and the app will keep you informed on nearby drone activities:

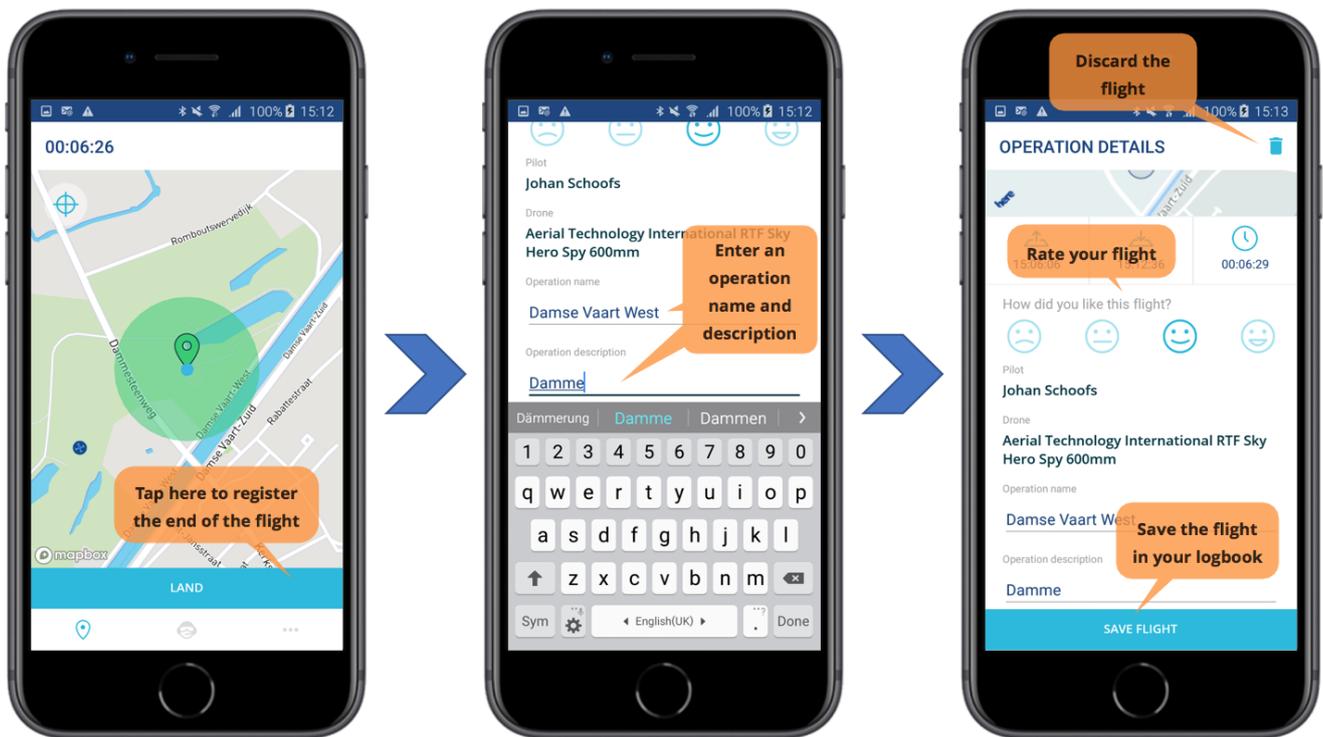


# Ending a flight

Simply tap the [ LAND ] button at the bottom of the "MAP" screen to register the end of the current flight.

You are then given a chance to enter, optionally, a flight evaluation, an operation name, and an operation description.

Your logbook is automatically updated with the information covering the flight. See section [Checking flight details and deleting flights](#) for more details on consulting your logbook.



Tap the 🗑️ icon at the top right of the "OPERATION DETAILS" screen if you do not want to record the flight in your logbook. After saving or discarding your flight you are automatically returned to the "MAP" screen.

# The PROFILE screen

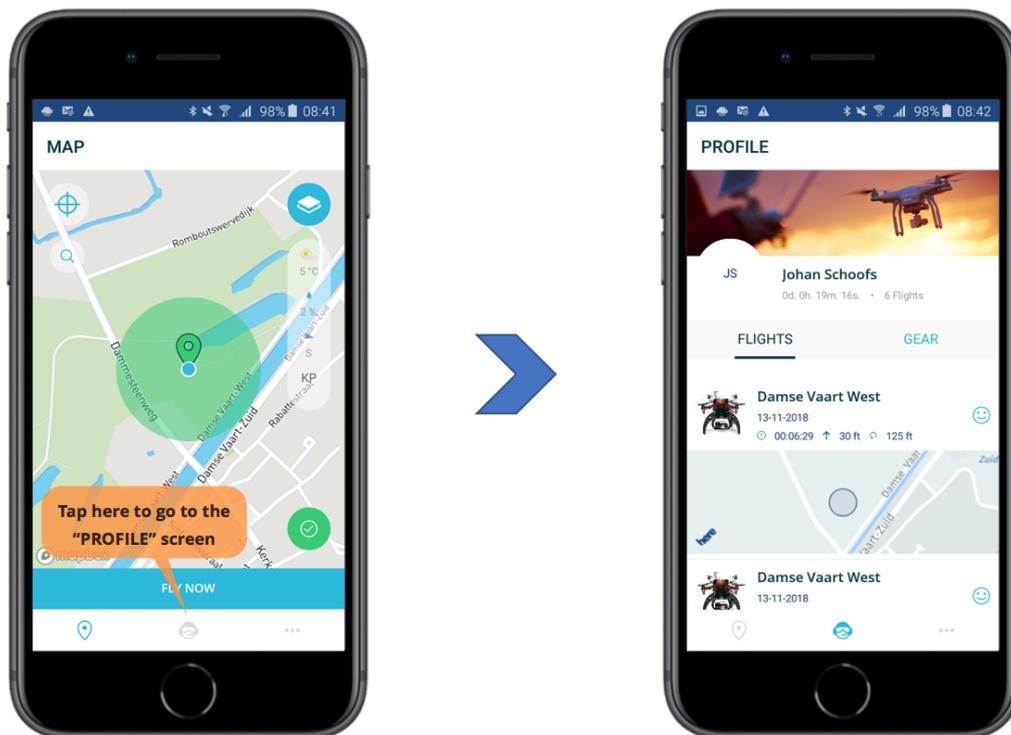


You need to be logged in to make use of the functionalities accessible via the PROFILE screen.

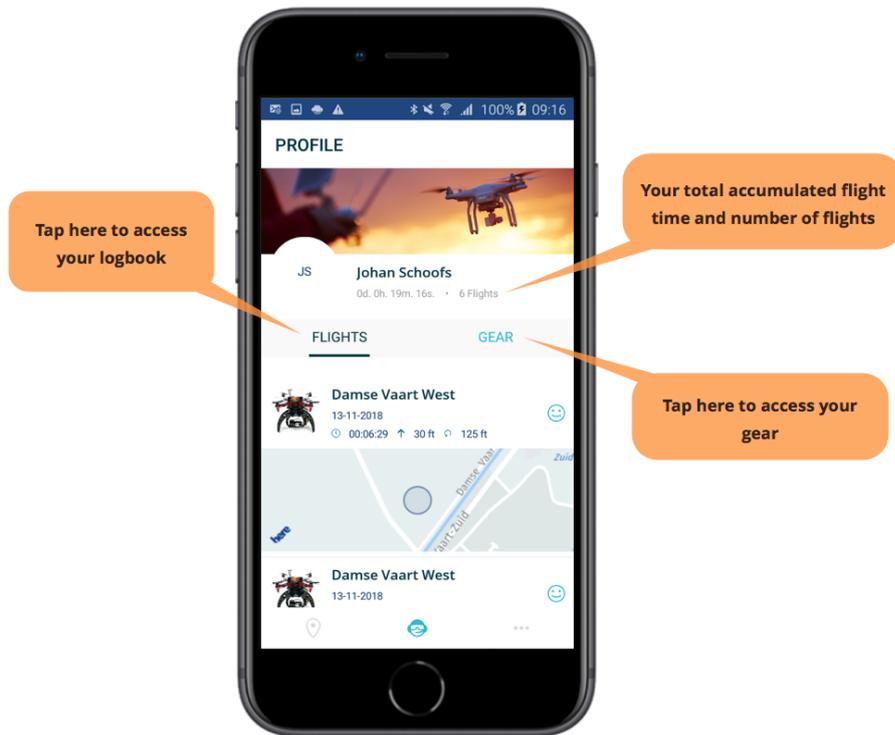
The "PROFILE" screen provides access to:

1. Your logbook including your logged flights.
2. Your gear i.e. your drone(s) including their technical characteristics.

Go to the "PROFILE" screen by tapping the  icon at the bottom of the screen:

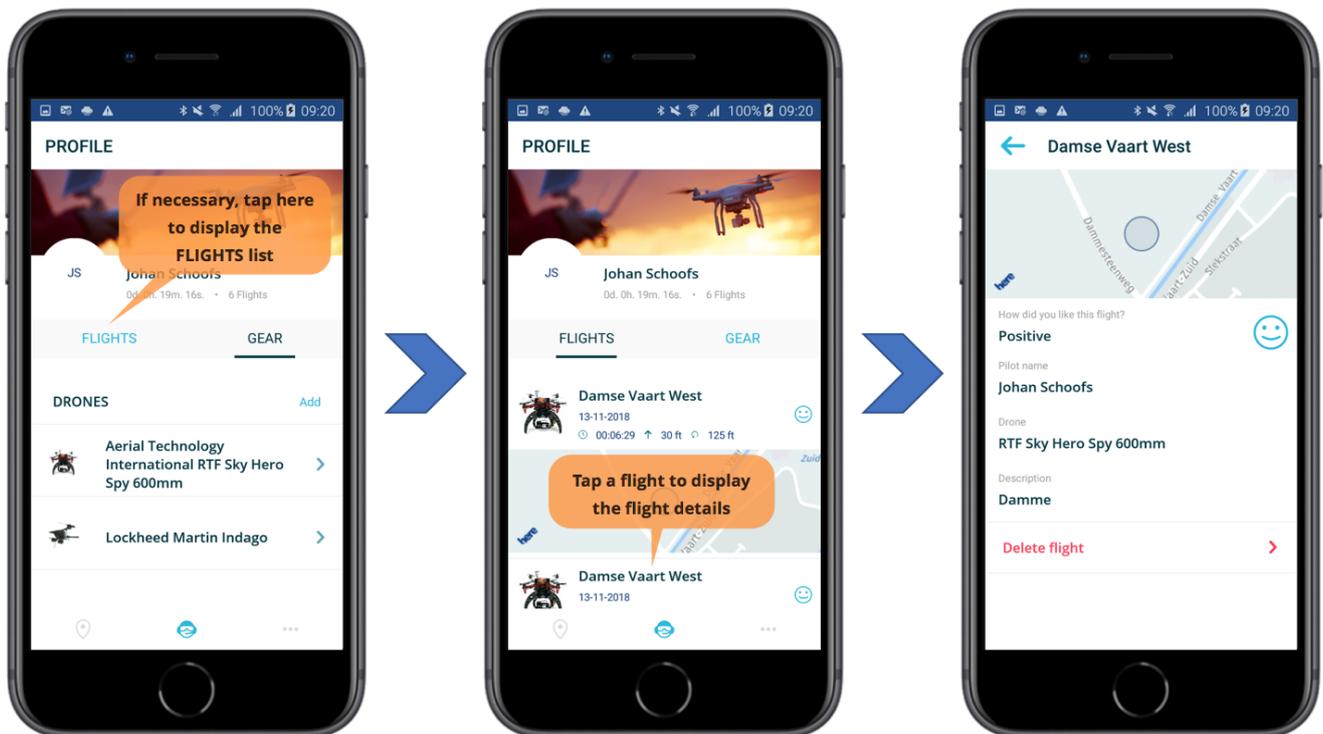


The "PROFILE" screen includes following user interface elements:

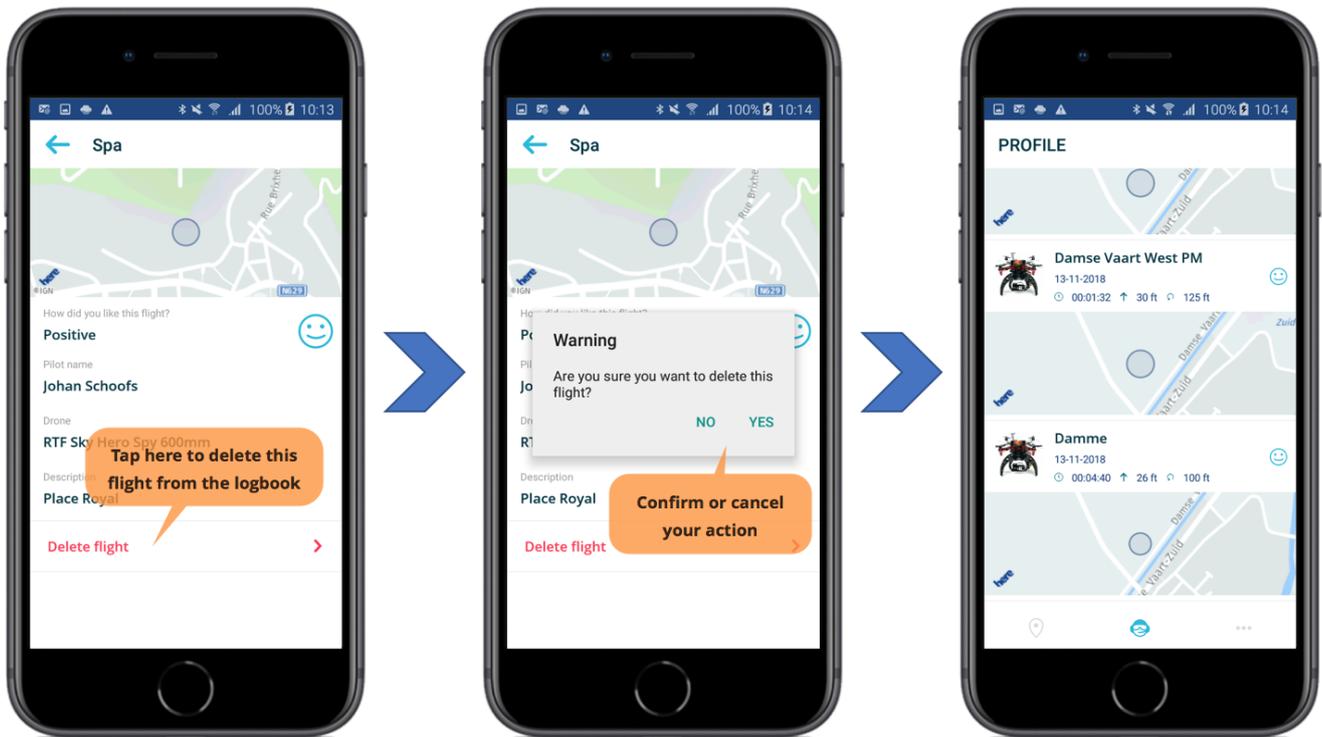


## Accessing your logbook

Tap "FLIGHTS" on the "PROFILE" screen if the logbook is not yet displayed. Scroll up and down to see all the registered flights. Tapping a logbook entry will display that entry's information in a new screen. Return to the logbook by tapping the ← icon at the top left of the screen:



Tapping "Delete flight" at the bottom of the screen allows you to delete the selected flight from your logbook:

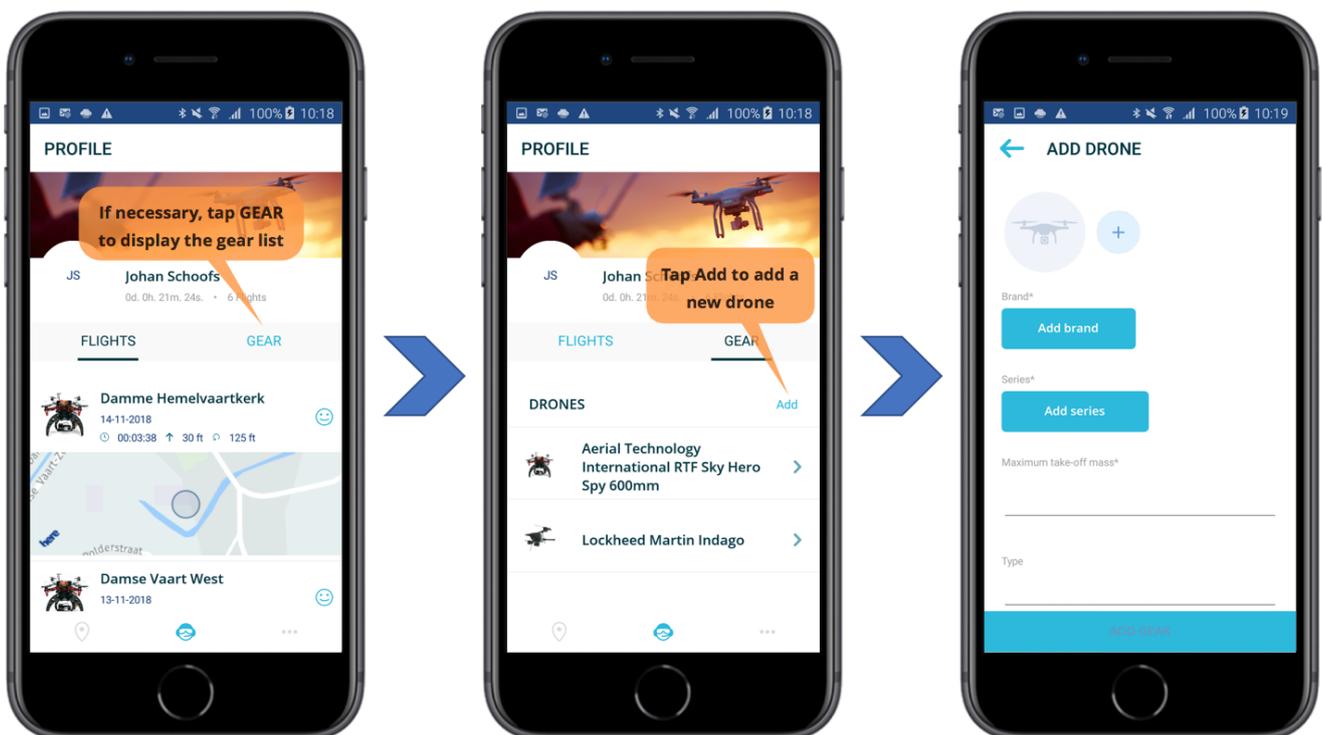


You are automatically returned to the logbook screen.

For more details concerning logged flight information: see section [Checking flight details and deleting flights](#).

## Adding drones

Tap "GEAR" on the "PROFILE" screen to display your drone(s) if they are not yet displayed and then tap "Add" to move to the "ADD DRONE" screen:



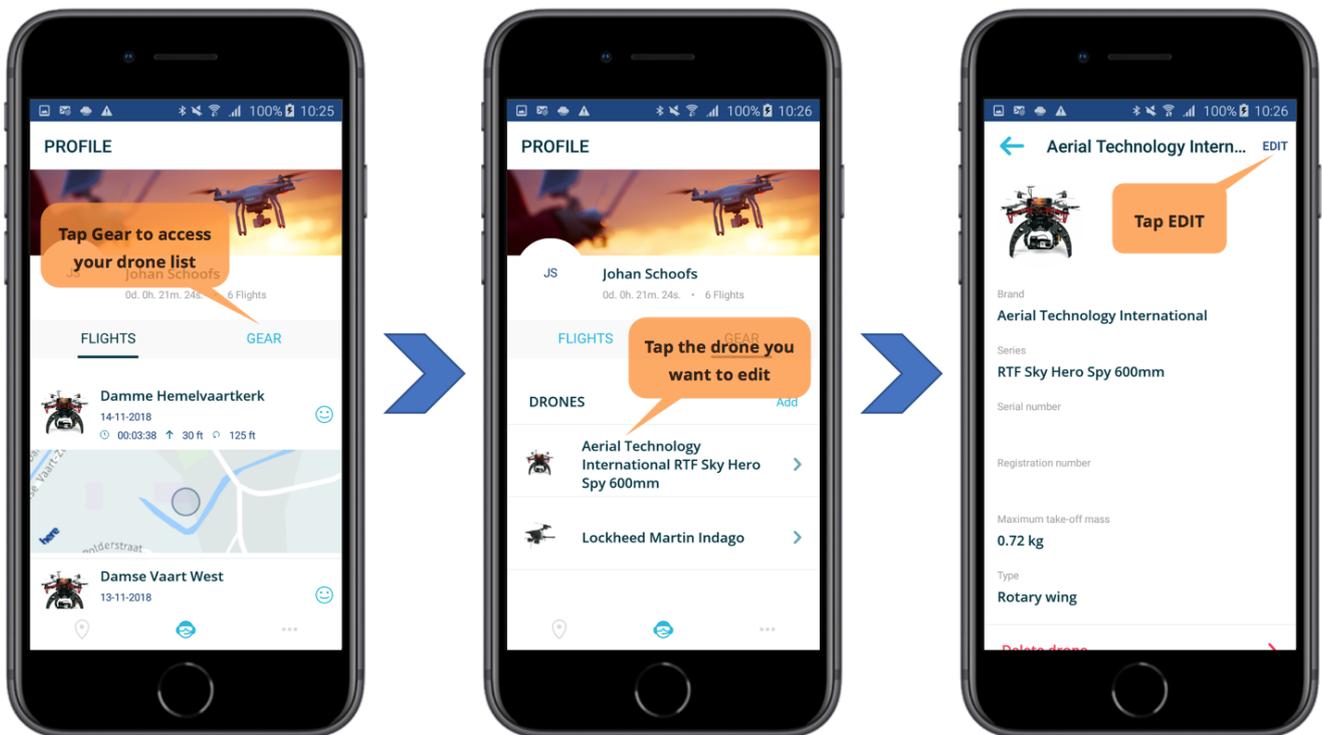
Now select the brand, the series, and the maximum take-off mass as explained in section [Logging in](#)

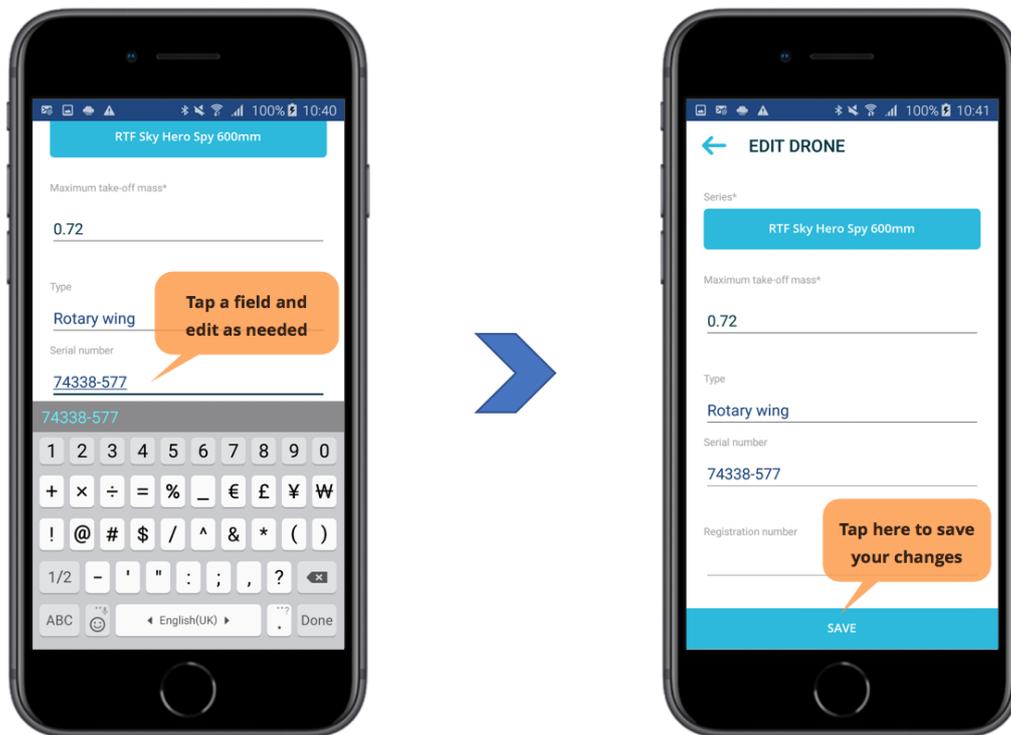
for the first time. Remember you can also upload a picture of your drone.

## Editing drones

You can edit the characteristics of a drone as follows:

1. Tap *GEAR* on the "PROFILE" screen to display the list of your drones.
2. Scroll through the list to locate the drone you want to edit.
3. Tap the drone you want to edit.
4. Tap *EDIT* in the top right of the screen.
5. Tap the field you want to edit and make the needed changes.
6. Tap [ **SAVE** ] at the bottom of the "EDIT DRONE" screen to save your changes.



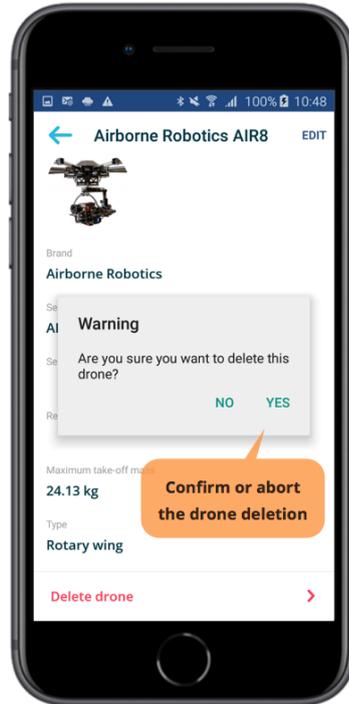
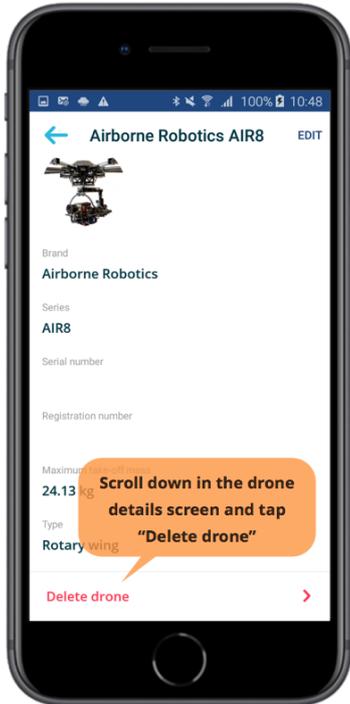
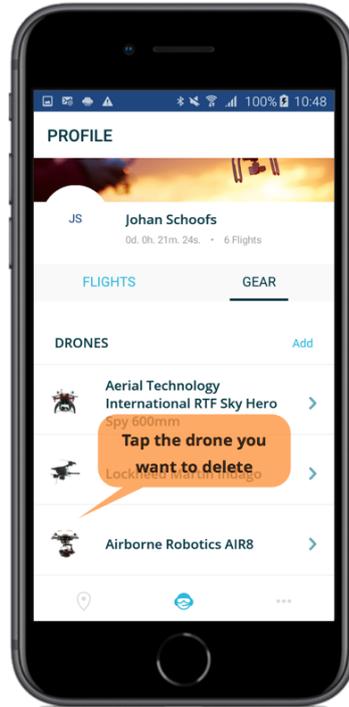
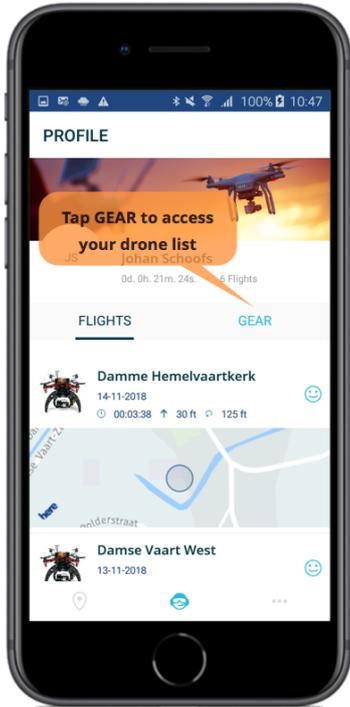


## Deleting drones



You can only delete drones that are not referred to from within one or more logbook entries. You would first have to delete the logbook entries referring to the drone before you would be able to delete the drone.

1. Tap *GEAR* on the "PROFILE" screen to display the list of your drones.
2. Scroll through the list to locate the drone you want to delete.
3. Tap the drone you want to delete.
4. Scroll to the bottom of the drone details screen, tap *Delete drone* and confirm your action:



# The MORE screen

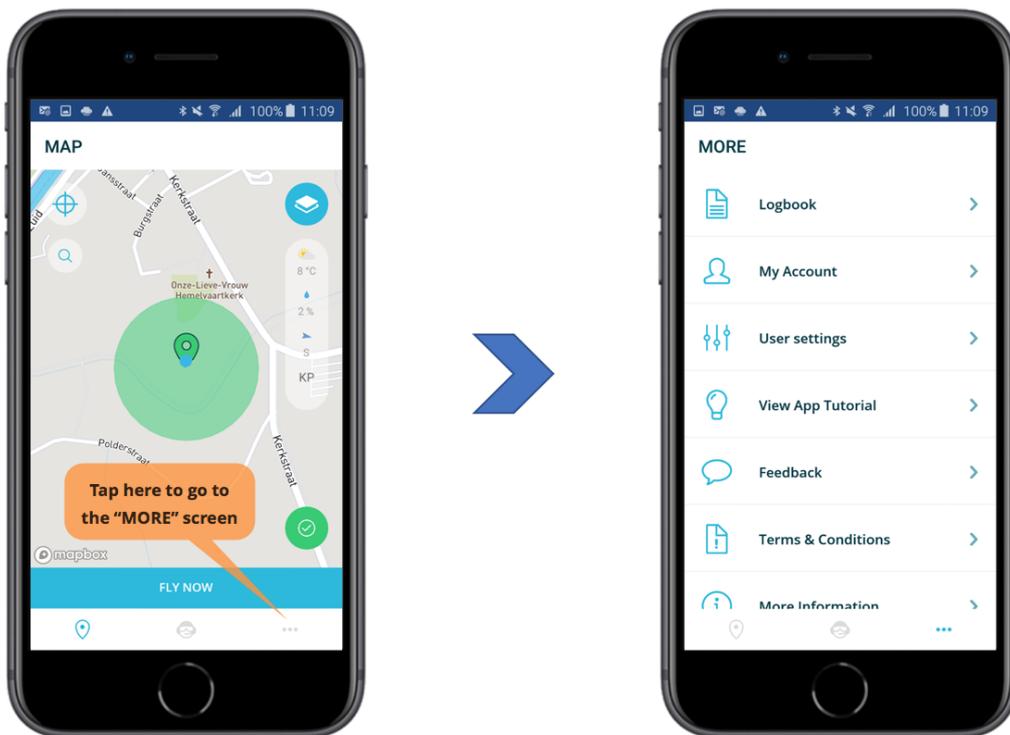


You need to be registered and logged in to use the *Logbook*, *My Account*, and *User settings* screens described below.

The "MORE" screen provides access to following functions:

Menu entry	Functionality
Logbook	Get detailed information on all your logged drone flights.
My Account	Change your email address and to manage your password.
User settings	Manage your personal unit preferences.
View App Tutorial	Launch the app tutorial that was also shown during your first app login.
Feedback	Provide feedback on the app
Terms & Conditions	Access the app's terms and conditions of use.
More Information	Access important information regarding the use of unmanned aircraft in Belgium.

Access the "MORE" screen by tapping the **☰** icon at the bottom right of the screen:

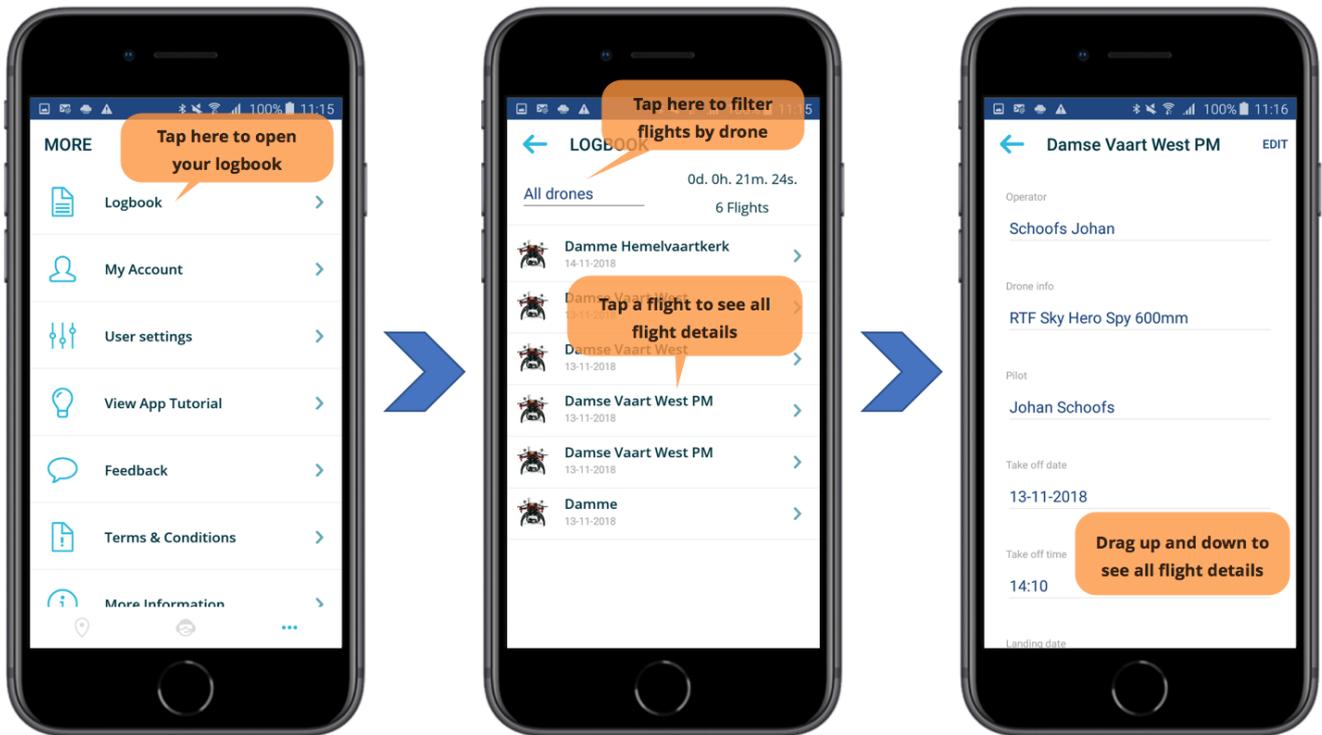


## Checking flight details and deleting flights

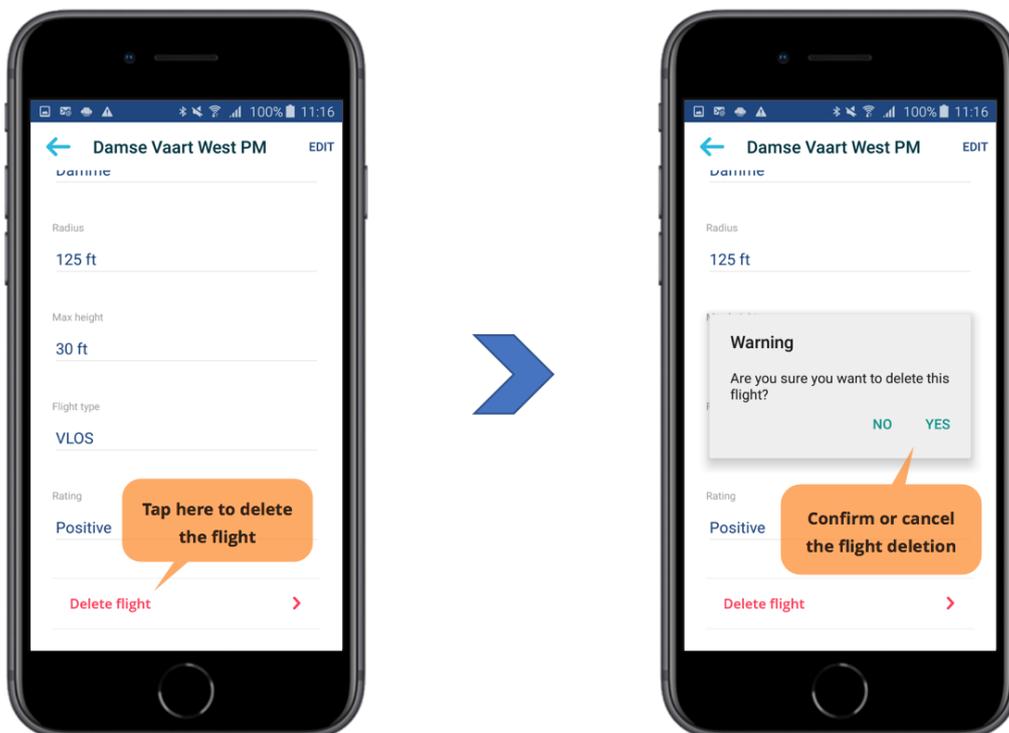
From the "MORE" screen, first tap *Logbook*, and then the flight of which you want to see all logged details:



The "LOGBOOK" screen contains a filter function allowing you to display only flights performed using the selected drone. The default is to display all flights performed by all your drones.



Scroll to the bottom of the flight details screen and tap *Delete flight* to delete the flight:

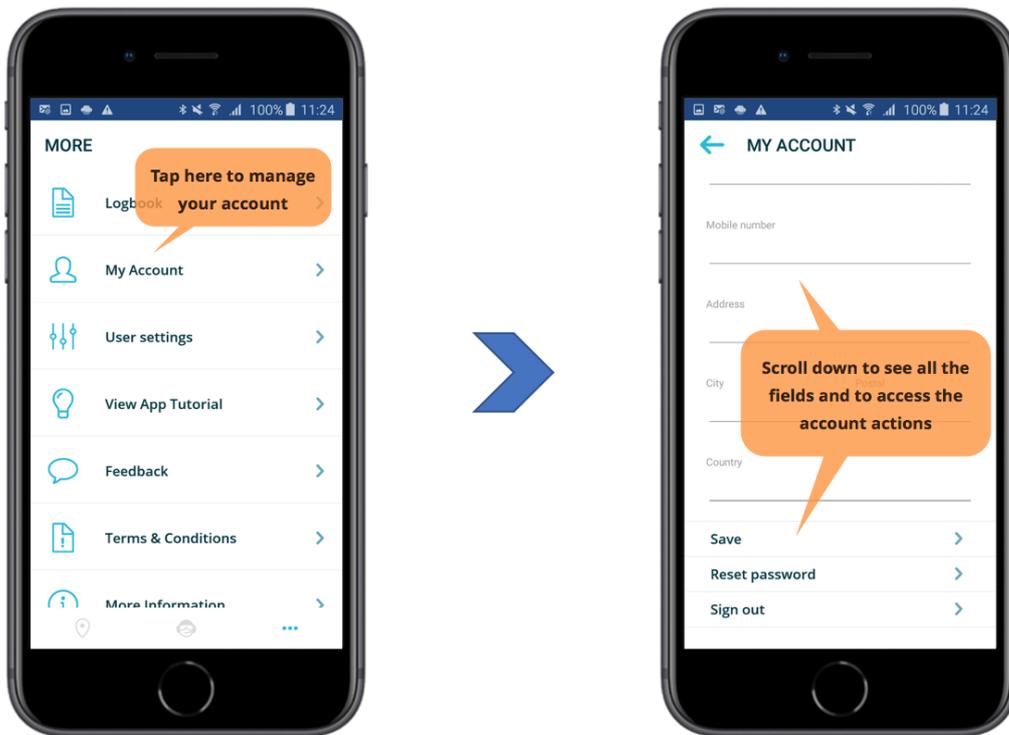


## Managing your account

From the "MORE" screen, tap *My Account*.

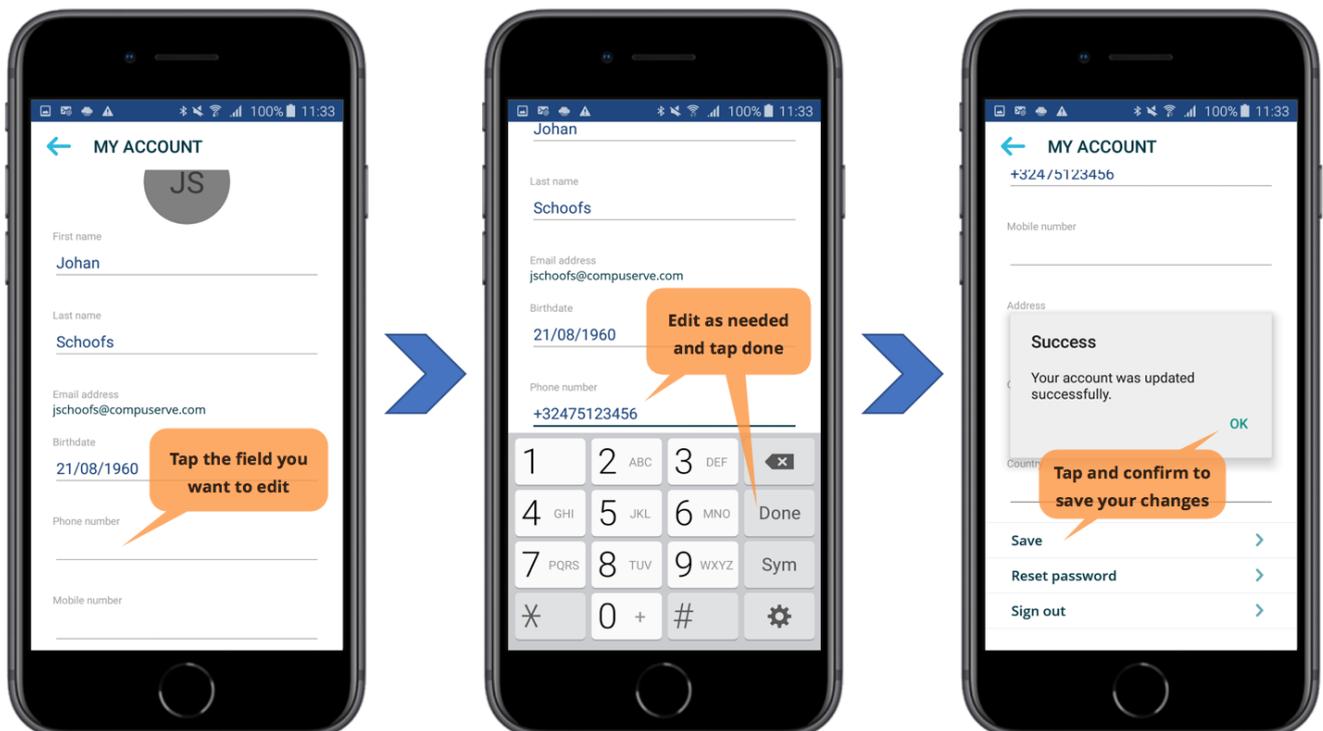
From the "MY ACCOUNT" screen you can:

- Change your account details.
- Reset your password.
- Sign out.



## Changing your account details

On the "MY ACCOUNT" screen, tap the field you want to edit, enter the new information and tap *Save*:





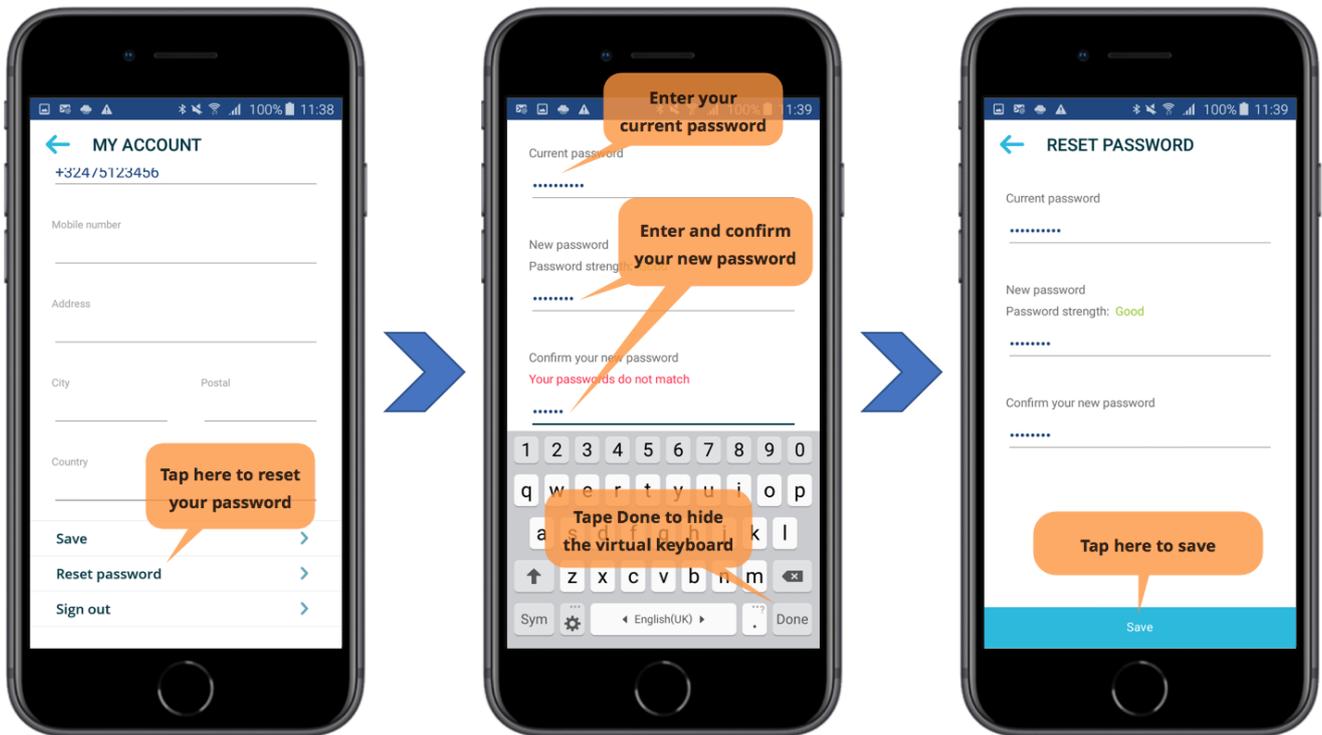
Do not forget to tap *Save*, if not your account details will not be updated!

## Resetting your password

On the "MY ACCOUNT" screen, tap *Reset password*, enter your current password, enter and confirm your new password, and tap the [ **Save** ] button at the bottom of the page.

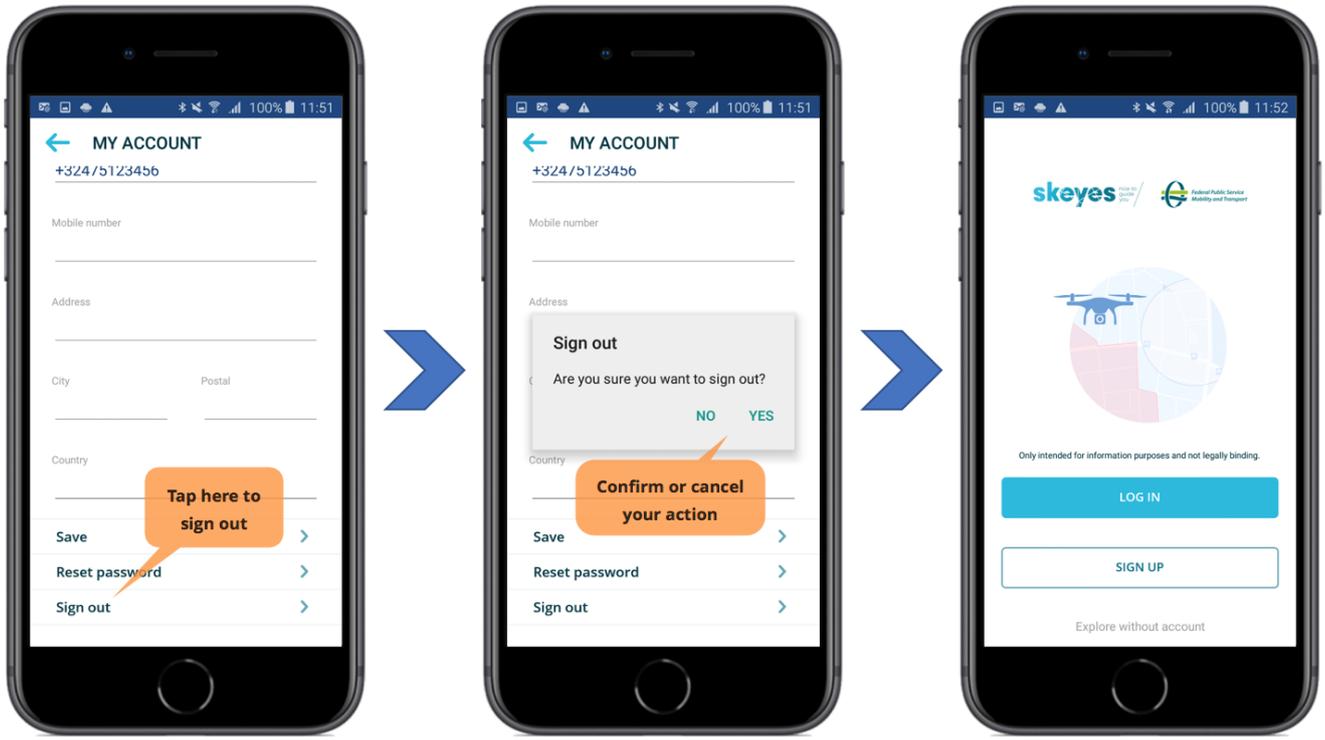


Make sure to choose a strong password. An indication of the password strength is include in the "RESET PASSWORD" screen.



## Signing out

To sign out from the app, tap *Sign out* on the "MY ACCOUNT" screen, and confirm the sign out by tapping the [ **Yes** ] button:



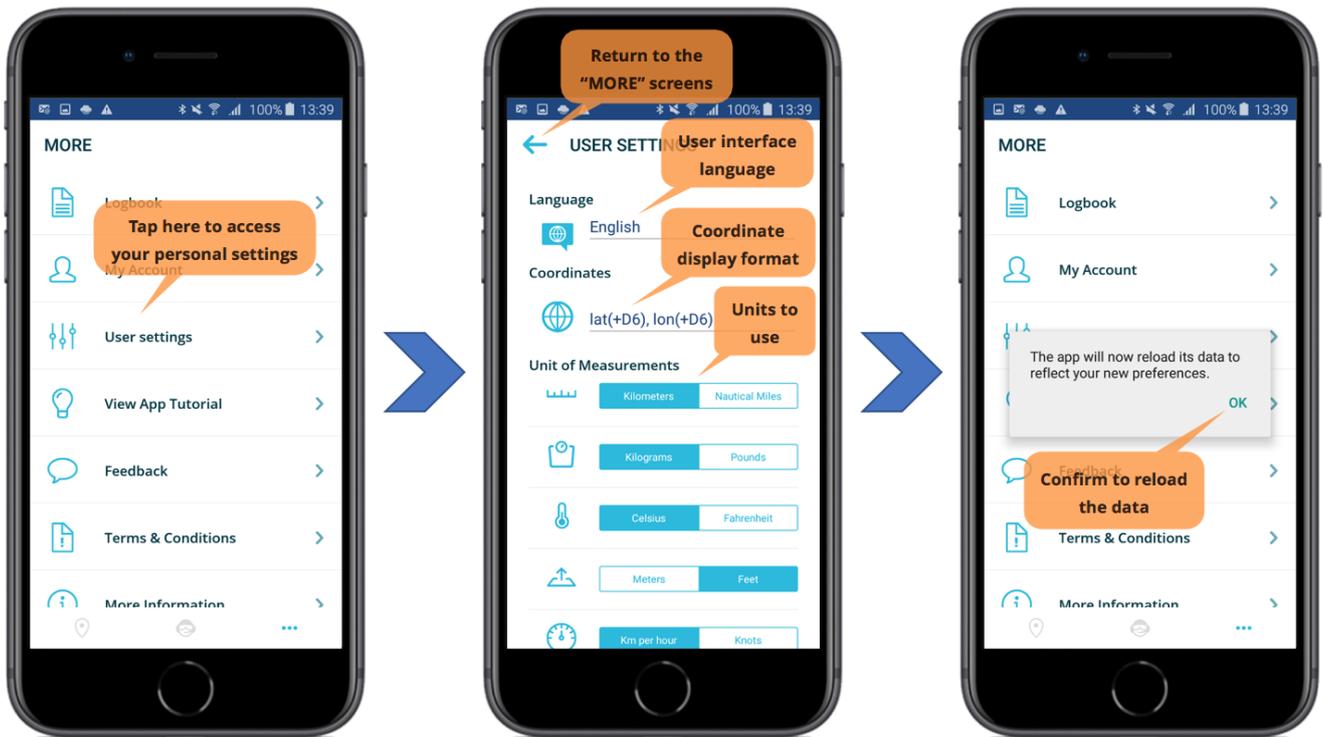
After tapping the [ Yes ] button, you will be returned to the app's login screen.

## Managing your user settings

From the "MORE" screen, tap *User settings* to manage your personal preferences used by the app.

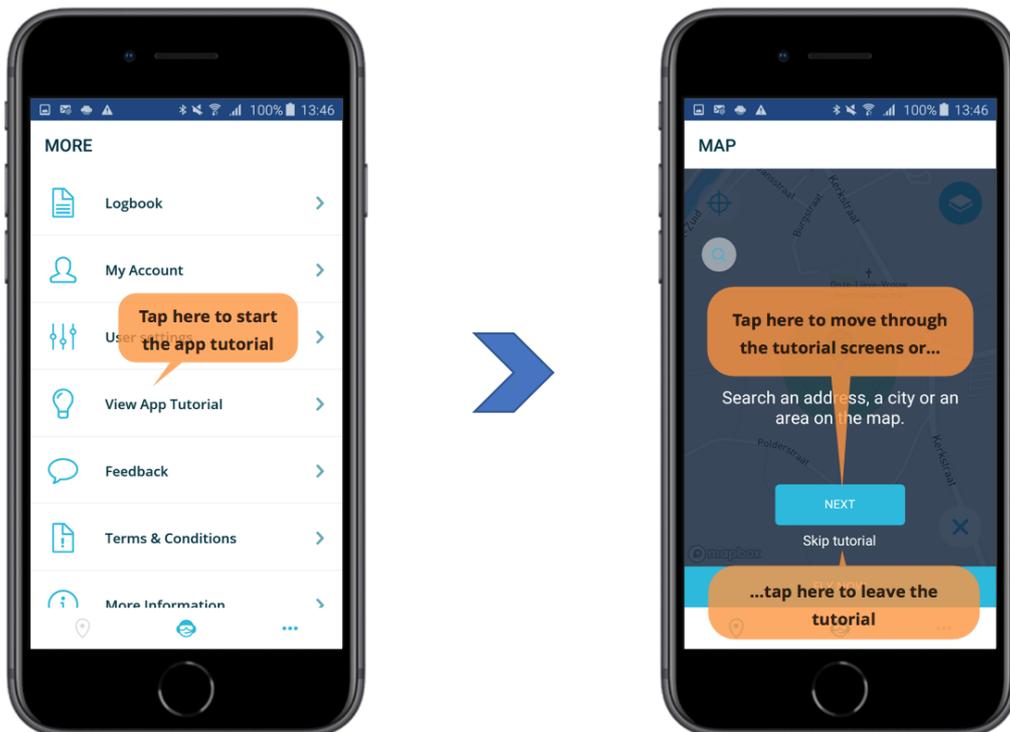
You can select the user interface language to use, the format to use when displaying coordinates and the preferred units to use for:

Setting	Preference
Distance	Kilometers or (nautical) miles.
Mass	Kilograms or pounds.
Temperature	Celcius or Fahrenheit.
Height	Meters or feet.
Speed	Km per hour or knots.



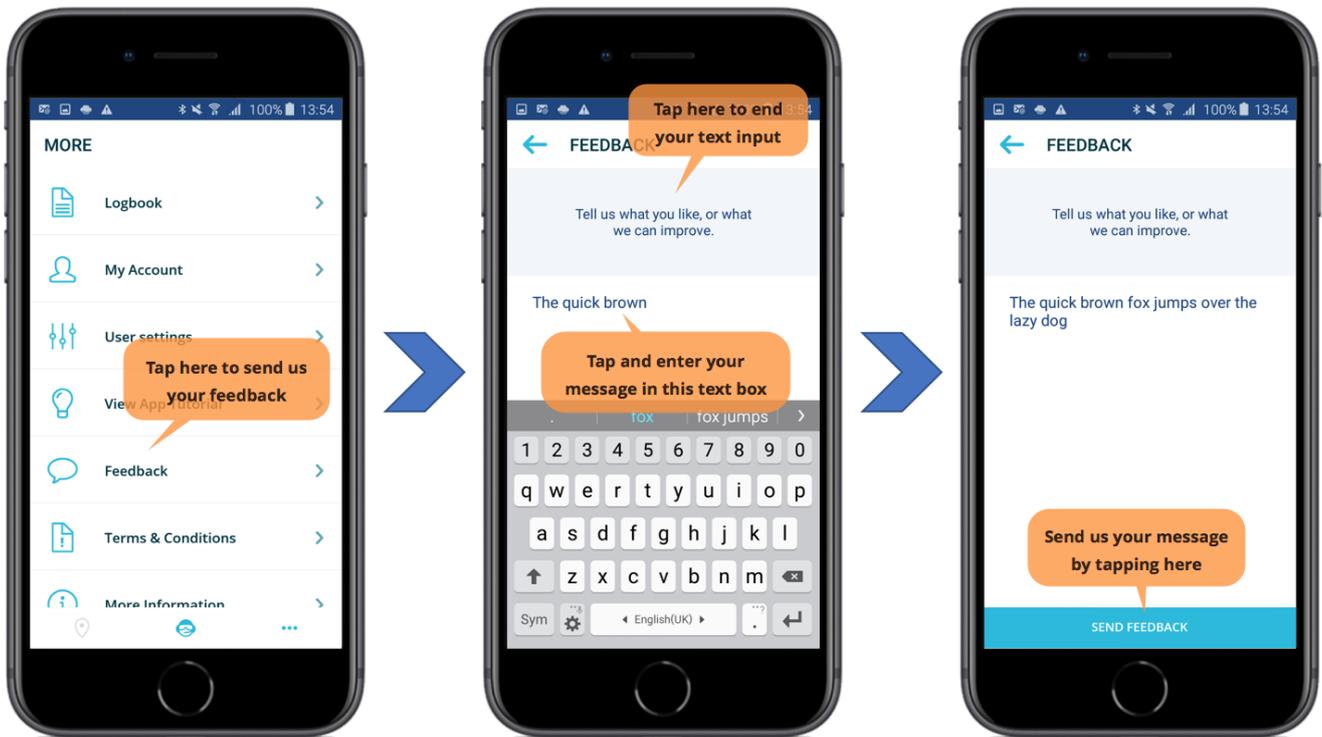
## Launching the app tutorial

Tap *View App Tutorial* from the "MORE" screen to launch the app's tutorial:



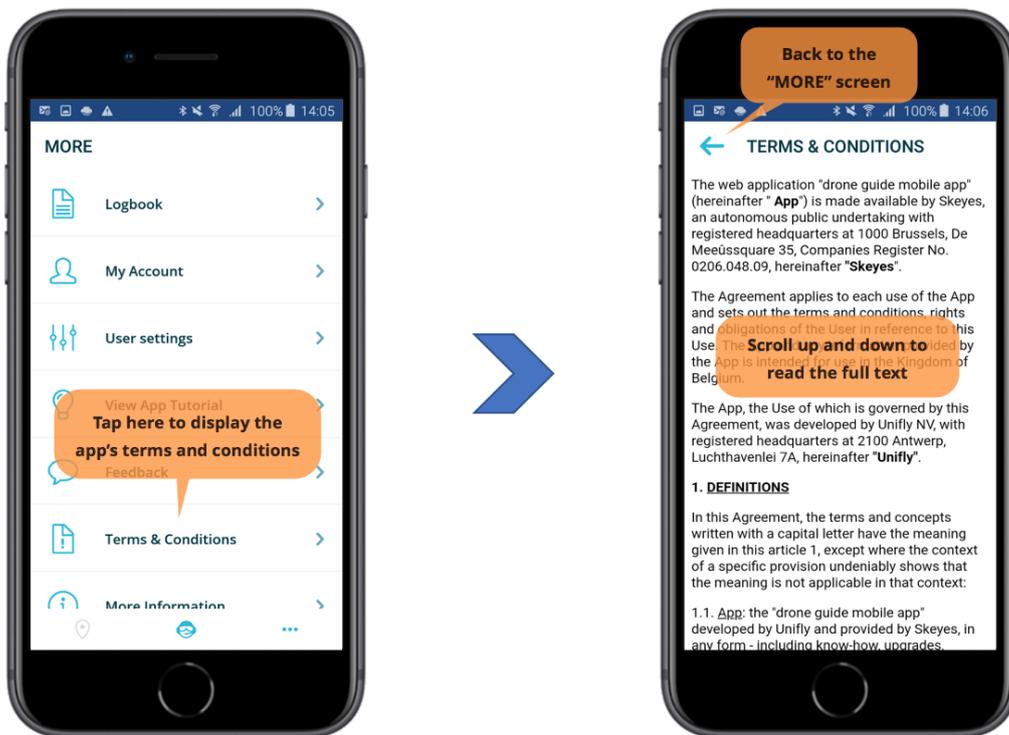
## Sending feedback

We welcome your feedback. Just tap *Feedback* from the "MORE" screen, enter your message and tap the [ **SEND FEEDBACK** ] button at the bottom of the screen:



## Accessing the terms and conditions of use

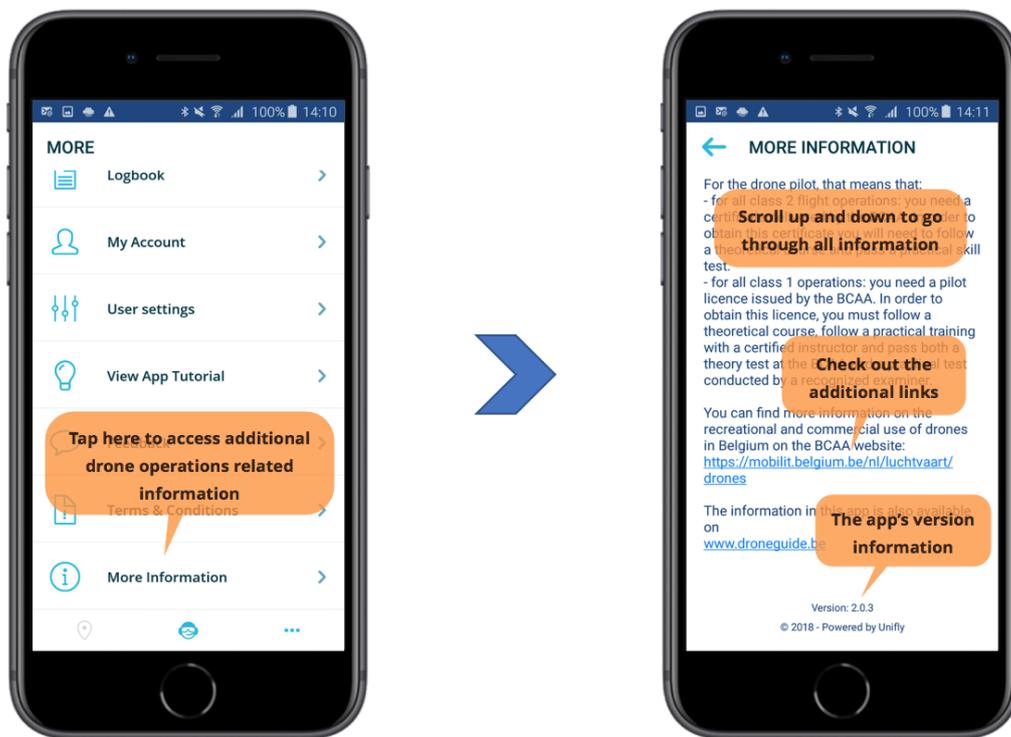
From the "MORE" screen, tap *Terms & Conditions* to access this important information:



Make sure to read through this information attentively to fully understand the legal limitations concerning the use of this application and to be aware of the Belgian legislation regarding the use of drones.

# Accessing additional information regarding the use of drones in Belgium

Tap *More Information* to display additional information regarding the use of drones in Belgium:



At the bottom of this screen you will find the app's version information. Please include the app's version number when reporting issues or suggestions.