

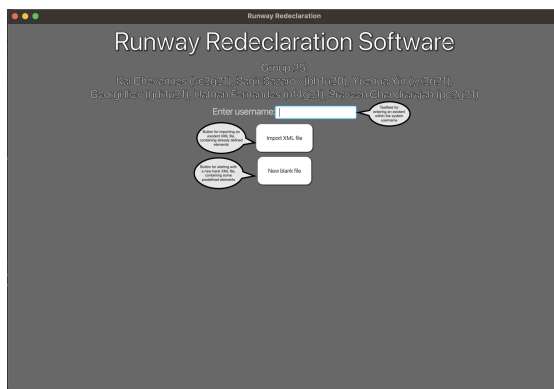
# Runway Re-declaration Tool - A simple User Guide and Frequently Asked Questions

## 1 General Overview

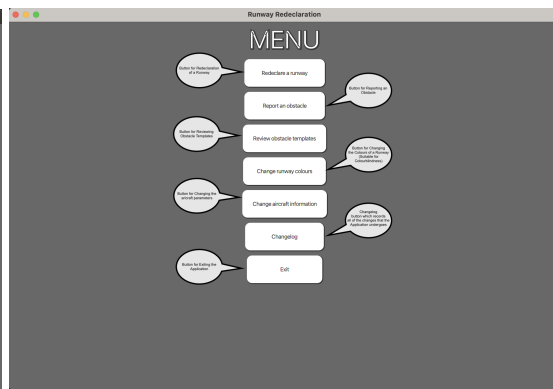
The purpose of this user guide is to introduce the primary features of the application and provide guidance on how to utilize them. The guide will begin by describing the initial screen that appears upon launching the application, and subsequently, it will demonstrate how to navigate through the various screens and menus

## 2 Initial Screen and Main Menu

Upon launching the application, users will be prompted to enter their unique username as a security measure. This feature has been introduced due to the critical nature of the Runway re-declaration tool, which can pose a serious threat to human life if misused. The Initial Screen is captured in image (a).



(a) Initial Screen

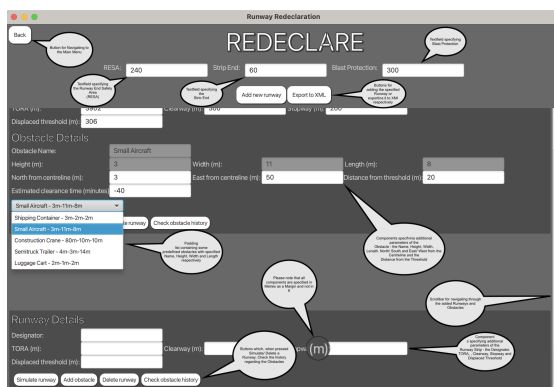


(b) Main Menu

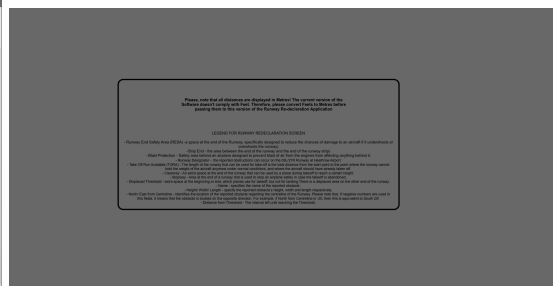
After entering their username, the user will be directed to the main menu where they can perform various actions depending on their choice after clicking on the corresponding button. The main menu is presented in attached image (b).

### 3 Redeclare Runway and Report Obstacle Screens

The Runway Redeclaration window, labeled as (c) in the attached images, provides users with an interface to set the parameters of a new track to be added or exported. Multiple tracks can be added by entering the required parameters, and additional parameters must be provided before the simulation can be executed. In addition, the window offers functionality to remove a specific obstacle or delete an entire track.



(c) Runway Redecoration Screen

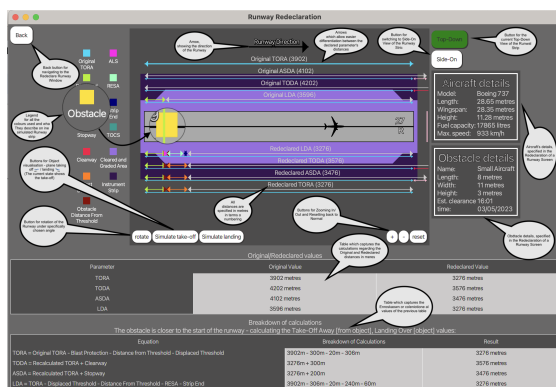


(d) Legend for Runway Redecclaration Screen

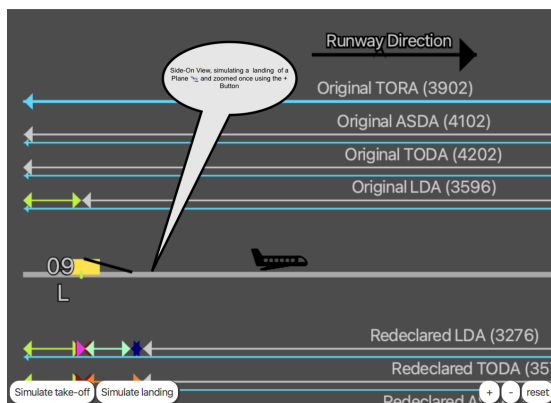
The legend, denoted by (d), offers concise and user-friendly explanations of each term, enabling the user to gain a more profound comprehension of their meaning and implications

## 4 Runway Simulation Screen

The Runway Simulation Screen incorporates various functionalities, including the Top-Down - (e) and Side-On - (f) options for viewing the Runway Strip, object visualization on the airdrome, as well as the calculation breakdown for potential takeoff and landing of an airplane. This screen provides a comprehensive simulation of the runway, encompassing numerous states of simulation.



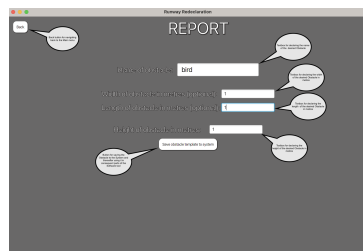
(e) Top-Down simulation



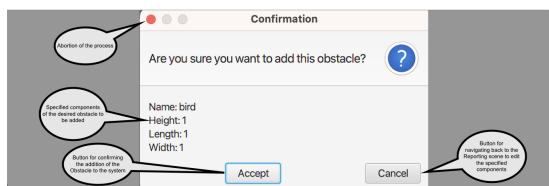
(f) Side-On simulation

## 5 Report an Obstacle Screen

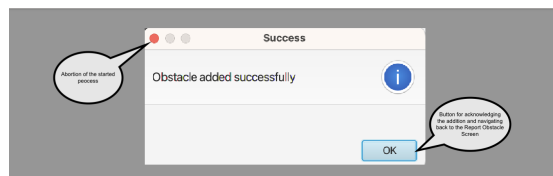
When submitting an obstacle report, the user is required to specify the obstacle's name and height, while width and length are optional as presented in (g). To ensure accuracy and prevent unintentional errors, the system incorporates two pop-up screens, depicted in (h) and (i) and enabling the user to double-check the inputted parameters of the obstacle.



(g) Report an Obstacle Screen



(h) Double Confirmation Pop-up Window



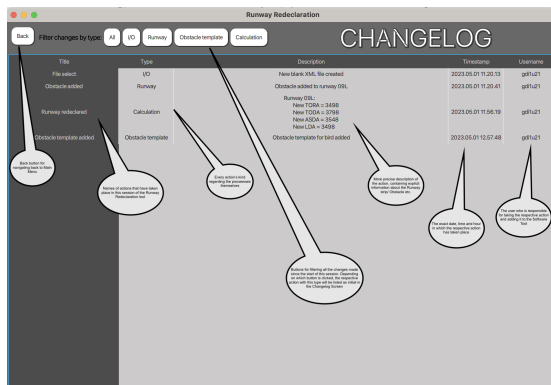
(i) Last Confirmation Pop-up Window

## 6 Review Obstacle Templates and Changelog Screens

In the Review Obstacle Screen, the user is provided with access to all obstacles that are available in the Runway Redeclaration tool. This includes both predefined obstacles imported from the XML schema and any user-declared obstacles. All relevant information pertaining to each obstacle is listed in this view as captured in (j)



(j) Review Obstacle Templates Screen



(k) Changelog Screen

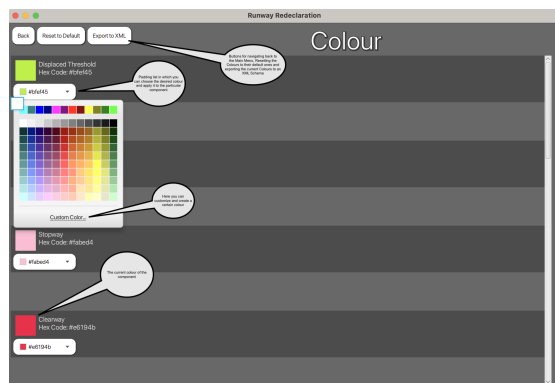
As opposed to the Review Obstacle Templates Screen, the Changelog Scene screen provides the user with a comprehensive record of all actions that have taken place during the current session of the software- any changes related to Runway, Obstacle, Calculation, or Input/Output in its tableView. Additionally, the screen provides a detailed description of each action along

with the exact time, date, and hour of occurrence and the user responsible for it. This information is visually presented in picture (k).

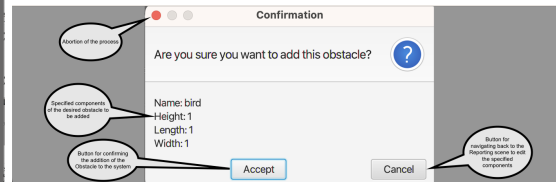
## 7 Change Runway Colours and Change Aircraft Information Screens

The Runway Color Scheme can be modified by choosing pre-defined colors or customizing a specific color as shown in image (l). The user can also revert to the Main Menu, reset the Color Scheme to its default values, and export the current Color Scheme as an XML Schema.

The Change Aircraft Information Screen - (m) allows for the modification and storage of various specifications of an aircraft, such as its Model Name, Length, Wingspan, Height, Fuel Capacity, and Max Speed.



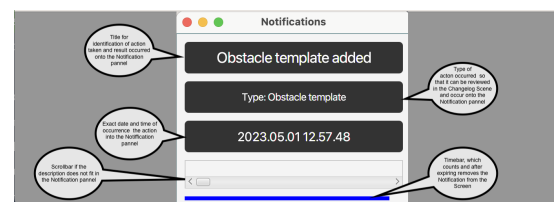
(l) Change Runway Colours Screen



(m) Change Aircraft Information Screen

## 8 Notification Pop-up Screen

The notification refers to a pop-up window that appears on the screen and remains visible for a predefined period of five seconds. The contents of the notification include a description of the action taken, along with details regarding the nature of the action and the precise date and time at which it was executed. This information is presented in a formal manner and is designed to keep the user informed about recent developments in the application. A visual representation of the notification popup window is illustrated in figure (l).



(n) Notification Pop-up Screen

## Frequently Asked Questions

### What do I need to do to start using the application?

- To gain access to the Runway Redeclaration tool, individuals are required to register as users in the application's user base. Failure to do so will result in the inability to log in and use the tool.

### What actions can I perform from the main menu?

- The Main Menu provides essential functionalities for the user to effectively utilize the Runway Re-declaration Tool, including the ability to Redeclare a Runway Strip, Report a New Obstacle, Review Obstacle Templates, and View the Changelog/History of Actions. These features aim to enhance the user experience and optimize the tool's efficiency.

### How can I add or remove a track in the Runway Redeclaration Screen?

- The Runway Redeclaration Screen facilitates the addition or removal of tracks in the system by filling out pertinent fields, including RESA, Strip End, and Blast Protection parameters. The software tool integrates the new runway declaration automatically, simplifying the process for users.

### What is the purpose of the legend, and how can it help me use the application?

- The purpose of the legend is to provide a comprehensive breakdown of all the colors utilized in the application to avoid any potential misunderstandings that may arise due to the overlapping and complexity of certain color schemes.

**What is the procedure for reporting an obstacle and what information is required? Why does the system use two pop-up screens when submitting an obstacle report?**

- To ensure precise reporting of obstacles, users must input necessary information, including the obstacle's name and height, in the Report Obstacle Window. The system includes two pop-up screens as a safety measure due to the critical nature of the Runway Redeclaration tool. Inaccurate reporting of obstacles can lead to catastrophic consequences, such as loss of human life.

#### **Can I change my username once I have entered it into the application?**

- Users are permitted to modify their username multiple times, provided that they are not currently logged into the application. However, once a user logs into the application, they must initiate a new session if they wish to change their username.

#### **How long can a session last, and what happens if I exceed that time limit?**

- The duration of a user's session on the platform is not restricted, provided that the user adheres to the established guidelines and protocols.

#### **What should I do if I encounter an error or technical issue while using the application?**

- In the event of a technical problem or malfunction with the Runway Redeclaration Tool, users are encouraged to contact the maintenance team by sending an email to [maintenanceRunwayRedeclarationHeathrowAirport@heathrowair.co.uk](mailto:maintenanceRunwayRedeclarationHeathrowAirport@heathrowair.co.uk). However, if a critical accident occurs, it is imperative that emergency services are notified immediately by calling 999.

#### **Is there any training or support available for using the Runway Re-declaration Tool?**

- Support and training for the Runway Redeclaration Tool are available through a dedicated support team. To inquire about the program, please send an email expressing interest to the email address provided in the previous message.

#### **Does the Software have a colourblind function?**

- The Runway Redeclaration Tool does not have a dedicated colorblind mode. However, users can easily access the Change Runway Colors Screen from the Main Menu to customize their color preferences.

#### **Can you place more than one obstacle on the same runway?**

- Multiple obstacles can be placed on a Runway, but simulating two obstacles simultaneously is not feasible due to the potential confusion it may cause for the user. This is not desirable in a critical system.

#### **Can this software be used at any UK airport?**

- Indeed, it can. This software is applicable to all UK airports that conform to the guidelines and regulations established by the government.

**Please don't hesitate to contact the Support and Maintenance team for any further inquiries regarding the Software by sending an email to [maintenanceRunwayRedeclarationHeathrowAirport@heathrowair.co.uk](mailto:maintenanceRunwayRedeclarationHeathrowAirport@heathrowair.co.uk). Our team will promptly respond to your message and assist you with any concerns you may have.**