

1 Acceptance Criteria

A "definition of done" for each user story we can use to evaluate their completion.

1.
 - Tool should be able to accurately recalculate TORA, TODA, ASDA, LDA for a given set of runway dimensions and a given obstacle's dimensions and position.
 - Should take into account non-default RESA, ALS and TOCS if provided.
2. test
3.
 - Tool should have a list of runways/obstacles the user can select from.
 - Tool should have an option to manually add a runway/obstacle to these lists by giving the relevant measurements.
 - Tool should have an option to manually change any dimension (of the runway, of an obstacle).
 - When any changes are made the calculations should be performed and any relevant views should be updated as the user presses a button
4.
 - Tool must have a 2D top-down and side-on view of the runway and obstacle.
 - Top-down/side-on views must show runway strip, threshold indicators, threshold designators, stopway/clearway for each end of the runway, displaced thresholds, take-off/landing direction, all re-declared distances, and the offset caused by RESA and slope angles relative to the obstacle if present.
 - Top-down view should also show the runway centre line, and the cleared/graded areas around the runway strip.
 - The side-on view must show a representation of the TOCS/ALS slope when an obstacle is present.
 - The threshold with the lowest value should be on the left.
 - Original distances are shown next to recalculated values so they can be compare.
5.
 - Tool should be able to import and export data about runways/obstacles/airports via XML.
 - Imported configurations should be added to the selectable menus.
6.
 - Calculations should be able to be viewed broken down into steps in a readable format.
7.
 - A given runway recalculation should be able to be exported in XML so it can be published, shared and easily parsed by other computers.

8.
 - The tool should have a log of all changes made shown to the user.
 - The log should update every time a change is made to the configuration.
9.
 - Graphic representations of a runway + calculations should be able to be exported in JPEG, PNG and GIF formats.
10. Decided not to include.
 - The image of a runway in the calculation should be in line with a real-world image of that runway with calculations overlaid accurately (if the runway exists).
 - The tool would have to interface with an API like AeroDataBox to allow users to select real-life runways and airports and a service like Google Maps to get an image.
11.
 - Colour should be customisable via pre-selected colour palettes that are useable for colourblind people
 - Keybinds should be added for some functionality of the tool to make it easier to use without a mouse (import/export/changing view)