**XCSoar on Club Kobos**

Loading the demo program on a windows PC

The .pdf file contains the slides with background information and can be stored / viewed at your leisure. The .zip file contains the information necessary to load and run XCSoar on a Windows PC.

To load XCSoar copy the .zip file into the root of your “Documents” folder then extract it into the same folder.  This will generate a folder called XCSoarData in the root of your “Documents” folder. It is important that the XCSoarData folder is as high as possible in the Documents directory hierarchy – ie in the root.

This folder contains the programme executable (called xcsoar.exe which is a self-contained application – it does not “install” on your PC) and a number of other folders and files that provide the source data for the program.

Open the XCSoarData folder and find the xcsoar.exe file, highlight it with one left click then right click and select “Create shortcut”. Then highlight the newly created “xcsoar.exe – Shortcut”  file with a left click, then right click and select “Properties” at the bottom of the list.

In the “properties” dialog box you’ll see a box called “target” which should contain something like C:\Users\Admin\Documents\XCSoarData\XCSoar.exe.

Place the cursor at the end of this field and add some characters so that the box says C:\Users\Admin\Documents\XCSoarData\XCSoar.exe -portrait

(Note that the space before -portrait is important as this format passes a parameter to the program to specify the screen aspect ratio to match the Kobo display).

Then press the “apply” box followed by “OK”.

I suggest you then drag or cut and paste the “xcsoar.exe – Shortcut” file onto your desktop so you can access it easily.

Double clicking the shortcut should run the program.

Playing with the simulator

Your mouse now acts on the simulator in the same way your finger would on the Kobo. A left click on the mouse corresponds to a single press on the Kobo screen. To swipe the screen, hold the left mouse button down and move it across the simulated screen.

To start using the simulator press the SIM icon. At the bottom of the screen the profile box should say “DEMO.prf” and in this case press continue. (To change to a different profile, click inside the profile box and select the one you want and then press continue….. A bit more about “profiles” later)

You’ll now see a map together with any warning messages. As the simulator thinks you’re always starting from Hinton it will come up with a warning that you’re inside Hinton airspace. XCSoar wants to make sure you’re aware of the warning so gives you 2 options to acknowledge it.

Pressing “ACK” means that you acknowledge the warning once and if you create the same warning later by flying into that airspace it will warn you again.

Pressing “ACK day” means that you acknowledge the warning and XCSoar will not warn you again about that airspace for the rest of the day.

As Hinton is our home airfield, and we know about the rules, press “ACK day” to get rid of the warning.

To get used to the map try clicking one of the turn points or airspace areas on the screen and see the information you get. Use the menu items that come up to get back to the main screen above.

To zoom out, swipe downward (hold left mouse button down and move mouse down the simulated screen). To zoom in, swipe upwards. In real life you would just swipe the Kobo screen up or down.

Around the map you’ll see Info Boxes that give various pieces of information relating to the flight. These can be programmed in numerous different ways once you get more familiar with XCSoar.

As you’re in a demo mode, the 2 bottom right boxes have special functions:

1) When “V GND” is highlighted the Up and Down arrows on the keyboard will make the glider move quicker or slower and the left and right arrows will make the glider turn.

2) When “Alt GPS” is highlighted you can increase or reduce the gliders height.

Note that after the V GND box has been highlighted for about 20seconds during which there has been no activity, the box will un-highlight itself.

Once the glider is in the air the map will include boxes next to landable fields giving arrival heights to that location.

If you try swiping the screen left or right (or on the PC simulator the left and right arrows have the same effect provided that “V GND” isn’t highlighted) you will see other pages that have been programmed in. One of the most interesting is the Flarm radar page which gives you a map of flarm equipped aircraft near you. (this only works when flying for real) I’d leave the other pages until you get more familiar with the program.

Creating a task

If you double click (press) anywhere on the map (or press the “M” button at the top right hand corner of the map on a Kobo) and select NAV -> task you get a screen for creating and managing tasks. The system guides you through selecting and adding turn points to your task. The first point is always the start and once you’ve added the last point press “Make Finish” to complete the task list. You can edit the details of each turn point ( eg start line width / turn point quadrant vs cylinder etc) by double clicking (pressing) any of the turn points or re-order them using the arrows at the bottom of the screen.

Pressing “Close” (twice if you’ve modified the task) will take you back to the map.

Pressing “Manage” will give you the option to save the task or browse existing ones. Pressing “Declare” will electronically declare the task in the IGC logger.

Now try flying that task and note what is shown in the various Info Boxes and the way it gives warnings about airspace issues.

Have a good play with the system to get used to it as **trying to learn about it whilst in the air is a really bad idea** (unless you’re in the K21 and a 2nd pilot is flying).

Configuring XCSoar

You will have seen that double clicking gets you to the main menu where, as well as NAV, you have boxes to allow you to QUIT the program, modify the DISPLAY, or CONFIGURE the system. In general please DON’T adjust the “Display” or “Config” settings on the Kobos unless you really know what you are doing and want to create your own profile.

The one area you may wish to change is the map or track up options. You get to these by going to the main menu…Configure -> System -> Map Display -> Orientation and there you’ll find the various options. When you press Close a few times you’ll get back to the map display and **the system will have saved whatever you’ve changed into the current profile**.

So if you think you want to create your own profile (eg to have “track up” rather than “north up” as in the demo) **you first have to create your own profile before making any changes.** To do this, go to the main menu and press Config twice to get to the second page of config options. Press Profiles and this will show you the currently available profiles. Select the one you want to base a new one on and press Copy. You’ll then be given the option to name your new profile and once you press OK that will become the active profile.

As I said please practice any of this on the PC sim before having a go on the Kobos for real!

Other Info

I’ve only scratched the surface of what you can do with the software, but I hope it’s enough to let you play with the simulator to find your way around. If you want more information take a look at:

<https://www.xcsoar.org/> latest manuals and software updates

<http://gethighstayhigh.co.uk/> good source for kobo info

<https://www.condorsoaring.com/forums/viewtopic.php?t=18563> instructions to use XCSoar with Condor

<https://asselect.uk/> Create and download configurable airspace files

<http://newportpeace.co.uk/turningpoints.htm> BGA turnpoints

Have fun