

Preparing .CUB airspace files.

From notes by Tim Newport-Peace and Barry Lytollis.

How to create airspace files and load to the LX7007 and other devices.

1. ASSelect

The BGA recommends using [ASSelect](#) to generate areas of airspace. This is now a web-based tool so the airspace it source should be up to date, but there are no guarantees of its accuracy of course.

From BGA Competition-Airspace-File:

ASSelect has a number of user options. The recommended ASSelect options are:

1. Main:

<i>No-ATZ Airfields</i>	<i>Class G</i>
<i>Gliding Airfields</i>	<i>Class G (but exclude competition host club)</i>
<i>Microlight Airfields</i>	<i>Exclude</i>

Obstacle Include (The NATS obstacle database has around 7,300 obstacles. For practicality reasons, ASSelect filters out the bulk of these, excluding obstacles approximately less than 600'agl, all wind turbines/farms, and obstacles offshore or in London or Manchester. Obstacle NOTAMs that would be excluded by these ASSelect filters can be excluded from the competition airspace file. The competition airspace file includes the ~57 ASSelect filtered obstacles as Danger Areas with a ½ mile radius up to the height of the obstacle.)

<i>HIRTA/GVS</i>	<i>Exclude</i>
<i>ATZ</i>	<i>Class D</i>
<i>ILS Feathers</i>	<i>Class D</i>
<i>Format OpenAir</i>	

2. Extra:

<i>Wave Boxes Default:</i>	<i>Clear all. Set as appropriate.</i>
<i>LOAs Default:</i>	<i>Clear all</i>
<i>Note the Cambridge RAZ is permanently enabled.</i>	
<i>RA(T)s Default:</i>	<i>Set (select all). Clear as appropriate.</i>

3. Options:

<i>Max. Level Default:</i>	<i>FL105. Set higher/unrestricted if potential wave conditions.</i>
<i>Omit North of: Default: None. Set as sensible. Omit</i>	
<i>South of: Default: None. Set as sensible.</i>	

This seems generally appropriate, except make Microlight Airfield Class G too. HIRTA/GVS can be excluded to avoid warnings by the Milfield GVS, or they can be included and the Milfield GVS edited out later using LXasBrowser.

Wave boxes, tick 'TRAG Northumbria'. 'NSGA Borders' is the non-transponder area activated by NOTAM – we should be aware of the status before launch.

Set max level to 'Unlimited'.

Exclude home.

Set *Omit North of* and *Omit South of* as appropriate.
More flexible editing can be done later using LXasBrowser.

2. LXasBrowser

LXASBrowser can be downloaded from:

http://lxnavigation.com/downloads/software_updates/tools/LxasBrowser.zip

- 1) Run LXasBrowser.exe and click File/New Workspace.
- 2) Click Open File  and load your source file.
- 3) Click on the "New Data" button  in the toolbar below the main menu.
- 4) Click on the red "AS" button  to view the airspace and set or create the region to use (Right-Click and invert selection to select all).
- 5) In the main LXasBrowser window, click on Transform to CUB . In the Airspace Info dialog that comes up, specify the name that will be shown in the LX instrument and click OK.
- 6) Specify a disk file name (.CUB) and click Save. You're done (except for getting it into the instrument without letting any of the smoke out, of course).

3. Copy to Instrument

Copy to a microSD card and download to the instrument. Note that the microSD card must be FAT16, the maximum volume size for FAT16 is 4GB. **If** you have a problem formatting your SD card as FAT16 try installing [pw12-free.exe](#) (sorry about the Ads).

On LX7007, go to SETUP > TRANSFER > *etc.*