How To Add New Aircraft Image Geometry to AVDS

Background

The aircraft in AVDS are rendered in OpenGL in the form of colored three-dimensional polygons. The coordinates and colors of these polygons are entered in text files, which AVDS reads and compiles into a binary file for speed of display. To add new aircraft images, users can either change the existing image files or add new ones.

Files and Directories

- By default AVDS is installed in the directory *C:\Program Files\AVDS*.
- By default aircraft image geometry files are located in the directory *AVDS\craft*.
- The file *craft\craftcap.txt* is a text file that is used by AVDS to list the aircraft image geometry files.
- The file *craft\craftcap.o* is a binary file that AVDS uses to store compiled versions of the image files.
- AVDS keeps track of the *craftcap.txt* file and any files that are listed in it and if they change, AVDS recompiles them and saves the results in the **craftcap.o** file.

Note: AVDS only checks and recompiles the image geometry files with it is first started. This means that changes will not be incorporated until after AVDS is stopped and restarted.

Creating An Aircraft Image File

To create a new aircraft image geometry file either *copy and modify an existing file* or draw an aircraft image in a CAD drawing package, save it in DXF format and use the *DXF to AVDS conversion utility* to create an aircraft image geometry file. The entries in the AVDS craft files are described in *Appendix A* of the AVDS manual. The DXF to AVDS conversion utility is described in *Appendix E* of the AVDS manual.

Inserting New Image Files

1. Create a new craft image geometry file.
2. Place this file in the *AVDS\craft* directory.
3. Edit the file AVDS\craft\craftcap.txt and insert a line containing the name of the new image geometry file, i.e. `include "filename.txt"`
4. Restart AVDS
5. Once AVDS has finished compiling the images files the main AVDS window will appear and the message window will contain an account of all of the craft files compiled.

Note: If AVDS encounters errors while compiling the aircraft images files error messages will be printed in the message window and the functions in AVDS will be disabled. If this is the case the errors in the image file must be fixed before AVDS can be started.