# Validating Files from old types of IGC Flight Recorders which do not have DLL files

- 1. This document refers to old types of Flight Recorders (FRs) where no IGC-compliant Data Link Library (DLL) file has been provided by the Manufacturer. In these cases the normal IGC Shell-based file Validation procedure based on DLL files can not be followed because the original Manufacturer has either ceased to exist or no longer deals in IGC FRs and is not available to create a DLL file or other FR updates.
  - 1.1 Downloading of IGC files from FRs is the Pilot's responsibility and outside the scope of this document. See also: <a href="www.fai.org/igc-documents">www.fai.org/igc-documents</a>, select "FR Manufacturers without DLL", then "FRs without DLL" also via the GFAC web site: <a href="www.ukiws.demon.co.uk/GFAC/documents/FRs">www.ukiws.demon.co.uk/GFAC/documents/FRs</a> without DLL.pdf

#### 2. The Problem

Older DOS-based programs from FR manufacturers are generally 16-bit programs.

These will not run on modern 64-bit PC Operating Systems (which are becoming the normal standard), although they will usually run on 32-bit PC Operating Systems.

## 3. The DOSBOX Solution

Claims using the DOS environment can use DOSBOX, an X86 emulator.

This can be downloaded from www.dosbox.com and Tutorials and a Manual are included.

#### 4. The Application

Having installed DOSBOX, find the configuration file:

C:\Users\myusername\AppData\Local\DOSBox\dosbox-0.74-2.conf (or later version)

Note that there should be no need to alter the configuration, but actions can be added to be taken when the environment is created in the [autoexec] section.

4.1 Method 1. Put the DOS programs into a single folder and edit the config file [autoexec] section as follows:

[autoexec]

#Lines in this section will be run at start up.

#You can put your MOUNT lines here:

mount C: C:\Users\myusername\Documents\myfolder

mount D: C:\Users\myusername\Documents\LIB

C:

PATH=D:\:Z:\

- 4.1.1 In the above DOSBOX example; C: is the working folder and D: is the library folder.
- Note: when a drive is "MOUNTed", it is in the form of a Windows folder. It is bad practice to mount a physical drive.
- 4.1.2 Use a text editor such as Notepad (not a Word Processor such as MS Word) to edit the Windows file C:\Users\myusername\AppData\Local\DOSBox\dosbox-0.74-2.conf (or later version) (or whatever this file is called in your version of Windows). \*\* Do not attempt to edit in DOSBOX.
- 4.2 Method 2. An alternative approach is to put programs and data files in the same location:

[autoexec]

#Lines in this section will be run at startup.

#You can put your MOUNT lines here:

mount C: C:\Users\myusername\Documents\myfolder

C:

4.2.1 "my folder" contains both programs and data files. For more information on the MOUNT command please refer to the manual.

After following one of the above methods, a claim file can be Validated:

## 5. VALIDATING AN IGC FILE

- 5.1 Load DOSBOX.
- 5.2 Copy the IGC file to be validated to: c:\Users\myusername\Documents\myfolder
- 5.3 In DOSBOX, use the command RESCAN to update the drive contents lists. Note: If this is not done, the new IGC file will not be available
- 5.4 Use the command VALI-xxxfilename.igc where xxx is the three-letter code of the manufacturer and filename.igc is the name of the file to be validated.

Note: To convert a Flight Recorder binary file (such as filename.ZAN) to an IGC file, use DOSBOX using CONV-xxx instead of VALI-xxx.

Zander FRs. It may be necessary to copy VALI-ZAN.EXE from D: to C: for correct operation.

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Comments to: Chairman IGC GFA Committee, Ian Strachan, ian@ukiws.demon.co.uk