

CHALK RIVER GRAPHICS

CrgSim Documentation

Application Note Sounds

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8/5/2016

We use our flight simulators for a number of purposes: enjoyment, learning, temporary escape, Everyone has their own reasons for turning on the computer and starting up a flight simulator.

One word heard frequently with respect to simulators is immersion. That is: how close to the “real thing” is the experience. The airlines have simulators that provide a great deal of immersion and are very close to the “real thing”. Unfortunately I'm having trouble locating a spare 30 or 40 million dollars to buy one of them. So what can be done to improve immersion short of a very large sum of money?

Well, sound is one aspect of the flight simulator to look at. FSX provides a set of sounds for the default airplanes. Sounds that go with engine noise, flaps up/down, gear up/down, and certain cockpit warnings. I suspect I'm not the only person who has heard “Pull UP!” or “Sink Rate!”.

CrgSim can enhance the sound experience with two pieces of software: CrgLocals and CrgSound.

The CrgSound module is delivered with two mp3 files of ATC chatter courtesy of www.liveatc.net. If you are a pilot chances are that you will have headphones on and there will be some ATC transmissions on the frequency you are tuned to. So - some ATC chatter sound in the background is expected. Lets cover the ATC sounds first.

CrgSound is designed to run on almost any windows computer attached to your local network. When started CrgSound will automatically look for the server program and connect to it. Then based on your configuration will start playing sound files. Two ATC sound files can quickly get tiresome so the first thing to do is to go to www.liveatc.com and download a number of ATC files matching your interests (Shanghai, Seattle, Keflavik, ... your choice). Copy these files to your CrgSound directory, modify the configuration file and you are good to go. Since ATC is not high fidelity you can play these files through a very inexpensive amplifier and inexpensive speakers attached to your sound computer.

You can, of course, use the main FSX computer to play these ATC files but CrgSound can be used on a spare low CPU powered computer (many of us have one in the closet) for additional control over volumes and playing time.

Want to add announcements as you are climbing to altitude? CrgSound configuration has the ability to play a sound based on timing, climbing through an altitude, or descending through an altitude. There are many announcement recordings available on the net.

There is another class of sounds we haven't covered yet: Altitude callouts on descent, 80 knots, V1 and rotate callouts in the cockpit. Also certain alarms and optional (and perhaps non-prototypical) callouts (gear up/down, auto thrust on, autopilot on, ...). All of these announcements are delivered by CrgSound

One of the duties of CrtgSound is to generate cockpit announcements based on input from the simulator. These sounds are in the **.wav** format. You can replace any of these sounds with your own, either generated by you or downloaded from the net. And if you do not care to hear a specific recording just rename the file to something else (for example: 80kts.wav to 80ktsX.wav). It will still be there if you change your mind later. The altitude and status call outs will be played at the same time as the other ATC sounds you have playing. If CrgSound is executing on the FSX computer all of the sounds will play together just as in the real thing.

So for most of us the added flight sounds (announcements, warnings, and ATC chatter) will add to the flying experience immersion. That is most likely a good thing.