CALIBRATING MULTIPLE THROTTLE, PROP & MIXTURE AXES TO "LINE UP"

The 4 throttle, 4 prop pitch and 4 mixtures pages all feature a button, centre bottom of the display, labelled "**Sync Pos**". This is used to help you calibrate multiple axes, for 2–4 engines, so that they are close to lining up, in similar positions, when providing the same input values (thrust or whatever) to Flight Sim. This is the procedure to follow when you want to do this:

1. Before starting on this process, first make sure you set whatever options you need. Choose the "no reverse zone" option before doing anything if this is what you want, and also the "Rev" options where needed to alter direction. The Slope and Filter facilities shouldn't be used.

2. Calibrate the first axis (for Engine #1) following the correct procedures as outlined above. It is important to get this right first. Calibrate the others too—but try to set the minimum, maximum (and centre if used) values such that the levers all line up at each of those two (or four) places. This gets you half way there already.

3. Now, line up all the levers in several intermediate places—especially those where you know they didn't give equal outputs before. For each lined up position, press the "**Sync Pos**" button. The positions of all the calibrated levers will be remembered. Do at least 4 such positions, spread over the lever range (between your minimum and maximum calibrations). The more positions you do, the smoother will be the calibration between each. FSUIPC will record up to 63 such positions, but will overwrite close ones with later settings. You will never need that many!

4. You don't need to set a large number of positions all in one go. Do a few, then OK out of the options and check the results. Bring up the quadrant levers display in FS so you can see how you are doing. If you need to do more, go back and simply use the **Sync Pos** button again. FSUIPC will ask you if you want to replace the settings you already did. If you think you ought to start again, say Yes. Else your new settings will be added to the previous ones, or replace them when very close.

For axes which have had a Synchronisation list made in this way, the "Slope" option does not apply. Instead, pressing the Slope button will show you the 'curve' representing how your **Sync Pos** recording has affected how the calibration will be performed. You cannot amend this there, but if you want to delete this feature for any of these axes, you can do so there. Bear in mind that if you do delete it there, then OK out of the Options, you will lose those settings forever. But if you are simply experimenting and want to go back to normal calibration, that's the way to do it—easier than editing the INI file.

The synchronisation positions are saved in the INI file, in the specific [JoystickCalibration] section currently applicable (eg. specific for the aircraft or profile when this is applied), in lines beginning "SyncSlope...". The numbers shown in pairs represent the x and y positions, respectively, of the (up to 63) points on the "slope" being used to calibrate the named axis.