Description:
File: *Recording 6_low_freq_boost_remove_speech_2_WoodPk_reinsert_16b.wav*

Background: See Reinen, Tor Arne. (2019). *Clean Sky 2 VOICI project information*. Zenodo. http://doi.org/10.5281/zenodo.2658911

Scenario: Sound recording during flight Trondheim – Oslo by Rely AS 2018-09-13, using a Falcon 2000LXS (2017). The full flight, gate to gate, is included.

Main intended usage: Obtain calibrated cockpit background noise for combining with any desired speech in design and tuning of speech recognition and dialog systems.

Recording and calibration: A MicW i436 microphone with windshield was placed just in front of the airplane throttle (see picture). The microphone was connected to an Apple iPod, operated by pilots. The setup has been calibrated by a standard 94 dB/1000 Hz calibrator. Signal sample values on the .wav -file can be converted to sound pressure in Pa by multiplying by 13.79.

Post-processing:

i. The following signal components have been removed from the recording, and replaced by nearby background noise:
   - Pilot speech
   - ATC communication
   - Voice messages automatically generated by the aircraft (e.g., altitude)
ii. The pitch trim confirmation signal has first been removed and then re-inserted at the correct level, but in a version recorded 30 cm from the cockpit loudspeakers.
iii. The recording setup has a high-pass function with cut-off at 150 Hz. A gentle boost has been applied below this frequency.

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