An Introduction to Noise

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Aeronautical Challenges in 1911



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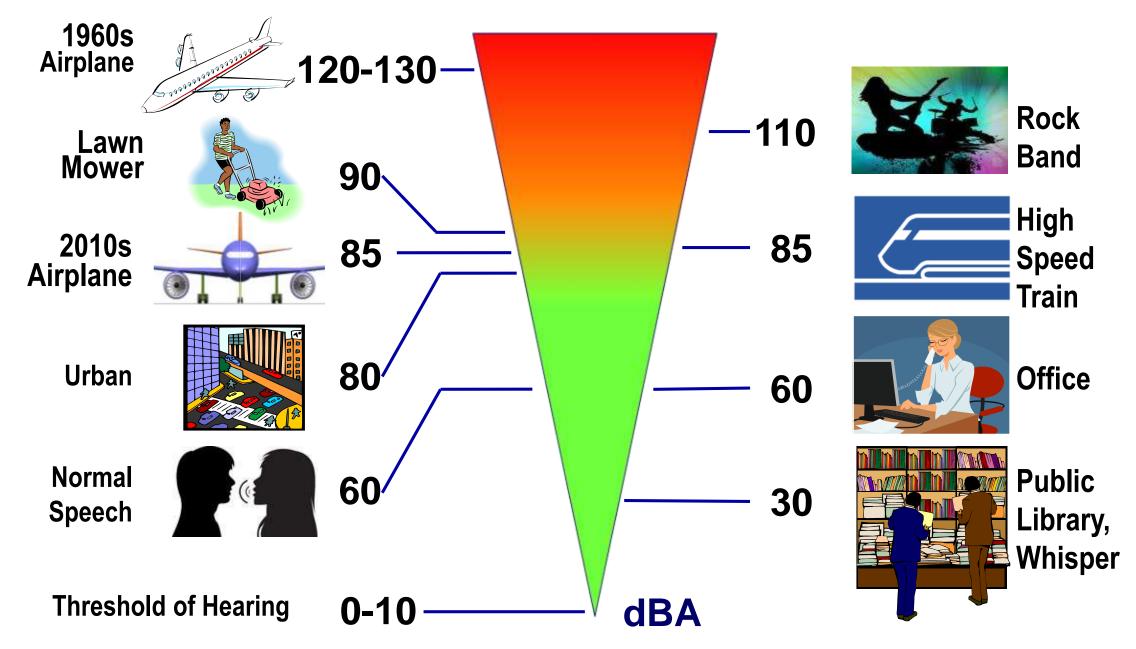
Noise in 1911

"...we may rest assured that the tremendous racket that is at present associated with the aeroplane plays a considerable part in prejudicing the public against these machines..."

A silent engine must inevitably be a step in the right direction..."



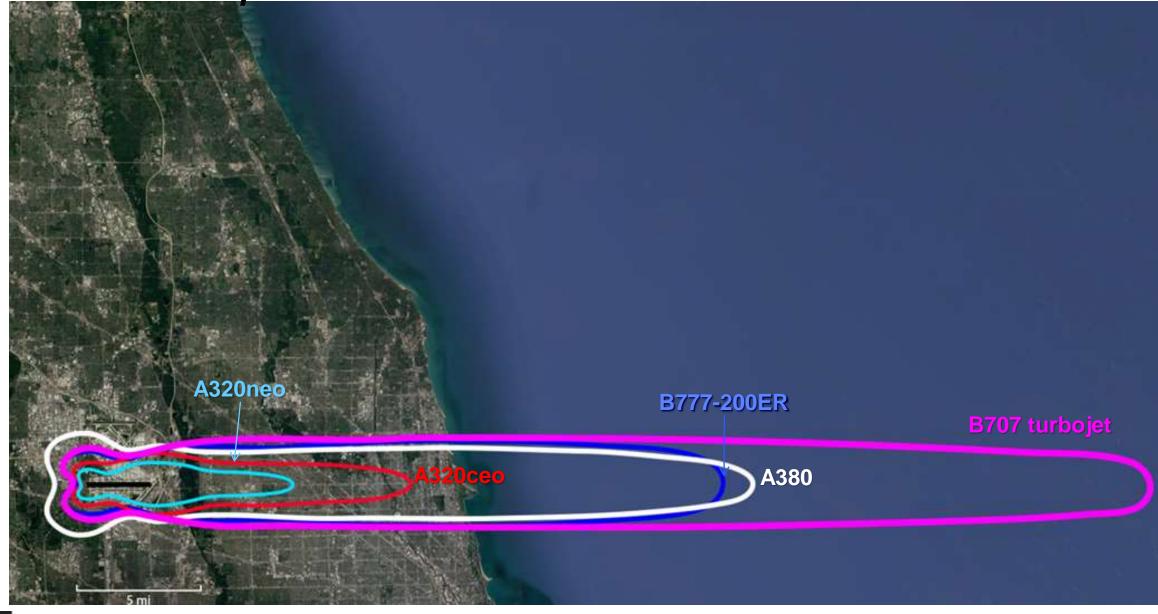
Noise in Perspective





Community Noise Reduction

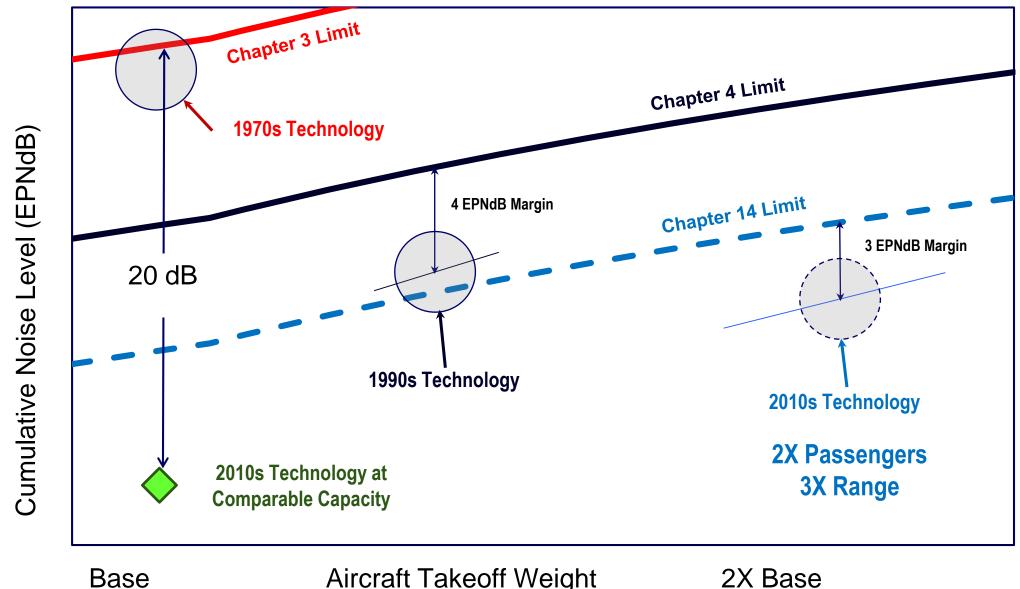
75 dB sound exposure level noise contours





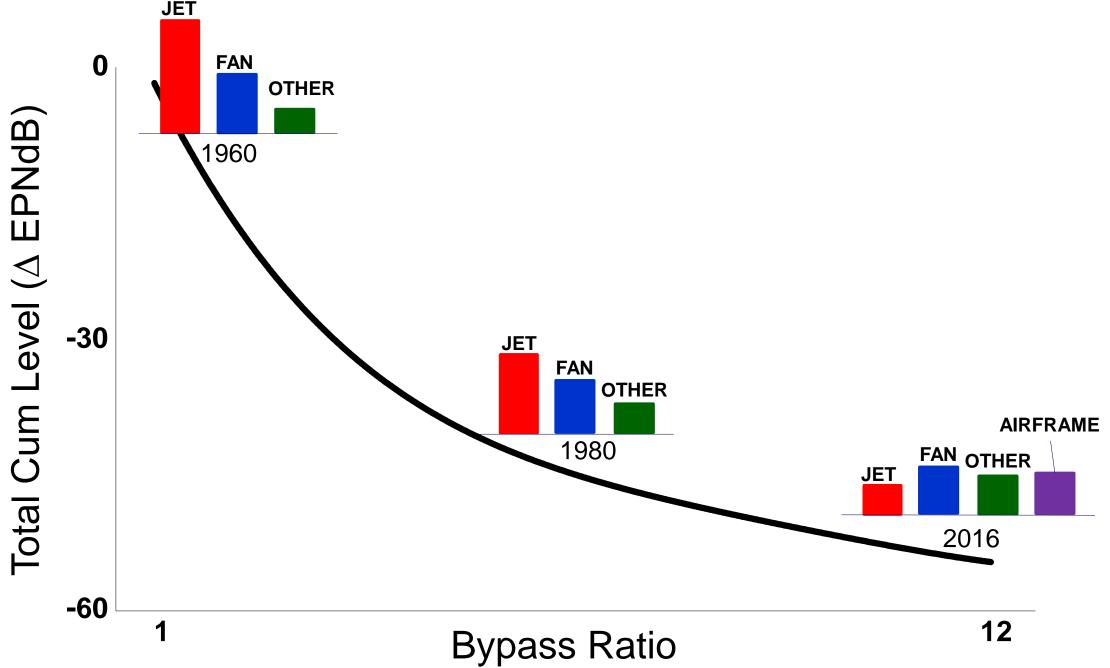
More Efficient Aircraft Deliver Noise Reduction

Lighter aircraft, less thrust, less noise





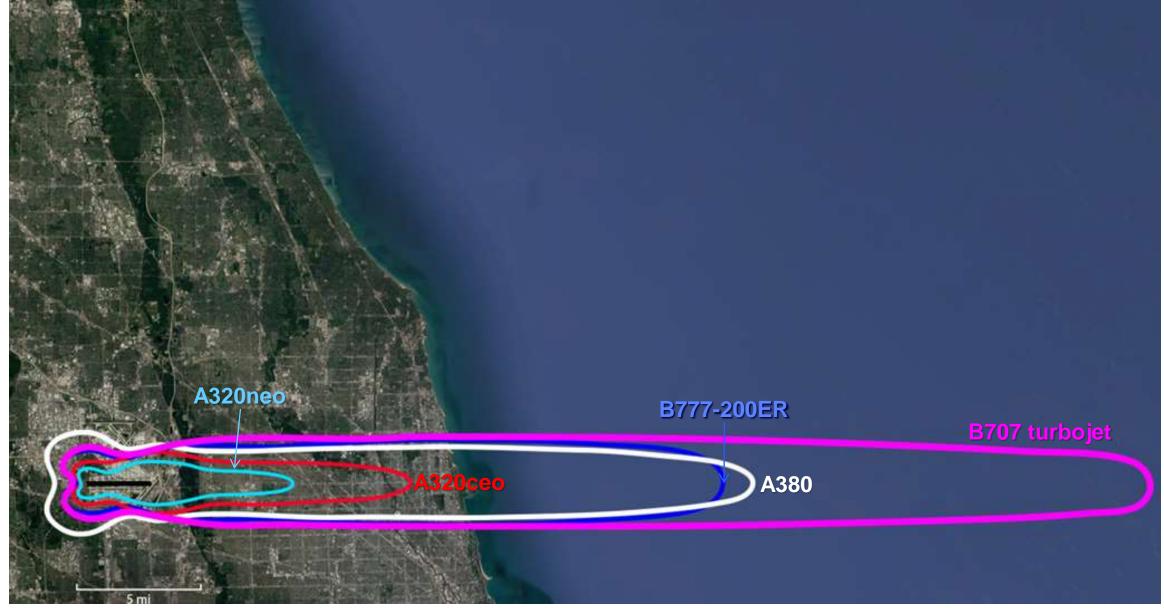
Steady Progress in Noise Reduction





Community Noise Reduction

Much achieved





Community Noise Reduction

How much more is needed?





Aircraft Noise: Making It and Hearing It

Making Less Noise

Lighter airplanes at same capability

Higher bypass ratio engines



Noise reduction technologies







2000

