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Autore	Ayton Lorna
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Nota di contenuto	High-Frequency Sound Generated by Sound-Aerofoil Interaction in Subsonic Uniform Flow -- High-Frequency Sound Generated by Gust-Aerofoil Interaction in Subsonic Uniform Flow -- High-Frequency Sound Generated by Gust-Aerofoil Interaction in Subsonic Shear Flow -- Leading-Edge Stagnation-Point Noise Generated by Turbulence in Subsonic Uniform Flow -- Concluding Remarks and Further Work.
Sommario/riassunto	This thesis investigates the sound generated by solid bodies in steady subsonic flows with unsteady perturbations, as is typically used when determining the noise generated by turbulent interactions. The focus is predominantly on modelling the sound generated by blades within an aircraft engine, and the solutions are presented as asymptotic approximations. Key analytical techniques, such as the Wiener-Hopf method, and the matched asymptotic expansion method are clearly detailed. The results allow for the effect of variations in the steady flow or blade shape on the noise generated to be analysed much faster than

when solving the problem numerically or considering it experimentally.