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2.12 - Flow at Constant Area  
2.13 - The Normal Shock Relations for a Perfect Gas; Chapter 3. One-Dimensional Wave Motion; 3.1 - Introduction; 3.2 - The Propagating Shock Wave; 3.3 - One-Dimensional Isentropic Equations; 3.4 - The Acoustic Equations; 3.5 - Propagation of Acoustic Waves; 3.6 - The Speed of Sound; 3.7 - Pressure and Particle Velocity in a Sound Wave; 3.8 - "Linearized" Shock Tube; 3.9 - Isentropic Waves of Finite Amplitude; 3.10 - Propagation of Finite Waves; 3.11 - Centered Expansion Wave; 3.12 - The Shock Tube; Chapter 4. Waves in Supersonic Flow; 4.1 - Introduction  
4.2 - Oblique Shock Waves  
4.3 - Relation Between  $\alpha$  and  $\beta$ ; 4.4 - Supersonic Flow Over a Wedge; 4.5 - Mach Lines; 4.6 - Piston Analogy; 4.7 - Weak Oblique Shocks; 4.8 - Supersonic Compression by Turning; 4.9 - Supersonic Expansion by Turning; 4.10 - The Prandtl-Meyer Function; 4.11 - Simple and Nonsimple Regions; 4.12 - Reflection and Intersection of Oblique Shocks; 4.13 - Intersection of Shocks of the Same Family; 4.14 - Detached Shocks; 4.15 - Mach Reflection; 4.16 - Shock-Expansion Theory; 4.17 - Thin Airfoil Theory; 4.18\* - Flat Lifting Wings; 4.19\* - Drag Reduction  
4.20\* - The Hodograph Plane  
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6.4 - Mach Number from Pressure Measurements

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#### Sommario/riassunto

The increasing importance of concepts from compressible fluid flow theory for aeronautical applications makes the republication of this first-rate text particularly timely. Intended mainly for aeronautics students, the text will also be helpful to practicing engineers and scientists who work on problems involving the aerodynamics of compressible fluids. Covering the general principles of gas dynamics to provide a working understanding of the essentials of gas flow, the contents of this book form the foundation for a study of the specialized literature and should give the necessary background

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