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References; 3 Characteristics of Aircraft As They Affect Airports; 3.1 Relationships between Aircraft and Airports; 3.2 The Influence of Aircraft Design on Runway Length
3.3 Other Airport Layout Factors 3.4 Factors Affecting Airport Capacity; 3.5 Noise; 3.6 Future Trends in Aircraft Design; References; 4 Airport System Planning; 4.1 Aviation System Planning; 4.2 Levels of Planning; 4.3 Planning Airport Systems under Different States of Industry; 4.4 Effect of Airline Hubs and Deregulation on U.S. Airport System; 4.5 Air Transport Planning in the United States; 4.6 Airport System Planning in Europe; 4.7 Airport System Plan Analysis; 4.8 Data Structure for Airport System Planning; References; 5 Airport Master Planning
5.1 Airport Master Plan: Definition and Objectives 5.2 Hierarchy of Planning; 5.3 Elements of Airport Master Plan: FAA; 5.4 ICAO Guidelines for Structure of Master Plan; 5.5 Airport Layout Design; 5.6 Data Requirements for Master Planning; 5.7 Structure of Master Plan Report; 5.8 Airport Site Selection; References; 6 CNS/ATM; 6.1 Evolution of the System; 6.2 U.S. National Airspace System (NAS); 6.3 CNS/ATM of the NAS; 6.4 Next-Generation Systems; References; 7 Airport Capacity; 7.1 Introduction; 7.2 Capacity, Level of Service, and Demand Peaking; 7.3 Airside Capacity
7.4 Factors Affecting Airside Capacity and Delay 7.5 Determination of Runway Capacity and Delay; 7.6 Annual Service Volume; 7.7 Preliminary Capacity Analyses; 7.8 Calculating Aircraft Delay; 7.9 Taxiway Capacity; 7.10 Gate Capacity; 7.11 Assessing System Capacity-Delay for Airport Development; 7.12 Airport Landside Capacity; References; 8 Airside Configuration and Geometric Design of the Airside; 8.1 Introduction; 8.2 Principles of Airport Layout; 8.3 Airfield Configuration; 8.4 Runway Orientation; 8.5 Obstructions to Airspace: FAA and ICAO Standards; 8.6 Runway Length
8.7 Clearways and Stopways

Sommario/riassunto

First published in 1979, Airport Engineering by Ashford and Wright, has become a classic textbook in the education of airport engineers and transportation planners. Over the past twenty years, construction of new airports in the US has waned as construction abroad boomed. This new edition of Airport Engineering will respond to this shift in the growth of airports globally, with a focus on the role of the International Civil Aviation Organization (ICAO), while still providing the best practices and tested fundamentals that have made the book successful for over 30 years.
