Record Nr. UNINA9910451098803321 Air transportation systems engineering [[electronic resource] /] / edited **Titolo** by George L. Donohue ... [et al.] Reston, Va., : American Institute of Aeronautics and Astronautics, Pubbl/distr/stampa c2001 **ISBN** 1-60086-663-8 1-60086-444-9 1-60119-205-3 Descrizione fisica 1 online resource (743 p.) Progress in astronautics and aeronautics: v. 193 Collana Altri autori (Persone) DonohueGeorge L Disciplina 387.7/40426 Soggetti Aeronautics - Systems engineering Air traffic control - Management Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. ""Cover"": ""Title"": ""Copyright"": ""Table of Contents"": ""Preface"": Nota di contenuto ""Chapter 1 Introduction""; ""Section I: U.S. and European ATM Systemsa €?Similarities and Differences""; ""Chapter 2 Air Traffic Management Capacity-Driven Operational Concept Through 2015""; ""Introduction""; ""Preliminary Design for the NAS""; ""Operational Concept Development""; ""Functions, Agents, and Performance""; ""ATM System Functional Structure""; ""Capacity, Safety, and Separation Assurance""; ""Capacity-Driven Operational Concept""; ""National Level Flow Management""; ""En Route and Outer Terminal Area"" ""Approach/Departure Transition"""Final Approach""; ""Surface""; ""Efficiency in Low Density En Route Airspace""; ""Conclusions""; ""References""; ""Chapter 3 Comparison of U.S. and European Airports and Airspace to Support Concept Validation""; ""Introduction""; ""Assessment Territory""; ""Metrics and Measures""; ""Assessment and Findings""; ""Conclusion""; ""References""; ""Chapter 4 Performance Review in Europe""; ""Introduction""; ""Background""; ""European Challenge""; ""Other Limitations on Growth""; ""Conclusions"" ""Chapter 5 United States and European Airport Capacity Assessment Using the GMU Macroscopic Capacity Model"""Introduction"": ""MCM

Approach""; ""MCM Validation""; ""MCM Assessment of U.S. and European Airports"; ""MCM Comparisons""; ""Conclusions""; ""References""; ""Section II: Economics of Congestion""; ""Chapter 6 Forecasting and Economic Analysis for Aviation Systems Engineering"; ""Introduction""; ""Evaluating National Impacts of ATM Investments""; ""Generating an Unconstrained Forecast""; ""Generating a Constrained Forecast""; ""Estimating and Closing the Performance Gap"" ""Estimating Airline Benefits from ATM Investments"""Overview of the Air Carrier Cost-Benefit Model""; ""Derivation of the Air Carrier Cost-Benefit Model""; ""LVLASO Scenario""; ""Conclusions""; ""References""; ""Chapter 7 Impact of Air Traffic Management on Airspace User Economic Performance""; ""Introduction""; ""Airline Cost Drivers and ATM Actions""; ""Estimates of System-Wide Excess Cost to Airlines""; ""Example of the Impact of ATM Improvements on Long-Term Airline Costs: Fleet Utilization and ATM Improvements"" ""The Larger Picture: The Influence of ATM on Demand-Related Airline Decisions"""Chapter 8 Effects of Schedule Disruptions on the Economics of Airline Operations""; ""Introduction""; ""Scope of Disruptions""; ""Alternatives Available to the Airlines for Handling Disruptions""; ""Cost Implications of Disruptions to the Airlines"": ""Snowstrom Event at Boston"": ""Aggregated Costs of Disruptive Events""; ""Conclusions""; ""Chapter 9 Modeling an Airline Operations Control Center""; ""Introduction""; ""Modeling Structure and Hypotheses""; ""Model Identification and Calibration""; ""Conclusions"" ""References""