Iata Airport Development Reference Manual 9th Edition

Handbook of Checked Baggage Screening – Advanced Airport Security Operation is a practical guide for project managers and designers embarking on hold-baggage screening developments within the airport environment for the first time. The book clearly explains away any uncertainty about the processes and procedures to be used by the various parties involved within the industry and sets out ‘best practice’ with respect to checked baggage screening design. Valuable lessons can be learned from actual case studies contributed by leading equipment manufacturers on recent 100% hold baggage screening projects. In addition to the all-important security screening of baggage and passengers the book also looks at the following areas associated with airport security, through the use of a detailed structured security check-list evaluation questionnaire. The questionnaire allows airports to assess the state of readiness of their airports and then, using the other chapters, gain an insight regarding which technology will best solve any security gaps. The authors offer a unique perspective through their background and experience. Many of the checked baggage screening procedures and equipment discussed in the book have already been implemented in the UK, with the authors responsible for leading this effort. The combined experience they can offer to the industry world wide is invaluable.

Aviation Investment uniquely addresses investment appraisal methods across the key industries that make up the aviation sector, including the airports, air traffic management, airline and aircraft manufacturing – or aeronautic – industries. This practice-oriented book presents methods through realistic case studies. It covers both economic appraisal, or cost-benefit analysis, measuring the value of projects to society, and financial appraisal, valuing projects as cash generators. This substantially expanded second edition covers in greater detail the treatment of environmental emissions, paying particular attention to climate change. It addresses the treatment of Market-Based Mechanisms (MBMs), including cap and trade systems like ETS and offset systems like CORSIA, and compares them to environmental taxes. It also addresses the adjustments needed to measure the foreign exchange generating value of projects, relevant in the presence of trade barriers. The new edition includes two new project types. One is airport relocations, perhaps the most complex type of airport projects, where the economic case is often more nuanced than may be apparent. The second is the re-introduction of supersonic travel. Aviation Investment offers all aviation sub-sectors a single-source reference, bringing together the theoretical background of the economic appraisal literature and aviation investment in practice. It is written in a style that is accessible to non-academic professionals, using formulae only where strictly necessary to enable practical applications, and benefits from the substantial practical experience of the author.

This report assesses the operational performance of explosives-detection equipment and hardened unit-loading devices (HULDs) in airports and compares their operational performance to their laboratory performance, with a focus on improving aviation security.

Major operational elements of the world’s air transport system are examined in this important book, which provides a rare overview and an invaluable single information source to managers in all sectors of the air transport industry. The air transport system considers route structure options in terms of operational impacts and describes the context and boundaries of the industry – the natural, regulatory and operational environments. ‘Systems’ perspectives are introduced to integrate the discussion of aircraft, airlines, airports and airspace issues. The issues faced in ensuring symbiosis of all these elements of the changing scene and the scope for developing balanced strategies to suit all stakeholder requirements are considered in depth to produce a comprehensive text with the potential to influence how well the air transport industry succeeds in meeting its many future challenges. Examines major operational elements of the world's air transport system Considers route structure options in terms of operational impacts Examines the natural, regulatory and operational boundaries of the industry

The objective of this book is to provide ICAO, States, competent authorities and aerodrome operators with a comprehensive overview of legal challenges related to international aerodrome planning. Answers to derived legal questions as well as recommendations thereafter shall help to enhance regulatory systems and to establish a safer aerodrome environment worldwide. Compliant aerodrome planning has an immense impact on the safety of passengers, personnel, aircraft – and of course the airport. Achieving a high safety standard is crucial, as many incidents and accidents in aviation happen at or in the vicinity of airports. Currently, more than 40% of the ICAO Member States do not fully comply with international legal requirements for aerodrome planning. Representatives of ICAO and States, as well as aerodrome and authority personnel, will understand why compliance with the different legal facets of aerodrome planning is challenging and learn how shortcomings can be solved.

Aviation Investment uniquely addresses investment appraisal methods across the key industries that make up the aviation sector, including the airports, air traffic management, airline and aircraft manufacturing - or aeronautic - industries. It is a practice-oriented book where methods are presented through realistic case studies. The emphasis is on economic appraisal, or cost-benefit analysis, in order to determine the viability of projects not only for private investors but for society as a whole. Financial (cash flow) appraisal is illustrated alongside economic appraisal, as the latter builds on the former, but also to show how economic appraisal enhances standard financial appraisal to determine the long-term sustainability of any investment. Aviation is a capital-intensive sector that is growing rapidly, with world traffic expected to double over the next 15 years or so. A great deal of economic appraisal of investment projects takes place already, as aviation is subject to government intervention through economic regulation and financial support, and as both investors and policy makers seek to understand issues such as how environmental legislation may impact the viability of investments. Both economic growth and welfare go hand in hand with sound investment decisions, particularly regarding sectors such as aviation where investments are large and almost invariably debt-financed. Aviation Investment offers all aviation sub-sectors a single-source reference, bringing together the theoretical background of the economic appraisal literature and aviation investment in practice. It is written in a style that is accessible to non-academic professionals, using formulae only where strictly necessary to enable practical applications, and benefits from the substantial practical experience of the author.

Air Transport Management: An International Perspective provides in-depth instruction in the diverse and dynamic area of commercial air transport management. The 2nd edition has been extensively revised and updated to reflect the latest developments in the sector. The textbook includes both introductory reference material and more advanced content so as to provide a solid foundation in the core principles and practices of air transport management. This 2nd edition includes a new chapter on airline regulation and deregulation and new dedicated chapters focusing on aviation safety and aviation security. Four new contributors bring additional insights and expertise to the book. The 2nd edition retains many of the key features of the 1st edition, including: • A clearly structured topic-based approach that provides information on key air transport management issues including: aviation law, economics; airport and airline management; finance; environmental impacts, human resource management; and marketing; • Chapters authored by leading air transport academics and practitioners worldwide which provide an international perspective; • Learning objectives and key points which provide a framework for learning; • Boxed case studies and examples in each chapter; • Keyword definitions and stop and think boxes to prompt reflection and aid understanding of key terms and concepts. Designed for undergraduate and postgraduate students studying aviation and business management degree programmes and industry practitioners seeking to expand their knowledge base, the book provides a single point of reference to the key legal, regulatory, strategic and operational

concepts and processes that shape the form and function of the world’s commercial air transport industry.
In this third edition the chapters have been enhanced to reflect changes in technology and the way the air transport industry runs. Key topics that are newly addressed include low cost airline operations, security issues and EASA regulations on airports. A new chapter covering extended details about wildlife control has been added to the volume.
This book offers a timely snapshot of research and developments in the area of air traffic engineering and management. It covers mathematical, modeling, reliability and optimization methods applied for improving different stages of flight operations, including both aerodrome and terminal airspace operations. It analyses and highlights important legal and safety aspects, and discusses timely issues such as those concerned with Brexit and the use of unmanned aerial vehicles. Gathering selected papers presented at the 6th edition of the International Scientific Conference on Air Traffic Engineering, ATE 2020, held in October 2020 in Warsaw, Poland, this book offers a timely and inspiring source of information for both researchers and professionals in the field of air traffic engineering and management.
Your stakeholder communications needs to be robust, at every level, to secure Solvency II compliance and gain internal buy-in for Solvency II as the new business-as-usual. Based on original research, Solvency II: Stakeholder Communications and Change is a well-structured and essential read for all involved in Solvency II implementation.
TRB's Airport Cooperative Research Program (ACRP) Report 25, Airport Passenger Terminal Planning and Design comprises a guidebook, spreadsheet models, and a user's guide in two volumes and a CD-ROM intended to provide guidance in planning and developing airport passenger terminals and to assist users in analyzing common issues related to airport terminal planning and design. Volume 1 of ACRP Report 25 explores the passenger terminal planning process and provides, in a single reference document, the important criteria and requirements needed to help address emerging trends and develop potential solutions for airport passenger terminals. Volume 1 addresses the airside, terminal building, and landside components of the terminal complex. Volume 2 of ACRP Report 25 consists of a CD-ROM containing 11 spreadsheet models, which include practical learning exercises and several airport-specific sample data sets to assist users in determining appropriate model inputs for their situations, and a user's guide to assist the user in the correct use of each model. The models on the CD-ROM include such aspects of terminal planning as design hour determination, gate demand, check-in and passenger and baggage screening, which require complex analyses to support planning decisions. The CD-ROM is also available for download from TRB's website as an ISO image.
ACRP report 55 examines passenger perception of level of service related to space allocation in specific areas within airport terminals. The report evaluates level-of-service standards applied in the terminal planning and design process while testing the continued validity of historic space allocation parameters that have been in use for more than 30 years.
This independent manual provides airport planners and architects with an essential planning guide and reference tool, based on the author’s extensive experience in the field and involvement in developing best practice airline and airport industry guidelines. Chapters cover topics such as demand forecasting, masterplan development, terminal pier and satellite infrastructure, baggage handling, apron design and airport security. Provides airport planners and architects with an essential guide and reference tool, based on the author’s extensive experience Discusses key airport planning issues including forecasting demand, planning and strategic objectives and airport security Outlines important airport planning principles specified by IATA for masterplan development featuring evaluation techniques and independent development planning
This guidebook for airport professionals, policy makers, and industry professionals provides a step-by-step process for conducting a business-driven evaluation of competing options to renew or replace airport terminal facilities. Some of the contributing factors of these decision-making tools include life-cycle cost, airside/landside or terminal capacity in relation to passenger demand, facilities obsolescence and condition, development risk, development schedule, changes in regulatory requirements, airline needs, operational constraints, tenant make-up, and airport business model. The process is repeatable and scalable to airports of different sizes. Furthermore, the guidebook is intended to assist airports in identifying the need for terminal redevelopment and selecting among competing options for renewing versus replacing existing terminal facilities. The guidebook promotes a sequential four-step process wherein the need for terminal redevelopment is determined, options are developed, evaluations are performed, and recommendations are documented.
THE MOST COMPLETE, UP-TO-DATE GUIDE TO THE MANAGEMENT AND OPERATION OF AIRPORTS Fully revised for the latest FAA, ICAO, and IATA standards and regulations, Airport Operations, Third Edition, provides proven strategies and best practices for efficiently managing airport functions. This in-depth resource offers a broad perspective on the privatization of air transport worldwide. To reflect the evolution of regulatory guidance, two new chapters have been added to address safety management systems and airport operations control centers. New information on the latest trends, including security, environmental impact control, and emerging technologies, is also included. Authoritative yet accessible, this practical reference is ideal for aviation educators, students, airport personnel, airport planners and designers, and aviation managers at all levels. Coverage includes: * The airport as an operational system * Airport peaks and airline scheduling * Airport noise control * Aircraft operating characteristics * Operational readiness * Ground handling * Baggage handling * Passenger terminal operations * Airport security * Cargo operations * Airport technical services * Airport aircraft emergencies * Airport access * Operational administration * Airport safety management systems * Airport operations control centers * The airport operations manual * Sustainable development and environmental capacity of airports
Foundations of Airport Economics and Finance analyzes the impact key economic indicators play on an airport's financial performance. As rapidly changing dynamics, including liberalization, commercialization and globalization are changing the nature of airports worldwide, this book presents the significant challenges facing current and future airports. Airports are evolving from quasi-monopolies to commercial companies operating in a global environment, with ever-increasing passenger and cargo volumes and escalating security costs that put a greater strain on airport systems. This book highlights the critical changes that airports are experiencing, providing a basic understanding of both the economic and financial aspects of the air transport industry. Identifies the economic roots of airport financial performance and how the interplay of its major parameters affects profitability Bridges the gap between the latest airport academic research and real-world airport financial management Covers cases and scenarios of numerous airports from around the world Includes learning aids, such as chapter introductions and summaries, glossary and appendices
"Describes best practices and specific design considerations and presents decision-making frameworks for implementing passenger conveyance systems. Passenger conveyance components include escalators, elevators, moving walkways, and passenger assist vehicles/carts. Automated People Mover systems (the subject of ACRP Reports 37 and 37A), personal rapid transit systems, and shuttle bus systems are not covered in the Guidebook. In addition to the Guidebook, ACRP Report 67 also includes a comprehensive database along with a Decision-Support Tool for planning, designing, and evaluating

passenger conveyance systems at airports as a function of specific airport design and operating parameters. This database allows project planners to examine how passenger conveyance components operate as a system throughout different areas within the airport environment."--Foreword.

The Global Airline Industry Second Editionprovides a definitive introduction to the global air transportationsystem. It features detailed coverage of airline economics,strategy, management, scheduling, operations, and ticketdistribution, as well as survey chapters on aviation safety andsecurity, airports, air traffic control, environmental impacts, andthe international regulatory environment in which the industryoperates. It offers a global perspective, drawing on theeditors' extensive experience with airline and air transportissues and featuring contributions from experts all around theworld. The Global Airline Industry, Second Edition has beensignificantly revised and updated from the bestselling firstedition and now also includes a chapter on Airline RevenueManagement.

Airport Development Reference ManualThe Independent Airport Planning ManualElsevier

This is the first book to review a trend in transport systems which has only recently come of age: the multi-modal interchange. Separate modes of transport are being linked through 'joined-up thinking', and transport designers and authorities are only now able to exploit interchange opportunities. This book presents examples of how these new opportunities have been planned and designed, and outlines how transfer and mobility can be improved in the future. Blow takes the airport as the focal point of true multi-modal passenger terminals and presents the development of these buildings as representing a new experience in travel. The book shows that the success of the experience of transferring from one mode of transport to another depends on the many factors, including congestion in an already overloaded system, and the way that designers and managers have addressed contingency planning. International examples are drawn from areas where mobility is most concentrated and the demands on design are at their highest. The book also addresses important issues of rebuilding and redevelopment, where once separate modes of transport are being linked to each other, and where short-term inconveniences rectify past wrongs in the long term. It is a compendium of architectural and engineering achievement.

This comprehensive guide to the planning and design of airport terminals and their facilities covers all types of airport terminal found around the world and highlights the environmental and technical issues that the designer has to address. Contemporary examples are critically reviewed through a series of case studies. This new edition covers the most recent examples of high quality, technically advanced designs from the Far East, Europe and North America. This book will be a source of inspiration and guiding principles for those who design, commission or manage airport buildings.

Sustainable Transportation and Smart Logistics: Decision-Making Models and Solutions provides deterministic and probabilistic models for transportation logistics problem-solving and decision-making. The book presents an overview of the intersections between sustainability, transportation, and logistics, and delves into the current problems associated with the implementation of sustainable transportation and smart logistics in urban settings. It also offers models for addressing complex structural problems and procedures for estimating transportation externalities such as environmental and social impacts, both in industrial and government arenas, as well as decision-making models from operational, tactical, and strategic management perspectives. Sustainable Transportation and Smart Logistics also covers best practices for practical corporate policy implementation, making it a comprehensive and vital resource for researchers, graduate students, practitioners, and policy makers in transportation, logistics, urban planning, economics, engineering, and environmental science. Examines various modes of transportation Includes mathematical models for decision-making in a wide variety of situations Presents public transportation and smart cities use cases

This proceedings volume chronicles the papers presented at the 35th CIB W78 2018 Conference: IT in Design, Construction, and Management, held in Chicago, IL, USA, in October 2018. The theme of the conference focused on fostering, encouraging, and promoting research and development in the application of integrated information technology (IT) throughout the life-cycle of the design, construction, and occupancy of buildings and related facilities. The CIB – International Council for Research and Innovation in Building Construction – was established in 1953 as an association whose objectives were to stimulate and facilitate international cooperation and information exchange between governmental research institutes in the building and construction sector, with an emphasis on those institutes engaged in technical fields of research. The conference brought together more than 200 scholars from 40 countries, who presented the innovative concepts and methods featured in this collection of papers.

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.

Airport development is critical to economic growth and poverty reduction. This book will help decision-makers assess whether Public Private Partnerships (PPP) might be a viable option to meet their airport development requirements. It walks the reader through the airport PPP process, from early preparation to bringing the project to market and managing the project during implementation. The book will help eradicate misconceptions about the role of the private sector in airport infrastructure. A Decision-Makers Guide to Public Private Partnerships in Airports provides an essential guide for those in a position to make decisions linked to airport development, to their advisers, their staff and also to students wishing to understand airport PPP.

Written by a range of international industry practitioners, this book offers a comprehensive overview of the essence and nature of airline operations in terms of an operational and regulatory framework, the myriad of planning activities leading up to the current day, and the nature of intense activity that typifies both normal and disrupted airline operations.

The first part outlines the importance of the regulatory framework underpinning airline operations, exploring how airlines structure themselves in terms of network and business model. The second part draws attention to the operational environment, explaining the framework of the air traffic system and processes instigated by operational departments within airlines. The third part presents a comprehensive breakdown of the activities that occur on the actual operating day. The fourth part provides an eye-opener into events that typically go wrong on the operating day and then the means by which airlines try to mitigate these problems. Finally, a glimpse is provided of future systems, processes, and technologies likely to be significant in airline operations. Airline Operations: A Practical Guide offers valuable knowledge to industry and academia alike by providing readers with a well-informed and interesting dialogue on critical functions that occur every day within airlines.

Modelling and Managing Airport Performance provides anintegrated view of state-of-the-art research on measuring andimproving the performance of airport systems with consideration ofboth airside and landside operations. The considered facets ofperformance include capacity, delays, economic costs, noise,emissions and safety. Several of the contributions also examinepolicies for managing congestion and allocating sparse capacity, aswell as for mitigating the externalities of noise, emissions, andsafety/risk. Key features: Provides a global perspective with contributing authors fromEurope, North and South America with backgrounds in academia,research institutions, government, and industry Contributes to the definition, interpretation, and sharedunderstanding of airport performance measures and relatedconcepts Considers a broad range of measures that quantify operationaland environmental performance, as well as safety and risk Discusses concepts and strategies for dealing with themanagement of airport performance Presents state-of-the-art modelling capabilities and identifiesfuture modelling needs Themed around 3 sections – Modelling Airport Performance,Assessing Airport Impacts, and Managing Airport Performance andCongestion Modelling and Managing Airport Performance is avaluable reference for researchers and practitioners in the globalair transportation community.

By far the most comprehensive book on the subject, the completely new Second Edition of Airport Operations updates the many developments in this fast-changing industry. The book provides a broad perspective on the effects of deregulation, privatization, and commercialization. Thoroughly illustrated, it examines the most current practices in airport security and terminal access, cargo relations, noise control, scheduling issues, and more. It is equally valuable to aviation educators and students as well as to airport personnel.

Managing Airports presents a comprehensive and cutting-edge insight into today's international airport industry. Approaching management topics from a strategic and commercial perspective rather than from an operational and technical angle, the book provides an innovative insight into the processes behind running a successful airport. This 4th edition has been fully revised and updated to reflect the many important developments in the management of airports and issues facing the aviation industry since the 3rd edition. The 4th edition features: New content on: coping with an increasingly volatile and uncertain operating environment, social media and other trends in technology, the evolving airport-airline relationship, responding to sustainability pressures and new security policies. New chapter focused solely on service quality and the passenger experience. This is to reflect the increasing need for airports to offer wide ranging and quality services to their diverse customer base to remain competitive and to achieve high satisfaction levels. Up dated and new international case studies to show recent issues and theory in practice. New case studies on emerging economies such as China, India and Brazil. Accessible and up-to-date, Managing Airports is ideal for students, lecturers and researchers of transport and tourism, and practitioners within the air transport industry.

Significantly updated in reference to the latest construction standards and new building types Sustainable design integrated into chapters throughout Over half of the entire book has now been updated since 2015 Over 100,000 copies sold to successive generations of architects and designers This book belongs in every design office. The Metric Handbook is the major handbook of planning and design data for architects and architecture students. Covering basic design data for all the major building types it is the ideal starting point for any project. For each building type, the book gives the basic design requirements and all the principal dimensional data, and succinct guidance on how to use the information and what regulations the designer needs to be aware of. As well as buildings, the Metric Handbook deals with broader aspects of design such as materials, acoustics and lighting, and general design data on human dimensions and space requirements. The Metric Handbook is the unique reference for solving everyday planning problems.