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Logistics Transportation Systems  MD Sarder 2020-10-17 Logistics
Transportation Systems compiles multiple topics on transportation logistics systems from both qualitative and quantitative perspectives, providing detailed examples of real-world logistics workflows. It explores the key concepts and problem-solving techniques required by researchers and logistics professionals to effectively manage the continued expansion of logistics transportation systems, which is expected to reach an estimated 25 billion tons in the United States alone by 2045. This book provides an ample understanding of logistics transportation systems, including basic concepts, in-depth modeling analysis, and network analysis for researchers and practitioners. In addition, it covers policy issues related to transportation logistics, such as security, rules and regulations, and emerging issues including reshoring. This book is an ideal guide for academic researchers and both undergraduate and graduate students in transportation modeling, supply chains, planning, and systems. It is also useful to transportation practitioners involved in planning, feasibility studies, consultation and policy for transportation systems, logistics, and infrastructure. Provides real-world examples of logistics systems solutions for multiple transportation modes, including seaports, rail, barge, road, pipelines, and airports Covers a wide range of business aspects, including customer service, cost, and decision analysis Features key-term definitions, concept overviews, discussions, and analytical problem-solving

Air Line Pilot  1997
Aircraft Performance Weight and Balance  Thiago Lopes Brenner 2021-05-15
This book covers the physics of flight (basic), jet engine propulsion, principles and regulations of aircraft performance and other related topics, always with an innovative and simple approach to piloting and flight planning. This way, a traditionally complex study was made into something fun and easy. The book is focused on class A aircraft performance and is suitable for those who are unfamiliar with airplane performance, as well as for those with some previous background or experience who want to gain a more in-depth understanding of the subject matter. To sum up: pilots (professionals and students), flight dispatchers, aeronautical engineers and aviation enthusiasts. Happy reading!

Flying Blind  Peter Robison 2021-11-30 NEW YORK TIMES BUSINESS BESTSELLER • A suspenseful behind-the-scenes look at the dysfunction that
contributed to one of the worst tragedies in modern aviation: the 2018 and 2019 crashes of the Boeing 737 MAX. An "authoritative, gripping and finely detailed narrative that charts the decline of one of the great American companies" (New York Times Book Review), from the award-winning reporter for Bloomberg. Boeing is a century-old titan of industry. It played a major role in the early days of commercial flight, World War II bombing missions, and moon landings. The planemaker remains a cornerstone of the U.S. economy, as well as a linchpin in the awesome routine of modern air travel. But in 2018 and 2019, two crashes of the Boeing 737 MAX 8 killed 346 people. The crashes exposed a shocking pattern of malfeasance, leading to the biggest crisis in the company’s history—and one of the costliest corporate scandals ever. How did things go so horribly wrong at Boeing? Flying Blind is the definitive exposé of the disasters that transfixed the world. Drawing from exclusive interviews with current and former employees of Boeing and the FAA; industry executives and analysts; and family members of the victims, it reveals how a broken corporate culture paved the way for catastrophe. It shows how in the race to beat the competition and reward top executives, Boeing skimped on testing, pressured employees to meet unrealistic deadlines, and convinced regulators to put planes into service without properly equipping them or their pilots for flight. It examines how the company, once a treasured American innovator, became obsessed with the bottom line, putting shareholders over customers, employees, and communities. By Bloomberg investigative journalist Peter Robison, who covered Boeing as a beat reporter during the company’s fateful merger with McDonnell Douglas in the late ‘90s, this is the story of a business gone wildly off course. At once riveting and disturbing, it shows how an iconic company fell prey to a win-at-all-costs mentality, threatening an industry and endangering countless lives.

**A Guide to the Top 100 Companies in China**

**Proceedings of 10th International Conference on Recent Advances in Civil Aviation** Oleg Anatolyevich Gorbachev 2022-10-19 The volume comprises proceedings of the 10th International Conference on Recent Advances in Civil Aviation. The contents focus on air traffic control and management, quality control and reliability improvement of radio equipment and avionics, designing and testing aircraft assemblies and mechanisms, reliability improvement of aircraft management systems, aviation enterprise management, etc. There is also emphasis on the current problems and prospects for development of unmanned aircraft systems. This volume will be beneficial to researchers, practitioners, and policy-makers alike.

*The Turbine Pilot’s Flight Manual* Gregory Neal Brown 2001-03-01 Extensive animation and clear narration highlight this first-of-its-kind CD-ROM. It shows all major systems of jet and turboprop aircraft and how they work. Ideal for self-instruction, classroom instruction or just the curious at heart.

**AIR CRASH INVESTIGATIONS - THE BOEING 737 MAX DISASTER PART II - THE CRASH OF ETHIOPIAN AIRLINES FLIGHT 302** Dirk Barreveld 2021-11-11 On March 10, 2019, at 05:38 UTC, Ethiopian Airlines flight 302, Boeing 737-8 (MAX), ET-AVJ, took off as a scheduled international flight, from Addis Ababa Bole International Airport bound to Nairobi, Kenya. It departed Addis Ababa with 157 persons on board: 2 flight crew (a Captain and a First Officer), 5 cabin crew and one IFSO, 149 regular passengers. The take-off roll and lift-off was normal, including normal values of left and right angle-of-attack (AOA). Shortly after liftoff, the left Angle of Attack sensor recorded value became erroneous and the left stick shaker activated and remained active until near the end of the recording. In addition, the airspeed and altitude values from the left air data system began deviating from the corresponding right side values. The left and right recorded AOA values began deviating. At 5:40:22, the second automatic nose-down trim activated.
Following nose-down trim activation GPWS DON’T SINK sounded for 3 seconds and “PULL UP” also displayed on PFD for 3 seconds. The Captain was unable to maintain the flight path and requested to return back to the departure airport. At 05:43:21, an automatic nose-down trim activated for about 5 s. The stabilizer moved from 2.3 to 1 unit. The rate of climb decreased followed by a descent in 3 s after the automatic trim activation. The descent rate and the airspeed continued increasing. Computed airspeed values reached 500kt, pitch and descent rate values were greater than 33,000 ft/min. Finally, both recorders stopped recording around 05: 44 the Aircraft impacted terrain 28 NM South East of Addis Ababa near Ejere. All 157 persons on board: 2 flight crew, 5 cabin crew and one IFSO, and 149 regular passengers were fatally injured. The crash of Ethiopian Airlines Flight 302 was, after the crash of Lion Air Flight 610 on October 29, 2018, the second crash of a Boeing 737 MAX 8 within a period of 4 months.

**SACAA CPL Radio Aids** Louise Hahn 2020-02-06 Radio aids manual for the SACAA Commercial pilots’ licence. This covers all the subject material required for the SACAA CPL Syllabus Radio aids which are navigation services that are ground based, they transmit electronic signals which in turned are received by units in the aircraft. They are used for departures, en route navigation and arrivals. Please Visit our webpage www.aviationtraining.biz for more information on other products like our Computer based training ground school, with full explanations, videos, lots of examples, quizzes to practice with, and a gamification element because learning should be fun. You should also look for a you tube channel, where we post videos to help with some of the exam questions, you can also reach out to us via our facebook page @aviationtrainingsa Good luck with your exams 😊


**Airbus A320** Facundo Conforti 2020-08-17 Welcome to the most complete manual about the MCDU operations based on the FMS system of the great A320. This manual describes all functions of the MCDU (Multi-Function Control and Display Unit) for Airbus A320 including definitions, normal operations and abnormal operations in real flights. Learn all about each part of the MCDU, each key, each function and every detail you need as a pilot. After learning the all theory concepts, you will learn to operate the MCDU in different flights, including domestic flights, international flight and abnormal flights with emergencies. At the end of this book, you will be ready for operating the MCDU like a professional pilot.

737-345 Classic Pilot Handbook Mike Ray 2016-04-14 Captain Mike Ray has put together a complete collection of just about everything a pilot needs to know to "Pass the Checkride". The document is profusely illustrated with a clearly understood visual and complete "training toolset" that will allow you to enter the simulator completely confident that you will at least look like you know what you are doing. The material is presented in an entertaining way that will keep your attention while providing a depth of understanding to the otherwise totally boring stuff you got from the company.

Test and Evaluation of a Multifunction Keyboard and a Dedicated Keyboard for Control of a Flight Management Computer 1986

The Dangers of Automation in Airliners Jack J. Hersch 2020-11-24 The award-winning journalist delves “into the confluence of modern airplane technology and pilot behavior to probe how and why flight disasters happen” (BookTrib). Aviation automation has been pushed to its limits, with pilots increasingly relying on it. Autopilot, autothrottle, autoland, flight management systems, air data systems, inertial guidance systems. All these systems are only as good as their inputs which, incredibly, can go rogue. Even the automation itself is subject to unpredictable failure. And what of the pilots? They began flight training with their hands on the throttle and yoke,
and feet on the rudder pedals. Then they reached the pinnacle of their careers—airline pilot—and suddenly they were going hours without touching the controls other than for a few minutes on takeoff and landing. Are their skills eroding? Is their training sufficient to meet the demands of today’s planes? The Dangers of Automation in Airliners delves deeply into these questions. You’ll be in the cockpits of the two doomed Boeing 737 MAXs, the Airbus A330 lost over the South Atlantic, and the Bombardier Q400 that stalled over Buffalo. You’ll discover exactly why a Boeing 777 smacked into a seawall, missing the runway on a beautiful summer morning. And you’ll watch pilots battling—sometimes winning and sometimes not—against automation run amok. This book also investigates the human factors at work. You’ll learn why pilots might overlook warnings or ignore cockpit alarms. You’ll observe automation failing to alert aircrews of what they crucially need to know while fighting to save their planes and their passengers. The future of safe air travel depends on automation. This book tells its story.

Advances in Human Aspects of Transportation: Part I Neville Stanton 2021-07-19 Human Factors and Ergonomics have made a considerable contribution to the research, design, development, operation and analysis of transportation systems which includes road and rail vehicles and their complementary infrastructure, aviation and maritime transportation. This book presents recent advances in the Human Factors aspects of Transportation. These advances include accident analysis, automation of vehicles, comfort, distraction of drivers (understanding of distraction and how to avoid it), environmental concerns, in-vehicle systems design, intelligent transport systems, methodological developments, new systems and technology, observational and case studies, safety, situation awareness, skill development and training, warnings and workload. This book brings together the most recent human factors work in the transportation domain, including empirical research, human performance and other types of modeling, analysis, and development. The issues facing engineers, scientists, and other practitioners of human factors in transportation research are becoming more challenging and more critical. The common theme across these sections is that they deal with the intersection of the human and the system. Moreover, many of the chapter topics cross section boundaries, for instance by focusing on function allocation in NextGen or on the safety benefits of a tower controller tool. This is in keeping with the systemic nature of the problems facing human factors experts in rail and road, aviation and maritime research—it is becoming increasingly important to view problems not as isolated issues that can be extracted from the system environment, but as embedded issues that can only be understood as a part of an overall system.

ATPL Theory Question Bank - General Navigation Faraz Sheikh 2022-03-02 This is an ATPL theoretical question bank for the topic: GENERAL NAVIGATION. It comes with 200+ questions for the student pilot to practice with. Our entire ATPL question bank booklets equate to over 4600+ questions for your ATPL exams. All questions are marked with the answers so the student can refer directly to the answers. The book is not to be used for real reference or operation and is created for training purposes only. Our ATPL question bank booklets include the following topics: - AGK – Electrics - AGK – Engines - AGK – Instruments - AGK – Systems - Air Law - Communications - Flight Planning - General Navigation - Human Performance - Meteorology - Operations - Principles of Flight - Radio Navigation Student Pilots are required to undertake all these theoretical exams for the Air Transport Pilots License (ATPL) prior to fully qualifying as ready First Officers to join the Airline industry. These exams are also pre-requisite for pilots before they complete their Commercial Pilots License (CPL) and Instrument Rating (IR).

The Multitasking Myth Loukia D. Loukopoulos 2016-03-03 Despite growing concern with the effects of concurrent task demands on human performance,
and research demonstrating that these demands are associated with vulnerability to error, so far there has been only limited research into the nature and range of concurrent task demands in real-world settings. This book presents a set of NASA studies that characterize the nature of concurrent task demands confronting airline flight crews in routine operations, as opposed to emergency situations. The authors analyze these demands in light of what is known about cognitive processes, particularly those of attention and memory, with the focus upon inadvertent omissions of intended actions by skilled pilots. The studies reported within the book employed several distinct but complementary methods: ethnographic observations, analysis of incident reports submitted by pilots, and cognitive task analysis. They showed that concurrent task management comprises a set of issues distinct from (though related to) mental workload, an area that has been studied extensively by human factors researchers for more than 30 years. This book will be of direct relevance to aviation psychologists and to those involved in aviation training and operations. It will also interest individuals in any domain that involves concurrent task demands, for example the work of emergency room medical teams. Furthermore, the countermeasures presented in the final chapter to reduce vulnerability to errors associated with concurrent task demands can readily be adapted to work in diverse domains.

AIR CRASH INVESTIGATIONS, CAPTAIN LOST CONTROL The Crash of Kenya Airways Flight 507 Hank Williamson, editor 2012-07-01 During the night of 04th May 2007, the B737-800, registration 5Y-KYA, operated by Kenya Airways as flight KQA 507 from Abidjan international airport (Cte d'Ivoire), to the Jomo Kenyatta airport Nairobi (Kenya), made a scheduled stop-over at the Douala international airport (Cameroon). The weather was stormy. A number of departing planes decided to wait for the weather to improve. Kenya Airways, however, decided to depart. Shortly after take-off at about 1000 ft, the aircraft entered into a slow right roll that increased continuously and eventually ended up in a spiral dive. On the 5th May 2007 at approximately 0008 hrs, the airplane crashed in a mangrove swamp South-South/East of Douala. All 114 people on board were killed and the airplane was completely destroyed. The airplane crashed after loss of control by the crew as a result of spatial disorientation, after a long slow roll, during which no instrument scanning was done, and in the absence of external visual references in a dark night.

Boeing 737 Graham M. Simons 2021-03-15 An in-depth history of the controversial airplane, from its design, development and service to politics, power struggles, and more. The Boeing 737 is an American short- to medium-range twinjet narrow-body airliner developed and manufactured by Boeing Commercial Airplanes, a division of the Boeing Company. Originally designed as a shorter, lower-cost twin-engine airliner derived from the 707 and 727, the 737 has grown into a family of passenger models with capacities from 85 to 215 passengers, the most recent version of which, the 737 MAX, has become embroiled in a worldwide controversy. Initially envisioned in 1964, the first 737-100 made its first flight in April 1967 and entered airline service in February 1968 with Lufthansa. The 737 series went on to become one of the highest-selling commercial jetliners in history and has been in production in its core form since 1967; the 10,000th example was rolled out on 13 March 2018. There is, however, a very different side to the convoluted story of the 737’s development, one that demonstrates a transition of power from a primarily engineering structure to one of accountancy, number-driven powerbase that saw corners cut, and the previous extremely high safety methodology compromised. The result was the 737 MAX. Having entered service in 2017, this model was grounded worldwide in March 2019 following two devastating crashes. In this revealing insight into the Boeing 737, the renowned aviation historian Graham M. Simons examines its design, development and service over the decades since 1967. He also explores the
darker side of the 737's history, laying bare the politics, power-struggles, changes of management ideology and battles with Airbus that culminated in the 737 MAX debacle that has threatened Boeing's very survival.

**Air Crash Investigations** Igor Korovin 2009-10 On 14 September 2008 Aeroflot Flight 821, a Boeing 737-505, operated by Aeroflot-Nord, a subsidiary of the Russian airline Aeroflot, crashed on approach to Bolshoye Savino Airport, Perm, Russia. All 82 passengers and 6 crew members were killed. The aircraft was completely destroyed. According to the final investigation report, the main reason of the crash was pilot error. Both pilots had lost spatial orientation due to new instruments they were not familiar with, lack of proper training, insufficient knowledge of English and fatigue from lack of adequate rest. Alcohol in the Captain's blood may also have contributed to the accident.


**Human Factors in Multi-Crew Flight Operations** Harry W. Orlady 2017-07-05 With the pace of ongoing technological and teamwork evolution across air transport, there has never been a greater need to master the application and effective implementation of leading edge human factors knowledge. Human Factors in Multi-Crew Flight Operations does just that. Written from the perspective of the well-informed pilot it provides a vivid, practical context for the appreciation of Human Factors, pitched at a level for those studying or engaged in current air transport operations. Features Include: - A unique seamless text, intensively reviewed by subject specialists. - Contemporary regulatory requirements from ICAO and references to FAA and JAA. - Comprehensive detail on the evolutionary development of air transport Human Factors. - Key statistics and analysis on the size and scope of the industry. - In-depth demonstration of the essential contribution of human factors in solving current aviation problems, air transport safety and certification. - Future developments in human factors as a 'core technology'. - Extensive appendices, glossary and indexes for ease of reference. The only book available to map the evolution, growth and future expansion of human factors in aviation, it will be the text for pilots and flight attendants and an essential resource for engineers, scientists, managers, air traffic controllers, regulators, educators, researchers and serious students.

**The Boeing 737 Technical Guide** Chris Brady 2020-04-18 This is an illustrated technical guide to the Boeing 737 aircraft. Containing extensive explanatory notes, facts, tips and points of interest on all aspects of this hugely successful airliner and showing its technical evolution from its early design in the 1960s through to the latest advances in the MAX. The book provides detailed descriptions of systems, internal and external components, their locations and functions, together with pilots notes and technical specifications. It is illustrated with over 500 photographs, diagrams and schematics. Chris Brady has written this book after many years developing the highly successful and informative Boeing 737 Technical Site, known throughout the world by pilots, trainers and engineers as the most authoritative open source of information freely available about the 737.

**Human Error, Safety and Systems Development** Philippe Palanque 2006-04-11 Recent accidents in a range of industries have increased concern over the design, development, management and control of safety-critical systems. Attention has now focused upon the role of human error both in the development and in the operation of complex processes. Human Error, Safety and Systems Development gathers contributions from practitioners and researchers presenting and discussing leading edge techniques that can be used to mitigate the impact of error (both system and human) on safety-critical systems. Some of these contributions can be easily integrated into existing systems engineering practices while others provide a more theoretical and fundamental perspective on the issues raised by these kinds of
interactive systems. More precisely the contributions cover the following themes: –Techniques for incident and accident analysis; –Empirical studies of operator behaviour in safety-critical systems; –Observational studies of safety-critical systems; –Risk assessment techniques for interactive systems; –Safety-related interface design, development and testing; –Formal description techniques for the design and development of safety-critical interactive systems. Many diverse sectors are covered, including but not limited to aviation, maritime and the other transportation industries, the healthcare industry, process and power generation and military applications. This volume contains 20 original and significant contributions addressing these critical questions. The papers were presented at the 7th IFIP Working Group 13.5 Working Conference on Human Error, Safety and Systems Development, which was held in August 2004 in conjunction with the 18th IFIP World Computer Congress in Toulouse, France, and sponsored by the International Federation for Information Processing (IFIP).

**The Logistics and Supply Chain Innovation Handbook** John Manners-Bell 2019-07-03 The Fourth Industrial Revolution is now transforming logistics and supply chain industries. Consumer habits are changing fast and supply chains are having to adapt to meet the challenges created by this dynamic new environment. Traditional logistics operating models are under threat. Incumbent freight operators across the entire transport and warehousing spectrum have been forced to develop strategies to effectively compete with new start-ups. The Logistics and Supply Chain Innovation Handbook provides a comprehensive overview of all the major new technologies and business models currently under development and looks at this process of disruption in detail. The Logistics and Supply Chain Innovation Handbook covers many important topics, such as crowd sourcing and shipping, on-demand delivery, autonomous vehicles, automation in the warehouse, electric vehicles and alternative fuels. It provides readers with a straightforward and easy to understand assessment of these innovations and their impact on the industry. Online supporting resources include PowerPoints and sample case studies.

**Human Factors in Computing Systems** 1994

**Device Simulation Models** Holly Kathleen Hughes Graham 1996

**Aircraft Performance and Sizing, Volume II** Timothy Takahashi 2017-12-15

This book is a concise practical treatise for the student or experienced professional aircraft designer. This volume comprises key applied subjects for performance based aircraft design: systems engineering principles; aircraft mass properties estimation; the aerodynamic design of transonic wings; aircraft stability and control; takeoff and landing runway performance. This book may serve as a textbook for an undergraduate aircraft design course or as a reference for the classically trained practicing engineer.

**Pilot Windshear Guide** 1988

**Decreasing Fuel Consumption and Exhaust Gas Emissions in Transportation** Michael Palocz-Andresen 2012-12-15 Within all areas of transportation, solutions for economical and environmentally friendly technology are being examined. Fuel consumption, combustion processes, control and limitation of pollutants in the exhaust gas are technological problems, for which guidelines like 98/69/EC and 99/96 determine the processes for the reduction of fuel consumption and exhaust gas emissions. Apart from technological solutions, the consequences of international legislation and their effects on environmental and climate protection in the area of the transportation are discussed.

**The Role of Computers in Research and Development at Langley Research Center** 1994

**FAA/NASA Joint University Program for Air Transportation Research 1992-1993** 1994

**ATPL Theory Question Bank - Radio Navigation** Faraz Sheikh 2022-03-02

This is an ATPL theoretical question bank for the topic: RADIO
NAVIGATION. It comes with 260+ questions for the student pilot to practice with. Our entire ATPL question bank booklets equate to over 4600+ questions for your ATPL exams. All questions are marked with the answers so the student can refer directly to the answers. The book is not to be used for real reference or operation and is created for training purposes only. Our ATPL question bank booklets include the following topics: AGK – Electrics - AGK – Engines - AGK – Instruments - AGK – Systems - Air Law - Communications - Flight Planning - General Navigation - Human Performance - Meteorology - Operations - Principles of Flight - Radio Navigation Student Pilots are required to undertake all these theoretical exams for the Air Transport Pilots License (ATPL) prior to fully qualifying as ready First Officers to join the Airline industry. These exams are also prerequisite for pilots before they complete their Commercial Pilots License (CPL) and Instrument Rating (IR).

**Instrument Procedures Handbook** Federal Aviation Administration (FAA) 2016-10-24 This handbook supersedes FAA-H-8261 -16, Instrument Procedures Handbook, dated 2014. It is designed as a technical reference for all pilots who operate under instrument flight rules (IFR) in the National Airspace System (NAS). It expands and updates information contained in the FAA-H-8083-15B, Instrument Flying Handbook, and introduces advanced information for IFR operations. Instrument flight instructors, instrument pilots, and instrument students will also find this handbook a valuable resource since it is used as a reference for the Airline Transport Pilot and Instrument Knowledge Tests and for the Practical Test Standards. It also provides detailed coverage of instrument charts and procedures including IFR takeoff, departure, en route, arrival, approach, and landing. Safety information covering relevant subjects such as runway incursion, land and hold short operations, controlled flight into terrain, and human factors issues also are included.

**Advances in Aviation Psychology, Volume 2** Michael A. Vidulich 2017-05-18 Since 1981, the biennial International Symposium on Aviation Psychology (ISAP) has been convened for the purposes of (a) presenting the latest research on human performance problems and opportunities within aviation systems, (b) envisioning design solutions that best utilize human capabilities for creating safe and efficient aviation systems, and (c) bringing together scientists, research sponsors, and operators in an effort to bridge the gap between research and applications. Though rooted in the presentations of the 18th ISAP, held in 2015 in Dayton, Ohio, Advances in Aviation Psychology is not simply a collection of selected proceedings papers. Based upon the potential impact of emerging trends, current debates or enduring issues present in their work, select authors were invited to expand upon their work following the benefit of interactions at the symposium. Consequently the volume includes discussion of the most pressing research priorities and the latest scientific and technical priorities for addressing them. This book is the second in a series of volumes. The aim of each volume is not only to report the latest findings in aviation psychology but also to suggest new directions for advancing the field.

**737NG Training Syllabus** Mike Ray 2013-02-01 737NG Training Syllabus is the descriptive title for this beautifully illustrated 383 plus page document. The highly detailed, full color book is virtually crammed with original graphics and thousands of words of descriptive text that will provide a complete training syllabus for persons wishing to learn to operate the 737NG jet airliner. While intended specifically for the Flight Simulation market, professional airline pilots will find the information useful and informative. This is a guide intended to teach "simmers" how to fly the jet the way "the Pros do".

**AIAA Flight Simulation Technologies Conference** 1988

**Federal Register** 2013
The Limits of Expertise  R. Key Dismukes 2017-03-02 Why would highly skilled, well-trained pilots make errors that lead to accidents when they had safely completed many thousands of previous flights? The majority of all aviation accidents are attributed primarily to human error, but this is often misinterpreted as evidence of lack of skill, vigilance, or conscientiousness of the pilots. The Limits of Expertise is a fresh look at the causes of pilot error and aviation accidents, arguing that accidents can be understood only in the context of how the overall aviation system operates. The authors analyzed in great depth the 19 major U.S. airline accidents from 1991-2000 in which the National Transportation Safety Board (NTSB) found crew error to be a causal factor. Each accident is reviewed in a separate chapter that examines events and crew actions and explores the cognitive processes in play at each step. The approach is guided by extensive evidence from cognitive psychology that human skill and error are opposite sides of the same coin. The book examines the ways in which competing task demands, ambiguity and organizational pressures interact with cognitive processes to make all experts vulnerable to characteristic forms of error. The final chapter identifies themes cutting across the accidents, discusses the role of chance, criticizes simplistic concepts of causality of accidents, and suggests ways to reduce vulnerability to these catastrophes. The authors’ complementary experience allowed a unique approach to the study: accident investigation with the NTSB, cognitive psychology research both in the lab and in the field, enormous first-hand experience of piloting, and application of aviation psychology in both civil and military operations. This combination allowed the authors to examine and explain the domain-specific aspects of aviation operations and to extend advances in basic research in cognition to complex issues of human performance in the real world. Although The Limits of Expertise is directed to aviation operations, the implications are clear for understanding the decision processes, skilled performance and errors of professionals in many domains, including medicine.