

***Terminal Chaos: Why U.S. Air Travel Is Broken and How to Fix It***

By George L. Donohue and Russell D. Shaver III, George Mason University, with Eric Edwards

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*Why U.S. Air Travel Is Broken and How to Fix It*

BIC subject categories:  
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TRP Aerospace and aviation technology;  
WGM Aircraft: general interest

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*Why U.S. Air Travel Is Broken and How to Fix It*

By **George L. Donohue and Russell D. Shaver III**  
George Mason University, with Eric Edwards

Praise for *Terminal Chaos*:

*This is a very disturbing book—and it was intended to be. For the crisis in U.S. aviation is far more serious than most people imagine. Donohue and Shaver have given us the best prescription I've seen for fixing it.*

—Robert W. Poole Jr., Director of Transportation Studies, Reason Foundation

*Donohue and Shaver have taken an enormously arcane and complex set of issues and players and laid them all out very clearly and directly .... It's among the best and most thoughtful pieces written on the subject ... it's a very, very good—and mostly evenhanded—distillation of the background and causes of the current quagmire that will only worsen as time is allowed to pass with no real fixes in sight.*

—David V. Plavin, former Director of Airports Council International–North America and former Director of the Port Authority of New York and New Jersey

*The air transportation system is fixable but the patient needs urgent and holistic care NOW. Donohue and Shaver are the doctors, and the doctors are in! They have the knowledge and capability to work through this problem to success.*

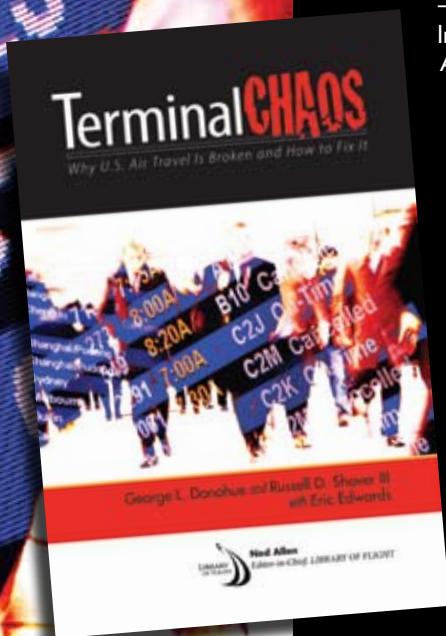
—Paul Fiduccia, President of the Small Aircraft Manufacturers Association

*An impassioned and controversial look at the current state of aviation in the U.S. by a former FAA insider. This is must read material for those concerned with how the aviation system affects them as an airline passenger.*

—Glen J. D. McDougall, President of MBS Ottawa and former Director General, Department of Transport Canada

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Why U.S. Air Travel Is Bro



## About the Authors



**Dr. George L. Donohue** is currently a Professor of Systems Engineering and Operations Research and Director of the Center for Air Transportation Systems Research at George Mason University, Fairfax, Virginia. He is also a Co-director of the Federal Aviation Administration's National Center of Excellence for Aviation Operations Research. Donohue was formerly the Associate Administrator for Research and Acquisitions at the FAA and has broad experience in managing major research and technology programs in both the public and private sector. Before joining the FAA, Donohue served as Vice President of the RAND Corporation, in Santa Monica, California, and was previously Director of the Office of Aerospace and Strategic Technology at the Defense Advanced Research Projects Agency. He has also held technical and technical management positions at Dynamics Technology, Inc., the U.S. Navy, and NASA. Dr. Donohue has received numerous awards, such as the Secretary of Defense Meritorious Civilian Service Medal and the Air Traffic Control Association Clifford Burton Memorial Award. He has published over 60 reports and articles and is the principal editor of *Air Transportation Systems Engineering*, the only reference book on the subject.

He was a Director of RTCA, Inc. and was nominated by President Clinton to become the FAA Deputy Administrator after demonstrating substantial success in replacing the old FAA technology acquisition process and in pioneering personnel reforms at the FAA. He replaced 30-year-old air traffic control computers and radar systems and initiated the

new aircraft surveillance system pilot program in Alaska. This Alaska demonstration program achieved significant success in demonstrating how the new ADS-B technology can be used to safely separate aircraft with a much lower air traffic controller workload. He was awarded the Embry-Riddle Aeronautical University Pinnacle Award for Outstanding Individual Contribution to the art and science of air traffic control for this achievement.

He is a Fellow of the American Institute of Aeronautics and Astronautics and holds PhD and MS degrees in Mechanical and Aerospace Engineering from Oklahoma State University and a BSME degree from the University of Houston. Dr. Donohue is also a pilot, with a single-engine private pilot's certificate.

**Dr. Russell Shaver** is currently a visiting research fellow in the Center for Air Transportation Systems Research at George Mason University. He was formerly a senior research analyst at the RAND Corp. For over 35 years, he held numerous analysis and management positions at RAND. From 1994 to 2000 he was the chief scientist for policy analysis at the MITRE Center for Advanced Aviation System Development in McLean, Virginia. He holds a BS degree in Mechanical Engineering from Yale University and a PhD in Applied Mechanics from the University of California at Berkeley.

# CHAOS

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## About the Book

### The Problem

In total passenger miles, air travel has never been more popular. But as any frequent flyer knows, air travel problems are growing even faster—long lines, lost luggage, overbooking, flight delays, and serious safety issues. And instead of doing something about it, the traveling public seems simply to be sitting down, buckling in, and allowing itself to be treated like sheep.

But it doesn't have to be this way. There are solutions to our air travel problems, real solutions that can make real differences. And they don't require 15 years to implement.

With decades of experience in civil aviation and policy, Drs. George Donohue and Russell Shaver are well qualified to assess the problems in the system and to offer responsible, workable solutions.

### The Stories

They are compelling, high-profile horror stories—passengers stranded for hours on the tarmac, flights cancelled for “bad weather” when there’s not a drop of rain anywhere near the flight path, and an overall sense of apathy and obstructionism among those responsible for managing the industry. Interestingly, these problems are not the inevitable result of the size or complexity of the U.S. system. Air transportation in Europe, with almost identical air traffic control systems and safety standards, is far better. Amsterdam moves 30% more passengers than Newark, but the average flight delay is an order of magnitude lower.

### The Causes

So just how did we get where we are in the U.S. system today? Donohue and Shaver cite multiple reasons for the chaos we now face, including airline deregulation, multiple governmental agencies with no central oversight or responsibility, multiple corporate entities with conflicting agendas, and a technologically outdated air traffic control system. And there seems to be a complete absence of advocacy for the customer—the passengers.

### The Cures

Fortunately, Donohue and Shaver don't leave us in this state of chaos. Their provocative analysis not only identifies the causes and extent of the problems, but also provides us with a course heading that will put us on the path to recovery.

**This book should be read by every airline passenger traveling in or through the United States.** As a country, we simply can't afford to let the chaos continue.

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