Airport and Air Traffic Control System January 1982

NTIS order #PB82-207606

AIRPORT AND AIR TRAFFIC CONTROL SYSTEM

For sale by the Superintendent of Documents,

Library of Congress Catalog Card Number 82-600545

U.S. Government Printing Office, Washington, D.C. 20402

Foreword

Air transportation is expected to continue growing during the next two decades. In dealing with this growth it will be important to ensure safety and minimize the costs of the system to the Government and airspace users. Large investments are now anticipated in both airports and air traffic control systems, investments that require unusually long leadtimes. For these reasons the House Committee on Appropriations has requested that OTA conduct an assessment of airport capacity and related air traffic control issues.

This subject is, more than most, a moving target. There have been rapid changes in Federal Aviation Administration (FAA) plans in recent years, and these plans have been further complicated by airline deregulation and the aftermath of the Professional Air Traffic Controllers Organization strike. These events affect future plans because they influence the rate of growth and where that growth will occur. There also continue to be rapid and significant changes in the aviation, telecommunications, and data-processing technologies on which the system relies. In addition, these plans are coming before Congress during a period of increasing budgetary constraints.

This assessment is intended to provide a perspective on both airport development aid and FAA's proposed air traffic control system modernization. In both areas there are questions of how much improvement will be needed, how soon it will be needed, and how the funding of improvements will be allocated among airspace users.

JOHN H. GIBBONS Director

Airport and Air Traffic Control Advisory Panel Members

Raymond L. Bisplinghoff, *Chairman Vice President and Director of R&D*, Tyco Laboratories

Jesse Borthwick
Executive Director

National Association of Noise Control Officials

Secor D. Browne

Secor D. Browne Associates, Inc.

Jack Enders

President
The Mitre Corp.

Matthew Finucane

Aviation Consumer Action Project

William T. Hardaker

Assistant Vice President, Air Navigation/Traffic

Control

Air Transport Association

William Horn, Jr.

National Business Aircraft Association, Inc.

Jack D. Howell

Air Line Pilots Association, International

Alton G. Keel, Jr.

Assistant Secretary of the Air Force Research, Development and Logistics

Clifton A. Moore General Manager Department of Airports City of Los Angeles

Thomas L. Oneto *Planning Officer*

Aircraft Owners and Pilots Association

Robert E. Poli *President*

Professional Air Traffic Controllers Association

Gilbert F. Quinby

Consultant

Janet St. Mark President SMS Associates

David S. Stempler

Airline Passengers Association

Richard Taylor Vice President

Boeing Commercial Airplane Co.

David Thomas

General Aviation Manufacturers Association

Airport and Air Traffic Control System Project Staff

John Andelin, Assistant Director, OTA Science, Information, and Natural Resources Division

William Mills, Project Director

Marsha Fenn M. Karen Gamble Larry L. Jenney Paul B. Phelps Zalman Shaven

Contractors

Adib Kanafani, Institute of Transportation Studies, University of California at Berkeley Vincent Volpicelli, Port Authority of New York and New Jersey Jerry D. Ward Robert Simpson, Flight Transportation Laboratory, Massachusetts Institute of Technology

John Heritage, *Editor*R. Bryan Harrison

OTA Publishing Staff

John C. Holmes, Publishing Officer

John Bergling Kathie Boss Debra M. Datcher Joe Henson