

**A l e k s a n d r a M o z d z a n o w s k a**  
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## EDUCATION

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**MASSACHUSETTS  
INSTITUTE OF  
TECHNOLOGY (MIT)** PhD in the Engineering Systems Division's Technology, Management, and Policy program,  
June 2008. GPA: 4.9/5.0  
*Thesis title:* System Transition: Dynamics of Change in the US Air Transportation System  
*Topics studied include:* science and technology policy, and engineering systems analysis  
Masters of Science in Aeronautical Engineering, June 2004. GPA: 4.9/5.0  
*Thesis title:* Regional Jet Operating Patterns in the Continental US  
*Topics studied include:* policy, economics, airline management, and air traffic operations and  
control.  
Bachelor of Science in Aeronautical Engineering, June 2002. GPA: 4.7/5.0  
*Topics studied include:* physics, biology, chemistry, thermodynamics, propulsion,  
aerodynamics, and structures.  
Bachelor of Science in Literature, June 2002. GPA: 4.7/5.0  
*Topics studied include:* renaissance and medieval literature.

**AWARDS** Recipient of Integrative Graduate Education and Research Training/NSF Fellowship  
(2004-2006)  
Recipient of MIT Graduate Fellowship (2002-2003)  
Recipient of United Technologies Corporation Award (2002)

## SELECTED EXPERIENCE

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**INTERNATIONAL  
CENTER FOR AIR  
TRANSPORTATION, MIT** Researched dynamics of transition in the National Air Transportation system. **(6/2004-  
Present)**  
Documented historical changes in air transportation in collaboration with FAA's Research,  
Engineering and Development Advisory Committee to establish a baseline understanding of  
transition dynamics. **(6/2004-10/2004)**  
Investigated means for facilitating consensus within and across stakeholders in the context of  
aviation and the environment as part of the Lateral Alignment Research Group. **(2/2005-5/2005)**  
Enumerated stakeholder values and mechanisms of influence between stakeholders to identify  
leverage points. Work was conducted as part of an MIT class in conjunction with the US Joint  
Planning and Development Office. **(2/2005-5/2005)**

**PROGRAM ON  
EMERGING  
TECHNOLOGIES, MIT** As a member of a student/faculty team studied the uncertainty associated with emerging  
technologies in order to understand the societal implications of and responses to such  
technologies. Work focused on ubiquitous computing. **(9/2004-8/2006)**

**INTERNATIONAL  
CENTER FOR AIR  
TRANSPORTATION, MIT** Analyzed traffic (ETMS) and economic (Form 41) data to determine the operational and  
economic impacts of the growth of regional jets on the national airspace system.  
**(8/2002-6/2004)**

**AERONAUTICS AND  
ASTRONAUTICS  
DEPARTMENT, MIT** Teaching Assistant for Unified Engineering **(9/2000-5/2001)**, Thermal Energy **(9/2001-12/2001)**,  
and Experimental Projects **(2/2002-5/2002)**. Held office hours, graded tests, problem sets and  
projects, and reviewed and edited student papers and presentations.

**GENERAL ELECTRIC  
AIRCRAFT ENGINES** Developed a model of the CF34-8 aircraft engine compressor under different tip clearance  
conditions in order to predict the engine's efficiency. **(6/2001-8/2001)**

**ORBITAL SCIENCES  
CORP.** Developed a database of vehicle requirement, and interfaced two computational programs.  
Analyzed and optimized the possible trajectories of an air launched two-stage vehicle.  
**(5/2000-8/2000)**

**FLUID DYNAMICS  
RESEARCH LAB, MIT** Studied the impact of manufacturing errors on turbine blade performance. Performed surface  
response analysis using a two-to-the-k factorial design, a fractional factorial design, and a  
central composite design to model the system. **(1/2000)**

## **PUBLICATIONS**

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A. Mozdzanowska, R. Weibel, K. Marais, E. Lester, A. Weigel, R.J. Hansman. Dynamics of Air Transportation System Transition and Implications for ADS-B Equipage. In Proceedings of the 2007 Aviation Technology, Integration and Operations Conference. Belfast, Ireland. September 2007.

A. Mozdzanowska, R. Weibel, E. Lester, R.J. Hansman. The Dynamics of Air Transportation System Transition. In Proceedings of the 7th Air Traffic Management Conference. Barcelona Spain. July 2007.

A. Mozdzanowska, R.J. Hansman. Crisis Events as a Catalyst for Change in the US Air Transportation System – Implications for Capacity. In Proceedings of the 10th International Conference on Technology Policy and Innovation. Stavanger, Norway. June 2007. *Awarded Best Paper.*

A. Mozdzanowska, R.J. Hansman. “The US Air Transportation System”, *Handbook of Transportation Policy and Administration*. Edited by Jeremy F. Plant, Van R. Johnston, and Cristina E. Ciocirlan. Boca Raton: CRC Press Taylor and Francis Group. 2007. Pages 9—26.

J. Black, K. Downes, F. Field, A. Mozdzanowska, K. Steel. More than “just shopping:” personalization, privacy and the (ab)use of data. In Proceedings of the 2006 9<sup>th</sup> *International Conference on Technology Policy and Innovation*. Santorini, Greece. June 2006.

A. Mozdzanowska, R.J. Hansman. Growth and Operating Patterns of Regional Jets in the United States. *AIAA Journal of Aircraft*. Vol. 42, no. 4, pp. 858-864. July-Aug. 2005

A. Mozdzanowska, R.J. Hansman. Observations and Potential Impacts of Regional Jet Operating Trends. In *Proceedings of the 2003 Aviation Management, Education and Research Conference*. Montreal, Quebec. July 2003.

A. Mozdzanowska, R.J. Hansman, D. Delahaye, J. Histon. Emergence of Regional Jets and the Implications on Air Traffic Management. In *Proceedings of the 2003 Air Traffic Management Conference*. Budapest, Hungary. June 2003.

## **PRESENTATIONS**

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International Conference on Technology Policy and Innovation. Stavanger, Norway, June 2007.

MIT Air Traffic Control Course. Cambridge, MA, October 2006.

Aviation Management, Education and Research Conference. Montreal, Quebec, July 2003.

Air Traffic Management Conference. Budapest, Hungary, June 2003

Airline Industry Meeting. Cambridge, MA, February 2003, November 2003, October 2006, October 2007.

Joint University Program. Atlantic City, NJ, January 2003. Cambridge, MA, October 2003. Princeton, NJ, April 2005.

Washington DC, January 2006. Princeton, NJ, April 2006, Cambridge, MA, October 2006, Princeton, NJ, April 2007..

## **ACTIVITIES AND LEADERSHIP**

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Vinyasa yoga instructor (2006-Present)

Member of the MIT Graduate Association of Aeronautics and Astronautics (2002-2004)

Officer of Sigma Gamma Tau (National Aerospace Honor Society) (2000-2001)

Member, Tau Beta Pi (National Engineering Honor Society) (1999-Present)

## **SKILLS**

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Fluent in Polish.