

CURRICULUM VITAE

May 2020

Name: **Tatjana Krstic Simic**

Present status: Assistant Professor

Division of Airports and Air Traffic Safety, Department of Air Transport,
University of Belgrade - Faculty of Transport and Traffic Engineering,
(Employed since November 1, 1996.)

Fields of interest: Air Traffic Control/Management;
Airport Planning, Design and Operations;
Human Factor in Air Traffic Control;
Sustainability of Air Traffic System;
Air Traffic Analysis, Modeling and Forecasting;

Nationality: Serbian

Place of birth: Negotin, Serbia

Date of birth: September 12, 1971.

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University of Belgrade
Vojvode Stepe 305,
Belgrade, 11000, Serbia
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Education:

1990-1996 Dipl. ing. (B.S. in Engineering), Air Transport
University of Belgrade - Faculty of Transport and Traffic Engineering

Undergraduate thesis: **“Non-precision Instrument Approach to Threshold THR11 at Nis Airport”**, graduated July 18, 1996, thesis adviser Obrad Babic

1997-2004 Master of Science (M.S. in Air Transport Engineering)
University of Belgrade - Faculty of Transport and Traffic Engineering,

Master thesis: **“Airfield Traffic Complexity”**
obtained October 22, 2004, thesis adviser Vojin Tomic

2012-2015 PhD (PhD in Air Transport Engineering)
University of Belgrade - Faculty of Transport and Traffic Engineering

PhD thesis: **“Influence of airfield traffic complexity on sustainable airport development”**
obtained May 29, 2015, thesis adviser Obrad Babic

Teaching experience:

2017-to date Air Traffic Control 1 (teaching and labs, one semester undergraduate course)
Air Traffic Control 2 (labs, one semester undergraduate course)
Aviation Meteorology (teaching and labs, one semester undergraduate course)
Air Transport Sustainable Development (teaching and labs, one semester undergraduate course)

2015-2017: Air Traffic Control 1 (labs, one trimester undergraduate course)
Air Traffic Control 2 (labs, one trimester undergraduate course)
Meteorology (teaching and labs, one trimester undergraduate course)

2009-2015: Air Traffic Control 1 (labs, one trimester undergraduate course)
Air Traffic Control 2 (labs, one trimester undergraduate course)
Aviation Meteorology (teaching and labs, one trimester undergraduate course)
Airports 1 (labs, one trimester undergraduate course)
Airports 2 (labs, one trimester undergraduate course)

1996-2009: Air Traffic Control (labs, two semester undergraduate course)
Airports (labs, two semester undergraduate course)
Air Navigation (labs, one semester undergraduate course)
Air Cargo (labs, one semester undergraduate course)
Transportation Networks (labs, one semester undergraduate course)
Introduction to Air Transportation (labs, one semester undergraduate course)

Papers:

- O. Babic and T. Krstic, "Airspace Daily Operational Sectorization by Fuzzy Logic", Fuzzy Sets and Systems, November 16, 2000, Vol. 116, No. 1, pp. 49-64; ISSN 0165 – 0114
- V. Tomic, O. Babic and T. Krstic, "A Model to Minimize Runway Operation Costs", 16th European Conference on Operational Research, EURO XVI, Brussels, Belgium, July 12-15, 1998.
- F. Netjasov, T. Krstic and I. Poltoracki, "Survey of Traffic and Radar Controller Communication and Workload", 1st International Conference on Research in Air Transportation, ICRAT 2004", Zilina, Slovakia, November 22- 23, 2004, pp. 161-169, paper ID 107
- T. Krstic Simic, V. Tomic, "Airfield Traffic Complexity", The 2010 World Conference of Air Transport Research Society, Air Transport Research Society (ATRS), Porto, Portugal, July 6-9, 2010.
- T. Krstic Simic, F. Netjasov, V. Tomic, "Air traffic complexity: a function of traffic characteristics", European Conference on Complex Systems 2011 – ECCS 2011, Satellite Meeting: Complexity and the Future of Transportation Systems, Wiena, Austria, September 15, 2011, pp 10-13.
- T. Krstic Simic, O. Babic, V. Andric, "Influence of Airport Operations Management on Traffic Complexity and Efficiency", 6th International Conference on Research in Air Transportation, ICRAT 2014, track: "Airport Design", Istanbul Technical University, Istanbul, Turkey, May 26-30, 2014.
- T. Krstic Simic, O. Babic, "Airport Traffic Complexity and Environment Efficiency Metrics for Evaluation of ATM Measures", Journal of Air Transport Management, Volume 42, January 2015, pp. 260-271.
- T. Krstic Simic, O. Babic, "Influence of Air Traffic Control Management Tactics on Airport Efficiency" (in serbian), Tehnika , Vol. 70, Issue 4, 2015, pp. 673-680.
- T. Krstic Simic, O. Babic, "Impact of traffic management measures on airport operating performance", 42nd Symposium of Operations Research, SYM-OP-IS 2015, session "Traffic, Transport and Communication", Silver Lake, Serbia, September 15-18, 2015, pp. 508-511.
- T. Krstic Simic, O. Babic (2016), "Influence of airport operations management on flights cost efficiency", 43rd Symposium of Operations Research, SYM-OP-IS 2016, session "Traffic, Transport and Communication", Tara, Serbia, September 20-23, 2016, pp. 591-594.
- F. Netjasov, B. Mirkovic, T. Krstic Simic, O. Babic, "Hazard Identification Approach for Future Highly Automated Air Traffic Management Concept of Operations: Experiences from AUTOPACE project", 7th International Conference on Safety and Security Engineering, SAFE 2017, Rome, Italy, September 6-8, 2017; WIT Transactions on The Built Environment , Vol. 174, pp. 303-316.
- B. Mirkovic, T. Krstic Simic, F. Netjasov, O. Babic, "Methodology for Safety Risk Assessment in Future Air Traffic Management Concept of Operations", 44th Symposium of Operations Research, SYM-OP-IS 2017, session "Traffic, Transport and Communication", Zlatibor, Serbia, September 25-28, 2017, pp. 729-733.
- B. Mirkovic, F. Netjasov, T. Krstic Simic, O. Babic, "Safety Risk Assessment in Future Automated Air Traffic Management System", 97th Transportation research Board Annual Meeting, session "Current Issues in Aviation", Washington, D.C, USA, January 7-11, 2018, <http://amonline.trb.org/2018-subject-index?qr=1>
- T. Krstic Simic, R. Jovanovic, B. Stojiljkovic, "Airport Emission Charges – Economic Measures Towards Sustainable Airport Development" (in serbian), Tehnika , Vol. 74, Issue 1, 2019, pp. 113-120.
- T. Krstic Simic, O. Babic, "Influence of Airfield Operations Management on Flights Time and Cost Efficiency", The 23rd World Conference of Air Transport Research Society (ATRS), Amsterdam, The Netherlands, July 2019.
- F. Netjasov, B. Mirkovic, T. Krstic Simic, O. Babic, F. Comendador, R. Valdes, D. Pérez, "Identification of Safety Critical Hazards to Support Future Air Traffic Controller Training", The 23rd World Conference of Air Transport Research Society (ATRS), Amsterdam, The Netherlands, July 2019.

T. Krstic Simic, O. Babic, "Influence of airport airside area layouts and air traffic management tactics on flight cost efficiency", Transportation Planning and Technology, Volume 43, Issue 2, 2020, pp. 208-222.

**Professional
experience:**

Analysis of Airspace and Air Traffic Management Organization for Bosnia and Herzegovina - Analysis of Different Solutions Regarding "The Intermediate" Airspace,

Study prepared for ICAO Expert Working Group Meeting on the Provision of Air Navigation Services in Bosnia and Herzegovina, September 2000.

Institute of Faculty of Transport and Traffic Engineering, August 2000.

Client: Civil Aviation Department, Banja Luka, Republic of Serpska

Evaluation of Belgrade FIR Air Route Alternatives,

Institute of Faculty of Transport and Traffic Engineering, April 2001.

Client: Federal Ministry of Transport and Federal Air Traffic Control Authority, Belgrade, Yugoslavia

Study of Priority Investments in Transport Infrastructure of FR Yugoslavia for Main Transport Corridors, Book 4 - Air Traffic Infrastructure,

Institute of Faculty of Transport and Traffic Engineering, June 2001.

Client: Federal Ministry of Transport and Ministry of Transport and Telecommunication of Republic of Serbia, Belgrade, Yugoslavia

Belgrade Airport Lighting and Signing System for CAT IIIb - phase I: Conceptual Design and Operational Requirements,

Institute of Faculty of Transport and Traffic Engineering, August 2001.

Client: Belgrade Airport, Belgrade, Yugoslavia

Belgrade Airport Lighting and Signing System for CAT IIIb - phase I, Detailed Functional Design,

Institute of Faculty of Transport and Traffic Engineering, April 2002.

Client: Belgrade Airport, Belgrade, Yugoslavia

Norway Fast Time Simulation Study,

Institute of Faculty of Transport and Traffic Engineering together with EUROCONTROL CRDS (CEATS Research, Development and Simulation Centre), Budapest, Hungary and NAR Consulting, Oslo, Norway, November 2003 - June 2004.

Client: AVINOR (Norwegian Civil Aviation Authority), Oslo, Norway

Fast Time Simulation for the Serbia and Montenegro Airspace - Phase I,

Institute of Faculty of Transport and Traffic Engineering together with EUROCONTROL CRDS (CEATS Research, Development and Simulation Centre), Budapest, Hungary, September 2005 - March 2006.

Client: Serbia and Montenegro Air Traffic Services Agency (SMATSA) Ltd, Belgrade, Serbia and Montenegro

Expert Witness Findings and Opinion in the Case of Mid-air Accident over VOR Zagreb in 1976,

Institute of Faculty of Transport and Traffic Engineering, May – December 2010.

Client: Commerce Court, Belgrade, Serbia

A support to sustainable development of the Republic of Serbia's air transport system,

Institute of Faculty of Transport and Traffic Engineering, January 2011 – 2019,

Research grant: Ministry of Education, Science and Technological Development, Belgrade, Serbia, 2011-2014 research programme in technological development, Project Number 36033

Technical control of project documentation: General project of Apron C extension at airport "Nikola Tesla" Belgrade,

Institute of Faculty of Transport and Traffic Engineering, January 2012.

Client: "Nikola Tesla" Airport, Belgrade, Serbia

Facilitating the automation pace (AUTOPACE),

Institute of UB-FTTE, in cooperation with CRIDA, Politechnic University of Madrid, University of Granada, University of Bologna, March 2016 – March 2018.

Research Grant: Horizon 2020 - SESAR research and innovation programme (grant agreement No 699238)

Assessment of Performance in current ATM operations and of new Concepts of operations for its Holistic Enhancement (APACHE),

Institute of UB-FTTE, in cooperation with Barcelona Tech, ALG and ENAC, May 2016 – May 2018.

Research Grant: Horizon 2020 - SESAR research and innovation programme (grant agreement No 699338)

Visiting: Munich Airport, “Terminal 2 Project Team”
Munich, Germany, 2000 (two months)

Workshops - Summer Schools: **Course “FIDIC Contracts for Construction”**, organized by The World Bank Group and International Finance Corporation, 2003.

Course “GEN-SPACE (ATC familiarization simulation)”, organized by EUROCONTROL, CRDS (CEATS Research, Development and Simulation Centre), Budapest, Hungary, October 2006.

Summer School on “Air Transport Economics”, organized jointly by University of Belgrade – Faculty of Transport and Traffic Engineering, Berlin School of Economics and Law, and the German Aviation Research Society (GARS), Belgrade, Serbia, September 2009.

Workshop in “Fundamentals of Risk Analysis and Safety Assessment of Air Traffic Operations”, organized jointly by University of Belgrade - Faculty of Transport and Traffic Engineering and Air Transport Safety Institute of National Aerospace Laboratory (NLR-ATSI, Amsterdam), Belgrade, Serbia, October 2009.

Seminar “Volcanic Ash Crisis 2010 ”, organized by University of Belgrade - Faculty of Transport and Traffic Engineering, Belgrade, Serbia, September 2010.

Seminar “Signals and System Theory”, organized jointly by “Automatic Control Laboratory”, ETH Zurich, Switzerland and University of Belgrade - Faculty of Transport and Traffic Engineering, Belgrade, Serbia, September 2012.

Workshop on “Automation of air traffic processes and air transportation systems”, organized jointly by University of Belgrade - Faculty of Transport and Traffic Engineering and Automation Control Laboratory, Swiss Federal Institute of Technology Zurich, Belgrade, Serbia, June 2013.

Summer School on “Air Transport Economics”, organized jointly by University of Belgrade – Faculty of Transport and Traffic Engineering, and the German Aviation Research Society (GARS), Belgrade, Serbia, September 2013.

Language: Serbian: mother tongue
English: read, write, speak