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Sessions

- 1 AUTOMOTIVE AND RAILWAY TRANSPORT Chairman Prof. Ž. Bazaras
- 2 SUSTAINABLE TRANSPORTATION SOLUTIONS Chairman Prof. A. Keršys
- 3 AVIATION AND DEFENCE TECHNOLOGIES Chairman Prof. A. Fedaravičius
- 4 WATERBORNE TRANSPORT Chairman Prof. V. Paulauskas

Conference Organizing Committee address

Kaunas University of Technology

Studentų str. 56-237, LT - 51424, Kaunas, Lithuania

Phone: +370 612 03307, e-mail arturas.kersys@ktu.lt, https://transportmeans.ktu.edu

Schedule of the Conference

22nd international scientific conference Transport Means 2018 will be held on 3–5 October, 2018 in "Trasalis" Conference Centre, Trakai (Lithuania), Gedimino str. 26.

3 October, 2018

9.00 - 10.00	Registration (Coffee)	
10.00 – 13.30	Plenary session (Coffee break 11.40-12.00)	
13.30 – 14.30	Lunch	
14.45	Excursion to Trakai Castle	
19.00	Conference Dinner (Hall GALVÉ)	

4 October, 2018

Parallel sessions 1-3 (Coffee break 11.00-11.20)

9.00 - 13.30	Automotive and Railway Transport I (Hall SKAISTIS)		
9.00 – 13.30	Sustainable Transport Solutions I (Hall AKMENA)		
9.00 – 13.30	Aviation and Defence Technologies I (Hall LUKA)		
13.30 – 14.30	Lunch		
14.45	Excursion to Kernavė		
19.00	Conference Dinner (Hotel RESTAURANT)		

5 October, 2018

Parallel sessions 4-6 (Coffee break 11.00-11.20)

9.00 – 13.30	Automotive and Railway Transport II (Hall SKAISTIS)
9.00 – 13.30	Sustainable Transport Solutions II (Hall AKMENA)
9.00 - 13.30	Aviation and Defence Technologies II (Hall LUKA)
13.30 – 14.30	Lunch

Session 7 "Waterborne Transport" will be held on 5 October in Klaipėda University, Klaipėda, Bijūnų Str. 17, Room 235

10.00 – 13.00	Naterborne Transport
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3 October, 2018

22nd International Scientific Conference Transport Means 2018

Registration

9.00 - 10.00

Registration

Hall SKAISTIS

"Trasalis" Conference Centre Gedimino str. 26, Trakai

Plenary Session

Chairman - Prof. V. Ostaševičius

Co-Chairman - Prof. A. Fedaravičius

10.00 – 13.30	Plenary Session		"Trasalis" Conference Centre
11.40 – 12.00	Coffee and refreshments	Hall SKAISTIS	Gedimino str. 26, Trakai

Welcoming speeches

V. Ostaševičius, Scientific Editorial Committee

L. Balaševičius, Vice-Rector for Research and Innovations,

Kaunas University of Technology

A. Vilkauskas, Dean of the Faculty of Mechanical Engineering and

Design, Kaunas University of Technology

Enabling Smart, Sustainable and Innovative Mobility: Policy and Challenges

G. Mažeika, Ministry of Transport and Communications, Lithuania

LG Growth Strategy 2030: Regional Leadership

R. Janutėnas, JSC Lithuanian Railways, Lithuania

Fast Charging for Electrical Transport

V. Jablonskis. JSC ABB. Lithuania

Road Safety Analysis and Trends in Kaunas City

A. Gužys, Kaunas University of Technology, Lithuania

Adaptation and Experimental Analysis of the Universal Asynchronous Receiver-Transmitter Based Communication in Autonomous Ground Vehicle

P. Skačkauskas, Vilnius Gediminas Technical University, Lituania

Optimization of the Location of LNG Bunkering Stations on the Basis of Graph Theory

V. Paulauskas, Klaipėda Shipping Research Centre, Lithuania

Discuss	sions

13.30 - 14.30 Lunch

Session 1 - AUTOMOTIVE AND RAILWAY TRANSPORT I

Chairman - Prof. Ž. Bazaras Co-Chairman - Dr. S. Japertas

9.00 – 13.30	Session 1		"Trasalis" Conference Centre Gedimino str. 26, Trakai
11.00 – 11.20	Coffee and refreshments	Hall SKAISTIS	

Impact of Line Electrification on Operation of Railways

A. Massel, Railway Research Institute (Poland)

Development of the Theory and Methodology of Controlling the Local Tribological Contact Thermomechanical Loading

M. Gorbunov, M. Kovtanets, A. Kostyukevich, V. Nozhenko, Volodymyr Dahl East Ukrainian National University (Ukraine), G. Vaičiūnas, S. Steišūnas, VGTU

Theory and Practice of the Innovative Spring Suspension Design for Locomotive to Improve its Traction and Dynamic Characteristics

M. Gorbunov, K. Kravchenko, S. Kara, Volodymyr Dahl East Ukrainian National University (Ukraine), J. Gerlici, University of Žilina (Slovakia), G. Bureika, S. Steišūnas, VGTU

Determination of the Critical Gauge Widening of the Railway Track

V. Petrenko, VGTU

Active Technical Means of Increasing Safety in Railway Level Crossings

G. Bureika, VGTU, **V. Nozhenko**, **O. Prosvirova**, Volodymyr Dahl East Ukrainian National University (Ukraine)

Crank Train Concept Design of an In-Line Two-Cylinder Range Extender Engine

L. Drápal, J. Vopařil, Brno University of Technology (Czech Republic)

The Development of the Modular Forwarder Superstructure for the Dendromass Transport

J. Kašpárek, M. Škopán, M. Sedláček, Brno University of Technology (Czech Republic)

Vibration Analysis of the Turbocharger Considering Low Frequency Excitations

P. Novotny, M. Jonak, J. Doman, Brno University of Technology (Czech Republic)

Using a Dynamic Simulation to Determine the Power Requirement for the Tracked Vehicle Movement

D. Hloušek, M. Jonák, Brno University of Technology (Czech Republic)

Investigation of Ride Properties of a Rail Vehicle with Wheel Defects

- J. Dižo, M. Blatnický, University of Žilina (Slovak Republic), S. Steišūnas, VGTU,
- A. Falendysh, Ukrainian State University of Railway Transport (Ukraine)

Innovation, Informatization and Digitization of the Infrastructure Facilities Design and Construction of High-speed Railways in Russia & Eurasian Union

N. Telyatnikova, E. Spiridonov, D. Boyarinov, Russian University of Transport (Russia)

Parameters of the Reliability and Risk Level for Repair and Track Maintained Work

Improving

E. N. Grin, A. A. Zaytsev, Russian University of Transport (Russia)

Comparison of Methods for Assessing the Changes in Railway Passenger Numbers G. Vaičiūnas, VGTU, S. Tsykhmistro, K. Kravchenko, Volodymyr Dahl East Ukrainian National University (Ukraine)

Investigation on the Reliability of Axle-Box Failure Detectors in Lithuanian Railways
O. Lunys, S. Steišūnas, VGTU, M. Gorbunov, O. Nozhenko, Volodymyr Dahl East

Ukrainian National University (Ukraine)

Methods of Vibrational Comfort Evaluation in Means of Transport

E. Kardas-Cinal, Warsaw University of Technology (Poland)

The Effectiveness Evaluation of International Railway Transportation in the Direction of "Ukraine – European Union"

M. Kurhan, D. Kurhan, Dnipropetrovsk National University of Railway Transport named after academician V. Lazaryana (Ukraine)

Research of Railway Crashed Stone use of 40 -70 mm Fraction

O. Pshinko, O. Patlasov, V. Andrieiev, M. Arbuzov, O. Hubar, O. Hromova, R. Markul, Dnipropetrovsk National University of Railway Transport named after academician V. Lazaryana (Ukraine)



Session 2 - SUSTAINABLE TRANSPORTATION SOLUTIONS I

Chairman - Prof. A. Keršys

Co-Chairman - Dr. J. Jablonskytė

9.00 – 13.30	Session 2		"Trasalis" Conference Centre
11.00 – 11.20	Coffee and refreshments	Hall AKMENA	Gedimino str. 26, Trakai

Intercultural Differences in Automotive After Sales – Comparison of Customer Demands and Production Conditions in Germany and Mexico

C. Aigner, M. Hege, H. Lücken, Esslingen University of Applied Sciences (Germany)

Self-Organized Learning Algorithm for Immune Neuro-Fuzzy Anti-collision System of Autonomous Unmanned Aerial Vehicles' Team

A. Beinarovica, M. Gorobetz, A. Levchenkov, Riga Technical University (Latvia)

The Influence of the Piston Surface Shapes on Biodiesel Combustion in Compression Ignition Engine

Changchun Xu, Haeng Muk Cho, Kongju National University (South Korea),

D. Samoilenko, Warsaw University of Technology (Poland), **Md. Abul Kalam**, University of Malaya (Malaysia), **Young Duck Yun**, Korea Wecosta Company

Recent Trends in Development of Safety Management Systems in Rail Transport

P. Smoczyński, A. Kadziński, A. Gill, A. Kobaszyńska-Twardowska, Poznan University of Technology (Poland)

Standardised Description of Illegal Railway Track Crossings to Support the Characterisation of Analysis Areas Used in Risk Management Processes

A. Gill, P. Smoczyński, K. Panicz, Anna Kobaszyńska-Twardowska, Poznan University of Technology (Poland)

A Review of Qualitative and Safety-Related Solutions of Tram Interior to Support their Selection at the Tram Design Stage

G. Gramza, A. Gill, Poznan University of Technology (Poland)

A Selecting the Best Statistical Distribution for Time to Failure the Railway System Components by Using Multi-criterial Analysis

J. Selech, K. Andrzejczak, Poznan University of Technology (Poland)

Flexible Prediction of the Vehicle Component Damage

K. Andrzejczak, J. Selech, Poznan University of Technology (Poland)

Selected Aspects of the Environmental Friendliness Assessment of Railway Transport Using the Indicator Method

J. Żak, P. Gołębiowski, K. Popiela, Warsaw University of Technology (Poland)



The Problem of Dock-door Assignment in a Cross-docking Terminal

K. Popiela, M. Wasiak, J. Żak, P. Gołębiowski, Warsaw University of Technology (Poland)

The Statistical Analysis of Passenger Transport Between Selected European Airports

M.Boniecki, J.Tomaszewska, A.Toruń, J.Iwański, J. Żurek, Polish Air Force Academy, M. Woch, Warsaw University of Technology, M. Zieja, Air Force Institute of Technology (Poland)

Design of Reaction Time Measuring Device

V. Socha, S. Kušmírek, L. Hanáková, A. Lališ, A. Pereverzeva, J. Průcha, Czech Technical University in Prague (Czech Republic), L. Socha, P. Hanák, Technical University of Košice (Slovak Republic)

Lowering the Ccosts by Applying Optimised Cost Index

M. Mačej, L. Socha, P. Hanák, Technical University of Košice (Slovak Republic),
 V. Socha, L. Hanáková, Czech Technical University in Prague (Czech Republic)

Assessment of Noise Levels Caused by Passenger Wagons:

a Case of Paneriai Railway Station

L. Sladkevičienė, E. Valma, Vilnius College of Technologies and Design, K. Čižiūnienė, Vilnius College of Technologies and Design, VGTU

Increasing of Transport Safety by Using the Intelligent Signalling Device RMS

E. Sventeková, Z. Urbancová, University of Žilina (Slovak Republic)

Identification of Risks in Transport Infrastructure and Geographic Information Systems

Z. Urbancová, E. Sventeková, University of Žilina (Slovak Republic)

Operators' (pilots and ATCOs) Load Monitoring and Management in Highly Automated Systems

U. Kale, I. Jankovics, J. Rohacs, D. Rohacs, Budapest University of Technology and Economics, A. Gandotra, R. Bizonics, Eötvös Loránd University (Hungary)

Strategic Management on Transport by Evacuation of Population in Case of Natural Disasters

S. Kinzhikeyev, Budapest University of Technology and Economics (Hungary)

Session 3 - AVIATION AND DEFENCE TECHNOLOGIES I

Chairman – Prof. A. Fedaravičius Co-Chairman – M. Lendraitis

9.00 – 13.30	Session 3		"Trasalis" Conference Centre
11.00 – 11.20	Coffee and refreshments	Hall LUKA	Gedimino str. 26, Trakai

Methods of Image Processing in Thermographic Testing of Ballistic Composite Armors

W. Swiderski, Military Institute of Armament Technology (Poland)

Factors Determining the Success and Failure of Military Transport Operations -Human Factor in Transport

J. Ryczyński, M. Nowakowska, General Tadeusz Kościuszko Military University of Land Forces, (Poland)

Use of Acoustic Emissions to Determine the Technical Condition of Mechanical Gearbox

J. Furch, J. Glos, University of Defence (Czech Republic)

Stress of the Steering Mechanism of Combat Tracked Vehicles

V. Neumann, University of Defence (Czech Republic)

Possibility of Vibrodiagnostics in Determining Technical Condition of Combat Vehicle Gearbox

C. V. Tran, J. Furch, University of Defence (Czech Republic)

Analysis of Stress Distribution of Tracked Vehicle Torsion Bar

Q. H. Nguyen, J. Furch, University of Defence (Czech Republic)

Comparative Measurement of Instruments Used for Evaluation of Terrain Trafficability

K. Cibulova, University of Defence (Czech Republic)

Application of Altered Methodology for Bearing Strength Measurements of Unpaved Airport Surfaces

L. Cicmanec, J. Safranko, M. Petrasek, University of Defence (Czech Republic)

Tribology and Reliability

J. Stodola, University of Defence (Czech Republic)

Basic Principles of Critical Infrastructure Protection

J. Štoller, P. Dvořák, T. Túró, E. Zezulová, University of Defence (Czech Republic)



Non-destructive Testing of Critical Infrastructure Objects

P. Dvořák, J. Štoller, T. Baláž, J. Krejčí, University of Defence (Czech Republic)

Structural Analysis of Centrifugal Compressor Impellers with Different Blade Shapes

- J. Čerňan, P. Pecho, University of Žilina, M. Cúttová, Armed Forces Academy of gen.
- M. R. Štefánik, K. Semrád, Technical University of Košice (Slovak Republic)

Simulation Methods Used for Planetary Gearbox Analysis

P. Droppa, M. Riečičiar, Armed Forces Academy of gen. M. R. Štefánik (Slovak Republic)

Reduction of Thermal Signature of Military Vehicle Using Polymer Composite Plates

E. Popardovská, V. Popardovský, Armed Forces Academy of gen. M. R. Štefánik (Slovak Republic)

Degradation of Oil in Turbine Engines, Aviation Equipment Type L 410th

P. Lukášik, M. Marchevka, P. Droppa, M. Marko, Armed Forces Academy of gen. M. R. Štefánik (Slovak Republic)

Land Warrior System Estimation: Case of Lithuania Troops

S. Bekesiene, The General Jonas Žemaitis Military Akademy of Lithuania

The Analysis of Safety of Flights of Airbus A320

S. Hoskova-Mayerova, University of Defence (Czech Republic), **M.** Woch, Warsaw University of Technology, **P.** Krzysiak, **J.** Tomaszewska, **J.** Żurek, Polish Air Force Academy, **M.** Zieja, Air Force Institute of Technology

5 October, 2018

Session 4 – AUTOMOTIVE AND RAILWAY TRANSPORT II

Chairman – Dr. S. Japertas
Co-Chairman – Dr. R. Makaras

9.00 – 13.30	Session 4	Hall SKAISTIS	"Trasalis" Conference Centre
11.00 – 11.20	Coffee and refreshments		Gedimino str. 26, Trakai

The Effects of Load Cell Wall Design in the Assessment of Shape Compatibility in Vehicle Collisions

S. Himmetoglu, Hacettepe University (Turkey)

Derivation of Crush Force versus Deformation Behaviour of Vehicles at Different Impact Speeds

S. Himmetoglu, K. B. Yilmaz, B. Yildirim, A. Tekin, Hacettepe University (Turkey)

The Comparative Analysis of the Rolling Resistance Coefficients Depending on the Type of Surface – Experimental Research

P. Sawicki, K. J. Waluś, Ł. Warguła, Poznań University of Technology (Poland)

Small Engines Spark Ignited (SI) for Non-road Mobile Machinery- Review

Ł. Warguła, K.J. Waluś, P. Krawiec, Poznań University of Technology (Poland)

Influence of Using Ozonized Diesel Fuel on Exhaust Gases Toxic Emissions in a Compression Ignition Engine

M.K. Wojs, D. Samoilenko, P. Orliński, M. Bednarski, Warsaw University of Technology (Poland)

IoT Solutions for Internal Combustion Engine Test Bench

A. Prokhorenko, S. Kravchenko, I. Karyagin, National Technical University "Kharkiv Polytechnic Institute" (Ukraine), **D. Samoilenko**, Warsaw University of Technology (Poland)

Research of the Efficiency of use of Second-generation Biodiesel and Diesel Blends in Compression Ignition Engines Assessing Exhaust Gas Recirculation

A. Rimkus, S. Pukalskas, K. Čižiūnienė, VGTU

Analysis of Rejuvenation Process for Effective Hot-in-Place Recycling of Asphalt Pavement

R. Kleizienė, M. Paliukaitė, A. Vaitkus, Road Research Institute of VGTU

Influence of Hydrogen Co-combustion with HVO on Performance, Emissions and Combustion in the Compression Ignition Engine

R. Juknelevičius, S. Pukalskas, VGTU, S. Szwaja, Czestochowa University of Technology (Poland)

Research of Influence of Obstacles Shape on the Radial Characteristics of the Pneumatic Wheel

- J. Jackowski, Military University of Technology in Warsaw, L. Levulytė, VGTU,
- M. Wieczorek, M. Żmuda, Military University of Technology in Warsaw (Poland)

The Problems of High-speed Traffic on General Railways

- V. Tkachenko, S. Sapronova, State University of Infrastructure and Technology,
- N. Gorbunov, Volodymyr Dahl East Ukrainian National University (Ukraine)

Cargo Fastening on Automobile Transport Considering its Deformation

A. O. Shimanovsky, I. E. Krakava, V. I. Yakubovich, I. A. Varazhun, Belarusian State University of Transport (Belarus)

Analysis of Torque Distribution in Ball-Screw Mechanisms under Extreme Temperature Conditions

I. Penkov, Tallinn University of Technology (Estonia)

The Concept and Struggles in the Progress of Vehicle Traffic Autonomation R. Litvaitis, KTU

Urban Real Driving Analysis with and without Coordinated Traffic Lights Control

J. Kreicbergs, M. Gailis, A. Grislis, Riga Technical University (Latvia)

Drawbar Performance of a Hybrid Agricultural Vehicle

U. K. Medževeprytė, R. Makaras, KTU

Research of Efficiency of Trolleybuses Used in Urban Public Transport

E. Juodis, KTU, D. Juodvalkis, KTU, Kaunas Technical College

The Stand Simulation of Stability of a Car with a Trailer

E. Semionovas, KTU, D. Juodvalkis, R. Skvireckas, KTU, Kaunas Technical College

Designing and Investigating of Electric Tricycle

V. Shah, V. Lukoševičius, C. Varghese, A. Pakalnis, KTU

Revising the Phenomenon of Tire Hydroplaning

S. Krishnasamy, V. Lukoševičius, A. Laskys, KTU

Influence of Car Tire Aspect Ratio on Driving Through Road Unevenness

K. Parczewski, H. Wnęk, University of Bielsko-Biala (Poland)

Selected Problems of Vehicle Microclimate Modeling

M. Kučera, Š. Čorňák, Duc Linh Do, V. Horák, University of Defence (Czech Republic)



Session 5 - SUSTAINABLE TRANSPORTATION SOLUTIONS II

Chairman - Prof. A. Keršys

Co-Chairman - Dr. J. Jablonskytė

9.00 – 13.30	Session 5		"Trasalis" Conference Centre
11.00 – 11.20	Coffee and refreshments	Hall AKMENA	Gedimino str. 26, Trakai

Identification of the Efficiency of Extraction

Instruments in Special Vehicles in Transport

- T. Binar, J. Švarc, University of Defence, A. Dvořák, Military Research Institute,
- P. Dostál, J. Rozlivka, Mendel University in Brno (Czech Republic)

Optimization of Vehicle Suspension Neural Model

V. Popardovský, Armed Forces Academy of gen. M. R. Štefánik (Slovak Republic)

The Road Safety Advertisements Targeting Drunk

Driving: Do Threat Appeals Actually Arouse Fear?

R. Markšaitytė, D. Šakinytė, L. Šeibokaitė, A. Endriulaitienė, K. Žardeckaitė-Matulaitienė, J. Slavinskienė, Vytautas Magnus University

Driver Education as a Way to Improve Road Safety in Poland

A. Mężyk, Kazimierz Pulaski University of Technology and Humanities in Radom (Poland)

Using Risk Analysis to Explain Failures on the Example of a Loading Point for Road Tankers

K. Ksiądzyna, General Tadeusz Kościuszko Military University of Land Forces, (Poland)

The Issue of Live Animal Transport in the European Community on the Selected Example - Transport of Horses

M. Wincewicz-Bosy, J. Ryczyński, General Tadeusz Kościuszko Military University of Land Forces, (Poland)

Investigation of Hydraulic Throttling within Geothermal Injection Well Filter Using CFD Simulation

M. Bogdevicius, V. Nikitin, VGTU

Safety of Pedestrian Crossings and Additional Lighting Using Green Energy

A. Patlins, Riga Technical University (Latvia), **A. Hnatov**, **Shch. Arhun**, Kharkiv National Automobile and Highway University (Ukraine)

Using of Green Energy from Sustainable Pavement Plates for Lighting Bikeways

A. Patlins, Riga Technical University (Latvia), **A. Hnatov**, **Shch. Arhun**, Kharkiv National Automobile and Highway University (Ukraine)

Repeatability of the Road Surface Temperature Indications Using a Mobile Sensor in the Context of a Road Weather Information System

A. Maczyński, K. Brzozowski, A. Ryguła, University of Bielsko-Biala (Poland)

The Market of Transport Services in Poland - the Analysis of Changes of the Subject Structure. B. Zagożdżon, P. Sołtys, Kazimierz Pulaski University of Technology and Humanities (Poland)

Determining the Position Using Neural Network

M. Polasek, V. Pucek, J. Nemecek, R. Bloudicek, University of Defence (Czech Republic)

Determination of the Geographical Location of a Central Facility

A. Seidlová, D. Šourek, M. Ledvinová, University of Pardubice (Czech Republic)

Using the Self-braking Method when the Post-overhaul Diagnostics of Diesel-hydraulic Locomotives

B. Bodnar, O. Ochkasov, D. Bobyr, R. Korenyuk, Dnipropetrovsk National University of Railway Transport named after academician **V. Lazaryana** (Ukraine), **Ž. Bazaras**, KTU

Safety Performance Analysis of the Movement and Operation of Locomotives

B. Bodnar, O. Ochkasov, E. Bodnar, T. Hryshechkina, Dnipropetrovsk National University of Railway Transport named after academician V. Lazaryana (Ukraine), R. Keršys, KTU

Use of the Wavelet Transform for the Analysis of Irregularity of Crankshaft Angular Velocity

B. Bodnar, O. Ochkasov, D. Chernyaev, Dnipropetrovsk National University of Railway Transport named after academician V. Lazaryana (Ukraine), R. Skvireckas, KTU

Rationale for Choosing the Type of Traction Rolling Stock for the Enterprise of Industrial Transport. D. Kozachenko, M. Dovbnia, O. Ochkasov, V. Serdiuk, A. Shepotenko, Dnipropetrovsk National University of Railway Transport named after academician V. Lazaryana (Ukraine), A. Keršys, KTU

The Issue of Parking Areas Conditions in Surrounding of Logistics and Production Facilities in Slovakia and Poland. M. Kostrzewski, Warsaw University of Technology (Poland), P. Varjan, University of Žilina (Slovak Republic) Silesian University of Technology Approach to Location of Air Cargo Terminals

D. Šourek, A. Seidlová, University of Pardubice (Czech Republic)

Cargo Securing and its Economic Consequences. M. Vlkovský, P. Veselík, University of Defence (Czech Republic), D. Grzesica, University of Technology (Poland)

Bio-corrosion damage to steel of gas main under combined effect of sulfate-reducing bacteria and thionic bacteria

M.S. Polutrenko, O.V. Maruschak, Ivano-Frankivsk National Technical University of Oil and Gas, P.O. Maruschak, O. Prentkovskis, Ternopil Ivan Pul'uj National Technical University (Ukraine)

Substantiation of Bernoulli Grippers Parameters at Non-Contact Transportation of Objects with a Displaced Center of Mass

V.B. Savkiv, R.I. Mykhailyshyn, P.O. Maruschak, Ternopil Ivan Pul'uj National Technical University (Ukraine), F. Duchon, Slovak University of Technology in Bratislava (Slovak Republic), O. Prentkovskis, VGTU

Session 6 - AVIATION AND DEFENCE TECHNOLOGIES II

Chairman – Prof. A. Fedaravičius Co-Chairman – M. Lendraitis

9.00 - 13.30	Session 6		"Trasalis" Conference Centre
11.00 – 11.20	Coffee and refreshments	Hall LUKA	Gedimino str. 26, Trakai

Security Problems in the Operation of Unmanned Transport Platforms

A. Typiak, R. Typiak, Ł. Rykała, Military University of Technology (Poland)

Tag Tracking with a Mecanum Wheeled Mobile Robot Using Ultra Wideband Signals Ł. Rykała, A. Typiak, R. Typiak, Military University of Technology (Poland)

E. Rykaia, A. Typiak, R. Typiak, Willitary University of Technology (Poland)

The Process of Preparation and Implementation of the Baltic Air Policing Task Force

Z. Korecki, B. Adámková, University of Defence (Czech Republic)

Concept of Wind Speed and Direction Measurement by COTS Multicopter

R. Bystřický, M. Dub, University of Defence (Czech Republic)

Virtual Reality in Aviation Training

M. Żmigrodzka, K. Kostur-Balcerzak, Polish Air Force Acadamy in Deblin (Poland)

The Mapping of SSR Transponder Triggering Areas Outside a Radar Operational Coverage

S. Pleninger, T. Lipták, Czech Technical University in Prague (Czech Republic)

Development of Concentrated Parameter Distribution-Type Model for the Examination of Gas Turbine Engines Supplied by Alternative Fuels

B. Varga, L. Kavas, K. Fehér, National University of Public Service,

K. Beneda, Budapest University of Technology and Economics (Hungary)

Vehicles Assembling Technological Systems Creation Experience with the Use of Hand Pulse Tools

I. Vorobiov, N. Nechyporuk, I. Bychkov, National Aerospace University "Kharkiv Aviation Institute" (Ukraine)

Experimental and Numerical Investigations on Impulse Self-pierce Riveting of Lightweight Aircraft Aluminium and Mixed Structures

I. Vorobiov, N. Nechyporuk, K. Maiorova, National Aerospace University "Kharkiv Aviation Institute" (Ukraine)

Mathematical Model of the Off-road Vehicle Suspension

M. Maloch, Š. Čorňák, University of Defence (Czech Republic)

Assessment of Defence Technologies as a Part of Operational Capabilities Fulfillment's in National Security System

E. Debicka, Motor Transport Institute (Poland)



Technological Features of Creating Nanostructured Decorative-protective Coatings

M. Urbaha, S. Bogdanova, K. Savkovs, Riga Technical University (Latvia)

Evaluating the Efficiency of Spacecraft Electric Thruster Operation

S. Kravchenko, SIA Cryogenic and vacuum systems, **A. Urbahs**, Riga Technical University (Latvia)

Vibro Acoustic Measurement at Sea: How Predictable Are Motor Failure by Means of Vibration Measurement?

R. Klaucans, Riga Technical University (Latvia)

Requirements for Helicopter's Planer Construction Fatigue Testing

M. Urbaha, K. Carjova, P. Nagaraj, Riga Technical University, V. Turko, Ltd "AVIATEST LTD" (Latvia)

Research and Development of a Rocket with Predefined Parameters

A. Fedaravičius, S. Kilikevičius, A. Survila, S. Račkauskas, KTU

Research and Design of Middle Range Rocket Target

A. Fedaravicius, N. M. Kommanaboina, H. P. Manimaran, M. R. Papanaboina, S. Račkauskas, A. Survila, S. Vikas TL, KTU

Inspection of the Honeycomb Sandwich Panel Using Ultrasonic Phased Arrays

M. R. Papanaboina, N. M. Kommanaboina, H. P. Manimaran, KTU, E. Jasiūnienė, KTU, Prof. K. Barsauskas Ultrasound Research Institute

Impact Damage Analysis of Aircraft Composite Structures at Low Velocity

C. Thankachen, V. Shah, V. Bhatt, V. Lukoševičius, K. Balakrishnan, KTU

Non Destructive Testing in the Case of Aircraft Wheel Overhaul

M. Hovanec, P. Korba, E. Jenčová, P. Koščák, J. Piľa, P. Yagnik, Technical University of Košice (Slovak Republic)

Utilization of Adams for Evaluation of Tracked Vehicle Vibration

M. Sojka, S. Cornak, University of Defence (Czech Republic)

Session 7 - WATERBORNE TRANSPORT

Chairman – Prof. V. Paulauskas Co-Chairman – B. Plačienė

9.00 – 13.30	Session 7	Room 235	Klaipėda University Bijūnų Str. 17, Klaipėda
11.00 – 11.20	Coffee and refreshments		

Complex Approach to Seaport Attractiveness and

State Competitiveness Advantages

J. Belova, Lithuanian Maritime Academy (Lithuania), **R. Mickienė**, **E. Valionienė**, Lithuanian Maritime Academy, Mykolas Romeris university (Lithuania)

The Phenomenological Model of a Global Maritime Labour Market

V. Senčila, Lithuanian Maritime Academy (Lithuania)

Benefits and Efficiency of the Use of Navigational Simulators in Marine Navigation Studies

V. Dubra, O. Šveistrys, P. Fiodorov, Lithuanian Maritime Academy (Lithuania)

Assessment of the Impact of Klaipeda State Seaport Cruise Shipping on Air Pollution

G. Pletkauskaitė, Klaipeda University (Lithuania), **A. Žukauskaitė**, Klaipeda University, Lithuanian Maritime Academy (Lithuania), **J. Žukauskaitė**, **I. Paliakienė**, Lithuanian Maritime Academy (Lithuania)

Public Procurement of Innovative Products and Services:

New Solutions for Port of Klaipėda

S. Briedienė, Lithuanian Maritime Academy (Lithuania)

Inland Waterways (IWW) for the Oversize Cargo Transportation and Water Tourism

V. Paulauskas, D. Paulauskas, B. Placiene, R. Barzdziukas, Klaipeda University (Lithuania), Z. Marciniak, Institute of Geography, Faculty of Physical Education, Health and Tourism, Kazimierz Wielki University (Poland)

LNG Bunkering Stations Location Optimization on Basis Graph Theory

- V. Paulauskas, Klaipeda Shipping Research Centre, Klaipeda University (Lithuania),
- L. Henesey, Blekinge Institute of Technology (Sweden), D. Paulauskas,
- I. Ronkaitytė, Klaipeda University (Lithuania), L. Gerlitz, Wismar University of Applied Sciences (Germany), S. Jankowski, Maritime University of Szczecin (Poland),
- M. Canepa, World Maritime University (Sweden

Telematics Support to Calculate the Vessel Route in Restricted Area

T. Neumann, Gdynia Maritime University (Poland)

Technical Requirements for Systems for the Reception of Waste from Inland Vessels Operated on International Waterways of the European Union

A. Deja, Maritime University of Szczecin (Poland), **M. Kaup**, **W. Ignalewski**, West Pomeranian University of Technology Szczecin (Poland)

Scale with a Built-in Three-axis Acceleration Sensor for Applications in Sea Transport

I. Bester, M. Chrzan, Kazimierz Pulaski University of Technology and Humanities in Radom (Poland)

Unmanned aerial platform using for monitoring of oil pollution of sea aquatorium

A. Urbahs, V. Zavtkevics, Institute of Aeronautics, Riga Technical University (Latvia)

LNG Supply Chain on Danube

L. Illes, MULTI engineering services (Slovak Republic), T. Kalina, M. Jurkovic,

M. Sulgan, University of Zilina (Slovak Republic)

Effect of the Pistons Group Replacement with Discs on the Accuraccy of Torsional Oscillations Calculations

R. Indriksons, Latvian Maritime academy (Latvia)



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