

NATIONAL ACADEMY OF SCIENCES OF UKRAINE
MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL AVIATION UNIVERSITY

PROGRAM

**The Eighth World Congress “AVIATION
IN THE XXI-st CENTURY”**

**Safety in Aviation
And Space Technologies**

October 10-12, 2018

Kyiv

COFOUNDER

- ➔ National Aviation Academy "Azerbaijan Hava Yollari" Closed Joint-Stock Company, Azerbaijan
- ➔ Georgian Aviation University, Georgia
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- ➔ The State School of Higher Education in Chelm, Poland
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SCHEDULE

of The Eighth World Congress
“AVIATION IN THE XXI-st CENTURY”
Safety in Aviation and Space Technologies

	10.10.2018
10.00-18.00	XI International Aviation and Space salon AVIASVIT-XXI (IEC, 15 Brovarskoy Ave.)
10.30-12.30	Symposia sessions (Conference hall 13, Entrance 3-C, IEC, 15 Brovarskoy Ave.)
12.30-13.30	Lunch
13.30-15.00	Symposia sessions (Conference hall 13, Entrance 3-C, IEC, 15 Brovarskoy Ave.)
	11.10.2018
9.00-10.00	Registration of participants
10.00-12.00	Plenary session
13.00-14.00	Lunch
14.00-18.00	Symposia sessions
	12.10.2018
9.00-12.00	Symposia sessions
13.00-14.00	Lunch
14.00-18.00	Symposia sessions

SYMPOSIUM 1
MODERN SPACE AND AVIATION TECHNOLOGIES

1.1. Automation and energy saving on aviation transport

Chairman – V. Zakharchenko, National Aviation University, Ukraine.

Secretary – N. Sokolova, National Aviation University, Ukraine.

11 October, 14:30, room 5.103

1. Information support for the effective functioning of diagnostic systems and integrated avionics control systems for modern aircraft.

S.S. Ilyenko, V.V. Tikhonov, A.V. Ilyenko, National Aviation University, Ukraine.

2. Gene identification in adaptive control systems of aviation engine.

S.S. Tovkach, National Aviation University, Ukraine.

3. Wave Distribution in Wireless Technologies for Adaptive Control System of Aviation Engine.

S.S. Tovkach, National Aviation University, Ukraine.

4. Automation and energy saving in aviation transport

O. Maslak, O. Nesterov, National Aviation University, Ukraine.

5. Flow control by vortex cavity generator.

V.A. Voskoboynick, O.A. Voskoboinyk, A.V. Voskobijnyk, Institute of Hydromechanics NASU, Ukraine.

6. Complex alternative source of electrical energy.

M.P. Kravchuk, T.V. Kravchuk, National Aviation University, Ukraine.

7. Methods of runway overrun prevention.

V.M. Kazak, D.O. Shevchuk, L.V. Panchuk, V.V. Shulevka, National Aviation University, Ukraine.

8. The tasks of optimization in the electric power industry.

O. Churina, National Aviation University, Ukraine.

9. Algorithm of the intelligent control system gas-turbine engine.
V.V. Shulevka, L.V. Panchuk, National Aviation University, Ukraine.

10. Saving energy resources of autonomous power sources of unbeiled flying apparatuses.
B.E. Zhurilenko, N.P. Sokolova, N.K. Nikolayeva, National Aviation University, Ukraine.

11. Wavelet-Based Algorithm for Detection the Node Faults of Aviation Engine.
S.S. Tovkach, S.V. Yenchey, National Aviation University, Ukraine.

12. Mathematical optimization model of avionics.
V.P. Zaharchenko, S.V. Yenchey, V.V. Tihonov, National Aviation University, Ukraine.

13. Dynamic model of estimation of fail-safe feature boothing ergatic interface.
V.P. Zaharchenko, S.V. Yenchey, National Aviation University, Ukraine.

1.2. Modern technologies of aircrafts airworthiness support

Chairman – S. Dmytriev, National Aviation University, Ukraine.

Secretary – A. Goncharenko, National Aviation University, Ukraine.

11 October, 14:00, room 11.229.

1. Initial considerations for the multi-optional doctrine implementation to the aircraft airworthiness support effectiveness estimations.

A.V. Goncharenko, National Aviation University, Ukraine.

2. Considerations for the aeronautical engineering degrading state probability determination.

A.V. Goncharenko, National Aviation University, Ukraine)

3. Aeronautical engineering degrading state maximal probability determination as a proof for the hybrid-optional functions entropy conditional optimality doctrine application.

A.V. Goncharenko, National Aviation University, Ukraine.

4. Multi-optional doctrine with the uncertainty degree evaluation for the aircraft airworthiness support technologies.

A.V. Goncharenko, National Aviation University, Ukraine.

5. Prediction of the fatigue cracks propagation in elements of structural elements made of composite materials.

Y.I. Smirnov, National Aviation University, Ukraine.

6. Influence of the New Paperless Maintenance Procedures on the Continuing Airworthiness Personnel Training.

V.O. Maksymov, O.I. Yurchenko, National Aviation University, Ukraine.

7. Practical use of activation energy of wear resistance and compatibility of tribocouple materials.

O.I. Bogdanovych, National Aviation University, Ukraine.

8. Dynamic research of reduction valve

V.S. Butko, K.R. Maksimov, A.S. Dakhovnik, National Aviation University, Ukraine,

9. Radial clearances influence on gas turbine engines of air and ground application main parameters.

A.P. Voznyuk, National Aviation University, Ukraine.

10. Materials of new generation for perspective aerospace engineering.

M.F. Molodtsov, Y.P. Puchkov, National Aviation University, Ukraine.

11. Statistical analysis of the frequency control during the brand changing of the material into production of vanes HTE.

Y.V. Omelchenko, Kyvyj Rih collage of National Aviation University, Ukraine.

12. Conceptual approaches to the design of aircraft maintenance system educational ontology.

A.V. Rugain, National Aviation University, Ukraine.

13. The Concept of Selecting a Training Aircraft

T. A. Semytkivska, K.N. Shapoval, (Flight Academy National Aviation University, Ukraine)

1.3. Aircraft fatigue and fracture

Chairmen – S. Ignatovich, National Aviation University, Ukraine.

Secretary – T. Maslak, National Aviation University, Ukraine.

11 October, 14:30, room 11.220

1. Creating 3D models with modern programs for further use in modeling modern constructions and processes related to fatigue and destruction of aviation structures.

S.S. Malyz, Dnieper National University named after Oles Honchar, Ukraine.

2. Analysis of long term strength of gas turbine engine elements.

D.V. Breslavsky, O.A. Tatarinova, NTU «KhPI», Ukraine.

3. Influence of production technology of fiberglass on the strength characteristics.

V. Astanin, O. Shevchenko, A. Balalaev, N. Bondar, National Aviation University, Ukraine.

4. Method for the examination of corrosion preventive compounds influence on the friction in riveted aircraft joints.

M.V. Karuskevich, S.V. Shchepak, T.P. Maslak, National Aviation University, Ukraine.

O.P. Linnik, Antonov State Company, Ukraine.

5. Crack length distribution model for fatigue damage.

S.R. Ignatovich, S.S. Yutskevych, V.S. Krasnopolskii, National Aviation University, Ukraine.

6. The matter of aircraft structure corrosion damage classification.
S.S. Yutskevych, S.V. Khiznyak, V.I. Zakiev, National Aviation University, Ukraine.

7. Influence of working environment on strength properties of fibrous shell structures by taking into account a temperature.
N. Bondar, V. Astanin, National Aviation University, Ukraine.

1.4. Modern tribotechnologies in aircraft and general purpose mechanical engineering

Chairman – M. Kindrachuk, National Aviation University, Ukraine.

Secretary – A. Khimko, National Aviation University, Ukraine.

11 October, 14:30, room 2.222

1. Tribological investigations of single and multi-layer composite electrolytic coating.

M.V. Kindrachuk, A.O. Kornienko, S.V. Fedorchuk, National Aviation University, Ukraine.

2. Criteria of safety and effectiveness of replacing materials for tribotechnical purposes for aircraft friction units.

A.S. Bychkov, State Scientific and Research Expert-Forensic Center of the MIA of Ukraine, Ukraine.

3. Analysis of the changes in the load-bearing capacity of lubricating layers of lithium greases at contact load changing.

R.G. Mnatsakanov, O.Ye. Yakobchuk, A.M. Khimko, M.S. Khimko, V.V. Tokaruk, National Aviation University, Ukraine.

4. Dynamic analysis of the lever mechanism.

O.V. Bashta, National Aviation University, Ukraine.

G.S. Boyko, East Ukrainian National University named after V. Dal, Ukraine.

P.L. Nosko, Yu.0. Tsybrii, National Aviation University, Ukraine.

5. The study on tribological properties of Co-TiC powder alloys.

O.V. Tisov, O.I. Dukhota, M.V. Kindrachuk, A.O. Kornoenko, A.O. Yurchuk, National Aviation University, Ukraine.

6. Mechanics of long-length space steel ropes taking into account a friction between coils.

V.I. Kravtsov, National Aviation University, Ukraine.

7. Tribological interaction of the ferromagnetic surface and its existence conditions in a pulsed magnetic field.

M.M. Svyryd, O.Y. Sydorenko, V.F. Labunets, V.M. Borodiy, National Aviation University, Ukraine.

8. The Bayes' formula in terms of the multi-optional uncertainty conditional optimality doctrine.

A.V. Goncharenko, National Aviation University, Ukraine.

1.5. Engines and Power Installations

Chairman – M. Kulik, National Aviation University, Ukraine.

Secretary – I. Kinaschuk, National Aviation University, Ukraine.

11 October, 13:30, room 1.131

1. Analysis of Cooling of Electric Motor by Radial Fan; Realization of the Experimental Analysis of CFD.

Gurkan Ortamevzi, Wat Motor Industry by Arçelik Global, Turkey. Ibrahim Emre Gunduz, Istanbul Technical University, Turkey.

2. Forming pillars of volts using configuration of Cassini ovals.

V.M. Mel'nick, V.V. Karachun, S.V. Fesenko, Igor Sikorsky KPI, Ukraine.

3. Investigation of the flow in compressor cascades with active flow control in supercirculation mode.

Yu.M. Tereshchenko, K.V. Doroshenko, I.O. Lastivka, Yu.Y. Tereshchenko, National Aviation University, Ukraine.

4. Problems and perspectives of the use of intermetallic alloys as a

material for details of gas turbine engine.

Y.A. Belokon, G.I. Shevchenko, V.G. Sabirov, Zaporizhzhia State Engineering Academy, Ukraine.

5. Natural gas turbine flow meters calibrations in low gas flow pressure situations.

M.P. Andriyishyn, K.I. Kapitanchuk., National Aviation University, Ukraine.

N.M. Andriyishyn, YSC «UkrGasVydobuvanaya», Ukraine.

6. New directions and approaches to improve the efficiency of air propellers.

F.I. Kirchu, Hussein Hanesh, National Aviation University, Ukraine.

7. Pressurization systems using oxygen vapor for oxygen tank of oxidizer-rich staged combustion cycle.

Yu.A. Mitikov, I.D. Dubrovskiy, M.I. Vasin, Oles Honchar Dnipro National University, Ukraine.

8. Advanced approach to the design of the propulsion systems propellant tanks hot pressurization systems.

Y.A. Mitikov, D.G. Polyakov, Oles Honchar Dnipro National University, Ukraine.

9. Mathematical calculation of acoustic loads at launch of a rocket.

E.S. Mironenko, G.I. Sokol, M.A. Katrenko, Oles Honchar University, Ukraine.

10. Axial compressors air bleeding schemes of gas-turbine engine.

I.F. Kinaschuk, I.I. Gvozdetskiy, M.I. Kinaschuk, National Aviation University, Ukraine.

11. Influence of Separated currents on heat Transfer in a discrete rough channel.

N. Sidenko, E. Dzelzitis, Riga Technical University, Faculty of Civil Engineering, Institute of Heat, Gas and Water Technology, Latvia.

12. Exergy Analysis of a PT6 Engines In Specific Temperature of Cruise Process.

Halil Yalcin AKDENIZ, Eskisehir Osmangazi University, Eskisehir Vocational School, Turkey.

Onder ALTUNTAS, Eskisehir Technical University, Turkey.

M. Ziya SOGUT, Piri Reis University, Turkey.

13. New method of tip losses reduction in thrusters ducted fan type based on the acoustic resonators separation flow control.

F.I. Kirchu, M.Y. Bohdanov, Hussein Hanes, National Aviation University, Ukraine.

14. Express evaluation of technical condition of gas turbine engines.

M. Kulik, V. Kozlov, L. Volianska, A. Moroz, K. Torhov, National Aviation University, Ukraine.

15. The experimentally investigation of the processes of supplying the liquid to the chamber with countercurrent.

M.O. Katrenko, Panchenko, Oles Honchar Dnipro National University, Ukraine.

16. The dynamic characteristics of the propellers UAV.

S.O. Ischenko, M.R. Stetsivka, National Aviation University, Ukraine.

SYMPOSIUM 2

INTELLIGENT SYSTEMS AND TECHNOLOGY IN THE AEROSPACE AREA

2.1. Methods and facilities of technical and medical diagnostics

Chairman – D. Ornatsky, National Aviation University, Ukraine.

Secretary – Yu. Vitruk, National Aviation University, Ukraine.

12 October, 11:20 room 11.309

1. Experimental technique of tests of units of automatic equipment of aircraft.

O.M. Ponomarev, Oles Honchar Dnipro National University, Ukraine.

2. Automatized airfield meteorological station for temperature measurements.

J.V. Vitruk, National Aviation University, NTUU “Igor Sikorsky Kyiv Polytechnic Institute”, Ukraine.

D.P. Ornatsky, National Aviation University Ukraine.

3. The substance of metrological supply and measurement of ultrasonic power in the water environment.

O.V. Monchenko, V.R. Pechena, National Aviation University, Ukraine.

4. System prediction of physiological changes in the body.

V.D. Kuzovik , K.O. Bezvershnuik.

5. The diagnostics of emotional state deformation in the professional activity of Operators in Air Navigation System

T.F. Shmelova, National Aviation University, Ukraine.

Arnold Sterenharz, ECM Space Technologies GmbH (ECM), Germany.

Yu.V. Sikirda, Flight Academy of the National Aviation University, Ukraine.

6. The Estimation of Noise Signals Characteristics of Wind Power Units.

N.B. Marchenko, G.V. Martyniuk, L.M. Scherbak, National Aviation University, Ukraine.

7. Telemedicine: the current state and prospects of development.

V.D. Kuzovik, M.A. Nazarchuk, National Aviation University, Ukraine.

8. Intellectual Technologies in Industry and Aerospace Complex.

A.E. Kolosov, V.I. Sivetskii, V.V. Vanin, E.P. Kolosova,

A.L. Sokolskii, I.I. Ivitskiy, National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute», Ukraine.

9. Aspects of Intellectualization of Polymer Composite Materials.
A.E. Kolosov, V.I. Sivetskii, V.V. Vanin, E.P. Kolosova, A.L. Sokolskii, I.I. Ivitskiy, National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute», Ukraine.
10. Measuring system for non-destructive control of metal bars.
O. Kryvokulskaya, O. Blyznyuk, D. Ornatsky, V. Khryapa, National Aviation University, Ukraine.
11. The complex assessment psychophysiological state.
O.V. Bulyhina,, O.B. Ivanets, K.O. Bezvershnuik, National Aviation University, Ukraine.
12. The system of vibration diagnostics of bearing units with notch n-channel filter based on iterative-integrating converters.
V.V. Dovgan, DP "Ukrmetrteststandard", Ukraine. D.P. Ornatskiy, National Aviation University, Ukraine.
13. Relay protection system for small-based networks with reduced technical-economic indicators.
D. Ornatsky, B. Dobrzhanska, S. Koverson, National Aviation University, Ukraine.
14. Technological expert diagnostic system of aircraft.
I.P. Bilokur, V.G. Demydko, National Aviation University, Ukraine.

2.2. Automated process control systems

Chairman – V. Sineglazov, National Aviation University, Ukraine.

Secretary – M. Mukhina, National Aviation University, Ukraine.

11 October, 14:00, room 5.411

1. Research of different methods of data transmission and their problems in remote areas using magnetometric survey.
M.P. Mukhina, G.M. Babeniuk, National Aviation University, Ukraine.

2. Model of one-dimensional search correlation extreme navigation system by relief field.
M.P. Mukhina, I.V. Barkulova, National Aviation University, Ukraine.
3. Stability of automatic control systems of inertial objects.
A.K. Ablesimov, National Aviation University, Ukraine.
4. Automated system of environment thermal and moisture state control.
M.P. Vasylenko, National Aviation University, Ukraine.
5. Double-deck estimation of flight-navigation parameters in inertial-satellite navigation systems for unmanned aerial vehicles.
M.K. Filyashkin, National Aviation University, Ukraine.
6. Automatic stabilization system of the UAV at gas-dynamic method takeoff and landing.
N.F. Tupitsyn, National Aviation University, Ukraine.
7. Analysis of Errors of the Measuring Converter Which Results from an Abrupt Change of Additive Errors of its Blocks.
I.Yu. Sergeyev, National Aviation University, Ukraine.
8. Verification and control of composite machining speed with usage of acoustic emission.
S.F. Filonenko, National Aviation University, Ukraine.
9. Information system for control of transportation in the enterprise.
V.M. Sineglazov, E.V. Daskal, National Aviation University, Ukraine.
10. Computer-aided design of vertical-axis wind turbines with a combined rotor.
V.M. Sineglazov, M.P. Vasylenko, National Aviation University, Ukraine.
11. Measurement of airplane alignment in flight mode.
A.P. Kozlov, National Aviation University, Ukraine.

12. Intellectual computer-aided design system of wind turbine axial generator.

V.M. Sineglazov, A.S. Chirko, National Aviation University, Ukraine.

13. Intellectual Hybrid Renewable Energy Systems.

V.M. Sineglazov, O.I. Chumachenko, A.T. Kot, National Aviation University, Ukraine.

14. Sensitivity analysis of a quadcopter robust control systems to the wind disturbance.

V.M. Sineglazov, O.O. Kizitskyi, A.T. Kot, National Aviation University, Ukraine.

2.3. Information technology and systems in the aviation industry

Chairman – P. Pavlenko, National Aviation University, Ukraine.

Secretary – A. Temnikov, National Aviation University, Ukraine.

11 October, 14:30, room 11.206

1. Gravimetr for gravimetric complexes on air- and spacecraft.

O.M. Bezvesilna, National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute», Ukraine.

A.H. Tkachuk, Zhytomyr State Technological University, Ukraine.

2. New information coefficients of vibration signals for technical condition monitoring in rotating electric power machines.

V.F. Hraniak, V.V. Kukharchuk, Vinnitsa National Technical University, Ukraine.

3. The Knowledge Computing and Engineering in the representation of knowledge in industrial information systems.

A.B.M. Salem, Ain Shams University, Egypt.

V. Shendryk, Sumy State University, Ukraine.

4. The system for prediction of security state of an enterprise in the aviation industry using semantic–frame fuzzy models of knowledge

base.

N.O. Ivanchenko, National Aviation University, Ukraine.

H.F. Ivanchenko, National Economic University named after V. Hetman, Ukraine.

5. Analyzing information risks of the simulation polygon for the protection of critical information resources.

B.Y. Korniyenko, L.P. Galata, National Aviation University, Ukraine.

6. A brief overview of modern software optimization approaches.

P.O. Prystavka, A.K. Shevchenko, National Aviation University, Ukraine.

7. Markov Chain Model for Stock Market Move Prediction.

P.O. Prystavka, O.V. Tyvodar, National Aviation University, Ukraine.

8. Negative Ions in Space Exploration.

Leonid I. Gretchikhin, Belarusian State Academy of Communications, Minsk, Republic of Belarus.

9. Modeling of business processes of industrial enterprise on the basis of modern information systems with the account of theoretical and legal approaches to the analysis of information security.

A.V. Tolbatov, V.A. Tolbatov, Sumy State University, Ukraine.

10. Mathematical model of informational processes of a desorption.

A.H. Ibrayev, I.N. Sagynbay, Kazakh National Research Technical University after K.I. Satpaev, Republic of Kazakhstan.

11. Design solutions for the integration of production information systems.

P.M. Pavlenko, National Aviation University, Ukraine.

B.A. Suleimenov, Satbayev University, Kazakhstan.

T.M. Zakharchuk, A.V. Temnikov, National Aviation University, Ukraine.

12. Models and method of expert assessment of aviation security

level of airports.

V.O. Temnikov, A.V. Temnikov, National Aviation University, Ukraine.

13. New approaches in practical tasks of profession activity estimation.

O.V. Zaritskiy, P.M. Pavlenko, V.V. Sudik, National Aviation University, Ukraine.

14. Computer technology of elastic-damping elements of aircraft equipment unit optimization.

S.V. Filipkovskiy, Kharkov National Automobile and Highway University, Ukraine.

15. Manipulation robot program trajectories at restrictions in the form of obstacles.

M.Sh. Baybatshaev, A.A. Beisenbayev, K.I. Satpayev Kazakh National Research Technical University, Kazakhstan.

16. Analysis of the mechanism for combining personal scientific information with ORCID profiles.

I.O. Chernytska, Poltava National Technical Yuri Kondratyuk University, Ukraine.

S.S. Fedin, National Transport University, Ukraine.

17. The process of computer modeling of the recommendation system for news content.

Gavrilenko Olena, NTUU «KPI», Ukraine.

18. The security system of information technologies of Motor Sich chief technologist department.

K. Balushok, M. Birouk, Motor Sich PJSC, Ukraine.

19. Comparative analysis of TEXT MINING algorithms for identifying agitation data.

Gavrilenko Olena, Oliynik Yuri, Khanko Hanna, NTUU «Igor Sikorsky Kyiv Polytechnic Institute», Ukraine.

20. Toolset of intellectual analysis of economic status of enterprise with application of pattern recognition.

L. O. Filipkovska, National Aerospace University named after M.Y. Zhukovsky «Kharkov Aviation Institute», Ukraine.

21. The method of information interaction management of project bureau specialists.

D.A. Svyrydenko, National Aviation University, Ukraine.

22. Computer aided modeling of foundry processes at Motor Sich PJSC.

K. Balushok, V. Raschupkin, Motor Sich PJSC, Ukraine.

23. Information Technologies of Decision Support in Transboundary Emergencies.

O.Y. Cherednichenko, V.V. Tkachenko, National Technical University "Kharkiv Polytechnic Institute", Ukraine.

Research Center of the Armed Forces of Ukraine "State Oceanarium", Ukraine.

24. Multipurpose use of the pipeline-liquid system in the nonlinear range of perturbations.

V.V. Gavrilenko, National Transport University, Ukraine.

O.S. Limarchenko, Kyiv National Taras Shevchenko University, Ukraine.

O.P. Kovalchuk, National Transport University, Ukraine.

2.4. Intelligent robotic systems and measuring systems

Chairman – V. Kvasnikov, National Aviation University, Ukraine.

Secretary – O. Osmolovsky, National Aviation University, Ukraine.

10 October, 14:00, room 11.403

1. The methods of functional analysis and the principles of diagnostic of stress-deformed condition of construction structures.

L.V.Kuzmych, National Aviation University, Ukraine.

2. Calculation of errors of movement of chains of measuring robots.
A.O. Isachenko, National Aviation University, Ukraine.
3. The development of a differential-digital method for precision measurements of the geometric parameters of aviation details.
V. Kvasnikov, M. Katajeva, A.Yurchuk, National Aviation University, Ukraine.
4. Research of hard-to-reach areas at geodetic works.
O.O. Lugovyh, Y.O.Podchashynskiy, Zhytomyr State Technological University, Ukraine.
A.S. Hurtin, Vikoil LTD, Ukraine.
5. Neural Network Method for Determination of Components of Angle Measurement Errors.
Irina Cherepanska, Elena Bezvesilna, Artem Sazonov, Zhytomyr State Technological University, Ukraine.
6. Determination of motion parameters and geometric parameters of objects in production by their videoimages.
Yu.O. Podchashynskiy, L.O. Chepiuk, O.O. Lugovyh, T.S. Voronova, Zhytomyr State Technological University, Ukraine.
7. Computer simulation of a concentrated light curve from LED source.
N.I. Kulik, National University of Water and Environmental Engineering, Ukraine.
8. Design of low frequency bandwidth filter with high selectivity.
A.V. Rudyk, National Aviation University, Ukraine
V.A. Rudyk, M.I. Matej, Kiev National University of Civil Engineering and Architecture, Ukraine.
9. Improved accuracy of radiological measurements in test laboratories.
K.V. Pavlovich, National Aviation University, Ukraine.
D.G. Matviyenko, State enterprise "Cherkasy Scientific-Production

10. Computerized systems of continuous monitoring of the technical condition of bridge constructions.
R.M. Zapotochnyi, Silesian University of Technology, Poland.
V.P. Kvasnikov, National Aviation University, Ukraine.
11. Features of measuring the distance between objects of sensor networks in the conditions of indirect visibility.
V.P. Kvasnikov, National Aviation University, Ukraine.
A.S. Dudnik, Kyiv National Taras Shevchenko University, Ukraine.
12. Software Product Development Agile Technologies.
V. Kotetunov, National Transport University, Ukraine.
13. Information-measuring system for determination of elastic parameters of composite polymeric and heterogeneous materials.
V.A. Mashchenko, Odessa State Academy of Technical Regulation and Quality, Ukraine.
V.P. Kvasnikov, National Aviation University, Ukraine.
14. Gyro gravimeter of airborne gravimetry system.
O.M. Bezvesilna, L.O. Chepiuk, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine.
15. Characteristics of an airborn measuring complex.
O.M. Bezvesilna, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine.
16. Intelligent monitoring of cyber attacks.
S.V. Golub, S.A. Yemelyanov, Cherkasy National University named after Bogdan Khmelnytsky, Ukraine.
17. Measurement of linear dimensions of cylindrical parts.
O.P. Lisoviy, Ministry of Defence Ukraine.
18. Energy security as a component of Ukraine's national security.
A.D. Nalyvayko, L.P. Nalyvayko, National University of Defense of Ukraine named after Ivan Chernyhovsky, Ukraine.
19. Analysis of destabilizing vibrational effects on a coordinate

measuring machine.

A.L. Perederko, Odessa State Academy of technical regulation and quality, Ukraine.

20. Intelligent monitoring of cardiograms.

S.V. Golub, V.V. Horban, Cherkasy National University named after Bogdan Khmelnytsky, Ukraine.

SYMPOSIUM 3

MODERN CYBERSECURITY CHALLENGES

Chairman – O. Korchenko, National Aviation University, Ukraine.

Vice-Chairman – S. Gnatyuk, National Aviation University, Ukraine.

Secretary – A. Gizun, National Aviation University, Ukraine.

3.1. Information Security Management

12 October, 10:00, room 11.111

1. Detect Signs of Information-Psychological Influence in Media Reports.

Y.I. Mikhieiev, Zhytomyr Military Institute, Ukraine.

O.M. Naumchak, Zhytomyr Military Institute, Ukraine.

2. Decision support on mutual investment in cybersecurity of the information and educational environment of the university.

V.A. Lakhno, National University of Life and Environmental Sciences of Ukraine, Ukraine,

B.S. Akhmetov, L.M. Kydyralin, Kazakh National Pedagogical University named after Abay, Kazakhstan.

3. The theoretical basis of system construction of the state information security in social networking services.

R.V. Hryshchuk, Zhytomyr Military Institute, Ukraine.

K.V. Molodetska, Zhytomyr National Agroecological University, Ukraine.

4. Converting intervals into triangular fuzzy numbers for information

security risk assessment systems.

S.V. Kazmirchuk, M.V. Kolomiets, National Aviation University, Ukraine.

B.B. Akhmetov, Caspian State University of Technology and Engineering. Shch. Esenova, The Republic of Kazakhstan.

O.G. Korchenko, National Aviation University, Ukraine.

5. Information-psychological impact detection and identification as a basis for counteracting information aggression.

V.S. Hriha, I.A. Shchudlyk, A.I. Gizun, National Aviation University, Ukraine.

6. The problem of information-psychological impact evaluation in the modern studies of information warfare.

B.Y. Kobilnyk, I.A. Shchudlyk, A.I. Gizun, National Aviation University, Ukraine.

7. Physiological and psychological human peculiarities as inclination indicators of being an insider.

A.I. Gizun, A.I. Blidar, National Aviation University, Ukraine.

8. Evaluation of State and Information Security Management.

Zh.V. Kudrytska, National Aviation University, Ukraine.

O.I. Klimova, Donetsk State University of Management, Ukraine.

O.V. Aparova, State University of Telecommunications, Ukraine.

3.2. Information & Communication Technologies Security

12 October, 10:00, room 11.111

1. Formation of linguistic standards for of intrusion detection systems.

Anna Korchenko, National Aviation University, Ukraine.

2. Distributed Ledger Blockchain and its application.

A.V. Kulikovskiy, National Aviation University, Ukraine.

3. Etalons models of linguistic variables for spoofing attacks

detection systems.

A.O. Korchenko, P.O. Vikulov, National Aviation University, Ukraine.

4. The application of discrete wavelet transform for forecasting the operational load of the Web server of the distance education system.

L.A. Tereikovska, Kyiv National University of Construction and Architecture, Ukraine.

K.O. Radchenko, NTUU "Igor Sikorsky KPI", Ukraine.

K.O. Kharlamov, Kyiv National University of Construction and Architecture, Ukraine.

5. Cryptographic Application of Cellular Automata.

S.E. Ostapov, Yu.V. Tanasyuk, Yuriy Fedkovych Chernivtsi National University, Ukraine.

A.Ye. Perepelitsyn, National Airspace University "KhAI", Ukraine)

6. Legal entropy in cybersecurity: a systematic method of aerospace monitoring.

P.M. Lisovskyi, Interregional Academy of Personnel Management, Ukraine.

Y.P. Lisovska, Interregional Academy of Personnel Management, Ukraine.

7. Mathematical model of hybrid crypto code constructions on damaged codes.

S. Yevseiev, Simon Kuznets Kharkiv National University of Economics, Ukraine.

R. Korolev, Kharkov National Air Force University, Ukraine.

8. Cryptographic methods of information protection.

Gulnur Zhangissina, International Academy of Informatization, Kazakhstan.

Ahmad Djoan, Kim Ilya., Toleuhan Tomas, Kairat Ruslan, Amanbaev Tair, D. Kleymenova, Vilkovitskay Sofa, Birzhanov Alibi, Bulgusheva Toma, Kadirov Asman (Kazakhstan).

9. Approach to Increase Speed for Deterministic Protocols of Quantum Cryptography.

S.O. Gnatyuk, T.O. Okhrimenko (Zhmurko), National Aviation University, Ukraine.
B.S. Akhmetov, N.A. Seilova, Kh.I. Yubuzova, Satbayev University, Republic of Kazakhstan.

3.3. Technical Information Security

12 October, 10:00, room 11.111

1. Determination of structural parameters of a multilayer cyber threat detection perceptron.

I.A. Tereikovskiy, NTUU “Igor Sikorsky Kyiv Polytechnic Institute”, Ukraine.

V.V. Pogorelov, National Aviation University, Ukraine.

O.I. Tereikovskiy, NTUU “Igor Sikorsky Kyiv Polytechnic Institute”, Ukraine.

3.4. Critical Information Infrastructure Protection

12 October, 10:00, room 11.111

1. Structure of the method of estimating the consequences of the leakage of state secrets from cyber attacks to critical information infrastructure.

A.G. Korchenko, Yu.A. Dreis, O.A. Romanenko, National Aviation University, Ukraine.

SYMPOSIUM 4 INFORMATION TECHNOLOGIES

4.1. Computer systems

Chairman – V. Kozlovskiy, National Aviation University, Ukraine.

Secretary – Y. Artamonov, National Aviation University, Ukraine.

11 September, 15:00, room 6.200.

1. Architecture of a neural network for finding initial approximation

in hydrodynamic problems.

O.M. Glazok, National Aviation University, Ukraine.

2. Advanced Approach to Usage of an Electronic Composer.

A.V. Vishnevsky, National Aviation University, Ukraine.

3. Backstepping algorithm for controlling non-linear objects.

D.P. Kucherov, National Aviation University, Ukraine.

4. Information flows optimization in a multi-profile training center based on a local wireless computer network.

V.I. Morzhov, I.A. Zhukov, National Aviation University, Ukraine.

5. Formalization of load management mechanisms in sensory networks

V.O. Ostapenko, Taras Shevchenko National University of Kyiv, Ukraine.

6. Formalization of the diagnostic problem of cancer in automated systems.

Y.Y. Holovach, National Aviation University, Ukraine.

7. Image Preparation for Processing in Video Surveillance Systems.

A.O. Druzhevskiy, National Aviation University, Ukraine.

Y.B. Artamonov, National Aviation University, Ukraine.

8. Modeling of formation of electronic materials adaptive learning course.

Y.B. Artamonov, National Aviation University, Ukraine.

4.2. Advanced information technologies in aviation

Chairman – O.Pysarchuk, National Aviation University, Ukraine.

Secretary – M.Olenin, National Aviation University, Ukraine.

11 October, 14:30, room 6.311.

1. Ontology-driven distributed multi-agent systems in aviation.

S. Lebid, M. Olenin, National Aviation University, Ukraine.

2. Transfer methods of mobile applications from iOS to Android platform.

O. Marchenko, B. Melnik, M. Olenin, National Aviation University, Ukraine.

3. Software models' refinement in AGILE approach. Review and Challenges.

O.V. Chebanyuk, National Aviation University, Ukraine. Abdel-Badeeh M. Salem, Ain Shams University, Egypt.

4. Information model describing the polypropylene aviation filtering elements forming process.

Anastasiya Vecherkovskaiya, Svitlana Popereshnyak, Taras Shevchenko National University of Kyiv, Ukraine.

5. Concept and modeling of the global aerospace system.

T.V. Labutkina, V.V. Belikov, Oles Honchar Dnipro National University, Ukraine.

4.3. Mathematical modeling and numerical methods

Chairman – V. Denysiuk, National Aviation University, Ukraine.

Secretary – V. Pakhnenko, National Aviation University, Ukraine.

11 October, 14:40, room 6.200

1. Graphic model of the target audience of psychological influence in social networks.

V.S. Savchuk, Zhytomyr Military Institute, Ukraine.

2. Computer simulation techniques for solving the tasks of optimal design of aerospace composite structures.

A.V. Kondratiev, National Aerospace University "Kharkiv Aviation Institute", Ukraine.

3. On some boundary properties of conformal mappings of simply connected domains.

O.V. Karupu, National Aviation University, Ukraine.

4. On some aspects of modeling of professional activity of future aviation engineer in teaching of mathematical disciplines in multinational groups.
O.V. Karupu, T.A. Oleshko, V.V. Pakhnenko, National Aviation University, Ukraine.
5. Mathematical modeling of the visibility range of the aerodromie fires of the light-signal systems from the meteorological visibility range in MatLab environment.
Yu.M. Kvach, A.A. Zelenkov, National Aviation University, Ukraine.
6. Ukrainian National Academy of Science, Ukraine. On the aerodynamic calculation of high-speed ground transport vehicles.
A.V. Sokhatsky, Institute of transport systems and technology,
7. Gamma distributed time-delayed model of two linearly coupled Goodwin oscillators.
A. Antonova, National Aviation University, Ukraine.
8. Inertial Navigation Accuracy and Accelerometers with damping.
Y.A. Opanasiuk, National Aviation University, Ukraine.
9. Markov Chain Model for Stock Market Move Prediction.
P.O. Prystavka, O.V. Tyvodar, National Aviation University, Ukraine.
10. Microblowing as an effective tool of drag reduction of modern high-speed vehicles.
Ye.O. Shkvar, Shi-ju. E, A.S. Kryzhanovskiy, Jian-Cheng Cai, Zhejiang Normal University, China.
11. Algorithm of the Statistical Modeling of Retrial Queuing System $GI / G / m / 0 // K / D$.
S.V. Serebriakova, National Aviation University, Ukraine.
12. Disjunctive Permutations and their Applications.
O.D. Glukhov, T.A. Oleshko, National Aviation University, Ukraine.

13. On non-Abelian groups with complemented non-Abelian subgroups.

P.P. Baryshovets, National Aviation University, Ukraine.

14. Implementation of the method of boundary integral equations in boundary value problems of gasdynamics.

Y. Krashanytsya, A. Hoshmandi, N. Hristenko, National Aerospace University by it. N.E.Joukowsky «KHAU», Ukraine.

15. Mathematical modeling of the motion of a mechanical body in a viscous liquid.

I.P. Kudzinovska, I.S. Klyus, National Aviation University, Ukraine.

16. The Fourier series summation method with $\sigma_k(r, \alpha)$ -factors

V.P. Denysiuk, National Aviation University, Ukraine.

17. Modelling of creep and fatigue life of viscoelastic metal matrix composites.

B.P. Maslov, S.P. Timoshenko Institute of Mechanics NAS Ukraine, Ukraine.

18. Perspective morphing-based technology of improvement the aerodynamic properties of wind turbine blades.

A.S. Kryzhanovskiy, Ye.O. Shkvar, Zhejiang Normal University, China.

SYMPOSIUM 5
AIR NAVIGATION: TENDENCIES AND PROSPECTS

5.1. Navigation and air traffic management

Chairman – V. Konin, National Aviation University, Ukraine.

Secretary – O. Pogurelskiy, National Aviation University, Ukraine.

10 October, 10:30,

(Conference hall 13, Entrance 3-C, IEC, 15 Brovarskoy Ave.)

1. Network Analysis of Crew and Air Traffic Controller Actions in Case of Engine Problems on Multi-engine Aircraft during Take-off.

M.V. Kasatkin, Yu.V. Sikirda, Flight Academy of the National Aviation University, Ukraine.

2. Concept of monitoring complex of radio signal environment in the airdrome area.

Eduard Kovalevskiy, Vasyl Kondratiuk, Svitlana Ilnytska, Research and Training Centre “Aerospace Centre”, National Aviation University, Ukraine.

3. Aeronavigation: trends and prospects for the development of the article.

K. Starostina, V. Pakhomov, L. Ship, D. Nesmianova, National Aviation University, Ukraine.

4. System optimization of psychological and emotional compatibility of operators in air navigation system.

T.F. Shmelova, Yu.N. Kovalyov, V.V. Kalashnikova, National Aviation University, Ukraine.

5. Radionavigation field monitoring in the landing area using software-defined radio receiver.

V.A. Shevts, V.M. Kondratiuk, S.I. Ilnytska, O.V. Kutsenko, National Aviation University, Ukraine.

6. The quality and efficiency of the use of the air traffic controlled airspace.

O.P. Narizhny, V.S. Demianchuk, National Aviation University, Ukraine.

7. Sound dampening of onboard equipment.
V.M. Mel'nick, V.V. Karachun, S.V. Fesenko, G.V. Boiko, Igor Sikorsky KPI, Ukraine.
8. The simulation model of the system for determining the actual values of the weight of an empty aircraft.
A.S. Tymoshenko, Flight Academy of NAU, Ukraine.
9. Runway incursion warning system model for ATC tower simulator.
N.A. Salo, A.V. Zemlyanskiy, Flight academy of the National Aviation University, Ukraine.
10. An analysis of automation of forming exercises for air traffic control simulators with the module method.
N.A. Salo, A.V. Zemlyanskiy, Flight academy of the National Aviation University, Ukraine.
11. Analysis of the existing classification of potentially conflict situations for air traffic controllers simulators.
A.V. Zemlyanskiy, N.A. Salo, I.Yu. Unhul, Flight Academy of the National Aviation University, Ukraine.

5.2. Unmanned aerial systems and complexes

Chairman – V. Larin, National Aviation University, Ukraine.

Secretary – I. Prihodko, National Aviation University, Ukraine.

10 October, 10:30,

(Conference hall 13, Entrance 3-C, IEC, 15 Brovarkoy Ave.)

1. Decision Support System of Unmanned Aerial Vehicle's Operator for Choosing of the Alternate Aerodrome/Place in the Case of Emergency Landing.
T.F. Shmelova, National Aviation University, Ukraine.
Yu.V. Sikirda, Flight Academy of the National Aviation University, Ukraine.

2. Improving the accuracy of the SINS for a fast-rotating, controlled object by measuring the apparent acceleration.

V.B. Uspenskyi, M.V. Nekrasova, NTU «KhPI», Ukraine.

5.3. English in science and engineering: modern challenges

Chairman – N. Pazura, National Aviation University, Ukraine.

Secretary – O. Pershukova, National Aviation University, Ukraine.

11 October, 15:20, room 11.413

1. How to motivate students to study English language for professional purposes.

N.S. Zelinska, National Aviation University, Ukraine.

2. Scaffolding techniques within the context of teaching English for students of electronics.

O.O. Pershukova, National Aviation University, Ukraine.

3. Methodological aspects of delivering effective Aviation English classes to future air traffic controllers.

T.M. Fursenko, National Aviation University, Ukraine.

4. Role of technology in foreign language teaching.

O.M. Vasiukovych, National Aviation University, Ukraine.

5. Some Specific Features of Teaching English for Specific Purposes.

L.S. Nemlii, National Aviation University, Ukraine.

5.4. Avionics and control of complex systems

Chairman – S. Pavlova, National Aviation University, Ukraine.

Secretary – V. Romanenko, National Aviation University, Ukraine.

10 October, 13:30,

(Conference hall 13, Entrance 3-C, IEC, 15 Brovarskoy Ave.)

1. Engineering-psychological problem of flight safety in case of

failures in avionics.

Y.V. Hryshchenko, E.A. Starchenko, National Aviation University, Ukraine.

2. Kalman filter for channel estimation in OFDM systems.

***O. Myronchuk, O. Shpylka, National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute», Ukraine.
D. Smolych, National Aviation University, Ukraine.***

3. Estimation of conflict resolution ways between aircrafts and convectively unstable atmosphere.

A.S. Kovalova, National Aviation University, Ukraine.

4. New way of transfer of ownership on intellectual property objects of Avionic based on Blockchain technology.

V.M. Zemlyanskiy, O.O. Zakrevskiy, National Aviation University, Ukraine.

5. Theoretical analysis of comparison of modern characteristics and parameters natural light for improving electrical current from perspective solar panels civil aircrafts.

O.G. Sitnik, D.V. Koruahin, National Aviation University, Ukraine.

6. Laser Measurement Device for Air – Speed (LMDAS) parameters of Aircraft.

V.M. Zemlyanskiy, M.O. Gusev, A.V. Ovenko, National Aviation University, Ukraine.

M.R Mirza, Institute of Space Technology, Pakistan.

7. Laser flowmeter for optically active liquid-lubricant materials.

V.M. Zemlyanskiy, M.O. Gusev, S.G. Yegorov, S.V. Poliak, National Aviation University, Ukraine.

8. Robust control of system with nonorthogonal MEMS arrays.

O.A. Sushchenko, N.D. Novytska, Y.M. Bezkorovainyi, V.O. Golitsyn, National Aviation University, Ukraine.

9. Avoidance of accidents during demonstration flights.

A.A. Polozhevets, E.M. Hohlov, S.S. Derets, National Aviation University, Ukraine.

SYMPOSIUM 6

ELECTRONIC SYSTEMS, MICRO-and NANOSYSTEM TECHNIQUE, AND IoT ELECTRONIC TECHNOLOGY SYMPOSIUM (ESMNT)

Chairman – Felix Yanovsky, National Aviation University, Ukraine.
TPC Chair and Coordinator – Yuliya Averyanova, National Aviation
University, Ukraine.

Session ESMNT 1 Invited Talk

11 October, 13:30, Academic Council Hall

Chairperson – Felix Yanovsky, National Aviation University, Ukraine.

Graph Signal Processing: Filtering and Sampling,
Geert Leus, Delft University of Technology, The Netherlands

Session ESMNT 2 Micro- and Nanoelectronic Devices and Systems

11 October, 15:30, Academic Council Hall

Chairpersons – Felix Yanovsky and Yuliya Averyanova, National
Aviation University, Ukraine.

1. Research of a Capacitive Distance Sensor to Grounded Surface.
*A. S. Levytskyi, I.O. Zaitsev, A.I. Novik, V.O. Bereznychenko, The
Institute of Electrodynamics of the NAS of Ukraine, Ukraine.
A.M. Smyrnova, Kyiv National University of Trade and Economics,
Ukraine.*

2. Formation of Ultrashort Pulses of THz Range in NarrowGap
Semiconductors.
V. Grimalsky, S. Koshevaya, J. Escobedo-A., Autonomous

University of State Morelos (UAEM), Mexico.

Yu.Rapoport, T. Shevchenko National University, Ukraine.

3. Electrical and Quantal Analysis of Photonic Crystals.

Chen Xiang, Fanmin Kong, Kang Li, Shandong University, China.

4. Reprogrammable Multiplexer Nanocircuits.

O.S. Melnyk, A.M. Mikolushko, T.K. Denysko, National Aviation University, Ukraine.

5. Nanocircuit for Protection of the Cryptographic Information.

O.S. Melnyk, D.G. Milke, Y.V. Poliakov, National Aviation University, Ukraine.

Session ESMNT 3 Radio-Electronics Systems, Methods and Technologies

12 October, 09:00, Academic Council Hall

Chairpersons – L.V. Sibruk, National Aviation University, Ukraine.

Maria Antyufeyeva, V. N. Karazin Kharkiv National University, Ukraine.

1. Comparative Study of Signal Processing of Two UWB GPR Antenna Units.

D.O. Batrakov, K.S. Beloshenko M.S. Antyufeyeva, V.N. Karazin Kharkiv National University, Ukraine.

A.G. Batrakova, S.N. Urdzik, Kharkiv National Automobile and Highway University.

2. Composite Particles Model of Doppler-Polarimetric Meteorological Radar Signal.

Anna Rudiakova, Yuliya Averyanova, Felix Yanovsky, National Aviation University, Ukraine.

3. Antenna of Mobile Radio Monitoring System

L.Y. Ilnitskyi, L.V. Sibruk, I.I. Mykhalchuk, National Aviation University, Ukraine.

4. Measuring the Size of Objects by X-ray Stereoscopy in Nondestructive Testing and Medical Use.

S.I. Miroshnychenko, E.V. Volkov, National Aviation University, Ukraine, “Teleoptika SPA. Ltd.

Session ESMNT 4 Electronics in Biomedical and Cryptographic Applications

12 October, 11:10, Academic Council Hall

Chairpersons – A. Biletsky and M. Glazunov, National Aviation University, Ukraine.

1. Multidimensional Gray Transformations in Cryptographic Applications.

A.Ya. Beletsky, National Aviation University, Ukraine.

2. About the Minimum Number of S-blocks Activated on First SPN Cycles.

I.V. Lisitskaya, K.E. Lisitsky, Kharkov National University, V.N. Karazine, Ukraine.

3. Modern Development Trends of the Digital Radiographic Units.
N.S. Miroshnichenko, S.I. Miroshnichenko, National Aviation University, Ukraine.

A. A. Nevgasymyi, Production Research Company Teleoptic, Ukraine.

4. Methods of Mathematics and Bioinformatics in Contemporary Oncology.

O. M. Klyuchko, National Aviation University, Ukraine.

T.V. Pyatchanina, M.G.Mazur, Kavetsky Institute of Experimental Pathology, Oncology and Radiobiology, National Academy of Sciences of Ukraine, Ukraine.

SYMPOSIUM 7 ENVIRONMENTAL PROTECTION

Chairman – O. Zaporozhets, National Aviation University, Ukraine.
Secretary – K. Kazhan, National Aviation University, Ukraine.

11 October, 14:00, room 5.611.

1. Methods of aircraft engines emissions assessment within the airport.
K. Ulianova, K. Synylo, National Aviation University, Ukraine.

2. Numerical simulation of the jet from the aircraft engine by OPENFOAM.
K. Synylo, A. Krupko, National Aviation University, Ukraine

3. Performing the optimization of compressed air specific consumption depending on the defining dimensionless structural and operating parameters of the motor-car pneumatic motor.
O.I. Voronkov, D.B. Glushkova, I.N. Nikitchenko, E.V. Teslenko, A.O. Nazarov, Kharkiv National Automobile and Highway University, Ukraine.

4. The impact of airports on visual safety of environment.
M.M. Radomska, National Aviation University, Ukraine.

5. Electromagnetic screens application for population protection from electromagnetic fields and radiation.
V. Glyva, National Aviation University, Ukraine.
O. Panova, National University of Construction and Architecture, Ukraine.

6. External environmental air distribution exchange by using UAV.
A.G. Sitnik, L.M. Sitnyanskykh, I.V. Kravets, National Aviation University, Ukraine.

7. Monitoring of electromagnetic environment at the civil aviation aerodromes.

***V. Glyva, O. Tykhenko, National Aviation University, Ukraine.
O. Tymoshenko, Odesa International Airport, Ukraine.***

8. Stirling engine in residential heating systems.

M.V. Dudnyk, O.L. Marchenko, Oles Honchar Dnipro National University, Ukraine.

9. The impact of aviation and rocket-space technology on the ozone layer: causes of destruction and recovery methods.

***I.A. Bida, A.V. Kononenko, V.S. Prokopchuk, M.P. Savchuk,
L.M. Teleniuk, V.V. Horupa, National Aviation University,
Ukraine.***

10. Detailed flight operation data for accurate aircraft noise assessment.

Oleksandr Zaporozhets, Larisa Levchenko, National Aviation University, Ukraine.

11. Noise monitoring for improvement of operational performances of the aircraft in vicinity of airports.

O. Zaporozhets, National Aviation University, Ukraine.

A. Jagniatinskis, Gediminas Technical University, Lithuania.

B. Fiks, Gediminas Technical University, Lithuania.

M. Smiesek, Politechnika Rzeszowska, Poland.

A. Chyla, M. Bukala, SVANTEK, Poland.

12. PARE preliminary analysis of ACARE Challenge 3 environmental impact goals (towards quieter and cleaner environment in aviation sector).

***Oleksandr Zaporozhets, Volodymyr Isaienko, Kateryna Synylo,
National Aviation University, Ukraine.***

L. Campos, Instituto Superior Tecnico, Portugal.

Joana Soares, INOVAMAIS S.A., Portugal.

13. Risk methodology as a tool for aircraft noise assessment and control.

Oleksandr Zaporozhets, Larisa Levchenko, National Aviation University, Ukraine.

Boris Blyukher, Indiana State University, USA.

14. Input data for aircraft noise measurements and modeling.

K.I. Kazhan, National Aviation University, Ukraine.

15. The conditions and factors for the formation of environmentally dangerous internal processes in water in technogenically loaded territories.

S.M. Madzhd, National Aviation University, Ukraine.

16. Cleaning of mineralized water.

D.K. Romas, I.M. Trus, M.D. Gomelya, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute, Ukraine.

17. Ecological-aesthetic reorganization of the foot-traffic network on the NAU territory

G.I. Bolotov, V.N. Pershakov, O.I. Pylypenko, National Aviation University, Ukraine.

SYMPOSIUM 8

INTERNATIONAL SYMPOSIUM ON ELECTRIC AVIATION AND AUTONOMOUS SYSTEMS (ISEAS-2018)

October 10, 2018	
08:30-09:30	REGISTRATION
09:30-10:40	OPENING SESSION
	Room: National Aviation University Vchena Rada
	Prof. Dr. Isayenko Volodymyr Nikolaevich – Rector of NAU
	Prof. Dr. T. Hikmet Karakoc – Founding Chair of ISEAS
	Prof. Dr. Oleksandr Zaporozhets – Co-Chair of

	ISEAS 2018
	Burak Pehlivan – President of International Turkish Ukrainian Businessmen Association
10:40-11:00	COFFEE BREAK
11:00-12:30	KEYNOTE SPEECHES Chair: Prof. Dr. Hikmet Karakoc
	Room: National Aviation University Vchena Rada
11:00-11:30	Prof. Dr. Jozsef Rohacs – Budapest University of Technology and Economics TBD “THEORETICAL AND PRACTICAL ASPECTS OF DEVELOPING THE ELECTRIC /HYBRID AIRCRAFT”
11:30-12:00	Prof. Dr. Birol Kilkis – Baskent University “AN ELECTRIC AIRCRAFT BUT NOT EXACTLY”
12:00-12:30	Prof. Dr. Roy Hartfield – Auburn University “AERO-PROPULSIVE FLIGHT MECHANICS FOR TWENTY FIRST CENTURY AIRCRAFT DESIGN”
12:30-14:00	LUNCH BREAK
14:00-16:30	KEYNOTE SPEECHES Chair: Prof. Dr. Oleksandr Zaporozhets
14:00-14:30	Carlos Javier Munoz Garcia – European Aviation Safety Agency “CERTIFICATION OF PROPULSION LITHIUM BATTERIES”
14:30-15:00	Tevfik İnal – General Electric “HYBRID ELECTRIC PROPULSION”
15:00-15:30	COFFEE BREAK
15:30-16:30	Technical Session 1 Chair: Prof. Dr. Jozsef Rohacs

	<u>Oleksandr Zaporozhets</u> , Volodymyr Isaienko “TRENDS OF POSSIBLE AIRCRAFT HYBRID ARCHITECTURES AND THEIR IMPACT ON ENVIRONMENT”
	<u>Utku Kale</u> , Istvan Jankovics, Jozsef Rohacs, Daniel Rohacs “RADICALLY NEW SOLUTIONS REDUCING THE REQUIRED CAPACITY OF MISSION ENERGY BATTERY MASS OF ELECTRIC AIRCRAFT”
	<u>Isil Yazar</u> “BATTERY MODELS FOR ALL ELECTRIC AND HYBRID ELECTRIC PROPULSION SYSTEMS IN AVIATION: A LITERATURE SURVEY”
	Agnes Wangai, <u>Utku Kale</u> , Jozsef Rohacs “ESTIMATING THE REDUCTION OF ENVIRONMENTAL IMPACT IN AIRPORT AREAS THROUGH INTRODUCTION OF NEW SMALL ELECTRIC / HYBRID AIRCRAFT INTO OPERATION”

October 11, 2018	
09:00-10:00	REGISTRATION
10:00-12:00	CONGRESS PLENARY SESSIONS
12:30-14:00	LUNCH BREAK
14:00-15:00	Technical Session 2 Chair: Prof. Dr. Roy Hartfield
	Room: National Aviation University Fifth Building 611
	<u>Viral Rathod</u> “DESIGN OF A 4-SEAT GENERAL AVIATION ELECTRIC AIRCRAFT”

	<u>M. Ziya Sögüt</u> , Süleyman Ozkaynak, Mehmet Akman “TECHNOLOGY OPPORTUNITIES AND MANAGEMENT OF UNMANNED AERIAL VEHICLES IN MARITIME OPERATIONS”
	Tetiana Shmelova, Arnold Sterenharz, Yuliya Sikirda “AUTOMATED SYSTEM FOR MONITORING AND DIAGNOSTICS PILOT’S EMOTIONAL STATE IN FLIGHT”
	Emre Özbek, M. Baris Özerdem, Yasin Şöhret, Tahir Hikmet Karakoc “METRICS OF AIRFOIL DETERMINATION FOR BIO INSPIRED MINI UAV’S”
	<u>Hyung Uk Jee</u> “IMPROVING TROUBLESHOOTING METHODS OF AIRCRAFT ELECTRICAL FAULTS PROCESS”
15:00-15:30	COFFEE BREAK
15:30-16:30	Technical Session 3 Chair: Prof. Dr. Birol Kilkis Room: National Aviation University Fifth Building 611
	<u>Heiko Engemann</u> , Patrick Wiesen, Kallweit Stephan, Nicolas Limpert, Josef Franko “AUTONOMOUS MOBILE ROBOTS DEVELOPED BY TEAM MASCOR FOR MBZIRC 2017”
	Ruxandra Mihaela Botez, Maxime Kuitche “FLIGHT DYNAMICS SIMULATOR DESIGN STUDIES FOR UNMANNED AERIAL SYSTEMS”
	Emrah Yigit, Isil Yazar, T. Hikmet Karakoc “FIXED PITCH PROPELLER COMBINED DC MOTOR STEADY-STATE MODEL FOR MICROCLASS UAVS NEW GENERATION

	PROPULSION SYSTEMS”
	Alexandr Kuznetsov, Anastasia Kiyan, Yuriy Tarasenko, Evgeniy Malenko, Olexandr Polins'ky “NEW CODE-BASED PSEUDORANDOM GENERATOR”
	<u>Emre Özbek</u> , Yasin Şöhret, Hikmet Karakoc “BIO-INSPIRED UAV DESIGN PARAMETERS AND EFFECTS OF FLIGHT PERFORMANCE”
16:30-17:30	Technical Session 4 Chair: Prof. Dr. Sergii Boichenko
	Room: National Aviation University Fifth Building 611
	Alexandr Kuznetsov, Roman Serhienko, Anna Uvarova, Valeriy Smirnov “METHODS OF FORMING CRYPTOGRAPHIC KEYS FROM BIOMETRIC IMAGES USING FUZZY EXTRACTORS”
	<u>Muhammet Yunus Turan</u> “UNMANNED AIRCRAFT VEHICLE WITH PARABOLIC WING”
	Halil Yalcin Akdeniz, Onder Altuntas, <u>Ziya Sogut</u> , Hikmet Karakoc “ADVANTAGES AND DISADVANTAGES OF HYBRID ELECTRIC PROPULSION SYSTEMS AND CONVENTIONAL PROPULSION SYSTEMS WITH COMPARATIVE ANALYSIS”
	<u>Emrah Yigit</u> , Isil Yazar, Hikmet Karakoc “UNLOADED BATTERY-MOTOR MODELING FOR MICRO/MINI-CLASS UAVS USING AN ELECTRIC PROPULSION SYSTEM”
	<u>Burak Tarhan</u> , Kadir Kemal Apaydın, Emre Özbek, Hikmet Karakoc “THE COMPARISON OF LI-ION AND LIFEPO4 BATTERIES FOR ALL ELECTRIC AIRCRAFT CONCEPT”

October 12, 2018	
09:00-10:00	Technical Session 5 Chair: Assoc. Prof. Dr. C. Ozgur Colpan
	Room: National Aviation University Fifth Building 611
	<u>Mehmet Ziya Söğüt</u> , Enver Yalcın, Baris Ozerdem, Tahir Hikmet Karakoc “ASSESSMENT OF THE EFFICIENCY INDEXES OF ENERGY IN AIR TRANSPORT”
	Murat Ayar, <u>Orhan Aras</u> , Kürşad Melih Güleren, Tahir Hikmet Karakoc “COMPONENT PRIORITIZATION OF MINI ELECTRIC UAV ON PRELIMINARY DESIGN STAGE”
	Kahraman Coban, C. Özgür Çolpan, T. Hikmet Karakoc “ENVIRONMENTAL ASSESSMENT OF A SMALL TURBOJET USING BIOFUEL”
	<u>Gorkem Yalın</u> , Vehbi Emrah Atasoy, C. Ozgür Colpan, T. Hikmet Karakoc “FLIGHT PERFORMANCE ESTIMATION OF FUEL CELL POWERED UAV”
	Murat Ayar, <u>Orhan Aras</u> , Kürşad Melih Güleren, T. Hikmet Karakoc “ENGINE SELECTION PROCESS WITH AHP ON MINI ELECTRIC UAV”
10:00-10:30	COFFEE BREAK
10:30-11:30	Technical Session 6 Chair: Asst. Prof. Dr. Kateryna Synylo
	Room: National Aviation University Fifth Building 611
	<u>M. Ziya Söğüt</u> , Enver Yalcın, Tahir Hikmet Karakoc “A FRAMEWORK APPROACH OF ELECTRIC PROPULSION TECHNOLOGIES FOR FUTURE

	PERSPECTIVE”
	Mariia Lutsenko, Mykola Pastukhov, Tetiana Kuznetsova, Dmytro Prokopovych-Tkachenko, Fedir Kurinni “NIST PQC: CODE-BASED CRYPTOSYSTEMS”
	<u>Burak Tarhan</u> , Emre Özbek, Hikmet Karakoc “A PORTABLE GROUND CONTROL STATION DESIGN FOR UAV FIELD OPERATIONS”
	<u>Büşra Boğa</u> , Emre Özbek, Hikmet Karakoc “A PEM FUEL CELL AND CONVENTIONAL BATTERY ASSESSMENT IN THE SCOPE OF UAV DESIGN”
	<u>Irem Turk</u> , Isil Yazar, Tahir Hikmet Karakoc “SOLAR ENERGY APPLICATIONS IN AVIATION: A GENERAL REVIEW”
	<u>Zeynep Tek</u> , Burak Tarhan, Emre Özbek, Hikmet Karakoc “MANUFACTURE PLANNING AND THE APPLICATION OF SPECIFIC TOOLS ON MINI UAV WING MANUFACTURE”
	<u>Elif Yildirim</u> , Hasan Yamik, T. Hikmet Karakoc “HYBRID ELECTRIC POWERED SYSTEM FOR THE ROBINSON R22 HELICOPTER”
11:30-12:00	CLOSING SESSION
	Room: National Aviation University Fifth Building 611
12:00-14:00	LUNCH BREAK
14:00-16:00	Technical visit to UAV and Chemmotology Laboratories of National Aviation University

SYMPOSIUM 9
AVIATION CHEMMOTOLOGY

Co-Chairman – S. Boichenko, National Aviation University, Ukraine
Secretary – L. Cherniak, National Aviation University, Ukraine.

11 October, 14:00-17:00, room 5.601.

1. Interaction of gasoline volatility and ecological characteristic

L.M. Cherniak, L.O. Cherniy, National Aviation University, Ukraine.

2. Aviation Fuel Supply Technological Equipment's Protection from Static Electricity

S.O. Puzik, V.I. Kurilov, A.V. Varenyk, National Aviation University, Ukraine.

P.I. Lypovenko, Association "Airports of Ukraine".

3. Thermo-kinetic model for assessment of durability of contact surfaces under lubricating.

O. Mikosianchyk, R.Mnatsakanov, N. Kichata, I.Jakymetz, National Aviation University, Ukraine.

4. Emission of oxygen dissolved in fuel at aircraft climb.

V. Iefymenko, E. Novoselov, A. Kustovska, N. Atamanenko, National Aviation Universit, Ukraine.

O. Iefimenko, Gas and hydrocarbon liquids certification center, Ukraine.

5. Additives to the diesel fuel on the basis of petroleum acids.

O.I. Kosenko, A.D. Kustovska, V.Y. Gorstka, National Aviation University, Ukraine.

6. Chemmotological aspects of corrosion inhibitors used in automobile gasolines and aviation fuels production.

P.Topilnytsky, V. Romanchuk, National University "Lvivska Polytechnica", Ukraine.

7. Organic waste for water reservoirs ecological improvement.

L.I. Pavliukh, National Aviation University, Kyiv, Ukraine.

SYMPOSIUM 10
**COMMUNICATION FACTOR IN MODERN
INTERNATIONAL RELATIONS**

**10.1. International economic cooperation of Ukraine in the
aviation and space fields**

Chairman – S. Sidenko, National Aviation University, Ukraine.

Secretary – I. Nabok, National Aviation University, Ukraine.

11 October, 13:30, room 7.401a

1. Ukrainian international economic cooperation in the development of the national aviation cluster.

S.O. Bila, National Aviation University, Ukraine.

2. Ukraine in the International Ranking “Doing Business”.

Kuzmenko Halyna, Central Ukrainian National Technical University, Kropyvnytskyi, Ukraine.

3. Local Taxes and Fees as an Instrument of Stimulating the Innovative Development of Business Entities.

Shalimov Volodymyr, Central Ukrainian National Technical University, Kropyvnytskyi, Ukraine.

4. The impact of business aviation on the economy of Europe.

K.V. Antonenko, D.S. Koriava, National Aviation University, Ukraine).

5. Analysis and prospects of aviation development in Ukraine

M.P. Vysotska, O.M. Kyrylenko, M. Sheputa, National Aviation University, Ukraine.

6. The Aerospace Sector in Ukraine’s Innovation Strategy.

S.V. Sidenko, National Aviation University, Ukraine.

7. Features of international low-flying airlines activity in Ukraine.

L.M.Pobochenko, National Aviation University, Ukraine.

8. Opportunities for integration of aircraft and spacecraft industry into global value chain.

O.M. Kushnirenko, O.S. Zarudna, Institute for Economics and Forecasting, NAS of Ukraine, Ukraine.

10.2. The transformation of journalism in the context of technologizing the world and the processes of globalization

Chairman – E.D. Tsykhovska, National Aviation University, Ukraine.

Secretary – V.M. Vasylychenko, National Aviation University, Ukraine.

10 October, 11:20 , room 7.217.

1. Russian jargon in the Ukrainian-language texts on the online media.

T.M. Andreeva, Taras Shevchenko National University of Kyiv, Ukraine.

2. Data visualization: basic principles and common types.

A.D. Lichenko, National Aviation University, Ukraine.

3. Art blogs as a kind of contemporary art criticism and journalism.

S.T. Trycolenko, National Aviation University, Ukraine.

4. Reform of State- and Municipal-Owned Press in Ukraine: Hard and Slow Process Dynamics in Media Experts Assessments.

H.I. Nazarenko, National Aviation University, Ukraine.

5. Paraphrasis in the nominations of political figures in the mass media.

V.M. Vasylychenko, National Aviation University, Ukraine.

10.3. Information and legal foundations of international relations

Chairman – L. Kiyanutca, National Aviation University, Ukraine

Secretary – I. Les, National Aviation University, Ukraine.

11 October, 13:30, room 7.208

1. Elements of Crime of Genocide according to International Law.

K.A. Vazhna, Kyiv National University of Culture and Arts, Ukraine.

2. The legal basis of the militia's activity during the period of the formation of an independent state of Ukraine (end of 1990 - mid-1991).

I.O. Les, National Aviation University, Ukraine.

3. International terrorism in the conditions of globalization: modern challenges.

Yuriy Voloshyn, Alina Zamula, National Aviation University, Ukraine.

4. International legal aspect of international information security

O.G. Shyroкова-Murarash, Y.R. Akchurin, National Aviation University, Ukraine.

5. Strategic prognostication in the American foreign policy

N.F. Rzhavska, National Aviation University, Ukraine.

6. Information support for the international conflict settlement process.

M.M. Aliiev, Y.I. Slashchova, National Aviation University, Ukraine.

7. The Belt and Road Initiative (BRI) as a major component of the geo-economic strategy of the People's Republic of China.

L.L. Kyianytsia, National Aviation University, Ukraine.

8. The religious factor in modern international relations.

S.S. Troyan, National Aviation University, Ukraine.

A.M. Kyrydon, State Scientific Institution "Encyclopedic Publishing

House”, Ukraine.

9. Semantic differences in Japanese mimetics.

D.O. Rzhevska, National Aviation University, Ukraine.

10. The problems of improvement of legislation of Ukraine in combating human trafficking.

Y.F. Kota, National Aviation University, Ukraine.

11. Statutory rape: concept, criminalization and qualification.

M.S. Melnychenko, National Aviation University, Ukraine.

12. Status of insanity in criminal law.

Strekotenko Liliya Vadumivna, National Aviation University, Ukraine.

13. Diplomatic Immunity: Basic Aspects.

Ivanova Olha, National Aviation University, Ukraine.

14. Institute of international individual criminal responsibility.

Vladyslav Yarmolenko, National Aviation University, Ukraine.

15. Modern approaches to cybercrime classification in international law.

Marta Yurivna Yatsyshyn, National Aviation University, Ukraine.

16. Model Research on Ningbo – CEEC Scientific and Technological Exchange and Cooperation.

Wang Bo, Hu Danjuan, Ningbo University of Technology, China.

Klobukov Vitaliy, National Aviation University, Ukraine.

10.4. The aviation and the tourism Vladyslav Yarmolenko,

Chairman – G. Balabanov, National Aviation University, Ukraine.

Secretary – M. Rudnieva, National Aviation University, Ukraine.

11 September, 13:30, room 7.401.b

1. Forward-looking applications of lightweight aircraft in tourism

development.

S.P. Fokin, National Aviation University, Ukraine.

2. Ukrainian tourist market monitoring.

O.A. Borisyuk, O.P. Berkova, National Aviation University, Ukraine, Ukraine.

3. The role of aviation in the management of global tourism growth.

L. Tkachuk, Taras Shevchenko National University of Kyiv, Ukraine.

4. Aviation and tourism: the current trends of cooperation.

***G.Balabanov, National Aviation University, Ukraine.
L. Tkachuk, Taras Shevchenko National University of Kyiv, Ukraine.***

5. Strategies of modern airlines that can attract new customers.

V. Yeremeieva, R. Krapyva, National Aviation University, Ukraine.

6. The low cost aviation carriers impact on modern tourism.

M.Rudnieva, National Aviation University, Ukraine.

7. Communication factor in modern international relations. Aviation and tourism. Realities and prospects of development of the domestic aviation market through the prism of interaction with the tourism industry.

I.P. Panasiuk, A.O. Tertychna, National Aviation University, Ukraine.

8. Innovative projects in tourist air transportations in Ukraine.

G.Sh.Uvarova, National Aviation University, Ukraine.

SYMPOSIUM 11
ECONOMICS AND MANAGEMENT IN AVIATION
Chairman – S. Petrovska, National Aviation University, Ukraine.
Secretary – A. Shevchenko, National Aviation University, Ukraine.

11 October, 14:00, room 2.314.

1. Strategy of inter-industry cooperation "Aviation - Tourism - Cultural Heritage".
T. Palyvoda, Ministry of Culture of Ukraine, Ukraine.
N. Kasianova, National Aviation University, Ukraine.

2. Brand as an indicator of the parity strategic relations between Ukraine and EU.
G.Y. Studinska, KNTEU.

3. Air Transport State Subsidies: Turkey.
Ali Emre Sarılgan, Eskişehir Technical University, Turkey.

4. Economic Nature of Air Transportation Market.
V.V. Klymenko, National Aviation University, Ukraine.

5. Actual questions of enterprises' innovative potential
S.T. Piletska, National Aviation University, Ukraine.
T. Ye. Korytko, Institute of the Economy of Industry of the NAS of Ukraine.
O. Yu. Zham, National Aviation University, Ukraine.

6. Boryspil International Airport competitive environment analysis and the new airport's hub-and-spoke development concept.
S.V. Petrovska, National Aviation University, Ukraine.
K.V. Astakhov, Adviser to CEO, Boryspil International Airport, Ukraine.

7. Air cargo supply chain safety in international transport corridors (ITC).
V.A. Kulyk, V.Y. Marchuk, O.V. Ovdiienko, National Aviation University, Ukraine.

8. Improving environmental competitiveness of air transport enterprise.
Z.M. Poberezhna, National Aviation University, Ukraine.
9. Perspectives and strategic areas of development of the aviation industry in Ukraine.
N.Y. Liskovych, National Aviation University, Ukraine.
10. Organization of flight safety in the air transportation system.
N.V. Solovey, National Aviation University, Ukraine.
11. Innovative human capital in the world and Ukrainian aviation.
O.V. Polous, National Aviation University, Ukraine.
12. Economic security of high-tech enterprises of aviation sector in the conditions of global competition.
O.V. Arefeva, National Aviation University, Ukraine.
13. Methodology for assessing the quality of air passenger service.
T.V. Kniazieva, National Aviation University, Ukraine.
T. Cherniavska, State University of Applied Sciences in Konin, Poland.
14. The Analysis of the Foreign Experience of the Aircraft Engineering Enterprises Transformation.
O.I. Klimova, Donetsk State University of Management, Ukraine.
S.F. Smerichevskiy, National Aviation University, Ukraine.
15. Factors affecting the demand for air transportation.
V. Sibruk, S.Ramenska, National Aviation University, Ukraine.
16. Areas of customer loyalty of development in the socially responsible marketing system.
G.V. Malakhivska, A.V. Shevchenko, National Aviation University, Ukraine.
17. Ways of improvement of the state policy of safety of civil aviation.

O.M. Kychan, National Aviation University, Ukraine.

18. Educational Competences for Lifelong Learning.

N.V. Ushenko, V.E.Komandrovska, National Aviation University, Ukraine.

19. Comprehensive approach to strategic management in the aviation industry.

T.O. Prokopenko, V.A. Prokopenko, Cherkassy State Technological University, Ukraine.

SYMPOSIUM 12

TRANSPORT TECHNOLOGY AND LOGISTICS

Chairman – G .Yun, National Aviation University, Ukraine.

Secretary – M. Yanchuk, National Aviation University, Ukraine.

11 October, 13:20, room 2.305

1. Research and practice aspects of multimodal transportations stakeholder relations.

O.Y. Sokolova, L.O. Sulyma, T.A. Akimova, National Aviation University, Ukraine.

2. Analysis of the Ukrainian transport system economic development (regional perspective).

O.Y. Sokolova, T.A. Akimova, National Aviation University, Ukraine.

3. Efficiency of introduction of "green technologies" on aviation transport.

O.Y. Sokolova, I.V.Borets, Yu.V. Shevchenko, National Aviation University, Ukraine.

4. Management of the risks of multimodal transport operators

Yu.V. Shevchenko, O.E. Sokolova, I.V.Borets, National Aviation University, Ukraine.

5. Organization of the air transportation in the conditions of a terrorist threat: a problem statement.
K.V. Marintseva, V.E. Akmaldinova, National Aviation University, Ukraine.
6. Assessment of the influence of profiling on measures to ensure air safety at the airport.
A.M. Valko, National Aviation University, Ukraine.
7. Unmanned aerial system for agricultural.
G.N. Yun, K.V. Marintseva, National Aviation University, Ukraine.
8. Theoretical aspects of special purpose airline marketing policy in performing agricultural aviation works
O. Solovyova, I. Herasymenko, National Aviation University, Ukraine.
9. Key performance indicators for transport.
Oleksandr Omelchenko, Denys Medynskiy, National Aviation University, Ukraine.
10. Application of Bayesian Method into a Mathematical Model for Airline Route Planning, Evaluation and profit maximization.
L.V. Androshchuk, National Aviation University, Ukraine.
Aidan Rooney, Trinity College, Dublin Institute of Technology, Ireland.
11. Some aspects of the alternative strategies choice for the auto transport enterprise restructuring through modeling.
I.V. Shevchenko, National Aviation University, Ukraine.
Y.A. Palamarchuk, Russia.
12. Development of Ukrainian logistics system in the conditions of the circular economy.
M.Y. Grigorak, L.V. Savchenko, National Aviation University, Ukraine.
13. Key features of development agro-logistics in Ukraine.
A.A. Antonov, A.M. Koptev, N.O. Bryzatiuk, L.V. Savchenko,

National Aviation University, Ukraine.

14. Prospects for the use of unmanned aircraft in the Ukrainian economy.

V.P. Fedyna, National Aviation University, Ukraine.

S.O. Marinchenko, Taras Shevchenko National University of Kyiv, Ukraine.

15. Modern tendencies of development of systems of self-service of passengers at airports.

O.M. Biliakovych, L.G. Biliakovych, O.V.Kharchenko, National Aviation University, Ukraine.

16. Advantages of using aviation in agriculture.

S.V. Pron, O. Soloviova, National Aviation University, Ukraine.

17. Application of certain Human Factors criteria to the actual aircraft maintenance engineers operational duties in aviation transport.

V.Yu. Ivannikova, National Aviation University, Ukraine.

Aidan Rooney, Technological University of Dublin, Ireland.

18. Some aspects of the use of unmanned aerial vehicles in agriculture.

M. Petrenko, National Aviation University, Ukraine.

SYMPOSIUM 13

HUMAN FACTOR IN AVIATION

Chairman – S. Yahodzinskyi, National Aviation University, Ukraine.

SESSION A

Language modeling of aviation information systems.

Chairmen – O. Kovtun, National Aviation University, Ukraine.

A. Paszkowska, University of Silesia, Poland

Secretary – T. Semyhinivska, National Aviation University, Ukraine.

11 October, 14:40, room 8.1412

1. Modern Aviation Terminology: Translation Problems.
I. Burlakova, A. Sibruk, National Aviation University, Ukraine.
2. Communicative graduate adaptation: overcoming problems at the workplace.
T. Davydenko, O. Lysak, T. Anpilohova, National Aviation University, Ukraine.
3. Human Factor in Translation of Aviation Scientific and Technical Literature.
Gabriele Simoncini, John Cabot University, Italy.
T.V. Zhuravel, N.I. Khaidari, National Aviation University, Ukraine.
4. Specific short terms in the pilot communication.
Y.O. Ivanov, National Aviation University, Ukraine.
5. The way of learning and studies of aviation terminology in the Ukrainian language.
E.W. Danylina, L.I. Sidorenko, T.M. Chuhlib, National Aviation University, Ukraine
6. Aeronautical symbols in Hart Crane's poems.
A.V.Kolisnychenko, National Aviation University, Ukraine.
7. Aviation English Proficiency as a Key Principle of Flight Safety.
L. Konoplianyk, V. Bazova, National Aviation University, Ukraine.
8. Model of forming professional and communicative competence of future translators in the aviation industry.
Natalia Bilous, National Aviation University, Ukraine.
9. Translation of aviation abbreviations.
Anna Paszkowska, University of Silesia, Poland.
A.V. Shcherbyna, National Aviation University, Ukraine.
10. Translation procedures, strategies and methods of aviation terminology.

O.K. Katerna, G.G. Yenchewa, National Aviation University, Ukraine.

11. Awareness of phraseology as a key safety factor in the aviation environment.

A.A. Zasluzhena, National Aviation University, Ukraine.

I.A. Soroka, “KROK” University, Ukraine.

12. Peculiarities of the professional communication in bilingual aviation space.

N. Romanchenko, I. Burlakova, National Aviation University, Ukraine.

13. Improving Pilot-Controller Communication.

Tetyana Tarnavska, Taras Shevchenko National University of Kyiv, Ukraine.

14. Machine translation of aviation related texts: profundity or nonsense?

M. Pylypchuk, National Aviation University, Ukraine.

A.M. Podstawska, University of Silesia in Katowice, Republic of Poland.

15. Aviation Technical Documentation in English as a Challenge for Non-Native Speakers.

A.M. Vozniuk, National Aviation University, Ukraine.

16. Specificity of aviation terminology rendering in translation (based upon English-Ukrainian movie “Sally: miracle on the Hudson”).

A. Ivanova (Rati), National Aviation University, Ukraine.

17. Language problem in aviation.

O. Nesterov, O. Maslak, National Aviation University, Ukraine.

18. Formation of English lexical competence on the basis of educational strategies.

G.V. Dyshleva, S.M. Dyshleva, Dragomanov NPU, Ukraine.

19. Phonetic mistakes of a pilot and crew members as passengers' safety hazard.

O.V. Polyakova, National National Aviation University, Ukraine.

20. Competence based approach to teaching professional English in training aviation specialists.

O. Akmaldinova, L. Budko, T. Shulga, National Aviation University, Ukraine.

21. Communicative competence of aviation specialists in the field of flight safety (aviation security).

G. Maksymovich, S. Tkachenko, O. Yashchuk, National Aviation University, Ukraine.

22. Language Aspect In Training Aviation Specialists.

N. Balatska, V. Borets, I. Kozeletska, N. Denysenko, National Aviation University, Ukraine.

23. Secondary nomination as a way of creation aviation terms.

T.M. Dyachuk, L.A. Dobrovol'ska, N.O. Senchylo, National Aviation University, Ukraine.

24. The significance of linguistic component for the efficient training of future specialists in the aviation industry.

L.V. Baranovska, National Aviation University, Ukraine.

SESSION B

Psychology of aircraft safe operation and modern ergatic systems

Chairmen – L. Pomytkina, National Aviation University, Ukraine.

Erman Akilli, Kirsehir Ahi Evran University, Turkey

Secretary – Y. Pryshupa, National Aviation University, Ukraine

11 October, 14:40, room 8.1203

1. Exhaustion as factor of reduction of working capacity of employees.

L.V. Pomytkina, O.V. Girchuk, National Aviation University, Ukraine.

E.A. Pomytkin, Institute of Pedagogical Studies and Adult Education, Ukraine.

2. Solving the problem of individualization of assessment of physical possibilities of students by means of physical culture.

V. Fotyniuk, National Aviation University, Ukraine.

3. Data collection for researching of the role of human factors after investigation of aviation events.

O.H. Ilkova, National Aviation University, Ukraine.

4. “Motivation on success” as index of intellectual mobility of future aviation specialists.

Y. Pryshupa, National Aviation University, Ukraine.

5. Approximation algorithm of criterial estimate of psychophysiological state of the operator of technological processes of enterprises.

Gulevets' Vadym Dmytrovych, National Aviation University, Ukraine.

6. Soft Power, Nation Branding and Civil Aviation Nexus: Turkish Airlines Case.

Erman AKILLI, Kirsehir Ahi Evran University, Turkey.

7. Human performance as a casual factor of aircraft accidents.

A.O. Davidenko, National Aviation University, Ukraine.

8. Informal communication system and personal fulfillment in scientific and technical activities.

L.Yakovytska, National Aviation University, Ukraine.

9. Innovative models of the university education system (international practices).

E. Luzik, A. Kokarjeva, National Aviation University, Ukraine.

10. Problem of pedagogical technologies of technological going near educating.

I. Dejneko, S. Gejchenko, I. Sky`dan, M. Vely`chenko, National Aviation University, Ukraine.

11. Responsibility for the Personal Health as Factor Of Reliability of the Future Airspecialist.

N. Orlenko, S. Orgeeva, V. Khachatryan, V. Koroty, National Aviation University, Ukraine.

12. Contingent Factors of Physical Activity of the Person in the Problem Field of Physical Education.

I.I. Vrzhesnevskiy, National Aviation University, Ukraine.

A.A. Vankov, MSU, Moscow, Russia.

T.I. Rakytna, L.O. Shyp, National Aviation University, Ukraine.

13. Methods for increasing the distress tolerance of students of public high schools for the extreme future professions.

V.M. Clebov, O.I. Podlesnyi, State University of Infrastructure and Technology, Ukraine.

V.I. Bobr, National Aviation University, Ukraine.

14. Entropy methods of human factor analysis applied to the problem of safety of aviation.

V.A. Kasianov, A.V. Goncharenko, National Aviation University, Ukraine.

15. Connection between stressresistance and psychological endurance of aviation specialists.

V.V. Zlahodukh, National Aviation University, Ukraine.

16. Anti-stress System Support for Ensuring Reliability of Flying Activities.

V.P. Korotkov, Company Limited Liability "Interbranch scientific and technical center "Ecology-2005", Ukraine.

17. Profiling as a method of aviation security: a comparative analysis of such experience in Israel and USA.

V.Y. Yudina, O.M. Vlasova-Chmeruk, National Aviation University, Ukraine.

18. Male-Female differences in Aviation (with focus on incidents/accidents).

S. Miroshnyk, O. Kovtun, National Aviation University, Ukraine.

SESSION C

Social, political, moral and psychological components of aviation safety.

Human factor management: current situation and prospects.

Anthropological and historical-cultural dimensions of aviation safety.

Chairmen – O.A. Khomeriki, National Aviation University, Ukraine.

J. Havu, Tampere University, Tampere, Finland

Secretary – M. Abysova, National Aviation University, Ukraine.

11 October, 14:40, room 8.803

1. Problems of aviation and astronautics in the programme "HORIZON 2020": Ukrainian vector.

T. Klynina, O.Yurchenko, National Aviation University, Ukraine.

2. Safety provision in Flight as a mockery of Sherman Alexie indigenous heroes.

Natalia Bereznikova, National Aviation University, Ukraine.

3. Political component in the system of preparation professionals for the aviation industry

N.G. Ishakova, National Aviation University, Ukraine.

4. The prospects of human resource management thanks to development of hybrid disciplines

O.A. Khomeriki, I.V. Litovchenko, A.K. Yakovenko, National Aviation University, Ukraine.

5. Transport education in the higher education system within the context of modern socio-economic processes
L.I. Liasota, M.V. Strihul, N.O. Polovaya, National Aviation University, Ukraine.
6. Requirements for personal and professional skills of aviation industry software engineers in the context of professional mobility formation.
N. Murkina, L. Tereminko, National Aviation University, Ukraine.
7. Anthropoc principle as a cosmological and philosophical problem.
M. Abysova, T. Shorina, O. Matyukhina, U. Koshetar, National Aviation University, Ukraine.
8. The Human Factor in the Aviation Activity of P.M. Nesterov.
V.M. Grebennikov, Yu.B. Smolnikov, National Aviation University, Ukraine.
9. The role of the suggestive technologies in the educational process of future aviators.
S.V. Kharytska, N.V. Glushanytsya, National Aviation University, Ukraine.
10. The idea of flight as the desire to expand human`s boundaries.
O. Skyba, O. Sidorkina, N. Sukhova, T. Poda, National Aviation University, Ukraine.
11. State Aviation Administration of Ukraine Website as a source of information about flight safety.
S.V. Lytvynska, National Aviation University, Ukraine.
12. Aviator Ievgraph Kruten: known and unknown pages of his life and career.
Oleg Zaharchuk, National Aviation University, Ukraine.
13. Analysis of aviation it specialists' competency in airline industry safety.
O. Hurska, N. Denysenko, National Aviation University, Ukraine.

14. The use of special purpose aircraft in different sectors of the national economy under the current conditions in Ukraine.
Zh. Paskal, National Aviation University, Ukraine.
O. Marchenko, Volodymyr Vynnychenko Central Ukrainian State Pedagogical University, Kropyvnytskyi.
15. Problems of test control implementation in reparation of future social workers of aviation industry.
O.M. Kotykova, N.Ie. Novikova, T.V. Petrenko, I.F. Timkin, National Aviation University, Ukraine.
16. Crew resource management application in commercial aviation.
S. Grynyuk, National Aviation University, Ukraine.
J. Havu, Tampere University, Tampere, Finland.
17. Aviation Infrastructure: Human Factor vs Automation.
S. Yahodzinskyi, I. Skyba, N. Chenbaj, A. Erovenko, National Aviation University, Ukraine.
18. Theoretical and methodological principles for determining the contradictions of the system of sociological support of aviation activity.
V.S. Kornilov, N.P. Pyvovarova, N.I. Hryshchenko, National Aviation University, Ukraine.
19. Main trends in the development of world civil aviation.
O.V. Iliencko, O.V. Klochkivskyi, National Aviation University, Ukraine.
20. Perception of space exploration in the Grass Dancer by Susan Power.
Oksana Shostak, National Aviation University, Ukraine.
21. Aviation security in a globalized environment Summary.
L. Chupriy, Yu. Medvedeva, I. Shapoval, National Aviation University, Ukraine.

SYMPOSIUM 14
**PROBLEMS OF DEVELOPMENT OF THE MODERN
AIRPORT**

Chairman – A. Bieliatynskyi, National Aviation University, Ukraine.

Secretary – A. Vyshnevskya, National Aviation University, Ukraine.

12 October, 13:30, room 5.303.

1. Problems of modern airport development.
R.O. Levchuk, National Aviation University, Ukraine.

2. Problems of influence of urban infrastructure on aviation safety of modern airport.
S. Deviatkina, National Aviation University, Ukraine.

3. Modern trends in the development of the international hub airports.
Y. Rubanov, Airport Consulting Vienna.
I.V. Ivanova, National Aviation University, Ukraine.
K.V. Astakhov, Adviser to CEO, Boryspil International Airport.

4. Calculation of losses from rainfall falling in the design of culverts and drainage systems on highways.
Nikolaj Sytnichenko, Donbas National Academy of Civil Engineering and Architecture, Ukraine.
Andrii Bieliatynskyi, He Yulin, National Aviation University, Ukraine.

5. Designing traffic distribution for non-signal intersection of transport interchanges in one level in the central business districts of the city.
Andrii Bieliatynskyi, He Yulin, Master, Valeriy Pershakov, Kateryna Lysnytska, National Aviation University, Ukraine.

6. Problems of counteraction to fire danger and fire resistance of high-rise buildings.
Valerii Pershakov, Andrii Bieliatynskyi, Evgenii Bakulin, Gregory Bolotov, Ivanna Martynenko, National Aviation University, Ukraine.

7. Sensitivity quantification of airfield rigid pavement stress responses using “Aerodrom 380” program.

O.V. Rodchenko, National Aviation University, Ukraine.

8. Geoinformation providing of airport development.

Olena Boyko, National Aviation University, Ukraine.

SYMPOSIUM 15

AIR AND SPACE LAW: INTERNATIONAL AND NATIONAL ISSUES OF SECURITY

Chairman – I. Sopilko, National Aviation University, Ukraine.

Secretary – V. Cherevatyuk, National Aviation University, Ukraine.

11 October, 13:30, room 1.447

1. Criminal legal protection of safety of civil aviation under the legislation of Ukraine (art. 276-282 of CC of Ukraine).

S.Y. Lychova, N.O. Semchuk, National Aviation University, Ukraine.

2. Implementation of ICAO standards as a condition for the development of modern regulatory provision of the domestic aviation industry.

S.G. Holovko, National Aviation University, Ukraine.

3. Ensuring the Safety of International Civil Aviation as a Main Principle of International Air Law.

S.V. Vyshnovetska, Kh.V. Kmetyk, National Aviation University, Ukraine.

4. Public financial-legal regime in the field of civil aviation security.

Yuriy Pyvovar, National Aviation University, Ukraine.

5. Legal Regulation of mergers and acquisitions of aviation industry.

V.P. Kozyreva, National Aviation University, Ukraine.

6. About a system of international.

I.L. Borodin, National Aviation University, Ukraine.

O.M. Myronets, National Aviation University, Ukraine.

7. Concepts of aviation security and aviation safety in air law.

O.M. Myronets, National Aviation University, Ukraine.

8. Features of criminal liability for fulfilling professional duties by a crew member or air traffic control dispatcher while being intoxicated or under the influence of narcotic or psychotropic substances.

V.N. Kubalsky, K.P. Braslavets, National Aviation University, Kyiv, Ukraine,

9. Problems of realization of the right to compensation in case of flight delay.

N. Khotsianovska, National Aviation University, Ukraine,

S. Khomyachenko, National University of Life and Environmental Sciences of Ukraine, Ukraine.

10. International criminal liability for the aggression of the Russian Federation against Ukraine.

Kostiantyn Nesterenko, National Aviation University, Ukraine.

11. The regulatory framework for the functioning of the international standard of electronic clearance and cargo escorting e-Freight.

V.S. Volostnykh, Academy of Public Administration under the aegis of the President of the Republic of Belarus, the Republic of Belarus.

SYMPOSIUM 16

ASPECT OF THE EDUCATION OVER THE LIFE

Chairman – O. Dikova-Favorska, National Aviation University,
Ukraine.

Secretary – I. Polishchuk, National Aviation University, Ukraine.

10 October, 15:00, room 8a-014

1. Fighting against stereotypes of thinking is a key challenge for modern education.

Galina P. Balabanova, National Aviation University, Ukraine.

2. Algorithm of developing professional targets for a specialist with functional limitations of health in the system of higher education.

Olena Dikova-Favorska, National Aviation University, Ukraine.

3. The impact of continuing education on the development of personnel of the enterprise.

T.V. Sivashenko, National Aviation University, Ukraine.

4. Development of continuing education in the conditions of educational reforms in Ukraine.

Iryna Deinega, National Aviation University, Ukraine.

5. Management aspect of education throughout life. Behavior economy in the conditions of informational and innovative development of society.

I.P. Panasiuk, A.O. Tertychna, National Aviation University, Ukraine.

SYMPOSIUM 17

ICAO SAFETY STRATEGIES

Chairman – G.Suslova, National Aviation University, Ukraine.

Secretary – O.Bilous, National Aviation University, Ukraine.

11 October, 13:30, room 8.206

1. The significance of the English language training for teachers of higher aviation education establishments.

Oleksandr Bilous, ICAO Training Institute, National Aviation University, Kyiv, Ukraine.

2. ICAO Safety Strategies.

E. Costei, Euro Aviation Consulting Team Ltd, the UK.

3. Determining the angle of attack as a critical element of flight.

Valeriy Migunov, "Antonov" state enterprise, Ukraine.

4. Aviation English training centers and their compliance with ICAO

Doc 9835 requirements.

Olga Berezhko, ICAO Training Institute, National Aviation University, Ukraine.

5. The role of state aviation authorities' support on Aviation Security in the global context.

Igor Dobrovolskyi, ICAO Training Institute, National Aviation University, Ukraine.

6. Some aspects on the assurance of air cargo security.

Oleksandr Kirichenko, ICAO Training Institute, National Aviation University, Ukraine.

7. Comparative evaluation of unmanned aerial vehicle control system.

Kateryna Stadnik, ICAO Training Institute, National Aviation University, Ukraine.

8. Human Factor in Aviation Security.

Tetiana Zagnii, ICAO Training Institute, National Aviation University, Ukraine.

Notes