

INTERNATIONAL CIVIL AVIATION ORGANIZATION
NATIONAL ACADEMY OF SCIENCES OF UKRAINE
MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL AVIATION UNIVERSITY

PROGRAM

**THE SIXTH WORLD CONGRESS
“AVIATION IN THE XXI-st CENTURY”**

**Safety in Aviation
And Space Technologies**

September 23-25, 2014

Kyiv

COFOUNDER

- National Aviation Academy State “Azerbaijan Hava Yollari” Closed Joint-Stock Company, Azerbaijan
- Georgian Aviation University, Georgia
- JSC “Civil Aviation Academy”, Kazakhstan
- Nanchang Hangkong University, China
- Vilnius Gediminas Technical University, Lithuania
- The State School of Higher Education in Chelm, Poland
- The International University of Logistics and Transport in Wroclaw, Poland
- Polish – Ukrainian Research Institute, Poland-Ukraine

SCHEDULE

of the Sixth World Congress
“**AVIATION IN THE XXI-st CENTURY**”
Safety in Aviation and Space Technology

23.09.2014

- 8.00-10.00 Registration of participants
- 10.00-12.00 Plenary session
- 13.30-18.00 Symposia sessions

24.09.2014

- 9.00-13.00 Symposia sessions
- 13.00-14.00 Lunch
- 14.15-18.00 Symposia sessions

25.09.2014

- 9.00 – 12.00 Symposia sessions

SYMPOSIUM 1
MODERN SPACE AND AVIATION TECHNOLOGIES

**1.1. Modern tribotechnologies in aircraft and general purpose
mechanical engineering**

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

Secretary – **O. Tisov**, National Aviation University, Ukraine.

24 September, 13³⁰,
room 2.406

1. System analysis of discrete-oriented structure surface properties.
V. Marchuk, National Aviation University, Ukraine.

2. Factors of crack initiation and microcrack propagation in
aluminum.
O.V. Bashta, National Aviation University, Ukraine.

3. The mechanism of friction between surfaces with regular micro
grooves under boundary lubrication.
M. Kindrachuk, National Aviation University, Ukraine.
O. Radionenko, Pryazovskiy State Technical University, Ukraine.
**A. Kryzhanovskiy, V. Marchuk, National Aviation University,
Ukraine.**

4. Nickel-based eutectic alloy for composite electrolytic coatings.
**A.O. Kornienko, S.V. Fedorchuk, National Aviation University,
Ukraine.**

5. Gradient composite coatings for working surfaces of braking
devices.
M. Kindrachuk, O. Tisov, National Aviation University, Ukraine.

6. Wear resistant protective materials for rotor blades of aircraft gas
turbine engines.
**T. Cherepova, G. Dmitrieva, Institute for Metal Physics NASU,
Ukraine.**

A.Duhota, M. Kindrachuk, O. Tisov, National Aviation University, Ukraine.

7. Wear resistance of vacuum-arc and electroplated coatings in the condition of fretting-corrosion.

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

8. Formation of wear resistant surface layers quality by electric-strengthening of sprayed coatings.

N.A. Miedvedieva, O.V. Radko, National Aviation University, Ukraine.

9. Biogeochemical aspects of tribology.

V. Shmarov, V. Labunets, O. Samkov, National Aviation University, Ukraine.

I. A. Kozlova, Zabolotny Institute of Microbiology and Virology, NAS Ukraine, Ukraine.

R.Y. Belevtsev, Institute of Geochemistry earth environment NAS Ukraine, Kyiv, Ukraine.

10. Tribological properties of polymer composite materials.

O.V. Radko, V.F. Labunets, L.S. Bratitsa, V.V. Zagrebelnyi, National Aviation University, Ukraine.

O.V. Andreev, SE «Antonov», Ukraine.

11. The influence of external factors on the laws of initial running in of antifrictional systems.

M.V. Kindrachuk, J.L. Khlevna, National Aviation University, Ukraine.

12. Self-reinforced heat-resistant organoplastics: advanced materials of tribological purpose.

A.I. Burya, O.A. Naberezhnaya, Dneprodzerzhynsk State Technology University, Ukraine.

13. Regularities of friction and wear amorphous-crystalline coating on the basis of zirconium.

E.V. Kharchenko, National Aviation University, Ukraine.

14. Resistance to wear of detonation coatings Cr-Si-B in a vacuum which contains molybdenum disulfide.

S.D. Nedayborshch, SE «PLANT 410CA», Ukraine.

E.V. Kharchenko, National Aviation University, Ukraine.

1.2. Aerodynamics and flight safety

Chairman – **S. Ischenko**, National Aviation University, Ukraine.

Secretary – **A. Bondar**, National Aviation University, Ukraine.

24 September, 10⁰⁰,
room 11.229

1. The experimental equipment for wind tunnel TAD - 2 NAU.

S.A. Ischenko, A.V. Bondar, National Aviation University, Ukraine.

2. The assessment of the effectiveness wing with soft skin.

G. Ortamevzi, D.N. Zinchenko, Kyiv Polytechnic Institute, Ukraine.
V.V. Zilinka, National Aviation University, Ukraine.

3. Calculation research of aerodynamic characteristics of the wings small elongation for layout the aircraft with high bearings properties.

A. Rahmati, D.N. Zinchenko, Kyiv Polytechnic Institute, Ukraine.
V.V. Zilinka, National Aviation University, Ukraine.

4. Research of technological parametres of manufacture of polymeric pipelines of aircrafts for increase of safety of flights.

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

5. Features of experimental research of production of aviation polymeric pipelines are for the increase of reliability of exploitation of air ships.

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

1.3. Fatigue and fracture of aircraft structures

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

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

24 September, 9⁰⁰,
room 11.220

1. Negative side effects caused by corrosion preventive compounds.
V.N. Shmarov, S.R. Ignatovich, M.V. Karuskevich, National Aviation University, Ukraine.

2. Studying of steel 12H18N10T physical-mechanical properties changes by resonance method of inelasticity controlling.
S.S. Yutskevych, Rao De, Liu Yong, National Aviation University, Ukraine. G.G. Pisarenko, A.M. Maylo, Institute of Problems of Strength NASU, Ukraine.

3. Influence of local fatigue damage on the crack propagation rate.
S.V. Shchepak, O.P. Linnik, V.M. Oleksiuk, National Aviation University, Ukraine.

4. Analysis of the plastic zone size and shape for the aluminium alloys.
T.P. Maslak, D.N. Kostenuik, National Aviation University, Ukraine.

5. Fatigue crack growth modelling in thin plate under asymmetrical cyclic loading allowing for damage accumulation.
A.V. Plashchynska, V.P. Golub, Institute of mechanics by S.P. Timoshenko NASU, Ukraine.
M.V. Karuskevich, National Aviation University, Ukraine.

6. Damage of fiber reinforced polymer matrix composites from a drop-weight impact event.
O.A. Schevchenko, O.I. Olefir, O.E. Skrypnikov, National Aviation University, Ukraine.

7. To the question of the airplane construction damage by the soil solid particles in the operation.
I.O. Golovchenko, National Aerospace University «KhAI», Ukraine.

1.4. Problems of recovery controllability of the aircrafts

Chairman – **V. Kazak**, National Aviation University, Ukraine.

Secretary – **D. Shevchuk**, National Aviation University, Ukraine.

25 September, 15²⁰,
room 10.117

1. Perspective of ion-marker methods in wing diagnosis.
V. Kazak, I. Zharin, National Aviation University, Ukraine.
2. Problem of increasing the lifetime of wireless sensor networks.
O. Lysenko, National Aviation University, Ukraine.
V. Novikov, National Technical University «KPI», Ukraine.
3. Automation of project management of modernization aviation equipment.
Y. Zakharchenko, National Aviation University, Ukraine.
4. Wavelet transform for estimating the technical state aviation gas turbine engine.
S. Enchev, S. Tovkach, National Aviation University, Ukraine.
5. Dynamic uninterruptible power supply.
N. Krasnoshapka, V. Tikhonov, T. Mazur, National Aviation University, Ukraine.
6. The mathematical formulation of movement optimization of flying robots group based on unmanned aerial vehicles.
O. Lysenko, E. Tachinina, H. Panchenko, National Aviation University, Ukraine.
7. Mathematical model of reliability wireless sensor network node.
P. Lazarchuk, National Aviation University, Ukraine.
A. Zarutskya, T. Pryscheva, I. Alekseeva, National Technical University «KPI», Ukraine.

8. Reliability and operation characteristics of civil aviation airfield automated light signal systems.

S. Ilienکو, National Aviation University, Ukraine.

9. Integration of modern smart control systems in aircraft power distribution system.

V. Zakharchenko, V. Kozub, National Aviation University, Ukraine.

10. Probabilistic and classical approaches to routing algorithms in sensor networks.

P. Lazarchuk, V. Novikov, National Aviation University, Ukraine.

V. Volovik, I. Alekseeva, National Technical University «KPI», Ukraine.

11. Decisions making support system for pilots in extra situation.

M. Vasilyev, National Aviation University, Ukraine.

12. Methods of intellectualization control of self-organizing radio networks.

E. Tachinina, National Aviation University, Ukraine.

D. Harkavyi, L. Afanaseva, National Technical University «KPI», Ukraine.

13. Method of improving the efficiency of wireless sensor networks.

S. Galchenko, National Aviation University, Ukraine.

O. Kafidova, V. Petrova, National Technical University «KPI», Ukraine.

14. Automatic wing leading edge airplane aerodynamic diagnostics system in flight condition.

D. Shevchuk, M. Levchenko, O. Pavlenko, National Aviation University, Ukraine.

15. Methods of peer review of quality indicators of telecommunication systems the disaster zone in terms of destructive influences.

S. Galchenko, National Aviation University, Ukraine.

O. Velykyi, T. Prischepa, National Technical University «KPI», Ukraine.

16. The organizational structure of airport electrical energy consumption efficiency management.

A. Aslanyan, V. Zakharchenko, N. Sokolova, National Aviation University, Ukraine.

17. Mathematical model of energetic object.

A. Aslanyan, O. Belska, National Aviation University, Ukraine.

18. Stabilization of height hovering of helicopter in conditions of discrete external perturbations.

V. Kazak, N. Tymoshenko, National Aviation University, Ukraine.

1.5. Engines and Power Installations

Chairmen – **M. Kulyk**, National Aviation University, Ukraine.

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

23 September, 13³⁰,
room 1.131

1. Experimental diagram of boundary stresses in thermocyclic testing of heat resisting materials and analytical estimation of durability.

M. Kulyk, M. Koveshnikov, L. Volyanska Y. Petruk, National Aviation University, Ukraine.

2. Method for determination of gas turbine engine main parameters.

V.V. Panin, Kyiv State Maritime Academy, Ukraine.

L.G. Volyanska, O.I. Chumak, National Aviation University, Ukraine.

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

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

4. Integral method of gas ejectors calculating in mixing chamber with uneven flow by sections.
K.I. Kapitanchuk., P.I. Grekov, N.M. Andriyishyn, M.Y. Bogdanov, National Aviation University, Ukraine.
5. Modeling of flow on the plate.
Yu.Yu. Tereshchenko, A. Tehrani, J. Abolhassanzade, National Aviation University, Ukraine.
6. Numerical simulation of flow at compressor stage.
Yu.M. Tereschenko, K.V. Doroshenko, Yu.Yu. Tereschenko, National Aviation University, Ukraine.
7. Gas turbine engines diagnosing with neural network: data for static network training.
O.S. Yakushenko, O.V. Popov, K.V. Doroshenko, Y.Y. Tereshchenko, V.E. Miltsov, P.O. Vlasenko, National Aviation University, Ukraine.
8. Solution of inverse problems of dynamics of an aircraft engine turbopump to reduce its vibration.
A.V. Goroshko, V.P. Royzman, Khmelnsky National University, Ukraine.
9. Operative control of technical state of gas turbine units.
V.V. Kozlov, National Aviation University, Ukraine.
10. Method of consumption determination through secondary flow of TFE.
I.I. Gvozdetskiy., I.F. Kinaschuk, F.I. Kirchu, M.I. Kinaschuk, National Aviation University, Ukraine.
- 11 Control system of valves gas compressor unit (GPU).
E.P. Yasinitskiy, National Aviation University, Ukraine.

1.6. Latest technologies for maintaining aircraft airworthiness

Chairman – **S.O. Dmitriev**, National Aviation University, Ukraine

Secretary – **E.A. Sapeluk**, National Aviation University, Ukraine

24 September, 10⁰⁰,
room 11.229

1. Formalization of procedures and determining the optimal maintenance of aircraft and aircraft engines programs.

S. Dmitriev, V. Burlakov, O. Popov, D. Popov, National Aviation University, Ukraine.

2. Improving of aircraft ground handling management system at the airport.

A.A. Tamargazin, I.I. Linnik, T.Y. Kramarenko, National Aviation University, Ukraine.

3. Estimation of kinetic characteristics and modification activation energy of "ИИХ15" in aviation fuel "TC-I".

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

4. Transient response of hydraulic pressure regulators.

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

5. Fuzzy model for diagnostics of GTE state.

L.A. Zhuravlova, E.A. Sapeluk, National Aviation University, Ukraine.

6. Effect of magnetic abrasive machining of gas turbine engine blades in repair process on their service life.

Yu.S. Nalimov, G.S. Pysarenko Institute for Problems of Strength, NAS of Ukraine, Ukraine.

E.I. Yurchenko, A.S. Tugarinov, National Aviation University, Ukraine.

7. Gas turbine engine blades fatigue strength test after welding repair for the purpose of their airworthiness maintenanc.

*Yu.S. Nalimov, G.S.Pysarenko Institute for Problems of Strength,
NAS of Ukraine, Ukraine.*
E.I. Yurchenko, A.S. Tugarinov, National Aviation University, Ukraine.

8. Increasing small electromagnetic valves reliability and service life.
*Y.N. Rikunich, Y.B. Fedorichko, Public Company «Kiev central
bureau of valve design», Ukraine.*
*E.I. Barilyuk, G.I. Zayonchkovskiy, National Aviation University,
Ukraine.*

1.7. Methods and tools for technical and medical diagnostics

Chairmen – **Y. Kuts**, National Aviation University, Ukraine.
Secretary – **E. Suslov**, National Aviation University, Ukraine.

23 September, 14⁰⁰,
room 11.311.

1. Measurement systems of characteristics of radio emission on the
basis of acoustooptic spectrum analyzer.
G. Sokolovska, National Aviation University, Ukraine.

2. Using NDT methods for maintenance diagnosing.
I.P. Bilokur, National Aviation University, Ukraine.

3. Procedure of statistical data processing in non-destructive testing.
S.R. Sunetchiieva, National Aviation University, Ukraine.

4. Method of measurement the human operator professional fitness to
the extreme activity.
*E. Volodarsky, National Technical University of Ukraine "KPI",
Ukraine.*
L. Kosheva, O. Bulyhina, National Aviation University, Ukraine.

5. Application of artificial neural networks for prognosis in
medicine.
*M. Burichenko, M. Dvornik, O. Ivanets V. Kucherenko, National
Aviation University, Ukraine.*

6. Hardware and software system of evaluation criteria of the additional information CNS.

V.D. Kuzovyk, Y.Y. Onykienko, National Aviation University, Ukraine.

7. Hardware-software system for evaluation operator's psychophysiological state.

V.D. Kuzovyk, A.D. Gordieiev, National Aviation University, Ukraine.

8. Uncertainly Estimation in Phase Ultrasound Method.

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

1.8. Automated process control systems

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

Secretary – **R.Bohdan**, National Aviation University, Ukraine.

24 September, 9⁰⁰,
room 5.411.

1. Algorithm of Gaussian particle filter for the trajectory estimation in correlation extreme navigation system.

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

2. Comparative analysis of data fusion algorithms in inertial-satellite navigation systems.

M.K. Filyashkin, National Aviation University, Ukraine.

3. Stability borders and regions of stabilization systems of inertial control objects.

A. Ablesimov, National Aviation University, Ukraine.

4. Optimal choice of the technical means of heading, pitch and bank channel subsystems of navigation equipment simulation table.

V.M. Sineglazov, S.O. Dolgorukov, National Aviation University, Ukraine.

5. Increase of effectiveness of hardware-in-the-loop test bench.
B.V. Roman, National Aviation University, Ukraine.
6. The methodic of cleanroom ventilation and air conditioning system design.
V.V. Kalinichenko, V.N. Fedosenko, E.I. Andrienko, National Aviation University, Ukraine
7. Effectiveness improvement of cleanroom design.
V.V. Kalinichenko, V.N. Fedosenko, N.S. Voropaev, National Aviation University, Ukraine.
8. Integration design complex of cad systems.
V.M. Sineglazov, A.P. Godny, National Aviation University, Ukraine.
9. Dynamic data integration in the design of wind-power plant.
A.V. Kulbaka, National Aviation University, Ukraine.
10. Geometric sizes determination of clean zones.
M.I. Krynetskyi, V.N. Fedosenko, E.N. Radko, National Aviation University, Ukraine.
11. An intelligence image processing system.
Yu.M. Kemeniash, National Aviation University, Ukraine.
O.I. Chumachenko, KPI, Ukraine.
12. The optimal redistribution time of simulator training.
Ju.M. Shmelev, National Aviation University, Ukraine.
13. Algorithm of inertial navigation system correction by means of correlation extreme navigation system.
M.P. Mukhina, I.V. Seden, National Aviation University, Ukraine.
14. On stability-providing method of continued fraction approximation.
O.V. Melnikov, National Aviation University, Ukraine.
O.V. Glushko, R.Yu. Tkachev, Donbass State Technical University, Alchevsk, Ukraine.

15. Software control system of solar power plant.

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

1.9. Specialized Computer Systems and CALS – Technology in Aviation

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

Secretary – **V. Treityak**, National Aviation University, Ukraine.

24 September, 14⁰⁰,
room 11.207

1. Development of information system of the assessment of complexity of project works.

P. Pavlenko, S. Tolbatov, National Aviation University, Ukraine.

2. Information technology of consolidation and synchronization of production and normatively certificate information.

V. Treityak, National Aviation University, Ukraine.

3. Analysis of the amplitude parameters of acoustic emission by friction composites.

S. Filonenko, T. Nimchenko, National Aviation University, Ukraine.

4. Using cloud services in educational process.

V.V. Gavrylenko, National Transport University, Ukraine.

P. Pavlenko, National Aviation University, Ukraine.

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

5. 3D modeling of experimental stand for research n-mass chain transmission.

O.I. Pilipenko, A.V. Poluyan, Chernihiv National Technological University, Ukraine.

D. Barannik, National Aviation University, Ukraine.

6. Vehicle traffic safety control in non-stationary environment.
G.L. Baranov, National Transport University, Ukraine.
P.Pavlenko, National Aviation University, Ukraine.
I.V. Tyhonov, Kyiv State Academy of Water Transport, Ukraine.
V.L. Mironova, O.M. Prohorenko, National Transport University, Ukraine.
7. The method of analysis and performance management of dispersed production planning.
A. Khlevnyy, National Aviation University, Ukraine.
8. Using ARIS SIMULATION toolset for modeling the process of evaluating IT-specialists' motivation to work.
S.V. Koziyakov, National Aviation University, Ukraine.
9. Method of estimating the Integrated competence of an IT-specialist.
Y.V. Vlasenko, National Aviation University, Ukraine.
10. The reliability model of information security systems.
N.S. Pelikh, National Aviation University, Ukraine.
11. Developing analysis of job complexity for needs of national trade market.
O. Zaritskyi, Firma "T.M.M." Ltd, Ukraine.
P. Pavlenko, National Aviation University, Ukraine.
V. Sudik, Allbau Software Competence Center in Ukraine.
12. Determination of efficiency of functioning of the integrated informative system.
M.V. Dvoiglazova, Chernigiv State Institute of Economic and Management, Ukraine.
T. Zaharchuk, National Aviation University, Ukraine.
13. Computer design of finish processing of non-rigid details.
V.I. Kalchenko, V.V. Kalchenko, A.M. Yeroshenko,
A.V. Kolohoida, ChNTU, Ukraine.

14. 3D-modeling design of main and rod journals with crossed axes crankshaft and circle grinding process.

V.I. Kalchenko, D.V. Kalchenko, ChNTU, Ukraine.

15. The geometry mathematical modelling of the overhauled valve-seat surfaces in the valve timing gear.

Y.Zharii, H.Veremei, Chernihiv National University Of Technology, Ukraine.

16. Mathematical model of «grain-bundle» system under strain.

V.Y. Solod, D.G. Muzychka, A.Y. Gorshkov, DSTU, Ukraine.

17. The transformation of the methodology of the «production-realization-consumption» system influenced by information technologies.

O. Cherednikov, M. Yurchenko, V. Tolkachew, Chernihiv National Technological University, Ukraine, Chernihiv Public organization: «Institute of Standardization of the Trade and Accounting Nomenclature».

A. Sereda, National Aviation University, Ukraine.

18. Information analysis aspects spatial dimension relations.

A.A. Borisov, S.G. Bondarenko, Chernihiv National Technological University, Ukraine.

V. Kudryakov, National Aviation University, Ukraine.

1.10. The intellectual robot-technical measuring complexes and systems

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

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

24 September, 10⁰⁰,
room 11.403.

1. Vibrating-string accelerometer for robotics complexes on air- and spacecraft.

O.M. Bezvesilna, National Technical University of Ukraine “Kyiv Polytechnic Institute”, Ukraine.

L.O. Chepiuk, Zhytomyr State Technological University, Ukraine.

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

2. Informative safety economic control system.

O. V. Boychenko, Tavricheskiy National University, Simferopol', Russian Federation.

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

3. Information technology of adaptive formation overlapping levels of monitoring systems.

S. V. Holub, Cherkasy National University CNU, Ukraine.

V. Y. Nemchekno, Cherkasy State Technological University, Ukraine.

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

4. The task of tracking a mobile robotic systems on a route.

B.P. Ivanov, Central Reserch of Armament of Armed Forces of Ukraine, Ukraine.

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

5. Formation's procedure of the nanoclusters: heterotransitions and heterosystems at the information technology.

V.V. Kovalchuk, State Environmental University, Odessa, Ukraine.

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

V.L. Kostenko, State Polytechnic University, Odessa, Ukraine.

O.O. Panchenko, State Computer Science Technology College, Odessa, Ukraine.

6. Research of the «determined chaos» phenomenon in the RL-diode electric circuit of sinusoidal current.

V.Y. Kucheruk, S.Sh. Katsyv, V.S. Mankovska, Vinnytsia National Technical University, Ukraine.

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

7. Gravimetr for robotics complexes on air- and spacecraft.
V.P. Kvasnikov, National Aviation University, Ukraine.
O.M. Bezvesilna, National Technical University of Ukraine “Kyiv Polytechnic Institute”, Ukraine.
A.H. Tkachuk, Zhytomyr State Technological University, Ukraine.
8. Semiconductor strain transducers for control systems deflected mode.
V.P.Kvasnikov, National Aviation University, Ukraine.
T.I. Ganeva, Odessa State Academy of Technical Regulation and Quality, Ukraine.
9. Implementation algorithm of diagnostic engine performance for mobile robot.
S.V. Marchenkova, V.P. Kvasnikov, National Aviation University, Ukraine.
10. Voltage control system of magnetoelectric generator.
V.S. Martyniuk, National Aviation University, Ukraine.
V.O. Grishin, College of National Aviation University, Kryvyi Rig, Ukraine.
11. Approaches to the automation of the processes of acoustic drying and to the design of sound generators.
K.J. Okhrimenko, V.A. Koretskyi, Cherkasy State Technological University, Ukraine.
O.I. Osmolovskyi, National Aviation University, Ukraine.
12. Influence of intrasystem perturbations on gradient adaptation process of information system to the external environment.
V.V. Skachkov, H.D. Bratchenko, A.N. Efimchikov, Odessa State Academy of Technical Regulation and Quality, Ukraine.
V.M. Ilchenko, National Aviation University, Ukraine.
13. Elements of the theory of construction of methods assessment of dynamic uncertainty in measurement of parameters motion robotic complexes.
O. M. Vasilevskyi, Ministry of Education and Science of Ukraine.
O.I. Osmolovskyi, National Aviation University, Ukraine.

14. Investigation of knitted soldered copper wire meshes for lightning protection of carbon fiber composite skin of aircraft
L.R. Vishnyakov, V.J. Kokhaniy, Institute for Problems of Materials Science NASU, Ukraine.
V.P. Kvasnikov, National Aviation University, Ukraine.
I.I. Chernyavskiy, ASTC «Antonov», IPMS NASU, Ukraine.
O.V. Zubkov, Institute for Problems of Materials Science NASU, Ukraine.

1.11. Information security in aviation

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

Secretary – **S. Gnatyuk**, National Aviation University, Ukraine.

24 September, 14⁰⁰,
room 11.111.

1. Complex approach to mitigate cyberthreats in civil aviation.
O.G. Korchenko, S.O. Gnatyuk, National Aviation University, Ukraine.
2. Mutual control based on quantum secret sharing for remote access in electoral process automation system.
Ye.V. Vasiliu, I.V. Limar, O.S. Popov Odesa National Academy of Telecommunications, Ukraine.
3. Integer representation with delayed carry.
V.Yu. Kovtun, A.O. Okhrimenko, National Aviation University, Ukraine.
O.L. Stokipniy, Kharkiv National University of Economic, Ukraine.
4. Dynamic ontology of air traffic management systems: networking and modelling.
A.L. Antipov, Eastern Siberia Air Navigation, FSUE ATM Corporation, Russia.
N.A. Kinash, A.I. Trufanov, Irkutsk State Technical University, Russia.
A.A. Tikhomirov, INHA University, Republic of Korea.
S.O. Gnatyuk, R.A. Umerov, National Aviation University, Ukraine.

5. Comparative analysis of methods of post-quantum cryptography based on lattice theory.

M.O. Ryabyy, European University, Ukraine.

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

6. Adaptive mechanisms using in information resources security systems.

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

M.V. Zakharova, Cherkasy State Technological University, Ukraine.

7. Basic criteria of CERT's working efficiency.

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

8. System and models for computer networks and systems penetration testing.

Yu.B. Kovalenko, E.O. Sokolov, National Aviation University, Ukraine.

9. Quantum game theory in classification of quantum information security methods.

S.O. Gnatyuk, T.O. Zhmurko, National Aviation University, Ukraine.

10. Base parameters of forecasting and identification of computer attacks in information and communication systems.

A.I. Hizun, S.I. Topcheev, National Aviation University, Ukraine.

M.O. Ryabyy, European University, Ukraine.

11. Bugs searching device.

Z.O. Samosud, National Aviation University, Ukraine.

12. Method of template hiding data in vector image structure.

V.M. Kinzeryavyy, O.M. Kinzeryavyy, National Aviation University, Ukraine.

13. Choice of methods of optimal search of information protecting tools from unauthorized access to computerized systems

O.V. Gavrylenko, D.S. Matviiv, National Aviation University, Ukraine.

14. Modern analytical fraud detection systems.

Ya.B. Khanko, National Aviation University, Ukraine.

15. Economic component of information security of aviation infrastructure .

V.V. Kozlovskiy, A.V. Mischenko, National Aviation University, Ukraine.

16. Metrological reliability of technical information protection.

T.L. Scherbak, National Aviation University, Ukraine.

17. Criteria for the identification of critical infrastructures of the state.

S.O. Gnatyuk, V.M. Sidorenko, National Aviation University, Ukraine.

18. Modern methods and neural network model parameter estimation of information systems security.

O.G. Korchenko, I.A. Terejkowski, National Aviation University, Ukraine.

1.12. Computer systems

Chairman – **O. Litvinenko**, National Aviation University, Ukraine.

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

23 September, 15⁰⁰,
room 6.200.

1. Software for automated booktext manipulation.

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

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

2. Analysis of method defends from DDOS attack.
M.N. Duraid, I.F. Kashkevich, National Aviation University, Ukraine.
3. Model wireless networks as a queueing system with flow of demands of a complex structure.
O.M. Dyshliuk, National Aviation University, Ukraine.
4. Computer appliance implementation of load distribution in neural-like systems.
Y.B.Artamonov, O.O. Zholdakov, G.N. Kremenetskiy, National Aviation University, Ukraine.
5. Computational mathematical method of fluid dynamics problems solving.
O.M. Glazok, National Aviation University, Ukraine.
6. An algorithm for information processing in implementation of landscape data dynamic loading.
O.M. Glazok, F.S. Khodchenko, National Aviation University, Ukraine.
7. Methods modeling control processes complex economic systems.
G.M. Kvita, Kyiv National University of Technologies and Design, Ukraine.
O.M. Dyshliuk, National Aviation University, Ukraine.
8. Analytical technologies for recognition of aerial photos.
O.S. Vasyliyev economic Co.Ltd "Vesta", Ukraine.
O.O. Belyakov, National Aviation University, Ukraine.
9. Basic principles of the e-government.
V. Klobukov, S. Volhonskiy, D. Samofalov, V. Ryabokon, National Aviation University, Ukraine.
10. Electronic documents management systems of higher education institutions as a component of e-government.

*S. Volhonskiy, D. Samofalov, L. Klobukova, O.Zykov
National Aviation University, Ukraine.*

11. Requirements for infrastructure electronic document management systems in higher education institutions.

*V. Klobukov, S. Volhonskiy, D. Samofalov, V. Ryabokon,
National Aviation University, Ukraine.*

12. The basic principles of automated systems deployment inside containers virtualization software in a project.

*V. Klobukov, V. Ryabokon, O.Zykov, L.Klobukova
National Aviation University, Ukraine.*

1.13. Advanced information technologies in aviation

Chairman – **M. Sidorov**, National Aviation University, Ukraine.

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

26 September, 15⁰⁰,
Room 6.313.

1. Green software life cycle model.

N.A. Sidorov, National Aviation University, Ukraine.

2. Methodologies for ontology creation.

*I.S. Chystiakova, Institute of Software Systems National Academy
of Sciences, Ukraine.*

3. Method of flight simulator development.

R.A. Kolisnichenko, National Aviation University, Ukraine.

4. Effective programming style.

M.M. Kostiv, National Aviation University, Ukraine.

5. Loss identification method in lean software development.

E.M. Sidorov, National Aviation University, Ukraine.

6. Ontology of programming style.

N.M. Sidorova, Y.M. Kramar, National Aviation University, Ukraine.

7. Mathematical model of software ecosystem.

O.O. Grinenko, National Aviation University, Ukraine.

8. Methods of code optimization on the criterion of minimum energy consumption.

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

9. The domain-oriented tool for constructing software.

Y. Ryabokin, National Aviation University, Ukraine.

1.14. Mathematical modeling and numerical methods

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

Secretary – **Ye. Shkvar**, National Aviation University, Ukraine.

24 September, 15³⁰,
room 6.200.

1. Necessary condition for excitation the oscillations in goodwin's model of business cycle.

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

2. Method of improvement of the convergence of trigonometric interpolating polynomials.

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

3. Mathematical processing of the results of non-destructive testing.

V.G. Demydko, V.I. Mamchuk, National Aviation University, Ukraine.

4. Some systematic mistakes in near-wall turbulence modeling and possible way to overcome them.

B.P. Golovnya, National University, Ukraine.

5. On integral moduli of smoothness of conformal mappings.
O.V. Karupu, National Aviation University, Ukraine.
6. On the relation between oscillatory solutions of second-order differential equation and corresponding difference equation.
O. Karpenko, National Aviation University, Ukraine.
M. Bohner, Missouri University of Science and Technology, Rolla, MO, USA.
O. Stanzhytskyi, Taras Shevchenko National University of Kyiv, Ukraine.
7. Research of the complete energy of mechanical system under random perturbation.
Oksana. I. Kovtun, National Aviation University, Ukraine.
Oleg. V. Pereguda, Taras Shevchenko National University of Kyiv, Ukraine.
8. Mathematical models of flow of bodily profiles limited stationary viscous incompressible fluid flow.
Yu. Krashanitsa, National Aerospace University "KHAI", Ukraine.
Ye. Shkvar, National Aviation University, Ukraine.
Peng Yue, National Aerospace University "KHAI", Ukraine.
9. Mathematical models of turbulent viscosity coefficient for wall shear flows.
V. Movchan, Ye. Shkvar, National Aviation University, Ukraine.
10. Discrete models generation for layered shells of a spacecraft.
S.V. Choporov, A.O. Lisnyak, Zaporizhzhya National University, Ukraine, Zaporizhzhya.
D.V. Akimov, Yuzhnoye State Design Office, Ukraine.
11. An investigation of a spacecraft's propellant tank's shell's bearing strength.
V.Z. Gristchak, S.I. Gomeniuk, S.N. Grebeniuk, Zaporizhzhya National University, Ukraine.
I.F. Larionov, P.G. Degtiarenko, V.N. Sirenko, D.V. Akimov, Yuzhnoye State Design Office, Ukraine.

SYMPOSIUM 2

UNMANNED AIRCRAFT SYSTEMS (UAS)

Chairman – **V. Kharchenko**, National Aviation University, Ukraine.

Secretary – **D. Prusov**, National Aviation University, Ukraine.

24 September, 10⁰⁰
room 11.314

1. The Remote-Piloted Aircraft System Development and its Experimental Testing in Accordance with the Certification Basis.

V.P. Kharchenko, D.E. Prusov, National Aviation University, Ukraine.

2. Balloon platform as a safety system for testing Unmanned Aircraft Equipment.

Krzysztof Szafran, Institute of Aviation, Warsaw, Poland.

3. Conceptually New Approach to the Formation of Aerodynamic Wing Layout. Vortex Active UAV Wing.

E.P. Udarcev, National Aviation University, Ukraine.

4. Vortex Slat of Unmanned Aerial Vehicle.

S.I. Alekseenko, O.O. Zhdanov, National Aviation University, Ukraine.

5. Digital Video Stabilization for Unmanned Aerial Vehicle.

P.O. Prystavka, E.P. Nichikov, National Aviation University, Ukraine.

6. Procedure of Recognition Target Object on Video Frames in a Video Streaming Data from UAV Processing System.

A.A. Rohatiuk, National Aviation University, Ukraine.

7. Fundamentals of Safety and Efficiency of the Next Generation Unmanned Aircraft Systems.

V.P. Kharchenko, National Aviation University, Ukraine, Traffic College of Ningbo University of Technology, China.

Wang Bo, Economics and Management College of Ningbo University of Technology, China.

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

8. Training of Personnel of Unmanned Aircraft Systems.

V.V. Kabanyachyi, D.M. Matijchyk. National Aviation University, Ukraine.

9. Develop the Curriculum for Unmanned Aerial Vehicles Operators.

V.P. Kharchenko, T.F. Shmelova, D.E. Prusov, National Aviation University, Ukraine.

SYMPOSIUM 3 AIR NAVIGATION AND ATM SYSTEMS

3.1. Air traffic management

Chairman – **T. Shmelova**, National Aviation University, Ukraine.

Secretary – **D. Vasyliiv**, National Aviation University, Ukraine.

24 September, 13³⁰,
room 11.323.

1. Determining the influence of factors of internal and external environment of management on the safety of aviation enterprise.

A.Yu. Assaul, National Aviation University, Ukraine.

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

O.S. Stasyuk, T.F. Shmelova, National Aviation University, Ukraine.

2. Neural network for automated estimation of pre-simulating training.

A.P. Bilko, V.A. Lazorenko, O.V. Poluhovich, T.F. Shmelova, National Aviation University, Ukraine.

3. Unmanned aerial vehicle's group flights.

D.I. Bondarev, National Aviation University, Ukraine.

T.R. Jafarzade, National Aviation Academy, Azerbaijan.

A.N. Kozub, National Defence Academy of Ukraine.

4. Systematization of aircraft wake vortices modeling types based on the use of various mathematical methods.

V.I. Chepizhenko, R.E. Lukiianchuk, National Aviation University, Ukraine.

5. Experimental research of terminal control area operations under uncertainty conditions.

Yu.V. Chynchenko, I.M. Kim, O.S. Samartseva, V.O. Vakhrina, National Aviation University, Ukraine.

6. Professional reliability of operator of air navigation system.

O. Kozhokhina, V. Gribov, S. Rudas, National Aviation University, Ukraine.

7. Analysis of European concepts implementation in ATM.

A. Zadorozhnia, S. Pavlova, National Aviation University, Ukraine.

8. Indicators of integrity satellite channel depending on antenna gain.

D.I. Tereshchenko, National Aviation University, Ukraine.

3.2. Communication, navigation, surveillance

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

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

24 September, 10⁰⁰,
room 11.321.

1. Navaid facility for aircraft positioning.

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

2. Spline as a universal mean for continuous UAV parameters processing.
N.S. Kuzmenko, National Aviation University, Ukraine.

3. Aircraft landing flare.
E.O. Kovalevskiy, V.V. Konin, T.I. Olevinska, National Aviation University, Ukraine.

4. Control of process degradation of transport technological system.
V.G. Melkumyan, T.L. Malyutenko, National Aviation University, Ukraine.

5. Initial analysis of space debris hazard.
V.V. Konin, O.S. Pogurelskiy, F.O. Shyshkov, National Aviation University, Ukraine.

6. Model for navigation satellite availability on various orbits analysis.
V.V. Konin, O.S. Pogurelskiy, F.O. Shyshkov, National Aviation University, Ukraine.

7. Simulation of navigation satellites availability on the near-Earth space.
V.V. Konin, O.S. Pogurelskiy, F.O. Shyshkov, National Aviation University, Ukraine.

8. Some practical results of integrated navigation system flight testing.
V. Kharchenko, V. Kondratyuk, S. Ilynska, O. Kutsenko, E. Vyshnyakova, A. Ismael, National Aviation University, Ukraine.

3.3. Aviation English and safety of flight

Chairman – **O. Petrashchuk**, National Aviation University, Ukraine.

Secretary – **L. Korol**, National Aviation University, Ukraine.

24 September, 11⁴⁰,
room 11.313.

1. Linguistic profile of ground-to-air radiotelephony communication.

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

2. Time perspective as a personality resource of aero navigation specialists.

K. Povoroznik, National Aviation University, Ukraine.

3. The aircraft maintenance engineer competence within the context of aviation safety regulations.

T. Kharlamova, National Aviation University, Ukraine.

4. The effect of student-relationship on the quality of training.

L. Nemliy, National Aviation University, Ukraine.

5. Directed activities related to texts as means of teaching reading technical texts.

L. Korol, National Aviation University, Ukraine.

6. Why using video is challenging.

O. Skipalska, National Aviation University, Ukraine.

7. Aviation safety in the context of emergency situations.

O. Vasyukovych, National Aviation University, Ukraine.

8. Educational function of a resource CAREER PATH: CIVIL AVIATION for the teaching aviation English.

N. Zelinska, National Aviation University, Ukraine.

3.4. Avionics

Chairman – **Y. Hryshchenko**, National Aviation University, Ukraine.

Secretary – **G. Polozhevets**, National Aviation University, Ukraine.

24 September, 13³⁰,
room 5.403.

1. Informational services for crew about minimal critical flight velocities.

A. Chuzha, G. Polozhevets, I. Donchenko, National Aviation University, Ukraine.

2. Reliability assessment of aircraft with regard of information factors and feedback loops.

A. Skrypets, V. Tronko, U. Grishenko, O. Kozhokhina, National Aviation University, Ukraine.

3. Problems of technical condition estimation of complex aviation systems components.

V. Chepizhenko, O. Orlov, O. Tryzna, National Aviation University, Ukraine.

4. Prevention of crew and personnel errors related with the failure obligatory actions caused by inappropriate psychological state.

S. Egorov, T. Kravsova, National Aviation University, Ukraine.

5. Results of investigation the information criterias to empower crew enviroment persepction possibilities by psychologig influence.

O. Sytnyk, L. Sytnyanskyh, M. Onyshchuk, National Aviation University, Ukraine.

6. Independence of doppler effect from wave-length at the multiwave concerted sounding and reception.

V. Zemljanskij, M. Gusiev, National Aviation University, Ukraine.

7. Enchantment of automatic flight control system quality at approach phase.

D. Prosvirin, National Aviation University, Ukraine.

8. The two-wave LDV with cophased reception of the doppler signals.

V. Zemljanskij, A. Chudecov, M. Gusev, National Aviation University, Ukraine.

9. Organization of integrated logistics support of maintenance and repair of aircraft.

Maksym Romaniuk, National Aviation University, Ukraine.

3.5. Complex systems control

Chairman – **V.N. Azarskov**, National Aviation University, Ukraine.

Secretary – **O.A. Sushchenko**, National Aviation University, Ukraine.

24 September, 14⁰⁰,
room 5.503

1. Robust adaptive automatic MIMO process control in the presence of great parametric uncertainty.

V.N. Azarskov, L.S. Zhiteckii, K. Yu. Solovchuk, National Aviation University, Ukraine.

2. Numerical analysis of stochastic gradient algorithms for on-line learning in neural network models: a new simulation result.

V.N. Azarskov, L.S. Zhiteckii, S.A. Nikolaienko, National Aviation University, Ukraine.

3. Approach to design of robust systems for stabilization of unmanned aerial vehicles equipment.

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

4. Problems of implementation of safety management system on civil aviation aerodromes.

V.N. Azarskov, S.S. Devyatkina, National Aviation University, Ukraine.

5. 2D fractal model of an airplane with 2 set radiative antennas.

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

6. Oscillation damping of air-space structures with joint-up dynamic absorber.

V.N. Azarskov, D.V. Gristchak, D.D. Gristchak, National Aviation University, Ukraine.

7. The neural realization of an electronic composer.

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

8. Precise vibratory gyroscope based on resonator made of elinvar alloy.

V.V. Chikovani, H.V. Tsiрук, National Aviation University, Ukraine.

O.V. Petrenko, Plant Automatics, Ukraine.

4. IEEE MICROWAVES, RADAR and REMOTE SENSING (MRRS-2014)

Chairman – **Felix Yanovsky**, National Aviation University, Ukraine.

Coordinator – **Yuliya Averyanova**, National Aviation University, Ukraine.

SESSION A1 - SIGNAL AND IMAGE PROCESSING

23 September, 14.00–15.40,
Assemble Hall, Building 1

1. Lower bound on image filtering mean squared error in the presence of spatially correlated noise.

Mikhail Uss, Aleksey Rubel, Vladimir Lukin, National Aerospace University, Kharkov, Ukraine

Benoit Vozel, Kacem Chehdi, University of Rennes 1 – Enssat France, Rennes.

2. A neural network based predictor of filtering efficiency for image enhancement.

Aleksey Rubel, Aleksey Naumenko, Vladimir Lukin, National Aerospace University, Kharkov, Ukraine.

3. Direction finding using bank of modified weighted unitary root – music estimators.

Volodymyr I. Vasylyshyn, Kharkiv Air Force University, Kharkiv, Ukraine.

4. Statistical analysis of meteorological echoes mean power estimate.

Dmytro S. Rachkov, David I. Lekhovytskiy, Andrii V. Semeniaka, Kharkiv National University of Radio Electronics, Kharkiv, Ukraine.

5. Harmonic signal frequency estimation under an impulse interference action.

I. G. Prokopenko, I. P. Omelchuk, Y. D. Chyrka, National Aviation University, Kyiv, Ukraine.

SESSION A2 - REMOTE SENSING

23 September, 16.00 – 17.40,
Assemble Hall, Building 1

1. Some features of a radar measuring polarization spectrum.

Yuliya Averyanova, Felix J. Yanovsky, National Aviation University, Kyiv, Ukraine.

2. Combined use of radiometer and double frequency radar for measurement of rain intensity.

Anna Linkova, Grygoriy Khlopov, A. Ya. Usikov Institute for Radiophysics and Electronics of National Academy of Sciences of Ukraine, Kharkiv, Ukraine.

3. Backscattering of electromagnetic waves from ice crystals in cloud.

Alex Pitertsev, Felix J. Yanovsky, National Aviation University, Kyiv, Ukraine.

4. The creation of pressure maps using sif/iff information.

Ladislav Gregor, Libor Drazan, Jiri Vesely, University of Defence, Brno, Czech Republic.

5. The mapping of the total water content over the Kharkiv region by GNSS measurements.

Alexey L. Kovorotniy, Feliks V. Kivva, Vladimir N. Gorobets, A. Ya. Usikov Institute for Radiophysics and Electronics of National Academy of Sciences of Ukraine, Kharkiv, Ukraine
Yuriy V. Goncharenko, University of Birmingham, Brmingham, UK.

SESSION A3 - MICROWAVE DEVICES AND ANTENNAS

24, September, 09.00 – 10.40

Building 3, room 406

1. A new high-performance OPA based VCO for microwave applications.

V.V. Ulansky, A.A. Kolesnik, National Aviation University, Kyiv, Ukraine.

H.M. Elsherif, Tripoli University, Tripoli, Libya.

2. Small-aperture dielectric disk antenna with the axial radiation.

Sergey Radionov, Ivan Ivanchenko, Nina Popenko, O.Ya. Usikov Institute for Radiophysics and Electronics of the NAS of Ukraine, Kharkiv, Ukraine.

3. Occupied bandwidth of digital television measurement at monitoring stations.

Leonid Sibruk, D.P. Bondarenko, O.A. Basanskyy, National Aviation University, Kiyv, Ukraine.

4. Parameters measurement and operating mode determination for microwave circuit.

Lyudvig Y. Ilnitsky, Leonid V. Sibruk, Olga A. Shcherbina, National aviation university, Kyiv, Ukraine.

5. Time-domain characterization of novel band notched microstrip antennas for UWB application.

Hemlata Soni, Pradeep Chhawcharia, Techno India NJR Institute of Technology Udaipur (Rajasthan), India.

Pushtivardhan Soni, Dhirubhai Ambani, Institute of Information and Communication Technology, Gandhinagar (Gujarat), India.

SESSION A4 - SIGNAL AND DATA

24, September, 10.50 -12.30
building 3, room 406

1. CFAR detection algorithm of noise-like radar signals.

Igor Prokopenko, Igor Martynchuk, National Aviation University, Kyiv, Ukraine.

2. Comparison of approximation and rigorous solution of electromagnetic scattering from nonspherical drops.

Grigoriy Khlopov, Ganna Veselovska, O.Ya. Usikov Institute for Radiophysics and Electronics of the NAS of Ukraine, Kharkiv, Ukraine.

3. Passive acoustic radar for aircraft trajectory tracking.

Rustem Sinitsin, Felix Yanovsky, Eugene Chervoniak, Oleksandr Zaporozhets, National Aviation University, Kyiv, Ukraine.

4. Nonparametrical rank detection and estimation of radar doppler signals.

Kostyantyn Prokopenko, National Aviation University, Kyiv, Ukraine.

5. Modeling of discrete condition monitoring for radar equipment.

A. Raza, Department of the President`s Affairs Abu Dhabi, UAE Vladimir Ulansky, National Aviation University, Kyiv, Ukraine.

6. Optimization of use of resources in multiposition radar systems.

Igor Prokopenko, Vitalii Vovk, Sergey Stavitskiy, Valeriy Medvedev, National Aviation University, Kyiv, Ukraine.

SESSION A5 - MICROWAVE AND NANO-ELECTRONIC
DEVICES

24, September, 14.00 -16.40
Building 3, room 406

X-ray 3D stereo remote sensing for biomedical application.

S.I. Miroshnychenko, "Teleoptic" PRA" Ltd, Kiev, Ukraine.

E.V.Volkov, National Aviation University, Kyiv, Ukraine.

Residual phase errors and autofocusing in airborne SAR systems.

Ievgen M. Gorovyi, Oleksandr O. Bezvesilnyi, Dmytro M. Vavriv,

***Institute of Radio Astronomy of NAS of Ukraine, Kharkiv,
Ukraine.***

Classification, identification and detection of biological agents with
graphene nanosensor.

***Emir G. Aznakayev, Diana E. Aznakayeva, National Aviation
University, Kyiv, Ukraine.***

Development of low power multi channel interpolator for system on
chip in 4g application.

Vivek Jain, Navneet Agarwal, MPUAT, Udaipur, India.

***Pradeep Chhawcharia, Techno India NJR Institute of Technology
Udaipur (Rajasthan), India.***

An overview of spectrum sensing in cognitive radar systems.

***M. Tahir Mushtaq, Faran Awais Butt, Ahmed Malik, School of
Engineering University of Management and Technology, Lahore,
Pakistan.***

SYMPOSIUM 5
ENVIRONMENT PROTECTION

5.1. Chemical technology and engineering

Chairman – **V.M. Ledovskykh**, National Aviation University, Ukraine.

Secretary – **T.A. Haievska**, National Aviation University, Ukraine.

23 September, 15³⁰,
room 12.211.

1. Urban tree biomass as a sorbent for spilled petroleum products.

S.A. Chripko, E.F. Novoselov, National Aviation University, Ukraine.

2. Electroreduction of aliphatic carbonyl compounds at the aluminum cathode.

O. Davydenko, V. Ledovskykh, National Aviation University, Ukraine.

3. Efficiency of modified forms of natural zeolites in the processes of methanol transformation into components of motor fuel.

A. Kustovska, O. Kosenko, National Aviation University, Ukraine.

4. Electro-spark treatment of steel surface for varnish-paintwork quality improving.

S. Levchenko, V. Ledovskykh, National Aviation University, Ukraine.

5. The influence of light oil products on the surface activity of lowmolecular alcohols.

M.R. Maksymiuk, V.L. Chumak, T.V. Neshta, U.S. Bosak, V.V. Didenko, National Aviation University, Ukraine.

6. Betulinic acid derivatives synthesis.

E.F. Novoselov, O.I. Tkachenko, V.A. Kachur, National Aviation University, Ukraine.

7. Catalyst surface acidic properties at rapeseed oil heterogeneous catalytic transesterification with ethyl alcohol.

I.V. Olshevsky, T.A. Haievska, Yu.V. Bilokopytov, National Aviation University, Ukraine.

8. Minimizing of petroleum products natural evaporation by ultralight insulating system.

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

9. Gelation reaction rate of silicate compositions.

O. Titova, National Aviation University, Ukraine.

10. Optimizing the properties of mixed fuel based on compositions hydrocarbon-alcohol.

V.V. Yefymenko, O.V. Yefimenko, National Aviation University, Ukraine.

11. Usage of hydrotreating process in the production of jet fuels.

V.V. Yefymenko, N.S. Atamanenko, National Aviation University, Ukraine.

5.2. Environmental protection

Chairman – **O. Zaporozhets**, National Aviation University, Ukraine.

Secretary – **K. Synylo**, National Aviation University, Ukraine.

24 September, 10⁰⁰,
room 5.601.

1. Aviation under the context of international law in the sphere of biodiversity: gaps and necessary steps.

V. Havrylenko, Ia. Movchan, O. Zaporozhets, D. Hulevets, Iu. Kartash, National Aviation University, Ukraine.

2 Implementation of energy-saving technologies at airports to increase the level of environmental safety.

M.M. Radomska, O.M. Tykhenko, O.V. Ryabchevsky, O.M. Dekhtiarenko, National Aviation University, Ukraine.

3. Ukrainian aviation under the context of international law in the sphere of climate change: gaps and recommendations for improvement.

O. Zaporozhets, V. Tokarev, Ia. Movchan, National Aviation University, Ukraine.

O. Grasko, Civil Aviation Administration, Ukraine.

4. Electromagnetic load on the airport staff and basic methods of its reducing.

V. Glyva, V. Kovalenko, N. Kychata National Aviation University, Ukraine.

L. Levchenko National Technical University of Ukraine “Kyiv Polytechnic Institute”, Ukraine.

5. Information support of complex improving of security level at the enterprise.

B. Khalmuradov, National Aviation University, Ukraine.

O. Evtushenko, N. Volodchenkova, National University Food Technology, Ukraine.

6. Modelling and measurement of aircraft engine emissions inside the airport area.

P. Wiesen, R. Kurtenbach, Bergische University of Wuppertal, Germany.

O. Zaporozhets, K. Synylo, National Aviation University, Ukraine.

7. Monitoring of aircraft noise.

K. Kazhan, National Aviation University, Ukraine.

8. Passive method of inboard noise reduction for aircrafts.

V. Makarenko, V. Tokarev, National Aviation University, Ukraine.

9. On the issue of light air ions normalization in the air of controllers room.

Kh. Pankiv, National University “Lviv Polytechnic”, Ukraine.

I. Paryliak, Kyiv National University of Construction and Architecture, Ukraine.

O. Sydorov, National Aviation University, Ukraine.

L. Levchenko National Technical University of Ukraine “Kyiv Polytechnic Institute”, Ukraine.

10. Mitigation of aircraft noise and acoustic pollution near airports.
I. Borisov, N. Kizilova, Yu.I. Rudnev, Kharkov National University, Ukraine.
E. Konovalova, National Aviation University, Ukraine.

11. Renewable energy - wind, overview.
I.V. Yakymets, National Aviation University, Ukraine.

12. Risk assessment vs conscience.
A.V. Lukyanchykov, T.M. Lukyanchykova, S.I. Karasev National Aviation University, Ukraine.

13. Materials of aerial photographs as part of monitoring systems of animal -vehicle collision.
O. Kokhan, National Aviation University, Ukraine.

5.3. Land management, cadastre and land monitoring

Chairmen – ***M. Kovalchuk***, National Aviation University, Ukraine.

Secretary – ***I. Kapelistaja***, National Aviation University, Ukraine.

23 September, 14⁰⁰,
room 3.504.

1. Features establishment and functioning of the cadastre system of estate of Sweden.
M.G. Bagauri, National Aviation University, Ukraine.

2. Analysis of modern methods of geodetic support design airport.
A.F. Dankevich, National Aviation University, Ukraine.

3. Geoecological aspects of environmental management geological monument of nature stows the Haidamatskyu yar.
I.M. Kapelistaja, National Aviation University, Ukraine.

4. Modern EU practice of creating the cadastre- registration systems.
T.V. Kozlova, National Aviation University, Ukraine.
5. Land relations in the field of urban development.
I.O. Novakovska, Institute of Land Relations Ukraine, Kyiv, National Aviation University, Ukraine.
6. Factor of transport accessibility for spatial planning.
Nataliia Pashynska, Institute of Geography of the National Academy of Science of Ukraine, Kyiv, Ukraine, National Aviation University, Kiev, Ukraine.
7. Using the openstreet map in the cadastral and planning works.
V.V. Putrenko, National Aviation University, WDC-Ukraine NTUU “KPI”, Ukraine.
8. Satellites of planets – self-6gravitating formation in the solar system.
S.O. Yasenev, National Aviation University, Ukraine.

5.4. Biotechnology in aviation

Chairmen – **K. Garkava**, National Aviation University, Ukraine.

Secretary – **N. Nikolaieva**, National Aviation University, Ukraine.

24 September, 10⁰⁰,
room 5.713.

1. Biological technologies for space: range of problems and new prospects.
V.I. Karpenko, V.G. Lazariev, A.V. Drazhnikova, National Aviation University, Ukraine.
2. Use of higher aquatic vegetation in the system of «Bioplato» to reduce concentration of pollutants in sewage.
I.O. Kolomiets, I.V. Samofal, V.V. Gorupa, National Aviation University, Ukraine.
3. Stressful factors of space flight.

O.M. Kovalev, V.V. Gorupa, National Aviation University, Ukraine.

O.O. Linnik, Institute of Physiology named after A.A. Bohomoltsia NAS Ukraine.

4. Stress activation of free radical oxidation.

O.M. Kovalev, N.V. Nikolaieva, National Aviation University, Ukraine.

O.O. Linnik, Institute of Physiology named after A.A. Bohomoltsia NAS Ukraine.

5. Antimicrobial properties of biologically active substances of ginger root extract.

V. Kudas, O. Vasylchenko, National Aviation University, Ukraine.

6. The issue of air pollution by toxic substances and their effect on pollen of woody plants.

N.V. Nikolaieva, K.G. Garkava, V.V. Khrobust, National Aviation University, Ukraine.

7. Improving extraction of biological active substances of Sambucus spp.

M. Skuratovska, M. Baranovsky, National Aviation University, Ukraine.

8. Comparative analysis of anticancer drugs on basis of gemcitabine.

K.I. Fedulova, L.O. Kosogolova, National Aviation University, Ukraine.

SYMPOSIUM 6

AVIATION CHEMMOTOLOGY

Chairman – L. Yanovsky, FGUP “Central Institute of Aircraft Engines named by P.I. Baranov”, Russian Federation

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

Secretary – L. Cherniak, National Aviation University, Ukraine.

24 September, 15⁰⁰,
room 5.601.

1. A new paradigm of use of traditional and alternative fuels and lubricants. Foresight of chemmotology.

S. Boichenko, National Aviation University, Kyiv, Ukraine.

2. Modern ways of solving the problem of gasoline vapors emissions from storage tanks.

L. Cherniak, M. Radomska, National Aviation University, Kyiv, Ukraine.

W. Reschetilowski, Institute of Industrial Chemistry, Dresden University of Technology, Dresden, Germany.

3. Tribological properties of friction pair in magnetic field.

M. Svirid, I. Trofimov, A. Kolomiets, A. Plotnykov, National Aviation University, Ukraine.

4. The assessment of environmental parameters of conventional and alternative fuels.

M. Radomska, L. Cherniak, National Aviation University, Ukraine

5. Tribo-cavitation for aviation kerosene.

A. Stelmakh, R.E. Kostyunik, A.V. Stelmakh, National Aviation University, Ukraine.

6. Experimental comparison of differential-phase method and method of dynamic focusing in defining roughness parameters of surfaces.

O. Stelmakh, A. Ibraimov, V. Radziewski, National Aviation University, Ukraine.

7. Impact of rape oil ethyl ethers additives on some characteristics of jet fuel.

A. Iakovlieva, National Aviation University, Ukraine.

K. Lejda, Rzeszowska Politechnika, Poland.

S. Boichenko, National Aviation University, Ukraine.

H. Kuszewski, Rzeszowska Politechnika, Poland.

O. Vovk, O. Martynova, National Aviation University, Ukraine.

8. Assessment of allelopathic activity in process of airports territory decontamination by application of phytoremediation in SITU.

O. Shtyka, T. Bilyk, National Aviation University, Kyiv, Ukraine.

9. The effectiveness of kerosene-water emulsions removal using polypropylene sorbents with imbibition promoters.

O. Shtyka, National Aviation University, Kyiv, Ukraine.

J. Sęk, Lodz University of Technology, Lodz, Poland.

10. Quality boosting of diesel fuels by the isomerization of n-paraffins on mesoporous support based catalysts – design of experiments in combination with kinetic modeling.

A. Rüfer, A. Werner, W. Reschetilowski, Dresden University of Technology, Dresden, Germany.

11. Influence of fuels with alternative components on lubricating materials.

O. Shevchenko, P. Lemish, V. Kamenieva Ukrainian State University of Chemical Technology, Dniepropetrovs'k, Ukraine.

12. Investigation of performance and environmental characteristics of motor and aviation gasolines with different content of ethanol.

A. Azarenkova, S. Boichenko, O. Aksenov, National Aviation University, Ukraine.

13. Aircraft lubricant materials with additives of molybdenum disulfide and diselenide graphene-like nanoparticles.

J. Lyubinin, M. Kurbatova, State enterprise «Scientific and Research Institute for Refining and Petrochemical Industry “MASMA”, Ukraine.

***L. Kulikov, K. Grinkevych, N. Konig-Ettel, I. Tkachenko,
L. Mordel, Frantsevich Institute for Problems of Materials Science
of NASU, Ukraine.***

14. Model of hydrocarbons transport through the porous ground media.

Andrzej Gawdzik, University of Opole, Department of Process Engineering, Opole, Poland.

Jarostaw Gawdzik, University of Technology, Faculty of Civil and Environmental Engineering, Division of Waste Management, Kielce, Poland.

Barbara Gawdzik, Jan Kochanowski University of Humanities and Sciences, Faculty of Mathematics and Science, Institute of Chemistry, Kielce, Poland.

Alicja Gawdzik, University of Opole, Department of Process Engineering, Opole, Poland.

15. Determination of factors influencing the amount of light gasoline hydrocarbons losses from evaporation in HST.

Nina Chernobaeva, Nikolay Shutko, National Aviation University, Ukraine.

16. Prospects for modernization of aircraft's tribosystems in accordance with the Directive ICAO Doc 9977.

A. Nikitin, PhD, G. Nikitin, National Aviation University, Ukraine.

17. Stabilization of service properties of turbine oils with electrostatic field and impulses of electromagnetic nature.

T. Marynych, National Aviation University, Ukraine.

18. Estimation of tribological and operating characteristics of hydraulic fluids.

N. Krasilnikova, I. Lyubinin, State owned Enterprise S&R Institute of Crude Oil Refining and Petrochemical Industry "MASMA", Kiev, Ukraine.

K. Pashynska, Ye. Rudnytska, O. Yevdokymenko, National Aviation University, Ukraine.

19. A New Model For Charging EVs With Current Fuel Infrastructure – Self Charging Electric Vehicle Configuration Fed By Stationary Outboard Fuel.

Emrah Kinav, S.Z. Baykara, Yildiz Technical University, Turkey.

20. Fuel filling complex low cost.

K. Suyarkov, Hansaconsult Ingenieurgesellschaft mbH, Reinbek, Germany.

21. Inclusion of Biofuels and Sustainability Criteria on the EU regulation: EU Fuel Quality and Renewable Energy Directives. Application on aviation.

María del Mar de la Rica, César Velarde, Observatory of Sustainability in Aviation (OBSA), SENASA, Spain.

22. Methods of calculating the geometric dimensions of the gravitational inertial cleaner type (GICT).

S. Puzik, V. Manzii, A. Hvozdetzkyi, National Aviation University, Ukraine.

SYMPOSIUM 7 COMMUNICATION FACTOR IN MODERN INTERNATIONAL RELATIONS

7.1. Information and legal principles of international relations

Chairman – **O. V. Sosnin**, National Aviation University, Ukraine.

Secretary – **O. Yu. Kondratenko**, National Aviation University, Ukraine.

24 September, 10⁰⁰,
room 7.206.

1. International law mechanisms for world forest ecosystem protection.

I. S. Iatsukhnenko, National Aviation University, Ukraine.

2. International information transparency.
O. O. Kozhushko, National Aviation University, Ukraine.
3. Informational component of Russian aggression against Ukraine.
O. Yu. Kondratenko, National Aviation University, Ukraine.
4. Some aspects of biometric passports introduction in Ukraine in compliance to ICAO and EU specifications.
V. I. Mazur, O. Yu. Mazur, National Aviation University, Ukraine, Ukrainian National Airlines, Ukraine.
5. Strategic prognostication of the USA foreign policy.
N. F. Rzhavska, National Aviation University, Ukraine.
6. Establishing public administration of education – the way to build in Ukraine into the knowledge society.
O. V. Sosnin, National Aviation University, Ukraine.
7. Ukraine's role in the world in countering human trafficking.
I. Yu. Shcherbyna, V. N. Kubalskiy, National Aviation University, Ukraine.
8. International law and geo-economic causes of terrorism escalation and occurrence.
R. V. Fedynets, National Aviation University, Ukraine.

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

Chairman – **Y.V. Kozachok**, National Aviation University, Ukraine.
Secretary – **V.M. Vasylchenko**, National Aviation University, Ukraine.

24 September, 10⁰⁰,
room 7.217.

1. Ukrainian media in the context of axiology.
O. M. Ryzhko, National Aviation University, Ukraine.

2. Information component of terrorism in the globalization.
V.A. Emets, National Aviation University, Ukraine.
3. Effect of media on the formation of Ukrainian national political consciousness in the context of globalization.
T. E. Martynova, National Aviation University, Ukraine.
4. Transformation of the journalism and phenomenon cognitive linguistics in the modern scientific knowledge.
I.V. Kevlyuk, National Aviation University, Ukraine.
5. Ukrainian tautological phraseology in the texts of media.
T.M. Andreeva, Taras Shevchenko National University of Kyiv, Ukraine.
6. The phraseologisms motivated by the rite of oath in the media.
V.M. Vasylychenko, National Aviation University.
7. Internet trolling: the latest efficient manipulative technique for the formation of public opinion in Ukrainian media landscape.
G.I. Nazarenko, National Aviation University.

7.3. The international scientific and technical cooperation of Ukraine in aerospace industry

Chairman – **S.V. Sidenko**, National Aviation University, Ukraine.
Secretary – **M.P. Vysotskfa**, National Aviation University, Ukraine.

23 September, 13³⁰,
room 7.401(a).

1. Prospects of international grain market in the season 2014-2015 years
K.V. Antonenko, O.I. Kotlyarova, National Aviation University, Ukraine.
2. Impact of globalization on labor migration.
M.P. Vysotska, V.O. Ilenko, National Aviation University, Ukraine.

3. International cooperation of Ukraine in aerospace industry.
S. Gryniuk, National Aviation University, Ukraine.
4. Economic diplomacy as important component foreign policy.
I. Derevyanko, National Aviation University, Ukraine.
5. Features of the creation and operation of international strategic alliances in the aviation.
I. Nabok, National Aviation University, Ukraine.
6. Institutional base of nigerian aviation industry.
Z.S. Sokolova, National Aviation University, Ukraine.

SYMPOSIUM 8

ECONOMY AND MANAGEMENT IN AVIATION

Chairman – **V. Matveev**, National Aviation University, Ukraine.

co-Chairman – **I. Suvorova**, National Aviation University, Ukraine.

Secretary – **O. Vovk**, National Aviation University, Ukraine.

24 September, 14⁰⁰,
room 2.401.

1. Investment activity in Ukraine: aims and obstacles.
T. Bilenko, National Aviation University, Ukraine.
2. The global market aircraft construction.
I. Heiets, National Aviation University, Ukraine.
3. Intelligent logistics systems.
M. Grygorak, Y. Varenko, National Aviation University, Ukraine.
4. Angstrommanagement technology and 3d-modelling in of airlines.
T. Kuznetsova, National Aviation University, Ukraine.
5. The airline deregulation effects of tourism industry in turkey.
Ali Emre SARILGAN, Anadolu University, Turkey.

6. Air transportation management education comparison in Anadolu University and National Aviation University.

Iryna Kuryanova, Anadolu University Vocational School of Transportation, Turkey.

Ali Emre Sarulgan, Anadolu University, Turkey.

7. Inter-firm interaction of the aviation enterprise as a method to enhance the functioning of Ukrainian aviation complex.

G. Malakhivska, National Aviation University, Ukraine.

8. Resource allocation improvement in the tasks of airport ground handling operations.

K. Marintseva, G. Yun, National Aviation University, Ukraine.

9. Low-cost airlines in Ukraine: history and perspectives.

V. Myroniuk, V. Matveev, National Aviation University, Ukraine.

10. Legal, organizational and economic aspects of classification of enterprises integration.

O. Ovsak, O. Kyrylenko, National Aviation University, Ukraine.

11. Mechanisms of global markets aerospace.

T. Ostapenko, National Aviation University, Ukraine.

12. Influence of the marketing environment demographic factor on the development of the Ukrainian higher education market.

S. Ramens'ka, National Aviation University, Ukraine.

13. Influence of globalization processes on the airline industry of Ukraine.

V. Sibruk, National Aviation University, Ukraine.

14. European integration of Ukraine and participation of international organizations in reforming the national agricultural sector.

V. Klymenko, National Aviation University, Ukraine.

A. Lozova, Taras Shevchenko National University of Kyiv, Ukraine.

SYMPOSIUM 9
HUMAN FACTOR IN AVIATION

Chairman – **A. Gudmanian**, National Aviation University, Ukraine.

Session A. Language modelling of aviation information systems

Chairman – **O. Kovtun**, National Aviation University, Ukraine.

Secretary – **L. Konoplianyk**, National Aviation University, Ukraine.

24 September, 15²⁰,
room 8.1412

1. Requirements to pilots and air traffic controllers' proficiency in aeronautical communication.

***O. Kovtun, A. Gudmanian, National Aviation University, Ukraine.
A. Mikhaylov, Siberian State Aerospace University,
named after academician M.F. Reshetnev, Russian Federation.***

2. Professional competence as a required component of professional ethics of a future interpreter in the area of aviation.

N. Belous, S. Iagodzinskyi, National Aviation University, Ukraine.

3. The role and function of sign language in aviation.

***N. Zakharchuk, S. Kharytska, National Aviation University,
Ukraine.***

***P.-P. Mittertreiner, Quality Engineer at the Dutch Railroad.
Network Administrator, the Netherlands.***

4. Lexical ways of aviation terminology rendering.

T. Smirnova, National Aviation University, Ukraine.

5. English-language training of future aviation specialists and its influence on flight safety.

***O. Bondaruk, S. Volgina, O. Yashchuk, National Aviation
University, Ukraine.***

6. Basic principles of teaching aviation English to pilots and air traffic controllers.

O. Kovtun, National Aviation University, Ukraine.

G. Simoncini, John Cabot University, Italy.

7. Human factor in aviation documentation translation: grammatical transformations in use.

S. Shurma, National Aviation University, Ukraine.

8. Professional ethics of an aviation industry translator.

G. Encheva, T. Semyhinivska, National Aviation University, Ukraine.

9. Aviation terminology formation as a factor of safety.

I. Burlakova, T. Diachuk, National Aviation University, Ukraine.

10. Evolution of human factors in aviation: history and definitions.

O. Shved, L. Sydorenko, National Aviation University, Ukraine.

11. The human factor and linguistic aspects to ensure communication efficiency in the aviation industry.

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

12. Communication in aviation.

L. Konoplianyk, National Aviation University, Ukraine.

13. Motivation for training of future specialists in aviation industry.

L. Bondar, N. Iskhakova, National Aviation University, Ukraine.

14. The problems of the aeronautical text machine translation adaptation.

G. Gayovych, V. Teleutsia, National Aviation University, Ukraine.

15. Providing professional reliability of the flight crew members.

Ya. Absaliyeva, L. Kucheriava, G. Mikhnenko, National Aviation University, Ukraine.

16. Language communication difficulties in aviation.

O. Shostak, Yu. Pryshupa, National Aviation University, Ukraine.

**Session B. Social, political, moral and psychological components
of aviation safety**

Chairman – **S. Iagodzynski**, National Aviation University, Ukraine.

Secretary – **N. Iskhakova**, National Aviation University, Ukraine.

24 September, 15²⁰,
room 8.803

1. The role of scientific humanitarian knowledge
in spiritual aviation expert personality build-up.

***O. Sidorkina, O. Skyba, T. Poda, I. Skyba, National Aviation
University, Ukraine.***

2. Requirements for scientific and pedagogical staff
in the process of formation of future psychologists' readiness
for professional activity in the aviation industry.

***L. Baranovska, T. Kovalkova, National Aviation University,
Ukraine.***

3. Compensation for damages in aviation: historical and legal aspect.

T. Klynina, National Aviation University, Ukraine.

4. Women-pilots in the Great Patriotic War of the Soviet Union.

***Yu. Smolnikov, O. Yurchenko, National Aviation University,
Ukraine.***

5. Cross-cultural factors in aviation safety.

***T. Davydenko, S. Yurchenko, National Aviation University,
Ukraine.***

6. The requirements for personal and professional skills of aviation
industry software engineers in the context of professional
communication readiness development.

H. Babii, L. Tsymbalist, National Aviation University, Ukraine.

7. The role of human factor in aviation safety.

Y. Zharoid, National Aviation University, Ukraine.

8. The results of the development of theoretical and methodological foundation of social and psychological support of aviation.
V. Kornilov, K. Fedosova, National Aviation University, Ukraine.
9. Training of the future aviation experts for professional activities.
L. Prudka, National Aviation University, Ukraine.
10. Methodological approaches to the research of the problem of training of future social workers in the aviation field.
O. Kotykova, L. Dovgoplova, National Aviation University, Ukraine.
11. Psychological causes of human factor occurrence.
V. Furman, National Aviation University, Ukraine.
12. Philosophical sciences in shaping ideological culture of Aviation Universities students.
L. Drotianko, N. Sukhova, L. Kadnikova, L. Moklyak, National Aviation University, Ukraine.
13. Technological age: ethics of responsibility.
M. Abysova, T. Shorina, National Aviation University, Ukraine.
14. Kyiv Aeronautical Society as the leading centre of aviation specialists' in Ukraine training.
V. Grebennikov, V. Doroshenko, National Aviation University, Ukraine.
15. Formation of the NAU students' value system during the physical education classes.
T. Kasatska, S. Heichenko, National Aviation University, Ukraine.
16. Social projection of justice in the global airspace of the 21st century.
S. Ordenov, H. Kleshnia, National Aviation University, Ukraine.

17. Synergetic model of integrative-and-activity educational system as a basis for forming planetary thinking in the process of future aviation specialists training.
E. Luzik, National Aviation University, Ukraine.
18. The humanitarian aspects of security policy of Ukraine in the context of European integration.
L. Chupriy, National Aviation University, Ukraine.
19. Psychological work with pilots in combat conditions.
O. Blinov, National Aviation University, Ukraine.
20. Using an interdisciplinary approach in the context motivation students for physical education.
I. Wrzesnewskyj, N. Orlenko, N. Turchina, National Aviation University, Ukraine.
Agita Abele, Latvian Academy of Pedagogy, Latvia.
21. Vectors of modernization of the national system of higher education.
O. Khomeriki, M. Klyov, National Aviation University, Ukraine.
22. Subculture as the agent of action of cultural tradition – the initiator of innovation and institutionalisation processes.
K. Nastoiashcha, National Aviation University, Ukraine.
23. The human factor in the corporate culture of the aviation industry of Ukraine.
S. Stoyan, National Aviation University, Ukraine.

Session C. Psychology of aircraft safe operation and modern ergatic systems

Chairman – **O. Petrenko**, National Aviation University, Ukraine.

Secretary – **V. Biletska**, National Aviation University, Ukraine.

24 September, 15²⁰,
room 8.1203

1. Emotional burnout as one of the psychological consequences that occur during the continuous monitoring of personal professional levels of quality assurance engineers.

H. Borodina, Y. Ardashova, M. Ivanyuk, National Aviation University, Ukraine.

2. Transforming gender identity of students studying at the Faculty «Air Traffic Control».

Y. Ardashova, S. Barabash, National Aviation University, Ukraine.

3. Stretching practice in the process of the students' physical education.

I. Bondarenko, J. Danilchenko, National Aviation University, Ukraine.

4. Practising standard statistical and graphic data presentation lexicon as a factor of safe air traffic communication.

A. Akmalidnova, O. Pysmenna, National Aviation University, Ukraine.

5. Training humans for an automated air traffic.

A. Davidenko, National Aviation University, Ukraine.

6. Decision-making in stressful cognitive conditions as a psychological problem.

L. Pomytkina, National Aviation University, Ukraine.

7. Development of professional responsibility of civil aviation pilots.

V. Zlagoduh, National Aviation University, Ukraine.

8. Optimizing non-technical skills within the workplace.
Andrew Duma, Royal Flying Doctor Service, Australia.
9. Human factor and psychological aspects in flight safety provision.
O. Akmal'dinova, L. Budko, O. Kravchuk, T. Shulga, National Aviation University, Ukraine.
10. Cellphone use on airliners: an attempt at newspaper discourse analysis.
M.-M. Rybalko, National Aviation University, Ukraine.
11. The ratio of body weight and length of the NAU first-year students.
L. Yasko, National Aviation University, Ukraine.
I. Pereverseva, Ulyanovsk State Technical University, Russia.
12. Recreating walking classes in the process of the students' physical education.
V. Zinchenko, Y. Usachov, T. Tarnavska, National Aviation University, Ukraine.
13. Independent work of students for physical education.
V. Biletska, National Aviation University, Ukraine.
O. Pryimakov, Uniwersytet Szczecinski, Poland.
14. Physical preparation of air traffic controllers.
N. Nosenko, I. Skydan, T. Svirska, National Aviation University, Ukraine.
15. The structure of psychophysical potential professional development of students of aviation industry.
V. Fotynyuk, National Aviation University, Ukraine.
16. ATC risk level estimation of distances between aircraft during flight level rules violations.
O. Reva, S. Borsuk, National Aviation University, Ukraine.

17. Emotional intelligence as a determinant of situational psychological readiness of air traffic controllers.
T. Zaporozhets, National Aviation University, Ukraine.
18. Psychological conception of man-machine verbal interaction in the intelligent cockpit.
O. Petrenko, National Aviation University, Ukraine.
19. Factors affecting NAU students motivation to regular exercise.
I. Vrzhesnevskyy, T. Rakytina, E. Cherniayev, National Aviation University, Ukraine.
O. Novoselova, Uralskyy State University, Russia.
20. Recursive models of psychodynamics in the framework of subjective entropy of preferences paradigm.
V. Kasianov, A. Goncharenko, National Aviation University, Ukraine.
21. Human factors in aircraft maintenance.
N. Glushanytsia, National Aviation University, Ukraine.
22. Features of ICAO "risk triangle" solutions of human factors under complicated standards of the airspace separation.
Aleksey Reva, National Aviation University, Kiev, Ukraine
Bala Mirzayev, Peyman Mukhtarov, Shahin Nasirov, The Main Center of the Unified System Air Traffic Control of the Azerbaijan Republic, Baku.

SYMPOSIUM 10
SPATIAL ORGANIZATION OF AIR COMPLEXES
Chairman – **A. Bieliatynskyi**, National Aviation University, Ukraine.
Secretary – **A. Vyshnevska**, National Aviation University, Ukraine.

24 September, 10⁰⁰
room 5.303

1. Improvement of concrete airfield pavement design.
O.V. Rodchenko, National Aviation University, Ukraine.

2. Introduction of the acoustic emission method in technical diagnostics of bridges.
A. Byelyatynskyi, National Aviation University, Ukraine.
E. Krayshkina, A.V. Skrypchenko, P.M. Koval, The National Academy of Fine Arts and Architecture, Ukraine.

3. Moving in interior design.
I. Kuznetsova, V. Sirak, National Aviation University, Ukraine,

4. Special features of modern yacht interiors.
I. Kuznetsova, H. Shepel, National Aviation University, Ukraine,

5. Theoretical modeling as a research method of a relaxation center at the airport.
O.V. Chemakina, I.A. Lysiuk, National Aviation University, Ukraine.

6. Features of the formation of first-aid medical centers with using air ambulance.
O.V. Chemakina, I.V. Minyailo, National Aviation University, Ukraine.

7. Tawning covers as means of formation of architectural expressiveness of airports.
G.N. Agieieva, National Aviation University, Ukraine.

8. Methodological approach to scientific research in architectural space at the example of octagonal constructions.
N.O. Mrynska, Ukraine.

9. Effectiveness of the buffer zone.

G.I. Bolotov, National Aviation University, Ukraine.

10. Improvement of management development of airport infrastructure.

V. Pavelko, Zaporizhzhya National Technical University Zaporizhzhya, Ukraine.

11. Basic characteristics of open public spaces on the territory of civil airports organization.

O.V. Chemakina, O. Vasylenko, National Aviation University, Ukraine.

12. Specifics of the space-planning organization of aviation universities.

Y.V. Socolova, National Aviation University, Ukraine.

13. Effect of environmental competence architects is rated the world's airports.

O. Osipenko, National Aviation University, Ukraine.

14. Method of progressive collapse modeling based on real high-rise building examples.

M.S. Barabash, M.A. Romashkyna, National Aviation University, Ukraine.

15. The method of calculating the metal frame considering its spatial work.

N.O. Kostyra, E.A. Bakylin, National Aviation University, Ukraine.

16. Analysis of the main results of experimental research rigidity of plane tension reinforced concrete composite constructions.

V. Kolchunov, T. Tugay, I. Yakovenko, National Aviation University, Ukraine.

17. Building a computer model of an optoelectronic fire smoke alarm detector.

G. Sokolov, National Aviation University, Ukraine.

SYMPOSIUM 11
**AIR AND SPACE LAW: INTERNATIONAL AND NATIONAL
ISSUES OF SECURITY**

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

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

23 September, 13³⁰,
room 1.411

1. Globalization and commercialization of space activities as a determining factor of development of international space law.
N.N. Antonenko, National Aviation University, Ukraine.
2. Terms of the Air Code of Ukraine and provisions of criminal law.
S.R. Bagirov, National Aviation University, Ukraine.
3. Realization of international legal norms of adjusting the safety of aviation in Ukraine.
S.G. Golovko, V.V. Sobkova, National Aviation University, Ukraine.
4. Structural and functional aspects personnel of Civil Aviation.
O. A. Husar, National Aviation University, Ukraine.
5. Legal regime of regional patents.
K. Kmetyk, National Aviation University, Ukraine.
6. Problems of administrative and legal regulation of safety in current conditions.
I.Ya. Kozachok, National Aviation University, Ukraine.
7. Measures to prevent the bankruptcy of the debtor - Aviation Enterprise and extrajudicial procedures.
V.P. Kozyreva, National Aviation University, Ukraine.
8. Criminal and legal characteristic of socially dangerous consequences of violation of traffic rules safety and operation of air transport (art. 276 of CC of Ukraine).
S.Ya. Lykhova, I.O. Roschyna, National Aviation University, Ukraine.

9. Modern trends of air and international air law development.
N.V. Maliarchuk, N.M. Tereshchenko, National Aviation University, Ukraine.
10. Functions of administrative law in aviation sphere.
O.M. Myronets, National Aviation University, Ukraine.
11. Financial sanction in Ukrainian law: theoretical aspects.
I.P. Ustinova, National Aviation University, Ukraine.
12. Civil liability: conceptional approach.
R.B. Shyshka, National Aviation University, Ukraine.
13. Innovation is such a complex purposeful change.
N.B. Shust, National Aviation University, Ukraine
A.O. Yaroshenko, Dragomanov National Pedagogical University, Kyiv, Ukraine.

SYMPOSIUM 12

INNOVATIVE TECHNOLOGY OF PROFESSIONAL TRAINING ON THE BASIS OF HIGHER EDUCATION

Chairman – **V. Shpylyovyi**, National Aviation University, Ukraine.

Secretary – **Yu. Kazarinov**, National Aviation University, Ukraine.

24 September, 13³⁰,
room 8.905.

1. Challenges of aircraft maintenance personnel training standards harmonization.
Iryna Zarubinska, Anatoliy Polukhin, National Aviation University, Ukraine.
2. Creating the scientific school management of innovative development.
V. Shpylyovyi, National Aviation University, Ukraine.

3. The problem of functioning of magistracy on project management.
M. Grinyova, Poltava National Pedagogical University named after V.G. Korolenko, Ukraine.
O. Mykhalchenko, National Aviation University, Ukraine.
4. Implementation of the statistical methods into the project activity of the aviation production-and-maintenance complexes.
A. Ovsyankin, Yu. Kazarinov, National Aviation University, Ukraine.
5. Traditional methods of diagnostics learning outcomes with the help of innovative technologies.
L. Vdovenko, V.Yudka, G. Serdyuk, National Aviation University, Ukraine.
6. Training future heads of educational establishments in terms magistracy specialty "Management of educational institutions".
N. Sas, Poltava National Pedagogical University named after V.G. Korolenko, Ukraine.
O. Mykhalchenko, National Aviation University, Ukraine.
7. Mastering the bases of project activity as a resource of general pedagogical training in high school.
O. Zhdanova-Nedilko, Poltava National Pedagogical University named after V.G. Korolenko, Ukraine.
Yu. Kazarinov, National Aviation University, Ukraine.
8. Design contents of competency oriented education in higher educational institutions.
H. Sorokina, Poltava National Pedagogical University named after V. G. Korolenko, Ukraine.
L. Vdovenko, National Aviation University, Ukraine.
9. Child labour corps as an innovative project A.S. Makarenko.
A. Tkachenko, Poltava National Pedagogical University named after V. G. Korolenko, Ukraine.
N. Chaika, National Aviation University, Ukraine.

10. On the state of availability secondary educational institutions Ukraine with computers and internet access.

N. Shumar, G. Kyrychevskyy, National Aviation University, Ukraine.

11. *Research activity of future managers in project management.*

S. Grinyov, Poltava National Pedagogical University named after V. G. Korolenko, Ukraine.

A. Ovsyankin, V. Ignatyev, National Aviation University, Ukraine.

13 ROUND TABLE DISCUSSION

ICAO: Aviation Safety Challenges

Chairperson – **G. Suslova**, National Aviation University, Ukraine

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

23 September, 14³⁰,
room 8.200.

1. Security Aspects of Air Cargo and Mail Transportation.

Andrii Kryzhanovskiy, National Aviation University, Ukraine.

2. Risk Management in Civil Aviation.

Igor Dobrovolskyi, National Aviation University, Ukraine.

3. Crisis Management Concept.

Yuliya Zagnii, National Aviation University, Ukraine.

4. Training and Upgrading of Aviation Security Personnel.

Tetiana Zagnii, National Aviation University, Ukraine.

5. Facilitation of the Travel Document Security Chain.

Oleksandr Bilous, National Aviation University, Ukraine.

6. Analysis of Laser Attack Impact on Professional Pilot Activities.

Olena Dolgova, National Aviation University, Ukraine.

7. Implementation of Security Procedures in Air Traffic Control.
Oksana Sobodieieva, National Aviation University, Ukraine.

8. Civil-Military Coordination in Air Traffic Control.
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Notes
