

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

PROGRAM

OF THE SECOND WORLD CONGRESS "AVIATION IN THE XXI-st CENTURY"

"SAFETY IN AVIATION"



September 19-21, 2005
Kyiv, Ukraine

**WELCOME to the Second World Congress
“Aviation in the XXI-st Century”
“Safety in Aviation”**

It is my honor and pleasure to welcome you to the Second World Congress.

The main objectives of this meeting are to analyze global trends, practical, experimental and theoretical achievements review in civil aviation and cosmonautics. Realization is possible by investigation of world community and senior staff who are busy with actual problems of aviation safety decision.

Each day of September 19-21, symposiums will be running in parallel. These days will assemble the whole aviation community and many prominent representatives from European countries as well as from around the world.



The organizer of the Congress is the National Aviation University, which history dates back to 1933. Founded 70 years ago the University has become a real cradle of aviation specialists training for Ukraine and almost 120 countries of the world, as well as a scientific and research center. Well-known scientific schools in the fields of management, mechanics, electronics, electrical engineering, materials science, information technologies and computer sciences, diagnostic of complicated systems have been created at the University.

The Congress is organized in cooperation with the International Civil Aviation Organization (ICAO), Ministry of Education and Science of Ukraine, National Academy of Sciences of Ukraine, Eurocontrol, UkSatse, Regional Air Navigation Services Development Association (RADA) and others.

**Vitaliy Babak, Rector of National Aviation University
Chairman of the Congress**

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**PROGRAM
OF THE SECOND WORLD CONGRESS
“AVIATION IN THE XXIst
CENTURY”
“*SAFETY IN AVIATION*”**

SEPTEMBER 19-21, 2005

KYIV

PROGRAMMING COMMITTEE

Chairman

V. Babak National Aviation University, Ukraine

co-Chairmen

A. Gurzhiy Ministry of Education and Science, Ukraine

A. Shpack National Academy of Sciences, Ukraine

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Russia

B.Peacock Robinson Aviation System Inc., USA

Ph.Rochat Air Transport Action Group and
Environmental Department of IATA,
Switzerland

H.Rohling Technical University of Hamburg-Harburg,
Germany

Soon Kil Hong Hankuk Aviation University, South Korea

V.Sultanov ANS Providers of Azerbaijan 'AZANS',
Azerbaijan

K.Theil ICAO

GENERAL INFORMATION

You are welcome to take part in the Second World Congress "Aviation in the XXIst Century" "Safety in Aviation".

Chairman of the Congress is Prof. **Vitaliy Babak**, Rector of the National Aviation University.

English, Russian and Ukrainian are the official language of the Congress

Conference Proceedings

All papers accepted for presentation at the Congress will be included in the Congress Proceedings. Registration is a prerequisite for paper inclusion in the Proceedings. The Proceedings will be distributed on CD. Printed copies of the Proceedings will also be available.

Conference Fee

Full participant	
advanced registration before May 30, 2005	300 Euros
registration after May 30, 2005	350 Euros
Students pay	50%
Accompanied persons	150 Euros

Each conference fee covers:

- ◆ Participation in the Congress
- ◆ Congress proceedings +CD
- ◆ Coffee-break during the sessions
- ◆ Welcome party
- ◆ Official Dinner

For registration fee

▶ Dollar account:

Foreign Exchange Account - Beneficiary
ProminvestBank of Ukraine,
Jovtnevy Branch of Kiev NAU

ACCT № 26008301230561/840

Beneficiary's Bank - Bank of New York
USA IRVT US 3N 890-0060-077 /USA/

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In your payment slip you indicate "For participation in the work of the World Congress "Safety in Aviation", surnames and names of participants.

▶ Euro account:

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ACCT №260030160

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In your payment slip you indicate "For participation in the work of the World Congress "Safety in Aviation", surnames and names of participants.

- ▶ by cash at the registration desk during the registration procedure.

**SCHEDULE OF THE SECOND WORLD CONGRESS
"AVIATION IN THE XXI CENTURY"**

18.09.2005

Meeting and hotel accommodation
Registration of participants

19.09.2005

8.00-9.30	Registration of participants
10.00-10.30	Greetings
10.30-11.30	Plenary session
11.30-12.00	Coffee-break
12.00-13.00	Plenary session
13.00-14.00	Lunch
14.15-18.00	NAU facilities visiting, State Aviation Museum
14.15-18.00	MRRS Sessions
18.00	Welcome Party

20.09.2005

10.00-13.00	Symposia Sessions
13.00-14.00	Lunch
14.15-17.00	Symposia Sessions
17.00	Meetings and discussions
19.00	Official dinner

21.09.2005

9.00 - 12.30	Symposia Sessions
13.00 -14.00	Lunch
14.30-16.00	Symposia Sessions
16.00-16.30	Closing Session

PLENARY SESSION

September, 19th,
Monday 10⁰⁰-13⁰⁰

Opening Address

V.Babak, *National Aviation University, Ukraine*

Greetings to the Congress

10:10-10:30

10.30-10.45 Information Technologies in Aerospace Navigation

Vitaliy Babak, Volodymyr Kharchenko,

National Aviation University, Ukraine

10.45-11.00 Aviation Safety

Karsten Theil, *ICAO Regional Director Europe and North Atlantic*

11.00-11.15 ICAO Future Aviation Safety Initiatives

Mitchel Fox, *ICAO Headquarters, Montreal*

11.15-11.30 Regional Cooperation as an Evolutionary Trend in
Air Traffic Management

Dmytro Babeychuk, *Regional Air Navigation Services
Development Association, Ukraine*

Bill Peacock, *Robinson Aviation System Inc., USA*

12.00-12.15 Aviation & Environment Summit – on the way to the
Environmentally Friendly Air Transportation System

Philippe Rochat, *Air Transport Action Group, Switzerland*

12.15-12.30 ATM Safety from the Eurocontrol Perspective

Tzvetomir Blajev, *Eurocontrol*

12.30-13.00 Honorary Doctorates Ceremony

13:00-14:00

Lunch

SYMPOSIUM 1

FLIGHT SAFETY AND CONTINUED AIRWORTHINESS

Chairman – **A. Palmer**, *North Dakota University, USA*

co-Chairman – **S. Shmarov**, *National Aviation University, Ukraine*

SESSION A

Unmanned Aerial Vehicles (UAV)

Chairman - **S.Ishchenko**, *National Aviation University, Ukraine*

**20 September, 10⁰⁰,
room 9.201**

Exhibition

**UNMANNED AERIAL VEHICLES OF THE NATIONAL AVIATION
UNIVERSITY**

**20 September, 14¹⁵,
room 9.201**

1. AVIATION DESIGN PROTECTION AND ENGINEERING TECHNOLOGY

Liu Gao Hang, Wang Yun, Meng Hiag, *Nanjing, University of Aeronautics and Astronautics, China*

2. PROBLEM OF SMALL AIRPLANE FLIGHT SAFETY UNDER TURBULENCE

W. Wisniwski, K. Szafran, *Institute of Aviation, Warsaw, Poland*

3. NEW CONCEPT OF PILOTS TRAINING

A. Palmer, *North Dakota University, USA*

4. AERODYNAMIC PECULIARITIES OF UNMANNED AERIAL VEHICLES DESIGN

S.Ishchenko, *National Aviation University, Ukraine*

**21 September, 9⁰⁰,
room 9.201**

1. DESIGN OF SUBOPTIMAL ROBUST FLIGHT CONTROL SYSTEMS FOR SMALL UAV

A.Tunik, T.A.Galaguz, *National Aviation University, Ukraine*

Xu Guo Dong, *China*

2. THE PECULIARITIES OF UNMANNED AERIAL VEHICLES CONTROL OPERATORS TRAINING
M. Mateychuk, *National Aviation University, Ukraine*
3. NON-STABLE AERODYNAMICS OF TRANSPORT AIRPLANES
E. Udartsev, *National Aviation University, Ukraine*

SESSION B

**New methods of aircraft maintenance and retrofitting.
Information support of aircraft during their service life**

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

**20 September, 14¹⁵ ,
room 11.229**

1. TRENDS IN ENGINE RENEWING FOR THE IL-76
A.Inozemtsev, V. Chernov, *Perm' Motor, Russia*
2. ALTERNATIVE APPROACHES TO FLIGHT SAFETY LEVEL ESTIMATION
S. Dmitriev, V. Kasianov, G. Suslova, *National Aviation University, Ukraine*
3. TRIBOLOGICAL PROBLEMS OF AIRCRAFT SAFETY
S. Konyashov, *Federal State Unitary Enterprise, Russia*,
S.Dmitriev, M.Kindrachuk, E.Kulhaviy, A.Kryzhanovskiy,
National Aviation University, Ukraine
4. RESISTENCE TO IMPACT INFLUENCE OF COMPOSITE STRUCTURAL PARTS
V.Astanin, O. Shevchenko, *National Aviation University, Ukraine*

**21 September, 9⁰⁰ ,
room 11.229**

1. SURFACE STRENGTHENING AND RECONSTRUCTION OF PARTS AND ELEMENTS BY MEANS OF MODERN TECHNOLOGICAL METHODS
A.Kudrin, *The head of plan 410, Ukraine*
S. Dmitriev, M. Kindrachuk, V.Labunets, *National Aviation University, Ukraine*

2. MATHEMATICAL OPTIMIZATION MODEL OF AVIONICS
COMPLICATION ON EARLY STAGE OF DESIGNING
**V.Vorob'yov, T. Bilyh, V.Zakharchenko, M.Novikova,
S. Kondratenko, A.Kiselyov,** *National Aviation University, Ukraine*
3. DEFORMATION SURFACE PATTERN OF SINGLE- AND POLY
CRYSTALS UNDER FATIGUE
M. Karuskevich, O. Karuskevich, T.Maslak, N. Hayday, *National
Aviation University, Ukraine*
4. FLOW STABILITY IN AXIAL COMPRESSOR
A. Inozemtsev, *Perm' Motor, Russia*
M. Tereshenko, E. Volianskaya, *National Aviation University,
Ukraine*
5. PRESSURE STABILIZATION AT THE INLET TO
COMPRESSOR POWER INSTALLATION
M.Kulyk, K.Kapitanchuk, P.Grekov, S.Onischenko,
National Aviation University, Ukraine

SESSION C

Modeling and numerical methods in gas-hydrodynamics

Chairman - **V.Grinchenko,** *National Academy of Sciences, Ukraine*

**20 September, 14¹⁵ ,
room 6.203**

1. PROBLEMS OF TURBULENT BOUNDARY LAYER OVER
THE DEFORMABLE SURFACE OF VISCOELASTIC LAYER
V.Grinchenko, *National Academy of Sciences, Ukraine*
G.Voropayev, *Hydromechanics Institute, Ukraine*
2. EXPERIMENTAL INVESTIGATION OF GERTLER
WHIRLWINDS ON CURVILINEAR MOBILE SURFACE
V.Nikishov, V.Oleksyuk, S.Pihur, *Hydromechanics Institute,
Ukraine*
3. TO CALCULATION OF AERODYNAMIC PERFORMANCE OF
HIGH – SPEED GROUND VEHICLES
O.Prikhodko, *Dnipropetrovsky National University, Ukraine*
A.Sokhatsky, *Academy of Custom Service, Ukraine*

4. MATHEMATICAL MODELING IN THEORY OF TURBULENT BOUND LAYERS
V. Movchan, *National Aviation University, Ukraine*
5. THE LIQUID CAVITIES NEAR THE HARD BOUND
V. Buyvol, *National Aviation University, Ukraine*
6. NONLINEAR OSCILLATION IN RESERVOIR OF REVOLUTION
O. Limarchenko, *International Mathematical Center, NAS of Ukraine*

21 September, 9⁰⁰ ,
room 6.203

1. ONE APPROACH TO RANDOM PROCESSES INTERPOLATION
V. Denisiuk, *National Aviation University, Ukraine*
2. ABOUT SOME CHARACTERISTICS OF CONFORMAL MAPPING
E. Karupu, *National Aviation University, Ukraine*
3. MATHEMATICAL MODELING AND METHODS OF TURBULENT LAYER MANAGEMENT
E. Shkvar, *National Aviation University, Ukraine*
4. RENPHMOGROUP ANALYSIS OF TURBULENT IN DIBE PROCESS
A. Dolinsky, *Academician NAS, Ukraine*
B. Basok, **A. Turinov**, *Institute of Technical Thermal Physics, Ukraine*
5. HYDRODYNAMICAL INSTABILITY OF DIBE PROCESS
A. Dolinsky, *Academician NAS of Ukraine*
A. Avramenko, *Institute of Technical Thermal Physics, Ukraine*

SYMPOSIUM 2
DIAGNOSTIC SYSTEMS IN AEROSPACE TECHNOLOGIES

Chairman – **V.Babak**, *National Aviation University, Ukraine*
co-Chairman – **V.Kvasnikov**, *National Aviation University, Ukraine*

SESSION A

20 September, 10⁰⁰,
room 11.311

1. IMPACT OF SPECIFIC CERAMIC-METAL LAYER PROPERTIES ON ACOUSTIC EMISSION
V.Babak, S.Filonenko, V.Stadnychenko, *National Aviation University, Ukraine*
2. AUTOMATED CONTROL SYSTEM OF AIRCRAFT ENGINE PARTS BY A SAMPLE
M.Gumen, T.Ivolgina, *National Aviation University, Ukraine*
3. INTELLECTUAL SYSTEM OF AUTOMATIC-CONTROL OF LINEAR ENGINES ON AEROSTATIC SUPPORTS REPLACEMENT
O.Dashenko, *Odessa National Politechnical University, Ukraine*
O.Osmolovskiy, *National Aviation University, Ukraine*
4. SYSTEMS OF ROBOT-VISION AND DIGITAL IMAGE PROCESSING OF DIAGNOSTIC PARAMETERS
V.Kvasnikov, N.Shibitskaya, O.Borkovskiy, *National Aviation University, Ukraine*
5. CONCEPTUAL NEURAL NETWORK APPROACH TO DIAGNOSTICS OF DEFECTS IN THE TECHNICAL SYSTEMS
L.Kolomiets, O.Kochetkova, *National Aviation University, Ukraine*
6. APPLICATION OF MODERN INFORMATION TECHNOLOGIES IN THE DIAGNOSTIC TASKS OF ROBOTO-TECHNICAL COMPLEXES
V.Lahno, *National Aerospace University “KhAI”, Ukraine*
M.Rudneva, *National Aviation University, Ukraine*

8. MATHEMATICAL MODEL FOR DIAGNOSTIC PARAMETERS ADAPTIVE SYSTEM MEASUREMENT OF COORDINATE-MEASURING MACHINE VIBROSUPPORTS
U.Kunchenko, M.Kiselev, A.Perederko, *National Aviation University, Ukraine*
9. EXPERIENCE OF THE APPLICATION OF MULTI-AGENT TECHNOLOGIES IN THE AUTOMATED PRODUCTION SYSTEMS
P.Pavlenko, *National Aviation University, Ukraine*
10. OPPORTUNITIES OF GIS SPATIAL MODELING FOR ESTIMATION OF THE INTEGRATED COST OF THE PROJECTED COMMUNICATION ROUTES
O.Ischuk, V.Shvajko, A.Kurbatskiy, *USC GIS Analyst Center, Ukraine*
11. TECHNOLOGY OF CALCULATION OF REGIONAL MAPS OF RISKS FROM DANGEROUS NATURAL HAZARDS BY MEANS OF GIS SPATIAL ANALYSIS
O.Ischuk, *USC GIS Analyst Center, Ukraine*

SESSION B

**21 September, 10⁰⁰,
room 11.311**

1. INTELLECTUAL SYSTEM OF COMPLEX AIRCRAFT UNITS SURFACES MEASUREMENT
V.Babak, V.Kvasnikov, *National Aviation University, Ukraine*
2. IDENTIFICATION OF DYNAMIC OBJECTS PARAMETERS IN THE SYSTEMS OF TECHNICAL DIAGNOSTICS
V.Babak, N.Shibitskaya, A.Isak, *National Aviation University, Ukraine*
3. USE OF INDUCTIVE TRANCDUSERS IN THE LOW-FREQUENCY OSCILLATION SECTION OF BRIDGE CONSTRUCTIONS
S.Filonenko, I.Korniienko-Miftakhova, *National Aviation University, Ukraine*

4. INTELLECTUAL SYSTEM OF DETERMINATION OF DIAGNOSTIC PARAMETERS OF COORDINATE-MEASURING MACHINES
L.Borkovska, M.Nalisnyi, *National Aviation University, Ukraine*
5. INTELLECTUAL 3D-LAZER MEASURING SYSTEM OF AIRCRAFT ENGINE PARTS DIAGNOSTICS
V.Kupko, V.Ilchenko, *National Aviation University, Ukraine*
6. THE METHOD OF AIRCRAFT ENGINE FUEL CONTENT BY MEANS OF MAGNITOELASTIC TRANSDUCERS
V.Larin, *National Aviation University, Ukraine*
7. APPLICATION OF HEURISTIC SYSTEMS DESIGN PRINCIPLES IN TECHNICAL DIAGNOSTICS PROCEDURES SUPERVISION
S.Golub, R.Medvedeva, *National Aviation University, Ukraine*
8. METHODS OF FORMALIZATION OF TECHNOLOGICAL KNOWLEDGE IN CONSULTING MODELS
P.Pavlenko, N.Evdokimova, V.Kudryakov,
National Aviation University, Ukraine
9. SELF-CHECK INTELLECTUAL SYSTEM FOR TECHNOLOGICAL LASER MOVEMENT AND ORIENTATION
Z.Uskova, *Moscow Aviation Institute, Russia*
B.Shevchenko, *Cherkassy, Ukraine*
U.Shevchenko, *National Aviation University, Ukraine*
10. FORECASTING AND MODELING SUBSYSTEM OF UKRAINIAN GOVERNMENTAL INFORMATION AND ANALYTICAL SYSTEM OF EMERGENCY SITUATIONS
O.Ischuk, V.Shvajko, A.Kurbatskiy, *USC GIS Analyst Center, Ukraine*

SYMPOSIUM 3

AIR TRAFFIC MANAGEMENT SECURITY AND SAFETY

Chairman – **K.Theil, ICAO**

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

SESSION A

Aeronavigation systems and technologies

Chairman – **K.Theil, ICAO**

co-Chairman – **C. Murray Warfield, Qantas Airways Ltd., Australia**

**20 September, 9⁰⁰,
room 11.321**

1. THE SAFE AIRPORT BUSINESS CASE
R.C.Brown, SELEX Sistemi Integrati S.p.A., Italy
2. SAFETY ASSESSMENT OF METHODOLOGY FOR SIMULATIONS – SAFETY INDICATORS
Jelena Djokic, EUROCONTROL-CRDS, Hungary
3. ON-LINE ESTIMATION OF THE OBSERVED LEVEL OF AIR TRAFFIC SAFETY
A.Kouzova, A.Monakov, St. Petersburg State University of Aerospace, Russia
N.Mirolubova, JSC “PELENG”, Russia
4. ANTICIPATING THE NEXT THREAT TO AVIATION
John F.Mullins, Robinson Aviation System Inc., USA
5. CNS/ATM A REGIONAL APPROACH
Bill Peacock, Robinson Aviation System Inc., USA
O.Shvets, UkSATSE, Ukraine
6. SOFTWARE ARCHITECTURE OF MODELING SYSTEM FOR COMPARISON OF AIRCRAFT CONFLICT RESOLUTION ALGORITHMS
V.Kharchenko, S.Zakora, National Aviation University, Ukraine
7. RADAR APPROACH AND AIR TRAFFIC CONTROL TOWER FACILITIES
P.V.J.Drechse, North Dakota University, USA

8. NEW APPROACH TO FLIGHT SAFETY MANAGEMENT
Yu.Kordyanin, I.Misharin, *Main Enterprise of Flight Information Processing, Ukraine*
9. ANALYSIS AND EXPERIMENTAL MODELING OF ADS-B CHARACTERISTICS WITH THE APPLICATION OF SECTOR ANTENNAS
V.Sultanov, R.Nabiev, E.Nahmadov, *AZANS, Azerbaijan*

**20 September, 14³⁰,
room 11.321**

10. HARMONIZATION AND INTEGRATION OF CIVIL-MILITARY ATM, EXPERIENCE IN 1992-2005
Bruno Reichstadler, *ALES, Slovak Republic*
11. DEFINITION OF QUANTITATIVE ESTIMATIONS OF AIR TRAFFIC CONTROLLER PROFESSIONAL LEVEL BY MEANS OF FUZZY SETS THEORY
V.Kharchenko, Yu.Chynchenko, L.Latypova, *National Aviation University, Ukraine*
12. USING OF GEO INFORMATION SYSTEMS BASED ON WEB TECHNOLOGIES FOR THE QUALITY ASSURANCE IN THE AIR NAVIGATION SERVICES
T.Schmelova, S.Vlasov, *the State Flight Academy of Ukraine*
13. SIGNATURE ANALYSIS OF THE PHASED ANTENNA ARRAYS OF ADOPTIVE ANTENNA SYSTEMS IN CNS/ATM
V.Shvecz, *National Aviation University, Ukraine*
14. REVIEW OF AERONAUTICAL SYSTEMS AND FLIGHT MANAGEMENT SYSTEMS (FMS) CREATED BY SPECIALISTS OF UKRAINIAN COMPANIES
A. Krivovyaz, *State enterprise «Orizon-Navigation», Ukraine*
15. EVALUATION OF PROBABILITY OF AIRCRAFT COLLISION AT COOPERATIVE AIR TRAFFIC CONTROL
V.P. Kharchenko, V.M. Vasylyev, *National Aviation University, Ukraine*
A.G. Kukush, *Kyiv Taras Shevchenko National University, Ukraine*

16.REGIONAL AIM AS INFORMATION BASE FOR FUTURE SYSTEM CNS/ATM

S.Tkach, *UkSatse, Ukraine*

Poster presentations (presented by PhD students of the National Aviation University):

1. AIRPLANE DYNAMIC VIRTUAL CONTROL IN FUNCTIONALLY CLOSED “CNS-AIRPLANE” SYSTEMS

S.Pavlova, *National Aviation University, Ukraine*

2. RESEARCH OF THE EXPERIMENTAL DATA OF THE SATELLITE NAVIGATION SYSTEMS

I. Mushtina, *National Aviation University, Ukraine*

3. COMPUTER - AIDED SYSTEM OF NAVIGATION SYSTEMS ACCESSIBILITY FORECASTING

D.G.Babeychuk, S.V. Vodopianov, *Regional Air Navigation Service Development Association, Ukraine*

V.V. Konin, O.P. Sushich, *National Aviation University, Ukraine*

Exhibition

AERONAVIGATION INFORMATION TECHNOLOGIES AND SYSTEMS

SESSION B

Computer aided design

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

co-Chairman - **L. Sibruk**, *National Aviation University, Ukraine*

**20 September, 9⁰⁰,
room 5.407**

1. STUDY OF THERMAL EFFECTS IN METALLIC CVG RESONATOR

V.Chikovani, Yu.Yatsenko, *State Research Enterprise “Ukrainian Center for Optical Instrument Technology”, Ukraine*

2. THE BASE PRINCIPLES OF THE FLYING DEVICES OF THE SAME AUTOMATIC DESIGN

V.Sineglazov, A.Brykalov, *National Aviation University, Ukraine*

3. **PRODUCT STRUCTURE BASED ON CAD ASSEMBLY DATA**
V.Sineglazov, S.Kyevorkov, *National Aviation University, Ukraine*
4. **THE VISUALIZATION SYSTEMS ENTERPRISE LEVEL**
V.Sineglazov, S.Duddkovsky, *National Aviation University, Ukraine*
5. **MOTION CONTROL APPLIED TO NONMINIMUM PHASE SYSTEMS: A GENERALIZATION**
V.Azarskov, S.Zhiteckij, O.Suschenko, *National Aviation University, Ukraine*
6. **CAD DATA AND TECHNICAL DOCUMENTATION ARCHIVES BASED ON WINDCHILL TECHNOLOGIES**
V.Sineglazov, S.Kyevorkov, *National Aviation University, Ukraine*
7. **NEW TECHNOLOGIES OF VISUALIZATION**
V.Sineglazov, S.Duddkovsky, *National Aviation University, Ukraine*
9. **THE PROBLEM AND ALGORITHM OF SYNTHESIS OF OPTIMUM STOCHASTIC STABILIZATION SYSTEMS WITH INCREASED ROBASTICITY**
V. Azarskov, L.Blokhin, *National Aviation University, Ukraine*
10. **PROBLEMS AND METHODOLOGY OF MOVING OBJECTS AIRBORNE METERING AND CONTROL SYSTEMS DYNAMIC CERTIFICATION USING MOTION SIMULATION COMPLEXES**
V. Azarskov, L. Blokhin, *National Aviation University, Ukraine*
11. **FUZZY INFERENCES IN THE SYSTEM A TENSOR-VARIABLE**
I.Zhukov, Yu.Minaev, O.Filimonova, *National Aviation University, Ukraine*

Poster presentation (presented by PhD students of the Institute of Computer Technologies of the National Aviation University)
COMPUTERIZED SYSTEM FOR COMPARATIVE ANALYSIS OF ELECTRONIC TEXTS

O.Stjopushkina, A.Kralina, *National Aviation University, Ukraine*
Exhibition

COMPUTER AIDED DESIGN AND MODELING IN ELECTRONICS & CONTROL SYSTEMS



Workshop on Microwaves, Radar and Remote Sensing - MRRS 2005

Chairman – **F. Yanovsky**, *National Aviation University, Ukraine*
19 September, 14¹⁰ -14²⁰,
room 1.002

Opening of the International Workshop on Microwaves, Radar and Remote Sensing –MRRS 2005

SESSION A1

Radar Theory and Systems

Chairman - **Ioan Nicolaescu**, *Romania*

19 September, 14²⁰,
room 1.002

1. POLISH RADAR TECHNOLOGY 50th ANNIVERSARY
E. Sedek, *Telecommunication Research Institute, Warsaw, Poland*
2. AN AUTOMOTIVE RADAR NETWORK BASED ON 77GHz FMCW SENSORS
H. Rohling, *Technical University of Hamburg-Harburg, Germany*
3. THE EMERGENCE PRINCIPLE FOR POLARIZATION PARAMETERS DEFINITION
V. Tatarinov, *Tomsk State University of Control Systems and Radioelectronics, Russia*
2. EXPERIMENTAL INVESTIGATION OF EMERGENCE PRINCIPLE AT THE SCATTERING BY COMPLEX RADAR OBJECT
V. Tatarinov, S. Tatarinov, *Tomsk State University of Control Systems and Radioelectronics, Russia*
5. DETECTION OF THE CORRELATED SIGNALS IN A MIXTURE WITH THE CORRELATED CLUTTERS
I. Prokopenko, *National Aviation University, Ukraine*
16⁰⁰ –16²⁰ Coffee Break

SESSION B1

Antenna Theory and Engineering

Chairman - **Roberto Sorrentino**, *Italy*

**19 September, 14²⁰,
room 1.001**

1. EUROPEAN FRAMEWORK FOR THE ANALYSIS OF ANTENNA STRUCTURES – THE ANTENNA SOFTWARE INITIATIVE AND THE ELECTROMAGNETIC DATA INTERFACE

G. Vandebosch, *Katholieke Universiteit Leuven, Belgium*

R. Gillard, *IETR, INSA, Rennes, France*

P. E. Frandsen, *TICRA, Denmark*

J.-P. Martinaud, *Thales Airborne Systems, France*

2. CHALLENGES AND SOLUTIONS IN THE DESIGN OF CIRCULARLY POLARIZED ANTENNAS FOR RFID APPLICATIONS

A. Andrenko, *Fujitsu Laboratories LTD, Yokosuka, Japan*

3. MILLIMETER-WAVE INTEGRATED LENS ANTENNAS: A REVIEW

R. Sauleau, *Institut d'Electronique et de Telecommunications de Rennes, France*

4. RADIATION CHARACTERISTICS OF THE 2D CYLINDRICAL REFLECTOR ANTENNA SYSTEM COVERED BY A CIRCULAR LOSSY RADOM

T. Oguzer, *Dokuz Eylul University, Buca-Izmir, Turkey*

5. HORN RADIATION PROPERTIES FOR SYNTHESIZED PULSE SIGNALS IN 6-mm WAVELENGTH RANGE

V. Alekseev, O. Drobakhin, S. Pridatko, D. Saltykov,

Dnepropetrovsk National University, Ukraine

16⁰⁰ –16²⁰ Coffee Break



SESSION A2

Radar Systems and Technology

Chairman – **Hermann Rohling**, *Germany*

19 September, 16²⁰,
room 1.002

1. **LOW-COST SAR FOR LIGHT-WEIGHT AIRCRAFT PLATFORM**
D. Vavriv, V. Vynogradov, V. Volkov, R. Kozhyn, O. Bezvesilniy, S. Alekseenkov, A. Shevchenko, M. Vasilevskiy, *Institute of Radio Astronomy NAS, Ukraine*
2. **AIRPORT SURVEILLANCE RADAR ON THE BASIS OF SLIDING ANTENNAS AND NOISE WAVEFORM SAR**
K. Lukin, *Institute of Radiophysics & Electronics, National Academy of Sciences, Ukraine*
3. **NOISE RADAR TECHNOLOGY FOR AIRPORT SAFETY**
K. Lukin, *Institute of Radiophysics & Electronics, National Academy of Sciences, Ukraine*
4. **MULTIFREQUENCY NEAR-ZONE RADAR OF 6-mm WAVE RANGE WITH COMBINATION OF PULSE SYNTHESIS AND TRANSVERSAL SCANNING**
O. Drobakhin, V. Alekseev, M. Andreev, Ye. Kondratyev, D. Saltykov, *Dnipropetrovsk National University, Ukraine*
5. **SPACE-TIME AMBIGUITY MATRICES AND THEIR USE FOR ESTIMATION OF POTENTIAL RESOLUTION OF POLARIMETRIC SYNTHETIC APERTURE RADAR**
D. Purik, G. Sharygin, *Tomsk State University of Control Systems and Radioelectronics, Russia*

SESSION B2

Space and Air Radio-Electronic Systems

Chairman – **Vladimir Schejbal**, *Czech Republic*

19 September, 16²⁰,
room 1.001

1. SLOTTED WAVEGUIDE ACTIVE PHASED ARRAYS FOR MOBILE SATELLITE TERMINALS
R. Sorrentino, R. V. Gatti, *University of Perugia, Italy*
2. PERSONAL COMMUNICATION SYSTEMS (PCS) ANTENNA WITH MANAGED RADIATION CHARACTERISTICS AND STUDY OF ITS INTERACTION WITH THE USER
G. Ghvedashvili, K. Tavzarashvili, D. Kakulia, R. Zaridze,
Tbilisi State University, Georgia
3. EFFICIENCY OF METHOD OF AUXILIARY SOURCES FOR MATHEMATICAL MODELING AND SIMULATION APPLIED PROBLEMS
D. Kakulia, G. Ghvedashvili, K. Tavzarashvili, R. Zaridze,
Tbilisi State University, Georgia
4. ALGORITHMS AND SOFTWARE FOR CALCULATION OF FREQUENCY-DISTANCE SPACING OF RADIO-ELECTRONIC SYSTEMS
V. Ivanov, L. Sibruk, M. Reshetnik, *National Aviation University, Ukraine*
5. STBC-TCM FOR MC-CDMA SYSTEMS WITH SOVA-BASED DECODING AND SOFT-INTERFERENCE CANCELLATION
L. A. Paredes Hernandez, M. G. Otero, *Universidad Politecnica de Madrid, Spain*
6. THE NEW TRENDS IN AUTOMATION FOR AVIONICS
L. Crovella, *Avionics Systems, Torino, Italy*



SESSION A3

Remote sensing of atmosphere

Chairman – **Herman Russchenberg**, *The Netherlands*

20 September, 8¹⁰,
room 1.002

1. MULTIPURPOSE PHASED ARRAY RADAR – CIVILIAN APPLICATIONS?
D. Zrnic, D. Forsyth, *NOAA, National Severe Storms Laboratory, Norman OK, USA*
2. NOVEL POSSIBILITIES OF Ka- AND W-BAND DUAL-WAVELENGTH DOPPLER MEASUREMENTS FOR RETRIEVING CLOUD AND RAIN PARAMETERS
O. Bezvesilniy, D. Vavriv, *Institute of Radio Astronomy, NAS of Ukraine*
3. MODELING OF RELATIONSHIP BETWEEN DIFFERENTIAL DOPPLER VELOCITY AND TURBULENCE
I. Mazura, *National Aviation University, Ukraine*
4. ANALYSIS OF THE POSSIBILITY TO DETERMINE WIND PARAMETERS AHEAD THE AIRCRAFT BY USING POLARIMETRIC AIRBORNE RADAR
Yu. Averyanova, A. Averyanov, *National Aviation University, Ukraine*
5. ADVANCED ALGORITHM FOR RADAR DETECTION OF ICING. CALCULATION OF POLAREMETRIC OBSERVABLES
A. Pitertsev, *National Aviation University, Ukraine*

10:10- 10:30 Coffee Break

SESSION B3

UWB signals and through obstacles detection

Chairman – **N.T.Cherpak**, *Ukraine*

**20 September, 8¹⁰,
room 1.001**

1. UWB SIGNAL PROPAGATION THROUGH WALLS
P. Bezousek, V. Schejbal, D. Cermak, Z. Nemeč, M. Hajek,
University of Pardubice, Czech Republic
2. ELECTROMAGNETIC WAVE PROPAGATION THROUGH OBSTACLES
V. Scheibal, D. Cermak, Z. Nemeč, *University of Pardubice, Czech Republic*
O. Fiser, *UFA, Prague, Czech Republic*
3. MICROWAVE THROUGH-OBSTACLES LIFE-SIGNS DETECTION SYSTEM
A.Vertiy, I. Voynovskyy, *TUBITAK-Marmara Research Center, Turkish-Ukrainian Joint Research Laboratory, Gebze, Turkey*
4. SOME CONSIDERATIONS ABOUT SIMPLE SHAPES' ULTRAWIDEBAND RCS
I. Nicolaescu, *Teodorescu Sorinel Military Technical Academy, Bucharest, Romania*
5. ULTRA-WIDEBAND RADAR WITH ARBITRARY SOUNDING FEATURES
V.Prokhorenko V.Ivashchuk, S.Korsun, *VIY, Transient Technologies, Ukraine*

10:10- 10:30 Coffee Break



SESSION A4
Remote Sensing of the Earth
Chairman – **Dusan Zrnic, USA**

20 September, 10³⁰,
room 1.002

1. NEW RESULTS IN THE THEORY AND TECHNIQUES OF REMOTE SENSING OF THE EARTH
A. Kozlov, A. Logvin, Moscow State Technical University of Civil Aviation, Russia
 2. THE FEATURES OF RADAR OBSERVATIONS OF SNOW COVER FROM SPACEBORNE CARRIERS
I. Kalmykov, V. Yefimov, Center for Radiophysical Sensing of the Earth, NAS and NSA of Ukraine
S.Ye. Yatsevich, Institute of Radiophysics and Electronic, NAS of Ukraine
 3. SNOW DAYS DETERMINATION IN IRAN, USING PASSIVE MICROWAVE SATELLITE DATA
A. Matkan, University of Shahid Beheshti, Tehran, Iran
 4. DAMAGED FORESTS: DETECTION USING AIRBORNE SAR IMAGES
V. Ivanov, R. Paschenko, O. Stadnyk, S. Yatsevich, Institute for Radiophysics and Electronics, National Academy of Sciences of Ukraine
 5. FIELD TEST OF THE RADIO-WAVE INTROSCOPE
A. Kudelya, P. Grigorovskiy, L. Kosolup, Research Institute of Building Production, Ukraine
A. Kovalenko, Kiev Geological Survey Technical School, Ukraine
- 12¹⁰ – 13⁰⁰ - TPC Meeting**
13⁰⁰ – 14⁰⁰ Lunch



SESSION B4

Passive and Semi-Active Systems

Chairman – **Guy Vandenbosch**, *Belgium*

**20 September, 10³⁰,
room 1.001**

1. SPATIAL (APERTURE) NOISE GENERATORS
I. Bragin, V. Sgibnev, *Russian Federal Space Agency, Moscow*
2. RESULTS OF THE ELABORATION OF RADIOMETRIC RECEIVERS FOR SUBMILLIMETER FREQUENCY RANGE
I. Bragin, V. Sgibnev, *Russian Federal Space Agency, Moscow*
3. PASSIVE MEASUREMENT OF THE DISTANCE TO LIGHTNING SOURCE FROM AN AIRPLANE
D. Glushko, F. Yanovsky, *National Aviation University, Ukraine*
4. SIMULATION AND EVALUATION OF THE PASSIVE COHERENT LOCATION SYSTEM
L. Slezak, M. Kvasnicka, M. Pelant, J. Vavra, R. Plsek, *ERA, Czech Republic*
Radek Plsek, *University of Pardubice, Czech Republic*
5. SELECTION OF RADAR SIGNAL IN SEMI-ACTIVE RADAR WITH USING OF CELLULAR COMMUNICATION BASE STATION ILLUMINATION
A. Firsakov, *Military Academy, Minsk, Belarus*
H. M. Elhetki, *Belarusian State University of Informatics and Radio-electronics, Minsk, Belarus*
6. ANALYSIS OF POSSIBILITIES OF CREATING THE RADIO-ELECTRONIC COMPLEXES TO BE MADE FOR DETECTION OF RADIO BRIGHTNESS OBJECTS (OVER GROUND, ABOVE-WATER AND UNDER GROUND)
I. Bragin, V. Sgibnev, *Russian Federal Space Agency, Moscow*

12¹⁰ – 13⁰⁰ - TPC Meeting

13⁰⁰ – 14⁰⁰ Lunch

SESSION A5

Remote sensing of atmosphere II

Chairman – **Dmytro Vavriv**, *Ukraine*

20 September, 14²⁰,
room 1.002

1. **GROUND-BASED ATMOSPHERIC REMOTE SENSING IN THE NETHERLANDS; EUROPEAN OUTLOOK**
H. Russchenberg, *IRCTR, Delft University of Technology, The Netherlands*
H. van der Marel, *Aerospace engineering, Delft University of Technology, The Netherlands*
F. Bosveld, R. Boers, *Royal Netherlands Meteorological Institute, The Netherlands*
D. Swart, A. Apituley, *National Institute for Public Health and the Environment, The Netherlands*
H. ten Brink, *Netherlands Energy Research Foundation*
G. de Leeuw, *Netherlands Organization for Applied Scientific Research*
R. Uijlenhoet, *Wageningen University and Research Centre*
B. Arbesser-Rastburg, *European Space Agency*
2. **INFLUENCE OF THE SHAPE OF TURBULENCE SPECTRUM ONTO THE DOPPLER SPECTRUM OF THE RADAR RETURNS FROM RAIN**
Yahya Khraisat, *Al_Balqa Applied University / Al-huson University College, Jordan*
3. **DOPPLER-POLARIMETRIC RADAR DATA PROCESSING. RETURNS FROM WIDE SPREAD PRECIPITATION**
C.M.H.Unal, H.W.J.Russchenberg, L.P.Ligthart, *Delft University of Technology, The Netherlands*
F. Yanovsky, *National Aviation University, Ukraine*
4. **SOFTWARE FOR DOPPLER-POLARIMETRIC WEATHER RADAR DATA PROCESSING**
Y. Ostrovsky, H. Rohling, *Technical University of Hamburg-Harburg, Hamburg, Germany*

F. Yanovsky, *National Aviation University, Ukraine*

5. DEVELOPMENT AND INVESTIGATION OF HAIL DETECTION ALGORITHMS

I. Braun, *National Aviation University, Ukraine*

6. ANALYSIS OF INTERCONNECTION BETWEEN DOPPLER-POLAREMETRIC PARAMETERS AND TURBULENCE INTENSITY IN RAIN ZONE

V. Marchuk, *National Aviation University, Ukraine*

SESSION B5

Microwave elements and devices

Chairman – **R. Sauleau**, *France*

20 September, 14²⁰,
room 1.001

1. FREQUENCY TUNABLE MICROWAVE DIELECTRIC DEVICES

Yu. Poplavko, V. Molchanov, V. Pashkov, *National Technical University of Ukraine "KPI", Ukraine*

Eu. Furman, M. Lanagan, *The Pennsylvania State University, University Park, PA, USA*

2. SOURCE OF FEMTO-SECOND WAVE PACKAGES ON THE BASIS OF TWO-STREAM FREE ELECTRON LASERS

V. Kulish, *National Aviation University, Ukraine*

A. Lysenko, V. Savchenko, I. Majornikov, *Sumy State University, Ukraine*

3. ELECTROMAGNETIC FIELD SCATTERING BY A THIN DIELECTRIC DISK

M. Balaban, *Institute of Radiophysics & Electronics, National Academy of Sciences of Ukraine, Kharkiv*

4. MICRO-MECHANICAL PROPERTIES OF BIOMATERIALS

I. Zakiev, E. Aznakayev, A. Markovsky, E. Gursky, V. Zakiev, *National Aviation University, Ukraine*



5. **DIFFRACTION FROM SEMICONDUCTIVE INCLUSIONS IN A RECTANGULAR WAVEGUIDE**
M. Davidovich, *Saratov State University, Russia*
6. **SEMICONDUCTOR DEVICES IN MILLIMETER WAVE RADIO SYSTEMS**
V. Lyubchenko, *Institute of Radio Engineering & Electronics, Russian Academy of Sciences, Moscow, Russia*

SESSION A6

Radar Signal Processing

Chairman – **A. Andrenko**, *Japan*

21 September, 9⁰⁰
room 1.002

1. **MICROWAVE FREQUENCIES SPECTRAL ESTIMATION**
R.F.Damian, I. Casian-Botez, D. Alexa, *Technical University Iasi, Romania*
2. **DATA FUSION IN THE PRESENCE OF UNCERTAINTY CONCERNING MEASUREMENTS' ORIGIN**
G. Gavriloiu, A. Stoica, *Military Technical Academy, Bucharest, Romania*
A. Sperila, *Romanian Air Force, Bucharest Romania*
3. **CONVERGENCE IMPROVEMENT IN ITERATIVE METHODS**
R.F.Damian, I. Casian-Botez, D. Alexa, *Technical University Iasi, Romania*
4. **NONPARAMETRIC ESTIMATES OF A PROBABILITY DENSITY FUNCTION FOR RADAR SIGNAL PROCESSING**
R. Sinitsyn, *National Aviation University, Ukraine*
5. **DIGITAL BEAMFORMING USING CONSTANT MODULUS ALGORITHM**
I. Golubeva, Y. Prokopenko, Y. Poplavko, *National Technical University of Ukraine "KPI", Ukraine*

11.10-11:25 Coffee Break

11:30 –12:00 Closing Ceremony

SESSION B6

**Measurements, Analysis and Optimization in
Microwaves**

Chairman – **Yu. Poplavko**, *Ukraine*

**21 September, 9⁰⁰,
room 1.001**

1. MICROWAVE CHARACTERIZATION TECHNIQUE FOR
CONDENSED MATTER FROM FIRST PRINCIPLES
N.Cherpak, A.Barannik, Yu.Prokopenko, Yu.Filipov, *Institute for
Radiophysics and Electronics, National Academy of Sciences of
Ukraine*
2. A STEPWISE METHODOLOGY FOR THE LOCAL
OPTIMIZATION OF SUBSTRATE LENSES
R. Sauleau , B. Bares, *Institut d'Electronique et de
Telecommunications de Rennes, France*
3. OPTIMIZATION OF SMALL SIZE LENSES FOR RADAR
APPLICATIONS
A. Boriskin, *Institute of Radiophysics and Electronics (IRE),
National Academy of Sciences of Ukraine*
S. Boriskina , *G. Green Institute for Electromagnetic Research,
University of Nottingham, UK*
R. Sauleau, *IETR, University of Rennes, France*
A.I. Nosich *IRE Ukraine, IETR, University of Rennes, France*
4. NEAR-FIELD SET-UP WITH THE HIGH SPACE RESOLUTION
OF MEASUREMENTS IN THE MILLIMETER RANGE
I.Ivanchenko , D.Ivanchenko, N. Popenko, R.Chernobrovkin,
*Institute of Radiophysics and Electronics, National Academy of
Sciences of Ukraine*
5. INVERSE WAVEGUIDE AND COAXIAL PROBLEM
SOLUTIONS FOR MULTILAYERED MEDIA
M. Davidovich, *Saratov State University, Russia*

11.10-11:25 Coffee Break

11:30 –12:00 Closing Ceremony

SYMPOSIUM 4

Environment Protection

Chairman – **Philippe Rochat**, *Executive Director of Air Transport Action Group, Switzerland*

co-chairman – **Dominique Colline**, *Snecma Moteurs, Group SAFRAN, France*

20 September, 10⁰⁰,
room 1-116a

1. OVERVIEW OF EC AIRCRAFT NOISE RESEARCH
D. Collin, *Snecma Moteurs, France*
2. CALCULATION TOOLS FOR BALANCED ENVIRONMENT PROTECTION IN AIRPORTS OF CIVIL AVIATION
V. Tokarev, O. Zaporozhets, *National Aviation University, Ukraine*
3. TOOLS FOR MEASURING AIRPORT LOCAL AIR QUALITY
D. Raper, *Manchester Metropolitan University, UK*
4. NEW RUSSIAN METHOD FOR EMISSION INVENTORY IN AIRPORTS OF CIVIL AVIATION
O. Kartyshev, *GosNIGA, Moscow, Russia*
5. MODELING AND CONTROL OF NOISE AROUND AIRPORTS
N. van Oosten, *Anotec Consulting, S.L., Spaine*
6. ON AIRCRAFT NOISE AND ITS MONITORING AT TALLIN AIRPORT
M. Enneveer, *Tartu Aviation College, Estonia*
7. STRATEGIC EIS FOR AIRPORT ENVIRONMENT MANAGEMENT
D. Dimitriu, *Manchester Metropolitan University, UK*
8. SENSOR-ACTUATOR APPLICATION FOR VIBRATION/NOISE CONTROL IN TRANSPORT MEANS
O. Taeger, *Dresden Technical University, Germany*

Poster presentations (presented by PhD students
of the National Aviation University):

1. ***IsoBella*** – TOOL FOR AIRCRAFT NOISE CONTOUR
CALCULATION AROUND THE AIRPORTS
G. Golembijevskiy, *National Aviation University, Ukraine*
2. ***NoBel*** – TOOL FOR AIRCRAFT NOISE SPECTRA
ASSESSMENT ACCOUNT OF GROUND AND SHIELDING
EFFECTS ON NOISE PROPAGATION
O. Konovalova, *National Aviation University, Ukraine*
3. ***PolEmiCa*** – TOOL FOR AIR POLLUTION AND AIRCRAFT
ENGINE EMISSION ASSESSMENT IN AIRPORTS
K. Sinilo, *National Aviation University, Ukraine*
4. ***3PRisk*** – THIRD PARTY RISK ASSESSMENT AROUND THE
AIRPORTS
I. Gosudarskaja, *National Aviation University, Ukraine*

SYMPOSIUM 5 Economics in Aviation

Chairman – **V. Shchelkunov**, *National Aviation University, Ukraine*
co-Chairman – **V. Matveev**, *National Aviation University, Ukraine*

**20 September, 10⁰⁰,
room 2.418**

1. LEGAL AND ECONOMIC ASPECTS FOR COMMERCIAL
ACTIVITY PERFECTION OF UKRAINIAN AIRLINES
V. Shchelkunov, *National Aviation University, Ukraine*
2. TURKISH AIR TRANSPORTATION INDUSTRY EVOLUTION
AND CURRENT OUTLOOK
Yusuf Sengur, Ali Emre Sarligan, *Anadolu University, School of
Civil Aviation, Turkey*
3. THE WAYS OF IMPROVEMENT OF AIRLINE PASSENGER
TARIFF POLICY
D. Bugayko, *National Aviation University, Ukraine*
4. AIR CARGO A COMPETITIVE APPROACH
L. Maresio, *Malpensa logistica Europa S.p.A., Italy*

5. THE RFID APPLICATION OF EUROPEAN MAIL
G.Vieder, *Malpensa logistica Europa S.p.A., Italy*
6. PRIORITY DIRECTIONS OF USE FSA IN CA
S.Khoudasova, V.Baranova, *National Aviation University, Ukraine*
7. STATE ROLE IN REALIZATION OF FOREIGN TRADE ACTIVITIES
H.Gurina, H.Ploskonos, *National Aviation University, Ukraine*
8. GLOBALIZATION AS THE ESSENTIAL FACTOR OF INFLUENCE ON ECONOMIC SAFETY IN AIRCRAFT
I. Kononova, A.Lysenko, *National Aviation University, Ukraine*
9. STATE REGULATION OF CIVIL AVIATION IN UKRAINE
M.Voronin, *National Aviation University, Ukraine*
10. SOME ASPECTS OF MANAGEMENT OF INFORMATIONAL PROCESSES OF ECONOMIC SAFETY OF ENTERPRISES
V.Novak, L.Makarenko, Yu. Symonenko, *National Aviation University, Ukraine*
11. INCENTIVE MEASURES ON CONSTANT USE OF NATURAL RESOURCES IN UKRAINE.
T. Bilenko, *National Aviation University, Ukraine*
12. THE ECONOMIC SAFETY OF THE UKRAINE ENTERPRISES
A.Naumenko, A.Gavrilenko, T.Gavrilko, *National Aviation University, Ukraine*
13. FORECASTING AS AN INTEGRAL PART OF BUSINESS PLANNING IN AVIATION
P.Khryptulov, *National Aviation University, Ukraine*
14. SAFETY PROVIDING PROBLEMS AS APPLIED AVIATION TO ECONOMICS BRANCHES
G.Yun, V.Lagutochkin, *National Aviation University, Ukraine*
15. SAFETY PROVIDING OF FLIGHT BY RASING THE LEVEL OF SPECIALISTS QUALIFICATION
G.Michaylov, *National Aviation University, Ukraine*

Round table

**21-22 September, 10⁰⁰
room 2.418**

**AIR CARGO LOGISTICS AND SUPPLY CHAIN
MANAGEMENT**

SYMPOSIUM 6

Human Factor in Aviation

Chairman – **Soon-Kil Hong**, *Hankuk Aviation University, Korea*
co-Chairman – **A.Gudmanian**, *National Aviation University, Ukraine*

SESSION A

Psychological and Juridical Support in Aviation

Chairman – **Allen Batteau**, *Wayne State University, USA*
co-Chairmen – **T.Kudlaj**, *National Aviation University, Ukraine*
O.Petrenko, *National Aviation University, Ukraine*

**20 September, 10⁰⁰,
room 1.215**

1. STRATEGIES TO OVERCOME TECHNOLOGICAL PERIPHERALIZATION
A.Batteau, *Wayne State University, USA*
2. THE IMPACT OF NATIONAL AND LABOR CULTURE ON THE EFFICIENCY AND EFFECTIVENESS OF THE CREW RESOURCE MANAGEMENT. THE CASE STUDY OF A SOUTHEASTERN EUROPEAN AIRLINE'S COCKPIT CREWMEMBERS
Yannis (John) S. Lainos, *Technological Educational Institution, Athens-Greece*
3. A STUDY ON THE EFFECT OF AVIATION SAFETY OVER THE AIR PASSENGER'S BEHAVIOR FOR ENHANCEMENT OF AVIATION SAFETY MANAGEMENT
Lee, Kang-Seok, *Hanseu University, Korea*
Hong, Soon-Kil, *Hankuk Aviation University, Korea*

4. TEAM PERFORMANCE FACTORS
C.Y.Kim, S.K.Hong, S.C.Lee, *Hankuk Aviation University, Korea*
5. PSYCHO-PHYSIOLOGICAL ASPECTS OF PERSONNEL PROFESSIONAL SELECTION IN AVIATION
O.Malkhazov, *National Aviation University, Ukraine*
6. TRANSFORMATION OF PSYCHOLOGICAL CRITERIA OF PROFESSIONAL SUITABILITY OF CIVIL AVIATION PILOTS IN THE PROCESS OF AIRCRAFT GENERATION REPLACEMENT
O.Petrenko, *National Aviation University, Ukraine*
7. MEDICAL ASPECTS OF EVALUATION OF AIR TRAFFIC CONTROLLERS PROFESSIONAL RELIABILITY
O.Kaniskin, *The State Air Traffic Service Enterprise, Ukraine*
8. PROBLEMS OF ECOLOGICAL SAFETY IN THE REALIZATION OF SPACE ACTIVITIES
N.Malysheva, *International Center for Space Law, Ukraine*
9. SPACE ACTIVITIES STATE REGULATIONS FOR PROVISION OF NATIONAL SAFETY OF UKRAINE UNDER TRANSITION TO STABLE DEVELOPMENT
O.Behlyi, *National Aviation University, Ukraine*
10. SOME LEGAL ASPECTS OF FLIGHT SAFETY IN AIR SPACE
V.Ryzhyy, *National Aviation University, Ukraine*

**21 September, 11⁰⁰,
room 1.215**

1. QUANTITATIVE EVALUATION OF SUBJECTIVE FACTORS INFLUENCE ON FLIGHT SAFETY
V.Kasianov, A.Goncharenko, *National Aviation University, Ukraine*
2. PSYCHO-DIAGNOSTIC AND PSYCHO-THERAPEUTIC ASPECTS OF THE HUMAN FACTOR OPTIMIZATION IN AVIATION
N.Ratsyborynska, *Centre of the Aviation and Astronautics Medicine of the Ukrainian Air Forces, Ukraine*

3. ETHNIC AND SOCIAL PECULIARITIES OF A CREW IMPACT ON FLIGHT SAFETY
O.Dolgova, *National Aviation University, Ukraine*
4. EXPERIENCE AND VITAL PROBLEMS OF THE INDIVIDUAL-ORIENTED PSYCHOLOGICAL TRAINING OF GLIDER PILOTS
P.Kharaberyush, *Central Aeroclub of Ukraine*
5. ADAPTATION ON OF THE NATIONAL LAW TO THE EU CIVIL AVIATION REGULATORY BASIS
N.Pasichnyk, *National Aviation University, Ukraine*
6. PROTECTION INTO INTELLECTUAL PROPERTY IN SPACE ACTIVITIES
N.Zoubach, *National Space Agency of Ukraine*
7. PROBLEMS OF FAVORABLE LEGAL PREVAILING CONDITIONS FOR CAPITAL INVESTMENT TO THE AEROSPACE FIELD
S.Gerasymchuk, *National Space Agency of Ukraine*
8. PROVISION OF INTERNATIONAL LIABILITIES OF UKRAINE IN THE MISSILE TECHNOLOGY CONTROL REGIME
I.Chupryn, *National Space Agency of Ukraine*

SESSION B

Aviation English and Flight Safety

Chairman – **Patricia Sullivan**, *USA*

co-Chairman – **G.Suslova**, *National Aviation University, Ukraine*

**20 September, 10⁰⁰,
ICAO Center**

1. AVIATION ENGLISH TESTING SYSTEM EVALUATION AND DEVELOPMENT
Patricia Sullivan, *USA*
2. ICAO STANDARDS AND RECOMMENDED PRACTICES CONCERNING LANGUAGE PROFICIENCY REQUIREMENT
A.Gudmanian, G.Suslova, *National Aviation University, Ukraine*

3. ICAO ENGLISH LANGUAGE PROFICIENCY RATING SCALE CONCEPT
G.Suslova, O.Zhuravliova, *National Aviation University, Ukraine*
4. TRAINING METHODS FOR APPLICATION OF AVIATION TERMINOLOGY IN AERONAUTICAL COMMUNICATIVE FUNCTION
R.Gilchenko, *National Aviation University, Ukraine*
5. DEVELOPMENT OF AVIATION ENGLISH TEST FOR AIR TRAFFIC CONTROLLERS
E.Petrashchuk, *AEROLINGUA Training Center, Ukraine*

Workshop - Upgrading and Continuing Education. Trends and Problems of Development

Chairman - **R.Ginevicius**, *Vilnius Gediminas Technical University, Lithuania*

co-Chairman - **Guy Brazeau**, *IATA Training and Development Institute*

**20 September, 10⁰⁰,
room 1.116**

1. A NEW STRATEGIC COURSE IN THE TRAINING AND CONTINUING AVIATION SPECIALISTS EDUCATION IN LITHUANIA
R.Ginevicius, J.Stankunas, *Vilnius Gediminas Technical University, Lithuania*
2. TRENDS IN AVIATION SPECIALISTS TRAINING
G. Brazeau, *IATA Institute, Canada*
3. SYSTEMS OF SPECIALISTS CONTINUING TRAINING AS ONE OF THE MOST IMPORTANT FACTORS OF AVIATION SAFETY
R. Salimov, *National Aviation University, Ukraine*
D. Mayster, *State Social Service, Germany*
4. UPGRADING OF AIRPORT GROUND SERVICES SPECIALISTS AS AN IMPORTANT COMPONENT IN FLIGHT SAFETY PROVISION
M. Shinkarchuk, *National Aviation University, Ukraine*
A. Zakrevsky, *National aviation university, Ukraine*

CH. Serd-Yanjiv, *Civil Aviation Administration, Mongolia*

5. HUMAN FACTOR AS AN IMPORTANT CRITERIUM FOR EMPLOYMENT SERVICE STRATEGY DEVELOPMENT

A.Melnik, L. Shayan, *Kiev Employment Center, Ukraine*

6. IMPACT OF UPGRADING AND CONTINUOUS EDUCATION ON THE LEVEL OF AIR TRANSPORT SYSTEM SAFETY

A.Savinov, *National Aviation University, Ukraine*

G. Sadykova, *Ministry of Transport and Communications, Kazakhstan*

7. UPGRADING OF TOP-MANAGERS QUALIFICATION AS A FACTOR OF SAFETY PROVISION

I.Paliy, *Institute of Training Specialists, Ministry of Industrial Policy, Ukraine*

8. DISTANT FORM OF EDUCATION FOR AVIATION SPECIALISTS IN THE FIELD OF AVIATION SAFETY

M. Ikramov, Kh. Khusnutdinova, *Tashkent State Aviation Institute, Uzbekistan*

9. PROBLEMS OF PERSONNEL TRAINING FOR AVIATION

B. Fazlanshoyev, *„Tol-Airlines”, Tajikistan*

10. QUALITY MANAGEMENT IN THE SYSTEM OF ADDITIONAL PROFESSIONAL TRAINING

E. Borisova, *Commercial Institute, Cheboksary, Russia*

11. PECULIARITIES OF AVIATION PERSONNEL UPGRADING SYSTEM ON THE BASIS OF EDUCATIONAL ESTABLISHMENTS COOPERATION

S.Karateev, *«AT Group», Tyumen, Russia*

12. ACTUAL PROBLEMS AND TRENDS IN THE DEVELOPMENT OF ADDITIONAL PROFESSIONAL TRAINING

S. Kondratyev, *State Academy of Innovations, Russia*

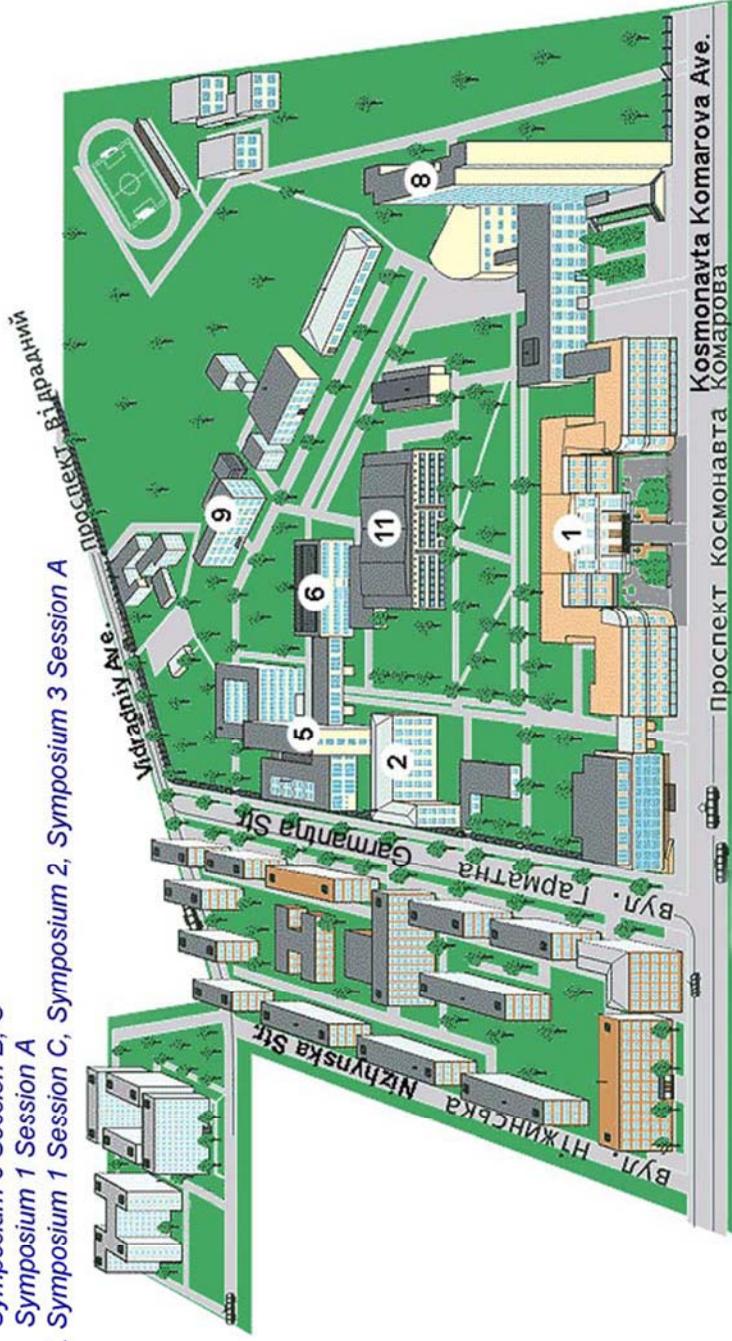
13. CONTINUING EDUCATION IN RUSSIA AND THE USA

A. Demyanchenko, *Interstate Association of Continuing Education, Russia*

Draves W.A., *USA, Learning Resources Network*

Campus NAU

1. Plenary Session, MRRS, Symposium 4, Symposium 6 Session A
2. Symposium 5
5. Symposium 3 Session B
6. Symposium 1 Session B
8. Symposium 6 Session B, C
9. Symposium 1 Session A
11. Symposium 1 Session C, Symposium 2, Symposium 3 Session A





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