

# 'Henri Coandă' Air Force Academy



The cover features a blue background with a white grid. A purple circle is on the left, and a yellow triangle with a green star is on the right. At the bottom left, there are four colorful diagonal stripes (teal, pink, yellow, dark teal) with white airplane icons. At the bottom right, there is a circular logo with a white paper airplane and a dashed line, and the Romanian coat of arms.

**28 MAY • 02 JUNE**

**THE EUROPEAN  
AIR FORCE  
ACADEMIES  
COMMANDERS'  
CONFERENCE,  
(EUAFA-CC)**

**27th edition**

**FOLLOWED BY**

**21st edition**

**THE INTERNATIONAL  
CONFERENCE**  
*Scientific Research and  
Education in the Air Force*  
**(AFASES 2019)**

*held in Braşov, "Henri Coandă"  
Air Force Academy under the patronage of  
Romanian Presidency of the Council  
of the European Union*

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# Conference Guide

# AFASES 2019





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Romanian Presidency of the Council of the European Union



**Academia Forțelor Aeriene  
„Henri Coandă”**



**Universitatea  
Transilvania  
din Brașov**

# Conference Guide **AFASES 2019**

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# Conference Agenda

## Friday, May 31<sup>st</sup>, 2019

08 <sup>00</sup> – 09 <sup>00</sup>	Participants registration
09 <sup>00</sup> – 10 <sup>00</sup>	AFASES Opening Session: speeches, program presentation group photo
10 <sup>00</sup> – 11 <sup>30</sup>	Plenary session: Keynote speakers presentations
11 <sup>30</sup> - 12 <sup>00</sup>	Coffee break
12 <sup>00</sup> – 13 <sup>30</sup>	Paper presentations on panels (I)
13 <sup>30</sup> – 14 <sup>30</sup>	Lunch
14 <sup>30</sup> – 16 <sup>00</sup>	Paper presentations on panels (II)
08 <sup>00</sup> – 16 <sup>00</sup>	In parallel, workshop on military drones, in partnership with the Romanian Headquarter of Communications and Informatics
17 <sup>00</sup> – 19 <sup>00</sup>	Concert in Concil Square (Air Force Academy Military Band and Brasov Philharmonic Orchestra)
20 <sup>00</sup> – 24 <sup>00</sup>	AFASES official dinner/ AFASES facilities

## Saturday, June 1<sup>st</sup>, 2019

10 <sup>00</sup> – 11 <sup>30</sup>	Paper presentation on panels
10 <sup>00</sup> – 11 <sup>30</sup>	In parallel, workshop on military drones, in partnership with the Romanian Headquarter of Communications and Informatics
10 <sup>00</sup> – 18 <sup>00</sup>	Braşov-Ghimbav Airport: Exhibition <b>Braşov fAir</b>
10 <sup>00</sup> – 16 <sup>00</sup>	International Children's Day Spectacle
10 <sup>30</sup> – 12 <sup>00</sup>	Sports competitions
12 <sup>00</sup> – 16 <sup>00</sup>	Flights by light planes, balloons, parachute jumping
12 <sup>00</sup> – 16 <sup>00</sup>	Training for Air Show
16 <sup>00</sup> - 22 <sup>00</sup>	Concert Iron Dragon

## Sunday, June 2<sup>nd</sup> 2019

10 <sup>00</sup> - 12 <sup>00</sup>	Transport to Braşov-Ghimbav Airport
10 <sup>00</sup> – 17 <sup>30</sup>	In parallel, Exhibition Braşov fAir
12 <sup>30</sup> – 17 <sup>30</sup>	Braşov Air Show ( <b>BrAShow</b> )
17 <sup>30</sup> – 19 <sup>30</sup>	Hangar Party
19 <sup>30</sup> - 20 <sup>00</sup>	Transport to Braşov



# The Session Panels

	Room	Page
<b>1. MILITARY SCIENCES</b>	<b>E5</b>	<b>10</b>
<b>2. AIRSPACE SECURITY SYSTEMS &amp; CYBER DEFENCE</b>	<b>E44</b>	<b>15</b>
<b>3. FUNDAMENTAL SCIENCES &amp; ENGINEERING</b>	<b>E45</b>	<b>18</b>
<b>4. METEOROLOGY &amp; APPLIED CLIMATOLOGY</b>	<b>E72</b>	<b>23</b>
<b>5. OPERATIONAL MEDICINE</b>	<b>E32</b>	<b>26</b>
<b>6. OPERATIONAL REQUIREMENTS FOR AERIAL DRONES USED IN INTEGRATED AIR SPACE (WORKSHOP)</b>	<b>E54</b>	<b>29</b>
<b>7. ROMANIAN MILITARY THINKING (ROUND TABLE)</b>	<b>C13</b>	<b>31</b>

# International Scientific Committee

## Scientific Directors of the Conference:

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Military Technical Academy, Bucharest, Romania

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**Daniela ROȘCA**, PhD

University of Craiova, Romania

**Alexandra SARCINSCHI**, PhD

“Carol I” National Defense University, Bucharest, Romania

**Michael TODOROV**, PhD

Technical University, Sofia, Bulgaria

**Michal ŽÁK**, PhD

Charles University, Prague, Czech Republic

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Prof habil. **Adrian LESENCIUC**, PhD  
Vice Rector for Science, 'Henri Coandă' Air Force Academy , Brasov,  
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Assist Prof Eng **Vasile PRISACARIU**, PhD  
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OR <b>Mihăiță POPA</b>	Std <b>Oana MAXIM</b>	Std <b>Răzvan LEAȘ</b>
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WO <b>Marius CODREANU</b>	Std <b>Andrei COSMA</b>	Std <b>Vlăduț PREUTU</b>
OR <b>Alexandru PAȘCA</b>	Std <b>Denisa MĂLUȚAN</b>	

# Keynote Speakers

## **Presentation of Joe BORELLI, PhD**

City University of New York/ The New York City Council, New York, USA

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## **Presentation of Antonia COLIBASANU, PhD**

analyst, Geopolitical Futures, Austin, Texas, USA

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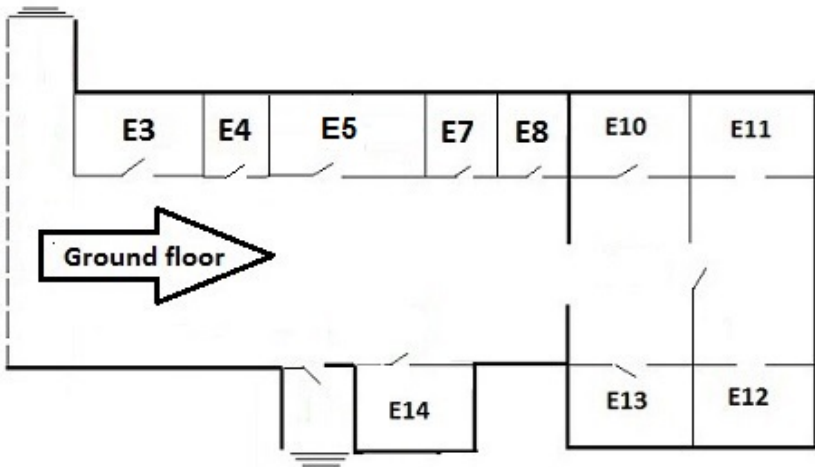
## **Presentation of Andreas MATZARAKIS, PhD**

“Albert Ludwigs” University, Freiburg, Germany/ German Meteorological Service, Freiburg, Germany

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# 1. Military Sciences

## Conference ROOM E5



# 1. Military Sciences

Conference ROOM E5

## Chairmen:

**Brigadier General Corneliu POSTU**

Board Director of General Staff

**Adrian LESENCIUC**

“Henri Coandă” Air Force Academy, Braşov, Romania

**Panel coordinator:**

**Cătălin CIOACĂ**

“Henri Coandă” Air Force Academy, Braşov, Romania

1.	<p><b><i>THE ISSUE OF AIRSPACE AND OUTER SPACE DELIMITATION AND ITS POTENTIAL IMPACT ON GLOBAL SECURITY</i></b></p> <p><b>Radu-Mihai DINCĂ*, Traian ANASTASIEI**</b></p> <p>*“Carol I” National Defence University, Bucharest, Romania</p> <p>**“Henri Coandă” Air Force Academy, Braşov, Romania</p>
2.	<p><b><i>CONSIDERATIONS ABOUT REFORM OF EUROPEAN AVIATION SAFETY</i></b></p> <p><b>Eduard MIHAI, Oliver CIUCĂ</b></p> <p>“Henri Coandă” Air Force Academy, Braşov, Romania</p>
3.	<p><b><i>CONSIDERATIONS ABOUT THE FUTURE FIGHTER PILOTS DEVELOPMENT</i></b></p> <p><b>Laurentiu MITITELU</b></p> <p>Romanian Air Force Headquarter Bucharest, Romania</p>
4.	<p><b><i>ANALYSIS SPECIFIC BEHAVIOR OF MISSILE GUIDANCE SYSTEMS WITH RANDOM PERTURBATIONS</i></b></p> <p><b>Nikolay Veselinov GENCHEV</b></p> <p>Aviation Faculty, “Vasil Levski” National Military University, Veliko Târnovo, Bulgaria</p>

5.	<p><b><i>GLIDER FLIGHT TRAINING APPLICATION IN TURKISH AIR FORCE</i></b>  <b>Goksel KESKIN*</b>, <b>Hasim KAFALI**</b>, <b>Seyhun DURMUS*</b>, <b>Selim GURGEN*</b>, <b>Melih Cemal KUSHAN*</b>  *Eskişehir Osmangazi University, Graduate School of Natural and Applied Sciences Eskişehir, Turkey  **Mugla Sıtkı Koçman University, Dalaman School of Civil Aviation, Muğla, Turkey</p>
6.	<p><b><i>RESEARCH ON APPLICATIONS OF MINI-TURBOJET AND TURBOJET ENGINED MILITARY UAVS</i></b>  <b>Mehmet TURKAY*</b>, <b>Selim GURGEN*</b>, <b>Göksel KESKIN*</b>, <b>Seyhun DURMUS**</b>, <b>Melih Cemal KUSHAN*</b>  *Eskişehir Osmangazi University, Department of Mechanical Engineering, Eskişehir, Turkey  **Balıkesir University, Edremit School of Civil Aviation, Balıkesir, Turkey</p>
7.	<p><b><i>FUNDAMENTAL TREATIES BETWEEN THE RUSSIAN FEDERATION AND THE USA IN THE NUCLEAR MISSILE SPHERE</i></b>  <b>Alexandru-Marius FUGARETU</b>  “Nicolae Balcescu” Land Forces Academy, Sibiu, Romania</p>
8.	<p><b><i>WHY DID THE AXIS LOSE THE SECOND WORLD WAR? A POLITICO-MILITARY AND SOCIO-ECONOMIC PERSPECTIVE</i></b>  <b>Gabriel GIUVARĂ*</b>, <b>Gabriel RĂDUCANU**</b>  *Air Operations Center, Bucharest, Romania  ***“Henri Coandă” Air Force Academy, Braşov, Romania</p>
9.	<p><b><i>THE INFLUENCE OF ESSENTIAL GENERIC TECHNOLOGIES ON FUTURE CURRICULUM PROGRAMS</i></b>  <b>Toma PLEŞANU</b>  “Nicolae Balcescu” Land Forces Academy, Sibiu, Romania</p>
10.	<p><b><i>METHODS OF RESEARCH AND ORGANIZATIONAL DEVELOPMENT OF MILITARY STRUCTURES</i></b>  <b>Adrian Valentin CÎŢĂ</b>  “Nicolae Bălcescu” Land Forces Academy, Sibiu, Romania</p>
11.	<p><b><i>MODELING IN OPERATIONAL RESEARCH</i></b>  <b>Serjiiu-Gheorghe OBREJA*</b>, <b>Ionuț TĂRTĂREANU**</b>  *“Henri Coandă” Air Force Academy, Braşov, Romania  **Regional Department of Defense Resources Management Studies, Braşov, Romania</p>

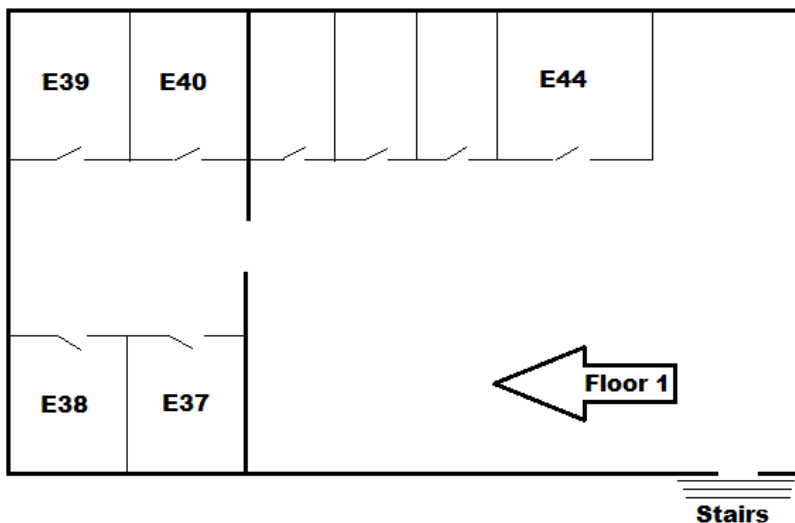
12.	<b><i>THE CARPATHIAN REGION – REGIONAL SECURITY COMPLEX</i></b> <b>Mircea BARAC</b> Romanian Defence Staff
13.	<b><i>THE DIALECTICS OF DECISIONAL TYPOLOGIES: RATIONALITY VS INTUITION</i></b> <b>Florin STAFI, Marian NICULAE</b> National Defense University "Carol I", Bucharest, Romania
14.	<b><i>POLIHEURISITC APPROACH OF CYBERWARFARE BASED ON CYBER POWER INDEX</i></b> <b>Horațiu MOGA*, Andrei LUCHIAN**, Răzvan BOBOC**</b> **CNIF-MFP, Brașov, Romania **Transilvania University, Brașov, Romania
15.	<b><i>THE HYBRID HEAVY ASSAULT</i></b> <b>Bogdan-Cezar CHIOSEAU</b> "Henri Coandă" Air Force Academy, Brașov, Romania
16.	<b><i>ACTIVE CYBER DEFENCE IN THE CONTEXT OF HYBRID ACTIONS</i></b> <b>Cătălin CIOACĂ, Bogdan ȚUȚUIANU, Ștefan RĂDĂCINĂ</b> "Henri Coandă" Air Force Academy, Brașov, Romania
17.	<b><i>"POWER DISTANCE", "UNCERTAINTY AVOIDANCE" AND THE LEVEL OF LINGUISTIC KNOWLEDGE – ESSENTIAL DIMENSIONS OF FUNCTIONING OF MILITARY COALITIONS</i></b> <b>Rita PALAGHIA</b> "Henri Coandă" Air Force Academy, Brașov, Romania
18.	<b><i>SWOT ANALYSIS OF "BALTICA 07" MISSION FROM CIVIL- MILITARY COOPERATION PERPECTIVE</i></b> <b>Cosmina-Oana ROMAN</b> "Henri Coandă" Air Force Academy, Brașov, Romania
19.	<b><i>ASPECTS REGARDING PEACEFUL WAYS OF CONFLICT PREVENTION AND OF SOLVING INTERNATIONAL DIFFERENCES</i></b> <b>Dumitru TOADER</b> "Henri Coandă" Air Force Academy, Brașov, Romania
20.	<b><i>PSYOPS, LEGITIMACY AND INTERNATIONAL POLITICAL CULTURE</i></b> <b>Ioana LEUCEA, Ioana-Miruna POPESCU</b> "Mihai Viteazul" National Intelligence Academy, Bucharest, Romania

21.	<p><b><i>THE IDENTITY MAP OF RADICALIZED YOUTH</i></b>  <b>Florentina HĂHĂIANU, Andrei-Cristian MORARU</b>  “Mihai Viteazul” National Intelligence Academy, Bucharest, Romania</p>
22.	<p><b><i>SUICIDAL ATTACKS - BETWEEN RATIONAL AND IRRATIONAL</i></b>  <b>Ammar EL BENNI</b>  “Mihai Viteazul” National Intelligence Academy, Bucharest, Romania</p>
23.	<p><b><i>THE ROLE OF COMMUNICATION IN INFORMATION OPERATIONS (INFO OPS) AND INFORMATION RESOURCES MANAGEMENT (IRM)</i></b>  <b>Adrian LESENCIUC</b>  “Henri Coandă” Air Force Academy, Braşov, Romania</p>
24.	<p><b><i>DISCIPLINARY LIABILITY OF THE MILITARY PERSONNEL</i></b>  <b>Mihai-Alin MECLEA, Dumitru TOADER</b>  “Henri Coandă” Air Force Academy, Braşov, Romania</p>
25.	<p><b><i>THE EUROPEAN UNION CITIZENSHIP</i></b>  <b>Dumitru TOADER</b>  “Henri Coandă” Air Force Academy, Braşov, Romania</p>
26.	<p><b><i>THE DETERMINATION METHOD OF THE COMBAT POSSIBILITIES OF MILITARY UNIT</i></b>  <b>Azer ALIEV, Azad BAYRAMOV</b>  Armed Forces War College of the Azerbaijan Republic Baku, Azerbaijan Republic</p>



## 2. Airspace Security Systems & Cyber Defence

Conference ROOM E44



## 2. Airspace Security Systems & Cyber Defence

Conference ROOM E44

### Chairmen:

**Marin MARINOV**

Aviation Faculty, “Vasil Levski” National Military University, Dolna Mitropolia, Bulgaria

**Laurian GHERMAN**

“Henri Coandă” Air Force Academy, Brasov, Romania

### Panel coordinator:

**Laurian GHERMAN**

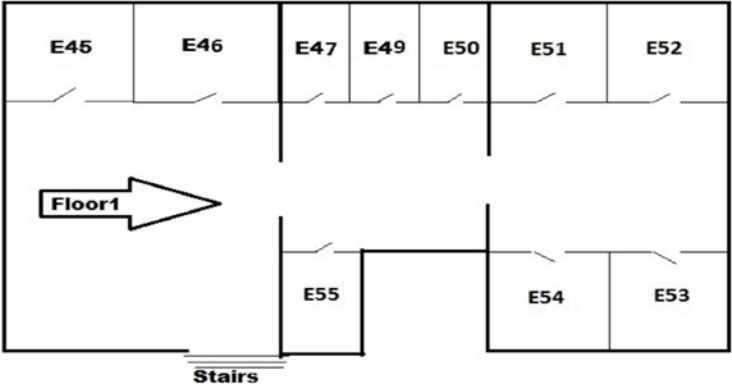
“Henri Coandă” Air Force Academy, Braşov, Romania

1.	<b><i>"POOLING AND SHARING" OR "INTELLIGENT DEFENSE" IN THE FIELD OF SECURITY</i></b> <b>Ivaylo ANGELOV</b> “Vasil Levski” National Military University, Veliko Tarnovo, Bulgaria
2.	<b><i>ONBOARD VISUAL TRACKING FOR UAS</i></b> <b>Marian-Valentin BĂNICĂ, Anamaria RĂDOI, Petrişor-Valentin PÂRVU</b> “Politehnica” University, Bucharest, Romania
3.	<b><i>COMPARATIVE ANALYSE REGARDING THE SURFACE-TO-AIR MISSILES GUIDING IN TERMS OF USING THE THREE POINTS AND PROPORTIONAL APPROACH METHODS</i></b> <b>Cristian-George CONSTANTINESCU, Vasile-Ioan ŞANDRU, Constantin STRÎMBU</b> “Henri Coandă” Air Force Academy, Braşov, Romania

4.	<p><b><i>COMPUTING OF PERFECT BAYESIAN EQUILIBRIUM INVOLVED IN RADIO-JAMMING WARFARE BASED ON INCOMPLETE INFORMATION DYNAMIC GAMES WITH KNOWN CHANCE</i></b></p> <p><b>Andrei LUCHIAN*</b>, <b>Horațiu MOGA**</b>, <b>Razvan BOBOC*</b></p> <p>*Transilvania University, Brașov, Romania **CNIF-MFP, Brașov, Romania</p>
5.	<p><b><i>A STATIC CALIBRATION OF MEMS 3-AXIS ACCELEROMETER USING GENETIC ALGORITHM</i></b></p> <p><b>Marin MARINOV</b>, <b>Zhivo PETROV</b></p> <p>Aviation Faculty, “Vasil Levski” National Military University, Dolna Mitropolia, Bulgaria</p>
6.	<p><b><i>CYBER TERRORISM AND THE EFFECTS OF THE RUSSIAN ATTACKS ON DEMOCRATIC STATES IN THE EST-EUROPEAN AREA</i></b></p> <p><b>Ovidiu MOȘOIU*</b>, <b>Ion BĂLĂCEANU**</b>, <b>Eduard MIHAI*</b></p> <p>*“Henri Coandă” Air Force Academy, Brașov, Romania **“Carol I” National Defence University, Bucharest, Romania</p>
7.	<p><b><i>ASPECTS ABOUT INTEGRATE RESPONSIVE WEBSITES FOR CYBER DEFENSE STRATEGIES - BOOTSTRAP VERSUS W3.CSS</i></b></p> <p><b>Livia SANGEORZAN*</b>, <b>Nicoleta ENACHE-DAVID*</b>, <b>Claudia-Georgeta CARSTEA**</b>, <b>Denisa-Iulia CATANA*</b></p> <p>*Transilvania University, Brașov, Romania “Henri Coandă” Air Force Academy, Brașov, Romania</p>
8.	<p><b><i>COMPUTATIONAL AND EXPERIMENTAL DESIGN OF A FIXED WING</i></b></p> <p><b>Laura – Alexandra STĂNESCU*</b>, <b>Constantin – Alexandru MATEI**</b></p> <p>*“Politehnica” University, Bucharest, Romania **“Alexandru Ioan Cuza” Police Academy, Bucharest, Romania</p>
9.	<p><b><i>NEW THREATS TO NATIONAL SECURITY OF STATES - CYBER THREAT</i></b></p> <p><b>Daniel-Cornel ȘTEFĂNESCU*</b>, <b>Alina PAPOI**</b></p> <p>*“Henri Coandă” Air Force Academy, Brasov, Romania **Romanian Defence Staff, Ministry of National Defense, Bucharest, Romania</p>
10.	<p><b><i>COMPARATIVE REVIEW OF THE LEGAL STATUS OF CADETS AND STUDENTS IN BULGARIAN HIGHER EDUCATION INSTITUTIONS</i></b></p> <p><b>Yosif YOSIFOV</b>, <b>Nikolay ZHECHEV</b>, <b>Alexander KUMANOV</b></p> <p>Artillery Air Defense and CIS Faculty, “Vasil Levski” National Military University, Shoumen, Bulgaria</p>

# 3. Fundamental Sciences & Engineering

Conference ROOM E45



# 3. Fundamental Sciences & Engineering

Conference ROOM E45

Chairmen:

**Ruxandra Mihaela BOTEZ**

École de Technologie Supérieure in Montréal, Canada

**Constantin ROTARU**

“Henri Coandă” Air Force Academy, Brasov, Romania

Panel coordinator:

**Constantin ROTARU**

“Henri Coandă” Air Force Academy, Braşov, Romania

Invited Paper:

***EXPERIMENTS ON A MORPHING WING MODEL FOR A FULL-SCALED PORTION OF A REAL WING***

**Ruxandra Mihaela BOTEZ**

École de Technologie Supérieure in Montréal, Canada

1.	<p><b><i>FLOW CONTROL INVESTIGATION USING THE COANDA EFFECT ON AIRFOILS</i></b> <b>Alexandru DUMITRACHE<sup>*</sup>, Florin FRUNZULICA<sup>**</sup>, Horia DUMITRESCU<sup>*</sup> Tudor IONESCU<sup>**</sup></b> <sup>*</sup>Institute of Mathematical Statistics and Applied Mathematics, Bucharest, Romania <sup>**</sup>“Politehnica” University, Bucharest, Romania</p>
2.	<p><b><i>TRACKING MANEUVERING TARGET WITH KALMAN FILTER AND INTERACTIVE MULTIPLE MODEL</i></b> <b>Deyan ATANASOV</b> Artillery Air Defense and CIS Faculty, “Vasil Levski” National Military University, Shoumen, Bulgaria</p>

3.	<p><b><i>CANARD UAV IMPROVEMENT USING VECTORED THRUST</i></b>  <b>Liviu DINCA, Jenica-Ileana CORCAU, Dionis CUMPAN</b>  University of Craiova, Romania</p>
4.	<p><b><i>ASPECT REGARDING THE CHOICE OF AN AIR OR GROUND  AMBULANCE FOR THE PROVISION OF EMERGENCY  MEDICAL CARE ON THE TERRITORY OF THE REPUBLIC OF  BULGARIA</i></b>  <b>Ivan IVANOV, Yulian STANCHEV</b>  Aviation Faculty, "Vasil Levski" National Military University, Dolna Mitropolia,  Bulgaria</p>
5.	<p><b><i>THE IMPORTANCE OF LIFE-CYCLE ANALYSIS IN ECONOMIC  ANALYSIS OF ENVIRONMENTAL IMPACT OF ALTERNATIVE  AIRCRAFT FUEL</i></b>  <b>Jozsef TOTH, Bertold BEKESI</b>  National University of Public Service, Budapest, Hungary</p>
6.	<p><b><i>CONTROL LAW FOR AN AIRCRAFT SUPERSONIC AIR INLET  WITH INTERNAL COMPRESSION</i></b>  <b>Alexandru-Nicolae TUDOSIE*, Emanuel DUMITRU*, Marius-Alin  ASPRA**</b>  *University of Craiova, Romania  **S.C. Eneria S.R.L. Craiova, Romania</p>
7.	<p><b><i>REFLECTIONS OF ILLUSTRATED POSTCARDS IN THE  PROMOTION OF ROMANIAN MINING ACTIVITIES</i></b>  <b>Bogdan CIORUȚA, Mirela COMAN, Alexandru Leonard POP</b>  Technical University of Cluj-Napoca - North University Centre of Baia Mare,  Romania</p>
8.	<p><b><i>THEORETICAL CONSIDERATIONS IN THE SELECTION OF  THE OPTIONAL TECHNOLOGY FOR THE DEPPOLUTION OF A  CONTAMINATED SOIL WITH LIQUID PETROLEUM PRODUCTS</i></b>  <b>Mirela COMAN, Bogdan CIORUȚA</b>  Technical University of Cluj-Napoca - North University Centre of Baia Mare,  Romania</p>
9.	<p><b><i>ON THE USE OF SUPER CAPACITORS FOR ELECTRIC  MOTORS POWER SUPPLY</i></b>  <b>Constantin Daniel OANCEA*, Sabin CODREA**, Adrian-Mihai  ALEXEI**, Marin DUMITRU**, Daniel ȘUTEU**</b>  *Politehnica University, Bucharest, Romania  **Military Equipment and Technologies Research Agency, Bucharest, Romania</p>

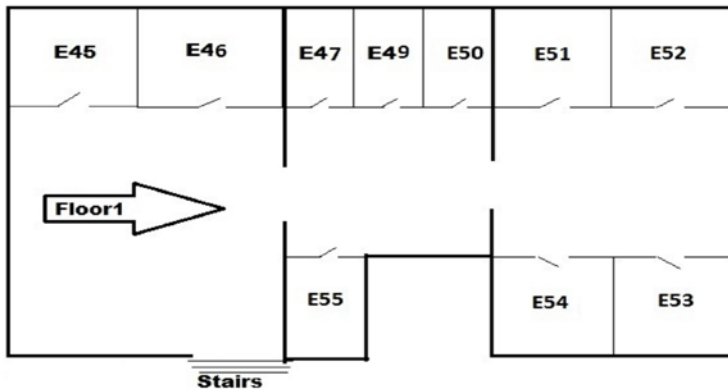
10.	<p><b><i>DESIGN FOR ADDITIVE MANUFACTURING WITH CASE STUDIES ON AIRCRAFTS AND PROPULSION SYSTEMS</i></b>  <b>Özgür POYRAZ*</b>, <b>Melih Cemal KUŞHAN**</b>  *TEI, Tusaş Engine Industries, , Eskişehir, Turkey  **Eskişehir Osmangazi University, Eskişehir, Turkey</p>
11.	<p><b><i>A HYBRID PROPULSION SYSTEM FOR UAS</i></b>  <b>Dragoş Daniel ISVORANU, Petrişor-Valentin PÂRVU, Octavian GRIGORE</b>  “Politehnica” University, Bucharest, Romania</p>
12.	<p><b><i>NUMERICAL MODELING OF ACOUSTIC WAVE PROPAGATION IN UNLIMITED SPACE</i></b>  <b>Alina-Elena ADETU*</b>, <b>Cătălin ADETU**</b>, <b>Vasile NĂSTĂSESCU*</b>  * Military Technical Academy, Bucharest, Romania  **“Politehnica” University, Bucharest, Romania</p>
13.	<p><b><i>CALCULATING TOOL FOR THE SPRING CONSTANT OF A SERPENTINE FLEXURE USED IN INERTIAL MEMS DEVICES</i></b>  <b>Petre NEGREA, Vlad Aurelian VĂDUVESCU</b>  University of Craiova, Romania</p>
14.	<p><b><i>METHOD OF CONTROL OF AIRCRAFT CENTER OF GRAVITY BASED ON THE FUEL CONSUMPTION ORDER</i></b>  <b>Alexandru-Nicolae TUDOSIE, Petre NEGREA, Vlad Aurelian VĂDUVESCU</b>  University of Craiova, Romania</p>
15.	<p><b><i>EMERGING TRENDS IN THE MANAGEMENT OF TECHNOLOGY AND INNOVATION- THE INTEGRATION OF DYNAMIC CAPABILITIES</i></b>  <b>Mircea BOŞCOIANU*</b>, <b>Elena- Corina BOŞCOIANU**</b>  * “Henri Coandă” Air Force Academy, Braşov, Romania  ** National Institute for Aerospace Research "Elie Carafoli" , Bucharest, Romania</p>
16.	<p><b><i>SAFETY MANAGEMENT- UNDERSTANDING RESILIENCE ENGINEERING IN AVIATION BY OPTION THINKING</i></b>  <b>Mircea BOŞCOIANU*</b>, <b>Elena- Corina BOŞCOIANU**</b>  * “Henri Coandă” Air Force Academy, Braşov, Romania  ** National Institute for Aerospace Research "Elie Carafoli" , Bucharest, Romania</p>
17.	<p><b><i>AERODYNAMIC ANALYSIS OF HELICOPTER VERTICAL TAIL</i></b>  <b>Vasile PRISACARIU, Alexandru CHIRILĂ</b>  “Henri Coandă” Air Force Academy, Braşov, Romania</p>

18.	<p><i><b>INFLUENCE OF AUTOMATION OF AIRSPACE ACTIVITIES ON AIR TRAFFIC SAFETY</b></i></p> <p><b>Ionică CÎRCIU, Vasile PRISACARIU</b>  “Henri Coanda” Air Force Academy, Braşov, Romania</p>
19.	<p><i><b>NUMERICAL SOLUTIONS FOR COMBUSTION WAVE VELOCITY</b></i></p> <p><b>Constantin ROTARU</b>  “Henri Coandă” Air Force Academy, Braşov, Romania</p>



# 4. Meteorology & Applied Climatology

## Conference ROOM E53



# 4. Meteorology & Applied Climatology

Conference ROOM E53

Chairman:

**Sorin CHEVAL**

“Henri Coandă” Air Force Academy, Braşov, Romania

Panel coordinator:

**Sorin CHEVAL**

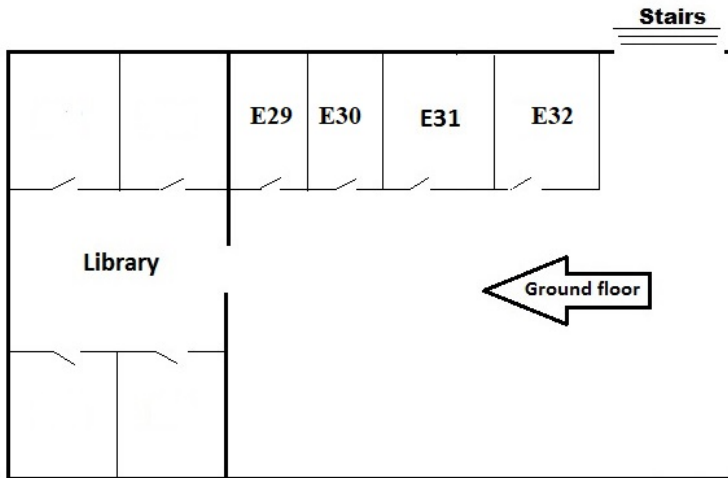
“Henri Coandă” Air Force Academy, Braşov, Romania

1.	<b><i>MARS A NEW STATE –OF - THE - ART FACILITY FOR ATMOSPHERIC AND ENVIRONMENTAL RESEARCHES</i></b> <b>Simona ANDREI, Bogdan ANTONESCU, Doina NICOLAE</b> National Institute of R&D for Optoelectronics INOE 2000, Magurele, Romania
2.	<b><i>GROSSWETTERLAGEN ANALYSED WITH CM SAF DATA</i></b> <b>Michael ZAK</b> Department of Atmospheric Physics, Faculty of Mathematics and Physics, Charles University, Prague, Czech Republic
3.	<b><i>THE THREAT OF TORNADOES IN ROMANIA</i></b> <b>Bogdan ANTONESCU</b> National Institute of R&D for Optoelectronics INOE 2000, Magurele, Romania

4.	<p><b><i>ASSESSING THE CHEMICAL COMPOSITION OF PRECIPITATION OVER THE EUROPEAN CONTINENT DURING THE LAST TWO DECADES</i></b></p> <p><b>Ágnes KERESZTESI<sup>*</sup>, Róbert SZÉP<sup>*</sup>, Marius-Victor BIRSAN<sup>**</sup>, Ion-Andrei NITA<sup>**</sup>, Zsolt BODOR<sup>***</sup></b></p> <p><sup>*</sup>University of Pécs, Faculty of Natural Sciences, Pécs, Hungary.  <sup>**</sup> National Meteorological Administration, Bucharest, Romania.  <sup>***</sup>Sapientia Hungarian University of Transylvania, Faculty of Economics, Miercurea Ciuc, Romania</p>
5.	<p><b><i>ASSESSMENT OF IAȘI URBAN HEAT ISLAND USING GROUND MEASUREMENTS AND SATELLITE IMAGES</i></b></p> <p><b>Lucian SFÎCĂ<sup>*</sup>, Pavel ICHIM<sup>*</sup>, Andrei NIȚĂ<sup>*</sup>, Paul MACARO<sup>**</sup>, Adrian URȘU<sup>*</sup>, Vlăduț-Iulian MITOC<sup>*</sup></b></p> <p><sup>*</sup>Faculty of Geography and Geology, “Alexandru Ioan Cuza” University, Iași, Romania  <sup>**</sup> “Gheorghe Asachi” Technical University, Iași, Romania</p>
6.	<p><b><i>THE THERMAL PERCEPTION OF MILITARY STUDENTS IN AN URBAN ENVIRONMENT</i></b></p> <p><b>Sorin CHEVAL<sup>*</sup>, Alexandru DUMITRESCU<sup>**</sup>, Petrisor DOBRE<sup>***</sup></b></p> <p><sup>*</sup>“Henri Coanda” Air Force Academy, Brasov, Romania  <sup>**</sup> National Meteorological Administration, Bucharest, Romania  <sup>***</sup> Research Institute of the University of Bucharest, Romania</p>

# 5. Operational Medicine

## Conference ROOM E32



# 5. Operational Medicine

Conference ROOM E32

Chairman:

**Cătălin Gabriel SMARANDACHE**

“Carol Davila” University of Medicine and Pharmacy, Bucharest, Romania

Panel coordinators:

**Alexandru KERESZTES**

“Regina Maria” Emergency Military Hospital Braşov, Romania,  
commander

**Mihaela OANCEA**

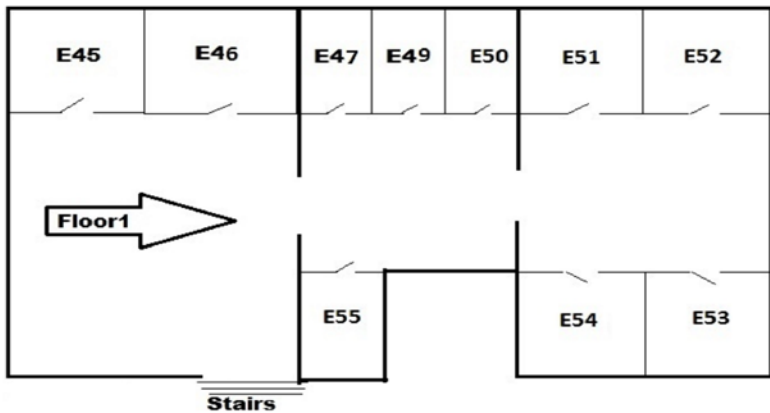
“Henri Coandă” Air Force Academy, Braşov, Romania

1.	<p><b><i>FROM THE WHITE SQUADRON TO MEDEVAC –SMMU. EARLY TIMES, PRESENT AND FUTURE OF THE OPERATIONAL MILITARY MEDICINE</i></b></p> <p><b>Marius BUIU</b> 71<sup>st</sup> Air Base, Câmpia Turzii, Romania</p>
2.	<p><b><i>BRAIN-COMPUTER INTERFACES APPLICATIONS FOR AIR FORCE PERSONNEL</i></b></p> <p><b>Cosmin Dragos DUGAN*</b>, <b>Cristian BARNA**</b>, <b>Daniel DINU***</b>, <b>Florin BUSTIUC****</b></p> <p>*Ponderas Hospital, The “Regina Maria” Health Network, Romania **National Intelligence Academy “Mihai Viteazul”, Bucharest, Romania ***Bucharest University of Economic Studies, Bucharest, Romania ****National Intelligence Academy “Mihai Viteazul”, Bucharest, Romania</p>

3.	<p><b><i>PENETRATING CRANIO-CEREBRAL INJURIES – NEWS AND PERSPECTIVES - CASE PRESENTATION</i></b>  <b>Cristian NĂSTASE*</b>, <b>Michal MARINESCU*</b>, <b>Cristian POPESCU*</b>,  <b>Horatiu MANOLE**</b>  *Department of Neurosurgery, “Dr. Carol Davila” Clinical Central Military Emergency Hospital, Bucharest, Romania  ** Department of Ophthalmology, “Dr. Carol Davila” Clinical Central Military Emergency Hospital, Bucharest</p>
4.	<p><b><i>SURGICAL STABILIZATION IN THE CHEST WALL PATHOLOGY -OUR EXPERIENCE-</i></b>  <b>Claudiu NISTOR, Dragoș MARIN, George GOGOLAN, Daniel PANTILE, Adrian CIUCHE</b>  Department of Thoracic Surgery, “Dr. Carol Davila” Central Military Emergency University Hospital, Bucharest, Romania</p>
5.	<p><b><i>MANAGEMENT AND TREATMENT PARTICULARITIES OF POSTTRAUMATIC STRESS DISORDER</i></b>  <b>Bogdan Mircea PETRESCU, Daniel VASILE, Octavian VASILIU, Andrei MANGALAGIU, Cristian CANDEA</b>  Department of Psychiatry , University Military Emergency Hospital “Dr. Carol Davila”, Bucharest, Romania</p>
6.	<p><b><i>AEROMEDICAL EVACUATION IN A MARITIME WAR ZONE</i></b>  <b>Adrian POPENȚIU*</b>, <b>Doru MOGA*</b>, <b>Elena STOIAN*</b>, <b>Vanina SABĂU*</b>, <b>Alexandru SABĂU**</b>, <b>Cătălin Gabriel SMARANDACHE***</b>, <b>Dan SABĂU**</b>  * Department of Surgery / Operational Medicine Service, “Dr. Alexandru Augustin” Emergency Military Hospital Sibiu, Romania  ** Second Surgical Clinic, “Victor Papilian” Faculty of Medicine, Sibiu, Romania  *** “Carol Davila” University of Medicine and Pharmacy, Bucharest, Romania</p>
7.	<p><b><i>THE TREND EVOLUTION IN MILITARY HEALTH – A RETROSPECTIVE STUDY IN A MILITARY POPULATION</i></b>  <b>Radu TĂȚAR, Andreea VARGA, Dorina PETRA</b>  University of Medicine and Pharmacy of Tirgu Mures, Romania</p>

# 6. Operational Requirements for Aerial Drones Used in Integrated Air Space (Workshop)

Conference ROOM E54



# 6. Operational Requirements for Aerial Drones Used in Integrated Air Space (Workshop)

Conference ROOM E54

Chairman:

**Sorin BĂLĂȘESCU**

42<sup>nd</sup> Center of Communications and Informatics, Râșnov, Romania

Panel coordinator:

**Vasile PRISACARIU**

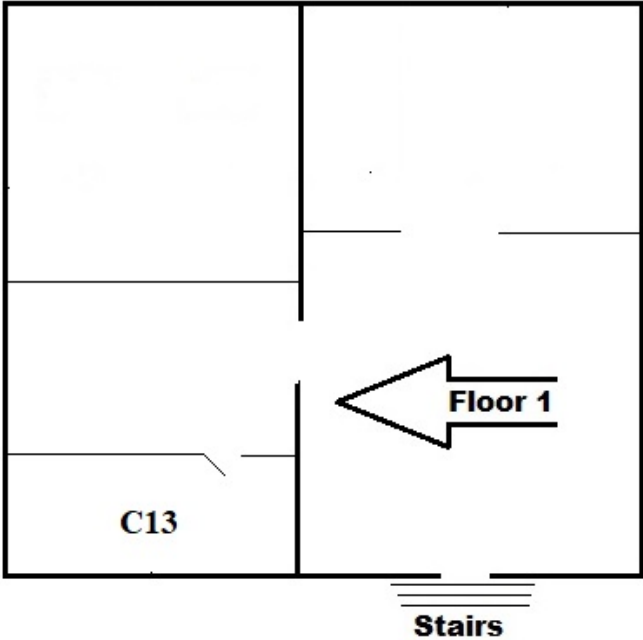
“Henri Coandă” Air Force Academy, Brașov, Romania

May 31, 2019 Friday	Lectures and debates Static drone display	08.00 – 16.00 “Henri Coandă” Air Force Academy E 54 room
June 1, 2019 Saturday	Static drone display Demo drone flights	10.00 – 11.30 Ghimbav Airfield
June 2, 2019 Sunday	Static drone display Demo drone flights	10.00 – 17.30 Ghimbav Airfield



# 7. Romanian Military Thinking (Round Table)

Conference ROOM C13



# 7. Romanian Military Thinking (Round Table)

Conference ROOM C13

**Chairman:**

**Lieutenant General Laurian ANASTASOF**

Deputy of General Staff

**Panel coordinator:**

**Brigadier General (AF) Gabriel RĂDUCANU**

“Henri Coandă” Air Force Academy, Braşov, Romania

**Topics:**

1.	The opportunity of organizing the conference entitled “National Security & Defence – Challenges and Trends” by the General; Staff, in the context of celebrating 155 years of “Romanian Military Thinking”.
2.	Purpose of the conference and definition of objectives.

<p>3.</p>	<p>Panels and coordinating institutions:          Proposal:</p> <ul style="list-style-type: none"> <li>- Theory and Military Art, coordinated by Operations Directorate and Strategic Planning Directorate (General Staff), in collaboration with “Carol I” National Defense University and “Nicolae Balcescu” Land Forces Academy;</li> <li>- Intelligence and Security, coordinated by the Military Intelligence Directorate and Communications and Informatics Systems Headquarter, in collaboration with the Center for Strategic Studies / “Carol I” National Defense University and “Henri Coanda” Air Force Academy;</li> <li>- Modernization of the Military Organization, coordinated by the Personnel and Mobilization Directorate, Structures and Supply Planning Directorate and Logistic Directorate, in collaboration with Strategic Studies Center / “Carol I” National Defense University and “Mircea cel Batran” Naval Academy;</li> <li>- Military History/ Military Doctrines, coordinated by Training and Doctrines Directorate, in collaboration with the Military Archives.</li> </ul>
<p>4.</p>	<p>Period, venue, and institutions’ responsibilities.</p>

# Notes:

# Notes:

# Notes:



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