

CONFERENCE GUIDE



Henri Coanda  
Air Force Academy  
Brasov, Romania

# AFASTUD 2021

The 22<sup>nd</sup> Students' International Conference

*Communicating across Cultures*

26 March 2021  
Brasov, Romania

# Conference Agenda

**FRIDAY, March 26, 2021**

8.00 – 11.00 - Paper presentations on panels (I)

## **1. MILITARY SCIENCES & MANAGEMENT**

**Moderators:**

Lt. Col. Lect Bogdan **CHIOSEAU**A

Student Omar **OCAL**

Student Liviu-Nicușor **RĂDUCU**

## **2. WEAPONS & DEFENSE TECHNOLOGY**

**Moderators:**

Lt.Col. Marian-Cristian **ENE**

Lt.Col. Ioan-Dănuț **BĂLOS**

Student Cătălina **ALDEA**

Student Andrei **COPCIAG**

## **3. HUMANITIES & SOCIAL SCIENCES**

**Moderators:**

Lect Daniela **NAGY**

Student Ruth **DRĂGUȘIN**

Lect Ramona **HĂRȘAN**

Student Oana Adelina **STOICA**

## **4. FUNDAMENTAL SCIENCES & ENGINEERING**

**Moderators:**

Assist. Prof. Eng. George-Cristian **CONSTANTINESCU**

Student Eugenia-Valentina **BECHERESCU**

Assist. Prof. Eng.Vasile **PRISACARIU**

Student Andrei **CURIMAN**

11.00 – 11.30 Break

11.30 – 15.00 Paper presentations on panels (II)



# Scientific Committee

---

Senior Researcher Eng. Irina **ANDREI**, PhD  
*National Institute for Aerospace Research "Elie Carafoli", Bucharest, Romania*

---

Brig Gen (r) Prof. Vasile **BUCINSCHI**, PhD  
*"Henri Coandă" Air Force Academy, Brasov, Romania*

---

Assoc. Prof Elena **BUJA**, PhD  
*Transilvania University of Braşov, Romania*

---

Prof. Sorin **CHEVAL**, PhD  
*"Henri Coandă" Air Force Academy, Brasov, Romania*

---

Col. Assoc. Prof Eng. Dilyan **DIMITROV**, PhD  
*"Vasil Levski" National Military University, Veliko Târnovo, Bulgaria*

---

Col. Assoc.Prof. Eng. Laurian **GHERMAN**, PhD  
*"Henri Coandă" Air Force Academy, Brasov, Romania*

---

Assoc. Prof Diana **ILIŞOI**, PhD  
*"Henri Coandă" Air Force Academy, Brasov, Romania*

---

Assoc. Prof Ioanna **LEKEA**, PhD  
*Hellenic Air Force Academy, Acharnae, Greece*

---

Lt.Col. Prof. Adrian **LESENCIUC**, PhD  
*"Henri Coandă" Air Force Academy, Brasov, Romania*

---

Assoc. Prof. Eng. Doru **LUCULESCU**, PhD  
*"Henri Coandă" Air Force Academy, Brasov, Romania*

---

Assoc. Prof. Eng. Liliana **MIRON**, PhD  
*"Henri Coandă" Air Force Academy, Brasov, Romania*

---

Maj Gen Prof. Gabriel-Florin **MOISESCU**, PhD  
*"Henri Coandă" Air Force Academy, Brasov, Romania*

---

Col Assoc Prof Zhivo **PETROV**, PhD  
*"Georgi Benkovski" Air Force Academy, Dolna Mitropolia, Bulgaria*

---

Col. Assoc.Prof. Vasile **ŞANDRU**, PhD  
*"Henri Coandă" Air Force Academy, Brasov, Romania*

---

Prof. Mariselda **TESSAROLO**, PhD  
*University of Padua, Padua, Italy*

---

Prof eng. Michael **TODOROV**, PhD  
*Technical University, Sofia, Bulgaria*



# Conference Panels

	Page.
<b>1. MILITARY SCIENCES &amp; MANAGEMENT</b>	<b>7</b>
<b>2. WEAPONS &amp; DEFENSE TECHNOLOGY</b>	<b>11</b>
<b>3. HUMANITIES &amp; SOCIAL SCIENCES</b>	<b>15</b>
<b>4. FUNDAMENTAL SCIENCES &amp; ENGINEERING</b>	<b>21</b>



# 1. Military Sciences & Management

## Moderators:

Lt. Col. Lect Bogdan **CHIOSEAU**, PhD

„Henri Coanda” Air Force Academy, Brasov

---

Student Omar **OCAL**

„Henri Coanda” Air Force Academy, Brasov

---

Student Liviu-Nicușor **RĂDUCU**

„Henri Coanda” Air Force Academy, Brasov

---

- 
1. Role of Engagement of Armed Forces in the Fight Against Terrorism  
**Raluca-Elena ARHIP**  
*“Henri Coanda” Air Force Academy, Brasov, Romania*

---

  2. Emergency Management, Essential Condition for the Prevention of Aviation Occurrences in Air Force  
**Adrian AVRAM**  
*“Henri Coanda” Air Force Academy, Brasov, Romania*

---

  3. Battle Command and Troops Leading Procedures Applied in Anti-Aircraft Artillery  
**Andreea BOGZOIU**  
*“Henri Coanda” Air Force Academy, Brasov, Romania*

---

  4. Intelligence Preparation of the Battlefield Integration in the Planning Process of Anti-Aircraft Artillery Combat Actions  
**Roxana-Georgeana CALDARE**  
*“Henri Coanda” Air Force Academy, Brasov, Romania*

---

  5. Some Challenges to the Military Dimension of Security  
**Ilișca-Anișoara COMAN**  
*“Henri Coanda” Air Force Academy, Brasov, Romania*

---

  6. The Threat Posed by Terrorism Against the World States  
**Adriana- Rebeca DĂNILĂ**  
*“Henri Coanda” Air Force Academy, Brasov, Romania*
-



---

Prisoner of War Status in Different Type of Conflicts

**7. Marius-Marian DIAC**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

Alternatives Found at European Level to Make Air Traffic More Efficient.  
Study of the Challenges of Space Sharing by Military and Civilian

**8. Operators**

**Paula DIACONAȘU**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

The Importance of Air Traffic Management for Achieving Safety of  
Flights

**9. Georgian-Denis GOSTIN**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

NATINADS, Romania's contribution to NATINADS

**10. Alexandru GRECU**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

Air Traffic Control

**11. Elena-Laura ION**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

Resilience Study for Operational Air Traffic Control in Dealing With  
Aeronautical Emergency Situations

**12. Rebeca-Andreea IONIȚĂ**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

Military Leadership

**13. Elena-Bianca IORGA**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

Shared Use of Air Space by Military and Air Operators Civil

**14. FUA-Flexible Use of Airspace**

**Alex KEREKEȘ**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

Airspace Management — Flexible Use Of Airspace (FUA)

**15. Sorin LEAUA**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

The Effects of the Iraq War on the Population

**16. Cristina-Maria MOVILĂ**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

- 
- The Peacekeeping Operations the Need for a Comprehensive Approach
- 17. Marian Cosmin MUȘAT**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
- 
- Study on the Attitude of Hitler's Great Commanders Towards the Nazi Regime and its Impact on the Perception of the War
- 18. Vasilica NEGRU**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
- 
- Study on the Application of the Principles of Operational Law in Air Force Missions
- 19. Cosmina Irina PODAR**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
- 
- Helicopters - Support Capability for Ground Forces
- 20. Ioan Alexandru POPA**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
- 
- Study on Geopolitical Scenarios for Defence of Romania's Border Area From the Black Sea
- 21. Lavinia PURICI**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
- 
- Use of Drones in Contemporary Air Operations
- 22. Liviu Nicușor RĂDUCU**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
- 
- Study on Management of Information Systems
- 23. Angel Gabriel SARDARU**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
- 
- Nonverbal Communication in the Military System
- 24. Mădălina Teodora TÂMPESCU**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
- 
- 1960: the U-2 Crisis
- 25. Ana-Maria UNGUREANU**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
- 
- Study on Occupational Stress Management in the Activity of Air Traffic Controllers
- 26. Neculai-Ștefan URSACHE**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
- 
- Professional Stress in the Air Traffic Control Activity
- 27. Denis Bogdan VĂTĂMANELU**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
-



## 2. WEAPONS & DEFENSE TECHNOLOGY

### Moderators:

Lt.Col. Marian-Cristian **ENE**

„Henri Coanda” Air Force Academy, Brasov

Lt.Col. Ioan-Dănuț **BĂLOS**

„Henri Coanda” Air Force Academy, Brasov

Student Cătălina **ALDEA**

„Henri Coanda” Air Force Academy, Brasov

Student Andrei **COPCIAG**

„Henri Coanda” Air Force Academy, Brasov

---

The Fuze Used for Anti-Aircraft Fire

1. **Cătălina Elena ALDEA**

*“Henri Coanda” Air Force Academy, Brasov, Romania*

---

Hovering and Ground Effect

2. **Andreea-Mălina BĂLĂNICĂ**

*“Henri Coanda” Air Force Academy, Brasov, Romania*

---

Study of the OSA Missile System

3. **Eduard Daniel BÂRLEAN**

*“Henri Coanda” Air Force Academy, Brasov, Romania*

---

9K33OSA Missile System

4. **Bogdan-Constantin CADĂR**

*“Henri Coanda” Air Force Academy, Brasov, Romania*

---

9K32 STRELA 2 Missile System

5. **Andrei-Daniel COPCIAG**

*“Henri Coanda” Air Force Academy, Brasov, Romania*

---

Radar Warning Receivers (RWR)

6. **Vlad-Gabriel COVALIU**

*“Henri Coanda” Air Force Academy, Brasov, Romania*

---

---

Cyber security and Its Applicability in the Military Domain

**7. Andrei-Daniel DUMITRACHE**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

Fuel Cell as a Power Source for Unmanned Ground Vehicle

**8. Marek FERENČÁK**

*Armed Forces Academy of General M. R. Štefánik, Liptovský Mikuláš, Slovakia*

---

Technologies Used in Weapon Systems

**9. Andra Codruța GHERASIM**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

Active Means of Defense of the Centers of Gravity Against Aerial Threats

**10. Denisa GRADEA**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

Russia's Response to NATO's Advanced Presence in Europe

**11. Florian Cătălin IONESCU**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

Research Regarding the Missile System MIM-23 Hawk

**12. Stefan Danut ISAR**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

General Notions About Missiles

**13. Mihai-Adrian MĂLIȚĂ**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

"Swarming Drones": The New Face of Air Warfare

**14. Maria-Mădălina MARTIN**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

The Role of Anti-Aircraft Rocket Systems in a NATO A2/AD Architecture in the Black Sea Region

**15. Diana-Cristina MILU**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

Fire Control System of the 88 mm Flak Anti-Aircraft Gun

**16. Fănica Ionelia MÎȚU**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

The Importance of Radar Cross Section in Detection Process

**17. Oana-Andra NICOLAE**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

---

18. The Use of Models and Simulation in Military Instruments That Deserve the Patriot System

**Andrada PĂNOIU**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

19. A Comparison of Russia's S-400 Triumf Against U.S. PATRIOT

**Alexandru Ștefan PĂPĂLĂU**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

20. The Major Items of Patriot System

**Narcisa PAVEL**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

21. Russian A2/AD - A Growing Problem

**Silviu Constantin POPA**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

22. Research on Anti-Aircraft Artillery Systems. Canon 8.8 cm Flak

**Iuliana PRODEA**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

23. Preserving Airspace's Integrity and Sovereignty, The New Challenge of the 21<sup>st</sup> Century. The Character of Air Policing at National and NATO Level

**Ioana-Georgiana PURCARU**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

24. Expandable Electronic Means of Attack

**Alina Elena ROMAN**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

25. A Comparative Study of Efficiency in Battle For Surface to Air Missiles Defense Systems

**Andrada-Monica ROMAN**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

26. Seekers For Surface-To-Air Missile Systems

**Dragoș-Marian STAN**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

27. Homing All the Way Killer – Hawk

**Mihaela Cristina STROE**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

28. Unmanned Aerial Vehicles

**George ȚÎRDEA**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

---

Overview of the “Patriot” Complex

**29. Ionela-Nicoleta TECUȚĂ**

*“Henri Coanda” Air Force Academy, Brasov, Romania*

---

Overcoming a Stair-Type Obstacle With Tracked Vehicle

**30. Tomáš KRÍŠ**

*Armed Forces Academy of General M. R. Štefánik, Liptovský Mikuláš, Slovakia*

---

Deadly GEPARD

**31. Ionuț - Robert VLĂSCEANU**

*“Henri Coanda” Air Force Academy, Brasov, Romania*

---

# 3. HUMANITIES & SOCIAL SCIENCES

## Moderators:

Lect Daniela **NAGY**, PhD

„Henri Coanda” Air Force Academy, Brasov

---

Lect Ramona **HĂRȘAN**, PhD

„Henri Coanda” Air Force Academy, Brasov

---

Student Ruth **DRĂGUȘIN**

„Henri Coanda” Air Force Academy, Brasov

---

Student Oana Adelina **STOICA**

„Henri Coanda” Air Force Academy, Brasov

---

---

The Essence of Leadership, Leader’s Qualities

**1. Cezar Valentin ACUJBOAEI**

*“Henri Coanda” Air Force Academy, Brasov, Romania*

---

Stimulating the Development of Teenagers Through Sports and Leisure Activities

**2. Larisa-Andreea ANDRONACHE**

*“Henri Coanda” Air Force Academy, Brasov, Romania*

---

Public Speaking: The Science of Debate, English-Speaking Models of Global Interest

**3. Sebastian Avram**

*“Henri Coanda” Air Force Academy, Brasov, Romania*

---

Achieving an Efficient Communication Within the Military Educational Institutions

**4. Andreea-Alexandra BEGA**

*“Henri Coanda” Air Force Academy, Brasov, Romania*

---

Human Performance and Limitations

**5. Lucian BICHIU**

*“Henri Coanda” Air Force Academy, Brasov, Romania*

---

Leadership and Its Role in Streamlining Military Actions

**6. Dina-Florentina BORTUN**

*“Henri Coanda” Air Force Academy, Brasov, Romania*

---



- 
7. Drill Comands and Related Terms in English and Romanian – A  
Comparative Approach  
**Lucian Valentin BOSTAN**  
*“Henri Coanda” Air Force Academy, Brasov, Romania*
- 
8. Disney Animations and Propaganda Before and During World War II  
**Eduard BOTAȘ**  
*“Henri Coanda” Air Force Academy, Brasov, Romania*
- 
9. The Influence of Electromagnetic Waves on Human Body and Health  
**Alexandra-Raluca BRATU**  
*“Henri Coanda” Air Force Academy, Brasov, Romania*
- 
10. Radiotelephony Standard Phraseology and Its Importance in Avoiding  
Aviation Disasters  
**Ioana-Raluca COMĂRNICEANU**  
*“Henri Coanda” Air Force Academy, Brasov, Romania*
- 
11. What it Takes to be an Air Traffic Controller  
**Claudiu-Ovidiu CONSTANTIN**  
*“Henri Coanda” Air Force Academy, Brasov, Romania*
- 
12. Leadership in Military Operations  
**Liviu CONSTANTINOAIA**  
*“Henri Coanda” Air Force Academy, Brasov, Romania*
- 
13. Sport – A Mechanism of Life and Peace  
**Andra-Mihaela CREȚU, Andrei ȚÎNȚĂREANU**  
*“Henri Coanda” Air Force Academy, Brasov, Romania*
- 
14. Management of Stress Among Aircraft Pilots  
**Dragoș-Constantin CRÎNGAȘU**  
*“Henri Coanda” Air Force Academy, Brasov, Romania*
- 
15. Operational Stress Control  
**Elena DOBRE**  
*“Henri Coanda” Air Force Academy, Brasov, Romania*
- 
16. The Military Woman  
**Larisa Anamaria DOCUZ**  
*“Henri Coanda” Air Force Academy, Brasov, Romania*
- 
17. Elements That May Have Led to the Failure of the United Nations  
Assistance Mission for Rwanda- Unamir, 1994  
**Ruth DRĂGUȘIN-ARDELEAN**  
*“Henri Coanda” Air Force Academy, Brasov, Romania*
-

---

	Combat Stress Reaction
<b>18.</b>	<b>Leonard-Florentin DRUG</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
<hr/>	
	Occupational Stress in the Activity of the Air Traffic Controller
<b>19.</b>	<b>Irina-Georgiana DUDU</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
<hr/>	
	Lifelong Learning of Military Professional
<b>20.</b>	<b>Cosmin Andrei ENACHE</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
<hr/>	
	To Be, or Not to Be...Bilingual
<b>21.</b>	<b>Ramona Simina GĂLĂȚAN</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
<hr/>	
	Study About Major Risks of Stress, Fatigue and Sleep Among Aviation Personnel
<b>22.</b>	<b>Cristian Ioan GIURGIU</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
<hr/>	
	The Influence of Physical Activities in Moments of Stress, Anxiety and Depression
<b>23.</b>	<b>Teodora-Maria GROZA</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
<hr/>	
	Perspectives on Women's Involvement in the Effective Functioning of the Military System
<b>24.</b>	<b>Andrada Lăcrămioara Giorgiana ILIE</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
<hr/>	
	Dress Codes, Uniforms, and Their Influence on Behavior
<b>25.</b>	<b>Alexandru LAZĂR</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
<hr/>	
	Aerodrome Control Service – A Permanent Challenge for Air Traffic Controllers
<b>26.</b>	<b>Lorena-Ștefania LUPU</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
<hr/>	
	Motivatin for Learning
<b>27.</b>	<b>Ștefan-Andrei MARE</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>

---

---

28. Language Proficiency Issues Non Native English Speakers Encounter in Aviation

**Andrea Simona MIHALI**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

29. Interpersonal Communication in the Military

**Adelina-Florentina MIRON**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

30. Post-Traumatic Stress Disorder Among Veteran And Deployed Military

**Bogdan Andrei MITREA**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

31. The Role of Emotional Intelligence in Leadership

**Andreea-Ioana MOISA**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

32. Roman Law

**Oana-Diana MOLDOVAN**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

33. Cognitive Dissonance: Why Do We Feel Uneasy?

**Mihai-Radu MOLDOVAN**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

34. The Influence of Meteorological Conditions on Landing and Take-Off

**Codruț – Ștefănel MOLDOVEANU**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

35. Risk: From Definition to Consequences

**Vlad-Paulian OPREA**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

36. Communicative Competence–Essential Requirement in Completing the Profile of the Romanian Soldier

**Anamaria-Valentina PĂTRAȘCU**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

37. The Heroes of the National Integration War Ecaterina Teodoroiu, Elena Caragiani, Marina Hociotă

**Ionela PAVEL**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

38. Professional Stress in the Traffic Controller's Activity

**Dragoș Constantin PENESCU**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

---

	Interpersonal Relationships in the Digital Age
<b>39.</b>	<b>Nicoleta-Monica PETRAȘ</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	Knowing People Through the Face and What it Expresses
<b>40.</b>	<b>Elena-Tatiana PETRE</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	The Effects of Mass-Media Manipulation on Culture and Society
<b>41.</b>	<b>Bianca-Mădălina PINTILEI</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	Dissimulating the Perception of Propaganda in the Consciousness of Public Opinion
<b>42.</b>	<b>Sahin Ianis Florentin RASTGU</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	Preventing The Phenomenon of Sexual Harassment in the Army
<b>43.</b>	<b>Adriana Mihaela RISTEA</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	Getting Behind Entangled Wires
<b>44.</b>	<b>Darius-Mihai SIMION</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	The Resurgence of the So-Called Islamic State, a Reality?
<b>45.</b>	<b>Ștefan-Sebastian SÎRBU</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	NATO Expansion
<b>46.</b>	<b>Cristina- Andreea STAN</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	Three Deadliest Plane Crashes of All Time
<b>47.</b>	<b>Silviu STANCIU</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	Fear of Flight
<b>48.</b>	<b>Bianca-Mădălina TUDOSE</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	Pilot Suicide - The Tacit Aviation Crisis
<b>49.</b>	<b>Paula-Cristina URDEA</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>

---

- 
50. Study on Psychosocial Determinations in the Carrying Out of the  
Military Career  
**Marian-Cătălin VLĂZAN**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
-

## 4. FUNDAMENTAL SCIENCES & ENGINEERING

### Moderators:

Assist. Prof. Eng. George-Cristian **CONSTANTINESCU**, PhD  
„Henri Coanda” Air Force Academy, Brasov

Assist. Prof. Eng. Vasile **PRISACARIU**, PhD  
„Henri Coanda” Air Force Academy, Brasov

Student Eugenia-Valentina **BECHERESCU**  
„Henri Coanda” Air Force Academy, Brasov

Student Andrei **CURIMAN**  
„Henri Coanda” Air Force Academy, Brasov

- 
- Cyberwar
1. **Dragoş - Adrian AGIU**  
*„Henri Coanda” Air Force Academy, Brasov, Romania*
- 
- Pseudo-Random Number Generator
2. **Ionuţ-Doduţ ALDULEA**  
*„Henri Coanda” Air Force Academy, Brasov, Romania*
- 
- Using of Arduino UNO Developing Kit in the Process of Simplifying the  
Sorting of Mail Devices Using RFID Tags
3. **Alexandru-Ionuţ BADEA**  
*„Politehnica” University of Bucharest, Romania*
- 
- Study on modern cryptography
4. **Andrei Mădălin BĂJAN**  
*„Henri Coanda” Air Force Academy, Brasov, Romania*
- 
- Signal Transmission Using Time Multiplexing
5. **Maria-Ruxandra BOCA**  
*„Henri Coanda” Air Force Academy, Brasov, Romania*
- 
- The Impact of Tropical Cyclones on Humanity
6. **Alex-Claudiu BORZA**  
*„Henri Coanda” Air Force Academy, Brasov, Romania*
-

- 
- The Influence of Jet Stream on Aviation
- 7. Maria-Teodora CARDOS**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
- 
- Attenuation of Electromagnetic Radiation by Atmospheric Conditions
- 8. Andrei COHAI**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
- 
- The Aerodynamics of Fighter Aircraft
- 9. Ionuț-Vlăduț COVACI**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
- 
- Effects of Atmospheric Phenomena on Communications
- 10. Andrei – Gheorghe COZMA**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
- 
- The Cathode-Ray Tube
- 11. Monica-Florentina CRIHAN**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
- 
- The Study of Radar Ranging Equation Using Python Programming Language
- 12. Bianca Teodora DEDU**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
- 
- Maintenance of Digital Radar Systems
- 13. Marian-Cristian DRĂCEA**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
- 
- A Trip to the World of Unmanned Aircraft Vehicles
- 14. Andreea-Cristina GONTARIU**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
- 
- Full Discharge Pulse Modulator
- 15. Alexandru HOTINCEANU**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
- 
- Variable Sweep Wings. Grumman F-14A Tomcat Wing
- 16. Dănilă MARGINEAN**  
*"Henri Coanda" Air Force Academy, Brasov, Romania*
- 
- The Verification by Calculus of the Transmission of the Extraction Machine's Reducer from the Old Pit With Skip – Lonea Minig Plant
- 17. Danut Ilie MATEI**  
*Department of Industrial Mechanical Engineering and Transport, University of Petroșani, Romania*
-

---

	The Aspects of Using Passive Filters
<b>18.</b>	<b>Oana MAXIM</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	DETECTORS
<b>19.</b>	<b>Irina MOROȘAN</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	The Impact of Thunderstorm on Aviation Activities
<b>20.</b>	<b>Augusta-Gabriela MOROȘAN</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	Intermediate Frequency Amplifiers
<b>21.</b>	<b>Ioana Alexandra MUREȘAN</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	The Effects of G-Forces on the Human Body
<b>22.</b>	<b>Anca Maria NĂSTASE</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	Radio Frequency Power Amplifier
<b>23.</b>	<b>Simona-Daniela NEGURĂ</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	Pulse Modulators. Partial Discharge Modulators (With Active Switch)
<b>24.</b>	<b>Raluca-Ioana OAIĐĂ</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	Intermediate Frequency Amplifier
<b>25.</b>	<b>Mihnea PAVLOVICI-PAVEL</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	Analysis of Termic Extremes Recorded at the Meteorological Station in Drobeta Turnu-Severin, Between 1965 and 2015
<b>26.</b>	<b>Andreea PÎȘNEI</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	Operational Amplifier
<b>27.</b>	<b>Oana-Ionela POPESCU</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	Database
<b>28.</b>	<b>George-Claudiu ȘÎRBESCU</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>
	Voltage Stabilizers
<b>29.</b>	<b>Ioana Miruna Diana SLOTEA</b> <i>"Henri Coanda" Air Force Academy, Brasov, Romania</i>

---



- 
30. Analysis of Extreme Precipitation Recorded at the Meteorological Station in Cluj-Napoca, Between 1965 And 2015

**Oana Adelina STOICA**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

31. Logarithmic Amplifier: Theory and Implementation

**Diana-Maria UNGUR**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

UAS Operation Risks

32. **Anett VAGHY**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

Intelligent Ways of Measuring Wind Speed

33. **Marilena – Ioana ZUZEAC**

*"Henri Coanda" Air Force Academy, Brasov, Romania*

---

