

Wednesday 26.10.2016 – “Nicolae TIPEI” Amphitheatre

Section 2 – Flight Mechanics and Systems Integration

Wednesday 26.10.2016. Afternoon session

S2.2. Co-Chairman:

Marius STOIA-DJESKA

Ion STROE

14.³⁰ - 14.⁵⁰

S2.2.1 *A Local Sensitivity Analysis of Some Performances of Reactive Projectiles, Rockets and Missiles*, Florin MINGIREANU¹, Marius STOIA-DJESKA² (¹Romanian Space Agency, Mendeleev Street, nr. 21-25, Bucharest, 010362/ Romania; ²“POLITEHNICA” University of Bucharest, Faculty of Aerospace Engineering, Polizu Street 1-7, postal code 011061, sector 1, Bucharest).

14.⁵⁰ - 15.¹⁰

S2.2.2 *Analysis of Dynamic Stability on Ground Roll for a Jet Transport Under Crosswind and Slippery Conditions*, Achim IONITA¹, Andreea-Irina AFLOARE² (¹AEROSPACE Consulting, B-dul Iuliu Maniu 220, Sector 6, Bucharest 061126, Romania; ²INCAS – National Institute for Aerospace Research “Elie Carafoli”, B-dul Iuliu Maniu 220, Sector 6, Bucharest 061126, Romania).

15.¹⁰ - 15.³⁰

S2.2.3 *Efficiency Analysis of Earth-Mars Interplanetary Travel Using a Solar Sail Propulsion Device plant*, Radu BLIDERAN, Alexandru IONEL, Mihaela NASTASE (INCAS – National Institute for Aerospace Research “Elie Carafoli”, B-dul Iuliu Maniu 220, Sector 6, Bucharest 061126, Romania).

15.³⁰ - 15.⁵⁰

S2.2.4 *A Preliminary Tool for Trajectory Optimization for a Small Launcher*, Ana-Maria NECULAESCU¹, Ion STROE² (¹INCAS – National Institute for Aerospace Research “Elie Carafoli”, B-dul Iuliu Maniu 220, Sector 6, Bucharest 061126, Romania; ²“POLITEHNICA” University of Bucharest, 313 Splaiul Independenței, Bucharest 060042, Romania).

15.⁵⁰ - 16.¹⁰

S2.2.5 *Decelerator systems for the atmospheric reentry of launcher upper stages*, Bogdan DOBRESCU, Radu BLIDERAN, Adrian CHELARU (INCAS – National Institute for Aerospace Research “Elie Carafoli”, B-dul Iuliu Maniu 220, Sector 6, Bucharest 061126, Romania).

16.¹⁰ - 16.⁴⁰

Coffee Break

S2.2. Co-Chairman:

Florin MINGIREANU

Mihai Victor PRICOP

16.⁴⁰ - 17.⁰⁰

S2.2.6 *Direct Spatial Motion Simulation of Aircraft Subjected to Engine Failure*, Yassir ABBAS¹, Mohammed MADBOULI², Gamal EL-BAYOUMI² (¹Aeronautical Engineering Department, Engineering College, Karary University, Khartoum, Sudan; ²Aeronautical Engineering Department, Engineering College, Cairo University, Giza State, Egypt).

17.⁰⁰ - 17.²⁰

S2.2.7 *Performance Analysis of the IAR 99 SOIM and IAR 99 TD Propulsion Systems*, Alexandru IONEL, Stefan PALAS, Irina-Carmen ANDREI (INCAS – National Institute for Aerospace Research “Elie Carafoli”, B-dul Iuliu Maniu 220, Sector 6, Bucharest 061126, Romania).

17.²⁰ - 17.⁴⁰

S2.2.8 *Numerical Simulation on the Efficiency of Propulsion Systems as Leo Deorbiting Devices*, Mihaela NASTASE, Radu BLIDERAN, Alexandru IONEL (INCAS – National Institute for Aerospace Research “Elie Carafoli”, B-dul Iuliu Maniu 220, Sector 6, Bucharest 061126, Romania).

17.⁴⁰ - 18.⁰⁰

S2.2.9 *Dynamic Stability of Earth Re-Entry Capsule*, Dumitru PEPELEA, Marius Gabriel COJOCARU, Mihai Victor PRICOP, Mihai Leonida NICULESCU (INCAS – National Institute for Aerospace Research “Elie Carafoli”, B-dul Iuliu Maniu 220, Sector 6, Bucharest 061126, Romania).

18.²⁰ - 18.⁴⁰ ***Q & A***

19.⁰⁰ ***GALA DINNER***

Thursday 27.10.2016 – “Nicolae TIPEI” Amphitheatre

Section 5 – Systems, Subsystems and Control in Aeronautics

Thursday 27.10.2016. Morning session

S5.1 Co-Chairman:

Stefan BOGOS
Grigore CICAN

12.²⁰ - 12.⁴⁰

S5.1.1 *Optimizing Ion Propulsion Systems Depending on the Nature of the Propellant*, Grigore CICAN¹, Ionut-Florian POPA² (1^{“POLITEHNICA”} University of Bucharest, Faculty of Aerospace Engineering, Gh. Polizu Street 1-5, 011061, Bucharest, Romania; 2National Research and Development Institute for Gas Turbines COMOTI, 220 D Iuliu Maniu, Bd., sector 6, cod 061126, OP76, CP174, Bucharest, Romania).

12.⁴⁰ - 13.⁰⁰

S5.1.2 *A Brief Discussion Regarding Types of Cavitation in Squeeze Film Dampers and Cavitation’s Effects*, Laurentiu MORARU (“POLITEHNICA” University of Bucharest, Faculty of Aerospace Engineering, Gh. Polizu Street 1-5, 011061, Bucharest, Romania).

13.⁰⁰ - 14.⁰⁰

Lunch

Thursday 27.10.2016 – “Nicolae TIPEI” Amphitheatre

Section 5 – Systems, Subsystems and Control in Aeronautics

Thursday 27.10.2016. Afternoon session

S5.2 Co-Chairman:

Laurentiu MORARU
Jeni Alina POPESCU

14.⁰⁰ - 14.²⁰

S5.2.3 *On \mathcal{H}_∞ Control and its UAV Applications*, Elfatih G. HAMDI*, Gamal M. Sayed EL-BAYOUMI, Ayman H. M. KASEM (Aeronautical Engineering Department, Engineering College, Cairo University, Giza State, Egypt).

14.²⁰ - 14.⁴⁰

S5.2.4 *Performance Estimation on Micro Gas Turbine Plant Recuperator*, Laura Alina STIKA, Jeni Alina POPESCU, Sorin Gabriel TOMESCU, Valeriu-Alexandru VILAG (Romanian Research and Development Institute for Gas Turbines COMOTI, web page: <http://www.comoti.ro>).

14.⁴⁰ - 15.⁰⁰

S5.2.5 *Longitudinal automatic control system for a light weight aircraft*, Cristian VIDAN*, Silviu Ionut BADEA (Military Technical Academy, Faculty of Mechatronics and Integrated Armament Systems, M2 Department of Aircraft Integrated Systems and Mechanics, 39-49 George Coşbuc Avenue, Sector 5, Bucharest 050141, Romania).

15.⁰⁰ - 15.²⁰

S5.2.6 *Software Generated Fuel Consumption Profile for a Light Attack and Jet Trainer Mission*, Adrian MIHAL, Alexandru IONEL, Tiberiu SALAORU, Stefan PALAS, Radu BOGATEANU, Manuela CALCEA, Viorica ILINOIU (INCAS – National Institute for Aerospace Research “Elie Carafoli”, B-dul Iuliu Maniu 220, Sector 6, Bucharest 061126, Romania).

15.²⁰ - 15.⁴⁰

S5.2.7 *Modelling of Selected Performance Criteria in Developing a VTVL Liquid Propulsion System*, Irina-Carmen ANDREI, Alexandru IONEL, Stefan PALAS (INCAS – National Institute for Aerospace Research “Elie Carafoli”, B-dul Iuliu Maniu 220, Sector 6, Bucharest 061126, Romania).

15.⁴⁰ - 16.⁰⁰

Coffee Break

S5.2 **Co-Chairman:**

Jeni Alina POPESCU
Laurentiu MORARU

16.⁰⁰ - 16.²⁰

S5.2.8 *Numerical Modelling Application for Simulating Engine Test Cell Validation Methodology of a Turbofan Exhaust System*, Irina-Carmen ANDREI, Alexandru IONEL, Adrian MIHAI, Stefan PALAS, Tiberiu SALAORU (INCAS – National Institute for Aerospace Research “Elie Carafoli”, B-dul Iuliu Maniu 220, Sector 6, Bucharest 061126, Romania).

Thursday 27.10.2016 – “Nicolae TIPEI” Amphitheatre

Section 7 – ATS and full Automation ATM

Thursday 27.10.2016. Afternoon session

S7.2 **Co-Chairman:**

Simion TATARU
Mihai Leonida NICULESCU

16.²⁰ - 16.⁴⁰

S7.2.1 *Automation and Systems Issues in Air Traffic Control*, Gabriela STROE¹, Irina-Carmen ANDREI² (1“POLITEHNICA” University of Bucharest, Faculty of Aerospace Engineering, Polizu Street 1-7, postal code 011061, sector 1, Bucharest; 2INCAS – National Institute for Aerospace Research “Elie Carafoli”, B-dul Iuliu Maniu 220, Sector 6, Bucharest 061126, Romania).

16.⁴⁰ - 17.⁰⁰

S7.2.2 *Automated Conflict Resolution in Air Traffic Management*, Gabriela STROE¹, Irina-Carmen ANDREI² (1“POLITEHNICA” University of Bucharest, Faculty of Aerospace Engineering, Polizu Street 1-7, postal code 011061, sector 1, Bucharest; 2INCAS – National Institute for Aerospace Research “Elie Carafoli”, B-dul Iuliu Maniu 220, Sector 6, Bucharest 061126, Romania).

18.⁰⁰ **CLOSING SESSIONS**