



STOWARZYSZENIE TWÓRCÓW AERONAUTYKI I JEJ ROZWOJU – STAR/POLAND



Wednesday, 17.06.2026

8.00-10.00 – Registration

10.00-11.30 – Opening and Plenary Session

Coffee break

Session 1 11.30-13.10	Session 2 11.30 – 13.10
1. FEASIBILITY STUDY OF A RESPONSIVE SPACE SYSTEM Łukasz Kiskowiak, Piotr Zieliński, Aleksander Olejnik, Stanisław Kachel, Robert Rogólski, Kamil Chudy 2. AUTOMATIC AIRCRAFT TAKEOFF BASED ON DATA FROM AN ONBOARD VISION SYSTEM Paweł Krzaczkowski, Damian Kordos, Łukasz Wałek, Zbigniew Gomółka, Ewa Żesławska 3. FRACTIONAL-ORDER NEURAL NETWORKS FOR ANOMALY DETECTION IN OPTICAL FIBER PRODUCTION FOR AVIATION AND AEROSPACE APPLICATIONS Zbigniew Gomółka, Ewa Żesławska, Michał Komsa 4. LIMITS OF APPLICABILITY OF MODEL-FREE ALGORITHM-BASED CONTROL SYSTEM FOR A SMALL UNMANNED HELICOPTER IN DATA DEGRADATION CONDITIONS Sara Waśniewska, Marcin Żugaj 5. INTELLIGENT UAV MISSION SCHEDULING AND AIRSPACE RESOURCE MANAGEMENT USING ALGEBRAIC-LOGICAL META-MODELING Ewa Żesławska, Zbigniew Gomółka, Dawid Madej	1. ADVANCES IN AIRCRAFT HYDRAULIC SYSTEMS: TRENDS AND FUTURE PERSPECTIVES Ryszard Dindorf, Zbigniew Koruba, Jakub Takosoglu, Piotr Woś 2. URBAN MOBILITY TRAFFIC MANAGEMENT TOOL Antoni Kopyt, Mateusz Sochacki 3. EXPERIMENTAL AND NUMERICAL STUDIES OF THE THERMAL RESISTANCE OF A PROTOTYPE PROTECTIVE CASING FOR A CATASTROPHIC FLIGHT DATA RECORDER Andrzej J. Panas, Krzysztof Łęczycki, Anna Krupińska, Maciej Starczewski, Zbigniew Jakielaszek, Mirosław Nowakowski 4. AGGREGATE INDICATOR OF AIRCRAFT PISTON ENGINE OIL DEGRADATION BASED ON PHYSICO-CHEMICAL PARAMETERS Michał Trendak 5. ANALYSIS OF THE INFLUENCE OF CURING PARAMETERS ON THE THERMAL AND MECHANICAL PROPERTIES OF GLASS-EPOXY LAMINATES AS ONE OF THE CRITERIA FOR MATERIALS USED IN AVIATION Piotr Zagulski, Rafał Chatys

13.10-14.00 – Lunch break

Partner wydarzenia: Województwo Podkarpackie



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Session 3: 14.00-16.00 (ERA-II)	Session 4: 14.00-16.00 (Student session)
1. UNMANNED AIRCRAFT CONTROL SYSTEM CAPABILITIES Jacek Pieniążek 2. USER INTERFACE DESIGN FOR UAS FLEET MANAGEMENT SYSTEM Grzegorz Dec, Dariusz Rzońca, Sławomir Samolej, Łukasz Walek 3. UAV FORMATION FLIGHT IN NON-SEGREGATED AIRSPACE Grzegorz Drupka, Daniel Lichoń, Jacek Pieniążek, Tomasz Rogalski 4. FLIGHT PLAN REPLANNING ALGORITHM IN A REGULAR GRAPH-BASED AIRSPACE Grzegorz Dec, Dariusz Rzońca, Sławomir Samolej 5. HUMAN FACTORS OF UAV REMOTE CONTROL TEAMS Jacek Pieniążek, Krzysztof Warzocha, Piotr Ciecierski 6. OPTIMAL SELECTION OF OBSERVATION POINTS DURING UAV MISSION NEAR RESTRICTED AREAS Leszek Rolka	1. APPLICATION OF THE STARLINK NETWORK IN UAV COMMUNICATION-SYSTEM CONCEPT AND EXPERIMENTAL STUDY OF LINK PARAMETERS Kacper Osiński, Paweł Rzucidło, Damian Kordos 2. DESIGN OF A TAKE-OFF RUNWAY LENGTH CALCULATOR FOR GENERAL AVIATION APPLICATIONS Jan Kurowski, Grzegorz Drupka 3. ANALYSIS OF THE POSSIBILITIES OF APPLYING FUZZY LOGIC CONTROLLER IN THE AUTOTHROTTLER SYSTEM OF GENERAL AVIATION AIRCRAFT Mateusz Kuska, Grzegorz Kopecki 4. APPLICATION OF LSTM RECURRENT NEURAL NETWORKS FOR UAV POSITION ESTIMATION USING TIME SERIES OF SELECTED FLIGHT PARAMETERS Franciszek Erd, Dariusz Nowak 5. THE ZETA FILTER: ATTITUDE ESTIMATION USING VON MISES–FISHER CONCENTRATION DYNAMICS ON S^3 Paweł Zalewski, Paweł Rzucidło

19.00 – Get Together

Partner wydarzenia: Województwo Podkarpackie



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STOWARZYSZENIE TWÓRCÓW AERONAUTYKI I JEJ ROZWOJU – STAR/POLAND

Thursday, 18.06.2026

Session 5: 9.00-10.30	Session 6: 9.00-10.30
1. STATISTICAL DISTRIBUTION OF PROPULSION SYSTEM POWER DEMAND FOR AN ULTRALIGHT GYROCOPTER DURING NORMAL OPERATION Jacek Czarnigowski, Michał Trendak, Piotr Jakliński 2. CONCEPT FOR THE USE OF A REDUCTION GEARBOX IN AN ELECTRIC OR HYBRID DRIVE SYSTEM FOR AN UNMANNED AERIAL VEHICLE (UAV) TO IMPROVE DRIVE EFFICIENCY Kamil Kucharski, Michał Kuźniar 3. ANALYSIS OF PROPULSION SYSTEM COMPONENT SELECTION AND MISSION TRAJECTORY FOR A CONCEPTUAL 200 KG UAV Michał Kuźniar, Jacek Czarnigowski 4. MASS-ENERGY RELATIONSHIPS IN MULTIROTOR UNMANNED AERIAL VEHICLES POWERED BY PROTON EXCHANGE MEMBRANE FUEL CELLS: AN INDICATOR-BASED APPROACH Maciej Mrozowski, Jarosław Sęp, Piotr Wygonik	1. MEASUREMENT NOISE USING A LOCAL JACOBIAN-BASED LQR, LEAD PREDICTION, AND CONSTRAINED TERMINAL Marta Grzyb, Zbigniew Koruba 2. IN-SITU MEASUREMENTS OF LATEX BALLOON ENVELOPE PRESSURE AND BURST DURING STRATOSPHERIC ASCENT Piotr Grzybowski, Kamil Ziółkowski 3. POSITION ESTIMATION IN AN ANGULAR-DISTANCE SYSTEM USING MULTIPLE SENSOR DATA Łukasz Kiciński, Janusz Narkiewicz 4. METHODS OF USING QUATERNION METHODS IN HELMET-MOUNTED SIGHTING SYSTEMS Andrzej Pazur, Sławomir Michalak, Andrzej Szelmanowski

10.30-11.00: Coffee break

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Session 7: 11.00-13.30	Session 8: 11.00-13.30
1. ANALYSIS OF THE ELECTRICAL ROBUSTNESS OF UAV PROPULSION SYSTEM AGAINST FAULT CONDITION Mariusz Korkosz, Robert Żywicki, Stanisław Noga, Tomasz Rogalski 2. TECHNICAL FEASIBILITY AND MASS-ENERGY ANALYSIS OF A HYBRID TAIL ROTOR DRIVE FOR THE S-70I BLACK HAWK HELICOPTER Małgorzata Pawlak, Michał Kuźniar, Tomasz Gałaczyński 3. FOQI-BASED ASSESSMENT OF RECYCLED CFRP FOR SUSTAINABLE AEROSPACE STRUCTURES Tomasz Maik, Andrzej Majka 4. WIND-AWARE FLIGHT-LINE SEQUENCING FOR MANNED AIRCRAFT IN CORRIDOR AERIAL PHOTOGRAMMETRY MISSIONS Łukasz Salach, Andrzej Majka	1. CONTROL OF TWO SERVO VALVES FOR A TANDEM ACTUATOR IN A FLY BY WIRE SYSTEM – A MODEL REFERENCE CONTROL APPROACH Grzegorz Kopecki, Jerzy Szura 2. ADAPTIVE METHOD FOR OPTICAL TRACKING OF MANEUVERING AERIAL OBJECTS UNDER LIMITED COMPUTATIONAL RESOURCES Yurii Yukhymenko, Tomasz Rogalski, Nataliia Stelmakh 3. ANALYSIS OF THE DZHANIBEKOV EFFECT BASED ON EXPERIMENTAL DATA Hubert Kaczorowski, Paweł Rzucidło 4. DIAGNOSING HELICOPTER SWASHPLATES USING THE FAM-C METHOD Andrzej Gębura, Sławomir Michalak, Tomasz Tokarski, Tomasz Gajewski

13.30-14.30 Lunch break

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Session 9: 14.30-16.00	Session 10: 14.30-16.00
1. IDENTIFYING TEMPORAL AND LOCAL PATTERNS OF WILDLIFE STRIKE OCCURRENCE Grzegorz Drupka, Tomasz Kapuściński, Piotr Szczerba, Michał Zielosko 2. DEVELOPMENT OF A RAPID, LOW-COST, AND ITERATIVE METHOD FOR UAV PROPELLER DESIGN AND SELECTION USING ADDITIVE MANUFACTURING AND EXPERIMENTAL AERODYNAMIC VALIDATION Maciej Kalwara, Marcin Borkowski, Michał Kuźniar, Piotr Krauz 3. AUTOMATED SYSTEM FOR UAV OPTICAL TRACKING AND GUIDANCE WITH ADAPTIVE KALMAN FILTERING Solomiia Perepechai, Tomasz Rogalski, Nataliia Stelmakh, Yurii Yukhymenko 4. COMPARATIVE MASS–ENERGY ANALYSIS OF PEMFC POWER SYSTEMS FOR MULTIROTOR UAV APPLICATIONS Maciej Mrozowski, Jarosław Sęp, Michał Kuźniar	1. APPLICATION OF ACTIVE DISTURBANCE REJECTION CONTROL (ADRC) FOR AUTONOMOUS TAXIING OF UNMANNED AIRCRAFT Albert Zajdel 2. SELECTION AND ADJUSTMENT OF OVERLOAD PULSE PARAMETERS IN A BALLISTIC TEST WHEN EVALUATING THE IMPACT RESISTANCE OF A CATASTROPHIC FLIGHT DATA RECORDER'S PROTECTIVE CASING Zbigniew Jakielaszek, Mirosław Nowakowski, Andrzej J. Panas 3. ANALYSIS OF THE TECHNICAL FEATURES OF THE "EHANG EH216-S" ELECTRIC VERTICAL TAKE-OFF AND LANDING AIRCRAFT Daniel Lichoń 4. VIBRATION ANALYSIS OF THE HIGH SPEED ELECTRIC MOTOR DEDICATED TO UNMANNED AERIAL VEHICLE Stanisław Noga, Mariusz Korkosz, Damian Kordos

16.00 – Scientific Committee and Session Chairs Meeting

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