

08:00		09:00		REGISTRATION											
Room		MAJOR													
09:00		09:10		Welcome Address: Arnaud LE PAPE											
09:10		09:20		Opening Remark : Louis LE PORTZ, 3AF President											
09:20		09:25		Opening Remark : Franco BERNELLI, CEAS President											
09:25		09:30		Opening Remark : EHA (Fredrik Knaple, Oliver Dismore) (tbc)											
09:30		09:40		Opening Remark: Aix Marseille University (tbc)											
09:40		10:15		Keynote : Alain DE ZOTTI, Executive VP Engineering and Tomasz KRYSINSKI, Research and Innovation VP, Airbus Helicopters											
10:15		11:00		COFFEE BREAK											
11:00		11:30		Keynote : Pascal DAURIAC, Director of R&T, Safran Helicopter Engines											
11:30		12:00		Keynote : Philippe BEAUMIER, Director of Aeronautics, ONERA											
12:00		12:30		VFS80 Best Paper : "Scenario-Based Helicopter Flight Simulation of Accident-Prone Vortex Ring State (VRS) Encounters" - E. Sotiropoulos-Georgiopoulos, GIT (Alfred Gessow Award)											
12:30		14:00		NETWORKING LUNCH											
Room		MAJOR		GRAND LARGE		ESTAQUE		JOLIETTE		SAINT-JEAN		LACYDON			
Topic		Session 1 Aerodynamics 1		Session 2 Acoustics 1		Session 3 Dynamics 1		Session 4 UAV 1		Session 5 Manufacturing 1		Session 6 Urban Air Mobility 1			
Chair		Klausdieter PAHLKE - DLR		Rainer HEGER - Airbus Helicopters		Pierangelo MASARATI - POLIMI		Sebastian TOPCZEWSKI - Warsaw University of Technology		Luca MEDICI - Leonardo Helicopters		Fabrice CUZIEUX - ONERA			
14:00		14:30		147 - Advancing Urban Air Mobility: High-Fidelity Computational Analysis of NASA's Air Taxi Concept Vehicles  Patricia VENTURA DIAZ - NASA - United States		133 - Feasibility of an acoustic liner applied to a Fenestron Victor LAFONT - ONERA - France		015 - High-fidelity Aeroelastic Analysis of Rotor Blade Using Three-dimensional Finite Element Formulation and Panel Method  Seongwoo CHEON - Jeonbuk National University - South Korea		016 - Flight Performance of a Multirotor Unmanned Aerial Vehicle with Digital Displacement Hydrostatic Transmission  Calum ARNOTT - Flowcopter Ltd - United Kingdom		062 - Development of a weight-optimized single-piece composite drive shaft for tail drive line application  Sebastien BARLET-BAS - Nexteam Group - France		122 - Special Condition VTOL: Airworthiness requirements as a first building block for VTOL safety  Lionel TAUSZIG - EASA - Germany	
14:30		15:00		040 - Numerical Simulations of a Heavy-Lift eVTOL  Timotheos CHRONIS - The University of Manchester - United Kingdom		179 - Potential of Unconventional Low-Noise Propulsion Designs for UAV/UAM Applications  Adam SIERADZKI - Lukaszewicz Research Network ; Institute of Aviation (ILOT) - Poland		020 - Tight coupling of helicopter airframe including elastic main rotor shaft  Oskar WENGRZYN - Institut für Aerodynamik und Gasdynamik Universität Stuttgart - Germany		092 - UAV icing trials: a new approach  Riccardo PARIN - Eurac Research - Italy		079 - Defects Detection in Rotor Composite Parts using Instance Segmentation  Nicolas GRISELIN - AIRBUS Helicopters - France		078 - Evaluating stability of an eVTOL configuration: trim strategies, static margin and aerodynamic interactions.  Raphael PERRET - ONERA - France	
15:00		15:30		021 - Experimental-Numerical Investigation of the Aerodynamic Interaction between Tandem Propellers Reproducing a Tiltwing eVTOL in Transition Maneuver  Alex ZANOTTI - Politecnico di Milano - Italy		163 - JAXA-ONERA-DLR Cooperation: Results from Acoustic Optimizations of a Rotor in Descent Flight  Gunther Andreas WILKE - German Aerospace Center (DLR) - Germany		084 - High-Fidelity Structural Loads Analysis of the Double-Swept ERATO Rotor  Hyeonsoo YEO - U.S. Army DEVCOM AvMC - United States		189 - Design of a 6-Axis Aerodynamic Balance for Phase-Lag Measurements on Tilt-Mounted Helicopter Rotors  Pietro LI VOLSI - TIDAV SAS - France		120 - Design, Manufacturing And Testing Of Highly Instrumented Rotor Blades For A Medium Size Helicopter Wind Tunnel Model  Henning MAINZ - German Aerospace Center (DLR) - Germany		217 - Estimation and Tracking of Maintenance and Damage on Advanced Air Mobility Concepts  Marilyn SMITH - Georgia Institute of Technology - United States	
15:30		16:00		COFFEE BREAK											
Room		MAJOR		GRAND LARGE		ESTAQUE		JOLIETTE		SAINT-JEAN		LACYDON			
Topic		Session 7 Aerodynamics 2		Session 8 Test & Evaluation 1		Session 9 Dynamics 2		Session 10 UAV 2		Session 11 Simulation & Training 1		Session 12 Systems 1			
Chair		Klausdieter PAHLKE - DLR		Neil TAYLOR - DSTL		Pierangelo MASARATI - POLIMI		Sebastian TOPCZEWSKI - Warsaw University of Technology		Pierluigi CAPONE - ZHAW Zurich University of Applied Sciences		Louis FABRE - Airbus Helicopters			
16:00		16:30		136 - Prediction of the laminar-to-turbulent transition position on a helicopter rotor in forward flight  François RICHEZ - ONERA - France		044 - Vibration Diagnostic Technologies for Helicopter MRO  Aleksy MIRONOV - D un D centres - Latvia		053 - Airframe Vibration Control Simulation of a Medium Utility Helicopter Using a Higher Harmonic Control System  Do-Hyung KIM - Korea Aerospace Research Institute - South Korea		029 - Cooperative Transportation Using Rotorcraft: Swing State Estimation and Control  Elia COSTANTINI - University of Bologna - Italy		090 - Development and Evaluation of Helicopter Autopilot Modes for Ship-deck Landing Maneuver  Arti KALRA - DLR (German Aerospace Center) - Germany		048 - Slalom-tailoring haptic piloting assistance: A comparison between an electrostatic force field-based design and a design inherited from human motion  Yale LEE - ONERA - France	
16:30		17:00		118 - A Comparison of Low- and High-Fidelity Models for Tail Rotor Icing Phenomena  Lakshmi SANKAR - Georgia Institute of Technology - United States		047 - Evaluation of Fibre Optic Sensing Techniques for Helicopter Rotor Blades during Ground Run and Whirl Tower Test  Simone WEBER - Airbus Helicopters Deutschland GmbH - Germany		099 - Experimental-Cum-Numerical Evaluation of Structural Properties and Vibrational Spectra of New Smart Twisting Active Rotor Blades  Sehoon CHANG - Konkuk University - South Korea		072 - Reinforcement Learning Implementation in the Control System for the Unmanned, Compound Helicopter  Sara WASNIEWSKA - Warsaw University of Technology - Poland		125 - Dual Pilot Active Sidestick Demonstrator Flexible rapid prototyping platform for research flight simulation  Alexej DIKAREW - German Aerospace Center (DLR) - Germany		064 - Redundancy in Automatic Flight Control System Design For A General Purpose Helicopter  Berk Akin YILDIZ - Turkish Aerospace Industries - Turkey	
17:00		17:30		056 - Validation of a turbulent boundary layer method for fuselages of helicopters  Hilal INAC - German Aerospace Center - Germany		159 - Rotor Component Load Reconstruction for Fiber-Bragg Instrumented Rotor Blades  Tobias PFLUMM - Kopter Germany - Germany		241 - Fundamental Understanding of Helicopter Rotor Hub Vibration Reduction using Non-structural Lumped Masses  Rohin MAJETI - German Aerospace Center (DLR) - Germany		095 - Hardware-In-the-Loop simulation for small-scale helicopter control systems assessment  Giulia BERTOLANI - University of Bologna - Italy		184 - Modeling of a Machine Learning-based Virtual Copilot for Helicopters  Stefano CECCHI - Politecnico di Torino - Italy		089 - Advanced Virtual Sensors for Rotorcrafts  Nicolò VALLANA - Leonardo SPA - Italy	
17:30		18:00		038 - Large Eddy Simulation of an Advancing Rotor for the Characterization of Wake Signature and Wake Encounter Severity on Final Approach  Guillaume QUERINJEAN - Université catholique de Louvain - Belgium		112 - Development Of A New Medium Size Helicopter Wind Tunnel Model  Oliver SCHNEIDER - DLR - Germany		243 - Fuselage Vibration Reduction of Lift-Offset Coaxial Rotor Vehicles with Auxiliary Propulsion via Individual Blade Pitch Control (IBC)  Isabella MAWRY - Pennsylvania State University - United States		113 - Analysis, Development, and Simulation of a Mission System for MUM-T Operational Scenarios  Marco CICALINI - TXT E-TECH - Italy		221 - A "User's Guide" to system identification methods for helicopter and VTOL applications  Anna ABA - ZHAW Zurich University of Applied Sciences - Switzerland		207 - A Practical Approach for Aircraft Systems Requirements Validation in Compliance with ARP4754  Luigi TURCO - Leonardo S.p.a. - Italy	
18:00		20:00		WELCOME COCKTAIL											

8:00		8:30		REGISTRATION					
Room	MAJOR	GRAND LARGE	ESTAQUE	JOLIETTE	SAINT-JEAN	LACYDON			
Topic	Session 13 Aerodynamics 3	Session 14 Test & Evaluation 2	Session 15 Dynamics 3	Session 16 UAV 3	Session 17 Aircraft Design 1	Session 18 Systems 2			
Chair	François RICHEZ - ONERA	Neil TAYLOR - DSTL	Alan IRWIN - Leonardo Helicopters	Fabrice CUZIEUX - ONERA	Luca MEDICI - Leonardo Helicopters	Sebastian TOPCZEWSKI - Warsaw University of Technology			
8:30	9:00	006 - Assessment Of A Hybrid Eulerian-Lagrangian Method By Comparison With Its Parent Codes Yi YUAN - Politecnico di Milano - Italy	063 - Development of a Propulsion Test Stand for eVTOL Applications Faust JAN-ARUN - eR - Germany	081 - Experimental and Analytical Comparison of Stiff and Flexible Rotor Blades for Whirl-Flutter Stability Andrew KRESHOCK - Army Research Lab - United States	009 - Autonomous Emergency Landing Maneuver of Unmanned Rotorcraft for Engine Inoperative Conditions Jun-Young AHN - Konkuk University - South Korea	236 - Sharing 15 years of eVTOL Aircraft Design Experience and Lessons Learnt James WANG - NTU - Singapore			
9:00	9:30	024 - Mid-Fidelity Numerical Calculation of a Tiltrotor Aircraft Aerodynamic Stability Derivatives Daniele GRANATA - Politecnico di Milano - Italy	121 - Development of Vortex Ring State indicator for a Helicopter Abdul Rashid TAJAR - HAL - India	216 - Active Whirl Flutter Suppression Using Control Surfaces Bedirhan YILMAZ - Turkish Aerospace Industries - Turkey	138 - UAV automatic landing on a ship-deck, multivariate sensor fusion for robust state estimation Antonio DIGIACOMO - Leonardo Helicopters - Italy	164 - Optimal Design and Wind Tunnel Testing of Propellers for a Winged Compound Helicopter Keita KIMURA - JAXA - Japan	066 - Electrical power generation on a rotating frame: Helicopter rotor Ice Protection System use case Luigi BOTTASSO - Leonardo Helicopters - Italy		
9:30	10:00	148 - Aeroelastic Load Evaluation During Tiltrotor Transition Using a Comprehensive Mid-Fidelity Approach Alessandro COCCO - University of Maryland - United States	219 - Effects of Control System Augmentation Level on Pilot Workload and Effectiveness Tom BERGER - U.S. Army Combat Capabilities Development Command Aviation & Missile Center - United States	247 - The effect of a nonlinear energy sink on the whirl flutter behaviour of a wing-propeller system Mohammadreza AMOOZGAR - University of Nottingham - United Kingdom	143 - A Framework for Model Based Helicopter Contour Flight Planning Rafael PAINTNER - German Aerospace Center (DLR) - Germany	057 - Novel Approach for Automated and Objective VTOL Concept Selection Victor ZAPPEK - Technical University of Munich - Germany	191 - A locking system to guarantee aeroelastic stability of a wing movable surface Giuseppe Marco CORNEO - Leonardo Helicopters - Italy		
10:00	10:30	222 - Details of Da Vinci Aerial Screw Physics, Aerodynamics and Performance Koushik MAREPALLY - University of Maryland, College Park - United States	227 - Design of Computer Vision Software for Flight Test Inconvenience Detection Eleonora BARBANO - TXT Group - TXT E-Tech - Italy	250 - Online Monitoring of Whirl Flutter during Wind Tunnel Testing in the ATTILA Project Keith SOAL - German Aerospace Center (DLR) - Germany	162 - Enhancing Unmanned Rotorcraft Guidance with LIDAR and ADS-B Integrated PGFlow Algorithm Jan RUDZKI - Technical University of Munich - Germany	074 - MANGROV: Modular and Adaptable Notation for Generalized Representation Of Vehicles Simon VERLEY - ONERA - France	195 - Experimental validation of robustness against failures of a fail-safe electro-mechanical actuator employed for the flap movables of a high-speed helicopter-plane Gianpietro DI RITO - University of Pisa - Italy		
10:30 11:00 COFFEE BREAK									
11:00 11:45 <i>Keynote - Colonel Pierre Madej, French Air &amp; Space Force</i>									
11:45 13:00 NETWORKING LUNCH									
13:00 14:00 <i>Special 50th ERF Event</i>									
Room	MAJOR	GRAND LARGE	ESTAQUE	JOLIETTE	SAINT-JEAN	LACYDON			
Topic	Session 19 Aerodynamics 4	Session 20 Acoustics 2	Session 21 Dynamics 4	Session 22 Crew Station & Human Factors 1	Session 23 Aircraft Design 2	Session 24 Flight Mechanics 1			
Chair	François RICHEZ - ONERA	Rainer HEGER - Airbus Helicopters	Alan IRWIN - Leonardo Helicopters	Luca MEDICI - Leonardo Helicopters	Pierangelo MASARATI - POLIMI	Marc HOEFINGER - DLR			
14:00	14:30	083 - High-Fidelity Aerodynamic Loads Analysis of the Double-Swept ERATO Rotor Mikel BALMASEDA AGUIRRE - ONERA - France	082 - Helicopter Noise Study: Towards a Better Understanding of Urban Air Mobility Noise Julien CAILLET - Airbus Helicopters - France	032 - Time accurate fluid-structure coupling employing a lightweight socket based data exchange Julius KLAUCK - Universität Stuttgart - Germany	208 - Subjective and Objective Workload Assessment of Novel Autorotation Cueing Methods using Haptic Cues Michael JUMP - The University of Liverpool - United Kingdom	061 - Towards a holistic approach for the predesign of eVTOL aircraft Pierre-Marie BASSET - ONERA - France	022 - Flight Simulation Model Development and Fidelity Assessment for eVTOL Handling Qualities Certification by Simulation Agata RYLKO - Politecnico di Milano - Italy		
14:30	15:00	088 - High Fidelity CFD/CSD Method for Rotor Blade Optimization Mark WOODGATE - University of Glasgow - United Kingdom	049 - A Noise Prediction Tool for IAM and AAM in Urban Environments Hasse DEKKER - Royal Netherlands Aerospace Centre (NLR) - The Netherlands	097 - Efficient Aeroelastic Analysis of Helicopter Blades via GNAT-based Model-Order Reduction Approach Inho JEONG - Jeonbuk National University - South Korea	185 - Integration Of Active Inceptors Systems In Fly-By-Wire Rotorcraft: Challenges And Opportunities Nicole TESTA - Leonardo Helicopters S.p.A. - Italy	031 - A Metaheuristics-Based Algorithm to Optimize the Fatigue Spectra of Mechanical Parts Laurent FERHI - Airbus Helicopters - France	151 - Stability and Control of a Coaxial Compound Helicopter with Rotor-On-Rotor Interactional Aerodynamics Dogyu JUN - University of Maryland - College Park - United States		
15:00	15:30	152 - Verification and Validation of CFD Software by ONERA, DLR, Airbus for Helicopter Fuselages Lukas ROTTMANN - German Aerospace Center (DLR) - Germany	203 - A Deep Learning-Based Real-Time Noise Prediction of Full-Scale Helicopter Rotor Guowei ZHANG - Technical University of Munich - Germany	205 - A Mid-Fidelity Aeroelastic Coupling Framework for Analyzing Flutter Dynamics in Rotorcraft Applications Moritz LINDER - Technical University of Munich - Germany		077 - Uncertainty quantification of a multi-fidelity digital twin of an eVTOL drone Andrea PEDRIOLI - Zurich University of Applied Science (ZHAW) - Switzerland	041 - Simulation and Analysis of Electric Motor Failure During eVTOL Aircraft Operations in Turbulent Airwake Jan GOERICKE - Advanced Rotorcraft Technology, Inc. - United States		
15:30 16:00 COFFEE BREAK									
Topic	Session 25 Aerodynamics 5	Session 26 Acoustics 3	Session 27 Dynamics 5	Session 28 Test & Evaluation 3	Session 29 Aircraft Design 3	Session 30 Flight Mechanics 2			
Chair	Thorsten SCHWARZ - DLR	Rainer HEGER - Airbus Helicopters	Klausdieter PAHLKE - DLR	Pierluigi CAPONE - ZHAW Zurich University of Applied Sciences	Pierangelo MASARATI - POLIMI	Marc HOEFINGER - DLR			
16:00	16:30	059 - Comparing Methods to Extract Sectional Angle of Attack from Blade-Resolved Rotor Simulations Maxim MOUNIER - NASA Ames Research Center - United States	058 - Acoustic and aerodynamic evaluation of POLIMI tandem propellers configurations within GARTEUR AG26 Alex ZANOTTI - Politecnico di Milano - Italy	223 - Subcomponent Modal Tests in the H135-Production Line to Further Improve Finite-Element Model Updating Johannes KNEBUSCH - German Aerospace Center (DLR) - Germany	087 - Icing Flight Test Campaign on the H175B Setareh TAHERI - Airbus Helicopters - France	017 - Analysis of an electric-propulsion gimballed prop-rotor by CAMRAD II Chihyun AHN - Seoul National University - South Korea	073 - The violent versus the silent aspects of Vortex Ring State, and the particular case of the double-swept H160 blade Manousos KELAIDIS - Airbus Helicopters - France		
16:30	17:00	050 - Towards Automated, Adaptive, and Mesh-free CFD Modelling for Rotorcraft Zhang TAO - University of Leicester - United Kingdom	091 - Analysis of the Aeroacoustic Performance of Twin Propellers in Hover by using the CIRA-Cusano Test Rig Antonio VISINGARDI - CIRA - Italy	096 - Decoupling Pilot Biomechanics from Control Device Dynamics in Biodynamic Feedthrough: A Multibody Dynamics Approach Andrea ZANONI - Politecnico di Milano - Italy	204 - Sea Level Flight Performance Test Overview for a Utility Helicopter Emre CAYDIBI - Turkish Aerospace Industries - Turkey	107 - Multifidelity Rotor Optimization Using a Modern Computational Aeromechanics Toolchain. Jeffrey SINSAY - Science & Technology Corp - United States	238 - High-Fidelity CFD Maneuver Simulation Using Blade Dynamics, Flight Mechanics and a Pilot Model Manuel KESSLER - University of Stuttgart - Germany		
17:00	17:30	018 - Challenges about comparing numerical simulations and experimental data for the vortex decay in a rotating system Filippo GAJO - University of Stuttgart - Germany	111 - Aeroacoustics of Oscillating Airfoil Under Icing Conditions Osman GÜNGÖR - Turkish Aerospace - Turkey	134 - A methodology for linearization of highly coupled flap-lag-pitch rotor-body dynamics on side-by-side helicopters Francesco MAZZEO - University of Modena and Reggio Emilia - Italy	206 - Analysis and Flight Test Comparison for Hover Performance Muhammed çağrı GÜMÜŞ - Turkish Aerospace Industries - Turkey	144 - Multi-Fidelity Artificial Neural Network for Rotor Blade Design Aparva ANAND - University of Maryland College Park - United States	253 - On the Performance and Flight Mechanics Analysis of Ducted Rotors - Axial Flight Maximilian MINDT - German Aerospace Center (DLR) - Germany		
17:30	18:00	177 - Analysis of Aerodynamic Interference Characteristics During the Deployment of Helicopter Mounted UAVs Wenqing ZHAO - Nanjing University of Aeronautics and Astronautics - China	149 - Numerical Analysis on the Aeroacoustic Characteristics of Coaxial Counter Rotating Propeller considering the Self-Interference Effect Hang XU - Nanjing University of Aeronautics and Astronautics - China	105 - Novel Modeling and Analysis Method on Rotorcraft Coupled Drive Train System Xiao WANG - Nanjing University of Aeronautics and Astronautics - China	213 - Assessment of Airspeed Calibration Methods on a Utility Helicopter Emre CAYDIBI - Turkish Aerospace Industries - Turkey		036 - Rigid-Elastic Coupled analysis of a Rotor-Fuselage-Slung-Load system Wang LUOFENG - Nanjing University of Aeronautics and Astronautics - China		
19:00 23:00 Conference dinner at Fort Ganteaume									

8:00		8:30		REGISTRATION					
Room		MAJOR	GRAND LARGE	ESTAQUE	JOLIETTE	SAINT-JEAN	LACYDON		
Topic		Session 31 Aerodynamics 6	Session 32 Flight Mechanics 3	Session 33 Urban Air Mobility 2	Session 34 Safety	Session 35 Engine & Propulsion 1	Session 36 Structures & Materials		
Chair		Thorsten SCHWARZ - DLR	Marc HOEFINGER - DLR	Fabrice CUZIEUX - ONERA	Stefan VANITT HOFF - NLR	Neil TAYLOR - DSTL	Luca MEDICI - Leonardo Helicopters		
08:30	09:00	065 - Experimental and Numerical Analysis of Aerodynamic Interaction between Wing and Propeller Alberto SAVINO - Politecnico di Milano - Italy	142 - Parametric Rotor Control Equivalent Turbulence Input (RCETI) Models Using Neural Networks Mahmoud HAYAJNH - Georgia Institute of Technology - United States	146 - Novel Analysis Methods to Support the Handling Qualities Evaluation of VTOL Aircraft Dakota MUSSO - Systems Technology, Inc. - United States	052 - Development of a multi-scale numerical approach for the crashworthiness of eVTOL aircrafts Edoardo NOVEMBRE - Politecnico di Milano - Italy	246 - Control of Helicopter parallel hybrid propulsion system David LEMAY - Safran Helicopter Engines - France	011 - Strain-based Shape Reconstruction and Temperature Compensation for Fiber-Bragg Instrumented Rotor Blades Tobias PFLUMM - Kopter Germany - Germany		
09:00	09:30	093 - Aerodynamic and Aeroacoustic Study of Wingtip-mounted Propeller and Distributed Propulsion System Geng QIAO - University of Glasgow - United Kingdom	161 - Tiltrotor control robustness assessment to model uncertainties in Hover and Near Hover Ground Effect Conditions Fabio RICCARDI - Leonardo Helicopters - Italy	192 - Piloted Simulation Evaluation of Augmented Control Modes and Mode Reversions on an eVTOL Aircraft Joseph HORN - The Pennsylvania State University - United States	140 - Investigating Helicopter Ditching and Flotation Stability using Computational Fluid Dynamics Eduardo Tadashi KATSUNO - University of Duisburg-Essen - Germany	035 - RCF (Rolling Contact Fatigue) crack propagation on integrated raceways Jörg LITZBA - Airbus Helicopters Technik GmbH - Germany	085 - A decision support tool for the economic impact assessment of Structural Health Monitoring Systems in composite rotorcraft elements Pietro BALLARIN - Politecnico di Milano - Italy		
09:30	10:00	150 - Computational Study of Aerodynamics and Noise of Quadrotor AAV in Full Configuration with Different Rotor Arm Angles Yuhyeon Hwang - Gyeongsang national university - South Korea	176 - Optimization-Based Feedforward Controller Design to Minimize the Effects of Cross-Coupling of a Helicopter with Articulated Rotor Can ÜNEN - Turkish Aerospace Industries - Turkey	220 - Effects of microscale wind disturbance on eVTOL aircraft performance during landing Giuseppe QUANRANTA - Politecnico di Milano - Italy	155 - Exit from Vortex-Ring-State – A comparative Study of different Recovery Techniques Tobias RIES - Airbus Helicopters - Germany	071 - Validation plan for compound split, variable rotor speed drivetrain Christopher GROSS - Advanced Drivetrain Technologies GmbH - Austria	086 - A new design principle for damage tolerant structural bonding in aerospace applications Martin BLACHA - Airbus Helicopters - Germany		
10:00 10:30 COFFEE BREAK									
10:30	11:00	102 - Investigation of Propeller Stall Flutter Murray MCKECHNIE - University of Glasgow - United Kingdom	210 - Low speed Translational Rate Command for Tiltrotor Control: Advancements and Applications Federico CELLETTI - Leonardo - Italy	170 - Numerical Aerodynamics and Performance Evaluation of a Hover-capable Airship for UAM Applications using the Flightstream Flow Solver Sebastian OBERNDORFER - Technical University Munich - Germany	160 - Scenario-based Safety Assessment of Thermal Runaway in eVTOL Battery Applications Colin BOSCH - Technical University of Munich - Germany	129 - T-625 GÖKBAY Air Induction System Icing Wind Tunnel Test Campaign Abdurrahman Burak DALDAL - Turkish Aerospace - Turkey	075 - Crashworthy Battery Integration Concepts for a Medium-Lift Hybrid-Electric Helicopter Erik WEGENER - DLR (German Aerospace Center) - Germany		
11:00	11:30	224 - Assessing the Interaction of Helicopter Rotor Downwash and Turbulent Airwakes near Hospital Landing Sites David SOUZA BRANCO - University of Liverpool - United Kingdom	240 - Standalone Time Domain Identification of a Full-Scale Helicopter Using Minimal Representation and Time Delays Ongun Hazar ASLANDOGAN - Technical University of Munich - Germany	123 - Vectored Thrust eVTOL Flight Dynamics Modelling and Real-Time Simulation Chen JIANG - Tsinghua University - China	226 - Experimental investigation of the flotation stability of a helicopter after ditching Simon TÖDTER - University of Duisburg-Essen - Germany	193 - ENGINE VIBRATION SURVEY TESTING ACTIVITIES Ahmet Hakan DEMIR - Turkish Aerospace Industries - Turkey	098 - New Concept for CFRP based Conformal Load-Bearing Antenna Structure Illkyung PARK - Korea Aerospace Research Institute - South Korea		
11:30 12:00 Keynote - Benoit Ferran, CTO of Ascendance Flight Technologies									
12:00 13:30 NETWORKING LUNCH									
Topic		Session 37 Aerodynamics 7	Session 38 Test & Evaluation 4	Session 39 Dynamics 6	Session 40 Crew Station and Human Factors 2	Session 41 Engine & Propulsion 2	Session 42 Aerodynamics 8		
Chair		François RICHEZ - ONERA	Pierluigi CAPONE - ZHAW Zurich University of Applied Sciences	Stefan VANITT HOFF - NLR	Sebastian TOPCZEWSKI - Warsaw University of Technology	Jamel CHERGUI - Airbus Helicopters	Philipp BEAUMIER - ONERA		
13:30	14:00	174 - Experimental Flowfield and Aeroacoustic Investigation of Twin Rotors in Hover Conditions Fabrizio DE GREGORIO - Centro Italiano Ricerche Aerospaziali - CIRA - Italy	069 - Infrared Thermography Procedure for Boundary Layer Transition Detection Mirko ZACCARA - Leonardo Helicopters - Italy	167 - Wind tunnel test of two electrical lift thrust units to assess static and dynamic loads Davide BALATTI - Leonardo Helicopters - United Kingdom	043 - Multimodal Cueing in Attitude Tracking Tasks: Pilot Cognitive Workload via Physiological Measurements Gabriele LUZZANI - POLITECNICO DI TORINO - Italy	201 - Powerplant Starting System's Reliability Ihsan Alp OZDEMIR - Turkish Aerospace Industries - Turkey	010 - Propeller-Rotor Aerodynamic Interaction in Helicopter Air-to-Air Refueling: an Analytical Solution for Rotor Trim Berend G. VAN DER WALL - German Aerospace Center (DLR) - Germany		
14:00	14:30	033 - Experimental investigation into the vortex ring state of multi-rotor configurations Daniele ZAGAGLIA - University of Glasgow - United Kingdom	103 - Hover Performance and Boundary Layer Measurements of Low Reynolds Number Rotors Christopher CAMERON - U.S. Army - United States	169 - TURBOLAB - test rig demonstrator for electromagnetic and gear mesh dynamic loads Adrien PARPINEL - Vibratex - France	158 - Evaluation of pilot flight performance and cockpit interaction with a mixed-reality headset in a helicopter simulator Tanja MARTINI - German Aerospace Center (DLR) - Germany	045 - A New Methodology for Engine Installation Effect Prediction Using Machine Learning Alexandre DI MARCO - Airbus Helicopters - France	027 - IRS Effects on Interactional Aerodynamics and Acoustics of a Coaxial Compound Helicopter in Forward Flight Sung U KANG - Gyeongsang National University - South Korea		
14:30	15:00	186 - Experimental Wind-Tunnel Testing of Rotor/Wake Aerodynamic Interactions on a Compound Helicopter Andrea COLLI - Politecnico di Milano - Italy	070 - A Framework for Numerical Flow Simulation of the Rotor Blade with Aeroelastic Deformation using the Model Deformation Measurement Data Kohei KONISHI - Tokyo University of Agriculture and Technology - Japan	225 - Fundamental Understanding of Hingeless Hub Proprotor Stability Nathan O'BRIEN - University of Maryland - United States	234 - Characterization of Precision and Accuracy for Combined Visual, Audio, and Haptic Localization Madeline FISCHER - University of Maryland - United States	100 - Decarbonization of helicopters : challenges for the engine manufacturer of compatibility with SAF 100% drop-in Christophe VIGUIER - Safran Helicopter Engines - France	037 - Analyzing low-speed rotor-fuselage interactions: a comparative study of simulations and flight-test data on H175 Damien DESVIGNE - Airbus Helicopters S.A.S. - France		
15:00	15:30	039 - Rotor Wake Tail Interactions of a Helicopter Wind Tunnel Model with Various Rotor Head Configurations Ulrich HARTMANN - Technical University Munich - Germany	145 - Propeller and Fuselage Wind Tunnel Testing of the Single and Coaxial Airframe-Rotor Test Apparatus (SCARTA) Luke BATTLEY - US Army Aviation and Missile Center - United States	252 - Indicial Aerodynamic Model for Flutter Assessment in Axial Flight Considering Blade Airfoil, Rotor Inflow and Wake Periodicity Jürgen ARNOLD - German Aerospace Center (DLR) - Germany	237 - Tau-Theory-Based Visual Cueing Method for Obstacle Avoidance Ceren Cansu ESMEK - Georgia Institute of Technology - United States	245 - Alternative propulsion system for helicopter and CO2 emissions Stéphane BEDDOK - Safran Helicopter Engines - France	012 - Impact of Rotor Inflow Modeling on Maximum Thrust, and Beyond, of an Isolated Rotor in Hover Berend G. VAN DER WALL - German Aerospace Center (DLR) - Germany		
15:30 16:00 COFFEE BREAK									
Topic		Session 43 Aerodynamics 9	Session 44 Flight Mechanics 4	Session 45 Crew Station and Human Factors 3		Session 46 Aircraft Design 4	Session 47 Simulation & Training 2		
Chair		Klausdieter PALHLKE - DLR	Marc HOEFINGER - DLR	Pierluigi CAPONE - ZHAW Zurich University of Applied Sciences		Luca MEDICI - Leonardo Helicopters	Stefan VANITT HOFF - NLR		
16:00	16:30	171 - Ground Effect of a Quadcopter Flying Above Inclined Plane Koichi YONEZAWA - Central research institute of electric power industry - Japan	080 - Mitigation of Motion Sickness in Rotorcraft by Using H <sub>∞</sub> -Control Süleyman ÖZKURT - University of Stuttgart - Germany	198 - In-Flight Evaluation of Pilot Gaze Patterns During Ship Deck Landings Malte-Jörn MAIBACH - German Aerospace Center (DLR) - Germany		076 - Overview of Rotor Hover Performance Capabilities at Low Reynolds Number for Mars Exploration Witold KONING - NASA Ames Research Center - United States	249 - Evaluation of the representativeness of flight mechanics models during Vortex-Ring-State entries and recovery manoeuvres Laurent BINET - ONERA - France		
16:30	17:00	233 - Experimental Study of Rotor Ground effect in Low-density environment Vellingiri RAMANUJAM R - Indian Institute of Technology Madras - India	168 - Definition of Disturbance Rejection Requirements for Improved Vibrational Ride Comfort Tim BURKHARDT - University of Stuttgart - Germany	251 - Adapted measurement method to assess mental workload in maintainability studies: industrial point of view Lorrys BERTHON - Airbus / ENSAM - France		230 - Conceptual Design of Mars VTOL Aircraft for Pit Craters Exploration Donguk LEE - Hanseo University - South Korea	215 - A Velocity Potential Based Finite State Modeling of Ground Effect Andro METRY - Georgia Institute of Technology - United States		
17:00	17:30	197 - ABL Inclusion Effects on Rotor Airloads Simulations in a Shipborne Environment Gregorio FRASSOLDATI - Leonardo Helicopters - Italy	153 - Control and Navigation of a Helicopter during Tail Rotor Failure Yusuf Onur ARSLAN - Turkish Aerospace - Turkey			117 - Application of an Inverse Design Methodology to Rotor Tip Design Michelle KU - Georgia Institute of Technology - United States	139 - A Novel Wake Interference Model for Helicopter Real-Time Simulation Jan Juraj DEVERLIJA - Zurich University of Applied Sciences - Switzerland		