

Day 1 - Tuesday September 18th

Auditorium

9:00 Welcome and Opening Speeches
Keynote presentation "Update on the CleanSky2 Fast Rotorcraft Programs" by Ron van Maanen (CleanSky JU)

10:30 Coffee break

11:00 Keynote presentation by GKN-Fokker,
"Training enhancement for the Defence Helicopter Command – The power of visionary needs analysis" by Maj. Roland Blankenspoor (DHC, RNAF)
"Aviation challenges for the Global Energy Market" by Tony Cramp & Alrik Hoencamp (SHELL Aircraft)

12:30 Networking Lunch

	Lecture Room Aerodynamics I Philippe Beaumier	Senate Room Flight Mechanics I Marilena Pavel	Frans van Hasselt Room Unmanned Rotorcraft I Richard Markiewicz	Commission Room 3 Dynamics I Pierangelo Masarati	Commission Room 2 Test & Evaluation I Klausdieter Pahlke
13:30	23 A Hybrid Navier-Stokes/ Viscous Vortex Particle Methodology for Modeling Maneuver Loads <i>Sankar Lakshmi</i> (Georgia Institute of Technology, USA)	108 Progress in the development of a time-to-contact autorotation cueing system <i>Michael Jump</i> (University of Liverpool, UK)	5 Impact scenarios for collisions with unmanned aerial vehicles and their consequences to rotorcraft <i>Florian Franke</i> (Tech Hochschule Ingolstadt, Germany)	14 An extensive helicopter Ground Vibration Test: from pretest analysis to the study of non-linearities <i>Christopher Ciavarella</i> (Airbus Helicopters GmbH, Germany)	49 Evaluation of a Slung Load Control System for Piloted Cargo Operations <i>Daniel Benjamin Nonnenmacher</i> (DLR, Germany)
14:00	40 Aerodynamics of Single and Multiple Rotors Hovering Inside Square Tunnels <i>Yasutada Tanabe</i> (JAXA, Japan)	25 Complementary Use of Black-Box and Physics-Based Techniques in Rotorcraft System Identification <i>Susanne Seher-Weiss</i> (DLR - Flight Systems, Germany)	59 Design space analysis of an autonomous aerial crane VTOL concept with a detachable airship envelope <i>Yu Ito</i> (Yamato Holdings Co., Ltd., Japan)	41 Vibration Reduction Analyses using Individual Blade Pitch Controls for Lift-offset Rotors <i>Jae-Sang Park</i> (Chungnam National University, South Korea)	86 Measurement of Transient Blade Passage Loads in a Coaxial Counter-Rotating Rotor <i>Daiju Uehara</i> (The University of Texas at Austin, USA)
14:30	96 Assessing different blade designs in hover and forward flight <i>George Barakos</i> (University of Glasgow, UK)	20 Height-Velocity Diagram Analysis of a Variable Speed Rotor Helicopter <i>Renliang Chen</i> (Nanjing University, China)	160 Maximizing the safety and hover efficiency of small unmanned multirotors: a flight-validated numerical investigation <i>Lee Whitcher</i> (Georgia Tech - D Guggenheim School, USA)	100 Human biodynamic models for rotorcraft comfort assessment <i>Aykut Tamer</i> (Politecnico Di Milano, Italy)	165 Measurement of rotorblade structural dynamics <i>Simone Weber</i> (Airbus Helicopters/Cranfield University, UK)
15:00	47 Rotor Airfoil Aerodynamic Design Method and Test Verification <i>Long He</i> (CARDC, China)	97 Discrete Vortex Cylinder Method for the Preliminary Loads Calculating of the Helicopter Flight <i>Evgeny Nikolaev</i> (Kazan Helicopters Plant, Russia)	51 The Tilt-Quadrotor: Modelling and Attitude Stabilization <i>Ricardo Marques</i> (Inst Superior Técnico, Uni Lisboa, Portugal)	95 Investigation of the effect of helicopter bearing surfaces on the dynamics of main and tail rotor blades on flare in autorotation <i>Marat Gaskarov</i> (PJSC Kazan Helicopters, Russia)	57 Helicopter Engine Air Intake Icing Wind Tunnel Certification Test <i>Karel Lammers</i> (NLR, Netherlands)
15:30	Coffee break				
	Aerodynamics II Philippe Beaumier	Flight Mechanics II Marilena Pavel	Unmanned Rotorcraft II Richard Markiewicz	Dynamic II Pierangelo Masarati	Test & Evaluation II Klausdieter Pahlke
16:00	56 Investigation on Loss of Tail-rotor Effectiveness of Helicopter with Ducted Fan Tail Rotor <i>Nahyeon Roh</i> (Pusan National University, South Korea)	39 Low Order Aeromechanics of Tilt-Rotor Helicopters <i>Wesley Appleton</i> (University of Manchester, UK)	18 A Physics-Based Approach to Urban Air Mobility <i>Patricia Ventura Diaz</i> (NASA Ames Research Center, USA)	69 Simulation of Active Flow Control Actuator Using CFD with Application to Rotor Blade Vibration Reduction <i>Ryan Patterson</i> (University of Michigan, USA)	107 Optimisation of differential infrared thermography for unsteady boundary layer transition measurement <i>Christian Wolf</i> (DLR, Germany)
16:30	66 Aerodynamic and Flight Mechanics Analysis of Airbus Helicopter's Compound Helicopter RACER in Hover under Crosswind <i>Jakob Thiemeier</i> (Universität Stuttgart, Germany)	30 Identification and Selection of Rotorcraft Candidate Models to Predict Handling Qualities and Dynamic Stability <i>Johannes Wartmann</i> (DLR, Germany)	112 Preliminary Analysis and Conceptual Design of a Modular Rotary-Wing Unmanned Air System <i>Nicholas Bojdo</i> (University of Manchester, UK)	16 Drivetrain Influence on the Lead-Lag Modes of Hingeless Helicopter Rotors <i>Felix Armin Weiss</i> (DLR, Germany)	168 Tracking dynamically scaled separating objects during a helicopter wind tunnel test <i>Anton de Bruin</i> (NLR, Netherlands)
17:00	98 An Experimental Investigation of Hub Drag Characteristic on Coaxial Rigid Rotor Aircraft <i>Min Tang</i> (CARDC, China)	53 Extensive analysis of hardover and trim-runaway failures on tluh mathematical model based on cs-29 requirements <i>Dogan Yildiz</i> (TAI, Turkey)	139 Controller Gain Optimization for Gust Rejection in a UAV <i>Venkatasubramani Subba Reddier Pappu</i> (Pennsylvania State University, USA)	21 Helicopter vibrations: a major comfort improvement through seat sarib implementation <i>Anne-Claire Chapuis-Desplanques</i> (Airbus Helicopters, France)	174 Actively controlled trailing edge flaps with electromechanical actuation <i>M.I. Myasnikov</i> (Mil Moscow Helicopter Plant, Russia)
17:30		10 Real Time Flight Dynamics Model Identification of Tilt-Rotor Aircraft <i>Wei Wu</i> (Nanjing University, China)	143 Development of an Automatic System for Helicopter Approach to a Moving Vessel <i>Sebastian Topczewski</i> (Warsaw University of Technology)	84 Experimental Research on Whirl Flutter of Tiltrotor Aircraft <i>Linghua Dong</i> (Nanjing University, China)	61 Experimental investigation on dynamic stall flow control for wind turbine airfoil using plasma actuator <i>Guoqiang Li</i> (CARDC, China)

19:00 Welcome reception at Prinsenhof Delft

Day 2 - Wednesday September 19th

	Lecture Room	Senate Room	Frans van Hasselt Room	Commission Room 3	Commission Room 2
	Aerodynamics III Klausdieter Pahlke	Flight Mechanics III Przemyslaw Bibik	Engine and Propulsion I Philippe Beaumier	Dynamic III Ruslan Mirgazov	Acoustics I Rainer Heger
9:00	13 Aerodynamic Investigation of Rotor / Propeller Interactions on a Fast Rotorcraft Ronan Boisard (ONERA, France)	161 Rotorcraft-pilot couplings: analysis and detection in a safety enhancement framework Pierangelo Masarati (Politecnico di Milano, Italy)	33 Flight Testing and Analysis of Gas Turbine Engine Performance- A Multivariable Approach Ilan Arush (National Test Pilot School, USA)	144 Mixed-Sensitivity H_infinity On-Blade Control Jahaz Alotaibi (University of Leicester, UK)	77 Aero-acoustic analysis with a permeable surface for tip-jet rotor noise characterisation in hovering flight Kiro Kim (KonKuk University, South-Korea)
9:30	89 Experimental and numerical aerodynamic investigation of advanced tail boom designs based on optimised thick airfoil profiles Guillaume Legras (Airbus Helicopters, France)	118 Wind turbine wakes and helicopter operations. Overview of the Garteur HC-AG23 activities Richard Bakker (NLR, Netherlands)	38 Low Order Multidisciplinary Optimisation of Counter-Rotating Open Rotors Dale Smith (University of Manchester, UK)	164 Stability analysis of whirl flutter in a nonlinear gimbal rotor-nacelle system Christopher Mair (University of Bristol, UK)	50 The development of a European helicopter noise model Marthijn Tuinstra (NLR, Netherlands)
10:00	91 Numerical-Experimental Correlation of Rotor Flowfield in Ground Effect Claudio Pasquali (Roma Tre University, Italy)	36 Numerical investigations of the aerodynamics and handling qualities of a helicopter flying across a wind turbine wake Antonio Visingardi (CIRA, Italy)	72 Experimental and Theoretical Considerations at Total Pressure Distortions on a Helicopter Turboshift Engine Fabian Fuchs (TU-Dresden Germany)		71 Design of a generic rotor noise source for helicopter fuselage scattering tests Jianping Yin (DLR, Germany)
10:30	Coffee break				
	Lecture Room				
11:00	"The Electric VTOL Revolution" by Mr. Mike Hirschberg (<i>Executive Director AHS—The Vertical Flight Society</i>)				
11:30	AHS Best Paper Award; "Avoiding Obstacles during Approach: DVE-Mitigation Flight Trials and Beyond" by Mr. Michael Zimmermann (DLR)				
12:00	ARF Best Paper Award; "A Study of Rotor/Wing Aerodynamic Interaction at High Speed Flight on a Compound Helicopter" by Mr. Hideaki Sugawara (JAXA)				
12:30	Networking Lunch				
	Lecture Room	Senate Room	Frans van Hasselt Room	Commission Room 3	Commission Room 2
	Aerodynamics IV Alan Irwin	Flight Mechanics IV Przemyslaw Bibik	Engine and Propulsion II Richard Markiewicz	Operational aspects Alrik Hoencamp	Crew Station & Human Factors Antoine de Reus
13:30	35 Experimental studies of non-stationary aerodynamic characteristics of a helicopter profile oscillating over the angle of the pitch Ruslan Mirgazov (TsAGI, Russia)	68 Rotating Blade Root Pitch Link Load Estimation and Control J.V.R. Prasad (Georgia Institute of Technology, USA)	55 Dynamic Simulation of a Rotorcraft Hybrid Engine in Simcenter Amesim Ioannis Roumeliotis (Cranfield University, UK)	17 Master Minimum Equipment List (M MEL) / Engine Time Limited Dispatch (TLD) on Helicopter Matthias Hatzak (Airbus Helicopters Deutschland, Germany)	94 Isomorphic Spatial Visual-Auditory Displays for Operations in DVE for Obstacle avoidance Martine Godfroy-Cooper (San Jose State Uni /NASA ARC, USA)
14:00	8 Orthogonal vortex-rotor interaction: impact on rotor controls, blade flapping, thrust and power Berend Van der Wall (DLR, Germany)	135 Reinforcement Learning Control for Helicopter Landing In Autorotation Kadircan Kopsa (Middle East Tech Uni, Turkey)	83 Simulation of a Compound-Split transmission for the UH-60 Pierre Paschinger (Zoerkler Gears, Austria)	67 Development and Validation of Physics Based Models for Ice Shedding Lakshmi Sankar (Georgia Inst. of Technology, USA)	132 Skyflight Mobile: a service to enhance the Leonardo flying experience Susanna Maria De Bernardi (Leonardo Helicopters, Italy)
14:30	110 Investigation of a Helicopter Model Rotor Wake Interacting with a Cylindrical Sling Load Antonio Visingardi (CIRA, Italy)	99 Modeling and Control of Lift Offset Coaxial and Tiltrotor Rotorcraft Tom Berger (US Army Aviation Develop, USA)	87 Performance Degradation Modelling of Rotorcraft Engines Operating in Brownout Conditions Matthew Ellis (University of Manchester, UK)	114 Determining a safe-distance guideline for helicopters near a wind turbine and wind park Richard Bakker (NLR, Netherlands)	133 Active Vibration Control for the Kazan ANSAT Bastian Kindereit (LORD Corporation, France)
15:00	117 Experimental Investigation of the Effects of Helicopter Rotor Tip Geometries on Aerodynamic Performance and Tip Vortex Sinem Uluocak (TAI, Turkey)	60 Estimation of Handling Quality Parameters of a Rotorcraft using Open-loop Linearized and Nonlinear Flight Dynamic Models Sakthivel Thangavel (Indian Institute of Technology, India)	155 Loss of Lubrication Test of Isotropic Superfinished AH-64 D (Apache) Engine Nose Gearbox Without Black Oxide Coating Lane Winkelmann (REM Surface Engineering, Inc, USA)	11 Shipboard Landing Period Based on Dynamic Rollover Risk Prediction Binh Dang Vu (ONERA, France)	111 Investigation of Optic Flow, Time-to-Intercept, and Pilot Workload During Aggressive Approach-to-Hover Maneuvers Edward Bachelder (San Jose State University, USA)
15:30	Coffee break				
	Aerodynamics V Alan Irwin	Aircraft Design I Rainer Heger	Unmanned Rotorcraft III Przemyslaw Bibik	Simulation and training I Pierangelo Masarati	HUMS & Maintenance Lex ten Have
16:00	124 Spectral Galerkin Method for Rotor Induced Velocity Modelling Raphaël Perret (ONERA, France)	26 Development of Improved Rotor Blade Tip Shape Using Multidisciplinary Design Analysis and Optimization Joonbae Lee (KAI, South Korea)	163 Optimizing a multirotor propeller for hover performance given constraints on size and the use of consumer-grade additive man. Lee Whitcher (Georgia Institute of Technology, USA)	145 Safety, quality and efficiency in flight data gathering Regine Pattermann (Reiser Simulation and Training, Germany) & Jos Stevens (NLR, the Netherlands)	3 A rugged fiber optics monitoring system for helicopter rotor blades Luigi Bottasso (Leonardo Helicopters, Italy)
16:30	28 Generation of Mars Helicopter Aerodynamic Rotor Model for Comprehensive Analyses Witold Koning (NASA Ames Research Center, USA)	32 HOPLITE - A Conceptual Design Environment for Helicopters Incorporating Morphing Rotor Technology Kushagra Vidyarthi (Delft Uni of Technology, Netherlands)	104 Unified Framework for Analysis and Design Optimization of a Multirotor Unmanned Aerial Vehicle Daejin Lim (Seoul National University, South Korea)	45 Eigenmode distortion as a novel criterion for motion cueing fidelity in rotorcraft flight simulation Ivan Miletovic (Delft Uni of Technology, Netherlands)	22 Detecting Planetary Gear Bore Crack Wenyi Wang (Defence Science and Technology, Australia)
17:00	65 CFD-CSD coupled simulations of helicopter rotors using mapped Chebyshev pseudo-spectral method Dong Kyun Im (Yongsan University, South Korea)	75 A Design-Centric Evaluation of Multi-Fidelity Aircraft Cost Modeling Approaches Rober Scott (US Army Aviation Development, USA)	175 Development of UAV rotor blades using RTM process Auke Jongbloed (KVE Composites, Netherlands)	125 Model Predictive Motion Cueing for a Helicopter Hover Task on an 8-DOF Serial Robot Simulator Frank Drop (Max Planck Institute, Germany)	119 Predictive Maintenance for Helicopter from Usage Data: Application to Main Gear Box Nassia Daouayry (Airbus Helicopters, France)
17:30	15 Unsteady Aerodynamic Interaction between Rotor and Ground Obstacle Jianfeng Tan (Nanjing Tech University, China)	63 Universal geometric transformation method PGT for aircraft design Alexander Nikolsky (TsAGI, Russia)	162 Modeling and simulation based analysis of a hybrid multirotor unmanned aerial vehicle concept Derya Kaya (Middle East Tech University, Turkey)	126 Initial Progress in Developing a Predictive Simulation Tool to Inform Helicopter Ship Operations Wajih Ahmed Memon (University of Liverpool, UK)	169 Fiber Bragg Grating Sensors toward Structural Health Monitoring in Composite Materials: Challenges and Solutions Arash Alvandi (Polimi, Italy)
19:00	Conference dinner at paddle steamer 'De Majesteit' (<i>Bus transport from TU Delft conference centre</i>)				

Day 3 - Thursday September 20th					
Lecture Room					
9:00	Opening of the Safety workshop				
9:10	Keynote presentation on "EASA Rotorcraft Safety Strategy" by David Solar (EASA)				
9:50	Emeritus Professor Gareth Padfield - "The Danger of speed instability below minimum power; a forgotten problem?"				
10:30	Coffee break				
	Lecture Room	Senate Room	Frans van Hasselt Room	Commission Room 3	Commission Room 2
	Aerodynamics VI Alan Irwin	Safety Workshop Joost Vreeken	Systems, Avionics and sensors Ivan Miletovic	Simulation and training II Jasper van de Vorst	Acoustics II Yves Delrieux
11:00	101 Higher-Order Simulations of Interactional Aerodynamics on Full Helicopter Configurations using a Hamiltonian Strand Approach Jannik Petermann (TU München, Germany)	-- Airbus Helicopters (AH) flight test safety management system	170 BladeSense – A novel approach for measuring dynamic helicopter rotor blade deformation Simone Weber (Airbus Helicopters/Cranfield University, UK)	31 A handling qualities insight of the FSTDs certification dynamic tests through linear state-space identification Xavier Barral (ONERA, France)	46 Towards a European helicopter noise calculation methodology Marthijn Tuinstra (NLR, Netherlands)
11:30	128 The Elevated Helipads – Study of Wind And Rotor Wash Influence for Most Common Configuration Types Adam Sieradzki (Instytut Lotnictwa, Poland)	24 The potential of technologies to mitigate helicopter accident factors - status update and way forward Jos Stevens (NLR, Netherlands)	42 Development of Integrated Avionics Functions for Enhanced Crew Situation Awareness in Civil Helicopter Missions Omkar Halbe (Airbus Helicopters Deutschland, Germany)	70 Correlation of Finite State Multi-rotor Dynamic Inflow Models with CFD Data J.V.R. Prasad (Georgia Institute of Technology, USA)	92 Boundary integral formulations for noise scattered by helicopter fuselage Caterina Poggi (Roma Tre University, Italy)
12:00	150 Prediction of Unsteady Aerodynamic Loads and Wake Structure of Wind Turbine in Yawed Inflow Hakjin Lee (Korea Advanced Inst. of S&T, South Korea)	24 The potential of technologies to mitigate helicopter accident factors - status update and way forward Jos Stevens (NLR, Netherlands)	121 Research on Vision System for Degraded Visual Environment Kohei Funabiki (JAXA, Japan)	79 Effectiveness of a Computer-Based Helicopter Trainer for Initial Hover Training Paolo Francesco Scaramuzzino (Technical University of Delft)	116 Experimental and Numerical Investigation of Near-Field Rotor Aeroacoustics Robert Stepanov (Kazan National Research Technical University, Russia)
12:30	Networking Lunch				
	Aerodynamics VII Harmen van der Ven	Safety Workshop Jos Stevens	Aircraft Design II Luca Medici	Simulation and training III Jasper van der Vorst	Structures & Materials Martijn Priems
13:30	142 The influence of the state of flight on a helicopter cooling Katarzyna Surmacz (Institute of Aviation, Poland)	19 New technologies to enhance rotorcraft crash safety Dr. Akif O. Bolukbasi (The Boeing Company, USA)	58 Probabilistic approach and inertial Tolerancing for H/C ramp-up in production Mathieu Krebs (Airbus Helicopters, France)	153 Structure and performance of rotor wake formulation based on differential algebraic equations Diego Hidalgo (Uni Pontificia Bolivariana, Colombia)	90 Automation of structural cross sectional rotor blade modeling for aeromechanical rotor blade optimization Bram Van de Kamp (DLR, Germany)
14:00	140 Investigation on Hovering Rotors over Inclined Ground Planes -- a Computational and Experimental Study Stefan Platzer (Technical University of Munich, Germany)	127 Cabin safety sensitivity to the mechanical parameters of the main crashworthy stages Paolo Astori (Politecnico di Milano, Italy)	81 Qualification and certification of Special Patrol Insertion & Extraction (SPIE) equipment for military helicopters Natalie Münnhoff (NLR, Netherlands)	138 Development of a civil light helicopter flight simulator for pilot training Urs Kazenmaier (Max Planck Institute, Germany)	43 Twist morphing of a hingeless rotor blade using a moving mass Mohammadreza Amoozgar (Swansea University, UK)
14:30	148 Implementation of aero-elastic capabilities in a LBM flow solver: application to a low-Reynolds rotor for Antonio Alguacil (ISAE-Supaero, France)	78 Rotorcraft loss of control in-flight - The need for research to support increased fidelity in flight training devices, Mark White (University of Liverpool, UK)	102 Conceptual Design Tradeoffs for Future Single Main Rotor Compound Helicopters Daniel Schrage (Georgia Tech, USA)	131 An Objective Assessment Tool (gOAT) for Helicopter Flight Simulator Antoni Kopyt (Warsaw University of Technology, Poland)	158 A Preprocessor for Parametric Composite Rotor Blade Cross-Sections Tobias Pflumm (Technische Universität München, Germany)
15:00	166 Application of Parametric Airfoil Design for Rotor Performance Improvement Joon Lim (US Army ADD, USA)	130 Embedding intelligent image processing algorithms: the new safety enhancer for helicopter missions Pierre Zoppitelli (Airbus Helicopters, France)	4 Optimization of Preliminary Design Process For a Medium Lift Multi Role Helicopter Abdul Rashid Tajar (HAL, India)		167 Vibration Fatigue Analysis of Horizontal Tail using Finite Element Method Vijaya Kumar Rayavarapu (RWRDC, HAL, India)
15:30	Coffee break				
	Aerodynamics VIII Harmen van der Ven	Safety Workshop Jos Stevens	Aircraft Design III Luca Medici	Flight Mechanics V Marilena Pavel	Test & Evaluation III Ruslan Mirgazov
16:00	147 Influence of the rotor distance on efficiency of a coaxial rotor system powered by electrical drives for VTOL aircraft Matthias Kränzler (Robert-Bosch, Germany)	120 Evaluation of rotor blade models for rotor outwash Umberto Morelli (CFD Laboratory School of Engineering, UK)	113 Fuel Cell and Battery Hybrid Power Architecture for Electric VTOL Wanyi Ng (University of Maryland, USA)	156 Rotorcraft shipboard landing guidance using MPPI trajectory optimization J.V.R. Prasad (Georgia Institute of Technology, USA)	173 Some results of GARTEUR Action Group HC-AG 19 on Methods for Improvement of Structural Dynamic Finite Element Models Hans vanTongeren (NLR, Netherlands)
16:30	85 Experimental study of rotor and ship interference in the absence of ambient wind Jie Wu (CARD, China)	109 CFD analysis for the helicopter wake in ground effect Gianmarco Ducci (CFD Laboratory School of Engineering, UK)	105 Development of a Conceptual Design Tool for Various Compound Helicopters Donguk Lee (Seoul National University, South Korea)	157 Nonlinear optimal adaptive transition control of a tilt-prop VTOL UAV Murat Senipek (Middle East Technical University, Turkey)	172 Using Multibody Dynamics for the Stability Assessment of a new Double-Swept Rotor Blade Setup Jürgen Arnold (DLR, Germany)
17:00	159 Aerodynamic analysis of helicopter in interaction with wind turbine wakes Theologos Andronikos (National Technical Uni of Athens, Greece)	171 Assessment of the feasibility of an extended range helicopter operational standard for offshore flights Myles Morelli (Politecnico di Milano, Italy)	154 Dynamic Stall Model Optimization with CFD and Assessment with Comprehensive Approach for Improved Blade Design Arda Yucekayali (TAI, Turkey)	106 A generic ground dynamics model for ground handling evaluations Kaan Sansal (TAI, Turkey)	80 An experimental study on the hover performance characteristics of the coaxial propellers configuration for the Drone Deog-Kwan Kim (KARI, South Korea)
17:30			7 Dynamic Extendable Chord to Improve Helicopter Rotor Performance Dong Han (Nanjing University, China)	141 Simulation tools for UAV/OPV autorotation performance metrics evaluation Laurent Binet (ONERA, France)	74 Experimental Investigation of OA212 Airfoil Dynamic Stall Control Using DBD Plasma Actuators Chang Zhiqiang (CARD, China)