

ICAO Colloquium on Aviation and Climate Change



BIOGRAPHIES

ICAO Colloquium on Aviation and Climate Change

EN-ROUTE TO SUSTAINABILITY

ICAO Headquarters, Montréal, Canada
11 - 14 May 2010

MR. DAN ALLYN

Session One

Engine Emissions Regulations
Boeing Commercial Airplane Company

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BOEING

Dan Allyn has been an engineer with Boeing for 23 years. During that time he has primarily supported several Commercial Airplane product development programs with a focus on engine performance, nozzle performance, and engine emissions. Dan is currently the Emissions Regulations focal for the Boeing Commercial Airplane Company. Dan has been the Chairman of the International Coordinating Council of Aerospace Industries Association (ICCAIA) and a member of ICAO CAEP Working Group 2 and 3, and MDG. Dan received a MS in Aeronautics and Astronautics and a BS in Mechanical Engineering from the University of Washington.

CAPTAIN AYESHA AL HAMILI



OPENING SESSION

Representative of the United Arab Emirates
on the Council of ICAO

Since October 2009, Capt. Aysha AL Hamili heads the Permanent Mission of the UAE on the ICAO Council – becoming the first ever female Emirati in charge of a diplomatic mission, and the youngest ever Permanent Representative to the ICAO Council. Just recently, she has been appointed as Vice-chairperson of the Air Transport Committee.

Before coming to ICAO, Capt. AL Hamili was head of UAE's General Civil Aviation Air Transport Department, where she was in charge of bilateral air services negotiations. She participated in more than 40 bilateral negotiations, and successfully chaired the working group that drafted UAE's air transport policy.

In addition to her diplomatic and policy skills, Capt. Al Hamili holds an airline transport pilot license (ATPL). She started flying at the age of 16 when she acquired her Private Pilot License (PPL), becoming the first ever female Emirati pilot.

She started her career as a commercial pilot with Abu Dhabi Aviation on the Dash-8. She received a bachelor's degree in Social and Behavioural Sciences from Zayed University with an area of speciality in International Studies. She continues her education at City University of London in Masters in Air Transport Management.

Capt. AL Hamili has received several awards recognizing her contribution to the development of gender equality and civil aviation in the UAE.

MR. STEVE BURT

Session Two

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Steve Burt is an experienced executive working with organisations such as Dun & Bradstreet and British Petroleum and on change management projects with Bain & Co. and McKinsey. He has provided strategic management leadership to a multi-billion pound business conglomerate.

He has board level and business development leadership skills, with experience in both private and public organisations working with shareholders, politicians, unions and NGOs. He has managed complex global contracts and advised on health, safety, environmental cost and risk management in a number of industries.

He is retained by technology, manufacturing, airline, mining and property organisations advising on sustainability economic strategies and planning. He designed and led one of the first global environmental measuring, reporting and costing projects for a global airline provisions company.

Steve is an expert in information, data, risk and cost management systems, sustainability economics and abatement strategies.

PROF. JOHN-PAUL CLARKE



Session Four

Associate Professor,
Daniel Guggenheim School of Aerospace Engineering and
H. Milton Stewart School of Industrial and Systems Engineering
Director, Air Transportation Laboratory

John-Paul Clarke is an Associate Professor in the Daniel Guggenheim School of Aerospace Engineering with a courtesy appointment in the H. Milton Stewart School of Industrial and Systems Engineering, and Director of the Air Transportation Laboratory at the Georgia Institute of Technology. He received S.B. (1991), S.M. (1992), and Sc.D. (1997) degrees in aeronautics and astronautics from the Massachusetts Institute of Technology.

His research and teaching in the areas of control, optimization, and system analysis and design are motivated by his desire to simultaneously maximize the efficiency and minimize the societal impact (especially on the environment) of the global air transportation system. He has made seminal contributions in the areas of air traffic management, aircraft operations, and airline operations – three key elements of the air transportation system – and has been recognized globally for developing, among other things, key analytical foundations for the Continuous Descent Arrival (CDA) and novel concepts for robust airline scheduling. His research has resulted in significant changes in engineering methods, processes and products – most notably the development of new arrival procedures for four major US airports and one European Airport, and changes in airline scheduling practices.

Dr. Clarke is an Associate Fellow of AIAA and a member of AGIFORS, INFORMS, and Sigma Xi. He is currently Chair of the Advisory Council for Transportation Statistics (ACTS) appointed by the Secretary of Transportation, and a member of the Aeronautics And Space Engineering Board (ASEB) of the National Academies, and the AIAA Technical Committee on Management. Dr. has served on the AAA Air Transportation Systems Technical Committee, the FAA Research, Engineering and Development Advisory Committee (REDAC), as well as several other national and international committees. He was the first director of PARTNER, the Center of Excellence for Aviation Noise and Aircraft Emissions Mitigation, and is a researcher in PARTNER and NEXTOR, the Center of Excellence for Aviation Operations Research. Dr. Clarke was awarded the AIAA/AAAE/ACC Jay Hollingsworth Speas Airport Award in 1999, the FAA Excellence in Aviation Award in 2003, and was selected as a Gilbreth Lecturer by the National Academy of Engineering in 2006.

MR. STEVE CSONKA



Session Three

Technical Director
Advanced Programs & Environmental Strategy
GE Aviation

Steve is an engineer with 24 years of broad experience in commercial aviation with GE Aviation and American Airlines. He has a BS and MS in Aerospace Engineering, with thesis focus in combustion. During his career, his involvement has spanned the entire life-cycle of commercial aircraft: conceptual analysis, design, manufacture, test, certification, operations, marketing, and support of turbine engines, and in the performance and economic analysis supporting the development, marketing, and acquisition of new aircraft and engines.

Steve wears two hats in his current role. In an Advanced Programs function, Steve strategizes with aircraft companies, internal projects, and engineering regarding the feasibility, value and potential introduction of advanced applications and concepts. As such, he is very focused on product requirements, technology, and value propositions. That proficiency also serves him well for his dedicated support of the Marketing Strategy function, as well as ecomagination - GE's disciplined approach to solving tomorrow's environmental challenges with advanced technology.

In the above roles, he is immersed in strategy, policy and regulation activities. He serves as a member of the board for ATAG (Air Transport Action Group), and as a steering group member for CAAFI (Commercial Aviation Alternative Fuels Initiative), and his function is intertwined with advocacy with Congress, EPA, IATA, and CAEP.

MS. MARIA DI PASQUANTONIO



Session Four

International NextGen Projects Lead
ATO International, AJG-41

Ms. DiPasquantonio recently joined the FAA's Air Traffic International Office as the International NextGen Projects Lead in March of 2010. Prior to that, Maria served as the FAA's Senior Representative to the Caribbean in the Office of International Aviation. From 2002 through 2008 she held the position of Director of Investment Planning and Analysis in the FAA's Air Traffic Organization Finance Service Unit, where she was responsible for business case evaluation of both NextGen and legacy NAS programs. Also while at the FAA she held positions as the Wide Area Augmentation System Satellite Acquisition Program Manager and Local Area Augmentation Program Manager.

She began her career in government at the Naval Air Warfare Center in Warminster, Pennsylvania as an Aerospace Engineer where she served in various project management and leadership positions both there and within the broader Naval Air Systems Command.

Ms. DiPasquantonio holds a Bachelor of Science Degree in Aerospace Engineering from Boston University and a Master of Management Degree with concentration in Public Administration from Penn State University. She is currently a Doctoral Candidate at the Virginia Polytechnic and State University Center for Public Administration and Policy where her research interests include performance-based organizations and public-private partnerships.

MR. CHRISTIAN DUMAS

Session One Sponsor:
AIRBUS and BOEING

Building on his aeronautical engineering background, Christian Dumas started his career as commercial manager within "Aerospatiale". In 1985, he joined "Air Inter" airline, being involved in aircraft and engines acquisitions. He went back to Aerospatiale in 1989, holding several commercial and strategy positions within Aircraft Division, ATR and finally Sogerma (aircraft maintenance). In 2000, he joined EADS as VP International Development.

In 2003, he became VP Air Traffic Management within Airbus, where he also acted as Project Director for the European SESAR project. He is since 2008 holding the position of VP Environmental Affairs.

MR. LIONEL ALAIN DUPUIS



Welcome and
Introduction

Permanent Representative of Canada on the Council of the International Civil Aviation Organization (ICAO), Montreal
Judge, Member of the Administrative Tribunal of the Organization of American States,
Washington, D.C.
Dean of ICAO Council Members

Born in Montreal, Mr. Dupuis has degrees in air and space law and constitutional law from the University of Montreal and McGill University. A foreign service officer since 1981, Mr. Dupuis has been posted to the Legal Affairs Bureau, to the Office of the Chief Air Negotiator and to the Western European Division at the Department of Foreign Affairs. He served in Lima, La Paz, Caracas, Santo Domingo and Washington, D.C. He taught comparative and constitutional law at the Pontifical Catholic University of Peru and aviation law at the International Aviation Management Training Institute (Montreal), as well as diplomatic immunities and privileges at the Canadian Foreign Service Institute.

He became Deputy Chief of Mission at the Permanent Mission of Canada to the Organization of American States (OAS), in Washington, D.C. where he held elected offices as chairman of the OAS Working Group on Representative Democracy and Human Rights and chairman of the Working Group on Amendments to the Statute of the OAS Administrative Tribunal. He was elected a judge and member of this Tribunal at the OAS General Assembly session in Caracas in June 1998. In July 1998, Mr. Dupuis became Diplomatic Advisor in the Privy Council Office.

In July 2000, he took his new duties as Deputy Chief of Protocol and Head of Ceremonial.

In 2004, Mr. Dupuis has been re-elected at the OAS Tribunal as a member and the President of this Court until 2011.

Since September 11, 2001, Mr. Dupuis is Permanent Representative of Canada on the Council of the International Civil Aviation Organization (ICAO) where he became chairman of the Technical Cooperation and the Joint Support (circumpolar air routes) Committees. In September 2005 he became First Vice-President of the ICAO Council.

Mr. Dupuis also published several specialized air and constitutional law articles, and also wrote about diplomatic immunities and American politics.

Mr. Dupuis is Member of the Board of the International Law Association and the founding member of the Montreal Institute for Mediterranean Studies and trustee of the Château Ramezay Museum. He is a member of the Enders-Fulbright Foundation (New York City) and is active in the field of fine arts in Montreal. In June 2008, Mr. Dupuis became the dean of the ICAO Council Members.

MR. GREGG C. FLEMING



Session Two

Director
Center for Environmental and Energy Systems
Center of Innovation (RVT-40) Volpe National Transportation Systems
Center, RITA/USDOT

As Director of the Environmental and Energy Systems Center of Innovation at the Volpe Center, Gregg Fleming has over 20 years of experience in all aspects of transportation-related acoustics, air quality, and climate issues. He has guided the technical work of numerous, multi-faceted teams on projects supporting all levels of Government, Industry, and Academia, including the International Civil Aviation Organization, the Federal Aviation Administration, the Federal Highway Administration, the National Park Service, the National Aeronautics and Space Administration, the Environmental Protection Agency, and the National Academy of Sciences.

Mr. Fleming holds a B.S. degree in Electrical Engineering from the University of Lowell. He has co-authored numerous peer-reviewed journal articles and has participated substantially in the development of national and international standards on technical issues pertaining to acoustics, air quality, and climate change.

MR. PHILIPPE FONTA



Session Three

Philippe Fonta,
Head of Environmental Policy – Center of Competence Powerplant, Airbus

Philippe Fonta was appointed Head of Environmental Policy of the Airbus Engineering's Center of Competence (CoC) Powerplant in March 2010. In this role, he leads the development and implementation of the environmental policy of the CoC Powerplant, which encompasses acoustics and engine emissions matters, from technological goal setting processes, associated research programs to certification and guarantees to customers.

Mr. Fonta is also chairman of the environmental committee of the International Council of Aerospace Industries Associations (ICCAIA). This committee is one official observer to the standard and recommendation elaboration process at ICAO level.

Mr Fonta joined Airbus in 1992, successively working as Operations engineer for Flight Operations Support and Services, dealing with A320 Family performance documentation. He then worked for the Marketing Division as Environmental Manager to carry-on performance and economic analysis in the frame of sales campaigns and then as Director Business Coordination for the Environmental Affairs team being in charge of all-economic and communication related issues. He endorsed the responsibility of Head of Sustainable Development for Airbus from 2007 to 2010.

Since 1999, Philippe Fonta is Airbus' representative in the ICAO FESG (Forecasting and Economic analysis Support Group).

Mr Fonta graduated from the French Civil Aviation School (Toulouse, France) and has additional qualification on environment and sustainable development from the College of the High Studies on Environment and Sustainable Development (Paris, France).

Philippe Fonta was born in 1966. Married with four children Philippe is a former rugby player and still plays occasionally.

Airbus is an EADS company.

MR. VINCE GALOTTI



Session Four

Deputy Director of the Air Navigation Bureau
ICAO

Vince Galotti is the Deputy Director of the Air Navigation Bureau at the International Civil Aviation Organization – ICAO in Montréal. Prior to this, he was the Chief of Air Traffic Management. Prior to his posting in Montreal, he worked for ICAO in its Paris Office as a Technical Officer. He also worked as an air traffic controller and ATS instructor in Saudi Arabia for a period of six years. After his time in Saudi Arabia, he attended Embry-Riddle Aeronautical University in Daytona Beach Florida where he earned a Master's Degree in Aeronautical Science. He also taught at the University as an Adjunct Instructor and worked as a Research Assistant.

Mr. Galotti began his aviation career as an air traffic controller working for the Federal Aviation Administration in the New York Air Route Traffic Control Center. He has written extensively on aviation issues including a textbook on the Future Air Navigation System, published by Ashgate in 1997.

MR. JON GODSON



Session Five

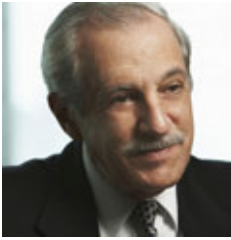
Assistant Director
Aviation Environment - Best Practices
International Air Transport Association

Jon joined IATA in 2008 and has over 20 years environmental management experience including 4 years with the United Nations Environment Programme. Jon is responsible for the IATA Carbon Offset Program which provides offset management services to member airlines and is currently involved in assisting airlines comply with the new European Emissions Trading System (ETS) regulations.

Jon has a background in environmental auditing and waste management and is completing an MSc in Climate Change.

Jon is British and was educated at the Universities of Bradford and Loughborough.

MR. ROBERTO KOBEH GONZÁLEZ



Session Nine
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Roberto Kobeh González
President of the Council of ICAO

Mr. Roberto Kobeh González is President of the Council of the International Civil Aviation Organization (ICAO). He was elected to the position in 2006, after serving eight years as the Representative of Mexico on the Council. During that time, he served as First Vice-President of the Council, Chairman of the Finance Committee, and as a Member of the Air Transport Committee.

Beginning in 1966, Mr. Kobeh González held a number of posts of increasing responsibility with his Government's Directorate General of Civil Aeronautics. As Deputy Director General in the areas of Administration and Air Transport, he took part in negotiations on bilateral agreements with various countries. From 1978 to 1997, he served as Director General of the Air Navigation Services of Mexico (SENEAM), the agency responsible for providing navigation, air traffic control, meteorology, and aeronautical communications services.

Mr. Kobeh González has also been a professor of aeronautical electronics at the National Polytechnic Institute of Mexico. He received numerous awards, including the Award for Extraordinary Service from the Federal Aviation Administration (FAA) of the United States in 1988. In 1997, he was awarded the Emilio Carranza Medal from the Government of Mexico for his contribution to the development of civil aviation in Mexico for 30 consecutive years. Most recently, in 2004, he received the award for Contribution to the Development of Aviation in the Central American Region from the Central American Corporation for Air Navigation Services (COCESNA).

MR. PHILIP GOOD



Opening Session
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International Carbon Market, Aviation and Maritime Unit
European and International Carbon Markets, Directorate DG Climate Action
European Commission

Philip Good works for the European Commission in the International Carbon Market, Aviation and Maritime Unit of the newly created DG Climate Action. The Unit is responsible for the development of an international carbon market through linking trading systems and the inclusion aviation into the EU Emissions Trading System (EU ETS).

Philip is currently managing the implementation of the legislation to include aviation in EU ETS.

Previously Philip regulated the automotive sector, developing legislation for limiting emissions from road vehicles.

Prior to joining the European Commission, Philip was a management consultant at PricewaterhouseCoopers specialising in environment and climate change.

MR. YURI HERRERAS YAMBANIS



Session Seven

Bioenergy & Agroenergetic Crops S.L. (BIOECA)

Yuri Herreras Yambanis is an Industrial Engineer from Universidad Politécnica de Madrid, holds a Master in Nuclear Science and Technology from the same university and is currently developing his PhD in Sustainable raw materials for the bioenergy industry. Apart from his academic role, where he has published several articles, he has participated in international congresses and has developed several consulting work in the renewable energies area.

From September 2009 he manages BIOEca (Bioenergy and Agroenergetic Crops S.L.), a company that specializes in the implementation of integral agroenergetic projects aimed at supplying the biofuel industry with sustainable, competitive, non-food feedstock raw materials.

MS. LISA HODES



Session Five

General Counsel and Director, US Markets
The Gold Standard Foundation

Ms. Lisa Hodes currently serves as the General Counsel and Director of US Markets for the Gold Standard Foundation. From 2004-2009, Ms. Hodes practiced environmental law and commercial litigation at the law firms Greenberg Traurig LLP and Sullivan & Worcester LLP. She has experience in matters arising under Superfund, the Clean Water Act, the Oil Pollution Act, the Clean Air Act and the Resource Conservation and Recovery Act, as well as issues related to climate change. At Greenberg Traurig, Ms. Hodes routinely advised clients on environmental matters in regulatory compliance and corporate transactions. She was also an active member of Greenberg Traurig's Climate Change Task Force and Carbon Credits Group. Ms. Hodes began studying climate change issues during her undergraduate years at Tufts University, where she earned a Bachelor of Arts in International Relations in 2001. Ms. Hodes continued her environmental studies while at the American University Washington College of Law from 2001-2004.

MR. CURTIS A. HOLSCLAW



Session Three

ICAO CAEP Working Group on Emissions

Mr. Curtis A. Holsclaw is the Manager of the Emissions Division in the Federal Aviation Administration's Office of Environment and Energy. In that capacity he manages a staff that is responsible for the policy, regulatory, and technical aspects of aviation air emissions as it relates to engine emissions, air quality, and global atmospheric effects. This includes research, engineering and development activities to advance the characterization of aircraft emissions, computer-modeling techniques and methodologies to better estimate the environmental and health impacts of aviation related emissions and to assess measures to reduce those impacts. He has about thirty years of experience in aircraft noise and engine emissions certification. Prior to joining the FAA in 1992 he worked for Douglas Aircraft Company. In addition to his duties and responsibilities at the FAA he has also served as the Co-Rapporteur for the performance and emissions technical working group for the International Civil Aviation Organization's Committee on Aviation Environmental Protection (ICAO-CAEP). He has served in that role for the last fifteen years and has been actively involved in ICAO-CAEP activities for about twenty five years in order to develop noise and emissions certification standards for commercial transport aircraft and engines.

MR. ANDREW HOWARD



Session Five

Manager (OIC), Strategy and Policy Development
Sustainable Development Mechanisms Programme
UNFCCC Secretariat

Andrew Howard has been instrumental at the UN Climate Change Secretariat in the development and implementation of the Kyoto Protocol, in particular missions trading and the CDM. He supported the inter-governmental negotiations that set down the rules for these mechanisms and has led projects to establish key components of the trading infrastructure underlying the carbon market. He now manages the Strategy and Policy Development Unit in the market mechanisms arm of the secretariat and leads its support for the further negotiation and development of market-based instruments for the post-2012 period.

MR. ARI HUHTALA



Session Eight

Sr. Environmental Specialist, Climate Change Team,
Environment Department
The World Bank

Ari is coordinating and reporting on activities related to climate finance, including work on tracking and monitoring financial flows, cooperating with the UN, OECD and other organizations, and developing a UNFCCC/UNDP/WBG climate finance knowledge platform.

He joined the World Bank in 2009 and before that and he has spent most of his life in development work, first in the field of industrial development and technology/investment promotion and then specializing in environmental financing issues. His experience includes UNDP in Hanoi and Dhaka, UNIDO headquarters in Vienna in charge of programs in Asian LDCs, UNIDO Representative in Bangkok, manager for cleaner production financing at UNEP Paris, environmental advisor to the Finnish Foreign Ministry and Team Leader for a KfW environmental credit line in Indonesia.

Ari holds a Masters of Economics from Finland.

MS. JANE HUPE



Welcome and
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Chief, Environment, Environment Branch
ICAO

Jane Hupe is Chief, Environment in ICAO's Air Transport Bureau, and the Secretary of the Committee on Aviation Environmental Protection (CAEP). Her responsibilities include the management of the ICAO Environmental Programme, the CAEP, and the coordination of all activities in the field of aviation and the environment with other International Organizations, both inside and outside the UN family, such as UNFCCC, IMO, UNEP, and ISO.

Jane has been at the forefront of ICAO's efforts to define and promote policies and standards for an environmentally sustainable aviation. She advises the ICAO Council on all aviation environmental matters and represents ICAO in other international fora in this field.

Jane has a Master's degree in Aviation from the École Nationale de L'Aviation Civile (ENAC), Toulouse, France, and many other post-graduate degrees, including in environmental auditing. Prior to 1998, Jane worked as a consultant with ICAO's Technical Cooperation Bureau, and for 15 years with the Brazilian Civil Aviation Authorities.

Jane was a lead author for the Intergovernmental Panel on Climate Change (IPCC) Reports on Aviation related measures, including the 2007 IPCC Fourth Assessment Report and the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. For her work, Jane received a certificate acknowledging her contribution to the award of the 2007 Nobel Peace Prize to the IPCC.

DR. EBAD JAHANGIR



Session Three

Environment Officer, Environment Branch, ICAO

Dr. Ebad Jahangir currently works in the Environment Section of the International Civil Aviation Organization (ICAO). ICAO is a specialized agency of the United Nations responsible for the safe and efficient development of Civil Aviation. Dr. Jahangir serves as a technical expert for international environmental policy making and coordinates Standards and Recommended Practices in the areas of noise, local air quality, and greenhouse gases.

Dr. Jahangir has more than 20 years of experience in the global aerospace industry. His areas of expertise include aviation environmental impacts, systems engineering and program management. He has a Ph.D. in Aerospace Engineering from the University of Michigan, Ann Arbor and an M.S. in Systems Design and Management from the MIT Sloan School of Management.

MR. TIM JOHNSON



Opening Session
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Director AEF, CAEP observer for
International Coalition for Sustainable Aviation (ICSA)

ICAO CAEP Aviation Carbon Calculator Support Group (ACCS) rapporteur

Tim Johnson has been working in the national and international aviation environmental policy field for over twenty years, as Director of the UK-based Aviation Environment Federation and as a consultant. He is the CAEP Observer on behalf of the International Coalition for Sustainable Aviation (ICSA) and is co-rapporteur of the Aviation Carbon Calculator Support groups (ACCS). ICSA is a structured network of environmental non-governmental organisations working in the field of aviation and environmental protection.

MR. MIKE KENNEY



Tutorial

Director, KB Environmental Sciences, Inc.

Mike Kenney is the co-founder of KB Environmental Sciences, Inc. (known as “KBE”); a company that specializes in transportation-related environmental assessments – with an emphasis on aviation, air quality, climate change and noise. Mike and the staff of KBE have been involved in the successful completion of over 100 environmental assessments for airports, airlines and governmental agencies around the world.

Mike has advanced degrees and training in environmental science, air quality, hazardous materials, and environmental toxicology. He is board-certified as a Qualified Environmental Professional, a Certified Hazardous Materials Manager and a Certified Industrial Hygienist. He is also the co-editor of the book *Airport Air Quality: Approaches, Basics & Challenges* published by the University of California at Berkeley.

MR. ANDY KERSHAW



Session Five

Manager, Environmental Policy
British Airways

Andy Kershaw is Environmental Policy Manager at British Airways and has led development of the company’s climate change programme since 2003. Andy holds a Masters degree in Environmental Economics from Imperial College London and has contributed to research into multilateral climate policy for aviation, competitiveness impacts of emissions trading, sleep disturbance from aircraft noise and noise-reducing flight procedures. Andy is chairman of the Association of European Airlines Climate Change Committee and is programme manager of the Aviation Global Deal Group.

MS. HOLLY KRAMBECK



Session Five

Carbon Finance Unit
The World Bank

Holly Krambeck is a Carbon Finance Specialist in the World Bank's dedicated Carbon Finance Unit, where she works on expanding transport sector access to climate-based finance. Her responsibilities include developing tools for estimating greenhouse gas emission reductions associated with different types of transport investment programs, as well as Clean Development Mechanism project review and management.

Prior to joining the Bank, Holly worked as an infrastructure economics and finance specialist with Parsons Brinckerhoff, Inc., where she was task lead and project manager for infrastructure projects and climate-based initiatives in the US and abroad. Holly has a Master of Science in Transportation and a Master in City Planning, both from the Massachusetts Institute of Technology.

MR. LAURENCE LEAVITT

Session Three

Chief Engineer for Aerosciences, Research Directorate
NASA Langley Research Center
Hampton, Virginia

Mr. Leavitt has been working in the fields of propulsion/airframe integration and configuration aerodynamics research at the NASA Langley Research Center since 1975. He has held a number of technical leadership positions including Head of the Configuration Aerodynamics Branch and Assistant Head of the Propulsion Aerodynamics Branch. He is currently the Chief Engineer for Aerosciences within the Research Directorate at Langley. Over the last 16 months, Mr. Leavitt has served on the Agency's formulation team for the Environmentally Responsible Aviation (ERA) Project where he currently is the Project Engineer (Acting) for Vehicle Systems Integration.

Mr. Leavitt earned his B.S. degree in Aerospace Engineering from North Carolina State University and his M.S. in Aerospace Engineering from the George Washington University. He has served on a number of professional technical groups including the American Institute of Aeronautics and Astronautics (AIAA) Air Breathing Propulsion Technical Committee, the AIAA Turbine Engine Testing Working Group, and the SAE Military/VSTOL Technical Committee. He is currently a member of the NATO Research and Technology Organization (RTO) Applied Vehicle Technology Panel, which conducts and promotes co-operative research and information exchange to support the development and effective use of national defense research and technology to meet NATO needs, and is a member and former Chair of the Performance, Stability and Control, Fluid Physics Technical Committee within AVT.

MR. DAVID LEE



Session One

Professor, Manchester Metropolitan University (MMU) and Director, Centre for Aviation Transport, and the Environment (CATE)

David S Lee is Professor of Atmospheric Science at Manchester Metropolitan University (MMU) and Director of the Centre for Aviation, Transport, and the Environment (CATE), a centre of excellence with a staff base of 22. David completed his doctoral studies in 1990 in atmospheric science and moved to the United Kingdom Atomic Energy Authority, working on various atmospheric science issues. In 1997, he moved to the UK Ministry of Defence's research organization, DERA (Defence Evaluation Research Agency) to lead a new group, subsequently QinetiQ. In 2001, David was made a Visiting Professor at MMU, and subsequently moved back to MMU (where he graduated from and co-founded a research unit in 1986) in 2003. CATE has expanded dramatically over the past 7 years and now has extensive modelling and analytical capabilities (including a LIDAR and has recently become Cray Supercomputing's UK launch customer for the CX-1 supercomputer). David has been supporting the UK's activities in the CAEP arena since about 1995 and is a member of the UK delegation at CAEP meetings. He co-leads the new CAEP group, the Impacts and Science Group with the FAA's Dr Lourdes Maurice, Chief Scientist, Energy and Environment. David has specialized in research on aviation impacts on climate and has published many peer-reviewed papers on this subject, and was lead author for the recent ATTICA assessment. He has been a Lead Author for the IPCC since 1997.

MR. CHRIS LYLE



Session Six

Representative of the United Nations World Tourism Organization (UNWTO) to ICAO

Chris Lyle's career spans British Airways, the United Nations Economic Commission for Africa and ICAO as well the World Tourism Organization (UNWTO) for which he is currently Representative to ICAO. His primary expertise is in regulatory policy, economic analysis and environmental protection. Over the past three years much of his focus has been on climate change impacts of tourism and aviation.

Chris is a graduate of Cambridge University with a postgraduate in operational research, and he is a Fellow of the Royal Aeronautical Society.

DR. MA XIANGSHAN



Opening Session

Senior Climate Change Officer
Department of Planning and Development
Civil Aviation Administration of China (CAAC)

Dr. Ma Xiangshan, senior aviation and climate change official, is working under “Office of Energy Conservation and Emission Reduction” at Department of Planning and Development, Civil Aviation Administration of China (CAAC). He’s responsible for the research and negotiation on aviation and climate change in CAAC. He received his Diploma (Master) and his Doctorate (Ph.D.) in Macroeconomic Management, in 1999 and 2004, respectively, both from the Renmin University of China, one of the top 10 universities in China. Since 2006, Dr Ma has been engaged in the research on aviation economics, impact analysis and policy studies regarding aviation and climate change. The negotiations at which Dr Ma, as a key negotiator or advisor, has been present include: ICAO GIACC negotiations (2008-2009), ICAO High-level Meeting on International Aviation and Climate Change (2009), ICAO DGCI meetings and such significant Copenhagen 2009: United Nations Climate Change Conference as well as AWG-LCA 8 and SBSTA 31 meetings with regards to aviation emission reduction items.

MR. JEFF MACDONALD



Session Four

Director, Operations Planning and Programs,
NAV CANADA

Jeff MacDonald is the Director of Operations Planning and Programs at NAV CANADA. His responsibilities include Air Navigation System planning, National customer, and stakeholder consultations, ICAO and Transport Canada liaison, level of service analysis, business case development and program/project coordination.

He is also involved in the development of NAV CANADA’s strategies on surveillance and performance based navigation as well as the application of new capability to improve service and reduce costs.

AMBASSADOR RAYMUNDO SANTOS ROCHA MAGNO



Opening Session

Representative of Brazil on the Council of ICAO

Ambassador Raymundo Santos Rocha Magno was born in Rio de Janeiro, Brazil, on April 11, 1953, son to Raymundo Fernando Pantoja Magno and Maria do H. Santos Rocha Magno. He is married to Socorro Vila Magno and has three children.

Ambassador Magno was admitted to the Brazilian Diplomatic Service in 1975, after successfully concluding the Diplomatic Service Preparatory Course offered by the Rio Branco Institute, of the Ministry of External Relations of Brazil. He holds a law degree (J.D.) from the Universidade do Distrito Federal and concluded the Higher Degree Studies of the Rio Branco Institute in 1995.

In Brasília, Ambassador Magno held positions in the following areas of the Ministry of External Relations: Department of Consulate and Legal Affairs, Department of Trade Promotion, Department of the Americas, and Protocol Department. He was also Diplomatic Advisor to the Minister of Communications of Brazil and International Advisor to the Minister Chief of Staff of the President of Brazil.

Abroad, Ambassador Magno was assigned to the Embassy in Bonn, Federal Republic of Germany (Third and Second Secretary); the Permanent Delegation to the Latin American Integration Association (ALADI), with headquarters in Montevideo, Uruguay (First Secretary); the Embassy in Paramaribo, Suriname (First Secretary); the Permanent Delegation to the Organization of the American States (OAS), in Washington, D.C., United States of America (Counselor); and the Embassy in Montevideo, Uruguay (Second Class Minister). He is the Permanent Representative of Brazil to the International Civil Aviation Organization (ICAO), with headquarters in Montreal, Canada, since January 3rd, 2008.

Ambassador Magno has participated in several conferences and international meetings on various political, economic and commercial issues. More recently, he was head of the Brazilian delegation to the following conferences and meetings: 36th Assembly of the International Civil Aviation Organization (ICAO), being elected 3rd Vice-President of the said Assembly of ICAO; Fourth Meeting of Parties of the Cartagena Protocol on Biosafety, held in Bonn, Germany, and the Ninth Conference of the Parties of the Convention on Biological Diversity, held also in Bonn; Diplomatic Conference on Compensation for Damage Caused by Aircraft to Third Parties Arising from Acts of Unlawful Interference or from General Risks (DCCD); High-Level Meeting on International Aviation and Climate Change; Conference on Aviation and Alternative Fuels; Diplomatic Conference on the Implementation of the South American Air Navigation and Safety Organization. In 2008 Ambassador Raymundo Magno was elected Member of the Compliance Committee of the Cartagena Protocol on Biosafety for the years 2009 – 2012. He was also elected Chairman of the Working Group on Governance (2008) and Chairman of the Air Transport Committee (2008-2009), both of the Council of the International Civil Aviation Organization, ICAO.

Over his career, Ambassador Magno received the following commendations: Order of Rio Branco, Brazil, Grand Officer; Order of Aeronautical Merit - Grand Officer, Brazil, Order of Military Merit, Brazil, Officer; Santos Dumont Medal, Brazil; Merit Order, Federal Republic of Germany, First Class; Order of the Condor of the Andes, Republic of Bolivia, Commander; Bernardo O'Higgins Order, Republic of Chile, Commander; National Merit Order, Republic of Ecuador, Commander; National Order of the Cedar, Republic of Lebanon, Commander; Royal Norwegian Merit Order, Kingdom of Norway, Commander; and Order of the Palm, Republic of Surinam, Officer.

MS. LUISA MARELLI



Session Seven

Luisa Marelli is an official of the European Commission, working at the Joint Research Center (JRC) in Italy since 2002.

She has a degree in physics and a PhD in Optics, and after 5 years working on air quality and assessment of emissions from transport, she is now responsible for the JRC “Biofuels Thematic Programme”, which coordinates JRC’s research activities on biofuels: analysis and testing of sustainability of biofuels production and use, such as GHG emissions savings, direct and indirect effects due to land use change, soil erosion and degradation, impacts to tropical forests, maintenance of biodiversity, impact on water resources etc. The studies also include a technological assessment of 2nd generation biofuels, analysis on the compatibility of biofuels with advanced engines and after-treatment devices, impact on exhaust emissions and energy efficiency tests.

DR. LOURDES Q. MAURICE



Session Seven

Chief Scientific and Technical Advisor,
Environment Office, Environment and Energy (AEE-3)
Federal Aviation Authority, United States

Dr. Lourdes Q. Maurice is the Chief Scientific and Technical Advisor for Environment in the Federal Aviation Administration's Office of Environment and Energy. She serves as the agency technical expert for basic and exploratory research, and advanced technology development focused on aircraft environmental impacts and its application to noise and emissions certification and policy, and the application of alternative fuels to mitigate environmental impacts. Lourdes manages and provides agency technical leadership for the Partnership for AiR Transportation Noise and Emissions Reduction (PARTNER) Center of Excellence. She previously served as the Air Force Deputy, Basic Research Sciences and Propulsion Science and Technology in the office of the Deputy Associate Secretary of the Air Force for Science and Technology. She also worked at the Air Force Research Laboratory's Propulsion and Power Directorate from 1983 to 1999 planning and executing basic, exploratory, and advanced development propulsion science and technology programs, focusing on state-of-the-art aviation fuels and propulsion systems. Her areas of expertise include pollutant formation chemistry, combustion kinetics, hypersonic propulsion, and aviation fuels. She received her B.Sc. in Chemical Engineering and M.Sc. in Aerospace Engineering from the University of Dayton in Dayton, Ohio and her Ph.D. in Mechanical Engineering from the University of London's Imperial College at London, United Kingdom. She is also a Distinguished Graduate of National Defense University's Industrial College of the Armed Forces, where she earned a M.Sc. in National Resource Strategy. Lourdes has served as a Lead Author for the Nobel-Prize winning United Nation's Intergovernmental Panel on Climate Change and the National Academies of Science National Research Council. She is an Associate Editor for American Institute of Aeronautics and Astronautics' (AIAA) Journal of Propulsion and Power and serves on the Editorial Board of the International Journal of Aeroacoustics. She has authored over 100 publications and is a 2003 Fellow of AIAA

CAPTAIN PAUL MCCARTHY



Session Four

Representative of IFALPA to ICAO

Captain Paul McCarthy is currently the Representative of IFALPA (International Federation of Air Line Pilot Associations) at ICAO. In this position he is responsible for executing IFALPA technical policy through the ICAO process and responding to all technical initiatives brought before ICAO. He retired in 2004 as a B- 777 Captain after 32 years of service with Delta Air Lines. He is a licensed attorney in Massachusetts and Florida and practiced in Boston for 18 years, concentrating in maritime matters. He served as a pilot with the U.S. Navy on carriers prior to Delta. He has held positions of increasing responsibility within the pilot associations culminating with service as the executive air safety chairman of ALPA International and principle officer, technical for IFALPA.

MR. ALAN MELROSE



Session Four
Session Six

ICAO CAEP Independent Experts Rapporteur

Alan has 38 years experience in Environmental Management in a wide range of private and public sector organisations. Establishing Manchester Airport's Environmental Control Department in 1988, he was actively involved in delivering Manchester's Second Runway and helped to secure several 'world firsts' in environmental management.

Alan joined EUROCONTROL 9 years ago and leads projects including the Continuous Descent implementation initiative, Collaborative Environmental Management roll-out and environmental training. Alan supports various ICAO activities including the development of CDO guidance and is a task leader in CAEP Working Group 2 including chairing the Independent. He was actively involved in the SESAR Definition Phase and will also lead environmental risk and regulation related tasks in the SESAR Development Phase.

MRS. FOLASADE ODUTOLA



Welcome and
Introduction

Director, Air Transport Bureau, ICAO

Ms. Folasade Odutola assumed duties as Director, Air Transport Bureau on 7 May 2007. She holds an MSc in Air Transport Engineering from Cranfield University, and a BSc (First Class Hons.) in Aeronautical Engineering from the University of Glasgow, both in the UK. Ms Odutola has worked in the aviation industry since 1977, mostly within the regulatory sphere

Immediately before taking up the position with ICAO, Ms. Odutola was Rector and CEO of the Nigerian College of Aviation Technology, an ab-initio training institute for all aviation professionals. Prior to that, she worked briefly in an airline followed by a period of over 20 years in the Nigerian civil aviation regulatory system, where she attained the position of Director, Airworthiness and Operations Standards. She has served as secretary/member of many committees set up to consider issues of high importance to the Nigerian aviation industry while she organised a number of ICAO joint workshops. Ms. Odutola was charged with the responsibility of setting up the very first air transport licensing branch in the regulatory authority where she also handled commercial duties. She has participated in several bilateral air services agreement meetings as well.

She is a Fellow of the Royal Aeronautical Society and a Chartered Engineer of the British Council.

MR. XAVIER OH



Session Two
Session Six

Environment Manager
Airports Council International (ACI)

Xavier Oh has been the Environment Manager at ACI since September 2005 and is based in the ACI Montreal Bureau, located near ICAO Headquarters.

As an industry association, ACI is an official Observer at ICAO's Committee on Aviation Environmental Protection (CAEP). Xavier is the ACI representative, participating at all levels from the triennial CAEP meetings to the technical work groups on noise, emissions and operations.

As the secretary of ACI's World Environment Standing Committee, one of his main tasks is developing, coordinating and implementing policy on all issues relating to the environment and airports. Noise and gaseous aircraft emissions are the main global issues, but local issues such as air and water quality, energy efficiency and land management also have global significance.

Xavier's background includes engineering studies in Australia and Canada, working for 6 years as a consultant in machine and structural dynamics in Australia and Malaysia, and 10 years as an acoustical engineer in New Zealand.

DR. KEIICHI OKAI



Session Seven

Associate Senior Researcher
Jet engine Technology Research Center,
Aerospace Research and Development Directorate
Japan Aerospace Exploration Agency (JAXA)

Keiichi OKAI is an associate senior researcher at Aerospace Research and Development Directorate (ARD), Japan Aerospace Exploration Agency (JAXA). He received his B. S. (1996), M.S. (1998) and Dr. (Eng.) (2001) degrees in aeronautics and astronautics from the University of Tokyo. He joined National Aerospace Laboratory (now JAXA) in April 2001. From October 2006 to September 2007, he was a visiting scientist at German Aerospace Center (DLR), Cologne Germany.

His research topics are hydrogen and potential alternative aviation fuels, fundamental combustion and aero-engine system concepts.

He is an American Institute for Aeronautics and Astronautics (AIAA) technical committee member on terrestrial energy systems and a working group three member for the International Civil Aviation Organization's Committee on Aviation Environmental Protection nine (ICAO-CAEP/9).

He was awarded the 18th Japan Society for Aeronautical and Space Sciences (JSASS) Award (best paper award) in 2009.

DR. STELIOS PESMAJGLOU



Session Two

Director of Professional Programs
Greenhouse Gas Management Institute

Stelios Pesmajglou is Director of Professional Programs at the Greenhouse Gas Management Institute (GHGMI) and is leading the efforts of GHGMI in relation to the development of the Professional Certification Programs. Stelios has more than 14 years of national and international experience on a broad range of issues relating to climate change. His main area of expertise is policy and technical aspects of climate change mitigation, including: negotiations on climate change issues; evaluation of mitigation options for the reduction of greenhouse gas emissions; development of guidelines on reporting and review of information under the UNFCCC and its Kyoto Protocol; preparation and technical evaluation and auditing of greenhouse gas emission inventories; and national reports on actions to address climate change.

Between October 1999 and July 2008, Stelios worked at the UNFCCC secretariat, where he held positions of increasing responsibility. From January 2006 until July 2008, he was the leader of the Analysis and Methods sub-programme that dealt with: mitigation of climate change; land use, land-use change and forestry (including reducing emissions from deforestation in developing countries); emissions from international aviation and maritime transport; and research and systematic observation. Stelios organized all workshops for the dialogue on long-term cooperative action to address climate change and coordinated the drafting of the final report by the co-facilitators – the result of the negotiations on this dialogue was the adoption of the Bali Action Plan in December 2007.

Between October 1999 and December 2005, Stelios worked on both methodological and political issues, including: supporting the negotiations on the development of guidelines on reporting and review of information under the Convention and the Kyoto Protocol; and contributing to the development of rules and modalities for the three Kyoto mechanisms (international emissions trading, clean development mechanism and joint implementation). Stelios coordinated and organized greenhouse gas inventory review activities, and undertook and supervised methodological work related to the improvement of methods for the estimation of greenhouse gas emissions from various sources.

Stelios is a contributing author to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories and the WBCSD/WRI Greenhouse Gas Protocol.

Before joining the UNFCCC secretariat, Stelios worked at the National Observatory of Athens, in Greece, (March 1995 to September 1999) where he participated in the national delegation responsible for the negotiations on the Kyoto Protocol. As an expert adviser to the Greek Ministry for the Environment, Physical Planning and Public Works, he participated in national and international meetings and workshops that focused on the implementation of policies and measures, particularly for the energy sector. Stelios established the basis of a national system for the preparation of national greenhouse gas inventories of Greece and compiled inventories of emissions of greenhouse gases and ozone precursors for Greece. He also participated in national and international research programs that dealt with

developing energy supply and demand scenarios on CO2 emissions for Greece; implementation of wind energy projects; and the development of environmental pressure indicators for air pollution and acidification.

Stelios completed his studies at Imperial College of Science, Technology and Medicine (London, United Kingdom) and has a Bachelors degree in Aeronautical Engineering; a Masters degree in Computational Fluid Dynamics and Structural Mechanics; and a Doctorate in Aerodynamics of Wind Turbines.

MR. TIM REES



Session Four

Environment Programmes Manager
Civil Air Navigation Services Organization (CANSO)

Tim is a professional air traffic controller with over 18 year's experience. Tim has extensive expertise in ATC training, ATC performance assessment and as a supervisor and ATC Line Manager with Airservices Australia. More recently Tim has held the position of CNS/ATM specialist where he has been a leading operational authority on performance based air traffic management, ADS-B and strategic planning. He is a published ATM columnist with a leading Australian aviation magazine and the co-author of the current Airservices Australia ATM 5 year plan. Tim is now on a two-year secondment to CANSO as the Environment Programme Manger.

MS. CÉLIA ALVES RODRIGUES



Session Four

Environmental Officer
SESAR Joint Undertaking

Célia ALVES RODRIGUES is the Environment Officer at the SESAR Joint Undertaking based in Brussels, Belgium since March 2010. The mission of the SESAR Joint Undertaking is to develop a modernised air traffic management system for Europe. This future system will ensure the safety and fluidity of air transport over the next thirty years, will make flying more environmentally friendly and reduce the costs of air traffic management.

Célia is the focal point for SESAR environmental aspects, working in the Economics and Environment Unit providing guidance to the different work packages and projects to ensure that the environmental objectives of the programme are achieved. She is also responsible for the programme management of the AIRE.

Previously Célia was working at ICAO, as an associate environmental Officer since 2007 Célia also collaborated with the World Health Organization on the noise and health unit from 2002 to 2006.

Over the years, Célia has worked in a broad range of cultures, living and working in Portugal, Italy, Belgium, France, Germany, Poland, and Canada. She is Portuguese and speaks fluent English, French, Spanish, and Italian, as well as some German.

PROF. DR. ROBERT SAUSEN

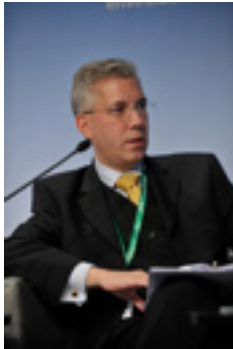


Session One

Co-ordinator of EU Integrated Project QUANTIFY
Deutsches Zentrum für Luft und Raumfahrt –
DLR Institute für Physik der Atmosphäre

Prof. Dr. rer. nat. Robert Sausen (born in 1955) studied physics, mathematics, computer science, and atmospheric physics at Universität Kaiserslautern, Germany, and Eidgenössische Technische Hochschule (ETH) Zürich, Switzerland. He received his Diplom in Physics in Zürich in 1979. In 1983 he became Dr. rer. nat. at the Technische Hochschule Darmstadt, Germany, with a thesis on two-dimensional turbulence on a rotating sphere. Then he worked as a postdoc at the Max-Planck-Institut für Meteorologie, Hamburg. In 1986 he became a Hochschulassistent (assistant professor) at the Meteorologisches Institut of Universität Hamburg. In both positions he worked on coupling of atmosphere and ocean models, climate simulations, and atmospheric diagnostic. In 1991, he got his Habilitation and *venia legendi* for Meteorology at Universität Hamburg. In the same year he became head of the department "Dynamik der Atmosphäre" of the DLR-Institut für Physik der Atmosphäre in Oberpfaffenhofen, Germany. Since 1992 he is a member of the Fakultät für Physik of the Ludwig-Maximilians-Universität München, where he teaches meteorology, since 2000 as a professor. At DLR, the work of Prof. Sausen is dedicated to the impact of transport, in particular aviation, on the chemical composition of the atmosphere and on climate. Meanwhile he has been working on modelling of the global climate for two decades and published more than 80 peer reviewed papers. In 2000 he was awarded the Otto-Lilienthal-Preis, in 2007 his contribution to the IPCC assessments was awarded by the Nobel Peace Prize. Currently, he is the co-ordinator of the EU Integrated Project QUANTIFY (Quantifying the Climate Impact of global and European Transport Systems) and the EU Specific Support Action ATTICA (European Assessment of Transport Impacts on Climate Change and Ozone Depletion).

CAPTAIN CHRIS SCHROEDER



Session Seven

Corporate Social Responsibility, Environment & Fuel Optimization in Qatar Airways.

Capt. Chris Schroeder is in charge of Corporate Social Responsibility, Environment & Fuel Optimization in Qatar Airways.

He joined Qatar Airways by the end of 2008 from IATA where he was the Head of Flight Operations and the Fuel Efficiency Program (Green Teams).

During his 20 years commercial flying career with the United Nations and major airlines in Asia and the Middle East he accumulated close to 13,000 hours on aircraft such as the Boeing 747 and the Airbus A320, A330 & A340. He held several senior management, consultant and advisor positions with organizations such as the UNDP, EBRD, Dubai Aerospace Enterprise and Lufthansa Flight Training just to mention a few, throughout his career.

Capt. Schroeder holds several Masters Degrees in Aviation Science and Airline Management, an MBA and an IATA Diploma with Distinction in Operations Management. He has also been awarded with the Texas Honorary Citizenship and with a Doctor (honoris causa) of University from Trinity. He also completed his Lean Six Sigma executive training and is an IEMA certified CSR Practitioner.

DR. CHARLES E. SCHLUMBERGER



Session Seven

Principal Air Transport Specialist
The World Bank

Dr. Charles E. Schlumberger, a Swiss national, is the Principal Air Transport Specialist of the World Bank in Washington DC. In this function he is responsible for the Bank's policy and development priorities in the field of air transportation. He supervises or participates directly in several air transport projects globally, which range from air transport infrastructure financing, air carrier restructuring and/or privatization, air transport safety and security projects, and air transport policy advice to governments.

Prior to his appointment to the World Bank in 1998, Dr. Schlumberger has held the position of Vice-President at Union Bank of Switzerland, responsible for international credit restructuring. Prior to his activities in financial institutions, he was the CEO of a Logistics and Transport Group in France, and worked as a lawyer on aviation related matters in Switzerland.

Dr. Schlumberger graduated in 1986 with a Law Degree from Basel Law School, focusing on Aviation Law and Bankruptcy Procedures. He further holds an MBA from Harvard Business School in Boston, USA, and received a degree of Doctor of Civil Law from the Institute of Air and Space Law of McGill University in Montreal, Canada. He is also an active FAA and EASA licensed pilot and certified flight instructor.

PROF. DR. ULRICH SCHUMANN



Session One
Session Six

Director of the Institute of Atmospheric Physics of the Deutsches Zentrum für Luft- und Raumfahrt (DLR), Oberpfaffenhofen, Germany

Dipl.-Ing.	Diploma in Mechanical Engineering, TU Berlin	1964–1969
Dr.-Ing.	Research Center and University of Karlsruhe, Numerical Simulation of Turbulence	1969–1973
Post-Doc	National Center for Atmospheric Research, Boulder, Colorado, USA	1974–1975
	Scientist, Research Center Karlsruhe	1976–1982
habil.	Habilitation in Fluid and Structural Dynamics, University Karlsruhe	1978
Dr.rer.nat.habil.	Habilitation in Theoretical Meteorology	1986
	Ludwig-Maximilians-University (LMU), Munich	1984–1987
Professorships	apl. Professor, Fluid Dynamics, University Karlsruhe	
	apl. Professor, Theor. Meteorology, LMU Munich	since 1988
	DFG-Priority Programme “Research on the effects of aircraft and spacecraft upon the atmosphere”	1992-1997
Coordinator	Many further national (BMBF) and European (EU) Projects, e.g. on aviation, NOx, cirrus, lightning and climate: AERONOX, POLINAT I and II, EULINOX, INCA, TROCCINOX, ECATS.	1992-2008
HALO	Elected “Fachgutachter” DFG Member of the Scientific Advisory Council HALO	2004-2008 2002-
Co-Investigator	within 2 projects of the ACCRI Aviation Cli-mate Change Research Initiative (ACCRI) of the FAA (USA)	2010-
Presently Coordinator	of the DLR Project “Climate-compatible Air Transport System, CATS”	2008-2011
Lead Author	IPCC Report Aviation and the Global Atmosphere, chapter 4 (Aerosols and cirrus) WMO Rapporteur on Aviation and the Environment	1999

	Thomas A. Jaeger Prize	1981
	Alfred-Wegener Medal	2002
	Aachen & Munich Award for Science and Techn.	2005
Awards	J. F Lewis Richardson Medal	2007
	Contributor to IPCC; Noble Peace Prize	2008
Current position	Director, Institute of Atmospheric Physics, DLR in Oberpfaffenhofen	since 1982

MR. SHANNON SCOTT



Session Four
Session Five

Senior Policy Adviser - Aviation Environment
Airspace and Environment Policy Unit

Shannon Scott joined the Civil Aviation Authority of New Zealand (CAA) in 2009 as Senior Policy Adviser for Aviation Environment. He joined the CAA from the Ministry of Research, Science and Technology, where he was responsible for developing international science cooperation programmes with partners in North Asia.

Prior to joining the public service, Shannon managed an International Programmes team at the University of Canterbury, New Zealand, providing customised education and training programmes for international clients in areas such as environmental management and public sector management. He has also worked as a translator and editor in China.

Shannon has degrees in Geography (with a focus on Climatology) and Chinese language, and has also completed an FAA-approved aircraft dispatcher certificate course.

MR. ALAIN SIEBERT



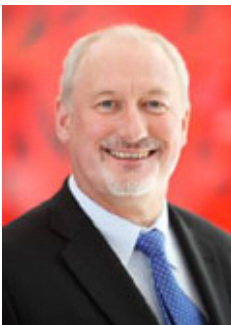
Session Four

Chief Economics and Environment
SESAR Joint Undertaking

Alain SIEBERT is the Chief Economics & Environment at the SESAR Joint Undertaking based in Brussels, Belgium. He is responsible for all economical and environmental aspects for this new, ambitious European program recently launched by the European Commission, Eurocontrol and the industry. SESAR is the European air traffic management modernisation programme. Its aim is to develop the next generation air traffic management system that will be capable of ensuring the safety and efficiency of air transport worldwide over the next 30 years.

Alain started his career as a Management Trainee at Air France and later joined SAS Group as Executive Assistant to the Chief Financial Officer. He was later assigned Head of Strategic Development & Fuel Conservation under the responsibility of the Chief Operating Officer. There he supported the senior operations management team in strategic business planning and execution with main responsibility for Fuel Conservation. In this role he was responsible for the design and implementation of investment/cost reduction programs geared at optimizing airline operations from an economical & environmental efficiency perspective.

MR. PAUL STEELE



Opening Session
Session Seven

Director, Aviation Environment
International Air Transport Association (IATA)
Executive Director
Air Transport Action Group (ATAG)

Paul Steele is Executive Director of the Air Transport Action Group (ATAG), the only global association that represents all sectors of the air transport industry. Its mission is to promote aviation's sustainable growth for the benefit of global society.

Paul is also Director Aviation Environment of the International Air Transport Association (IATA), with the responsibility for guiding and implementing IATA's environment strategy worldwide. Before joining IATA in December 2007, Paul was COO of WWF International. Paul also has over 20 years' senior management experience with major international companies, including The Virgin Trading Company, Hilton Hotel Group and Pepsi Cola International.

MR. ACHIM STEINER



Welcome and
Introductions

UNEP Executive Director
United Nations Under-Secretary General
Director-General of the United Nations Office at Nairobi

Acting on the nomination of Secretary-General Kofi Annan, the UN General Assembly unanimously elected Achim Steiner as the Executive Director of UNEP on 16 March 2006 for a four-year term, effective 15 June 2006. He becomes the fifth Executive Director in UNEP's history. Effective 1 March 2009, Achim was also appointed Director-General of the UN Offices at Nairobi (UNON).

Before joining UNEP, Achim served as Director General of the World Conservation Union (IUCN) from 2001 to 2006. IUCN is widely regarded as one of the most influential and highly respected organizations in the field of conservation, environment and natural resources management. He held responsibility for the management and oversight of 1,000 staff located in 42 countries.

His professional track record in the fields of sustainable development policy and environmental management, his first-hand knowledge of civil society, governmental and international organizations, as well as his global experience spanning five continents, make him an excellent choice to lead the United Nations Environment Programme.

His professional career has included assignments with governmental, non-governmental and international organizations in different parts of the world. In Washington, where he was Senior Policy Advisor of IUCN's Global Policy Unit, he led the development of new partnerships between the environment community, the World Bank and the United Nations system. In Southeast Asia he worked as Chief Technical Advisor on a programme for the sustainable management of Mekong River watersheds and community-based natural resources management. In 1998 he was appointed Secretary-General of the World Commission on Dams, based in South Africa, where he managed a global programme of work to bring together the public sector, civil society and the private sector in a global policy process on dams and development.

He worked both at grassroots level as well as at the highest levels of international policy-making to address the interface between environmental sustainability, social equity and economic development.

Achim, a German national, was born in Brazil in 1961, where he lived for ten years. His educational background includes a BA from the University of Oxford as well as an MA from the University of London with specialization in development economics, regional planning, and international development and environment policy. He also studied at the German Development Institute in Berlin as well as the Harvard Business School.

He serves on a number of international advisory boards, including the China Council for International Cooperation on Environment and Development (CCICED).

MR. SCOTT STONE



Opening Session
Session Five

Aviation Environment Policy
Aviation Operations Branch, Australia

Scott is the General Manager, Aviation Environment, in the Australian Government Department of Infrastructure, Transport, Regional Development and Local Government. His responsibilities include providing policy advice to the Government on environmental issues including aircraft noise and emissions, and administering relevant regulation.

Scott has worked in aviation-related areas of the Department for most of the last 15 years. His most recent responsibility was coordinating the development of the Australian Government's Aviation Policy White Paper, a comprehensive review of Australia's aviation policy settings.

MS. KATIE SULLIVAN



Session Five

Katie Sullivan
Canadian Director, International Emissions Trading Association (IETA)
Canada

Katie Sullivan recently joined the International Emissions Trading Association (IETA) as its new Canadian Director. In this role, Katie leads IETA's efforts in further enhancing its Canadian members' ability to engage in constructive climate policy dialogue at federal, provincial and territorial levels, while also contributing to IETA's growing international policy work on economic instruments to combat climate change. Prior to joining IETA, Katie worked as a consultant for ICF International, where she provided strategic climate change advisory services and specialized in greenhouse gas policy and carbon market developments in North America. While at ICF, Katie was Secretariat for the Industry Provincial Offsets Group (IPOG), a Canadian multi-stakeholder group formed to provide the federal government with policy recommendations on key design elements and market considerations for Canada's emerging domestic offsets system. Katie holds a Masters in Environment, Development and Policy from the University of Sussex, and an Honours Bachelor of Public Affairs & Policy Management from Carleton University.

MR. CHRISTOPHER SURGENOR



Moderator

Editor, GreenAir Online

Christopher Surgenor's 35-year career in the media started with global advertising agency J. Walter Thompson and has since covered magazine, book and newsletter publishing, specialising in international business-to-business publications with a technology-based content.

For the past 20-plus years, he has focused on aviation-related media – including publishing and conference events – covering the airline, airport, cargo, aircraft maintenance and air traffic management sectors. In 1995 he started Air Transport Publications Ltd, a London-based company with a number of internationally circulated magazine and reference book titles, where he was the Publisher and Editorial Director. The company was awarded a Queen's Award for Enterprise: International Trade in 2004.

In 2007, he launched GreenAir Online, an online publication with news, features, comment and information covering aviation's impact on the environment and climate change. Alongside a rapidly-growing readership worldwide, the publication has gained a reputation for independent and comprehensive editorial coverage of a major challenge for the aviation industry.

MR. TED THRASHER



Tutorial

Environment Officer, ICAO

Ted Thrasher is the Environmental Officer for Modelling and Analyses for the International Civil Aviation Organization (ICAO), a specialized agency of the United Nations, where he is responsible for the modelling and assessment of aircraft noise and aircraft engine emissions. He coordinates related activities for ICAO's Committee on Aviation Environmental Protection (CAEP) in support of the development of international environmental standards for aircraft and the development of guidance material. Prior to joining ICAO, Mr. Thrasher was the Director of Simulation, Modelling, and Analysis for CSSI in Washington, D.C. Mr. Thrasher holds a Bachelor of Science degree in Aviation Engineering from The Ohio State University and a commercial pilot's license.

MR. ARNALDO VIEIRA DE CARVALHO



Session Eight

Sr. Energy Specialist with the Energy Division
Inter-American Development Bank – IDB

Mr. Vieira de Carvalho has been working with biofuels since the seventies. He is working for the IDB since 1997 on financing and implementing sustainable energy projects, including biofuels. He was Director of the Latin American Energy Organization - OLADE in Quito, Ecuador and General Manager of Promon Engenharia, a leading Brazilian consulting firm in Rio de Janeiro and São Paulo, acting internationally. He has also worked as independent energy consultant in several Latin American countries for power utilities and international organizations such as The World Bank, UN agencies and the Organization of American States – OAS. Mr. Vieira de Carvalho holds a Mechanical Engineering degree from the Aeronautical Institute of Technology – ITA in São José dos Campos, Brazil and a M.S. degree from Kansas State University – KSU with a thesis dissertation on biofuels.

PROF IAN A. WAITZ

Session One

B.S., 1986, Pennsylvania State University
M.S., 1988, George Washington University
Ph.D., 1991, California Institute of Technology

Ian A. Waitz is the Jerome C. Hunsaker Professor of Aeronautics and Astronautics at MIT and Director of the Partnership for AiR Transportation Noise and Emissions Reduction (PARTNER), an FAA/NASA/Transport Canada-sponsored Center of Excellence. His principal fields of interest include propulsion, fluid mechanics, thermodynamics, reacting flows, aeroacoustics, and, in particular, aspects of the above that relate to environmental issues associated with aircraft design and operation. Professor Waitz has written approximately 60 technical publications including a report to the U.S. Congress on aviation and the environment, holds three patents and has consulted for many organizations. During 2002-2005 he was Deputy Head of the Department of Aeronautics and Astronautics. He served as an associate editor of the AIAA Journal of Propulsion and Power. In 2003 Professor Waitz received a NASA Turning Goals Into Reality Award for Noise Reduction. He was honored with the 2002 Class of 1960 Innovation in Education Award and appointment as a MacVicar Faculty Fellow in 2003. He is a Fellow of the AIAA, and an ASME and ASEE member.

DR. MARK WATSON



Head of Environmental Affairs
Cathay Pacific Airways

Mark Watson works for Cathay Pacific Airways in Hong Kong as the airline's Head of Environmental Affairs. He has worked in the Sustainable Development arena since obtaining his Doctorate in 1995 and has advised international governments, aid agencies and multinationals on a wide range of environmental and social issues. In his career to date, he has lived and worked in the Caribbean, Latin America, Africa and Asia, including two years' in mainland China as an environmental adviser to the PRC government. He has a longstanding professional interest in aviation, having previously been Head of Environmental Affairs at the Society of British Aerospace Companies (SBAC), where he led the organisation's work on the UK Sustainable Aviation initiative, alongside major airlines, aerospace manufacturers, airports and air navigation services' providers. Mark returned to Asia in 2008 to work in a new senior management role addressing the key challenges of aviation, the environment and climate change for one of the world's leading airlines.

At Cathay Pacific he works on a diverse range of strategy and policy-related initiatives aimed at reducing the airline's emissions, both on the ground and in the air, including long term technology acquisition and deployment. As a member of the IATA Environment Committee and the Aviation Global Deal (AGD) group, he has been heavily involved in UN climate change processes within ICAO and the UNFCCC relating to industry's call for aviation to be included in a global sectoral scheme to addressing emissions and was a member of the IATA delegation at Copenhagen in December 2009. Mark also oversees Cathay Pacific's new Sustainable Development Strategy which aims to embed social, economic and environmental issues within the airline's business model.

MS. NANCY YOUNG



Session Seven

Nancy N. Young, Esq.
Vice President, Environmental Affairs
Air Transport Association of America, Inc.

Nancy N. Young is the Vice President of Environmental Affairs at the Air Transport Association of America, Inc. (ATA). In this capacity, Ms. Young directs ATA's environmental programs, represents the ATA airlines in international negotiations over new aircraft noise and emission standards and provides counsel to ATA and its members on other environmental issues of significance to the air transportation industry. Ms. Young returned to ATA in 2007 from the law firm of Beveridge & Diamond, P.C., where she was a principal/partner. Ms. Young had previously served as ATA's Associate General Counsel, Environmental and International Programs.

As a principal at Beveridge & Diamond prior to joining ATA in 2000 and again from 2005-2007, Ms. Young worked extensively in the aviation and transportation areas and with a variety of other industries, providing comprehensive regulatory and litigation services with respect to a wide range of environmental media, including the climate change, hazardous and solid waste, spill prevention and management, air quality, noise and water quality areas. Ms. Young served as Co-Chair of the Firm's Climate Change and Waste Management and Recycling practices.

Ms. Young is a graduate of The College of William and Mary in Virginia (B.A., 1986) and of Harvard Law School (J.D., cum laude, 1990), where she served as Editor-in-Chief of the Harvard Journal on Legislation. She served as a Legislative Assistant to Congressman E. Thomas Coleman (MO) from 1986-87. Ms. Young is a member of the bar in Virginia and the District of Columbia. She is a member of the American Bar Association's Forum on Air and Space Law and the International Aviation Women's Association and participates in several of the working groups under the International Civil Aviation Organization's Committee on Aviation Environmental Protection.