

WELCOMING ADDRESS



DR. TAÏEB CHÉRIF Secretary General, ICAO

Dr. Taïeb Chérif has been the Secretary General of the International Civil Aviation Organization (ICAO) since August 2003. Prior to that, he was the Representative of Algeria on the Council of ICAO from 1998 to 2003. Dr. Chérif's career in aviation spans some 35 years during which he held a series of progressively more responsible

positions with the civil aviation authority of Algeria, where he was involved in the full range of airport, airline and air navigation operations, from regulatory and policy work to government relations and technical projects. In addition to his diverse aviation career, Dr. Chérif served as Secretary of State for Higher Education of Algeria. He holds a PhD in Air Transport Economics from Cranfield Institute of Technology, U.K. and a Diploma in Aeronautical Engineering from the École Nationale de l'Aviation Civile, Toulouse, France.

KEYNOTE SPEAKER



LEWIS M. FULTONInternational Energy Agency

Lewis Fulton has worked internationally in the field of transport/energy policy analysis for 20 years. He is a senior transport energy specialist with the International Energy Agency, Paris, where he recently returned after working there from 1999-2005. During 2006-2007 he

worked in Kenya with the UN Environment Program, on developing and implementing sustainable transport projects around the world, leveraging funding from the Global Environment Facility (GEF). His IEA reports include Energy Technology Perspectives 2008 (co-author), and lead author on Saving Oil in a Hurry (2005), Biofuels for Transport: An International Perspective (2004) Bus Systems for the Future (2002) and Saving Oil in Transport: Options and Strategies (2001). Previous positions have included the U.S. Department of Energy, Office of Policy (1992-1996) and the Independent University, Bangladesh (1996-1997). He received his Ph.D. in Energy Management and Environmental Policy from the University of Pennsylvania in 1994.



SESSION 1: SETTING THE SCENE



JANE HUPE
Chief, Environmental Unit, ICAO

Jane Hupe is the Chief of ICAO's Environmental Unit. She is also responsible for the coordination of the ICAO Council's Committee on Aviation Environmental Protection (CAEP). In that role, Jane advises the ICAO Council on

worldwide aviation environmental issues related to aircraft noise and aircraft engine emissions. Before joining ICAO in 1998, Jane worked as a consultant, advising ICAO on environmental protection, standards and regulations. Prior to that, she was an environmental specialist and advisor at the Institute of Civil Aviation in Brazil. Jane holds a Masters degree in Airport Management and a Post-graduate degree in Environmental Auditing.



JOHN HEIMLICH
Air Transport Association

John Heimlich joined the Air Transport Association in April 2001 and currently serves as vice president and chief economist. He serves on the DOT Advisory Council on Transportation Statistics, the CFTC Energy Markets Advisory Committee and the Consumer Energy Alliance Board of Advisors. He is also a member of the MIT Airline Industry Consortium, the Commercial Aviation Alternative

Fuels Initiative (CAAFI) and the National Algae Association. Heimlich played central roles in securing legislation to stabilize the industry after 9/11 and to reimburse carriers for security costs during the Iraq War. He also coordinated the industry's efforts to overcome fuel-supply disruptions during Hurricanes Katrina and Rita in 2005 and Gustav and Ike in 2008. Heimlich regularly interfaces with academia, Wall Street and members of the press regarding matters of energy and economics. Prior to ATA, Heimlich spent five years at United Airlines in financial planning, financial analysis and international and regulatory affairs. A native of Kent, Ohio, Heimlich holds a Bachelor of Arts degree, *magna cum laude*, Phi Beta Kappa, from Cornell University and a master's degree in public policy from Harvard University's John F. Kennedy School of Government.





PAUL STEELE
Air Transport Action Group

Paul Steele is Executive Director of the Air Transport Action Group (ATAG), a worldwide alliance of the many companies and associations throughout the air transport industry interested in promoting economically beneficial aviation capacity and infrastructure improvements in an environmentally responsible manner. Members include airlines, airports, manufacturers, air traffic control

authorities, airline pilot and air traffic controller associations, chambers of commerce, travel and tourism associations, ground transport and communications providers.

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. Prior to joining IATA in December 2007, Paul was Chief Operating Officer of WWF International. In this role, he worked extensively on spearheading major partnerships with business and industry with a view to helping them to develop and implement environment strategies. He worked to strengthen WWF's brand and improve capacity and efficiency within its global network, which includes more than 60 national and programme offices, and 4,800 employees worldwide.

Before WWF, Paul had over 20 years' senior management experience with major international companies. He was Chief Executive of The Virgin Trading Company, the consumer goods arm of Richard Branson's entrepreneurial empire.

Before that, he was Senior Vice President Sales, Marketing and Information Technology of the Hilton Hotel Group, covering 150 hotels in 50 countries and overseeing a sales and marketing team of 1,000 people. Prior to this, he worked for 15 years in various senior roles at Pepsi Cola International, lastly serving as Group Vice President in charge of Northern Europe.

Over the years, Paul has worked in a broad range of cultures and business environments, living and working in Germany, Austria, Turkey, Egypt, the United Kingdom and now Switzerland. He speaks fluent French and German, as well as some Italian and Eastern European languages. His hobbies include music, travel, wildlife, hiking and singing. He is married and has two children.





DAN RUTHERFORD

International Coalition for Sustainable Aviation (ICSA) International Council on Clean Transportation (ICCT)

Dan Rutherford is a staff scientist at the International Council on Clean Transportation, a US-based non-governmental organization that supports an international network of progressive regulators and experts dedicated to reducing conventional pollutant and GHG emissions from transport sources worldwide. As a member of the

ICCT's Global Goods Movement team, Dan works on policy options to reduce emissions from heavy-duty vehicles and commercial aviation. In his capacity as the ICCT's aviation program lead he serves as ICSA's observer to CAEP Working Group 3. Dan has a B.A. in Chemistry from the University of Minnesota at Morris and a M.S. and Ph.D. in Environmental Engineering from Stanford University.



RICHARD L. ALTMAN

Commercial Aviation Alternative Fuels Initiative (CAAFI)

Rich Altman serves as Executive Director of the Commercial Aviation Alternative Fuels Initiative (CAAFI) which he co-founded in mid-2006 with Airline, Manufacturer and FAA representatives. A 41-year aviation veteran, Rich spent 39 years with Pratt & Whitney initially as a propulsion engineer then branched into

Advanced Technology Business Development.

A founding member of the US Transportation Research Board Committee on Aviation effects on the Environment, he authored its papers on Technology Deployment and Alternative Fuels. He is a member of the FAA PARTNER Center of Excellence Advisory Board. He is a member of the Airport Cooperative Research Program Advisory Panel monitoring its project to create an alternative fuels handbook.

Rich holds Engineering Degrees from the Brooklyn and Rennselaer Polytechnic Institutes and an MBA from the University of Connecticut.



SESSION 2: OVERVIEW OF POTENTIAL OPTIONS FOR ALTERNATIVE FUELS



PETRUS N.J. ROETS SASOL

I hold a Higher National Diploma in Chemistry and a B Comm.

I have published in various national and international journals in the disciplines of synthetic fuels and road

binding materials.

Work experience:

Started with Sasol in the late 70's as Chemist and have more than 30 years of experience in the development and production of synthetic fuels. During my career at Sasol I hold the following positions: Refinery Chemist at the Natref petroleum refinery, Manager of heating fuels and road binding material research. Manager Chemical Department, Fuels Research Group. Responsibilities included; chemical support to the R&D function, technical plant support for Sasol's fuels production facilities and technical market support for Synthetic fuels and related products. I was project manager responsible for the qualification and approval of Sasol semi and fully synthetic jet fuel for commercial use. Currently I am the fuels manager for the US Coal to Liquid Fuels project



MOHD KHALIFA TURKI ALSOBAI

Vice Chairman & Managing Director Qatar Fuel - WOQOD

Date of Birth: 1953 (Doha) Social Status:: Married

Academic Bsc. Industrial Engineering, 1979, Qualifications: University of Louisville - US

Work Experience:

2007 Until Managing Director & Chief Executive Officer Now: "Qatar Holding" Qatar Intermediate Industries

Holding Co. Ltd.



2002 Until Now:	Vice Chairman & Managing Director, Qatar Fuel - WOQOD		
2001 Until Now:	Technical Expert to HE Deputy Premier, Minister of Energy & Industry		
1990 Until Now:	General Manager, Qatar Jet Fuel Company (Qjet)		
1990 - 2001:	General Manager, National Oil Distribution Company (NODCO)		
1986 - 1990:	Deputy General Manager, National Oil Distribution Company (NODCO)		
1982 - 1984:	Senior Project Engineer (Refinery)		
1980 - 1982:	Project Engineer (Refinery)		
1979 - 1980:	Trainee in Qatar General Petroleum Corporation		

Other Key Positions:

2007 Until Now:	Director Board Member, Qatar International Petroleum Ltd. (QPI)
2003 - 2007:	Director Board Member, Qatar General Retirement & Pension Authority
1996 - 1999:	Director Board Member, Steel Coating Company
1993 - 1999:	Director Board Member, Qatar Industrial Manufacturing Company (QIMCO)
1992 - 1997:	Vice Chairman, Qatar Shipping Company (Q-Ship)
1990 - 1994:	Chairman of the National Emergency Committee, For Petroleum Products



CAPTAIN CHRIS SCHROEDER OATAR AIRWAYS

Captain Chris Schroeder is the newly appointed Head of Fuel Optimization, Environment & corporate Social Responsibility in Qatar Airways.

He joined Qatar Airways from IATA where he was the Head of Flight Operations and the Fuel Efficiency Program

(Green Teams) for the past two years.

During his 20 years commercial flying career with the United Nations and major airlines in Asia and the Middle East he accumulated close to 13000 hours on aircraft such as the Boeing 747 and the Airbus A320, A330 and



A340. He held several senior management and advisor positions 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. Currently he pursues his PhD in Management. He speaks fluent English, German, French as well as basic Russian and Arabic.



PHILIPPE FONTA
Airbus

Philippe Fonta was appointed Head of sustainable development in February 2007. In this role, he leads the development and implementation of the Airbus strategy on sustainable development, integrating environmental, social and economic criteria. As such, he represents Airbus at major international events related to

environmental and sustainable development issues, including alternative fuel opportunities.

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



PAUL BOGERS
Shell Aviation

Paul holds an MSC in Aeronautical Engineering from Delft University in The Netherlands, and a post-graduate degree in compressible fluid dynamics in turbomachinery from the Von Karman NATO Institute in Brussels.

In 1997 he joined industry, working for Rolls-Royce Aero Engines in the UK in a range of technical, commercial and strategic functions. After a short period of running a niche strategy consultancy he joined Shell Aviation in 2001.



His first role was as Business Manager for turbine engine oils followed by an assignment as Project Manager for Differentiated Fuels, leading the KLM field evaluation of the APA101 jet fuel additive.

In January 2004 he was appointed European Sales Manager for aviation lubricants leading a most diverse virtual team serving customers from private pilots though to major airlines who rely on AeroShell.

Most recently ,Paul joined Global Solutions in 2007 as the Aviation Technology Manager looking after the R&T.



LEAH RANEYContinental Airlines

Leah Raney is the Managing Director of Global Environmental Affairs for Continental Airlines and has responsibility for environmental, noise, and sustainability issues worldwide. She handles everything from environmental clearances for new terminal and runway construction to day-to-day compliance with state and

federal environmental regulations to emerging global climate change initiatives. Leah has been with Continental for almost 12 years and in the environmental profession for a total of 20 years after getting her civil engineering degree from Texas A & M University. Although she is married with two children, she is also active in the International Air Transport Association, the International Civil Aviation Organization, and is currently the Air Transport Association (ATA) International Noise and Emissions Chair.



BILL WASONBio-Pure Fuels

Bill Wason is owner of Bio-Pure Fuels, formed in 2005 to produce feedstock for biofuel producers and food markets including vegetable oil and meal, sugar cane, biomass, algae and solid waste. The company is involved in planning and finance of several large biofuel and oil seed crush facilities including a \$135 million 1.2 million ton oil seed crush plant for canola and camelina,

a 100 million gallon biodiesel plant and 2nd generation biofuel site in Houston and feedstock projects in Brazil to plant oil seed trees and sugar cane on 1 million hectares of state land. Mr. Wason is also a co-owner of a Brazilian trading and freight forwarding company and President of several



non-profits in Maranhao, Brazil. Mr. Wason started up a biodiesel business in 2001 as President of a Bio-Clean Fuels, which built a 10 million gallon/year biodiesel plant in Bakersfield, California. A joint venture with a Polish firm followed to build a 75 million biodiesel plant at a port in Poland. Experience base includes executive positions in other alternative fuel companies and in carbon trading and research and development projects.



JENNIFER HOLMGREN

UOP

Jennifer Holmgren is General Manager of the Renewable Energy and Chemicals business unit at UOP LLC, a whollyowned subsidiary of Honeywell International.

This group delivers UOP technologies based on renewable resources to the market. Prior to this assignment, Jennifer was Director of Exploratory and Fundamental Research at UOP. This group was accountable for UOP's strategic R&D

portfolio and delivering new tools and methods.

Jennifer earned a bachelor's of science degree in Chemistry from Harvey Mudd College a doctorate degree in Inorganic Materials Synthesis from the University of Illinois at Urbana-Champaign and an MBA from the University of Chicago. Previous assignments at UOP include the preparation and characterization of novel zeolites, molecular sieves and layered materials (clays, pillared clays and layered double hydroxides) and setting up the infrastructure necessary to develop fundamental mechanistic understanding in UOP's core areas. She also participated on a number of Technology Delivery projects in the BTX and Olefins areas.

Jennifer was a member of the R&D Reengineering Design Team, which redefined UOP's technology commercialization methodology. She was the first Chair of R&D's Technical Community Organization. She currently serves on multiple external advisory boards. She is the author or co-author of 50 US patents, 20 scientific publications and is the 2003 recipient of the Council for Chemical Research's (CCR) Malcolm E. Pruitt Award.



YASUNORI ABE

Japan Airlines

August 2001 Director, Administration, Engineering
April, 2004 Deputy Vice President, Flight Operations

Engineering

April, 2008 Vice President, Environmental Affairs



BRIAN GOODALL Sapphire Energy

Brian's career has spanned three decades in the petrochemical, materials and energy industries: Royal Dutch Shell, BFGoodrich, Albemarle, Rohm and Haas Company, and Imperium Renewables, where his team delivered the 1,000 gallons of biojet fuel used on Virgin Atlantic's first-ever "green" jet flight in February 2008.

Currently Brian is VP of Downstream Technology at Sapphire Energy where he and his team delivered the hundreds of gallons of refined algal oil which, in partnership with UOP, was transformed into the first algal jet fuel to fly on a commercial aircraft (Continental Airlines, January 7 2009).



FAYETTE S. COLLIERNational Aeronautics and Space Administration

Fayette S. Collier is the Principal Investigator of the Subsonic Fixed Wing Project of NASA's Fundamental Aeronautics Program. In this capacity, Dr. Collier directs the planning and execution of NASA's fundamental research program focused on the subsonic transport

sector, working in partnership with Industry, FAA, AFRL and other government agencies. The research project is focused on development of engine and airframe technologies, and physics-based design tools and processes that will enable dramatic improvements in noise, emissions, and performance characteristics of future subsonic aircraft operating in the air transportation system.

Dr. Collier is a graduate of Virginia Tech (Ph.D., 1988) and the Massachusetts Institute of Technology (M.B.A., 1997) where he participated as a NASA Sloan



Fellow. He serves on numerous committees for the Agency, including the JPDO's Environmental Working Group, and the AFRL Fixed Wing Executive Council, and was a contributor to the development of the National R & D Plan for Aeronautics. He is an advisor to graduate students at Virginia Tech and Georgia Tech. Dr. Collier is a member of the AIAA



MAURO IURK ROCHA Petrobras

Mauro lurk Rocha is Chemical Engineer, graduate for Rio de Janeiro Federal University. He has specialization in Petroleum Process Enginery and Master Business Administration at IBMEC-RJ. Since 1980 he has been working in Research and Development Center of PETROBRAS - CENPES, in quality of automotive and

industrial fuels activities. During last 29 years has been working in Fuels Management, coordinating research projects related with aviation fuels and diesel fuel. Actually is Petrobras Senior Consultant.

SESSION 3: CHALLENGES TO DEVELOPMENT AND DEPLOYMENT OF ALTERNATIVE FUELS



DORIS SCHRÖCKER European Commission

Doris Schröcker is policy and project officer in the Unit for the Single Sky and modernisation of air traffic control in the European Commission's Directorate General for Energy and Transport (DG TREN). She is in charge of the

Commission's feasibility study on the use of alternative fuels, including sustainable biofuels, in aviation. Before joining the Unit, she was Head of DG TREN's Research Coordination Team for energy and transport in the EU research framework programmes.





DR. LOURDES Q. MAURICE Federal Aviation Administration

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 Aeroacustics. She has authored over 100 publications and is a 2003 Fellow of AIAA.





ALEXANDRE TONELLI FILOGONIO EMBRAER

Graduated in Mechanic / Aeronautic Engineering from Federal University (State of Minas Gerais), Engineering Scholl in 1979, and pos graduated in Economic Engineering in 1994.

1980	Actuation a	s a maintenance	engineer in
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aeronautic engine maintenance station

actuation as a product development engineer 1981-1989 in Embraer Propulsion Systems department

Actuation as technical manager in airplane and

1990 - 2000

helicopter maintenance station

2001 up to now Actuation as technical responsibly by fuel tank

> safety, Embraer 170/190 fuel system development team leader, and technical responsibly by Embraer airplanes fuel system

development.

Now a days, working in Technology

Development department, Alternative Fuels Team manager. Actuation as a DER for Brazilian Aeronautic Civil Authority (ANAC).

Philippe Fonta (see above)



MARK RUMIZEN

Commercial Aviation Alternative Fuels Initiative

Mark Rumizen is a member of the Commercial Aviation Alternative Fuels Initiative (CAAFI) steering committee and is the leader of the CAAFI Certification & Qualification Panel. He has been employed by the Federal Aviation Administration (FAA) since 1991 and is currently the Aviation Fuels Specialist in the Aircraft Certification

Division.

Prior to the FAA, Mark was employed by GE Aircraft Engines and Pratt & Whitney Aircraft in various engineering and marketing roles. He has a



Bachelor of Science degree in Civil Engineering from the University of Buffalo and a Master of Business Administration (MBA) from Boston University.



RAVIN J APPADOO
Aviation Fuel Solutions Inc.

Ravin Appadoo is President of Aviation Fuel Solutions Inc., an aviation fuel consulting company based on the Southshore of Montreal, Canada. He does consulting, research, training and audit work for major companies including airlines, airports, oil companies and not for profit

organizations like IATA, the UN and ICAO.

Ravin Appadoo was formerly Assistant Director Fuel Services at IATA working from the Montreal Office where he was the focal point for all technical fuel work of the commercial airline industry. He also led the work of important industry Groups including serving as secretary to the Aviation Fuel Working Group and Administrator of the IATA Fuel Quality Pool. Prior to joining IATA, Ravin followed a 15-year career at Air Mauritius, the national airline of Mauritius. His work experience covered a diverse portfolio of responsibilities ranging from purely engineering, operational and technical activity through consulting to more finance-related issues like fuel purchasing, financial risk management and aviation insurance.

Ravin is an engineer by training, holding a Bachelor degree in Mechanical Engineering. He also holds an MBA from Surrey University and a PhD from Cranfield University, U.K. His research work focused on Jet fuel and the impact of changing specifications on supply, distribution and price.





DR. NADER RIZKRolls Royce

Dr. Nader Rizk is an Engineering Consultant at Rolls-Royce in Indianapolis. He has over 30 years of experience in the fields of combustion, sprays, and fuels. His main responsibility is to develop low emissions technology for future engines. Dr. Rizk is also responsible for evaluating the use of alternative fuels in Rolls-Royce engines. He is currently involved in assessing impact of F-T fuels on

performance of engines. He represents Rolls-Royce in ICAO WG-3 activities.

Dr. Rizk received his B.S. in Mechanical Engineering from Cairo University, and M.S. and Ph.D. in Thermal Power from Cranfield Institute of Technology in England.



NANCY N. YOUNG, ESQ. 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 Womens Association and participates in several of the working groups under the International Civil Aviation Organization's Committee on Aviation Environmental Protection.

Dr. Lourdes Maurice (see above)



PROFESSOR CHRIS WILSON University Sheffield, Omega

Professor Chris Wilson received his first degree was in Aeronautical Engineering from Loughborough University and a PhD in Gas turbine combustion from the University of Leeds. After completion of his first degree he worked for Rolls Royce Military Engine Division in Bristol, where he became the manager of the military combustion research group before becoming a Combustion Specialist

for Rolls Royce plc.

In 1994 Chris moved to The UK's Defence Research Agency at Farnborough (Previously known as the National Gas Turbine Establishment, NGTE) where he held several posts including Technology Chief for the Combustion and Environment business group. In 1999 he was appointed a DERA, and subsequently a QinetiQ, Fellow in recognition of his contributions in the area of gas turbine combustion.

In 2003 Chris moved to the University of Sheffield to pursue an academic career, within the Department of Mechanical Engineering. Chris has been instrumental in setting up a Low Carbon Combustion Centre, in collaboration with the University of Leeds and has established a Centre of Excellence in Fluids research with Rolls Royce and Shell in the area of gas turbine fuels and Lubricants.

Chris's research has a track record in addressing environmental issues of aviation. He was the coordinator of the highly successful European programme PARTEMIS, The UK PI in the DERA/NASA collaborative programme on gas turbine particulates emissions. He is the Thematic Area Leader for Engine Technology in the European ECATS Network of Excellence a role he



also performs in the AERONET network. He is a participant in a raft of EU funded research programmes looking at alternative fuels and gas turbine combustion including; Alfabird, SWAFAE and TECC. At a national level Chris coordinates the OMEGA activities on Alternative fuels for aviation. His work has resulted in over 150 publications and he was honoured in 2007 to receive recognition from the IPCC for his contribution to the organisation receiving the Nobel Prize.

Chris is a Chartered Engineer, Fellow of the Energy Institute, Fellow of the Royal Aeronautical Society, Fellow of the Institution of Mechanical Engineers, member of the Combustion Institute, member of the Institute of Atomisation and Spray Systems and a member of the International Gas Turbine Institute technical committee on combustion and fuel.

Paul Bogers (see above)



HORTENCIA BARTON American Airlines, Inc.

Hortencia Barton has served as Manager of Domestic Fuel Supply for American Airlines since November 2003. She is responsible for the procurement and management of domestic jet fuel supply, electricity, natural gas and deicing/anti-icing fluids totaling approximately \$7.2 billion annually.

Prior to this position, Hortencia held numerous financial, inventory management and logistic positions in Food & Beverage and Finance at American from 1989 to 2003.

Hortencia is on the Finance Council at her church and is on the Board of Directors for the Flower Mound High School Ice Hockey Club.

Hortencia was born in Monterrey, Mexico and grew up in Houston, Texas. She graduated from Rice University with a bachelor's degree in Managerial Studies. She received her Master of Business Administration degree from the University of Texas at Austin.

Hortencia and her husband, Doug, live in Flower Mound, Texas with their two sons.





XAVIER OH
Airports Council International

Xavier 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, operations and market-based measures.

As the secretary of ACI's World Environment Standing Committee, another 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 mechanical 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.



SESSION 4: INITIATIVES TO PROMOTE COOPERATION

Doris Schröcker (see above)



ANCELMO DE GÓIS Brazil

Ancelmo César Lins de Góis has been a career diplomat since 1994. He has been posted to the Brazilian Mission to the European Union in Brussels (2001-2004) - where he was Head of the S&T Section; and to the Brazilian Embassy in Pretoria/South Africa (2004-2006) - where he was Head of the Economic Section.

In Brasília, he has held positions in the Sciene and Technology Division (1996-1999) and in the Scientific and Technological Cooperation Department (2000). Since November 2008 he is Head of the Division of Services Negotiations, which, among other areas of responsibility, is the unit charged with handling aviation related affairs.

Richard Altman (see above)



MICHEL BALJET
International Air Transport Association

Graduated in 1981: Analytical Chemistry

Over 24 Years working for KLM: laboratory (testing lubes, fuels, hydraulic fluids, drinking water, etc.), Lab. Manager and finally as Master Engineer of Process, Equipment and

Materials Development, developing innovative ideas for the future.

Since 1996 active in fuel business and active in various international groups.

Joined IATA Operations in 2006 as Assistant Director, Technical Fuel Services.



Next to many other fuel related items, project leader of the IATA Alternative Fuels team.



DALE L. SMITH
Boeing Commercial Airplanes

Dale Smith leads the analysis of trends and public policies at the intersections of commercial aviation, energy and the environment for Boeing Commercial Airplanes, including aircraft noise, emissions and aviation alternative

fuels.

Smith, who previously led environmental corporate citizenship activities for the company in the Northwest region of the U.S., has held various leadership positions in the company's Commercial Airplane, Integrated Defense & Space, and Support Services divisions, including finance & cost management, process architecture, and community relations.

Prior to joining Boeing in 1988, Smith managed and consulted political campaigns in the Midwest region of the U.S. and in Washington, D.C. He received his Bachelor of Arts in Political Science in 1983 from Wheaton College (Illinois).

WORKSHOP WRAP UP



MS. FOLASADE ODUTOLA
Director, Air Transport Bureau, ICAO

Ms. Folasade Odutola assumed duties as Director, Air Transport Bureau on 7 May 2007. She holds a Master's degree in Air Transport Engineering from Cranfield University (then Cranfield Institute of Technology), Bedford, UK, and a Bachelor of Science (First Class Hons.)

degree in Aeronautical Engineering from the University of Glasgow, UK. Ms Odutola has worked in the aviation industry since 1977, in an airline, regulatory agencies and an aviation training establishment. She has attended numerous technical and management courses, including manufacturer's courses on many aircraft types, air transport economics, performance enhancement, management for directors and CEOs, management development for senior executives, and management of training courses.



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 professionals for the aviation industry. Prior to that, she worked in the Nigerian civil aviation regulatory system for over 20 years, culminating in the attainment of the position of Director. Airworthiness and Operations Standards in the Nigerian Civil Aviation Authority (NCAA), which was established at the turn of the millennium. During this period, she served as secretary/member of many committees set up to consider issues of high importance to the Nigerian aviation industry among which were the setting up of a national aircraft maintenance hangar as well as the establishment of NCAA and the Nigerian Airspace Management Agency (NAMA), while she organised the first ever ICAO/NCAA regional workshops on safety matters safety oversight and then on operators certification. She played a front line role in the ICAO voluntary as well as the first mandatory safety oversight audits of the country. She was also the Chairperson of a Task Force set up in 2005, to verify airworthiness and operational safety of commercial aircraft operators in Nigeria. Ms. Odutola was charged with the responsibility of setting up the very first air transport licensing branch in the regulatory authority and handled this matter and later commercial duties (air navigation facilities charges, ticket sales tax etc.) and has also participated in bilateral air services agreement meetings and other air transport activities.

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