SWIFT 2012 Session Abstracts and Speaker Bios

(As of Sept 8, 2012)

Contents

Morning Opening Plenary - Tuesday, September 18, 2012

Airline Industry Economics: Past, Present and Forecasted Trends

A discussion of some of the key issues facing the industry in the coming 5-10 years, including the economy, carbon reduction policies, fuel prices, new technologies.

Michael Tretheway, Executive Vice President - InterVISTAS Consulting Inc.

Mike Tretheway is Executive Vice President and Chief Economist the with InterVISTAS Group and President of InterVISTAS Consulting Inc. (Canada) Dr. Tretheway earned a Ph.D. in economics from the University of Wisconsin and served for 14 years as Associate Professor in the Faculty of Commerce and Business Administration at the University of British Columbia, where he continues as an Adjunct Professor. He has served as an advisor to governments, industry and consumer groups in the U.S., Canada, Australia, New Zealand, Africa, and the European Union. He has taught in Canada, France, Brazil, China and Malaysia. Dr. Tretheway is a past member of the Board of Tourism British Columbia, is a member of the editorial board of the Quarterly Journal of Finance and Accounting, and is a member of the Board of Experts of the United Nations World Tourism Organisation. Before co-founding InterVISTAS Consulting in 1997, Dr. Tretheway served as Special Advisor to the President & CEO of the Vancouver International Airport Authority, and was responsible for the marketing of the airport.

ICAO Block Upgrades

ICAO developed the Block Upgrades concept primarily to ensure that aviation Safety is maintained and enhanced while traffic increases, that Air Traffic Management (ATM) improvement programmes are effectively harmonized, and that barriers to future aviation efficiency and environmental gains can be removed, at reasonable cost. The core of the Block Upgrade concept is a pragmatic system of Modules involving communications, navigation and surveillance capabilities linked to four specific and interrelated Performance Areas, namely:

- Airport Operations;
- Globally-interoperable systems and data;
- Optimum capacity and flexible flights; and
- Efficient flight path.

David Gamper, Director, Safety and Technical - Airports Council International

David Gamper is Director, Safety and Technical Affairs at Airports Council International's World Office, where he is responsible for ACI's aerodrome safety and operations policy and guidance. He has been ACI's representative on ICAO's Air Navigation Commission since 2011. Mr Gamper holds a degree in Engineering Science from the University of Cambridge, UK

Morning Breakout Sessions, Tuesday, September 18, 2012

Option 1

Airport Collaborative Decision Making

Airport Collaborative Decision Making (A-CDM) is a management tool to facilitate improved information sharing among all stakeholders, enabling optimized use of local capacity, and informed decision-making under rapidly changing operating conditions and irregular operations. The use of available resources can be constantly optimized, thus improving predictability, capacity, performance resilience and efficiency. The presentation will describe how the widespread introduction of A-CDM can benefit airports and their users around the world. It reports on the project being set in place by ACI World, together with the regions and with an industry partner for this project, CANSO, to implement A-CDM pilot projects with the objective of facilitating globally harmonized A-CDM systems.

David Gamper, Director, Safety and Technical - Airports Council International

David Gamper is Director, Safety and Technical Affairs at Airports Council International's World Office, where he is responsible for ACI's aerodrome safety and operations policy and guidance. He has been ACI's representative on ICAO's Air Navigation Commission since 2011. Mr Gamper holds a degree in Engineering Science from the University of Cambridge, UK

Option 2

Best Practices in Airfield Asphalt Pavement Maintenance

A discussion of the various methods for crack repair in Asphalt runways and taxiways. Topics to include; Identify the type of crack, Preparation for application and Different application methods.

Tim Morris, Area Sales Manager, International Sales Division - Crafco Inc.

Tim has more than 30 years of Sales and Technical experience in the Asphalt Rubber industry. With Crafco Inc for almost 30 years he has seen many changes in the industry in both North America and throughout the world Tim's areas of responsibility are Asia Middle East, Canada and the US Military outside of the US.

Option 1

The Alberta Oil Sands Airports: Trans-Con To Bush Strips

The Alberta Oil Sands hold more than 170 billion barrels of recoverable oil with a service life expected to be ~100 years. The energy sector has turned to commercial aviation in support of the current Fly-In, Fly-Out model of labour supply throughout the area. Aggregate traffic numbers for the Oil Sands airfields rival those of the Fort McMurray airport (15th largest in Canada) – itself a critically important cog in the

development of this strategic national resource. Some 40+ Oil Sands airports are presently in operation – ranging from 7500' runways supporting critical aircraft in the B767-300ER class and whose operating procedures and on-site equipment would rival many of the country's NAS airports to 2000' rough field strips supporting DHC-6 operations. RP Erickson & Associates has completed the first comprehensive review of air transportation within the Oil Sands region. This presentation will provide insights into what is unquestionably - the largest private air play on the continent.

Rick Erickson, Principal - RP Erickson & Associates

The Calgary-based firm provides professional consulting services to the aviation industry. The company has qualifications in the disciplines of market research, strategic planning, air services development, economic and statistical analysis, government policy formation, corporate and external communications, and strategic advocacy.

Option 2

Best Practices In Airfield Concrete Pavement Maintenance

Short review of available techniques and materials. Both partial and full depth repairs will be addressed. Long term as well as temporary solutions together with importance of correct installation methods will be discussed.

Hakan Ekim - Teknika Inc. Toronto

Hakan Ekim holds B.Sc degree in Engineering Physics and Post Graduate Diploma in Corrosion Engineering from Hull University and UMIST Manchester in the UK respectively. He has in excess of 30 years of international work experience in concrete repair and protection. Significant amount of his time has been devoted to concrete pavement rehabilitation. Hakan Ekim is currently the president of Teknika Inc. Toronto.

Afternoon Breakout Sessions – Tuesday, September 18, 2012

Option 1

SNOWTAM workshop

SNOWiz Go Live.

Olivier Meier, Manager - AIM Projects and Program, NAV CANADA

The SNOWiz application and SNOWiz web service are scheduled to go live October 1st 2012. This will mark a milestone in RSC reporting automation in Canada. The presentation will explain what will change and how airports can sign up for the program.

Olivier Meier is a certified PMP working as Project Manager in the AIS department at NAV CANADA, the Canadian Air Navigation Service Provider. His current responsibility is the ICAO NOTAM/SNOWTAM transition in CANADA. He is trained as an Air Traffic Controller and holds a degree in Software Engineering and IT Project Management. Prior to his arrival in Canada 5 years ago, he worked for Skyguide, the Swiss Air Navigation Service Provider. His last position held was Project Portfolio Manager for the AIM department. Upon his arrival in Canada Olivier Meier initially worked as a Project Manager for the International Air Transport Association (IATA) in Montreal, where his main responsibilities were 3 main Industry Cost Reduction Projects. He specializes in complex projects with extensive external stakeholder involvement where he can apply his excellent communication, leadership and change management skills. He is fluent in German, English and French. Currently Olivier Meier resides in Montreal with his wife and his two kids.

Developing the Next Generation of Airfield Condition Reporting Systems.

Leonard Taylor, President & CEO – Tradewind Scientific Ltd.

As part of Canada's move towards harmonization with ICAO standards, the next generation of Airfield Surface Condition Reporting Systems is currently in development. By leveraging Tradewind Scientific's extensive experience with end-to-end electronic AMSCR systems in Scandinavia and elsewhere, we have been able to create an innovative new platform for report generation. Working alongside NAV Canada to implement the latest changes has been a challenging but productive experience.

Leonard Taylor is the President & CEO of Tradewind Scientific Ltd. based in Ottawa, Canada. The company is focused on the provision of specialized technical testing services and products to airports worldwide. In this capacity, Leonard has been responsible for the management of airport runway friction and roughness testing programs using state-of-the-art equipment for more than thirty years. Leonard is an active participant in a number of international committees and forums concerning airfield surface condition monitoring and the harmonization of ICAO runway friction measurement and SNOWTAM reporting processes. Recent major projects include the implementation of a nation-wide network of TRACR II winter reporting systems at some 50 Norwegian civil & military airports. Leonard Taylor holds both an Honours B.Sc. from Trent University (Peterborough, Ontario, Canada) and post-graduate M.Sc. and B.Ed. degrees from Queen's University (Kingston, Ontario, Canada).

Executive Overview of Toronto Pearson's Adoption of SNOWiz and Changes to AMSCR.

Robin Hollett, Manager, Runways/Taxiways – Toronto Pearson, Greater Toronto Airports Authority

Executive overview how Toronto Pearson is managing changes as a result of changes to the *Canadian NOTAM Procedures Manual* (CNPM), and the new version of the Aircraft Movement Surface Condition Report (AMSCR) and Canadian Runway Friction Index (CRFI) form.

Robin is currently employed with the Greater Toronto Airports Authority in the capacity of Manager, Runways & Taxiways. Robin heads up a team of 90 Airfield Maintenance personnel responsible for maintaining the integrity of Toronto Pearson's manoeuvring area. Robin is no stranger to the airport business as he held several positions over his 14 year tenure at Toronto Pearson including Manager Operations, Manager, Technical Maintenance and Airport Duty Manager. He has also worked as a Senior Construction Inspector for an International engineering firm for 5 years during the peak of Toronto Pearson's airport development program and he has held a fixed wing pilot's license for over 20 years.

Paul Cudmore, General Manager/COO - Team Eagle Ltd

An overview of the challenges and opportunities during Team Eagle's involvement with the NAV CANADA SNOWTAM project, including milestones and lessons learned during build and delivery + a forecast on future implementations and overall runway condition reporting/winter operations management improvement possibilities

Paul Cudmore has been the General Manager & Chief Operating Officer at Team Eagle for the past eight years, being actively involved in the organizations growth strategy, which includes the support of new products and services, industry partnerships and overall team development. Paul is also involved in many Team Eagle industry initiatives including projects with the FAA & NAV CANADA, and recently completed a 3 year term as the Corporate Member of the IAAE Canada Board of Directors. Paul holds both a Masters in Business Administration and a degree in General Science from the University of Guelph, Ontario, Canada.

SNOWTAM And Runway Surface Condition Reporting Changes.

Bruce Applin, Manager, Airside & Groundside Services And Safety Management Systems - Winnipeg Airports Authority Inc.

Panel discussion with Nav. Canada. Bruce, along with WAA airfield foremen and IT specialists, is representing airports by assisting in the development of SNOWTAM the program.

Bruce Applin started his career in airports in 1985 with Transport Canada at Winnipeg James Armstrong International Airport and has enjoyed being part of the evolution of the airport. Married to his beautiful wife Cindy for about as long as he has been married to the airfield. Two grown children away from home attempting to solve the world's problems.

Option 2

An Innovative Approach Used to Locate and Repair a Runway Roughness Event at YYZ

Modern aircraft have sophisticated instrumentation on board designed to monitor the structural health of each aircraft. This data was used to isolate and quantify a runway roughness event at YYZ. Once isolated, computer simulation of the aircraft experiencing the roughness was used to optimize an effective repair.

Kevin Chee, Senior Engineer, Airside Civil - Greater Toronto Airports Authority

Kevin Chee graduated in Civil Engineering from University of Waterloo in 1993 and is a registered professional engineer in the Province of Ontario since 1997. He has been working in the field of airfield design and construction since 1992. He is currently the Senior Engineer of the Airside and Infrastructure design department for the Greater Toronto Airports Authority where he manages the airfield assets, 5-year capital restoration program, and in-house design for all restoration projects.

Tony Gerardi, President - APR Consultants Inc

Mr. Gerardi is retired from the US Air Force (civilian) where he was Chief Engineer for the aircraft Structural Integrity Branch at Wright Patterson AFB, Ohio. He retired in 1993 and formed APR Consultants, which specializes in airport pavement smoothness evaluation. He is an active member of the ASCE Air Transport Division's Airfield Pavements committee and has served as chairman of the subcommittee on Airport Pavement Ride Quality Criteria. Mr. Gerardi has an MS in Aeronautical Engineering from University of Dayton.

Option 1

SNOWTAM Workshop (Continued)

Option 2

Challenges and Solutions to Airfield Pavement Design and Construction in Remote Areas in the North with Extreme Climatic Conditions – A Case Study

This presentation discusses the unique challenges that can be encountered during the design and construction of airfield pavements in remote areas and under harsh climatic and soil conditions in the North. The case study will identify the problems encountered and the solutions that were implemented to overcome these issues. The case study is about the runway pavement at Churchill Falls Airport in Labrador. The airport is located in a very remote area with a limited number of paving contractors and limited access to good paving materials. In addition to the remoteness of the airport, it also experiences harsh winters and a frost penetration depth of approximately 3.0 m below the ground surface. Sub-grade soils at the airport are comprised of a frost susceptible glacial till underlain by a shallow,

undulated bedrock. Extensive Ground Penetrating Radar (GPR) survey was carried out to determine the shape of the bedrock. The primary distress on the runway pavement was extensive frost heaving resulting from frost susceptible soils, shallow bedrock, deep frost penetration and high water table. The shallow bedrock was also one of the major challenges during construction, particularly during deep subdrain installation. Production of good quality hot-mix asphalt and hauling it from a distant plant to the runway was another significant challenge.

Ludomir Uzarowski, Ph.D, P.Eng, Principal, Pavement & Materials Engineering - Golder Associates Ltd

Dr. Uzarowski is also an adjunct professor at the University of Waterloo, Department of Civil and Environmental Engineering. He has a Ph.D. in Civil Engineering from the University of Waterloo and Master of Science in Highway Engineering from the University of Nottingham, U.K. and from Gdansk Technical University in Poland. Dr. Uzarowski has 37 years of experience. He has written 51 technical papers and made more than 110 presentations on pavement and materials technology in Canada, U.S., Europe and Japan. In 2009, Dr. Uzarowski received a prestigious Willis Chipman Award from Consulting Engineers of Ontario for Perpetual Pavement on the Red Hill Valley Parkway in Hamilton, Ontario, Canada.

Option 1

<u>NOTAM Procedures Workshop</u>

My team is developing the standards for the NOTAM and SNOWTAM as well as the ongoing development of NOTAM standards. I have developed the new AMSCR form and have participated in the development of SNOWiz (SNOWTAM Wizard). I will be accompanying Mr. O. Meier and answering questions other participants may have.

Caroline Doucet - NAV CANADA

- Commercial Pilot license
- With NAV CANADA for 13 years; worked at the NOTAM office for 7 years and in AIM Development for 3 years

Olivier Meier, Manager - AIM Projects and Program - NAV CANADA

Olivier Meier is a certified PMP working as Project Manager in the AIS department at NAV CANADA, the Canadian Air Navigation Service Provider. His current responsibility is the ICAO NOTAM/SNOWTAM transition in CANADA. He is trained as an Air Traffic Controller and holds a degree in Software Engineering and IT Project Management. Prior to his arrival in Canada 5 years ago, he worked for Skyguide, the Swiss Air Navigation Service Provider. His last position held was Project Portfolio Manager for the AIM department. Upon his arrival in Canada, Olivier Meier initially worked as a Project Manager for the International Air Transport Association (IATA) in Montreal, where his main responsibilities were 3 main Industry Cost Reduction Projects. He specializes in complex projects with extensive external stakeholder involvement where he can apply his excellent communication, leadership and change management skills. He is fluent in German, English and French. Currently Olivier Meier resides in Montreal with his wife and his two kids.

Option 2

Best Practices for Airport Concrete Pavement Construction

In October, 2011 the ACPA published an updated version of the Innovative Pavement Research Foundation's (IPRF) Best Practices Manual. The new publication incorporated much of the research reports published by the IPRF. This presentation will provide an overview of the new publication and provide a brief overview of best practices for concrete pavement construction.

Gary L. Mitchell, P.E., Vice President, Airport & Pavement Technology - American Concrete Pavement Association

As ACPA's Vice President of Airports and Pavement Technology, Mr. Mitchell serves as the primary technical contact for design, construction, materials, and rehabilitation topics related to airfield facilities. He also serves on various committees and advisory boards including the FAA's Research Engineering and Develop Advisory Committee (REDAC) Subcommittee on Airports. Mitchell holds a Master's Degree in Structural and Construction Engineering from North Carolina State University as well as a Bachelor's Degree in Structural Engineering from Vanderbilt University. He holds licenses as a Professional Engineer in the states of Florida, Georgia, Kentucky, North Carolina, South Carolina and Tennessee.

Option 1

FAA Airport Technology R&D Activities Pertaining to Airport Runway Safety

FAA Airport Technology R&D has been actively engaged in addressing the safety of aircraft landings on contaminated runways (i.e. water, slush, ice, and snow). This has included participation in the Takeoff and Landing Performance Assessment Aviation Rulemaking Committee (TALPA ARC) Runway Condition Matrix Validation Effort. In addition, a research project has also been initiated to examine aircraft braking performance during landings on contaminated runway surfaces.

Joseph Breen, P.E. General Engineer - Federal Aviation Administration

Joseph Breen is a General Engineer in the FAA's Airport Technology R&D Branch at the William J. Hughes Technical Center in Atlantic City, New Jersey, U.S.A. He is the Program Manager on a project evaluating aircraft braking performance during landings on contaminated runways. Joseph holds B.S. and M.S. Degrees in Mechanical Engineering from Widener University, Chester, Pennsylvania and is a Registered Professional Engineer in the State of Pennsylvania.

Option 2

Runway Concrete Slab Replacement in Record Time at YVR

Runway maintenance, repairs and upgrades are essential to normal and safe operation at all airports; however, because runways at busy commercial airports are often used on a 24-hour basis, crucial

maintenance requires careful planning and scheduling. Removal and replacement of eleven panels over five different areas of Runway 08L-26R, and returning the runway back to service after 46-hour runway closure was made possible by using Lafarge Canada's Chronolia® concrete at the Vancouver International Airport.

Lincoln Chan, PEng. Principal Project Manager - Hatch Mott MacDonald

Lincoln Chan is an Associate and a Principal Project Manager in the Vancouver office of Hatch Mott MacDonald. Lincoln has extensive knowledge in airport planning, design and construction. He has been actively involved in majority of the Vancouver International Airport's capital projects for the last 13 years, and is currently managing over 10 airfield projects.

Morning Breakout Sessions – Thursday September 20, 2012

Option 1

Friction Panel: Runway Surface Friction Reporting.

Thomas J. Yager, Consultant and NASA Distinguished Research Associate - Yager Enterprises LLC, retired NASA Langley Research Center

This presentation describes scope of reporting requirements, test equipment available, and pertinent reference documents. Seasonal test monitoring of runway pavement friction performance is discussed and aircraft operational limitations are identified.

Thomas J. Yager is a retired senior research engineer at the National Aeronautics and Space Administration's (NASA) Langley Research Center in Hampton, Virginia. He was the NASA Program Manager for the Joint Winter Runway Friction Measurement Program. He has authored or co-authored over 140 technical reports, articles and presentations describing the results of his studies. Tom has been recently given the title of NASA Distinguished Research Associate in order to complete two research reports.

Friction Measurement and Runway Condition Assessment.

Joerg Simon, Head of Airport Operations -Munich Airport International

Starting with a summary of the historical development of surface friction measurement and how it all began, the presentation gives a brief overview about today's situation and a possible future alternative for an automated runway reporting system.

After a professional training as ATC controller Joerg Simon moved to the Airport Operations Department of Munich Airport International and has been working in this field for more than 20 years, the last 3 years as head of the department. Joerg is also a member of the ICAO Friction Task Force, representing Germany in this group.

Runway Friction and the High Reliability Organization.

John Gadinski, President - Four Winds Consulting

High reliability organizations pose unique safety management requirements. Because airlines perceive risk in unique ways, the interaction between airports and airlines highlights the how concepts such as probability and resilience affect how differently pavement friction can be viewed by each.

John Gadzinski served in the US Navy where he flew the F-14, the A-4 Skyhawk, and a senior landing signals officer with 322 carrier landings. Party to the 2005 NTSB investigation on the MDW overrun, John was a founding member of the International Friction Pavement Association and served on the FAA's rule making committee on airline takeoff and landing performance.

ICAO Friction Task Force Update.

Armann Norheim, Rapporteur ICAO Friction Task Force - ICAO

An update from the Friction Task Force perspective on developing a global reporting format for reporting the runway state condition with respect to the safe operation of aircraft and review of ICAO Standards, Recommendations and guidance material related to surface friction characteristics in the important tyre-to-ground interface.

Armann Norheim is an engineer, consultant and a Norwegian native. He has over 20 years of experience in management of airports with special focus on pavement surface conditions and reporting. He has worked for the governmental Norwegian airport owner Avinor and at an Arctic research station at Svalbard. Since 2008 he has been the leader of the ICAO Friction Task Force (FTF)

Option 2

Runway Grooving, Norman Wells, NWT

Following user complaints of poor braking action on the runway in Norman Wells, NWT, the GNWT grooved the surface and is pleased with the results. This session presents:

- The problem with the runway surface
- Grooving as the selected solution
- Results of grooving and lessons learned

Aldin Jansen, Project Engineer - Government of the Northwest Territories, Department of Transportation, Airports Division

Aldin Jansen is the in-house civil engineer responsible for design, construction, management, coordination, and delivery of civil capital and major operations-and-maintenance projects for the GNWT Department of Transportation—Airports Division. Mr. Jansen has a degree in civil engineering from the University of Manitoba in Winnipeg and has been working in the aviation field in Yellowknife, NWT, for twelve years. Before joining the GNWT he worked as a geotechnical engineer and as a Flight Service Specialist.

Option 1

Friction Panel: Runway Surface Friction Reporting (continued)

Option 2

Existing And Potential Maintenance Techniques For Low Volume/Municipal Airport Runways

Low volume/municipal airports runways are unique pavements as in many cases they are located in remote areas and access to common paving materials or techniques is not always possible. Pavement degradations are often a function of exposure to the elements rather than traffic loading. This presentation covers a variety of existing and potential maintenance techniques that may be adapted to airfields pavements.

Jean-Martin Croteau, P.Eng. Technical Director - ColasCanada Inc.

Jean-Martin CROTEAU is the Technical Director of ColasCanada Inc. a subsidiary of Colas S.A. a worldwide leader in the construction of transportation infrastructures. In his role, Jean-Martin is responsible to provide technical support to the 40 business units of ColasCanada Inc. located throughout Canada. He is a graduated civil engineer from the Royal Military College of Canada, Kingston, Ontario, and he is a registered professional engineer in Alberta, B.C., Ontario and Quebec. Jean-Martin is an active member and past president of the CTAA (2000), and he is also an active member of TAC.

Option 1

Vegetation Control, Grass Maintenance & Cutting for Small/Medium Airports

This presentation will cover summer operations and the current coordination issues at YYC. It will also examine how YYC has come up with some innovative solutions to minimize airfield incursions. There will be an opportunity during this talk to share knowledge in an open forum setting.

Derwin Hein, Supervisor, Airfield Facilities - Calgary Airport Authority

Derwin has been with the Calgary Airport Authority since 2000. He has spent the last 4 in his current role as airfield supervisor. He has been involved in summer operations and coordination for 8 years, with the last 2 being direct coordination with airside expansion. Derwin was also responsible for the field coordination current pavement restoration and future taxiway infrastructure.

Option 2

Human Factors

John Gadinski, President - Four Winds Consulting

John Gadzinski served in the US Navy where he flew the F-14, the A-4 Skyhawk, and a senior landing signals officer with 322 carrier landings. Party to the 2005 NTSB investigation on the MDW overrun, John was a founding member of the International Friction Pavement Association and served on the FAA's rule making committee on airline takeoff and landing performance.

Option 3

Asphalt Mix Optimization For Airfields

Asphalt mixes for airfield construction require different properties when compared to typical roadway mixes. Some of the issues with asphalt cement selection and asphalt mix design for airfields will be presented.

Alexander (Sandy) Brown, PEng, Canadian Regional Engineer, Director, Ontario Hot Mix Producers Association - Asphalt Institute

Sandy Brown is a professional engineer registered to practice in Ontario. Sandy has worked for over 30 years as a consultant in geotechnical and materials engineering, 24 years of which were with Golder Associates Ltd. In 2005, Sandy started in a shared position as Technical Director for the Ontario Hot Mix Producers Association and Canadian Regional Engineer for the Asphalt Institute. In these roles, he offers expert advice and training to the paving industry and owners regarding pavement design, asphalt mix design and pavement issues across Canada and the United States. Sandy also serves as a Friend on the FHWA Mix Expert Task Group, FHWA Binder Expert Task Group and the FHWA Pavement Sustainability Technical Working Group.

Option 1

Cargojet B727 Over-Run At The Greater Moncton International Airport – An Operations Perspective On Aircraft Recovery

On Wednesday, March 24 2010 at approximately 0310 local time, a B727 cargo aircraft exited runway 06 at the Greater Moncton International Airport. What impact did this have on airport operations, and what should you consider for a similar aircraft recovery at your airport. More importantly, what, if anything, was learned that may prevent future occurrences?

Chris Farmer, Director of Operations - Greater Moncton International Airport

Chris Farmer is currently the Director of Operations at the Greater Moncton International Airport, a role he has filled for the past 10 years. Prior to joining the Moncton team he was at the Halifax Stanfield International Airport for 10 years as an airport duty manager and later as a planner. Chris worked for Transport Canada as a security specialist after nine years in the military. He has worked on ICAO assignments as a technical specialist in airport operations. He is a graduate of St. Mary's University in Halifax and Loughborough University in the UK. He has an instrument rated, multi-engine commercial pilot's license and his spare time he trains and competes in long distance triathlon.

Option 2

Diversions / Irregular Operations (IROPS) Planning for Large and Small Airports

Unexpected diversions into an airport of any size pose problems for airport operators. The United States Congress has mandated that airports submit IROPS response plans to the US Department of

Transportation. Sample plans will be discussed at this session, as well as the availability of an IROPS contingency planning guidebook and how to establish a regional airport communication network to more effectively respond to IROPS events.

Paul Sichko, Assistant Director / MSP Operations MSP – Metropolitan Airports Commission

Paul Sichko is an Assistant Director / MSP Operations at Minneapolis-Saint Paul International Airport (MSP). He is responsible for the field maintenance and airside operations departments. He has been with the Metropolitan Airports Commission since 1989. Sichko has a Bachelor of Arts degree in Aviation Administration from Augustana (SD) College, where he also earned a single-engine land aircraft rating. He was a member of the Takeoff and Landing Performance Assessment (TALPA) rulemaking committee that has submitted a proposed runway contaminant reporting system to the FAA. He is also involved in national irregular operations (IROPS) planning and response.

Option 3

Non-Paved Airport Operators' Obligations And Recommendations

This presentation discusses gravel runway airfield obligations and recommendations as they relate to Transport Canada's recent Advisory Circular 300-004, which states 'Canada's most commonly used device is the Boeing High Load Penetrometer.' The heaviest aircraft certified for non-pavement operations have not had a single runway-related safety incident when Boeing's methodology is correctly applied.

Link to download AC 300-004: http://www.tc.gc.ca/eng/civilaviation/opssvs/managementservices-referencecentre-acs-menu-455.htm

Gord Drysdale, President - CBR Technology Inc.

Former military and commercial pilot with 25,000+ flight hours, Gord Drysdale has successfully used Boeing's CBR methodology for over 25 years. His company, CBR Technology Inc. is considered Canada's leading gravel runway expert. CBR Tech also offers a range of services including surveys, AWOS and radio installation and inspections.

Afternoon Breakout Sessions – Thursday September 20, 2012

Option 1

PANEL: Runway Surface Friction Management Practices: Rubber Removal, Testing Programs, Surface Texturing, Grooving,

United States Air Force Airfield Damage Repair - Contingency Rubber Removal

The USAF ADR program is being modernized for damage assessment, crater repair, pavement sustainment, and rubber removal using new material and updating equipment over existing capabilities. This presentation will focus on contingency rubber removal.

Runway rubber removal is a maintenance function employed to ensure safe landing areas for aviation operations. Rubber deposits accumulate on runway areas where aircraft tires touchdown and braking occurs. This tire rubber build up occludes pavement micro texture and macro texture, causing a significant loss in available skid resistance during wet conditions. Reduction of available pavement micro texture in a wet environment prevents the development of adhesional friction which can result in viscous hydroplaning.

To restore friction to safe levels for aircraft operations, rubber must be periodically removed. Several techniques for rubber removal are available. Waterblasting, detergent (chemical), bead blasting, and others methods are proven technologies. This presentation will summarize results of a two contingency rubber removal capabilities, field evaluations, and final recommendations to the USAF.

Thomas J. Yager, Consultant and NASA Distinguished Research Associate, Yager Enterprises LLC, retired NASA Langley Research Center

This presentation identifies runway pavement issues such as removal of rubber deposits, friction testing to determine wet pavement performance and complete remedial treatments as necessary cold, winter weather sets in. A variety of problem solutions are identified to improve the runway operational safety.

Thomas J. Yager is a retired senior research engineer at the National Aeronautics and Space Administration's (NASA) Langley Research Center in Hampton, Virginia. He was the NASA Program Manager for the Joint Winter Runway Friction Measurement Program. He has authored or co-authored over 140 technical reports, articles and presentations describing the results of his studies. Tom has been recently given the title of NASA Distinguished Research Associate in order to complete two research reports.

Runway Surface Friction Management Practices

Will identify Seattle-Tacoma International Airport's (Sea-Tac) runway pavement inspection & discrepancy reporting procedures and the means and methods we use to measure, identify, and correct deteriorating coefficient of friction levels on our runway surfaces.

John Christianson, General Manager Aviation Maintenance - Port of Seattle, Seattle-Tacoma International Airport

In 1973 I started my career in Airport maintenance when I joined the Port of Seattle as a member of the airfield maintenance crew at Seattle Tacoma International Airport. After 14 years I was promoted to the position of Airfield Maintenance Superintendent. After a series of other internal department promotions and 25 years with the Port, I was chosen lead the airport maintenance organization as the General Manager of Aviation Maintenance. In this current role, I have airport wide maintenance responsibilities and lead a team of over 350 dedicated maintenance professionals.

R. Craig Mellerski, Civ, DAF, Senior Research Civil Engineer & Program Manager
Pavement & Ballistics/Blast Protection Research Programs - Air Force Research Laboratory

Craig is currently a Senior Research Civil Engineer and Program Manager for the Airfield Operating Surfaces and Engineering Mechanics and Explosive Effects Research Groups at the Air Force Research Laboratory, Materials and Manufacturing Directorate, Airbase Technologies Division, Tyndall Air Force Base, Florida.

David Rigsbee - Chemtek

Airfield Pavement Friction Maintenance at Denver International Airport

Operational forces utilize several different methods to test and maintain the desired levels of friction on the concrete runways at DIA. These methods will be explained along with other related observations.

Keith E. Johnson, Senior Engineer-Airfield Construction - Denver International Airport

Keith Johnson has been the Senior Engineer for Airfield Construction and a project manager for four years at Denver International Airport. He is an active registered Professional Engineer in Colorado and Iowa and is an Accredited Airport Executive. He has civil engineering degrees from the University of Nebraska and the University of Illinois.

Option 2

PANEL: Equipment: Developments In Multi-Role, Restoration Programs, Purchasing Strategies. Getting The Best Value From Your Vehicle Fleet.

Preston "Benny" Benedyk, Air Force Civil Engineer Vehicle Program Manager - Headquarters, Air Force Civil Engineer Support Agency (AFCESA)

An Overview Into Vehicle Optimization Strategies.

The objective of vehicle optimization for any agency is to get the best value for their investment and maximum life expectancy from their vehicles by using quality management, continuous improvement process, life cycle analysis, preventive/corrective maintenance, remanufacturing, and proper human resource management.

Preston "Benny" Benedyk is the United States Air Force Civil Engineer Vehicle Program Manager, Headquarters Air Force Civil Engineer Support Agency, Tyndall Air Force Base, Florida. Benny has over 28 years military and civilian heavy construction equipment experience and currently responsible for developing minimal configuration standards for all Civil Engineer base maintenance, construction, and snow removal vehicles. He holds a Masters Degree in Operations Management from the University of Arkansas and a Bachelors Degree in Industrial Technology, Southern Illinois University.

Mike Carlson, Airport Operations Manager - Denver International Airport

DIA Considerations During The Selection Process Of Multi-Function Equipment And The Procurement Of The Equipment.

Testing and final selection process of multi-function equipment in order to optimize the DIA Snow & Ice Control Plan. Considerations included equipment life cycle, maintenance of and operating cost of the equipment, the benefits of multi-function equipment and efficiencies and strategies to procure the equipment. Equipment configurations during snow removal will also be discussed.

Mike Carlson:

- 17 years with Airport Operations at DIA as both Assistant Airport Operations Manager (5 years) and Airport Operations Manager (12 years)
- Airport Operations Lead Airfield Trainer
- Oversight of the DIA Snow & Ice Control Plan
- B.S. – Aviation Management
- ACE - Operations

Sylvain Marchand, Assistant Director Airfield and Mobile Equipment - Montréal-Trudeau Airport

Discussion of the benefits of fleet renewal, equipments modifications and improvements at Montreal-Trudeau, the involvement of his team and supervisors generated efficiency on and off the airfield.

Sylvain joined the field engineers regiment 1979 as a heavy equipment operator in the Canadian Forces, in 1985 started as a seasonal equipment operator and in 1998 began his permanent career as airfield

maintenance team leader. Sylvain became supervisor Airfield maintenance in 2000 and now manages both the airfield maintenance and mechanic's department at Montréal-Trudeau Airport.

Option 1

Effectively Managing Fatigue in the Workplace

Fatigue is present, particularly in 24/7 work environment. Effectively managing the risk associated with that fatigue requires understanding the elements of fatigue, proper scheduling using sleep science, education of all equal stakeholders, and a proactive system of monitoring/correcting the schedule process to minimize the threat that fatigue presents.

Greg Whiting, Captain - Airline Pilots Association, International

Currently Greg is a B777 Captain for United Airlines operating primarily internationally. During the 33 years he has been associated with United, he has also flown B727, DC-10, B737, B757, and B767 aircraft. From 1980 to 1985 Greg was Operations Manager and Assistant to Regional Vice President. He acted as UAL Station Manager at Edmonton and Calgary. For the past fifteen years he has been heavily involved with pilot scheduling at UAL on behalf of the Airline Pilots Association (ALPA). These efforts lead to a position on the Airline Pilots Association's National Flight Time/Duty Time Committee in 2006. During the summer of 2009, he participated on with the Aviation Rule Change (ARC) group in Washington DC in response to pilot fatigue. This work will culminate with a proposed rule change in 2011 to the current FAR's. He currently is the ALPA Chairman of the Fatigue Mitigation Implementation Committee. Greg also completed a career with the USAFR in 1996 with combined active and reserve activity of 23 years flying the C-141 as a flight examiner, chief of standardization and flying safety officer. Married for forty-two years with two grown daughters and resides in Puyallup, WA.

Option 2

ROUNDTABLE -

This is a roundtable discussion on a variety of topics that affect all types of airfield maintenance operations. Topics will include snow control operations, cost effective airfield winter maintenance, budget constraints, operator training, deicing products and aircraft, right-sizing your vehicle fleet, safety and much more.

Facilitator: Preston "Benny" Benedyk - United States Air Force

Preston "Benny" Benedyk is the United States Air Force Civil Engineer Vehicle Program Manager, Headquarters Air Force Civil Engineer Support Agency, Tyndall Air Force Base, Florida. Benny has over 28 years military and civilian heavy construction equipment experience and currently responsible for developing minimal configuration standards for all Civil Engineer base maintenance, construction, and snow removal vehicles. He holds a Masters Degree in Operations Management from the University of Arkansas and a Bachelors Degree in Industrial Technology, Southern Illinois University.

Option 3

Full-Scale Testing on Asphalt of Heavily Loaded High Inflation Pressure Aircraft Tires

A description is given of a series of full-scale high tire pressure (HTP) tests conducted on hot-mix asphalt (HMA) surfaced pavements at the FAA National Airport Pavement Test Facility (NAPTF) in collaboration with the Airport Technology group of Boeing Commercial Airplanes. The tests were performed in response to a proposal that the upper tire pressure limit for PCN reporting be raised from 1.50 to 1.75 MPa and consisted of running 49x19-20 36-Ply aircraft tires on heated asphalt pavements at 23.8 MT (52,500 lbs) and 27.8 MT (61,300 lbs), and at 1.45 MPa (219 psi) and 1.69 MPa (245 psi). The upper tire pressure limit has since been raised by ICAO to 1.75 MPa.

Gordon Hayhoe, Technical Director, Pavement R&D, U.S. DO - Federal Aviation Administration

General Engineer in the Airport Technology R&D Branch, Pavement Section, ANG-E262, the FAA William J. Hughes Technical Center, Atlantic City International Airport, New Jersey, U.S.A. Technical Director of Pavement R&D and also working on quantifying aircraft braking performance on snow and ice contaminated surfaces. Employed by the FAA for fifteen years. Member of ASTM Committees E17 (Vehicle-Pavement Systems) and F09 (Tires), and a member of SAE. Earned Master's and Doctoral degrees from the Cranfield Institute of Technology, Bedford, England.

Option 1

Safety Culture

WESTJET safety culture
Overall brief about WESTJET's SMS process
Reporting culture

Ajit (AJ) Borawake, Flight Safety Investigator - WESTJET

AJit Borawake is an experienced aviation professional with 16 years aviation experience in various operational positions with various carriers. His roles, current and past include: WESTJET Flight Safety Investigator, North-West Air-Link Flight Dispatcher, American Eagle Flight Dispatcher. AJ's credentials include: Certified Accident investigator, PILOT's license, FAA and Transport Canada Flight Dispatcher, Post graduate in Aviation management.

Option 2: Roundtable (continued)

Option 3

Late Season/Cold Weather Paving

The simple advise is always have good summer weather for paving but this is a bit naive. Many factors conspire to delay paving until we are in less than ideal conditions. Coping with the conditions that we have and making some alterations to procedures is the key to a successful outcome.

Alexander (Sandy) Brown, P Eng. Canadian Regional Engineer, Director, Ontario Hot Mix Producers Association - Asphalt Institute

Sandy Brown is a professional engineer registered to practice in Ontario. Sandy has worked for over 30 years as a consultant in geotechnical and materials engineering, 24 years of which were with Golder Associates Ltd. In 2005, Sandy started in a shared position as Technical Director for the Ontario Hot Mix Producers Association and Canadian Regional Engineer for the Asphalt Institute. In these roles, he offers expert advice and training to the paving industry and owners regarding pavement design, asphalt mix design and pavement issues across Canada and the United States. Sandy also serves as a Friend on the FHWA Mix Expert Task Group, FHWA Binder Expert Task Group and the FHWA Pavement Sustainability Technical Working Group.

Keynote Dinner – Thursday September 20, 2012

Lessons from QF32

Richard de Crespigny was in command of the world's largest and most advanced commercial jetliner on November 4 2010 when he and his fellow officers were faced with their greatest challenge.

He had dead-headed to Singapore from Sydney to take control of the continuation of QF32 (London origin) to Sydney. Four minutes after takeoff, just as the aircraft was settling into a comfortable and quiet climb, one engine spectacularly exploded. The damage to the aircraft was extraordinary. On top of ensuring that 440 passengers remained calm during the ordeal, he had a mammoth fight on the flight deck to keep the aircraft in the air and then get it back on the ground safely. For two hours he and his fellow crew (technical and cabin) remained calm as they planned how to stabilise the damage, configure the overweight aircraft then manoeuvre towards Changi Airport in Singapore and land. Once on the ground, a recalcitrant engine refused to shut down, fuel was leaking near white-hot brakes and a new environment was set for potential disaster. Passengers remained on board for two gruelling hours before they were safely disembarked.

Richard will explain in vivid detail the drama aboard the aircraft once the engine exploded. How did he keep them calm? How was panic averted? He will explain why he made the decision to keep passengers on board - why using a slide evacuation posed too many dangers. His address will contain important messages regarding teamwork, problem solving, judgement, knowledge, experience and putting years of highly-skilled training into practice. Finally he will discuss the after effects of such a pivotal event and how his life has changed forever.

Captain Richard Champion de Crespigny

1957 Born - Melbourne
1974 Matriculation (Melbourne Grammar)
1975 Joined RAAF Academy (Point Cook)
1979 BSc and Grad Dip MilAv (Melbourne University)
1979 RAAF Pilot's course
1980 Posted to Caribou Transport (38 Squadron, Richmond)
1982 Aide-de-Camp to Sir Zelman Cohen and Sir Ninian Stephen
1983 Posted to Iroquois (helicopter) (5 Squadron, Canberra)
1984 Posted to Sinai Desert (Egypt)
1984 Posted to Fighter Introduction Course and Fleet Support (Williamtown)
1986 Posted to RAAF Instructor's Course / Resigned from RAAF (Flight Lieutenant)
1987 Started "Aeronaut Industries Pty Ltd" - Computer software distribution and development
1986 Joined Qantas Converted to Boeing 747-200 & 300 (Classic)
1989 Converted to Boeing 747-400
2004 Converted to Airbus A330
2008 Converted to Airbus A380
4 Nov 2010 QF32!

- Married: Coral Mae Ford
- Children: Alex (b 1989) and Sophia (b 1990)
- Flying Hours: 15,000 (since 1976)