TECHNICAL PROGRAM

Opening Session

1:00 pm to 2:00 pm Room: Provinces

Harmonizing Geospatial Activities Across the World's Longest Common Border

Mark Corey, Assistant Deputy Minister, Earth Sciences Sector, Natural Resources Canada, Canada



Mark Corey

Mark Corey previously was Vice-President / ADM of The Leadership Network (part of the Treasury Board Portfolio); ADM, Market and Industry Services Branch at Agriculture and Agri-food Canada; and Associate ADM, Operations Sector at Industry Canada. He has held several positions with NRCan, including Director General, Mapping Services Branch; Director, Geodetic Survey of Canada; Director, Products and Services Division; and Director, Strategic Planning.

Corey is a graduate of the University of Western Ontario, where he obtained Bachelor's and Master's degrees in Political Science. He was a course participant in the Advanced National and International Studies Program at the National Defence College in Kingston.

Timothy R. Petty, Deputy Assistant Secretary for Water and Science, U.S. Department of the Interior, USA

Timothy R. Petty is the Department of the Interior's Deputy Assistant Secretary for Water and Science. In this position, he assists the Assistant Secretary with oversight of the U.S. Geological Survey. Petty, a hydrogeologist with private and public sector experience, worked in the private sector for more than 10 years in California and Indiana as a geologist and a hydrogeologist specializing in structural geology, aquifer testing, ground water well installation, environmental risk assessment, underground water contamination and cleanup. He also worked for a non-profit educational organization in Russia for four years, providing logistical and strategic support for educational conferences. Upon his return to the U.S., Petty served as a senior analyst at the U.S. Department of Energy, assisting the director of Nonproliferation National Security, and most recently, he worked for the U.S. Senate to enhance communications systems using advanced technology resources. Petty has a Master's degree in Executive International Business Management from the University of Maryland's University College and a Bachelor's degree in Geosciences from Purdue University.

Presentation of the 2007 William T. Pecora Award

The William T. Pecora Award is presented by the U.S. Department of the Interior (DOI) and the U.S. National Aeronautics and Space Administration (NASA) to individuals and groups that make outstanding contributions toward understanding the Earth by means of remote sensing. The 2007 individual Pecora Award will be presented during the Opening Session by DOI and NASA representatives.

The award was established in 1974 to honor the memory of Dr. William T. Pecora, former Director of the U.S. Geological Survey and Under Secretary, Department of the Interior. Dr. Pecora was a motivating force behind the establishment of a program for civil remote sensing of the Earth from space. His early vision and support helped establish what we know today as the Landsat satellite program.



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Exhibit Hall

1:00 pm to 7:00 pm Confederation Ballroom

Poster Session

1:00 pm to 7:00 pm Confederation Ballroom

Beverage Break in Exhibit Hall

2:00 pm to 2:30 pm Confederation Ballroom

Technical Sessions

2:30 pm to 3:45 pm

Session 1

Role of the Committee on Earth Observation Satellites (CEOS) in GEO (Group on Earth Observations)

Moderator: Barbara J. Ryan, CEOS Chair, U.S. Geological Survey, USA

Room: Quebec

CEOS – the Satellite Component of GEO

Barbara J. Ryan, CEOS Chair, U.S. Geological Survey, USA

CEOS Activities at the Canadian Space Agency

Daniel De Lisle, *Canadian Space Agency*, Canada

Enhancing Satellite Observations for Climate – Responding to the Global Climate Observing System (GCOS) Implementation Plan

Jean-Louis Fellous, CEOS Executive Officer, CNES/ESA, France

The CEOS Constellations — A Framework for Building the Space Component of GEOSS

DeWayne Cecil, National Aeronautics and Space Administration, USA

Session 2

Homeland Security and Public Safety I — Introductory Panel – Building Capacity to Link Practitioners with Remote Sensing and Geospatial Technology

Moderator: Ed Freeborn, *L-3 Communications*, *GSI*, USA

Room: Ontario

Government, Industry, and Academia Partnerships that Listen to Requirements, and Build What is Needed

Todd Macuda, Institute for Aerospace Research, National Research Council, Canada

Ed Freeborn



Enabling Technology through Collaborative Partnerships with the End User

Stephen Young, Selex Airborne and Sensor Systems, USA

The Geospatial Working Group, a Forum for Coordinating GEOINT Standards for the National System for Geospatial Intelligence

Mark Demulder, National Center for GEOINT Standards, National Geospatial-Intelligence Agency, USA

The Secure Border Initiative (SBI) and SBInet Current Infrastructure and Program Areas, Part I — How Industry Can Work with the Government and Prime Contractor

Alan Runyan-Beebe, Monitron LLC, USA

Session 3

Cross-Border Applications of Remote Sensing

Moderator: Bert Guindon, Canada Centre for Remote Sensing, Natural Resources Canada, Canada

Room: British Columbia

Monitoring Environmental Treaty Compliance using Earth Observing Data

Shaida Johnston, NASA Goddard Space Flight Center, USA

A Role for Remote Sensing in Integrated Land Use and Transportation Planning

Bert Guindon, Canada Centre for Remote Sensing, Natural Resources Canada, Canada

Isobel Heathcote and Ying Zhang

Assessing Population Movement during the Israel-Lebanon Crisis of 2006 using DMSP Imagery

Maria J. Garcia Quijano, *Florida Atlantic University*, USA

Daniele Cerra, Antonio de la Cruz, Marcin Mielewczyk, and Gracia Joyanes

Mapping Insect Defoliation using Multi-Temporal Landsat Data

Sylvia Thomas, Canada Centre for Remote Sensing, Natural Resources Canada, Canada

Alice Deschamps, Robert Landry, Joost van der Sanden, and Ron Hall

Session 4

Snow Cover Mapping

Moderator: Karem Chokmani, *Institut* National de la recherche scientifique (INRS-ETE), Canada

Room: Alberta

Validation of a Weighted Algorithm for Estimating Snow Water Equivalent Over a Fractional Snow Cover

Kim R. Turchenek, *University of Regina*, Canada

Joseph M. Piwowar and Chris Derksen

Historical Snow Mapping over Eastern Canada using Daily NOAA-AVHRR and SSM/I Data for the Validation of the Canadian Regional Climate Model

Karem Chokmani, Institut National de la Recherche Scientifique (INRS-ETE), Canada

Monique Bernier, Alain Royer, Maxime Turcotte, Lisa-Marie Pâquet and Yves Gauthier

Estimation of Snow Correlation Length using Near Infrared Digital Photography

Ally Touré, Université de Sherbrooke, Canada

Kalifa Goïta, Alain Royer, Christian Mätzler, and Martin Schneebeli

Snow Water Equivalent Retrieval in a Sub-Arctic Environment of the North of Quebec from Space-borne Passive Microwave Observations

François Vachon, *Université de Sherbrooke*, Canada

Kalifa Goïta, Danielle De Sève and Alain Royer

Session 5

Panel Discussion — Airborne Digital Mapping

Moderator: Brian Huberty, U.S. Fish and Wildlife Service, USA

Room: Les Saisons

Sponsored by Primary Data Acquisition Division (PDAD). Organized by Brian Huberty, U.S. Fish & Wildlife Service

Aerial Imaging is in a period of rapid growth and change with new technologies, new customers, and new missions. This is a select panel of digital camera manufacturers and operators from across North America to talk about the highlights and a few pitfalls of these new airborne digital mapping cameras.

Panelists

Mike Claassen, *Groupe Alta*, Canada Dave Stonehouse, *Verimap*, Canada Eric Liberty, *Applanix*, Canada Qassim Abdullah, *Fugro EarthData*, USA

Technical Sessions

4:15 pm to 5:30 pm

Session 6

The CEOS Constellations — The Space Component of GEOSS

Moderator: DeWayne Cecil, *National*Aeronautics and Space Administration, USA
Room: Quebec

The CEOS Constellation for Atmospheric Composition

M.L. Melo, *Canadian Space Agency*, Canada J. Langen

The CEOS Constellation for Land Surface Imaging

G. Bryan Bailey, U.S. Geological Survey, USA

The CEOS Constellation for Ocean Surface Topography

Stan Wilson, National Oceanic and Atmospheric Administration, USA

François Parisot

The CEOS Constellation for Precipitation

Erich Stocker, National Aeronautics and Space Administration, USA

Session 7

Homeland Security and Public Safety II — Airborne and Satellite Imagery for Disaster Preparedness and Response

Moderator: Kari Craun, U.S. Geological Survey, National Geospatial Technical Operations Center, USA

Room: Ontario

This invited session will promote US/Canadian partnerships as a follow-on and extension to previous ASPRS-sponsored Imagery and Geospatial Data in Disaster Response sessions. A prime focus will be on the International Charter, Space and Major Disasters.

Introduction and Update on Progress

Kari Craun, U.S. Geological Survey, National Geospatial Technical Operations Center, USA

Overview of the International Charter

Ahmed Mahmood, *Canadian Space Agency*, Canada

Overview of Charter Products used in Emergency Response

Brenda Jones, U.S. Geological Survey, USA

Overview of NRCAN's Task of Creating Standard Emergency Response Products

David McCormack, Canadian Hazards Information Service, Natural Resources Canada, Canada

TECHNICAL PROGRAM

Tuesday, October 30

Session 8

Panel Discussion — The Effect of **North American Policies on Commercial Remote Sensing**

Moderator: Tahara Moreno, National Oceanic and Atmospheric Administration, USA **Room: Les Saisons**

Organized by Kay Weston, National Oceanic and Atmospheric Administration, USA

For the North American remote sensing industry to achieve commercial success, there must be certainty, predictability and transparency in the policies that govern the industry. Panelists from the U.S. and Canada will discuss their nation's individual commercial remote sensing regulations and policies from both the perspective of the companies that must follow these policies and the governments that must develop and monitor them. The current state of the industry and how each country's commercial remote sensing policy affects the industry will be discussed.

Panelists:

John Hornsby, MacDonald Dettwiler and Associates Limited, Geospatial Services, USA Phillip Baines, Science and Technology, Foreign Affairs and International Trade Canada, Canada

Kay Weston, National Oceanic and Atmospheric Administration, USA Matthew O'Connell, GeoEve, USA Jill Smith, DigitalGlobe, USA

ASPRS Meeting Schedule

ASPRS 2008 Annual Conference

Oregon Convention Center/Doubletree Hotel Lloyd Center Portland Oregon April 27 - May 2, 2008

ASPRS 2008 Fall Conference The William T. Pecora Memorial Symposium

Adams Mark Hotel Denver, Colorado November 17 - 20, 2008

ASPRS 2009 Annual Conference 75th Anniversary of ASPRS

Baltimore Marriott Waterfront Hotel, Baltimore, Maryland March 8 - 13, 2009

ASPRS/MAPPS 2009 Fall Conference

Crowne Plaza Hotel San Antonio, Texas November 16 - 19, 2009

ASPRS 2010 Annual Conference

Town and Country Hotel San Diego, California April 26 - 30, 2010

Save the dates!!!

Session 9

Land Cover Mapping Systems

Moderator: Kevin Smith, Ducks Unlimited, Canada

Room: Alberta

St. Lawrence Observing System (SLOS)

Guy Aube, Canadian Space Agency, Canada

Y. Crevier

Coastal Change Analysis: Completion of a National Baseline

Nate Herold, NOAA Coastal Services Center,

Development of Inventory and Modeling Products to Support International Conservation Programs across Western Canada

Kevin Smith, Ducks Unlimited, Canada

Xiangyue Wei, Alain Richard, Glenn Mack, and Eric Butterworth

Southern Ontario Land Resource Information System (SOLRIS) - From Concept to **Production – Challenges in Producing a Regional Ecological Land Classification** (ELC)-based Land Cover Product

Ian Smyth, Ontario Ministry of Natural Resources, Canada

Richard Mussakowski

Session 10

Advancing Remote Sensing Applications with Hyperspectral Technologies

Moderator: H. Peter White, Canada Centre for Remote Sensing, Natural Resources Canada, Canada

Room: British Columbia

Hyperspectral Remote Sensing Algorithms for Retrieving Forest Chlorophyll Content from Leaf to Canopy Level

Yongqin Zhang, University of Toronto, Canada

Jing M. Chen and John R.Miller

Off-nadir Impacts on Deriving Biophysical **Properties from Hyperspectral Data**

H. Peter White, Canada Centre for Remote Sensing, Natural Resources Canada, Canada

Abdel Abuelgasim

Improved Site-specific Herbicide **Management using Artificial Neural Nets and Hyperspectral Image Data**

Peter R. Eddy, University of Lethbridge, Canada

A.M. Smith, B.D. Hill, C.A. Coburn, D.R. Peddle, and R.E. Blackshaw

Derivative Indices to Estimate Chlorophyll Content with Hyperspectral Remote Sensing

Jincheng Gao, Kansas State University, USA

Douglas G. Goodin

Social Events



Exhibitors' Reception

5:30 pm to 7:00 pm **Confederation Ballroom**

This conference highlight is sponsored by the exhibiting companies and provides an excellent opportunity to see the latest products and services offered to the industry by the world wide suppliers. Also, the reception affords all

attendees a great time to see old friends and make new ones. Light hors d'oeuvres and beverages will be served.

Canadian Remote Sensing Society — Gold Medal Dinner

7:30 pm to 11:00 pm **Mother McGinty's Irish Pub, 67 Clarence Street**

Come celebrate achievement in Canadian remote sensing at this colourful pub in the heart of Ottawa's famous Byward Market! An easy 10-minute walk or 2-minute cab ride from the Westin Hotel. What better way to spend an evening than with an excellent meal together with your colleagues and friends in the relaxed atmosphere of Mother McGinty's. All are welcome -capacity is 125, so please purchase your ticket early. For more information, visit http://www. casi.ca/.

Ticket price: \$75 CND