Government Update for Business Aviation
July 7, 2016

Denis Guindon
Director General, Aviation Safety Oversight and Transformation
AIR SECTOR BY THE NUMBERS

• Industry size and diversity is reflected in the numbers:
  • 36,450 Canadian registered aircraft
  • 68,546 licensed pilots
  • 2,324 air carriers (59.5% Canadian; 40.5% Foreign)
  • 15,839 aircraft maintenance engineers and 1001 approved maintenance organizations
  • 567 certified aerodromes (306 airports, 261 heliports) and 1820 non-certified aerodromes
  • 15,000,000 km² of airspace managed by the largest single Air Navigation Service provider in the world (NAV CANADA)
  • $27.7B in annual revenues generated by the third largest aerospace sector in the world, which:
    • Exports 80% of its output
    • Employs 141,000 people in Canada (2012)
    • Contributes over $12B to federal and provincial treasuries
AVIATION SAFETY BY THE NUMBERS

- 1289 FTEs (as of June 30, 2016)
- 1095 FTEs responsible for oversight
- Approximately $124M budget
- Attrition rate 1% per month
- Average Inspector age is 50 years old
- Changed nearly 20% of the inspectorate in the last 18 months
ORGANIZATIONAL CHART

- Civil Aviation still one national aviation safety team, but with increased leadership capacity
- Organic approach to developing organization
  - Files may overlap between Regulatory Framework and Oversight

Director General
Aviation Safety
Regulatory Framework
Aaron McCrorie

Director General
Aviation Safety
Oversight and Transformation
Denis Guindon

Office of the Directors General
Lucille Kamal

Director
Management Services
Félix Meunier

Director
Policy and Regulatory Services
Michel Beland

Director
Standards
Robert Sincennes

Acting Director
National Operations
Jean-Pierre Côté

Director
National Aircraft Certification
David Turnbull

Director
Medicine
David Salisbury

Regional Director
Atlantic Region
Peter Fullarton

Regional Director
Quebec Region
Justin Bourgault

Regional Director
Ontario Region
Joseph Szwarek

Regional Director
Prairie and Northern Region
Jean-Stéfane Bergeron

Regional Director
Pacific Region
Shari Currie
RISK MANAGEMENT – KEY ACTIONS TO DATE

Civil Aviation is striving for a nimble and agile program that strengthens aviation safety, supports a vibrant aerospace industry, while maintaining public confidence in the system.

• **Oversight program improvements** to modernize and update the civil aviation oversight system to continuously improve services provided to the aviation industry, surveillance of the aviation system and overall safety of air sector for travelling public.

• **Civil Aviation Transformation project** to modernize and respond to emerging trends and ensure national consistency in delivery of program and work.

• **Regulatory prioritization** to achieve Transport Canada’s safety, economic and environmental objectives; establish international harmonization and bilateral aviation safety agreements to achieve aviation safety and trade objectives.
OVERSIGHT PROGRAM IMPROVEMENTS

- Transport Canada has taken steps to modernize and update the civil aviation oversight system in an effort to continuously improve services provided to the aviation industry, surveillance of the aviation system and the overall safety of the air sector for the travelling public.

- The approach to oversight has evolved to include:
  - Appointment of a Director General, Civil Aviation dedicated to oversight
  - An Oversight Advisory Board
  - A National Oversight Office
  - Updated surveillance tools, guidance materials and documentation
  - A risk indicator database and surveillance planning tool
  - A formal process to ensure appropriate management review and sign off of surveillance reports
  - A standard approach for document collection and retention for surveillance activities
  - A formal process for identifying and managing high risk operators
  - A five-year quality assurance plan to review adherence to surveillance policies and to evaluate effectiveness of the program
CIVIL AVIATION TRANSFORMATION PROJECT

Project Drivers:

- To modernize and respond to emerging trends
- Ensure national consistency in delivery of program and work that we do

**AREAS OF ACTION**

01  GOVERNANCE
Need for improvement to the administration of TCCA Program

02  LEADERSHIP/MANAGEMENT
Provide strong focused change leadership

03  OVERSIGHT
Ensure national consistency and program delivered by well qualified and trained workforce

04  REGULATORY PROGRAM MODERNIZATION
Modernization and streamlining of the Canadian Aviation Regulations

05  SUPPORTING OUR PEOPLE
Undertake program improvements to better support our people in their day-to-day work

06  ORGANIZATIONAL STRUCTURE
Make refinements to the organizational structure of TCCA to increase organizational effectiveness and agility

07  TECHNOLOGICAL IMPROVEMENT
Obtain/develop needed technological tools to support our staff in their work

**TODAY**

- STAFF GUIDANCE/TOOLS NEED ENHANCEMENT
- STRUCTURES NOT FULLY OPTIMIZED
- UNCLEAR ROLES/RESPONSIBILITIES
- OUTDATED REGULATIONS
- REACTIVE
- RIGID
- SILOS

**FUTURE**

- EFFECTIVE OVERSIGHT AND REGULATORY PROGRAMS
- STAFF SUPPORTED – GUIDANCE AND TOOLS
- GOVERNANCE AND STRUCTURES RENEWED
- CONSISTENCY IN PROGRAM DELIVERY
- MODERN
- AGILE
REGULATORY PRIORITIZATION

• Focus on mitigating system-level safety risks through regulatory and non-regulatory action:
  
  1. **Approach and Landing**: assessing potential regulatory changes, including approach ban requirements, enhancements to runway end safety areas, and increase education and awareness
  
  2. **Unmanned Air Vehicles**: implementing a more rigorous regulatory framework to strengthen safety, while providing the regulatory conditions to support economic growth in the sector
  
  3. **Loss of Control In-Flight**: supporting international efforts to reduce accidents by focusing primarily on enhancing pilot training
  
  4. **Human Performance Factors**: addressing risks that can affect an individual’s performance through regulatory initiatives, including “Flight and Duty Time and FRMS” and “Crew Resource Management”

• Advance key international engagement efforts, with a focus on ICAO Assembly, strengthening bi-lateral relationships with existing partners (FAA and EASA) and emerging partners (China, India and Brazil).

• Develop and implement strategies to better support the Canadian aerospace sector’s ability to compete in the international market (e.g. modernized cost recovery framework).
Aerodrome Work Consultations
CAR 306 – Water Airports

Cockpit Voice Recorders (CVR)
*Operations to and from dry/wet contaminated runways – CAR 705
(Approach and Landing (Phase of Flight))
Miscellaneous Amendment
Emergency Locator Transmitters (ELT)

*Flight Duty Time and Fatigue Risk Management System (Risk posed by Human Performance Factors)
*Unmanned Air Vehicles (UAV)
Flight Deck Occupants
*Airside Access and Vehicle Control (AAVC) (Approach and Landing (Phase of Flight))

*Runway End Safety Area (RESA) (Approach and Landing (Phase of Flight))
Standard ELT – Maintenance Intervals
CAR 521 – Approval of the Type Design or a Change to the Type Design of an Aeronautical Product
*Standard - Crew Resource Management (CRM)
(Risk posed by Human Performance Factors & Risk of Loss of Control In-Flight)

Approach Ban (Approach and Landing (Phase of Flight))
Approved Training Organizations (ATO)

* Top Aviation System – Level Safety Risk
### NATIONAL SERVICE PERFORMANCE
#### AVERAGE WORKING DAYS

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<thead>
<tr>
<th>Apr 1 – Mar 31</th>
<th>14-15</th>
<th>15-16</th>
<th>Net Days</th>
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<td>Volume</td>
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<td>Volume</td>
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<td>Flight Crew Rating Initial Issue</td>
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<td>Manual Amendment</td>
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### SPECIAL AUTHORIZATION – AVERAGE WORKING DAYS

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<tr>
<th>Apr 1 – Mar 31</th>
<th>2014-15</th>
<th>2015-16</th>
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<td>POCs</td>
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<td>49.9</td>
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PERFORMANCE RESULTS

• Volume of services delivered in 2015-2016:
  - 4,705 Operating Certificates (includes the issuance and amendments of Special Flight Operating Certificates (SFOCs), Air Operator Certificates (AOCs), Private Operating Certificates (POCs), Foreign Air Operator Certificates (FAOCs) Flight Training Units (FTUs) and Approved Maintenance Organizations (AMOs)
  - 31,032 Licensing requests
  - 106 exemptions
  - 7,847 Aircraft registration requests
  - 803 Aircraft Inspections
  - 2,220 Delegate nominations/appointments and renewals
  - 3,340 Manuals approved or amended
  - 3,227 Approvals, authorizations and assessments conducted (includes Obstacle Assessments)
RECENT ACCOMPLISHMENTS

• Publication of TP 312 5th edition

• Development of policy options for Runway End Safety Areas; publication of Notice of Proposed Amendment (NPA) in Spring 2016

• Publication of a Civil Aviation Safety Alert to promote stabilized approach criteria

• Development of NPA on Crew Resource Management; meetings with stakeholders

• Seaplane Operations Canada Gazette, Part I (CGI) publication

• Winter Maintenance CGI publication

• Minimum Take-Off Performance CGI publication

• Aerodrome Work Consultations CGI publication
RECENT ACCOMPLISHMENTS (CONT’D)

- Flight Deck Occupants Interim Orders
- Minimum Equipment List NPA publication
- Emergency Locator Transmitters NPA publication
- Progress on bilateral technical agreements with China and Japan
- Flight Attendant Regulation amendments published in CGII
- Flight Crew Fatigue NOI published in CGI
- UAV Regulation NPA publication; extensive outreach to industry
- Progress in developing International Standards on greenhouse gas and air pollutant for aircraft
- Publication of Performance Based Navigation State Plan
### WHAT’S COMING

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<tr>
<th>Event</th>
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<tr>
<td>Exemption on Training to Proficiency</td>
<td>End of summer</td>
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<tr>
<td>Advisory Circular on Training to Proficiency</td>
<td>End of summer</td>
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<tr>
<td>Advisory Circular on CAR 604 Regulations</td>
<td>End of July</td>
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<tr>
<td>Exemption on Persons Assigned on Board Duties (PAOBD)</td>
<td>Under review</td>
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TOPICS RAISED BY CBAA

• TC budget constraints and impacts

• Standardization and education of inspectors on CAR 604

• Application of >6 pax certification criteria for compliance with CAR 604
QUESTIONS?