

# TCCA Update

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# Overview

- Transport Canada Organization
- Aircraft Certification Standards Division
- CAN-TSO standards and design approvals
- NPA 2015-011- Airworthiness Manual (AWM) 537
- CAN-TSO-3C503 vs ETSO-2C503
- Canada-European Community Agreement on Civil Aviation Safety
- TCCA validation or acceptance of foreign TSO approvals



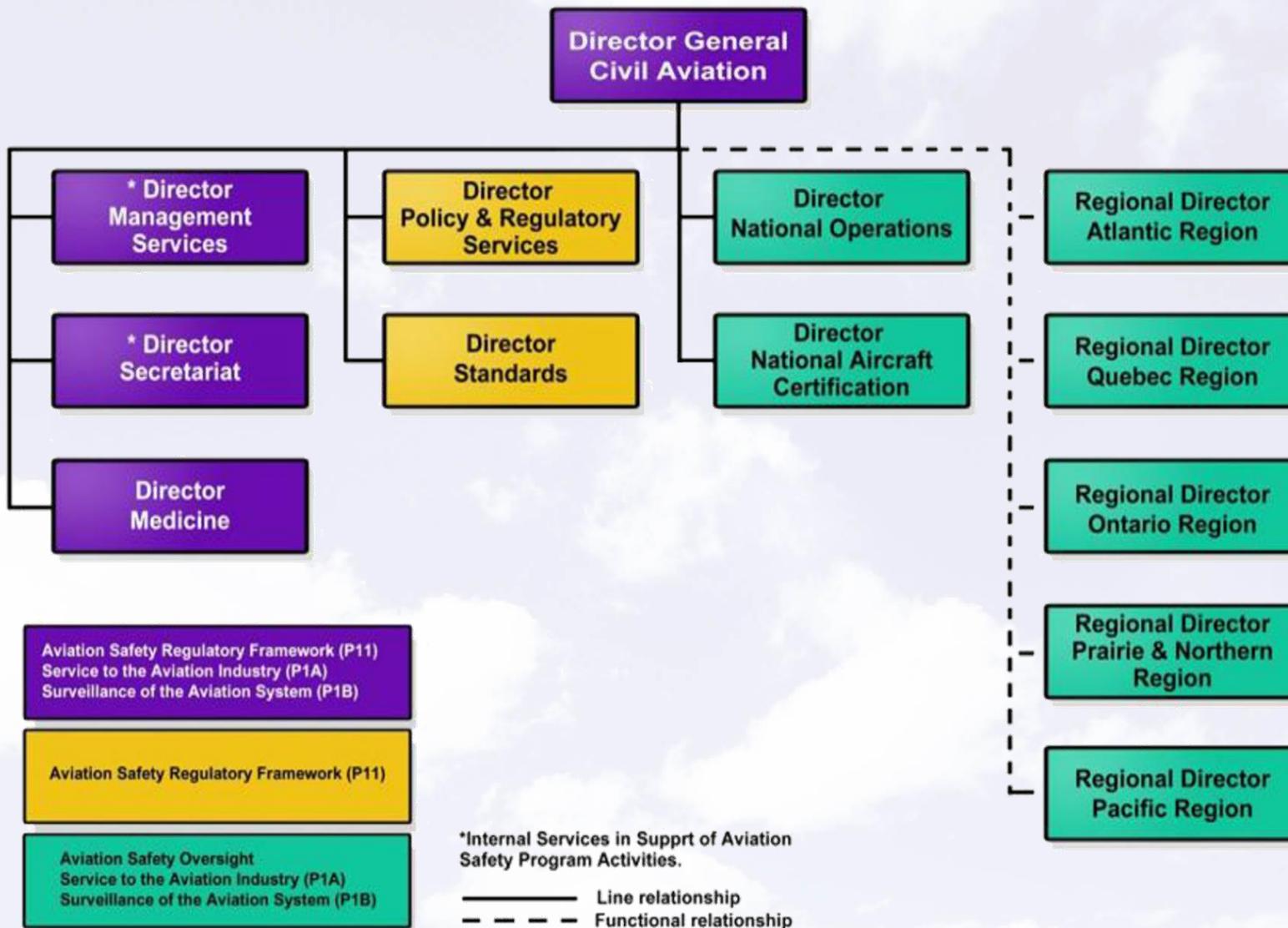
# Transport Canada Organization



- HQ in Ottawa
- Five Regional Offices
- Thirty Six TC Centres
- Over 5000 Employees across Canada



# Transport Canada Organization



# Aircraft Certification Standards Division

- Establishes and regulates standards for aeronautical products designed and operated in Canada.
- Guides the aerospace industry with respect to certification in highly technical fields, particularly in areas of new or revised approaches as a result of emerging technical trends.
- Participates to active aircraft certification projects
  - Special Conditions Airworthiness
  - Exemptions
  - Certification Basis review/comment
- Manages Airworthiness Manual (AWM) design standard amendments
  - E.g. **AWM Chapter 537 contains a list of CAN-TSO**



## CAN-TSO standards and design approvals

- Part V Subpart 21 of the *Canadian Aviation Regulations (CAR) 521* came into force in December 2009.
- Before CAR 521, appliances and parts were approved via “Appliance Type Certificates” under the CAR 511 Type Certification regulations.
- Division III of CAR 521 specifies the requirements for issuance of “Canadian Technical Standard Order (CAN-TSO) Design Approvals”.



## CAN-TSO standards and design approvals

- Airworthiness Manual (AWM) Chapter 537 contains a list of CAN-TSO. Currently, all CAN-TSO are adopted from the FAA.
- AWM 537 is amended periodically via Notices of Proposed Amendment (NPA).
- **NPA 2015-011** has been submitted.
  - The closing date for comments is **2015/07/04** and the NPA will be in force on **2015/08/04**, if no dissents are received.



# NPA 2015-011

- This proposed amendment to AWM 537 includes:
  - Reorganization: title change of AWM 537.103
  - Moving the list of current CAN-TSOs from AWM 537.103 to a newly introduced AWM 537 **Appendix A**– *List of Canadian Technical Standard Orders* and to subdivide the list of current CAN-TSOs into **Index 1, Index 2 and Index 3**
- Timelines for NPA
  - Consultation through CARAC Mgmt & Procs
  - Subject to a 30 day consultation period
  - Becomes effective 30 days after NPA closing date if no dissents received



# NPA 2015-011

## AWM Section 537 – New **Appendix A**

- **Index 1** would consist of those CAN-TSOs identical to those used by the FAA
- **Index 2** would consist of those CAN-TSOs identical to those used by EASA
- **Index 3** would consist of those CAN-TSOs that have been developed by the Minister and issued pursuant to CAR 521.106(b).



# NPA 2015-011

## AWM Section 537 – Appendix A **Index 1**

- Adopt by reference the recently published Federal Aviation Administration (FAA) Technical Standard Orders (TSOs), as added to or removed from the FAA Current TSO list between **May 4, 2012 and March 18, 2015.**



# NPA 2015-011

## AWM Section 537 – Appendix A **Index 2**

- Adopt by reference those European Technical Standard Orders (ETSOs), as published by the European Aviation Safety Agency (EASA), that form part of Index 2 to Subpart B of **CS-ETSO – Amendment 9**
- Only added where an FAA-TSO does not exist for a particular application (i.e. ETSO-2C5XX series)



# NPA 2015-011

## AWM Section 537 – Appendix A **Index 3**

- Consists of those CAN-TSOs that have been developed pursuant to section 521.106(b) of the Canadian Aviation Regulations (CARs)
- Only added where these CAN-TSOs are not technically similar to either FAA-TSOs or ETSOs



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# NPA 2015-011

## AWM Section 537 – Appendix A **Index 3**

- Include the **CAN-TSO-3C503** – *Helicopter Passenger Transportation Suit Systems (HPTSS)*, developed by the Minister and issued on January 23, 2015



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# CAN-TSO-3C503 vs ETSO-2C503



- **CAN-TSO-3C503** – *Helicopter Passenger Transportation Suit Systems (HPTSS)*



- **ETSO-2C503** – *Helicopter Crew and Passenger Immersion Suits for Operations to or from Helidecks Located in a Hostile Sea Area*



## CAN-TSO-3C503 vs ETSO-2C503

- Some significant differences. Example:  
Water Penetration Test
  - **CAN-TSO-3C503** – After flame exposure
  - **ETSO-2C503** – No flame exposure
- Some minor differences. Example:  
Conspicuity
  - **CAN-TSO-3C503** – 250cm<sup>2</sup> tot / 100cm<sup>2</sup> hood
  - **ETSO-2C503** – 300cm<sup>2</sup> tot / 100cm<sup>2</sup> hood



# Canada-European Union Agreement on Civil Aviation Safety

- The Agreement was signed on 6 May 2009.
- The Technical Implementation Procedures (TIP) and the Common TSO list were signed on September 20, 2011.
- The List of Common CAN-TSO and ETSO Standards was last revised in September 2013.
  - TCCA is currently reviewing the Sep 2013 listing and plan for an update by **Sep 2015**.



## TCCA validation or acceptance of foreign TSO approvals

- TCCA has historically accepted FAA TSO'ed articles into Canada without need for application or validation.
- TCCA accepts “Common List” ETSO'ed articles into Canada without need for application or validation.
- EASA accepts CAN-TSO'ed articles into the E.C. without need for application or validation.
- Note: The TSO compliance data may be reviewed by an importing authority as part of an aircraft level design approval (TC or STC).



# Contact Information

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# Thank you for your time!



## Any Questions?

