

Transport Canada Civil Aviation

CAN-TSO Rulemaking Update

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Transport
Canada

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Canada

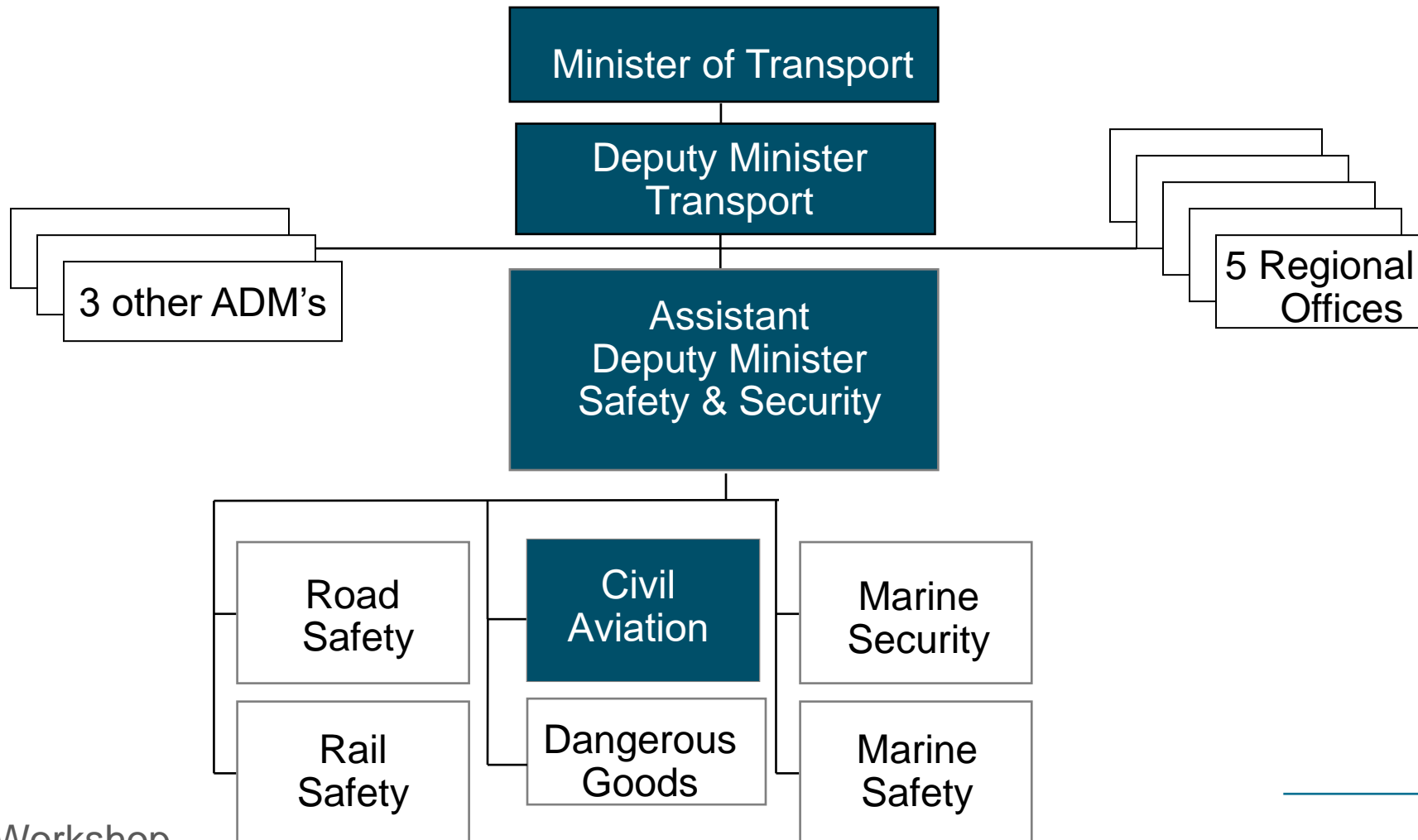
Transport Canada Organisation



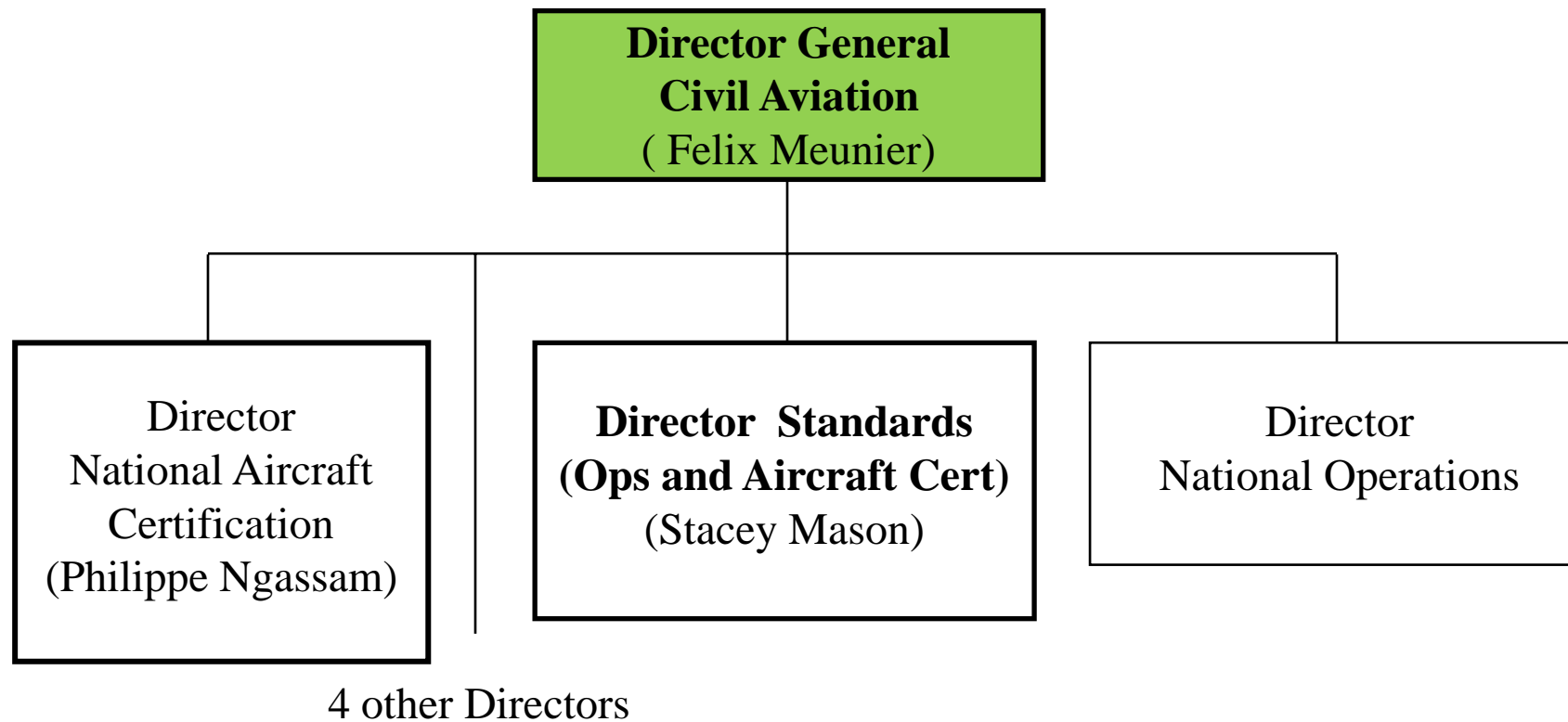
- HQ in Ottawa
- Five Regional Head Offices
- Thirty Six TC Centres
- Over 5000 Employees across Canada



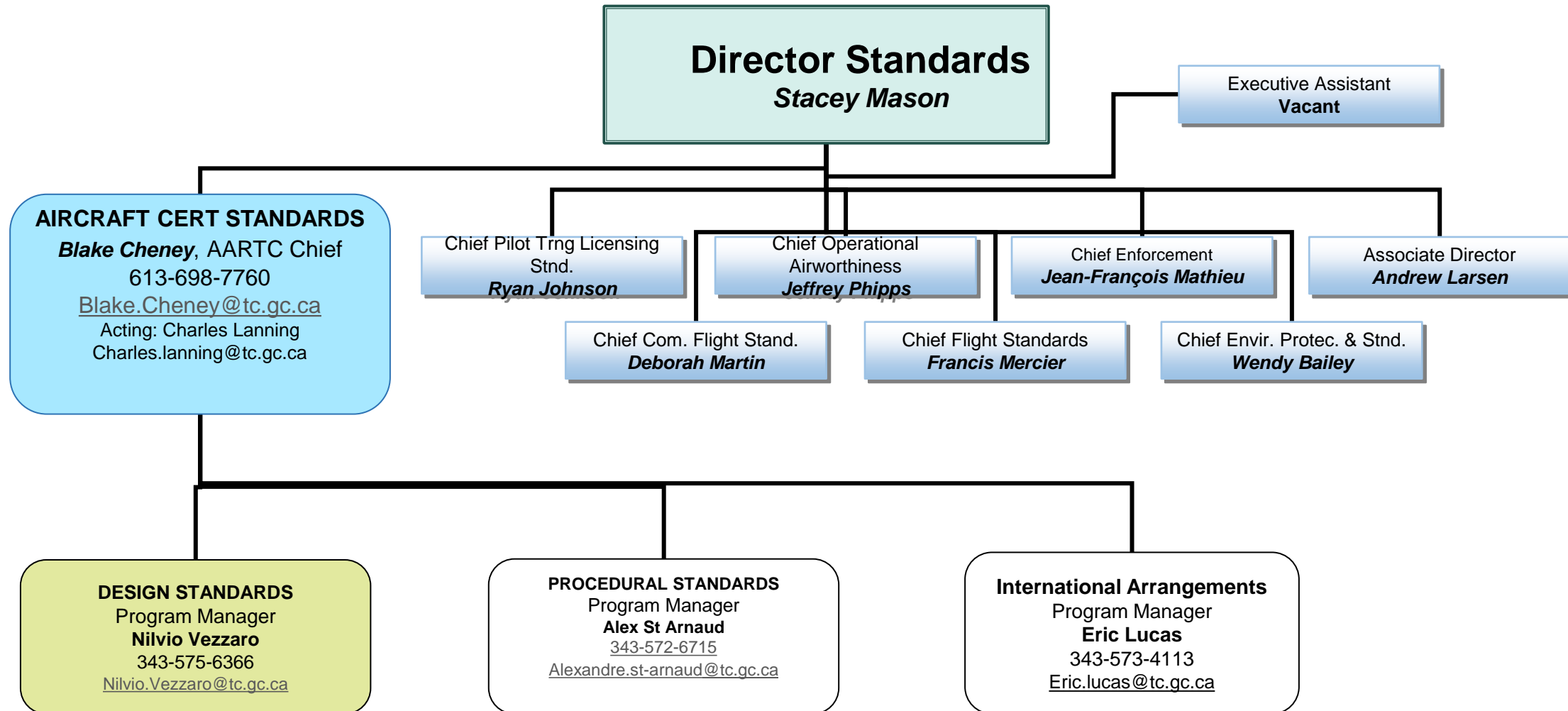
Transport Canada Organisation



Transport Canada Civil Aviation Organisation



Civil Aviation Standards branch (AART)



Transport Canada Organisation (...)

Aircraft Certification Standards Division

- Establishes and regulates standards (including CAN-TSO)...
 - 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.
 - Develops guidance and advisory material
- Contributes to active aircraft certification projects
 - Special Conditions Airworthiness – develop and issue
 - Exemptions – develop and recommend to grant/deny
 - Applicable Standard of Airworthiness – review
 - Findings of equivalent safety – review

National Aircraft Certification (NAC)



AWM Chapter 537 Introduction

- TCCA *Airworthiness Manual* (AWM) is the collection of standards for aeronautical products
 - Standards are incorporated by reference in Subpart 521 of the *Canadian Aviation Regulations* (CARs)
- AWM Chapter 537 – *Appliances and Parts* contains the list of effective CAN-TSOs (Subchapter B, Appendix A)
 - Index 1 contains CAN-TSOs that incorporate FAA TSOs
 - Index 2 contains CAN-TSOs that incorporate EASA CS-ETSO Index 2 5XXX series ETSOs (specific to EASA) (*see upcoming change*)
 - Index 3 contains CAN-TSOs that are TCCA specific
 - CAN-TSO-3C503 – *Helicopter Passenger Transportation Suit Systems* (HPTSS)

AWM Chapter 537 Status

- Last update: current Change 537-19, effective since August 28, 2022

[//https://tc.canada.ca/en/corporate-services/acts-regulations/list-regulations/canadian-aviation-regulations-sor-96-433/standards/part-v-airworthiness-chapter-537-standards-appliances-parts](https://tc.canada.ca/en/corporate-services/acts-regulations/list-regulations/canadian-aviation-regulations-sor-96-433/standards/part-v-airworthiness-chapter-537-standards-appliances-parts)

- Currently Section 537.103 Appendix A contains:
 - Index 1: FAA TSOs effective up to April 1st, 2022
 - Index 2: ETSOs from CS-ETSO Amendment 16 (current is Amendment 17, 31-Aug-2022) Subpart B, Index 2, ETSO-2C5XX series only
 - Index 3: Unique Canadian CAN-TSO-3C503, no change since 2015.

AWM Chapter 537 Updates

- NPA 2023-013 is under public CARAC consultation until October 18, 2023

<https://wwwapps.tc.gc.ca/Saf-Sec-Sur/2/NPA-APM/npaapmr.aspx?id=3039&GoCTemplateCulture=en-CA>

Highlights of proposed updates in NPA 2023-013:

- Index 1: incorporation of FAA TSOs up to July 11, 2023
- Index 2: Incorporation of all ETSOs of CS-ETSO-Amendment 17, Subpart B, Index 2
- Subsequent revisions of FAA TSOs and ETSOs will be automatically adopted via ambulatory reference, unless they are “manually” removed from the list in Appendix A
- TSOs and ETSOs newly introduced by FAA and EASA (new number), or cancelled, will not be automatically incorporated/cancelled in AWM 537. They will need to be manually introduced or removed.

AWM Chapter 537 Update - Benefits

With implementation of the proposed NPA 2023-013:

1. Better harmonization with FAA TSOs and EASA ETSOs at all times (automatic incorporation of revisions)
 - Still need “manual” updates for new or cancelled TSOs. Much less frequent.
2. Allow Canadian applicants to apply for approval of all Index 2 ETSO equivalent CAN-TSO (unique or non technically equivalent to FAA TSOs)
3. Simplifies and expands the reciprocal acceptance of CAN-TSOs and ETSOs (see slide # 13)

AWM Chapter 537 – Next updates

Routine updates

- FAA TSOs introduced (new number) after July 11, 2023 and ETSOs introduced in next Amendment (18 and up) of CS-ETSO will be considered for adoption as CAN-TSO at next update
 - No known additional CAN-TSO at this date
- No new TCCA specific CAN-TSO (Index 3) is currently planned

Major update:

- Planned Incorporation of EASA CS-APU as a CAN-TSO

List of Common ETSO and CAN-TSO Standards

- The “common list” is a document established to facilitate reciprocal acceptance.
 - Lists common standards per section 2.8.1(b) of the Technical Implementations Procedures (TIP) of the Agreement on Civil Aviation Safety between the European Union and Canada.
- Current List is out of date (signed on 13-Mar-2020).
 - Per agreement provisions, CAN-TSOs/ETSOs not included in the list can be accepted by other means
- Plan is to leverage NPA 2023-013, to facilitate an automatic update of the “List” in the future.
 - In the “common list” document, dynamically refer to all CAN-TSOs/ETSOs specified in AWM 537 Appendix A

CAR 521 Amendments

- CAR 521 currently undergoing extensive rewrite
 - Most extensive review of *Regulations* since 1991, incl. CARs 521, 571, 101
 - Follows stakeholder feedback received since 2009
 - General rework to correct, clarify, and better align provisions, while harmonizing with U.S. 14 CFR part 21 and Annex I “Part 21” to Commission Regulation (EU) No. 748/2012 as far as practicable and recognizing there are differences between those two sets of rules.
- Entire Division III – CAN-TSO proposed to be rewritten, but -
 - Manufacturer certificate issued under CAR 561, to remain separate from the design approval of articles under CAR 521.
 - Design approval and manufacturer approval in respect of an aeronautical product are not necessarily held by the same entity, but there must be a relationship between these holders, if separate.

Thank you and we look forward to working with you!





Questions?