



Transport
Canada

Transports
Canada

Transport Canada Civil Aviation Program Manual

for the

Civil Aviation Directorate

Issuing Office: Transport Canada Civil Aviation

File Number: Z 5000-7-1 U

Issue Number: 05

RDIMS Number: 14914809 (version française : SGDDI 16833326)

Effective Date: 2021-07-27

Canada

Table of contents

1.0 Introduction 4

1.1 Purpose 4

1.2 Applicability 4

1.3 Description of changes 4

2.0 References and requirements..... 4

2.1 Reference documents 4

2.2 Cancelled documents..... 5

2.3 Definitions..... 5

3.0 Overview of Transport Canada 6

4.0 Overview of Canada’s civil aviation program 7

4.1 History 7

4.2 State safety program (SSP) responsibilities 8

4.3 TCCA’s vision and mission 8

4.4 Safety Management System (SMS) at a glance 8

4.5 Organizational structure 9

4.6 Governance structure..... 11

4.7 Reporting structure..... 11

4.8 Core responsibility CR 1 — Safe and secure transportation system..... 12

4.9 Aviation Safety Regulatory Framework (P11)..... 12

4.10 Aviation Safety Oversight (P12)..... 13

4.10.1 Aviation Safety Oversight (P12) – Surveillance Activities 13

4.10.2 Aviation Safety Oversight (P12) – Service Activities 13

4.11 Civil Aviation Business Support Services 14

5.0 Management system..... 14

5.1 Risk management 15

5.1.1 Risk management methodology..... 16

5.2 Management responsibility 17

5.2.1 Management commitment..... 17

5.2.2 Values and ethics 17

5.2.3 Stakeholders 17

5.2.4 Management review 17

5.3 Resource management..... 18

5.3.1 Human resources 18

5.3.2 Competency awareness and learning..... 18

5.3.3 Workplace 18

5.4 Program design and delivery 18

5.5 Measurement and analysis 19

5.5.1 Stakeholder satisfaction 19

5.5.2 Measurement and monitoring 19

5.6 Continuous improvement 19

6.0 Contact us..... 19
Appendix A — TCCA organizational descriptions 21

List of figures

Figure 1 — Civil Aviation Directorate organizational structure 10
Figure 2 — TCCA's business model..... 15

1.0 Introduction

1.1 Purpose

- (1) The purpose of the Transport Canada Civil Aviation (TCCA) Program Manual is to provide an overview of Transport Canada's Civil Aviation Directorate, specifically as it pertains to the following Transport Canada Program Inventory areas:
 - (a) Aviation Safety Regulatory Framework (Transport Canada Chart of Accounts code P11)
 - (b) Aviation Safety Oversight (P12)
- (2) The TCCA Program Manual fulfills the requirements of paragraph 6.1(1)(a) of the Civil Aviation Integrated Management System (IMS) Standard (TP 14693) ([RDIMS 9350305](#)).

1.2 Applicability

- (1) This document is applicable to all TCCA personnel. It does not cover Program Inventory area Aircraft Services (P14).

1.3 Description of changes

- (1) This TCCA Program Manual, Issue 05 was updated to reflect organizational changes, and also to be aligned with Transport Canada's Departmental Results Framework (DRF) and Program Inventory (PI) ([RDIMS 13535516](#)) and Transport Canada's State Safety Program (SSP) Manual, TP 15462 ([RDIMS 15904513](#)).

2.0 References and requirements

2.1 Reference documents

- (1) It is intended that the following reference materials be used in conjunction with this document:
 - (a) Treasury Board of Canada Secretariat — [Management Accountability Framework](#)
 - (b) Treasury Board of Canada Secretariat — [Results for Canadians: A Management Framework for the Government of Canada](#), March 2000
 - (c) Transport Canada — State Safety Program Manual, TP 15462 ([RDIMS 15904513](#))
 - (d) Transport Canada — Civil Aviation Integrated Management System Standard, TP 14693 ([RDIMS 9350305](#))
 - (e) Transport Canada — Civil Aviation Governance: An Integrated Decision Making Framework ([RDIMS 11893089](#))
 - (f) Transport Canada — [Civil Aviation Service Standards and Fees](#)
 - (g) Transport Canada — Departmental Results Framework and Program Inventory ([RDIMS 13535516](#))
 - (h) Transport Canada — Civil Aviation Performance Information Profiles:
 - (i) Aviation Safety Regulatory Framework ([RDIMS 14443368](#))
 - (ii) Aviation Safety Oversight ([RDIMS 14470666](#))

- (i) Transport Canada — [Financial Policy and Procedures Manual](#) (TP 117), Annex 10 — [Financial Codes](#) (intranet only)
- (j) Performance Measurement Framework.

2.2 Cancelled documents

- (1) By default, it is understood that the publication of a new issue of a document automatically renders any earlier issues of the same document null and void.

2.3 Definitions

- (1) The following **terms** are used in this document and are defined as they relate to TCCA:
 - (a) **Aviation Safety** — Refers to Transport Canada’s Departmental Results Framework (DRF) nomenclature that includes the following Transport Canada Program Inventory areas:
 - (i) Aviation Safety Regulatory Framework (P11)
 - (ii) Aviation Safety Oversight (P12)
 - (b) **Civil Aviation Directive** — An operational policy document that provides formal direction and imposes specific responsibilities. A CAD describes what TCCA personnel must achieve and defines their responsibilities. A CAD is mandatory in nature and application.
 - (c) **Departmental Results Framework** — A departmental planning and reporting document that is aligned with requirements set forth in the Treasury Board of Canada Secretariat (TBS) Policy on Results. It includes core responsibilities, departmental results, results indicators, and an inventory of programs that are described in their logical relationship to each other and to the core responsibilities to which they contribute.
 - (d) **Enterprise** — The holder of one or more TCCA issued Civil Aviation Documents under a single Accountable Executive. For example, a company holds an Approved Maintenance Organization Certificate, an Air Operator Certificate, an Approved Training Organization Certificate and a Design Organization Authority. The term Enterprise is intended to denote that surveillance is conducted on the whole enterprise rather than on an individual Canadian Aviation Document. The term Enterprise is intended to denote that surveillance is conducted on the whole enterprise rather than on an individual Canadian Aviation Document.
 - (e) **Integrated Management System** — All interrelated TCCA activities that are necessary to manage the Civil Aviation Directorate and conduct its mandate.
 - (f) **Integrated Planning, Monitoring and Reporting Framework (IPMRF)** — A framework that integrates a series of planning, monitoring and reporting processes within TCCA. (Refer to CAD QUA-015 Issue 01 — Integrated Planning, Monitoring and Reporting Framework (IPMRF) ([RDIMS 5058064](#)))
 - (g) **Oversight** — Activities that support service to the aviation industry and surveillance of the aviation system—including the systematic promotion, monitoring, and enforcement of compliance with Transport Canada requirements governing safety or security—and that contribute to departmental core responsibilities.
 - (h) **Performance Information Profile** — Results-based management tool created for each program from the Program Inventory ([RDIMS 13535516](#)). A PIP is used to support an integrated view of each program, facilitate the development of department-wide performance measures, plan for and guide the generation of performance information,

and act as a repository for other key information about a program and its measurement requirements.

- (i) **Safety** — The condition to which risks are managed to acceptable levels.
 - (j) **Safety Management System** — A documented process for managing risks that integrates operations and technical systems with the management of financial and human resources to ensure aviation safety or the safety of the public. (Refer to CAR Part I, Subpart 101 — [Interpretation](#) and Subpart 107 — [Safety Management System Requirements](#))
 - (k) **Stakeholder** — A person or organization with an interest in aviation safety. External stakeholders include the traveling public, the aviation industry, foreign civil aviation authorities, and ICAO. Internal stakeholders include TCCA personnel and the Minister of Transport.
 - (l) **State Safety Program** — Canada’s holistic and integrated commitment to meet ICAO Annex 19 requirements on State aviation safety. As Canada’s lead organization, Transport Canada is responsible for coordinating a unified approach to aviation safety with all partner organizations, including the Transportation Safety Board (TSB), NAV CANADA, and the Department of National Defence (DND). (See SSP Manual, TP 15462 ([RDIMS 15904513](#)) for more details.)
- (2) The following **abbreviations** are used in this document:
- (a) **CAD**: Civil Aviation Directive
 - (b) **CARs**: *Canadian Aviation Regulations*
 - (c) **DRF**: Departmental Results Framework
 - (d) **ICAO**: International Civil Aviation Organization
 - (e) **IMS**: Integrated Management System
 - (f) **MAF**: Management Accountability Framework
 - (g) **PBC**: Program Business Committee
 - (h) **PIP**: Performance Information Profile
 - (i) **SMS**: Safety Management System(s)
 - (j) **SSP**: State Safety Program
 - (k) **TBS**: Treasury Board of Canada Secretariat
 - (l) **TCCA**: Transport Canada Civil Aviation (Civil Aviation Directorate)

3.0 Overview of Transport Canada

- (1) Transport Canada is the federal government department responsible for most of the transportation policies, programs and goals set by the Government of Canada to ensure that the national transportation system is safe, efficient and accessible to all its users.
- (2) **Transport Canada’s Mission**: “To serve the public interest through the promotion of a safe and secure, efficient and environmentally responsible transportation system in Canada.”
- (3) **Transport Canada’s Vision**: “A transportation system in Canada that is recognized worldwide as safe and secure, efficient and environmentally responsible.”
- (4) As a regulatory department, Transport Canada plays a key role in the government’s commitment to streamlined regulations that provide a high level of protection to the travelling public.

- (5) To succeed in its mission, Transport Canada is committed to being a world-leading organization that:
 - (a) Develops and implements effective policies, programs, and legislative and regulatory frameworks;
 - (b) Works in partnership with other governments, industry and stakeholders;
 - (c) Is recognized as a progressive, effective and accountable organization; and
 - (d) Sustains a healthy and productive work environment that values professional excellence, teamwork, open communication, diversity, continuous learning, and mutual respect.
- (6) The TBS approved Transport Canada's DRF in 2018. This DRF is the structure that links all Transport Canada programs to the core responsibilities (CRs) to which they contribute, as follows:
 - (a) A Safe and Secure Transportation System (CR 1);
 - (b) A Green and Innovative Transportation System (CR 2); and
 - (c) An Efficient Transportation System (CR 3).

4.0 Overview of Canada's civil aviation program

4.1 History

- (1) Aviation in Canada can be traced back to 1909 when a biplane, the Silver Dart, was flown a distance of 800 meters during the first of a series of tests and demonstrations. A mere 10 years later, in 1919, Parliament passed the *Aeronautics Act*, providing a modern legislative foundation for regulating air traffic in Canada.
- (2) In 1936, the *Department of Transport Act* was created to transfer control and supervision of civilian flight operations to the Department of Transport. In the years following, Canada's airspace was recognized as a global transit area for long-distance international flights, and TCCA became committed to providing world-class safety and administration.
- (3) Transport Canada revised the [Aeronautics Act](#) in 1985 to reflect government direction and meet the needs of the aviation industry.
- (4) After conducting extensive studies in the early 1990s, the Government of Canada made the decision to commercialize a number of its major activities. Beginning in 1992, control of many Canadian airports was devolved to local airport authorities as part of the National Airports Policy (NAP), and in 1996 civil air navigation services were transferred to NAV CANADA. These changes marked a significant shift in Transport Canada's mandate: rather than carrying out a dual role as regulator and major service provider, Transport Canada would now focus solely on its regulatory role.
- (5) On October 10, 1996, the [Canadian Aviation Regulations](#) (CARs), which replaced Air Regulations and Air Navigation Orders (ANOs), came into effect.
- (6) In 1999, Transport Canada released Flight 2005—A Civil Aviation Safety Framework for Canada ([RDIMS 800996](#)). In 2006, the department followed with Flight 2010—A Strategic Plan for Civil Aviation ([RDIMS 1849852](#)). These key documents outlined and further supported the department's strategic direction for the years ahead. They also introduced a method of managing safety risks in civil aviation—one that would eventually lay the foundation upon which to build a solid, proactive safety culture through SMS.
- (7) In June 2005, SMS became law for some airlines and aircraft maintenance organizations, and in January 2008 SMS became law for airports and some air navigation service providers, well in

advance of the ICAO standard requiring that member States establish an SMS regulatory framework for airline operations by January 1, 2009.

4.2 State safety program (SSP) responsibilities

- (1) As a member State and long-time host of ICAO, Canada plays a leading role in the development of tools, processes and standards that contribute to aviation safety. The management and execution of TCCA's Program forms an integral part of Canada's overall SSP responsibilities.
- (2) As required by ICAO Annex 19 — Safety Management, all ICAO member States are required to have an SSP implemented by November 2019. TCCA is the lead organization for SSP implementation within Canada.
- (3) A full description of Canada's program to meet its State safety management responsibilities, including oversight, is available in Canada's SSP Manual, TP 15462 ([RDIMS 15904513](#)).

4.3 TCCA's vision and mission

- (1) The stated mission and vision for TCCA are:

Mission

To develop and administer policies and regulations for the safest civil aviation system for Canada and Canadians using a systems approach to managing risks.

Vision

An integrated and progressive civil aviation system that promotes a proactive safety culture.

- (2) These mission and vision statements reflect the dynamic interaction that is required between TCCA and industry in order to administer its policy and regulatory frameworks and programs. In the context of an increasingly complex environment and an overall government direction that encourages a more performance-based regulatory framework, TCCA has structured its governance and activities such that its decision-making process includes a risk-based approach that addresses concerns from a systems perspective.
- (3) Because TCCA cannot deal with every situation, its involvement in these situations is assessed based on its responsibilities, its resources, and the likely effectiveness of such involvement relative to that of stakeholders, such as other civil aviation authorities, ICAO, the private sector, non-governmental organizations, and the voluntary sector. Collaborative approaches, including partnerships and networking, are one of the many options at TCCA's disposal to achieve positive outcomes.
- (4) A systems approach to risk management promotes transparent processes that establish clear lines of accountability for decision-making. TCCA's mission is based on the concept that intervention strategies—such as rulemaking, oversight, and certification—are tools used to mitigate risk and that the Canadian public is, ultimately, the client.

4.4 Safety Management System (SMS) at a glance

- (1) SMS contributes to improve systems and procedures to maximize the safety of aviation operations. As SMS is directed towards external stakeholders, TCCA imposes a similar model on

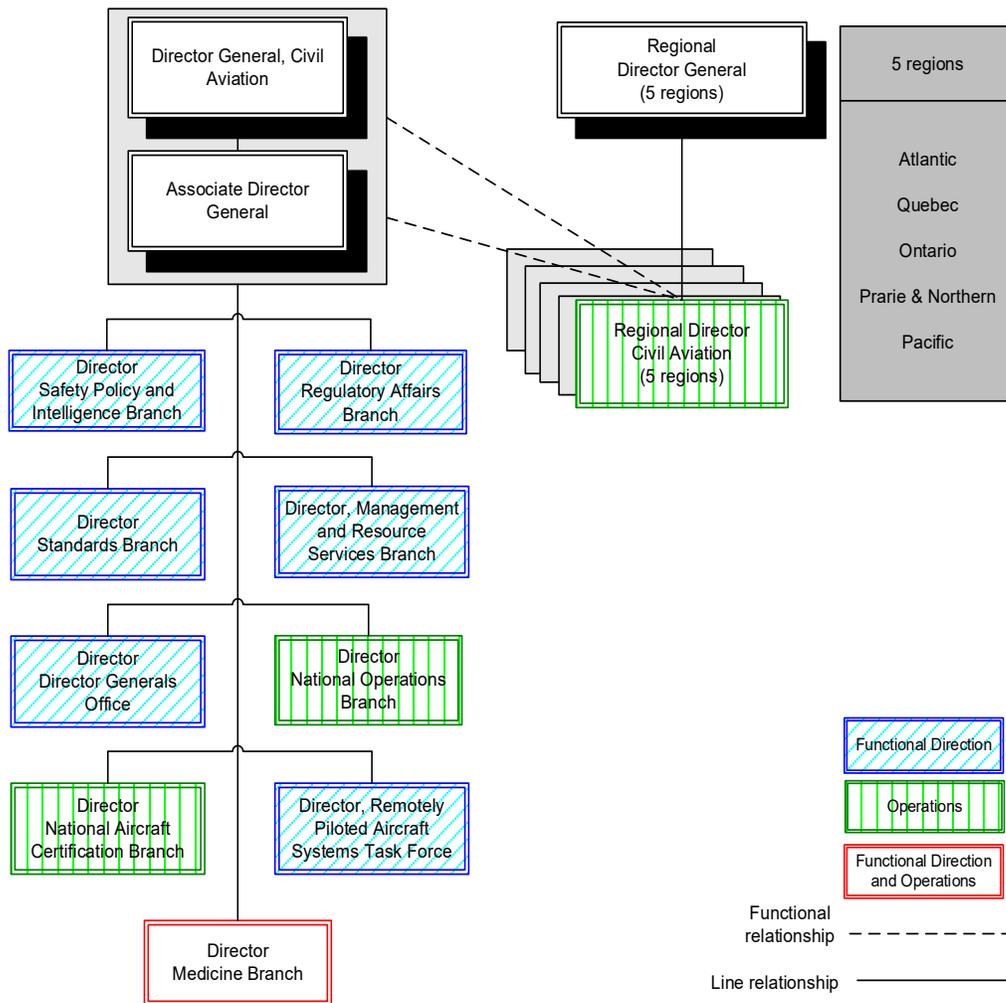
itself to reach management excellence and continuous improvement. This is the Integrated Management System (IMS), which can be considered as an internal SMS.

- (2) Safety management is based on the premise that hazards, risks and threats will always exist. Systemic and proactive management is therefore required to identify and control these hazards, risks and threats before they lead to mishaps. A proactive safety culture involves TCCA and industry working together to reduce the likelihood of accidents.
- (3) Safety is defined as “The condition to which risks are managed to acceptable levels.” SMS aims to reduce risks in aviation and seeks to steer the accident rate downward.

4.5 Organizational structure

- (1) The TCCA program is led by one Director General and one Associate Director General, and it is divided into several headquarter branches, one headquarter task force, and five regional branches.
- (2) All headquarter and regional branches are managed by directors.
- (3) All headquarter task forces are assigned for a limited duration.
- (4) Regional directors have a line reporting relationship with a regional Director General and a functional reporting relationship with the Director General and Associate Director General, Civil Aviation. Refer to [Appendix A](#) of this manual for further description of TCCA's organizational structure.

Figure 1 — Civil Aviation Directorate organizational structure



- (5) The functional relationship allows the Director General, Civil Aviation (DGCA) to provide direction within the scope of the Civil Aviation Directorate. The line relationship signifies a command over resources and activities.
- (6) At headquarters, five branches and one task force (Safety Policy and Intelligence, Regulatory Affairs, Management and Resource Services, Standards, Director Generals Office, and Remotely Piloted Aircraft Systems (RPAS)) provide national functional direction to the Civil Aviation Directorate. Functional direction is the exercise of functional authority by:
 - (a) Issuing and monitoring compliance with operational policies and procedures; and
 - (b) Providing guidelines and advice on the interpretation and implementation of these operational policies and procedures.
- (7) Two headquarter branches (National Operations and National Aircraft Certification) and all regional branches are responsible for the day-to-day operational activities of the Directorate.
- (8) One headquarters branch (Medicine) provides functional direction and performs operational activities.

Note: for a description of organizational structures above the TCCA level, please consult Transport Canada's SSP Manual, TP 15462 ([RDIMS 15904513](#)).

4.6 Governance structure

- (1) The **Civil Aviation Program Business Committee (PBC)** is TCCA's governing body responsible for the achievement of the activities belonging to the Civil Aviation Directorate, including financial planning, resource allocation, human resource management, communications, program evaluation, and information management and technology. The Committee is comprised of the Director General and Associate Director General, Civil Aviation as the accountable executives for the Directorate and directors at Headquarters and in the regions. The Committee acts as a forum for high-level decision-making regarding TCCA.
- (2) TCCA sub-committees, including forums and networks, are established to focus on particular areas of the program. These sub-committees have the responsibility to move matters between committees, or to ask the appropriate PBC functional lead to do so.
- (3) Current and full descriptions of the membership, purpose and mandate of TCCA's main sub-committees is provided in Civil Aviation Governance: An Integrated Decision Making Framework ([RDIMS 11893089](#)). Sub-committees described in this document include:
 - (a) Operational Management Committee (OMC)
 - (b) Flying Program Requirements and Coordination Sub-committee (FPRCS)
 - (c) Aircraft Certification Consultation Team (ACCT)
 - (d) Policy and Regulatory Affairs Steering Committee (PRASC)
 - (e) Civil Aviation Regulatory Program Standardization (CARPS) Network
 - (f) Analysis, Occurrence, Planning and Reporting Management Committee (AOPR-MC)
- (4) In addition to the above-mentioned sub-committees, various other sub-committees are in place to ensure that internal services are positioned, available and focused to enable TCCA to achieve outcomes. These internal services sub-committees include:
 - (a) National Integrated Management System Action Team (NIMSAT), which is comprised of a representative from the Business Management group within each HQ branch and region. NIMSAT provides a means to ensure that there is consistent implementation of the TCCA IMS, as well as the continual improvement of the Civil Aviation Directorate.
 - (b) Civil Aviation IM/IT Executive Oversight Committee, which has the mandate to ensure that all Information Management (IM) and Information Technology (IT) initiatives and activities are managed from a TCCA-wide perspective and that they contribute to the organization's strategic business goals. This sub-committee has the authority to review and recommend the priority of Civil Aviation IM/IT related projects; substantiate cost / resource estimates of those projects / activities; and make recommendations to PBC.
 - (c) National Civil Aviation Learning Committee (NCALC), which has the mandate to provide oversight and guidance in the identification, development, design, delivery and validation of learning programs, products and activities to meet the national civil aviation learning needs and to bring issues to PBC for decision as required.

4.7 Reporting structure

- (1) In TCCA, a reporting structure is established whereby each employee has a clear line of reporting to a supervisor, manager or director. The organization structure is further detailed through organizational charts. These charts detail the reporting structure for all employees.
- (2) HQ branches are divided into divisions, usually managed by a chief who reports to a director. The chief will have a number of direct reports as well.

- (3) In the regions, Associate Directors of Operations (ADO) support the Regional Director. Each ADO oversees a number of Technical Team Leads (TTL) and/or Service Team Leads (STL). They are responsible for the management of the operational oversight activities including service to aviation industry and surveillance of the aviation system. Other regional divisions such as Standards Coordination and Analysis, Occurrence, Planning and Reporting (AOPR) play a key role in specific areas that are vital to the program.

4.8 Core responsibility CR 1 — Safe and secure transportation system

- (1) Transport Canada’s Departmental Results Framework (DRF) is the structure that links all Transport Canada programs to its core responsibilities. TCCA program activities are found under core responsibility (CR) 1 “Safe and Secure Transportation System.” (Refer to Transport Canada’s DRF and Program Inventory ([RDIMS 13535516](#)))
- (2) Transport Canada’s DRF provides the framework under which TCCA manages its resources to achieve expected results. The framework serves as the basis for resource allocations by Parliament, TBS, and departmental management.
- (3) Program results are measured by establishing a series of Key Performance Indicators each with specific measurable targets. These indicators are recorded in PIPs (see item [2.1\(1\)\(h\)](#) of this manual for list of TCCA PIPs). By using modern management tools, progress is assessed during periodic Management Review exercises. The performance measures support two ultimate outcomes:
- (a) Continued improvement in the high level of aviation safety in Canada; and
 - (b) A high level of public confidence in the TCCA program.
- (4) To support these outcomes, TCCA is responsible to develop and administer a series of policies, regulations, and standards necessary for the safe conduct of Canadian civil aviation activities. It controls a portion of international airspace in a manner that is harmonized with the international aviation community.
- (5) As per the DRF and Program Inventory, the TCCA program is further defined by the following programs:
- (a) Aviation Safety Regulatory Framework (P11); and
 - (b) Aviation Safety Oversight (P12)

4.9 Aviation Safety Regulatory Framework (P11)

- (1) Regulations remain one of the key tools used by government to achieve public policy outcomes. Other means of achieving the outcomes include education, promotion, and awareness, and establishing collaborative partnerships with stakeholders when appropriate.
- (2) As part of the Aviation Safety Regulatory Framework program, TCCA develops risk-based policies, regulations, standards and guidelines that are aligned with international civil aviation standards, and that promote a safe and harmonized aviation culture for Canadians, for air travelers in Canada, and for Canada’s aviation industry as a whole.
- (3) TCCA administers its policies and priorities within a legally sound framework through the following services:
- (a) Developing safety policy and providing regulatory program advice related to civil aviation;
 - (b) Providing direction and advice in the development of policy, drafting of legislation, regulations, standards, and advisory material;
 - (c) Providing leadership in the identification, mitigation, and management of risks; and

- (d) Providing legal support in ensuring compliance and enforcement of regulations, standards, and guidelines.
- (4) The Canadian Aviation Regulation Advisory Council (CARAC) is the means by which TCCA assesses and recommends potential changes to the CARs and their associated standards, through cooperative rulemaking activities. It provides functional advice to the regional and headquarters personnel and advises external stakeholders on the consultation process.
- (5) Overviews of all the planned activities that fall under the Regulatory Framework Programs of all the modes in Safety and Security as per the DRF are provided in annual Forward Regulatory Plans (FRPs).

4.10 Aviation Safety Oversight (P12)

- (1) TCCA's Aviation Safety Oversight program oversees the safety of Canada's national air transportation system through Surveillance of the Aviation System and Service to the Aviation Industry activities.

4.10.1 Aviation Safety Oversight (P12) – Surveillance Activities

- (1) Aviation Safety Oversight includes the activities related to the surveillance of the aviation system.
- (2) TCCA conducts system and non-system based surveillance of the aviation system to monitor the aviation industry for compliance to the regulatory framework. This is done through risk-based surveillance activities that are either planned or reactive and, when necessary, through audits and enforcement action.
- (3) TCCA plans surveillance activities each year based on enterprises' risk profiles. These surveillance activities include:
 - (a) Program Validation Inspections (PVI) – A process of research and on-site review of one or more parts of the Safety Management System or other regulated areas of an organization.
 - (b) Process Inspections (PI) – An in-depth review of an organization process used to produce an output to check whether it functions.
 - (c) Safety Management System (SMS) Assessments – A surveillance activity that evaluates effectiveness and level of compliance with regulations.
- (4) Reactive surveillance activities are an integral part of oversight and are mainly driven by risks, safety campaigns, and regional requirements. This approach allows Civil Aviation to react quickly to emerging or changing risks in aviation as a whole or as related to an individual operator. Reactive surveillance activities are often PIs, Targeted Inspections (TIs), or Compliance Inspections.
- (5) Civil Aviation Medicine conducts assessment on individuals in safety sensitive positions. In this perspective, surveillance is conducted on the population of pilots and air traffic controllers. Civil Aviation Medicine also monitors the examination work of the Civil Aviation Medical Examiners.

4.10.2 Aviation Safety Oversight (P12) – Service Activities

- (1) Transport Canada provides services to the aviation industry based on the Canadian aviation regulatory framework in areas such as:
 - (a) Issuance of personnel licences;
 - (b) Medical assessments required for the certification of licensed aviation personnel;
 - (c) Issuance of operating certificates to organizations;

- (d) Accreditation of approved check pilots (ACPs); and
 - (e) Certification of aeronautical products.
- (2) While the end product of these activities is the delivery of a certificate, a licence, or some other Civil Aviation Document to an aviation stakeholder, the underlying purpose of these activities is for TCCA to reasonably assure itself that individuals, organizations and aeronautical products can operate safely and in compliance with applicable regulatory requirements.
 - (3) These services are provided in response to demand from the aviation industry. In meeting these demands, TCCA has established and advertised [service standards](#). These service standards communicate to stakeholders the commitment to timeliness and the related level quality for each service delivered when the stakeholders does business with TCCA.
 - (4) Overall stakeholder satisfaction is measured through various means, such as stakeholder surveys. Should specific issues or concerns arise, aviation stakeholders, both internal and external, can submit them through the [Civil Aviation Communications Centre](#).

4.11 Civil Aviation Business Support Services

- (1) In the DRF, Internal Services are presented as an adjunct to the architecture and are not directly linked to the departmental core responsibilities.
- (2) Within TCCA, business support services related to business, human resources and financial planning, monitoring and reporting, as well as continuous improvement with IMS (quality assurance/quality control), are embedded within TCCA's three programs.
- (3) TCCA's business resources support the Civil Aviation Directorate's programs to achieve departmental priorities and ensure oversight of compliance with legislation, policy and procedures associated with the related activities.

Note: Refer to the Transport Canada Integrated Decision Making Framework ([RDIMS 9872636](#)) for more detailed information on how the department is structured.

5.0 Management system

- (1) Like other government departments, TCCA must respond to an environment that is increasingly complex, brought on in part by a changing workforce, globalization, new safety challenges, and emerging technological advancements. This requires a policy framework that is dynamic in that it allows for the development of medium and long-term strategies and approaches that respond effectively to emerging issues. This then translates into risk-based analyses that offer options in ways that are balanced and fair while keeping in mind the impacts on both TCCA and civil aviation stakeholders.
- (2) One of the challenges of developing and implementing a national program is maintaining consistency and integration among all planned and systematic activities and processes. To address this challenge, TCCA published the Civil Aviation IMS Standard ([RDIMS 9350305](#)), which guides the development and management of the Civil Aviation Directorate. The Standard sets out the requirements for management practices and controls for coordinating all activities and processes, while ensuring consistency in the delivery of the TCCA program across the country. These processes are interlinked and documented through TCCA's Documentation Framework. The Director, Management and Resources Services is the executive responsible for the implementation of the IMS.
- (3) TCCA's management system aligns with the Management Accountability Framework (MAF) that articulates principles of good public service management, which TBS expects senior public service managers to follow. The MAF is structured around ten key elements that collectively

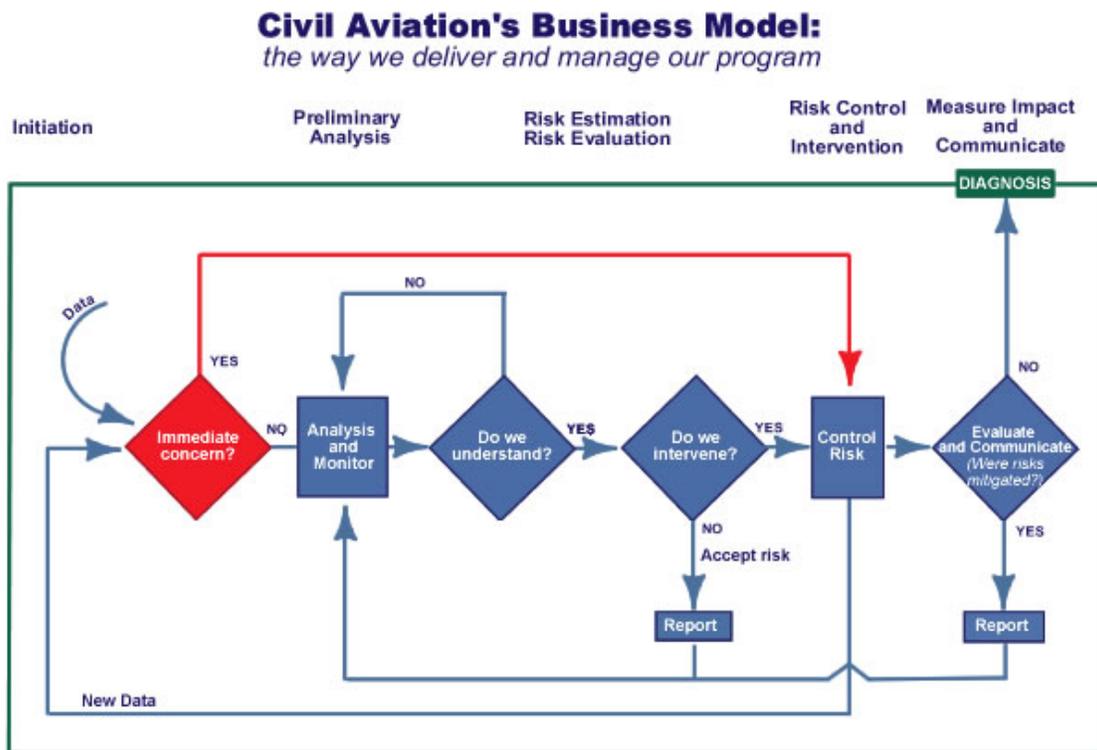
define "management" and provides public-service managers with a clear list of management expectations within an overall framework for high organizational performance.

- (4) The management system is comprised of five key processes that work together to ensure the effective and efficient management of the Civil Aviation Directorate. These processes are:
 - (a) Management responsibility;
 - (b) Documentation;
 - (c) Program design and delivery;
 - (d) Training; and
 - (e) Evaluation.
- (5) Continuous improvement and risk management are integrated within these processes and form part of management review and facilitate the redesign of a particular activity process.

5.1 Risk management

- (1) TCCA has a business model that is based on risk management and applies to all activities and processes in the delivery and management of its program. (Refer to [Figure 2](#))

Figure 2 — TCCA's business model



- (2) The application of risk management in TCCA occurs on many levels, with a focus on both internal program risks and external system safety risks.
 - (a) For example, the Directorate considers internal risks to help senior management determine their ability and capacity to carry out the Program's mandate. On an operational level, risk management processes are commonly used for decision making

when assessing the risks to aviation safety and to determine the appropriate mitigation strategies.

- (b) Furthermore, as per Safety Management requirements of ICAO Annex 19, TCCA also identifies, assesses, and monitors significant system-wide safety concerns on an aggregate level. This framework is outlined further in the SSP Manual, TP 15462 ([RDIMS 15904513](#)).
- (c) Taken together, risk management activities at TCCA inform effective planning, resource allocation and decision making to ensure a safe civil aviation system.

5.1.1 Risk management methodology

- (1) Risk management introduces the idea that the likelihood of an event happening can be reduced or the severity of its consequences minimized. In TCCA, the term is frequently used in the context of decision making pertaining to managing situations that affect aviation safety. Effective risk management seeks to maximize the benefits of a risk—usually a reduction in time or cost—while mitigating the risk itself.
- (2) Risk management is a systematic approach to setting the best course of action under uncertainty by identifying, understanding, assessing, monitoring, acting on, and communicating risk issues. Effective communication and consultation is essential to the success of the process. The business model is divided into five phases:
 - (a) **Initiation** – Collect and integrate proactive and reactive data from various sources internal and external to TCCA in order to identify issues. For example, issues are raised through the PBC, industry, the [Civil Aviation Communications Centre](#), and through management system assessments.
 - (b) **Preliminary analysis** – Analyze the issue by understanding the causal, contributing, and underlying factors; determine the scope of the issue; establish a benchmark to enable measurement of the impact. Continuously monitor reported issues for trends (aggregate issues).
 - (c) **Risk estimation and risk evaluation** – Once the risk is understood, including the likelihood of its manifestation and its severity, decide if the risks are tolerable/acceptable or not. If the risks are acceptable, then no intervention is required. If the risks are not acceptable, determine how to intervene to bring the hazardous conditions into the range of acceptability. The dimension of cost-benefit is examined in the context of risk mitigation calling into question whether the benefits of any proposed risk mitigation strategy offset the costs of its implementation. For more information, consult the intranet (myTC) webpage on [Risk Management in Civil Aviation](#) (RDIMS 13398396).
 - (d) **Risk control and intervention** – Generally, there are three strategies for managing risk: (1) eliminate the hazardous condition; (2) mitigate the risks; or (3) transfer the risk. In terms of mitigation, TCCA designs and executes intervention strategies that address the components of the risk equation (probability and severity).
 - (e) **Measure impact and communicate** – After a time, the results of the risk mitigation strategy should be ascertained to determine if the planned interventions are achieving the desired results, if any adjustments to the original plan must be made, and to justify current or future resource expenditures. If the planned interventions are not achieving the desired results, a diagnostic exercise must be conducted to discover where the failure occurred in the application of the business model. The answer may be in the design or execution of the mitigation strategy phase, the decision-making phase (the misapplication or inappropriateness of risk criteria), or the analysis or data-capturing phases. As part of a transparent process, the results of the measurement and diagnostic, if applicable, should be communicated to stakeholders.

- (f) Throughout the risk management process, recording and reporting occurs to provide information for decision-making, continuous improvement, and stakeholder communications.

5.2 Management responsibility

5.2.1 Management commitment

- (1) Management is committed to developing, implementing, and continuously improving programs and services within TCCA. This commitment is defined and reviewed as part of the organization's strategic direction and business planning, monitoring and reporting process.
- (2) The PBC conducts management reviews that contribute to the strengthening of the system by identifying opportunities for improvement and determining program changes based on new business direction.

5.2.2 Values and ethics

- (1) TCCA is committed to strong leadership in compliance with Transport Canada's Code of Values and Ethics ([RDIMS 6587068](#)) and the [Values and Ethics Code for the Public Sector](#) (VECPS). As a result, employees occupying higher risk positions, such as inspectors, technical support staff and managers (executives and equivalent levels) are required to complete a Declaration of Conflict of Interest and Post-Employment ([RDIMS 7139901](#)) every two years.
- (2) Furthermore, the annual employee performance management process has been leveraged to highlight values and ethics and to discuss an employee's behaviors in reference to TC's Code of Values and Ethics. As well, we follow the guidelines specified in TC's Code of Values and Ethics when an ethical issue or breach of the Code is verified. One way this leadership is demonstrated is through open communications between management and employees through various activities and forums whose purpose is to engage employees in the achievement of the organizational objectives.

5.2.3 Stakeholders

- (1) TCCA's stakeholders are people or organizations with an interest in aviation safety. These include external stakeholders (e.g. traveling public and the aviation industry) and internal stakeholders (e.g. TCCA personnel and the Minister of Transport).
- (2) TCCA is focused on enhancing stakeholder satisfaction and considers stakeholder needs and expectations when designing and delivering its program while balancing resource requirements and public safety.
- (3) One way to monitor the level of stakeholder satisfaction is through stakeholder feedback, such as the [Civil Aviation Communications Centre](#) and Canadian Aviation Regulation Advisory Council (CARAC).
- (4) The [Transport Canada Service Charter](#) reaffirms TCCA's commitment to high standards of service and is an example of TCCA's strengthened effort to deliver a regulatory program that is effective, efficient, transparent, and responsive.

5.2.4 Management review

- (1) TCCA, through the PBC, plans and conducts a management review annually to ensure that the organization is achieving its specific goals and objectives in an efficient and effective manner.
- (2) Management reviews are also conducted at various levels of the organization on one or more activities on an ongoing basis (e.g. monthly financial reviews, business plans).

- (3) The outcomes of a management review may result in corrective action plans (CAPs) leading to improvements of management systems and their processes, realignment of resource allocations, identification of issues between existing program activities, internal and independent audits, strict document controls, and ongoing monitoring of corrective actions.

5.3 Resource management

5.3.1 Human resources

- (1) TCCA ensures that its workforce and organizational structure are effectively positioned to deliver and adapt to the program requirements of today and the future. The continuous evolution of the program is in response to many external challenges.
- (2) Human resources management is linked to strategic and business plans both at the departmental and program level. TCCA's work and workforce are aligned with business priorities, and the integrated human resources plan identifies and responds to the challenges resulting from these priorities.
- (3) TCCA is committed to having a workforce representative of Canada's population, in accordance with the TBS promotion of diversity, key commitments under the MAF. As a result, this inevitably leads TCCA to have more inclusive policies, programs, and services. In this perspective, diversity is a core organizational value. Respect for others is of utmost importance, and differences shall be embraced as TCCA strives to achieve an organization that reflects Canada's diverse society.

5.3.2 Competency awareness and learning

- (1) TCCA identifies the competency requirements for all positions and then determines the corresponding learning requirements for personnel to attain and maintain competency requirements.
- (2) Employees are made aware of how they individually and collectively contribute to the achievement of the organization's strategic direction and objectives.
- (3) TCCA employees and managers have a shared responsibility to identify and prioritize learning activities through the performance management process that includes the establishment of a learning plan. The learning activities are linked to current position requirements or mandatory learning/development, specialized training to current position or learning that may support achieving career development goals.

5.3.3 Workplace

- (1) TCCA is committed to providing a safe workplace for its employees. As an employer, TCCA is committed to:
 - (a) Providing tools, equipment, and training to foster a safe environment; and
 - (b) Addressing all human and physical factors of the work environment and ensuring they meet the requirements of the [Canada Labour Code, Part II](#), and supplemental requirements.

5.4 Program design and delivery

- (1) When introducing new activities or when significant modifications are made to existing ones, TCCA follows a documented project management framework. Projects are aligned with the Integrated Planning, Monitoring and Reporting Framework (IPMRF).

- (2) The delivery of an activity, product, or service requires the involvement of employees across the organization. The interaction is at multiple levels and may cross organizational and geographical boundaries. Accordingly, program delivery requires effective communication, data and information exchange, and clear assignment of roles and responsibilities.
- (3) Prior to delivery of all program activities, monitoring functions that are built into the process are conducted. This ensures that the expected qualities of all the products and services are met.

5.5 Measurement and analysis

5.5.1 Stakeholder satisfaction

- (1) TCCA develops and publishes [service standards](#) to ensure the timeliness of safety oversight services. In designing service standards and delivering its services, TCCA strives to address stakeholder requirements while balancing its responsibilities for public safety and the judicious use of public funds.
- (2) TCCA has established processes to measure and analyze its services, to ensure that they are being delivered within the service standards and that any determined corrective actions are documented in an opportunity for improvement session. This type of plan is based on stakeholder focus priorities; sets targets for improvement in client satisfaction; and then monitors and reports on performance to obtain levels of service.
- (3) The [Civil Aviation Communications Centre](#) is available to stakeholders to report opportunities for service improvement. The reported situations are reviewed by management and help identify areas to monitor and improve the way TCCA does business.

5.5.2 Measurement and monitoring

- (1) TCCA monitors and, where applicable, measures the processes that are used for program delivery in order to verify that planned results and service standards have been met. When results have not been met, a corrective action plan (CAP) is developed and delivered.
- (2) TCCA has implemented and adheres to the TBS requirements of the [Policy on Results](#) (effective July, 2016). This policy sets out the fundamental requirements for Canadian federal departmental accountability for performance information and evaluation, while highlighting the importance of results in management and expenditure decision making, as well as public reporting.

5.6 Continuous improvement

- (1) The management system is based on the principle of the continuous improvement cycle and is a key output of the measurement and analysis of management reviews.
- (2) TCCA ensures that continuous improvement of the TCCA program is accomplished by conducting management reviews. The outputs are incorporated into subsequent strategic and annual plans to ensure this improvement of the program.
- (3) Part of the strategic and annual plan are quality assurance (QA) activities. Such activities are prioritized on a risk-based approach. Subsequently, these activities are planned and implemented following a five-year perspective.

6.0 Contact us

For more information, please contact:

Management and Resource Services (AARA)

E-mail: [Documentation Services - Aviation / Services de documentation – Aviation](#)

Suggestions for amendment to this document are invited and should be submitted via the same e-mail address mentioned above.

Document approved by

Andy Cook
Acting Director General, Civil Aviation

Appendix A — TCCA organizational descriptions

The following section provides a brief description of TCCA's headquarters and regional branches:

- (1) **Safety Policy and Intelligence Branch** is responsible for the development of evidence-based aviation safety policy based on strategic risk assessment that supports strong decision making and forms the basis for advancing TCCA program objectives.
- (2) **Regulatory Affairs Branch** develops regulations based on regulatory, program and operational policy; manages the Civil Aviation regulatory agenda including the development, coordination and analysis process with TBS; reviews Standards and other documents incorporated by reference from a regulatory perspective, and manages the Canadian Aviation Regulation Advisory Council (CARAC). The Branch also works with internal and external stakeholders to issue exemptions to the CARs, as required.
- (3) **Standards Branch** develops standards, operational and enforcement procedures, and guidance and safety-awareness material in order to mitigate risks to aviation safety. Accordingly, this branch establishes the corresponding training requirements for the inspectorate and provides operational units with functional guidance and regulatory interpretation. Standards Branch is also responsible for regulating aircraft registration and leasing; maintaining the Canadian Civil Aircraft Register; and maintaining safety oversight of recreational aviation and special flight operations such as air shows.
- (4) **Management and Resource Services Branch** provides guidance and services to the national management team. It develops and manages TCCA's IMS; acts as an authority for internal quality assurance; and oversees the implementation of specific quality improvement plans and corrective action plans. The branch is also responsible for TCCA's strategic business planning and performance reporting, including budget management and analysis and the Activity Reporting and Standards System (ARASS). This branch is the focal point for people management strategies including human resource planning, employee development, knowledge transfer and learning for TCCA employees. The branch also provides advice on matters regarding aviation terminology; and offers professional linguistic services. Finally, the branch provides for the centralized delivery of financial, administrative and HR transaction services to all HQ branches.
- (5) **Directors General Office (DGO) Branch** acts as the single point of contact for information requests to ensure consistency of messages on many complex subjects resulting in optimal use of time and resources within short and strict deadlines. This minimizes the need for repetitive engagement of subject matter experts and allows for minimal strain on Directorate resources involved in regulatory or oversight activities, as well as other internal services, to provide succinct and pertinent information to senior management. The DGO also provides advice and support to the Director General and Associate Director General for the management and organization of TCCA's PBC meetings and town hall events.
- (6) **National Operations Branch** is an operational unit that is responsible for the safety oversight of assigned enterprises including air navigation service providers and certain national air operators, as well as all foreign air operators operating to, from and within Canada. The branch manages and improves its oversight program through quality assurance activities and data analysis, which identify strategic and tactical issues critical to aviation safety.
- (7) **National Aircraft Certification Branch** is an operational unit that is responsible for the regulatory oversight of Canada's aeronautical product design and manufacturing enterprises, including regional product certification activities. This primarily involves the Canadian certification of aeronautical products emanating from these enterprises, facilitating the certification of these products in other countries and jurisdictions thus enabling exportation, and in addition holding State of Design responsibilities for the continuing airworthiness of these products wherever they may be owned and operated worldwide. Continuing airworthiness oversight responsibilities also include all Canadian registered aircraft including non-Canadian State of design products. The

branch's operations are highly reliant on an established delegation of authority system established in 1968, whereby industry representatives are granted the authority to make findings of compliance to design standards and in some cases issue approvals. Ongoing surveillance of these delegates and delegated organizations comprises an important aspect of the Branch's operations.

- (8) **Medicine Branch** develops and applies the regulations, standards, and procedures for performing medical assessments that are required for the certification of licensed aviation personnel. The branch also plays a pivotal role in creating and harmonizing international aviation medical standards.
- (9) **Regional TCCA Branches** are found in each of the five Transport Canada regions—Atlantic, Ontario, Quebec, Prairie and Northern, and Pacific. The regional TCCA branches are operational units. They are responsible for aviation safety oversight of those air enterprises typically headquartered in its region. Their oversight responsibilities include inspections safety promotion, as well as the certification of people and organizations. They enhance the oversight program through quality assurance activities and data analysis, which identify strategic and tactical issues critical to aviation safety. They are responsible for the strategic management of regional high-profile issues affecting the aviation industry and the public including matters that trigger media interest. Regional Enforcement Units (REUs) carry out punitive enforcement activities and have a functional relationship to both the Transport Canada Centre of Expertise (CEE) and Standards Branch. Regionally located National Aircraft Certification Branch engineers, meanwhile, perform aeronautical product certification activities to better serve regional applicants.
- (10) **Remotely Piloted Aircraft Systems (RPAS) Task Force** updates and improves the CARs to safely integrate remotely piloted aircraft systems into Canada's air transportation sector. In addition to issuing approvals, the task force also implements and promotes new policies, programs and educational initiatives to help ensure regulatory compliance.