

# BELIZE AVIATION SAFETY POLICY



## A POLICY OF THE GOVERNMENT OF BELIZE



## RECORD OF AMMENDMENTS AND CORRIGENDA

AMMENDMENTS/CORRIGENDA					
No.	DATE ENTERED	DATE APPLICABLE	ENTERED BY:		

BELIZE AVIATION SAFETY POLICY, as the SSP top-level (exposition) document, is a living document. If, as a result of development in or due to an amendment to the scope and functions of the applicable legislation and international standards and recommended practices, changes occur that will necessitate revision of this Policy, it must be amended.



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#### **FOREWORD**

As of 2006, Contracting States to the Chicago Convention are obliged to implement a State Safety Programme (SSP) in order to achieve an acceptable level of safety in the operations of aircraft and in the provision of services within the aviation system, as introduced through the Standards and Recommended Practices (SARPs) contained in Annex 19 – Safety Management as adopted by the Council of the International Civil Aviation Organization (ICAO) on February 2013, which became applicable on November 2013.

The SSP is defined as a set of regulations and activities aimed at improving safety; the main objective of which is to achieve an Acceptable Level of Safety Performance (ALoSP) within the State. It provides the framework for the State and all service providers (as defined in Annexes 1, 6 (Parts I, II and III), 8, 11, 13 and 14 (Vol. I) to the Chicago Convention) to acknowledge their safety responsibilities, and for service providers to establish Safety Management Systems (SMS).

Belize, as an ICAO Member State, is required to establish SSP and ALoSP indicators. Among other requirements, the SSP mandates that every service provider develop a SMS, and ensure that ALoSP indicators are achieved through proper application of the SMS within Flight Operations, and within the Aviation System.

Effective SSP implementation is a gradual process, requiring time to mature fully. Factors that affect the time required to establish an SSP include the complexity of the air transportation system, as well as the maturity of the aviation safety oversight capabilities of the State.

This Aviation Safety Policy is an exposition document for Belize which charts our strategy to strengthen Belize's safety management functions for civil aviation activities. It is a governing document on a comprehensive level which outlines our guiding principles and safety objectives, as well as the necessary processes to effectively implement this strategy.

The Ministry of Blue Economy and Civil Aviation, the Department of Civil Aviation ("the Department") and the Accident Investigation Unit (AIU) of Belize are committed to working closely with our stakeholders to implement the SSP and enhance safety management in Belize.

We must continue to improve aviation safety to safeguard the well-being of the aviation community and air travelers.

Hon. Andre Perez

Minister responsible for Civil Aviation



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#### INTRODUCTION

Aviation safety is of paramount importance to the sustainability of the civil aviation industry in Belize. Aviation activities are growing steadily and the industry is becoming more complex. At the top of the ICAO's agenda is the management of aviation safety to ensure growth and sustainability.

With air traffic projected to double in the next 15 to 20 years, safety risks must be addressed proactively to ensure that this significant expansion is carefully managed and supported through strategic regulations and infrastructure.

In order to meet such safety demands, ICAO introduced an Annex dedicated to Safety Management in order to reinforce the role played by States in managing safety at a State level, stressing the concept of overall safety performance in all domains, in coordination with service providers.

Annex 19 - Safety Management requires each contracting State to establish a State Safety Programme in order to achieve an ALoSP in civil aviation. The implementation of an effective SSP will systematically address safety risks in Belize as an ICAO contracting State.

As defined, an SSP is an integrated set of regulations and activities aimed at improving safety. It combines elements of both prescriptive and performance-based approaches to the management of aviation safety and is built around the following key components:

SSP component 1
 SSP component 2
 SSP component 3
 SSP component 3
 SSP component 4
 State safety risk management;
 State safety assurance; and
 State safety promotion.

The main mid-term and long-term objectives of the SSP are the overall management and improvement of aviation safety by the State, to achieve Acceptable Levels of Safety Performance Indicators. An SSP sets requirements and the environment for air operators and service providers in a State to establish and maintain a Safety Management System (SMS). States are also responsible for the approval and/or acceptance and oversight of service providers' SMS.

The Civil Aviation Act, Chapter 239 of the Laws of Belize (Revised Edition 2011) is in the process of being amended to incorporate provision for the establishment of the SSP; corresponding subsidiary legislation will also need to be developed, for the incorporation of provisions for regulating the Safety Management Systems within the air operators and/or service providers as required by ICAO Annex 19. These, together with the supporting Technical Standards contained in the Aeronautical Information Circulars (AICs), will be mandating service providers to establish and maintain SMS; and guidelines will be contained in the corresponding Advisory Circulars (ACs).



The Department of Civil Aviation is working closely with the aviation industry to foster safety and a "just culture" approach to facilitate the implementation of SMS by industry. The aviation industry is currently engaged in this process, and the role of the Department is to provide an enabling environment for its effective implementation. The Department will therefore monitor and assess the effectiveness of the SMS.

The Director of Civil Aviation (the Director) ensures the coordination of all safety management programmes through the SSP, under the leadership of the Minister responsible for Civil Aviation.



## 1. CHALLENGES AND PRIORITIES

Air Transport is vital to economic growth in Latin America and the Caribbean, where it generates around USD \$156 billion in Gross Domestic Product (GDP). It supports 7.2 million jobs, connecting the region with 160 global cities on 2.6 million flights per year; fostering business growth, people-to-people ties and personal journeys of discovery. In Belize, aviation supports 33 percent of the country's GDP <sup>(1)</sup>.

The principal objective is to allow the aviation industry to be an engine of economic growth and social and cultural development. However, it is a challenging task; requiring regulation and ensuring the right infrastructure is in place to maximize the many benefits this industry generates.

The successful management of the COVID-19 pandemic requires the assessment and management of risks that extend beyond the boundaries of managing aviation safety risks as defined in Annex 19 – Safety Management Civil Aviation. The airline industry has been virtually grounded by COVID-19 and recovery has been muted in most markets due to travel restrictions. Deep recession and weak consumer confidence also hampered the recovery. We expect the share of world GDP spent on air transport to be 0.5% in 2021, half of the pre-crisis levels. On the other hands, world trade is expected to rebound strongly in 2021, which will be supportive for air cargo volume.

States and the civil aviation industry will need to commit towards building a more resilient air transport system. The success of aviation's recovery today and future resilience is best achieved with collective efforts among stakeholders across region and sectors.

The growth in air traffic introduces complexities and additional stresses to our aviation system. The Department is tasked to continue its facilitation of high air traffic volumes, without compromising safety standards. As such, the Department is building up and strengthening its capabilities and capacity in tandem with global and industry developments. This will not only ensure adequate safety oversight, but will also help to maintain an enabling regulatory environment that facilitates the sustained growth and development of the aviation industry.

Regulatory approaches are also changing in response to the changing needs in the aviation landscape. The evolving aviation environment necessitates performance-based regulation and data-driven regulatory approaches, leveraging predictive analysis and info-communication technology. The regulator's skill-set needs to correspondingly expand, as new regulatory approaches are developed and implemented.

Belize is committed to working with ICAO, regional and international partners to advance aviation safety globally.



ICAO has, through its Global Aviation Safety Plan, identified priorities and targets for States to strengthen safety oversight capabilities, implement their SSPs and build upon their safety management efforts to develop advanced safety oversight systems, including predictive risk management. Three (3) operational priorities have also been identified: (1) improving runway safety; (2) mitigating the risk of Controlled Flight - Into Terrain (CFIT) accidents and (3) mitigating the risk of Loss of Control in flight (LOC-I) accidents.

Belize is also committed to achieving these priorities and targets, as well as to addressing the challenges unique to our civil aviation system, through the continuous monitoring, assessment and management of our State's safety performance.

<sup>(1)</sup> Oxford Economics Report. "Economic Benefits of Air Transport in Belize". Edition 2018. Prepared with IATA's support.



## 2. SAFETY POLICY, OBJECTIVES AND RESOURCES

## 2.1 State Safety Policy Statement

## 2.1.1 Belize's Safety Policy Statement

Belize is committed to developing and implementing effective strategies, frameworks and processes to ensure that civil aviation activities under our responsibility achieve the highest practicable level of safety.

The Department of Civil Aviation, under the Ministry of Blue Economy and Civil Aviation as the Ministry responsible for Civil Aviation, promotes and regulates the safety of civil aviation in Belize. To this end, the Department will:

- A. set national policies and standards that are consistent with the Standards, Recommended Practices and Procedures of ICAO;
- B. adopt a data-driven and performance-based approach to safety regulation and safety oversight activities, where appropriate, leveraging safety data and information to identify safety trends, and adopt a risk-based approach to address areas of greater safety concern accordingly;
- C. monitor and measure the safety performance of our aviation system to identify, address and mitigate aviation safety risks;
- D. collaborate and consult with the industry to address safety matters, promote good safety practices and build a strong and proactive safety culture based on safety management principles;
- E. encourage the collection, analysis and exchange of safety data and information;
- F. contribute effectively to improving aviation safety in international and regional fora;
- G. ensure sufficient financial, human and corporate support resources for safety management; and
- H. equip staff with the proper skills and expertise to discharge their safety oversight and management responsibilities competently.



As the provider of Air Navigation Services, the Department will:

- A. implement an effective and efficient Safety Management System to mitigate aviation safety risks associated with Air Traffic Management (ATM);
- B. enhance our ATM capabilities to deliver safety and efficiency improvements to airspace users, so as to support the growth of Belize's aviation system; and
- C. contribute effectively in international and regional fora for the improvement of aviation safety through ATM modernization efforts in Belize and the North American Central American and Caribbean (NACC) region.

The Aircraft Accident Investigation Unit (AIU) of the Ministry of Blue Economy and Civil Aviation will be the entity in Belize responsible for conducting safety investigations into aircraft accidents and serious incidents. The AIU promotes aviation safety by drawing safety lessons from investigations, as well as co-managing, along with the Department's SSP Unit, the reporting systems, namely the mandatory occurrence reporting system and the voluntary incident reporting system. To this end, the AIU will:

- A. institute and conduct investigations in a manner consistent with the Standards and Recommended Practices of ICAO Annex 13 on Aircraft Accident and Incident Investigation and under the provisions to be incorporated into the Civil Aviation Act;
- B. maintain objectivity, impartiality and independence in the course of its accident and serious incident investigations;
- C. collaborate with the regional and international accident investigation communities and aviation industry to keep abreast of accident investigation advances; and enhance aviation safety by promoting the sharing of expertise, experiences and safety information,
- D. collaborate with the Ministry of Blue Economy and Civil Aviation to ensure allocation of sufficient financial, human and corporate resources for accident and incident investigations; and
- E. equip staff with proper skills and expertise to competently discharge their accident and incident investigation responsibilities.



## 2.2 Safety Objectives

2.2.1 Belize, as an ICAO Contracting State, strives for a high level of aviation safety. Effective safety oversight builds confidence in our aviation system, encourages aviation-related investments and operations, and facilitates continued growth.

To achieve this, Belize will:

- a. mitigate aviation safety risks, with the aim of preventing accidents with fatalities involving entities under its safety oversight;
- b. enhance safety management capabilities of the Belize aviation industry and of the relevant State agencies, to continuously improve safety performance and mitigate risks;
- c. develop progressive and robust aviation safety, regulatory and investigative regimes, taking into account and balancing the needs of, the stakeholders within the industry, the government, the travelling public and the international community; and
- d. actively and effectively contribute and collaborate in international and regional fora to enhance the safety of domestic and international civil aviation.
- 2.3 Belize's Safety Legislative Framework

## 2.3.1 Legislation

Belize has a national aviation safety legislative framework, supported by the necessary aviation subsidiary legislation to implement the Chicago Convention and its Annexes.

The following pieces of legislation are applicable:

a. Civil Aviation Act, Chapter 239, Revised Edition (R.E) 2011

The current Civil Aviation Act (the Act), CAP 239, R.E. 2011, is a revised edition of the substantive laws consolidated up to 31<sup>st</sup> December 2011. It was prepared by the Law Revision Commissioner under the authority of the Law Revision Act, Chapter 3 of the Substantive Laws of Belize, Revised Edition 2011.



The Act provides for the regulation of aviation safety in Belize including the adoption of the necessary Regulations to implement the Chicago Convention and its Annexes, as well as for their amendment. Among other things, it empowers the Department to take appropriate measures in the event of non-compliance with legislation and regulations, or when it is assessed that there are potential safety risks to the civil aviation system. It also makes provisions for the investigation of any accident arising out of or in the course of air navigation, occurring in, over Belize, or occurring to Belize registered aircraft wherever they may be.

Provisions will be made in the Act for the establishment of an Accident Investigation Unit (AIU) and the appointment of a Chief Investigator and Accident Investigator(s) and to include the delegation of powers to inspectors.

## b. Belize Department of Civil Aviation

The Act also establishes the Belize Department of Civil Aviation, and provides that the principal function of the Department is to regulate and administer a safe civil aviation system, whilst ensuring that Belize discharges its obligations properly under international civil aviation agreements and treaties, in particular, the Convention on International Civil Aviation.

The Department is the regulatory and oversight body in all civil aviation matters in Belize. It is headed by the Director of Civil Aviation. As a Contracting State to the Convention on International Civil Aviation since 1991, Belize is obligated to comply with the Standards and, as far as practicable, the Recommended Practices contained in all nineteen Annexes to the Convention.

## c Belize Civil Aviation Regulations (BCARs)

BCARs are subsidiary legislation made under authority of section 4 of the Act and prescribe, among other things, the safety regulatory requirements as contained in the various Annexes of the Chicago Convention. They also contain Technical Requirements, which are mandatory requirements for various aviation activities. BCARs are approved by the Minister responsible for Civil Aviation.

## d BCAR 13 – Accident/Incident Investigation

BCAR 13 outlines the regulatory framework for the processes and procedures for the investigation of aircraft accidents and incidents, in accordance with Annex 13 of the Chicago Convention, including the issuance of investigation reports and safety recommendations.



#### 2.3.2 Guidance material

2.3.2.1 Guidance material provides detailed information on policies and regulations, safety recommendations, guidelines for regulatory processes and advisory circulars issued by the Department. Where appropriate, guidance material also provides service providers with the Acceptable Means of Compliance (AMC) with the Technical Requirements found in the BCARs. The Department may also accept alternative means prior to implementation, if they adequately meet the intent of the regulatory requirements; and it is verified through a proper assessment during the corresponding certification process phases, as defined in the published Certification Process Document (CPD).

## 2.3.3 Policies and procedures

- 2.3.3.1 Policies and procedures for civil aviation regulation and investigation of aircraft accidents and incidents have been established, and are applicable to the relevant Department and AIU staff, respectively. They cover functional areas such as rule development, grant of licenses/certificates/approvals, enforcement, surveillance and investigation. They also provide guidance on governance matters such as personal conduct, training and capacity building, as well as administrative matters such as the handling of State Letters issued by ICAO.
- 2.3.3.2 Mutually agreed policies and procedures are to be in place to coordinate the work and resources between the Department and AIU.

## 2.3.4 Ministerial Direction

2.3.4.1 The Department functions both as regulatory authority and service provider (in the areas of air navigation services and in coordinating training in air traffic control). To ensure clear functional separation in these areas, the Minister issued directions to the Department pursuant to section 12 (2) of the Act, with respect to the discharge of both functions. The Department is required to give effect to all such directions issued by the Minister.

## 2.3.5 Review of Legislation & Regulations

2.3.5.1 There are procedural manuals in place to guide the review of aviation safety legislation, regulations, guidance material, and policies and procedures, to ensure that they remain effective and relevant to Belize's aviation system.



- 2.3.5.2 The processes required for compliance with ICAO SARPs result, inter alia, from ICAO technical State Letters for amendments of the Annexes, maintenance of the Compliance Checklists, and the very needs identified within the Belize aviation industry. The Director of Civil Aviation shall oversee the rule-making procedure, which shall be an ongoing exercise, in consultation with the relevant stakeholders.
- 2.3.5.3 The Department's internal SSP Working Group has been tasked to regularly review the SMS regulations and guidance materials, covering the entire ICAO SMS framework, in four-year cycles. The revision ensures that specific operating regulations, guidance materials and implementation policies on SMS remain relevant and appropriate to service providers; and identifies areas of improvements in our safety oversight of SMS implementation by service providers.
- 2.3.5.4 The Department plans to adopt a principle-based, or outcome-based approach, where appropriate, when drafting the BCARs. This will allow the industry more room for flexibility, provided that both the safety intent of the requirement and an equivalent level of safety can be achieved.
- 2.4 Belize's Safety Responsibilities and Accountabilities
- 2.4.1 The Ministry of Blue Economy and Civil Aviation is the parent Ministry of the Department and AIU. The subsequent paragraphs describe the roles of the various organizations in relation to civil aviation and the coordination of the SSP.
- 2.4.2 Ministry of Blue Economy and Civil Aviation
- 2.4.2.1 The MBECA is a government entity that provides leadership, strategic direction, good governance, and oversight on all matters relating to the development of civil aviation for, and on behalf of, the Government of Belize.

## The MBECA has responsibility for:

- i. the Department of Civil Aviation a government department responsible for ensuring the safety, and promotion and oversight of the development of the aviation industry in Belize;
- ii. the Accident Investigation Unit a government unit responsible for instituting and conducting investigations into aircraft accidents and incidents in Belize and participating in international investigations involving Belize registered aircraft; and
- iii. the Belize Airports Authority (BAA) a statutory board responsible for the management, maintenance and administration of prescribed airport facilities and aerodromes in Belize



- 2.4.3. Belize Department of Civil Aviation
- 2.4.3.1 The Department of Civil Aviation was established by the Act for the administration of the said Act in Belize; and of the regulations made thereunder.
- 2.4.3.2 The functions and duties of the Department are set out in section 10 (1) of the Act and include the following:
  - (a) To ensure the safety of air navigation;
  - (b) To promote and encourage the orderly and economic development of civil aviation;
  - (c) To ensure the observation of any regulations made under this Act;
  - (d) To initiate and carry out surveys into any aspect of civil aviation;
  - (e) To advise the Minister on all matters affecting civil aviation; and
  - (f) To perform such other functions as the Minister may from time to time impose.
- 2.4.3.3 The existing Units of the Department are responsible for aviation safety, regulatory oversight and safety management, with a key role in upholding a safe aviation environment within the civil aviation system in Belize.

The Department is in the process of establishing an internal Safety Review Group (SRG) to participate in guided discussions to gain understanding of the broader safety risks across the aviation system. These experts will be guided by available safety trend information, known accidents and serious incidents contributing factors, or known deficiencies in the State's SSO processes. This brainstorming-type approach will be done collaboratively with the Department's Units and, where applicable, with service providers, to identify "known" safety issues for each aviation sector.

- 2.4.3.4 To carry out the SSP responsibilities, the Department is organized into two Units, with one additional Unit under development. The key areas of responsibility of these Units are as follows:
  - a. Aerodrome and Air Navigation Services Regulation Unit
  - i. The Deputy Director is the supervisor of this Unit. This Unit is responsible for the conduct of safety oversight of the aerodrome operator, air navigation service provider, aeronautical meteorological services provider and the safe transport of dangerous



goods by air. The Unit is additionally responsible for the development and implementation of regulations for aerodrome operations and Air Traffic Services (ATS); and

- ii. Ensuring compliance with relevant Annexes of the Chicago Convention:
- Annex 3: Meteorological Service for International Air Navigation
- o Annex 4: Aeronautical Charts
- Annex 5: Units of Measurements to be used in Air and Ground Operations
- Annex 10: Aeronautical Telecommunications
- Annex 11: Air Traffic Services
- o Annex 12: Search and Rescue
- Annex 14: Aerodromes
- Annex 15: Aeronautical Information Services
- Annex 18: Safe Transport of Dangerous Goods by Air
- b. Airworthiness, Flight Operations and Licensing Unit
- i. The Chief Operations Officer (COO) is the supervisor of this Unit. This Unit is responsible for the conduct of safety oversight, and the development and implementation of regulations and standards and procedures relating to:
  - o operations of Belize air operators
  - o airworthiness of Belize-registered aircraft
  - approved maintenance organizations
  - o general aviation aircraft and operations
  - o unmanned aircraft systems
  - surveillance of foreign operators
- ii. The Unit must also ensure compliance with relevant Annexes of the Chicago Convention, namely:
  - Annex 1: Personnel Licensing
  - Annex 2: Rules of the Air
  - o Annex 6: Operation of Aircraft
  - o Annex 7: Aircraft Nationality and Registration Marks
  - o Annex 8: Airworthiness of Aircraft
  - Annex 16: Environment Protection



- c. Safety Policy and the Department's SSP Unit
- i. The SSP Unit is currently under development. Once established, the Unit will be responsible for the management of Belize's obligations under the ICAO USOAP CMA, in coordination with the National Continuous Monitoring Coordinator (NCMC) and his/her Team.

The Unit is also tasked with the implementation and sustainability of the SSP and coordination with internal and external stakeholders on relevant SSP activities, as well as the identification and analysis of safety trends and monitoring of safety indicators; and with the formulation and revision of aviation safety policies across SRGs, once it is fully established.

- ii. It will be the responsibility of the Unit to ensure compliance with relevant Annexes of the Chicago Convention:
  - Annex 19: Safety Management
- 2.4.4 National Aviation Safety Committee (NASC)
- 2.4.4.1 The NASC is a national-level committee in the process of being established to coordinate SSP activities, chaired by the Director of Civil Aviation.

The NASC comprises representatives from the AIU, relevant divisions within the Department involved in safety regulation and representatives from government entities with responsibilities relevant to the implementation and maintenance of the SSP. (Ref.: Appendix C.- Belize's State Aviation Safety Structure).

The NASC is responsible for overseeing the development and implementation of the SSP, and for reviewing the level of safety performance and policies and practices related to SSP.

- 2.4.5 Accident Investigation Unit
- 2.4.5.1 The AIU is responsible for instituting and conducting investigations in a manner consistent with the Standards and Recommended Practices of ICAO Annex 13 on Aircraft Accident and Incident Investigation and under the provisions to be incorporated into the Civil Aviation Act.



The Government of Belize approved the establishment of an Accident Investigation Unit the functions of which will be set out in the Civil Aviation Act to include the following:

- a. Instituting and conducting investigations into any accidents or serious incidents which occur in Belize;
- b. To conduct investigations into any accidents or incidents outside the territory of Belize, that involve a Belize registered aircraft or an aircraft operated by a Belizean operator, if all or a part of the investigation has been delegated to Belize, or the occurrence is in a non-contracting state which does not intend to conduct the investigation; and
- c. To conduct investigations into incidents from which air safety lessons may be derived.
- 2.4.6 Coordination between the Department and the AIU
- 2.4.6.1 Besides working closely on SSP activities, the Department and the AIU also cooperate in the following areas:
  - a. Classification of Occurrences

The AIU and the Department's SSP Unit ensure consistency in the classification of occurrences involving Belize air operators, Belize-registered aircraft, and stakeholders to ensure accurate and timely reporting of information to ICAO under the Accident/Incident Data Reporting (ADREP) System.

## b. Sharing of Safety Information

The Belize Aviation Accident/Incident Reporting System and Belize Confidential Aviation Incident and Occurrence Reporting programme, are safety data and information collection systems administered by the Department's SSP Unit and the AIU, respectively.

AOC holders, approved maintenance organizations and service providers in general, are mandated to report aviation safety occurrences through the Department's Aviation Accident/Incident Reporting System. The Confidential Aviation Incident and Occurrence Reporting programme, on the other hand, is a voluntary, non-punitive confidential reporting programme for aviation incidents and safety deficiencies, where the reporter's identity is protected by the AIU and the Department's SSP Units respectively. Safety information obtained from the Department's Aviation Accident/Incident Reporting System and from the Confidential Aviation Incident and



Occurrence Reporting Programme, after being de-identified, are shared between the Department's SSP Unit and the AIU for the purpose of conducting safety trend analysis.

c. Issuance of Safety Recommendations

The Department's SSP Unit receives safety recommendations from the AIU based on its investigations and other sources, including foreign accident investigation authorities.

The Department's SSP Unit is also informed of safety recommendations issued by the AIU to the Belize aviation industry, so that this additional information can be used to support the conduct of safety oversight.

d. Technical Support for Investigation

The Department shall provide technical experts to the AIU upon request by the Investigator-in-Charge, to support the conduct of an investigation of accidents and incidents.

Technical experts from the Department shall be seconded to the AIU and relieved of their normal duties for the entire duration of the investigation, or for the portion of the investigation for which their technical expertise is required.

- 2.5 Accident and Incident Investigations
- 2.5.1 AIU's investigations are independent and separate from judicial or administrative proceedings. Through their investigations, the AIU analyses the factual information and circumstances leading to accidents and serious incidents.

The AIU identifies safety issues and concerns, produces findings of the investigations, draws conclusions, identifies contributing factors and probable causes; and issues safety recommendations to address these safety concerns.

2.5.2 The Department can also conduct investigations of occurrences as a part of its enforcement policy. Such investigations could continue independently of the AIU's investigations, as much as possible.

The investigations conducted by the Department aim to expeditiously determine safety gaps to prevent recurrence, assess breaches of regulations and guidance material, and identify areas for improvement in the safety regulations and oversight processes.



## 2.6 Enforcement Policy and Framework

- 2.6.1 Compliance with Belize's aviation safety legislation and requirements by organizations and persons is crucial to effective safety management. Through regular reviews and consultations with the industry, the Department ensures that its regulations are up to date and relevant. It also provides guidance to the industry on how to achieve compliance.
- 2.6.2 In the event of non-compliance, the primary focus will be to address the root cause of the contravention, and ensure that the individual or organization complies. Where necessary, the Department will take immediate safety actions to address any imminent safety risk.
- 2.6.3 The Department is committed to fostering a "just culture" in Belize's aviation community. As such, it will strive to create an environment of openness, fairness and trust in which people are encouraged to report or share safety-related information, including their own errors.

Accountability is important to ensure integrity of the system; and unacceptable behaviors, such as gross negligence, and intentional or willful acts to contravene the rules, will-have to be dealt with appropriately.

2.6.4 When considering whether enforcement action should be taken, the Department will take into account: (i) type, counts and duration of contravention; (ii) circumstances of the contravention; (iii) adverse effect on aviation safety; (iv) aggravating and mitigating considerations; (v) potential efficacy of proposed actions; and (vi) totality and parity principles.

Where warranted, the Department may take sanctions against contraveners, which can range from verbal and written warnings, to administrative action on the Aviation Safety Instrument, to prosecution.



#### 3. STATE SAFETY RISK MANAGEMENT

#### 3.1 Overview

3.1.1 While the conventional approach of checking for regulatory compliance has thus far yielded effective aviation safety outcomes, the global aviation community is moving towards safety management.

States and industry are now taking a systematic approach towards identifying and mitigating safety risks, and are instituting organizational structures and mechanisms to track safety performances.

- 3.1.2 To strengthen safety risk management, Belize is progressively putting in place the supporting elements, from establishing SMS regulations, to working with industry on their safety performances.
- 3.2 Safety Requirements for service providers' SMS
- 3.2.1 The Department requires the following service providers, in Belize, to implement SMS:
  - a. Belize Air Operator Certificate (AOC) Holders (Airplanes and Helicopters);
  - b. Approved Maintenance Organizations (AMOs); Belize Airworthiness Requirements (BCAR) -145
  - c. Aviation Training Organizations (ATOs), approved by the Department, and that are exposed to safety risks during the provision of their services;
  - d. Aeronautical Meteorological service providers (s);
  - e. Air Navigation Services (ANS) provider (s);
  - f. Operators of Certified Aerodromes; and
  - g. General aviation operators of large/ turbo-jet airplanes and helicopters for corporate aviation operations, approved by the Department
- 3.2.2 A service provider's interface with other service providers and sub-contractors can result in significant contribution to the safety of its products or services. Hence, the Department, as the national air navigation services provider, requires all maintenance contractors of the Department's communications, navigation and surveillance systems, to implement an SMS.



3.2.3 Service providers are required to implement an SMS, in compliance with the Department's Technical Requirements. A list of relevant Department Technical Requirements and guidance material is shown below:

Operator/Service Provider	SMS Requirements)	Guidance Material
Air Operator (AOC Holder)	BCAR-OPS 1	
Approved Maintenance Organization (AMO)	BCAR-145	
Aerodrome Operator	BCAR-14; v. 1 BCAR-139	AC No.: BDCA-01-2014
Air Navigation Services provider	BCAR-ATS	

- 3.3 Agreement on service providers' Safety Performance Indicators
- 3.3.1 In accordance to Annex 19 and ICAO Doc. 9859, Safety Management Manual, air operators and service providers are required to define safety performance measurements as part of their SMS performance monitoring mechanism. The measurements refer to the indicators, alerts and targets used to measure and monitor safety performance over time.

Safety performance measurements take into account the nature of the operations, the safety objectives of the air operators and service providers and the aviation safety risks faced.

Air operators and service providers are also required to review their safety performance measurements regularly, to ensure relevance with their safety objectives and prevailing hazards and risks. These safety performance measurements are agreed on between the Department and air operators/service providers.



#### 4. SAFETY ASSURANCE

## 4.1 Overview

4.1.1 Safety assurance, at the State level, provides a self-check to ensure that the Department is exercising the regulatory functions that constitute safety risk controls within the aviation system. State safety assurance is accomplished through safety oversight of air operator and service providers. Quality assurance is achieved through Belize's safety oversight system.

## 4.2 Safety Oversight

- 4.2.1 The Department is in the process of implementing a data-driven surveillance programme to ensure that resources are focused on, and prioritized according to, the areas of concern.
- 4.2.2 Safety Oversight of air operators and service providers
- 4.2.2.1 Belize, through the Department of Civil Aviation, has put in place a safety oversight system to ensure ongoing compliance with regulatory requirements by air operators and service providers, through surveillance activities such as mandatory reporting, audits, inspections, interviews and onsite/offsite checks. These activities will be carried out on a continuous monitoring basis, in the near future, using a risk-based approach to place priority on areas of greater safety concern or need.
- 4.2.2.2 Non-compliances, deficiencies or improvements may be identified during surveillance activities. When non-compliance or deficiency is identified, the air operator or the service provider concerned will be required to take remedial actions within a stipulated timeframe, to return to a safe state, to facilitate the continued provision of their services. Where safety risk is assessed to be imminent, enforcement actions such as suspension, or the imposition of conditions on particular activities, may be taken.
- 4.2.3 Quality Assurance in Belize's Safety Oversight System
- 4.2.3.1 Belize is committed to fulfilling its ICAO USOAP CMA obligations. The effectiveness of Belize's safety oversight function is monitored through regular audits carried out by either an appropriately trained internal audit team, or a team of external consultants.
- 4.3 Safety Data Collection, Analysis and Exchange
- 4.3.1 The Department's SSP Unit and the AIU collect, analyze and exchange safety data and information for the purpose of safety improvement. Safety information is also shared with air operators and/or service providers, other States/Administrations and ICAO, as appropriate.



## 4.3.2 Mandatory Occurrence Reporting

- 4.3.2.1 The Belize Aviation Accident/ Incident Reporting System provides the platform for mandatory reporting by air operators and service providers to the Department's SSP Unit and the AIU. The scope of safety data collection is not limited to aircraft accidents and incidents, but extends to safety hazards and threats. In this regard, the Civil Aviation Act and the BCAR 13 specify the mandatory reportable occurrences and events and the processes for reporting. The Department also encourages the reporting of potential safety deficiencies that could affect flight safety.
- 4.3.3 Belize's Confidential Voluntary Incident and Occurrence Reporting programme
- 4.3.3.1 The Belize Confidential Aviation Incident and Occurrence Reporting programme, comanaged by the SSP Unit and the AIU, aims to enhance aviation safety through the collection of voluntary feedback on incidents. Incidents can be related to flight operations, ground operations, air traffic management, aircraft maintenance, and passenger handling operations. The Confidential Aviation Incident and Occurrence Reporting programme does not eliminate the need for mandatory reporting of aircraft accidents and incidents to the Department's SSP Unit and to the AIU, as required by the Civil Aviation Act and the BCAR 13, and other relevant authorities under the existing law.
- 4.3.3.2 The sources of information passed as confidential voluntary report is protected by deidentification. Additionally, the AIU and the SSP Unit officers who administer the Confidential Aviation Incident and Occurrence Reporting programme, cannot be compelled to disclose the information obtained under the programme.
- 4.3.4 Safety Data and Information Analysis
- 4.3.4.1 Besides collecting data and information through the Belize Aviation Accident/Incident Reporting System, the SSP Unit collects data and information from surveillance activities, deidentified information and safety recommendations provided by the AIU, accident and incident reports and other sources. The SSP Unit analyses these data and information for the purposes of improving safety. Hazard identification and risk management are carried out for significant events and as required for safety risk management.
- 4.3.5 Acceptable Level of Safety Performance (ALoSP)
- 4.3.5.1 The SSP Unit foresees the development of safety indicators to monitor the safety performance of the aviation system. These indicators will include accidents, serious incidents and occurrences within broad domains of aviation operations (e.g., air navigation services, aerodrome



operations, flight operations). Based on the targets and alerts designed for these indicators, the Department is developing follow-up actions to address safety issues in a timely manner.

## 4.4 Data-driven Safety Oversight

- 4.4.1 Prioritization of surveillance activities will allow the Department to dedicate resources to areas of greater safety concern. The Department is in the process of developing a strategy aimed at a risk-based approach to surveillance activities.
- 4.4.2 Surveillance activities will be carried out based on the organization's risk profile, which determines the scope, frequency and resources needed to carry out surveillance on an air operator or a service provider. The risk profiling, will include considerations of, inter alia, the air operator's or service provider's safety performance track record, the scope and complexity of work that the organization is involved in, the trends of operational events, and the presence of significant safety issues.
- 4.4.3 The scope and frequency of surveillance activities will be adjusted based on the Department's safety priorities and its safety performance analyses.



#### 5. SAFETY PROMOTION

## 5.1 Overview

- 5.1.1 Training frameworks have been institutionalized by the Department's SSP Unit and the AIU to promote knowledge sharing and retention to strengthen the technical competencies of staff. With respect to safety promotion for industry, the SSP Unit and AIU carry out a series of activities to communicate safety information and encourage dialogue with the aviation industry and the public.
- 5.2 Internal Training, Communication and Dissemination of Safety Information

## 5.2.1 Training

- 5.2.1.1 Training is provided by the Central American Institute of Aeronautics (ICCAE for its acronym in Spanish) in collaboration with the Central American Safety Agency (ACSA for its acronym in Spanish). These institutions offer a variety of training, ranging from generic, 'soft-skill' training, and technical training, to functional training. These types of training occur at different phases, such as during the early stages of induction, on-the-job-training and during recurrent training. The Department's Technical Training Framework equips the Department's SRG officers, including inspectors, with basic, specialized and recurrent training to carry out their safety regulation duties effectively. The basic induction training includes On-job-Training (OJT), which is carried out under guided supervision.
- 5.2.1.2 AIU officers also undergo practical training, participate in in investigations, and are equipped with generic SMS and SSP knowledge. Training is conducted mainly at ICCAE and outsourced to Southern California Safety Institute (SCSI)
- 5.2.2 Communication and Dissemination of Safety Information
- 5.2.2.1 The Department is in the process of acquiring- adequate software and contracting adequate IT personnel, in order to maintain an electronic document management system and communications tools for storing, analyzing and sharing safety information. Annual SRG fora are held, providing opportunities for SRG senior management to engage staff on aviation safety issues, ranging from international developments, to work plans, to culture, and even training.
- 5.2.2.2 The AIU conducts departmental meetings regularly, to ensure sharing of essential information among staff. Investigation-related meetings are held as often as necessary. Active communication of safety information within the workforce is encouraged and practiced.



- 5.3 External Training, Communication and Dissemination of Safety Information
- 5.3.1 Training
- 5.3.1.1 Safety assurance is a shared responsibility between Regulators and air operators/service providers. Understanding safety management from the perspectives of international organizations and regulators, augments various facets of state safety assurance, including safety oversight and safety data collection analysis and exchange. To achieve this, the Department, in collaboration with ICCAE, conducts various aviation safety courses, catering to a wide range of participant profiles, including industry, new hires, and veterans.
- 5.3.2 Communication and Dissemination of Safety Information
- 5.3.2.1 Both the Department's SSP Unit and the AIU maintain websites for industry and public access, sharing up-to-date information on changes to requirements, investigation reports, and safety lessons learned from the review of foreign investigation reports. In addition, the SSP Unit is in the process of developing and maintaining a social media account, to increase outreach to the general public.



#### APPENDIX A – ACRONYMS/ABBREVIATIONS

AC Advisory Circular

ADREP Accident/ Incident Data Reporting
AIC Aeronautical Information Circular
AIS Aeronautical Information Service

AIU Accident and Incident Investigation Unit of Belize
ALoSP Acceptable Level of Safety Performance indicator

AMC Acceptable Means of Compliance AMO Approved Maintenance Organization

ANS Air Navigation Service
AOC Air Operator Certificate
ATM Air Traffic Management

ATO Aviation Training Organization

ATS Air Traffic Services

BDCA Belize Department of Civil Aviation

CFIT Controlled Flight into Terrain
CMA Continuous Monitoring Approach

CNS Communications, Navigation, Surveillance

CPD Certification Process Document

ICCAE Instituto Centroamericano de Capacitación Aeronáutica

ICAO International Civil Aviation Organization

LOC-I Loss of control in flight

MET(IAN) Meteorological Service for International Air Navigation

MBECA Ministry of Blue Economy and Civil Aviation

NACC North American, Central American and Caribbean Office

NASC National Aviation Safety Committee SARP Standards and Recommended Practice

SMS Safety Management System

SP Safety Publication (s)
SRG Safety Review Group
SSO State Safety Oversight
SSP State Safety Programme
UA Unmanned aircraft

USOAP Universal Safety Oversight Audit Programme



## APPENDIX B - REFERENCE DOCUMENTS

## **BELIZE'S LEGISLATION**

- o Interpretation Act CHAPTER 1 (Revised Edition 2011)
- o Civil Aviation Act CHAPTER 239 (Revised Edition 2011)

## **BELIZE'S REGULATORY REQUIREMENTS**

0	BCAR - APL	Aeronautical Personnel Licenses
0	BCAR – OPS 1	Commercial Air Transport (Aeroplanes)
0	BCAR – 145	Approved Maintenance Organizations
0	BCAR – 14; Vol. I	Aerodrome Design and Operation
0	BCAR – 139	Certification of Aerodromes
0	BCAR - ATS	Air Traffic Services
0	BCAR – 13	Aircraft Accident and Incident Investigation

## ICAO ANNEXES AND DOCUMENTS

- Annex 1 Personnel Licensing
- o Annex 6 Operation of Aircraft

Part I — International Commercial Air Transport — Aeroplanes

Part II — International General Aviation — Aeroplanes

Part III — International Operations — Helicopters

- Annex 8 Airworthiness of Aircraft
- o Annex 11 Air Traffic Services
- o Annex 13 Aircraft Accident and Incident Investigation
- o Annex 14 Aerodromes

Volume I — Aerodrome Design and Operations

o Annex 19 – Safety Management

**Doc. 9859** – Safety Management Manual (3<sup>rd</sup> and 4<sup>th</sup> Edition)

## **APPENDIX C – BELIZE'S STATE AVIATION SAFETY STRUCTURE**

