# NATIONAL AVIATION SAFETY PLAN

JAMAICA 2024-2026

#### FOREWORD

A safe, resilient, and sustainable aviation system contributes to Jamaica's economic development. It is a key enabler for Jamaica's primary industries, including the tourism industry upon which Jamaica depends for its economic health. Jamaica is committed to enhancing aviation safety and to the resourcing of supporting activities. The purpose of this National Aviation Safety Plan (NASP) is to, through the development and implementation of a national aviation safety strategy, continually reduce fatalities, and the risk of fatalities related to aviation activities. The NASP promotes the effective implementation of Jamaica's oversight system for aviation safety; a risk-based approach to managing aviation safety, and a coordinated approach to collaboration between Jamaica and other States, regions, and industry participants. All stakeholders are encouraged to support and implement the NASP as Jamaica's national strategy for the continuous improvement of aviation safety.

Jamaica's NASP is aligned with the International Civil Aviation Organization (ICAO) Global Aviation Safety Plan (GASP, Doc 10004) and the North America and Central Caribbean (NACC) Regional Safety Plan (RASP).

The Honourable Minister Daryl Vaz, MP Minister of Science, Energy, Telecommunications and Transport

Dated March 19, 2024

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### GLOSSARY

ACI	Airports Council International	CASSOS	Caribbean Aviation Safety and Security Oversight System
ADS-B	Automatic Dependent Surveillance - Broadcast	CAST	Commercial Aviation Safety Team
AGA	Aerodromes and Ground Aids	CE	Critical Elements (See Note1 and Figure 5.2)
AIB	Aviation Inspection Body	CICTT	ICAO Common Taxonomy Team
AIG	Accident and Incident Investigation	EI	Effective Implementation
ANS	Air Navigation Services	FAA	Federal Aviation Administration
ANSP	Air Navigation Services Provider	FY	Financial Year (April 1 to March 31)
AOC	Air Operator Certificates	G-HRC	Global High-Risk Categories (See Note 4)
ASBU	Aviation Safety Block Upgrades	GANP	Global Air Navigation Plan
ATC	Air Traffic Control	GASP	Global Aviation Safety Plan
ATO	Approved Training Organization	HRC	High-Risk Categories
ATS	Air Traffic Services	ICAO	International Civil Aviation Organization
BBB	Basic Building Blocks	ICAO NACC	ICAO North American, Central American and Caribbean
CAA	Civil Aviation Authority	ICAO OPS Roadmap	ICAO Operational Safety Risks Roadmap
CAMP	Civil Aviation Master Plan	ΙCAO TCB	ICAO Technical Cooperation Bureau
CANSO	Civil Air Navigation Services Organization	ICAO SARPs	ICAO Standards and Recommended Practices
CAP	Corrective Action Plan	IMC	Instrument Meteorological Conditions
CAR	Caribbean Region	JCARs	Jamaica Civil Aviation Regulations, 2012
CARs	Civil Aviation Regulations		

LACAC	Latin-American Civil Aviation Commission	RPAS	Remotely Piloted Aircraft Systems
MoEG&JC	Ministry of Economic Growth & Job Creation	RSOO	Regional Safety Oversight Organizations
MoFPS	Ministry of Finance and the Public Service	RST	Runway Safety Team
MOU	Memorandum Of Understanding	SDA	Safety Data Analysis
N-HRC	National High-Risk Category (See Note 3)	SEI	Safety Enhancement Initiative
NACC	North American, Central American and Caribbean	SME	Subject Matter Expert
NASP	National Aviation Safety Plan	SMS	Safety Management Systems
NTP	National Transport Policy	SPI	Safety Performance Indicator
ODPEM	Office of Disaster Preparedness and Emergency Management	SSP	State Safety Programme
OJT	On-the-Job Training	SSPIA	State Safety Programme Implementation Assessment
OLF	On-line Framework	USOAP	Universal Safety Oversight Audit Programme
ORG	Organizational Challenges	USOAP- CMA	Universal Safety Oversight Audit Programme Continuous Monitoring
OP	Operational Safety Risks	SPI	Approach Safety Performance Indicator
Portfolio Ministry	Ministry of Transport and Mining	SSP	State Safety Programme
PQ	Protocol Question		
PPQ	Priority Protocol Question		Policy Development
RAIO	Regional Accident Investigation Organization		Rule-making
RANP	Regional Air Navigation Plan		Safety Data Management, Analysis 8
RASG	Regional Aviation Safety Group	061	Exchange
RASG-PA	Regional Aviation Safety Group - Pan America		Safety Promotion
RASP	Regional Aviation Safety Plan	7.	.,
RASG	Regional Aviation Safety Group	and the second	Targeted Safety Oversight Activities

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### **SECTION 1. INTRODUCTION**

#### 1.1 STRUCTURE OF THE NATIONAL AVIATION SAFETY PLAN (NASP)

- 1.1.1 This NASP presents the strategic direction for the management of aviation safety in Jamaica at the national level, for the three (3) years, 20244 through 2026. It comprises six (6) sections.
- 1.1.2 The sections of the NASP included are: (1) introduction; (2) the purpose of the NASP, (3) Jamaica's strategic direction for the management of aviation safety, (4) the national Operational Safety Risks identified for the 2024-2026 NASP, (5) organizational challenges addressed in the NASP, and (6) a description of how the implementation of the identified safety enhancement initiatives (SEIs) listed in the NASP are to be monitored.

## 1.2 RELATIONSHIP BETWEEN THE NATIONAL AVIATION SAFETY PLAN AND THE STATE SAFETY PROGRAMME (SSP)

1.2.1 This NASP addresses the Operational Safety Risks (OPS) and Organizational Challenges (ORG) presented in the ICAO Global Aviation Safety Plan (ICAO GASP) and the NACC RASP. The NASP has been developed in the absence of mature safety data analysis (SDA), as described in the ICAO State Safety Programme (SSP) Implementation Assessment (SSPIA). The initiatives listed in this NASP also addresses organizational challenges and aims to enhance organizational capabilities related to effective safety oversight. The Safety Enhancement Initiatives are found at Appendix A (Jamaica National Aviation Safety Plan Safety Enhancement Initiatives (SEIs) of this document.

#### 1.3 RESPONSIBILITY FOR NATIONAL AVIATION SAFETY PLAN DEVELOPMENT, IMPLEMENTATION, MONITORING AND EVALUATION

- 1.3.1 In collaboration with the Ministry responsible for civil aviation and Jamaica's national aviation industry, the Jamaica Civil Aviation Authority (JCAA) is responsible for the development, implementation, and monitoring of this NASP.
- 1.3.2 The NASP was developed in consultation with key aviation stakeholders and is aligned with the 2023 2025 edition of the GASP and the 2020 2022 edition of the North American, Central American and Caribbean Regional Aviation Safety Plan (NACC RASP).

#### 1.4 NATIONAL SAFETY ISSUES, GOALS AND TARGETS

#### 1.4.1 Generally

- 1.4.1.1 Changing economic, social and technological developments have altered the environment in which the air transport industry operates. Jamaica's aviation system, like others around the world, has been impacted by global changes precipitated by, among other disruptive events, the COVID-19 pandemic. Jamaica has adopted a proactive approach to identify emerging aviation safety issues and associated hazards, assess related risks and implement effective mitigation strategies. These efforts support Jamaica's strategy to expand domestic and international airport infrastructure and services as stated in Jamaica's Vision 2030 National Development Plan.
- 1.4.1.2 Jamaica was first audited by ICAO in 2007 and has been subject to three (3) validation missions since; the last audit was in 2016. The effective implementation of the eight Critical Elements (CEs)<sup>1</sup> of an effective safety oversight system ("Effective Implementation" or "El")<sup>2</sup> was assessed as part of the Universal Safety Oversight Audit Programme Continuous Monitoring Approach, (USOAP CMA). The results of this assessment are depicted at Table 5.2.2 (ICAO Universal Safety Oversight Audit Programme (USOAP) Jamaica's Results by Critical Elements (CEs) and Technical Areas). Jamaica's Overall Effective Implementation is 81.51%. Significant deficiencies have been found with respect to CE-8-Resolution of Safety Concerns (61.11%) and CE-4-Qualified Technical Personnel (67.57%), and in Technical Area-Accident Investigation (AIG) (55.71%) and Technical Area-Aerodromes and Ground Aids (AGA)(66.96%). The level of maturity for Jamaica's State Safety Programme (SSP) ("Level 0") and aerodrome infrastructure were critical issues identified as shortcomings and will be prioritized for improvement through the NASP.

#### 1.4.2 Jamaica's State Self-Assessment: Safety Issues

1.4.2.1 Jamaica has identified the following issues through its State Self-Assessment: For each target to improve the Effective Implementation rate related to a Critical Element, Jamaica will conduct periodic State Self-Assessments. The output of those Self-Assessments will be validated through ICAO USOAP Audits. All Critical Element Effective Implementation scores referenced for targets under the SEIs identified in this NASP are based on State Self-Assessments.

#### 1. Latent precursor events that may lead to undesirable outcomes

Through an occurrence database, Jamaica has identified precursor events that may lead to undesirable outcomes such as accidents and serious incidents in the National

<sup>&</sup>lt;sup>1</sup> The Critical Elements of an effective State aviation safety oversight system are: (1) primary aviation legislation (CE-1); (2) specific operating regulations (CE-2); (3) state system and functions (CE-3); (4) qualified technical personnel (CE-4); (5) technical guidance, tools and the provision of safety-critical information (CE-5); (6) licensing, certification, authorisation and/or approval obligations (CE-6); (7) surveillance obligations (CE-7); and (8) resolution of safety concerns (CE-8) (Source: ICAO)

<sup>&</sup>lt;sup>2</sup> El is a measure of the State's safety oversight capability, calculated for each critical element, each audit area or as an overall measure

High-Risk Categories (N-HRCs)<sup>3</sup>. The occurrence database also captures the percussor events for the Global High-Risk Categories (G-HRCs)<sup>4</sup>. Jamaica has had a good aviation safety record and will manage precursor events through the Safety Enhancement Initiatives (SEIs) in the NASP.

# 2. Inadequate safety oversight capabilities to meet surveillance obligations (CE-7)

Jamaica is required to implement documented surveillance processes for safety oversight. This includes defining and planning inspections and audits and monitoring civil aviation activities on a continuous basis. Jamaica must proactively assure that aviation license-, certificate-, authorisation-, and approval- holders continue to meet the established requirements and operate at the level of competency and safety required to undertake the aviation-related activities for which they have been licensed, certified, authorised and/or approved to perform. As reflected in the outcomes of Jamaica's ICAO USOAP Audits, Jamaica's safety oversight capabilities must improve in the areas discussed in paragraph 1.5.2.

# 3. Outdated work procedures related to some guidance materials to effectively support safety oversight

The Jamaican State is expected to provide appropriate facilities, comprehensive and up-to-date technical guidance material and procedures, safety-critical information, tools, and equipment to the technical personnel responsible for aviation safety oversight. This is to enable those responsible for safety oversight for the civil aviation industry to perform their functions effectively. Jamaica is also required to provide technical guidance to the aviation industry on the implementation of relevant regulations. The procedures and guidance materials used by Jamaica (particularly the guidance material for the resolution of safety concerns and enforcement procedures) are outdated. This deficiency is also reflected in the outcomes of ICAO USOAP Audits in which Jamaica scored 61.11% in CE-8 (Resolution of Safety Concerns). To improve safety assurance, Jamaica's technical guidance materials and procedures must improve in certain identifiable areas.

# 4. Insufficient pool of qualified and experienced aviation professionals within the civil aviation industry (CE-4 and CE-6)

Jamaica has established minimum qualification requirements for the technical personnel performing safety-related functions within the aviation industry. Despite comprehensive training programmes to facilitate the essential training for aviation safety inspectors, challenges remain. The pool of aviation professionals within the

<sup>&</sup>lt;sup>3</sup> The high-risk categories of aviation occurrences identified at the national level by the NASP currently in force that need to be addressed to mitigate the risk of fatalities because of aviation activities nationally.

<sup>&</sup>lt;sup>4</sup> Global High-Risk Categories of aviation occurrences as identified by the GASP currently in force that need to be addressed to mitigate the risk of fatalities because of aviation activities globally. The identified G-HRCs are: (1) Controlled Flight into Terrain (CFIT); (2) Loss of control in-flight (LOC-I); (3) Mid Air collision (MAC); (4) Runway excursion (RE); (5) Runway incursion (RI)

industry continues to dwindle and has led to a general skills shortage within Jamaica. Succession planning within the CAA and the wider industry must be improved to better manage this phenomenon.

# 5. Inadequate specific operating regulations to support safety oversight mandate (CE-2)

Jamaica is expected to promulgate regulations for civil aviation activities to address national requirements emanating from the primary aviation legislation, for standardised operational procedures, products, services, equipment, and infrastructure in conformity with the ICAO Annexes. The State has identified a gap in the timely updating of specific operating regulations. The outcome for Jamaica in the last USOAP audit in this area was and El score of 72.97%.

#### 6. Lack of independence (separation) of accident investigation and resourcing for these functions (State Civil Aviation System and Safety Oversight Functions (CE-3) and Technical Area AIG)

To support safety management within the State, as a part of its obligations to the civil aviation industry, Jamaica, within its State system and functions is required to establish a process to investigate accidents and incidents in accordance with ICAO Annex 13 (Aircraft Accident and Incident Investigation). Currently the accident investigation function resides within the Civil Aviation Authority, with functional independence, which causes resource constraints. This is not ideal as it may lead to a conflict of interest. This deficiency is also reflected in the outcomes of 2016 ICAO USOAP Audit in which Jamaica scored 55.71% in Technical Area-AIG (Accident Investigation); its lowest overall in the Audit, and below the world average. While this deficiency is comparable across States, Jamaica has identified this area as a means of improvement in safety assurance.

#### 7. Slow progress on the implementation of a State Safety Programme and Safety Management Systems by Industry

In accordance with ICAO Annex 19 (Safety Management), a State is required to establish and implement a "present and effective" State Safety Programme (SSP) with prescribed features. The SSP is a set of regulations and activities aimed at improving safety within the State.

Specified aviation entities within Jamaica are also required to establish and implement a Safety Management System (SMS) to manage safety risks at the industry level. While some work has begun, Jamaica has not yet achieved the foundation level for the SSP and does not yet have the features of a "present and effective" SSP. SMS has not been fully implemented in relevant aviation entities.

This NASP will identify the necessary actions to advance the SSP at the State level and SMS at the industry level.

#### 8. Inadequate participation in regional groupings

Harmonization is important for safety, and regional collaboration is an effective tool in this effort. Jamaica must adequately resource regional participation to improve collaboration at the regional level which is essential for the management of safety within the State. Through collaboration, Jamaica and its regional partners can align on potential mitigations or solutions for identified risks. This will allow Jamaica to address issues that it may ordinarily on its own, not be able to solve.

# 9. Inadequate collection, storage, and analysis of safety data gathered from industry

Effective State safety risk management for Jamaica depends on advancing collaboration across operational domains to identify hazards and manage safety risks. The analysis of various forms of safety data is needed to develop effectual mitigation strategies. This requires a close collaboration between the State and participants within its aviation industry. Through partnerships with key stakeholders at the national level, safety data must be analysed to support maintenance of safety performance indicators (SPIs) related to the safety risks and the major components of the aviation system. Jamaica has identified a challenge in aggregating safety data, its analysis, and related information exchange. The State has identified that it must modernise its data collection mechanisms, implement tools and develop the skills that will facilitate effective safety data collection, analysis, and processing.

# 10.Legacy infrastructure at aerodromes and Air Navigation Services Provider (ANSP)

International air transport is dependent on a safe, secure, sustainable, and interoperable global aviation system. To support this system, States must ensure that the related infrastructure is appropriate and available. That is, the aerodrome and ANSP infrastructure must meet related ICAO Standards as found in the Annexes and related guidance materials. The provision of essential services across different areas of operations is the feature of a robust air navigation system. Essential infrastructure for a strong air navigation system is captured in two (2) technical frameworks, the Basic Building Blocks (BBB), and Aviation Safety Block Upgrades (ASBU). Infrastructure is needed to support the following services: (1) aerodrome operations, (2) air traffic management, (3) aeronautical search and rescue, (4) aviation meteorology, (5) aeronautical information, and (6) communications, navigation and surveillance. Jamaica has identified that some

core legacy infrastructure components at its aerodromes and air navigation service facilities that must be continuously upgraded.

#### 1.4.3 Jamaica's State Safety Goals and the National Aviation Safety Plan

- 1.4.3.1 The National Aviation Safety Plan for Jamaica (2024-2026) will address the issues listed in Section 1.4.2 (Jamaica's State Self-Assessment: Safety Issues) above. The national goals will be articulated and targets and metrics to support the achievement of those goals will be specified. This NASP will also identify the safety enhancement initiatives (key actions) that will support the achievement of Jamaica's national safety goals for aviation.
- 1.4.3.2 Jamaica has identified the following goals and targets for the National Aviation Safety Plans:

#### GOAL 1

Achieve a continuous reduction in the Operational Safety Risks (OPS) that impact Jamaica's air transport industry.

This goal aims to achieve a reduction in Operational Safety Risks that impact Jamaica's air transport industry. Jamaica will achieve this reduction by addressing precursor events that lead to Global High-Risk category occurrences (G-HRCs). Jamaica will further analyse its own incidents and serious incidents to determine national high-risk category occurrences (N-HRCs) and implement mitigation strategies. The CAA will collaborate with industry to create awareness on the precursors of global and national high risk category occurrences.

#### GOAL 2

Strengthen Jamaica's safety oversight capabilities.

This goal aims to strengthen Jamaica's safety oversight capabilities through the progressive implementation of the eight (8) Critical Elements of an effective safety oversight system for civil aviation. There is a high correlation between the responses given by a State to the ICAO USOAP CMA Protocol Questions (PQs) and the State's ability to mitigate Operational Safety Risks. Jamaica will, therefore, closely monitor the Priority Protocol Questions (PQs) and continue to implement its Corrective Action Plan (CAP) to address all findings; with the prioritisation of key activities to address deficiencies identified for CE-8 (Resolution of Safety Concerns) and the Technical Area-6 (Accident Investigation) (AIG).

#### GOAL 3

Implement an Effective State Safety Programme (SSP)

This goal seeks to ensure that the State of Jamaica has implemented an effective SSP. This goal seeks to guarantee that Jamaica builds the Foundational SSP required by ICAO and achieves Level 4 (a "present and effective SSP") by 2025, and that a National Aviation Safety Plan is published by 2023 and updated every three (3) years. The mechanism and tools for safety data collection, aggregation, analysis, processing, and related information exchange will also be addressed under this goal as part of the SSP implementation. In the effort to implement the SSP, and in accordance with the provisions of Annex 19 (Safety Management), Jamaica will also promote the implementation of SMS by relevant service providers across Jamaica.

#### **GOAL 4**

Increase collaboration at the regional level.

This goal is to enhance safety through sustained and meaningful regional collaboration in the regulatory and operational environment for civil aviation. Jamaica through its participation in regional initiatives will offer assistance to partner States, exchange information on safety risks and engage in activities that will boost safety risk management across the Caribbean, the NACC and Pan-America regions.

#### GOAL 5

Expand the use of industry programmes and safety information sharing networks by service providers.

This goal is directed at industry and is meant to expand the use of industry programmes and safety information sharing networks by service providers. It seeks to promote safety information sharing networks that will assist in the development of aviation safety plans at the provider level, and at the national and regional levels.

#### GOAL 6

Ensure the appropriate infrastructure is available to support safe operations.

This goal is to ensure that Jamaica continue the appropriate aerodrome and ANSP infrastructure to support safe air transport operations using the framework of the Global Air Navigation Plan (GANP), and the Basic Building Blocks (BBBs) of the Aviation Safety Block Upgrades. To advance the achievement of this goal, Jamaica will activate effective safety oversight and safety management as part of its SSP. Improvements will be safely introduced through proactive safety risk management.

#### 1.5 OPERATIONAL CONTEXT

#### 1.5.1 Aerodromes

- 1.5.1.1 Jamaica has three (3) international aerodromes; the largest and busiest is located in the tourism mecca of Montego Bay, the second largest in the capital city, Kingston and the third, catering to private international operations, just outside of the North Coast hub of Ocho Rios. One (1) international aerodrome is certified, the other two (2) international aerodromes are in the document evaluation phase of the certification process. Fuel farm facilities are available at all three (3) international airports.
- 1.5.1.2 There are seventeen (17) heliports.
- 1.5.1.3 There are three (3) public domestic aerodromes. One (1) domestic aerodrome has a fuel farm facility.

#### 1.5.2 Airspace

1.5.2.1 Jamaica's airspace known as the Kingston Flight Information Region, has four (4) Classes: A, D, E and G. These classes are designated in accordance with the types of flights permitted, the rules of operation and the level of air traffic management services provided.

#### 1.5.3 Air Traffic Movements

1.5.3.1 Between January 2013 and December 2022 (a period of ten (10) years) there were 1,821,609 air traffic movements managed within Jamaica. This number accounted for inbound and outbound movements at the three (3) international airports (34.5%) and three (3) domestic aerodromes (7%) as well as overflights that traversed the Kingston Flight Information Region (58.5%).

#### 1.5.4 Air Operators

- 1.5.4.1 Currently five (5) air operator certificates (AOCs) are in force. One (1) AOC has been issued to an international (non-scheduled) operator. Jamaica also has four (4) operators, which operate domestic services.
- 1.5.4.2 There are two (2) operators of fixed-wing aircraft that operate domestic air taxi services using piston engine aircraft. There is one (1) helicopter operator that utilizes a turbine engine rotorcraft.

- 1.5.4.3 There is one (1) domestic cargo operator.
- 1.5.4.4 Jamaica's air transport industry also relies on other activities that support air operators including *inter alia* ground handlers, dangerous goods and cabin safety service providers and aviation caterers

#### **1.5.5** Approved Training Organizations

1.5.5.1 Currently there are three (3) training organizations; one (1) provides flight training instruction, one (1) provides flight training, ground school only, and the other provides air traffic management training.

#### 1.5.6 **Aviation Security Providers**

1.5.1 Jamaica has nine (9) certified aviation security providers with the objective of safeguarding civil aviation against acts of unlawful interference.

#### 1.6 COMMON HAZARDS AND SAFETY DEFICIENCIES IN JAMAICA

#### 1.6.1 General Information

- 1.6.1.1 Jamaica is situated in the Greater Antilles between North and South America between latitude 17-19 degrees North and longitude 76-79 degrees West.
- 1.6.1.2 The island is approximately 11,395 square metres (4,400 square miles) and exists under the seasonal threat of hurricanes, constant threat of adverse tropical weather, is located in an earthquake-prone zone, and may be subject to other disasters from time to time.

#### 1.6.2 Topography

1.6.2.1 Jamaica an island, is surrounded by water (the Caribbean Sea). Jamaica's terrain is mountainous, and all three (3) international aerodromes are within five (5) nautical miles (NM) of high ground and water.

#### 1.6.3 Natural Hazards

- 1.6.3.1 Tropical Cyclones (Hurricanes)
- 1.6.3.1.1 Jamaica lies in amidst the Atlantic hurricane belt where hurricanes occur from June to November. The official hurricane season for Jamaica therefore, is June 1 to November 30, as designated by international convention. During this period, Jamaica's weather pattern is significantly influenced by these events. A hurricane can generate the following: a) extreme wind conditions; b) severe sea conditions; and c) flooding and landslides from heavy rains.

1.6.3.1.2 Hurricanes have often affected Jamaica over the years. Historically, the southern region of Jamaica has had the highest incidence of hurricanes. Most major storms have been of category 3 or 4 in strength. These hurricanes have, at times, caused damage to aerodromes and other air transport facilities, and have limited access to the key international aerodrome found on the coast of Kingston on the Palisadoes Peninsula.

#### 1.6.3.2 Earthquakes

- 1.6.3.2.1 Jamaica is susceptible to earthquakes; it may experience an average of up to 80 felt tremors per year but may experience up to two hundred (200) in any one year (ODPEM). Jamaican earthquake disaster events have been accompanied by primary and secondary effects including ground liquefaction, landslides and tsunamis which may follow an earthquake. The island has experienced several high intensity earthquakes in the past.
- 1.6.3.2.2 The Kingston region, the location of one of the highest concentrations of felt earthquakes across the island, is the location of one (1) of Jamaica's key international aerodromes It has also been identified that in this area (the Palisadoes Peninsula), there is the possibility of liquefaction (ODPEM). An earthquake event could result in significant damage to infrastructure; cutting off access to the aerodrome.
- 1.6.3.2.3 Kingston also hosts the Kingston Air Traffic Control Centre which is the hub for the provision of air traffic control services for Jamaica's Flight Information Region.
- 1.6.3.3 Other Adverse Tropical Weather Events
- 1.6.3.3.1 Jamaica's wet season occurs from June to November each year. During this period, the island may be subject to short-term rain hazards (storms) associated with non-cyclonic tropical waves and depressions. These storms also often generate heavy rainfall, flooding and trigger lightning that may cause significant infrastructure damage.
- 1.6.3.3.2 Increasing temperatures and droughts will also have impact on infrastructure.

#### 1.6.4 Infrastructure

- 1.6.4.1 Two (2) of three (3) of Jamaica's international aerodromes are located in Jamaica's population centres (Kingston and Montego Bay). This may limit expansion for growth beyond current expansion activities.
- 1.6.4.2 Key aerodrome and ANSP infrastructure are located on Jamaica's coastline (on the Palisadoes Penninsula (Kingston) and in Montego Bay, St. James). This infrastructure is subject to the effects of salt water/air erosion. Each of Jamaica's international aerodromes is situated near hilly terrain to the east and south.

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#### 1.6.5 Civil Unrest

1.6.5.1 Social unrest and demonstrations infrequently occurs in Jamaica. If these events were to occur, they may disrupt operations at international aerodromes.

### SECTION 2. PURPOSE OF JAMAICA'S NATIONAL AVIATION SAFETY PLAN

#### 2.1 GENERALLY

2.1.1 The National Aviation Safety Plan is the master planning document for the management of aviation safety within Jamaica. It outlines Jamaica's strategic direction for aviation safety management for the next three (3) years, 2024 to 2026. This NASP addresses national Organizational Challenges and Operational Safety Risks, sets national safety goals and targets, and presents a series of Safety Enhancement Initiatives (SEIs) to achieve those goals.

#### 2.2 NATIONAL AVIATION SAFETY PLAN DEVELOPMENT

2.2.1 Jamaica's Vision 2030 National Development Plan, National Transport Policy and the National Disaster Plan were considered in the development of this NASP. The Global Aviation Safety Plan (GASP) and NACC Regional Aviation Safety Plan (NACC RASP) were also used to ensure alignment of this NASP with global and regional priorities. When developed, the Civil Aviation Master Plan for Jamaica will inform future editions of Jamaica's NASP.

#### 2.3 GLOBAL AND NATIONAL HIGH-RISK CATEGORIES

2.3.1 This NASP has been developed using the safety goals and targets and Global High-Risk Categories of occurrences from both the GASP (www.icao.int/gasp) and the NACC RASP as well as National High-Risk Categories of occurrences. These are highlighted within the text as applicable.

#### 2.4 SAFETY ENHANCEMENT INITIATIVES (SEIs)

- 2.4.1 The Safety Enhancement Initiatives captured in this NASP are activities that support the improvement of safety at the national, regional, and global levels.
- 2.4.2 This NASP includes several actions to address specific safety issues and recommended SEIs for individual States as outlined in the <u>NACC RASP</u>. These SEIs have been adopted by Jamaica and have been included in this NASP with cross-references for the individual SEI as relevant.
- 2.4.3 Jamaica has also identified other SEIs which are specific to its context.

# SECTION 3. JAMAICA'S STRATEGIC DIRECTION FOR THE MANAGEMENT OF AVIATION SAFETY

#### 3.1 GENERALLY

- 3.1.1 This NASP presents the Safety Enhancement Initiatives (SEIs) that were developed to address the Organizational Challenges (ORG) and Operational Safety Risks (OPS) Roadmaps, as presented in the ICAO Global Aviation Safety Roadmap (Doc 10161).
- 3.1.2 Safety Enhancement Initiatives were also developed for the State-specific issues affecting Jamaica as identified in Section 1.4.2 (Jamaica's State Self-Assessment: Safety Issues) above. Critically, these issues include the imperative for the development of a modernized State safety management database.
- 3.1.3 This NASP is developed and maintained by the Jamaica Civil Aviation Authority, in coordination with key aviation stakeholders and will be updated at least once every three (3) years.

GOAL TARGET		INDICATORS	GASP & RASP ALIGNMENT
GOAL 1: Achieve a continuous reduction in the Operational	<ol> <li>By 2024, establish the baseline of precursor events (G-HRCs &amp; N-HRCs) by collecting, storing, analysing, and exchanging safety data</li> </ol>	1.1.1. Baseline of precursor events in G-HRCs and N- HRCs established	<b>GASP:</b> Goal 1, Target 1.1
Safety Risks that impact Jamaica's air transport industry	1.2 Maintain a decreasing trend in national accident rate (Jamaica)	1.2.1 Number of accidents per million departures	NACC RASP: Goal 1, Target 1.1
	1.3 Collaborate with industry stakeholders through the Resolution of Safety Concerns mechanism to implement strategies which support a downward trend in latent events	<ul> <li>1.3.1 Number of accidents</li> <li>1.3.2 Percentage of occurrences related to High-Risk Categories (HRCs)</li> <li>1.3.3 Percentage of occurrences classified as 'serious incidents'</li> <li>1.3.4 Percentage of occurrences related to Additional Operational Safety Risks (e.g., 'go-arounds' &amp; 'unstabilized approaches'</li> <li>1.3.5 Number of incidents</li> </ul>	

#### 3.2 SAFETY GOALS, TARGETS AND INDICATORS

GOAL	TARGET	INDICATORS	GASP & RASP ALIGNMENT
GOAL 2: Strengthen Jamaica's safety oversight capabilities	<ul> <li>2.1 Update National Transport Policy (NTP) espousing the guiding principles and the broad course of action to be adopted by Jamaica, emphasizing the pursuit of air transport as a safe mode of transportation as follows: <ol> <li>By 2024, complete the draft of the NTP</li> </ol> </li> <li>2. By 2025, complete consultations with aviation stakeholders for the update of the NTP</li> <li>By 2026, National Transport Policy update completed and final version circulated</li> </ul> <li>2.2 Jamaica to improve its rate of El of the Critical Elements (CEs) of an effective State safety oversight system, focussing on PQs as follows: <ol> <li>By 2025: El Score of 85%</li> <li>By 2026: El Score</li> </ol> </li>	<ul> <li>2.1.1 NTP Update Green Paper completed by 2024</li> <li>2.1.2 Number of stakeholder consultation sessions held during NTP review</li> <li>2.1.3 Number of participants in NTP stakeholders' consultation sessions</li> <li>2.1.4 Feedback received from stakeholders</li> <li>2.1.5 Percentage completion of the policy-making processes related to NTP Update</li> <li>2.1.6 NTP updated and circulated by Dec. 2026</li> <li>2.2.1 Percentage Overall El Score achieved within targeted timeline</li> </ul>	GASP: Goal 2 Target 2.1 ICAO NACC RASP: Goal 2 Target 2.1
	of 90% 2.3 Jamaica to improve its rate of El in Technical Area (Accident Investigation) by focussing on PQs as follows: 1. By 2024: El Score of 60% 2. By 2025: El Score of 65% 3. By 2026: El Score of 75% 2.4 Jamaica to improve its rate of El for Critical Element CE-1 (Primary Aviation Legislation) (including SSP components), focussing on PQs as follows: By 2025: El Score (CE-1) (Primary Legislation): 90%	<ul> <li>2.3.1 Percentage completion of primary legislation update processes</li> <li>2.3.2 Percentage El Score related to CE-1 (Primary Aviation Legislation)</li> <li>2.4.1 Percentage El Score related to CE-1 (Primary Aviation Legislation)</li> </ul>	

GOAL	TARGET	INDICATORS	GASP & RASP ALIGNMENT
GOAL 2: Strengthen Jamaica's safety oversight capabilities (Cont'd)	<ul> <li>2.5 Jamaica to improve its rate of El of the Critical Element CE-8 (Resolution of Safety Concerns), focussing on PQs as follows:</li> <li>By 2025: El Score (CE-8) (Resolution of Safety Concerns): 90%</li> </ul>	2.5.1 Percentage El Score related to CE-8 (Resolution of Safety Concerns)	GASP: Goal 2 Target 2.1 ICAO NACC RASP: Goal 2 Target 2.1
	2.6 By 2024, implement regulations related to emerging technologies (RPAS, Drones) aligned applicable ICAO Standards	2.6.1 Percentage completion of processes to implement updated regulations	
	<ul> <li>2.7 Jamaica to enhance safety oversight by requiring local registration for foreign aircraft operating domestically for more than 180 days:</li> <li>By 2026: Draft harmonizing operating regulations</li> </ul>	2.7.1 Percentage completion of processes to update specific operating regulations related to the oversight of foreign- aircraft with commercial domestic operations	
	2.8 By 2025, achieve and maintain an adequate pool of qualified and experienced aviation professionals within the industry	<ul> <li>2.8.1 Number of active licensed aviation professionals within Jamaica's air transport industry</li> <li>2.8.2 Number of foreign national airmen certified for activity in Jamaica</li> </ul>	
	2.9 Maintain Jamaica's rate of effective implementation of the Critical Element CE-4 (Qualified Technical Personnel) at 90%	2.9.1 Percentage El score related to CE-4 (Qualified Technical Personnel)	
	2.10 By 2025, review and update guidance materials and review and update at a minimum of three-year intervals	2.10.1 Percentage of required reviews and updates for guidance materials completed annually	

GOAL	TARGET	INDICATORS	GASP & RASP ALIGNMENT
GOAL 3: Implement an effective State Safety Programme (SSP)	3.1 By 2024, Jamaica to implement the foundation of a State Safety Programme	3.1.1 Percentage completion of Jamaica-Corrective Action Plans related to the SSP Foundational PQs (Self-Assessment	GASP: Goal 3 Targets 3.1 and 3.3
	3.2 By 2025, implement "present and effective" State Safety Programme (Level 4)	3.2.1 Level of maturity achieved in Annex 19 (Safety Management) PQs	ICAO NACC RASP: Goal 3 Targets 3.1
	3.3 By 2024, publish a National Aviation Safety Plan (Jamaica) by September 2024	3.3.1 Jamaica National Aviation Safety Plan published by September 2024	and 3.2
	3.4 By 2026, achieve industry- wide operators' Safety Management System framework submission level of 80% (based on complexity of operations)	3.4.1 Percentage of applicable Service Providers in Jamaica that have implemented a Safety Management System	
	3.5 By 2025, mandatory, and voluntary reporting systems (including data protection mechanisms and tools) are deployed industry-wide	3.5.1 Percentage processes completed for primary legislation updates regarding data protection of mandatory and voluntary reports	
	3.6 Conduct meetings and seminars with stakeholders to promote safety initiatives	3.6.1 Percentage of planned meetings and seminars convened to promote safety initiatives	
	3.7 Increased national and regional publication of Jamaica's safety information from official sources by 2024	3.7.1 By 2024, process established for the exchange of safety data, information, methodologies and guidance materials	
	3.8 Personnel with adequate competencies are in place to analyze safety data for decision-making and forecasting by 2024	3.8.1 Work with local and regional partners to leverage available technologies	
		3.8.2 Develop risk modelling capabilities	
		3.8.3 Allocate resources to proactively use risk modelling capabilities	

GOAL 4: Increase collaboration at the regional level	4.1	By 2024, Jamaica to seek technical assistance from Regional Aviation Safety Group - NACC in SSP implementation	4.1.1	By 2024, at least one (1) instance of technical assistance in SSP implementation secured from the NACC RASG	<b>GASP:</b> Goal 4 Target 4.1
	4.2	By 2024, increase participation of Jamaica's SMEs and other technical personnel in regional activities including seminars, workshops, and	4.2.1	Percentage of RASG-PA seminars, workshops & meetings convened with the participation of Jamaica's aviation SMEs	ICAO NACC RASP: Goal 4 Target 4.1
		meetings.	4.2.2	Number of NACC Regional Aviation Safety Working Groups that convened with the participation of Jamaica's SMEs.	
			4.2.3	Percentage of seminars, workshops & meetings convened by regional partners with the participation of Jamaica's aviation SMEs	
	4.3	By 2025, Jamaica exchanges information on Operational Safety Risks, incl. information on Safety Performance Indicators (SPIs), and emerging issues, to the Regional Aviation Safety Group - Pan America (RASG-PA) <sup>5</sup>	4.3.1	Number of reports on Operational Safety Risks, Safety Performance Indicators and emerging issues submitted by Jamaica through the ICAO Secure Portal	
GOAL 5: Expand the use of industry programmes and safety information sharing networks by service	5.1	By 2025, build and maintain an increasing trend in industry's contribution to Safety Information Exchange using standardized Safety Performance Indicators (SPIs)	5.1.1	Percentage of applicable service providers using globally harmonized SPIs as part of their SMS and other reporting mechanisms	<b>GASP:</b> Goal 5 Target 5.1 and
providers	5.2	By 2026 increase the number of service providers participating in internationally recognised industry programmes	5.2.1	Number of service providers involved in an industry assessment programme (As per target 3.5)	ICAO NACC RASP: Goal 5 Target 5.1

<sup>&</sup>lt;sup>5</sup> Regional Aviation Safety Groups (RASGs) serve as a regional cooperative forum integrating global, regional, sub-regional, national and (Continued) industry efforts in continuing to enhance aviation safety worldwide. RASGs develop and implement work programmes that support a regional performance framework for the management of safety on the basis of the Global Aviation Safety Plan (GASP). RASGs build on the work already done by States, existing sub-regional organizations such as the Cooperative Development of Operational Safety and Continuing Airworthiness Programmes (COSCAPs) and Regional Safety Oversight Organizations (RSOOs) and support the establishment and operation of a performance based safety system for the region. The following RASGs have been established: Regional Aviation Safety Group - Europe (RASG-EUR); Regional Aviation Safety Group - Africa (RASG-AFI); Regional Aviation Safety Group - Middle East (RASG-MID) and the Regional Aviation Safety Group - Pan America (RASG-PA). The reports of RASG meetings are reviewed by the Commission on a regular basis and by the Council as deemed necessary.

GOAL	TARGET	INDICATORS	GASP & RASP ALIGNMENT
GOAL 6: Ensure the appropriate infrastructure is available to support safe operations	<ul> <li>6.1 Jamaica to improve its rate of effective implementation of the Technical Area - Aerodromes and Ground Aids (AGA) with a focus on PQs as follows: <ol> <li>By 2025: El Score Technical Area (AGA): 90%</li> <li>By 2026: El Score Technical Area (AGA): 90%</li> </ol> </li> </ul>	6.1.1 Percentage El score related to Technical Area- Aerodromes and Ground Aids (AGA) with the prescribed timeframe	GASP: Goal 6 Target 6.1 and ICAO NACC RASP Goal 6 Target 6.1
	<ul> <li>6.2 By 2024, Conduct gap analysis to identify deficiencies in aerodrome- related core infrastructure as measured against ICAO SARPs (Annex 14 (Aerodrome Designs &amp; Operations) and Doc. 9426 ATS Planning Manual, GANP, ASBU, BBB, RANP and JCARs.</li> </ul>	<ul> <li>6.2.1 Percentage completion of gap analysis measuring deficiencies in core infrastructure at aerodrome and ANSP as measured against ICAO SARPs (Annex 14 (Aerodromes Designs &amp; Operations) and Doc. 9426 (ATS Planning Manual), GANP, ASBU, BBB, RANP and Civil Aviation Regulations)</li> </ul>	
	<ul> <li>6.3 By 2024, conduct gap analysis to identify deficiencies in ANSP-related core infrastructure as measured against ICAO SARPs (Annex 14 (Aerodrome Designs &amp; Operations) and Doc. 9426 ATS Planning Manual, GANP, ASBU, BBB, RANP and JCARs.</li> </ul>	6.3.1 Percentage completion of gap analysis measuring deficiencies in core infrastructure at aerodrome and ANSP as measured against ICAO SARPs (Annex 11 (Air Traffic Services) and Doc. 9426 (ATS Planning Manual), GANP, ASBU, BBB, RANP and Civil Aviation Regulations)	
	6.4 By 2027, core infrastructure for aerodromes as measured against ICAO SARPS (Annex 14 and Doc. 9426, GANP & ASBU BBB, RANP, NACC-RANP, ATS Planning Manual and Civil Aviation Regulations) implemented	<ul> <li>6.4.1 Percentage of aerodrome infrastructure-related deficiencies measured against the NACC-RANP</li> <li>6.4.2 Percentage of aerodromes that are certified by the JCAA</li> <li>6.4.3 Percentage of Runway</li> </ul>	GASP: Goal 6 Target 6.1 and ICAO NACC RASP Goal 6 Target 6.1
		Safety Teams (RSTs) implemented at international aerodromes	

GOAL	GOAL TARGET		GASP & RASP ALIGNMENT
GOAL 6: Ensure the appropriate infrastructure is available to support safe operations	<ul> <li>6.5 Jamaica to improve its rate of effective implementation of the Technical Area - Air Navigation Services with a focus on PQs as follows: <ol> <li>By 2025: El Score Technical Area (ANS): 90%</li> <li>By 2026: El Score Technical Area (ANS): 90%</li> </ol> </li> </ul>	6.5.1 Percentage implementation of applicable infrastructure- related ICAO Standards linked to ASBU and BBBs	
	6.6 By 2027, implement the core infrastructure for ANSP as measured against ICAO SARPS (Annex 14 and Doc. 9426, GANP & ASBU BBB, RANP, NACC-RANP, and Civil Aviation Regulations)	<ul> <li>6.6.1 Percentage of ANSPs that are certified by the JCAA</li> <li>6.6.2 Percentage of ANSP infrastructure- related deficiencies measured against the NACC RANP</li> <li>6.6.3 Percentage implementation of infrastructure-related ICAO Standards linked to ASBU BBBs</li> </ul>	

#### 3.3 SAFETY ENHANCEMENT INITIATIVES (SEIs)

3.3.1 Safety Enhancement Initiatives are one or more actions to eliminate or mitigate operational safety risks or to address an identified safety issues. SEIs generally fall within the categories identified below in **Table 3.3.1 (Categories for Safety Enhancement Initiatives).** 



Table 3.3.1 Safety Enhancement Initiative Categories

- 3.3.2 The Safety Enhancement Initiatives outlined in this NASP are to be implemented through Jamaica's existing safety oversight capabilities, the State Safety Programme (when implemented) and the safety management systems implemented by service providers industry-wide. SEIs derived from the ICAO Global Aviation Safety Roadmap (Doc 10161) were selected to achieve the national safety goals presented in the NASP. Several of the national SEIs presented therefore, are linked to overarching regional and international level SEIs, and are expected to help to enhance aviation safety globally. Other context-specific SEI's were also introduced for national use. The full list of the SEIs is presented in **Appendix A (Jamaica National Aviation Safety Plan Safety Enhancement Initiatives (SEIs))** to this NASP.
- 3.3.3 The NASP also addresses emerging issues. Emerging issues include concepts of operations, technologies, public policies, business models or ideas that might affect safety in the future, and for which insufficient data exists to complete typical data-driven analysis. Due to the lack of data, emerging issues cannot automatically be considered as Operational Safety Risks. It is important that Jamaica remains vigilant on emerging issues to identify hazards and safety deficiencies, collect and

aggregate relevant data and proactively develop mitigations to address any associated risk. This NASP addresses the following emerging issues, which were identified through safety oversight activities for further analysis:

- 1. Management of small, unmanned aircraft systems operating in Jamaica's airspace, including in the vicinity of aerodromes;
- 2. Management of Remotely Piloted Aircraft Systems (RPAS) in Jamaica (domestic and international);
- 3. Introduction of ultra-light aircraft operations;
- 4. Introduction of light sport aircraft in flight training;
- 5. Introduction of ADS-B surveillance;
- 6. Laser strikes; and
- 7. Fractional ownership of aircraft.

### **SECTION 4. NATIONAL OPERATIONAL SAFETY RISKS**

#### 4.1 GENERALLY

4.1.1 This NASP includes Safety Enhancement Initiatives that address national Operational Safety Risks, derived from lessons learned from occurrences and from data-driven considerations. These SEIs may include actions such as: policy development, rulemaking; targeted safety oversight activities; safety data management, analysis and exchange; and safety promotion. Separate sections are distinguished to address commercial air transport and general aviation to make the information more accessible to stakeholders.

#### 4.2 **REPORTING ON OPERATIONAL SAFETY RISKS**

4.2.1 Jamaica will publish an Annual Safety Report which includes safety information including local, national and international safety trends. The JCAA Annual Safety Report is available on the JCAA Web site at <u>Annual Safety Reports - Jamaica Civil Aviation Authority (jcaa.gov.jm</u>). The summary of accidents and serious incidents that have occurred in Jamaica's airspace. The Annual Safety Reports will also include information on accidents and incidents involving Jamaican-registered aircraft and air operators, across the globe. **Table 4.2 (Accident and Serious Incident Occurrences - Jamaica (2018- Present)** below captured such information for the period 2018 to the present.

YEAR	FATAL ACCIDENTS	NON-FATAL ACCIDENTS	SERIOUS INCIDENTS				
Commercial air transport occurrences in Jamaica							
2018 - 2022	1 (N8281Q)	0	0				
2022 - Present	0	0	0				
General aviation aircraft occurrences in Jamaica							
2018 - 2022	0	1 (XBJMR)	0				
2022 - Present	1 (N3254B)	1 (unknown aircraft)	0				

 Table 4.2 (Accident and Serious Incident Occurrences - Jamaica (2018- Present))

#### 4.3 HIGH-RISK CATEGORIES

- 4.3.1 In the last twenty-six (26) months, Jamaica has had one event classified under the Global High-Risk Category.
- 4.3.2 As aligned with the GASP, NACC-RASP, and Jamaica's NASP goals, precursor events are monitored with the view to managing the risks associated with events in the High-Risk Categories. Jamaica, has identified national Operational Safety Risks as listed in Table 4.3 (National Operational Safety Risks) as National High-Risk Categories. The Government of Jamaica through the Ministries with responsibility for transport, finance, foreign affairs; the Jamaica Civil Aviation Authority; the Airports Authority of Jamaica; ICAO; and CASSOS will collaborate to implement a series of SEIs to address these National HRCs. Included below at **Appendix A** (Jamaica National Aviation Safety Plan - Safety Enhancement Initiatives) are the SEI's derived from the ICAO OPS Roadmap, contained in the ICAO Global Aviation Safety Roadmap (Doc 10161).

	1	2	3	4
National High-Risk Categories (N-HRCs)	Pilot Decision- Making	Loss of aircraft separation	Aerodrome Infrastructure deficiencies	Incursions at aerodromes
	Inadvertent flying into IMC	ATCO-Pilot- Aerodrome personnel communication challenges	Failure of navigational aids	Bird Strikes
Precursors	Accessing & assessing meteorological forecasts	Equipment failure	Lack of wind shear warning infrastructure	Animals and persons breaching airport perimeter
	Gear up landing	Loss of situational awareness by ATCO or Pilot	Runway conditions	Lack of situational awareness by ATCO or Pilot

### **SECTION 5. ORGANIZATIONAL CHALLENGES (ORG)**

#### 5.1 GENERALLY

5.1.1 In addition to the national Operational Safety Risks listed in the NASP, Jamaica has identified Organizational Challenges (ORG) and a series of SEIs have been selected for inclusion in this NASP, to address them. These Organizational Challenges are given priority in this NASP since they are aimed at enhancing and strengthening Jamaica 's safety oversight capabilities and the management of aviation safety across the industry at the national level.

#### 5.2 CRITICAL ELEMENTS OF AN EFFECTIVE STATE SAFETY OVERSIGHT SYSTEM

5.2.1 The International Civil Aviation Organization has defined the eight (8) critical elements (CEs) of an effective State safety oversight system as presented in Table 5.2.1 (Critical Elements of an Effective State Safety Oversight System). Jamaica is committed to the effective implementation of these CEs as part of its overall mandate.

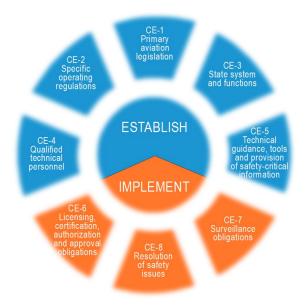


Figure 5.2: Critical Elements (CEs) of an Effective State Safety Oversight System

5.2.2 The latest ICAO activities, which aim to measure the effective implementation of the eight CEs of Jamaica's safety oversight system, as part of the ICAO Universal Safety Oversight Audit Programme (USOAP), have resulted in the scores presented below at Table 5.2.2 (Jamaica's Effective Implementation Rate by Critical Elements (CEs) and Technical Areas).

OVERALL EFFECTIVE IMPLEMENTATION (EI) SCORE - JAMAICA							
81.51%							
El score by Critical Element (CE)							
CE-1	CE-2	CE-3	CE-4	CE-5	CE-6	CE-7	CE-8
85.71 %	72.97 %	96.30 %	67.57 %	82.83 %	88.55 %	77.78%	61.11 %
El score by Technical Area <sup>6</sup>							
LEG	ORG	PEL	OPS	AIR	AIG	ANS	AGA
85.71 %	100 %	97.18 %	96.08 %	92.22 %	55.71 %	78.50 %	66.96 %

**Table 5.2.2:** Jamaica's Effective Implementation Rate by Critical Elements (CEs) and Technical Areas

**Source**: ICAO Universal Safety Oversight Audit Programme (USOAP)

#### 5.3 PRIORITIZED ORGANIZATIONAL CHALLENGES

5.3.1 The Organizational Challenges (ORG) in the Jamaican context identified below were considered to be of the utmost priority because they impact the effectiveness of safety risk controls. These challenges were chosen based on the analysis of the ICAO USOAP data, accident and incident investigation reports, safety oversight activities over the past five (5) years. These issues are typically systemic in nature and relate to challenges associated with the conduct of Jamaica's safety oversight functions, implementation of State Safety Programme at the national level and the level of SMS implementation by national service providers. The factors considered include organizational culture, policies and procedures within JCAA and within service providers. These Organizational Challenges are aligned with those listed in the 2023 - 2025 edition of the GASP, as well as the 2020 - 2022 NACC RASP.

<sup>&</sup>lt;sup>6</sup> Eight (8) Technical Areas subject to the ICAO USOAP: (1) primary aviation legislation and civil aviation regulations (LEG), (2) civil aviation organization (ORG); (3) personnel licensing and training (PEL); (4) aircraft operations (OPS); (5) airworthiness of aircraft (AIR); (6) aircraft accident and incident investigation (AIG); (7) air navigation services (ANS); and (8) aerodromes and ground aids (AGA).

5.3.2 Jamaica (as supported by the JCAA and other key stakeholders) will implement a series of Safety Enhancement Initiatives to address the national Operational Safety Risks and Organizational Challenges listed in this NASP at Sections 4 and 5 respectively. These SEIs have been derived from the ICAO ORG Roadmap, contained in the ICAO Global Aviation Safety Roadmap (Doc 10161). Appendix A (Jamaica National Aviation Safety Plan - Safety Enhancement Initiatives) outlines the full list of the Safety Enhancement Initiatives that Jamaica will undertake throughout the three-year lifespan of this NASP.

### **SECTION 6. MONITORING IMPLEMENTATION**

#### 6.1 GENERALLY

- 6.1.1 Jamaica will continuously monitor the implementation of the Safety Enhancement Initiatives outlined in this NASP and measure the safety performance of the national civil aviation system, to ensure the intended results are achieved, using the mechanisms presented in **Appendix A (Jamaica National Aviation Safety Plan -Safety Enhancement Initiatives)**.
- 6.1.2 Jamaica will review this NASP at least every three (3) years and maintain a current and relevant list of identified Operational Safety Risks, Organizational Challenges and Safety Enhancement Initiatives.

#### 6.2 SAFETY PERFORMANCE

- 6.2.1 The JCAA will periodically review the safety performance of the industry as related to the SEIs outlined in Appendix A (Jamaica National Aviation Safety Plan Safety Enhancement Initiatives) to ensure the achievement of the national safety goals outlined above at Section 1.5.4 (Jamaica's Safety Goals and the National Aviation Safety Plan).
- 6.2.2 As required, Jamaica will seek the support of industry partners, ICAO, the ICAO NACC Office, CANSO, CASSOS and LACAC, to ensure the timely implementation of the SEIs selected to address the Operational Safety Risks and Operational Challenges faced by Jamaica. Through close monitoring of the SEIs, Jamaica will adjust this NASP and related activities as needed and update this NASP accordingly.

#### 6.3 SAFETY PERFORMANCE INDICATORS

- 6.3.1 Jamaica will use the indicators listed in **Section 3 (Jamaica's Strategic Direction for the Management of the Aviation Safety)** above to measure the safety performance of the national civil aviation system and to monitor each national aviation safety target.
- 6.3.2 An annual safety report will be published to provide stakeholders with relevant upto-date information on the progress made in achieving the national aviation safety goals, as well as the implementation status of the SEIs.

- 6.3.3 In the event that the national aviation safety goals are not met, the root causes will be presented. If Jamaica identifies a critical operational safety risk if not met, reasonable measures will be taken to mitigate them as soon as is practicable, possibly leading to an unscheduled revision of the NASP.
- 6.3.4 Jamaica has adopted a standardized approach to provide information at the regional level, for reporting to the Regional Aviation Safety Group Pan America (RASG-PA) by way of survey responses, self-assessments and filing of differences on the On-Line Framework (OLF)<sup>7</sup> and responses to State Letters<sup>8</sup>. This allows the region to receive information and assess Operational Safety Risks using common methodologies.

<sup>&</sup>lt;sup>7</sup> The primary tool used by ICAO to collect, continuously monitor and reporting USOAP CMA data. It provides ICAO, Member States and other authorized users with a suite of web-integrated applications that allow access to safety-related information and documentation received during USOAP CMA activities from Member States and international organizations that have an agreement with ICAO for sharing of safety information under the USOAP CMA (ICAO).

<sup>&</sup>lt;sup>8</sup> A State letter is the medium through which ICAO, under the authority of the Secretary

General, officially communicates *inter alia* Standards and Recommended Practices (SARPs) and policies and obtains data from States related to air transport. This, to promote the fulfilment of State obligations relevant to the Convention on International Civil Aviation (Doc. 7300)(the "Chicago Convention") (ICAO). State letters are also used by ICAO Regional Offices to officially communicate with the Member States.

Any question about this NASP and its initiatives, and further requests for information, may be addressed to the following:

Jamaica Civil Aviation Authority 4 Winchester Road Kingston 10 876 960 3948 jcivav@jcaa.gov.jm jcaa.gov.jm Intentionally left blank

### **APPENDIX A**

## JAMAICA NATIONAL AVIATION SAFETY PLAN: SAFETY ENHANCEMENT INITIATIVES (SEIs)

# **ORGANIZATIONAL CHALLENGES (ORG)**



#### ORGANIZATIONAL CHALLENGE (ORG) 1: Latent precursor events that may lead to undesirable outcomes

	<b>Target 1.1:</b> By 2024, establish the baseline of precursor events for G-HRCs and N-HRCs by collecting, storing, analysing and exchanging safety data
<b>GOAL 1:</b> Achieve a continuous reduction in Operational Safety Risks that	<b>Target 1.2:</b> Maintain a decreasing trend in national accident rate (Jamaica)
impact Jamaica's air transport industry	<b>Target 1.3:</b> Collaborate with industry stakeholders through the Resolution of Safety concerns mechanism to implement strategies which support a downward trend in latent events

Safety Enhancement Initiative	t Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
<b>Target 1.1</b> By 2024, establish the	Establish the baseline of precursor events by	Q1 2024 to Q4 2024	JCAA	JCAA ANSP	Persons engaged to collate data on precursor events	High	Establish centralized database
baseline of precursor events (G-HRCs & N- HRCs) by collecting, storing, analysing and exchanging safety data	collecting, storing, analyzing and			Aerodromes AOC operators ATO AMO	Percentage of Flight Safety Department Units for which safety data has been collated		Continuous monitoring through quarterly reporting on progress toward the establishment of the database
Target 1.2 Maintain a decreasing trend in national accident rate (Jamaica)	6H – While working to improve safety oversight, work with RASG and/or RSOO to address National High- Risk Categories of occurrences	Q1 2024 to Q4 2024	JCAA	Industry Service ProvidersSafety promotion with the ANSP to provide Flight Safety with the necessary dataAnalyse the data collated to determine the number of precursor events since 2012Determine the baseline of precursor events per annum	Providers ANSP to provide Flight Safety with the necessary	High	Continuous monitoring through quarterly reporting on progress toward the establishment of
					determine the number of precursor events since		the database
					precursor events per		
	18B Develop safety performance measurement methodologies, aligned with	ANSP developed within prescribed timeframe Aerodromes AOC operators e ATO Implement the cy AMO methodology which uses	developed within	High	Track progress on a quarterly basis towards development of methodology		
region metrics establi: risk ma	regional safety metrics, using the established safety risk management process				methodology which uses the established safety risk		Track percentage progress towards implementation of methodology on a quarterly basis

Safety Enhancement Initiative	t Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 1.3 Collaborate with industry stakeholders through the Resolution of Safety Concerns mechanism to implement strategies that	18C Develop Safety performance indicators (SPIs) and safety performance targets using the established safety risk management process	Q4 2025	JCAA	JCAA ANSP Aerodromes AOC operators ATO AMO	SPIs and Safety performance targets established	High	Track progress on quarterly basis for the establishment of SPIs and targets
support a downward trend in latent events	18D Ensure effective mandatory safety reporting systems by service providers	Q2 2024	JCAA	JCAA ANSP Aerodromes AOC operators ATO, AMO	Ratio of formal mandatory reports submitted within specified timeframe versus known reportable incidents]	High	Processing of all known and formally reported mandatory reports Documenting all known incidents through the CADORS/MOR mechanism
	18E Encourage establishment of voluntary safety reporting systems as part of service providers' SMS	Q4 2025	JCAA	JCAA ANSP Aerodromes AOC operators ATO, AMO	Number of planned vs actual meetings/seminars held with service providers re voluntary reporting systems	High	Quarterly review of feedback, notes and participation from meeting.
	18G Continue to contribute information on Operational Safety Risks, including SSP SPIs, and emerging issues, to the RASG	Ongoing (Q1 2024-Q4 2025)	JCAA	JCAA ANSP Aerodromes AOC operators ATO, AMO	Number of reports submitted to the RASG	Low	Annual review of reports submitted

#### ORGANIZATIONAL CHALLENGE (ORG) 2: Inadequate State safety oversight capabilities

**GOAL 2:** Strengthen Jamaica's safety oversight capabilities

**Target 2.1:** Update National Transport Policy (NTP) espousing the guiding principles and the broad course of action to be adopted by Jamaica, emphasizing the pursuit of air transport as a safe mode of transportation as follows:

- a. By 2024, complete the draft of the NTP;
- b. By 2025, complete consultations with aviation stakeholders for the update of the NTP
- c. By 2026, NTP update completed and final version circulated.

**Target 2.2:** Jamaica to improve its rate of effective implementation of the Critical Elements (CEs) of a State Safety Oversight System, focussing on Protocol Questions (PQs) as follows:

- a. By 2024: 83% El Score
- b. By 2025: 85% El Score
- c. By 2026: 90% El Score

**Target 2.3:** Jamaica to improve its rate of effective implementation of the ICAO USOAP Technical Area (Accident Investigation) by focussing on Protocol Questions (PQs) as follows:

- a. By 2024: 60% El Score
- b. By 2025: 65% El Score
- c. By 2026: 75% El Score

**Target 2.4:** Jamaica to improve its rate of effective implementation of the Critical Element CE-1 (Primary Aviation Legislation)(including SSP components), focussing on PQs as follows:

By 2025: El Score (CE-1)(Primary Legislation): 90%

**Target 2.5:** Jamaica to improve its rate of effective implementation of CE-8 (Resolution of Safety Concerns), focussing on priority Protocol Questions (PQs) to 90% El Score by 2025

**Target 2.6:** Implement regulations on emerging technologies (RPAS, Drones etc.) in keeping with applicable ICAO standards by 2024

**Target 2.7:** Jamaica to harmonize the oversight of foreign registered aircraft operating domestically with locally registered aircraft by 2026 through the update of regulations

**Target 2.8:** Achieve and maintain an adequate pool of qualified and experienced aviation professionals within the industry by 2025

**Target 2.9:** Jamaica to maintain its rate of effective implementation of the CE-4 (Qualified Personnel), focussing on priority Protocol Questions (PQs) as follows:

- a. 2023: 90% El Score;
- b. 2024: 90% El Score; and
- c. 2025: 90% El Score.

**Target 2.10:** Review and update guidance materials by 2025, and within three-year intervals thereafter

Safety Enhancement Initiative	t Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 2.1	Complete the draft NTP	Q4 2024	Ministry of	JCAA	Percentage completion of the	Medium	Review progress on the
Ensure National Transport Policy			Transport and Mining (Portfolio	ANSP	NTP	_	stages of implementation towards receiving approval
(NTP) emphasizes aviation safety	Consult with aviation stakeholders on the draft NTP	Q4 2025	Ministry)	Aerodromes AOC Holders	Number of consultations held		for NTP
	Publication of final NTP	Q4, 2026	_	AMO Holders	Instances of feedback	-	
<u>©=</u> ⊠.44,				ATO Holders	received from aviation stakeholders		
				Private Aircraft owners	NTP gazetted		
				Ministry of Tourism	Null gazetted		
				Military Aviation			
Target 2.2	Address all PQs (1B)	2024	JCAA	ANSP	Percentage Overall El Score	High	Review of completed
Jamaica to improve				Aerodromes	(Jamaica) Percentage Effective Implementation Self- Assessment completed		self-assessments
its rate of effective implementation of				AOC Holders		-	
the Critical Elements				AMO			
(CEs) of a State Safety Oversight				ATO			
System, focussing on Protocol Questions				Air Operators (Private)			
(PQs) as follows:				Portfolio Ministry			
a. By 2024: 83% El Score b. By 2025: 85% El Score	Update primary legislation and	2024	JCAA	ANSP	Percentage El score in CE-1	High	Review of completed
c. By 2026: 90% El Score	regulations (1C)			Aerodromes	(Primary Aviation Legislation) & CE-2 (Specific Operating	-	self-assessments
				AOC Holders	Regulations)		
		2024	JCAA	AMO		Llink	Deview of our events to words
	Increased level of compliance with ICAO SARPs & El scores (1D)	2024	JCAA	ATO	Percentage CAP completion	High	Review of progress towards completion of Corrective
				Air Operators (Private)			Action Plan
				Portfolio Ministry			

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 2.2 Jamaica to improve its rate of effective implementation of the Critical Elements (CEs) of a State Safety Oversight System, focussing on Protocol Questions (PQs) as follows:	Strengthen the process of identification and filing of differences with ICAO SARPs (1E)	2024	JCAA	ANSP Aerodromes AOC Holders AMO ATO Air Operators (Private) Portfolio Ministry	Percentage completion Manual (Filing of Differences) Percentage differences identified that are filed with ICAO	High	Review of completed self- assessments
a. By 2024: 75% El Score b. By 2025: 85% El Score c. By 2026: 90% El Score	Establish an independent accident and incident investigation body as per Annex 13 (3A)	Aerodromes (Primary Aviation Legislation	Portfolio Ministry	Percentage El score in CE-1 (Primary Aviation Legislation) and CE-2 (Specific Operating Regulations)		Review of completed self- assessments	
(conta)				ATO Air Operators (Private) Portfolio Ministry CASSOS ICAO NACC	Percentage El score related to Technical Area-Accident Investigations (AIG)		Submit legislative update to Office of Chief Parliamentary Counsel through Portfolio Ministry

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 2.3	Develop an effective system	2025	Portfolio Ministry	JCAA	% El score in CE-1 (Primary		Review completed self-
Establish an	to promulgate technical guidance and tools and			ANSP	Aviation Legislation) and CE-2 (Specific Operating		assessments
independent accident and incident	provide safety critical			Aerodromes	Regulations)		Review progress of
investigation body	information needed for technical personnel to			AOC Holders	Percentage El score related		drafting request and subsequent updates as
(SEI-3)	effectively conduct accident			AMO	to Technical Area-AIG		required
	and incident investigations (3B)			ATO			Track progress legislative
				Air Operators (Private)			update submission to
				CASSOS			Office of the Chief Parliamentary Counsel
				ICAO NACC			through Portfolio Ministry
							Track passage of Legislative Update through GOJ Parliament
	Establish primary legislation	2025	Portfolio Ministry	JCAA	Percentage El score in CE-1	Medium	Review completed self-
	and regulations to create the following:			ANSP	(Primary Aviation Legislation) and CE-2		assessments
	an independent accident			Aerodromes	(Specific Operating		Track progress of Legislative Update
	investigation mechanism (1C)			AOC Holders			Submission to Office of
	Establishment of State Safety			AMO Holders	Percentage El score related		the Chief Parliamentary Counsel through Portfolio
	Programme (1C)			ATO Holders	to Technical Area-AIG		Ministry
				Private Aircraft owners			
				CASSOS			
				ICAO NACC			
	Establish an independent	2025	Portfolio Ministry	JCAA	Percentage progress	Medium	Review of completed self-
	accident and incident investigation authority			CASSOS	towards implementation of accident investigation		assessment in the area of AIG
	(mechanism), as per Annex			ICAO NACC	entity/mechanism		
	13 requirements (3A) (CE-1 and CE-3)				Improving El score from 55% to 70%		

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 2.4 Jamaica to improve its El rate	Strengthen primary aviation law and subsidiary	Q4 2025	Portfolio Ministry	JCAA	Percentage score in CE-1 (Primary Aviation	High	Track progress of legislative updates
for CE-1 (Primary	regulations, to empower the			ANSP	Legislation) and CE-2		legislative updates
Aviation Legislation)	competent authority to			Aerodromes	(Specific Operating		
(including SSP components),	conduct regulatory oversight, this includes			AOC Holders	Regulations) regarding pecuniary fines		
focussing on PQs as	separation of oversight			AMO Holders			
follows:	functions and service provision functions (CE-1			ATO Holders			
By 2025: El Score (CE-1)(Primary Legislation): 90%	and CE-2) and updates to pecuniary fines (1C)			Private Aircraft owners			
Target 2.5 Jamaica	Strengthen legislation in the	Q4 2025	Portfolio Ministry	JCAA	Percentage score in CE-1 (Primary Aviation Legislation) and CE-2	Medium	Track progress of legislative updates
to improve its El rate for CE-8 (Resolution	area of Resolution of Safety Concerns including			ANSP			
of Safety Concerns),	pecuniary fines (1C)			Aerodromes	(Specific Operating		
focussing on priority Protocol Questions				AOC Holders	Regulations) regarding pecuniary fines		
(PQs) to 90% El				AMO Holders	pecuniary lines		
Score by 2025				ATO Holders			
				Private Aircraft owners			
Target 2.6	Implement legislation	2024	Portfolio Ministry	JCAA	Percentage score in CE-1	Medium	Track progress of
Implement regulations	regarding emerging technologies (1C) by 2024			ANSP	(Primary Aviation Legislation) and CE-2		Legislative Update Submission to Office of
on emerging technologies (RPAS,	technologies (TC) by 2024			Aerodromes	(Specific Operating		the Chief Parliamentary
Drones, UAS) aligned				AOC Holders	Regulations)		Counsel through
with ICAO Standards				AMO Holders			Portfolio Ministry
(CAL)				ATO Holders			
				Private Aircraft owners			
				CASSOS			
				ICAO NACC			

Safety Enhancemer Initiative	nt Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 2.7 By 2026 harmonize oversight of foreign- registered aircraft operating domestically with locally-registered aircraft through updated regulations	Harmonize regulations for foreign and locally registered aircraft (1C) by 2026	2026	Portfolio Ministry	JCAA ANSP Aerodromes AOC Holders AMO Holders ATO Holders Private Aircraft owners CASSOS ICAO NACC	Percentage score in CE-1 (Primary Aviation Legislation) and CE-2 (Specific Operating Regulations)	Medium	Track progress of Legislative Update Submission to Office of the Chief Parliamentary Counsel through Portfolio Ministry
Achieve and maintain an adequate pool of	Achieve and maintain an adequate pool of qualified and experienced aviation professionals within the industry	2025	JCAA	MoFPS MoEG&JC Portfolio Ministry ANSP Aerodromes AOC Holders AMO Holders ATO Holders Private Aircraft Owners CASSOS ICAO NACC IATA ACI CANSO	Number of local- and domestic-based aircraft on Jamaica's aircraft registry Number of scholarships awarded to Next Generation of Aviation Professionals Number of scholarships applications submitted for Next Generation of Aviation Professional programmes Number of training interventions for JCAA safety oversight staff	Low	Track Jamaica's ICAO USOAP EI responses for CE-4 (Qualified Technical Personnel) through Self- Assessment

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 2.8 Achieve and maintain an adequate pool of qualified and experienced aviation professionals within the industry by 2025 (Cont'd) (SEI-4)	Achieve and maintain an adequate pool of qualified and experienced aviation professionals within the industry	2025	JCAA	MoFPS MoEG&JC Portfolio Ministry ANSP Aerodromes AOC Holders AMO Holders ATO Holders Private Aircraft Owners CASSOS ICAO NACC IATA ACI CANSO	Percentage of filled positions at the JCAA in safety oversight related functions against ICAO man-hour calculations in this area Time taken to fill vacancies in safety oversight related functions Turnover rate of personnel in safety oversight related functions	Low -	Track Jamaica's ICAO USOAP EI responses for CE-4 (Qualified Technical Personnel) through Self- Assessment
	Collaborate with RASG and/or RSOO, other States, ICAO, industry joint programmes and/or technical school partnerships to attract, recruit and train qualified and sufficient technical personnel and develop a strategy for their retention (CE-4) (6F)	2025	JCAA	ANSP Aerodromes AOC Holders AMO Holders ATO Holders Private Aircraft owners CASSOS ICAO NACC IATA ACI CANSO	Number of agreements established with regional and international training organization	Low	Annual review

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 2.8	Creating an environment that	2025	Portfolio Ministry	ANSP	Number of new entrants	Low	Review data on number
Achieve and maintain an	will attract new and foreign based aviation professionals		Min. with portfolio	Aerodromes			of new entrants to industry
adequate pool of	to Jamaica		AOC Holders			maasay	
qualified and experienced			Education, Job Creation &	AMO Holders			
aviation			Immigration	ATO Holders			
professionals within the industry by			JCAA	Private Aircraft owners			
2025 (Cont'd)				CASSOS			
(SEI-4)				ICAO NACC			
<b>F</b>				CANSO			
Target 2.9 Maintain effective implementation of CE4 of Jamaica's oversight system above 90% (SEI-5)	Establish a process for resource planning & allocation in alignment with the JCAA's organizational structure, as required to conduct effective oversight (4B)	2025	Ministry with responsibility for civil aviation	JCAA	% completion of resource plan based on changing needs of industry oversight	Medium	Review progress towards completion of annual resource plan
	Establish an effective system	2025	JCAA	ANSP	% completion of system to	Medium	Review progress towards
200	to identify and track			Aerodromes	track qualifications and		implementation of
×	qualifications and training of existing technical personnel			AOC Holders	training		modified qualifications and training tracking
	(5A)			AMO Holders			system
				ATO Holders			
				Private Aircraft owners			
				CASSOS			
				ICAO NACC			
				CANSO			

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 2.9 Maintain effective implementation of CE4 of Jamaica's oversight system above 90% (Cont'd) (SEI-5)	Identify the gaps in qualified technical personnel and training requirements necessary to implement the oversight mandate (5B)	2025	JCAA	ANSP Aerodromes AOC Holders AMO Holders ATO Holders Private Aircraft owners CASSOS ICAO NACC CANSO	% completion of system to track qualifications and training	Medium	Review progress towards implementation of modified qualifications and training tracking system
	Establish a compensation scheme for the attraction and retention of qualified technical personnel (5C)	2025	Ministry with responsibility for civil aviation Ministry of Finance	JCAA Staff Associations	Percentage completion of compensation schedules	Medium	Review progress of compensation schedule development
	Make use of RSOO (CASSOS) and RAIOs or equivalent means to secure technical personnel to perform those function that cannot be performed by Jamaica acting on its own (5D)	On-going	JCAA	CASSOS ICAO NTSB Transport Canada Ministry with responsibility for civil aviation	Number of agreements with regional entities to share resources	Low	Review implementation of partnership agreements
	Strengthen human resource plans to support hiring and retention of the appropriate number of qualified technical personnel required (5E)	2025	Ministries with air transport Ministry of Finance JCAA	JCAA Staff Associations Ministry of Labour	Percentage completion of plan for hiring and retention (Manpower Plan)	Medium	Review progress of towards implementation for Manpower Plan annually

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
CE4 of Jamaica's	Strengthen the training programmes and policies for technical personnel and verify that the type and frequency of training	2025	JCAA	Aviation Safety Inspectors	Number of training events deployed for initial recurrent and specialized training	High	Review of progress against annual training plan
above 90% (Cont'd) (SEI-5)	successfully completed (i.e. initial, recurrent, specialized and OJT) are sufficient to acquire/maintain the required qualification and level of competence corresponding to the assigned duties and responsibilities of technical personnel(5F)				Number of training events conducted		
Target 2.10	Review guidance	2025	JCAA	ANSP	Number of technical	Medium	Review completed self- assessments
Review and update	documentation at a minimum of three-year intervals			Aerodromes	guidance manuals updated		
guidance materials by 2025, and within	of three-year intervals			AOC Holders			
three-year intervals				AMO Holders			
thereafter				ATO Holders			
and the second s				Private Aircraft Owners			
				CASSOS			
				ICAO NACC			
				IATA			
				ACI			
				CANSO			
_					Number of new technical guidance manuals developed		Track progress of implementation of Corrective Action Plan (CAP)

#### ORGANIZATIONAL CHALLENGE (ORG) 3: Slow progress on both SSP and SMS implementation

#### **GOAL 3:** Implement a State Safety Programme

Target 3.1 Jamaica to implement the foundation of an SSP by 2024

**Target 3.2** Implement "present and effective" State Safety Programme by 2025

**Target 3.3** Publish a National Aviation Safety Plan (Jamaica) by September 2023

**Target 3.4** By 2026, achieve industry-wide operator's Safety Management System framework submission level of 80% (based on complexity of operations)

**Target 3.5** Mandatory and voluntary reporting systems (including data protection mechanisms and tools) are deployed industry-wide by 2025

**Target 3.6** 90 Percent (90%) of planned industry meetings and seminars conducted in keeping with requirements of Component 4 of the SSP and SMS

**Target 3.7** Increased national and regional publication of Jamaica's safety information from official sources by 2024

**Target 3.8** Personnel with adequate competencies are in place to analyze safety data for decision-making and forecasting by 2024

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 3.1 By 2024, Jamaica to implement the foundation of an SSP (SEI-13)	13A Secure State- level commitment to improve safety by implementation of Jamaica NASP	2024	Portfolio Ministry	JCAA ANSP Aerodromes AOC Holders AMO Holders ATO Holders Private Aircraft owners	Percentage completion of Jamaica National Aviation Safety Plan	High	Track progress of completion and distribution of Jamaica NASP
	13B – update SSP gap analysis (checklist) then the detailed SSP self- assessment	2024	JCAA	Portfolio Ministry	Percentage completion of SSP Gap Analysis and detailed Self- Assessment	High	Track progress toward deployment of SSP Implementation Self- Assessment Tools Track progress toward completion of SSP Gap Analysis & detailed Self-Assessment

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
<b>Target 3.1</b> By 2025, Jamaica to implement the foundation of an SSP	Establish an SSP Implementation Team (13C)	2024	JCAA	Portfolio Ministry	Terms of Reference (TORs) established and SSP Implementation Tam Members appointed by June 2023	High	Track progress of appointment for SSP Implementation Team Members appointed
(SEI-13) (Cont'd)					Number of meetings convened	-	Track number of meetings convened and review meeting summaries and action list
	Update Implementation Plan for the SSP (13D)	FY Q2 2024	JCAA	Portfolio Ministry	Percentage completion of SSP Implementation Plan Update	High	Track progress of preparation and execution of SSP Implementation Plan
	Issue SSP and SMS Specific Operating Regulations (CE-2)(13E)	FY Q4 2024	Portfolio Ministry	JCAA OPC AGC Industry	Percentage legislative update delivered against plan	High	Track progress towards gazetting and promulgation of Specific Operating Regulations
	Verify SMS implementation by service providers (13F)	2024	JCAA	Industry Service Providers (incl. ANSP)	Percentage of Service Providers that have implemented SMS	High	Surveillance of activities of Industry Service Providers
	Identify and share safety management best practices (13G)	2024	JCAA	Industry Service Providers	Number of industry stakeholder engagements Number of safety management best practices shared	High	Track progress towards dissemination of matters related to safety management

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 3.2	Work with the ICAO	2024	JCAA	ICAO NACC	Percentage completion of	High	Track progress towards
By 2025, implement "present and	Regional Office to make use of	ike use of ailable means		ICAO TCB	Jamaica-ICAO Memorandum of Understanding (MoU)		implementation of MoU
effective" State	available means			MoF&PS	implementation		
Safety Programme (Cont'd)	(e.g., Technical Cooperation Bureau			Portfolio Ministry			Periodic review of
	(TCB)) and other SSP Implementation stakeholders to Team			Jamaica-ICAO MoU partnership outcomes			
SEI-14, SEI-15, SEI- 16	acquire assistance needed for SSP			(Steering Committee)			and impact
and the second s	implementation (14C)			SSP Implementation Team			
~				(Working Group)			
	Work with CASSOS	2024-2025	JCAA	CASSOS (RSOO)	percentage completion of SSP	High	Quarterly review of SSP
	(RSOO), LACAC, and other States			LACAC	training needs analysis		training needs analysis
	and other			Partner States			T L CCD
	organizations, as appropriate to train qualified technical	o train nical		Partner Organizations MoF&PS	Organizations interventions deployed for technical personnel with SSP		Track SSP implementation assessment
	personnel to fulfil their duties and			Portfolio Ministry		_	Track SSP-enabling
responsib regarding	responsibilities regarding SSP	esponsibilities egarding SSP		SSP Implementation Team	Number of technical personnel certified as SSP practitioners		training deployment
	implementation (14D)			(Steering Committee)	Number of training assistance interventions received from	-	Track effectiveness of SSP-enabling training
				SSP Implementation Team	Partner States and Partner Organizations		interventions
				(Working Group)			

(Working Group)

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 3.2 By 2025, implement "present and effective" State Safety Programme (Cont'd) SEI-14, SEI-15, SEI-16	Establish and implement a process for sharing technical guidance, tools and safety- critical information related to SSP (e.g., advisory circulars, staff instructions, safety performance indicators), in collaboration with other States, RASG, RSOO, ICAO and/or other stakeholders (15F)	2024-2025	JCAA	Portfolio Ministry ICAO NACC ICAO TCM RASG-PA CASSOS (RSOO) LACAC Partner States Partner Organizations SSP Implementation Team (Steering Committee SSP Implementation Team (Working Group)	2)	High	Track progress towards establishment of process for sharing SSP-related technical guidance, tools and safety-critical data and information
	Establish a system for the continuous improvement of the SSP, in collaboration with all key aviation stakeholders (16C)	2024-2025	JCAA	Portfolio Ministry ICAO ICAO NACC RASG-PA	Percentage implementation of continuous improvement system for SSP	Medium	Track progress towards implementation continuous improvement system for SSP
					Percentage completed milestones for implementation of SSP continuous improvement		Track SSP Protocol Question Responses in ICAO USOAP Self-Assessment

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
"present and promote best effective" State practices and	champion State to promote best practices among	2024-2025	JCAA	ICAO NACC ICAO TCB	Number of international and regional working groups and committees participating in.	Low	Track Jamaica's contribution working groups and committees
(Cont'd) SEI-14, SEI-15, SEI-16				LACAC CASSOS MoF&PS Portfolio Ministry	Percentage Effective Implementation (EI) Score related to SSP ICAO USOAP PQs		Track SSP Protocol Question Responses in ICAO USOAP Self-Assessment
€ C K				Team	Number of States seeking technical assistance from Jamaica		Track number of States seeking technical assistance from Jamaica
				SSP Implementation Team (Working Group)	Number of States to which Jamaica provides technical assistance		Track number of States to which Jamaica provides technical assistance
Target 3.3 By September 2024, publish a National Aviation Safety Plan (Jamaica)	Publication and dissemination of Jamaica NASP	2024	JCAA	Portfolio Ministry Industry service providers	Percentage completion of National Aviation Safety Plan (NASP)	High	Track publication and availability of NASP

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
By 2026 achieve implem	Verify SMS implementation by service providers (13F)	2026	JCAA	Portfolio Ministry Industry Service Providers	Service Providers that have	High	Track submission of SMS Manuals by Industry Service Providers
80% (based on complexity of operations) SEI-13					Percentage Effective Implementation (EI) Score for SMS-related PQs	_	Track SMS Protocol Question Responses in ICAO USOAP Self-Assessment
<b>F</b>							
Target 3.5 Mandatory and Voluntary reporting systems including data protection is in place by 2025 SEI-8	Implementation of legislation for protecting safety data, safety information and related sources, in accordance with Appendix 3 of Annex 19 (Safety Management) (8A)	2025	JCAA	Portfolio Ministry Industry Service Providers	Percentage implementation of legislative update related to safety data and safety information protection in accordance with Appendix 3, Annex 19 (A)	High	Track progress toward promulgation and gazetting of legislative update related to safety data and safety information protection
	Update and maintain a mandatory safety reporting system (8B)	2025	JCAA	Portfolio Ministry Industry Service Providers ICAO	Percentage implementation of mandatory safety reporting system	High	Track progress towards update and maintenance of mandatory reporting system
				RASG-PA	Number of mandatory and voluntary reports received and analyzed		Track number of submissions - mandatory and voluntary reports
					Number of safety reports published annually		Track number of safety reports published annually

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 3.5	Provide information	2025			High	Track progress	
Mandatory and Voluntary reporting systems including data protection is in	from the service provider to the State safety data collection and processing systems (SDCPS) or			Industry Service Providers	the SDCPS		towards update and maintenance of mandatory reporting system
place by 2025 (Cont'd) SEI-8	safety information sharing networks, including the mandatory safety						Track number of submissions - mandatory and voluntary reports
	required (8C)	reporting system, as required (8C)		Track number of safety reports published annually			
-() <del></del> @I	Establish internal mechanisms related to the protection of safety data, safety information and related sources for the purpose of safety improvement (8D)	2025	JCAA	Industry Service Providers	Mechanism in place to protect data	High	Annual review of processes and mechanism
	Expand voluntary and confidential hazard/occurrence	2025	Industry Service Providers	JCAA Industry Service providers	rvice Just culture SMS in place	High	Track number of operators with an implemented SMS
	reporting systems as part of the SMS (8E)				Number of voluntary and confidential reports received from operators	-	Track number of submissions - voluntary reports

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 3.5 Mandatory and Voluntary reporting systems including data protection is in place by 2025 SEI-8 (Cont'd)	Expand and maintain a safety database for technical personnel to monitor system safety issues within the service provider (8F)	2025	Industry Service Providers JCAA	Industry Service Providers JCAA	Number of operators with current SMS in place	High	Track currency of SMS implementation amongst operators
Target 3.6 Conduct meetings and seminars with stakeholders to promote safety initiatives SEI-6, SEI-18	90 % of planned industry meetings and seminars conducted in keeping with component 4 of the SSP and SMS	2024 -2026	JCAA	Portfolio Ministry ANSP Aerodromes AOC Holders AMO Holders ATO Holders Private Aircraft Owners License Holders	Percentage of meetings held versus planned	Low	Track number of interventions held with industry

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 3.6 Conduct meetings and seminars with stakeholders to promote safety initiatives SEI-6, SEI-18 (Cont'd)	Promote safety awareness and the two-way communication, sharing and exchange of safety-relevant information within the State's aviation organizations and encourage sharing of safety information with industry within the Jamaica (18F)	2024-2026	JCAA	Industry Service Providers Airmen	Percentage of planned seminars held	Medium	Track progress on seminars held
Target 3.7 Increased access to and dissemination of official safety information by 2024 both nationally and regionally SEI-9, SEI-15	Establish & implement a process for sharing technical guidance, tools and safety-critical info. related to SSP (e.g. advisory circulars, staff instructions, SPIs), in collaboration with other States,	2024	JCAA	Portfolio Ministry Offices of the Cabinet Industry Service Providers	Number of procedures developed for SSP- related safety-critical information exchange Number of channels available for SSP-related safety-critical information exchange	Medium	Track progress towards implementation of SSP Track progress of SMS implementation across industry
CK C	RASG, RSOO, ICAO and/or other stakeholders (15F)				Number of Service Providers that have implemented SMS with complexity appropriate for operations by 2025		

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
<b>Target 3.7</b> Increased access to and dissemination of official safety information by 2024 both nationally and regionally SEI-9, SEI-15	Develop safety performance indicators and safety performance targets, as well as associated alert settings, via the established safety risk management process (9B)	2024	JCAA	Industry Service Providers	Number of SPIs developed with appropriate targets and alert settings	High	Track development of SPIs and alert settings
of globall harmonize metrics fo developm monitorin safety performal	Encourage the use of globally harmonized metrics for the development and monitoring of safety performance indicators (9C)	2024	JCAA	Industry Service Providers	[Number of SPIs developed with appropriate targets and alert settings]	High	Track development of SPIs and alert settings
	Encourage sharing and use of information from within industry to identify hazards and safety deficiencies, and mitigate safety risks (9D)	2024	JCAA	Industry Service Providers	Number of reports received which assists in identifying hazards and safety deficiencies	Medium	Develop and review trend analysis schema to determine an increase or decrease in reports

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 3.7 Increased access to and dissemination of official safety information by 2024 both nationally and regionally SEI-9, SEI-15	Encourage sharing of information from industry to the State and region to assist in the development of national and regional aviation safety plans (9E)	2024	JCAA	Industry Service Providers	Percentage of industry service providers sharing data with the JCAA quarterly using established data set Percentage of industry queries provided with JCAA response within specified timeline Number of industry engagement opportunities to capture information on on future trends Percentage of information reports accepted versus those received Number of industry- advocated initiatives accepted and included in the national plan	Medium	Track progress of revision of national and regional plans in keeping with data collected and exchanged

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
<b>Target 3.7</b> Increased access to and dissemination of official safety information by 2024 both nationally and regionally	Encourage sharing of information from industry to the State and region to assist in the development of national and regional aviation safety plans (9E)	2024	JCAA	Industry Service Providers	e Number of information reports sent to the ICAO NACC regional body	Medium	Track progress of revision of national and regional plans in keeping with data collected and exchanged
SEI-9, SEI-15							
(Cont'd)							
Target 3.8 Ensure adequate skill sets are in place to	14A – Work with local and regional partners and	2024	JCAA	Portfolio Ministry ANSP	Percentage of industry providing safety data and information for analysis	High	Track submission of safety data and information by industry
analyse safety data for projection and	organizations to leverage available			Delegated Service Providers for ANSP			
decision-making	technologies			Aerodromes	Number of Jamaica's regional	_	Track Jamaica's
by 2024 (SEI-14)				AOC, AMO & ATO Holders	assistance intervention requests made and accepted		requests for regional assistance and
				Private Aircraft Owners			outcomes
S 8				License Holders			
				CASSOS			
				ICAO			

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
adequate skill sets IC are in place to C analyse safety data d for projection and o decision-making by m 2024 ar (SEI-14) m (Cont'd) C C P P ir m c c d d t f c c c c c c c c c c c c c c c c c c	Work with the ICAO Regional Office(s) and donor organizations to make use of available means (e.g., Technical Cooperation Bureau) to provide assistance in developing risk modelling capabilities (14C)	2024	JCAA	ICAO Regional CAAs Donor Organizations	Number of partnerships established to provide assistance	High	Review progress for the development of risk modelling capabilities
	Allocation of resources to support continued development of the proactive use of risk modelling capabilities (SEI-14 (Regional)	2024-2026	JCAA		Number of persons identified with appropriate skillsets for risk modelling activities	High	Track progress of the recruitment of personnel with required skill set
					Percentage of key activities where risk modelling is applied		Track implementation of risk modelling approaches

GOAL 4: Increase collaboration at the regional level

**Target 4.1:** Seek technical assistance from Regional Aviation Safety Group-Pan America (RASG-PA) in the implementation of SSP by 2024

**Target 4.2**: Increase participation of Jamaica's SMEs and other technical personnel in regional activities including seminars, workshops, and meetings.

**Target 4.3**: By 2025, Jamaica contributes information on Operational Safety Risks, including information on Safety Performance Indicators (SPIs), and emerging issues, to RASG-PA

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 4.1 Seek assistance in the implementation of SSP by 2024 ( <i>Linked to Target</i> 3.2)	Engage with regional partners to solicit assistance for the overall implementation of SSP by 2024	2024	JCAA	ICAO CASSOS	Regional partner identified ar proposal in place for assistanc	0	Progress towards achievement of milestones in the implementation of partnership
Target 4.2 Increase participation of Jamaica's SMEs and other technical personnel in regional activities including seminars, workshops, and meetings.	Monitor planned regional activities and plan for Jamaica's participation	2024 - 2026	JCAA	Portfolio Ministry MoFPS ICAO CASSOS ACI, IATA, CANSO	Number of regional activities i which the JCAA participates	in Low	Track implementation and participation in activities related to ICAO State Letters and other publications related to seminars, workshops, and meetings
	Participate in regional activities for sharing of best practices, mentoring, and conducting follow- up actions (CE-3)	2024 - 2026	JCAA	Portfolio Ministry MoFPS ICAO CASSOS ACI, IATA, CANSO	Number of regional seminars, workshops and meetings in which Jamaica participates	,	Track progress of submissions to be made to the Portfolio Ministry (related to ICAO State Letters & other publications related to seminar, workshop, and

meeting outcomes

By 2025, Jamaica contributes	15F – Establish and implement a process for sharing technical guidance,	2025	JCAA	ICAO ICAO NACC	Percentage implementation of processes to exchange	Low	Track progress of
Operational Safety Risks, incl. information on Safety Performance Indicators (SPIs), and emerging issues, to RASG- PA SEI-15, SEI-16	tools and safety- critical information related to SSP (e.g. advisory circulars, staff instructions, safety performance indicators), in collaboration with other States, RASG, RSOO, ICAO and/or other stakeholders			RASG-PA LACAC CASSOS ACI IATA CANSO	data and information on Operational Safety Risks, incl. information on Safety Performance Indicators (SPIs), and emerging issues, to RASG-PA Number of platforms by which means data and information on Operational Safety Risks, is exchanged with regional partners	_	implementation of processes for data and information exchange regional partners



#### ORGANIZATIONAL CHALLENGE (ORG) 5 Inadequate collection, storage, and analysis of safety data from industry

**GOAL 5:** Expand the use of industry programmes and safety information sharing networks by service providers

**Target 5.1** Build and maintain an increasing trend in industry's contribution to safety data and information sharing networks using standardized SPIs by 2025

**Target 5.2** Increase the number of service providers participating in internationally recognized industry programmes by 2025

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
<b>Target 5.1</b> Build and maintain an increasing trend in industry's contribution to safety data and information sharing networks using standardized SPIs by 2025 SEI-8, SEI-17 (Linked to Target 3.5)	8G - Expand and utilize a safety risk management process	2025	JCAA	ANSP Aerodromes AOC Holders AMO Holders ATO Holders Private Aircraft Operators Licensed Holders	Number of risk assessments conducted	High	Track progress on ris management throug review of risk reports



Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 5.1 Build and maintain an increasing trend in industry's contribution to safety data and information sharing networks using standardized SPIs by 2025 SEI-8, SEI-17 Link to Target 3.5 (Cont'd)	Establish national laws, regulations and policies protecting safety data, safety information and related sources, in accordance with Appendix 3 of Annex 19 (Safety Management)(17A) - Ensure that the protection of safety data, safety information and related sources does not interfere with the proper administration of justice or with maintaining or improving safety - Ensure that safety data, safety information and related sources are protected	2025	Ministry with responsibility of Civil Aviation]	Ministry of Justice Ministry of Legal and Constitutional Affairs Ministry with responsibility for Data Protection Act JCAA Aviation Service Providers	Percentage Effective Implementation score in the SSP PQs related to data protection	High	Track SSP-related PQs through self- assessment

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
<b>Target 5.1</b> Build and maintain	(Cont'd): Specify the						
an increasing trend in industry's contribution to safety data and information sharing networks using standardized SPIs by 2025 SEI-8, SEI-17 Link to Target 3.5	conditions under which safety data, safety information and related sources qualify for protection, including principles of exception and authoritative safeguards, such as de-identification of data						
(Cont'd)	- Ensure that safety data and safety information remain available for the purpose of maintaining or improving aviation safety						
	Establish a State confidential voluntary safety reporting system providing data to the safety database (17F)	2025	JCAA	Industry Service Providers Public	Percentage implementation State confidential voluntary safety reporting system Number of voluntary reports received and processed		Track progress sin the receipt and analysis of mandatory and voluntary reports

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
<b>Target 5.2</b> Increase the number of service providers participating in internationally recognized industry programmes by 2025 ( <i>Linked to 4.2</i> )	Encourage industry to participate in internationally- recognized industry programmes through surveillance mechanism	2025	JCAA	Industry Service Providers CANSO ACI IATA	Number of service providers participating in internationally recognized industry programmes	Low	Track progress towards increasing industry engagement

#### ORGANIZATIONAL CHALLENGE (ORG) 5 Latent precursor events that may lead to undesirable outcomes

**GOAL 6:** Ensure the appropriate infrastructure is available to support safe operations

**Target 6.1**: Jamaica to improve El in Technical Area – Aerodromes and Ground Aids (AGA) with a focus on PQs as follows:

2025: El Score Technical Area (AGA): 90%

**Target 6.2**: Conduct gap analysis to identify deficiencies in aerodrome-related core infrastructure as measured against ICAO SARPs (Annex 14 (Aerodrome Designs & Operations) and Doc. 9426 ATS Planning Manual, GANP, ASBU, BBB, RANP and JCARs by 2024.

**Target 6.3:** Conduct gap analysis to identify deficiencies in ANSP-related core infrastructure as measured against ICAO SARPs (Annex 14 (Aerodrome Designs & Operations) and Doc. 9426 ATS Planning Manual, GANP, ASBU, BBB, RANP and JCARs by 2024.

**Target 6.4:** Core infrastructure for aerodromes as measured against ICAO SARPs (Annex 14 (Aerodrome Designs & Operations) and Doc. 9426 ATS Planning Manual, GANP, ASBU, BBB, RANP and JCARs, implemented by 2027

**Target 6.5:** Jamaica to improve its rate of El in Technical Area - Air Navigation Services with a focus on PQs as follows:

2025: El Score Technical Area (ANS): 90%

**Target 6.6:** Core infrastructure for ANSP as measured against ICAO SARPs (Annex 14 (Aerodrome Designs & Operations) and Doc. 9426 ATS Planning Manual, GANP, ASBU, BBB, RANP and JCARs, implemented by 2027

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
<b>Target 6.1</b> : Jamaica to improve its rate of El in Technical Area - Aerodromes and Ground Aids	Identify core infrastructure (AGA- Aerodromes) in Annex 14, Doc 9426 and JCARs	2025	JCAA	ICAO ICAO NACC RASG-PA ANSP erodrome Operators	Percentage Effective Implementation score in the PQs related to Aerodromes & Ground Aids	Low	Track Protocol Question Responses in ICAO USOAP Self-Assessment related to AGA
(AGA) with a focus on PQs as follows: By 2025: El Score Technical Area (AGA): 90%	AGA) with a focus n PQs as follows: y 2025: El Score echnical Area Conduct gap analysis for aerodromes and ANSP against				Number of deficiencies identified that are resolved and progressing to resolution		Track progress towards the resolution of identified deficiencie through gap analysis of aerodromes vis á vis requirements for core infrastructure and corrective action



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Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 6.2: Conduct gap analysis to identify deficiencies in <b>aerodrome</b> - related core infrastructure as measured against ICAO SARPs (Annex 14 (Aerodrome Designs & Operations) & Doc. 9426 ATS Planning Manual, GANP, ASBU, BBB, RANP & JCARs by 2024.	Implement appropriate aerodrome- related core infrastructure requirements in accordance with ICAO SARPs (Annex 14 (Aerodrome Designs & Operations) and Doc. 9426 ATS Planning Manual, GANP, ASBU, BBB, RANP and Civil Aviation Regulation	2027	Aerodrome Operators	JCAA Portfolio Ministry MoFPS Airports Authority	Number of deficiencies in aerodrome-related core infrastructure requirements identified in gap analysis corrected in accordance with Corrective Action Plan Percentage of core infrastructure-related PQs for Aerodromes deemed satisfactory	Medium	Conduct surveillance on core infrastructure by aerodromes, review surveillance reports and track progress towards implementation of core infrastructure Track SSP PQ Responses in ICAO USOAP Self-Assessment related to core- infrastructure (Aerodromes)
Target 6.3: Conduct gap analysis to identify deficiencies in ANSP-related core infrastructure as measured against ICAO SARPs (Annex		2027 ANSP	Provi supportir Airports A	Delegated Services Providers supporting ANSP Airports Authority Aerodrome	Number of deficiencies in ANSP-related core infrastructure requirements identified in gap analysis corrected in accordance with Corrective Action Plan	Medium	Conduct surveillance on core infrastructure by aerodromes, review surveillance reports and track progress towards implementation of core infrastructure
14 (Aerodrome Designs & Ops) & Doc. 9426 ATS Planning Manual, GANP, ASBU, BBB, RANP and JCARs by 2024.	(Annex 14 (Aerodrome Designs & Operations) and Doc. 9426 ATS Planning Manual, GANP, ASBU, BBB, RANP & JCARs		Operators	Percentage of core infrastructure-related PQs for ANSP deemed satisfactory		Track SSP Protocol Question Responses in ICAO USOAP Self-Assessment related to core infrastructure (ANSP)	



Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity	
Target 6.4: Core infrastructure for aerodromes as measured against ICAO SARPs (Annex 14 (Aerodrome Designs & Operations) and Doc. 9426 ATS	Implement appropriate Aerodrome- related core infrastructure requirements in accordance with ICAO SARPs (Annex 14	2027 Aerodrome Operators	2027			Number of deficiencies in Aerodrome-related core infrastructure requirements identified in gap analysis corrected in accordance with Corrective Action Plan	Medium	Conduct surveillance on core infrastructure by aerodromes, review surveillance reports and track progress towards implementation of core infrastructure
Planning Manual, GANP, ASBU, BBB, RANP and JCARs, implemented by 2027	(Aerodrome Designs & Operations) and Doc. 9426 ATS Planning Manual, GANP, ASBU, BBB, RANP and JCARs			Percentage of core infrastructure-related PQs for Aerodrome deemed satisfactory		Track SSP Protocol Question Responses in ICAO USOAP Self-Assessment related to core infrastructure (Aerodrome)		
<b>Target 6.5</b> : Jamaica to improve its rate of El in Technical Area - Air	J	2024	2024 JCAA	JCAA ICAO ICAO NACC RASG-PA ANSP Aerodrome Operators	Percentage completion of self assessment in the areas of AGA and ANS	f 	Track El Score based on self assessment in AGA & ANS Technical Areas	
Navigation Services with a focus on PQs as follows: 2025: El Score Technical Area (ANS): 90%	Manual and JCARs in order to conduct gap analysis for aerodromes and ANSP against documents above				Number of deficiencies identified that are resolved and progressing to resolution		Track number of deficiencies and resolution identified through gap analysis of Air Navigation Services vis á vis requirements for core infrastructure	

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 6.6: Core infrastructure for ANSP as measured against ICAO SARPs (Annex 14 (Aerodrome Designs & Operations) and Doc. 9426 ATS	Implement appropriate Air Navigation Services -related core infrastructure requirements in accordance with ICAO SARPs (Annex 14	2027	ANSP	JCAA Portfolio Ministry MoFPS Airports Authority Aerodrome Operators Delegated Services	Number of deficiencies in ANSP-related core infrastructure requirements identified in gap analysis corrected in accordance with Corrective Action Plan	Medium	Conduct surveillance on core infrastructure by ANSP, review surveillance reports and track progress towards implementation of core infrastructure
Planning Manual, GANP, ASBU, BBB, RANP and Civil Aviation Regulations implemented by 2027	(Aerodrome Designs & Operations) and Doc. 9426 ATS Planning Manual, GANP, ASBU, BBB, RANP and JCARs		Providers - ANSP	Percentage of core infrastructure-related PQs for Aerodrome deemed satisfactory	_	Track SSP Protocol Question Responses in ICAO USOAP Self-Assessment related to core infrastructure (Aerodrome)	



# **OPERATIONAL SAFETY RISKS**

#### **OPERATIONAL SAFETY RISK 1: Latent precursor events that may lead to undesirable outcomes**

**GOAL 1:** Achieve a continuous reduction in Operational Safety Risks that impact Jamaica's air transport industry **Target 1.1:** Maintain a decreasing trend of the national rate of precursor events

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 1.1 Maintain a decreasing trend of the national rate of precursor events	Collect safety data and information on precursor events and conduct analysis to ensure decreasing trend	2024 - 2026	JCAA	ANSP Aerodromes AOC Operators ATO, AMO Holders ACI, CANSO, IATA Private Aircraft	Number of risk event reports collected on precursor events	High	Track progress on risk mitigation strategies to be deployed to maintain decreasing trend in precursor events
£₩				Airmen License Holders			

Safety Enhancement Initiative	Action	Timeline	Responsible Entity	Stakeholders	Metrics	Priority	Monitoring Activity
Target 1.1 Maintain a decreasing trend of the national rate of precursor events	Mitigate contributing factors to precursor events by implementing safety recommendations from accident and serous incident investigations	2024 - 2026	JCAA		Percentage of recommendations from accident and serious incident investigations implemented	High	Track progress towards implementation of recommendations from accident and serious incident reports
	Partner with industry to create awareness of precursor events and promote equipage upgrading as necessary	2024 - 2026	JCAA	ANSP Aerodromes AOC operators ATO AMO ACI CANSO IATA Private Aircraft Owners Airmen License Holders	Number of engagements held with industry addressing precursor events Number of awareness reports circulated to industry	Low	Track number of industry engagements on precursor events convened
	Promote training, workshops, and seminars, within industry and international partners in respect of precursor events of High-Risk Categories of occurrences	2024 - 2026	JCAA		Number of entities that engage in training	Medium	Training conducted for industry

### [THE END]