



### **CORPORATE PLAN**

2017-2020





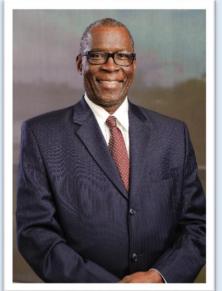




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### CHAIRMAN'S FOREWORD



The Corporate Plan for the period 2017 to 2020, as required under Sections 15 and 16 of Act No. 11 of 2001, outlines the aims and objectives of the Trinidad and Tobago Civil Aviation Authority (TTCAA). The TTCAA has aligned its corporate direction to the overarching International Civil Aviation Organisation (ICAO) objectives as guided by the fifteen (15) year Global Air Navigation Plan (GANP), and the Global Aviation Safety Plan (GASP).

The Corporate Plan as a high-level statement seeks to articulate how the Authority will achieve its vision of ensuring the highest level of Safety, Security and Effectiveness in the Trinidad and Tobago Aviation Industry. The Civil Aviation Act mandates that the Corporate Plan outline the programmes and goals of the Authority and shall include:

- (a) The Authority's operational environment;
- (b) The strategies of the Authority;
- (c) Performance measures of the Authority;
- (d) Review of performance against previous Plans;
- (e) Analysis of risk factors likely to affect safety in the aviation industry; and

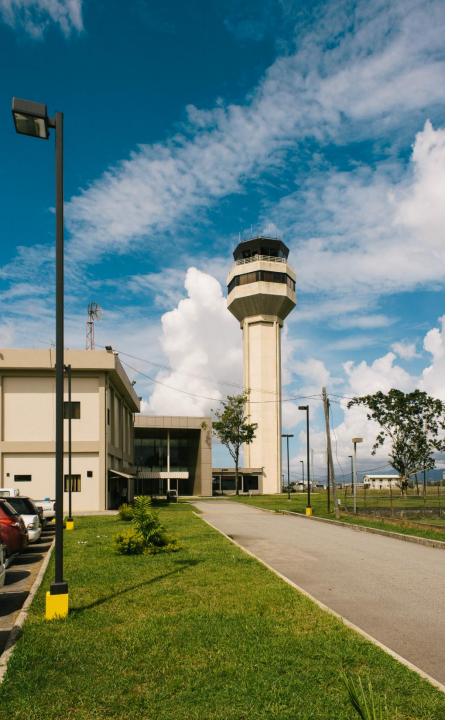
(f) Human resource strategies and industrial relations strategies.

As a contracting state of the ICAO, Trinidad and Tobago is required to properly discharge its obligations under the various Conventions, including the adoption of the Standards and Recommended Practices (SARPs) contained in the Annexes to the ICAO Convention on International Civil Aviation.

The TTCAA's strategies focus on the incorporation and implementation of continuous safety improvement initiatives within its air navigation services and regulatory oversight functions. To this end, the TTCAA has committed resources geared to research and development; the use of modern technology; including air navigation equipment, instruments and the training and development of its human capital.

Through the continuous collaboration with stakeholders including the Government of the Republic of Trinidad and Tobago (GORTT), the TTCAA shall continue to strive for excellence and to ensure the highest level of safety, security and effectiveness in Trinidad and Tobago and the region.

CAPTAIN THOMAS E LAWRENCE CHAIRMAN TRINIDAD AND TOBAGO CIVIL AVIATION AUTHORITY



### INTRODUCTION

The Trinidad and Tobago Civil Aviation Authority (TTCAA) presents the 2017 – 2020 Corporate Plan as required under Section 15 and 16 of the Trinidad and Tobago Civil Aviation Act No. 11 of 2001.

The TTCAA has aligned its corporate direction to the overarching ICAO objectives as guided by the fifteen year Global Air Navigation Plan (GANP), the Global Aviation Safety Plan (GASP) and the Standards and Recommended Practices (SARPs).

The Plan seeks to articulate how the Authority will strive to achieve its vision of ensuring the highest level of Safety, Security and Effectiveness in the Trinidad and Tobago Aviation Industry.

### THE OPERATIONAL ENVIRONMENT

The Trinidad and Tobago Civil Aviation Authority environment is impacted by:

#### a. External factors at the Global, Regional and National levels

The external environment ranges from statutory and international obligations to implementing Government policy initiatives and regulating an industry that is dynamic and consists of many varied participants.

#### b. Internal factors at the organizational level

The internal environment includes factors within the Authority that impacts the approach and success of the operations.



### THE OPERATIONAL ENVIRONMENT

EXTERNAL CONVENTIONS AND DECLARATIONS AFFECTING THE TTCAA

#### I. The Convention on International Civil Aviation

The Convention on International Civil Aviation, signed in Chicago on 7 December 1944, established certain principles and arrangements in order that international civil aviation may be developed in a safe and orderly manner and that international air transport services may be established on the basis of equality of opportunity and operated soundly and economically.

The Convention formed the International Civil Aviation Organisation (ICAO) with aims and objectives to develop the principles and techniques of international air navigation and to foster the planning and development of international air transport.

#### II. The Port of Spain Declaration

Trinidad and Tobago, as a contracting state of ICAO and a member of the North American, Central American and Caribbean Directors of Civil Aviation (NACC/DCA) together with twenty two (22) states signed the Port of Spain Declaration. The meeting was held in Trinidad from April 28 – 30, 2014. The contracting State undertake to collaborate in securing the highest practicable degree of uniformity in regulations, standards, procedures and organization in relation to aircraft personnel, airways and auxiliary services in all matters which will facilitate an improve air navigation.

#### III. Other Civil Aviation Agreements & Treaties

Other Civil Aviation Agreements, Treaties, Conventions and Protocols that impact on the international civil aviation environment are:

- The Warsaw Convention
- The Tokyo Convention

### THE OPERATIONAL ENVIRONMENT

#### I. Regulatory Services

THE INTERNAL ENVIRONMENT The Regulatory Division is responsible for certification and surveillance or airmen, air operators, aviation maintenance and aviation training in accordance with the eight (8) critical elements of the state safety oversight system, related activities and the implementation of the various aspects of the national programmes relating to civil aviation security.

#### **II.** Air Navigation Services

The Air Navigation Services Division of the Authority has the responsibility of efficiently managing and operating air navigation services within the Piarco Flight Information Region (FIR). The Piarco FIR encompasses 750,000 square miles which is inclusive of the air space over the Eastern Caribbean Islands. The FIR spans north to Antigua, bordering San Juan and the New York FIR to the south of Trinidad, bordering Guyana, Suriname and French Guiana. It also extends to mid-way across the Atlantic, bordering Dakar FIR, Portugal FIR and the Azores FIR. Through the utilization of state-of-the-art technology and high levels of expertise, the TTCAA Air Navigation Service Provider strives to connect with its stakeholders to develop a collaborative approach to providing a safe and efficient service.

#### **III.** Corporate Services

The Corporate Services Division provides support services to the core functions of Air Navigation and Regulatory Services. The auxiliary services includes Corporate Planning, Finance, Human Resources, Information Technology, Property Maintenance and Engineering, Air Transport Economic Regulation and the Civil Aviation Training Centre.

### PERFORMANCE REVIEW



The Trinidad and Tobago Civil Aviation Authority monitors and reports on progress against targets to the Ministry of Works and Transport annually as captured in the Annual Report.

Significant achievements have been made in the following areas for the past period under review.

- Change Management
- Industrial Relations
- Infrastructure
- International Treaty Obligations
- Human Resource Development
- Technology & Operational Improvements
- Training

### STRATEGIES & PERFORMANCE MEASURES 2017 - 2020

### **VISION AND MISSION**

#### THE AUTHORITY'S VISION

To ensure the highest level of Safety, Security and Effectiveness in the Trinidad and Tobago Aviation Industry. THE AUTHORITY'S MISSION

The provision of a Regulatory Framework to facilitate a Safe, Secure and Effective Aviation Industry and to provide Air Navigation Services within the Piarco Flight Information Region (FIR).

### **FOCUS AREAS & STRATEGIC PRIORITIES**

#### **REGULATORY:**

Enhancing the regulatory oversight of the civil aviation sector within Trinidad & Tobago.

#### Improve the Regulatory Framework.

Sustain an optimum standard for safety and security in the civil aviation sector.

Recruit, train and develop a cadre of regulatory personnel.

Implement effective enforcement programmes to secure compliance with aviation safety standards.

#### AIR NAVIGATION SERVICES:

Ensuring continuous improvements in safety, capacity and efficiency of the air navigation services operations within the Piarco Flight Information Region.

Improve airspace safety, capacity, efficiency and reduce the impact of air transport on the environment within the Piarco FIR.

Maintain and leverage developments in air navigation technology.

#### CORPORATE SERVICES:

Strengthening the support services and being a cohesive, results – driven organization.

Strengthen the Governance Structure within the TTCAA.

Continue to develop the TTCAA's human resources and re-engineer processes.

Enhance teambuilding and continue to improve internal communication initiatives.

Ensure the highest standard of accountability, transparency and probity of the TTCAA's financial systems.

Provide effective, reliable and secure information technology services.

Optimize property and equipment to support the delivery of services and corporate priorities.

#### CIVIL AVIATION TRAINING CENTRE:

Providing training in air navigation services and other specialized programs.

Be the premier aviation training provider.

#### **REGULATORY:**

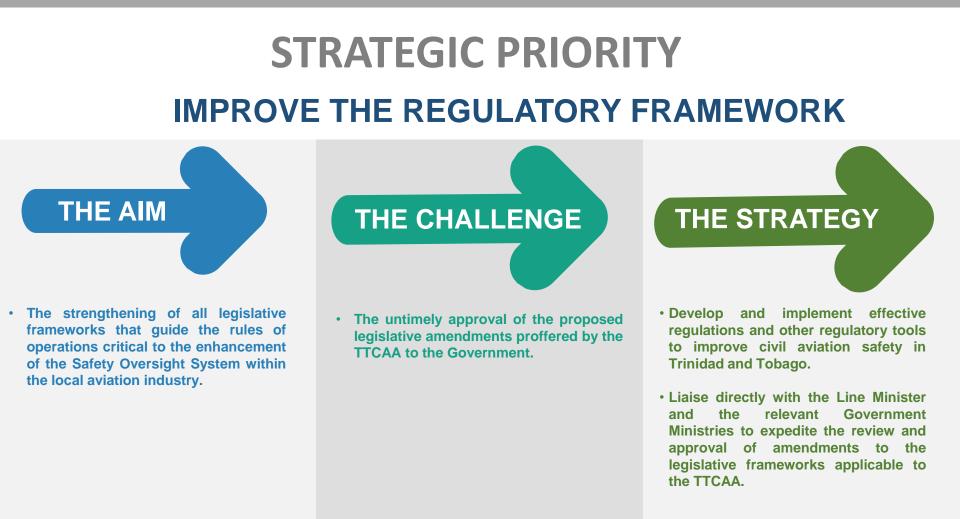
Enhancing the regulatory oversight of the civil aviation sector within Trinidad and Tobago.



- Improve the Regulatory Framework.
- Sustain an optimum standard for safety and security in the civil aviation sector.
- Recruit, train and develop a cadre of regulatory personnel.
- Implement effective enforcement programmes to secure compliance with aviation safety.

#### **REGULATORY:**

Enhancing the regulatory oversight of the civil aviation sector within Trinidad and Tobago.



### **STRATEGIC PRIORITY** IMPROVE THE REGULATORY FRAMEWORK

STRATEGIC	STRATEGIC	PERFORMANCE
OBJECTIVES	INITIATIVES	MEASURES
• Prompt amendments to the regulatory framework to enhance the governance structure of the local civil aviation sector.	<ul> <li>Review and evaluate the regulatory framework. Emphasis would be placed on:</li> <li>Amendments to the TTCAA Act 11 of 2001.</li> <li>Amendments of all the Trinidad and Tobago Civil Aviation Regulations (TTCARs) with respect to amendments to the Annexes received in 2015 and 2016.</li> <li>Develop action plans outlining the gaps in the regulatory framework and areas of priorities for amendments.</li> <li>Propose amendments to the regulatory framework as required.</li> <li>Update policies and procedures as required.</li> </ul>	<ul> <li>Amendments to the regulatory framework and submission of same to the Line Minister within nine (9) months of the date of notification from the ICAO.</li> <li>Updated policies and procedures manuals.</li> </ul>

#### **REGULATORY:**

Enhancing the regulatory oversight of the civil aviation sector within Trinidad and Tobago.

### **STRATEGIC PRIORITY** SUSTAIN AN OPTIMUM STANDARD FOR SAFETY AND SECURITY IN THE CIVIL AVIATION SECTOR

# THE AIM

 Stakeholders have confidence in the safety and security of air transport within Trinidad and Tobago and the Piarco Flight Information Region.

### THE CHALLENGE

- Difficulties in retaining adequately qualified and experienced personnel in the local aviation industry.
- Emergent and changing threats to aviation security.

### THE STRATEGY

- Continuously train and develop a cadre of technically sound experts to support the obligations of the TTCAA to oversight the safety and security of all aviation activities of the State.
- Employ timely, comprehensive risk based approaches in the conduct of inspections and surveillance activities.
- Accelerate the improvement of safety oversight through the exchange of information with aviation stakeholders.
- Support the implementation of safety management systems and self monitoring initiatives across all safety related disciplines in the local civil aviation industry.
- Ensure continued investments and implementation in technology advancements that contribute significantly to safety improvements.

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### **STRATEGIC PRIORITY** SUSTAIN AN OPTIMUM STANDARD FOR SAFETY AND SECURITY IN THE CIVIL AVIATION SECTOR

STRATEGIC	STRATEGIC	PERFORMANCE
OBJECTIVES	INITIATIVES	MEASURES
• The successful implementation of the State Safety Plan and Safety Management System across all safety related disciplines within the sector.	<ul> <li>Deliver the highest level of safety performance within Trinidad and Tobago through the following initiatives:</li> <li>Conduct a comprehensive analysis of the State's aviation system and augment our safety management framework.</li> <li>Consult with all segments of the aviation industry on issues regarding regulatory development.</li> <li>Enhance safety reporting and communication systems.</li> <li>Interact effectively with service providers in the resolution of safety concerns.</li> <li>Allocate resources, implement safety geared air navigation technologies and train personnel.</li> <li>Conduct performance-based and compliance-oriented oversight activities supported by safety risk assessments.</li> <li>Comply with and wherever possible, exceed international safety requirements and standards.</li> <li>Oversee the certification of Air Navigation Services.</li> </ul>	<ul> <li>The evaluation of objectives achieved within the State Safety Plan against pre- defined safety indicators and safety targets.</li> </ul>

collection and processing systems.

### **STRATEGIC PRIORITY** SUSTAIN AN OPTIMUM STANDARD FOR SAFETY AND SECURITY IN THE CIVIL AVIATION SECTOR

STRATEGIC	STRATEGIC	PERFORMANCE
OBJECTIVES	INITIATIVES	MEASURES
• A secure air transport system in Trinidad and Tobago with no major security incidents.	<ul> <li>Deliver the highest level of aviation security and facilitation performance within Trinidad and Tobago through the following initiatives:         <ul> <li>Identify and monitor existing and emerging security threats to civil aviation through the employment of mechanisms such as; intelligence information, advanced security procedures, technology, and surveillance by aviation security personnel.</li> <li>Implement relevant responses to security threats within the local civil aviation sector.</li> <li>Continuous monitoring of regulated entities' compliance with Civil Aviation Security Regulations, Policy and Procedures.</li> <li>The provision of local aviation security training and seminars.</li> <li>The conduct of aviation security oversight activities of all relevant stakeholders, the identification of deficiencies and the adoption of appropriate resolution actions.</li> <li>Address all findings of the ICAO as identified in periodic Universal Security Audit Programme (USAP).</li> <li>Implement a National Regulated Agent and Supply Chain Programme and obtain US pre-clearance recognition for air cargo.</li> <li>Establish a National Facilitation framework for Trinidad and Tobago.</li> </ul> </li> </ul>	<list-item><list-item><list-item></list-item></list-item></list-item>

#### **REGULATORY:**

Enhancing the regulatory oversight of the civil aviation sector within Trinidad and Tobago.

### **STRATEGIC PRIORITY** RECRUIT, TRAIN AND DEVELOP A CADRE OF REGULATORY PERSONNEL

## THE AIM

• To ensure the TTCAA consistently maintains a cadre of trained and competent regulatory personnel.

### THE CHALLENGE

• Difficulties in retaining adequately qualified and experienced personnel in the local aviation industry.

### THE STRATEGY

• The development of a well defined structured Succession Planning Framework for the Regulatory Division of the TTCAA. Emphasis would be placed on identifying successors for critical positions within the regulatory function.

### **STRATEGIC PRIORITY** RECRUIT, TRAIN AND DEVELOP A CADRE OF REGULATORY PERSONNEL

STRATEGIC	STRATEGIC	PERFORMANCE
OBJECTIVES	INITIATIVES	MEASURES
• To foster and promote the development of high performing regulatory personnel ensuring that competent successors are identified for key positions within the Regulatory Division.	<ul> <li>Identify the key areas and positions that are critical to the operational activities and the attainment of strategic objectives within the Regulatory Division.</li> <li>Identify the capabilities and competencies in key areas and critical positions for establishing learning and development plans, setting clear performance expectations for assessing performance.</li> <li>Establish the succession planning strategy inclusive of developing internal talent pools for recruitment of personnel.</li> <li>Incorporate strategies for learning, training, development and knowledge transfer.</li> <li>Evaluate the effectiveness of the succession plans.</li> </ul>	<ul> <li>An established Succession Planning Framework for the Regulatory Division to ensure that the statutory requirements of the Authority are achieved.</li> </ul>

#### **REGULATORY:**

Enhancing the regulatory oversight of the civil aviation sector within Trinidad and Tobago.

### **STRATEGIC PRIORITY**

### IMPLEMENT EFFECTIVE ENFORCEMENT PROGRAMMES TO SECURE COMPLIANCE WITH AVIATION SAFETY STANDARDS



• To encourage compliance with rules applicable to civil aviation and to deter non-compliance.

### THE CHALLENGE

 Difficulties in enforcing and imposing penalties upon non-compliant participating aircraft operators and unmanned aircraft systems.

### THE STRATEGY

- Effectively distinguish between premeditated violations from unintentional errors or deviations.
- Take action against aircraft operators that consistently and deliberately operate outside the Trinidad and Tobago Civil Aviation legal framework.
- Educate and promote training for aircraft operators that show commitment to resolving safety deficiencies.

### **STRATEGIC PRIORITY**

### IMPLEMENT EFFECTIVE ENFORCEMENT PROGRAMMES TO SECURE COMPLIANCE WITH AVIATION SAFETY STANDARDS

STRATEGIC	STRATEGIC	PERFORMANCE
OBJECTIVES	INITIATIVES	MEASURES
<ul> <li>To promote compliance with aviation regulations in Trinidad &amp; Tobago and in the Piarco Flight Information Region.</li> </ul>	<ul> <li>Employ preventative action programs to reduce violations and promote voluntary compliance through education, licensing and certification, public notifications, consultation with industry, routine inspections / surveillance and field operations.</li> <li>Conduct inspection and surveillance activities with due diligence to timely detect and resolve possible violations of the local regulations.</li> <li>Effectively determine and impose penalties when the evidence indicates an individual or air operator is in violation of aviation regulations.</li> </ul>	<ul> <li>The results of internal and external compliance reviews of the Safety Oversight Systems.</li> <li>An overall increase in education programs and initiatives with aviation stakeholders with the aim of encouraging compliance with rules applicable to civil aviation and to deter non-compliance.</li> <li>An overall reduction in violations identified within the local civil aviation system.</li> <li>The imposition of penalties by the Authority to address serious infractions against aviation safety and security.</li> </ul>

#### AIR NAVIGATION SERVICES:

Ensuring continuous improvements in safety, capacity & efficiency of the air navigation services operations within the Piarco Flight Information Region (FIR).



- Improve safety, capacity, efficiency and reduce the impact of air transport on the environment within the Piarco FIR.
- Maintain and leverage development in air navigation technology.

#### **AIR NAVIGATION SERVICES:**

Ensuring continuous improvements in safety, capacity & efficiency of the air navigation services operations within the Piarco Flight Information Region (FIR).

### **STRATEGIC PRIORITY**

### **IMPROVE SAFETY, CAPACITY, EFFICENCY & REDUCING THE IMPACT OF AIR** TRANSPORT ON THE ENVIRONMENT WITHIN THE PIARCO FIR

THE AIM	THE CHALLENGE	THE STRATEGY
<ul> <li>To maximize the value and improve the overall efficiency of the Piarco Flight Information Region without compromising safety.</li> </ul>	<ul> <li>The varying capabilities in technology of aircraft utilising the Piarco FIR.</li> <li>The anticipated global shortage of skilled aviation professionals.</li> </ul>	<ul> <li>Successfully implement the processes and technologies outlined in ICAO's Global Air Navigation Plan (GANP) - Aviation System Block Upgrades (ABSU) as well as the Regional Performance Based Air Navigation Implementation Plan.</li> <li>The adoption of system-wide information</li> </ul>
<ul> <li>To support and implement initiatives to minimize the adverse environmental effects of civil</li> </ul>	<ul> <li>Rapid growth and increase density of air traffic.</li> </ul>	management to drive the integration and interoperability of systems to combine different types of data, for greater safety and effectiveness and to meet the expectations of the stakeholders.
aviation activities.	Coordinating with key stakeholders in the local aviation industry to ensure environmental targets / mandates as directed by ICAO are achieved.	<ul> <li>Develop and manage our human resources within the ANSP.</li> <li>Focus on the delivery of value and balancing value with service and safety by maintaining and building</li> </ul>

- with service and safety by maintaining and building relationships with local and international aviation stakeholders for a collaborative approach to the provision of a safe and efficient Piarco Flight Information Region.
- · Closer collaboration with aviation stakeholders with the intent of improving the environmental performance of aviation.

### **STRATEGIC PRIORITY**

#### IMPROVE SAFETY, CAPACITY, EFFICENCY & REDUCE THE IMPACT OF AIR TRANSPORT ON THE ENVIRONMENT WITHIN THE PIARCO FIR

STRATEGIC	STRATEGIC	PERFORMANCE
OBJECTIVES	INITIATIVES	MEASURES
SAFETY         • to ensure the Piarco FIR is safe and secure.         • To attain regional safety targets as outlined in the ICAO Port of Spain beclaration.	<ul> <li>Enhance civil aviation safety in Trinidad and Tobago and the Piarco Flight Information Region (FIR) through the following measures:</li> <li>Identify and monitor existing types of safety risks in the provision of ANS.</li> <li>Develop and implement an effective Safety Management System (SMS) to respond to emerging risks.</li> <li>Ensure effective implementation and adherence to TTCAA Regulations.</li> <li>Identify and develop remedial plans to target the root causes of deficiencies.</li> <li>Collaborate with stakeholders to identify hazards and mitigate risks.</li> </ul>	<ul> <li>A completed risk assessment performed on the Air Navigation Services.</li> <li>The continuous monitoring and implementation of corrective actions to risks identified.</li> <li>Minimal deficiencies identified in audits conducted by the ICAO and the Regulatory Division of the TTCAA.</li> <li>The evaluation of objectives achieved within the regional safety targets as outlined in the ICAO Port of Spain Declaration.</li> </ul>

### **STRATEGIC PRIORITY**

#### IMPROVE SAFETY, CAPACITY, EFFICENCY & REDUCE THE IMPACT OF AIR TRANSPORT ON THE ENVIRONMENT WITHIN THE PIARCO FIR

STRATEGIC	STRATEGIC	PERFORMANCE
OBJECTIVES	INITIATIVES	MEASURES
CAPACITY, EFFICIENCY & ENVIRONMENT         • An efficient, dynamic and flexible flight management system with minimum impact on the environment.	<ul> <li>Enhance the efficiency of ANS operations by addressing issues related to the improvement of Demand and Capacity Balancing through the following measures:</li> <li>Develop, coordinate and implement Air Navigation Plans in accordance with Regional and Global Plans using the Aviation Systems Block Upgrade (ASBU) methodology.</li> <li>Reduce operational unit costs, facilitate increased traffic (including passengers and cargo) and optimize the use of existing and emerging technologies.</li> <li>Study trends, coordinate planning and develop guidance for stakeholders that supports the sustainable development of international civil aviation.</li> <li>Assist stakeholders to improve efficiency of aviation operations through effective Collaborative Decision Making (CDM).</li> <li>Comply with ICAO standards and recommended practices in relation to environmental protection.</li> </ul>	<list-item><list-item></list-item></list-item>

#### **AIR NAVIGATION SERVICES:**

Ensuring continuous improvements in safety, capacity & efficiency of the air navigation services operations within the Piarco Flight Information Region (FIR).

### **STRATEGIC PRIORITY**

#### **MAINTAIN & LEVERAGE DEVELOPMENTS IN AIR NAVIGATION TECHNOLOGY**

THE AIM	THE CHALLENGE	THE STRATEGY
<ul> <li>To be proactive in the approach to safety for all aviation activities within the Piarco FIR through the utilisation of advanced avionic technologies.</li> </ul>	<ul> <li>Increased attention to cyber security.</li> <li>Enhancing technical competencies and capacity to keep up-to-date with advancements in technology.</li> <li>Managing and coordinating legacy and new technologies without compromising safety.</li> <li>Approval from the Line Ministry for expenditure associated with the</li> </ul>	<ul> <li>Implement the Piarco Flight Information Region (FIR) Airspace Concept, through the determination of the intended operations of the airspace, the sectors, routes and terminal areas contained within The Global Air Navigation Plan 2013 – 2028 through the Aviation System Block Upgrade methodology.</li> <li>Implement the relevant technologies in accordance with the Regional and Global Plans using the Aviation Systems Block Upgrade (ASBU) methodology.</li> </ul>

development of technologies in air

navigation within the Piarco FIR.

- Provide advance training to technical air navigation services personnel.
- Actively participate in global and regional ICAO work groups in relation to the approach in managing the establishment of new technology.

### STRATEGIC PRIORITY MAINTAIN & LEVERAGE DEVELOPMENTS IN AIR NAVIGATION TECHNOLOGY.

STRATEGIC	STRATEGIC	PERFORMANCE
OBJECTIVES	INITIATIVES	MEASURES
<ul> <li>The successful implementation of the:         <ul> <li>Projects within the ICAO Port of Spain Declaration.</li> <li>Automatic dependent surveillance-broadcast (ADS-B) / Multilateration (MLAT) within the Piarco FIR Continental airspace.</li> <li>Communication/Surveillance enhancement using Controller- pilot data link communications (CPDLC) / Automatic dependent surveillance—contract (ADS-C).</li> <li>Air traffic services (ATS) inter-facility data communications (AIDC) with adjacent flight information regions.</li> <li>Very Small Aperture Terminal (VSAT) network within the Continental Airspace.</li> <li>Air Traffic Management (ATM) Upgrade.</li> <li>Renewal of Smartnet Primary routers for Eastern Caribbean (ECAR) network.</li> <li>Surveillance ADS-B Satellite Technology.</li> <li>Surveillance ADS-B Continental + Multi Lateration.</li> <li>Communication redundancy for Continental flight information regions - VSAT</li> <li>ATS Message Handling System (AMHS) &amp; Aeronautical Information Management (AIM) Contingency.</li> <li>System-Wide Information Management (SWIM).</li> <li>AMHS Upgrade.</li> <li>SPATIA</li> <li>AMHS Comsoft (hardware)</li> <li>Renovation of Air Navigation Services (ANS) Operations Training Facility Building.</li> <li>ANS Operations Training Facility Building - outfitting.</li> <li>ISO Certification of Aeronautical Information Management</li> <li>Aeronautical mobile services (AMS)/ Very high frequency (VHF) network Upgrade.</li> <li>Replacement of three (3) distance measuring equipment (DME).</li> <li>Replacement of Tobago localizer</li> </ul> </li> </ul>	<ul> <li>Exploit existing and emerging technologies in an effort to improve aviation communication, navigation, surveillance and air traffic management within the Piarco FIR.</li> <li>Implement air navigation technologies in accordance with the ICAO Port of Spain Declaration and the Aviation Systems Block Upgrade (ASBU) methodology.</li> </ul>	<ul> <li>Targets achieved in accordance with implementation timelines as captured in the ICAO Port of Spain Declaration and the Aviation Systems Block Upgrade (ASBU).</li> <li>The investment and enhancements of new technologies are expected to: <ul> <li>Improve capacity and efficiency in the Piarco FIR.</li> <li>Reduce aircraft emissions.</li> <li>Increase availability and reliability of communication.</li> <li>Improve search and rescue services.</li> <li>Improve surveillance capabilities.</li> </ul> </li> </ul>

- Replacement of Tobago localizer.
- Renewal upgrade of Topdesk.
- Digital Automatic terminal information service (ATIS).
- ECAR Aeronautical fixed service (AFS) enhancement.
- Communication between Piarco & SAL, Piarco & Santa Maria.
- Successful improvements and enhancements to all Communication, Navigation and Surveillance infrastructure.

### CORPORATE SERVICES:

Strengthening the support services and being a cohesive, results driven organization.



- Strengthen the Governance Structure within the TTCAA.
- Continue to develop the TTCAA's human resources and re-engineer processes.
- Enhance team building and continue to improve internal communication initiatives.
- Ensure the highest standard of accountability, transparency and probity of the financial systems.
- Provide effective, reliable and secure information technology services.
- Optimize property and equipment to support the delivery of services and corporate priorities.

#### **CORPORATE SERVICES:**

Strengthening the support services and being a cohesive, result driven organization.

#### **STRATEGIC PRIORITY** STRENGTHEN THE GOVERNANCE STRUCTURE WITHIN THE TTCAA THE AIM THE CHALLENGE THE STRATEGY A robust Governance. **Risk** and Inculcating a Corporate Governance Develop implement and а Compliance framework within the culture in the TTCAA. comprehensive and innovative TTCAA. Governance, Risk and Compliance **Developing consistency in internal rules** program. The program would consider: and regulation. • Strategic alignment risk and Authority-wide education and training in management. **Corporate Governance.** • Program structure and guidelines. • Risk controls establishment.

• Monitoring and reporting.

### STRATEGIC PRIORITY STRENGTHEN THE GOVERNANCE STRUCTURE WITHIN THE TTCAA

STRATEGIC OBJECTIVES	STRATEGIC INITIATIVES	PERFORMANCE MEASURES
• To establish and effective Governance, Risk and Compliance Model for the TTCAA.	<ul> <li>Conduct a comprehensive review of the Governance, Risk and Compliance Framework within the TTCAA.</li> <li>Augment the Compliance Framework to consider:         <ul> <li>Governance</li> <li>Structure</li> <li>Structure</li> <li>Oversight responsibilities</li> <li>Talent and Culture</li> <li>Infrastructure</li> <li>Compliance program and reporting</li> <li>Risk</li> <li>Process Risk and Control definition</li> <li>Risk Management</li> </ul> </li> </ul>	<ul> <li><u>Governance</u></li> <li>Control functions to support the Governance, Risk and Compliance Framework operational within the Authority, such as Internal Audit, Compliance, Enterprise Risk Management.</li> <li>Policy documents developed.</li> <li><u>Risk</u></li> <li>Conduct risk analysis, risk assessments and the establishment of a risk register.</li> <li>An increase in the number of risk discussions at a supervisory level and above.</li> <li>Risk reporting and timely risk mitigation.</li> <li>Timely monitoring of risk.</li> <li>Mumber of hours in compliance training / employee.</li> <li>Efforts devoted to compliance discussions</li> </ul>
Risk and Compliance Model for the	<ul> <li>the Governance, Risk and Compliance Framework within the TTCAA.</li> <li>Augment the Compliance Framework to consider:</li> <li>Governance <ul> <li>Structure</li> <li>Structure</li> <li>Oversight responsibilities</li> <li>Talent and Culture</li> <li>Infrastructure</li> <li>Compliance</li> <li>Compliance program and reporting Risk</li> <li>Process Risk and Control definition</li> </ul> </li> </ul>	<ul> <li>Governance, Risk and Complia Framework operational within Authority, such as Internal A Compliance, Enterprise Risk Manageme</li> <li>Policy documents developed.</li> <li><u>Risk</u> <ul> <li>Conduct risk analysis, risk assessm and the establishment of a risk register</li> <li>An increase in the number of discussions at a supervisory level above.</li> <li>Risk reporting and timely risk mitigation</li> <li>Timely monitoring of risk.</li> </ul> </li> <li>Compliance <ul> <li>Number of hours in compliance training employee.</li> </ul> </li> </ul>

• Tools and Technology

 Number of compliance issues identified and timely rectified.
 30

at a supervisory level and above.

#### **CORPORATE SERVICES:**

Strengthening the support services and being a cohesive, result driven organization.

### **STRATEGIC PRIORITY** CONTINUE TO DEVELOP THE TTCAA'S HUMAN RESOURCES & RE-ENGINEER PROCESSES

## THE AIM

• To foster an environment that encourages continuous process improvements and learning through fundamental rethinking and redesign of systems / processes and enhancing the conduct of business

### THE CHALLENGE

- Reliance on the existing processes resulting in a resistance to change.
- Training of key personnel.

#### THE STRATEGY

- Initiate from the Executive Level a comprehensive review of the processes employed in the conduct of business within the Authority with the intent to improve operations and to better serve our internal customers.
- Employ continuous efforts in identifying the root cause of non value creating activities and improve / re-engineer processes.
- Identify areas for automation through out the Authority and to implement technologies to streamline processes.
- Continuous training and development initiatives for staff to ensure a dynamic knowledgeable and skilled workforce.

### STRATEGIC PRIORITY CONTINUE TO DEVELOP THE TTCAA'S HUMAN RESOURCES & RE-ENGINEER PROCESSES

STRATEGIC OBJECTIVES	STRATEGIC INITIATIVES	PERFORMANCE MEASURES
• To be the driver of innovation, productivity and growth through mobilizing the workforce towards excellence and improving our systems and processes.	<ul> <li>Focus on total redesign of processes with the involvement of all internal constituents.</li> <li>The redesign process would entail: <ul> <li>Defining the objectives and framework for the process.</li> <li>Identifying the needs of the internal and external stakeholders.</li> <li>Inderstanding the current processes to be reengineered.</li> <li>Creating new designs for processes.</li> <li>Implementing and communicating reengineered processes.</li> </ul> </li> <li>Invest in the continuous training and development of employees.</li> <li>Ensure performance management processes are designed and executed to align and maximize</li> </ul>	<ul> <li>MEASURES</li> <li>The number of manual processes automated.</li> <li>The timely resolution of employee industrial relation issues.</li> </ul>
	employees' performance with the goals of the Authority.	

#### **CORPORATE SERVICES:**

Strengthening the support services and being a cohesive, result driven organization.

### **STRATEGIC PRIORITY** ENHANCE TEAM BUILDING & CONTINUE TO IMPROVE INTERNAL COMMUNICATION INITIATIVES

# THE AIM

• To develop a Corporate Culture that is forward-thinking in its approach by leveraging from the unique knowledge, insights and talents of its people.

### THE CHALLENGE

• Fostering a culture based on openness, loyalty and trust.

### THE STRATEGY

- Promote open communication and knowledge sharing throughout the Authority.
- Integrate the core values of honesty, integrity, respect and equity in the conduct of business.

### **STRATEGIC PRIORITY**

### ENHANCE TEAM BUILDING & CONTINUE TO IMPROVE INTERNAL COMMUNICATION INITIATIVES

STRATEGIC	STRATEGIC	PERFORMANCE
OBJECTIVES	INITIATIVES	MEASURES
• To be a more collaborative motivated workforce that supports the strategic initiatives, vision and mission of the Authority.	<ul> <li>Build effective cross functional work teams based on the principles of loyalty and trust.</li> <li>Facilitate opportunities such as team building sessions, corporate activities to improve relations and enhance cohesion within the Authority.</li> <li>Increase productivity and work efficiency through collaborative team projects.</li> <li>Encourage learning opportunities through the exchange of information and knowledge cross functionally.</li> <li>Openly communicate and share information throughout the Authority relating to corporate initiatives.</li> <li>Enhance internal communication channels within the Authority.</li> <li>Facilitate focus groups to identify pertinent issues that impact employee morale and motivation.</li> <li>Improve both horizontal (peer to peer) and vertical (employee to manager) communications.</li> </ul>	<ul> <li>Active participation of employees in team building initiatives.</li> <li>Incorporation of employee recommendations to strategic initiatives of the Authority.</li> <li>Enhance the communication medium within the Authority.</li> <li>Reduction in the number of industrial relations issues.</li> </ul>

#### CORPORATE SERVICES:

Strengthening the support services and being a cohesive, result driven organization.

### **STRATEGIC PRIORITY**

### ENSURE THE HIGHEST STANDARD OF ACCOUNTABILITY, TRANSPARENCY AND PROBITY OF THE TTCAA'S FINANCIAL SYSTEMS

THE AIM	THE CHALLENGE	THE STRATEGY
<ul> <li>To enhance the overall financial strength in order to deliver the strategic goals.</li> </ul>	<ul> <li>Untimely financial statement audits.</li> <li>Critical amendments to the Organisation Structure required in the</li> </ul>	<ul> <li>Collaborate with the External Auditors for the finalization of the Authority's financial statements.</li> </ul>
	Finance Department.	Finalize the proposed Organisation     Structure for the Finance Department.
	<ul> <li>Resources required to conduct a comprehensive review of the system, processes and policies that currently</li> </ul>	<ul> <li>Employ the required resources to review the financial systems of the</li> </ul>

Authority.

govern the Finance function of the

Authority for recommended process

enhancements.

### **STRATEGIC PRIORITY**

### ENSURE THE HIGHEST STANDARD OF ACCOUNTABILITY, TRANSPARENCY AND PROBITY OF THE TTCAA'S FINANCIAL SYSTEMS

STRATEGIC	STRATEGIC	PERFORMANCE
OBJECTIVES	INITIATIVES	MEASURES
• To secure the financial viability of the Authority by ensuring the highest standards of accountability, probity and financial control.	<ul> <li>Prioritize and align resources to the strategic activities by actively monitoring the economic and funding environment and objectively appraising the short and long term financial implications of all major decisions.</li> <li>Continuously update short and long term financial forecasts to guide decision making.</li> <li>Secure and manage the funds to support investments in infrastructure and the development of new sustainable activities.</li> <li>Maintain a comprehensive and effective risk management assurance framework and closely monitor the major financial risks to the Authority.</li> <li>Periodically review and update the financial strategy and undertake an annual assessment of financial sustainability.</li> <li>Maintain the balance between our recurrent and capital expenditure.</li> <li>Manage costs and efficiencies in the delivery of all activities.</li> <li>Engage external auditors to critically review the financial systems of the Authority for financial</li> </ul>	<ul> <li>Variance analysis reporting.</li> <li>Implemented cost reduction initiatives.</li> <li>The incorporation of probability analysis, trending, and other predictive analytical models for revenue generation.</li> <li>Financial forecasting and reporting on capital and recurrent expenditure projections.</li> <li>An expanded and approved product and service portfolio with implemented costing structures.</li> <li>Increased revenue generation.</li> <li>Finalized audited financial statements.</li> </ul>

statement finalization.

#### **CORPORATE SERVICES:**

Strengthening the support services and being a cohesive, result driven organization.

### **STRATEGIC PRIORITY** PROVIDE EFFECTIVE, RELIABLE AND SECURE INFORMATION TECHNOLOGY SERVICES

THE AIM		

Create a reliable and scalable information technology infrastructure, enabling innovative uses of technology for the evolving requirements of the Authority.

### THE CHALLENGE

- Creating data and information governance programs in an evolving technological environment.
- Managing and strengthening electronic and media security and privacy for the Authority's information systems.
- Rapid advancements in technology and related costs.
- Incorporating IT risk management and business continuity.

#### THE STRATEGY

- Conduct an information technology audit of hardware, software and systems against contemporary requirements in similar organizations in the aviation industry.
- Conduct a comprehensive risk assessment of the information technology capability.
- Invest in enhancing information technology capability to promote information privacy, security and to mitigate against threats to the TTCAA and the wider Piarco Flight Information Region.

### STRATEGIC PRIORITY PROVIDE EFFECTIVE, RELIABLE AND SECURE INFORMATION TECHNOLOGY SERVICES

A secure and robust information technology system throughout the	
Authority.	

STRATEGIC

OBJECTIVES

#### STRATEGIC INITIATIVES

- Conduct an information technology audit and risk assessment of the Authority's information technology capabilities to inform amendments to policies, systems, procedures and adoption of new technologies.
- Modernize / update the information management systems, networks and platforms to protect business critical applications and data to promote the continuity of operations within the Authority.
- Review the Authority's divisions, functions and procedures with a view of promulgating business process re-engineering.

#### PERFORMANCE MEASURES

- A Board approved IT Policies and Procedures Manual that outlines process flows to support business process reengineering.
- A comprehensive risk and audit assessment report that outlines:
- The system architecture and components and its overall level of security.
- o A list of threats and vulnerabilities.
- The system's current security controls and its risk levels.
- Recommended safeguards and contingency measures to reduce risk levels.
- A developed IT Business Continuity Disaster Recovery Plan.
- A functional intranet for the Authority.
- Timely reporting and response to threats to the information technology systems and the wider Piarco Flight Information Region.

#### **CORPORATE SERVICES:**

Strengthening the support services and being a cohesive, result driven organization.

### **STRATEGIC PRIORITY**

### OPTIMIZE THE PROPERTY AND EQUIPMENT TO SUPPORT THE DELIVERY OF SERVICES AND CORPORATE PRIORITIES



 Deliver optimum output from the TTCAA's property and equipment through modern maintenance industry best practices.

### THE CHALLENGE

- Maintaining compliance standards.
- Maintaining and tracking assets and infrastructure.
- Effectively controlling and monitoring operating and maintenance expenditure.

### THE STRATEGY

- Maintain an exceptionally high standard of the capability of the Authority's assets to perform their designed function thereby increasing the internal stakeholder value and the Authority's return on its asset investments.
- Proactively coordinate, manage, and monitor internal and external risks associated with facilities management of the TTCAA Complex.
- Critically examining operating and maintenance expenses and implementing measures to reduce cost, increase efficiency and optimize resources.

### **STRATEGIC PRIORITY**

### OPTIMIZE THE PROPERTY AND EQUIPMENT TO SUPPORT THE DELIVERY OF SERVICES AND CORPORATE PRIORITIES

STRATEGIC	STRATEGIC	PERFORMANCE
OBJECTIVES	INITIATIVES	MEASURES
<ul> <li>To successfully plan, develop and deliver on property maintenance projects to enhance and maintain an environment that supports high productivity output within the Authority.</li> </ul>	<ul> <li>Amend the organization structure of the Property Maintenance and Engineering (PM&amp;E) Department for the effective deployment of human resources to meet the corporate objectives of the Authority.</li> <li>Develop a comprehensive maintenance implementation plan and related budgets for all the property and equipment under the purview of the PM&amp;E Department.</li> <li>Develop, implement and record process work flows that will support the efficient delivery of maintenance projects.</li> <li>Develop a process to prioritize maintenance projects using a risk matrix methodology to ensure the optimum use of resources.</li> <li>Utilise project management principles in developing, executing and monitoring all projects of the PM&amp;E Department.</li> <li>Monitor and manage all PM&amp;E projects in relation to cost, quality and time.</li> <li>Regular reviews of the major maintenance programme.</li> </ul>	<ul> <li>An approved Predictive Maintenance Program that would allow for:</li> <li>Regular variance analysis reporting of project attainment against established targets.</li> <li>Develop and maintain a detailed analysis of project costs and cost over-runs.</li> </ul>

CIVIL AVIATION TRAINING CENTER:

Providing training in air navigation services and other specialized programs.



- Be the premier aviation training provider.

#### CIVIL AVIATION TRAINING CENTER: Providing training in air navigation services and other specialized programs.

### **STRATEGIC PRIORITY** BE THE PREMIER AVIATION TRAINING PROVIDER

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- To be the Premier Air Navigation Service Training Provider for the region with state of the art / modern facilities and advanced technological capabilities to reach the new age of learning.
- To provide broad base aviation training.

#### THE CHALLENGE

- Regional institutions which offer training in Air Traffic Control and Aeronautical Information Services.
- Continuously improving the quality and capacity of leadership and management at all levels in the Civil Aviation Training Centre.
- The cost of recruiting a cadre of competent highly trained personnel.
- Attracting business on a continuous basis.

#### **THE STRATEGY**

- Realise the vision of being the Premier Aviation Training Provider for the region through organisational restructuring, a complement of highly trained instructors and modernised learning facilities.
- Explore avenues for revenue generation in areas such as, rental of the CATC facility and the administration of training programs.

### **STRATEGIC PRIORITY**

### **BE THE PREMIER AVIATION TRAINING PROVIDER**

STRATEGIC	STRATEGIC	PERFORMANCE
OBJECTIVES	INITIATIVES	MEASURES
<ul> <li>Creating CATC into a world class leading aviation training facility of academic excellence.</li> <li>Developing CATC into an economically viable business unit.</li> </ul>	<ul> <li>Develop a high level business plan for the Civil Aviation Training Centre.</li> <li>Revising the CATC organisation structure based on the business plan and recruit and train staff as required.</li> <li>Provide state of the art / modern facilities with advanced technological capabilities to reach the new age learning.</li> <li>Develop curricula for the provision of tailored programmes to meet the needs of the aviation industry.</li> <li>Ensure the highest standards of quality for all programmes delivered by the CATC.</li> <li>Maximise the full potential of CATC's international affiliations and associations through the development of standardized training packages and delivery of specialised courses.</li> <li>Employ aggressive marketing strategies for the enhancement of the CATC image for greater market share and economic profitability.</li> <li>Consider the training needs of the Next Generation of Aviation Professionals (NGAP) for the sustainability of the future international air transport system.</li> </ul>	<list-item><list-item><list-item><list-item><list-item><list-item></list-item></list-item></list-item></list-item></list-item></list-item>

### **RISK FACTOR IN THE AVIATION INDUSTRY**



The Authority has recognized the importance of a robust risk management framework, supported by an innovative system which takes into consideration significant risk factors affecting the aviation industry. The risk management framework includes the identification, assessment and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor and control the probability and / or impact of adverse events to maximize the realisation of opportunities. Risk mitigation measures are continuously employed by the Authority within our risk management system.

To maintain and improve the safety record, anticipating the future threats to operations is critical. In addition to the host of potential risks by natural hazards, technological advances, human error, war and terrorism, the aviation industry must remain alert to a number of other new challenges.

Some of the significant risk factors affecting the industry include:

- Threats to security
- Threats to safety
- Economic factors

### **CLOSING REMARKS**



This Corporate Plan represents the Authorities goals objectives and future work activities. The Plan expresses the strategies, milestone and desired outcomes for the Authority along with progress measurement practices and change management policies.

The Authority is committed to monitoring and reporting on its progress regularly with a continuous to strive to facilitate a safe, secure and effective civil aviation system within Trinidad and Tobago and the Piarco Flight Information Region.

