



# ORIA Aerodrome Vehicle Operators Manual

## Annex "C" to ORIA Aerodrome Manual

Version 5.0 | 9<sup>th</sup> May 2022

## Table of Contents

Foreword .....	5
Distribution, Review and Amendment Procedures .....	6
Record of Amendments.....	8
Definitions .....	10
Abbreviations .....	13
Chapter 1 .....	14
1. Introduction.....	14
Chapter 2 .....	16
2. Management Safety Accountabilities and Responsibilities .....	16
2.1 Chief Executive Officer (CEO).....	16
2.2 Chief Safety Management Officer (CSMO) .....	16
2.3 Chief Airport Operations Officer .....	17
2.4 Chief Security Officer .....	17
2.5 All Airside Drivers/ Operators .....	18
Chapter 3 .....	19
3. Map of Owen Roberts International Airport .....	19
3.2 Runways and Markings .....	20
3.3 Taxiways and Markings.....	20
3.4 Aprons and Markings.....	20
3.5 Hot Spots .....	20
3.6 Perimeter Road.....	21
3.7 Jet Blast Fence .....	21
3.8 Runway Strip.....	21
3.9 Markings, Signs and Lights.....	28
Chapter 4 .....	32
4. Airside Access Procedures .....	32
4.7 Radio Communications Procedures.....	34
4.8 Monitoring Radio While Operating on Manoeuvring Area.....	39
4.9 Difficulty in Establishing Radio Communications.....	39
4.10 Light Gun Signals.....	40
Chapter 5 .....	42
5. Driver Safety Guidelines .....	42
5.1 Authorization .....	42
5.2 Seatbelts .....	42
5.3 Speed Limits.....	42

5.4	Speed Limit Exemptions.....	43
5.5	Right of Way .....	43
5.6	General Apron Safety Rules for Drivers/Operators .....	44
5.7	Personal Protective Equipment .....	45
5.8	Foreign Object Debris (FOD) .....	46
5.9	Driving in the Operating Areas .....	47
5.10	Security Checkpoint Access Gates .....	49
Chapter 6	.....	52
6.	Enforcement and Penalties.....	52
6.2	Safety Infraction Tickets .....	52
6.3	Cancellation of Permits.....	52
Chapter 7	.....	54
7.	Vehicle Licensing and Inspections .....	54
7.1	Vehicles/Towed Equipment Airside Permit .....	54
7.2	Ground Handling Equipment .....	55
Chapter 8	.....	56
8.1	Reporting of Airside Incidents/Accidents .....	56
8.2	Mandatory Reporting .....	56
8.3	Voluntary Reporting .....	56
Chapter 9	.....	58
9.1	Risk Management .....	58
Chapter 10	.....	59
10.1	Driver Safety Assurance.....	59
10.2	Driver Safety Training and Education .....	59
10.3	Drivers with a Revoked Driving Permit.....	60
10.4	Recurrence of Driver Training.....	60
10.5	Validity of Permit/Endorsement .....	60
10.6	Lost Permit.....	61
10.7	Safety Communications .....	61
10.7.2	The Communications Element.....	61
10.7.3	Consultation.....	61
10.7.4	Reporting .....	61
10.7.5	Safety Meetings .....	62
10.8	Conclusion .....	62
Appendix A1	– Driver/Operator Qualification Procedure.....	63
Appendix A2	– Aerodrome Vehicle Operator Permit Application Form.....	66

Appendix A3 – Manoeuvring Area and Ground Handling Equipment Driver Endorsement Form ..... 67

Appendix A4 – Apron Vehicle Registration Form ..... 68

Appendix A5 – Airside Operators Permit Renewal Application ..... 69

Appendix A6 - Safety Report Form ..... 70

Appendix A7 – Vehicle Inspection Form ..... 72

## Foreword

This Airside Vehicle Operators Manual has been prepared and issued under the Overseas Territories Aviation Requirements Part 139, Certification of Aerodromes. These Regulations require the Cayman Islands Airports Authority, as the Airport Operator, to control vehicle access and operation within the Airside area of Owen Roberts International Airport.

The requirements for the Airside operation of vehicles set out in this manual is to ensure the safe and orderly movement of vehicular traffic so that aircraft operations are not interrupted or impeded and is designed to be incorporated as part of the Owen Roberts International Airport, Aerodrome Manual and as such, any changes in this Manual must be approved by the Regulator before implementation.

According to the Overseas Territories Aviation Requirements Part 139, procedures for controlling the operation of surface vehicles on or near the movement area of the Airport must be included in the Aerodrome Manual. Such requirement is met through the publication of this Manual and as such this Manual is Annex "C" to the Owen Roberts International Airport Aerodrome Manual.

Failure to comply with the requirements of this manual is a breach of the conditions set down by the relevant authorities for use and to drive Airside, any such failure will be considered by the Cayman Islands Airports Authority in determining whether to exclude individuals or entities from Airside use or operation of Vehicles.

Approved by:



Albert Anderson  
Chief Executive Officer  
Cayman Islands Airports Authority

Date: 9 May 2022

Distribution, Review and Amendment Procedures

The CIAA and its management are committed to the on-going process of improving its Aerodrome Vehicle Operators Procedures and therefore updating the Aerodrome Vehicle Operators Manual when changes are identified.

The Chief Safety Management Officer is responsible for the production, amendment, and electronic distribution of this Aerodrome Vehicle Operators Manual. If at any time, a requirement in this manual cannot be complied with, a report must be made to the Chief Safety Management Officer as well as the Airport Operations Command Centre.

When amended by the Chief Safety Management Officer and subsequently satisfactorily reviewed by the Quality and Compliance Manager, the Quality and Compliance Manager will email an electronic copy of the amended version to the Civil Aviation Authority of the Cayman Islands along with details of the amendment.

Once the amendment is approved by the Civil Aviation Authority of the Cayman Islands and the CIAA CEO, one electronic copy of the approved amended version will be emailed to the Civil Aviation Authority of the Cayman Islands. The Chief Safety Management Officer will distribute the approved amended version to manual recipients listed in the tables below and make it available at the below CIAA website.

<http://www.caymanairports.com>

CIAA Personnel:

Air Traffic Control Manager	CKIA Air Traffic Control Tower
Airport Manager CKIA	CKIA Rescue and Fire Fighting Service
Chief Airport Operations Officer	Director General of Civil Aviation
Chief Executive Officer	Facilities and Projects Manager
Chief Financial Officer	CNS Manager
Chief of Commercial Services	ORIA Air Traffic Control Tower
Chief Safety Management Officer	ORIA Rescue and Fire Fighting Service
Chief Security Officer	

Airlines and Handling Agents:

Air Agencies Ltd.	DHL
Air Canada	FedEx
American Airlines	Island Air Ltd.
British Airways	Jet Blue
Cayman Airways Ltd. / Cayman Express / CAL Engineering	Sprint Services
Cayman Islands Helicopters	United Airlines
Delta Airlines	UPS

Ground Services Agents:

Airport Professional Services	Island Companies Ltd.
Airport Lounge/Hungry Horse	Jacques Scott/Caymania Duty Free
Black Coral Jewellery	Kirk Freeport Ltd.
Bodden Freeport	Papillion
Cayman Dispatch Services	Reliable Industries Ltd.
Flowers Air Dispatch Services	Rubis Fuels Ltd.
Flowers Security Services	SOL Petroleum Ltd.
Goddard Catering Services	Tortuga Duty Free

Government Agencies:

Cayman Islands Fire Service	Department of Tourism
Civil Aviation Authority of the Cayman Islands	H.M. Customs Department
Department of Agriculture	Office of the Governor
Department of Environment (M.R.C.U.)	Postal Department
Department of Immigration	Royal Cayman Islands Police

Other Partners:

Bodden Funeral Home	Jacques Scott
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All master documents are published and issued in an electronic format and are re-published in its entirety at its next version. Printed versions are not controlled. Amendments to the original manual will:

- a) Be listed in an amendment record;
- b) Be recorded in the next version number;
- c) Be dated in the page footer together with the current version number; and
- d) Be marked with a vertical bar next to the amended text.

Record of Amendments

Version number	Date	Revised or reviewed by (Position title)	Revisions approved by (Position title)	Reasons & details of changes	Next review date
V4.0	19/06/2019	CSMO & QCM	CEO	Draft reformatted, Foreword; Distribution and Amendment Procedures; Record of Amendments; Vehicle Light Signals; Safety Vests; Chapter 3, 3.5.1.1 Markings, Figure 4; Chapter 5, 5.2, Seatbelts; 5.8.2, updated rules for Operating a Vehicle in the Manoeuvring Area; 5.8.4, Special Apron Access lanes removed and replaced with procedures for Code “D” and “E” aircraft; Area 2 Drivers Map 5.8.5 deleted; Sample Airside Vehicle Permit Decal; Chapter 10, 10.1.3 reworded; 10.2.2 c) revised contact title; Appendix A1 4, Application Process A1, 5, iv revised contact title; Appendix A2 – A7 Forms reformatted including 2-tier drivers application form in A3.	19/12/2019
V4.1	07/07/2021	CSMO & QCM		Page 11, Abbreviations table updated; Chapter 3, page 17 - 26 updated with new information based on added airside facilities; Chapter 4, page 27. 4.1 and 4.2 reworded; page 29 – 34, updated communications procedures; page 36, 5.2, seatbelt info updated, 5.3.2, speed limit image inserted; page 37, speed limit exemptions updated; page 42 - 43, instruction regarding crossing roadway markings updated; 5.9.3.1, i, vehicle service roadway info updated; page 44, new roadway drawing inserted; page 53, 10.2.2 c) updated; page 57, Appendix A1, 5, iv, updated.	
V4.2	23/08/2021	QCM		Complete rearrangement of Chapter 3; CAACI comments to V4.1 addressed.	
V4.3	07/09/2021	QCM		Page 18, updated aerodrome map with correct runway headings; Removed taxiway H from Figure 15; persons added to 3.4.2; minimize replaced removed in 3.5.1; below replaced above in 3.8.1; Runway guard lights depicted in Figure 12; 3.9.1.2 reworded; 3.9.2.3 relocated to 3.9.2.2; 4.4 reference to Figure 13 included; 5.9.2.1 c) reworded; Figure 15 taxiway H removed; 5.3.9.1 I a) to d) reworded; Figure 16 with ATS boundary added.	
V4.4	02/05/2022	QCM		Page 13, added AOCC & CIAA abbreviations; page 19, inserted taxiway H in Figure 1 aerodrome map and subsequent Figures; pages 20-31, Chapter 3 airside facilities information updated; pages 32-40, page 42-43, 5.3.2 & 5.4	



				updated; Page 44, 5.6.1 b) updated; page 46, Figure 7 renumbered to Figure 14; page 47, 5.9.2.1 b) & c) updated; page 48, 5.9.3.1 a) to d) updated; page 49, 5.10.1 updated; pages 50-51, new Figures inserted with manoeuvring area info; Page 60, 10.2.2 c) updated; page 64, 5. iv) testing contact updated.	
V5.0	09/05/2022	CSMO & QCM	CEO	New approved version incorporating changes contained in draft version V4.4	

Definitions

<b>ACCIDENT</b>	An accident or a mishap is an incidental and unplanned event or circumstance, often with lack of intention or necessity. It usually implies a generally negative outcome which might have been avoided or prevented had circumstances leading up to the accident been recognized, and acted upon, prior to its occurrence.
<b>AERODROME</b>	Means the Owen Roberts International Airport or the Charles Kirkconnell International Airport (CKIA).
<b>AIRCRAFT ACCIDENT</b>	<p>An occurrence associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:</p> <p>a) a person is fatally or seriously injured as a result of:</p> <ul style="list-style-type: none"> <li>i. being in the aircraft, or direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or direct exposure to jet blast, except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or the aircraft sustains damage or structural failure which:</li> <li>ii. adversely affects the structural strength, performance or flight characteristics of the aircraft, and would normally require major repair or replacement of the affected component, except for engine failure or damage, when the damage is limited to a single engine, (including its cowlings or accessories), to propellers, wing tips, antennas, probes, vanes, tires, brakes, wheels, fairings, panels, landing gear doors, windscreens, the aircraft skin (such as small dents or puncture holes), or for minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting</li> </ul>

	from hail or bird strike (including holes in the radome); or the aircraft is missing or is completely inaccessible.
<b>AIRCRAFT INCIDENT</b>	An occurrence, other than an accident, associated with the operation of an aircraft, which affects or could affect continued safe operation if not corrected. An incident does not result in serious injury to persons or substantial damage to aircraft.
<b>AIRCRAFT STAND</b>	A designated area on an apron intended to be used for parking aircraft.
<b>AIRPORT SECURITY OFFICER</b>	An Authorized Officer in the employ of the Cayman Island Airports Authority specifically to aviation security and other delegated functions.
<b>AIRSIDE</b>	The movement area of an airport, adjacent terrain and buildings or portions thereof, access to which is controlled.
<b>APRON/RAMP</b>	A defined area in an aerodrome, intended to accommodate aircraft for the purposes of loading or unloading passengers, mail or cargo, fuelling, parking or maintenance.
<b>APRON TAXIWAY</b>	A portion of a taxiway system located on an apron and intended to provide a through taxi-route across the apron.
<b>DRIVER</b>	A person who is in control of a vehicle. In relation to a trailer, includes the driver of a vehicle by which the trailer is drawn, and 'drive' shall be construed accordingly
<b>FOREIGN OBJECT DEBRIS (FOD)</b>	Includes any object found in an inappropriate location that, as a result of being in that location, can damage an aircraft or equipment or injure airport personnel. Acronym also used to describe damage caused by such debris.
<b>INCIDENT</b>	An occurrence, other than an accident, associated with the operation or handling of an aircraft' which affects or could affect the safety of operation.
<b>INJURY</b>	An injury is a condition which requires medical assistance, including first aid.
<b>MANOEUVRING AREA</b>	That part of an aerodrome used by aircraft for landing, taxiing, and take off, excluding aprons.

<b>MOVEMENT AREA</b>	That part of an aerodrome used for the take-off, landing and the taxiing of aircraft, consisting of the manoeuvring area and the aprons.
<b>OWNER</b>	In relation to a motor vehicle, includes every person or organization who is the owner or joint owner or part owner of the vehicle; and any person or organization who has the use of the vehicle under a hire-purchase agreement but not the lessor under any such agreement; the person or organization in whose name the vehicle is registered.
<b>PARK</b>	To bring a vehicle to a stationary position and cause it to wait for any purpose other than that of immediately taking up or setting down passengers, goods or luggage.
<b>REGULATOR</b>	Civil Aviation Authority of the Cayman Islands.
<b>ROAD HOLDING POSITION</b>	A designated position at which vehicles will be required to hold.
<b>RUNWAY</b>	A defined rectangular area on a land aerodrome, prepared for the landing and take-off of aircraft along its length.
<b>RUNWAY HOLDING POSITION</b>	A designated position intended to protect a runway, an obstacle limitation surface, or an ILS/MLS critical/sensitive area at which taxiing aircraft and vehicles shall stop and hold, unless otherwise authorized by the Aerodrome Control Tower.
<b>RUNWAY STRIP</b>	A defined area including the runway and stopway, if provided, intended: to reduce the risk of damage to aircraft running off a runway; and to protect aircraft flying over it during take-off or landing operations.
<b>SHALL</b>	Used to indicate any instruction, directive or procedure which is mandatory (compulsory).
<b>SHOULD</b>	Used to indicate a process or procedure which is recommended (optional).
<b>TAXIWAY</b>	A defined path on a land aerodrome established for the taxiing of aircraft.
<b>VEHICLE</b>	Any motorized equipment which is operated by a driver, including tugs and belt loaders.
<b>VEHICULAR ACCESS ROAD</b>	An established surface route on the movement area meant for the exclusive use of vehicles.

Abbreviations

<b>AOM</b>	Airport Operations Manager
<b>ADO</b>	Airside Duty Officer
<b>AOCC</b>	Airport Operations Command Centre
<b>ATC</b>	Air Traffic Control
<b>ORIA</b>	Owen Roberts International Airport
<b>AVOP</b>	Airside Vehicle Operator Permit
<b>CAACI</b>	Civil Aviation Authority of the Cayman Islands
<b>CAOO</b>	Chief Airport Operations Officer
<b>CEO</b>	Chief Executive Officer
<b>CIAA</b>	Cayman Islands Airports Authority
<b>CSMO</b>	Chief Safety Manager Officer
<b>FOD</b>	Foreign Object Debris
<b>GHE</b>	Ground Handling Equipment
<b>QCM</b>	Quality and Compliance Manager
<b>RWY</b>	Runway
<b>T-AVP</b>	Temporary Airside Vehicle Permit
<b>TWY</b>	Taxiway

## Chapter 1

### 1. Introduction

- 1.1 It is the policy of the Cayman Islands Airports Authority (CIAA) to promote airside safety at Owen Roberts International Airport (ORIA) using its Safety Management System. The Aerodrome Vehicle Operators Manual is part of the CIAA Aerodrome Manual. All personnel who operate on ORIA airside should make themselves familiar with the contents of this manual. Copies may be obtained from the Chief Safety Management Officer by calling 345-916-5317 or emailing [Andrew.mclaughlin@caymanairports.com](mailto:Andrew.mclaughlin@caymanairports.com)
- 1.2 Worldwide Aviation statistics indicate that a high number of accidents/incidents such as FOD (or human) ingestion, and aircraft/vehicle collisions are caused by safety infractions such as runway incursions, poor driving practices, poor communication, poor FOD control and poor knowledge of the aerodrome airside operating environment. Such accidents/incidents often relate directly to the level of training of airside vehicle operators. It is therefore critical that all airside vehicle operators are trained, tested, and certified in accordance with the guidelines set forth in **Appendix A1** of this manual before commencing operational duties on ORIA airside.
- 1.3 In addition, periodic refresher training must be conducted and documented in accordance with the requirements of **Appendix A1, Section 5, Testing, viii**. Ultimately it is the responsibility of the Chief Executive Officer of the aerodrome to ensure that such training is made available to all personnel required to operate motorized vehicles or ground support equipment in the course of their duties on the aerodrome.
- 1.4 All persons operating on the airside at ORIA shall comply with the requirements of this Manual. Failure to comply with the requirements of this Manual may result in restriction of an operator's right to operate on the airside.
- 1.5 The Manual contains mandatory procedures and information related to the safe operation of vehicles and equipment on an airport but may not necessarily include procedures to cover specific conditions which may occur from time to time; some situations are unique. Such situations should be addressed by applying the rules of right of way and best judgment in the interest of safety.
- 1.6 The cooperation of everyone is necessary to prevent potentially serious accidents on airports. The CIAA has compiled this manual to be used in employee training, to promote safety by helping to reduce runway incursions, miscommunications with Air Traffic Control and apron mishaps.
- 1.7 Employees who operate vehicles or equipment on airports also have key responsibilities in these efforts. It is ultimately the vehicle operator who is responsible for the safe operation of the vehicle. Employers have the responsibility to ensure that vehicle operators are given appropriate training and briefings before being assigned to any duties in the movement area and that any deficiencies are promptly corrected.

1.8 By its nature, it is necessary for some of the information in this Manual to be generic. In addition to orientation and operational information, the Manual includes other information that a ground vehicle operator will find relevant, such as control of foreign object debris (FOD), security, and reporting accidents/incidents.

## Chapter 2

### 2. Management Safety Accountabilities and Responsibilities

#### 2.1 Chief Executive Officer (CEO)

**2.1.1 Safety Accountability:** The CEO is accountable to the CIAA Board of Directors for the safe management of Owen Roberts International Airport (ORIA).

**2.1.2 Safety Responsibility:** In discharging this accountability the CEO is responsible for:

- a) Authorizing a Safety Policy that indicates the CIAA's commitment to driver safety;
- b) Ensuring a Safety Management System is implemented to monitor driver safety program effectiveness; and
- c) Assuming the leadership role to ensure proactive safety commitment throughout the CIAA, particularly at senior management level, to driver safety.

#### 2.2 Chief Safety Management Officer (CSMO)

**2.2.1 Safety Accountability:** The Chief Safety Management Officer is accountable to the CEO for:

- a) Providing advice and assurance relating to driver safety issues and performance; internal, external, and international safety initiatives and requirements;
- b) Establishing driver safety standards;
- c) Establishing a system for driver safety education and awareness;
- d) Establishing a driver safety reporting system; and
- e) Effective interface with the CAACI regarding driver safety matters.

**2.2.2 Safety Responsibility:** In discharging these accountabilities, the Chief Safety Management Officer is responsible for:

- a) Assisting the Chief Airport Operations Officer in establishing driver safety guidelines and publishing them to all ORIA users;
- b) Conducting driver accident/incident investigations and forwarding recommendations to the CEO to assist in final determination of any necessary penalties for drivers involved;
- c) Monitoring driver safety concerns in the aviation industry and their perceived impact on the organization's operations aimed at service delivery;
- d) The design, development and management of an effective reporting and record keeping program directed towards increasing the driver safety performance level of ORIA;



- e) Convening on the behalf of the CEO, the CIAA ORIA Safety Committee and reporting all relevant driver safety reports to address issues of concern to all operators;
- f) Ongoing review of interface between ORIA, CKIA, CAACI, and other aviation organizations and ensuring improvements are made when required.

### 2.3 Chief Airport Operations Officer

2.3.1 **Safety Accountability:** The Chief Airport Operations Officer is accountable to the CEO to ensure all airside drivers are competently trained and certified in the execution of driver safety, to ensure regularity and efficiency of airside operations at ORIA.

2.3.2 **Safety Responsibilities:** In discharging this accountability, the Chief Airport Operations Officer is responsible for:

- a) Ensuring that employers provide proof of formal training and qualification for each employee on the equipment they intend to operate airside at ORIA in accordance with this manual;
- b) Ensuring the application of each potential airside driver/operator is properly verified and all prerequisites met before course scheduling;
- c) Ensuring that driver safety issues are reported in a timely manner to the Chief Safety Management Officer;
- d) Ensuring that all daily operations managers and staff reporting to him are trained, qualified and competent to discharge their driver safety related obligations; and
- e) Ensuring that all necessary driver safety training, testing, and assessments have been documented in each individual driver qualification record and this record has been accepted and filed by the Chief Safety Management Officer before final issue of any type of driving permit or endorsement.

### 2.4 Chief Security Officer

2.4.1 **Safety Accountability:** The Chief Security Officer is accountable to the CEO for the effective airside vehicle operators training and management of the security officers who patrol airside areas and are assigned to the security checkpoints which allow access to airside facilities.

2.4.2 **Safety Responsibilities:** In discharging this accountability the Chief Security Officer is responsible for:

- a) The control of passenger and vehicle traffic entering and exiting the airside of ORIA;
- b) Ensuring that in exercising access control to airside all vehicles and drivers are checked for the proper permits, and or endorsements for the equipment they wish to operate;

- c) Ensuring the officers under your control are properly trained and competent in executing their duties in enforcing driver safety requirements at ORIA airside facilities, to include acting as escorts for vehicles with very scarce need to operate on the airside; and
- d) Ensuring effective liaison is conducted between the security section and other ORIA sections, and relevant external organizations to ensure that requesting vehicles have the appropriate permission to enter airside areas and that driver safety protocol is adhered to by all persons obtaining access to ORIA airside facilities. It is important to give full details of the types of vehicles, number of vehicles, and their intended purpose when requesting this permission.

## 2.5 All Airside Drivers/ Operators

### 2.5.1 All airside drivers/ operators have the following safety responsibilities:

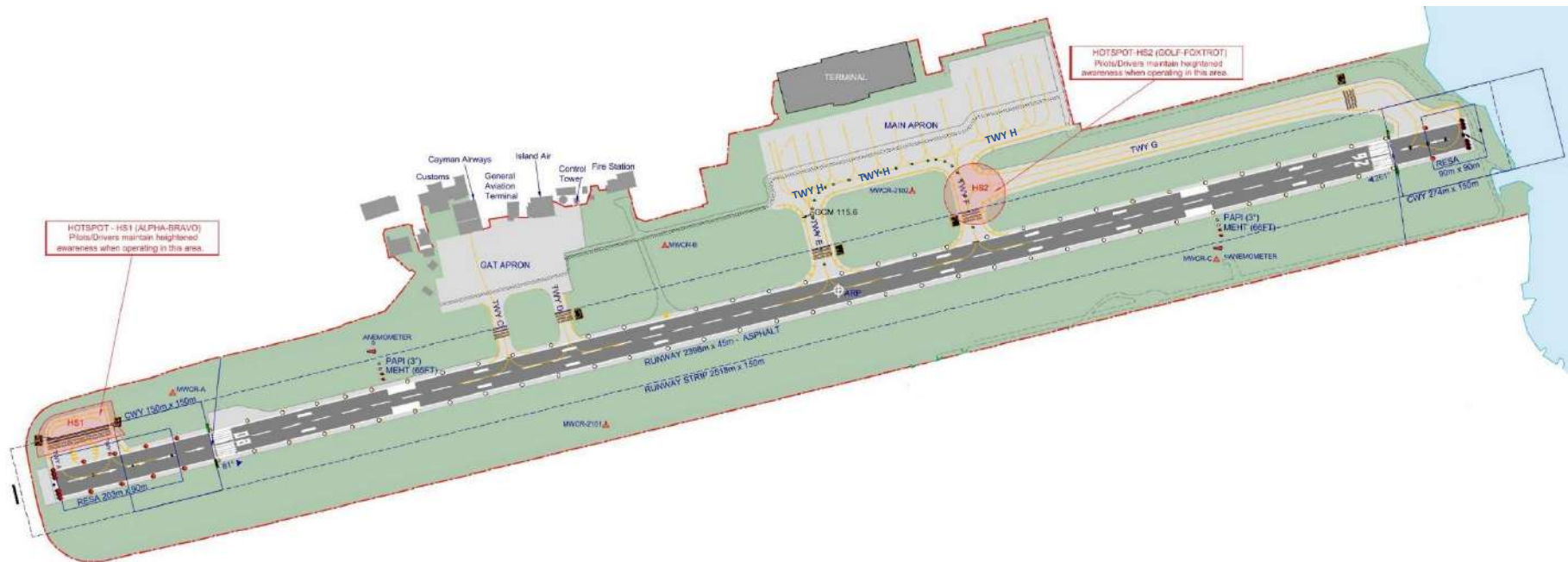
- a) To comply with the relevant safety requirements and procedures outlined in the ORIA Aerodrome Vehicle Operations Manual, CIAA Safety Management Manual (SMM) and any Supplementary Manuals including other Instructions and Notices;
- b) To apply driver safety measures as required by safety management procedures and instructions;
- c) To advise the Chief Safety Management Officer of any safety occurrence or system failure and to identify and report any situation of potential risk or concern affecting airside safety via one of the following means:
  - i. Report directly to their supervisor or the Chief Safety Management Officer;
  - ii. Submitting either an Incident/Accident report or a Confidential Report to the Airport Operations Command Centre by calling **(345) 244-5835 or 1-800-534-AOCC (5835)**.

Chapter 3

3. Map of Owen Roberts International Airport

3.1.1 The following Figure 1 aerodrome map provides vehicle operators with an outline of airside facilities at Owen Roberts International Airport with one runway surface consisting of two active runways – designated as runway 08 (allowing landings and take-offs to the east) and runway 26 (allowing landings and take-offs to the west).

Figure 1 – Map of Owen Roberts International Airport



### 3.2 Runways and Markings

3.2.1 As depicted in Figure 2 below, runways are rectangular areas at airports that are prepared for the landing and take-off of aircraft and have specific markings on them that are white with numbers on each end, and runway centerline markings through the middle. Remember runways are meant for aircraft use, so never drive your vehicle on it unless you have authorization from Air Traffic Control.

### 3.3 Taxiways and Markings

3.3.1 Taxiways are designated paths on land aerodromes used by aircraft to taxi to and from the runway. Taxiways look like runways but are usually not as wide and they don't have the same kind of markings. Taxiway markings are yellow, and instead of numbers, taxiways use letters or letter/number combinations as designators. There are currently seven taxiways designated as A, B, C, D, E, F & G from west to east that are located north of runway 08 and 26 and depicted in Figure 3 below.

### 3.4 Aprons and Markings

3.4.1 Aprons are defined areas on an aerodrome constructed to facilitate aircraft parking, boarding and disembarkation of passengers, loading and unloading of mail or cargo, refueling, and maintenance activities. There are two parking aprons, one for General Aviation aircraft and one for Commercial Aviation aircraft with apron parking stands 1 - 14; one service roadway connecting the General and Commercial Aviation aprons, one service road across the commercial apron and two service access roads, one each at either end of the commercial apron.

3.4.2 Vehicles operating on either apron depicted in Figure 4 below shall give way to moving aircraft. Vehicles on the apron should also maintain a safe distance from parked aircraft. Additionally, on the commercial apron, red safety line markings denote areas which should be free of objects, vehicles, persons, or equipment while the aircraft engine is running.

### 3.5 Hot Spots

3.5.1 A Hot Spot is a location on an airport movement area with a history of potential risk of collision or runway incursion, and where heightened attention by pilots and drivers is necessary. ORIA airside hot spots are clearly marked with a red box or circle as depicted at taxiway A and B, and at the intersection of taxiway F and G in Figure 5 below. Hot spots are included on airport charts to alert pilots and vehicle operators to maintain a heightened awareness when operating in these locations. Hot spots are discussed and monitored by the airport Runway Safety Team for short and long-term mitigation opportunities to minimize the hazard.

### 3.6 Perimeter Road

3.6.1 There is a Perimeter Road inside the airside fencing that follows the contour of the perimeter fence as depicted in Figure 6 below with four road holding position signs depicted in Figure 7 that are predominately used by Maintenance Personnel for maintenance purposes and Airport Security for security patrols.

### 3.7 Jet Blast Fence

3.7.1 A Jet Blast Fence shown in Figure 7 is located on the western end of runway to redirect high energy exhaust from aircraft engines to prevent damage to persons and vehicles using the public road around the western end of runway. A section of perimeter road is located in between the western end of runway and the jet blast fence to facilitate the movement of vehicles operating in between road holding position signs HOSAY and MANGO.

### 3.8 Runway Strip

3.8.1 The ORIA Runway Strip is the grass area surrounding the runway and depicted in Figure 3 below. This area is prepared for or is suitable for reducing aircraft damage in the event aircraft unintentionally skids of the side or end of the runway.

Figure 2 – Runways and Markings

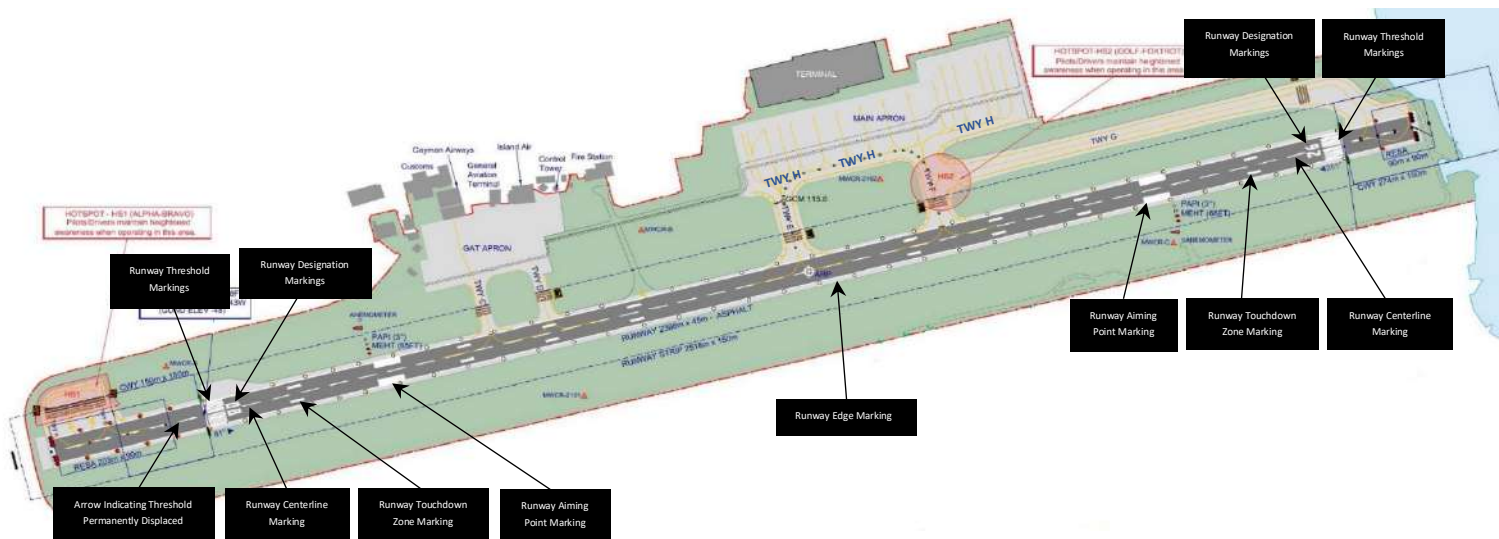


Figure 3 – Taxiways, Markings and Runway Strip

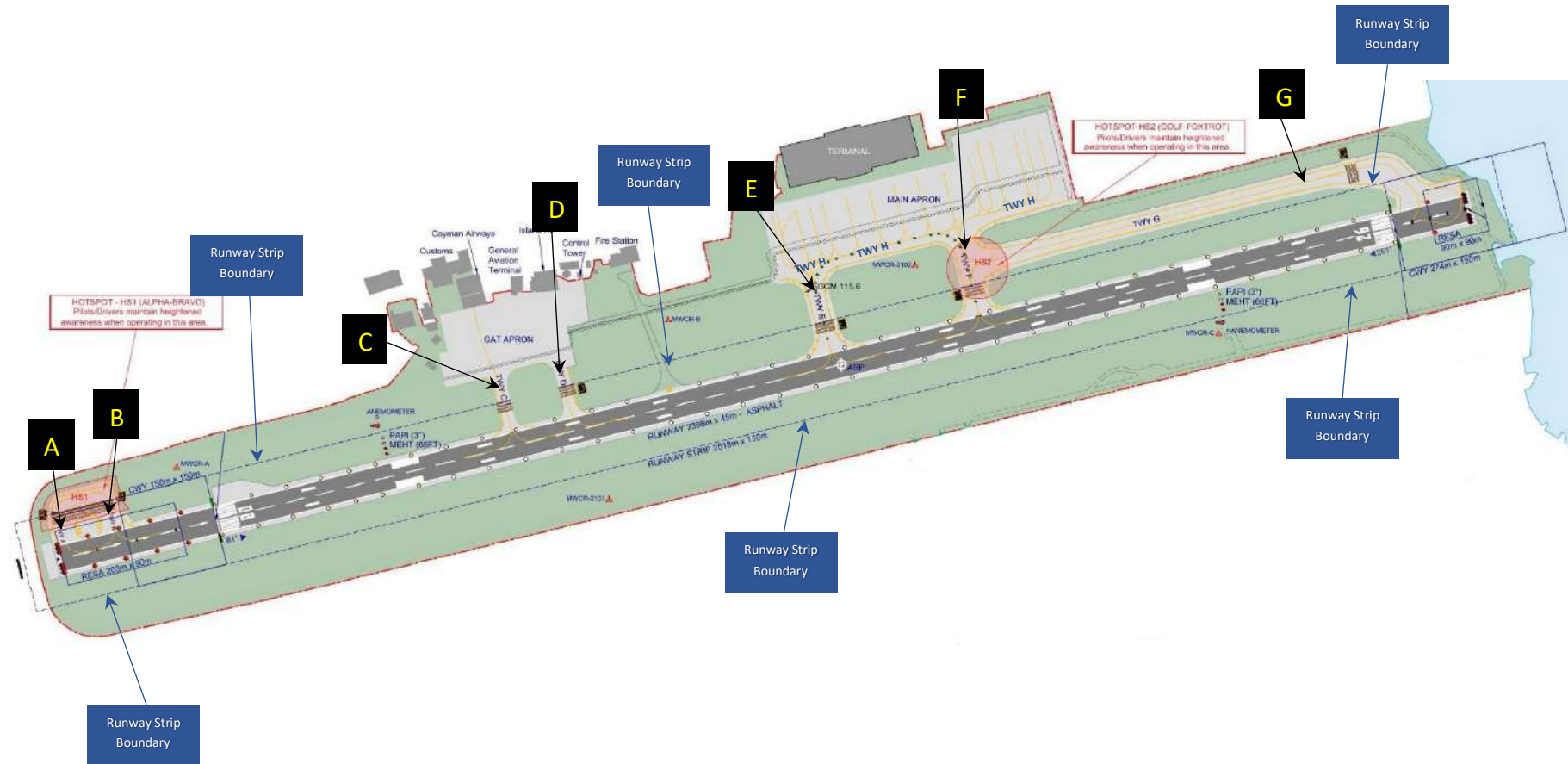


Figure 4 – General Aviation and Commercial Terminal Aprons

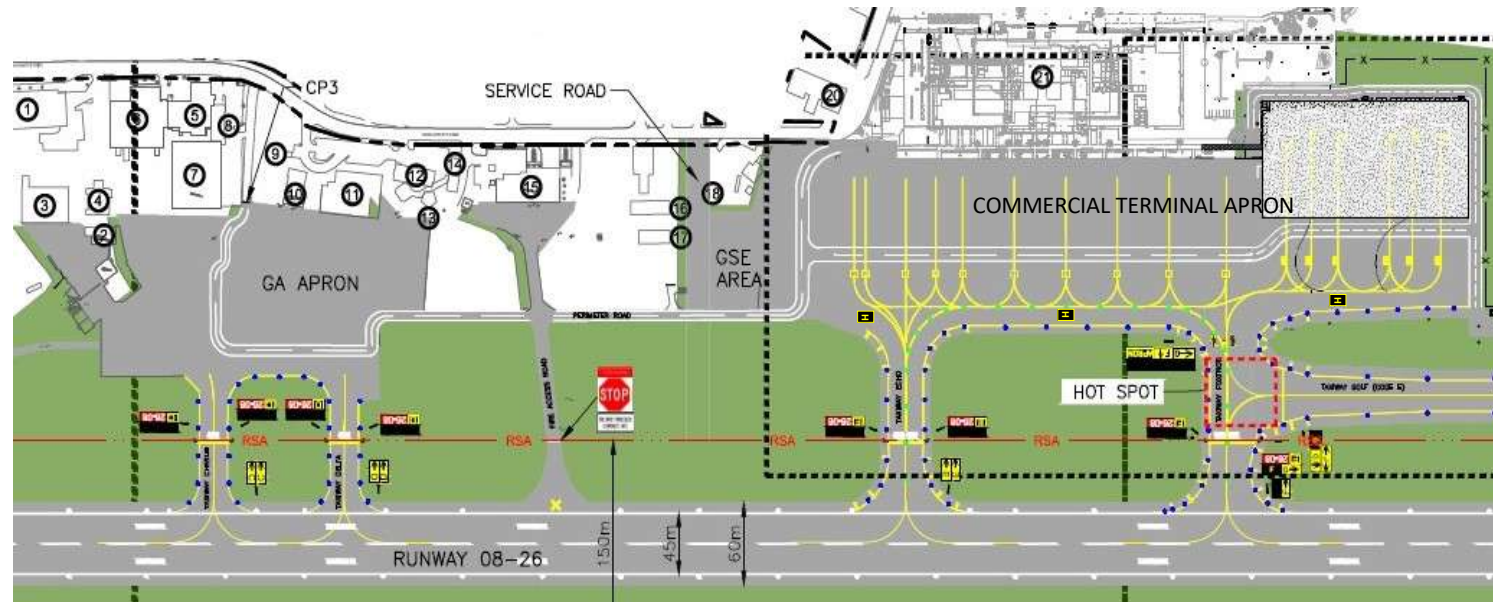




Figure 5 – Hot Spots

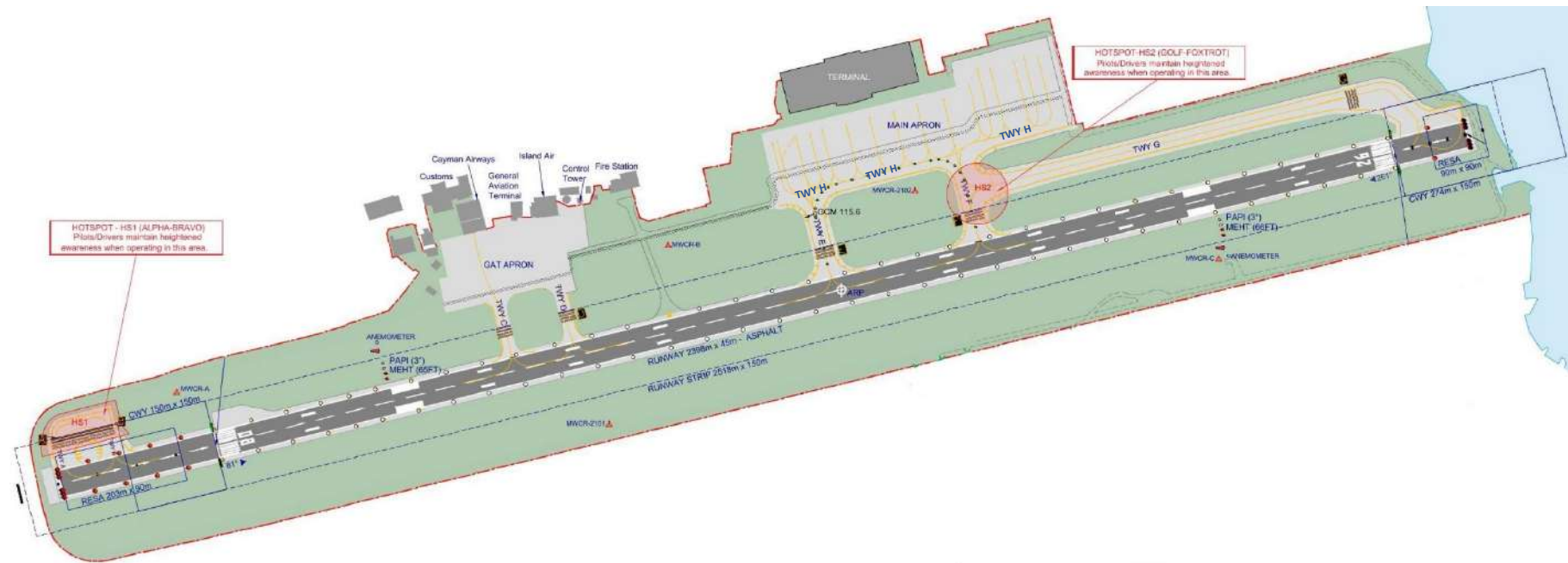


Figure 6 – Perimeter Road

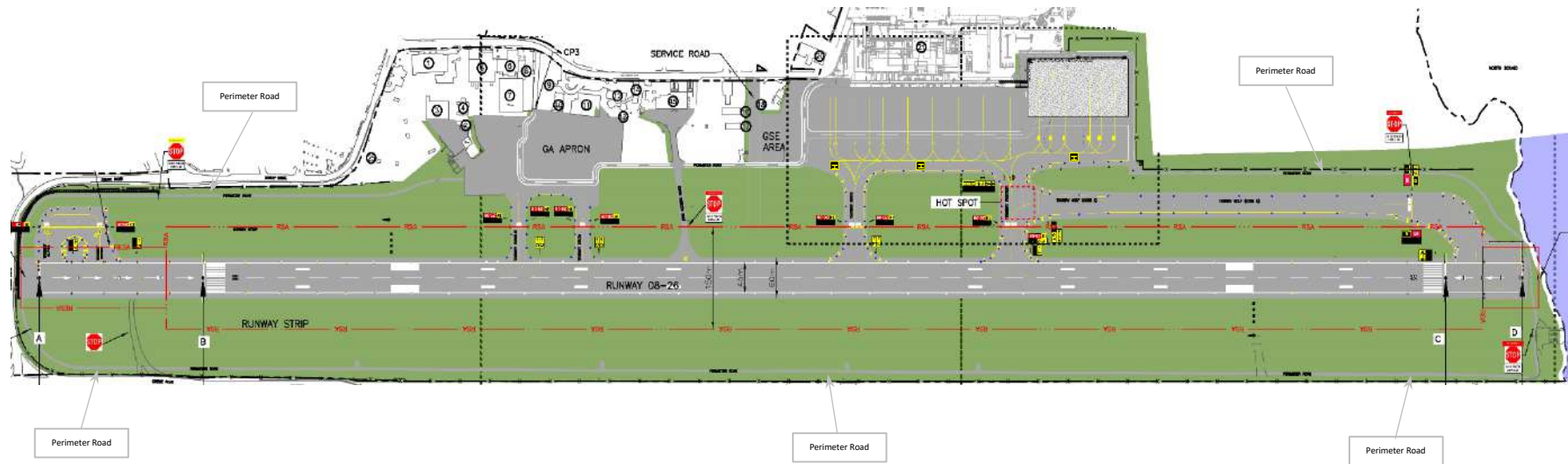
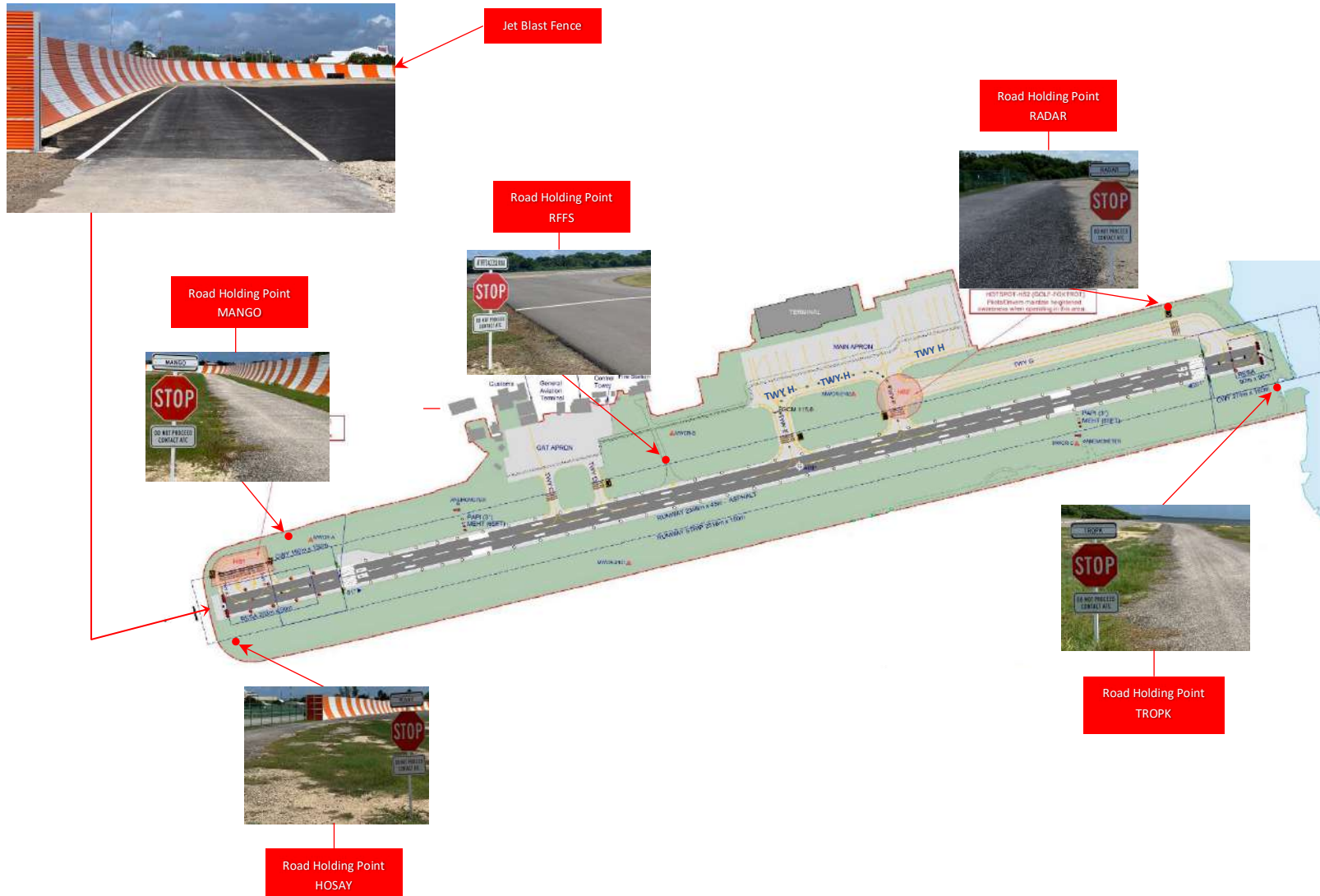


Figure 7 – Perimeter Road Holding Signs and Jet Blast Fence



### 3.9 Markings, Signs and Lights

3.9.1 Markings, Signs and Lighting are provided to guide aircraft and vehicle operations on the airport.

3.9.1.1 **Markings:** Runway markings are painted white as shown in Figure 2 above. Taxiways have yellow markings. The center of the taxiway has a continuous solid yellow line providing continuous guidance from the runway to aircraft stands and two solid yellow stripes displayed along the edges as shown in Figure 8 below. As the taxiway comes to within 175 feet from the edge of the runway, you will see what pilots call a "Runway-Holding Point" which is a designated position intended to protect a runway and its airport obstacle limitation surface. Taxiing aircraft and vehicles shall stop and hold at the holding point markings shown in Figure 9, unless otherwise authorized by the ORIA air traffic control tower to enter the runway.

Figure 8 – Taxiway Centre Line and Side Stripe Markings



3.9.1.2 **The Runway Holding Position** marking consist of two solid yellow stripes followed by two broken yellow stripes as depicted in Figure 9. This is the airport version of a stop sign. Along the side of the taxiway next to the holding position markings is a runway holding position sign with runway numbers as shown in Figure 10. As indicated in Chapter 4, 4.4, air traffic control clearance must be obtained from Owen Roberts Tower before entering a taxiway or before passing either of these markings to enter the runway.

Figure 9 – Runway Holding Point



Figure 10 – Runway Holding Position Sign



3.9.1.3 The taxiway C runway holding point markings depicted in Figure 9 above is representative of other holding point markings found on taxiway A, B, D, E, F, and G. When vacating a runway, via a taxiway, operators must proceed past the holding side of the taxiway runway holding point marking painted on a taxiway as shown in Figure 9 above.

3.9.2 **Signs** - There are three kinds of signs on an airport:

3.9.2.1 **Mandatory Instruction Signs** used to display compulsory commands which have a red background with white lettering. This information must be obeyed. An example is a runway holding position sign shown in Figure 10 that is located next to the holding position pavement markings. ATC permission is required before proceeding past this sign and location.

3.9.2.2 **Location Signs** tell the operator their exact location. These signs have a black background with yellow lettering, the reverse coloring used on an information sign. You will observe a location sign attached to the mandatory sign in Figure 10 above indicating the operator is holding short of runway 26 - 08 on taxiway C.

3.9.2.3 **Information Signs** are used to provide operators with information of where taxiways and aprons are located. These signs have a yellow background with black lettering. The example used in Figure 11 is a runway exit sign from the runway onto taxiway C leading to the general aviation apron.

Figure 11 – Runway Exit Sign










3.9.2.4 **Location Signs** tell the operator their exact location. These signs have a black background with yellow lettering, the reverse coloring used on an information sign. You will observe a location sign attached to the mandatory sign in Figure 10 indicating the operator is holding short of runway 26 - 08 on taxiway C.

3.9.2.4.1 **Perimeter Road Holding Signs** are in strategic locations as depicted in Figure 7. Permission must be obtained from ATC to proceed beyond each perimeter road holding position sign when required to enter the runway strip and cross the eastern and western end of each runway.

3.9.3 **Lights** – Runway, taxiway, and approach lighting systems are controlled by Owen Roberts Tower and used for air navigation purposes especially at night and during periods of low visibility during the day. Sample light images are shown in Figure 12.

- a) Approach lighting systems are installed on the approach end of each runway and consist of a series of lightbars that extends outward from the center of runway displaced thresholds and used to enhance the safety of aircraft, particularly in conditions of reduced visibility;
- b) Precision approach path indicators consist of four light units that are visible from 5 miles during the day, providing a glidepath with safe obstruction clearance for aircraft on approach to landing;
- c) Runway displaced threshold and wing bar lights are green in the direction of approach to the runway and demarcates the beginning of the runway that is available for landing because the runway threshold has been displaced;
- d) Runway edge lights are white and change to yellow throughout the roll out and departure end of the last 2000 feet of runway. These lights are used to outline the edges of the runway during periods of darkness or restricted visibility conditions;
- e) Runway end lights consist of 6 red lights placed perpendicular to the runway centerline and located at the farthest end of the runway away from the beginning of the runway;
- f) Taxiway edge lights are blue and used to outline the edges of taxiways during periods of darkness or restricted visibility conditions. Green centerline lights are located on taxiway E and F and used to facilitate the movement of ground traffic in low visibility conditions;
- g) Runway guard lights are installed on either side of each taxiway perpendicular to holding position markings where the taxiway intersects with the runway and consist of a pair of elevated flashing yellow lights intended to caution pilots or vehicle drivers that they are about to enter an active runway;
- h) Blue edge lights are provided on aprons and aprons are lit with floodlighting to assist with operational maneuvering guidance during nighttime and low visibility operations.
- i) An aerodrome beacon is located on top of the ATC tower and used to indicate the location of the airport from the air through the constant rotation of flashing white and green lights.

Figure 12 – Lighting Systems

<p><b>Approach, Displaced Threshold and Runway Edge Lights</b></p>	<p><b>Precision Approach Path Indicators</b></p>
 <p>A photograph showing a runway at dusk. In the foreground, three yellow lights are mounted on a concrete pad. The runway ahead is illuminated with a series of green lights along the edges and a central line of yellow lights.</p>	 <p>A photograph of a grassy field with four red lights spaced out across it, used for precision approach path indicators.</p>
<p><b>Runway End Lights</b></p>	<p><b>Taxiway Edge and Centerline Lights</b></p>
 <p>A photograph of a runway end at night, featuring a series of red lights along the edge and a white arrow pointing forward on the pavement.</p>	 <p>A photograph of a taxiway at dusk, showing blue lights along the edges and a central line of green lights.</p>
<p><b>Runway Guard Lights</b></p>	<p><b>Apron Flood Lights</b></p>
 <p>A photograph of a runway guard light system, showing a series of red lights along the edge of a gravel area with a yellow and blue centerline.</p>	 <p>A photograph of an apron area at night, illuminated by tall floodlights. An aircraft is visible in the background.</p>
<p><b>Aerodrome Beacon</b></p>	
 <p>A photograph of an aerodrome beacon, a tall tower with a rotating light on top, illuminated at night.</p>	

## Chapter 4

## 4. Airside Access Procedures

4.1 Owen Roberts International Airport is a "controlled" airport. Therefore, this requires aircraft and vehicles that operate on runways and on taxiways (maneuvering area) to have authorization from Air Traffic Control (Owen Roberts Tower) to operate in these areas.

4.2 Operators must also obtain permission from Owen Roberts Tower to operate within the runway strip. Likewise, vacate the runway strip when directed by ATC. Operators working in the runway strip and outside the taxiways will have no markings to indicate where they will require an ATC clearance to operate. The CIAA AVOP course includes detailed map training to recognize the runway strip boundaries depicted in Figure 3 and to remain clear of, unless authorized by ATC.

4.3 Aircraft and vehicle operating on the General Aviation and Commercial Terminal aprons on the painted two-lane vehicle service roadways are not controlled by ATC but are required to comply with airside vehicle operating procedures published by the CIAA.

4.4 When an "apron" is included with a "maneuvering area", the combined area is termed a Movement Area. **As an operator of a vehicle, you must obtain permission from Owen Roberts Tower before you traverse (cross) the painted AVOP roadway double lines shown in Figure 13 to operate on a taxiway, runway or runway strip or when crossing the end of a runway using the airport perimeter fence road.** The following standard words and phrases shall be used as appropriate two-way radio communications between Ground Equipment Operators and Air Traffic Control:

## Standard Words and Phrases

<b>Word/Phrase</b>	<b>Meaning</b>
Acknowledge	Let me know you have received and understood this message.
Advise Intentions	tell me what you plan to do
Affirm	Yes
Correction	An error has been made in the transmission and the correct version follows
Disregard	Consider that message/instruction as not sent
Expedite	Phrase used by ATC when such action compliance is required to avoid an imminent situation.
Hold/ Hold Short	Phrase used to keep a vehicle or Aircraft within a specified area or at a specified point while awaiting further clearance from air traffic control.  Note: When such instructions are given by ATC, the recipient is expected to acknowledge the restriction by repeating the restriction in the read back.



How do you read me?	Question relating to the quality of the transmission or to determine how well the transmission is being received.  Note: A perfect transmission would be acknowledged as 5 by 5 for strength "5". A weak and poorly audible communication would likely be rated with a "2" or a "3".
Negative	No, or permission is not granted, or that is not correct
Pass your Message	Continue with your message only. Do not move.
Proceed	ATC do not use the word "proceed" in in their terminology as it could be confused with an instruction to proceed onto a manoeuvring area when the intent was only to continue with a communication.
Radio Check	I wish to know how well you can hear me – please advise your readability of my transmission
Read Back	Repeat my message back to me
Roger	Your message was received and understood. It must never be used to mean "yes" or "no".
Say Again	Repeat all, or the following part of your last message
Standby	Wait and I will call you back
Vacate	Means clear the area
Vacated	I have vacated runway/taxiway/area
Verify	I request confirmation of information
Wilco	I have received your message, understand it, and will comply with it

4.5 The International Phonetic Alphabet is used to assist in voice transmission of call signs, runway/taxiway designators and the spelling of proper names and unusual words. The phonetic alphabet is made up of particular words to denote the letters. When used, the pronunciations as shown in 4.5 below.

4.6 Readability of radio signals (i.e. how well a transmission can be heard) is categorized in the below table. This table is used to indicate the readability of radio transmissions when radio checks are required to make sure radios and microphones are working correctly. For example:

*Driver: "Owen Roberts Tower, Security, Radio check".*

*Owen Roberts Tower: "Ranger One, Owen Roberts Tower, Readability 5".*

<b>1</b>	Unreadable
<b>2</b>	Readable now and again
<b>3</b>	Readable but with difficulty
<b>4</b>	Readable
<b>5</b>	Perfectly readable

#### 4.7 International Phonetic Alphabet

<b>A</b>	ALPHA	Al-fa	<b>N</b>	NOVEMBER	No-VEM-ber
<b>B</b>	BRAVO	BRAH-voh	<b>O</b>	OSCAR	OSS-cah
<b>C</b>	CHARLIE	CHAR-lee	<b>P</b>	PAPA	Pah-PAH
<b>D</b>	DELTA	DEL-tah	<b>Q</b>	QUEBEC	Key-BECK
<b>E</b>	ECHO	ECK-oh	<b>R</b>	ROMEO	ROH-me-OH
<b>F</b>	FOXTROT	FOKS-trot	<b>S</b>	SIERRA	See-AIR-rah
<b>G</b>	GOLF	Golf	<b>T</b>	TANGO	TANG-go
<b>H</b>	HOTEL	Hoh-TELL	<b>U</b>	UNIFORM	YOU-nee-form
<b>I</b>	INDIA	IN-dee-ah	<b>V</b>	VICTOR	VIC-tah
<b>J</b>	JULIETT	JEW-lee-	<b>W</b>	WHISKEY	WISS-key
<b>K</b>	KILO	ETT	<b>X</b>	X-RAY	ECKS-ray
<b>L</b>	LIMA	KEE-low	<b>Y</b>	YANKEE	YANG-key
<b>M</b>	MIKE	LEE-mah	<b>Z</b>	ZULU	ZOO-loo

#### 4.7 Radio Communications Procedures

4.7.1 All personnel and vehicle operators must be conversant with current communication procedures and obtain permission from Owen Roberts Tower before entering the airside manoeuvring area (taxiway, runway, including runway strip) or crossing the end of a runway using the airport perimeter road. The following communications techniques and phraseology will assist in ensuring that radio communications are clearly understood.

- a) Before transmitting, check that the receiver volume is set at the optimum level and listen out on the frequency to be used to ensure that there will be no interference with a transmission from another operator.

- b) Be familiar with microphone operating techniques and do not turn your head away from it whilst talking or vary the distance between it and your mouth. Severe distortion of speech may arise from:
  - i. Talking too close to the microphone; or
  - ii. Touching the microphone with the lips.
- c) Use a normal conversation tone, speak clearly and distinctly.
- d) Maintain an even rate of speech. When it is known that the message will be written down by the recipients, speak at a slightly slower rate.
- e) Maintain the speaking volume at a constant level. A slight pause before and after numbers will assist in making them easier to understand.
- f) Avoid using hesitation sounds such as 'er' and excessive use of courtesies and entering into non-operational conversations.
- g) Depress the transmit switch fully before speaking and do not release it until the message is complete. This will ensure that the entire message is transmitted. However, do not depress transmit switch until ready to speak.
- h) Be aware that the mother tongue of the person receiving the message may not be English. Therefore, speak clearly and use standard words and phrases wherever possible.
- i) One of the most irritating and potentially dangerous situations in radio communications is a 'stuck' microphone button. Operators should always ensure that the button is released after a transmission and the microphone placed in an appropriate place that will ensure that it will not inadvertently be switched on.
- j) After a call has been made, a period of at least 10 seconds should elapse before a second call is made. This should eliminate unnecessary transmissions while the receiving station is getting ready to reply to the initial call.
- k) Contact Owen Roberts Tower on CIAA **radio channel 2**. Before communicating (talking) make sure no one else is communicating on radio channel **2** (no other communications is in progress), **say who you are calling and who you are**. For example:
  - i. Identify the unit you are calling and say who you are:  
*Driver: "Owen Roberts Tower, Operations"*  
*Driver: "Owen Roberts, Ranger One (security)"*

- ii. If Owen Roberts Tower is too busy the controller will reply “STANDBY”.

This means that the driver should wait until the controller calls back.

*Owen Roberts Tower: “Operations, Owen Roberts Tower, Standby”*

*Owen Roberts Tower: “Ranger One, Owen Roberts Tower, Standby”*

- iii. The driver shall not proceed until permission is granted to proceed to intended destination. When Owen Roberts Tower is not busy the air traffic controller will communicate the following message.

*Owen Roberts Tower: “Operations, Owen Roberts Tower, Pass your Message”*

*Owen Roberts Tower: “Ranger One, Owen Roberts Tower, Pass your Message”*

- iv. You should then communicate who you are, communicate your position and intended destination. For example:

*Driver: “Owen Roberts Tower, Operations, located on the apron, request permission to conduct runway Inspection”*

*Driver: “Owen Roberts Tower, Ranger One, located on the apron, Request permission to conduct security perimeter check”.*

- v. If there is conflicting arriving or departing aircraft movements, Owen Roberts Tower will communicate the following.

*Owen Roberts Tower: “Operations, Standby, traffic departing runway 08”.*

*Owen Roberts Tower: “Ranger One, Standby, traffic departing runway 08”*

- vi. If there is no conflicting aircraft movement, Owen Roberts Tower will communicate the following.

*Owen Roberts Tower: “Operations, Permission granted to conduct runway inspection, Report vacated”.*

*Owen Roberts Tower: “Ranger One, Permission granted to conduct security perimeter check, Report vacated”.*

- vii. When the runway inspection or security perimeter check is completed, and runway is vacated the following will be communicated to Owen Roberts Tower.

*Driver:* "Owen Roberts Tower, Operations, Runway inspection completed, Runway vacated".

*Driver:* "Owen Roberts Tower, Ranger One, Security perimeter check completed, Runway vacated".

- viii. If for air traffic control reasons, Owen Roberts Tower requires you to clear the runway, taxiway, or runway strip to facilitate aircraft movements, Owen Roberts Tower will communicate the following.

*Owen Roberts Tower:* "Operations, Owen Roberts Tower, Traffic on final approach to runway 08, Vacate the runway, Report vacated".

*Owen Roberts Tower:* "Ranger One, Owen Roberts Tower, Traffic on final approach to runway 08, Vacate the runway strip, Report vacated".

- ix. A driver receiving instructions to vacate the runway or taxiway, or runway strip must acknowledge receiving the controller's message and communicate the following.

*Driver:* "Owen Roberts Tower, Operations, Vacating the active runway, Will Report Vacated".

*Driver:* "Owen Roberts Tower, Ranger One, Vacating the runway strip, Will report vacated".

- x. Drivers instructed to vacate the runway or runway strip areas, depending on their location, should immediately proceed to clear the runway via a taxiway as instructed by ATC or proceed to the perimeter road located north or south of the runway strip then notify Owen Roberts Tower that the runway or runway strip is vacated and provide their location. For example:

*Driver:* "Owen Roberts Tower, Operations, Runway vacated, Located next to Gate 8".

*Driver:* "Owen Roberts Tower, Ranger One, Runway strip vacated, Located next to Gate 8".

- xi. When the arriving or departing aircraft has vacated the runway, Owen Roberts Tower will communicate the following.

*Owen Roberts Tower:* “Operations, Permission granted to continue runway inspection, Report vacated”.

*Owen Roberts Tower:* “Ranger One, Permission granted to continue security perimeter check, Report vacated”.

- xii. Security officers conducting perimeter fence inspections will request permission to cross the end of each runway when located at road holding position signs RADAR, TROPK, HOSAY, MANGO. For example:

*Driver:* “Owen Roberts Tower, Ranger One, at HOSAY, request permission to cross from HOSAY to MANGO”.

*Owen Roberts Tower:* Ranger One, Permission granted, report vacated”.

*Driver:* “Owen Roberts Tower, Ranger One, Permission granted to cross from HOSAY to MANGO, report vacated”.

- xiii. There are occasions when vehicles need to operate on taxiways either for maintenance purposes or in direct support of aircraft operations. It is important that a continuous listening watch is maintained on Owen Roberts Tower frequency, not only in case of further instructions or information from the tower, but also so that drivers can be aware of the movements, and intended movements, of other vehicles or aircraft thereby reducing the risk of conflict. For example:

*Driver:* “Owen Roberts Tower, Maintenance, located on the main terminal apron, request permission to enter taxiway Hotel”.

*Driver:* “Owen Roberts Tower, Maintenance, located on the main terminal apron, request permission to enter taxiway Golf”.

- xiv. If there is conflicting arriving or departing aircraft movements, Owen Roberts Tower will communicate the following.

*Owen Roberts Tower:* “Maintenance, Standby, traffic arriving runway 08 and vacating via taxiway Golf and Hotel”.

*Owen Roberts Tower:* “Maintenance, Standby, traffic taxiing to runway 08 via taxiway Hotel and Echo”.

- xv. If there is no conflicting aircraft movement, Owen Roberts Tower will communicate the following.

*Owen Roberts Tower:* "Maintenance, Permission granted to enter taxiway Hotel, Report vacated".

*Owen Roberts Tower:* "Maintenance, Permission granted to enter taxiway Golf via taxiway Hotel, Report vacated".

- xvi. Drivers should use the following phraseology when reporting sightings of wildlife.

*Driver:* "Owen Roberts Tower, Security, large flock of birds on grass south of taxiway Foxtrot".

**4.7.2 Always read back instructions received from Owen Roberts Tower exactly as the instructions are issued to you for confirmation before acting.** Communication with Owen Roberts Tower is not difficult; it can be mastered with a little practice. If an operator is unsure what the Owen Roberts Tower controller might have said or does not understand an instruction from the controller. **ASK THE CONTROLLER TO REPEAT IT USING THE WORDS "SAY AGAIN."** A controller, even one who is extremely busy, would rather repeat and explain something than to have a misunderstanding lead to an accident or runway incursion. **The vehicle operator shall not proceed to their intended destination unless the instructions from Owen Roberts Tower is clearly understood.**

#### 4.8 Monitoring Radio While Operating on Manoeuvring Area

**4.8.1** Once permission is granted to operate on the manoeuvring area or within the runway strip drivers must constantly monitor CIAA radio channel 2 and must ensure they are always within hearing distance of their radio. A change in air traffic control operational conditions and aircraft movements may require Owen Roberts Tower to issue instructions to vacate the manoeuvring area or runway strip, therefore you are required to:

- a) Comply with the procedures in this manual.
- b) Keep your eyes open, stay alert and never go beyond hearing range of your radio.
- c) Never leave objects (equipment or tools) on the manoeuvring area.

#### 4.9 Difficulty in Establishing Radio Communications

**4.9.1** On occasion Drivers may have trouble contacting or establishing communications with Owen Roberts Tower. Listed below are several conditions that could exist and solutions to correct them:

- a) Unable to establish communications due to the vehicle possibly in a radio "dead spot". Radio frequencies are subject to "line of sight" restrictions and there are some locations where this "line of sight" is located that presents a

problem. When this occurs reposition the vehicle at least 100 feet and re-attempt contact with Owen Roberts Tower.

- b) Check the radio volume to ensure the microphone is not stuck in the transmit position (stuck mike) and be sure you are on the correct frequency.
- c) If unable to establish communications due to a stuck mike blocking that frequency. Contact Owen Roberts Tower or the Airport Operations Command Center using the telephone numbers in the listed order of priority in the table below and advise one of them of the situation.

	Contact	Telephone
1.	Owen Roberts Tower	244-5856
2.	Owen Roberts Tower	945-1822
3.	AOCC	244-5835

- d) If unable to establish communications due to an "out of service" or broken radio transmitter and unserviceable telephone. The vehicle operator should follow the procedures outline in 4.8 below.

#### 4.10 Light Gun Signals



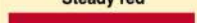

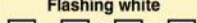

4.10.1 Air traffic controllers have a backup system for communicating if they lose communication with a vehicle in the maneuvering area. Located in the ATC tower is a very bright light gun with different colors used to pass instructions to vehicle drivers. If you are ever working on a runway or taxiway and your radio quits, you should turn your vehicle towards the tower, start flashing your headlights and the controller will signal you with the light gun. This may take some time if the controller's attention is directed towards another part of the airport. Alternatively, try another frequency on your radio or telephone the tower if you have access to a phone.

4.10.2 **BE PATIENT! Even a failed radio is not an excuse for proceeding without a proper clearance.** If all means of communication fail the driver of the affected vehicle must leave the maneuvering area immediately while looking out and giving way to aircraft. The following is an explanation of the light gun signals followed by a handy chart that can be printed and kept by the driver:

- a) Continuous GREEN Light directed at the vehicle - the driver is authorized to enter and drive on the runway or taxiway;
- b) Continuous RED Light directed at the vehicle - the driver shall stop the vehicle immediately;
- c) Intermittent RED Light is directed at the vehicle - the driver must drive the vehicle clear of the runway or taxiway immediately;



- d) Intermittent GREEN Light is directed at the vehicle the driver whose vehicle has been ordered to stay clear of the runway or taxiway may return to the runway or taxiway; and
- e) Intermittent WHITE Light is directed at the vehicle' the driver is to return at once to his starting point;
- f) Alternating Red and Green is a General warning signal. Use extreme caution.

Color and Type of Signal	Movement of Vehicles, Equipment and Personnel	Aircraft on the Ground	Aircraft in Flight
<b>Steady green</b> 	Cleared to cross, proceed or go	Cleared for takeoff	Cleared to land
<b>Flashing green</b> 	Not applicable	Cleared for taxi	Return for landing (to be followed by steady green at the proper time)
<b>Steady red</b> 	Stop	Stop	Give way to other aircraft and continue circling
<b>Flashing red</b> 	Clear the taxiway/runway	Taxi clear of the runway in use	Airport unsafe, do not land
<b>Flashing white</b> 	Return to starting point on airport	Return to starting point on airport	Not applicable
<b>Alternating red and green</b> 	Exercise extreme caution!!!!	Exercise extreme caution!!!!	Exercise extreme caution!!!!

## Chapter 5

### 5. Driver Safety Guidelines

#### 5.1 Authorization

- 5.1.2 Drivers operating within the airside must possess a valid Airside Vehicle Operator Driving Permit (AVOP), issued by the Cayman Islands Airports Authority. This permit shall be produced to authorized officers upon request.

*(Refer **Appendix A1**: Qualification Process, and **Appendix A2** for Form).*

#### 5.2 Seatbelts

- 5.2.1 All airside passenger vehicles operating at Owen Roberts International Airport shall be equipped with seatbelts for drivers and passengers including Ground Handling Equipment (GHE).
- 5.2.2 Operators of airside vehicles are responsible for ensuring that seatbelts are worn; this includes passengers. Passengers shall only travel in Vehicles if they have an allocated seat. Based on the vehicle manufacturer's specifications, if owners of specific Ground Handling Equipment consider that seatbelts are not required, an appropriate safety case must be presented to the CIAA Chief Safety Management Officer for consideration and necessary safety action.

**Note- Failure to comply with this safety policy will result in the Driver of the vehicle being issued a CIAA Safety Infraction Ticket for each act of non-compliance.**

#### 5.3 Speed Limits

- 5.3.1 Drivers shall obey all regulatory signs in the airside and adhere to the speed limits of:

- a) 5 mph per hour within 30 feet of an aircraft;
- b) 10 mph per hour on apron roadway or access roadways; and
- c) 10 mph on the General Aviation Apron.

- 5.3.2 The speed limit signs painted on the surface of airside roadways such as that shown in Figure 13, indicate the speed permissible in MPH. The speed of **10 mph** is the maximum speed for ideal conditions for that stretch of road and must be reduced when surface and visibility conditions deteriorate.

Figure 13 – Vehicle Roadway and Speed Limit Markings



#### 5.4 Speed Limit Exemptions

5.4.1 Paragraphs 5.3.1 and 5.3.2 above do not apply to the following vehicles:

- a) Any fire-fighting vehicle being used to fight fire, preserve life or property, give aid or rescue persons who are in danger or involved in an accident or any other emergency;
- b) Any ambulance being used to aid or rescue persons who are in danger or involved in an accident or any other emergency;
- c) Any police vehicle being used by the Royal Cayman Islands Police Service to execute, facilitate, or aid in any emergency response or rescue operation; and
- d) Any vehicle that is owned by the CIAA and being used to execute, facilitate, or aid in any emergency response or rescue operation.

#### 5.5 Right of Way

5.5.1 Emergency vehicles such as fire vehicles, ambulance and police vehicles responding to an active emergency shall have priority over aircraft being towed. Emergency vehicles in response to an active emergency must be given priority to move ahead quickly and safely. Any indication of their approach, such as sirens or flashing “blue” lights should prompt the driver to give way by moving to the left, slowing down, or stopping if necessary. The following standard rule of right of way shall be applied while operating on all airside areas:

- a) **All aircraft, including those being towed, have right of way over all vehicles and pedestrians;**

- b) Passengers and Pedestrians have right of way over vehicles;**
- c) Vehicles traveling on airside roadways have right of way over vehicles entering/crossing roadways.**

## 5.6 General Apron Safety Rules for Drivers/Operators

5.6.1 The following guidelines should be followed by all personnel operating on the airside:

- a) Drivers and airside personnel must be aware of the dangerous effects of contact injuries that could be caused by rotating propellers and potential jet blast or ingestion when near a jet aircraft with its engines running;
- b) Drivers must inspect and secure all loose items on their vehicles to make sure their vehicles are roadworthy before vehicles are driven on the airside so that loose items do not become potential FOD. Any abnormality discovered that would compromise safety to themselves and others, must be reported to their management and the CSMO immediately. Defects must be corrected as soon as possible;
- c) Drivers transporting cargo across long distances, such as transfer between the Commercial and General Aviation aprons must check that loads and trailers are properly secured either by using:
  - i. Covered carts which will also protect cargo from rain and weather; or**
  - ii. Open carts with a protective net tied down to secure load; or**
  - iii. A second operator to shadow the same cargo transfer to detect any fallen items.**
- d) All drivers and cargo handlers shall use proper stacking techniques to ensure an open cart is not overloaded or unbalanced;
- e) Drivers / operators shall not operate in the movement area at any time while under the influence or residual effect of alcohol or drugs. This applies to medicine or prescribed drugs which may impair the ability of the driver;
- f) Drivers will not operate any vehicle while talking on a cell phone unless vehicle is equipped with appropriate "hands-free" device designed specifically for the vehicle. **Drivers will come to a complete stop to talk on cell phones or radios;**
- g) **Do not walk or drive a vehicle towards an aircraft or behind an aircraft while the aircraft engine is running. An aircraft with its engine running will display a flashing red-light signal known as an anti-collision light;**
- h) Do not drive or park under aircraft or aircraft wings unless the vehicles are used for servicing the aircraft;
- i) **Approach stationary aircraft at an angle and keep the aircraft on the driver's side; try to stay in view of pilot;**
- j) **Always use a Marshall or guide man when reversing towards aircraft;**

- k) Do not leave any motorized vehicle unattended with the engine running on the movement area; engage the handbrake whenever the vehicle is stationary;
- l) Keep the Passenger Boarding safety zone free of any obstruction. Do not drive, stop, or park in the Passenger Boarding safety zone;
- m) Deposit all Foreign Object Debris (FOD) in bins provided after handling of each flight;
- n) Report all fuel, oil, and other chemical spillages;
- o) **Drivers of vehicles shall keep clear of the aircraft engines and shall not pass within 10 ft (3 m) radius around the aircraft fuel tank vents;**
- p) Drivers of vehicles shall not drive over any hose or bonding cable-laid during aircraft refueling;
- q) Refueling tankers are not permitted to park unattended within 50 feet (15 M) of a terminal building.

## 5.7 Personal Protective Equipment

5.7.1 All personnel shall wear hearing protection when operating close to aircraft. Closed shoes, and a high visibility (hi-vis) safety vest (or during daytime operations a similar hi-vis shirt) always while in the movement area. The specifications for the safety vest to be used at ORIA are as follows:

- a) The basic color of the background material of the safety vest shall be **yellow, red or lime green** (see Figure 14 below);
- b) The airport security pass should be visible when wearing the safety vest;
- c) The safety vest should be imprinted with the respective organization's logo for easy identification.

5.7.2 During inclement weather, all personnel entering/performing work at all movement areas are always required to wear the high visibility (hi-vis) raincoat / rain suit. The airport pass should be visible when wearing the raincoat / rain suit. The high visibility (hi-vis) raincoat/rain suit should be imprinted with the respective organization's logo for easy identification.

**Note:** It is also permissible for the safety vest to be worn over a non-high visibility (hi-vis) raincoat/rain suit.

Figure 14 – Safety Vest



## 5.8 Foreign Object Debris (FOD)

5.8.1 Trash or rocks sucked into a jet engine can destroy or do significant damage to the engine in seconds. A rock caught by a propeller can damage the propeller, as well as become a deadly projectile. Make your airport a safer place by putting all trash in a covered container that won't be blown over. Get in the habit of picking up any trash and rocks near aircraft movement areas. Also pick up nails, bolts, or pieces of metal that could cause FOD or puncture tires. Avoid tracking mud and rocks onto the pavement surfaces. **Operators and users are encouraged to take appropriate measures to contain the risk of FOD. The following rules shall be followed on ORIA:**

- a) No persons shall place, discharge, or deposit any refuse or litter on the aprons except into the "Trash" bins provided at various locations;
- b) **All ground handling agents engaged in the servicing or handling of aircraft shall inspect the aircraft stands to ensure that no foreign objects or materials are left on the parking stand before every arrival and after every departure.** Items that are potential safety risks are those that may be ingested by aircraft engines or can cause damage to aircraft tires. Examples of such items are bolts and nuts from ground equipment plastic bags or sheeting and **shall be placed in Foreign Object Debris (FOD) containers** located near each parking stand/area.
- c) **The Aircraft Ground Handler shall ensure that the aircraft path to the stop line is clear of debris before the arrival and pushback of the aircraft.**

5.8.2 A picture of a FOD container north of and adjacent to CKIA apron stand is shown below.



**Note:** The FOD receptacles are not to be used as “garbage bins” Standard garbage like lunch containers should be disposed of using regular trash bins in locations throughout the aerodrome.

## 5.9 Driving in the Operating Areas

### 5.9.1 General Operating Rules

5.9.1.1 All drivers shall always switch on the flashing light beacon on top of their vehicles when operating on the movement area. The size of this beacon must be appropriate for the size of vehicle it is being used on to provide ample visibility. Emergency vehicles shall have “blue” lights while maintenance vehicles have “yellow” lights.

### 5.9.2 Rules for Operating a Vehicle in the Manoeuvring Area

5.9.2.1 The maneuvering area is reserved for flight operations, e.g. take-off, landing and taxiing of aircraft. It is comprised of the runways and taxiways but excludes the apron. A Driver who is required to drive in the maneuvering area will attend the appropriate CIAA Training session and meet the requirements for a Maneuvering Area Driver’s Permit (Identified by a “red” background on the current AVOP Permit) The following rules apply for driving on or across these areas:

- a) Drivers shall not cross a runway under any circumstances unless positive permission has been given and acknowledged by the ORIA ATC Tower.
- b) Drivers proceeding to any part of the maneuvering area (taxiways, runways) shall obtain prior approval from ATC over the assigned radio frequency before traversing (crossing) south of the roadway markings double lines on the painted AVOP driving roadway lanes, for example taxiway Hotel, and proceeding to their intended destination. Sample roadway marking double lines are shown in Figure 13 above.
- c) Drivers wishing to enter the maneuvering area shall remain on or north of the vehicle roadway until permission is granted to enter the maneuvering area by Owen Roberts Tower.

- d) Where there are no hold signs or position markings, drivers are to remain clear of the maneuvering areas as denoted by the natural depression caused by the drainage culverts on either side of the runway, or the PVC pipes installed to provide guidance, or the imaginary line formed by the windsock unless permission to enter is received from ATC.
- e) No vehicle can stop without authorization in any part of the maneuvering area. In the event of a vehicle breakdown the driver must ensure it is reported to Air Traffic Control immediately. The vehicle shall not be left unattended.

### 5.9.3 *Rules for Operating a Vehicle Outside the Manoeuvring Area*

5.9.3.1 ATC does not have the responsibility to control movements on airside outside the maneuvering area. Access to this area is controlled by Airport Security and permission to enter is governed by proof the vehicle operator has knowledge of the rules created by the airport authority - Specifically, the Apron Vehicle Permit and the Airport Vehicle Operator's Permit. Rules specific to this area address:

- i. Aircraft Stands, Vehicle Service Roadways, and Apron Taxiway area is shown in Figure 15 below.
  - a) Two-lane vehicle service roadways are located behind aircraft parking apron stands 1 through 14 on the main commercial terminal apron and the southern section of the general aviation apron. These roadways are primarily used for the movement of ground handling service vehicles and equipment to and from aircraft parked on each apron stand shown as yellow lines in Figure 15.
  - b) Taxiway H south of the two-lane roadway double lines on the southern part of the commercial apron depicted in Figure 15 form part of the airport taxiway system to and from taxiways E, F, & G providing aircraft with access to and from aircraft parking stands 1 - 14. Aircraft stand lead-in lines branch off from taxiway H centerline marking, crossing the vehicle service roadway onto the commercial apron for aircraft to gain access to and from aircraft parking position stands 1 to 14.
  - c) ATC is responsible for controlling aircraft and vehicles operating on taxiways. The ORIA air traffic service boundary coincides with vehicle roadway boundary lines indicating that vehicles must have ATC permission to operate in areas beyond the air traffic service boundary line depicted in Figure 16.
  - d) Vehicles operating on the general aviation or commercial terminal apron shall give way to aircraft in accordance with Section 5.5 Right of Way rules in Chapter 5.



- e) At no time should aircraft be approached from the front of an apron stand parking position **unless under direct supervision of airport apron personnel.**
- f) The speed limit is **10 MPH while driving on these roadways.**

**Note: Drivers shall not use the aircraft apron parking stands as short cuts to get to their intended destination.**

ii. Access Roadways

Speed limits for access roadways at Owen Roberts International Airport are as follows:

- a) **10 MPH** for the roadway connecting the main apron to the General Aviation apron;
- b) **5 MPH** for the roadway connecting the west gate and baggage loading area to the main apron;
- c) **5 MPH** for the roadway connecting the east gate and baggage unloading area to the main apron; and
- d) **5 MPH** for the roadway connecting the General Aviation apron to the main road.

#### 5.10 Security Checkpoint Access Gates

5.10.1 Security checkpoint access gates (CP2, 3, & 5) designed to allow vehicle airside access from the landside to carry out routine, maintenance, and emergency operations are depicted in Figure 15 below. Access gates are manned and monitored by airport security officers to prevent the unauthorized access of vehicles to the airside movement area. Persons and vehicles requiring airside access must be screened by airport security before access is permitted to enter the airside movement area.

Figure 15 – Apron Stands, Taxiways and Vehicle Service Roadways

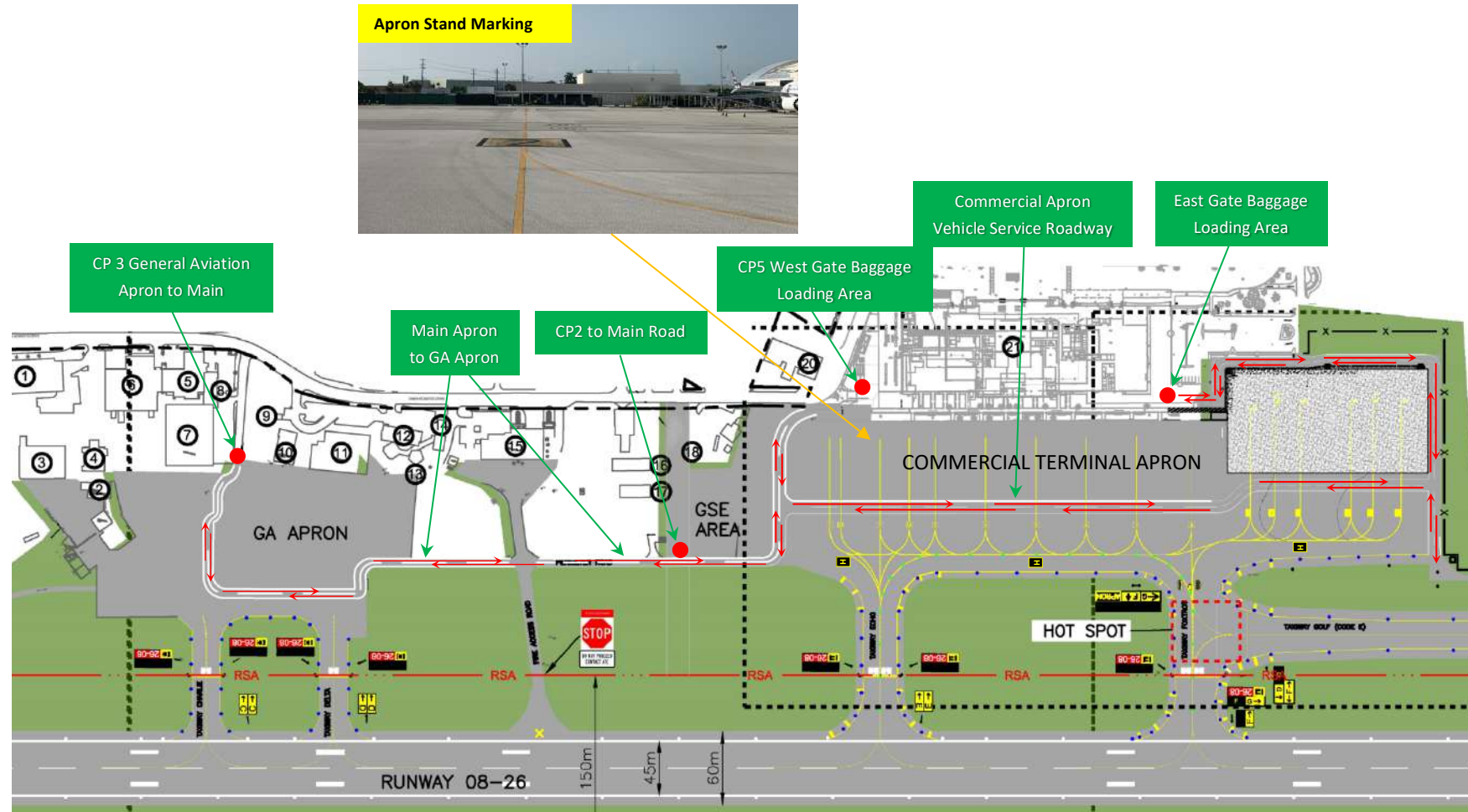
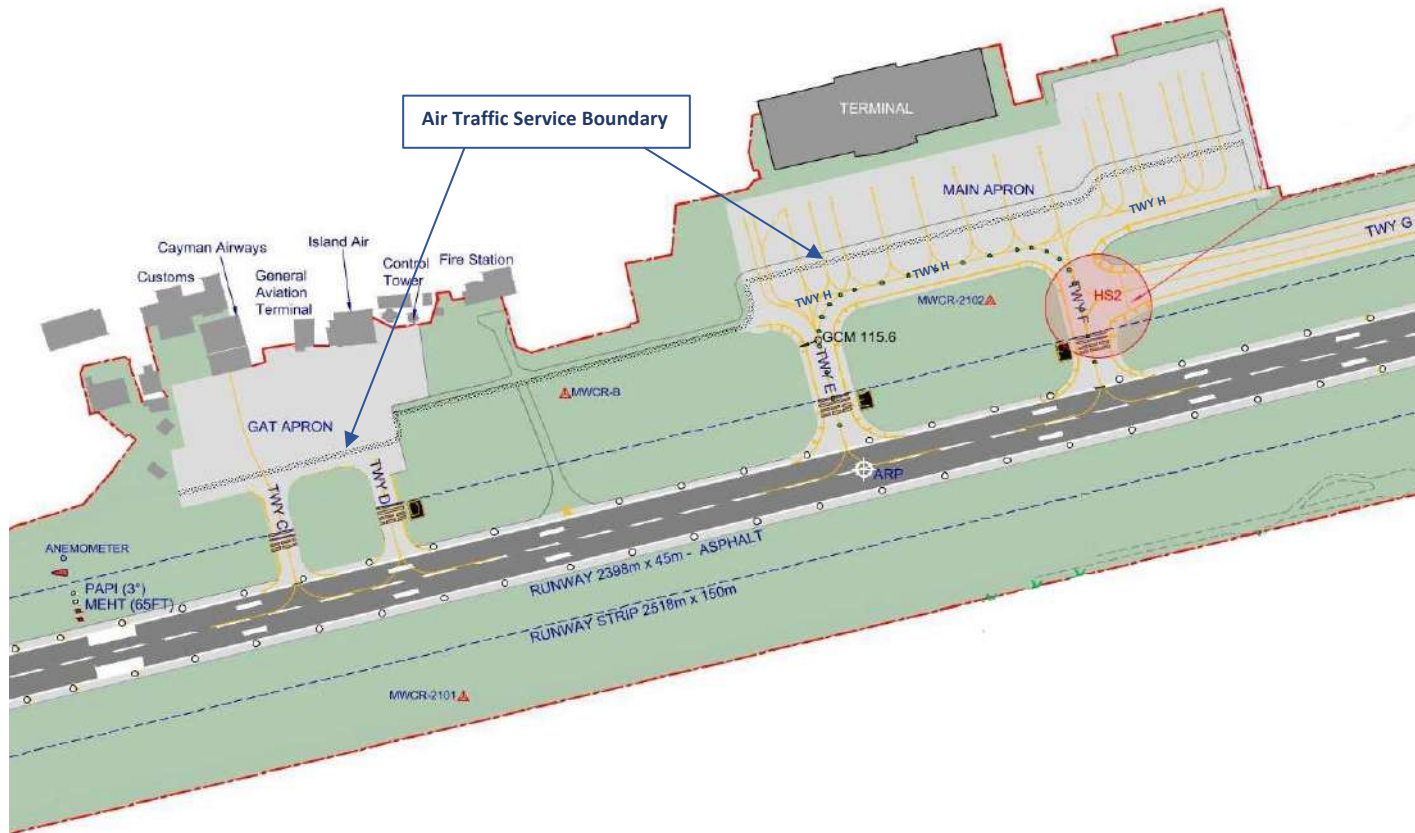


Figure 16 – Air Traffic Service Boundary



## Chapter 6

### 6. Enforcement and Penalties

6.1 It is expected that ALL users of the Movement Area will comply with the requirements of this Manual. Safety Office personnel, CIAA Security Officers and Airport Duty Officers will be assisting in the enforcement of the rules outlined in this manual. They will be administering **Safety Infraction Tickets** when appropriate for violating said rules. In rare instances members of CIAA management may witness an infraction and verbal notice will be given to the offender on the spot followed by a formal ticket within 24 hours. **Once a ticket has been issued the offender will call the Safety Office at (345) 244-5869 or (345) 916-5317 and accept responsibility for the ticket or schedule an appointment to discuss the circumstances behind the ticket.** The Chief Safety Management Officer will receive these tickets, advise the Chief Airport Operations Officer, and forward a copy of infraction to the management of the offender's company.

#### 6.2 Safety Infraction Tickets

##### 6.2.1 A driver who:

- a) Accumulates 12 demerit points or more within a period of 12 months from the date of the first offence;
- b) Is involved in an accident causing injury to personnel or damage to CIAA property and /or aircraft;
- c) Is involved in 2 minor accidents within a period of 12 month.

6.2.2 Will be suspended from driving on the airside! The driver will then be required to attend the CIAA mandated training and pass both theory and airside performance, under supervision, before the permit can be reinstated.

#### 6.3 Cancellation of Permits

6.3.1 The validity of an airside vehicle operators permit is based on holding a valid Cayman Islands Driver License. For this reason, **anytime the C.I. Driver license is expired, suspended, or revoked for any reason- it is the Drivers responsibility to notify Airport Operations and/or the Safety Office and surrender their AVOP permit.**

6.3.2 Notwithstanding any enforcement or penalty process described herein, the CIAA, through the Chief Executive Officer, reserves the right to withdraw permission to enter and drive on the airside, at any time. When an airside vehicle operator's permit has been cancelled, the holder of the permit shall, upon being notified by the CEO of the cancellation, surrender the permit to the CIAA.

<b>Table 1 – Safety Infraction Tickets</b>		
	<b>Infraction</b>	<b>Demerits Deducted</b>
<b>1.</b>	Failure to wear proper PPE	<b>4</b>
<b>2.</b>	Failure to load baggage cart properly	<b>4</b>
<b>3.</b>	Failure to properly chock ground equipment	<b>6</b>
<b>4.</b>	Riding or walking on moving conveyor belt loader	<b>6</b>
<b>5.</b>	Failure to use proper wands for directing aircraft	<b>5</b>
<b>6.</b>	Failure to place, or improper placement of safety cones	<b>6</b>
<b>7.</b>	Failure to have or turn on a vehicle safety beacon light	<b>3</b>
<b>8.</b>	Driving in an unsafe manner around an aircraft	<b>8</b>
<b>9.</b>	Parking or driving under an aircraft wing	<b>8</b>
<b>10.</b>	Failure to turn off all ground service equipment when not in use	<b>5</b>
<b>11.</b>	Driving over a fuelling or GSE hose and/or cable	<b>8</b>
<b>12.</b>	Use of cell phones around aircraft while being fuelled	<b>8</b>
<b>13.</b>	Failure to hand guide vehicles to aircraft (where appropriate)	<b>6</b>
<b>14.</b>	Failure to remove all GSE equipment from ramp 15 mins after departure	<b>4</b>
<b>15.</b>	Failure to drive in proper appointed vehicle lanes	<b>6</b>
<b>16.</b>	Driving beyond the speed limit of 10 mph on the airport	<b>5</b>
<b>17.</b>	Driving beyond the speed limit of 5 mph within 30 ft of parked aircraft	<b>8</b>
<b>18.</b>	Driving a vehicle without due care on the aerodrome	<b>8</b>
<b>19.</b>	Not conforming to traffic signs regulating the movement of traffic or showing the route to be followed by traffic in the aerodrome	<b>3</b>
<b>20.</b>	Not complying with the directions or verbal instructions given by an authorized officer regulating traffic in the movement area	<b>5</b>
<b>21.</b>	Failing to give way or failing to give maximum clearance to aircraft in the movement area	<b>8</b>
<b>22.</b>	Failing to comply with requirements, procedures and instructions relating to airport security	<b>8</b>
<b>23.</b>	Throwing garbage into FOD containers	<b>6</b>
<b>24.</b>	Smoking anywhere on the airside	<b>8</b>

Chapter 7

7. Vehicle Licensing and Inspections

7.1 Vehicles/Towed Equipment Airside Permit

7.1.1 All vehicles accessing or resident on the airside shall be inspected annually and once determined to be safe for airside operations will pay the appropriate fees as listed below and receive an Airside Vehicle Permit Decal. A sample decal is shown in Figure 17.

Figure 17 – Sample Airside Vehicle Permit Decal



7.1.2 The application for requesting this decal is in **Appendix A4** and should be filled out and returned to CIAA each year. It must be understood that all equipment must undergo inspection and pass using form in **Appendix A7** before decal shown above can be installed.

7.1.3 The annual apron vehicle charges are as follows:

<b>1. Unpowered vehicles (Carts, stairs etc.)</b>	\$10.00 per/ vehicle, p.a.
<b>2. Motorized vehicles Up to 1 ton (Including electric vehicles)</b>	\$100.00 per vehicle, p.a.
<b>3. Motorized vehicles Over 1 ton</b>	\$200.00 per vehicle, p.a.

7.1.4 These charges apply to vehicles that are frequently active on the apron, whether permanent or temporary. Please submit completed list and payment directly to the Chief Financial Officer, Cayman Islands Airports Authority. All vehicles and towed equipment being operated on the airside shall be maintained to meet all operational, mechanical and safety requirements for their purpose. In any event, vehicles operated airside shall:

- a) Have a working safety beacon mounted in a location which allows 360° visibility;
- b) Have no defects to control or braking systems;
- c) Have no leaks of lubricants, coolants, or contents;
- d) Have proper seating, working lights, safe tires, and sound bodywork.

### 7.1.5 Towed equipment shall have:

- a) Effective parking brakes;
- b) Positive-lock couplings on trailer and/or vehicle;
- c) Functioning locks (where applicable).

**Note: Vehicles which do not comply will not be allowed to enter or operate on the Movement Area**

## 7.2 Ground Handling Equipment

7.2.1 In addition to displaying a current GHE vehicle Apron permit (see figure. 2) any equipment motorized or not motorized that is used in support of aircraft operations on the airside and is not licensed as a passenger vehicle is considered Ground Handling Equipment and must always be used and maintained in a serviceable and safe condition. Only adequately trained, qualified and authorized personnel should be permitted to operate equipment. Ultimately it is the responsibility of the owner, and /or operator of this equipment to ensure this equipment meets the manufacturer specifications for minimum operational, mechanical and safety requirements for the purpose for which it was intended, and all operators are sufficiently trained on its proper use. In any event, all GHE operated airside shall:

- a) Have a working safety beacon mounted in a location which allows 360° visibility;
- b) Have no defects to control or braking systems;
- c) Have no leaks of lubricants, coolants, or contents;
- d) Have proper seating, working lights, safe tires, and sound bodywork;
- e) Have all manufacturer installed safeguards and bumpers in serviceable condition in the event it must encounter aircraft for proper operation;
- f) Present a clean and professional appearance as to paint (void of visible surface rust), markings and state of the equipment.
- g) Never move across the path of taxiing aircraft or embarking and disembarking passengers;
- h) Not be driven faster than walking speed when approaching or leaving an aircraft; and
- i) Not move towards an aircraft until- the aircraft has come to a complete stop, chocks are positioned, engines shut down, anti-collision beacons switched off, and if applicable, ground/ flight deck contact established.

**Note: Vehicles which do not comply will not be allowed to enter or operate on the movement Area!**

## Chapter 8

### 8.1 Reporting of Airside Incidents/Accidents

8.1.1 If you are involved in an accident, report it immediately to your supervisor. The Chief Safety Management Officer must be notified of all accidents or incidents within 24 hours. If a collision occurred between a vehicle and an aircraft, it's critical that the aircraft not be flown until the damage can be inspected and repaired. (Use the form in Appendix A6 for reporting incidents).

### 8.2 Mandatory Reporting

8.2.1 Mandatory reporting is required for:

- a) Any accident or event that results in a fatality, injury or illness to person or damage to property or the environment;
- b) An event which if not corrected would likely endanger people, property or the environment, or an incident involving circumstances indicating that an accident nearly occurred.

8.2.2 The following are examples of these types of incidents:

- a) Failure or significant malfunction of airfield lighting;
- b) Runways or aircraft maneuvering areas obstructed by aircraft, vehicles, or foreign objects, resulting in a hazardous or potentially hazardous situation;
- c) Runway incursions;
- d) Errors or inadequacies in marking of obstructions or hazards on runway or aircraft maneuvering areas;
- e) Collision between a moving aircraft and any other aircraft, vehicle, or other ground object;
- f) Jet or prop blast incidents that could have resulted in significant damage or serious injury;
- g) Significant spillage of fuel on airfield ramps or runways;
- h) FOD and wildlife on the runway that strikes an aircraft;
- i) When an aircraft was, or could have been, endangered by the impairment of any member of ground staff.

### 8.3 Voluntary Reporting

8.3.1 Any person working at the airport may and is encouraged to report what they see as a potential safety hazard or concern which could lead to an accident, damage, or injury. Examples include a driver not stopping for passengers, inadequate escorts for arriving or departing passengers, airside personnel potentially exposed to jet blast, FOD receptacles not emptied, vehicles left unattended on the apron, confusing signs, poor lighting, etc.



- 8.3.2 The person who wants to make a report may do so by verbally telling the Airport Safety Officer about his or her concern. This could take place while the Airport Safety Officer is conducting routine safety observations, or by phone to the Airport Safety Officer or by visiting the Airport Safety Officer in his office. The person may also decide to prepare and submit a written report to the Airport Safety Officer with a copy to the Safety Committee submit through the office of the Airport Manager. The person making the report can further elect whether to provide his or her name on the written report.

## Chapter 9

### 9.1 Risk Management

- 9.1.1 The purpose of identifying the hazards and assessing the airside risks is to determine whether enough has been done to prevent an incident or accident that may lead to fatalities, injuries, and ill health, and/or damage to aircraft. A thorough explanation of the process can be found in the CIAA Safety Management Systems Manual along with the necessary forms and registers for proper documentation.

## Chapter 10

### 10.1 Driver Safety Assurance

10.1.1. In any program, it is necessary to set and measure performance outcomes to determine whether the system is operating in accordance with expectations, and to identify where action may be required to enhance performance levels to meet these expectations. The acceptable level of safety expresses the safety goals of an organization and sets a baseline for future reduction.

10.1.2. SMS and Human Factors training tells us that accidents will occur despite our best efforts to avoid them. So, in order to ensure the highest levels of safety are always guaranteed while operating vehicles on the airside, each driver by accepting the Airside Vehicle Operators Permit submits to an immediate test (at employers' expense) to determine whether Drugs/Alcohol are a factor whenever:

- a) Their driving is suspect or erratic;
- b) They are involved in an incident or near miss that jeopardizes the safety of passengers or other airside employees;
- c) They are involved in an accident causing injury to personnel or damage to property and/ or aircraft.

10.1.3 Another less extreme method of ensuring the highest levels of safety on the airside is using Safety Infraction Tickets. Safety Infraction tickets are being used to monitor compliance with the rules and regulations in this manual. Safety Infraction Tickets will be used to develop driver trends and performance indicators to enable us to set proper goals for the AVOP Program at ORIA.

10.1.4 Currently as an average over the past five years, we are experiencing less than one accident or incident per year and will strive to continue to lower these occurrences. We will continue to monitor driver trends and strive for zero incidents in the coming year.

### 10.2 Driver Safety Training and Education

10.2.1 An organizations safety culture is linked to the success of its safety training program. All personnel must understand the organization's safety philosophy, policies, procedures, and practices, and they should understand their roles and responsibilities within that safety management framework. Driver Safety training should begin with the initial familiarization of employees and continue with the scheduling and completion of the ORIA AVOP course. This training will be provided for personnel who occupy positions that will require them to drive on the airside areas as outlined in Appendix A1. The training program will ensure that the safety policy and objectives of the organization are understood and adhered to by all staff, and that all staff is aware of the safety responsibilities of their positions.

10.2.2 To qualify for an Airside Vehicle Operators' Permit each applicant will:

- a) Complete the form In Appendix A2 and Attend and pass the 4-hour long ORIA Driver Orientation Course taught by CIAA designated personnel;
- b) Take and pass a written test (requests for verbal testing will be considered in appropriate circumstances). Pass mark is 80%, with remediation provided by the instructor;
- c) The driver will then contact the **Airport Safety Officer** at **345-244-5869** to schedule an airside driving skills test. This practical application test will be administered by CIAA authorized personnel. The test will include vehicle pre-operational inspection procedures, knowledge of radio communication procedures, and physical demonstration of airside driving skills. Upon successful completion of this test the driver will receive his/ her AVOP permit.

**Note: In the event a driver fails a test one (1) immediate opportunity for a re-test will be allowed. If the re-test is failed, the Applicant will be required to undergo re-training. An applicant requiring re-training cannot sit a re-test within fourteen (14) days of the original test.**

### 10.3 Drivers with a Revoked Driving Permit

10.3.1 Failure to comply with the requirements of this AVOM is a breach of the conditions of issue of an AVOP. This will be carefully considered when deciding whether to suspend or cancel an individual driver's AVOP.

10.3.2 A driver/operator will be required to undergo complete re-training and re-testing because of the suspension of their AVOP. Training undertaken will be relevant to the category of permit held (apron and/or taxiway/runway areas). The suspended AVOP will only be reinstated when the relevant driver is deemed competent by the CSMO to drive safely on the airside.

### 10.4 Recurrence of Driver Training

10.4.1 Refresher training shall be conducted every two years as a minimum, or more frequently at the discretion of the CIAA. A holder will be subjected to a AVOP Renewal Course (Application in Appendix A5) and re-test upon application for the renewal of a Permit.

### 10.5 Validity of Permit/Endorsement

10.5.1 An Aerodrome Vehicle Operator Permit will be valid for two (2) years after being issued. **It is the responsibility of the driver / operator to have the permit renewed.**

10.5.2 A Ground Support Equipment Endorsement (Appendix A3) will remain valid if the Cayman Islands Driver's license is valid and the AVOP is renewed, or until notice of removal submitted to CIAA by employer.

10.5.3 A Permit and subsequent endorsement(s) shall cease to be valid immediately upon termination of employment of the holder.

#### 10.6 Lost Permit

10.6.1 A driver/operator who loses a Permit shall immediately, or at the soonest opportunity, report this to the Chief Safety Management Officer at **345-916-5317**. Until a replacement Permit is issued, the driver/operator shall operate the Vehicle/GHE only under supervision of a driver who works for the same company and holds a valid AVOP to operate on the airside.

#### 10.7 Safety Communications

10.7.1 Safety communication is an essential foundation for the development and maintenance of an adequate safety culture. There are three basic elements used in safety communication - **communication, consultation, and reporting**. This is essential to making sure that any changes in policy are disseminated to all drivers, and the proper review of all accidents and incidents provide useful lessons learned for all.

##### 10.7.2 The Communications Element

- a) This captures the processes used to ensure the open exchange of safety-related information both externally and internally to the company. This element plays a critical role in ensuring that all the risks present in the air navigation system are recognized, registered, and mitigated and the information gained, plus improvement measures, are disseminated across the whole company.

##### 10.7.3 Consultation

- a) Consultation with all sections of CIAA and our customers and suppliers on all aspects of safety is an important aspect of safety management as it formalizes links of communication among the respective stakeholders of aviation safety.

##### 10.7.4 Reporting

- a) Reporting the results of safety investigations, safety reviews, safety audits and overall safety activities and performance to the appropriate audience has many benefits. It promotes transparency, commitment, ownership of safety issues. The most benefit of reporting safety issues and information is that it allows similar problems to be reported but most of all it allows for potential problems or issues to be eliminated before they happen. Prevention is always

best. The CIAA is committed to ensuring that all personnel working airside are informed about the safety policies and objectives, how well the airport is meeting safety objectives, results of accident and incident investigations, new safety practices, and other matters dealing with safety.

#### 10.7.5 Safety Meetings

- a) At least once per year, the SMS will hold safety meetings with airport staff and other personnel working at the airport to review the effectiveness of the AVOP Program.
  - i. Report on safety performance;
  - ii. Summarize the initiatives and action taken, or planned, to address safety concerns and potential hazards for Drivers;
  - iii. Report on lessons learned and action taken because of any driving incidents and accidents, and
  - iv. Discuss in an open forum the safety concerns that any of the AVOP licensed Drivers might have.

#### 10.8 Conclusion

10.8.1 This manual has covered the basics of how to safely operate vehicles on the airside areas. Remember also to be courteous to your fellow drivers, pay attention, do not get distracted, follow the rules and regulations, and set a good example. Eventually you will attain a comfortable and safe working knowledge. If there is something you don't understand, always ask before proceeding. As your knowledge and experience grows, share it with new employees or counsel drivers that you see doing something that is questionable or unsafe.

## Appendix A1 – Driver/Operator Qualification Procedure

### 1. Introduction

1.1 Every person driving/operating a vehicle or ground support equipment on the movement area shall be in possession of a current Aerodrome Vehicle Operators Permit (AVOP) and if applicable the appropriate GSE endorsement to this permit issued by the Cayman Islands Airports Authority. For purposes of this section, the Applicant will be deemed to be the intended driver/operator on whose behalf an application is submitted.

### 2. Responsibilities

#### 2.1 Employer

2.1.1 It is the responsibility of every employer who conducts operational functions on airside areas of ORIA to:

- a) Ensure that a current copy of this Manual and the ORIA Apron Management Manual is made available to every employee whose function requires their activity on airside areas;
- b) Ensure all employees who operate Vehicles/ GSE airside are trained per the requirements and comply with the directives of these Manuals;
- c) Ensure all vehicles are suitably designed and maintained for use on airside areas;
- d) Encourage a safety culture among its employees to meet the requirements of these Manuals.

#### 2.2 Employee

2.2.1 It is the responsibility of every employee who operates Vehicles/ Ground Support Equipment on airside areas of ORIA to:

- a) Comply with all requirements of the AVOM and Apron Management Manual;

### 3. Requirements for Application

3.1 Every person requesting an Aerodrome Vehicle Operating Permit (AVOP) shall:

- a) Be in possession of a current Cayman Islands Driving License for the category of vehicle being operated **or have demonstrated equivalent competency;**
- b) Be trained by the vehicle owner to operate the Vehicle/ GSE in the proper manner required for its use on the movement area. **Verification of this must be provided upon application.**

#### 4. Application Process

- i. The Applicant's employer shall apply for an AVOP or Ground Support Equipment Endorsement on the Applicant's behalf, using the Application Form at Appendix A2, A3 to the attention of the Chief Safety Management Officer (see address in Foreword) or deliver the application to the administrative offices of the CIAA. The application shall confirm that all conditions in A1.2 above have been met, in addition to any other pertinent requirements.
- ii. The Applicant shall not be allowed to drive/operate any vehicle or ground support equipment on the movement area without the supervision of a trained, licensed vehicle operator while an application is being processed.
- iii. The Applicant will be tested as expeditiously as possible (in accordance with published CIAA testing schedules).

#### 5. Testing

- i. Each applicant will attend and pass the 4-hour long ORIA Driver Orientation Course taught by CIAA designated personnel.
- ii. Each applicant will take and pass a written test (requests for verbal testing will be considered in appropriate circumstances).
- iii. Pass mark is 80%, with remediation provided by the instructor.
- iv. Having passed the classroom course and written test, the driver will contact the **Airport Safety Officer** at **345-244-5869** to schedule an airside driving skills test. This practical application test will be administered by CIAA authorized personnel. The test will include vehicle pre-operational inspection procedures, knowledge of radio communication procedures, and physical demonstration of airside driving skills. Upon successful completion of this test the driver will receive his/ her AVOP permit.
- v. If an Applicant fails a test, one (1) immediate opportunity for a re-test will be allowed. If the re-test is failed, the Applicant will be required to undergo re-training.
- vi. An applicant requiring re-training cannot sit a re-test within fourteen (14) days of the original test.
- vii. A driver / operator will be required to undergo complete re-training and re-testing because of temporary revocation of AVOP.
- viii. Refresher training shall be conducted **every two years** as a minimum, or more frequently at the discretion of the CIAA. A holder will be subjected to a re-test upon application for the renewal of a Permit.



## 6. Validity of Permit

- i. An Aerodrome Vehicle Operator Permit will be valid for two (2) years after being issued. **It is the responsibility of the driver / operator to have the permit renewed.**
- ii. A Ground Support Equipment Endorsement will remain valid if the Cayman Islands Driver's license is valid and the AVOP is renewed, or until notice of removal submitted to CIAA by employer.
- iii. A Permit and subsequent endorsement(s) shall cease to be valid immediately upon termination of employment of the holder.


## 7. Lost Permit

- i. A driver/operator who loses a Permit shall immediately, or at the soonest opportunity, report this to the CIAA Chief Airport Operations Officer, Tel: 943 7070. Until a replacement Permit is issued, the driver/operator shall operate the Vehicle/GHE only under supervision of his/her employer.

## 8. Record Keeping

- i. All records relating to the issue of an AVOP will be maintained by the Safety office for no less than seven years after the initial issue.

Appendix A2 – Aerodrome Vehicle Operator Permit Application Form

		<b>AERODROME VEHICLE OPERATOR PERMIT APPLICATION FORM</b>	
First Name:		Middle Name:	Last Name:
Street Address:		P.O. Box:	District:
Employer:		Position Held:	
Number of Years with Current Employer:		Date of Birth:	Telephone:

The Following Requirements Have Been Met:			
1.	Copy of Valid Cayman Islands Driver License:	Submitted: <input type="checkbox"/>	Expiry Date:
2.	Copy of Current Company Vehicle Training Record:	Submitted: <input type="checkbox"/>	
3.	Copy of CIAA AVOP Training Course:	Completed: <input type="checkbox"/>	
4.	Completion of Driver Orientation Course:	Completed: <input type="checkbox"/>	
Is your Driver's License subject to any conditions or restrictions (e.g. a requirement to wear glasses)? If so, please specify:			

I DECLARE THAT THE INFORMATION PROVIDED IS CORRECT AND TRUE. I ALSO UNDERSTAND THAT IF THIS APPLICATION IS APPROVED, THE PERMIT IS ISSUED SUBJECT TO THE FOLLOWING CONDITIONS:

1. THE PERMIT ENTITLES THE APPLICANT TO OPERATE THE VEHICLE TYPE SPECIFIED ON THE MOVEMENT AREA OF OWEN ROBERTS INTERNATIONAL AIRPORT, IN ACCORDANCE WITH ESTABLISHED SAFETY PRACTICES.
2. ENTRANCE TO A RESTRICTED AREA WILL BE ALLOWED ONLY IF THE APPLICANT HOLDS AND DISPLAYS A VALID ORIA SECURITY ACCESS PASS.
3. USE OF THE PERMIT IS SUBJECT TO THE ENFORCEMENT AND PENALTIES PROCESS DETAILED IN THIS MANUAL.
4. UPON SUSPENSION OR REVOCATION OF MY CAYMAN ISLANDS DRIVERS LICENSE OR TERMINATION OF EMPLOYMENT THE PERMIT SHALL CEASE TO BE VALID MUST BE RETURNED TO THE CAYMAN ISLANDS AIRPORTS AUTHORITY.


<b>Signature of Employer:</b>	<b>Signature of Applicant:</b>
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THE COMPLETED APPLICATION FORM AND FEE OF KY\$100.00 SHOULD BE SUBMITTED TO THE CAYMAN ISLANDS AIRPORTS AUTHORITY, P.O. BOX 10098 APO, GRAND CAYMAN.

For Official Use:

<b>Approved/Not Approved</b>	<b>Permit No:</b>
<b>Vehicle Type (s):</b>	<b>Area:</b>
<b>Authorized Signature:</b>	

Appendix A3 – Manoeuvring Area and Ground Handling Equipment Driver Endorsement Form

		<b>AERODROME MANOEUVRING AREA AND GROUND HANDLING EQUIPMENT DRIVER ENDORSEMENT APPLICATION FORM</b>	
<input type="checkbox"/> Manoeuvring Area Driver		<input type="checkbox"/> Ground Handling Equipment /Operator Driver	
First Name:	Middle Name:	Last Name:	
Street Address:	P.O. Box:	District:	
Employer:	Position Held:		
Airside Vehicle Operating Permit (AVOP) No:			

The Following Requirements Have Been Met:			
1.	Copy of Valid CIAA Airside Vehicle Operating Permit:	Submitted:	<input type="checkbox"/>
2.	Copy of Current Company Vehicle Training Record:	Submitted:	<input type="checkbox"/>

I DECLARE THAT THE INFORMATION PROVIDED IS CORRECT AND TRUE. I ALSO UNDERSTAND THAT ONCE THIS APPLICATION IS APPROVED, THE ENDORSEMENT IS ENTERED ON MY AVOP LICENSE SUBJECT TO THE FOLLOWING CONDITIONS:


1. THE ENDORSEMENT ENTITLES THE APPLICANT TO OPERATE THE **GHE** TYPE SPECIFIED ON THE MOVEMENT AREA OF OWEN ROBERTS INTERNATIONAL AIRPORT, IN ACCORDANCE WITH ESTABLISHED SAFETY PRACTICES.
2. ENTRANCE TO A RESTRICTED AREA WILL BE ALLOWED ONLY IF THE APPLICANT HOLDS AND DISPLAYS A VALID ORIA SECURITY ACCESS PASS.
3. USE OF THE EQUIPMENT IS SUBJECT TO THE ENFORCEMENT AND PENALTIES PROCESS DETAILED IN THIS MANUAL.
4. UPON SUSPENSION OR REVOCATION OF MY CAYMAN ISLANDS DRIVERS LICENSE OR TERMINATION OF EMPLOYMENT OR DISQUALIFICATION BY EMPLOYER, THE ENDORSEMENT SHALL CEASE TO BE VALID. IN EITHER CASE IT IS THE EMPLOYERS/ EMPLOYEES RESPONSIBILITY TO NOTIFY CIAA OF SUCH ACTION.

<b>Signature of Employer:</b>	<b>Signature of Applicant:</b>
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THE COMPLETED APPLICATION FORM AND ENDORSEMENT FORM SHOULD BE SUBMITTED TO: THE CAYMAN ISLANDS AIRPORTS AUTHORITY, P.O. BOX 10098 APO, GRAND CAYMAN.

Ground Handling Equipment Endorsement (s):	
1.	
2.	
3.	
4.	
<b>Authorized Signature:</b>	


Appendix A4 – Apron Vehicle Registration Form

	<b>APRON VEHICLE REGISTRATION FORM</b>
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**Company Name:**

QUANTITY	TYPE OF VEHICLE	REG #	TONNAGE	CHARGE
Example:				
1	Catering Truck	12 345	3	\$200.00
5	Baggage Carts	N/A	N/A	\$50.00
			<b>TOTAL</b>	<b>\$</b>

Appendix A5 – Airside Operators Permit Renewal Application

		<b>AERODROME VEHICLE OPERATOR PERMIT RENEWAL APPLICATION FORM</b>	
First Name:		Middle Name:	
Last Name:			
Street Address:		P.O. Box:	District:
Employer:		Position Held:	
Nationality:		Date of Birth:	Work Telephone:

How Long Have You Worked with Your Current Employer?
How Long Have You Held a CIAA AVOP License?

The Following Requirements Have Been Met:		
1.	Copy of Valid Cayman Islands Driver License:	Submitted: <input type="checkbox"/>
2.	Letter from Employer Listing Qualifications on Ground Handling Equipment:	Submitted: <input type="checkbox"/>

THE COMPLETED RENEWAL FORM AND FEE OF KY\$100.00 SHOULD BE SUBMITTED TO THE CAYMAN ISLANDS AIRPORTS AUTHORITY, P.O. BOX 10098 APO, GRAND CAYMAN.

I DECLARE THAT THE INFORMATION PROVIDED IS CORRECT AND TRUE. I ALSO UNDERSTAND THAT IF THIS APPLICATION IS APPROVED, THE PERMIT IS ISSUED SUBJECT TO THE FOLLOWING CONDITIONS:

1. THE PERMIT ENTITLES THE APPLICANT TO OPERATE THE VEHICLE TYPE SPECIFIED ON THE MOVEMENT AREA OF OWEN ROBERTS INTERNATIONAL AIRPORT, IN ACCORDANCE WITH ESTABLISHED SAFETY PRACTICES.
2. ENTRANCE TO A RESTRICTED AREA WILL BE ALLOWED ONLY IF THE APPLICANT HOLDS AND DISPLAYS A VALID ORIA SECURITY ACCESS PASS.
3. USE OF THE PERMIT IS SUBJECT TO THE ENFORCEMENT AND PENALTIES PROCESS DETAILED IN THIS MANUAL.
4. UPON SUSPENSION OR REVOCATION OF MY CAYMAN ISLANDS DRIVERS LICENSE OR TERMINATION OF EMPLOYMENT THE PERMIT SHALL CEASE TO BE VALID MUST BE RETURNED TO THE CAYMAN ISLANDS AIRPORTS AUTHORITY.

<b>Signature of Employer:</b>	<b>Signature of Applicant:</b>
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For Official Use:

<b>Approved/Not Approved</b>	<b>Permit No:</b>
<b>Vehicle Type (s):</b>	<b>Area:</b>
<b>Authorized Signature:</b>	

Appendix A6 - Safety Report Form

	<h2>SMS SAFETY REPORT FORM</h2>
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**Part A to be completed by the person identifying the event or hazard**

Date of Event:	Local Time:
Location:	
Name of Reporter:	Section/Organization:

**Please fully describe the event or identified hazard:**  
Include your suggestions on how to prevent similar occurrences.

**In your opinion, what is the likelihood of such an event or similar happening or happening again?**

Extremely improbable		Frequent		
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>

**What do you consider could be the worst possible consequence if this event did happen or happened again?**

Negligible				Catastrophic
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

**Part B To be completed by the Safety Officer**

Date the report was entered into the company database:

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

**Part C To be completed by the Safety Review Committee**

Rate the likelihood of the event occurring or recurring:

Extremely improbable

Frequent

**A**

**B**

**C**

**D**

**E**

Rate the worst-case consequences?

Negligible

Catastrophic

**1**

**2**

**3**

**4**

**5**

**What action or actions are required to ELIMINATE, MITIGATE or CONTROL the hazard to an acceptable level of safety?**

Resources required:

Responsibility for Action:

Agreed and Accepted by:

Safety Review Committee

Date:

Safety Officer

Date:

Responsible Manager

Date:

Accountable Manager

Date:

Appropriate Feedback given to staff by Safety Officer

Signed: \_\_\_\_\_

Date:

Follow up action required:


When

Who

Hazard log updated:

When

Appendix A7 – Vehicle Inspection Form

		<b>VEHICLE INSPECTION FORM</b>	
Company Name:		Fleet ID No:	
Vehicle Type:		Manufacturer:	
Year:	Model:	Colour:	
VIN No:			

Inspection Checklist:

<b>Stationary Checks</b>	<b>Satisfactory</b>	<b>Needs Attention</b>	<b>Unsatisfactory</b>
Steering free of play:			
Hand Brake:			
Service Brake:			
Tires:			
L/F			
L/R			
R/F			
R/R			
Lights:			
Headlamps			
Tail Lamps			
Indicators			
Safety Beacon			
Horn:			
Wipers:			
Fluid Leaks:			
Drivers Seating:			
Bumpers:			
Bodywork:			
<b>Undercarriage Checks</b>			
Chassis Integrity:			



Exhaust System:			
Suspension:			
<b>Mobile Checks</b>			
Speedometer:			
Brakes:			
Gears (smooth changes):			
Wheel Bearings:			
Other Items Checked:			
<b>Equipment Status:</b>	<b>Fail</b>	<b>Pass</b>	<b>New GSE Permit #</b>
<b>Remarks:</b>			
<b>Re-Inspection Comments:</b>			

<b>Inspectors Name and Signature:</b>	<b>Inspection Date:</b>

<p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>a) If <b>NEEDS ATTENTION</b> is recorded for <b>ANY</b> item on the checklist, corrective action must be taken regarding the item within 5 days to bring it to <b>SATISFACTORY</b> condition.</li> <li>b) If <b>UNSATISFACTORY</b> condition is recorded for ANY item on the checklist, the equipment shall not be used on the Airside until the corrective action has been completed and repair confirmed by a designated CIAA inspector after re-inspection.</li> </ul>
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