



ENTERPRISE

CHARITY AERODROME

PROJECT SUMMARY

JANUARY 5, 2025



INTRODUCTION

Alfro Alphonso & Sons Enterprise (hereinafter referred to as the “Developer”) intends to develop and manage a private aerodrome. The operations will be based at LOT 41, SECTION A, NORTH SIDE OF POMEROON ROAD, IN THE COUNTY OF ESSEQUIBO. This report describes the development of the site as an airstrip, take-off and landing area, supporting facilities such as service buildings, refueling hydrants, service pathways, firefighting and wash down facilities and maintenance service bays. It is intended to give a concise picture of what is expected with this undertaking.

The Developer is committed to construct the facility to meet all international and local standards and guidelines for such facilities.

The main objective of this venture is to enhance regional connectivity, improve transportation infrastructure, and support economic development. The airstrip will facilitate easier access to remote areas, promote tourism, and provide a critical link for local businesses.

This report is not intended to provide a detailed design, but to provide the initial findings for early decision-making purposes.

Our main reference is **ICAO Annex 14 Volume ii, FAA Circular #AC 150/5300-13B** and other related reference documents.

ROLE OF THE AIRSTRIP

The primary objective of the proposed project is to provide an independent facility for aircraft operations in close proximity to Charity, and to facilitate the growing need for air transport services coming from all sectors.

The aerodrome shall provide a location for aircraft operators providing commercial services (moving people and cargo, mining, tourism, medical services, construction, agriculture, news and media) from and near Charity and is also intended to support the coast guard, search and rescue, law enforcement and other emergency services.

Alfro Alphonso & Sons Enterprise will provide the necessary infrastructural amenities, such as the landing space and parking of aircraft, a fuel farm, a terminal building with facilities and services that include check-in, security checks, medical stabilization, baggage claim, Air Traffic Services (“ATS”) and provision of hangars for aircraft maintenance. Other services such as storage and handling support, etc. will be added as necessary to meet demands.

SITE LOCATION

The project site is situated at LOT 41; SECTION A, NORTH SIDE OF POMEROON ROAD, IN THE COUNTY OF ESSEQUIBO. The site coordinates are 7.394879, -58.5842187 with an average gradient of 2.8 inches per km.

It runs NORTH to SOUTH and is bounded by agricultural lands on the north, south and west and an access road to the east.

It is low lying and is covered by shrubbery. Residential properties around the area lie to the east of the location and are separated by utility reserves and a wide drainage canal.



AIRSTRIP ORIENTATION

A review of wind patterns of the area reveals that the wind follows the characteristic NE/SW trade wind stream for Guyana's seacoast. The proposed airstrip will be positioned to complement this, and is favorably oriented for location of FATO, TLOF and taxiway. (See Appendix 1)

The size of paved runway area is 2700 feet x 60 feet. The safety zone, will including a paved apron and will facilitate the simultaneous operation of multiple aircraft.

The western side of the plot has been kept free from any structure to provide additional room for expansion. The location of FATO is positioned in such a way that it causes the least sound disturbance to nearby inhabitants and is clear from obstructions.

OBSTACLE LIMITATION SURFACES

A visual obstacle survey of the area has been carried out. Examination reveals that there is no obstruction towards the North or Southern sides of the site. The Eastern side has some low residential structures that do not pose as obstacle limitation surfaces. The West has an obstruction that penetrates an obstacle limitation surface but does not interfere with the landing or take-off paths, and its effects could be otherwise offset by establishment of specific departure and arrival procedures.

CLOSEST AIRPORT

Kayman Sankar and Lake Mainstay Airstrips are about 7.4 and 10 nautical miles South East of the Charity site. This is well outside of the five- nautical mile safety radius as prescribed by Civil Aviation and Air Navigation Services.

MAINTENANCE / HANGAR BUILDING

The provision of hangars for routine maintenance, and also for longer term non-scheduled repairs are also considered a critical component of the project. Provision shall be made for the storage of frequent use parts and tools, as well as for the complete repair or overhaul if needed. It is our intention to provide every conceivable and practical component expected of a Performance Class 1 facility.

LIGHTING SYSTEM

We intend to use low profile, inset, LED 12V DC lighting as is preferred in high traffic facilities. DC was chosen because of our intended use of solar power with the requisite emergency backup systems.

DEVELOPMENT PLAN

The development plan for the airstrip is drawn to satisfy the requirements of ICAO Annex 14 Volume II, and FAA Circular #AC 150/5300-13B

The major features of the airstrip are as follows:

- The initial development will be on the eastern side of the plot to provide a clear area on the western side for future expansion.
- The eastern side of the site will be provided with a 9.84 feet high sound attenuation wall.
- A fuel yard of 70 feet x 60 feet shall be provided for the receipt and storage of fuel for aircraft.
- A passenger terminal building of 50 feet x 120 feet is proposed for movement of incoming and outgoing passengers. This building will be provided with check-in counters, security check and baggage scanners. It shall also have space for Airport staff, security personnel, ATM, small cafeteria, booking counter, toilets etc.
- An ATS tower will be incorporated into the design of the terminal building at 30 feet height. The height will be sufficient, considering the height of surrounding structures, so that the ATS staff can have a clear view of aircraft approaching the airstrip from any direction.
- A technical block and a meteorological office are also proposed on the ground floor of terminal building.
- The power requirement of the site will be fully met; this will be supplemented by the installation of solar panels.
- Filtered water will be provided at the site. An underground water tank is proposed to store filtered water for wash down and other purposes.
- One hangar of 75 feet x 310 feet is proposed for routine maintenance and repair of aircraft.
- The existing approach road to site will be upgraded, secured and used for incoming and outgoing of vehicular traffic.
- A car park will be built in the South Western end of plot.
- Separate secure entrances shall be provided for emergency service vehicles.
- Sewage will be handled by the installation of underground septic tanks.
- The regulatory requirements will be met through working arrangements with The Guyana Civil Aviation Authority, The Guyana Environmental Protection Agency, Guyana Customs and Immigration Services, The Guyana Fire Service, and Joint Services- (Police and Army) to facilitate satisfactory implementation.
- Construction is scheduled to begin during the first quarter of 2025, with a projected completion time of 10 months.

ENVIRONMENTAL CONSIDERATIONS AND MITIGATION MEASURES

Pre-Construction

1. Site Selection and Work Schedule

- The airstrip location was selected based on current ownership of existing lands and an extensive Environmental Assessment was done to ensure minimal ecological disruption and hence a Site Plan layout developed to minimize vegetation clearance and soil disturbance.
- Factors considered included proximity to sensitive habitats, potential impact on local communities, and existing land use.
- Obtain all necessary environmental clearances and develop an Environmental Management Plan (EMP) with mitigation, monitoring, and reporting strategies.
- Schedule works to avoid sensitive seasons (e.g., breeding or nesting seasons for wildlife).

2. Biodiversity

- A biodiversity management plan will be developed to protect local flora and fauna.
- Measures include creating buffer zones around sensitive areas, establishing wild-life corridors, and conducting regular monitoring of species populations.
- Identify and avoid ecologically sensitive areas (e.g., wetlands, protected zones).
- Restoration of habitats affected by the construction will be undertaken to ensure long-term ecological balance.

3. Technical & Logistical

- Ensure proper design to incorporate green building practices and disaster resilience.).
- A biodiversity management plan will be developed to protect local flora and fauna.
- Plan for storm water management and erosion control structures.
- Secure necessary utilities and waste disposal arrangements.

4. Social & Safety

- Conduct stakeholder engagement to address community concerns.
- Prepare a grievance redress mechanism.
- Develop a traffic management plan to minimize disruption to local transport.

Construction

1. Water Management

- Sustainable water management practices will be implemented to prevent runoff and protect local water bodies.

- Techniques such as rainwater harvesting, construction of retention ponds and installation of permeable surfaces will be employed.
- Regular water quality monitoring will be conducted to ensure compliance with environmental standards.

2. Noise Pollution

- Noise mitigation strategies will be employed to minimize the impact on nearby communities.
- These strategies include the installation of sound barriers, operational restrictions during nighttime hours, and the use of quieter construction machinery.
- Continuous noise monitoring will be conducted to ensure compliance with noise level regulations.

3. Carbon Footprint

- Efforts will be made to minimize the carbon footprint during both construction and operation phases.
- Renewable energy sources such as solar panels will be utilized for powering airstrip facilities.
- Energy efficient technologies and practices will be employed to reduce overall energy consumption.

4. Reforestation

- Native tree species will be planted around the airstrip to offset carbon emissions and enhance local biodiversity.
- A longterm maintenance plan will be in place to ensure the survival and growth of the planted trees.

5. Waste Management

- Strict waste management protocols will be followed during construction to ensure proper disposal and recycling of materials.
- Hazardous waste will be handled and disposed of in accordance with environmental regulations.
- Efforts will be made to reduce, reuse, and recycle materials wherever possible.

6. Emergency Preparedness

- An Emergency Response Plan will be prepared based on hazards and potential incidents that could occur for this type of project and actions to be followed should an emergency occur.
- The Plan will provide information and guidance to assist personnel in preventing, reporting, responding to and controlling hazards such as fire, medical emergencies or spills. It also sets out responsibilities and a chain of command for responding to emergencies. The Plan will form part of staff orientation and

training and weekly toolbox talks.

- This plan will incorporate the use of suitable and sufficient quantity of equipment such as fire extinguishers, spill kits and first aid kits.

7. Community Engagement

- Continuous engagement with local communities will be maintained to address their concerns and ensure the project benefits them economically and socially.
- Job opportunities and training programs will be provided to local residents to support employment and skill development.
- Community feedback will be incorporated into project planning and implementation to ensure transparency and inclusivity.

OPERATION

1. Water Management

- Techniques such as rainwater harvesting and regular water quality monitoring will be conducted to ensure compliance with environmental standards.

2. Noise Pollution

- Noise mitigation strategies will be employed to minimize the impact on nearby communities.
- Continuous noise monitoring will be conducted to ensure compliance with noise level regulations.

3. Carbon Footprint

- Renewable energy sources such as solar systems will be utilized for powering air trip facilities.
- Energy efficient technologies and practices will be employed to reduce overall energy consumption.

4. Waste Management

- Strict waste management protocols will be followed during operation to ensure proper disposal and recycling of materials.
- Hazardous waste will be handled and disposed of in accordance with environmental regulations.
- Efforts will be made to reduce, reuse, and recycle materials wherever possible.

5. Emergency Preparedness

- The Emergency Response Plan will be monitored based on hazards and potential incidents that could occur for this type of project and actions to be followed should an emergency occur.

- The Plan will be tested and evaluated quarterly and guidance to assist personnel in preventing, reporting, responding to and controlling hazards such as fire, medical emergencies or spills provide based on results. These results will guide staff orientation and training and weekly toolbox talks.

SOCIAL IMPACTS

1. Enhanced Connectivity

- Improved access to remote areas, fostering economic growth and development.
- Enhanced transportation infrastructure supporting regional trade and commerce.

2. Economic Development

- Promotion of tourism through improved access to tourist destinations.
- Creation of job opportunities and support for local businesses.
- Increased investment in the region due to improved infrastructure.
- Positive social impact through community engagement and involvement.
- Improved quality of life for local residents through job creation and economic opportunities.
- Strengthening of community resilience and capacity building.

CONCLUSION

This project will see the design and construction of a Performance Class1 Aerodrome, as outlined by the ICAO Annex 14 guidelines, with the inclusion of a search and rescue facility. The total area available for development is just shy of 50 acres, with phase 1 being primarily the buildup of the area and construction of a complete aerodrome with all necessary supporting and peripheral services. This serves to further illustrate our commitment to safety, and the willingness to partner with other complementing service providers. We embrace the opportunity to demonstrate our technical and industry specific expertise whilst we complete our project as the standard for all future aerodromes in Guyana.

Appendix 1

